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SAR EVALUATION REPORT

Applicant Name:
Samsung Electronics Co., Ltd.
129, Samsung-ro, Maetan dong,
Yeongtong-gu, Suwon-si
Gyeonggi-do, 16677, Korea

Date of Testing:
09/11/2024 - 10/24/2024
Test Site/Locations:
Element, Columbia, MD, USA
Element Morgan Hill, CA, USA
Element, Suwon, Korea
Document Serial No.:
1M2408260067-23.A3L

FCC ID: **A3LSMS938U**

APPLICANT: **SAMSUNG ELECTRONICS CO., LTD.**

DUT Type:	Portable Handset
Application Type:	Certification
FCC Rule Part(s):	CFR §2.1093
Model(s):	SM-S938U
Additional Model(s):	SM-S938U1

Equipment Class	Band & Mode	Tx Frequency	SAR 1g Head (W/kg)	SAR 1g Body-Worn (W/kg)	SAR 1g Hotspot (W/kg)	SAR 10g Phablet (W/kg)
PCE	GSM/GPRS/EDGE 850	824.20 - 848.80 MHz	0.79	0.33	0.51	N/A
PCE	GSM/GPRS/EDGE 1900	1850.20 - 1909.80 MHz	<0.1	0.38	0.61	N/A
PCE	UMTS 850	826.40 - 846.60 MHz	1.02	0.60	0.58	N/A
PCE	UMTS 1750	1712.4 - 1752.6 MHz	0.43	**0.64**	1.03	N/A
PCE	UMTS 1900	1852.4 - 1907.6 MHz	0.11	0.55	1.05	N/A
PCE	LTE Band 71	665.5 - 695.5 MHz	0.94	0.48	0.48	N/A
PCE	LTE Band 12	699.7 - 715.3 MHz	1.05	0.50	0.50	N/A
PCE	LTE Band 13	779.5 - 784.5 MHz	**1.26**	0.67	0.80	N/A
PCE	LTE Band 14	790.5 - 795.5 MHz	0.99	0.59	0.75	N/A
PCE	LTE Band 26	814.7 - 848.3 MHz	1.13	0.54	0.66	N/A
PCE	LTE Band 5	824.7 - 848.3 MHz	N/A	N/A	N/A	N/A
PCE	LTE Band 66	1710.7 - 1779.3 MHz	0.93	0.63	1.18	N/A
PCE	LTE Band 4	1710.7 - 1754.3 MHz	N/A	N/A	N/A	N/A
PCE	LTE Band 25	1850.7 - 1914.3 MHz	0.90	0.54	**1.37**	N/A
PCE	LTE Band 2	1850.7 - 1909.3 MHz	N/A	N/A	N/A	N/A
PCE	LTE Band 30	2307.5 - 2312.5 MHz	1.11	0.38	0.79	N/A
PCE	LTE Band 7	2502.5 - 2567.5 MHz	0.87	0.45	0.46	N/A
PCE	LTE Band 41	2498.5 - 2687.5 MHz	0.55	0.48	0.46	N/A
PCE	LTE Band 38	2572.5 - 2617.5 MHz	N/A	N/A	N/A	N/A
CBE	LTE Band 48	3552.5 - 3697.5 MHz	**1.25**	0.37	0.59	N/A
PCE	NR Band n71	665.5 - 695.5 MHz	0.87	0.43	0.44	N/A
PCE	NR Band n12	701.5 - 715.5 MHz	0.95	0.43	0.43	N/A
PCE	NR Band n14	790.5 - 795.5 MHz	0.89	0.53	0.69	N/A
PCE	NR Band n26	816.5 - 846.5 MHz	0.97	0.68	0.55	N/A
PCE	NR Band n5	826.5 - 846.5 MHz	N/A	N/A	N/A	N/A
PCE	NR Band n70	1697.5 - 1707.5 MHz	0.93	0.60	**1.19**	N/A
PCE	NR Band n66	1712.5 - 1777.5 MHz	0.90	0.61	**1.19**	N/A
PCE	NR Band n25	1852.5 - 1912.5 MHz	0.88	0.53	1.16	N/A
PCE	NR Band n2	1852.5 - 1907.5 MHz	N/A	N/A	N/A	N/A
PCE	NR Band n30	2307.5 - 2312.5 MHz	1.19	0.41	1.06	N/A
PCE	NR Band n7	2502.5 - 2567.5 MHz	1.11	0.44	0.52	N/A
PCE	NR Band n41	2501.01 - 2685 MHz	0.89	0.43	0.55	N/A
PCE	NR Band n38	2575 - 2615 MHz	N/A	N/A	N/A	N/A
CBE	NR Band n48	3555 - 3694.98 MHz	1.11	**0.48**	**0.65**	N/A
PCE	NR Band n78	3455.01 - 3544.98 MHz 3705 - 3795 MHz	N/A	N/A	N/A	N/A
PCE	NR Band n77	3455.01 - 3544.98 MHz 3705 - 3975 MHz	1.15	0.61	0.61	N/A
DTS	2.4 GHz WiFi	2412 - 2462 MHz	**0.78**	**0.39**	**0.80**	N/A
NII	5 GHz WiFi	U-NII-1: 5180 - 5240 MHz U-NII-2A: 5260 - 5320 MHz U-NII-2C: 5500 - 5720 MHz U-NII-3: 5745 - 5825 MHz U-NII-4: 5845 - 5885 MHz	**0.80**	**0.38**	**0.29**	**1.87**
6CD	6 GHz WiFi	U-NII-5: 5945 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz	**0.62**	<0.1	N/A	**0.38**
DSS	2.4 GHz Bluetooth	2402 - 2480 MHz	**0.32**	**0.21**	**0.49**	N/A
TNB	NTN Band 255	1639 - 1658 MHz	N/A	**0.39**	N/A	**2.80**
DXX	NFC	13.56 MHz	N/A	N/A	N/A	**<0.1**
UWB	UWB	6489.6 - 7987.2 MHz	N/A	N/A	N/A	**<0.1**
Simultaneous SAR per KDB 690783 D01v01r03:			**1.59**	1.54	1.57	**1.87**

Equipment Class	Band & Mode	Tx Frequency	Reported SAR (W/kg) Head	Body-Worn	Phablet	Reported PD (W/m^2)
6CD	6 GHz WiFi	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz	6.61	0.52	8.94	5.11
UWB	UWB	6489.6 - 7987.2 MHz	N/A	N/A	<0.1	0.49

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE C95.1-1992 and has been tested in accordance with the measurement procedures specified in Section 2.9 of this report; for North American frequency bands only.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them. Test results reported herein relate only to the item(s) tested.

RJ Ortanez
Executive Vice President

The SAR Tick is an initiative of the Mobile & Wireless Forum (MWF). While a product may be considered eligible, use of the SAR Tick logo requires an agreement with the MWF. Further details can be obtained by emailing: sartick@mwfai.info.

ACCREDITED
CERT #2041.01

TABLE OF CONTENTS

1 TEST LABORATORY INFORMATION

1.1 Introduction

This test report for device subject to testing at an accredited testing laboratory has been generated by the testing laboratory that tested the device. Measurements were performed at various locations within Element Materials Technology. Detailed location and accredited information regarding the testing laboratories are provided below.

1.2 Test Laboratories Information

1.2.1 Testing Laboratory 1

Test Firm Name	ELEMENT MATERIALS TECHNOLOGY WASHINGTON DC LLC
Test Lab Location	7185 Oakland Mills Road, Columbia, MD 21046, United States Tel. +1.410.290.6652 / Fax +1.410.290.6654
Accreditation Info.	Lab Code. (ISED): 2451B
	CAB Identifier (NIST): US0110
	ISO/IEC 17025 (A2LA): CERT #2041.01
	
Measurement system No.	C, E, G, H, J, L, O, R, S

1.2.2 Testing Laboratory 2

Test Firm Name	ELEMENT MATERIALS TECHNOLOGY SAN JOSE, CA
Test Lab Location	18855 Adams Ct, Morgan Hill, CA 95037 USA United States Tel. +1.408.538.5600 / Fax +1.410.290.6654
Accreditation Info.	Lab Code. (ISED): 22831
	CAB Identifier (NIST): US0211
	ISO/IEC 17025 (A2LA): CERT #2041.02
	
Measurement system No.	AM1, AM4, AM7, AM8, AM13, AM14

1.2.3 Testing Laboratory 3

Test Firm Name	ELEMENT MATERIALS TECHNOLOGY SUWON, LTD.
Test Lab Location	Yongin-si, Gyeonggi-do, 16954, South Korea Tel. +82.31.660.7391 / Fax +82)31-660-7318
Accreditation Info.	Lab Code. (ISED): 26168
	CAB Identifier (NIST): KR0169
	ISO/IEC 17025 (A2LA): CERT #2041.04
	
Measurement system No.	K2, K3, K4, K6

Note: For each test performed, the test site can be verified with the probe serial numbers specified in the table of Test System Verification and Equipment List.

2 DEVICE UNDER TEST

2.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
GSM/GPRS/EDGE 850	Voice/Data	824.20 - 848.80 MHz
GSM/GPRS/EDGE 1900	Voice/Data	1850.20 - 1909.80 MHz
UMTS 850	Voice/Data	826.40 - 846.60 MHz
UMTS 1750	Voice/Data	1712.4 - 1752.6 MHz
UMTS 1900	Voice/Data	1852.4 - 1907.6 MHz
LTE Band 71	Voice/Data	665.5 - 695.5 MHz
LTE Band 12	Voice/Data	699.7 - 715.3 MHz
LTE Band 13	Voice/Data	779.5 - 784.5 MHz
LTE Band 14	Voice/Data	790.5 - 795.5 MHz
LTE Band 26	Voice/Data	814.7 - 848.3 MHz
LTE Band 5	Voice/Data	824.7 - 848.3 MHz
LTE Band 66	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2	Voice/Data	1850.7 - 1909.3 MHz
LTE Band 30	Voice/Data	2307.5 - 2312.5 MHz
LTE Band 7	Voice/Data	2502.5 - 2567.5 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
LTE Band 38	Voice/Data	2572.5 - 2617.5 MHz
LTE Band 48	Voice/Data	3552.5 - 3697.5 MHz
NR Band n71	Voice/Data	665.5 - 695.5 MHz
NR Band n12	Voice/Data	701.5 - 713.5 MHz
NR Band n14	Voice/Data	790.5 - 795.5 MHz
NR Band n26	Voice/Data	816.5 - 846.5 MHz
NR Band n5	Voice/Data	826.5 - 846.5 MHz
NR Band n70	Voice/Data	1697.5 - 1707.5 MHz
NR Band n66	Voice/Data	1712.5 - 1777.5 MHz
NR Band n25	Voice/Data	1852.5 - 1912.5 MHz
NR Band n2	Voice/Data	1852.5 - 1907.5 MHz
NR Band n30	Voice/Data	2307.5 - 2312.5 MHz
NR Band n7	Voice/Data	2502.5 - 2567.5 MHz
NR Band n41	Voice/Data	2501.01 - 2685 MHz
NR Band n38	Voice/Data	2575 - 2615 MHz
NR Band n48	Voice/Data	3555 - 3694.98 MHz
NR Band n78	Voice/Data	3455.01 - 3544.98 MHz; 3705 - 3795 MHz
NR Band n77	Voice/Data	3455.01 - 3544.98 MHz; 3705 - 3975 MHz
NTN Band 255	Data	1629 - 1658 MHz
NR Band n258	Data	24250 - 24450 MHz; 24750 - 25250 MHz
NR Band n260	Data	37000 - 40000 MHz
NR Band n261	Data	27500 - 28350 MHz
2.4 GHz WIFI	Voice/Data	2412 - 2462 MHz
5 GHz WIFI	Voice/Data	U-NII-1: 5180 - 5240 MHz U-NII-2A: 5260 - 5320 MHz U-NII-2C: 5500 - 5720 MHz U-NII-3: 5745 - 5825 MHz U-NII-4: 5845 - 5885 MHz
6 GHz WIFI	Voice/Data	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz
2.4 GHz Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
UWB	Data	6489.6 - 7987.2 MHz

2.2 Time-Averaging Algorithm for RF Exposure Compliance

2.2.1 Time-Averaged Algorithm

This Device is enabled with the Qualcomm® Smart Transmit Gen2 feature with antenna grouping. This feature performs time-averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit feature (report SN could be found in Section 2.10– Bibliography).

Note that NTN operations are not enabled with Smart Transmit.

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of *SAR_design_target* or *PD_design_target*, below the predefined time-averaged power limit (i.e., P_{limit} for WWAN sub-6/WLAN/BT radio, and *input.power.limit* for 5G mmW NR), for each characterized technology and band. Characterization is achieved by determining P_{limit} for WWAN sub-6/WLAN/BT that corresponds to the exposure design targets after accounting for all device design related uncertainties, i.e., SAR_design_target (<FCC SAR Limit) for sub-6 radio. The SAR characterization is denoted as SAR char in this report (see SAR Summary Section and Part 0 SAR Test Results for P_{limit} Calculations Appendix).

Smart Transmit allows the device to transmit at higher power instantaneously, as high as P_{max}, when needed, but enforces power limiting to maintain time-averaged transmit power to P_{limit}. Below table shows P_{limit} EFS settings and maximum tune up output power P_{max} configured for this EUT for various transmit conditions (Device State Index DSI). Note that the device uncertainty for WWAN sub-6/WLAN/BT is 1.0dB for this EUT.

Exposure Scenario			Maximum Tune-Up Output Power*	Body-Worn, Hotspot, or Phablet	Head
Averaging Volume				1g/10g	1g
Spacing				10mm, 0mm	0mm
DSI				0	1
Technology/Band	Antenna	Antenna Group	P_{max}	P_{limit}	P_{limit}
GSM 850	A	AG0	25.3	29.7	31.5
GSM 850	E	AG1	25.3	27.7	20.3
GSM 1900	A	AG0	22.1	18.8	28.8
UMTS 850	A	AG0	24.0	25.9	29.0
UMTS 850	E	AG1	24.0	26.9	20.5
UMTS 1750	A	AG0	23.0	19.0	29.4
UMTS 1900	A	AG0	23.0	18.0	29.0
LTE Band 71	A	AG0	24.0	27.2	28.6
LTE Band 71	E	AG1	24.0	27.0	21.5
LTE Band 12	A	AG0	24.0	27.0	28.5
LTE Band 12	E	AG1	24.0	26.2	21.5
LTE Band 13	A	AG0	24.0	27.0	28.0
LTE Band 13	E	AG1	24.0	25.9	21.5
LTE Band 14	A	AG0	24.0	26.7	28.3
LTE Band 14	E	AG1	24.0	26.2	21.5
LTE Band 26/5	A	AG0	24.0	27.1	29.3
LTE Band 26/5	E	AG1	24.0	26.4	21.0
LTE Band 66/4	A	AG0	23.5	19.0	29.0
LTE Band 66/4	F	AG1	23.5	20.5	18.5
LTE Band 25/2	A	AG0	23.5	18.0	28.5
LTE Band 25/2	F	AG1	23.5	20.0	18.5
LTE Band 30	A	AG0	22.5	19.5	34.2
LTE Band 30	F	AG1	22.0	20.0	17.0
LTE Band 7	B	AG0	23.5	20.0	29.2
LTE Band 7	F	AG1	23.5	19.5	16.0
LTE Band 41/38	B	AG0	22.0	20.0	30.1
LTE Band 41/38	F	AG1	22.0	19.5	16.0
LTE Band 48	F	AG1	20.0	19.5	16.0
NR Band n71	A	AG0	24.0	26.4	29.5
NR Band n71	E	AG1	24.0	27.6	21.5
NR Band n12	A	AG0	24.0	26.2	28.2
NR Band n12	E	AG1	24.0	27.0	21.5
NR Band n14	A	AG0	24.0	26.7	29.3
NR Band n14	E	AG1	24.0	26.9	21.5
NR Band n26/n5	A	AG0	24.0	28.1	30.2
NR Band n26/n5	E	AG1	24.0	27.3	21.0
NR Band n70	A	AG0	23.5	19.0	29.0
NR Band n70	F	AG1	23.5	21.0	18.5
NR Band n66	A	AG0	23.5	19.0	29.2
NR Band n66	F	AG1	23.5	20.5	18.5
NR Band n25/n2	A	AG0	23.5	18.0	29.1
NR Band n25/n2	F	AG1	23.5	20.0	18.5
NR Band n30	A	AG0	22.5	19.5	33.9
NR Band n30	F	AG1	22.0	20.0	17.0
NR Band n7	B	AG0	23.5	20.0	28.2
NR Band n7	F	AG1	23.5	19.5	16.0
NR Band n41 PC2 (Path 1)	F	AG1	26.0	19.5	16.5
NR Band n41 PC2 (Path 1)	B	AG0	23.0	19.5	16.5
NR Band n41 PC2 (Path 1)	E	AG1	23.5	18.0	15.0
NR Band n41 PC2 (Path 1)	D	AG0	22.0	19.5	16.5
NR Band n41 PC2 (Path 2)	B	AG0	26.0	20.0	21.0
NR Band n41 PC2 (Path 2)	F	AG1	21.5	19.5	16.5
NR Band n41 PC2 (Path 2)	D	AG0	25.0	20.0	21.0
NR Band n41 PC2 (Path 2)	E	AG1	20.0	17.5	17.5
NR Band n38 (Path 1)	F	AG1	24.0	19.5	16.5
NR Band n38 (Path 2)	B	AG0	24.0	20.0	21.0
NR Band n48	F	AG1	22.0	19.5	16.0
NR Band n48	C	AG0	16.5	14.5	11.0
NR Band n48	I	AG1	21.0	19.0	15.5
NR Band n48	D	AG0	16.5	14.5	11.0
NR Band n78 PC2	F	AG1	26.0	18.0	16.0
NR Band n78 PC2	C	AG0	21.0	13.5	11.0
NR Band n78 PC2	I	AG1	25.5	18.0	15.5
NR Band n78 PC2	D	AG0	20.0	13.0	10.5
NR Band n77 PC2	F	AG1	26.0	18.0	16.0
NR Band n77 PC2	C	AG0	21.0	13.5	11.0
NR Band n77 PC2	I	AG1	25.5	18.0	15.5
NR Band n77 PC2	D	AG0	20.0	13.0	10.5
2.4 GHz WIFI	H	AG1	19.0	19.5	16.0
2.4 GHz WIFI	J	AG1	19.0	25.4	16.0
2.4 GHz WIFI	MIMO	AG1	19.0	19.4	16.0
5 GHz WIFI	H	AG1	17.0	15.0	15.0
5 GHz WIFI	E	AG1	17.0	15.0	15.0
5 GHz WIFI	MIMO	AG1	17.0	15.0	15.0
6 GHz WIFI	H	AG1	16.0	8.0	18.4
6 GHz WIFI	E	AG1	16.0	8.0	22.9
6 GHz WIFI	MIMO	AG1	16.0	8.0	17.0
2.4 GHz Bluetooth	H	AG1	18.9	21.3	18.9
2.4 GHz Bluetooth	J	AG1	18.4	25.9	20.4
2.4 GHz Bluetooth	MIMO	AG1	13.9	18.7	17.8

The maximum time-averaged output power (dBm) for any WWAN sub-6/WLAN/BT technology, band, and DSI is the minimum of ("P_{limit} EFS" and "Maximum tune up output power P_{max}") + 1dB device uncertainty. SAR values in this report were scaled to this maximum time-averaged output power to determine compliance per KDB Publication 447498 D01v06.

2.3 Nominal and Maximum Output Power Specifications

This device operates using the following maximum and nominal output power specifications. SAR values were scaled to the maximum allowed power to determine compliance per KDB Publication 447498 D01v06.

Note: Targets for 802.11ax/be RU operations can be found in 802.11ax/be RU SAR Exclusion Appendix.

2.3.1 Licensed Output Power

GSM/GPRS/EDGE 850										
Antenna A										
Power Level		Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
		1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Pmax	Max Allowed Power	33.5	33.5	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.5	32.5	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 0 (Body-Worn, Hotspot, or Phablet)	Max Allowed Power	33.5	33.5	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.5	32.5	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 1 (Head)	Max Allowed Power	33.5	33.5	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.5	32.5	31.5	29.5	27.5	27.0	25.0	23.0	22.0
GSM/GPRS/EDGE 850										
Antenna E										
Power Level		Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
		1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Pmax	Max Allowed Power	33.5	33.5	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.5	32.5	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 0 (Body-Worn, Hotspot, or Phablet)	Max Allowed Power	33.5	33.5	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.5	32.5	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 1 (Head)	Max Allowed Power	30.5	30.5	27.5	25.7	24.5	28.0	26.0	24.0	23.0
	Nominal	29.5	29.5	26.5	24.7	23.5	27.0	25.0	23.0	22.0
GSM/GPRS/EDGE 1900										
Antenna A										
Power Level		Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
		1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Pmax	Max Allowed Power	30.5	30.5	29.0	27.5	25.5	27.0	25.0	23.0	22.0
	Nominal	29.5	29.5	28.0	26.5	24.5	26.0	24.0	22.0	21.0
DSI = 0 (Body-Worn, Hotspot, or Phablet)	Max Allowed Power	29.0	29.0	26.0	24.2	23.0	27.0	25.0	23.0	22.0
	Nominal	28.0	28.0	25.0	23.2	22.0	26.0	24.0	22.0	21.0
DSI = 1 (Head)	Max Allowed Power	30.5	30.5	29.0	27.5	25.5	27.0	25.0	23.0	22.0
	Nominal	29.5	29.5	28.0	26.5	24.5	26.0	24.0	22.0	21.0

For GSM, the above powers listed are GSM burst average values.

UMTS Band 5 (850 MHz)					
Antenna A					
Power Level		Modulated Average Output Power			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 0 (Body-Worn, Hotspot, or Phablet)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 1 (Head)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
UMTS Band 5 (850 MHz)					
Antenna E					
Power Level		Modulated Average Output Power			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 0 (Body-Worn, Hotspot, or Phablet)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 1 (Head)	Max Allowed Power	21.5	20.5	20.5	20.5
	Nominal	20.5	19.5	19.5	19.5
UMTS Band 4 (1750 MHz)					
Antenna A					
Power Level		Modulated Average Output Power			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	Max Allowed Power	24.0	23.0	23.0	23.0
	Nominal	23.0	22.0	22.0	22.0
DSI = 0 (Body-Worn, Hotspot, or Phablet)	Max Allowed Power	20.0	19.0	19.0	19.0
	Nominal	19.0	18.0	18.0	18.0
DSI = 1 (Head)	Max Allowed Power	24.0	23.0	23.0	23.0
	Nominal	23.0	22.0	22.0	22.0
UMTS Band 2 (1900 MHz)					
Antenna A					
Power Level		Modulated Average Output Power			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	Max Allowed Power	24.0	23.0	23.0	23.0
	Nominal	23.0	22.0	22.0	22.0
DSI = 0 (Body-Worn, Hotspot, or Phablet)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 1 (Head)	Max Allowed Power	24.0	23.0	23.0	23.0
	Nominal	23.0	22.0	22.0	22.0

Mode / Band	Antenna		Modulated Average Output Power (in dBm)		
			Pmax	DSI = 0 (Body-Worn, Hotspot, or Phablet)	DSI = 1 (Head)
LTE Band 71	A	Max Allowed Power	25.0	25.0	25.0
		Nominal	24.0	24.0	24.0
LTE Band 71	E	Max Allowed Power	25.0	25.0	22.5
		Nominal	24.0	24.0	21.5
LTE Band 12	A	Max Allowed Power	25.0	25.0	25.0
		Nominal	24.0	24.0	24.0
LTE Band 12	E	Max Allowed Power	25.0	25.0	22.5
		Nominal	24.0	24.0	21.5
LTE Band 13	A	Max Allowed Power	25.0	25.0	25.0
		Nominal	24.0	24.0	24.0
LTE Band 13	E	Max Allowed Power	25.0	25.0	22.5
		Nominal	24.0	24.0	21.5
LTE Band 14	A	Max Allowed Power	25.0	25.0	25.0
		Nominal	24.0	24.0	24.0
LTE Band 14	E	Max Allowed Power	25.0	25.0	22.5
		Nominal	24.0	24.0	21.5
LTE Band 26/5	A	Max Allowed Power	25.0	25.0	25.0
		Nominal	24.0	24.0	24.0
LTE Band 26/5	E	Max Allowed Power	25.0	25.0	22.0
		Nominal	24.0	24.0	21.0
LTE Band 66/4	A	Max Allowed Power	24.5	20.0	24.5
		Nominal	23.5	19.0	23.5
LTE Band 66/4	F	Max Allowed Power	24.5	21.5	19.5
		Nominal	23.5	20.5	18.5
LTE Band 25/2	A	Max Allowed Power	24.5	19.0	24.5
		Nominal	23.5	18.0	23.5
LTE Band 25/2	F	Max Allowed Power	24.5	21.0	19.5
		Nominal	23.5	20.0	18.5
LTE Band 30	A	Max Allowed Power	23.5	20.5	23.5
		Nominal	22.5	19.5	22.5
LTE Band 30	F	Max Allowed Power	23.0	20.5	18.0
		Nominal	22.0	19.5	17.0
LTE Band 7	B	Max Allowed Power	24.5	21.0	24.5
		Nominal	23.5	20.0	23.5
LTE Band 7	F	Max Allowed Power	24.5	20.5	17.0
		Nominal	23.5	19.5	16.0
LTE Band 41/38	B	Max Allowed Power	25.0	23.0	25.0
		Nominal	24.0	22.0	24.0
LTE Band 41/38	F	Max Allowed Power	25.0	22.5	19.0
		Nominal	24.0	21.5	18.0
LTE Band 48	F	Max Allowed Power	23.0	22.5	19.0
		Nominal	22.0	21.5	18.0
NTN Band 255	F	Max Allowed Power	23.0	23.0	N/A
		Nominal	22.0	22.0	N/A

For LTE TDD, the above powers listed are TDD burst average values.

Mode / Band	Antenna		Modulated Average Output Power (in dBm)		
			Pmax	DSI = 0 (Body-Worn, Hotspot, or Phablet)	DSI = 1 (Head)
NR Band n71	A	Max Allowed Power	25.0	25.0	25.0
		Nominal	24.0	24.0	24.0
NR Band n71	E	Max Allowed Power	25.0	25.0	22.5
		Nominal	24.0	24.0	21.5
NR Band n12	A	Max Allowed Power	25.0	25.0	25.0
		Nominal	24.0	24.0	24.0
NR Band n12	E	Max Allowed Power	25.0	25.0	22.5
		Nominal	24.0	24.0	21.5
NR Band n14	A	Max Allowed Power	25.0	25.0	25.0
		Nominal	24.0	24.0	24.0
NR Band n14	E	Max Allowed Power	25.0	25.0	22.5
		Nominal	24.0	24.0	21.5
NR Band n26/n5	A	Max Allowed Power	25.0	25.0	25.0
		Nominal	24.0	24.0	24.0
NR Band n26/n5	E	Max Allowed Power	25.0	25.0	22.0
		Nominal	24.0	24.0	21.0
NR Band n70	A	Max Allowed Power	24.5	20.0	24.5
		Nominal	23.5	19.0	23.5
NR Band n70	F	Max Allowed Power	24.5	22.0	19.5
		Nominal	23.5	21.0	18.5
NR Band n66	A	Max Allowed Power	24.5	20.0	24.5
		Nominal	23.5	19.0	23.5
NR Band n66	F	Max Allowed Power	24.5	21.5	19.5
		Nominal	23.5	20.5	18.5
NR Band n25/n2	A	Max Allowed Power	24.5	19.0	24.5
		Nominal	23.5	18.0	23.5
NR Band n25/n2	F	Max Allowed Power	24.5	21.0	19.5
		Nominal	23.5	20.0	18.5
NR Band n30	A	Max Allowed Power	23.5	20.5	23.5
		Nominal	22.5	19.5	22.5
NR Band n30	F	Max Allowed Power	23.0	21.0	18.0
		Nominal	22.0	20.0	17.0
NR Band n7	B	Max Allowed Power	24.5	21.0	24.5
		Nominal	23.5	20.0	23.5
NR Band n7	F	Max Allowed Power	24.5	20.5	17.0
		Nominal	23.5	19.5	16.0
NR Band n41 PC2 (Path 1)	F	Max Allowed Power	27.0	20.5	17.5
		Nominal	26.0	19.5	16.5
NR Band n41 PC2 (Path 1)	B	Max Allowed Power	24.0	20.5	17.5
		Nominal	23.0	19.5	16.5
NR Band n41 PC2 (Path 1)	E	Max Allowed Power	24.5	19.0	16.0
		Nominal	23.5	18.0	15.0
NR Band n41 PC2 (Path 1)	D	Max Allowed Power	23.0	20.5	17.5
		Nominal	22.0	19.5	16.5
NR Band n41 PC2 (Path 2)	B	Max Allowed Power	27.0	21.0	22.0
		Nominal	26.0	20.0	21.0
NR Band n41 PC2 (Path 2)	F	Max Allowed Power	22.5	21.0	22.0
		Nominal	21.5	19.5	16.5
NR Band n41 PC2 (Path 2)	D	Max Allowed Power	26.0	21.0	22.0
		Nominal	25.0	20.0	21.0
NR Band n41 PC2 (Path 2)	E	Max Allowed Power	21.0	18.5	18.5
		Nominal	20.0	17.5	17.5
NR Band n38 (Path 1)	F	Max Allowed Power	25.0	20.5	17.5
		Nominal	24.0	19.5	16.5
NR Band n38 (Path 2)	B	Max Allowed Power	25.0	21.0	22.0
		Nominal	24.0	20.0	21.0
NR Band n48	F	Max Allowed Power	23.0	20.5	17.0
		Nominal	22.0	19.5	16.0
NR Band n48	C	Max Allowed Power	17.5	15.5	12.0
		Nominal	16.5	14.5	11.0
NR Band n48	I	Max Allowed Power	22.0	20.0	16.5
		Nominal	21.0	19.0	15.5
NR Band n48	D	Max Allowed Power	17.5	15.5	12.0
		Nominal	16.5	14.5	11.0
NR Band n78 PC3	F	Max Allowed Power	27.0	19.0	17.0
		Nominal	26.0	18.0	16.0
NR Band n78 PC3	C	Max Allowed Power	22.0	14.5	12.0
		Nominal	21.0	13.5	11.0
NR Band n78 PC3	I	Max Allowed Power	26.5	19.0	16.5
		Nominal	25.5	18.0	15.5
NR Band n78 PC3	D	Max Allowed Power	21.0	14.0	11.5
		Nominal	20.0	13.0	10.5
NR Band n77 PC2	F	Max Allowed Power	27.0	19.0	17.0
		Nominal	26.0	18.0	16.0
NR Band n77 PC2	C	Max Allowed Power	22.0	14.5	12.0
		Nominal	21.0	13.5	11.0
NR Band n77 PC2	I	Max Allowed Power	26.5	19.0	16.5
		Nominal	25.5	18.0	15.5
NR Band n77 PC2	D	Max Allowed Power	21.0	14.0	11.5
		Nominal	20.0	13.0	10.5

For NR TDD, the above powers listed are TDD burst average and framed average values

2.3.2 2.4 GHz WLAN Output Power

The below table is applicable is applicable in the following conditions:

- Pmax
- DSI=0 (Body-worn, Hotspot or Phablet)

Band	IEEE 802.11 Modulated/Frame Output Power (in dBm)																															
	SISO Antenna H												SISO Antenna J												SISO in MIMO							
	b		g		n		ac		ax (HE)		be (EHT)		b		g		n		ac		ax (HE)		be (EHT)		g (CDD + STBC)		n (CDD + STBC, SDM)		ac (CDD + STBC, SDM)		ax (HE) (CDD + STBC, SDM)		be (EHT) (CDD + STBC, SDM)	
Maximum / Nominal Power	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.
2.4 GHz WLAN	20.0	19.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0 ch. 1: 16.5 ch. 11: 16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	18.0 ch. 1: 16.5 ch. 11: 16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	20.0	19.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0 ch. 1: 16.5 ch. 11: 16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	18.0 ch. 1: 16.5 ch. 11: 16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0 ch. 1: 16.5 ch. 11: 16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	18.0 ch. 1: 16.5 ch. 11: 16.0	17.0 ch. 1: 16.5 ch. 11: 16.0

The below table is applicable is applicable in the following conditions:

- DSI=1 (RCV)

Band	IEEE 802.11 Modulated/Frame Output Power (in dBm)																															
	SISO Antenna H												SISO Antenna J												SISO in MIMO							
	b		g		n		ac		ax (HE)		be (EHT)		b		g		n		ac		ax (HE)		be (EHT)		g (CDD + STBC)		n (CDD + STBC, SDM)		ac (CDD + STBC, SDM)		ax (HE) (CDD + STBC, SDM)		be (EHT) (CDD + STBC, SDM)	
Maximum / Nominal Power	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.	Max.	Nom.
2.4 GHz WLAN	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	16.0 ch. 1: 16.5 ch. 11: 16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	16.0 ch. 1: 16.5 ch. 11: 16.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	16.0 ch. 1: 16.5 ch. 11: 16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	16.0 ch. 1: 16.5 ch. 11: 16.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	16.0 ch. 1: 16.5 ch. 11: 16.0	17.0 ch. 1: 16.5 ch. 11: 16.0	16.0 ch. 1: 16.5 ch. 11: 16.0

2.3.3 5 GHz WLAN Output Power

The below table is applicable is applicable in the following conditions:

- DSI=0 (Body-worn, Hotspot or Phablet), DSI=1 (Head)

Mode	Band	IEEE 802.11 Modulated/Frame Output Power (in dBm)																																	
		SISO Antenna H												SISO Antenna E												SISO in MIMO											
		a		n		ac		ax (HE)		be (EHT)		a		n		ac		ax (HE)		be (EHT)		a (CDD + STBC)		n (CDD + STBC, SDM)		ac (CDD + STBC, SDM)		ax (HE) (CDD + STBC, SDM)		be (EHT) (CDD + STBC, SDM)					
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.		
5 GHz WIFI (20MHz BW)	UNII-1	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0		
	UNII-2A	16.0	15.0	16.0	15.0	16.0	15.0	16.0 ch. 64: 15.5	15.0 14.5	16.0 ch. 64: 15.5	15.0 14.5	16.0	15.0	16.0	15.0	16.0	15.0	16.0 ch. 64: 15.5	15.0 14.5	16.0 ch. 64: 15.5	15.0 14.5	16.0	15.0	16.0	15.0	16.0	15.0	16.0 ch. 64: 15.5	15.0 14.5	16.0 ch. 64: 15.5	15.0 14.5		
	UNII-2C	16.0	15.0	16.0	15.0	16.0	15.0	16.0 ch. 100: 15.0	15.0 14.0	16.0 ch. 100: 15.0	15.0 14.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0 ch. 100: 15.0	15.0 14.0	16.0 ch. 100: 15.0	15.0 14.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0 ch. 100: 15.0	15.0 14.0	16.0 ch. 100: 15.0	15.0 14.0		
	UNII-3	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0		
	UNII-4	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0		
5 GHz WIFI (40MHz BW)	UNII-1			16.0	15.0	16.0	15.0	16.0 ch. 38: 15.5	15.0 14.5	16.0 ch. 38: 15.5	15.0 14.5			16.0	15.0	16.0	15.0	16.0 ch. 38: 15.5	15.0 14.5	16.0 ch. 38: 15.5	15.0 14.5			16.0	15.0	16.0	15.0	16.0 ch. 38: 15.5	15.0 14.5	16.0 ch. 38: 15.5	15.0 14.5		
	UNII-2A			16.0	15.0	16.0	15.0	16.0 ch. 62: 14.5	15.0 13.5	16.0 ch. 62: 14.5	15.0 13.5			16.0	15.0	16.0	15.0	16.0 ch. 62: 14.5	15.0 13.5	16.0 ch. 62: 14.5	15.0 13.5			16.0	15.0	16.0	15.0	16.0 ch. 62: 14.5	15.0 13.5	16.0 ch. 62: 14.5	15.0 13.5		
	UNII-2C			16.0	15.0	16.0	15.0	16.0 ch. 102: 14.0	15.0 13.0	16.0 ch. 102: 14.0	15.0 13.0			16.0	15.0	16.0	15.0	16.0 ch. 102: 14.0	15.0 13.0	16.0 ch. 102: 14.0	15.0 13.0			16.0	15.0	16.0	15.0	16.0 ch. 102: 14.0	15.0 13.0	16.0 ch. 102: 14.0	15.0 13.0		
	UNII-3			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0		
	UNII-4			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0		
5 GHz WIFI (80MHz BW)	UNII-1					16.0	15.0	15.5	14.5	15.5	14.5							16.0	15.0	15.5	14.5	15.5	14.5					16.0	15.0	15.5	14.5	15.5	14.5		
	UNII-2A					16.0	15.0	15.5	14.5	15.5	14.5							16.0	15.0	15.5	14.5	15.5	14.5					16.0	15.0	15.5	14.5	15.5	14.5		
	UNII-2C					16.0 ch. 106: 15.5	15.0 14.5	16.0 ch. 106: 13.5	15.0 12.5	16.0 ch. 106: 13.5	15.0 12.5							16.0 ch. 106: 15.5	15.0 14.5	16.0 ch. 106: 15.5	15.0 14.5	16.0 ch. 106: 15.5	15.0 14.5							16.0 ch. 106: 15.5	15.0 14.5	16.0 ch. 106: 15.5	15.0 14.5		
	UNII-3					16.0	15.0	16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0		
	UNII-4					16.0	15.0	16.0	15.0	16.0	15.0							16.0	15.0	16.0	15.0	16.0	15.0					16.0	15.0	16.0	15.0	16.0	15.0		
5 GHz WIFI (160MHz BW)	UNII-1/2A					15.5	14.5	14.0	13.0	14.0	13.0							15.5	14.5	14.0	13.0	14.0	13.0					15.5	14.5	14.0	13.0	14.0	13.0		
	UNII-2C					12.0	11.0	12.0	11.0	12.0	11.0							12.0	11.0	12.0	11.0	12.0	11.0					12.0	11.0	12.0	11.0	12.0	11.0		
	UNII-3/4					15.0	14.0	14.5	13.5	14.5	13.5							15.0	14.0	14.5	13.5	14.5	13.5					15.0	14.0	14.5	13.5	14.5	13.5		

2.3.4 6 GHz WLAN Output Power

The below table is applicable is applicable in the following conditions:

- Pmax, DSI = 1 (Head)

Mode	Band	IEEE 802.11 Modulated/Frame Output Power (in dBm)																							
		SISO Antenna H						SISO Antenna E						SISO in MIMO MIMO											
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)					
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.				
6 GHz WIFI (20MHz BW) - SP	UNII-5	17.0 ch. 2: 8.0	16.0 7.0	17.0 ch. 2: 7.0	16.0 6.0	17.0 ch. 2: 7.0	16.0 6.0	17.0 ch. 2: 8.0	16.0 7.0	17.0 ch. 2: 7.0	16.0 6.0	17.0 ch. 2: 7.0	16.0 6.0	17.0 ch. 2: 8.0	16.0 7.0	17.0 ch. 2: 7.0	16.0 6.0	17.0 ch. 2: 7.0	16.0 6.0				
	UNII-7	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0	17.0	16.0				
6 GHz WIFI (40MHz BW) - SP	UNII-5			17.0	16.0	17.0	16.0			17.0	16.0	17.0	16.0			17.0	16.0	17.0	16.0				
	UNII-7			17.0	16.0	17.0	16.0			17.0	16.0	17.0	16.0			17.0	16.0	17.0	16.0				
6 GHz WIFI (80MHz BW) - SP	UNII-5			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0				
	UNII-7			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0				
6 GHz WIFI (160MHz BW) - SP	UNII-5			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0				
	UNII-7			14.5	13.5	14.5	13.5			14.5	13.5	14.5	13.5			14.5	13.5	14.5	13.5				
6 GHz WIFI (320MHz BW) - SP	UNII-5					15.0	14.0					15.0	14.0					15.0	14.0				
	UNII-7					14.5	13.5					14.5	13.5					14.5	13.5				

Mode	Band	IEEE 802.11 Modulated/Frame Output Power (in dBm)																	
		SISO Antenna H						SISO Antenna E						SISO in MIMO MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - LPI	UNII-5	9.5 ch. 2: 8.0	8.5 7.0	10.0 ch. 2: 7.0	9.0 6.0	10.0 ch. 2: 7.0	9.0 6.0	9.5 ch. 2: 8.0	8.5 7.0	10.0 ch. 2: 7.0	9.0 6.0	10.0 ch. 2: 7.0	9.0 6.0	9.5 ch. 2: 8.0	8.5 7.0	10.0 ch. 2: 7.0	9.0 6.0	10.0 ch. 2: 7.0	9.0 6.0
	UNII-6	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0
	UNII-7	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0
	UNII-8	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0	10.0	9.0
6 GHz WIFI (40MHz BW) - LPI	UNII-5			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0
	UNII-6			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0
	UNII-7			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0
	UNII-8			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0			13.0	12.0	13.0	12.0
6 GHz WIFI (80MHz BW) - LPI	UNII-5			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
	UNII-6			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
	UNII-7			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0			16.0	15.0	16.0	15.0
	UNII-8			15.5	14.5	15.5	14.5			15.5	14.5	15.5	14.5			15.5	14.5	15.5	14.5
6 GHz WIFI (160MHz BW) - LPI	UNII-5			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0
	UNII-6			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0			15.0	14.0	15.0	14.0
	UNII-7			14.5	13.5	14.5	13.5			14.5	13.5	14.5	13.5			14.5	13.5	14.5	13.5
	UNII-8			14.5	13.5	14.5	13.5			14.5	13.5	14.5	13.5			14.5	13.5	14.5	13.5
6 GHz WIFI (320MHz BW) - LPI	UNII-5					15.0	14.0					15.0	14.0					15.0	14.0
	UNII-6					15.0	14.0					15.0	14.0					15.0	14.0
	UNII-7					14.5	13.5					14.5	13.5					14.5	13.5
	UNII-8					14.5	13.5					14.5	13.5					14.5	13.5

Mode	Band	IEEE 802.11 Modulated/Frame Output Power (in dBm)																	
		SISO Antenna H						SISO Antenna E						SISO in MIMO MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - VLP	UNII-5	5.5	4.5	6.0	5.0	6.0	5.0	5.5	4.5	6.0	5.0	6.0	5.0	5.5	4.5	6.0	5.0	6.0	5.0
	UNII-7	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
6 GHz WIFI (40MHz BW) - VLP	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (80MHz BW) - VLP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (160MHz BW) VLP	UNII-5			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
	UNII-7			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0			12.0	11.0	12.0	11.0
6 GHz WIFI (320MHz BW) VLP	UNII-5					12.0	11.0					12.0	11.0					12.0	11.0
	UNII-7					12.0	11.0					12.0	11.0					12.0	11.0

The below table is applicable is applicable in the following conditions:

- DSI=0 (Body-worn or Phablet)

Mode	Band	IEEE 802.11 Modulated/Frame Output Power (in dBm)																	
		SISO Antenna H						SISO Antenna E						SISO in MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - LPI	UNII-5	9.0 ch. 2: 8.0	8.0 7.0	9.0 ch. 2: 7.0	8.0 6.0	9.0 ch. 2: 7.0	8.0 6.0	9.0 ch. 2: 8.0	8.0 7.0	9.0 ch. 2: 7.0	8.0 6.0	9.0 ch. 2: 7.0	8.0 6.0	9.0 ch. 2: 8.0	8.0 7.0	9.0 ch. 2: 7.0	8.0 6.0	9.0 ch. 2: 7.0	8.0 6.0
	UNII-6	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0
	UNII-7	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0
	UNII-8	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0
6 GHz WIFI (40MHz BW) - LPI	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-6			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-8			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (80MHz BW) - LPI	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-6			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-8			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (160MHz BW) - LPI	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-6			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-8			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (320MHz BW) - LPI	UNII-5					9.0	8.0					9.0	8.0					9.0	8.0
	UNII-6					9.0	8.0					9.0	8.0					9.0	8.0
	UNII-7					9.0	8.0					9.0	8.0					9.0	8.0
	UNII-8					9.0	8.0					9.0	8.0					9.0	8.0

Mode	Band	IEEE 802.11 Modulated/Frame Output Power (in dBm)																	
		SISO Antenna H						SISO Antenna E						SISO in MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - SP	UNII-5	9.0 ch. 2: 8.0	8.0 7.0	9.0 ch. 2: 7.0	8.0 6.0	9.0 ch. 2: 7.0	8.0 6.0	9.0 ch. 2: 8.0	8.0 7.0	9.0 ch. 2: 7.0	8.0 6.0	9.0 ch. 2: 7.0	8.0 6.0	9.0 ch. 2: 8.0	8.0 7.0	9.0 ch. 2: 7.0	8.0 6.0	9.0 ch. 2: 7.0	8.0 6.0
	UNII-7	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0
6 GHz WIFI (40MHz BW) - SP	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (80MHz BW) - SP	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (160MHz BW) - SP	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (320MHz BW) - SP	UNII-5					9.0	8.0					9.0	8.0					9.0	8.0
	UNII-7					9.0	8.0					9.0	8.0					9.0	8.0

Mode	Band	IEEE 802.11 Modulated/Frame Output Power (in dBm)																	
		SISO Antenna H						SISO Antenna E						SISO in MIMO					
		a		ax (SU)		be (SU)		a		ax (SU)		be (SU)		a (CDD + STBC)		ax (SU) (CDD + STBC, SDM)		be (SU) (CDD + STBC, SDM)	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
6 GHz WIFI (20MHz BW) - VLP	UNII-5	5.5	4.5	6.0	5.0	6.0	5.0	5.5	4.5	6.0	5.0	6.0	5.0	5.5	4.5	6.0	5.0	6.0	5.0
	UNII-7	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.0
6 GHz WIFI (40MHz BW) - VLP	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (80MHz BW) - VLP	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (160MHz BW) VLP	UNII-5			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
	UNII-7			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0			9.0	8.0	9.0	8.0
6 GHz WIFI (320MHz BW) VLP	UNII-5					9.0	8.0					9.0	8.0					9.0	8.0
	UNII-7					9.0	8.0					9.0	8.0					9.0	8.0

2.3.5 2.4 GHz Maximum Bluetooth Output Power

The below table is applicable is applicable in the following conditions:

- Pmax, DSI=0 (Body-worn, Hotspot or Phablet), DSI=1 (Head)

Mode	Data Rate	Modulated Output Power (in dBm)							
		Single Antenna				Each Chain in Dual Mode			
		Antenna H		Antenna J		Antenna H		Antenna J	
Maximum / Nominal Power		Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
Bluetooth	1Mbps	19.5	18.5	19.5	18.5	19.5	14.5	15.5	14.5
Bluetooth EDR	2Mbps	16.5	15.5	16.5	15.5	16.5	11.5	12.5	11.5
Bluetooth EDR	3Mbps	16.0	15.0	16.0	15.0	16.0	11.5	12.5	11.5
Bluetooth LE	1Mbps	20.5	19.5	20.0	19.0	15.5	14.5	14.0	13.0
Bluetooth LE	2Mbps	20.5	19.5	20.0	19.0	15.5	14.5	14.0	13.0
Bluetooth LE	125kbps	13.0	12.0	11.0	10.0	N/A	N/A	N/A	N/A
Bluetooth LE	500kbps	13.0	12.0	11.0	10.0	N/A	N/A	N/A	N/A

2.4 DUT Antenna Locations

The overall dimensions of this device are > 9 x 5 cm. A diagram showing the location of the device antennas can be found in DUT Antenna Diagram & SAR Test Setup Photographs Appendix. Since the display diagonal dimension of this device is > 150 mm and <200 mm, it is considered a “phablet.” Exact antenna dimensions and separation distances are shown in the Technical Descriptions in the FCC filing.

Table 2-1
Device Edges/Sides for SAR Testing

Antenna	Back	Front	Top	Bottom	Right	Left
A	Yes	Yes	No	Yes	Yes	Yes
B	Yes	Yes	No	Yes	Yes	No
C	Yes	Yes	No	Yes	Yes	No
D	Yes	Yes	No	Yes	No	Yes
E	Yes	Yes	Yes	No	Yes	No
F	Yes	Yes	Yes	No	No	Yes
I	Yes	Yes	No	No	No	Yes
H	Yes	Yes	Yes	No	No	Yes
J	Yes	Yes	Yes	No	Yes	No
MIMO	Yes	Yes	Yes	No	Yes	Yes

Note: Particular DUT edges were not required to be evaluated for wireless router SAR or phablet SAR if the edges were greater than 2.5 cm from the transmitting antenna according to FCC KDB Publication 941225 D06v02r01 Section III and FCC KDB Publication 648474 D01v06r03. The distances between the transmit antennas and the edges of the device are included in the filing. When wireless router mode is enabled, NTN, U-NII-1, U-NII-2A, U-NII-2C, U-NII-4, and WIFI6E operations are disabled.

2.5 Near Field Communications (NFC) Antenna

This DUT has NFC operations. The NFC antenna is integrated into the device for this model. Therefore, all SAR tests were performed with the device which already incorporates the NFC antenna. A diagram showing the location of the NFC antenna can be found in DUT Antenna Diagram & SAR Test Setup Photographs Appendix.

2.6 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D01v06, transmitters are considered to be operating simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds.

This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB Publication 447498 D01v06 procedures.

Table 2-2
Simultaneous Transmission Scenarios

No.	Capable Transmit Configuration	Head	Body-Worn Accessory	Wireless Router	Phablet	Notes
1	GSM voice + 2.4 GHz Bluetooth SISO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
2	GSM voice + 2.4 GHz Bluetooth Dual	Yes	Yes	N/A	Yes	
3	GSM voice + 2.4 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
4	GSM voice + 2.4 GHz WLAN SISO	Yes	Yes	N/A	Yes	
5	GSM voice + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
6	GSM voice + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
7	GSM voice + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
8	GSM voice + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
9	GSM voice + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
10	GSM voice + 2.4 GHz WLAN MIMO + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
11	GSM voice + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
12	GSM voice + 2.4 GHz WLAN MIMO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
13	GSM voice + 2.4 GHz WLAN SISO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
14	GSM voice + 2.4 GHz WLAN SISO + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
15	GSM voice + 2.4 GHz WLAN SISO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
16	GSM voice + 2.4 GHz WLAN SISO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
17	GSM voice + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
18	GSM voice + 2.4 GHz Bluetooth SISO + 5 GHz WLAN MIMO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
19	GSM voice + 2.4 GHz Bluetooth SISO + 5 GHz WLAN SISO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
20	GSM voice + 2.4 GHz Bluetooth SISO + 6 GHz WLAN MIMO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
21	GSM voice + 2.4 GHz Bluetooth SISO + 6 GHz WLAN SISO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
22	GSM voice + 2.4 GHz Bluetooth Dual + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
23	GSM voice + 2.4 GHz Bluetooth Dual + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
24	GSM voice + 2.4 GHz Bluetooth Dual + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
25	GSM voice + 2.4 GHz Bluetooth Dual + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
26	GSM voice + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 5 GHz WLAN MIMO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
27	GSM voice + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 5 GHz WLAN SISO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
28	GSM voice + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 6 GHz WLAN MIMO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
29	GSM voice + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 6 GHz WLAN SISO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
30	UMTS/LTE/NR + 2.4 GHz Bluetooth SISO	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
31	UMTS/LTE/NR + 2.4 GHz Bluetooth Dual	Yes	Yes	N/A	Yes	
32	UMTS/LTE/NR + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
33	UMTS/LTE/NR + 2.4 GHz WLAN SISO	Yes	Yes	Yes	Yes	
34	UMTS/LTE/NR + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
35	UMTS/LTE/NR + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
36	UMTS/LTE/NR + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
37	UMTS/LTE/NR + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
38	UMTS/LTE/NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
39	UMTS/LTE/NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
40	UMTS/LTE/NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
41	UMTS/LTE/NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
42	UMTS/LTE/NR + 2.4 GHz WLAN SISO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
43	UMTS/LTE/NR + 2.4 GHz WLAN SISO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
44	UMTS/LTE/NR + 2.4 GHz WLAN SISO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
45	UMTS/LTE/NR + 2.4 GHz WLAN SISO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
46	UMTS/LTE/NR + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
47	UMTS/LTE/NR + 2.4 GHz Bluetooth SISO + 5 GHz WLAN MIMO	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
48	UMTS/LTE/NR + 2.4 GHz Bluetooth SISO + 5 GHz WLAN SISO	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
49	UMTS/LTE/NR + 2.4 GHz Bluetooth SISO + 6 GHz WLAN MIMO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
50	UMTS/LTE/NR + 2.4 GHz Bluetooth SISO + 6 GHz WLAN SISO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
51	UMTS/LTE/NR + 2.4 GHz Bluetooth Dual + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
52	UMTS/LTE/NR + 2.4 GHz Bluetooth Dual + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
53	UMTS/LTE/NR + 2.4 GHz Bluetooth Dual + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
54	UMTS/LTE/NR + 2.4 GHz Bluetooth Dual + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
55	UMTS/LTE/NR + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 5 GHz WLAN MIMO	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
56	UMTS/LTE/NR + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 5 GHz WLAN SISO	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
57	UMTS/LTE/NR + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 6 GHz WLAN MIMO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
58	UMTS/LTE/NR + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 6 GHz WLAN SISO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
59	LTE + NR	Yes	Yes	N/A	Yes	
60	LTE + NR + 2.4 GHz Bluetooth SISO	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
61	LTE + NR + 2.4 GHz Bluetooth Dual	Yes	Yes	N/A	Yes	
62	LTE + NR + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
63	LTE + NR + 2.4 GHz WLAN SISO	Yes	Yes	Yes	Yes	
64	LTE + NR + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
65	LTE + NR + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
66	LTE + NR + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
67	LTE + NR + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
68	LTE + NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
69	LTE + NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
70	LTE + NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
71	LTE + NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
72	LTE + NR + 2.4 GHz WLAN SISO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
73	LTE + NR + 2.4 GHz WLAN SISO + 5 GHz WLAN SISO	Yes	Yes	Yes	Yes	
74	LTE + NR + 2.4 GHz WLAN SISO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
75	LTE + NR + 2.4 GHz WLAN SISO + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
76	LTE + NR + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
77	LTE + NR + 2.4 GHz Bluetooth SISO + 5 GHz WLAN MIMO	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
78	LTE + NR + 2.4 GHz Bluetooth SISO + 5 GHz WLAN SISO	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
79	LTE + NR + 2.4 GHz Bluetooth SISO + 6 GHz WLAN MIMO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
80	LTE + NR + 2.4 GHz Bluetooth SISO + 6 GHz WLAN SISO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
81	LTE + NR + 2.4 GHz Bluetooth Dual + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
82	LTE + NR + 2.4 GHz Bluetooth Dual + 5 GHz WLAN SISO	Yes	Yes	N/A	Yes	
83	LTE + NR + 2.4 GHz Bluetooth Dual + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
84	LTE + NR + 2.4 GHz Bluetooth Dual + 6 GHz WLAN SISO	Yes	Yes	N/A	Yes	
85	LTE + NR + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 5 GHz WLAN MIMO	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
86	LTE + NR + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 5 GHz WLAN SISO	Yes^	Yes	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
87	LTE + NR + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 6 GHz WLAN MIMO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
88	LTE + NR + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 6 GHz WLAN SISO	Yes^	Yes	N/A	Yes	^ Bluetooth Tethering is considered only on Ant H
89	GPRS/EDGE + 2.4 GHz Bluetooth SISO	N/A	N/A	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
90	GPRS/EDGE + 2.4 GHz Bluetooth Dual	N/A	N/A	N/A	Yes	
91	GPRS/EDGE + 2.4 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
92	GPRS/EDGE + 2.4 GHz WLAN SISO	N/A	N/A	Yes	Yes	
93	GPRS/EDGE + 5 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
94	GPRS/EDGE + 5 GHz WLAN SISO	N/A	N/A	Yes	Yes	
95	GPRS/EDGE + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
96	GPRS/EDGE + 6 GHz WLAN SISO	N/A	N/A	N/A	Yes	
97	GPRS/EDGE + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
98	GPRS/EDGE + 2.4 GHz WLAN MIMO + 5 GHz WLAN SISO	N/A	N/A	Yes	Yes	
99	GPRS/EDGE + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
100	GPRS/EDGE + 2.4 GHz WLAN MIMO + 6 GHz WLAN SISO	N/A	N/A	N/A	Yes	
101	GPRS/EDGE + 2.4 GHz WLAN SISO + 5 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
102	GPRS/EDGE + 2.4 GHz WLAN SISO + 5 GHz WLAN SISO	N/A	N/A	Yes	Yes	
103	GPRS/EDGE + 2.4 GHz WLAN SISO + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
104	GPRS/EDGE + 2.4 GHz WLAN SISO + 6 GHz WLAN SISO	N/A	N/A	N/A	Yes	
105	GPRS/EDGE + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J	N/A	N/A	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
106	GPRS/EDGE + 2.4 GHz Bluetooth SISO + 5 GHz WLAN MIMO	N/A	N/A	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
107	GPRS/EDGE + 2.4 GHz Bluetooth SISO + 5 GHz WLAN SISO	N/A	N/A	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
108	GPRS/EDGE + 2.4 GHz Bluetooth SISO + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
109	GPRS/EDGE + 2.4 GHz Bluetooth SISO + 6 GHz WLAN SISO	N/A	N/A	N/A	Yes	
110	GPRS/EDGE + 2.4 GHz Bluetooth Dual + 5 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
111	GPRS/EDGE + 2.4 GHz Bluetooth Dual + 5 GHz WLAN SISO	N/A	N/A	N/A	Yes	
112	GPRS/EDGE + 2.4 GHz Bluetooth Dual + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
113	GPRS/EDGE + 2.4 GHz Bluetooth Dual + 6 GHz WLAN SISO	N/A	N/A	N/A	Yes	
114	GPRS/EDGE + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 5 GHz WLAN MIMO	N/A	N/A	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
115	GPRS/EDGE + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 5 GHz WLAN SISO	N/A	N/A	Yes^	Yes	^ Bluetooth Tethering is considered only on Ant H
116	GPRS/EDGE + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
117	GPRS/EDGE + 2.4 GHz Bluetooth Ant H + 2.4 GHz WLAN Ant J + 6 GHz WLAN SISO	N/A	N/A	N/A	Yes	
118	NTN + 2.4 GHz Bluetooth SISO	N/A	Yes	N/A	Yes	
119	NTN + 2.4 GHz Bluetooth Dual	N/A	Yes	N/A	Yes	

1. SISO represents 2.4 GHz WLAN/BT transmission on Ant H or Ant J, and 5/6 GHz transmission on Ant H or Ant E.
2. When the user utilizes multiple services in UMTS 3G mode it uses multi-Radio Access Bearer or multi-RAB. The power control is based on a physical control channel (Dedicated Physical Control Channel [DPCCH]) and power control will be adjusted to meet the needs of both services. Therefore, the UMTS+WLAN scenario also represents the UMTS Voice/DATA + WLAN Hotspot scenario.
3. Per the manufacturer, WIFI Direct is not expected to be used in conjunction with a held-to-ear or body-worn accessory voice call. Therefore, there are no simultaneous transmission scenarios involving WIFI direct beyond that listed in the above table.
4. 5 GHz Wireless Router is only supported for the U-NII-3 by S/W, therefore U-NII-1, U-NII-2A, U-NII-2C, and U-NII-4 were not evaluated for wireless router conditions.
5. 6 GHz Wireless Router is not supported, therefore it was not evaluated for wireless router conditions.
6. This device supports 2x2 MIMO Tx for WLAN 802.11a/b/g/n/ac/ax/be. 802.11a/b/g/n/ac/ax/be supports CDD and STBC and 802.11n/ac/ax/be additionally supports SDM.
7. This device supports VoWIFI.
8. This device supports Bluetooth Tethering on Ant H only.
9. This device supports VoLTE.
10. This device supports VoNR.
11. LTE + 5G NR FR1 Scenarios are limited to EN-DC combinations with anchor bands as shown in the NR FR1 checklist.
12. 5G NR FR2 n258, n260, and n261 cannot transmit simultaneously.
13. LTE + 5G NR FR2 and 5G NR1 + 5G NR FR2 scenarios are limited to combinations with anchor bands as shown in the NR FR2 checklist.
14. UWB and NFC were evaluated for phablet based on expected usage conditions.

2.7 Miscellaneous SAR Test Considerations

(A) WIFI/BT

Since U-NII-1 and U-NII-2A bands have the same maximum output power and the highest reported SAR for U-NII-2A is less than 1.2 W/kg, SAR is not required for U-NII-1 band according to FCC KDB Publication 248227 D01v02r02.

Since Wireless Router operations are not allowed by the chipset firmware using U-NII-1, U-NII-2A, U-NII-2C, U-NII-4 WIFI and 6 GHz, only 2.4 GHz WIFI, 2.4 GHz Bluetooth, and U-NII-3 WIFI Hotspot SAR tests and combinations are considered for SAR with respect to Wireless Router configurations according to FCC KDB 941225 D06v02r01.

This device supports IEEE 802.11ax/be with the following features:

a) Up to 320 MHz Bandwidth only for 6GHz
b) Up to 160 MHz Bandwidth only for 5/6 GHz
c) Up to 20 MHz Bandwidth only for 2.4 GHz
d) 2 Tx antenna output
e) Up to 4KQAM is supported
f) TDWR and Band gap channels are supported for 5/6 GHz
g) MU-MIMO UL Operations are not supported

Per FCC KDB Publication 648474 D01v06r03, this device is considered a "phablet" since the display diagonal dimension is greater than 150mm and less than 200mm. Phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. Because wireless router operations are not supported for U-NII-1, U-NII-2A, U-NII-2C, U-NII-4 WIFI and 6 GHz, phablet SAR tests were performed. Phablet SAR was not evaluated for 2.4 GHz WLAN, 2.4 GHz Bluetooth, and U-NII-3 WLAN operations since wireless router 1g SAR was < 1.2 W/kg.

Per April 2019 TCB Workshop Notes and FCC guidance, SAR testing for 802.11ax/be follows initial test configuration procedures of KDB 248227, with 802.11ax/be considered a higher order 802.11 mode.

Per FCC guidance, SAR was performed using 6.5 GHz SAR probe calibration factors for WIFI 6GHz/UWB and 8GHz SAR probe calibration factors for UWB. FCC KDB 648474, FCC KDB 941225 D07 and FCC KDB 248227 were followed for test positions, distances, and modes. Absorbed power density (APD) using a $4cm^2$ averaging area is reported based on SAR measurements. Incident power density is evaluated at 2mm ensuring that the resolution is sufficient such that integrated power density (iPD) between d=2mm and d=λ/5mm is ≥ -1dB per equipment manufacturer guidance. Power density results are scaled up for uncertainty above 30%. Per TCB workshop October 2020 notes, 5 channels were tested for WIFI 6 GHz.

(B) Licensed Transmitter(s)

GSM/GPRS/EDGE DTM is not supported for US bands. Therefore, the GSM Voice modes in this report do not transmit simultaneously with GPRS/EDGE Data.

This device is only capable of QPSK HSUPA in the uplink. Therefore, no additional SAR tests are required beyond that described for devices with HSUPA in KDB 941225 D01v03r01.

LTE SAR for the higher modulations and lower bandwidths were not tested since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth; and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg for all configurations according to FCC KDB 941225 D05v02r04.

This device supports LTE Carrier Aggregation (CA) in the downlink. All uplink communications are identical to Release 8 specifications. Per FCC KDB Publication 941225 D05A v01r02, SAR for LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive.

Per FCC KDB Publication 648474 D01v06r03, this device is considered a "phablet" since the display diagonal dimension is greater than 150mm and less than 200mm. Therefore, phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg.

This device supports downlink 4x4 MIMO operations for some LTE Bands. Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation was not needed since the maximum average output power in 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25 dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

This device supports LTE/NR capabilities with overlapping transmission frequency ranges. When the supported frequency range of an LTE/NR Band falls completely within an LTE/NR band with a larger transmission frequency range, both LTE/NR bands have the same target power (or the band with the larger transmission frequency range has a higher target power), and both LTE/NR bands share the same transmission path and signal characteristics, SAR was only assessed for the band with the larger transmission frequency range.

This device supports LTE Carrier Aggregation (CA) for LTE Band 48 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per 2017 Fall TCB Workshop Notes.

This device can transmit with antenna switching for bands/modes on antenna A,B,E, and F. SAR tests were performed for each antenna where switching is used per band/mode to ensure compliance. Antennas and indicated band/modes are included in section 2.3.1 of this report .

Per FCC Guidance, C-Band for NR n77 (3705 – 3975 MHz) was fully tested according to FCC procedures. For each exposure condition and antenna, the worst-case position was additionally evaluated for the NR n77 DoD (3455.01 – 3544.98 MHz).

This device uses two transmit pathways for n41 operations (Path 1 and Path 2). For each exposure condition, the pathway with the highest target power was fully evaluated. The worst case for each antenna and exposure condition was additionally evaluated using the other path.

This device supports 5G NR for Bands n258, n260, and n261. RF Exposure assessment and simultaneous transmission analysis for these bands can be found in the Near Field PD Report (report SN can be found in Section 2.10 – Bibliography).

NR implementation supports SA and NSA mode. In EN-DC mode, NR operates with the LTE Bands shown in the NR FR1 checklist acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.

SRS was tested with CW signal per Qualcomm guidance in 80-w2112-4.

Per Qualcomm guidance in 80-W2112-4, when hotspot mode applies, 10-g extremity SAR is required for the surfaces and edges with hotspot mode 1g reported SAR > 1.2 W/kg. For surfaces and edges with hotspot mode 1g SAR < 1.2 W/kg, the 10-g extremity can be excluded when the normalized *SAR_design_target* for extremity DSI is less than or equal to that of hotspot DSI.

$$SAR\_design\_target\_extremity \leq \frac{SAR\_design\_target\_hotspot}{1g\ SAR\ limit} * 10g\ SAR\ limit$$

2.8 Guidance Applied

- IEEE 1528-2013
- FCC KDB Publication 941225 D01v03r01, D05v02r05, D05Av01r02, D06v02r01 (2G/3G/4G and Hotspot)
- FCC KDB Publication 248227 D01v02r02 (SAR Considerations for 802.11 Devices)
- FCC KDB Publication 447498 D01v06 (General SAR Guidance)
- FCC KDB Publication 865664 D01v01r04, D02v01r02 (SAR Measurements up to 6 GHz)
- FCC KDB Publication 648474 D01v06r03 (Phablet Procedures)
- October 2013 TCB Workshop Notes (GPRS Testing Considerations)
- May 2017 TCB Workshop Notes (LTE 4x4 Downlink MIMO)
- November 2017, April 2018, October 2018 TCB Workshop Notes (LTE Carrier Aggregation)
- April 2019 TCB Workshop Notes (IEEE 802.11ax, Dynamic Antenna Tuning)
- November 2017, October 2018, April 2019, November 2019, October 2020 TCBC Workshop Notes (6-8 GHz)
- SPEAG DASY6 Application Note (Interim Procedures for Devices Operating at 6-10 GHz) (Nov 2021)
- IEC/IEEE 63195-1:2022
- IEC 62479:2010

2.9 Device Serial Numbers

Several samples with identical hardware were used to support SAR testing. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units. The serial numbers used for each test are indicated alongside the results in Section 12.

2.10 Bibliography

Report Type	Report Serial Number
Near Field PD Report (Part 1)	1M2408260067-25.A3L
Near Field PD Report (Part 0)	
RF Exposure Part 2 Test Report	1M2408260067-24.A3L
RF Exposure Compliance Summary Report	1M2408260067-26.A3L
RF Exposure Part 0 Test Report	1M2408260067-31.A3L

3 LTE AND NR INFORMATION

LTE Information					
Form Factor	Portable Handset				
Frequency Range of each LTE transmission band	LTE Band 71: 665.5 - 695.5 MHz				
	LTE Band 12: 699.7 - 715.3 MHz				
	LTE Band 13: 779.5 - 784.5 MHz				
	LTE Band 14: 790.5 - 795.5 MHz				
	LTE Band 26: 814.7 - 848.3 MHz				
	LTE Band 5: 824.7 - 848.3 MHz				
	LTE Band 66: 1710.7 - 1779.3 MHz				
	LTE Band 4: 1710.7 - 1754.3 MHz				
	LTE Band 25: 1850.7 - 1914.3 MHz				
	LTE Band 2: 1850.7 - 1909.3 MHz				
	LTE Band 30: 2307.5 - 2312.5 MHz				
	LTE Band 7: 2502.5 - 2567.5 MHz				
	LTE Band 41: 2498.5 - 2687.5 MHz				
	LTE Band 38: 2572.5 - 2617.5 MHz				
	LTE Band 48: 3552.5 - 3697.5 MHz				
Channel Bandwidths	LTE Band 71: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 13: 5 MHz, 10 MHz				
	LTE Band 14: 5 MHz, 10 MHz				
	LTE Band 26: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz				
	LTE Band 5: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 66: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 4: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 25: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 2: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 30: 5 MHz, 10 MHz				
	LTE Band 7: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 38: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 48: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid	Mid-High	High
LTE Band 71: 5 MHz	665.5 (133147)		680.5 (133297)	695.5 (133447)	
LTE Band 71: 10 MHz	668 (133172)		680.5 (133297)	693 (133422)	
LTE Band 71: 15 MHz	670.5 (133197)		680.5 (133297)	690.5 (133397)	
LTE Band 71: 20 MHz	673 (133222)		680.5 (133297)	688 (133372)	
LTE Band 12: 1.4 MHz	699.7 (23017)		707.5 (23095)	715.3 (23173)	
LTE Band 12: 3 MHz	700.5 (23025)		707.5 (23095)	714.5 (23165)	
LTE Band 12: 5 MHz	701.5 (23035)		707.5 (23095)	713.5 (23155)	
LTE Band 12: 10 MHz	704 (23060)		707.5 (23095)	711 (23130)	
LTE Band 13: 5 MHz	779.5 (23205)		782 (23230)	784.5 (23255)	
LTE Band 13: 10 MHz	(N/A)		782 (23230)	(N/A)	
LTE Band 14: 5 MHz	790.5 (23305)		793 (23330)	795.5 (23355)	
LTE Band 14: 10 MHz	(N/A)		793 (23330)	(N/A)	
LTE Band 26: 1.4 MHz	814.7 (26697)		831.5 (26865)	848.3 (27033)	
LTE Band 26: 3 MHz	815.5 (26705)		831.5 (26865)	847.5 (27025)	
LTE Band 26: 5 MHz	816.5 (26715)		831.5 (26865)	846.5 (27015)	
LTE Band 26: 10 MHz	819 (26740)		831.5 (26865)	844 (26990)	
LTE Band 26: 15 MHz	821.5 (26765)		831.5 (26865)	841.5 (26965)	
LTE Band 5: 1.4 MHz	824.7 (20407)		836.5 (20525)	848.3 (20643)	
LTE Band 5: 3 MHz	825.5 (20415)		836.5 (20525)	847.5 (20635)	
LTE Band 5: 5 MHz	826.5 (20425)		836.5 (20525)	846.5 (20625)	
LTE Band 5: 10 MHz	829 (20450)		836.5 (20525)	844 (20600)	
LTE Band 66: 1.4 MHz	1710.7 (131979)		1745 (132322)	1779.3 (132665)	
LTE Band 66: 3 MHz	1711.5 (131987)		1745 (132322)	1778.5 (132657)	
LTE Band 66: 5 MHz	1712.5 (131997)		1745 (132322)	1777.5 (132647)	
LTE Band 66: 10 MHz	1715 (132022)		1745 (132322)	1775 (132622)	
LTE Band 66: 15 MHz	1717.5 (132047)		1745 (132322)	1772.5 (132597)	
LTE Band 66: 20 MHz	1720 (132072)		1745 (132322)	1770 (132572)	
LTE Band 4: 1.4 MHz	1710.7 (19957)		1732.5 (20175)	1754.3 (20393)	
LTE Band 4: 3 MHz	1711.5 (19965)		1732.5 (20175)	1753.5 (20385)	
LTE Band 4: 5 MHz	1712.5 (19975)		1732.5 (20175)	1752.5 (20375)	
LTE Band 4: 10 MHz	1715 (20000)		1732.5 (20175)	1750 (20350)	
LTE Band 4: 15 MHz	1717.5 (20025)		1732.5 (20175)	1747.5 (20325)	
LTE Band 4: 20 MHz	1720 (20050)		1732.5 (20175)	1745 (20300)	
LTE Band 25: 1.4 MHz	1850.7 (26047)		1882.5 (26365)	1914.3 (26683)	
LTE Band 25: 3 MHz	1851.5 (26055)		1882.5 (26365)	1913.5 (26675)	
LTE Band 25: 5 MHz	1852.5 (26065)		1882.5 (26365)	1912.5 (26665)	
LTE Band 25: 10 MHz	1855 (26090)		1882.5 (26365)	1910 (26640)	
LTE Band 25: 15 MHz	1857.5 (26115)		1882.5 (26365)	1907.5 (26615)	
LTE Band 25: 20 MHz	1860 (26140)		1882.5 (26365)	1905 (26590)	
LTE Band 2: 1.4 MHz	1850.7 (18607)		1880 (18900)	1909.3 (19193)	
LTE Band 2: 3 MHz	1851.5 (18615)		1880 (18900)	1908.5 (19185)	
LTE Band 2: 5 MHz	1852.5 (18625)		1880 (18900)	1907.5 (19175)	
LTE Band 2: 10 MHz	1855 (18650)		1880 (18900)	1905 (19150)	
LTE Band 2: 15 MHz	1857.5 (18675)		1880 (18900)	1902.5 (19125)	
LTE Band 2: 20 MHz	1860 (18700)		1880 (18900)	1900 (19100)	
LTE Band 30: 5 MHz	2307.5 (27685)		2310 (27710)	2312.5 (27735)	
LTE Band 30: 10 MHz	(N/A)		2310 (27710)	(N/A)	
LTE Band 7: 5 MHz	2502.5 (20775)		2535 (21100)	2567.5 (21425)	
LTE Band 7: 10 MHz	2505 (20800)		2535 (21100)	2565 (21400)	
LTE Band 7: 15 MHz	2507.5 (20825)		2535 (21100)	2562.5 (21375)	
LTE Band 7: 20 MHz	2510 (20850)		2535 (21100)	2560 (21350)	
LTE Band 41: 5 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 20 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 38: 5 MHz	2572.5 (37775)		2595 (38000)	2617.5 (38225)	
LTE Band 38: 10 MHz	2575 (37800)		2595 (38000)	2615 (38200)	
LTE Band 38: 15 MHz	2577.5 (37825)		2595 (38000)	2612.5 (38175)	
LTE Band 38: 20 MHz	2580 (37850)		2595 (38000)	2610 (38150)	
LTE Band 48: 5 MHz	3552.5 (55265)	3600.8 (55748)	(N/A)	3649.2 (56232)	3697.5 (56715)
LTE Band 48: 10 MHz	3555 (55290)	3601.7 (55757)	(N/A)	3648.3 (56223)	3695 (56690)
LTE Band 48: 15 MHz	3557.5 (55315)	3602.5 (55765)	(N/A)	3647.5 (56215)	3692.5 (56665)
LTE Band 48: 20 MHz	3560 (55340)	3603.3 (55773)	(N/A)	3646.7 (56207)	3690 (56640)
UE Category	UL UE Cat 18, DL UE Cat 20				
Modulations Supported in UL	QPSK, 16QAM, 64QAM, 256QAM				
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3~6.2.5? (manufacturer attestation to be provided)	YES				
A-MPR (Additional MPR) disabled for SAR Testing?	YES				
LTE Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations				
LTE Additional Information	This device does not support full CA features on 3GPP Release 16. It supports carrier aggregation and downlink MIMO features. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 17 Features are not supported: Relay, HetNet, Enhanced MIMO, eICIC, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

NR Information												
Form Factor	Portable Handset											
Frequency Range of each NR transmission band	NR Band n71: 665.5 - 695.5 MHz NR Band n12: 701.5 - 713.5 MHz NR Band n14: 790.5 - 795.5 MHz NR Band n26: 816.5 - 846.5 MHz NR Band n5: 826.5 - 846.5 MHz NR Band n70: 1697.5 - 1707.5 MHz NR Band n66: 1712.5 - 1777.5 MHz NR Band n25: 1852.5 - 1912.5 MHz NR Band n2: 1852.5 - 1907.5 MHz NR Band n30: 2307.5 - 2312.5 MHz NR Band n7: 2502.5 - 2567.5 MHz NR Band n41: 2501.01 - 2685 MHz NR Band n38: 2575 - 2615 MHz NR Band n48: 3555 - 3694.98 MHz NR Band n78: 3455.01 - 3544.98 MHz, 3705 - 3795 MHz NR Band n77: 3455.01 - 3544.98 MHz, 3705 - 3975 MHz NR Band n77 DoD: 3455.01 - 3544.98 MHz											
Channel Bandwidths	NR Band n71: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 35 MHz NR Band n12: 5 MHz, 10 MHz, 15 MHz NR Band n14: 5 MHz, 10 MHz NR Band n26: 5 MHz, 10 MHz, 15 MHz, 20 MHz NR Band n5: 5 MHz, 10 MHz, 15 MHz, 20 MHz NR Band n70: 5 MHz, 10 MHz, 15 MHz NR Band n66: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 35 MHz, 40 MHz, 45 MHz NR Band n25: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 35 MHz, 40 MHz NR Band n2: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 35 MHz, 40 MHz NR Band n30: 5 MHz, 10 MHz NR Band n7: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 35 MHz, 40 MHz, 50 MHz NR Band n41: 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 35 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz NR Band n38: 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz NR Band n48: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz NR Band n78: 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz NR Band n77: 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz											
Channel Numbers and Frequencies (MHz)												
NR Band n71: 5 MHz	665.5 (133100)		680.5 (136100)						695.5 (139100)			
NR Band n71: 10 MHz	668 (133600)		680.5 (136100)						693 (138600)			
NR Band n71: 15 MHz	670.5 (134100)		680.5 (136100)						690.5 (138100)			
NR Band n71: 20 MHz	673 (134600)		680.5 (136100)						688 (137600)			
NR Band n71: 25 MHz	675.5 (135100)		680.5 (136100)						685.5 (137100)			
NR Band n71: 30 MHz	678 (135600)		680.5 (136100)						683 (136600)			
NR Band n71: 35 MHz	680.5 (136100)		680.5 (136100)						680.5 (136100)			
NR Band n12: 5 MHz	701.5 (140300)		707.5 (141500)						713.5 (142700)			
NR Band n12: 10 MHz	704 (140800)		707.5 (141500)						711 (142200)			
NR Band n12: 15 MHz	706.5 (141300)		707.5 (141500)						708.5 (141700)			
NR Band n14: 5 MHz	790.5 (158100)		793 (158600)						795.5 (159100)			
NR Band n14: 10 MHz	793 (158600)		793 (158600)						793 (158600)			
NR Band n26: 5 MHz	816.5 (163300)		831.5 (166300)						846.5 (169300)			
NR Band n26: 10 MHz	819 (163800)		831.5 (166300)						844 (168800)			
NR Band n26: 15 MHz	821.5 (164300)		831.5 (166300)						841.5 (168300)			
NR Band n26: 20 MHz	824 (164800)		831.5 (166300)						839 (167800)			
NR Band n5: 5 MHz	826.5 (165300)		836.5 (167300)						846.5 (169300)			
NR Band n5: 10 MHz	829 (165800)		836.5 (167300)						844 (168800)			
NR Band n5: 15 MHz	831.5 (166300)		836.5 (167300)						841.5 (168300)			
NR Band n5: 20 MHz	834 (166800)		836.5 (167300)						839 (167800)			
NR Band n70: 5 MHz	1697.5 (339500)		1702.5 (340500)						1707.5 (341500)			
NR Band n70: 10 MHz	1700 (340000)		1702.5 (340500)						1705 (341000)			
NR Band n70: 15 MHz	1702.5 (340500)		1702.5 (340500)						1702.5 (340500)			
NR Band n66: 5 MHz	1712.5 (342500)		1745 (349000)						1777.5 (355500)			
NR Band n66: 10 MHz	1715 (343000)		1745 (349000)						1775 (355000)			
NR Band n66: 15 MHz	1717.5 (343500)		1745 (349000)						1772.5 (354500)			
NR Band n66: 20 MHz	1720 (344000)		1745 (349000)						1770 (354000)			
NR Band n66: 25 MHz	1722.5 (344500)		1745 (349000)						1767.5 (353500)			
NR Band n66: 30 MHz	1725 (345000)		1745 (349000)						1765 (353000)			
NR Band n66: 35 MHz	1727.5 (345500)		1745 (349000)						1762.5 (352500)			
NR Band n66: 40 MHz	1730 (346000)		1745 (349000)						1760 (352000)			
NR Band n66: 45 MHz	1730 (346000)		1745 (349000)						1760 (352000)			
NR Band n25: 5 MHz	1852.5 (370500)		1882.5 (376500)						1912.5 (382500)			
NR Band n25: 10 MHz	1855 (371000)		1882.5 (376500)						1910 (382000)			
NR Band n25: 15 MHz	1857.5 (371500)		1882.5 (376500)						1907.5 (381500)			
NR Band n25: 20 MHz	1860 (372000)		1882.5 (376500)						1905 (381000)			
NR Band n25: 25 MHz	1862.5 (372500)		1882.5 (376500)						1902.5 (380500)			
NR Band n25: 30 MHz	1865 (373000)		1882.5 (376500)						1900 (380000)			
NR Band n25: 35 MHz	1867.5 (373500)		1882.5 (376500)						1897.5 (379500)			
NR Band n25: 40 MHz	1870 (374000)		1882.5 (376500)						1895 (379000)			
NR Band n2: 5 MHz	1852.5 (370500)		1880 (376000)						1907.5 (381500)			
NR Band n2: 10 MHz	1855 (371000)		1880 (376000)						1905 (381000)			
NR Band n2: 15 MHz	1857.5 (371500)		1880 (376000)						1902.5 (380500)			
NR Band n2: 20 MHz	1860 (372000)		1880 (376000)						1900 (380000)			
NR Band n2: 25 MHz	(N/A)		1880 (376000)						(N/A)			
NR Band n2: 30 MHz	(N/A)		1880 (376000)						(N/A)			
NR Band n2: 35 MHz	(N/A)		1880 (376000)						(N/A)			
NR Band n2: 40 MHz	(N/A)		1880 (376000)						(N/A)			
NR Band n30: 5 MHz	2307.5 (461500)		2310 (462000)						2312.5 (462500)			
NR Band n30: 10 MHz	2310 (462000)		2310 (462000)						2310 (462000)			
NR Band n7: 5 MHz	2502.5 (500500)		2535 (507000)						2567.5 (513500)			
NR Band n7: 10 MHz	2505 (501000)		2535 (507000)						2565 (513000)			
NR Band n7: 15 MHz	2507.5 (501500)		2535 (507000)						2562.5 (512500)			
NR Band n7: 20 MHz	2510 (502000)		2535 (507000)						2560 (512000)			
NR Band n7: 25 MHz	2512.5 (502500)		2535 (507000)						2557.5 (511500)			
NR Band n7: 30 MHz	2515 (503000)		2535 (507000)						2555 (511000)			
NR Band n7: 35 MHz	2517.5 (503500)		2535 (507000)						2552.5 (511500)			
NR Band n7: 40 MHz	2520 (504000)		2535 (507000)						2550 (510000)			
NR Band n7: 50 MHz	2525 (505000)		2535 (507000)						2545 (509000)			
NR Band n41: 10 MHz	2501.01 (500202)	2547 (509400)	2592.99 (518598)						2639.01 (527802)	2685 (537000)		
NR Band n41: 15 MHz	2503.5 (500700)	2548.26 (509652)	2592.99 (518598)						2637.75 (527550)	2682.51 (536502)		
NR Band n41: 20 MHz	2506.02 (501204)	2549.49 (509898)	2592.99 (518598)						2636.49 (527298)	2679.99 (535998)		
NR Band n41: 25 MHz	2508.51 (501702)	2550.75 (510150)	2592.99 (518598)						2635.26 (527052)	2677.5 (535500)		
NR Band n41: 30 MHz	2511 (502200)	2552.01 (510402)	2592.99 (518598)						2634 (526800)	2674.98 (534996)		
NR Band n41: 35 MHz	2513.52 (502704)	2553.24 (510648)	2592.99 (518598)						2632.74 (526548)	2672.49 (534498)		
NR Band n41: 40 MHz	2516.01 (503202)	2567.34 (513668)	(N/A)						2618.67 (523734)	2670 (534000)		
NR Band n41: 45 MHz	2518.5 (503700)	2568.18 (513636)	(N/A)						2617.83 (523566)	2667.48 (533496)		
NR Band n41: 50 MHz	2521.02 (504204)		2592.99 (518598)						2664.99 (532998)			
NR Band n41: 60 MHz	2526 (505200)		2592.99 (518598)						2659.98 (531996)			
NR Band n41: 70 MHz	2531.01 (506202)		(N/A)						2655 (531000)			
NR Band n41: 80 MHz	2536.02 (507204)		(N/A)						2649.99 (529998)			
NR Band n41: 90 MHz	2541 (508200)		(N/A)						2644.98 (528996)			
NR Band n41: 100 MHz	2546.01 (509202)		2592.99 (518598)						2640 (528000)			
NR Band n38: 10 MHz	2575 (515000)		2595 (519000)						2615 (523000)			
NR Band n38: 15 MHz	2577.5 (515500)		2595 (519000)						2612.5 (522500)			
NR Band n38: 20 MHz	2580 (516000)		2595 (519000)						2610 (522000)			
NR Band n38: 25 MHz	2582.5 (516500)		2595 (519000)						2607.5 (521500)			
NR Band n38: 30 MHz	2585 (517000)		2595 (519000)						2605 (521000)			
NR Band n38: 40 MHz	2590 (518000)		2595 (519000)						2600 (520000)			
NR Band n48: 10 MHz	3555 (637000)	3601.68 (640112)	(N/A)						3648.33 (643222)	3694.98 (646332)		
NR Band n48: 15 MHz	3557.52 (637168)	3602.49 (640166)	(N/A)						3647.49 (643166)	3692.49 (646166)		
NR Band n48: 20 MHz	3560.01 (637334)	3603.33 (640222)	(N/A)						3646.68 (643112)	3690 (646000)		
NR Band n48: 30 MHz	3565.02 (637668)	3605.01 (640334)	(N/A)						3645 (643000)	3684.99 (645666)		
NR Band n48: 40 MHz	3570 (638000)	(N/A)	3624.99 (641666)						(N/A)	3679.98 (645332)		
NR Band n78: 10 MHz	3705 (647000)	(N/A)	(N/A)	(N/A)	3750 (650000)	(N/A)			(N/A)	3795 (655000)		
NR Band n78: 15 MHz	3707.52 (647168)	(N/A)	(N/A)	(N/A)	3750 (650000)	(N/A)			(N/A)	3792.48 (652832)		
NR Band n78: 20 MHz	3710.01 (647334)	(N/A)	(N/A)	(N/A)	3750 (650000)	(N/A)			(N/A)	3789.99 (652666)		
NR Band n78: 25 MHz	3712.5 (647500)	(N/A)	(N/A)	(N/A)	3750 (650000)	(N/A)			(N/A)	3787.5 (652500)		
NR Band n78: 30 MHz	3715.02 (647668)	(N/A)	(N/A)	(N/A)	3750 (650000)	(N/A)			(N/A)	3784.98 (652332)		
NR Band n78: 40 MHz	3720 (648000)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)			(N/A)	3780 (652000)		
NR Band n78: 50 MHz	3725.01 (648334)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)			(N/A)	3774.99 (651666)		
NR Band n78: 60 MHz	(N/A)	(N/A)	(N/A)	(N/A)	3750 (650000)	(N/A)			(N/A)	(N/A)		
NR Band n78: 70 MHz	(N/A)	(N/A)	(N/A)	(N/A)	3750 (650000)	(N/A)			(N/A)	(N/A)		
NR Band n78: 80 MHz	(N/A)	(N/A)	(N/A)	(N/A)	3750 (650000)	(N/A)			(N/A)	(N/A)		
NR Band n78: 90 MHz	(N/A)	(N/A)	(N/A)	(N/A)	3750 (650000)	(N/A)			(N/A)	(N/A)		
NR Band n78: 100 MHz	(N/A)	(N/A)	(N/A)	(N/A)	3750 (650000)	(N/A)			(N/A)	(N/A)		
NR Band n77 DoD: 10 MHz	3455.01 (630334)		3500.01 (633334)						3544.98 (636332)			
NR Band n77 DoD: 15 MHz	3457.5 (630500)		3500.01 (633334)						3542.49 (636166)			
NR Band n77 DoD: 20 MHz	3460.02 (630668)		3500.01 (633334)						3540 (636000)			
NR Band n77 DoD: 25 MHz	3462.51 (630834)		3500.01 (633334)						3537.48 (635832)			
NR Band n77 DoD: 30 MHz	3465 (631000)		3500.01 (633334)						3534.99 (635666)			
NR Band n77 DoD: 40 MHz	3470.01 (631334)		(N/A)						3529.98 (635332)			
NR Band n77 DoD: 50 MHz	3475.02 (631668)		(N/A)						3525 (635000)			
NR Band n77 DoD: 60 MHz	(N/A)		3500.01 (633334)						(N/A)			
NR Band n77 DoD: 70 MHz	(N/A)		3500.01 (633334)						(N/A)			
NR Band n77 DoD: 80 MHz	(N/A)		3500.01 (633334)						(N/A)			
NR Band n77 DoD: 90 MHz	(N/A)		3500.01 (633334)						(N/A)			
NR Band n77 DoD: 100 MHz	(N/A)		3500.01 (633334)						(N/A)			
NR Band n77: 10 MHz	3705 (647000)	3759 (650600)	3813 (654200)	(N/A)	3867 (657800)				3921 (661400)	3975 (665000)		
NR Band n77: 15 MHz	3707.52 (647168)	3760.5 (650700)	3813.51 (654234)	(N/A)	3866.49 (657766)				3919.5 (661300)	3972.48 (664832)		
NR Band n77: 20 MHz	3710.01 (647334)	3762 (650800)	3813.99 (654266)	(N/A)	3866.01 (657734)				3918 (661200)	3969.99 (664666)		
NR Band n77: 25 MHz	3712.5 (647500)	3763.5 (650900)	3814.5 (654300)	(N/A)	3865.5 (657700)				3916.5 (661100)	3967.5 (664500)		
NR Band n77: 30 MHz	3715.02 (647668)	3765 (651000)	3815.01 (654334)	(N/A)	3864.99 (657666)				3915 (661000)	3964.98 (664332)		
NR Band n77: 40 MHz	3720 (648000)	3768 (651200)	3816 (654400)	(N/A)	3864 (657600)				3912 (660800)	3960 (664000)		
NR Band n77: 50 MHz	3725.01 (648334)	3782.49 (652166)	(N/A)	3840 (656000)	(N/A)				3897.51 (659834)	3954.99 (663666)		
NR Band n77: 60 MHz	3730.02 (648668)	3803.34 (653556)	(N/A)	(N/A)	(N/A)				3876.66 (658444)	3949.98 (663332)		
NR Band n77: 70 MHz	3735 (649000)	3804.99 (653666)	(N/A)	(N/A)	(N/A)				3875.01 (658334)	3945 (663000)		
NR Band n77: 80 MHz	3740.01 (649334)	(N/A)	3840 (656000)						(N/A)	3939.99 (662666)		
NR Band n77: 90 MHz	3745.02 (649668)	(N/A)	3840 (656000)						(N/A)	3934.98 (662332)		
NR Band n77: 100 MHz	3750 (650000)	(N/A)	(N/A)						(N/A)	3930 (662000)		
SCS for NR Band n71, n12, n14, n26, n5, n70, n66, n25, n2, n30, n7	15 kHz											
SCS for NR Band n41, n38, n48, n78, n77, n77 DoD	30 kHz											
Modulations Supported in UL	DFT-s-OFDM: π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 256QAM											
A-MPR (Additional MPR) disabled for SAR Testing?	YES											
EN-DC and NR Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations											
LTE Anchor Bands for NR Band n71	LTE Band 2/48/66											
LTE Anchor Bands for NR Band n12	N/A											
LTE Anchor Bands for NR Band n14	N/A											
LTE Anchor Bands for NR Band n26	N/A											
LTE Anchor Bands for NR Band n5	LTE Band 2/48/66											
LTE Anchor Bands for NR Band n70	N/A											
LTE Anchor Bands for NR Band n66	LTE Band 2/5/12/13/48											
LTE Anchor Bands for NR Band n25	LTE Band 12											
LTE Anchor Bands for NR Band n2	LTE Band 5/12/13/48/66											
LTE Anchor Bands for NR Band n30	N/A											
LTE Anchor Bands for NR Band n7	N/A											
LTE Anchor Bands for NR Band n41	LTE Band 2/5/12/66											
LTE Anchor Bands for NR Band n38	N/A											
LTE Anchor Bands for NR Band n48	N/A											
LTE Anchor Bands for NR Band n78	N/A											
LTE Anchor Bands for NR Band n77	LTE Band 2/5/12/13/66											
LTE Anchor Bands for NR Band n77 DoD	N/A											

4 INTRODUCTION

The FCC and Innovation, Science, and Economic Development Canada have adopted the guidelines for evaluating the environmental effects of radio frequency (RF) radiation in ET Docket 93-62 on Aug. 6, 1996 and Health Canada Safety Code 6 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices. [1]

The safety limits used for the environmental evaluation measurements are based on the criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (SAR) in IEEE/ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz [3] and Health Canada RF Exposure Guidelines Safety Code 6 [22]. The measurement procedure described in IEEE/ANSI C95.3-2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave [4] is used for guidance in measuring the Specific Absorption Rate (SAR) due to the RF radiation exposure from the Equipment Under Test (EUT). These criteria for SAR evaluation are similar to those recommended by the International Committee for Non-Ionizing Radiation Protection (ICNIRP) in Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," Report No. Vol 74. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

4.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 4-1).

Equation 4-1
SAR Mathematical Equation

$$SAR = \frac{d}{dt}\left(\frac{dU}{dm}\right) = \frac{d}{dt}\left(\frac{dU}{\rho dv}\right)$$

SAR is expressed in units of Watts per Kilogram (W/kg).

$$SAR = \frac{\sigma \cdot E^2}{\rho}$$

where:

σ = conductivity of the tissue-simulating material (S/m)
ρ = mass density of the tissue-simulating material (kg/m^3)
E = Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]

5 DOSIMETRIC ASSESSMENT

5.1 Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

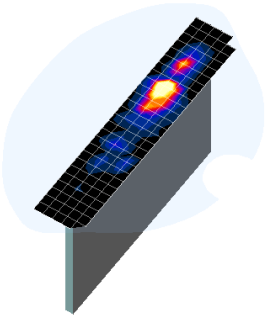


Figure 5-1
Sample SAR Area Scan

1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 5-1) and IEEE 1528-2013.
2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.
3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 5-1) and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):

   a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 5-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).

   b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the “Not a knot” condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.

   c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

Table 5-1
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

Frequency	Maximum Area Scan Resolution (mm) (Δx_{area}, Δy_{area})	Maximum Zoom Scan Resolution (mm) (Δx_{zoom}, Δy_{zoom})	Maximum Zoom Scan Spatial Resolution (mm)			Minimum Zoom Scan Volume (mm) (x,y,z)
			Uniform Grid	Graded Grid		
			$\Delta z_{zoom}(n)$	$\Delta z_{zoom}(1)$*	$\Delta z_{zoom}(n>1)$*	
≤ 2 GHz	≤ 15	≤ 8	≤ 5	≤ 4	≤ 1.5*Δz_{zoom}(n-1)	≥ 30
2-3 GHz	≤ 12	≤ 5	≤ 5	≤ 4	≤ 1.5*Δz_{zoom}(n-1)	≥ 30
3-4 GHz	≤ 12	≤ 5	≤ 4	≤ 3	≤ 1.5*Δz_{zoom}(n-1)	≥ 28
4-5 GHz	≤ 10	≤ 4	≤ 3	≤ 2.5	≤ 1.5*Δz_{zoom}(n-1)	≥ 25
5-6 GHz	≤ 10	≤ 4	≤ 2	≤ 2	≤ 1.5*Δz_{zoom}(n-1)	≥ 22

*Also compliant to IEEE 1528-2013 Table 6

6 DEFINITION OF REFERENCE POINTS

6.1 EAR REFERENCE POINT

Figure 6-2 shows the front, back and side views of the SAM Twin Phantom. The point "M" is the reference point for the center of the mouth, "LE" is the left ear reference point (ERP), and "RE" is the right ERP. The ERP is 15mm posterior to the entrance to the ear canal (EEC) along the B-M line (Back-Mouth), as shown in Figure 6-1. The plane passing through the two ear canals and M is defined as the Reference Plane. The line N-F (Neck-Front), also called the Reference Pivoting Line, is not perpendicular to the reference plane (see Figure 6-1). Line B-M is perpendicular to the N-F line. Both N-F and B-M lines are marked on the external phantom shell to facilitate handset positioning [5].

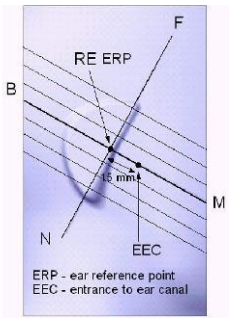


Figure 6-1
Close-Up Side view of ERP

6.2 HANDSET REFERENCE POINTS

Two imaginary lines on the handset were established: the vertical centerline and the horizontal line. The test device was placed in a normal operating position with the acoustic output located along the "vertical centerline" on the front of the device aligned to the "ear reference point" (See Figure 6-3). The acoustic output was than located at the same level as the center of the ear reference point. The test device was positioned so that the "vertical centerline" was bisecting the front surface of the handset at its top and bottom edges, positioning the "ear reference point" on the outer surface of the both the left and right head phantoms on the ear reference point.

Figure 6-2
Front, back and side view of SAM Twin Phantom

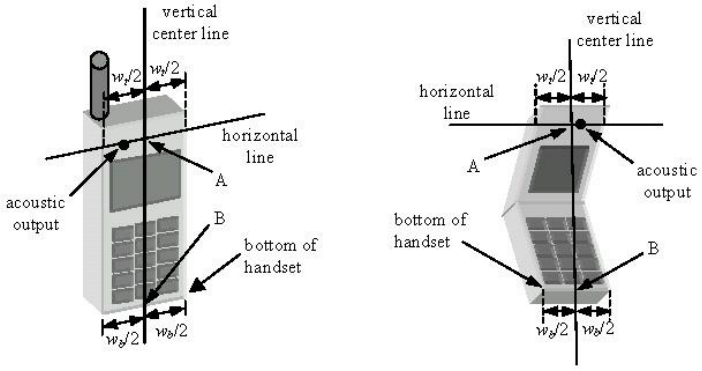


Figure 6-3
Handset Vertical Center & Horizontal Line Reference Points

7 TEST CONFIGURATION POSITIONS

7.1 Device Holder

The device holder is made out of low-loss POM material having the following dielectric parameters: relative permittivity ε = 3 and loss tangent δ = 0.02.

7.2 Positioning for Cheek

1. The test device was positioned with the device close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 7-1), such that the plane defined by the vertical center line and the horizontal line of the phone is approximately parallel to the sagittal plane of the phantom.

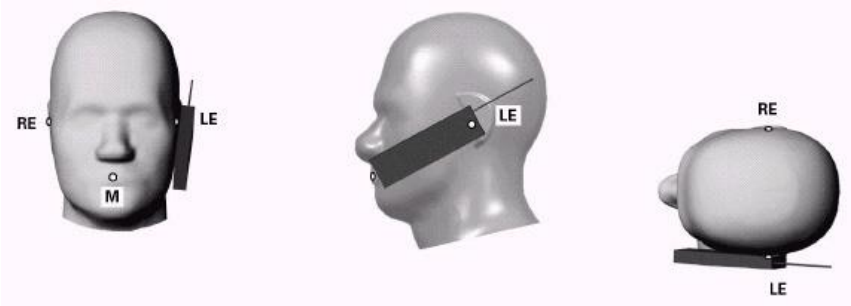


Figure 7-1 Front, Side and Top View of Cheek Position

2. The handset was translated towards the phantom along the line passing through RE & LE until the handset touches the pinna.
3. While maintaining the handset in this plane, the handset was rotated around the LE-RE line until the vertical centerline was in the reference plane.
4. The phone was then rotated around the vertical centerline until the phone (horizontal line) was symmetrical was respect to the line NF.
5. While maintaining the vertical centerline in the reference plane, keeping point A on the line passing through RE and LE, and maintaining the device contact with the ear, the device was rotated about the NF line until any point on the handset made contact with a phantom point below the ear (cheek) (See Figure 7-2).

7.3 Positioning for Ear / 15º Tilt

With the test device aligned in the “Cheek Position”:

1. While maintaining the orientation of the phone, the phone was retracted parallel to the reference plane far enough to enable a rotation of the phone by 15degrees.
2. The phone was then rotated around the horizontal line by 15 degrees.
3. While maintaining the orientation of the phone, the phone was moved parallel to the reference plane until any part of the handset touched the head. (In this position, point A was located on the line RE-LE). The tilted position is obtained when the contact is on the pinna. If the contact was at any location other than the pinna, the angle of the phone would then be reduced. In this situation, the tilted position was obtained when any part of the phone was in contact of the ear as well as a second part of the phone was in contact with the head (see Figure 7-2).

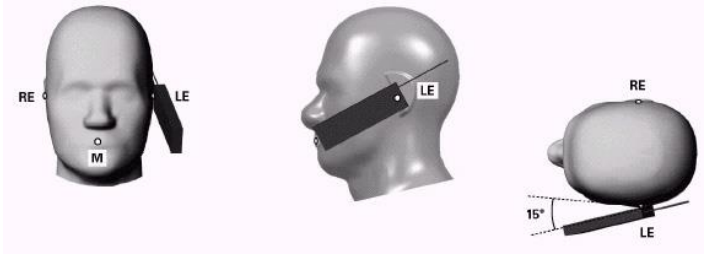


Figure 7-2 Front, Side and Top View of Ear/15º Tilt Position

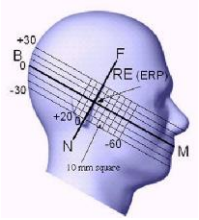


Figure 7-3
Side view w/ relevant markings

7.4 SAR Evaluations near the Mouth/Jaw Regions of the SAM Phantom

Antennas located near the bottom of a phone may require SAR measurements around the mouth and jaw regions of the SAM head phantom. This typically applies to clam-shell style phones that are generally longer in the unfolded normal use positions or to certain older style long rectangular phones. Per IEEE 1528-2013, a rotated SAM phantom is necessary to allow probe access to such regions. Both SAM heads of the TwinSAM-Chin20 are rotated 20 degrees around the NF line. Each head can be removed from the table for emptying and cleaning.

Under these circumstances, the following procedures apply, adopted from the FCC guidance on SAR handsets document FCC KDB Publication 648474 D01v06r03. The SAR required in these regions of SAM should be measured using a flat phantom. The phone should be positioned with a separation distance of 4 mm between the ear reference point (ERP) and the outer surface of the flat phantom shell. While maintaining this distance at the ERP location, the low (bottom) edge of the phone should be lowered from the phantom to establish the same separation distance between the peak SAR location identified by the truncated partial SAR distribution measured with the SAM phantom. The distance from the peak SAR location to the phone is determined by the straight line passing perpendicularly through the phantom surface. When it is not feasible to maintain 4 mm separation at the ERP while also establishing the required separation at the peak SAR location, the top edge of the phone will be allowed to touch the phantom with a separation < 4 mm at the ERP. The phone should not be tilted to the left or right while placed in this inclined position to the flat phantom.

7.5 Body-Worn Accessory Configurations

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 7-4). Per FCC KDB Publication 648474 D01v06r03, Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

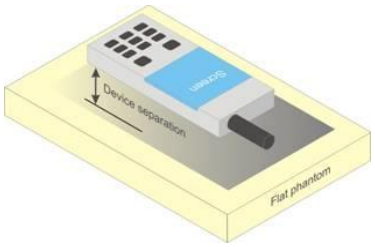


Figure 7-4
Sample Body-Worn Diagram

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not

contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented.
Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

7.6 Extremity Exposure Configurations

Devices that are designed or intended for use on extremities or mainly operated in extremity only exposure conditions; i.e., hands, wrists, feet and ankles, may require extremity SAR evaluation. When the device also operates in close proximity to the user's body, SAR compliance for the body is also required. The 1g body and 10g extremity SAR Exclusion Thresholds found in KDB Publication 447498 D01v06 should be applied to determine SAR test requirements.

Per KDB Publication 447498 D01v06, Cell phones (handsets) are not normally designed to be used on extremities or operated in extremity only exposure conditions. The maximum output power levels of handsets generally do not require extremity SAR testing to show compliance. Therefore, extremity SAR was not evaluated for this device.

7.7 Wireless Router Configurations

Some battery-operated handsets have the capability to transmit and receive user data through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06v02r01 where SAR test considerations for handsets (L x W ≥ 9 cm x 5 cm) are based on a composite test separation distance of 10 mm from the front, back and edges of the device containing transmitting antennas within 2.5 cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D01v06 procedures. The "Portable Hotspot" feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

7.8 Phablet Configurations

For smart phones with a display diagonal dimension > 150 mm or an overall diagonal dimension > 160 mm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that

support voice calls next to the ear, the phablets procedures outlined in KDB Publication 648474 D01v06r03 should be applied to evaluate SAR compliance. A device marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance. In addition to the normally required head and body-worn accessory SAR test procedures required for handsets, the UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna <=25 mm from that surface or edge, in direct contact with the phantom, for 10g SAR. The UMPC mini-tablet 1g SAR at 5 mm is not required. When hotspot mode applies, 10g SAR is required only for the surfaces and edges with hotspot mode 1g SAR > 1.2 W/kg.

8 RF EXPOSURE LIMITS

8.1 Uncontrolled Environment

UNCONTROLLED ENVIRONMENTS are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

8.2 Controlled Environment

CONTROLLED ENVIRONMENTS are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Table 8-1
SAR Human Exposure Specified in ANSI/IEEE C95.1-1992 and Health Canada Safety Code 6

HUMAN EXPOSURE LIMITS		
	UNCONTROLLED ENVIRONMENT *General Population* (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT *Occupational* (W/kg) or (mW/g)
Peak Spatial Average SAR Head	1.6	8.0
Whole Body SAR	0.08	0.4
Peak Spatial Average SAR Hands, Feet, Ankle, Wrists, etc.	4.0	20

1. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
2. The Spatial Average value of the SAR averaged over the whole body.
3. The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

8.3 RF Exposure Limits for Frequencies above 6 GHz

Per §1.1310 (d)(3), the MPE limits are applied for frequencies above 6 GHz. Power Density is expressed in units of W/m^2 or mW/cm^2.

Peak Spatially Averaged Power Density was evaluated over a circular area of 4 cm^2 per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes.

Table 8-2
Human Exposure Limits Specified in FCC 47 CFR §1.1310

Human Exposure to Radiofrequency (RF) Radiation Limits		
Frequency Range [MHz]	**Power Density** [mW/cm^2]	**Average Time** [Minutes]
(A) Limits For Occupational / Controlled Environments		
1,500 – 100,000	5.0	6
(B) Limits For General Population / Uncontrolled Environments		
1,500 – 100,000	1.0	30

Note: 1.0 mW/cm^2 is 10 W/m^2

9 FCC MEASUREMENT PROCEDURES

Power measurements for licensed transmitters are performed using a base station simulator under digital average power.

9.1 Measured and Reported SAR

Per FCC KDB Publication 447498 D01v06, when SAR is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance. For simultaneous transmission, the measured aggregate SAR must be scaled according to the sum of the differences between the maximum tune-up tolerance and actual power used to test each transmitter. When SAR is measured at or scaled to the maximum tune-up tolerance limit, the results are referred to as *reported* SAR. The highest *reported* SAR results are identified on the grant of equipment authorization according to procedures in KDB 690783 D01v01r03.

9.2 3G SAR Test Reduction Procedure

In FCC KDB Publication 941225 D01v03r01, certain transmission modes within a frequency band and wireless mode evaluated for SAR are defined as primary modes. The equivalent modes considered for SAR test reduction are denoted as secondary modes. When the maximum output power including tune-up tolerance specified for production units in a secondary mode is ≤ 0.25 dB higher than the primary mode or when the highest reported SAR of the primary mode, scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode, is ≤ 1.2 W/kg, SAR measurements are not required for the secondary mode. These criteria are referred to as the 3G SAR test reduction procedure. When the 3G SAR test reduction procedure is not satisfied, SAR measurements are additionally required for the secondary mode.

9.3 Procedures Used to Establish RF Signal for SAR

The following procedures are according to FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.”

The device is placed into a simulated call using a base station simulator in a RF shielded chamber. Establishing connections in this manner ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. Devices under test are evaluated prior to testing, with a fully charged battery and were configured to operate at maximum output power. In order to verify that the device is tested throughout the SAR test at maximum output power, the SAR measurement system measures a “point SAR” at an arbitrary reference point at the start and end of the 1 gram SAR evaluation, to assess for any power drifts during the evaluation. If the power drift deviates by more than 5%, the SAR test and drift measurements are repeated.

9.4 SAR Measurement Conditions for UMTS

9.4.1 Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC with TPC (transmit power control) set to all “1s” or applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HS-DPCCH etc) are tabulated in this test report. All configurations that are not supported by the DUT or cannot be measured due to technical or equipment limitations are identified.

9.4.2 Head SAR Measurements

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.

9.4.3 Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits all "1s". The 3G SAR test reduction procedure is applied to other spreading codes and multiple $DPDCH_n$ configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or $DPDCH_n$, for the highest reported SAR configuration in 12.2 kbps RMC.

9.4.4 SAR Measurements with Rel 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

9.4.5 SAR Measurements with Rel 6 HSUPA

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA.

When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

9.4.6 SAR Measurement Conditions for DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

9.5 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05v02r04 publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 or Anritsu MT8820C simulators are used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

9.5.1 Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

9.5.2 MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

9.5.3 A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

9.5.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r04:

a. Per Section 5.2.1, SAR is required for QPSK 1 RB Allocation for the largest bandwidth
   i. The required channel and offset combination with the highest maximum output power is required for SAR.
   ii. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required. Otherwise, SAR is required for the remaining required test channels using the RB offset configuration with highest output power for that channel.
   iii. When the reported SAR for a required test channel is > 1.45 W/kg, SAR is required for all RB offset configurations for that channel.
b. Per Section 5.2.2, SAR is required for 50% RB allocation using the largest bandwidth following the same procedures outlined in Section 5.2.1.
c. Per Section 5.2.3, QPSK SAR is not required for the 100% allocation when the highest maximum output power for the 100% allocation is less than the highest maximum output power of the 1 RB and 50% RB allocations and the reported SAR for the 1 RB and 50% RB allocations is < 0.8 W/kg.
d. Per Section 5.2.4 and 5.3, SAR tests for higher order modulations and lower bandwidths configurations are not required when the conducted power of the required test configurations determined by Sections 5.2.1 through 5.2.3 is less than or equal to ½ dB higher than the equivalent configuration using QPSK modulation and when the QPSK SAR for those configurations is <1.45 W/kg.

9.5.5 TDD

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05v02r04. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05v02r04. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4.

9.5.6 Downlink Only Carrier Aggregation

Conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink

carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band. Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for downlink only carrier aggregation configurations when the average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive.

9.6 SAR Testing with 802.11 Transmitters

The normal network operating configurations of 802.11 transmitters are not suitable for SAR measurements. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01v02r02 for more details.

9.6.1 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters.

A periodic duty factor is required for current generation SAR systems to measure SAR. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR is scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

9.6.2 U-NII-1 and U-NII-2A

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, SAR measurement using OFDM SAR test procedures is not required for U-NII-1 unless the highest reported SAR for U-NII-2A is > 1.2 W/kg. When different maximum output powers are specified for the bands, SAR measurement for the U-NII band with the lower maximum output power is not required unless the highest reported SAR for the U-NII band with the higher maximum output power, adjusted by the ratio of lower to higher specified maximum output power for the two bands, is > 1.2 W/kg. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

9.6.3 U-NII-2C and U-NII-3

The frequency range covered by U-NII-2C and U-NII-3 is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification. Unless band gap channels are permanently disabled, SAR must be considered for these channels. Each band is tested independently according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

9.6.4 Initial Test Position Procedure

For exposure conditions with multiple test positions, such as handset operating next to the ear, devices with hotspot mode or UMPC mini-tablet, procedures for initial test position can be applied. Using the transmission mode determined by the DSSS procedure or initial test configuration, area scans are measured for all

positions in an exposure condition. The test position with the highest extrapolated (peak) SAR is used as the initial test position. When reported SAR for the initial test position is ≤ 0.4 W/kg, no additional testing for the remaining test positions is required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

9.6.5 2.4 GHz SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either the fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.

2) When the reported SAR is > 0.8 W/kg, SAR is required for that position using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

2.4 GHz 802.11 g/n/ax OFDM are additionally evaluated for SAR if the highest reported SAR for 802.11b, adjusted by the ratio of the OFDM to DSSS specified maximum output power, is > 1.2 W/kg. When SAR is required for OFDM modes in 2.4 GHz band, the Initial Test Configuration Procedures should be followed. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

9.6.6 OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. Per April 2019 TCB Workshop and FCC guidance, 802.11ax/be was considered the highest order 802.11 mode. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

9.6.7 Initial Test Configuration Procedure

For OFDM, an initial test configuration is determined for each frequency band and aggregated band, according to the transmission mode with the highest maximum output power specified for SAR measurements. When the same maximum output power is specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration(s) with the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order IEEE 802.11 mode. The channel of the transmission mode with the highest average RF output conducted power will be the initial test configuration.

When the reported SAR is ≤ 0.8 W/kg, no additional measurements on other test channels are required. Otherwise, SAR is evaluated using the subsequent highest average RF output channel until the reported SAR result is ≤ 1.2 W/kg or all channels are measured. When there are multiple untested channels having the same subsequent highest average RF output power, the channel with higher frequency from the lowest

802.11 mode is considered for SAR measurements (See Section 9.6.6). When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

9.6.8 Subsequent Test Configuration Procedures

For OFDM configurations in each frequency band and aggregated band, SAR is evaluated for initial test configuration using the fixed test position or the initial test position procedure. When the highest reported SAR (for the initial test configuration), adjusted by the ratio of the specified maximum output power of the subsequent test configuration to initial test configuration, is ≤ 1.2 W/kg, no additional SAR tests for the subsequent test configurations are required. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

9.6.9 MIMO SAR considerations

Per KDB Publication 248227 D01v02r02, the simultaneous SAR provisions in KDB Publication 447498 D01v06 should be applied to determine simultaneous transmission SAR test exclusion for WIFI MIMO. If the sum of 1g single transmission chain SAR measurements is <1.6 W/kg, no additional SAR measurements for MIMO are required. Alternatively, SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

10 RF CONDUCTED POWERS

All conducted power measurements for Sub6 WWAN technologies and bands in this section were performed by setting *Reserve_power_margin* (Qualcomm® Smart Transmit EFS entry) to 0dB, so that the EUT transmits continuously at minimum (P_{limit}, maximum tune up output power P_{max}).

10.1 GSM Conducted Powers

Table 10-1
Measured P_{max} for all DSI for GSM 850 Ant A
Measured P_{limit} for DSI = 0 (Body-worn, Hotspot or Phablet) for GSM 1900 Ant A

Maximum Burst-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	32.91	32.91	31.62	**29.72**	27.73	26.84	25.71	23.58	22.56
	190	33.24	33.24	31.66	**29.77**	28.06	27.01	25.54	23.50	22.55
	251	33.20	33.20	31.61	**29.74**	27.61	27.11	25.42	23.61	22.55
GSM 1900	512	27.31	27.31	24.80	23.00	**21.75**	25.55	24.17	22.01	21.14
	661	27.65	27.65	24.57	22.93	**21.62**	25.51	24.04	22.10	21.26
	810	27.82	27.82	24.63	22.98	**21.52**	25.35	23.77	21.99	21.02

Calculated Maximum Frame-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	23.71	23.71	25.43	**25.29**	24.55	17.64	19.52	19.15	19.38
	190	24.04	24.04	25.47	**25.34**	24.88	17.81	19.35	19.07	19.37
	251	24.00	24.00	25.42	**25.31**	24.43	17.91	19.23	19.18	19.37
GSM 1900	512	18.11	18.11	18.61	18.57	**18.57**	16.35	17.98	17.58	17.96
	661	18.45	18.45	18.38	18.50	**18.44**	16.31	17.85	17.67	18.08
	810	18.62	18.62	18.44	18.55	**18.34**	16.15	17.58	17.56	17.84

GSM 850	**Frame Avg.Targets:**	23.30	23.30	25.31	**25.07**	24.32	17.80	18.81	18.57	18.82
GSM 1900		18.80	18.80	18.81	18.77	**18.82**	16.80	17.81	17.57	17.82

Table 10-2
Measured P_{max} for DSI = 1 (Head) for GSM 1900 Ant A

Maximum Burst-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 1900	512	29.39	29.39	28.00	**26.22**	24.35	25.55	24.17	22.01	21.14
	661	29.35	29.35	27.80	**26.15**	24.39	25.51	24.04	22.10	21.26
	810	29.70	29.71	27.87	**26.17**	24.57	25.35	23.77	21.99	21.02

Calculated Maximum Frame-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 1900	512	20.19	20.19	21.81	**21.79**	21.17	16.35	17.98	17.58	17.96
	661	20.15	20.15	21.61	**21.72**	21.21	16.31	17.85	17.67	18.08
	810	20.50	20.51	21.68	**21.74**	21.39	16.15	17.58	17.56	17.84
GSM 1900	**Frame Avg.Targets:**	20.30	20.30	21.81	**22.07**	21.32	16.80	17.81	17.57	17.82

Table 10-3
Measured P_{max} for DSI = 0 (Body-worn, Hotspot or Phablet) for GSM 850 Ant E

Maximum Burst-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	32.99	33.16	31.95	**29.16**	27.55	26.69	25.31	23.19	22.57
	190	32.78	33.00	31.99	**29.77**	27.52	26.76	25.24	23.39	22.40
	251	32.76	32.75	31.98	**29.68**	27.42	26.63	25.07	23.28	22.54

Calculated Maximum Frame-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	23.79	23.96	25.76	**24.73**	24.37	17.49	19.12	18.76	19.39
	190	23.58	23.80	25.80	**25.34**	24.34	17.56	19.05	18.96	19.22
	251	23.56	23.55	25.79	**25.25**	24.24	17.43	18.88	18.85	19.36
GSM 850	**Frame Avg.Targets:**	23.30	23.30	25.31	**25.07**	24.32	17.80	18.81	18.57	18.82

Table 10-4
Measured P_{limit} for DSI = 1 (Head) for GSM 850 Ant E

Maximum Burst-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	29.04	29.06	26.41	24.74	**23.28**	26.62	25.22	23.18	22.48
	190	29.38	29.40	26.43	24.69	**23.50**	26.70	25.23	23.42	22.53
	251	29.43	29.46	26.29	24.63	**23.44**	26.68	25.12	23.34	22.65

Calculated Maximum Frame-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	19.84	19.86	20.22	20.31	**20.10**	17.42	19.03	18.75	19.30
	190	20.18	20.20	20.24	20.26	**20.32**	17.50	19.04	18.99	19.35
	251	20.23	20.26	20.10	20.20	**20.26**	17.48	18.93	18.91	19.47
GSM 850	**Frame Avg.Targets:**	20.30	20.30	20.31	20.27	**20.32**	17.80	18.81	18.57	18.82

Note:

1. Both burst-averaged and calculated frame-averaged powers are included. Frame-averaged power was calculated from the measured burst-averaged power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
2. GPRS/EDGE (GMSK) output powers were measured with coding scheme setting of 1 (CS1) on the base station simulator. CS1 was configured to measure GPRS output power measurements and SAR to ensure GMSK modulation in the signal. Our Investigation has shown that CS1 - CS4 settings do not have any impact on the output levels or modulation in the GPRS modes.
3. EDGE (8-PSK) output powers were measured with MCS7 on the base station simulator. MCS7 coding scheme was used to measure the output powers for EDGE since investigation has shown that choosing MCS7 coding scheme will ensure 8-PSK modulation. It has been shown that MCS levels that produce 8-PSK modulation do not have an impact on output power.

GSM Class: B
GPRS Multislot class: 33 (Max 4 Tx uplink slots)
EDGE Multislot class: 33 (Max 4 Tx uplink slots)
DTM Multislot Class: N/A

Figure 10-1
Power Measurement Setup

10.2 UMTS Conducted Powers

Table 10-5
Measured P_{max} for all DSI for UMTS 850 Ant A
Measured P_{limit} for DSI = 0 (Body-worn, Hotspot or Phablet) for UMTS 1750 & UMTS 1900 Ant A

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	23.75	**23.79**	23.73	19.56	19.64	**19.69**	18.49	18.50	**18.52**	-
99		12.2 kbps AMR	23.77	23.82	23.77	19.57	19.65	19.69	18.47	18.51	18.56	-
6	HSDPA	Subtest 1	22.91	22.97	22.86	18.14	18.08	18.12	16.86	16.92	16.83	0
6		Subtest 2	22.91	23.00	22.88	18.14	18.12	18.13	16.87	16.93	16.79	0
6		Subtest 3	22.37	22.45	22.37	17.66	17.62	17.63	16.36	16.41	16.30	0.5
6		Subtest 4	22.38	22.47	22.37	17.63	17.62	17.61	16.35	16.42	16.30	0.5
6	HSUPA	Subtest 1	22.87	22.91	22.82	18.17	18.12	18.13	16.94	16.91	16.83	0
6		Subtest 2	20.78	20.86	20.74	16.11	16.11	16.14	14.89	14.95	14.83	2
6		Subtest 3	21.76	21.84	21.75	17.11	17.12	17.14	15.90	15.99	15.87	1
6		Subtest 4	20.71	20.83	20.72	16.11	16.10	16.09	14.95	14.93	14.78	2
6		Subtest 5	22.74	22.80	22.72	18.21	18.17	18.14	16.88	16.90	16.78	0
8	DC-HSDPA	Subtest 1	22.71	22.80	22.72	18.17	18.12	18.16	16.87	16.96	16.88	0
8		Subtest 2	22.73	22.82	22.74	18.18	18.13	18.12	16.91	16.98	16.85	0
8		Subtest 3	22.23	22.29	22.15	17.71	17.64	17.61	16.38	16.50	16.39	0.5
8		Subtest 4	22.21	22.29	22.19	17.65	17.64	17.63	16.39	16.49	16.35	0.5

Table 10-6
Measured P_{max} for DSI = 1 (Head) for UMTS 1750 & UMTS 1900 Ant A

3GPP Release Version	Mode	3GPP 34.121 Subtest	AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	23.08	23.09	**23.27**	23.14	23.15	**23.19**	-
99		12.2 kbps AMR	23.10	23.17	23.23	23.19	23.16	23.22	-
6	HSDPA	Subtest 1	21.74	21.67	21.72	21.65	21.68	21.55	0
6		Subtest 2	21.76	21.70	21.70	21.59	21.67	21.55	0
6		Subtest 3	21.21	21.20	21.24	21.13	21.15	21.02	0.5
6		Subtest 4	21.24	21.18	21.18	21.08	21.15	21.06	0.5
6	HSUPA	Subtest 1	21.84	21.76	21.76	21.60	21.70	21.56	0
6		Subtest 2	19.74	19.74	19.73	19.67	19.68	19.54	2
6		Subtest 3	20.72	20.73	20.74	20.59	20.70	20.65	1
6		Subtest 4	19.80	19.72	19.70	19.56	19.68	19.50	2
6		Subtest 5	21.75	21.73	21.75	21.64	21.68	21.60	0
8	DC-HSDPA	Subtest 1	22.80	22.67	22.69	22.60	22.61	22.55	0
8		Subtest 2	22.76	22.68	22.71	22.60	22.68	22.55	0
8		Subtest 3	22.76	22.69	22.75	22.64	22.70	22.58	0.5
8		Subtest 4	22.75	22.71	22.75	22.63	22.68	22.56	0.5

Table 10-7
Measured P_{max} for DSI = 0 (Body-worn, Hotspot or Phablet) for UMTS 850 Ant E

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	
99	WCDMA	12.2 kbps RMC	24.20	**24.32**	24.27	-
99		12.2 kbps AMR	24.26	24.32	24.30	-
6	HSDPA	Subtest 1	22.95	23.05	22.96	0
6		Subtest 2	22.97	23.07	22.96	0
6		Subtest 3	22.46	22.53	22.46	0.5
6		Subtest 4	22.41	22.52	22.47	0.5
6	HSUPA	Subtest 1	22.98	23.04	22.96	0
6		Subtest 2	20.94	21.03	20.91	2
6		Subtest 3	21.94	22.01	21.92	1
6		Subtest 4	20.95	21.01	20.92	2
6		Subtest 5	22.95	23.05	22.99	0
8	DC-HSDPA	Subtest 1	22.91	23.02	22.85	0
8		Subtest 2	22.93	23.03	22.99	0
8		Subtest 3	22.45	22.53	22.44	0.5
8		Subtest 4	22.46	22.52	22.42	0.5

Table 10-8
Measured P_{limit} for DSI = 1 (Head) for UMTS 850 Ant E

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	
99	WCDMA	12.2 kbps RMC	20.88	**20.93**	20.86	-
99		12.2 kbps AMR	20.88	20.92	20.86	-
6	HSDPA	Subtest 1	19.70	19.81	19.70	0
6		Subtest 2	19.74	19.82	19.72	0
6		Subtest 3	19.22	19.26	19.20	0.5
6		Subtest 4	19.23	19.30	19.19	0.5
6	HSUPA	Subtest 1	19.74	19.83	19.69	0
6		Subtest 2	17.70	17.83	17.70	2
6		Subtest 3	18.69	18.78	18.72	1
6		Subtest 4	17.70	17.82	17.72	2
6		Subtest 5	19.82	19.84	19.73	0
8	DC-HSDPA	Subtest 1	19.73	19.80	19.69	0
8		Subtest 2	19.74	19.80	19.72	0
8		Subtest 3	19.23	19.29	19.21	0.5
8		Subtest 4	19.20	19.28	19.19	0.5

DC-HSDPA considerations

- 3GPP Specification 34.121-1 Release 8 Ver 8.10.0 was used for DC-HSDPA guidance
- H-Set 12 (QPSK) was confirmed to be used during DC-HSDPA measurements
- The DUT supports UE category 24 for HSDPA

It is expected by the manufacturer that MPR for some HSPA subtests may be up to 2 dB more than specified by 3GPP, but also as low as 0 dB according to the chipset implementation in this model.

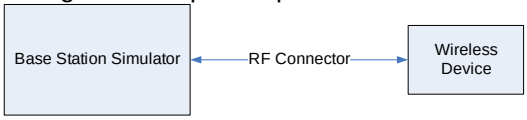


Figure 10-2
Power Measurement Setup

10.3 LTE Conducted Powers

Note: Per FCC KDB Publication 941225 D05v02r05, LTE SAR for the lower bandwidths was not required for testing since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg. Lower bandwidth conducted powers for all LTE bands can be found in LTE and NR Lower Bandwidth RF Conducted Powers Appendix.

Note: Some bands do not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

LTE Carrier Aggregation Notes:

1. This device supports uplink carrier aggregation for LTE CA_ 48C, with a maximum of two component carriers. For intraband contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when non-contiguous RB allocation is implemented. The conducted powers and MPR settings in this device are permanently implemented per the above 3GPP requirements.
2. Per FCC Guidance, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.

10.3.1 LTE Band 71

Table 10-9
LTE Band 71 Ant A Measured P_{Max} for all DSI - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.07	0	0
	1	50	**24.08**		0
	1	99	23.99		0
	50	0	22.91	0-1	1
	50	25	22.89		1
	50	50	**22.92**		1
	100	0	22.87		1
16QAM	1	0	23.12	0-1	1
	1	50	23.11		1
	1	99	22.89		1
	50	0	21.96	0-2	2
	50	25	21.93		2
	50	50	21.92		2
	100	0	21.91		2
64QAM	1	0	22.06	0-2	2
	1	50	22.25		2
	1	99	22.01		2
	50	0	20.93	0-3	3
	50	25	20.87		3
	50	50	20.89		3
	100	0	20.89		3
256QAM	1	0	19.01	0-5	5
	1	50	18.98		5
	1	99	18.96		5
	50	0	18.86		5
	50	25	18.86		5
	50	50	18.87		5
	100	0	18.85		5

Table 10-10
LTE Band 71 Ant E Measured P_{Max} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.49**	0	0
	1	50	24.24		0
	1	99	24.17		0
	50	0	**23.13**	0-1	1
	50	25	23.09		1
	50	50	23.11		1
	100	0	23.11		1
16QAM	1	0	23.46	0-1	1
	1	50	23.52		1
	1	99	23.39		1
	50	0	22.15	0-2	2
	50	25	22.11		2
	50	50	22.12		2
	100	0	22.10		2
64QAM	1	0	22.32	0-2	2
	1	50	22.32		2
	1	99	22.21		2
	50	0	21.06	0-3	3
	50	25	21.07		3
	50	50	21.03		3
	100	0	21.00		3
256QAM	1	0	19.18	0-5	5
	1	50	19.23		5
	1	99	19.08		5
	50	0	19.04		5
	50	25	19.01		5
	50	50	19.01		5
	100	0	19.02		5

Table 10-11
LTE Band 71 Ant E Measured P_{Limit} for DSI = 1 (Head) - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	21.31	0	0
	1	50	**21.36**		0
	1	99	21.26		0
	50	0	**21.26**	0-1	0
	50	25	21.23		0
	50	50	21.25		0
	100	0	21.23		0
16QAM	1	0	21.57	0-1	0
	1	50	21.60		0
	1	99	21.52		0
	50	0	21.33	0-2	0
	50	25	21.28		0
	50	50	21.32		0
	100	0	21.26		0
64QAM	1	0	21.52	0-2	0
	1	50	21.52		0
	1	99	21.28		0
	50	0	21.01	0-3	0.5
	50	25	21.01		0.5
	50	50	21.01		0.5
	100	0	20.97		0.5
256QAM	1	0	19.21	0-5	2.5
	1	50	19.29		2.5
	1	99	19.00		2.5
	50	0	19.00		2.5
	50	25	18.96		2.5
	50	50	18.96		2.5
	100	0	18.93		2.5

10.3.2 LTE Band 12

Table 10-12
LTE Band 12 Ant A Measured P_{Max} for all DSI - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.00	0	0
	1	25	**24.01**		0
	1	49	23.80		0
	25	0	22.83	0-1	1
	25	12	**22.94**		1
	25	25	22.90		1
	50	0	22.92		1
16QAM	1	0	23.12	0-1	1
	1	25	23.25		1
	1	49	23.07		1
	25	0	21.84	0-2	2
	25	12	21.92		2
	25	25	21.87		2
	50	0	21.92		2
64QAM	1	0	22.09	0-2	2
	1	25	22.20		2
	1	49	22.06		2
	25	0	20.83	0-3	3
	25	12	20.96		3
	25	25	20.92		3
	50	0	20.93		3
256QAM	1	0	18.93	0-5	5
	1	25	18.97		5
	1	49	18.79		5
	25	0	18.80		5
	25	12	18.94		5
	25	25	18.87		5
	50	0	18.88		5

Table 10-13
LTE Band 12 Ant E Measured P_{Max} for DSI = 0 (Body-worn, Hotspot or Phablet) - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.04	0	0
	1	25	24.04		0
	1	49	**24.06**		0
	25	0	23.00	0-1	1
	25	12	**23.09**		1
	25	25	23.08		1
	50	0	23.07		1
16QAM	1	0	23.34	0-1	1
	1	25	23.27		1
	1	49	23.31		1
	25	0	22.00	0-2	2
	25	12	22.14		2
	25	25	22.09		2
	50	0	22.07		2
64QAM	1	0	22.37	0-2	2
	1	25	22.37		2
	1	49	22.12		2
	25	0	21.15	0-3	3
	25	12	21.06		3
	25	25	21.06		3
	50	0	21.03		3
256QAM	1	0	19.01	0-5	5
	1	25	19.13		5
	1	49	19.00		5
	25	0	18.94		5
	25	12	19.06		5
	25	25	19.01		5
	50	0	19.03		5

Table 10-14
LTE Band 12 Ant E Measured P_{Limit} for DSI = 1 (Head) - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	21.32	0	0
	1	25	**21.34**		0
	1	49	21.25		0
	25	0	21.20	0-1	0
	25	12	**21.30**		0
	25	25	21.29		0
	50	0	21.28		0
16QAM	1	0	21.37	0-1	0
	1	25	21.58		0
	1	49	21.27		0
	25	0	21.26	0-2	0
	25	12	21.29		0
	25	25	21.33		0
	50	0	21.30		0
64QAM	1	0	21.47	0-2	0
	1	25	21.47		0
	1	49	21.36		0
	25	0	21.36	0-3	0.5
	25	12	21.03		0.5
	25	25	21.03		0.5
	50	0	21.02		0.5
256QAM	1	0	19.08	0-5	2.5
	1	25	19.19		2.5
	1	49	19.01		2.5
	25	0	18.90		2.5
	25	12	19.01		2.5
	25	25	19.00		2.5
	50	0	18.98		2.5

10.3.3 LTE Band 13

Table 10-15
LTE Band 13 Ant A Measured P_{Max} for all DSI - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**23.85**	0	0
	1	25	23.78		0
	1	49	23.83		0
	25	0	22.72	0-1	1
	25	12	22.77		1
	25	25	**22.83**		1
	50	0	22.79		1
16QAM	1	0	23.09	0-1	1
	1	25	23.03		1
	1	49	23.07		1
	25	0	21.77	0-2	2
	25	12	21.78		2
	25	25	21.79		2
	50	0	21.84		2
64QAM	1	0	22.12	0-2	2
	1	25	22.13		2
	1	49	22.02		2
	25	0	20.70	0-3	3
	25	12	20.75		3
	25	25	20.80		3
	50	0	20.84		3
256QAM	1	0	18.79	0-5	5
	1	25	18.95		5
	1	49	18.82		5
	25	0	18.71		5
	25	12	18.72		5
	25	25	18.77		5
	50	0	18.83		5

Table 10-16
LTE Band 13 Ant E Measured P_{Max} for DSI = 0 (Body-worn, Hotspot or Phablet) - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.91	0	0
	1	25	23.83		0
	1	49	**23.94**		0
	25	0	22.89	0-1	1
	25	12	22.87		1
	25	25	**23.01**		1
	50	0	22.97		1
16QAM	1	0	23.21	0-1	1
	1	25	23.21		1
	1	49	23.23		1
	25	0	21.89	0-2	2
	25	12	21.89		2
	25	25	21.94		2
	50	0	21.91		2
64QAM	1	0	22.10	0-2	2
	1	25	22.19		2
	1	49	22.13		2
	25	0	20.92	0-3	3
	25	12	20.93		3
	25	25	20.89		3
	50	0	20.94		3
256QAM	1	0	18.96	0-5	5
	1	25	19.19		5
	1	49	19.02		5
	25	0	18.81		5
	25	12	18.91		5
	25	25	18.89		5
	50	0	18.98		5

Table 10-17
LTE Band 13 Ant E Measured P_{Limit} for DSI = 1 (Head) - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.89	0	0
	1	25	**20.95**		0
	1	49	20.94		0
	25	0	20.91	0-1	0
	25	12	**21.03**		0
	25	25	20.92		0
	50	0	20.90		0
16QAM	1	0	20.93	0-1	0
	1	25	20.93		0
	1	49	20.94		0
	25	0	20.96	0-2	0
	25	12	20.97		0
	25	25	20.90		0
	50	0	20.93		0
64QAM	1	0	20.98	0-2	0
	1	25	20.92		0
	1	49	20.93		0
	25	0	20.94	0-3	0.5
	25	12	20.93		0.5
	25	25	20.97		0.5
	50	0	20.96		0.5
256QAM	1	0	19.00	0-5	2.5
	1	25	19.09		2.5
	1	49	18.96		2.5
	25	0	18.80		2.5
	25	12	18.86		2.5
	25	25	18.87		2.5
	50	0	18.96		2.5

10.3.4 LTE Band 14

Table 10-18
LTE Band 14 Ant A Measured P_{Max} for all DSI - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.69	0	0
	1	25	**23.83**		0
	1	49	23.70		0
	25	0	22.81	0-1	1
	25	12	22.86		1
	25	25	**22.88**		1
	50	0	22.83		1
16QAM	1	0	23.10	0-1	1
	1	25	23.19		1
	1	49	22.97		1
	25	0	21.84	0-2	2
	25	12	21.89		2
	25	25	21.88		2
	50	0	21.84		2
64QAM	1	0	22.00	0-2	2
	1	25	22.12		2
	1	49	22.05		2
	25	0	20.80	0-3	3
	25	12	20.89		3
	25	25	20.90		3
	50	0	20.79		3
256QAM	1	0	18.80	0-5	5
	1	25	18.99		5
	1	49	18.92		5
	25	0	18.75		5
	25	12	18.81		5
	25	25	18.81		5
	50	0	18.77		5

Table 10-19
LTE Band 14 Ant E Measured P_{Max} for DSI = 0 (Body-worn, Hotspot or Phablet) - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	23.85	0	0
	1	25	**23.97**		0
	1	49	23.85		0
	25	0	22.94	0-1	1
	25	12	23.01		1
	25	25	**23.03**		1
	50	0	22.96		1
16QAM	1	0	23.18	0-1	1
	1	25	23.33		1
	1	49	23.21		1
	25	0	21.96	0-2	2
	25	12	22.04		2
	25	25	22.03		2
	50	0	21.97		2
64QAM	1	0	22.14	0-2	2
	1	25	22.22		2
	1	49	22.12		2
	25	0	20.94	0-3	3
	25	12	21.00		3
	25	25	21.03		3
	50	0	20.95		3
256QAM	1	0	18.88	0-5	5
	1	25	19.23		5
	1	49	18.96		5
	25	0	18.88		5
	25	12	18.95		5
	25	25	18.97		5
	50	0	18.91		5

Table 10-20
LTE Band 14 Ant E Measured P_{Limit} for DSI = 1 (Head) - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	21.23	0	0
	1	25	**21.34**		0
	1	49	21.21		0
	25	0	21.17	0-1	0
	25	12	21.23		0
	25	25	**21.26**		0
	50	0	21.17		0
16QAM	1	0	21.22	0-1	0
	1	25	21.41		0
	1	49	21.38		0
	25	0	21.23	0-2	0
	25	12	21.27		0
	25	25	21.28		0
	50	0	21.22		0
64QAM	1	0	21.38	0-2	0
	1	25	21.58		0
	1	49	21.37		0
	25	0	20.96	0-3	0.5
	25	12	20.97		0.5
	25	25	21.00		0.5
	50	0	21.00		0.5
256QAM	1	0	18.89	0-5	2.5
	1	25	19.08		2.5
	1	49	18.99		2.5
	25	0	18.92		2.5
	25	12	18.98		2.5
	25	25	19.01		2.5
	50	0	18.92		2.5

10.3.5 LTE Band 26

Table 10-21
LTE Band 26 Ant A Measured P_{Max} for all DSI - 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.34	0	0
	1	36	**24.46**		0
	1	74	24.17		0
	36	0	23.01	0-1	1
	36	18	**23.03**		1
	36	37	23.02		1
	75	0	22.99		1
16QAM	1	0	23.10	0-1	1
	1	36	23.21		1
	1	74	23.05		1
	36	0	22.09	0-2	2
	36	18	22.10		2
	36	37	22.06		2
	75	0	22.04		2
64QAM	1	0	22.13	0-2	2
	1	36	22.52		2
	1	74	22.17		2
	36	0	21.08	0-3	3
	36	18	21.09		3
	36	37	21.01		3
	75	0	21.03		3
256QAM	1	0	19.04	0-5	5
	1	36	19.18		5
	1	74	19.00		5
	36	0	19.03		5
	36	18	19.06		5
	36	37	19.01		5
	75	0	18.98		5

Table 10-22
LTE Band 26 Ant E Measured P_{Max} for DSI = 0 (Body-worn, Hotspot or Phablet) - 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.45	0	0
	1	36	**24.60**		0
	1	74	24.37		0
	36	0	**23.21**	0-1	1
	36	18	23.17		1
	36	37	23.16		1
	75	0	23.11		1
16QAM	1	0	23.31	0-1	1
	1	36	23.47		1
	1	74	23.33		1
	36	0	22.27	0-2	2
	36	18	22.26		2
	36	37	22.20		2
	75	0	22.19		2
64QAM	1	0	22.31	0-2	2
	1	36	22.54		2
	1	74	22.33		2
	36	0	21.22	0-3	3
	36	18	21.24		3
	36	37	21.19		3
	75	0	21.16		3
256QAM	1	0	19.31	0-5	5
	1	36	19.33		5
	1	74	19.15		5
	36	0	19.19		5
	36	18	19.20		5
	36	37	19.15		5
	75	0	19.13		5

Table 10-23
LTE Band 26 Ant E Measured P_{Limit} for DSI = 1 (Head) - 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.78	0	0
	1	36	**21.15**		0
	1	74	20.78		0
	36	0	20.91	0-1	0
	36	18	**21.03**		0
	36	37	20.89		0
	75	0	20.94		0
16QAM	1	0	21.15	0-1	0
	1	36	21.21		0
	1	74	21.04		0
	36	0	21.00	0-2	0
	36	18	21.00		0
	36	37	20.97		0
	75	0	20.94		0
64QAM	1	0	21.13	0-2	0
	1	36	21.21		0
	1	74	21.08		0
	36	0	20.98	0-3	0
	36	18	20.99		0
	36	37	20.96		0
	75	0	20.95		0
256QAM	1	0	19.41	0-5	2
	1	36	19.46		2
	1	74	19.29		2
	36	0	19.20		2
	36	18	19.16		2
	36	37	19.15		2
	75	0	19.11		2

10.3.6 LTE Band 66

Table 10-24
LTE Band 66 (AWS) Ant A Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.50	18.75	**19.10**	0	0
	1	50	18.75	18.96	18.70		0
	1	99	18.41	18.39	18.64		0
	50	0	18.76	18.71	**19.03**	0-1	0
	50	25	19.00	19.00	18.81		0
	50	50	18.80	18.74	18.80		0
	100	0	19.02	18.73	18.64		0
16QAM	1	0	19.00	19.03	18.67	0-1	0
	1	50	19.02	18.95	18.65		0
	1	99	18.80	18.86	18.64		0
	50	0	18.79	18.74	18.72	0-2	0
	50	25	18.97	18.83	18.72		0
	50	50	18.82	18.79	18.90		0
	100	0	18.75	18.77	18.80		0
64QAM	1	0	19.00	18.96	18.80	0-2	0
	1	50	18.99	18.96	18.72		0
	1	99	18.97	18.77	18.68		0
	50	0	18.74	18.65	18.77	0-3	0
	50	25	18.78	18.72	18.80		0
	50	50	18.77	18.82	18.71		0
	100	0	18.76	18.87	18.72		0
256QAM	1	0	18.45	18.43	18.60	0-5	0.5
	1	50	18.57	18.43	18.57		0.5
	1	99	18.36	18.38	18.38		0.5
	50	0	18.39	18.33	18.39		0.5
	50	25	18.41	18.41	18.32		0.5
	50	50	18.39	18.32	18.34		0.5
	100	0	18.42	18.39	18.30		0.5

Table 10-25
LTE Band 66 (AWS) Ant A Measured P_{Max} for DSI = 1 (Head) - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.49	23.43	23.49	0	0
	1	50	**23.54**	23.44	23.38		0
	1	99	23.50	23.34	23.38		0
	50	0	22.50	22.48	22.41	0-1	1
	50	25	**22.57**	22.49	22.41		1
	50	50	22.50	22.31	22.48		1
	100	0	22.48	22.47	22.32		1
16QAM	1	0	22.57	22.57	22.82	0-1	1
	1	50	22.72	22.57	22.61		1
	1	99	22.57	22.55	22.77		1
	50	0	21.55	21.32	21.47	0-2	2
	50	25	21.60	21.51	21.46		2
	50	50	21.48	21.51	21.39		2
	100	0	21.54	21.45	21.39		2
64QAM	1	0	21.67	21.71	21.46	0-2	2
	1	50	21.72	21.66	21.46		2
	1	99	21.59	21.40	21.59		2
	50	0	20.41	20.53	20.59	0-3	3
	50	25	20.54	20.54	20.37		3
	50	50	20.67	20.50	20.43		3
	100	0	20.49	20.51	20.30		3
256QAM	1	0	18.52	18.50	18.58	0-5	5
	1	50	18.62	18.60	18.66		5
	1	99	18.53	18.46	18.33		5
	50	0	18.41	18.45	18.40		5
	50	25	18.52	18.47	18.36		5
	50	50	18.45	18.45	18.37		5
	100	0	18.51	18.43	18.33		5

Table 10-26
LTE Band 66 (AWS) Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	21.00	20.92	21.04	0	0
	1	50	20.95	20.97	**21.09**		0
	1	99	20.92	20.81	21.04		0
	50	0	20.96	20.97	20.98	0-1	0
	50	25	20.80	21.00	**21.02**		0
	50	50	20.81	20.84	20.98		0
	100	0	20.87	20.95	21.00		0
16QAM	1	0	21.50	21.23	21.33	0-1	0
	1	50	21.37	21.33	21.33		0
	1	99	21.36	21.29	21.50		0
	50	0	20.91	21.02	21.01	0-2	0
	50	25	20.85	20.98	21.03		0
	50	50	20.84	20.87	21.00		0
	100	0	20.79	20.98	20.99		0
64QAM	1	0	21.00	21.27	21.30	0-2	0
	1	50	21.26	21.27	21.30		0
	1	99	21.21	21.39	21.38		0
	50	0	20.63	20.71	20.74	0-3	0
	50	25	20.62	20.74	20.71		0
	50	50	20.54	20.60	20.71		0
	100	0	20.58	20.70	20.73		0
256QAM	1	0	18.83	18.89	18.79	0-5	2
	1	50	18.80	18.80	18.90		2
	1	99	18.77	18.78	18.76		2
	50	0	18.63	18.67	18.72		2
	50	25	18.56	18.68	18.73		2
	50	50	18.55	18.56	18.68		2
	100	0	18.54	18.66	18.71		2

Table 10-27
LTE Band 66 (AWS) Ant F Measured P_{Limit} for DSI = 1 (Head) - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.42	18.34	**18.57**	0	0
	1	50	18.41	18.34	18.50		0
	1	99	18.34	18.28	18.50		0
	50	0	18.40	18.50	18.55	0-1	0
	50	25	18.38	18.52	**18.60**		0
	50	50	18.32	18.37	18.54		0
	100	0	18.34	18.48	18.51		0
16QAM	1	0	18.77	18.62	18.74	0-1	0
	1	50	18.71	18.83	18.87		0
	1	99	18.60	18.71	18.76		0
	50	0	18.42	18.50	18.58	0-2	0
	50	25	18.34	18.54	18.57		0
	50	50	18.34	18.41	18.55		0
	100	0	18.35	18.52	18.56		0
64QAM	1	0	18.82	18.73	18.71	0-2	0
	1	50	18.64	18.99	18.92		0
	1	99	18.68	18.71	18.85		0
	50	0	18.41	18.52	18.59	0-3	0
	50	25	18.39	18.59	18.62		0
	50	50	18.39	18.42	18.59		0
	100	0	18.37	18.53	18.57		0
256QAM	1	0	18.58	18.74	18.69	0-5	0
	1	50	18.72	18.84	18.87		0
	1	99	18.66	18.50	18.68		0
	50	0	18.47	18.56	18.62		0
	50	25	18.40	18.59	18.64		0
	50	50	18.38	18.45	18.57		0
	100	0	18.36	18.54	18.61		0

10.3.7 LTE Band 25

Table 10-28
LTE Band 25 (PCS) Ant A Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.84	17.66	17.56	0	0
	1	50	**17.85**	17.70	17.80		0
	1	99	17.78	17.64	17.56		0
	50	0	17.68	17.73	17.59	0-1	0
	50	25	**17.84**	17.71	17.51		0
	50	50	17.72	17.66	17.54		0
	100	0	17.73	17.56	17.55		0
16QAM	1	0	17.82	17.53	17.56	0-1	0
	1	50	17.76	17.54	17.40		0
	1	99	17.75	17.67	17.53		0
	50	0	17.68	17.69	17.58	0-2	0
	50	25	17.75	17.74	17.50		0
	50	50	17.84	17.71	17.50		0
	100	0	17.65	17.55	17.53		0
64QAM	1	0	17.86	17.64	17.56	0-2	0
	1	50	17.97	17.79	17.44		0
	1	99	17.87	17.66	17.49		0
	50	0	17.71	17.68	17.60	0-3	0
	50	25	17.80	17.74	17.54		0
	50	50	17.89	17.63	17.52		0
	100	0	17.81	17.65	17.60		0
256QAM	1	0	17.84	17.80	17.56	0-5	0
	1	50	17.92	17.88	17.72		0
	1	99	17.75	17.78	17.62		0
	50	0	17.68	17.64	17.52		0
	50	25	17.78	17.65	17.55		0
	50	50	17.69	17.69	17.57		0
	100	0	17.77	17.63	17.50		0

Table 10-29
LTE Band 25 (PCS) Ant A Measured P_{Max} for DSI = 1 (Head) - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.49	23.37	23.26	0	0
	1	50	**23.51**	23.35	23.26		0
	1	99	23.39	23.32	23.13		0
	50	0	22.37	22.32	22.16	0-1	1
	50	25	**22.52**	22.37	22.16		1
	50	50	22.31	22.32	22.28		1
	100	0	22.39	22.18	22.16		1
16QAM	1	0	22.57	22.39	22.65	0-1	1
	1	50	22.46	22.49	22.72		1
	1	99	22.51	22.47	22.59		1
	50	0	21.40	21.37	21.28	0-2	2
	50	25	21.55	21.29	21.16		2
	50	50	21.45	21.44	21.31		2
	100	0	21.35	21.32	21.19		2
64QAM	1	0	21.58	21.48	21.40	0-2	2
	1	50	21.52	21.57	21.40		2
	1	99	21.53	21.41	21.34		2
	50	0	20.48	20.38	20.34	0-3	3
	50	25	20.47	20.31	20.25		3
	50	50	20.38	20.41	20.25		3
	100	0	20.36	20.39	20.36		3
256QAM	1	0	18.48	18.41	18.18	0-5	5
	1	50	18.52	18.54	18.28		5
	1	99	18.40	18.36	18.19		5
	50	0	18.31	18.30	18.15		5
	50	25	18.44	18.28	18.13		5
	50	50	18.31	18.31	18.19		5
	100	0	18.39	18.27	18.13		5

Table 10-30
LTE Band 25 (PCS) Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	20.09	20.12	20.16	0	0
	1	50	20.12	20.15	20.14		0
	1	99	20.09	**20.17**	20.08		0
	50	0	20.05	20.09	20.06	0-1	0
	50	25	20.15	20.12	20.18		0
	50	50	20.12	**20.19**	20.12		0
	100	0	20.12	20.09	20.16		0
16QAM	1	0	20.25	20.44	20.36	0-1	0
	1	50	20.35	20.37	20.38		0
	1	99	20.31	20.33	20.31		0
	50	0	20.09	20.11	20.09	0-2	0
	50	25	20.18	20.15	20.17		0
	50	50	20.18	20.18	20.15		0
	100	0	20.15	20.12	20.16		0
64QAM	1	0	20.40	20.63	20.40	0-2	0
	1	50	20.40	20.42	20.40		0
	1	99	20.52	20.42	20.30		0
	50	0	20.07	20.10	20.08	0-3	0
	50	25	20.19	20.17	20.19		0
	50	50	20.13	20.21	20.14		0
	100	0	20.13	20.13	20.16		0
256QAM	1	0	18.99	19.02	18.94	0-5	1.5
	1	50	18.98	19.12	19.11		1.5
	1	99	19.03	19.00	19.05		1.5
	50	0	18.75	18.85	18.80		1.5
	50	25	18.86	18.88	18.89		1.5
	50	50	18.82	18.89	18.83		1.5
	100	0	18.82	18.84	18.88		1.5

Table 10-31
LTE Band 25 (PCS) Ant F Measured P_{Limit} for DSI = 1 (Head) - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.48	18.63	**18.68**	0	0
	1	50	18.57	18.67	18.60		0
	1	99	18.46	18.63	18.56		0
	50	0	18.58	18.59	18.60	0-1	0
	50	25	18.68	18.63	**18.69**		0
	50	50	18.65	18.68	18.61		0
	100	0	18.62	18.59	18.65		0
16QAM	1	0	19.10	19.02	18.98	0-1	0
	1	50	19.16	18.93	18.89		0
	1	99	19.10	18.80	18.83		0
	50	0	18.61	18.61	18.65	0-2	0
	50	25	18.71	18.66	18.72		0
	50	50	18.63	18.69	18.66		0
	100	0	18.67	18.61	18.68		0
64QAM	1	0	18.86	18.96	18.93	0-2	0
	1	50	18.87	18.86	18.97		0
	1	99	18.88	18.87	18.87		0
	50	0	18.60	18.67	18.61	0-3	0
	50	25	18.71	18.66	18.76		0
	50	50	18.62	18.72	18.69		0
	100	0	18.65	18.61	18.72		0
256QAM	1	0	18.84	18.74	18.94	0-5	0
	1	50	18.94	18.86	18.93		0
	1	99	18.82	18.87	18.71		0
	50	0	18.60	18.66	18.63		0
	50	25	18.71	18.68	18.73		0
	50	50	18.65	18.71	18.65		0
	100	0	18.62	18.65	18.68		0

10.3.8 LTE Band 30

Table 10-32
LTE Band 30 Ant A Measured P_{limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**19.80**	0	0
	1	25	19.74		0
	1	49	19.64		0
	25	0	**19.84**	0-1	0
	25	12	19.81		0
	25	25	19.75		0
	50	0	19.79		0
16QAM	1	0	20.05	0-1	0
	1	25	20.11		0
	1	49	19.88		0
	25	0	19.83	0-2	0
	25	12	19.80		0
	25	25	19.76		0
	50	0	19.75		0
64QAM	1	0	20.09	0-2	0
	1	25	20.08		0
	1	49	19.82		0
	25	0	19.80	0-3	0
	25	12	19.51		0
	25	25	19.37		0
	50	0	19.39		0
256QAM	1	0	17.52	0-5	2
	1	25	17.72		2
	1	49	17.38		2
	25	0	17.43		2
	25	12	17.40		2
	25	25	17.39		2
	50	0	17.43		2

Table 10-33
LTE Band 30 Ant A Measured P_{Max} for DSI = 1 (Head) - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**22.45**	0	0
	1	25	22.08		0
	1	49	21.78		0
	25	0	21.49	0-1	1
	25	12	**21.50**		1
	25	25	21.46		1
	50	0	21.49		1
16QAM	1	0	21.70	0-1	1
	1	25	21.57		1
	1	49	21.20		1
	25	0	20.52	0-2	2
	25	12	20.54		2
	25	25	20.47		2
	50	0	20.49		2
64QAM	1	0	20.66	0-2	2
	1	25	20.65		2
	1	49	20.56		2
	25	0	19.54	0-3	3
	25	12	19.47		3
	25	25	19.45		3
	50	0	19.51		3
256QAM	1	0	17.66	0-5	5
	1	25	17.72		5
	1	49	17.42		5
	25	0	17.47		5
	25	12	17.47		5
	25	25	17.42		5
	50	0	17.42		5

Table 10-34
LTE Band 30 Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**19.46**	0	0
	1	25	19.44		0
	1	49	19.40		0
	25	0	**19.48**	0-1	0
	25	12	19.47		0
	25	25	19.42		0
	50	0	19.43		0
16QAM	1	0	19.77	0-1	0
	1	25	19.81		0
	1	49	19.68		0
	25	0	19.56	0-2	0
	25	12	19.53		0
	25	25	19.48		0
	50	0	19.50		0
64QAM	1	0	19.61	0-2	0
	1	25	19.80		0
	1	49	19.55		0
	25	0	19.25	0-3	1
	25	12	19.28		1
	25	25	19.21		1
	50	0	19.26		1
256QAM	1	0	17.29	0-5	3
	1	25	17.25		3
	1	49	17.18		3
	25	0	17.26		3
	25	12	17.29		3
	25	25	17.19		3
	50	0	17.23		3

Table 10-35
LTE Band 30 Ant F Measured P_{Limit} for DSI = 1 (Head) - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	16.39	0	0
	1	25	**16.48**		0
	1	49	16.29		0
	25	0	16.50	0-1	0
	25	12	**16.51**		0
	25	25	16.46		0
	50	0	16.46		0
16QAM	1	0	16.82	0-1	0
	1	25	16.82		0
	1	49	16.67		0
	25	0	16.51	0-2	0
	25	12	16.50		0
	25	25	16.43		0
	50	0	16.44		0
64QAM	1	0	16.53	0-2	0
	1	25	16.64		0
	1	49	16.51		0
	25	0	16.49	0-3	0
	25	12	16.48		0
	25	25	16.45		0
	50	0	16.43		0
256QAM	1	0	16.60	0-5	0
	1	25	16.70		0
	1	49	16.51		0
	25	0	16.56		0
	25	12	16.54		0
	25	25	16.51		0
	50	0	16.47		0

10.3.9 LTE Band 7

Table 10-36
LTE Band 7 Ant B Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**20.66**	20.23	20.44	0	0
	1	50	20.32	20.31	20.51		0
	1	99	20.21	20.32	20.31		0
	50	0	20.47	20.35	20.33	0-1	0
	50	25	**20.49**	20.43	20.22		0
	50	50	20.45	20.19	20.28		0
	100	0	20.43	20.31	20.26		0
16QAM	1	0	20.61	20.21	20.26	0-1	0
	1	50	20.48	20.44	20.35		0
	1	99	20.25	20.28	20.48		0
	50	0	20.45	20.33	20.24	0-2	0
	50	25	20.53	20.29	20.27		0
	50	50	20.53	20.28	20.37		0
	100	0	20.47	20.36	20.16		0
64QAM	1	0	20.71	20.50	20.54	0-2	0
	1	50	20.63	20.53	20.45		0
	1	99	20.57	20.37	20.42		0
	50	0	20.51	20.38	20.32	0-3	0
	50	25	20.57	20.41	20.16		0
	50	50	20.45	20.23	20.41		0
	100	0	20.49	20.25	20.34		0
256QAM	1	0	19.28	19.11	19.22	0-5	1.5
	1	50	19.27	18.96	19.12		1.5
	1	99	19.07	19.01	18.93		1.5
	50	0	19.06	18.91	18.87		1.5
	50	25	19.06	18.91	18.92		1.5
	50	50	18.98	18.89	18.92		1.5
	100	0	19.10	18.90	18.84		1.5

Table 10-37
LTE Band 7 Ant B Measured P_{Max} for DSI = 1 (Head) - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**23.98**	23.92	23.67	0	0
	1	50	23.91	23.66	23.72		0
	1	99	23.92	23.76	23.71		0
	50	0	23.10	22.94	22.91	0-1	1
	50	25	**23.18**	22.95	22.87		1
	50	50	23.03	23.03	22.95		1
	100	0	23.11	22.90	22.87		1
16QAM	1	0	23.35	23.04	22.86	0-1	1
	1	50	23.25	23.19	23.22		1
	1	99	22.98	23.10	23.30		1
	50	0	22.17	22.03	21.96	0-2	2
	50	25	22.30	22.10	21.93		2
	50	50	22.10	22.05	21.97		2
	100	0	22.10	21.94	21.95		2
64QAM	1	0	22.38	22.27	22.10	0-2	2
	1	50	22.36	22.21	22.30		2
	1	99	22.11	22.20	22.07		2
	50	0	21.23	20.92	21.02	0-3	3
	50	25	21.12	20.88	21.02		3
	50	50	21.09	20.91	20.94		3
	100	0	21.11	20.99	20.90		3
256QAM	1	0	19.18	19.10	18.99	0-5	5
	1	50	19.22	19.19	19.22		5
	1	99	19.05	19.04	19.04		5
	50	0	19.14	18.96	18.89		5
	50	25	19.11	18.97	18.88		5
	50	50	19.03	18.93	18.94		5
	100	0	19.10	18.97	18.84		5

Table 10-38
LTE Band 7 Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**19.72**	19.68	19.68	0	0
	1	50	19.70	19.63	19.71		0
	1	99	19.64	19.62	19.69		0
	50	0	19.74	19.69	19.75	0-1	0
	50	25	**19.80**	19.76	19.72		0
	50	50	19.74	19.73	19.77		0
	100	0	19.70	19.68	19.61		0
16QAM	1	0	20.11	19.89	19.89	0-1	0
	1	50	19.97	19.86	19.92		0
	1	99	19.94	19.90	19.90		0
	50	0	19.75	19.71	19.74	0-2	0
	50	25	19.80	19.79	19.87		0
	50	50	19.77	19.75	19.79		0
	100	0	19.79	19.78	19.74		0
64QAM	1	0	19.86	19.95	19.98	0-2	0
	1	50	19.91	20.04	19.95		0
	1	99	19.80	19.94	19.82		0
	50	0	19.81	19.70	19.77	0-3	0
	50	25	19.83	19.81	19.87		0
	50	50	19.78	19.75	19.78		0
	100	0	19.83	19.78	19.75		0
256QAM	1	0	19.22	18.91	19.06	0-5	1
	1	50	19.31	19.20	19.21		1
	1	99	19.09	19.09	19.19		1
	50	0	18.97	18.94	18.98		1
	50	25	19.07	19.05	19.06		1
	50	50	19.02	19.02	19.04		1
	100	0	19.04	19.00	18.95		1

Table 10-39
LTE Band 7 Ant F Measured P_{Limit} for DSI = 1 (Head) - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**16.30**	16.17	16.12	0	0
	1	50	16.21	16.15	16.11		0
	1	99	16.17	16.11	16.09		0
	50	0	16.24	16.16	16.17	0-1	0
	50	25	**16.27**	16.22	16.24		0
	50	50	16.25	16.20	16.22		0
	100	0	16.26	16.22	16.13		0
16QAM	1	0	16.46	16.36	16.39	0-1	0
	1	50	16.48	16.42	16.59		0
	1	99	16.39	16.31	16.48		0
	50	0	16.25	16.19	16.21	0-2	0
	50	25	16.32	16.25	16.25		0
	50	50	16.25	16.23	16.23		0
	100	0	16.27	16.22	16.17		0
64QAM	1	0	16.43	16.27	16.39	0-2	0
	1	50	16.51	16.43	16.36		0
	1	99	16.30	16.24	16.41		0
	50	0	16.28	16.18	16.21	0-3	0
	50	25	16.27	16.23	16.25		0
	50	50	16.22	16.17	16.24		0
	100	0	16.28	16.20	16.16		0
256QAM	1	0	16.31	16.23	16.26	0-5	0
	1	50	16.33	16.30	16.36		0
	1	99	16.37	16.31	16.46		0
	50	0	16.19	16.13	16.21		0
	50	25	16.26	16.25	16.30		0
	50	50	16.24	16.22	16.26		0
	100	0	16.23	16.20	16.20		0

10.3.10 LTE Band 41

Table 10-40
LTE Band 41 Ant B Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	22.63	22.53	22.39	22.45	22.50	0	0
	1	50	22.66	22.51	22.40	22.42	22.43		0
	1	99	**22.68**	22.54	22.20	22.33	22.29		0
	50	0	22.58	22.46	22.37	22.57	22.53	0-1	0
	50	25	22.57	22.33	22.34	22.38	22.52		0
	50	50	**22.62**	22.60	22.35	22.48	22.53		0
	100	0	22.53	22.28	22.39	22.52	22.46		0
16QAM	1	0	22.79	22.46	22.42	22.54	22.61	0-1	0
	1	50	22.64	22.70	22.36	22.48	22.46		0
	1	99	22.56	22.59	22.25	22.40	22.36		0
	50	0	22.40	22.33	22.23	22.19	22.41	0-2	0
	50	25	22.40	22.37	22.27	22.32	22.39		0
	50	50	22.32	22.53	22.32	22.14	22.37		0
	100	0	22.33	22.27	22.19	22.28	22.33		0
64QAM	1	0	22.34	22.39	22.09	22.33	22.42	0-2	0
	1	50	22.30	22.36	22.11	22.32	22.35		0
	1	99	22.14	22.34	22.07	22.34	22.23		0
	50	0	21.44	21.42	21.41	21.27	21.37	0-3	1
	50	25	21.43	21.30	21.24	21.21	21.53		1
	50	50	21.52	21.29	21.11	21.35	21.44		1
	100	0	21.38	21.26	21.34	21.15	21.20		1
256QAM	1	0	19.33	19.24	19.23	19.16	19.38	0-5	3
	1	50	19.41	19.31	19.23	19.32	19.42		3
	1	99	19.29	19.27	19.02	19.09	19.27		3
	50	0	19.34	19.24	19.23	19.26	19.40		3
	50	25	19.44	19.30	19.27	19.25	19.45		3
	50	50	19.37	19.32	19.19	19.30	19.35		3
	100	0	19.42	19.25	19.24	19.19	19.32		3

Table 10-41
LTE Band 41 Ant B Measured P_{Max} for DSI = 1 (Head) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	24.53	24.24	24.26	24.23	24.43	0	0
	1	50	24.48	24.39	24.23	24.33	24.37		0
	1	99	**24.56**	24.42	24.04	24.19	24.15		0
	50	0	23.37	23.28	23.24	23.22	23.49	0-1	1
	50	25	23.50	23.36	23.20	23.17	23.46		1
	50	50	**23.57**	23.41	23.26	23.33	23.43		1
	100	0	23.44	23.32	23.33	23.36	23.37		1
16QAM	1	0	23.64	23.39	23.22	23.36	23.50	0-1	1
	1	50	23.55	23.53	23.08	23.23	23.30		1
	1	99	23.38	23.44	23.04	23.10	23.17		1
	50	0	22.46	22.38	22.24	22.28	22.52	0-2	2
	50	25	22.66	22.33	22.36	22.26	22.59		2
	50	50	22.32	22.61	22.29	22.40	22.39		2
	100	0	22.54	22.25	22.29	22.28	22.46		2
64QAM	1	0	22.61	22.31	22.23	22.19	22.42	0-2	2
	1	50	22.44	22.46	22.07	22.33	22.23		2
	1	99	22.36	22.44	22.10	22.17	22.16		2
	50	0	21.34	21.39	21.28	21.41	21.50	0-3	3
	50	25	21.46	21.33	21.29	21.37	21.45		3
	50	50	21.58	21.31	21.41	21.19	21.44		3
	100	0	21.55	21.18	21.19	21.21	21.51		3
256QAM	1	0	19.32	19.23	19.37	19.23	19.37	0-5	5
	1	50	19.35	19.45	19.34	19.29	19.39		5
	1	99	19.30	19.39	19.11	19.04	19.12		5
	50	0	19.36	19.31	19.28	19.30	19.42		5
	50	25	19.49	19.35	19.33	19.27	19.44		5
	50	50	19.41	19.40	19.25	19.26	19.40		5
	100	0	19.47	19.28	19.32	19.24	19.33		5

Table 10-42
LTE Band 41 Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	21.86	**21.97**	21.87	21.75	21.90	0	0
	1	50	21.84	21.84	21.77	21.75	21.83		0
	1	99	21.81	21.77	21.58	21.63	21.75		0
	50	0	21.89	**21.95**	21.89	21.84	21.93	0-1	0
	50	25	21.94	21.91	21.88	21.79	21.87		0
	50	50	21.94	21.88	21.82	21.75	21.90		0
	100	0	21.89	21.90	21.86	21.75	21.89		0
16QAM	1	0	21.96	21.85	21.95	21.83	22.02	0-1	0
	1	50	22.01	21.98	21.78	21.85	21.88		0
	1	99	21.89	21.75	21.75	21.58	21.74		0
	50	0	21.88	21.95	21.94	21.83	21.97	0-2	0
	50	25	21.99	21.96	21.91	21.79	21.95		0
	50	50	21.95	21.91	21.79	21.83	21.89		0
	100	0	21.96	21.93	21.92	21.80	21.92		0
64QAM	1	0	21.91	21.93	21.89	21.89	22.03	0-2	0
	1	50	21.94	22.01	21.82	21.91	21.91		0
	1	99	21.76	21.96	21.74	21.60	21.80		0
	50	0	21.41	21.44	21.46	21.31	21.45	0-3	0.5
	50	25	21.47	21.46	21.40	21.28	21.38		0.5
	50	50	21.41	21.42	21.30	21.28	21.39		0.5
	100	0	21.44	21.38	21.38	21.22	21.40		0.5
256QAM	1	0	19.24	19.34	19.30	19.23	19.41	0-5	2.5
	1	50	19.32	19.34	19.34	19.37	19.39		2.5
	1	99	19.21	19.24	19.07	19.17	19.27		2.5
	50	0	19.37	19.41	19.44	19.30	19.46		2.5
	50	25	19.46	19.44	19.36	19.26	19.40		2.5
	50	50	19.41	19.38	19.30	19.24	19.40		2.5
	100	0	19.40	19.40	19.36	19.25	19.40		2.5

Table 10-43
LTE Band 41 Ant F Measured P_{Limit} for DSI = 1 (Head) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	18.35	**18.42**	18.26	18.23	18.32	0	0
	1	50	18.29	18.34	18.18	18.15	18.24		0
	1	99	18.23	18.22	18.00	17.99	18.12		0
	50	0	18.35	**18.41**	18.31	18.19	18.34	0-1	0
	50	25	18.38	18.40	18.29	18.18	18.28		0
	50	50	18.37	18.33	18.19	18.15	18.26		0
	100	0	18.36	18.39	18.28	18.14	18.26		0
16QAM	1	0	18.49	18.38	18.20	18.15	18.33	0-1	0
	1	50	18.44	18.31	18.16	18.21	18.20		0
	1	99	18.51	18.23	18.07	18.05	18.13		0
	50	0	18.31	18.36	18.33	18.20	18.36	0-2	0
	50	25	18.41	18.41	18.31	18.16	18.31		0
	50	50	18.40	18.34	18.21	18.18	18.31		0
	100	0	18.37	18.34	18.31	18.13	18.30		0
64QAM	1	0	18.28	18.33	18.21	18.13	18.31	0-2	0
	1	50	18.34	18.34	18.33	18.15	18.32		0
	1	99	18.25	18.32	18.04	17.91	18.02		0
	50	0	18.36	18.42	18.37	18.22	18.35	0-3	0
	50	25	18.44	18.42	18.31	18.19	18.34		0
	50	50	18.40	18.34	18.24	18.26	18.30		0
	100	0	18.39	18.38	18.28	18.18	18.30		0
256QAM	1	0	18.41	18.35	18.26	18.17	18.27	0-5	0
	1	50	18.39	18.44	18.19	18.26	18.41		0
	1	99	18.33	18.29	18.08	18.06	18.24		0
	50	0	18.40	18.44	18.38	18.25	18.44		0
	50	25	18.48	18.44	18.30	18.24	18.35		0
	50	50	18.43	18.37	18.27	18.22	18.37		0
	100	0	18.47	18.41	18.32	18.22	18.36		0

10.3.11 LTE Band 48

Table 10-44
LTE Band 48 Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 55340 (3560.0 MHz)	Low-Mid Channel 55773 (3603.3 MHz)	Mid-High Channel 56207 (3646.7 MHz)	High Channel 56640 (3690.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	21.48	21.68	**21.90**	21.76	0	0
	1	50	21.80	21.70	21.80	21.84		0
	1	99	21.64	21.71	21.71	21.86		0
	50	0	20.51	20.74	20.77	20.85	0-1	0.5
	50	25	20.71	20.91	**21.04**	20.99		0.5
	50	50	20.72	20.85	20.89	20.94		0.5
	100	0	20.66	20.82	20.84	20.94		0.5
16QAM	1	0	20.81	20.88	20.90	20.95	0-1	0.5
	1	50	20.86	20.93	20.97	21.29		0.5
	1	99	20.80	20.91	21.00	21.10		0.5
	50	0	19.52	19.77	19.81	19.83	0-2	1.5
	50	25	19.73	19.88	19.92	20.00		1.5
	50	50	19.69	19.89	19.92	19.95		1.5
	100	0	19.68	19.84	19.91	19.97		1.5
64QAM	1	0	19.86	19.98	19.98	19.94	0-2	1.5
	1	50	19.96	19.97	19.97	19.92		1.5
	1	99	19.94	19.92	19.95	19.95		1.5
	50	0	18.54	18.76	18.76	18.85	0-3	2.5
	50	25	18.66	18.87	18.92	18.97		2.5
	50	50	18.69	18.87	18.91	18.94		2.5
	100	0	18.71	18.89	18.89	18.98		2.5
256QAM	1	0	16.66	16.92	16.75	16.95	0-5	4.5
	1	50	16.61	16.87	16.70	16.89		4.5
	1	99	16.80	16.73	16.94	16.84		4.5
	50	0	16.49	16.77	16.75	16.87		4.5
	50	25	16.66	16.83	16.90	16.94		4.5
	50	50	16.67	16.83	16.95	16.98		4.5
	100	0	16.63	16.83	16.92	16.95		4.5

Table 10-45
LTE Band 48 Ant F Uplink Carrier Aggregation Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

	PCC							SCC							Power	
ination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
_48C	LTE B48	20	56207	3646.7	QPSK	1	0	LTE B48	20	56009	3626.9	QPSK	1	99	21.89	21.90

Table 10-46
LTE Band 48 Ant F Measured P_{Limit} for DSI = 1 (Head) - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55340 (3560.0 MHz)	55773 (3603.3 MHz)	56207 (3646.7 MHz)	56640 (3690.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	17.34	17.62	17.62	**17.92**	0	0
	1	50	17.42	17.43	17.80	17.75		0
	1	99	17.77	17.56	17.79	17.80		0
	50	0	17.52	17.77	17.81	**18.00**	0-1	0
	50	25	17.91	17.88	17.91	17.99		0
	50	50	17.69	17.87	17.93	17.95		0
	100	0	17.66	17.82	17.86	17.91		0
16QAM	1	0	17.74	17.70	17.70	17.89	0-1	0
	1	50	17.75	17.81	17.81	17.82		0
	1	99	17.76	17.90	17.90	17.93		0
	50	0	17.54	17.78	17.79	17.88	0-2	0
	50	25	17.69	17.90	17.94	17.99		0
	50	50	17.70	17.87	17.95	18.00		0
	100	0	17.71	17.88	17.94	18.01		0
64QAM	1	0	17.79	17.97	17.82	18.07	0-2	0
	1	50	17.69	18.16	17.90	18.11		0
	1	99	18.12	17.86	18.05	18.12		0
	50	0	17.56	17.76	17.79	17.86	0-3	0
	50	25	17.69	17.88	17.95	18.01		0
	50	50	17.71	17.85	17.94	18.01		0
	100	0	17.71	17.87	17.89	18.03		0
256QAM	1	0	16.39	16.65	16.57	16.71	0-5	1
	1	50	16.51	17.09	16.93	17.00		1
	1	99	16.73	17.14	16.75	17.00		1
	50	0	16.56	16.82	16.77	16.90		1
	50	25	16.67	16.90	16.97	17.05		1
	50	50	16.73	16.88	16.90	17.03		1
	100	0	16.69	16.87	16.89	17.03		1

Table 10-47
LTE Band 48 Ant F Uplink Carrier Aggregation Measured P_{Limit} for DSI = 1 (Head) - 20 MHz Bandwidth

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	56640	3690.0	QPSK	100	0	LTE B48	20	56442	3670.2	QPSK	100	0	17.99	17.91

Figure 10-3
Power Measurement Setup

10.4 NR Conducted Powers

Per October 2020 TCB Workshop Guidance, NR FR1 SAR evaluations are being generally based on adapting the existing LTE SAR procedures (FCC KDB Publication 941225 D05v02r05). Therefore, NR SAR for the lower bandwidths was not required for testing based on the measured output power and the reported NR SAR for the highest bandwidth. Lower bandwidth conducted powers for all NR bands can be found in LTE and NR Lower Bandwidth RF Conducted Powers Appendix.

Note: Some bands do not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

10.4.1 NR Band n71

Table 10-48
NR Band n71 Ant A Measured P_{Max} for all DSI - 35 MHz Bandwidth

NR Band n71 35 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.68	0	0.0
	1	94	**24.02**		0.0
	1	186	23.75		0.0
	90	0	22.88	0-1	1.0
	90	49	**24.11**	0	0.0
	90	98	22.98	0-1	1.0
	180	0	22.98		1.0
DFT-s-OFDM 16QAM	1	1	22.65	0-1	1.0
CP-OFDM QPSK	1	1	22.23	0-1.5	1.5

Table 10-49
NR Band n71 Ant E Measured P_{Max} for DSI = 0 (Body-worn, Hotspot or Phablet) - 35 MHz Bandwidth

NR Band n71 35 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.97	0	0.0
	1	94	**24.39**		0.0
	1	186	24.06		0.0
	90	0	23.21	0-1	1.0
	90	49	**24.35**	0	0.0
	90	98	23.33	0-1	1.0
	180	0	23.28		1.0
DFT-s-OFDM 16QAM	1	1	22.97	0-1	1.0
CP-OFDM QPSK	1	1	22.58	0-1.5	1.5

Table 10-50
NR Band n71 Ant E Measured P_{Limit} for DSI = 1 (Head) - 35 MHz Bandwidth

NR Band n71 35 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	21.62	0	0.0
	1	94	**21.71**		0.0
	1	186	21.56		0.0
	90	0	21.68	0-1	0.0
	90	49	**21.71**	0	0.0
	90	98	21.49	0-1	0.0
	180	0	21.59		0.0
DFT-s-OFDM 16QAM	1	1	21.49	0-1	0.0
CP-OFDM QPSK	1	1	21.79	0-1.5	0.0

10.4.2 NR Band n12

Table 10-51
NR Band n12 Ant A Measured P_{Max} for all DSI - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	24.11	0	0.0
	1	40	**24.12**		0.0
	1	77	24.00		0.0
	36	0	22.87	0-1	1.0
	36	22	**24.15**	0	0.0
	36	43	23.11	0-1	1.0
	75	0	23.03		1.0
DFT-s-OFDM 16QAM	1	1	22.88	0-1	1.0
CP-OFDM QPSK	1	1	22.78	0-1.5	1.5

Table 10-52
NR Band n12 Ant E Measured P_{Max} for DSI = 0 (Body-worn, Hotspot or Phablet) - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	24.40	0	0.0
	1	40	**24.44**		0.0
	1	77	24.26		0.0
	36	0	23.42	0-1	1.0
	36	22	**24.44**	0	0.0
	36	43	23.40	0-1	1.0
	75	0	23.27		1.0
DFT-s-OFDM 16QAM	1	1	23.27	0-1	1.0
CP-OFDM QPSK	1	1	22.95	0-1.5	1.5

Table 10-53
NR Band n12 Ant E Measured P_{Limit} for DSI = 1 (Head) - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**21.73**	0	0.0
	1	40	21.66		0.0
	1	77	21.67		0.0
	36	0	**21.71**	0-1	0.0
	36	22	21.70	0	0.0
	36	43	21.65	0-1	0.0
	75	0	21.59		0.0
DFT-s-OFDM 16QAM	1	1	21.57	0-1	0.0
CP-OFDM QPSK	1	1	22.04	0-1.5	0.0

10.4.3 NR Band n14

Table 10-54
NR Band n14 Ant A Measured P_{Max} for all DSI - 10 MHz Bandwidth

NR Band n14 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	158600 (793 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**23.84**	0	0.0
	1	26	23.56		0.0
	1	50	23.64		0.0
	25	0	22.85	0-1	1.0
	25	14	**23.58**	0	0.0
	25	27	22.42	0-1	1.0
	50	0	22.20		1.0
DFT-s-OFDM 16QAM	1	1	22.75	0-1	1.0
CP-OFDM QPSK	1	1	22.35	0-1.5	1.5

Table 10-55
NR Band n14 Ant E Measured P_{Max} for DSI = 0 (Body-worn, Hotspot or Phablet) - 10 MHz Bandwidth

NR Band n14 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	158600 (793 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**24.07**	0	0.0
	1	26	23.91		0.0
	1	50	24.03		0.0
	25	0	23.04	0-1	1.0
	25	14	**23.92**	0	0.0
	25	27	22.83	0-1	1.0
	50	0	23.11		1.0
DFT-s-OFDM 16QAM	1	1	22.92	0-1	1.0
CP-OFDM QPSK	1	1	22.51	0-1.5	1.5

Table 10-56
NR Band n14 Ant E Measured P_{Limit} for DSI = 1 (Head) - 15 MHz Bandwidth

NR Band n14 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	158600 (793 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	21.34	0	0.0
	1	26	21.40		0.0
	1	50	**21.46**		0.0
	25	0	21.32	0-1	0.0
	25	14	**21.36**	0	0.0
	25	27	21.27	0-1	0.0
	50	0	21.20		0.0
DFT-s-OFDM 16QAM	1	1	21.35	0-1	0.0
CP-OFDM QPSK	1	1	21.51	0-1.5	0.0

10.4.4 NR Band n26

Table 10-57
NR Band n26 Ant A Measured P_{Max} for all DSI - 20 MHz Bandwidth

NR Band n26 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	166300 (831.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	24.07	0	0.0
	1	53	**24.22**		0.0
	1	104	24.06		0.0
	50	0	23.11	0-1	1.0
	50	28	**24.11**	0	0.0
	50	56	23.09	0-1	1.0
	100	0	23.19		1.0
DFT-s-OFDM 16QAM	1	1	22.91	0-1	1.0
CP-OFDM QPSK	1	1	22.65	0-1.5	1.5

Table 10-58
NR Band n26 Ant E Measured P_{Max} for DSI = 0 (Body-worn, Hotspot or Phablet) - 20 MHz Bandwidth

NR Band n26 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	166300 (831.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	24.32	0	0.0
	1	53	**24.36**		0.0
	1	104	24.24		0.0
	50	0	23.35	0-1	1.0
	50	28	**24.42**	0	0.0
	50	56	23.26	0-1	1.0
	100	0	23.38		1.0
DFT-s-OFDM 16QAM	1	1	23.14	0-1	1.0
CP-OFDM QPSK	1	1	22.83	0-1.5	1.5

Table 10-59
NR Band n26 Ant E Measured P_{Limit} for DSI = 1 (Head) - 20 MHz Bandwidth

NR Band n26 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	166300 (831.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**21.23**	0	0.0
	1	53	21.14		0.0
	1	104	21.00		0.0
	50	0	21.02	0-1	0.0
	50	28	**21.06**	0	0.0
	50	56	20.99	0-1	0.0
	100	0	21.05		0.0
DFT-s-OFDM 16QAM	1	1	21.06	0-1	0.0
CP-OFDM QPSK	1	1	21.24	0-1.5	0.0

10.4.5 NR Band n70

Table 10-60
NR Band n70 Ant A Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 15 MHz Bandwidth

NR Band n70 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	340500 (1702.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	18.91	0	0.0
	1	40	**18.93**		0.0
	1	77	18.88		0.0
	36	0	**18.94**	0-1	0.0
	36	22	18.88	0	0.0
	36	43	18.82	0-1	0.0
	75	0	18.88		0.0
DFT-s-OFDM 16QAM	1	1	18.95	0-1	0.0
CP-OFDM QPSK	1	1	19.01	0-1.5	0.0

Table 10-61
NR Band n70 Ant A Measured P_{Max} for DSI = 1 (Head) - 15 MHz Bandwidth

NR Band n70 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	340500 (1702.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**23.67**	0	0.0
	1	40	23.65		0.0
	1	77	23.47		0.0
	36	0	22.67	0-1	1.0
	36	22	**23.66**	0	0.0
	36	43	22.68	0-1	1.0
	75	0	22.64		1.0
DFT-s-OFDM 16QAM	1	1	22.45	0-1	1.0
CP-OFDM QPSK	1	1	22.33	0-1.5	1.5

Table 10-62
NR Band n70 Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 15 MHz Bandwidth

NR Band n70 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	340500 (1702.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	20.70	0	0.0
	1	40	21.14		0.0
	1	77	**21.15**		0.0
	36	0	20.91	0-1	0.0
	36	22	21.02	0	0.0
	36	43	**21.05**	0-1	0.0
	75	0	21.00		0.0
DFT-s-OFDM 16QAM	1	1	20.84	0-1	0.0
CP-OFDM QPSK	1	1	21.14	0-1.5	0.0

Table 10-63
NR Band n70 Ant F Measured P_{Limit} for DSI = 1 (Head) - 15 MHz Bandwidth

NR Band n70 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	340500 (1702.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	18.32	0	0.0
	1	40	18.52		0.0
	1	77	**18.82**		0.0
	36	0	18.27	0-1	0.0
	36	22	18.47	0	0.0
	36	43	**18.52**	0-1	0.0
	75	0	18.44		0.0
DFT-s-OFDM 16QAM	1	1	18.16	0-1	0.0
CP-OFDM QPSK	1	1	18.49	0-1.5	0.0

10.4.6 NR Band n66

Table 10-64
NR Band n66 Ant A Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 45 MHz Bandwidth

NR Band n66 45 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	19.06	0	0.0
	1	121	19.08		0.0
	1	240	**19.20**		0.0
	120	0	**19.23**	0-1	0.0
	120	61	19.12	0	0.0
	120	122	19.10	0-1	0.0
	240	0	19.19		0.0
DFT-s-OFDM 16QAM	1	1	18.98	0-1	0.0
CP-OFDM QPSK	1	1	19.16	0-1.5	0.0

Table 10-65
NR Band n66 Ant A Measured P_{Max} for DSI = 1 (Head) - 45 MHz Bandwidth

NR Band n66 45 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.04	0	0.0
	1	121	**23.63**		0.0
	1	240	23.51		0.0
	120	0	22.75	0-1	1.0
	120	61	**23.74**	0	0.0
	120	122	22.79	0-1	1.0
	240	0	22.76		1.0
DFT-s-OFDM 16QAM	1	1	22.01	0-1	1.0
CP-OFDM QPSK	1	1	21.80	0-1.5	1.5

Table 10-66
NR Band n66 Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 45 MHz Bandwidth

NR Band n66 45 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**21.43**	0	0.0
	1	121	21.17		0.0
	1	240	21.04		0.0
	120	0	**21.19**	0-1	0.0
	120	61	21.09	0	0.0
	120	122	21.02	0-1	0.0
	240	0	21.13		0.0
DFT-s-OFDM 16QAM	1	1	21.28	0-1	0.0
CP-OFDM QPSK	1	1	21.31	0-1.5	0.0

Table 10-67
NR Band n66 Ant F Measured P_{Limit} for DSI = 1 (Head) - 45 MHz Bandwidth

NR Band n66 45 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**18.87**	0	0.0
	1	121	18.52		0.0
	1	240	18.52		0.0
	120	0	**18.64**	0-1	0.0
	120	61	18.53	0	0.0
	120	122	18.54	0-1	0.0
	240	0	18.57		0.0
DFT-s-OFDM 16QAM	1	1	18.76	0-1	0.0
CP-OFDM QPSK	1	1	18.87	0-1.5	0.0

10.4.7 NR Band n25

Table 10-68
NR Band n25 Ant A Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	17.80	0	0.0
	1	108	**17.87**		0.0
	1	214	17.86		0.0
	108	0	**17.86**	0-1	0.0
	108	54	17.83	0	0.0
	108	108	17.85	0-1	0.0
	216	0	17.74		0.0
DFT-s-OFDM 16QAM	1	1	17.65	0-1	0.0
CP-OFDM QPSK	1	1	17.92	0-1.5	0.0

Table 10-69
NR Band n25 Ant A Measured P_{Max} for DSI = 1 (Head) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	23.50	0	0.0
	1	108	**23.61**		0.0
	1	214	23.57		0.0
	108	0	22.55	0-1	1.0
	108	54	**23.56**	0	0.0
	108	108	22.56	0-1	1.0
	216	0	22.65		1.0
DFT-s-OFDM 16QAM	1	1	22.44	0-1	1.0
CP-OFDM QPSK	1	1	22.04	0-1.5	1.5

Table 10-70
NR Band n25 Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**20.14**	0	0.0
	1	108	20.05		0.0
	1	214	19.98		0.0
	108	0	19.91	0-1	0.0
	108	54	**20.00**	0	0.0
	108	108	19.91	0-1	0.0
	216	0	19.99		0.0
DFT-s-OFDM 16QAM	1	1	19.99	0-1	0.0
CP-OFDM QPSK	1	1	20.20	0-1.5	0.0

Table 10-71
NR Band n25 Ant F Measured P_{Limit} for DSI = 1 (Head) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**18.61**	0	0.0
	1	108	18.50		0.0
	1	214	18.39		0.0
	108	0	18.46	0-1	0.0
	108	54	**18.48**	0	0.0
	108	108	18.32	0-1	0.0
	216	0	18.47		0.0
DFT-s-OFDM 16QAM	1	1	18.49	0-1	0.0
CP-OFDM QPSK	1	1	18.73	0-1.5	0.0

10.4.8 NR Band n30

Table 10-72
NR Band n30 Ant A Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**19.29**	0	0.0
	1	26	19.26		0.0
	1	50	19.10		0.0
	25	0	19.19	0-1	0.0
	25	14	**19.26**	0	0.0
	25	27	19.25	0-1	0.0
	50	0	19.13		0.0
DFT-s-OFDM 16QAM	1	1	19.23	0-1	0.0
CP-OFDM QPSK	1	1	19.40	0-1.5	0.0

Table 10-73
NR Band n30 Ant A Measured P_{Max} for DSI = 1 (Head) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**22.19**	0	0.0
	1	26	22.06		0.0
	1	50	22.01		0.0
	25	0	21.25	0-1	1.0
	25	14	**22.20**	0	0.0
	25	27	21.23	0-1	1.0
	50	0	21.23		1.0
DFT-s-OFDM 16QAM	1	1	21.30	0-1	1.0
CP-OFDM QPSK	1	1	20.87	0-1.5	1.5

Table 10-74
NR Band n30 Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	19.03	0	0.0
	1	26	**19.20**		0.0
	1	50	19.04		0.0
	25	0	**19.27**	0-1	0.0
	25	14	19.26	0	0.0
	25	27	19.21	0-1	0.0
	50	0	19.19		0.0
DFT-s-OFDM 16QAM	1	1	19.42	0-1	0.0
CP-OFDM QPSK	1	1	19.33	0-1.5	0.0

Table 10-75
NR Band n30 Ant F Measured P_{Limit} for DSI = 1 (Head) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	16.10	0	0.0
	1	26	**16.28**		0.0
	1	50	16.01		0.0
	25	0	16.24	0-1	0.0
	25	14	**16.41**	0	0.0
	25	27	16.25	0-1	0.0
	50	0	16.25		0.0
DFT-s-OFDM 16QAM	1	1	16.49	0-1	0.0
CP-OFDM QPSK	1	1	16.08	0-1.5	0.0

10.4.9 NR Band n7

Table 10-76
NR Band n7 Ant B Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 50 MHz Bandwidth

NR Band n7 50 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	507000 (2535 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**20.41**	0	0.0
	1	135	20.22		0.0
	1	268	20.16		0.0
	135	0	**20.35**	0-1	0.0
	135	68	20.28	0	0.0
	135	135	20.13	0-1	0.0
	270	0	20.27		0.0
DFT-s-OFDM 16QAM	1	1	19.99	0-1	0.0
CP-OFDM QPSK	1	1	20.68	0-1.5	0.0

Table 10-77
NR Band n7 Ant B Measured P_{Max} for DSI = 1 (Head) - 50 MHz Bandwidth

NR Band n7 50 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	507000 (2535 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**23.56**	0	0.0
	1	135	23.22		0.0
	1	268	23.29		0.0
	135	0	22.40	0-1	1.0
	135	68	**23.28**	0	0.0
	135	135	22.15	0-1	1.0
	270	0	22.33		1.0
DFT-s-OFDM 16QAM	1	1	22.38	0-1	1.0
CP-OFDM QPSK	1	1	22.17	0-1.5	1.5

Table 10-78
NR Band n7 Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 50 MHz Bandwidth

NR Band n7 50 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	507000 (2535 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**19.79**	0	0.0
	1	135	19.57		0.0
	1	268	19.71		0.0
	135	0	19.63	0-1	0.0
	135	68	**19.74**	0	0.0
	135	135	19.61	0-1	0.0
	270	0	19.71		0.0
DFT-s-OFDM 16QAM	1	1	19.73	0-1	0.0
CP-OFDM QPSK	1	1	20.07	0-1.5	0.0

Table 10-79
NR Band n7 Ant F Measured P_{Limit} for DSI = 1 (Head) - 50 MHz Bandwidth

NR Band n7 50 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	507000 (2535 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	**16.31**	0	0.0
	1	135	16.14		0.0
	1	268	16.21		0.0
	135	0	**16.24**	0-1	0.0
	135	68	16.21	0	0.0
	135	135	16.08	0-1	0.0
	270	0	16.15		0.0
DFT-s-OFDM 16QAM	1	1	16.15	0-1	0.0
CP-OFDM QPSK	1	1	16.38	0-1.5	0.0

10.4.10 NR Band n41

Table 10-80
NR Band n41 PC2 Antenna F Path 1 Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	20.22	0	0.0
	1	137	**20.27**		0.0
	1	271	20.24		0.0
	135	0	20.24	0-1	0.0
	135	69	**20.33**	0	0.0
	135	138	20.28	0-1	0.0
	270	0	20.26		0.0
DFT-s-OFDM 16QAM	1	1	20.21	0-1	0.0
CP-OFDM QPSK	1	1	20.24	0-1.5	0.0

Table 10-81
NR Band n41 PC2 Antenna F Path 1 Measured P_{Limit} for DSI = 1 (Head) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	17.18	0	0.0
	1	137	**17.33**		0.0
	1	271	17.22		0.0
	135	0	17.18	0-1	0.0
	135	69	**17.29**	0	0.0
	135	138	17.23	0-1	0.0
	270	0	17.26		0.0
DFT-s-OFDM 16QAM	1	1	17.12	0-1	0.0
CP-OFDM QPSK	1	1	17.25	0-1.5	0.0

Table 10-82
NR Band n41 PC2 Antenna B, E, D Path 1 Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth		
	Channel	
Antenna	518598 (2592.99 MHz) Conducted Power [dBm]	
SRS #2 Ant B	**20.31**	
SRS #3 Ant E	**18.63**	
SRS #4 Ant D	**19.83**	

Table 10-83
NR Band n41 PC2 Antenna B, E, D Path 1 Measured P_{Limit} for DSI = 1 (Head) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth		
	Channel	
Antenna	518598 (2592.99 MHz) Conducted Power [dBm]	
SRS #2 Ant B	**17.30**	
SRS #3 Ant E	**15.60**	
SRS #4 Ant D	**16.85**	

Table 10-84
NR Band n41 PC2 Antenna B Path 2 Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	20.93	0	0.0
	1	137	**20.96**		0.0
	1	271	20.94		0.0
	135	0	20.91	0-1	0.0
	135	69	20.92	0	0.0
	135	138	**20.95**	0-1	0.0
	270	0	20.93		0.0
DFT-s-OFDM 16QAM	1	1	20.88	0-1	0.0
CP-OFDM QPSK	1	1	20.97	0-1.5	0.0

Table 10-85
NR Band n41 PC2 Antenna B Path 2 Measured P_{Limit} for DSI = 1 (Head) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	21.98	0	0.0
	1	137	21.97		0.0
	1	271	**22.00**		0.0
	135	0	**21.98**	0-1	0.0
	135	69	21.93	0	0.0
	135	138	21.93	0-1	0.0
	270	0	21.94		0.0
DFT-s-OFDM 16QAM	1	1	21.91	0-1	0.0
CP-OFDM QPSK	1	1	21.98	0-1.5	0.0

Table 10-86
NR Band n41 PC2 Antenna F & D Path 2 Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) and NR Band n41 PC2 Antenna E Path 2 Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) and P_{Limit} for DSI = 1 (Head)

NR Band n41 100 MHz Bandwidth	
	Channel
Antenna	518598 (2592.99 MHz)
	Conducted Power [dBm]
SRS #2 Ant F	19.96
SRS #3 Ant D	20.26
SRS #4 Ant E	18.07

Table 10-87
NR Band n41 PC2 Antenna F & D Path 2 Measured P_{Limit} for DSI = 1 (Head) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth	
	Channel
Antenna	518598 (2592.99 MHz)
	Conducted Power [dBm]
SRS #2 Ant F	17.03
SRS #3 Ant D	21.24

10.4.11 NR Band n48

Table 10-88
NR Band n48 Ant F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	19.87	20.35	20.34	0	0.0
	1	53	20.11	20.26	20.21		0.0
	1	104	20.29	20.27	**20.37**		0.0
	50	0	20.12	20.37	20.28	0-1	0.0
	50	28	20.16	20.34	**20.38**	0	0.0
	50	56	20.20	20.27	20.36	0-1	0.0
	100	0	20.14	20.32	20.33		0.0
DFT-s-OFDM 16QAM	1	1	19.89	20.31	20.23	0-1	0.0
CP-OFDM QPSK	1	1	19.88	20.31	20.29	0-1.5	0.0

Table 10-89
NR Band n48 Ant F Measured P_{Limit} for DSI = 1 (Head) - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	16.35	16.81	16.79	0	0.0
	1	53	16.59	16.74	16.67		0.0
	1	104	16.75	16.68	**16.84**		0.0
	50	0	16.56	16.81	16.75	0-1	0.0
	50	28	16.64	16.73	**16.83**	0	0.0
	50	56	16.77	16.77	16.77	0-1	0.0
	100	0	16.61	16.76	16.77		0.0
DFT-s-OFDM 16QAM	1	1	16.42	16.71	16.72	0-1	0.0
CP-OFDM QPSK	1	1	16.45	16.68	16.79	0-1.5	0.0

Table 10-90
NR Band n48 Antenna C, I, D Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth			
	Channel		
Antenna	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)
	Conducted Power [dBm]		
SRS #2 Ant C	15.36	15.33	15.16
SRS #3 Ant I	19.45	19.49	19.50
SRS #4 Ant D	14.98	15.07	15.16

Table 10-91
NR Band n48 Antenna C, I, D Measured P_{Limit} for DSI = 1 (Head) - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth			
	Channel		
Antenna	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)
	Conducted Power [dBm]		
SRS #2 Ant C	11.84	11.90	11.65
SRS #3 Ant I	15.96	16.01	15.95
SRS #4 Ant D	11.46	11.61	11.62

10.4.12 NR Band n77

Table 10-92
NR Band n77 DoD Antenna F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	633334 (3500.01 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	18.81	0	0.0
	1	137	18.58		0.0
	1	271	**18.99**		0.0
	135	0	18.73	0-1	0.0
	135	69	18.62	0	0.0
	135	138	**19.00**	0-1	0.0
	270	0	18.80		0.0
DFT-s-OFDM 16QAM	1	1	18.82	0-1	0.0
CP-OFDM QPSK	1	1	18.85	0-1.5	0.0

Table 10-93
NR Band n77 DoD Antenna F Measured P_{Limit} for DSI = 1 (Head) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	633334 (3500.01 MHz) Conducted Power [dBm]		
DFT-s-OFDM QPSK	1	1	16.88	0	0.0
	1	137	16.71		0.0
	1	271	**16.99**		0.0
	135	0	16.75	0-1	0.0
	135	69	16.64	0	0.0
	135	138	**17.00**	0-1	0.0
	270	0	16.73		0.0
DFT-s-OFDM 16QAM	1	1	16.84	0-1	0.0
CP-OFDM QPSK	1	1	16.83	0-1.5	0.0

Table 10-94
NR Band n77 DoD Antenna C, I, D Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth	
	Channel
Antenna	633334 (3500.01 MHz)
	Conducted Power [dBm]
SRS #2 Ant C	14.32
SRS #3 Ant I	17.90
SRS #4 Ant D	13.65

Table 10-95
NR Band n77 DoD Antenna C, I, D Measured P_{Limit} for DSI = 1 (Head) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth	
	Channel
Antenna	633334 (3500.01 MHz)
	Conducted Power [dBm]
SRS #2 Ant C	11.82
SRS #3 Ant I	15.54
SRS #4 Ant D	11.19

Table 10-96
NR Band n77 Antenna F Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM QPSK	1	1	18.49	**18.94**	0	0.0
	1	137	18.43	18.72		0.0
	1	271	18.51	18.93		0.0
	135	0	18.56	18.82	0-1	0.0
	135	69	18.48	18.78	0	0.0
	135	138	18.44	**18.90**	0-1	0.0
	270	0	18.46	18.85		0.0
DFT-s-OFDM 16QAM	1	1	18.38	18.83	0-1	0.0
CP-OFDM QPSK	1	1	18.49	18.86	0-1.5	0.0

Table 10-97
NR Band n77 Antenna F Measured P_{Limit} for DSI = 1 (Head) - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM QPSK	1	1	16.46	**16.94**	0	0.0
	1	137	16.41	16.67		0.0
	1	271	16.52	16.79		0.0
	135	0	16.47	16.73	0-1	0.0
	135	69	16.37	16.73	0	0.0
	135	138	16.30	**16.84**	0-1	0.0
	270	0	16.37	16.73		0.0
DFT-s-OFDM 16QAM	1	1	16.51	16.83	0-1	0.0
CP-OFDM QPSK	1	1	16.46	16.81	0-1.5	0.0

Table 10-98
NR Band n77 Antenna C, I, D Measured P_{Limit} for DSI = 0 (Body-worn, Hotspot or Phablet) - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth		
	Channel	
Antenna	650000 (3750 MHz)	662000 (3930 MHz)
	Conducted Power [dBm]	
SRS #2 Ant C	13.27	**14.29**
SRS #3 Ant I	17.70	**18.87**
SRS #4 Ant D	12.91	**13.40**

Table 10-99
NR Band n77 Antenna C, I, D Measured P_{Limit} for DSI = 1 (Head) - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth		
	Channel	
Antenna	650000 (3750 MHz)	662000 (3930 MHz)
	Conducted Power [dBm]	
SRS #2 Ant C	10.79	**11.73**
SRS #3 Ant I	15.11	**16.27**
SRS #4 Ant D	10.34	**10.85**

Figure 10-4
Power Measurement Setup – NR FDD

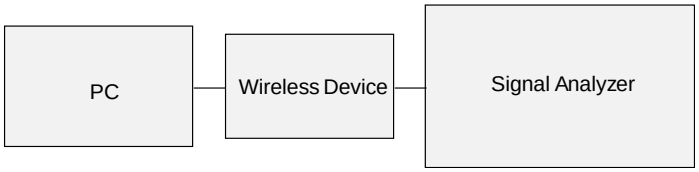


Figure 10-5
Power Measurement Setup – NR TDD

10.5 NTN Band 255 Conducted Powers

Table 10-100
NTN Band b255 Antenna F Measured P_{Max} for DSI = 0 (Body-worn and Phablet) - 20 MHz Bandwidth

Rx Channel	Tx Channel	Frequency	# Tones	Tone Start	BPSK	QPSK
228737	261505	1626.6	1	0	22.34	22.45
			1	5	22.56	**22.76**
			1	11	22.07	22.05
			3	0	22.02	21.49
			3	3	22.28	21.52
			3	6	22.04	21.48
			6	0	22.25	21.43
			6	6	22.22	21.38
			12	0	22.19	21.44
228906	261674	1643.5	1	0	22.06	22.01
			1	5	22.53	22.53
			1	11	22	22.03
			3	0	22.01	21.99
			3	3	22.19	22.08
			3	6	22	21.98
			6	0	22.14	21.94
			6	6	22.16	22.06
			12	0	22.16	22.11
229075	261843	1660.4	1	0	22.03	22.03
			1	5	22.53	22.49
			1	11	22.11	22.02
			3	0	22.15	20.78
			3	3	22.05	20.80
			3	6	22.12	20.75
			6	0	22.19	20.76
			6	6	22.27	20.78
			12	0	22.11	20.74

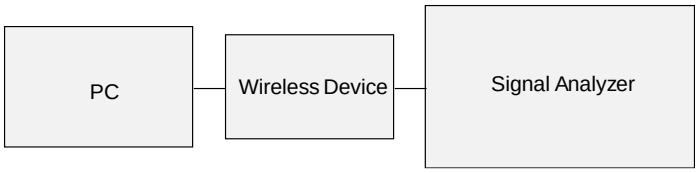


Figure 10-6
Power Measurement Setup – NTN

10.6 WLAN Conducted Powers

Table 10-101
2.4 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 1 (Head) – Ant H

2.4GHz WIFI (20MHz 802.11b SISO ANT H)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.88
2437	6		16.43
2462	11		16.80
2.4GHz WIFI (20MHz 802.11g SISO ANT H)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.57
2437	6		16.82
2462	11		16.79
2.4GHz WIFI (20MHz 802.11n SISO ANTH)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.62
2437	6		16.54
2462	11		16.79
2.4GHz WIFI (20MHz 802.11ac SISO ANTH)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.52
2437	6		16.76
2462	11		16.71

2.4GHz WIFI (20MHz 802.11ax SISO ANTH)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.75
2437	6		16.55
2462	11		16.97
2.4GHz WIFI (20MHz 802.11be SISO ANTH)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.83
2437	6		16.58
2462	11		16.29

Table 10-102
2.4 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 1 (Head) – Ant J

2.4GHz WIFI (20MHz 802.11b SISO ANT J)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.82
2437	6		16.33
2462	11		16.62
2.4GHz WIFI (20MHz 802.11g SISO ANTJ)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.75
2437	6		16.82
2462	11		16.70
2.4GHz WIFI (20MHz 802.11n SISO ANTJ)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.73
2437	6		16.73
2462	11		16.62
2.4GHz WIFI (20MHz 802.11ac SISO ANTJ)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.83
2437	6		16.67
2462	11		16.67
2.4GHz WIFI (20MHz 802.11ax SISO ANTJ)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.79
2437	6		16.83
2462	11		16.65
2.4GHz WIFI (20MHz 802.11be SISO ANTJ)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	16.77
2437	6		16.78
2462	11		16.64

Table 10-103
2.4 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 1 (Head) – MIMO

2.4GHz WIFI (20MHz 802.11g MIMO)					
Freq [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**		
			ANT1	**ANT2**	**MIMO**
2412	1	Average	16.47	16.21	19.35
2437	6		16.12	15.93	19.03
2462	11		16.51	16.01	19.28

Table 10-104
2.4 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 0 (Body-worn, Hotspot or Phablet) – Ant H

2.4GHz WIFI (20MHz 802.11b SISO ANT H)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	19.73
2437	6		19.51
2462	11		19.97
2.4GHz WIFI (20MHz 802.11g SISO ANT H)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.54
2437	6		17.42
2462	11		17.40
2.4GHz WIFI (20MHz 802.11n SISO ANT H)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.65
2437	6		17.53
2462	11		17.43
2.4GHz WIFI (20MHz 802.11ac SISO ANT H)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.09
2437	6		17.53
2462	11		17.43
2.4GHz WIFI (20MHz 802.11ax SISO ANT H)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.49
2437	6		17.41
2462	11		17.90
2.4GHz WIFI (20MHz 802.11be SISO ANT H)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.52
2437	6		17.40
2462	11		17.36

Table 10-105
2.4 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 0 (Body-worn, Hotspot or Phablet) – Ant J

2.4GHz WIFI (20MHz 802.11b SISO ANT J)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	19.55
2437	6		19.45
2462	11		19.53
2.4GHz WIFI (20MHz 802.11g SISO ANT J)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.35
2437	6		17.46
2462	11		17.08
2.4GHz WIFI (20MHz 802.11n SISO ANT J)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.48
2437	6		17.48
2462	11		17.04
2.4GHz WIFI (20MHz 802.11ac SISO ANT J)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.40
2437	6		17.55
2462	11		17.05
2.4GHz WIFI (20MHz 802.11ax SISO ANT J)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.36
2437	6		17.34
2462	11		17.46
2.4GHz WIFI (20MHz 802.11be SISO ANT J)			
Freq. [MHz]	**Channel**	**Detector**	**Conducted Power [dBm]**
2412	1	Average	17.33
2437	6		17.33
2462	11		17.43

Table 10-106
2.4 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 0 (Body-worn, Hotspot or Phablet) – MIMO

2.4GHz WIFI (20MHz 802.11g MIMO)					
Freq [MHz]	Channel	Detector	Conducted Power [dBm]		
			ANT1	ANT2	MIMO
2412	1	Average	17.96	17.77	20.88
2437	6		17.51	17.73	20.63
2462	11		17.74	17.82	20.79

Table 10-107
5 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 0 (Body-worn, Hotspot or Phablet), DSI = 1 (Head) – Ant H

5GHz WIFI (80MHz 802.11ac SISO ANT H)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-1	5210	42	15.53
UNII-2A	5290	58	15.95
UNII-2C	5530	106	15.71
	5610	122	16.00
	5690	138	15.59
UNII-3	5775	155	15.66
UNII-4	5885	171	15.89
5GHz WIFI (80MHz 802.11ax SISO ANTH)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-1	5210	42	15.80
UNII-2A	5290	58	15.58
UNII-2C	5530	106	15.42
	5610	122	15.78
	5690	138	15.93
UNII-3	5775	155	15.96
UNII-4	5885	171	15.67
5GHz WIFI (80MHz 802.11be SISO ANTH)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-1	5210	42	15.83
UNII-2A	5290	58	15.63
UNII-2C	5530	106	15.48
	5610	122	15.86
	5690	138	15.97
UNII-3	5775	155	15.45
UNII-4	5885	171	15.67

Table 10-108
5 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 0 (Body-worn, Hotspot or Phablet), DSI = 1 (Head) – Ant E

5GHz WIFI (80MHz 802.11ac SISO ANT E)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-1	5210	42	15.79
UNII-2A	5290	58	15.60
UNII-2C	5530	106	15.85
	5610	122	15.65
	5690	138	15.96
UNII-3	5775	155	15.69
UNII-4	5885	171	15.97
5GHz WIFI (80MHz 802.11ax SISO ANTE)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-1	5210	42	15.97
UNII-2A	5290	58	15.65
UNII-2C	5530	106	15.68
	5610	122	15.75
	5690	138	15.82
UNII-3	5775	155	15.77
UNII-4	5885	171	15.94
5GHz WIFI (80MHz 802.11be SISO ANTE)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-1	5210	42	15.99
UNII-2A	5290	58	15.70
UNII-2C	5530	106	15.72
	5610	122	15.81
	5690	138	15.81
UNII-3	5775	155	15.81
UNII-4	5885	171	15.98

Table 10-109
5 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 0 (Body-worn, Hotspot or Phablet), DSI = 1 (Head) – MIMO

5GHz WIFI (80MHz 802.11ac MIMO)					
Band	**Freq [MHz]**	**Channel**	**Avg. Conducted Powers [dBm]**		
			ANT1	**ANT2**	**MIMO**
UNII-1	5210	42	15.56	15.52	18.55
UNII-2A	5290	58	15.98	15.45	18.73
UNII-2C	5530	106	15.83	15.80	18.82
	5610	122	15.10	15.72	18.43
	5690	138	15.60	15.93	18.78
UNII-3	5775	155	15.20	15.61	18.42
UNII-4	5885	171	15.38	15.87	18.64

Table 10-110
6 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 0 (Body-worn or Phablet) – Ant H

6GHz WIFI (160MHz 802.11ax SISO ANT H)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-5	6025	15	8.81
	6345	79	8.73
UNII-6	6505	111	8.88
UNII-7	6825	175	8.83
UNII-8	6985	207	8.89

Table 10-111
6 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 0 (Body-worn or Phablet) – Ant E

6GHz WIFI (160MHz 802.11ax SISO ANT E)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-5	6025	15	8.93
	6345	79	8.51
UNII-6	6505	111	8.90
UNII-7	6825	175	8.91
UNII-8	6985	207	8.68
6GHz WIFI (160MHz 802.11be SISO ANT E)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-5	6025	15	8.79
	6185	47	9.26
	6345	79	9.07
UNII-6	6505	111	9.65
UNII-7	6665	143	9.11
	6825	175	9.72
UNII-8	6985	207	9.96

Table 10-112
6 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 0 (Body-worn or Phablet) – MIMO

6GHz WIFI (160MHz 802.11ax MIMO)					
Band	**Freq [MHz]**	**Channel**	**Avg. Conducted Powers [dBm]**		
			ANT1	**ANT2**	**MIMO**
UNII-5	6025	15	8.70	8.56	11.64
	6345	79	8.60	8.59	11.61
UNII-6	6505	111	8.49	8.72	11.62
UNII-7	6825	175	8.02	8.98	11.54
UNII-8	6985	207	8.29	8.81	11.57

Table 10-113
6 GHz WLAN Measured P_{max} Average RF Power for DSI = 1 (Head) – Ant H

6GHz WIFI (40MHz 802.11ax SISO ANT H)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-5	5965	3	16.99
	6285	67	16.54
UNII-7	6685	147	16.92

6GHz WIFI (80MHz 802.11ax SISO ANT H)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-6	6465	103	15.89
UNII-8	7025	215	15.24

6GHz WIFI (40MHz 802.11be SISO ANT H)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-5	5965	3	16.56
	6285	67	16.93
UNII-7	6685	147	16.71

6GHz WIFI (80MHz 802.11be SISO ANT H)			
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]
UNII-6	6465	103	15.66
UNII-8	7025	215	15.26

Table 10-114
6 GHz WLAN Measured P_{max} Average RF Power for DSI = 1 (Head) – Ant E

6GHz WIFI (40MHz 802.11ax SISO ANT E)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-5	5965	3	16.99
	6285	67	16.98
UNII-7	6685	147	16.89

6GHz WIFI (80MHz 802.11ax SISO ANT E)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-6	6465	103	15.50
UNII-8	7025	215	15.00

6GHz WIFI (40MHz 802.11be SISO ANT E)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-5	5965	3	16.69
	6285	67	16.83
UNII-7	6685	147	16.65

6GHz WIFI (80MHz 802.11be SISO ANT E)			
Band	**Freq. [MHz]**	**Channel**	**Avg. Conducted Power [dBm]**
UNII-6	6465	103	15.47
UNII-8	7025	215	15.08

Table 10-115
6 GHz WLAN Measured P_{max} Average RF Power for DSI = 1 (Head) – MIMO

6GHz WIFI (40MHz 802.11ax MIMO)					
Band	**Freq [MHz]**	**Channel**	**Avg. Conducted Powers [dBm]**		
			ANT1	**ANT2**	**MIMO**
UNII-5	5965	3	16.86	16.65	19.77
	6285	67	16.59	15.95	19.29
UNII-7	6685	147	16.90	16.60	19.76

6GHz WIFI (80MHz 802.11ax MIMO)					
Band	**Freq [MHz]**	**Channel**	**Avg. Conducted Powers [dBm]**		
			ANT1	**ANT2**	**MIMO**
UNII-6	6465	103	15.41	15.79	18.61
UNII-8	7025	215	14.84	15.20	18.03

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission modes with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured.

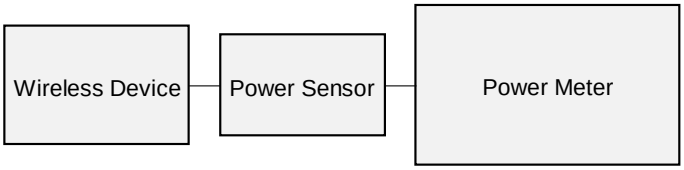


Figure 10-7
Power Measurement Setup

10.7 Bluetooth Conducted Powers

Table 10-116
Bluetooth Measured P_{max} Average RF Power for all DSI – Ant H

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Avg Conducted Power	
					[dBm]	[mW]
2402	1.0	GFSK	ePA	0	17.10	51.227
2441	1.0	GFSK	ePA	39	18.64	73.182
2480	1.0	GFSK	ePA	78	17.75	59.574
2402	2.0	π/4-DQPSK	ePA	0	13.79	23.920
2441	2.0	π/4-DQPSK	ePA	39	15.71	37.238
2480	2.0	π/4-DQPSK	ePA	78	14.88	30.780
2402	3.0	8DPSK	ePA	0	14.25	26.620
2441	3.0	8DPSK	ePA	39	15.83	38.255
2480	3.0	8DPSK	ePA	78	14.71	29.592

Table 10-117
Bluetooth Measured P_{max} Average RF Power for all DSI – Ant J

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Avg Conducted Power	
					[dBm]	[mW]
2402	1.0	GFSK	ePA	0	18.09	64.408
2441	1.0	GFSK	ePA	39	18.68	73.723
2480	1.0	GFSK	ePA	78	17.74	59.425
2402	2.0	π/4-DQPSK	ePA	0	15.06	32.055
2441	2.0	π/4-DQPSK	ePA	39	15.58	36.126
2480	2.0	π/4-DQPSK	ePA	78	14.46	27.954
2402	3.0	8DPSK	ePA	0	15.14	32.695
2441	3.0	8DPSK	ePA	39	15.55	35.917
2480	3.0	8DPSK	ePA	78	14.54	28.467

Table 10-118
Bluetooth Measured P_{max} Average RF Power for all DSI – MIMO

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	ANT1 Avg Conducted Power		ANT1 Target	ANT2 Avg Conducted Power		ANT2 Target	Dual Avg Conducted Power	
					[dBm]	[mW]	[dBm]	[dBm]	[mW]	[dBm]	[dBm]	[mW]
2402	1.0	GFSK	iPA	0	13.82	24.099	14.500	13.64	23.121	14.500	16.74	47.220
2441	1.0	GFSK	iPA	39	15.14	32.659	14.500	15.39	34.594	14.500	18.28	67.253
2480	1.0	GFSK	iPA	78	14.77	29.992	14.500	14.82	30.339	14.500	17.81	60.331
2402	2.0	π/4-DQPSK	iPA	0	11.21	13.213	11.500	11.49	14.093	11.500	14.36	27.306
2441	2.0	π/4-DQPSK	iPA	39	12.35	17.179	11.500	12.37	17.258	11.500	15.37	34.437
2480	2.0	π/4-DQPSK	iPA	78	11.48	14.060	11.500	11.53	14.223	11.500	14.52	28.284
2402	3.0	8DPSK	iPA	0	11.28	13.428	11.500	11.31	13.521	11.500	14.31	26.948
2441	3.0	8DPSK	iPA	39	12.42	17.458	11.500	12.41	17.418	11.500	15.43	34.876
2480	3.0	8DPSK	iPA	78	11.82	15.205	11.500	11.55	14.289	11.500	14.70	29.494

Table 10-119
Bluetooth LE Measured P_{max} Average RF Power for all DSI – Ant H

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Bluetooth Mode	Peak Conducted Power	
				[dBm]	[mW]
2402	125 kbps	0	LE	11.28	13.428
2440	125 kbps	19	LE	12.60	18.197
2480	125 kbps	39	LE	11.73	14.894
2402	500 kbps	0	LE	11.32	13.552
2440	500 kbps	19	LE	12.63	18.323
2480	500 kbps	39	LE	11.79	15.101
2402	1 Mbps	0	LE	19.25	84.140
2440	1 Mbps	19	LE	19.94	98.628
2480	1 Mbps	39	LE	19.16	82.414
2402	2 Mbps	0	LE	19.19	82.985
2440	2 Mbps	19	LE	20.08	101.859
2480	2 Mbps	39	LE	19.42	87.498

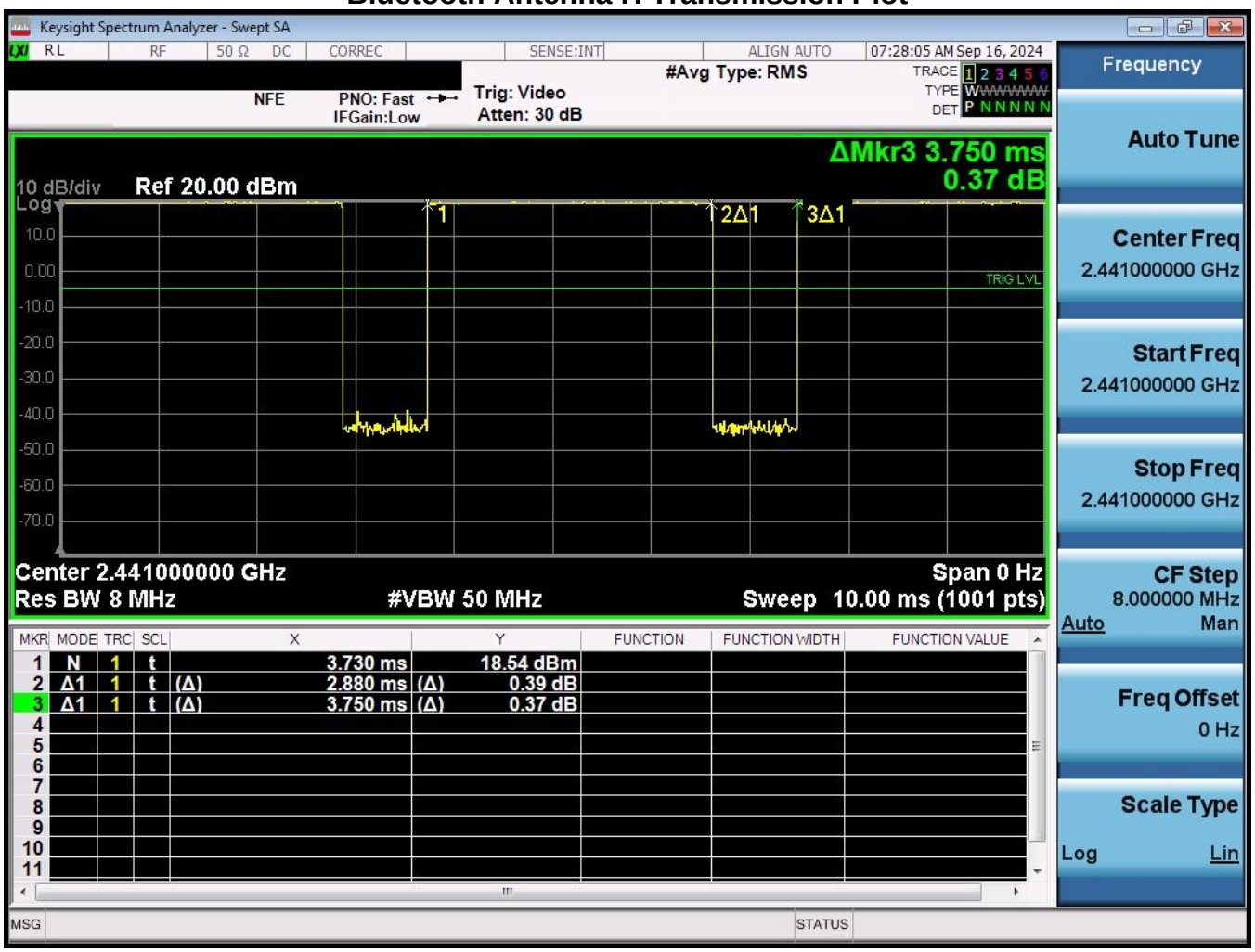
Table 10-120
Bluetooth LE Measured P_{max} Average RF Power for all DSI – Ant J

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Bluetooth Mode	Peak Conducted Power	
				[dBm]	[mW]
2402	125 kbps	0	LE	9.75	9.441
2440	125 kbps	19	LE	10.34	10.814
2480	125 kbps	39	LE	9.67	9.268
2402	500 kbps	0	LE	9.88	9.727
2440	500 kbps	19	LE	10.37	10.889
2480	500 kbps	39	LE	9.72	9.376
2402	1 Mbps	0	LE	18.77	75.336
2440	1 Mbps	19	LE	19.37	86.497
2480	1 Mbps	39	LE	18.32	67.920
2402	2 Mbps	0	LE	18.66	73.451
2440	2 Mbps	19	LE	19.27	84.528
2480	2 Mbps	39	LE	18.47	70.307

Table 10-121
Bluetooth LE Measured P_{max} Average RF Power for all DSI – MIMO

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Bluetooth Mode	ANT1 Peak Conducted Power		ANT2 Peak Conducted Power		Dual Peak Conducted Power	
						[dBm]	[mW]	[dBm]	[mW]	[dBm]	[mW]
2402	1 Mbps	GFSK	ePA	0	LE	14.35	27.227	13.72	23.550	17.06	50.778
2440	1 Mbps	GFSK	ePA	19	LE	15.44	34.995	13.92	24.660	17.76	59.655
2480	1 Mbps	GFSK	ePA	39	LE	15.39	34.594	13.61	22.961	17.60	57.555
2402	2 Mbps	GFSK	iPA	0	LE	14.46	27.925	13.99	25.061	17.24	52.987
2440	2 Mbps	GFSK	iPA	19	LE	15.43	34.914	14.09	25.645	17.82	60.559
2480	2 Mbps	GFSK	iPA	39	LE	15.48	35.318	14.00	25.119	17.81	60.437

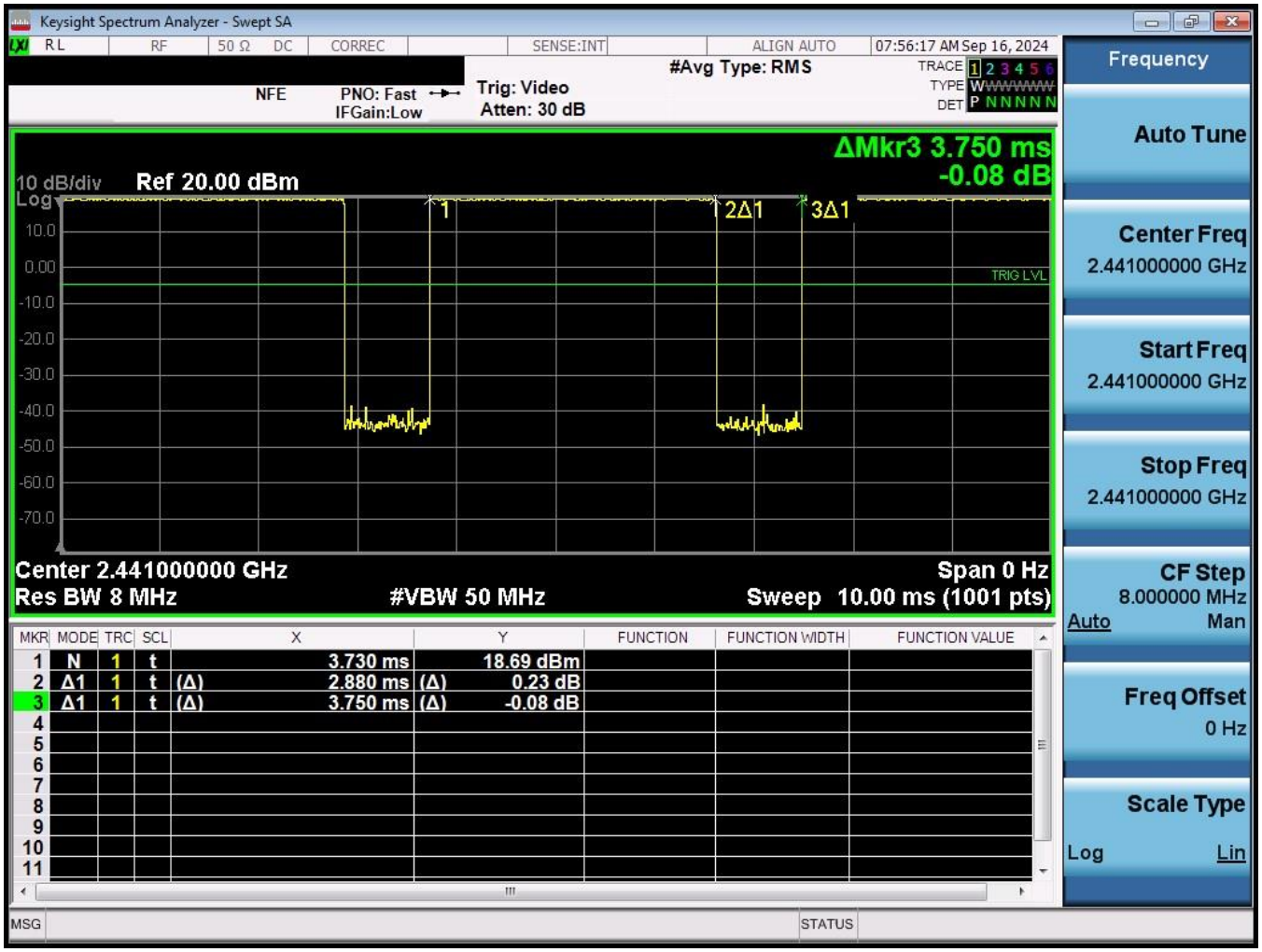
Figure 10-8
Bluetooth Antenna H Transmission Plot



Equation 10-1
Bluetooth Antenna H Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.88ms}{3.75ms} * 100\% = 76.8\%$$

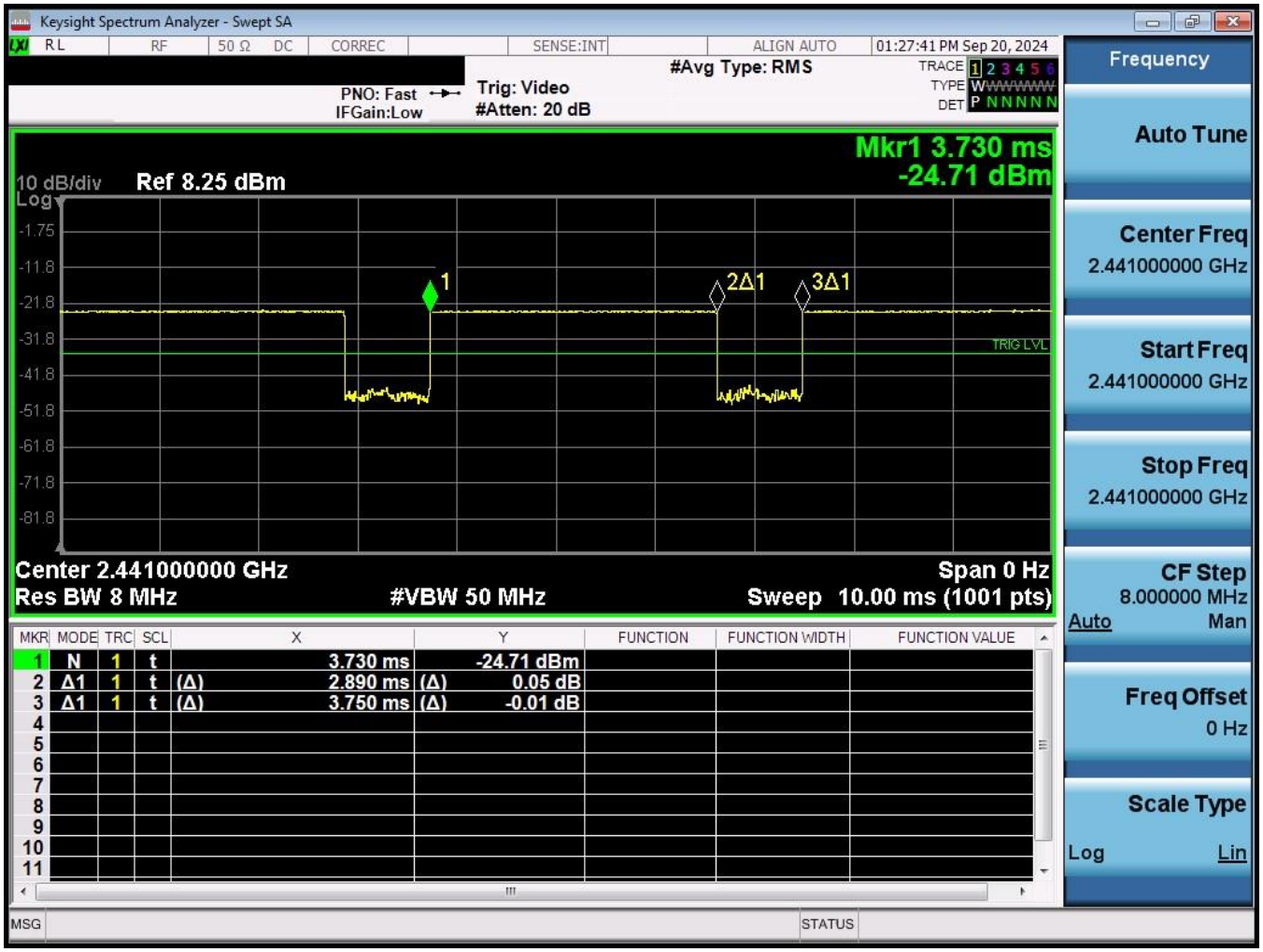
Figure 10-9
Bluetooth Antenna J Transmission Plot



Equation 10-2
Bluetooth Antenna J Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.88ms}{3.75ms} * 100\% = 76.8\%$$

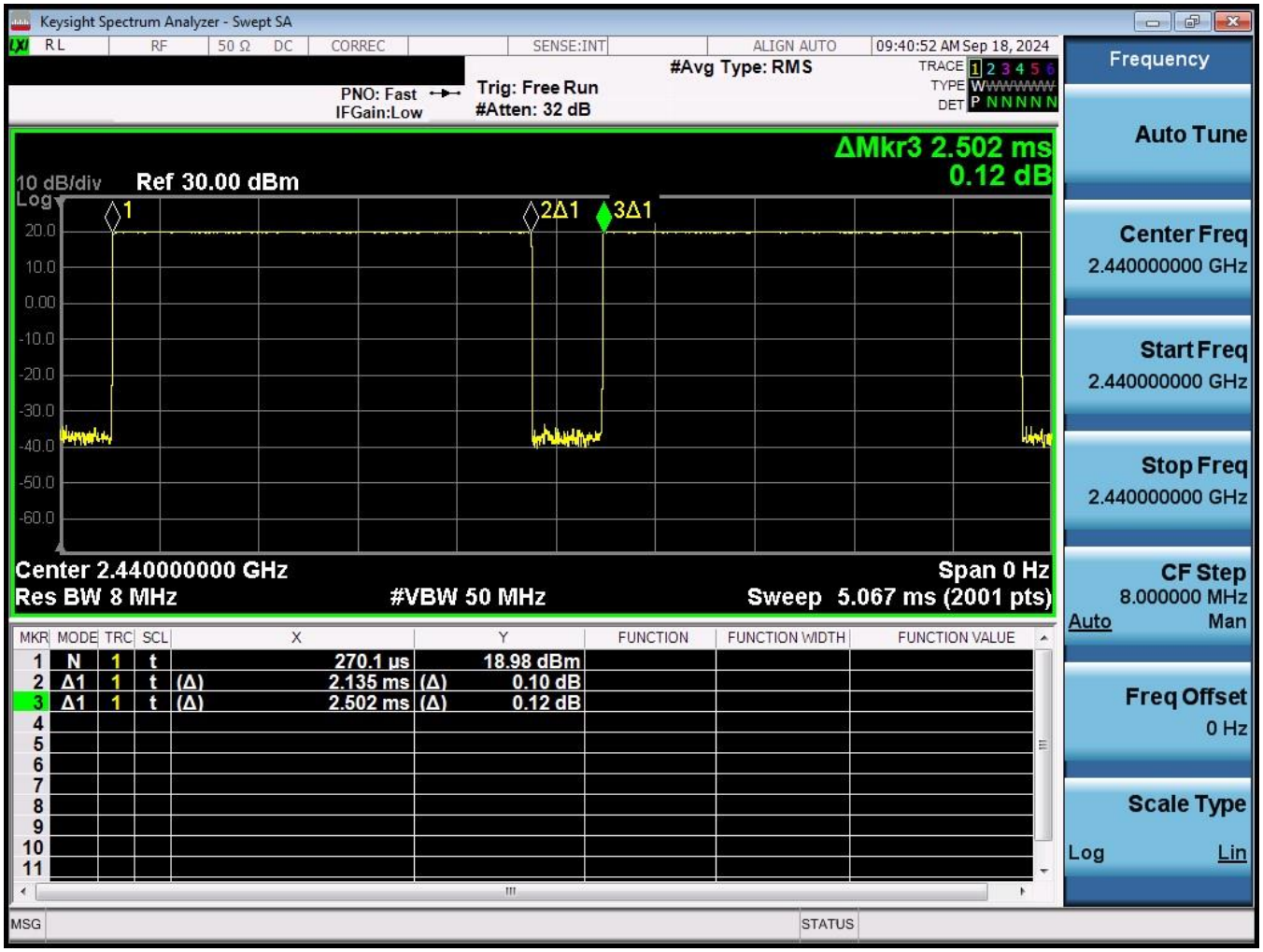
Figure 10-10
Bluetooth MIMO Transmission Plot



Equation 10-3
Bluetooth MIMO Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.890ms}{3.750ms} * 100\% = 77.07\%$$

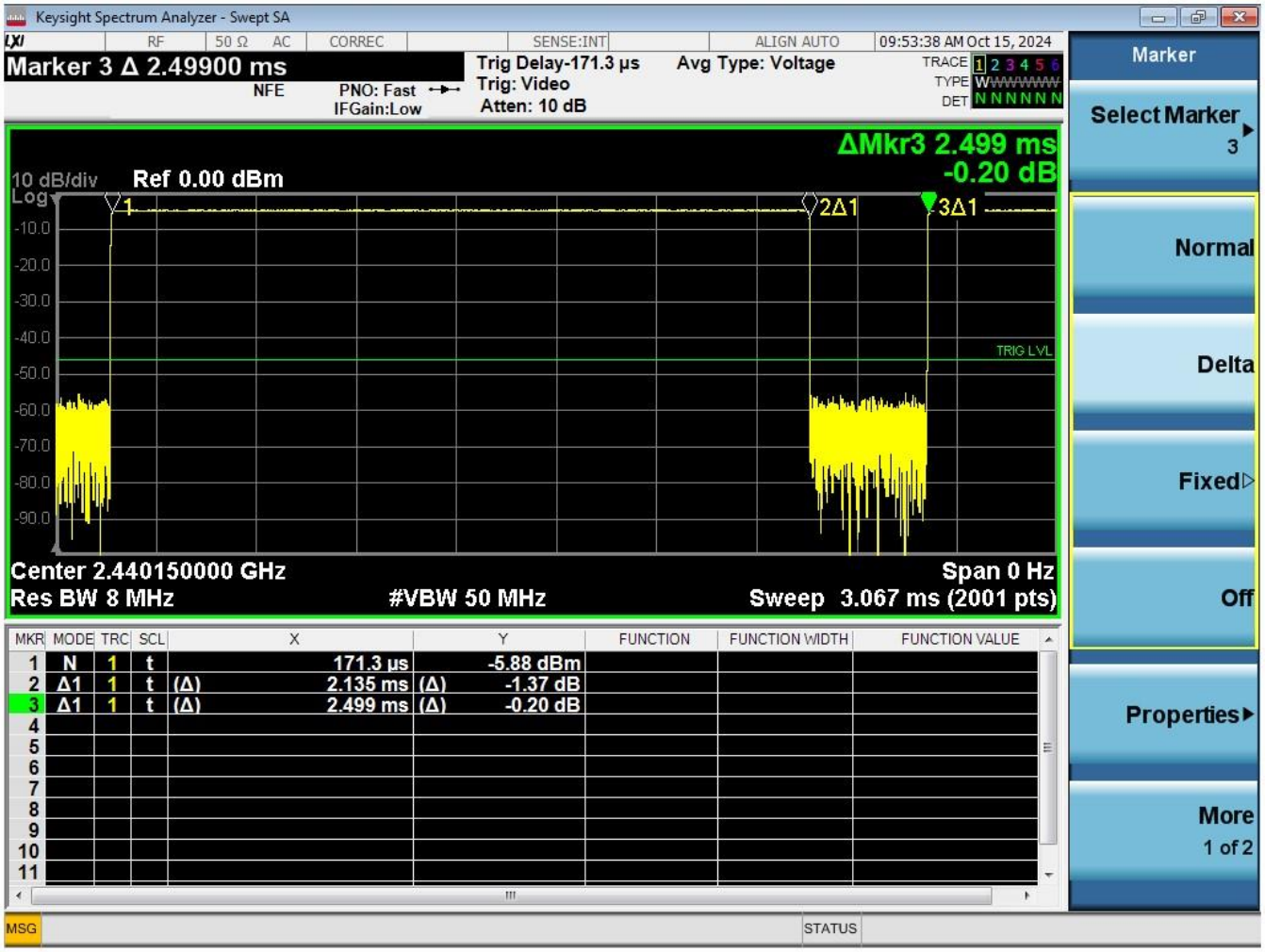
Figure 10-11
Bluetooth LE Antenna H Transmission Plot



Equation 10-4
Bluetooth LE Antenna H Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.135ms}{2.502ms} * 100\% = 85.33\%$$

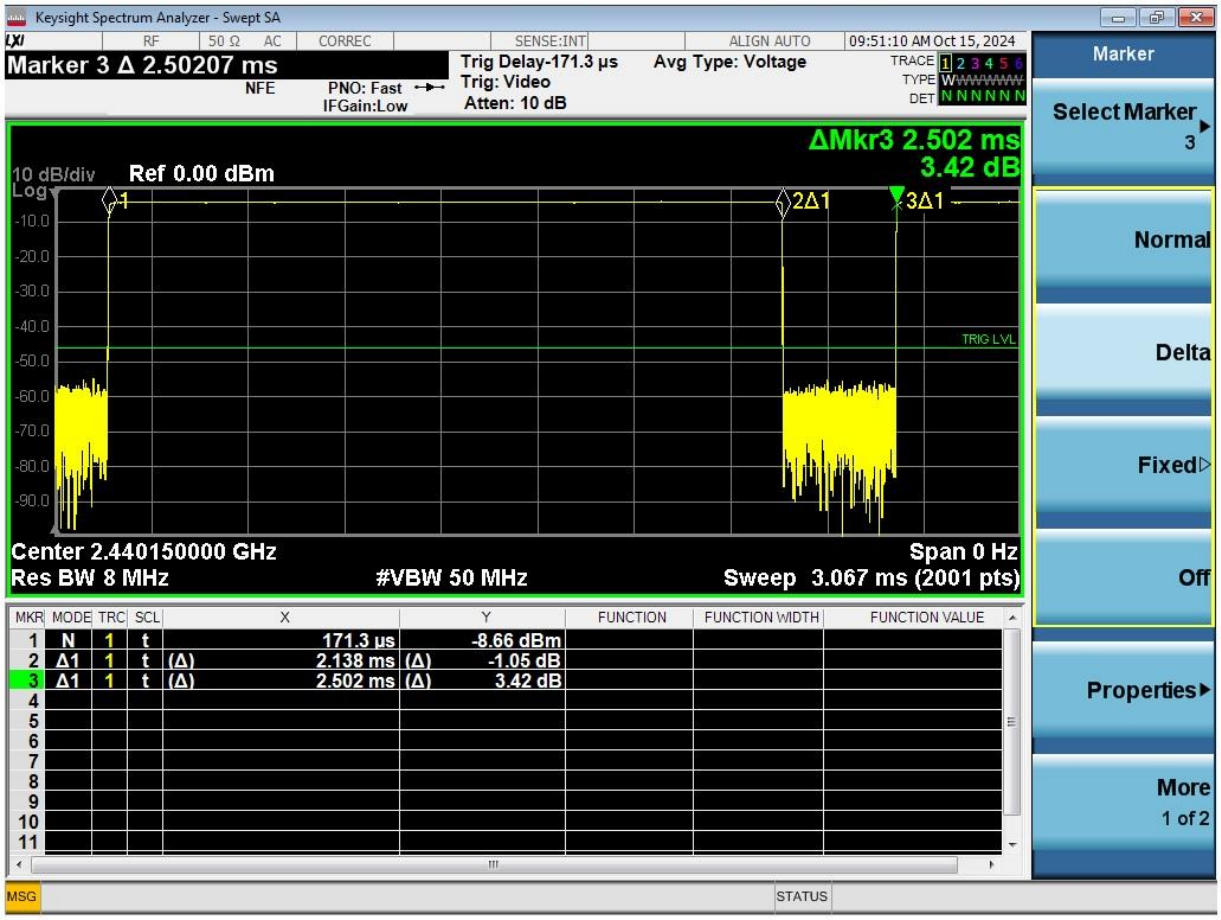
Figure 10-12
Bluetooth LE Antenna J Transmission Plot



Equation 10-5
Bluetooth LE Antenna J Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.135ms}{2.499ms} * 100\% = 85.43\%$$

Figure 10-13
Bluetooth LE MIMO Transmission Plot



Equation 10-6
Bluetooth LE MIMO Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.138ms}{2.502ms} * 100\% = 85.45\%$$

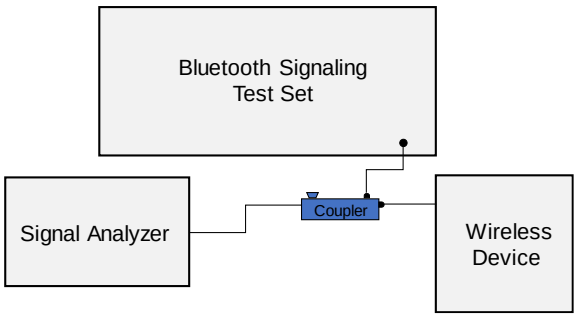


Figure 10-14
Power Measurement Setup

11 SYSTEM VERIFICATION

11.1 Tissue Verification

Table 11-1
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
10/02/2024	30 Head	24.8	4	0.716	57.318	0.750	55.000	-4.53%	4.21%
			6	0.716	55.954	0.750	55.000	-4.53%	1.73%
			12	0.717	53.466	0.750	55.000	-4.40%	-2.79%
			13	0.717	53.354	0.750	55.000	-4.40%	-2.99%
			14	0.717	53.297	0.750	55.000	-4.40%	-3.10%
			30	0.719	52.625	0.750	55.000	-4.13%	-4.32%
			60	0.722	52.049	0.753	54.325	-4.12%	-4.19%
			65	0.723	51.921	0.753	54.213	-3.98%	-4.23%
			150	0.751	50.187	0.760	52.300	-1.18%	-4.04%
09/18/2024	750 Head	21.6	680	0.876	40.503	0.888	42.305	-1.35%	-4.26%
			695	0.882	40.469	0.889	42.227	-0.79%	-4.16%
			700	0.883	40.456	0.889	42.201	-0.67%	-4.13%
			710	0.887	40.430	0.890	42.149	-0.34%	-4.08%
			725	0.892	40.383	0.891	42.071	0.11%	-4.01%
			750	0.900	40.305	0.894	41.942	0.67%	-3.90%
			770	0.907	40.255	0.895	41.838	1.34%	-3.78%
			785	0.912	40.222	0.896	41.760	1.79%	-3.68%
			800	0.917	40.184	0.897	41.682	2.23%	-3.59%
09/22/2024	750 Head	22.3	680	0.876	41.388	0.888	42.305	-1.35%	-2.17%
			695	0.881	41.322	0.889	42.227	-0.90%	-2.14%
			710	0.886	41.264	0.890	42.149	-0.45%	-2.10%
			725	0.892	41.214	0.891	42.071	0.11%	-2.04%
			750	0.901	41.163	0.894	41.942	0.78%	-1.86%
			770	0.908	41.116	0.895	41.838	1.45%	-1.73%
			785	0.913	41.057	0.896	41.760	1.90%	-1.68%
			800	0.918	40.986	0.897	41.682	2.34%	-1.67%
09/23/2024	750 Head	20.6	680	0.870	42.019	0.888	42.305	-2.03%	-0.68%
			695	0.875	41.972	0.889	42.227	-1.57%	-0.60%
			700	0.877	41.959	0.889	42.201	-1.35%	-0.57%
			710	0.880	41.929	0.890	42.149	-1.12%	-0.52%
			725	0.886	41.883	0.891	42.071	-0.56%	-0.45%
			750	0.895	41.804	0.894	41.942	0.11%	-0.33%
			770	0.903	41.746	0.895	41.838	0.89%	-0.22%
			785	0.908	41.702	0.896	41.760	1.34%	-0.14%
			800	0.914	41.653	0.897	41.682	1.90%	-0.07%
10/02/2024	750 Head	24.7	680	0.852	43.772	0.888	42.305	-4.05%	3.47%
			695	0.865	43.572	0.889	42.227	-2.70%	3.19%
			700	0.870	43.507	0.889	42.201	-2.14%	3.09%
			710	0.879	43.379	0.890	42.149	-1.24%	2.92%
			725	0.892	43.177	0.891	42.071	0.11%	2.63%
			750	0.915	42.856	0.894	41.942	2.35%	2.18%
			770	0.933	42.612	0.895	41.838	4.25%	1.85%
10/07/2024	750 Head	22.8	680	0.882	41.072	0.888	42.305	-0.68%	-2.91%
			695	0.887	41.028	0.889	42.227	-0.22%	-2.84%
			710	0.892	40.982	0.890	42.149	0.22%	-2.77%
			725	0.897	40.934	0.891	42.071	0.67%	-2.70%
			750	0.906	40.858	0.894	41.942	1.34%	-2.58%
			770	0.912	40.794	0.895	41.838	1.90%	-2.50%
			785	0.917	40.743	0.896	41.760	2.34%	-2.44%
			800	0.922	40.700	0.897	41.682	2.79%	-2.36%
09/25/2024	750 Head	22.1	680	0.880	40.216	0.888	42.305	-0.86%	-4.94%
			695	0.885	40.163	0.889	42.227	-0.44%	-4.89%
			700	0.887	40.143	0.889	42.201	-0.26%	-4.88%
			710	0.890	40.104	0.890	42.149	0.03%	-4.85%
			725	0.896	40.050	0.891	42.071	0.54%	-4.80%
			750	0.905	39.974	0.894	41.942	1.22%	-4.69%
			770	0.912	39.911	0.895	41.838	1.90%	-4.61%
			785	0.917	39.856	0.896	41.760	2.35%	-4.56%
			800	0.922	39.798	0.897	41.682	2.81%	-4.52%
10/24/2024	750 Head	19.0	680	0.855	40.863	0.888	42.305	-3.72%	-3.41%
			695	0.860	40.814	0.889	42.227	-3.26%	-3.35%
			710	0.866	40.752	0.890	42.149	-2.70%	-3.31%
			725	0.871	40.705	0.891	42.071	-2.24%	-3.25%
			750	0.879	40.636	0.894	41.942	-1.68%	-3.11%
			770	0.887	40.578	0.895	41.838	-0.89%	-3.01%
			785	0.892	40.529	0.896	41.760	-0.45%	-2.95%
			800	0.898	40.468	0.897	41.682	0.11%	-2.91%
09/18/2024	835 Head	21.6	815	0.924	40.144	0.898	41.594	2.90%	-3.49%
			820	0.926	40.129	0.899	41.578	3.00%	-3.49%
			835	0.931	40.085	0.900	41.500	3.44%	-3.41%
			850	0.936	40.037	0.916	41.500	2.18%	-3.53%
09/20/2024	835 Head	21.0	815	0.911	41.774	0.898	41.594	1.45%	0.43%
			820	0.913	41.757	0.899	41.578	1.56%	0.43%
			835	0.918	41.718	0.900	41.500	2.00%	0.53%
			850	0.923	41.668	0.916	41.500	0.76%	0.40%
09/22/2024	835 Head	22.3	815	0.924	40.919	0.898	41.594	2.90%	-1.62%
			820	0.926	40.902	0.899	41.578	3.00%	-1.63%
			835	0.932	40.862	0.900	41.500	3.56%	-1.54%
			850	0.939	40.835	0.916	41.500	2.51%	-1.60%
09/23/2024	835 Head	20.6	815	0.919	41.593	0.898	41.594	2.34%	0.00%
			820	0.921	41.571	0.899	41.578	2.45%	-0.02%
			835	0.927	41.508	0.900	41.500	3.00%	0.02%
			850	0.933	41.461	0.916	41.500	1.86%	-0.09%
09/23/2024	835 Head	20.7	815	0.871	42.806	0.898	41.594	-3.01%	2.91%
			820	0.874	42.788	0.899	41.578	-2.78%	2.91%
			835	0.880	42.680	0.900	41.500	-2.22%	2.84%
			850	0.883	42.614	0.916	41.500	-3.60%	2.68%
09/25/2024	835 Head	22.1	815	0.927	39.745	0.898	41.594	3.24%	-4.45%
			820	0.929	39.732	0.899	41.578	3.31%	-4.44%
			835	0.934	39.700	0.900	41.500	3.79%	-4.34%
			850	0.940	39.665	0.916	41.500	2.59%	-4.42%

Table 11-2
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
10/14/2024	1640 Head	21.8	1610	1.228	40.587	1.290	40.300	-4.81%	0.71%
			1620	1.233	40.570	1.296	40.284	-4.86%	0.71%
			1640	1.244	40.542	1.307	40.253	-4.82%	0.72%
			1650	1.249	40.526	1.313	40.237	-4.87%	0.72%
09/16/2024	1750 Head	22.0	1700	1.335	39.286	1.343	40.145	-0.60%	-2.14%
			1705	1.338	39.282	1.345	40.141	-0.52%	-2.14%
			1710	1.341	39.280	1.348	40.136	-0.52%	-2.13%
			1720	1.347	39.276	1.354	40.126	-0.52%	-2.12%
			1745	1.362	39.257	1.368	40.087	-0.44%	-2.07%
			1750	1.365	39.251	1.371	40.079	-0.44%	-2.07%
			1770	1.377	39.212	1.383	40.047	-0.43%	-2.09%
			1790	1.390	39.171	1.394	40.016	-0.29%	-2.11%
09/16/2024	1750 Head	21.8	1700	1.333	40.502	1.343	40.145	-0.74%	0.89%
			1705	1.336	40.490	1.345	40.141	-0.67%	0.87%
			1710	1.340	40.479	1.348	40.136	-0.59%	0.85%
			1720	1.346	40.458	1.354	40.126	-0.59%	0.83%
			1745	1.361	40.411	1.368	40.087	-0.51%	0.81%
			1750	1.364	40.401	1.371	40.079	-0.51%	0.80%
			1770	1.374	40.365	1.383	40.047	-0.65%	0.79%
			1790	1.385	40.335	1.394	40.016	-0.65%	0.80%
09/18/2024	1750 Head	23.0	1700	1.318	40.394	1.343	40.145	-1.86%	0.62%
			1705	1.320	40.386	1.345	40.141	-1.86%	0.61%
			1710	1.323	40.378	1.348	40.136	-1.85%	0.60%
			1720	1.329	40.358	1.354	40.126	-1.85%	0.58%
			1745	1.343	40.318	1.368	40.087	-1.83%	0.58%
			1750	1.346	40.311	1.371	40.079	-1.82%	0.58%
			1770	1.358	40.285	1.383	40.047	-1.81%	0.59%
			1790	1.369	40.258	1.394	40.016	-1.79%	0.60%
09/18/2024	1750 Head	23.0	1700	1.318	40.394	1.343	40.145	-1.86%	0.62%
			1705	1.320	40.386	1.345	40.141	-1.86%	0.61%
			1710	1.323	40.378	1.348	40.136	-1.85%	0.60%
			1720	1.329	40.358	1.354	40.126	-1.85%	0.58%
			1745	1.343	40.318	1.368	40.087	-1.83%	0.58%
			1750	1.346	40.311	1.371	40.079	-1.82%	0.58%
			1770	1.358	40.285	1.383	40.047	-1.81%	0.59%
			1790	1.369	40.258	1.394	40.016	-1.79%	0.60%
09/19/2024	1750 Head	21.0	1700	1.322	40.171	1.343	40.145	-1.56%	0.06%
			1705	1.325	40.164	1.345	40.141	-1.49%	0.06%
			1710	1.328	40.157	1.348	40.136	-1.48%	0.05%
			1720	1.335	40.142	1.354	40.126	-1.40%	0.04%
			1745	1.352	40.101	1.368	40.087	-1.17%	0.03%
			1750	1.355	40.091	1.371	40.079	-1.17%	0.03%
			1770	1.367	40.060	1.383	40.047	-1.16%	0.03%
			1790	1.378	40.025	1.394	40.016	-1.15%	0.02%
09/26/2024	1750 Head	19.1	1700	1.320	40.327	1.343	40.145	-1.71%	0.45%
			1705	1.323	40.319	1.345	40.141	-1.64%	0.44%
			1710	1.326	40.308	1.348	40.136	-1.63%	0.43%
			1720	1.332	40.287	1.354	40.126	-1.62%	0.40%
			1745	1.348	40.244	1.368	40.087	-1.46%	0.39%
			1750	1.351	40.235	1.371	40.079	-1.46%	0.39%
			1770	1.363	40.193	1.383	40.047	-1.45%	0.36%
			1790	1.376	40.156	1.394	40.016	-1.29%	0.35%
09/20/2024	1750 Head	20.3	1700	1.293	39.760	1.343	40.145	-3.72%	-0.96%
			1705	1.296	39.756	1.345	40.141	-3.64%	-0.96%
			1710	1.299	39.752	1.348	40.136	-3.64%	-0.96%
			1720	1.305	39.740	1.354	40.126	-3.62%	-0.96%
			1745	1.321	39.699	1.368	40.087	-3.44%	-0.97%
			1750	1.324	39.689	1.371	40.079	-3.43%	-0.97%
			1770	1.337	39.656	1.383	40.047	-3.33%	-0.98%
			1790	1.349	39.626	1.394	40.016	-3.23%	-0.97%
09/11/2024	1900 Head	19.0	1850	1.394	39.936	1.400	40.000	-0.43%	-0.16%
			1860	1.400	39.925	1.400	40.000	0.00%	-0.19%
			1880	1.413	39.907	1.400	40.000	0.93%	-0.23%
			1900	1.425	39.882	1.400	40.000	1.79%	-0.30%
			1905	1.428	39.874	1.400	40.000	2.00%	-0.31%
			1910	1.432	39.867	1.400	40.000	2.29%	-0.33%
			1920	1.438	39.852	1.400	40.000	2.71%	-0.37%
09/13/2024	1900 Head	21.5	1850	1.400	40.724	1.400	40.000	0.00%	1.81%
			1860	1.407	40.713	1.400	40.000	0.50%	1.78%
			1880	1.419	40.695	1.400	40.000	1.36%	1.74%
			1900	1.431	40.674	1.400	40.000	2.21%	1.69%
			1905	1.434	40.668	1.400	40.000	2.43%	1.67%
			1910	1.437	40.662	1.400	40.000	2.64%	1.66%
			1920	1.444	40.648	1.400	40.000	3.14%	1.62%
09/16/2024	1900 Head	21.8	1850	1.422	40.236	1.400	40.000	1.57%	0.59%
			1860	1.427	40.214	1.400	40.000	1.93%	0.53%
			1880	1.438	40.183	1.400	40.000	2.71%	0.46%
			1900	1.448	40.166	1.400	40.000	3.43%	0.41%
			1905	1.451	40.163	1.400	40.000	3.64%	0.41%
			1910	1.454	40.160	1.400	40.000	3.86%	0.40%
			1920	1.460	40.153	1.400	40.000	4.29%	0.38%
09/18/2024	1900 Head	23.2	1850	1.413	38.751	1.400	40.000	0.93%	-3.12%
			1860	1.418	38.735	1.400	40.000	1.29%	-3.16%
			1880	1.429	38.703	1.400	40.000	2.07%	-3.24%
			1900	1.442	38.681	1.400	40.000	3.00%	-3.30%
			1905	1.445	38.679	1.400	40.000	3.21%	-3.30%
			1910	1.448	38.678	1.400	40.000	3.43%	-3.31%
			1920	1.455	38.677	1.400	40.000	3.93%	-3.31%
09/26/2024	1900 Head	19.1	1850	1.414	40.035	1.400	40.000	1.00%	0.09%
			1860	1.420	40.017	1.400	40.000	1.43%	0.04%
			1880	1.432	39.988	1.400	40.000	2.29%	-0.03%
			1900	1.445	39.959	1.400	40.000	3.21%	-0.10%
			1905	1.448	39.952	1.400	40.000	3.43%	-0.12%
			1910	1.452	39.945	1.400	40.000	3.71%	-0.14%
			1920	1.458	39.929	1.400	40.000	4.14%	-0.18%
09/30/2024	1900 Head	21.3	1850	1.400	39.610	1.400	40.000	0.00%	-0.98%
			1860	1.405	39.591	1.400	40.000	0.36%	-1.02%
			1880	1.417	39.557	1.400	40.000	1.21%	-1.11%
			1900	1.429	39.523	1.400	40.000	2.07%	-1.19%
			1905	1.432	39.516	1.400	40.000	2.29%	-1.21%
			1910	1.435	39.508	1.400	40.000	2.50%	-1.23%
			1920	1.441	39.492	1.400	40.000	2.93%	-1.27%
10/02/2024	1900 Head	19.3	1850	1.414	39.230	1.400	40.000	1.00%	-1.93%
			1860	1.420	39.214	1.400	40.000	1.43%	-1.97%
			1880	1.432	39.186	1.400	40.000	2.29%	-2.04%
			1900	1.445	39.165	1.400	40.000	3.21%	-2.09%
			1905	1.448	39.160	1.400	40.000	3.43%	-2.10%
			1910	1.451	39.156	1.400	40.000	3.64%	-2.11%
			1920	1.458	39.145	1.400	40.000	4.14%	-2.14%
09/20/2024	1900 Head	20.3	1850	1.384	39.508	1.400	40.000	-1.14%	-1.23%
			1860	1.390	39.485	1.400	40.000	-0.71%	-1.29%
			1880	1.403	39.441	1.400	40.000	0.21%	-1.40%
			1900	1.416	39.409	1.400	40.000	1.14%	-1.48%
			1905	1.419	39.403	1.400	40.000	1.36%	-1.49%
			1910	1.422	39.397	1.400	40.000	1.57%	-1.51%
			1920	1.428	39.383	1.400	40.000	2.00%	-1.54%

Table 11-3
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
09/11/2024	2450 Head	20.7	2300	1.688	38.393	1.670	39.500	1.08%	-2.80%
			2310	1.695	38.371	1.679	39.480	0.95%	-2.83%
			2320	1.702	38.349	1.687	39.460	0.89%	-2.82%
			2400	1.757	38.234	1.756	39.289	0.06%	-2.69%
			2450	1.792	38.169	1.800	39.200	-0.44%	-2.63%
			2480	1.816	38.133	1.833	39.162	-0.93%	-2.63%
			2500	1.832	38.106	1.855	39.136	-1.24%	-2.63%
			2510	1.839	38.095	1.866	39.123	-1.49%	-2.63%
			2535	1.861	38.057	1.893	39.092	-1.69%	-2.65%
			2550	1.874	38.036	1.909	39.073	-1.83%	-2.65%
			2560	1.883	38.023	1.920	39.060	-1.93%	-2.65%
			2600	1.918	37.967	1.964	39.009	-2.44%	-2.70%
			2650	1.957	37.864	2.018	38.945	-3.02%	-2.78%
			2680	1.982	37.810	2.051	38.907	-3.38%	-2.82%
			2700	1.998	37.770	2.073	38.882	-3.72%	-2.88%
09/13/2024	2450 Head	21.3	2300	1.688	38.357	1.670	39.500	1.08%	-2.89%
			2310	1.695	38.337	1.679	39.480	0.95%	-2.90%
			2320	1.702	38.318	1.687	39.460	0.89%	-2.89%
			2400	1.759	38.188	1.756	39.289	0.17%	-2.80%
			2450	1.796	38.116	1.800	39.200	-0.22%	-2.77%
			2480	1.818	38.073	1.833	39.162	-0.82%	-2.78%
			2500	1.832	38.046	1.855	39.136	-1.24%	-2.79%
			2510	1.840	38.032	1.866	39.123	-1.39%	-2.79%
			2535	1.859	38.002	1.893	39.092	-1.80%	-2.79%
			2550	1.872	37.983	1.909	39.073	-1.94%	-2.79%
			2560	1.880	37.971	1.920	39.060	-2.08%	-2.79%
			2600	1.912	37.913	1.964	39.009	-2.65%	-2.81%
			2650	1.954	37.831	2.018	38.945	-3.17%	-2.86%
			2680	1.977	37.779	2.051	38.907	-3.61%	-2.90%
			2700	1.992	37.744	2.073	38.882	-3.91%	-2.93%
09/18/2024	2450 Head	21.8	2300	1.683	38.489	1.670	39.500	0.78%	-2.56%
			2310	1.694	38.462	1.679	39.480	0.89%	-2.58%
			2320	1.706	38.431	1.687	39.460	1.13%	-2.61%
			2400	1.791	38.132	1.756	39.289	1.99%	-2.94%
			2450	1.846	37.955	1.800	39.200	2.56%	-3.18%
			2480	1.876	37.837	1.833	39.162	2.35%	-3.38%
			2500	1.898	37.769	1.855	39.136	2.32%	-3.49%
			2510	1.910	37.734	1.866	39.123	2.36%	-3.55%
			2535	1.938	37.647	1.893	39.092	2.38%	-3.70%
			2550	1.953	37.589	1.909	39.073	2.30%	-3.80%
			2560	1.963	37.548	1.920	39.060	2.24%	-3.87%
			2600	2.007	37.385	1.964	39.009	2.19%	-4.16%
			2650	2.062	37.221	2.018	38.945	2.18%	-4.43%
			2680	2.095	37.106	2.051	38.907	2.15%	-4.63%
			2700	2.117	37.030	2.073	38.882	2.12%	-4.76%
09/19/2024	2450 Head	21.0	2300	1.705	38.107	1.670	39.500	2.10%	-3.53%
			2310	1.712	38.080	1.679	39.480	1.97%	-3.52%
			2320	1.721	38.069	1.687	39.460	2.02%	-3.53%
			2400	1.782	37.854	1.756	39.289	1.48%	-3.45%
			2450	1.822	37.835	1.800	39.200	1.22%	-3.48%
			2480	1.845	37.786	1.833	39.162	0.65%	-3.51%
			2500	1.861	37.751	1.855	39.136	0.32%	-3.54%
			2510	1.868	37.730	1.866	39.123	0.11%	-3.58%
			2535	1.887	37.686	1.893	39.092	-0.32%	-3.60%
			2550	1.899	37.665	1.909	39.073	-0.52%	-3.60%
			2560	1.908	37.653	1.920	39.060	-0.63%	-3.60%
			2600	1.938	37.583	1.964	39.009	-1.32%	-3.68%
			2650	1.976	37.495	2.018	38.945	-2.08%	-3.72%
			2680	2.000	37.448	2.051	38.907	-2.49%	-3.75%
			2700	2.015	37.407	2.073	38.882	-2.80%	-3.79%
09/23/2024	2450 Head	20.7	2300	1.713	38.903	1.670	39.500	2.57%	-1.53%
			2310	1.721	38.880	1.679	39.480	2.50%	-1.50%
			2320	1.728	38.872	1.687	39.460	2.43%	-1.49%
			2400	1.790	38.753	1.756	39.289	1.94%	-1.36%
			2450	1.829	38.669	1.800	39.200	1.61%	-1.35%
			2480	1.853	38.615	1.833	39.162	1.09%	-1.40%
			2500	1.869	38.583	1.855	39.136	0.75%	-1.43%
			2510	1.877	38.566	1.866	39.123	0.59%	-1.42%
			2535	1.897	38.522	1.893	39.092	0.21%	-1.48%
			2550	1.910	38.497	1.909	39.073	0.05%	-1.47%
			2560	1.918	38.481	1.920	39.060	-0.10%	-1.48%
			2600	1.951	38.417	1.964	39.009	-0.66%	-1.52%
			2650	1.995	38.335	2.018	38.945	-1.14%	-1.57%
			2680	2.019	38.287	2.051	38.907	-1.58%	-1.59%
			2700	2.035	38.257	2.073	38.882	-1.83%	-1.62%
09/25/2024	2450 Head	24.6	2300	1.658	38.855	1.670	39.500	-0.72%	-2.14%
			2310	1.670	38.823	1.679	39.480	-0.54%	-2.17%
			2320	1.682	38.587	1.687	39.460	-0.30%	-2.23%
			2400	1.772	38.271	1.756	39.289	0.91%	-2.59%
			2450	1.835	38.076	1.800	39.200	1.72%	-2.87%
			2480	1.883	37.949	1.833	39.162	1.64%	-3.10%
			2500	1.895	37.882	1.855	39.136	1.62%	-3.20%
			2510	1.897	37.844	1.866	39.123	1.66%	-3.27%
			2535	1.927	37.745	1.893	39.092	1.80%	-3.45%
			2550	1.945	37.678	1.909	39.073	1.89%	-3.57%
			2560	1.956	37.630	1.920	39.060	1.88%	-3.66%
			2600	2.001	37.487	1.964	39.009	1.88%	-3.90%
			2650	2.059	37.271	2.018	38.945	2.03%	-4.30%
			2680	2.093	37.354	2.051	38.907	2.05%	-4.53%
			2700	2.116	37.085	2.073	38.882	2.07%	-4.62%
09/25/2024	2450 Head	21.3	2300	1.714	38.203	1.670	39.500	2.62%	-3.28%
			2310	1.721	38.187	1.679	39.480	2.50%	-3.28%
			2320	1.729	38.175	1.687	39.460	2.48%	-3.28%
			2400	1.788	38.071	1.756	39.289	1.83%	-3.09%
			2450	1.829	37.998	1.800	39.200	1.60%	-3.07%
			2480	1.851	37.953	1.833	39.162	1.00%	-3.09%
			2500	1.867	37.924	1.855	39.136	0.65%	-3.09%
			2510	1.876	37.910	1.866	39.123	0.53%	-3.10%
			2535	1.897	37.865	1.893	39.092	0.23%	-3.14%
			2550	1.910	37.837	1.909	39.073	0.05%	-3.18%
			2560	1.919	37.818	1.920	39.060	-0.08%	-3.18%
			2600	1.953	37.739	1.964	39.009	-0.55%	-3.26%
			2650	1.998	37.637	2.018	38.945	-1.00%	-3.36%
			2680	2.021	37.574	2.051	38.907	-1.48%	-3.43%
			2700	2.039	37.534	2.073	38.882	-1.66%	-3.47%
09/30/2024	2450 Head	24.5	2300	1.645	39.166	1.670	39.500	-1.50%	-0.85%
			2310	1.658	39.143	1.679	39.480	-1.25%	-0.85%
			2320	1.672	39.116	1.687	39.460	-0.89%	-0.87%
			2400	1.776	38.779	1.756	39.289	0.00%	-1.30%
			2450	1.820	38.606	1.800	39.200	1.11%	-1.52%
			2480	1.849	38.470	1.833	39.162	0.87%	-1.77%
			2500	1.867	38.410	1.855	39.136	0.65%	-1.86%
			2510	1.879	38.377	1.866	39.123	0.70%	-1.93%
			2535	1.912	38.283	1.893	39.092	1.00%	-2.07%
			2550	1.932	38.221	1.909	39.073	1.20%	-2.18%
			2560	1.944	38.172	1.920	39.060	1.25%	-2.27%
			2600	1.984	38.033	1.964	39.009	1.02%	-2.50%
			2650	2.045	37.817	2.018	38.945	1.34%	-2.90%
			2680	2.080	37.684	2.051	38.907	1.41%	-3.12%
			2700	2.102	37.636	2.073	38.882	1.40%	-3.20%
10/02/2024	2450 Head	24.6	2300	1.641	38.506	1.670	39.500	-1.74%	-2.52%
			2310	1.653	38.474	1.679	39.480	-1.55%	-2.55%
			2320	1.664	38.436	1.687	39.460	-1.36%	-2.59%
			2400	1.753	38.159	1.756	39.289	-1.17%	-3.05%
			2450	1.808	37.928	1.800	39.200	0.44%	-3.24%
			2480	1.840	37.797	1.833	39.162	0.38%	-3.49%
			2500	1.863	37.718	1.855	39.136	0.43%	-3.63%
			2510	1.875	37.683	1.866	39.123	0.49%	-3.68%
			2535	1.903	37.582	1.893	39.092	0.53%	-3.84%
			2550	1.918	37.537	1.909	39.073	0.52%	-3.93%
			2560	1.930	37.495	1.920	39.060	0.52%	-4.01%
			2600	1.976	37.339	1.964	39.009	0.61%	-4.28%
			2650	2.032	37.151	2.018	38.945	0.69%	-4.63%
			2680	2.066	37.035	2.051	38.907	0.73%	-4.81%
			2700	2.088	36.954	2.073	38.882	0.72%	-4.95%
10/09/2024	2450 Head	21.0	2300	1.660	39.760	1.670	39.500	-0.60%	0.66%
			2310	1.667	39.742	1.679	39.480	-0.71%	0.66%
			2320	1.675	39.724	1.687	39.460	-0.71%	0.67%
			2400	1.738	39.595	1.756	39.289	-1.03%	0.78%
			2450	1.777	39.504	1.800	39.200	-1.28%	0.78%
			2480	1.802	39.449	1.833	39.162	-1.69%	0.73%
			2500	1.817	39.406	1.855	39.136	-2.05%	0.69%
			2510	1.824	39.387	1.866	39.123	-2.25%	0.67%
			2535	1.845	39.351	1.893	39.092	-2.54%	0.68%
			2550	1.858	39.331	1.909	39.073	-2.67%	0.68%
			2560	1.866	39.318	1.920	39.060	-2.81%	0.68%
			2600	1.898	39.257	1.964	39.009	-3.36%	0.64%
			2650	1.941	39.201	2.018	38.945	-3.82%	0.66%
			2680	1.967	39.150	2.051	38.907	-4.10%	0.62%
			2700	1.982	39.115	2.073	38.882	-4.39%	0.60%
10/14/2024	2450 Head	20.6	2300	1.744	39.261	1.670	39.500	4.43%	-0.61%
			2310	1.751	39.248	1.679	39.480	4.29%	-0.59%
			2320	1.758	39.235	1.687	39.460	4.21%	-0.57%
			2400	1.819	39.093	1.756	39.289	3.59%	-0.50%
			2450	1.855	38.999	1.800	39.200	3.06%	-0.51%
			2480	1.881	38.934	1.833	39.162	2.62%	-0.58%
			2500	1.897	38.903	1.855	39.136	2.26%	-0.60%
			2510	1.903	38.886	1.866	39.123	1.98%	-0.61%
			2535	1.920	38.853	1.893	39.092	1.43%	-0.66%
			2550	1.932	38.796	1.909	39.073	1.20%	-0.71%
			2560	1.942	38.774	1.920	39.060	1.15%	-0.73%
			2600	1.974	38.708	1.964	39.009	0.51%	-0.77%
			2650	2.011	38.588	2.018	38.945	-0.33%	-0.92%
			2680	2.038	38.539	2.051	38.907	-0.63%	-0.95%
			2700	2.052	38.505	2.073	38.882	-1.01%	-0.97%

Table 11-4
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
09/16/2024	3600 Head	19.3	3300	2.589	38.361	2.708	38.157	-4.39%	0.53%
			3350	2.631	38.313	2.759	38.100	-4.64%	0.56%
			3450	2.726	38.119	2.861	37.986	-4.72%	0.35%
			3500	2.768	38.008	2.913	37.929	-4.98%	0.21%
			3550	2.817	37.924	2.964	37.871	-4.96%	0.14%
			3600	2.869	37.835	3.015	37.814	-4.84%	0.06%
			3650	2.915	37.760	3.066	37.757	-4.92%	0.01%
			3690	2.955	37.676	3.107	37.711	-4.89%	-0.09%
			3700	2.965	37.663	3.117	37.700	-4.88%	-0.10%
			3750	3.015	37.604	3.169	37.643	-4.86%	-0.10%
			3900	3.164	37.303	3.323	37.471	-4.78%	-0.45%
			3930	3.197	37.260	3.353	37.437	-4.65%	-0.47%
			4100	3.366	36.965	3.528	37.243	-4.59%	-0.75%
			4150	3.429	36.901	3.579	37.186	-4.19%	-0.77%
09/18/2024	3600 Head	19.3	3300	2.601	38.859	2.708	38.157	-3.95%	1.84%
			3350	2.645	38.763	2.759	38.100	-4.13%	1.74%
			3450	2.740	38.586	2.861	37.986	-4.23%	1.58%
			3500	2.780	38.483	2.913	37.929	-4.57%	1.46%
			3550	2.833	38.410	2.964	37.871	-4.42%	1.42%
			3560	2.842	38.398	2.974	37.860	-4.44%	1.42%
			3600	2.877	38.312	3.015	37.814	-4.58%	1.32%
			3650	2.926	38.231	3.066	37.757	-4.57%	1.26%
			3690	2.962	38.173	3.107	37.711	-4.67%	1.23%
			3700	2.970	38.149	3.117	37.700	-4.72%	1.19%
			3750	3.022	38.077	3.169	37.643	-4.64%	1.15%
			3900	3.172	37.833	3.323	37.471	-4.54%	0.97%
			3930	3.199	37.779	3.353	37.437	-4.59%	0.91%
			4100	3.383	37.504	3.528	37.243	-4.11%	0.70%
			4150	3.435	37.401	3.579	37.186	-4.02%	0.58%
09/18/2024	3600 Head	19.6	3300	2.635	38.791	2.708	38.157	-2.70%	1.66%
			3350	2.685	38.697	2.759	38.100	-2.68%	1.57%
			3450	2.775	38.488	2.861	37.986	-3.01%	1.32%
			3500	2.819	38.417	2.913	37.929	-3.23%	1.29%
			3550	2.871	38.319	2.964	37.871	-3.14%	1.18%
			3560	2.879	38.294	2.974	37.860	-3.19%	1.15%
			3600	2.918	38.240	3.015	37.814	-3.22%	1.13%
			3650	2.966	38.126	3.066	37.757	-3.26%	0.98%
			3690	3.001	38.086	3.107	37.711	-3.41%	0.99%
			3700	3.011	38.054	3.117	37.700	-3.40%	0.94%
			3750	3.056	37.958	3.169	37.643	-3.57%	0.84%
			3900	3.211	37.690	3.323	37.471	-3.37%	0.58%
			3930	3.245	37.644	3.353	37.437	-3.22%	0.55%
			4100	3.418	37.349	3.528	37.243	-3.12%	0.28%
			4150	3.476	37.258	3.579	37.186	-2.88%	0.19%
09/23/2024	3600 Head	19.1	3300	2.614	38.897	2.708	38.157	-3.47%	1.94%
			3350	2.659	38.818	2.759	38.100	-3.62%	1.88%
			3450	2.751	38.657	2.861	37.986	-3.84%	1.77%
			3500	2.797	38.554	2.913	37.929	-3.98%	1.65%
			3550	2.841	38.468	2.964	37.871	-4.15%	1.58%
			3560	2.847	38.453	2.974	37.860	-4.27%	1.57%
			3600	2.892	38.373	3.015	37.814	-4.08%	1.48%
			3650	2.940	38.275	3.066	37.757	-4.11%	1.37%
			3690	2.979	38.222	3.107	37.711	-4.12%	1.36%
			3700	2.991	38.205	3.117	37.700	-4.04%	1.34%
			3750	3.043	38.140	3.169	37.643	-3.98%	1.32%
			3900	3.201	37.938	3.323	37.471	-3.67%	1.25%
			3930	3.230	37.850	3.353	37.437	-3.67%	1.10%
			4100	3.413	37.544	3.528	37.243	-3.26%	0.81%
			4150	3.478	37.461	3.579	37.186	-2.82%	0.74%
10/16/2024	3600 Head	19.1	3300	2.606	38.043	2.708	38.157	-3.77%	-0.30%
			3350	2.654	37.943	2.759	38.100	-3.81%	-0.41%
			3450	2.746	37.755	2.861	37.986	-4.02%	-0.61%
			3500	2.788	37.647	2.913	37.929	-4.29%	-0.74%
			3550	2.838	37.559	2.964	37.871	-4.25%	-0.82%
			3560	2.845	37.534	2.974	37.860	-4.34%	-0.86%
			3600	2.881	37.457	3.015	37.814	-4.44%	-0.94%
			3650	2.930	37.383	3.066	37.757	-4.44%	-0.99%
			3690	2.970	37.299	3.107	37.711	-4.41%	-1.09%
			3700	2.973	37.291	3.117	37.700	-4.62%	-1.08%
			3750	3.024	37.216	3.169	37.643	-4.58%	-1.13%
			3900	3.170	36.951	3.323	37.471	-4.60%	-1.39%
			3930	3.200	36.921	3.353	37.437	-4.56%	-1.38%
			4100	3.384	36.578	3.528	37.243	-4.08%	-1.79%
			4150	3.427	36.508	3.579	37.186	-4.25%	-1.82%
09/19/2024	5200-5800 Head	20.8	5150	4.523	34.775	4.608	36.050	-1.84%	-3.54%
			5180	4.557	34.727	4.635	36.009	-1.68%	-3.56%
			5190	4.570	34.705	4.645	35.998	-1.61%	-3.59%
			5200	4.581	34.682	4.655	35.986	-1.59%	-3.62%
			5210	4.592	34.662	4.666	35.975	-1.59%	-3.65%
			5220	4.604	34.647	4.676	35.963	-1.54%	-3.66%
			5240	4.626	34.604	4.696	35.940	-1.49%	-3.72%
			5250	4.637	34.583	4.706	35.929	-1.47%	-3.75%
			5260	4.649	34.564	4.717	35.917	-1.44%	-3.77%
			5270	4.662	34.544	4.727	35.906	-1.38%	-3.79%
			5280	4.674	34.531	4.737	35.894	-1.33%	-3.80%
			5290	4.684	34.522	4.748	35.883	-1.35%	-3.79%
			5300	4.694	34.508	4.758	35.871	-1.35%	-3.80%
			5310	4.703	34.486	4.768	35.860	-1.36%	-3.83%
			5320	4.713	34.459	4.778	35.849	-1.36%	-3.88%
			5500	4.906	34.145	4.963	35.643	-1.15%	-4.20%
			5510	4.920	34.120	4.973	35.632	-1.07%	-4.24%
			5520	4.931	34.104	4.983	35.620	-1.04%	-4.26%
			5530	4.942	34.088	4.994	35.609	-1.04%	-4.27%
			5540	4.954	34.067	5.004	35.597	-1.00%	-4.30%
			5550	4.966	34.039	5.014	35.586	-0.96%	-4.35%
			5560	4.977	34.015	5.024	35.574	-0.94%	-4.38%
			5580	5.002	33.986	5.045	35.551	-0.85%	-4.40%
			5600	5.028	33.959	5.065	35.529	-0.73%	-4.43%
			5610	5.040	33.932	5.076	35.518	-0.71%	-4.47%
			5620	5.051	33.913	5.086	35.506	-0.69%	-4.49%
			5640	5.075	33.871	5.106	35.483	-0.61%	-4.54%
			5660	5.100	33.838	5.127	35.460	-0.53%	-4.57%
			5670	5.112	33.826	5.137	35.449	-0.49%	-4.58%
			5680	5.126	33.809	5.147	35.437	-0.41%	-4.59%
			5690	5.139	33.791	5.158	35.426	-0.37%	-4.62%
			5700	5.152	33.773	5.168	35.414	-0.31%	-4.63%
			5710	5.165	33.755	5.178	35.403	-0.25%	-4.65%
			5720	5.179	33.742	5.188	35.391	-0.17%	-4.66%
			5745	5.205	33.717	5.214	35.363	-0.17%	-4.65%
			5750	5.208	33.710	5.219	35.357	-0.21%	-4.66%
			5755	5.212	33.703	5.224	35.351	-0.23%	-4.66%
			5765	5.218	33.682	5.234	35.340	-0.31%	-4.69%
			5775	5.228	33.665	5.245	35.329	-0.32%	-4.71%
			5785	5.242	33.649	5.255	35.317	-0.25%	-4.72%
			5795	5.259	33.641	5.265	35.305	-0.11%	-4.71%
			5800	5.265	33.638	5.270	35.300	-0.09%	-4.71%
			5800	5.265	33.638	5.270	35.300	-0.09%	-4.71%
			5805	5.271	33.632	5.275	35.294	-0.08%	-4.71%
			5825	5.298	33.613	5.296	35.271	0.04%	-4.70%
			5835	5.311	33.604	5.305	35.230	0.11%	-4.62%
			5845	5.321	33.581	5.315	35.210	0.11%	-4.63%
			5850	5.325	33.566	5.320	35.200	0.09%	-4.64%
			5855	5.328	33.553	5.325	35.197	0.06%	-4.67%
			5865	5.333	33.531	5.336	35.190	-0.06%	-4.71%
			5865	5.333	33.531	5.336	35.190	-0.06%	-4.71%
			5865	5.333	33.531	5.336	35.190	-0.06%	-4.71%
			5865	5.333	33.531	5.336	35.190	-0.06%	-4.71%
			5875	5.339	33.516	5.347	35.183	-0.15%	-4.74%
			5885	5.348	33.503	5.357	35.177	-0.17%	-4.76%
			5905	5.376	33.465	5.379	35.163	-0.06%	-4.83%

Table 11-5
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
09/23/2024	5200-5800 Head	20.2	5150	4.565	35.040	4.608	36.050	-1.15%	-2.80%
			5160	4.567	35.023	4.618	36.040	-1.10%	-2.82%
			5170	4.578	35.004	4.629	36.030	-1.10%	-2.85%
			5180	4.589	34.984	4.635	36.009	-0.99%	-2.85%
			5190	4.599	34.983	4.645	35.998	-0.99%	-2.88%
			5200	4.610	34.944	4.655	35.986	-0.97%	-2.90%
			5210	4.622	34.924	4.666	35.975	-0.94%	-2.92%
			5220	4.625	34.902	4.676	35.963	-0.68%	-2.95%
			5240	4.659	34.848	4.696	35.940	-0.79%	-3.04%
			5250	4.671	34.835	4.706	35.929	-0.74%	-3.04%
			5260	4.683	34.827	4.717	35.917	-0.72%	-3.03%
			5270	4.693	34.811	4.727	35.906	-0.72%	-3.05%
			5280	4.703	34.790	4.737	35.894	-0.72%	-3.08%
			5290	4.714	34.764	4.748	35.883	-0.72%	-3.12%
			5300	4.725	34.744	4.758	35.871	-0.69%	-3.14%
			5310	4.737	34.723	4.768	35.860	-0.65%	-3.17%
			5320	4.746	34.701	4.778	35.849	-0.67%	-3.20%
			5500	4.950	34.376	4.963	35.643	-0.26%	-3.55%
			5510	4.959	34.352	4.973	35.632	-0.26%	-3.59%
			5520	4.971	34.338	4.983	35.620	-0.24%	-3.60%
			5530	4.984	34.316	4.994	35.609	-0.20%	-3.63%
			5540	4.996	34.291	5.004	35.597	-0.18%	-3.67%
			5550	5.007	34.267	5.014	35.586	-0.14%	-3.71%
			5560	5.017	34.247	5.024	35.574	-0.14%	-3.73%
			5580	5.040	34.189	5.045	35.551	-0.08%	-3.85%
			5600	5.066	34.158	5.065	35.529	0.02%	-3.86%
			5610	5.079	34.139	5.076	35.518	0.06%	-3.89%
			5620	5.091	34.117	5.086	35.506	0.10%	-3.91%
			5640	5.114	34.079	5.106	35.483	0.16%	-3.96%
			5660	5.135	34.035	5.127	35.460	0.16%	-4.02%
			5670	5.146	34.009	5.137	35.449	0.18%	-4.06%
			5680	5.158	33.981	5.147	35.437	0.21%	-4.11%
			5690	5.172	33.959	5.158	35.426	0.27%	-4.14%
			5700	5.187	33.845	5.168	35.414	0.37%	-4.45%
			5710	5.189	33.921	5.178	35.402	0.41%	-4.16%
			5730	5.208	33.921	5.198	35.391	0.39%	-4.15%
			5745	5.233	33.871	5.214	35.363	0.36%	-4.22%
			5750	5.239	33.858	5.219	35.357	0.38%	-4.24%
			5755	5.245	33.845	5.224	35.351	0.40%	-4.26%
			5765	5.254	33.818	5.234	35.340	0.38%	-4.31%
			5775	5.262	33.802	5.245	35.329	0.32%	-4.32%
			5785	5.273	33.784	5.255	35.317	0.34%	-4.34%
			5795	5.286	33.770	5.265	35.305	0.40%	-4.35%
			5800	5.292	33.761	5.270	35.300	0.42%	-4.36%
			5810	5.292	33.761	5.270	35.300	0.42%	-4.36%
			5805	5.298	33.749	5.275	35.294	0.44%	-4.38%
			5825	5.318	33.702	5.296	35.271	0.42%	-4.45%
			5835	5.330	33.684	5.305	35.230	0.47%	-4.39%
			5845	5.341	33.654	5.315	35.210	0.49%	-4.42%
			5850	5.346	33.635	5.320	35.200	0.49%	-4.45%
			5855	5.349	33.619	5.325	35.197	0.45%	-4.48%
			5865	5.356	33.591	5.336	35.190	0.37%	-4.54%
			5885	5.356	33.591	5.336	35.190	0.37%	-4.54%
			5895	5.356	33.591	5.336	35.190	0.37%	-4.54%
			5875	5.366	33.580	5.347	35.183	0.36%	-4.56%
			5885	5.379	33.557	5.357	35.177	0.41%	-4.61%
			5905	5.401	33.486	5.378	35.163	0.42%	-4.77%
09/23/2024	6000 Head	20.0	5935	5.192	35.362	5.411	35.143	-4.05%	0.62%
			5970	5.229	35.288	5.448	35.120	-4.07%	0.48%
			5985	5.248	35.243	5.464	35.110	-3.95%	0.38%
			6000	5.268	35.206	5.480	35.100	-3.87%	0.30%
			6025	5.300	35.171	5.510	35.070	-3.81%	0.29%
			6065	5.340	35.102	5.557	35.022	-3.90%	0.23%
			6075	5.353	35.081	5.569	35.010	-3.88%	0.20%
			6085	5.369	35.055	5.580	34.998	-3.78%	0.16%
			6185	5.485	34.907	5.698	34.878	-3.74%	0.08%
			6275	5.607	34.722	5.805	34.770	-3.41%	-0.14%
			6285	5.615	34.707	5.816	34.758	-3.46%	-0.15%
			6305	5.642	34.682	5.840	34.734	-3.39%	-0.15%
			6345	5.700	34.635	5.887	34.686	-3.18%	-0.14%
			6475	5.839	34.430	6.041	34.530	-3.34%	-0.29%
			6485	5.847	34.400	6.052	34.518	-3.39%	-0.34%
			6500	5.864	34.349	6.070	34.500	-3.39%	-0.44%
			6505	5.871	34.335	6.076	34.494	-3.37%	-0.46%
			6545	5.936	34.280	6.122	34.446	-3.04%	-0.48%
			6665	6.074	34.055	6.285	34.302	-3.38%	-0.72%
			6675	6.082	34.050	6.273	34.290	-3.04%	-0.70%
			6685	6.085	34.042	6.285	34.278	-3.18%	-0.69%
			6715	6.102	33.987	6.319	34.242	-3.43%	-0.74%
			6785	6.200	33.890	6.400	34.158	-3.13%	-0.78%
			6825	6.227	33.794	6.447	34.110	-3.41%	-0.93%
			6985	6.437	33.510	6.633	33.918	-2.95%	-1.20%
			6995	6.441	33.508	6.644	33.906	-3.06%	-1.17%
			7000	6.443	33.506	6.650	33.900	-3.12%	-1.16%
			7005	6.447	33.505	6.656	33.894	-3.14%	-1.15%
			7025	6.472	33.457	6.680	33.870	-3.13%	-1.22%
			7500	7.681	32.650	7.240	33.300	-2.08%	-1.95%
			7980	7.644	31.859	7.816	32.724	-2.20%	-2.64%
10/09/2024	6000 Head	20.9	5935	5.442	36.377	5.411	35.143	0.57%	3.51%
			5970	5.486	36.297	5.448	35.120	0.73%	3.52%
			5985	5.485	36.282	5.464	35.110	0.38%	3.34%
			6000	5.518	36.202	5.480	35.100	0.69%	3.14%
			6025	5.586	36.146	5.510	35.070	1.38%	3.07%
			6065	5.620	36.163	5.557	35.022	1.13%	3.26%
			6075	5.623	36.140	5.569	35.010	0.97%	3.23%
			6085	5.629	36.099	5.580	34.998	0.88%	3.15%
			6185	5.761	35.925	5.698	34.878	1.11%	3.00%
			6275	5.897	35.773	5.805	34.770	1.42%	2.88%
			6285	5.897	35.752	5.816	34.758	1.39%	2.86%
			6325	5.969	35.714	5.840	34.734	1.18%	2.81%
			6345	5.974	35.664	5.887	34.686	1.48%	2.65%
			6475	6.143	35.376	6.041	34.530	1.69%	2.45%
			6485	6.154	35.379	6.052	34.518	1.69%	2.49%
			6500	6.166	35.376	6.070	34.500	1.58%	2.54%
			6505	6.170	35.365	6.076	34.494	1.55%	2.53%
			6545	6.228	35.203	6.122	34.446	1.48%	2.20%
			6665	6.358	35.009	6.285	34.302	1.48%	2.06%
			6675	6.371	34.969	6.273	34.290	1.56%	1.98%
			6685	6.386	34.960	6.285	34.278	1.61%	1.99%
			6715	6.431	34.988	6.319	34.242	1.77%	2.18%
			6785	6.469	34.754	6.400	34.158	1.34%	1.74%
			6825	6.563	34.775	6.447	34.110	1.80%	1.95%
			6985	6.715	34.548	6.633	33.918	1.24%	1.86%
			6995	6.715	34.482	6.644	33.906	1.07%	1.70%
			7000	6.718	34.447	6.650	33.900	1.02%	1.61%
			7005	6.722	34.419	6.656	33.894	0.99%	1.55%
			7025	6.752	34.325	6.680	33.870	1.08%	1.34%
			7500	7.352	33.423	7.240	33.300	1.55%	0.37%
			7980	7.679	32.797	7.816	32.724	2.09%	0.22%
			8000	8.009	32.919	7.840	32.700	2.18%	0.67%
09/22/2024	6000 Head	22.3	5935	5.258	36.869	5.411	35.143	-2.83%	4.91%
			5970	5.295	36.838	5.448	35.120	-2.86%	4.89%
			5985	5.283	36.777	5.464	35.110	-3.31%	4.75%
			6000	5.295	36.638	5.480	35.100	-3.39%	4.38%
			6025	5.359	36.644	5.510	35.070	-2.74%	4.49%
			6065	5.398	36.687	5.557	35.022	-2.88%	4.75%
			6075	5.392	36.653	5.569	35.010	-3.18%	4.69%
			6085	5.404	36.626	5.580	34.998	-3.15%	4.65%
			6185	5.548	36.539	5.698	34.878	-2.63%	4.76%
			6275	5.671	36.356	5.805	34.770	-2.31%	4.56%
			6285	5.675	36.377	5.816	34.758	-2.42%	4.65%
			6305	5.701	36.343	5.840	34.734	-2.38%	4.63%
			6345	5.763	36.282	5.887	34.686	-2.13%	4.60%
			6475	5.920	36.072	6.041	34.530	-2.00%	4.47%
			6485	5.948	36.076	6.052	34.518	-1.72%	4.51%
			6500	5.936	36.049	6.070	34.500	-2.21%	4.49%
			6505	5.927	36.041	6.076	34.494	-2.45%	4.48%
			6545	5.982	35.890	6.122	34.446	-2.29%	4.19%
			6665	6.104	35.718	6.285	34.302	-2.57%	4.12%
			6675	6.137	35.698	6.273	34.290	-2.17%	4.11%
			6685	6.163	35.676	6.285	34.278	-1.94%	4.08%
			6715	6.207	35.715	6.319	34.242	-1.77%	4.30%
			6785	6.280	35.469	6.400	34.158	-2.19%	3.84%
			6825	6.344	35.488	6.447	34.110	-1.60%	3.98%
			6985	6.465	35.277	6.633	33.918	-2.53%	4.01%
			6995	6.481	35.201	6.644	33.906	-2.75%	3.82%
			7000	6.464	35.183	6.650	33.900	-2.80%	3.73%
			7005	6.477	35.122	6.656	33.894	-2.69%	3.62%
			7025	6.547	35.014	6.680	33.870	-1.99%	3.38%

The above measured tissue parameters were used in the DASY software. The DASY software was used to perform interpolation to determine the dielectric parameters at the SAR test device frequencies (per KDB Publication 865664 D01v01r04 and IEEE 1528-2013 6.6.1.2. The tissue parameters listed in the SAR test plots may slightly differ from the table above due to significant digit rounding in the software.

11.2 SAR Test System Verification

Prior to SAR assessment, the system is verified to ±10% of the SAR measurement on the reference dipole at the time of calibration by the calibration facility. Full system validation status and result summary can be found in SAR System Validation Appendix.

Table 11-6
System Verification Results – Head

System Verification TARGET & MEASURED																					
SAR System	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp. (C)	Liquid Temp. (C)	Input Power (W)	Source SN	Probe SN	DAE	Measured SAR 1g (W/kg)	1W Target SAR 1g (W/kg)	1W Normalized SAR 1g (W/kg)	Deviation 1g (%)	Measured SAR 10g (W/kg)	1W Target SAR 10g (W/kg)	1W Normalized SAR 10g (W/kg)	Deviation 10g (%)	Measured 4cm² APD (W/m²)	1W Target 4cm² APD (W/m²)	1W Normalized 4cm² APD (W/m²)	Deviation 4cm² APD (%)
AM14	13	HEAD	10/02/2024	21.5	23.0	1.00	1004	7308	534	0.54	0.58	0.54	-6.23%	0.33	0.36	0.33	-6.18%	N/A	N/A	N/A	N/A
AM4	750	HEAD	09/18/2024	22.0	21.0	0.20	1097	7357	1582	1.73	8.27	8.65	4.59%	1.16	5.38	5.80	7.81%	N/A	N/A	N/A	N/A
J	750	HEAD	09/22/2024	21.9	22.3	0.20	1161	7406	1677	1.64	8.44	8.20	-2.84%	1.08	5.51	5.40	-2.00%	N/A	N/A	N/A	N/A
AM4	750	HEAD	09/23/2024	22.2	20.6	0.20	1097	7357	1582	1.74	8.27	8.70	5.20%	1.16	5.38	5.80	7.81%	N/A	N/A	N/A	N/A
J	750	HEAD	09/25/2024	24.0	22.9	0.20	1161	7406	1677	1.67	8.44	8.35	-1.07%	1.09	5.51	5.45	-1.09%	N/A	N/A	N/A	N/A
AM1	750	HEAD	10/02/2024	21.5	23.0	0.20	1097	7416	701	1.71	8.27	8.55	3.39%	1.13	5.38	5.65	5.02%	N/A	N/A	N/A	N/A
J	750	HEAD	10/07/2024	23.7	22.5	0.20	1054	7406	1677	1.73	8.52	8.65	1.53%	1.13	5.60	5.65	0.89%	N/A	N/A	N/A	N/A
L	750	HEAD	10/24/2024	19.8	19.0	0.20	1054	7660	1678	1.81	8.52	9.05	6.22%	1.21	5.60	6.05	8.04%	N/A	N/A	N/A	N/A
AM4	835	HEAD	09/18/2024	22.0	21.0	0.20	4d108	7357	1582	2.03	9.80	10.15	3.57%	1.34	6.34	6.70	5.68%	N/A	N/A	N/A	N/A
AM4	835	HEAD	09/20/2024	22.3	21.0	0.20	4d108	7357	1582	1.99	9.80	9.95	1.53%	1.31	6.34	6.55	3.31%	N/A	N/A	N/A	N/A
J	835	HEAD	09/22/2024	21.9	22.3	0.20	4d047	7406	1677	2.03	9.65	10.15	5.18%	1.33	6.31	6.65	5.39%	N/A	N/A	N/A	N/A
AM4	835	HEAD	09/23/2024	22.2	20.6	0.20	4d108	7357	1582	2.04	9.80	10.20	4.08%	1.34	6.34	6.70	5.68%	N/A	N/A	N/A	N/A
K3	835	HEAD	09/23/2024	22.8	20.5	0.20	4d119	7491	1532	2.02	9.96	10.10	1.41%	1.34	6.48	6.70	3.40%	N/A	N/A	N/A	N/A
J	835	HEAD	09/25/2024	24.0	22.9	0.20	4d047	7406	1677	1.84	9.65	9.20	-4.66%	1.20	6.31	6.00	-4.91%	N/A	N/A	N/A	N/A
G	1640	HEAD	10/14/2024	23.3	22.0	0.10	321	7570	1530	3.28	34.50	34.80	0.87%	1.91	18.50	19.10	3.24%	N/A	N/A	N/A	N/A
E	1750	HEAD	09/16/2024	22.3	22.0	0.10	1150	7409	1334	3.87	36.90	38.70	4.88%	2.07	19.40	20.70	6.70%	N/A	N/A	N/A	N/A
C	1750	HEAD	09/16/2024	22.6	21.8	0.10	1150	7659	1407	3.83	36.90	38.30	3.79%	2.05	19.40	20.50	5.67%	N/A	N/A	N/A	N/A
S	1750	HEAD	09/18/2024	25.0	23.0	0.10	1150	7803	1583	3.79	36.90	37.90	2.71%	2.05	19.40	20.50	5.67%	N/A	N/A	N/A	N/A
K4	1750	HEAD	09/19/2024	23.0	21.0	0.10	1051	7565	1466	3.49	37.00	34.90	-5.68%	1.86	19.50	18.60	-4.62%	N/A	N/A	N/A	N/A
O	1750	HEAD	09/20/2024	21.5	20.3	0.10	1148	3914	728	3.87	37.20	38.70	4.03%	2.07	19.40	20.70	6.70%	N/A	N/A	N/A	N/A
K4	1750	HEAD	09/26/2024	21.0	19.1	0.10	1051	7565	1466	3.85	37.00	38.50	4.05%	2.05	19.50	20.50	5.13%	N/A	N/A	N/A	N/A
K4	1900	HEAD	09/11/2024	19.2	19.0	0.10	5d141	7565	1466	3.87	40.30	38.70	-3.97%	2.00	21.00	20.00	-4.76%	N/A	N/A	N/A	N/A
K4	1900	HEAD	09/13/2024	22.6	21.5	0.10	5d141	7565	1466	4.15	40.30	41.50	2.98%	2.14	21.00	21.40	1.90%	N/A	N/A	N/A	N/A
C	1900	HEAD	09/16/2024	22.6	21.8	0.10	5d148	7659	1407	4.18	40.10	41.80	4.24%	2.16	21.00	21.60	2.86%	N/A	N/A	N/A	N/A
E	1900	HEAD	09/18/2024	24.3	23.2	0.10	5d080	7409	1334	4.30	39.60	43.00	8.59%	2.23	20.70	22.30	7.73%	N/A	N/A	N/A	N/A
S	1900	HEAD	09/18/2024	25.0	23.0	0.10	5d148	7803	1583	4.17	40.10	41.70	3.99%	2.19	21.00	21.90	4.29%	N/A	N/A	N/A	N/A
O	1900	HEAD	09/20/2024	21.5	20.3	0.10	5d080	3914	728	4.23	39.60	42.30	6.82%	2.19	20.70	21.90	5.80%	N/A	N/A	N/A	N/A
K4	1900	HEAD	09/26/2024	21.0	19.1	0.10	5d141	7565	1466	4.14	40.30	41.40	2.73%	2.14	21.00	21.40	1.90%	N/A	N/A	N/A	N/A
K4	1900	HEAD	09/30/2024	22.0	21.3	0.10	5d141	7565	1466	4.10	40.30	41.00	1.74%	2.12	21.00	21.20	0.95%	N/A	N/A	N/A	N/A
K4	1900	HEAD	10/02/2024	20.0	19.3	0.10	5d026	7565	1466	4.14	39.80	41.40	4.02%	2.14	20.70	21.40	3.38%	N/A	N/A	N/A	N/A
AM8	2300	HEAD	09/18/2024	22.0	21.8	0.10	1064	7427	467	4.95	49.30	49.50	0.41%	2.33	23.80	23.30	-2.10%	N/A	N/A	N/A	N/A
AM13	2300	HEAD	09/25/2024	20.7	22.6	0.10	1038	7682	1683	4.66	49.10	46.60	-5.09%	2.22	23.70	22.20	-6.33%	N/A	N/A	N/A	N/A
AM13	2300	HEAD	09/30/2024	23.5	22.6	0.10	1064	7682	1683	4.66	49.30	46.60	-5.48%	2.22	23.80	22.20	-6.72%	N/A	N/A	N/A	N/A
AM13	2300	HEAD	10/02/2024	21.7	23.0	0.10	1064	7682	1683	4.95	49.30	49.50	0.41%	2.31	23.80	23.10	-2.94%	N/A	N/A	N/A	N/A
K2	2450	HEAD	09/11/2024	20.0	20.7	0.10	945	7637	1652	5.30	53.40	53.00	-0.75%	2.47	25.10	24.70	-1.59%	N/A	N/A	N/A	N/A
K2	2450	HEAD	09/13/2024	21.5	21.3	0.10	945	7637	1652	5.71	53.40	57.10	6.93%	2.66	25.10	26.60	5.98%	N/A	N/A	N/A	N/A
AM8	2450	HEAD	09/18/2024	22.0	21.8	0.10	750	7427	467	5.26	52.60	52.60	0.00%	2.37	24.50	23.70	-3.27%	N/A	N/A	N/A	N/A
K2	2450	HEAD	09/23/2024	20.7	20.8	0.10	945	7637	1652	5.14	53.40	51.40	-3.75%	2.39	25.10	23.90	-4.78%	N/A	N/A	N/A	N/A
AM13	2450	HEAD	09/25/2024	20.7	22.6	0.10	855	7682	1683	5.14	52.40	51.40	-1.91%	2.36	24.60	23.60	-4.07%	N/A	N/A	N/A	N/A
K2	2450	HEAD	09/25/2024	21.3	21.3	0.10	945	7640	1645	5.48	53.40	54.80	2.62%	2.55	25.10	25.50	1.59%	N/A	N/A	N/A	N/A
K3	2450	HEAD	10/09/2024	20.5	21.0	0.10	882	7558	1364	5.40	53.00	54.00	1.89%	2.53	24.90	25.30	1.61%	N/A	N/A	N/A	N/A
AM8	2600	HEAD	09/18/2024	22.0	21.8	0.10	1042	7427	467	5.29	55.80	52.90	-5.20%	2.30	24.90	23.00	-7.63%	N/A	N/A	N/A	N/A
K2	2600	HEAD	09/19/2024	20.9	21.0	0.10	1009	7637	1652	5.60	56.60	56.00	-1.06%	2.52	25.50	25.20	-1.18%	N/A	N/A	N/A	N/A
K2	2600	HEAD	09/23/2024	20.7	20.8	0.10	1009	7637	1652	5.30	56.60	53.00	-6.36%	2.38	25.50	23.80	-6.67%	N/A	N/A	N/A	N/A
AM13	2600	HEAD	09/25/2024	20.7	22.6	0.10	1068	7682	1683	5.66	56.50	56.60	0.18%	2.47	25.40	24.70	-2.76%	N/A	N/A	N/A	N/A
K2	2600	HEAD	09/25/2024	21.3	21.3	0.10	1009	7640	1645	5.54	56.60	55.40	-2.12%	2.49	25.50	24.90	-2.35%	N/A	N/A	N/A	N/A
AM13	2600	HEAD	09/30/2024	23.5	22.6	0.10	1042	7682	1683	5.64	55.80	56.40	1.08%	2.48	24.90	24.80	-0.40%	N/A	N/A	N/A	N/A
AM13	2600	HEAD	10/14/2024	19.9	19.3	0.10	1042	7682	1683	5.59	55.80	55.90	0.18%	2.52	24.90	24.20	1.20%	N/A	N/A	N/A	N/A
H	3500	HEAD	09/16/2024	21.9	20.8	0.10	1097	7488	1415	6.75	65.40	67.50	3.21%	2.58	24.70	25.80	4.45%	N/A	N/A	N/A	N/A
L	3500	HEAD	09/18/2024	20.7	20.5	0.10	1097	7660	1678	6.92	65.40	69.20	5.81%	2.64	24.70	26.40	6.88%	N/A	N/A	N/A	N/A
H	3500	HEAD	09/18/2024	22.7	21.3	0.10	1097	7488	1415	6.41	65.40	64.10	-1.99%	2.47	24.70	24.70	0.00%	N/A	N/A	N/A	N/A
K4	3500	HEAD	09/23/2024	22.0	19.1	0.10	1068	7565	1466	6.01	65.30	60.10	-7.96%	2.31	24.70	23.10	-6.48%	N/A	N/A	N/A	N/A
H	3500	HEAD	10/16/2024	23.5	20.5	0.10	1097	7488	1415	6.47	65.40	64.70	-1.07%	2.50	24.70	25.00	1.21%	N/A	N/A	N/A	N/A
H	3700	HEAD	09/16/2024	21.9	20.8	0.10	1067	7488	1415	6.86	66.90	68.60	2.54%	2.55	24.30	25.50	4.94%	N/A	N/A	N/A	N/A
L	3700	HEAD	09/18/2024	20.7	20.5	0.10	1067	7660	1678	6.66	66.90	66.60	-0.45%	2.47	24.30	24.70	1.65%	N/A	N/A	N/A	N/A
H	3700	HEAD	09/18/2024	22.7	21.3	0.10	1067	7488	1415	6.90	66.90	69.00	3.14%	2.57	24.30	25.70	5.76%	N/A	N/A	N/A	N/A
K4	3700	HEAD	09/23/2024	22.0	19.1	0.10	1029	7565	1466	6.31	67.30	63.10	-6.24%	2.34	24.50	23.40	-4.49%	N/A	N/A	N/A	N/A
H	3900	HEAD	09/16/2024	21.9	20.8	0.10	1056	7488	1415	6.89	68.20	68.90	1.03%	2.42	23.80	24.20	1.68%	N/A	N/A	N/A	N/A
H	3900	HEAD	09/18/2024	22.7	21.3	0.10	1073	7488	1415	7.05	69.50	70.50	1.44%	2.49	24.30	24.90	2.47%	N/A	N/A	N/A	N/A
K6	5250	HEAD	09/19/2024	20.8	21.7	0.05	1237	7402	1502	3.86	80.10	77.20	-3.62%	1.11	22.90	22.20	-3.06%	N/A	N/A	N/A	N/A
K6	5250	HEAD	09/23/2024	21.5	20.2	0.05	1237	7402	1502	3.71	80.10	74.20	-7.37%	1.06	22.90	21.20	-7.42%	N/A	N/A	N/A	N/A
K6	5600	HEAD	09/19/2024	20.8	21.7	0.05	1237	7402	1502	3.90	82.00	78.00	-4.88%	1.11	23.30	22.20	-4.72%	N/A	N/A	N/A	N/A
K6	5600	HEAD	09/23/2024	21.5	20.2	0.05	1237	7402	1502	4.01	82.00	80.20	-2.20%	1.14	23.30	22.80	-2.15%	N/A	N/A	N/A	N/A
K6	5750	HEAD	09/19/2024	20.8	21.7	0.05	1237	7402	1502	3.92	79.20	78.40	-1.01%	1.12	22.50	22.40	-0.44%	N/A	N/A	N/A	N/A
K6	5750	HEAD	09/23/2024	21.5	20.2	0.05	1237	7402	1502	3.88	79.20	77.60	-2.02%	1.11	22.50	22.20	-1.33%	N/A	N/A	N/A	N/A
K6	5850	HEAD	09/19/2024	20.8	21.7	0.05	1237	7402	1502	4.15	80.40	83.00	3.23%	1.18	22.80	23.60	3.51%	N/A	N/A	N/A	N/A
K6	5850	HEAD	09/23/2024	21.5	20.2	0.05	1237	7402	1502	4.05	80.40	81.00	0.75%	1.15	22.80	23.00	0.88%	N/A	N/A	N/A	N/A
R	6500	HEAD	09/22/2024	23.5	22.3	0.03	1111	7527	1272	7.63	291.00	305.20	4.88%	1.42	53.50	56.80	6.17%	34.40	1300.00	1376.00	5.85%
AM7	6500	HEAD	09/23/2024	20.4	20.0	0.03	1019	7421	604	7.17	293.00	286.80	-2.12%	1.32	54.10	52.80	-2.40%	32.20	1320.00	1288.00	-2.42%
R	8000	HEAD	10/09/2024	21.3	20.9	0.03	1007	7527	1272	6.59	269.00	263.60	-2.01%	1.12	44.80	45.30	-1.10%	27.10	1111.00	1084.00	-2.34%

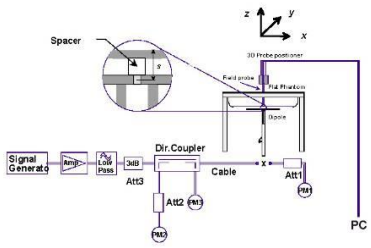


Figure 11-1
System Verification Setup Diagram

Figure 11-2
System Verification Setup Photo

11.3 Power Density Test System Verification

The system was verified to be within ±0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

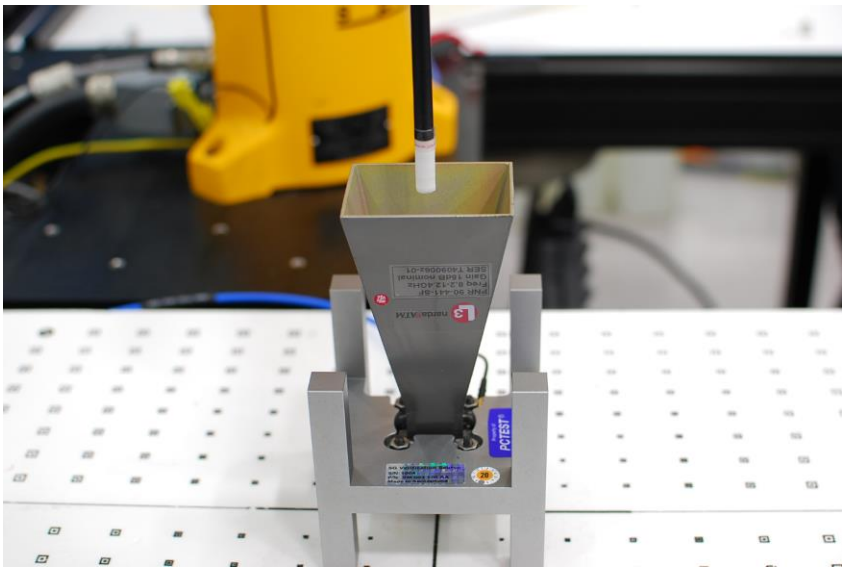


Figure 11-3
System Verification Setup Photo

Table 11-7
10 GHz Verifications

System Verification											
System	Frequency (GHz)	Date	Source S/N	Probe S/N	Prad (mW)	Normal psPD (W/m² over 4 cm²)		Deviation (dB)	Total psPD (W/m² over 4 cm²)		Deviation (dB)
						Measured	Target		Measured	Target	
Q	10	10/04/2023	1002	9622	93.3	59.90	54.60	0.40	60.30	54.90	0.41
R	10	10/14/2024	1002	9421	93.3	47.20	54.60	-0.63	47.40	54.90	-0.64

Note: A **10 mm distance spacing** was used from the reference horn antenna aperture to the probe element.

12 SAR DATA SUMMARY

12.1 GSM 850 Standalone SAR

Table 12-1

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	GSM 850	GSM	A	0015M	1:8.3	0.07	836.60	190	33.5	33.24	Right Cheek	0	0.058	1.062	0.062	0.323	0.202		36.4	35.7	31.5
Head	GSM 850	GSM	A	0015M	1:8.3	-0.02	836.60	190	33.5	33.24	Right Tilt	0	0.034	1.062	0.036	0.189	0.118		38.7		
Head	GSM 850	GSM	A	0015M	1:8.3	0.02	836.60	190	33.5	33.24	Left Cheek	0	0.067	1.062	0.071	0.373	0.233		35.7		
Head	GSM 850	GSM	A	0015M	1:8.3	-0.03	836.60	190	33.5	33.24	Left Tilt	0	0.040	1.062	0.042	0.223	0.139		38.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-2

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	GSM 850	GSM	E	0015M	1:8.3	0.02	848.80	251	30.5	29.43	Right Cheek	0	0.507	1.279	0.648	0.648	0.405		23.1	22.3	20.3
Head	GSM 850	GSM	E	0015M	1:8.3	-0.03	848.80	251	30.5	29.43	Right Tilt	0	0.442	1.279	0.565	0.565	0.353		23.7		
Head	GSM 850	GSM	E	0015M	1:8.3	0.03	848.80	251	30.5	29.43	Left Cheek	0	0.614	1.279	0.785	0.785	0.491		22.3		
Head	GSM 850	GSM	E	0015M	1:8.3	0.03	848.80	251	30.5	29.43	Left Tilt	0	0.616	1.279	0.788	0.788	0.493	A1	22.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-3

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-Worn/Hotspot	GPRS 850	GPRS 3 Tx Slots	A	0015M	1:2.76	0.05	836.60	190	30.5	29.77	Back	10	0.214	1.183	0.253	0.580	0.363		32.0	32.0	29.7
Hotspot	GPRS 850	GPRS 3 Tx Slots	A	0015M	1:2.76	0.00	836.60	190	30.5	29.77	Front	10	0.104	1.183	0.123	0.282	0.176		35.1		
Hotspot	GPRS 850	GPRS 3 Tx Slots	A	0015M	1:2.76	0.02	836.60	190	30.5	29.77	Bottom	10	0.045	1.183	0.053	0.122	0.076		38.8		
Hotspot	GPRS 850	GPRS 3 Tx Slots	A	0015M	1:2.76	-0.02	836.60	190	30.5	29.77	Right	10	0.079	1.183	0.093	0.214	0.134		36.3		
Hotspot	GPRS 850	GPRS 3 Tx Slots	A	0015M	1:2.76	-0.04	836.60	190	30.5	29.77	Left	10	0.081	1.183	0.096	0.220	0.138		36.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-4

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-Worn/Hotspot	GPRS 850	GPRS 3 Tx Slots	E	0015M	1:2.76	-0.02	836.60	190	30.5	29.77	Back	10	0.277	1.183	0.328	0.474	0.296	A2	30.9	29.0	27.7
Hotspot	GPRS 850	GPRS 3 Tx Slots	E	0015M	1:2.76	-0.02	836.60	190	30.5	29.77	Front	10	0.361	1.183	0.427	0.617	0.386		29.7		
Hotspot	GPRS 850	GPRS 3 Tx Slots	E	0015M	1:2.76	-0.20	836.60	190	30.5	29.77	Top	10	0.429	1.183	0.508	0.734	0.459	A3	29.0		
Hotspot	GPRS 850	GPRS 3 Tx Slots	E	0015M	1:2.76	-0.03	836.60	190	30.5	29.77	Right	10	0.239	1.183	0.283	0.409	0.256		31.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

12.2 GSM 1900 Standalone SAR

Table 12-5

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	GSM 1900	GSM	A	0015M	1:8.3	0.01	1909.80	810	30.5	29.70	Right Cheek	0	0.058	1.202	0.070	0.392	0.245	A4	32.8	32.8	28.8
Head	GSM 1900	GSM	A	0015M	1:8.3	0.05	1909.80	810	30.5	29.70	Right Tilt	0	0.021	1.202	0.025	0.142	0.089		37.2		
Head	GSM 1900	GSM	A	0015M	1:8.3	-0.07	1909.80	810	30.5	29.70	Left Cheek	0	0.038	1.202	0.046	0.257	0.161		34.7		
Head	GSM 1900	GSM	A	0015M	1:8.3	-0.13	1909.80	810	30.5	29.70	Left Tilt	0	0.037	1.202	0.044	0.250	0.156		34.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-6

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	GPRS 1900	GPRS 4 Tx Slots	A	0015M	1:2.076	-0.06	1850.20	512	23.0	21.75	Back	10	0.286	1.334	0.382	0.382	0.239	A5	24.0	21.7	18.8
Hotspot	GPRS 1900	GPRS 4 Tx Slots	A	0015M	1:2.076	-0.06	1850.20	512	23.0	21.75	Front	10	0.245	1.334	0.327	0.327	0.204		24.6		
Hotspot	GPRS 1900	GPRS 4 Tx Slots	A	0015M	1:2.076	0.01	1850.20	512	23.0	21.75	Bottom	10	0.482	1.334	0.643	0.643	0.402	A6	21.7		
Hotspot	GPRS 1900	GPRS 4 Tx Slots	A	0015M	1:2.076	-0.04	1850.20	512	23.0	21.75	Right	10	0.033	1.334	0.044	0.044	0.028		33.3		
Hotspot	GPRS 1900	GPRS 4 Tx Slots	A	0015M	1:2.076	0.01	1850.20	512	23.0	21.75	Left	10	0.035	1.334	0.047	0.047	0.029		33.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

12.3 UMTS 850 Standalone SAR

Table 12-7

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	UMTS 850	RMC	A	0015M	1:1	-0.06	836.60	4183	25.0	23.79	Right Cheek	0	63	0.096	1.321	0.127	0.319	0.199		33.9	33.4	29.0
Head	UMTS 850	RMC	A	0015M	1:1	0.00	836.60	4183	25.0	23.79	Right Tilt	0	63	0.056	1.321	0.074	0.186	0.116		36.3		
Head	UMTS 850	RMC	A	0015M	1:1	0.02	836.60	4183	25.0	23.79	Left Cheek	0	63	0.109	1.321	0.144	0.362	0.226		33.4		
Head	UMTS 850	RMC	A	0015M	1:1	0.02	836.60	4183	25.0	23.79	Left Tilt	0	63	0.054	1.321	0.071	0.179	0.112		36.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-8

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	UMTS 850	RMC	E	0015M	1:1	0.03	836.60	4183	21.5	20.93	Right Cheek	0	0.593	1.140	0.676	0.676	0.423		23.1	21.4	20.5
Head	UMTS 850	RMC	E	0015M	1:1	0.05	836.60	4183	21.5	20.93	Right Tilt	0	0.548	1.140	0.625	0.625	0.391		23.5		
Head	UMTS 850	RMC	E	0015M	1:1	0.01	826.40	4132	21.5	20.88	Left Cheek	0	0.868	1.153	1.001	1.001	0.626		21.4		
Head	UMTS 850	RMC	E	0015M	1:1	0.01	836.60	4183	21.5	20.93	Left Cheek	0	0.895	1.140	1.020	1.020	0.638	A7	21.4		
Head	UMTS 850	RMC	E	0015M	1:1	0.00	836.60	4183	21.5	20.93	Left Cheek	0	0.888	1.140	1.012	1.012	0.633		21.4		
Head	UMTS 850	RMC	E	0015M	1:1	0.02	846.60	4233	21.5	20.86	Left Cheek	0	0.846	1.159	0.981	0.981	0.613		21.5		
Head	UMTS 850	RMC	E	0015M	1:1	0.03	836.60	4183	21.5	20.93	Left Tilt	0	0.675	1.140	0.770	0.770	0.481		22.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram										

Note: Blue entry represents variability measurement

Table 12-9

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	UMTS 850	RMC	A	0015M	1:1	0.01	836.60	4183	25.0	23.79	Back	10	133	0.206	1.321	0.272	0.335	0.209		30.6	30.6	25.9
Hotspot	UMTS 850	RMC	A	0015M	1:1	-0.05	836.60	4183	25.0	23.79	Front	10	63	0.145	1.321	0.192	0.236	0.148		32.1		
Hotspot	UMTS 850	RMC	A	0015M	1:1	0.00	836.60	4183	25.0	23.79	Bottom	10	133	0.063	1.321	0.083	0.102	0.064		35.7		
Hotspot	UMTS 850	RMC	A	0015M	1:1	0.05	836.60	4183	25.0	23.79	Right	10	133	0.111	1.321	0.147	0.180	0.113		33.3		
Hotspot	UMTS 850	RMC	A	0015M	1:1	0.09	836.60	4183	25.0	23.79	Left	10	63	0.111	1.321	0.147	0.180	0.113		33.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-10

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	UMTS 850	RMC	E	0015M	1:1	0.02	836.60	4183	25.0	24.32	Back	10	0.425	1.169	0.497	0.770	0.481	A8	28.0	27.3	26.9
Hotspot	UMTS 850	RMC	E	0015M	1:1	0.02	836.60	4183	25.0	24.32	Front	10	0.460	1.169	0.538	0.833	0.521		27.6		
Hotspot	UMTS 850	RMC	E	0015M	1:1	0.00	836.60	4183	25.0	24.32	Top	10	0.498	1.169	0.582	0.902	0.564	A9	27.3		
Hotspot	UMTS 850	RMC	E	0015M	1:1	-0.05	836.60	4183	25.0	24.32	Right	10	0.296	1.169	0.346	0.536	0.335		29.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram											

12.4 UMTS 1750 Standalone SAR

Table 12-11

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	UMTS 1750	RMC	A	0015M	1:1	0.06	1752.60	1513	24.0	23.27	Right Cheek	0	99	0.098	1.183	0.116	0.402	0.251	A10	33.3	33.3	29.4
Head	UMTS 1750	RMC	A	0015M	1:1	-0.15	1752.60	1513	24.0	23.27	Right Tilt	0	99	0.053	1.183	0.063	0.217	0.136		36.0		
Head	UMTS 1750	RMC	A	0015M	1:1	0.01	1752.60	1513	24.0	23.27	Left Cheek	0	99	0.064	1.183	0.076	0.263	0.164		35.2		
Head	UMTS 1750	RMC	A	0015M	1:1	-0.03	1752.60	1513	24.0	23.27	Left Tilt	0	99	0.047	1.183	0.056	0.193	0.121		36.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-12

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	UMTS 1750	RMC	A	0015M	1:1	0.01	1752.60	1513	20.0	19.69	Back	10	99	0.599	1.074	0.643	0.643	0.402	A11	21.9	19.9	19.0
Hotspot	UMTS 1750	RMC	A	0015M	1:1	-0.01	1752.60	1513	20.0	19.69	Front	10	99	0.422	1.074	0.453	0.453	0.283		23.4		
Hotspot	UMTS 1750	RMC	A	0015M	1:1	-0.01	1712.40	1312	20.0	19.56	Bottom	10	107	0.852	1.107	0.943	0.943	0.589		20.2		
Hotspot	UMTS 1750	RMC	A	0015M	1:1	0.01	1732.40	1412	20.0	19.64	Bottom	10	101	0.822	1.086	0.893	0.893	0.558		20.4		
Hotspot	UMTS 1750	RMC	A	0015M	1:1	0.00	1752.60	1513	20.0	19.69	Bottom	10	99	0.938	1.074	1.007	1.007	0.629	A12	19.9		
Hotspot	UMTS 1750	RMC	A	0015M	1:1	-0.01	1752.60	1513	20.0	19.69	Right	10	99	0.083	1.074	0.089	0.089	0.056		30.4		
Hotspot	UMTS 1750	RMC	A	0015M	1:1	0.03	1752.60	1513	20.0	19.69	Left	10	99	0.062	1.074	0.067	0.067	0.042		31.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram											

12.5 UMTS 1900 Standalone SAR

Table 12-13

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	UMTS 1900	RMC	A	0015M	1:1	-0.02	1907.60	9538	24.0	23.19	Right Cheek	0	115	0.095	1.205	0.114	0.362	0.226	A13	33.4	33.4	29.0
Head	UMTS 1900	RMC	A	0015M	1:1	0.05	1907.60	9538	24.0	23.19	Right Tilt	0	115	0.034	1.205	0.041	0.130	0.081		37.8		
Head	UMTS 1900	RMC	A	0015M	1:1	-0.03	1907.60	9538	24.0	23.19	Left Cheek	0	115	0.080	1.205	0.096	0.305	0.191		34.1		
Head	UMTS 1900	RMC	A	0015M	1:1	0.01	1907.60	9538	24.0	23.19	Left Tilt	0	115	0.065	1.205	0.078	0.248	0.155		35.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-14

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	UMTS 1900	RMC	A	0015M	1:1	-0.02	1907.60	9538	19.0	18.52	Back	10	112	0.496	1.117	0.554	0.554	0.346	A14	21.5	18.7	18.0
Hotspot	UMTS 1900	RMC	A	0015M	1:1	0.01	1907.60	9538	19.0	18.52	Front	10	112	0.380	1.117	0.424	0.424	0.265		22.7		
Hotspot	UMTS 1900	RMC	A	0015M	1:1	0.01	1852.40	9262	19.0	18.49	Bottom	10	99	0.897	1.125	1.009	1.009	0.631		18.9		
Hotspot	UMTS 1900	RMC	A	0015M	1:1	-0.02	1880.00	9400	19.0	18.50	Bottom	10	46	0.889	1.122	0.997	0.997	0.623		19.0		
Hotspot	UMTS 1900	RMC	A	0015M	1:1	-0.02	1907.60	9538	19.0	18.52	Bottom	10	49	0.943	1.117	1.053	1.053	0.658	A15	18.7		
Hotspot	UMTS 1900	RMC	A	0015M	1:1	0.03	1907.60	9538	19.0	18.52	Bottom	10	49	0.941	1.117	1.051	1.051	0.657		18.7		
Hotspot	UMTS 1900	RMC	A	0015M	1:1	-0.04	1907.60	9538	19.0	18.52	Right	10	52	0.036	1.117	0.040	0.040	0.025		32.9		
Hotspot	UMTS 1900	RMC	A	0015M	1:1	-0.03	1907.60	9538	19.0	18.52	Left	10	115	0.042	1.117	0.047	0.047	0.029		32.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram											

Note: Blue entry represents variability measurement

12.6 LTE Band 71 Standalone SAR

Table 12-15

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 71	20	QPSK	A	0129M	1:1	0.04	680.50	133297	0.0	25.0	24.08	1	50	Right Cheek	0	28	0.128	1.236	0.158	0.362	0.226		33.0	33.0	28.6
Head	LTE Band 71	20	QPSK	A	0129M	1:1	0.08	680.50	133297	1.0	24.0	22.92	50	50	Right Cheek	0	137	0.095	1.282	0.122	0.351	0.219		33.1		
Head	LTE Band 71	20	QPSK	A	0095M	1:1	0.19	680.50	133297	0.0	25.0	24.08	1	50	Right Tilt	0	28	0.049	1.236	0.061	0.139	0.087		37.1		
Head	LTE Band 71	20	QPSK	A	0095M	1:1	-0.01	680.50	133297	1.0	24.0	22.92	50	50	Right Tilt	0	28	0.040	1.282	0.051	0.148	0.093		36.8		
Head	LTE Band 71	20	QPSK	A	0129M	1:1	0.05	680.50	133297	0.0	25.0	24.08	1	50	Left Cheek	0	28	0.128	1.236	0.158	0.362	0.226		33.0		
Head	LTE Band 71	20	QPSK	A	0129M	1:1	0.06	680.50	133297	1.0	24.0	22.92	50	50	Left Cheek	0	28	0.085	1.282	0.109	0.314	0.196		33.6		
Head	LTE Band 71	20	QPSK	A	0095M	1:1	0.07	680.50	133297	0.0	25.0	24.08	1	50	Left Tilt	0	28	0.049	1.236	0.061	0.139	0.087		37.1		
Head	LTE Band 71	20	QPSK	A	0095M	1:1	0.09	680.50	133297	1.0	24.0	22.92	50	50	Left Tilt	0	28	0.036	1.282	0.046	0.133	0.083		37.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-16

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 71	20	QPSK	E	0095M	1:1	-0.04	680.50	133297	0.0	22.5	21.36	1	50	Right Cheek	0	0.427	1.300	0.555	0.555	0.347		25.0	22.7	21.5
Head	LTE Band 71	20	QPSK	E	0095M	1:1	-0.06	680.50	133297	0.0	22.5	21.26	50	0	Right Cheek	0	0.414	1.330	0.551	0.551	0.344		25.0		
Head	LTE Band 71	20	QPSK	E	0095M	1:1	-0.01	680.50	133297	0.0	22.5	21.36	1	50	Right Tilt	0	0.426	1.300	0.554	0.554	0.346		25.0		
Head	LTE Band 71	20	QPSK	E	0095M	1:1	-0.01	680.50	133297	0.0	22.5	21.26	50	0	Right Tilt	0	0.422	1.330	0.561	0.561	0.351		25.0		
Head	LTE Band 71	20	QPSK	E	0129M	1:1	0.04	680.50	133297	0.0	22.5	21.36	1	50	Left Cheek	0	0.726	1.300	0.944	0.944	0.590	A16	22.7		
Head	LTE Band 71	20	QPSK	E	0129M	1:1	0.08	680.50	133297	0.0	22.5	21.26	50	0	Left Cheek	0	0.701	1.330	0.932	0.932	0.583		22.8		
Head	LTE Band 71	20	QPSK	E	0129M	1:1	0.10	680.50	133297	0.0	22.5	21.23	100	0	Left Cheek	0	0.683	1.340	0.915	0.915	0.572		22.8		
Head	LTE Band 71	20	QPSK	E	0129M	1:1	0.07	680.50	133297	0.0	22.5	21.36	1	50	Left Tilt	0	0.670	1.300	0.871	0.871	0.544		23.0		
Head	LTE Band 71	20	QPSK	E	0129M	1:1	0.13	680.50	133297	0.0	22.5	21.26	50	0	Left Tilt	0	0.665	1.330	0.884	0.884	0.553		23.0		
Head	LTE Band 71	20	QPSK	E	0129M	1:1	0.13	680.50	133297	0.0	22.5	21.23	100	0	Left Tilt	0	0.633	1.340	0.848	0.848	0.530		23.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-17

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 71	20	QPSK	A	0129M	1:1	0.06	680.50	133297	0.0	25.0	24.08	1	50	Back	10	137	0.229	1.236	0.283	0.470	0.294		30.4		
Body-worn/Hotspot	LTE Band 71	20	QPSK	A	0129M	1:1	-0.02	680.50	133297	1.0	24.0	22.92	50	50	Back	10	137	0.178	1.282	0.228	0.477	0.298		30.4		
Hotspot	LTE Band 71	20	QPSK	A	0095M	1:1	-0.05	680.50	133297	0.0	25.0	24.08	1	50	Front	10	137	0.129	1.236	0.159	0.265	0.166		32.9		
Hotspot	LTE Band 71	20	QPSK	A	0095M	1:1	-0.09	680.50	133297	1.0	24.0	22.92	50	50	Front	10	137	0.082	1.282	0.105	0.220	0.138		33.7		
Hotspot	LTE Band 71	20	QPSK	A	0095M	1:1	0.13	680.50	133297	0.0	25.0	24.08	1	50	Bottom	10	137	0.035	1.236	0.043	0.072	0.045		38.6	30.4	27.2
Hotspot	LTE Band 71	20	QPSK	A	0095M	1:1	-0.02	680.50	133297	1.0	24.0	22.92	50	50	Bottom	10	137	0.028	1.282	0.036	0.075	0.047		38.4		
Hotspot	LTE Band 71	20	QPSK	A	0129M	1:1	-0.06	680.50	133297	0.0	25.0	24.08	1	50	Right	10	137	0.228	1.236	0.282	0.468	0.293		30.5		
Hotspot	LTE Band 71	20	QPSK	A	0129M	1:1	-0.01	680.50	133297	1.0	24.0	22.92	50	50	Right	10	137	0.168	1.282	0.215	0.450	0.281		30.6		
Hotspot	LTE Band 71	20	QPSK	A	0129M	1:1	-0.01	680.50	133297	0.0	25.0	24.08	1	50	Left	10	27	0.171	1.236	0.211	0.351	0.219		31.7		
Hotspot	LTE Band 71	20	QPSK	A	0129M	1:1	-0.03	680.50	133297	1.0	24.0	22.92	50	50	Left	10	27	0.134	1.282	0.172	0.359	0.224		31.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-18

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 71	20	QPSK	E	0095M	1:1	-0.06	680.50	133297	0.0	25.0	24.49	1	0	Back	10	0.427	1.125	0.480	0.761	0.476	A17	28.1		
Body-worn/Hotspot	LTE Band 71	20	QPSK	E	0095M	1:1	0.01	680.50	133297	1.0	24.0	23.13	50	0	Back	10	0.366	1.222	0.447	0.892	0.558		27.4		
Hotspot	LTE Band 71	20	QPSK	E	0129M	1:1	0.10	680.50	133297	0.0	25.0	24.49	1	0	Front	10	0.333	1.125	0.375	0.593	0.371		29.2		
Hotspot	LTE Band 71	20	QPSK	E	0129M	1:1	0.04	680.50	133297	1.0	24.0	23.13	50	0	Front	10	0.287	1.222	0.351	0.700	0.438		28.5		
Hotspot	LTE Band 71	20	QPSK	E	0129M	1:1	-0.08	680.50	133297	0.0	25.0	24.49	1	0	Top	10	0.367	1.125	0.413	0.654	0.409		28.8	27.4	27.0
Hotspot	LTE Band 71	20	QPSK	E	0129M	1:1	-0.02	680.50	133297	1.0	24.0	23.13	50	0	Top	10	0.321	1.222	0.392	0.783	0.489		28.0		
Hotspot	LTE Band 71	20	QPSK	E	0129M	1:1	-0.02	680.50	133297	0.0	25.0	24.49	1	0	Right	10	0.312	1.125	0.351	0.556	0.348		29.5		
Hotspot	LTE Band 71	20	QPSK	E	0129M	1:1	-0.04	680.50	133297	1.0	24.0	23.13	50	0	Right	10	0.267	1.222	0.326	0.651	0.407		28.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.7 LTE Band 12 Standalone SAR

Table 12-19

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 12	10	QPSK	A	0129M	1:1	0.01	707.50	23095	0.0	25.0	24.01	1	25	Right Cheek	0	124	0.139	1.256	0.175	0.391	0.244		32.5		
Head	LTE Band 12	10	QPSK	A	0129M	1:1	0.04	707.50	23095	1.0	24.0	22.94	25	12	Right Cheek	0	124	0.105	1.276	0.134	0.378	0.236		32.7		
Head	LTE Band 12	10	QPSK	A	0095M	1:1	-0.06	707.50	23095	0.0	25.0	24.01	1	25	Right Tilt	0	124	0.063	1.256	0.079	0.177	0.111		36.0		
Head	LTE Band 12	10	QPSK	A	0095M	1:1	0.08	707.50	23095	1.0	24.0	22.94	25	12	Right Tilt	0	124	0.050	1.276	0.064	0.180	0.113		35.9		
Head	LTE Band 12	10	QPSK	A	0129M	1:1	0.08	707.50	23095	0.0	25.0	24.01	1	25	Left Cheek	0	124	0.132	1.256	0.166	0.371	0.232		32.8		
Head	LTE Band 12	10	QPSK	A	0129M	1:1	0.07	707.50	23095	1.0	24.0	22.94	25	12	Left Cheek	0	124	0.101	1.276	0.129	0.363	0.227		32.8		
Head	LTE Band 12	10	QPSK	A	0095M	1:1	-0.05	707.50	23095	0.0	25.0	24.01	1	25	Left Tilt	0	124	0.060	1.256	0.075	0.169	0.106		36.2		
Head	LTE Band 12	10	QPSK	A	0095M	1:1	-0.11	707.50	23095	1.0	24.0	22.94	25	12	Left Tilt	0	124	0.048	1.276	0.061	0.173	0.108		36.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-20

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 12	10	QPSK	E	0095M	1:1	-0.01	707.50	23095	0.0	22.5	21.34	1	25	Right Cheek	0	0.460	1.306	0.601	0.601	0.376		24.7		
Head	LTE Band 12	10	QPSK	E	0095M	1:1	-0.01	707.50	23095	0.0	22.5	21.30	25	12	Right Cheek	0	0.459	1.318	0.605	0.605	0.378		24.6		
Head	LTE Band 12	10	QPSK	E	0095M	1:1	0.01	707.50	23095	0.0	22.5	21.34	1	25	Right Tilt	0	0.448	1.306	0.585	0.585	0.366		24.8		
Head	LTE Band 12	10	QPSK	E	0095M	1:1	0.02	707.50	23095	0.0	22.5	21.30	25	12	Right Tilt	0	0.450	1.318	0.593	0.593	0.371		24.7		
Head	LTE Band 12	10	QPSK	E	0129M	1:1	0.10	707.50	23095	0.0	22.5	21.34	1	25	Left Cheek	0	0.803	1.306	1.049	1.049	0.656	A18	22.2		
Head	LTE Band 12	10	QPSK	E	0129M	1:1	0.11	707.50	23095	0.0	22.5	21.30	25	12	Left Cheek	0	0.800	1.318	1.054	1.054	0.659		22.2	22.2	21.5
Head	LTE Band 12	10	QPSK	E	0129M	1:1	0.08	707.50	23095	0.0	22.5	21.28	50	0	Left Cheek	0	0.790	1.324	1.046	1.046	0.654		22.3		
Head	LTE Band 12	10	QPSK	E	0129M	1:1	0.17	707.50	23095	0.0	22.5	21.34	1	25	Left Tilt	0	0.724	1.306	0.946	0.946	0.591		22.7		
Head	LTE Band 12	10	QPSK	E	0129M	1:1	0.08	707.50	23095	0.0	22.5	21.30	25	12	Left Tilt	0	0.701	1.318	0.924	0.924	0.578		22.8		
Head	LTE Band 12	10	QPSK	E	0129M	1:1	0.13	707.50	23095	0.0	22.5	21.28	50	0	Left Tilt	0	0.698	1.324	0.924	0.924	0.578		22.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-21

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 12	10	QPSK	A	0129M	1:1	-0.02	707.50	23095	0.0	25.0	24.01	1	25	Back	10	124	0.235	1.256	0.295	0.468	0.293		30.2		
Body-worn/Hotspot	LTE Band 12	10	QPSK	A	0129M	1:1	0.01	707.50	23095	1.0	24.0	22.94	25	12	Back	10	124	0.183	1.276	0.234	0.466	0.291		30.3		
Hotspot	LTE Band 12	10	QPSK	A	0095M	1:1	0.02	707.50	23095	0.0	25.0	24.01	1	25	Front	10	124	0.124	1.256	0.156	0.247	0.154		33.0		
Hotspot	LTE Band 12	10	QPSK	A	0095M	1:1	-0.02	707.50	23095	1.0	24.0	22.94	25	12	Front	10	124	0.098	1.276	0.125	0.250	0.156		33.0		
Hotspot	LTE Band 12	10	QPSK	A	0095M	1:1	0.09	707.50	23095	0.0	25.0	24.01	1	25	Bottom	10	124	0.041	1.256	0.051	0.082	0.051		37.8		
Hotspot	LTE Band 12	10	QPSK	A	0095M	1:1	-0.20	707.50	23095	1.0	24.0	22.94	25	12	Bottom	10	124	0.030	1.276	0.038	0.076	0.048		38.1	30.2	27.0
Hotspot	LTE Band 12	10	QPSK	A	0129M	1:1	-0.03	707.50	23095	0.0	25.0	24.01	1	25	Right	10	124	0.203	1.256	0.255	0.404	0.253		30.9		
Hotspot	LTE Band 12	10	QPSK	A	0129M	1:1	-0.06	707.50	23095	1.0	24.0	22.94	25	12	Right	10	124	0.155	1.276	0.198	0.395	0.247		31.0		
Hotspot	LTE Band 12	10	QPSK	A	0129M	1:1	-0.10	707.50	23095	0.0	25.0	24.01	1	25	Left	10	124	0.183	1.256	0.230	0.364	0.228		31.3		
Hotspot	LTE Band 12	10	QPSK	A	0129M	1:1	-0.08	707.50	23095	1.0	24.0	22.94	25	12	Left	10	124	0.139	1.276	0.177	0.354	0.221		31.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-22

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 12	10	QPSK	E	0095M	1:1	-0.05	707.50	23095	0.0	25.0	24.06	1	49	Back	10	0.404	1.242	0.502	0.661	0.413	A19	27.9		
Body-worn/Hotspot	LTE Band 12	10	QPSK	E	0095M	1:1	-0.02	707.50	23095	1.0	24.0	23.09	25	12	Back	10	0.381	1.233	0.470	0.780	0.488		27.2		
Hotspot	LTE Band 12	10	QPSK	E	0129M	1:1	0.04	707.50	23095	0.0	25.0	24.06	1	49	Front	10	0.287	1.242	0.356	0.470	0.294		29.4		
Hotspot	LTE Band 12	10	QPSK	E	0129M	1:1	0.05	707.50	23095	1.0	24.0	23.09	25	12	Front	10	0.285	1.233	0.351	0.583	0.364		28.5		
Hotspot	LTE Band 12	10	QPSK	E	0129M	1:1	-0.02	707.50	23095	0.0	25.0	24.06	1	49	Top	10	0.319	1.242	0.396	0.522	0.326		29.0		
Hotspot	LTE Band 12	10	QPSK	E	0129M	1:1	-0.06	707.50	23095	1.0	24.0	23.09	25	12	Top	10	0.316	1.233	0.390	0.647	0.404		28.0		
Hotspot	LTE Band 12	10	QPSK	E	0129M	1:1	0.00	707.50	23095	0.0	25.0	24.06	1	49	Right	10	0.387	1.242	0.481	0.634	0.396		28.1		
Hotspot	LTE Band 12	10	QPSK	E	0129M	1:1	-0.03	707.50	23095	1.0	24.0	23.09	25	12	Right	10	0.368	1.233	0.454	0.753	0.471		27.4	27.2	26.2
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.8 LTE Band 13 Standalone SAR

Table 12-23

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 13	10	QPSK	A	0129M	1:1	0.05	782.00	23230	0.0	25.0	23.85	1	0	Right Cheek	0	0	0.105	1.303	0.137	0.273	0.171		33.6		
Head	LTE Band 13	10	QPSK	A	0129M	1:1	0.08	782.00	23230	1.0	24.0	22.83	25	25	Right Cheek	0	0	0.085	1.309	0.111	0.280	0.175		33.5		
Head	LTE Band 13	10	QPSK	A	0095M	1:1	-0.15	782.00	23230	0.0	25.0	23.85	1	0	Right Tilt	0	0	0.020	1.303	0.026	0.052	0.033		40.8		
Head	LTE Band 13	10	QPSK	A	0095M	1:1	-0.11	782.00	23230	1.0	24.0	22.83	25	25	Right Tilt	0	0	0.038	1.309	0.050	0.125	0.078		37.0	32.3	28.0
Head	LTE Band 13	10	QPSK	A	0129M	1:1	0.04	782.00	23230	0.0	25.0	23.85	1	0	Left Cheek	0	0	0.132	1.303	0.172	0.343	0.214		32.6		
Head	LTE Band 13	10	QPSK	A	0129M	1:1	0.06	782.00	23230	1.0	24.0	22.83	25	25	Left Cheek	0	0	0.111	1.309	0.145	0.365	0.228		32.3		
Head	LTE Band 13	10	QPSK	A	0095M	1:1	0.01	782.00	23230	0.0	25.0	23.85	1	0	Left Tilt	0	0	0.062	1.303	0.081	0.161	0.101		35.9		
Head	LTE Band 13	10	QPSK	A	0095M	1:1	-0.02	782.00	23230	1.0	24.0	22.83	25	25	Left Tilt	0	0	0.043	1.309	0.056	0.141	0.088		36.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-24

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 13	10	QPSK	E	0095M	1:1	-0.01	782.00	23230	0.0	22.5	20.95	1	25	Right Cheek	0	0.550	1.429	0.786	0.786	0.491		23.5		
Head	LTE Band 13	10	QPSK	E	0095M	1:1	-0.01	782.00	23230	0.0	22.5	21.03	25	12	Right Cheek	0	0.643	1.403	0.902	0.902	0.564		22.9		
Head	LTE Band 13	10	QPSK	E	0095M	1:1	0.02	782.00	23230	0.0	22.5	20.90	50	0	Right Cheek	0	0.545	1.445	0.788	0.788	0.493		23.5		
Head	LTE Band 13	10	QPSK	E	0095M	1:1	0.07	782.00	23230	0.0	22.5	20.95	1	25	Right Tilt	0	0.559	1.429	0.799	0.799	0.499		23.4		
Head	LTE Band 13	10	QPSK	E	0095M	1:1	-0.02	782.00	23230	0.0	22.5	21.03	25	12	Right Tilt	0	0.562	1.403	0.788	0.788	0.493		23.5		
Head	LTE Band 13	10	QPSK	E	0129M	1:1	-0.11	782.00	23230	0.0	22.5	20.95	1	25	Left Cheek	0	0.842	1.429	1.203	1.203	0.752		21.6	21.5	21.5
Head	LTE Band 13	10	QPSK	E	0129M	1:1	0.09	782.00	23230	0.0	22.5	21.03	25	12	Left Cheek	0	0.835	1.403	1.172	1.172	0.733		21.8		
Head	LTE Band 13	10	QPSK	E	0129M	1:1	0.09	782.00	23230	0.0	22.5	20.90	50	0	Left Cheek	0	0.845	1.445	1.221	1.221	0.763		21.6		
Head	LTE Band 13	10	QPSK	E	0129M	1:1	0.14	782.00	23230	0.0	22.5	20.95	1	25	Left Tilt	0	0.847	1.429	1.210	1.210	0.756		21.6		
Head	LTE Band 13	10	QPSK	E	0129M	1:1	0.14	782.00	23230	0.0	22.5	21.03	25	12	Left Tilt	0	0.849	1.403	1.191	1.191	0.744		21.7		
Head	LTE Band 13	10	QPSK	E	0129M	1:1	0.13	782.00	23230	0.0	22.5	20.90	50	0	Left Tilt	0	0.870	1.445	1.257	1.257	0.786	A20	21.5		
Head	LTE Band 13	10	QPSK	E	0129M	1:1	0.14	782.00	23230	0.0	22.5	20.90	50	0	Left Tilt	0	0.825	1.445	1.192	1.192	0.745		21.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram										

Note: Blue entry represents variability measurement

Table 12-25

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 13	10	QPSK	A	0129M	1:1	0.00	782.00	23230	0.0	25.0	23.85	1	0	Back	10	0	0.289	1.303	0.377	0.597	0.373		29.2		
Body-worn/Hotspot	LTE Band 13	10	QPSK	A	0129M	1:1	0.00	782.00	23230	1.0	24.0	22.83	25	25	Back	10	0	0.232	1.309	0.304	0.606	0.379		29.1		
Hotspot	LTE Band 13	10	QPSK	A	0129M	1:1	-0.04	782.00	23230	0.0	25.0	23.85	1	0	Front	10	0	0.171	1.303	0.223	0.353	0.221		31.5		
Hotspot	LTE Band 13	10	QPSK	A	0129M	1:1	-0.06	782.00	23230	1.0	24.0	22.83	25	25	Front	10	0	0.130	1.309	0.170	0.340	0.213		31.6		
Hotspot	LTE Band 13	10	QPSK	A	4129M	1:1	-0.21	782.00	23230	0.0	25.0	23.85	1	0	Bottom	10	117	0.092	1.303	0.120	0.190	0.119		34.2	29.1	27.0
Hotspot	LTE Band 13	10	QPSK	A	4129M	1:1	-0.01	782.00	23230	1.0	24.0	22.83	25	25	Bottom	10	117	0.069	1.309	0.090	0.180	0.113		34.4		
Hotspot	LTE Band 13	10	QPSK	A	0129M	1:1	-0.06	782.00	23230	0.0	25.0	23.85	1	0	Right	10	0	0.140	1.303	0.182	0.289	0.181		32.3		
Hotspot	LTE Band 13	10	QPSK	A	0129M	1:1	-0.08	782.00	23230	1.0	24.0	22.83	25	25	Right	10	0	0.102	1.309	0.134	0.266	0.166		32.7		
Hotspot	LTE Band 13	10	QPSK	A	0129M	1:1	-0.02	782.00	23230	0.0	25.0	23.85	1	0	Left	10	117	0.189	1.303	0.246	0.390	0.244		31.0		
Hotspot	LTE Band 13	10	QPSK	A	0129M	1:1	-0.03	782.00	23230	1.0	24.0	22.83	25	25	Left	10	117	0.157	1.309	0.206	0.410	0.256		30.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-26

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 13	10	QPSK	E	0045M	1:1	-0.11	782.00	23230	0.0	25.0	23.94	1	49	Back	10	0.485	1.276	0.619	0.761	0.476	A21	27.0		
Body-worn/Hotspot	LTE Band 13	10	QPSK	E	0045M	1:1	0.01	782.00	23230	1.0	24.0	23.01	25	25	Back	10	0.391	1.256	0.491	0.760	0.475		27.0		
Hotspot	LTE Band 13	10	QPSK	E	0129M	1:1	0.03	782.00	23230	0.0	25.0	23.94	1	49	Front	10	0.519	1.276	0.662	0.815	0.509		26.7		
Hotspot	LTE Band 13	10	QPSK	E	0129M	1:1	0.00	782.00	23230	1.0	24.0	23.01	25	25	Front	10	0.409	1.256	0.514	0.796	0.498		26.8		
Hotspot	LTE Band 13	10	QPSK	E	0129M	1:1	0.04	782.00	23230	0.0	25.0	23.94	1	49	Top	10	0.623	1.276	0.795	0.978	0.611	A22	25.9	25.9	25.9
Hotspot	LTE Band 13	10	QPSK	E	0129M	1:1	0.00	782.00	23230	1.0	24.0	23.01	25	25	Top	10	0.494	1.256	0.620	0.961	0.601		26.0		
Hotspot	LTE Band 13	10	QPSK	E	0129M	1:1	0.02	782.00	23230	0.0	25.0	23.94	1	49	Right	10	0.512	1.276	0.653	0.804	0.503		26.8		
Hotspot	LTE Band 13	10	QPSK	E	0129M	1:1	0.00	782.00	23230	1.0	24.0	23.01	25	25	Right	10	0.417	1.256	0.524	0.811	0.507		26.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

12.9 LTE Band 14 Standalone SAR

Table 12-27

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 14	10	QPSK	A	0129M	1:1	0.02	793.00	23330	0.0	25.0	23.83	1	25	Right Cheek	0	117	0.091	1.309	0.119	0.255	0.159		34.2		
Head	LTE Band 14	10	QPSK	A	0129M	1:1	0.03	793.00	23330	1.0	24.0	22.88	25	25	Right Cheek	0	117	0.072	1.294	0.093	0.251	0.157		34.3		
Head	LTE Band 14	10	QPSK	A	0095M	1:1	-0.11	793.00	23330	0.0	25.0	23.83	1	25	Right Tilt	0	117	0.015	1.309	0.020	0.042	0.026		42.0		
Head	LTE Band 14	10	QPSK	A	0095M	1:1	0.09	793.00	23330	1.0	24.0	22.88	25	25	Right Tilt	0	117	0.017	1.294	0.022	0.059	0.037		40.5		
Head	LTE Band 14	10	QPSK	A	0129M	1:1	0.05	793.00	23330	0.0	25.0	23.83	1	25	Left Cheek	0	117	0.130	1.309	0.170	0.364	0.228		32.6	32.6	28.3
Head	LTE Band 14	10	QPSK	A	0129M	1:1	0.07	793.00	23330	1.0	24.0	22.88	25	25	Left Cheek	0	117	0.100	1.294	0.129	0.348	0.218		32.8		
Head	LTE Band 14	10	QPSK	A	0095M	1:1	-0.01	793.00	23330	0.0	25.0	23.83	1	25	Left Tilt	0	117	0.058	1.309	0.076	0.162	0.101		36.1		
Head	LTE Band 14	10	QPSK	A	0095M	1:1	0.09	793.00	23330	1.0	24.0	22.88	25	25	Left Tilt	0	117	0.043	1.294	0.056	0.150	0.094		36.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-28

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 14	10	QPSK	E	0095M	1:1	0.02	793.00	23330	0.0	22.5	21.34	1	25	Right Cheek	0	0.600	1.306	0.784	0.784	0.490		23.5		
Head	LTE Band 14	10	QPSK	E	0095M	1:1	-0.01	793.00	23330	0.0	22.5	21.26	25	25	Right Cheek	0	0.583	1.330	0.775	0.775	0.484		23.6		
Head	LTE Band 14	10	QPSK	E	0095M	1:1	-0.03	793.00	23330	0.0	22.5	21.34	1	25	Right Tilt	0	0.529	1.306	0.691	0.691	0.432		24.1		
Head	LTE Band 14	10	QPSK	E	0095M	1:1	-0.02	793.00	23330	0.0	22.5	21.26	25	25	Right Tilt	0	0.505	1.330	0.672	0.672	0.420		24.2		
Head	LTE Band 14	10	QPSK	E	0129M	1:1	0.07	793.00	23330	0.0	22.5	21.34	1	25	Left Cheek	0	0.738	1.306	0.964	0.964	0.603		22.6	22.5	21.5
Head	LTE Band 14	10	QPSK	E	0129M	1:1	0.06	793.00	23330	0.0	22.5	21.26	25	25	Left Cheek	0	0.701	1.330	0.932	0.932	0.583		22.8		
Head	LTE Band 14	10	QPSK	E	0129M	1:1	0.06	793.00	23330	0.0	22.5	21.17	50	0	Left Cheek	0	0.731	1.358	0.993	0.993	0.621		22.5		
Head	LTE Band 14	10	QPSK	E	0129M	1:1	0.16	793.00	23330	0.0	22.5	21.34	1	25	Left Tilt	0	0.740	1.306	0.966	0.966	0.604	A23	22.6		
Head	LTE Band 14	10	QPSK	E	0129M	1:1	0.14	793.00	23330	0.0	22.5	21.26	25	25	Left Tilt	0	0.714	1.330	0.950	0.950	0.594		22.7		
Head	LTE Band 14	10	QPSK	E	0129M	1:1	0.12	793.00	23330	0.0	22.5	21.17	50	0	Left Tilt	0	0.729	1.358	0.990	0.990	0.619		22.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-29

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 14	10	QPSK	A	0129M	1:1	-0.05	793.00	23330	0.0	25.0	23.83	1	25	Back	10	117	0.291	1.309	0.381	0.563	0.352		29.1		
Body-worn/Hotspot	LTE Band 14	10	QPSK	A	0129M	1:1	0.02	793.00	23330	1.0	24.0	22.88	25	25	Back	10	117	0.248	1.294	0.321	0.598	0.374		28.9		
Hotspot	LTE Band 14	10	QPSK	A	0129M	1:1	-0.16	793.00	23330	0.0	25.0	23.83	1	25	Front	10	117	0.144	1.309	0.188	0.279	0.174		32.2		
Hotspot	LTE Band 14	10	QPSK	A	0129M	1:1	-0.07	793.00	23330	1.0	24.0	22.88	25	25	Front	10	117	0.110	1.294	0.142	0.265	0.166		32.4		
Hotspot	LTE Band 14	10	QPSK	A	4129M	1:1	-0.03	793.00	23330	0.0	25.0	23.83	1	25	Bottom	10	117	0.101	1.309	0.132	0.196	0.123		33.7	28.9	26.7
Hotspot	LTE Band 14	10	QPSK	A	4129M	1:1	-0.04	793.00	23330	1.0	24.0	22.88	25	25	Bottom	10	117	0.074	1.294	0.096	0.178	0.111		34.1		
Hotspot	LTE Band 14	10	QPSK	A	0129M	1:1	0.10	793.00	23330	0.0	25.0	23.83	1	25	Right	10	117	0.111	1.309	0.145	0.215	0.134		33.3		
Hotspot	LTE Band 14	10	QPSK	A	0129M	1:1	-0.05	793.00	23330	1.0	24.0	22.88	25	25	Right	10	117	0.078	1.294	0.101	0.188	0.118		33.9		
Hotspot	LTE Band 14	10	QPSK	A	0129M	1:1	-0.04	793.00	23330	0.0	25.0	23.83	1	25	Left	10	117	0.189	1.309	0.247	0.366	0.229		31.0		
Hotspot	LTE Band 14	10	QPSK	A	0129M	1:1	-0.05	793.00	23330	1.0	24.0	22.88	25	25	Left	10	117	0.148	1.294	0.192	0.357	0.223		31.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-30

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 14	10	QPSK	E	0045M	1:1	0.18	793.00	23330	0.0	25.0	23.97	1	25	Back	10	0.464	1.268	0.588	0.775	0.484	A24	27.3		
Body-worn/Hotspot	LTE Band 14	10	QPSK	E	0045M	1:1	-0.05	793.00	23330	1.0	24.0	23.03	25	25	Back	10	0.365	1.250	0.456	0.757	0.473		27.4		
Hotspot	LTE Band 14	10	QPSK	E	0129M	1:1	0.07	793.00	23330	0.0	25.0	23.97	1	25	Front	10	0.452	1.268	0.573	0.755	0.472		27.4		
Hotspot	LTE Band 14	10	QPSK	E	0129M	1:1	0.05	793.00	23330	1.0	24.0	23.03	25	25	Front	10	0.349	1.250	0.436	0.724	0.453		27.6		
Hotspot	LTE Band 14	10	QPSK	E	0129M	1:1	0.00	793.00	23330	0.0	25.0	23.97	1	25	Top	10	0.593	1.268	0.752	0.991	0.619	A25	26.2	26.2	26.2
Hotspot	LTE Band 14	10	QPSK	E	0129M	1:1	0.02	793.00	23330	1.0	24.0	23.03	25	25	Top	10	0.460	1.250	0.575	0.955	0.597		26.4		
Hotspot	LTE Band 14	10	QPSK	E	0129M	1:1	0.01	793.00	23330	0.0	25.0	23.97	1	25	Right	10	0.413	1.268	0.524	0.690	0.431		27.8		
Hotspot	LTE Band 14	10	QPSK	E	0129M	1:1	0.03	793.00	23330	1.0	24.0	23.03	25	25	Right	10	0.409	1.250	0.511	0.849	0.531		26.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

12.10 LTE Band 26 (Cell) Standalone SAR

Table 12-31

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 26	15	QPSK	A	0129M	1:1	0.09	831.50	26865	0.0	25.0	24.46	1	36	Right Cheek	0	63	0.098	1.132	0.111	0.299	0.187		34.5		
Head	LTE Band 26	15	QPSK	A	0129M	1:1	0.07	831.50	26865	1.0	24.0	23.03	36	18	Right Cheek	0	63	0.078	1.250	0.098	0.330	0.206		34.1		
Head	LTE Band 26	15	QPSK	A	0129M	1:1	0.07	831.50	26865	0.0	25.0	24.46	1	36	Right Tilt	0	63	0.086	1.132	0.097	0.262	0.164		35.1		
Head	LTE Band 26	15	QPSK	A	0129M	1:1	0.02	831.50	26865	1.0	24.0	23.03	36	18	Right Tilt	0	63	0.066	1.250	0.083	0.280	0.175		34.8	33.6	29.3
Head	LTE Band 26	15	QPSK	A	0129M	1:1	0.08	831.50	26865	0.0	25.0	24.46	1	36	Left Cheek	0	63	0.115	1.132	0.130	0.351	0.219		33.8		
Head	LTE Band 26	15	QPSK	A	0129M	1:1	0.06	831.50	26865	1.0	24.0	23.03	36	18	Left Cheek	0	63	0.086	1.250	0.108	0.364	0.228		33.6		
Head	LTE Band 26	15	QPSK	A	0129M	1:1	0.08	831.50	26865	0.0	25.0	24.46	1	36	Left Tilt	0	63	0.078	1.132	0.088	0.238	0.149		35.5		
Head	LTE Band 26	15	QPSK	A	0129M	1:1	-0.19	831.50	26865	1.0	24.0	23.03	36	18	Left Tilt	0	63	0.057	1.250	0.071	0.241	0.151		35.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-32

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 26	15	QPSK	E	0129M	1:1	-0.07	831.50	26865	0.0	22.0	21.15	1	36	Right Cheek	0	0.652	1.216	0.793	0.793	0.496		23.0		
Head	LTE Band 26	15	QPSK	E	0129M	1:1	-0.21	831.50	26865	0.0	22.0	21.03	36	18	Right Cheek	0	0.629	1.250	0.786	0.786	0.491		23.0		
Head	LTE Band 26	15	QPSK	E	0129M	1:1	-0.15	831.50	26865	0.0	22.0	21.15	1	36	Right Tilt	0	0.605	1.216	0.736	0.736	0.460		23.3		
Head	LTE Band 26	15	QPSK	E	0129M	1:1	-0.08	831.50	26865	0.0	22.0	21.03	36	18	Right Tilt	0	0.582	1.250	0.728	0.728	0.455		23.3		
Head	LTE Band 26	15	QPSK	E	0129M	1:1	0.04	831.50	26865	0.0	22.0	21.15	1	36	Left Cheek	0	0.891	1.216	1.083	1.083	0.677		21.6	21.5	21.0
Head	LTE Band 26	15	QPSK	E	0129M	1:1	0.08	831.50	26865	0.0	22.0	21.03	36	18	Left Cheek	0	0.893	1.250	1.116	1.116	0.698	A26	21.5		
Head	LTE Band 26	15	QPSK	E	0129M	1:1	0.08	831.50	26865	0.0	22.0	20.94	75	0	Left Cheek	0	0.865	1.276	1.104	1.104	0.690		21.5		
Head	LTE Band 26	15	QPSK	E	0129M	1:1	0.06	831.50	26865	0.0	22.0	21.15	1	36	Left Tilt	0	0.842	1.216	1.024	1.024	0.640		21.8		
Head	LTE Band 26	15	QPSK	E	0129M	1:1	0.06	831.50	26865	0.0	22.0	21.03	36	18	Left Tilt	0	0.821	1.250	1.026	1.026	0.641		21.8		
Head	LTE Band 26	15	QPSK	E	0129M	1:1	0.14	831.50	26865	0.0	22.0	20.94	75	0	Left Tilt	0	0.829	1.276	1.058	1.058	0.661		21.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-33

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 26	15	QPSK	A	0129M	1:1	-0.05	831.50	26865	0.0	25.0	24.46	1	36	Back	10	63	0.243	1.132	0.275	0.446	0.279		30.6		
Body-worn/Hotspot	LTE Band 26	15	QPSK	A	0129M	1:1	0.07	831.50	26865	1.0	24.0	23.03	36	18	Back	10	63	0.210	1.250	0.263	0.536	0.335		29.8		
Hotspot	LTE Band 26	15	QPSK	A	0129M	1:1	-0.20	831.50	26865	0.0	25.0	24.46	1	36	Front	10	63	0.159	1.132	0.180	0.292	0.183		32.4		
Hotspot	LTE Band 26	15	QPSK	A	0129M	1:1	-0.07	831.50	26865	1.0	24.0	23.03	36	18	Front	10	63	0.122	1.250	0.153	0.311	0.194		32.1		
Hotspot	LTE Band 26	15	QPSK	A	0129M	1:1	-0.17	831.50	26865	0.0	25.0	24.46	1	36	Bottom	10	63	0.077	1.132	0.087	0.141	0.088		35.5	29.8	27.1
Hotspot	LTE Band 26	15	QPSK	A	0129M	1:1	-0.19	831.50	26865	1.0	24.0	23.03	36	18	Bottom	10	63	0.058	1.250	0.073	0.148	0.093		35.3		
Hotspot	LTE Band 26	15	QPSK	A	0129M	1:1	-0.13	831.50	26865	0.0	25.0	24.46	1	36	Right	10	63	0.087	1.132	0.098	0.160	0.100		35.0		
Hotspot	LTE Band 26	15	QPSK	A	0129M	1:1	-0.13	831.50	26865	1.0	24.0	23.03	36	18	Right	10	63	0.065	1.250	0.081	0.166	0.104		34.9		
Hotspot	LTE Band 26	15	QPSK	A	0129M	1:1	-0.15	831.50	26865	0.0	25.0	24.46	1	36	Left	10	63	0.124	1.132	0.140	0.228	0.143		33.5		
Hotspot	LTE Band 26	15	QPSK	A	0129M	1:1	-0.11	831.50	26865	1.0	24.0	23.03	36	18	Left	10	63	0.099	1.250	0.124	0.253	0.158		33.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-34

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 26	15	QPSK	E	0129M	1:1	0.12	831.50	26865	0.0	25.0	24.60	1	36	Back	10	0.494	1.096	0.541	0.748	0.468	A27	27.6		
Body-worn/Hotspot	LTE Band 26	15	QPSK	E	0129M	1:1	0.07	831.50	26865	1.0	24.0	23.21	36	0	Back	10	0.369	1.199	0.442	0.769	0.481		27.5		
Hotspot	LTE Band 26	15	QPSK	E	0129M	1:1	0.10	831.50	26865	0.0	25.0	24.60	1	36	Front	10	0.470	1.096	0.515	0.712	0.445		27.8		
Hotspot	LTE Band 26	15	QPSK	E	0129M	1:1	0.09	831.50	26865	1.0	24.0	23.21	36	0	Front	10	0.352	1.199	0.422	0.734	0.459		27.7	26.7	26.4
Hotspot	LTE Band 26	15	QPSK	E	0129M	1:1	-0.02	831.50	26865	0.0	25.0	24.60	1	36	Top	10	0.603	1.096	0.661	0.913	0.571	A28	26.7		
Hotspot	LTE Band 26	15	QPSK	E	0129M	1:1	0.00	831.50	26865	1.0	24.0	23.21	36	0	Top	10	0.446	1.199	0.535	0.929	0.581		26.7		
Hotspot	LTE Band 26	15	QPSK	E	0129M	1:1	-0.01	831.50	26865	0.0	25.0	24.60	1	36	Right	10	0.472	1.096	0.517	0.715	0.447		27.8		
Hotspot	LTE Band 26	15	QPSK	E	0129M	1:1	-0.02	831.50	26865	1.0	24.0	23.21	36	0	Right	10	0.361	1.199	0.433	0.752	0.470		27.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.11 LTE Band 66 (AWS) Standalone SAR

Table 12-35

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 66	20	QPSK	A	0068M	1:1	0.05	1720.00	132072	0.0	24.5	23.54	1	50	Right Cheek	0	99	0.113	1.247	0.141	0.397	0.248		33.0		
Head	LTE Band 66	20	QPSK	A	0068M	1:1	0.10	1720.00	132072	1.0	23.5	22.57	50	25	Right Cheek	0	99	0.078	1.239	0.097	0.343	0.214		33.6		
Head	LTE Band 66	20	QPSK	A	0068M	1:1	0.08	1720.00	132072	0.0	24.5	23.54	1	50	Right Tilt	0	99	0.069	1.247	0.086	0.243	0.152		35.1		
Head	LTE Band 66	20	QPSK	A	0068M	1:1	-0.15	1720.00	132072	1.0	23.5	22.57	50	25	Right Tilt	0	99	0.058	1.239	0.072	0.255	0.159		34.9	33.0	29.0
Head	LTE Band 66	20	QPSK	A	0068M	1:1	0.08	1720.00	132072	0.0	24.5	23.54	1	50	Left Cheek	0	0	0.058	1.247	0.072	0.204	0.128		35.9		
Head	LTE Band 66	20	QPSK	A	0068M	1:1	0.00	1720.00	132072	1.0	23.5	22.57	50	25	Left Cheek	0	0	0.044	1.239	0.055	0.193	0.121		36.1		
Head	LTE Band 66	20	QPSK	A	0068M	1:1	0.16	1720.00	132072	0.0	24.5	23.54	1	50	Left Tilt	0	0	0.045	1.247	0.056	0.158	0.099		37.0		
Head	LTE Band 66	20	QPSK	A	0068M	1:1	-0.10	1720.00	132072	1.0	23.5	22.57	50	25	Left Tilt	0	0	0.036	1.239	0.045	0.158	0.099		37.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-36

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.03	1720.00	132072	0.0	19.5	18.42	1	0	Right Cheek	0	0.723	1.282	0.927	0.927	0.579	A29	19.8		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.06	1745.00	132322	0.0	19.5	18.34	1	0	Right Cheek	0	0.636	1.306	0.831	0.831	0.519		20.3		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.07	1770.00	132572	0.0	19.5	18.57	1	0	Right Cheek	0	0.565	1.239	0.700	0.700	0.438		21.0		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.05	1720.00	132072	0.0	19.5	18.40	50	0	Right Cheek	0	0.704	1.288	0.907	0.907	0.567		19.9		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.07	1745.00	132322	0.0	19.5	18.52	50	25	Right Cheek	0	0.624	1.253	0.782	0.782	0.489		20.5		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.04	1770.00	132572	0.0	19.5	18.60	50	25	Right Cheek	0	0.548	1.230	0.674	0.674	0.421		21.2		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.04	1770.00	132572	0.0	19.5	18.51	100	0	Right Cheek	0	0.546	1.256	0.686	0.686	0.429		21.1	19.8	18.5
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.01	1770.00	132572	0.0	19.5	18.57	1	0	Right Tilt	0	0.625	1.239	0.774	0.774	0.484		20.6		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.01	1770.00	132572	0.0	19.5	18.60	50	25	Right Tilt	0	0.602	1.230	0.740	0.740	0.463		20.8		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.01	1770.00	132572	0.0	19.5	18.57	1	0	Left Cheek	0	0.383	1.239	0.475	0.475	0.297		22.7		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.01	1770.00	132572	0.0	19.5	18.60	50	25	Left Cheek	0	0.384	1.230	0.472	0.472	0.295		22.7		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	-0.03	1770.00	132572	0.0	19.5	18.57	1	0	Left Tilt	0	0.476	1.239	0.590	0.590	0.369		21.7		
Head	LTE Band 66	20	QPSK	F	0087M	1:1	0.05	1770.00	132572	0.0	19.5	18.60	50	25	Left Tilt	0	0.469	1.230	0.577	0.577	0.361		21.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-37

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	-0.16	1770.00	132572	0.0	20.0	19.10	1	0	Back	10	99	0.515	1.230	0.633	0.633	0.396	A30	21.9		
Body-worn/Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	-0.17	1770.00	132572	0.0	20.0	19.03	50	0	Back	10	99	0.498	1.250	0.623	0.623	0.389		22.0		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	0.17	1770.00	132572	0.0	20.0	19.10	1	0	Front	10	0	0.286	1.230	0.352	0.352	0.220		24.5		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	-0.16	1770.00	132572	0.0	20.0	19.03	50	0	Front	10	0	0.285	1.250	0.356	0.356	0.223		24.4		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	0.01	1720.00	132072	0.0	20.0	18.75	1	50	Bottom	10	99	0.876	1.334	1.169	1.169	0.731		19.3		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	-0.03	1745.00	132322	0.0	20.0	18.96	1	50	Bottom	10	99	0.913	1.271	1.160	1.160	0.725		19.3		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	-0.02	1770.00	132572	0.0	20.0	19.10	1	0	Bottom	10	99	0.953	1.230	1.172	1.172	0.733	A31	19.3		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	-0.05	1720.00	132072	0.0	20.0	19.00	50	25	Bottom	10	99	0.878	1.259	1.105	1.105	0.691		19.5	19.2	19.0
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	-0.04	1745.00	132322	0.0	20.0	19.00	50	25	Bottom	10	99	0.891	1.259	1.122	1.122	0.701		19.5		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	0.01	1770.00	132572	0.0	20.0	19.03	50	0	Bottom	10	99	0.942	1.250	1.178	1.178	0.736		19.2		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	0.02	1720.00	132072	0.0	20.0	19.02	100	0	Bottom	10	99	0.896	1.253	1.123	1.123	0.702		19.4		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	-0.10	1770.00	132572	0.0	20.0	19.10	1	0	Right	10	0	0.039	1.230	0.048	0.048	0.030		33.1		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	0.07	1770.00	132572	0.0	20.0	19.03	50	0	Right	10	0	0.045	1.250	0.056	0.056	0.035		32.4		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	0.05	1770.00	132572	0.0	20.0	19.10	1	0	Left	10	0	0.035	1.230	0.043	0.043	0.027		33.6		
Hotspot	LTE Band 66	20	QPSK	A	0068M	1:1	0.06	1770.00	132572	0.0	20.0	19.03	50	0	Left	10	0	0.035	1.250	0.044	0.044	0.028		33.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-38

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 66	20	QPSK	F	0087M	1:1	-0.02	1770.00	132572	0.0	21.5	21.09	1	50	Back	10	0.182	1.099	0.200	0.200	0.125		28.4	24.7	20.5
Body-worn/Hotspot	LTE Band 66	20	QPSK	F	0087M	1:1	0.03	1770.00	132572	0.0	21.5	21.02	50	25	Back	10	0.177	1.117	0.198	0.198	0.124		28.5		
Hotspot	LTE Band 66	20	QPSK	F	0078M	1:1	0.02	1770.00	132572	0.0	21.5	21.09	1	50	Front	10	0.163	1.099	0.179	0.179	0.112		28.9		
Hotspot	LTE Band 66	20	QPSK	F	0078M	1:1	-0.01	1770.00	132572	0.0	21.5	21.02	50	25	Front	10	0.158	1.117	0.176	0.176	0.110		29.0		
Hotspot	LTE Band 66	20	QPSK	F	0087M	1:1	0.02	1770.00	132572	0.0	21.5	21.09	1	50	Top	10	0.435	1.099	0.478	0.478	0.299		24.7		
Hotspot	LTE Band 66	20	QPSK	F	0087M	1:1	-0.03	1770.00	132572	0.0	21.5	21.02	50	25	Top	10	0.425	1.117	0.475	0.475	0.297		24.7		
Hotspot	LTE Band 66	20	QPSK	F	0087M	1:1	0.03	1770.00	132572	0.0	21.5	21.09	1	50	Left	10	0.099	1.099	0.109	0.109	0.068		31.1		
Hotspot	LTE Band 66	20	QPSK	F	0087M	1:1	0.04	1770.00	132572	0.0	21.5	21.02	50	25	Left	10	0.101	1.117	0.113	0.113	0.071		30.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.12 LTE Band 25 (PCS) Standalone SAR

Table 12-39

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 25	20	QPSK	A	0068M	1:1	0.18	1860.00	26140	0.0	24.5	23.51	1	50	Right Cheek	0	109	0.129	1.256	0.162	0.407	0.254		32.4	32.4	28.5
Head	LTE Band 25	20	QPSK	A	0068M	1:1	0.01	1860.00	26140	1.0	23.5	22.52	50	25	Right Cheek	0	109	0.100	1.253	0.125	0.396	0.248		32.5		
Head	LTE Band 25	20	QPSK	A	0068M	1:1	-0.18	1860.00	26140	0.0	24.5	23.51	1	50	Right Tilt	0	112	0.036	1.256	0.045	0.114	0.071		37.9		
Head	LTE Band 25	20	QPSK	A	0068M	1:1	0.06	1860.00	26140	1.0	23.5	22.52	50	25	Right Tilt	0	112	0.028	1.253	0.035	0.111	0.069		38.0		
Head	LTE Band 25	20	QPSK	A	0068M	1:1	0.05	1860.00	26140	0.0	24.5	23.51	1	50	Left Cheek	0	0	0.064	1.256	0.080	0.202	0.126		35.4		
Head	LTE Band 25	20	QPSK	A	0068M	1:1	0.05	1860.00	26140	1.0	23.5	22.52	50	25	Left Cheek	0	0	0.049	1.253	0.061	0.194	0.121		35.6		
Head	LTE Band 25	20	QPSK	A	0063M	1:1	0.08	1860.00	26140	0.0	24.5	23.51	1	50	Left Tilt	0	0	0.056	1.256	0.070	0.177	0.111		36.0		
Head	LTE Band 25	20	QPSK	A	0063M	1:1	-0.07	1860.00	26140	1.0	23.5	22.52	50	25	Left Tilt	0	0	0.050	1.253	0.063	0.198	0.124		35.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-40

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.06	1905.00	26590	0.0	19.5	18.68	1	0	Right Cheek	0	0.605	1.208	0.731	0.731	0.457		20.8	19.9	18.5
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.10	1905.00	26590	0.0	19.5	18.69	50	25	Right Cheek	0	0.618	1.205	0.745	0.745	0.466		20.7		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.03	1860.00	26140	0.0	19.5	18.57	1	50	Right Tilt	0	0.647	1.239	0.802	0.802	0.501		20.4		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.01	1882.50	26365	0.0	19.5	18.67	1	50	Right Tilt	0	0.686	1.211	0.831	0.831	0.519		20.3		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.03	1905.00	26590	0.0	19.5	18.68	1	0	Right Tilt	0	0.718	1.208	0.867	0.867	0.542		20.1		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.04	1860.00	26140	0.0	19.5	18.68	50	25	Right Tilt	0	0.646	1.208	0.780	0.780	0.488		20.5		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.04	1882.50	26365	0.0	19.5	18.68	50	50	Right Tilt	0	0.694	1.208	0.838	0.838	0.524		20.2		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.03	1905.00	26590	0.0	19.5	18.69	50	25	Right Tilt	0	0.745	1.205	0.898	0.898	0.561	A32	19.9		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.03	1905.00	26590	0.0	19.5	18.65	100	0	Right Tilt	0	0.733	1.216	0.891	0.891	0.557		19.9		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.00	1905.00	26590	0.0	19.5	18.68	1	0	Left Cheek	0	0.465	1.208	0.562	0.562	0.351		22.0		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.05	1905.00	26590	0.0	19.5	18.69	50	25	Left Cheek	0	0.485	1.205	0.584	0.584	0.365		21.8		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.02	1905.00	26590	0.0	19.5	18.68	1	0	Left Tilt	0	0.555	1.208	0.670	0.670	0.419		21.2		
Head	LTE Band 25	20	QPSK	F	0087M	1:1	0.00	1905.00	26590	0.0	19.5	18.69	50	25	Left Tilt	0	0.589	1.205	0.710	0.710	0.444		20.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-41

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	0.17	1860.00	26140	0.0	19.0	17.85	1	50	Back	10	109	0.416	1.303	0.542	0.542	0.339	A33	21.6	18.2	18.0
Body-worn/Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	-0.20	1860.00	26140	0.0	19.0	17.84	50	25	Back	10	109	0.416	1.306	0.543	0.543	0.339		21.6		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	0.06	1860.00	26140	0.0	19.0	17.85	1	50	Front	10	0	0.256	1.303	0.334	0.334	0.209		23.7		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	-0.20	1860.00	26140	0.0	19.0	17.84	50	25	Front	10	0	0.261	1.306	0.341	0.341	0.213		23.6		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	0.04	1860.00	26140	0.0	19.0	17.85	1	50	Bottom	10	112	0.869	1.303	1.132	1.132	0.708		18.4		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	0.01	1882.50	26365	0.0	19.0	17.70	1	50	Bottom	10	112	0.885	1.349	1.194	1.194	0.746		18.2		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	0.01	1905.00	26590	0.0	19.0	17.80	1	50	Bottom	10	112	0.888	1.318	1.170	1.170	0.731	A34	18.3		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	-0.02	1860.00	26140	0.0	19.0	17.84	50	25	Bottom	10	112	0.862	1.306	1.126	1.126	0.704		18.4		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	0.00	1882.50	26365	0.0	19.0	17.73	50	0	Bottom	10	112	0.844	1.340	1.131	1.131	0.707		18.4		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	0.04	1905.00	26590	0.0	19.0	17.59	50	0	Bottom	10	112	0.839	1.384	1.161	1.161	0.726		18.3		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	-0.03	1860.00	26140	0.0	19.0	17.73	100	0	Bottom	10	112	0.769	1.340	1.030	1.030	0.644		18.8		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	0.03	1860.00	26140	0.0	19.0	17.85	1	50	Right	10	0	0.032	1.303	0.042	0.042	0.026		32.7		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	-0.06	1860.00	26140	0.0	19.0	17.84	50	25	Right	10	0	0.033	1.306	0.043	0.043	0.027		32.6		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	0.12	1860.00	26140	0.0	19.0	17.85	1	50	Left	10	0	0.030	1.303	0.039	0.039	0.024		33.0		
Hotspot	LTE Band 25	20	QPSK	A	0068M	1:1	0.04	1860.00	26140	0.0	19.0	17.84	50	25	Left	10	0	0.030	1.306	0.039	0.039	0.024		33.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-42

xposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 25	20	QPSK	F	0087M	1:1	0.00	1882.50	26365	0.0	21.0	20.17	1	99	Back	10	0.160	1.211	0.194	0.194	0.121		28.1	23.8	20.0
Body-worn/Hotspot	LTE Band 25	20	QPSK	F	0087M	1:1	-0.12	1882.50	26365	0.0	21.0	20.19	50	50	Back	10	0.160	1.205	0.193	0.193	0.121		28.1		
Hotspot	LTE Band 25	20	QPSK	F	0087M	1:1	-0.02	1882.50	26365	0.0	21.0	20.17	1	99	Front	10	0.146	1.211	0.177	0.177	0.111		28.5		
Hotspot	LTE Band 25	20	QPSK	F	0087M	1:1	-0.05	1882.50	26365	0.0	21.0	20.19	50	50	Front	10	0.146	1.205	0.176	0.176	0.110		28.5		
Hotspot	LTE Band 25	20	QPSK	F	0087M	1:1	-0.01	1882.50	26365	0.0	21.0	20.17	1	99	Top	10	0.419	1.211	0.507	0.507	0.317		23.9		
Hotspot	LTE Band 25	20	QPSK	F	0087M	1:1	0.01	1882.50	26365	0.0	21.0	20.19	50	50	Top	10	0.429	1.205	0.517	0.517	0.323		23.8		
Hotspot	LTE Band 25	20	QPSK	F	0087M	1:1	0.05	1882.50	26365	0.0	21.0	20.17	1	99	Left	10	0.048	1.211	0.058	0.058	0.036		33.3		
Hotspot	LTE Band 25	20	QPSK	F	0087M	1:1	-0.03	1882.50	26365	0.0	21.0	20.19	50	50	Left	10	0.047	1.205	0.057	0.057	0.036		33.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.13 LTE Band 30 Standalone SAR

Table 12-43

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 30	10	QPSK	A	0079M	1:1	0.05	2310.00	27710	0.0	23.5	22.45	1	0	Right Cheek	0	0.020	1.274	0.025	0.299	0.187		39.4	38.4	34.2
Head	LTE Band 30	10	QPSK	A	0079M	1:1	0.12	2310.00	27710	1.0	22.5	21.50	25	12	Right Cheek	0	0.018	1.259	0.023	0.335	0.209		38.9		
Head	LTE Band 30	10	QPSK	A	0079M	1:1	0.09	2310.00	27710	0.0	23.5	22.45	1	0	Right Tilt	0	0.010	1.274	0.013	0.150	0.094		42.4		
Head	LTE Band 30	10	QPSK	A	0079M	1:1	0.07	2310.00	27710	1.0	22.5	21.50	25	12	Right Tilt	0	0.009	1.259	0.011	0.168	0.105		41.9		
Head	LTE Band 30	10	QPSK	A	0042M	1:1	0.09	2310.00	27710	0.0	23.5	22.45	1	0	Left Cheek	0	0.014	1.274	0.018	0.209	0.131		40.9		
Head	LTE Band 30	10	QPSK	A	0042M	1:1	0.03	2310.00	27710	1.0	22.5	21.50	25	12	Left Cheek	0	0.020	1.259	0.025	0.372	0.233		38.4		
Head	LTE Band 30	10	QPSK	A	0042M	1:1	0.01	2310.00	27710	0.0	23.5	22.45	1	0	Left Tilt	0	0.006	1.274	0.008	0.090	0.056		44.6		
Head	LTE Band 30	10	QPSK	A	0042M	1:1	0.02	2310.00	27710	1.0	22.5	21.50	25	12	Left Tilt	0	0.012	1.259	0.015	0.223	0.139		40.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-44

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 30	10	QPSK	F	0042M	1:1	-0.20	2310.00	27710	0.0	18.0	16.48	1	25	Right Cheek	0	0.767	1.419	1.088	1.088	0.680		17.6	17.5	17.0
Head	LTE Band 30	10	QPSK	F	0042M	1:1	-0.02	2310.00	27710	0.0	18.0	16.51	25	12	Right Cheek	0	0.681	1.409	0.960	0.960	0.600		18.1		
Head	LTE Band 30	10	QPSK	F	0042M	1:1	0.01	2310.00	27710	0.0	18.0	16.46	50	0	Right Cheek	0	0.781	1.426	1.114	1.114	0.696	A35	17.5		
Head	LTE Band 30	10	QPSK	F	0042M	1:1	-0.01	2310.00	27710	0.0	18.0	16.48	1	25	Right Tilt	0	0.741	1.419	1.051	1.051	0.657		17.7		
Head	LTE Band 30	10	QPSK	F	0042M	1:1	0.02	2310.00	27710	0.0	18.0	16.51	25	12	Right Tilt	0	0.703	1.409	0.991	0.991	0.619		18.0		
Head	LTE Band 30	10	QPSK	F	0042M	1:1	-0.01	2310.00	27710	0.0	18.0	16.46	50	0	Right Tilt	0	0.735	1.426	1.048	1.048	0.655		17.7		
Head	LTE Band 30	10	QPSK	F	0042M	1:1	0.20	2310.00	27710	0.0	18.0	16.48	1	25	Left Cheek	0	0.387	1.419	0.549	0.549	0.343		20.6		
Head	LTE Band 30	10	QPSK	F	0042M	1:1	0.03	2310.00	27710	0.0	18.0	16.51	25	12	Left Cheek	0	0.380	1.409	0.535	0.535	0.334		20.7		
Head	LTE Band 30	10	QPSK	F	0042M	1:1	-0.19	2310.00	27710	0.0	18.0	16.48	1	25	Left Tilt	0	0.592	1.419	0.840	0.840	0.525		18.7		
Head	LTE Band 30	10	QPSK	F	0042M	1:1	-0.02	2310.00	27710	0.0	18.0	16.51	25	12	Left Tilt	0	0.574	1.409	0.809	0.809	0.506		18.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-45

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 30	10	QPSK	A	0055M	1:1	0.18	2310.00	27710	0.0	20.5	19.80	1	0	Back	10	0.301	1.175	0.354	0.354	0.221		25.0	21.5	19.5
Body-worn/Hotspot	LTE Band 30	10	QPSK	A	0055M	1:1	0.09	2310.00	27710	0.0	20.5	19.84	25	0	Back	10	0.310	1.164	0.361	0.361	0.226	A36	24.9		
Hotspot	LTE Band 30	10	QPSK	A	0055M	1:1	0.03	2310.00	27710	0.0	20.5	19.80	1	0	Front	10	0.276	1.175	0.324	0.324	0.203		25.3		
Hotspot	LTE Band 30	10	QPSK	A	0055M	1:1	0.02	2310.00	27710	0.0	20.5	19.84	25	0	Front	10	0.281	1.164	0.327	0.327	0.204		25.3		
Hotspot	LTE Band 30	10	QPSK	A	0055M	1:1	-0.16	2310.00	27710	0.0	20.5	19.80	1	0	Bottom	10	0.666	1.175	0.783	0.783	0.489		21.5		
Hotspot	LTE Band 30	10	QPSK	A	0055M	1:1	-0.02	2310.00	27710	0.0	20.5	19.84	25	0	Bottom	10	0.681	1.164	0.793	0.793	0.496	A37	21.5		
Hotspot	LTE Band 30	10	QPSK	A	0055M	1:1	-0.10	2310.00	27710	0.0	20.5	19.80	1	0	Right	10	0.074	1.175	0.087	0.087	0.054		31.1		
Hotspot	LTE Band 30	10	QPSK	A	0055M	1:1	-0.10	2310.00	27710	0.0	20.5	19.84	25	0	Right	10	0.073	1.164	0.085	0.085	0.053		31.2		
Hotspot	LTE Band 30	10	QPSK	A	0055M	1:1	-0.16	2310.00	27710	0.0	20.5	19.80	1	0	Left	10	0.060	1.175	0.071	0.071	0.044		32.0		
Hotspot	LTE Band 30	10	QPSK	A	0055M	1:1	0.07	2310.00	27710	0.0	20.5	19.84	25	0	Left	10	0.060	1.164	0.070	0.070	0.044		32.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-46

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 30	10	QPSK	F	0055M	1:1	-0.21	2310.00	27710	0.0	21.0	19.46	1	0	Back	10	0.247	1.426	0.352	0.352	0.220		25.5	22.8	20.0
Body-worn/Hotspot	LTE Band 30	10	QPSK	F	0055M	1:1	0.01	2310.00	27710	0.0	21.0	19.48	25	0	Back	10	0.247	1.419	0.350	0.350	0.219		25.5		
Hotspot	LTE Band 30	10	QPSK	F	0055M	1:1	0.11	2310.00	27710	0.0	21.0	19.46	1	0	Front	10	0.213	1.426	0.304	0.304	0.190		26.1		
Hotspot	LTE Band 30	10	QPSK	F	0055M	1:1	0.02	2310.00	27710	0.0	21.0	19.48	25	0	Front	10	0.230	1.419	0.326	0.326	0.204		25.8		
Hotspot	LTE Band 30	10	QPSK	F	0055M	1:1	0.01	2310.00	27710	0.0	21.0	19.46	1	0	Top	10	0.455	1.426	0.649	0.649	0.406		22.8		
Hotspot	LTE Band 30	10	QPSK	F	0055M	1:1	0.02	2310.00	27710	0.0	21.0	19.48	25	0	Top	10	0.464	1.419	0.658	0.658	0.411		22.8		
Hotspot	LTE Band 30	10	QPSK	F	0055M	1:1	-0.17	2310.00	27710	0.0	21.0	19.46	1	0	Left	10	0.079	1.426	0.113	0.113	0.071		30.4		
Hotspot	LTE Band 30	10	QPSK	F	0055M	1:1	-0.05	2310.00	27710	0.0	21.0	19.48	25	0	Left	10	0.079	1.419	0.112	0.112	0.070		30.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.14 LTE Band 7 Standalone SAR

Table 12-47

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 7	20	QPSK	B	0042M	1:1	-0.20	2510.00	20850	0.0	24.5	23.98	1	0	Right Cheek	0	0.120	1.127	0.135	0.399	0.249		33.1	33.1	29.2
Head	LTE Band 7	20	QPSK	B	0042M	1:1	0.02	2510.00	20850	1.0	23.5	23.18	50	25	Right Cheek	0	0.101	1.076	0.109	0.404	0.253		33.1		
Head	LTE Band 7	20	QPSK	B	0042M	1:1	-0.13	2510.00	20850	0.0	24.5	23.98	1	0	Right Tilt	0	0.061	1.127	0.069	0.203	0.127		36.1		
Head	LTE Band 7	20	QPSK	B	0042M	1:1	0.03	2510.00	20850	1.0	23.5	23.18	50	25	Right Tilt	0	0.050	1.076	0.054	0.200	0.125		36.1		
Head	LTE Band 7	20	QPSK	B	0042M	1:1	0.07	2510.00	20850	0.0	24.5	23.98	1	0	Left Cheek	0	0.051	1.127	0.057	0.170	0.106		36.9		
Head	LTE Band 7	20	QPSK	B	0042M	1:1	0.16	2510.00	20850	1.0	23.5	23.18	50	25	Left Cheek	0	0.039	1.076	0.042	0.156	0.098		37.2		
Head	LTE Band 7	20	QPSK	B	0042M	1:1	-0.09	2510.00	20850	0.0	24.5	23.98	1	0	Left Tilt	0	0.068	1.127	0.077	0.226	0.141		35.6		
Head	LTE Band 7	20	QPSK	B	0042M	1:1	0.19	2510.00	20850	1.0	23.5	23.18	50	25	Left Tilt	0	0.052	1.076	0.056	0.208	0.130		36.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-48

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 7	20	QPSK	F	0042M	1:1	-0.02	2510.00	20850	0.0	17.0	16.30	1	0	Right Cheek	0	0.666	1.175	0.783	0.783	0.489		18.0	17.6	16.0
Head	LTE Band 7	20	QPSK	F	0042M	1:1	-0.01	2510.00	20850	0.0	17.0	16.27	50	25	Right Cheek	0	0.646	1.183	0.764	0.764	0.478		18.1		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	0.08	2510.00	20850	0.0	17.0	16.30	1	0	Right Tilt	0	0.723	1.175	0.850	0.850	0.531		17.7		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	0.02	2535.00	21100	0.0	17.0	16.17	1	0	Right Tilt	0	0.647	1.211	0.784	0.784	0.490		18.0		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	0.00	2560.00	21350	0.0	17.0	16.12	1	0	Right Tilt	0	0.608	1.225	0.745	0.745	0.466		18.2		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	-0.02	2510.00	20850	0.0	17.0	16.27	50	25	Right Tilt	0	0.693	1.183	0.820	0.820	0.513		17.8		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	-0.01	2535.00	21100	0.0	17.0	16.22	50	25	Right Tilt	0	0.633	1.197	0.758	0.758	0.474		18.2		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	0.00	2560.00	21350	0.0	17.0	16.24	50	25	Right Tilt	0	0.602	1.191	0.717	0.717	0.448		18.4		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	0.00	2510.00	20850	0.0	17.0	16.26	100	0	Right Tilt	0	0.733	1.186	0.869	0.869	0.543	A38	17.6		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	0.10	2510.00	20850	0.0	17.0	16.30	1	0	Left Cheek	0	0.328	1.175	0.385	0.385	0.241		21.1		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	0.00	2510.00	20850	0.0	17.0	16.27	50	25	Left Cheek	0	0.316	1.183	0.374	0.374	0.234		21.2		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	-0.05	2510.00	20850	0.0	17.0	16.30	1	0	Left Tilt	0	0.347	1.175	0.408	0.408	0.255		20.8		
Head	LTE Band 7	20	QPSK	F	0042M	1:1	0.06	2510.00	20850	0.0	17.0	16.27	50	25	Left Tilt	0	0.338	1.183	0.400	0.400	0.250		20.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-49

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 7	20	QPSK	B	0055M	1:1	0.07	2510.00	20850	0.0	21.0	20.66	1	0	Back	10	0.349	1.081	0.377	0.377	0.236		25.2	24.9	20.0
Body-worn/Hotspot	LTE Band 7	20	QPSK	B	0055M	1:1	-0.10	2510.00	20850	0.0	21.0	20.49	50	25	Back	10	0.359	1.125	0.404	0.404	0.253	A39	24.9		
Hotspot	LTE Band 7	20	QPSK	B	0055M	1:1	-0.11	2510.00	20850	0.0	21.0	20.66	1	0	Front	10	0.256	1.081	0.277	0.277	0.173		26.5		
Hotspot	LTE Band 7	20	QPSK	B	0055M	1:1	0.00	2510.00	20850	0.0	21.0	20.49	50	25	Front	10	0.268	1.125	0.302	0.302	0.189		26.2		
Hotspot	LTE Band 7	20	QPSK	B	0055M	1:1	0.05	2510.00	20850	0.0	21.0	20.66	1	0	Bottom	10	0.315	1.081	0.341	0.341	0.213		25.6		
Hotspot	LTE Band 7	20	QPSK	B	0055M	1:1	-0.03	2510.00	20850	0.0	21.0	20.49	50	25	Bottom	10	0.340	1.125	0.383	0.383	0.239		25.1		
Hotspot	LTE Band 7	20	QPSK	B	0055M	1:1	-0.05	2510.00	20850	0.0	21.0	20.66	1	0	Right	10	0.355	1.081	0.384	0.384	0.240		25.1		
Hotspot	LTE Band 7	20	QPSK	B	0055M	1:1	-0.07	2510.00	20850	0.0	21.0	20.49	50	25	Right	10	0.348	1.125	0.392	0.392	0.245		25.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-50

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 7	20	QPSK	F	0055M	1:1	0.01	2510.00	20850	0.0	20.5	19.72	1	0	Back	10	0.300	1.197	0.359	0.359	0.224		24.9	23.8	19.5
Body-worn/Hotspot	LTE Band 7	20	QPSK	F	0055M	1:1	0.07	2510.00	20850	0.0	20.5	19.80	50	25	Back	10	0.294	1.175	0.345	0.345	0.216		25.1		
Hotspot	LTE Band 7	20	QPSK	F	0055M	1:1	0.08	2510.00	20850	0.0	20.5	19.72	1	0	Front	10	0.247	1.197	0.296	0.296	0.185		25.7		
Hotspot	LTE Band 7	20	QPSK	F	0055M	1:1	0.03	2510.00	20850	0.0	20.5	19.80	50	25	Front	10	0.239	1.175	0.281	0.281	0.176		26.0		
Hotspot	LTE Band 7	20	QPSK	F	0055M	1:1	-0.03	2510.00	20850	0.0	20.5	19.72	1	0	Top	10	0.388	1.197	0.464	0.464	0.290	A40	23.8		
Hotspot	LTE Band 7	20	QPSK	F	0055M	1:1	-0.06	2510.00	20850	0.0	20.5	19.80	50	25	Top	10	0.383	1.175	0.450	0.450	0.281		23.9		
Hotspot	LTE Band 7	20	QPSK	F	0055M	1:1	0.08	2510.00	20850	0.0	20.5	19.72	1	0	Left	10	0.042	1.197	0.050	0.050	0.031		33.4		
Hotspot	LTE Band 7	20	QPSK	F	0055M	1:1	0.05	2510.00	20850	0.0	20.5	19.80	50	25	Left	10	0.049	1.175	0.058	0.058	0.036		32.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.15 LTE Band 41 Standalone SAR

Table 12-51

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 41	20	QPSK	B	0088M	1:1.58	-0.06	2506.00	39750	0.0	25.0	24.56	1	99	Right Cheek	0	0.071	1.107	0.079	0.403	0.252		34.0	34.0	30.1
Head	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.04	2506.00	39750	1.0	24.0	23.57	50	50	Right Cheek	0	0.057	1.104	0.063	0.406	0.254		34.0		
Head	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.04	2506.00	39750	0.0	25.0	24.56	1	99	Right Tilt	0	0.032	1.107	0.035	0.182	0.114		37.5		
Head	LTE Band 41	20	QPSK	B	0088M	1:1.58	-0.14	2506.00	39750	1.0	24.0	23.57	50	50	Right Tilt	0	0.025	1.104	0.028	0.178	0.111		37.6		
Head	LTE Band 41	20	QPSK	B	0088M	1:1.58	-0.16	2506.00	39750	0.0	25.0	24.56	1	99	Left Cheek	0	0.033	1.107	0.037	0.187	0.117		37.3		
Head	LTE Band 41	20	QPSK	B	0088M	1:1.58	-0.13	2506.00	39750	1.0	24.0	23.57	50	50	Left Cheek	0	0.023	1.104	0.025	0.164	0.103		37.9		
Head	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.05	2506.00	39750	0.0	25.0	24.56	1	99	Left Tilt	0	0.034	1.107	0.038	0.193	0.121		37.2		
Head	LTE Band 41	20	QPSK	B	0088M	1:1.58	-0.16	2506.00	39750	1.0	24.0	23.57	50	50	Left Tilt	0	0.025	1.104	0.028	0.178	0.111		37.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-52

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 41	20	QPSK	F	0088M	1:1.58	0.03	2549.50	40185	0.0	19.0	18.42	1	0	Right Cheek	0	0.417	1.143	0.477	0.477	0.298		20.2	19.5	16.0
Head	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.04	2549.50	40185	0.0	19.0	18.41	50	0	Right Cheek	0	0.413	1.146	0.473	0.473	0.296		20.2		
Head	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.03	2549.50	40185	0.0	19.0	18.42	1	0	Right Tilt	0	0.485	1.143	0.554	0.554	0.346	A41	19.5		
Head	LTE Band 41	20	QPSK	F	0088M	1:1.58	0.05	2549.50	40185	0.0	19.0	18.41	50	0	Right Tilt	0	0.453	1.146	0.519	0.519	0.324		19.8		
Head	LTE Band 41	20	QPSK	F	0088M	1:1.58	0.02	2549.50	40185	0.0	19.0	18.42	1	0	Left Cheek	0	0.167	1.143	0.191	0.191	0.119		24.2		
Head	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.03	2549.50	40185	0.0	19.0	18.41	50	0	Left Cheek	0	0.164	1.146	0.188	0.188	0.118		24.2		
Head	LTE Band 41	20	QPSK	F	0088M	1:1.58	0.04	2549.50	40185	0.0	19.0	18.42	1	0	Left Tilt	0	0.156	1.143	0.178	0.178	0.111		24.5		
Head	LTE Band 41	20	QPSK	F	0088M	1:1.58	0.02	2549.50	40185	0.0	19.0	18.41	50	0	Left Tilt	0	0.157	1.146	0.180	0.180	0.113		24.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-53

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.02	2506.00	39750	0.0	23.0	22.68	1	99	Back	10	0.423	1.076	0.455	0.455	0.284	A42	24.4	24.3	20.0
Body-worn/Hotspot	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.01	2506.00	39750	0.0	23.0	22.62	50	50	Back	10	0.423	1.091	0.461	0.461	0.288		24.3		
Hotspot	LTE Band 41	20	QPSK	B	0088M	1:1.58	-0.03	2506.00	39750	0.0	23.0	22.68	1	99	Front	10	0.250	1.076	0.269	0.269	0.168		26.7		
Hotspot	LTE Band 41	20	QPSK	B	0088M	1:1.58	-0.08	2506.00	39750	0.0	23.0	22.62	50	50	Front	10	0.246	1.091	0.268	0.268	0.168		26.7		
Hotspot	LTE Band 41	20	QPSK	B	0088M	1:1.58	-0.02	2506.00	39750	0.0	23.0	22.68	1	99	Bottom	10	0.371	1.076	0.399	0.399	0.249		25.0		
Hotspot	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.01	2506.00	39750	0.0	23.0	22.62	50	50	Bottom	10	0.368	1.091	0.401	0.401	0.251		24.9		
Hotspot	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.06	2506.00	39750	0.0	23.0	22.68	1	99	Right	10	0.373	1.076	0.401	0.401	0.251		24.9		
Hotspot	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.03	2506.00	39750	0.0	23.0	22.62	50	50	Right	10	0.377	1.091	0.411	0.411	0.257		24.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-54

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 41	20	QPSK	F	0088M	1:1.58	0.03	2549.50	40185	0.0	22.5	21.97	1	0	Back	10	0.151	1.130	0.171	0.171	0.107		28.1	26.8	19.5
Body-worn/Hotspot	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.03	2549.50	40185	0.0	22.5	21.95	50	0	Back	10	0.147	1.135	0.167	0.167	0.104		28.2		
Hotspot	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.04	2549.50	40185	0.0	22.5	21.97	1	0	Front	10	0.160	1.130	0.181	0.181	0.113		27.9		
Hotspot	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.06	2549.50	40185	0.0	22.5	21.95	50	0	Front	10	0.159	1.135	0.180	0.180	0.113		27.9		
Hotspot	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.10	2549.50	40185	0.0	22.5	21.97	1	0	Top	10	0.200	1.130	0.226	0.226	0.141		26.9		
Hotspot	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.17	2549.50	40185	0.0	22.5	21.95	50	0	Top	10	0.203	1.135	0.230	0.230	0.144		26.8		
Hotspot	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.06	2549.50	40185	0.0	22.5	21.97	1	0	Left	10	0.036	1.130	0.041	0.041	0.026		34.4		
Hotspot	LTE Band 41	20	QPSK	F	0088M	1:1.58	0.03	2549.50	40185	0.0	22.5	21.95	50	0	Left	10	0.033	1.135	0.037	0.037	0.023		34.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.16 LTE Band 48 Standalone SAR

Table 12-55

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Add'l Info	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.06	3560.00	55340	0.0	19.0	17.77	1	99	Right Cheek	0	N/A	0.768	1.327	1.019	1.019	0.637		16.9	16.2	16.0
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.01	3603.30	55773	0.0	19.0	17.62	1	0	Right Cheek	0	N/A	0.776	1.374	1.066	1.066	0.666		16.7		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.01	3646.70	56207	0.0	19.0	17.80	1	50	Right Cheek	0	N/A	0.788	1.318	1.039	1.039	0.649		16.8		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.03	3690.00	56640	0.0	19.0	17.92	1	0	Right Cheek	0	N/A	0.791	1.282	1.014	1.014	0.634		16.9		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.02	3560.00	55340	0.0	19.0	17.91	50	25	Right Cheek	0	N/A	0.729	1.285	0.937	0.937	0.586		17.2		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.01	3603.30	55773	0.0	19.0	17.88	50	25	Right Cheek	0	N/A	0.680	1.294	0.880	0.880	0.550		17.5		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.01	3646.70	56207	0.0	19.0	17.93	50	50	Right Cheek	0	N/A	0.717	1.279	0.917	0.917	0.573		17.3		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.05	3690.00	56640	0.0	19.0	18.00	50	0	Right Cheek	0	N/A	0.821	1.259	1.034	1.034	0.646		16.8		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.02	3690.00	56640	0.0	19.0	17.91	100	0	Right Cheek	0	N/A	0.834	1.285	1.072	1.072	0.670		16.7		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.01	3560.00	55340	0.0	19.0	17.77	1	99	Right Tilt	0	N/A	0.869	1.327	1.153	1.153	0.721		16.3		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.01	3603.30	55773	0.0	19.0	17.62	1	0	Right Tilt	0	N/A	0.845	1.374	1.161	1.161	0.726		16.3		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.03	3646.70	56207	0.0	19.0	17.80	1	50	Right Tilt	0	N/A	0.879	1.318	1.159	1.159	0.724		16.3		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.07	3690.00	56640	0.0	19.0	17.92	1	0	Right Tilt	0	N/A	0.921	1.282	1.181	1.181	0.738		16.2		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.02	3560.00	55340	0.0	19.0	17.91	50	25	Right Tilt	0	N/A	0.910	1.285	1.169	1.169	0.731		16.3		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.03	3603.30	55773	0.0	19.0	17.88	50	25	Right Tilt	0	N/A	0.870	1.294	1.126	1.126	0.704		16.5		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.06	3646.70	56207	0.0	19.0	17.93	50	50	Right Tilt	0	N/A	0.907	1.279	1.160	1.160	0.725		16.3		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.01	3690.00	56640	0.0	19.0	18.00	50	0	Right Tilt	0	N/A	0.940	1.259	1.183	1.183	0.739	A43	16.2		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.01	3690.00	56640	0.0	19.0	17.91	100	0	Right Tilt	0	N/A	0.935	1.285	1.201	1.201	0.751		16.2		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.01	3690.00	56640	0.0	19.0	17.92	1	0	Left Cheek	0	N/A	0.362	1.282	0.464	0.464	0.290		20.3		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.04	3690.00	56640	0.0	19.0	18.00	50	0	Left Cheek	0	N/A	0.358	1.259	0.451	0.451	0.282		20.4		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.01	3690.00	56640	0.0	19.0	17.92	1	0	Left Tilt	0	N/A	0.380	1.282	0.487	0.487	0.304		20.1		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.02	3690.00	56640	0.0	19.0	18.00	50	0	Left Tilt	0	N/A	0.374	1.259	0.471	0.471	0.294		20.2		
Head	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.01	3690.00	56640	0.0	19.0	17.99	100	0	Right Tilt	0	ULCA 4BC	0.935	1.262	1.180	1.180	0.738		16.2		
		20						3670.20	56442				100	0												
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram									

Table 12-56

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Add'l Info	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.02	3646.70	56207	0.0	22.5	21.90	1	0	Back	10	N/A	0.318	1.148	0.365	0.365	0.228	A44	24.8	22.7	19.5
Body-worn/Hotspot	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.01	3646.70	56207	0.5	22.0	21.04	50	25	Back	10	N/A	0.264	1.247	0.329	0.329	0.206		24.8		
Hotspot	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.02	3646.70	56207	0.0	22.5	21.90	1	0	Front	10	N/A	0.157	1.148	0.180	0.180	0.113		27.9		
Hotspot	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.05	3646.70	56207	0.5	22.0	21.04	50	25	Front	10	N/A	0.141	1.247	0.176	0.176	0.110		27.5		
Hotspot	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.03	3646.70	56207	0.0	22.5	21.90	1	0	Top	10	N/A	0.515	1.148	0.591	0.591	0.369	A45	22.7		
Hotspot	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.01	3646.70	56207	0.5	22.0	21.04	50	25	Top	10	N/A	0.426	1.247	0.531	0.531	0.332		22.7		
Hotspot	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.06	3646.70	56207	0.0	22.5	21.90	1	0	Left	10	N/A	0.075	1.148	0.086	0.086	0.054		31.1		
Hotspot	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.08	3646.70	56207	0.5	22.0	21.04	50	25	Left	10	N/A	0.072	1.247	0.090	0.090	0.056		30.4		
Hotspot	LTE Band 48	20	QPSK	F	0078M	1:1.58	-0.02	3646.70	56207	0.0	22.5	21.89	1	0	Top	10	ULCA 4BC	0.471	1.151	0.542	0.542	0.339		23.1		
		20						3626.90	56009				1	99												
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram									

12.17 NR Band n71 Standalone SAR

Table 12-57

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n71	35	QPSK	A	0078M	1:1	0.02	680.50	136100	DFT-s-OFDM	0.0	25.0	24.02	1	94	Right Cheek	0	137	0.100	1.253	0.125	0.353	0.221		34.0	33.5	29.5
Head	NR Band n71	35	QPSK	A	0078M	1:1	0.03	680.50	136100	DFT-s-OFDM	0.0	25.0	24.11	90	49	Right Cheek	0	137	0.101	1.227	0.124	0.349	0.218		34.0		
Head	NR Band n71	35	QPSK	A	0078M	1:1	0.09	680.50	136100	CP-OFDM	1.5	23.5	22.23	1	1	Right Cheek	0	64	0.073	1.340	0.098	0.389	0.243		33.5		
Head	NR Band n71	35	QPSK	A	0095M	1:1	-0.03	680.50	136100	DFT-s-OFDM	0.0	25.0	24.02	1	94	Right Tilt	0	137	0.022	1.253	0.028	0.078	0.049		40.5		
Head	NR Band n71	35	QPSK	A	0095M	1:1	-0.15	680.50	136100	DFT-s-OFDM	0.0	25.0	24.11	90	49	Right Tilt	0	137	0.021	1.227	0.026	0.073	0.046		40.8		
Head	NR Band n71	35	QPSK	A	0078M	1:1	-0.09	680.50	136100	DFT-s-OFDM	0.0	25.0	24.02	1	94	Left Cheek	0	64	0.098	1.253	0.123	0.346	0.216		34.1		
Head	NR Band n71	35	QPSK	A	0078M	1:1	-0.04	680.50	136100	DFT-s-OFDM	0.0	25.0	24.11	90	49	Left Cheek	0	64	0.100	1.227	0.123	0.346	0.216		34.1		
Head	NR Band n71	35	QPSK	A	0095M	1:1	-0.11	680.50	136100	DFT-s-OFDM	0.0	25.0	24.02	1	94	Left Tilt	0	27	0.013	1.253	0.016	0.046	0.029		42.8		
Head	NR Band n71	35	QPSK	A	0095M	1:1	0.04	680.50	136100	DFT-s-OFDM	0.0	25.0	24.11	90	49	Left Tilt	0	64	0.015	1.227	0.018	0.052	0.033		42.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-58

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n71	35	QPSK	E	0085M	1:1	-0.01	680.50	136100	DFT-s-OFDM	0.0	22.5	21.71	1	94	Right Cheek	0	0.545	1.199	0.653	0.653	0.408		24.3	23.0	21.5
Head	NR Band n71	35	QPSK	E	0085M	1:1	0.04	680.50	136100	DFT-s-OFDM	0.0	22.5	21.71	90	49	Right Cheek	0	0.536	1.199	0.643	0.643	0.402		24.4		
Head	NR Band n71	35	QPSK	E	0085M	1:1	0.00	680.50	136100	DFT-s-OFDM	0.0	22.5	21.71	1	94	Right Tilt	0	0.447	1.199	0.536	0.536	0.335		25.2		
Head	NR Band n71	35	QPSK	E	0085M	1:1	0.05	680.50	136100	DFT-s-OFDM	0.0	22.5	21.71	90	49	Right Tilt	0	0.443	1.199	0.531	0.531	0.332		25.2		
Head	NR Band n71	35	QPSK	E	0078M	1:1	-0.03	680.50	136100	DFT-s-OFDM	0.0	22.5	21.71	1	94	Left Cheek	0	0.647	1.199	0.776	0.776	0.485		23.6		
Head	NR Band n71	35	QPSK	E	0078M	1:1	0.03	680.50	136100	DFT-s-OFDM	0.0	22.5	21.71	90	49	Left Cheek	0	0.646	1.199	0.775	0.775	0.484		23.6		
Head	NR Band n71	35	QPSK	E	0078M	1:1	0.05	680.50	136100	DFT-s-OFDM	0.0	22.5	21.59	180	0	Left Cheek	0	0.708	1.233	0.873	0.873	0.546		23.0		
Head	NR Band n71	35	QPSK	E	0078M	1:1	0.01	680.50	136100	CP-OFDM	0.0	22.5	21.79	1	1	Left Cheek	0	0.711	1.178	0.838	0.838	0.524	A46	23.2		
Head	NR Band n71	35	QPSK	E	0078M	1:1	-0.15	680.50	136100	DFT-s-OFDM	0.0	22.5	21.71	1	94	Left Tilt	0	0.566	1.199	0.679	0.679	0.424		24.1		
Head	NR Band n71	35	QPSK	E	0078M	1:1	-0.04	680.50	136100	DFT-s-OFDM	0.0	22.5	21.71	90	49	Left Tilt	0	0.557	1.199	0.668	0.668	0.418		24.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-59

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	-0.15	680.50	136100	DFT-s-OFDM	0.0	25.0	24.02	1	94	Back	10	64	0.197	1.253	0.247	0.504	0.315		31.0		
Body-worn/Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	-0.01	680.50	136100	DFT-s-OFDM	0.0	25.0	24.11	90	49	Back	10	64	0.189	1.227	0.232	0.474	0.296		31.3		
Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	-0.01	680.50	136100	DFT-s-OFDM	0.0	25.0	24.02	1	94	Front	10	64	0.164	1.253	0.205	0.420	0.263		31.8		
Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	-0.01	680.50	136100	DFT-s-OFDM	0.0	25.0	24.11	90	49	Front	10	64	0.163	1.227	0.200	0.408	0.255		31.9		
Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	0.05	680.50	136100	DFT-s-OFDM	0.0	25.0	24.02	1	94	Bottom	10	64	0.042	1.253	0.053	0.107	0.067		37.7		
Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	-0.12	680.50	136100	DFT-s-OFDM	0.0	25.0	24.11	90	49	Bottom	10	64	0.045	1.227	0.055	0.113	0.071		37.5	30.4	28.1
Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	0.10	680.50	136100	DFT-s-OFDM	0.0	25.0	24.02	1	94	Right	10	64	0.192	1.253	0.241	0.491	0.307		31.1		
Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	-0.04	680.50	136100	DFT-s-OFDM	0.0	25.0	24.11	90	49	Right	10	64	0.218	1.227	0.267	0.546	0.341		30.7		
Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	-0.02	680.50	136100	CP-OFDM	1.5	23.5	22.23	1	1	Right	10	64	0.152	1.340	0.204	0.587	0.367		30.4		
Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	0.10	680.50	136100	DFT-s-OFDM	0.0	25.0	24.02	1	94	Left	10	137	0.145	1.253	0.182	0.371	0.232		32.4		
Hotspot	NR Band n71	35	QPSK	A	0058M	1:1	0.03	680.50	136100	DFT-s-OFDM	0.0	25.0	24.11	90	49	Left	10	137	0.157	1.227	0.193	0.393	0.246		32.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-60

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n71	35	QPSK	E	0078M	1:1	-0.01	680.50	136100	DFT-s-OFDM	0.0	25.0	24.39	1	94	Back	10	0.371	1.151	0.427	0.852	0.533		28.6		
Body-worn/Hotspot	NR Band n71	35	QPSK	E	0078M	1:1	0.05	680.50	136100	DFT-s-OFDM	0.0	25.0	24.35	90	49	Back	10	0.373	1.161	0.433	0.864	0.540	A47	28.6		
Hotspot	NR Band n71	35	QPSK	E	0085M	1:1	0.01	680.50	136100	DFT-s-OFDM	0.0	25.0	24.39	1	94	Front	10	0.331	1.151	0.381	0.760	0.475		29.1		
Hotspot	NR Band n71	35	QPSK	E	0085M	1:1	0.02	680.50	136100	DFT-s-OFDM	0.0	25.0	24.35	90	49	Front	10	0.327	1.161	0.380	0.758	0.474		29.2		
Hotspot	NR Band n71	35	QPSK	E	0078M	1:1	-0.13	680.50	136100	DFT-s-OFDM	0.0	25.0	24.39	1	94	Top	10	0.382	1.151	0.440	0.877	0.548	A48	28.5	28.5	28.0
Hotspot	NR Band n71	35	QPSK	E	0078M	1:1	0.00	680.50	136100	DFT-s-OFDM	0.0	25.0	24.35	90	49	Top	10	0.375	1.161	0.435	0.869	0.543		28.6		
Hotspot	NR Band n71	35	QPSK	E	0085M	1:1	-0.13	680.50	136100	CP-OFDM	1.5	23.5	22.58	1	1	Top	10	0.208	1.236	0.257	0.724	0.453		29.3		
Hotspot	NR Band n71	35	QPSK	E	0085M	1:1	0.00	680.50	136100	DFT-s-OFDM	0.0	25.0	24.39	1	94	Right	10	0.285	1.151	0.328	0.654	0.409		29.8		
Hotspot	NR Band n71	35	QPSK	E	0085M	1:1	0.01	680.50	136100	DFT-s-OFDM	0.0	25.0	24.35	90	49	Right	10	0.295	1.161	0.342	0.684	0.428		29.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.18 NR Band n12 Standalone SAR

Table 12-61

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n12	15	QPSK	A	0078M	1:1	-0.07	707.50	141500	DFT-s-OFDM	0.0	25.0	24.12	1	40	Right Cheek	0	124	0.133	1.225	0.163	0.340	0.213		32.8		
Head	NR Band n12	15	QPSK	A	0078M	1:1	-0.16	707.50	141500	DFT-s-OFDM	0.0	25.0	24.15	36	22	Right Cheek	0	124	0.138	1.216	0.168	0.351	0.219		32.7		
Head	NR Band n12	15	QPSK	A	0095M	1:1	0.07	707.50	141500	DFT-s-OFDM	0.0	25.0	24.12	1	40	Right Tilt	0	27	0.025	1.225	0.031	0.064	0.040		40.1		
Head	NR Band n12	15	QPSK	A	0095M	1:1	0.05	707.50	141500	DFT-s-OFDM	0.0	25.0	24.15	36	22	Right Tilt	0	27	0.027	1.216	0.033	0.069	0.043		39.8		
Head	NR Band n12	15	QPSK	A	0078M	1:1	-0.04	707.50	141500	DFT-s-OFDM	0.0	25.0	24.12	1	40	Left Cheek	0	27	0.143	1.225	0.175	0.366	0.229		32.5	32.5	28.2
Head	NR Band n12	15	QPSK	A	0078M	1:1	-0.06	707.50	141500	DFT-s-OFDM	0.0	25.0	24.15	36	22	Left Cheek	0	27	0.142	1.216	0.173	0.361	0.226		32.6		
Head	NR Band n12	15	QPSK	A	0078M	1:1	-0.05	707.50	141500	CP-OFDM	1.5	23.5	22.78	1	1	Left Cheek	0	27	0.085	1.180	0.100	0.296	0.185		33.4		
Head	NR Band n12	15	QPSK	A	0095M	1:1	-0.18	707.50	141500	DFT-s-OFDM	0.0	25.0	24.12	1	40	Left Tilt	0	27	0.026	1.225	0.032	0.067	0.042		39.9		
Head	NR Band n12	15	QPSK	A	0095M	1:1	0.02	707.50	141500	DFT-s-OFDM	0.0	25.0	24.15	36	22	Left Tilt	0	27	0.026	1.216	0.032	0.066	0.041		40.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-62

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n12	15	QPSK	E	0085M	1:1	-0.03	707.50	141500	DFT-s-OFDM	0.0	22.5	21.73	1	1	Right Cheek	0	0.506	1.194	0.604	0.604	0.378		24.6		
Head	NR Band n12	15	QPSK	E	0085M	1:1	0.00	707.50	141500	DFT-s-OFDM	0.0	22.5	21.71	36	0	Right Cheek	0	0.528	1.199	0.633	0.633	0.396		24.4		
Head	NR Band n12	15	QPSK	E	0085M	1:1	0.01	707.50	141500	DFT-s-OFDM	0.0	22.5	21.73	1	1	Right Tilt	0	0.406	1.194	0.485	0.485	0.303		25.6		
Head	NR Band n12	15	QPSK	E	0085M	1:1	0.02	707.50	141500	DFT-s-OFDM	0.0	22.5	21.71	36	0	Right Tilt	0	0.407	1.199	0.488	0.488	0.305		25.6		
Head	NR Band n12	15	QPSK	E	0078M	1:1	0.07	707.50	141500	DFT-s-OFDM	0.0	22.5	21.73	1	1	Left Cheek	0	0.681	1.194	0.813	0.813	0.508		23.3		
Head	NR Band n12	15	QPSK	E	0078M	1:1	0.03	707.50	141500	DFT-s-OFDM	0.0	22.5	21.71	36	0	Left Cheek	0	0.704	1.199	0.844	0.844	0.528		23.2		
Head	NR Band n12	15	QPSK	E	0078M	1:1	-0.03	707.50	141500	DFT-s-OFDM	0.0	22.5	21.59	75	0	Left Cheek	0	0.730	1.233	0.900	0.900	0.563	A49	22.9	22.9	21.5
Head	NR Band n12	15	QPSK	E	0078M	1:1	0.05	707.50	141500	CP-OFDM	0.0	22.5	22.04	1	1	Left Cheek	0	0.717	1.112	0.797	0.797	0.498		23.4		
Head	NR Band n12	15	QPSK	E	0078M	1:1	-0.12	707.50	141500	DFT-s-OFDM	0.0	22.5	21.73	1	1	Left Tilt	0	0.569	1.194	0.679	0.679	0.424		24.1		
Head	NR Band n12	15	QPSK	E	0078M	1:1	0.03	707.50	141500	DFT-s-OFDM	0.0	22.5	21.71	36	0	Left Tilt	0	0.597	1.199	0.716	0.716	0.448		23.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-63

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	-0.12	707.50	141500	DFT-s-OFDM	0.0	25.0	24.12	1	40	Back	10	63	0.214	1.225	0.262	0.587	0.367		30.8		
Body-worn/Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	-0.21	707.50	141500	DFT-s-OFDM	0.0	25.0	24.15	36	22	Back	10	63	0.215	1.216	0.261	0.585	0.366		30.8		
Body-worn/Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	-0.03	707.50	141500	CP-OFDM	1.5	23.5	22.78	1	1	Back	10	63	0.125	1.180	0.148	0.467	0.292		31.8		
Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	0.00	707.50	141500	DFT-s-OFDM	0.0	25.0	24.12	1	40	Front	10	63	0.158	1.225	0.194	0.433	0.271		32.1		
Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	-0.04	707.50	141500	DFT-s-OFDM	0.0	25.0	24.15	36	22	Front	10	63	0.163	1.216	0.198	0.444	0.278		32.0		
Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	0.08	707.50	141500	DFT-s-OFDM	0.0	25.0	24.12	1	40	Bottom	10	63	0.051	1.225	0.062	0.140	0.088		37.0	30.8	28.5
Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	-0.08	707.50	141500	DFT-s-OFDM	0.0	25.0	24.15	36	22	Bottom	10	63	0.051	1.216	0.062	0.139	0.087		37.0		
Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	0.02	707.50	141500	DFT-s-OFDM	0.0	25.0	24.12	1	40	Right	10	63	0.205	1.225	0.251	0.562	0.351		31.0		
Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	0.01	707.50	141500	DFT-s-OFDM	0.0	25.0	24.15	36	22	Right	10	63	0.204	1.216	0.248	0.555	0.347		31.0		
Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	0.11	707.50	141500	DFT-s-OFDM	0.0	25.0	24.12	1	40	Left	10	63	0.153	1.225	0.187	0.420	0.263		32.2		
Hotspot	NR Band n12	15	QPSK	A	0058M	1:1	-0.05	707.50	141500	DFT-s-OFDM	0.0	25.0	24.15	36	22	Left	10	63	0.159	1.216	0.193	0.433	0.271		32.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-64

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n12	15	QPSK	E	0078M	1:1	-0.03	707.50	141500	DFT-s-OFDM	0.0	25.0	24.44	1	40	Back	10	0.350	1.138	0.398	0.813	0.508		28.9		
Body-worn/Hotspot	NR Band n12	15	QPSK	E	0078M	1:1	0.01	707.50	141500	DFT-s-OFDM	0.0	25.0	24.44	36	22	Back	10	0.361	1.138	0.411	0.839	0.524	A50	28.8		
Hotspot	NR Band n12	15	QPSK	E	0085M	1:1	0.02	707.50	141500	DFT-s-OFDM	0.0	25.0	24.44	1	40	Front	10	0.317	1.138	0.361	0.736	0.460		29.4		
Hotspot	NR Band n12	15	QPSK	E	0085M	1:1	0.00	707.50	141500	DFT-s-OFDM	0.0	25.0	24.44	36	22	Front	10	0.320	1.138	0.364	0.743	0.464		29.3		
Hotspot	NR Band n12	15	QPSK	E	0078M	1:1	-0.02	707.50	141500	DFT-s-OFDM	0.0	25.0	24.44	1	40	Top	10	0.372	1.138	0.423	0.864	0.540		28.7	28.6	28.1
Hotspot	NR Band n12	15	QPSK	E	0078M	1:1	-0.03	707.50	141500	DFT-s-OFDM	0.0	25.0	24.44	36	22	Top	10	0.381	1.138	0.434	0.885	0.553	A51	28.6		
Hotspot	NR Band n12	15	QPSK	E	0085M	1:1	0.02	707.50	141500	CP-OFDM	1.5	23.5	22.95	1	1	Top	10	0.209	1.135	0.237	0.684	0.428		29.7		
Hotspot	NR Band n12	15	QPSK	E	0085M	1:1	-0.04	707.50	141500	DFT-s-OFDM	0.0	25.0	24.44	1	40	Right	10	0.377	1.138	0.429	0.876	0.548		28.6		
Hotspot	NR Band n12	15	QPSK	E	0085M	1:1	-0.10	707.50	141500	DFT-s-OFDM	0.0	25.0	24.44	36	22	Right	10	0.381	1.138	0.434	0.885	0.553		28.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.19 NR Band n14 Standalone SAR

Table 12-65

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n14	10	QPSK	A	0078M	1:1	0.07	793.00	158600	DFT-s-OFDM	0.0	25.0	23.84	1	1	Right Cheek	0	117	0.096	1.306	0.125	0.338	0.211		34.0		
Head	NR Band n14	10	QPSK	A	0078M	1:1	-0.01	793.00	158600	DFT-s-OFDM	0.0	25.0	23.58	25	14	Right Cheek	0	117	0.086	1.387	0.119	0.321	0.201		34.2		
Head	NR Band n14	10	QPSK	A	0095M	1:1	0.00	793.00	158600	DFT-s-OFDM	0.0	25.0	23.84	1	1	Right Tilt	0	0	0.020	1.306	0.026	0.070	0.044		40.8		
Head	NR Band n14	10	QPSK	A	0095M	1:1	0.09	793.00	158600	DFT-s-OFDM	0.0	25.0	23.58	25	14	Right Tilt	0	0	0.019	1.387	0.026	0.071	0.044		40.7		
Head	NR Band n14	10	QPSK	A	0078M	1:1	-0.14	793.00	158600	DFT-s-OFDM	0.0	25.0	23.84	1	1	Left Cheek	0	117	0.102	1.306	0.133	0.359	0.224		33.7	33.7	29.3
Head	NR Band n14	10	QPSK	A	0078M	1:1	0.04	793.00	158600	DFT-s-OFDM	0.0	25.0	23.58	25	14	Left Cheek	0	117	0.092	1.387	0.128	0.343	0.214		33.9		
Head	NR Band n14	10	QPSK	A	0078M	1:1	0.03	793.00	158600	CP-OFDM	1.5	23.5	22.35	1	1	Left Cheek	0	117	0.073	1.303	0.095	0.362	0.226		33.7		
Head	NR Band n14	10	QPSK	A	0095M	1:1	0.04	793.00	158600	DFT-s-OFDM	0.0	25.0	23.84	1	1	Left Tilt	0	63	0.022	1.306	0.029	0.077	0.048		40.4		
Head	NR Band n14	10	QPSK	A	0095M	1:1	0.07	793.00	158600	DFT-s-OFDM	0.0	25.0	23.58	25	14	Left Tilt	0	63	0.022	1.387	0.031	0.082	0.051		40.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-66

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n14	10	QPSK	E	0085M	1:1	0.02	793.00	158600	DFT-s-OFDM	0.0	22.5	21.46	1	50	Right Cheek	0	0.652	1.271	0.829	0.829	0.518		23.3		
Head	NR Band n14	10	QPSK	E	0085M	1:1	0.00	793.00	158600	DFT-s-OFDM	0.0	22.5	21.36	25	14	Right Cheek	0	0.620	1.300	0.806	0.806	0.504		23.4		
Head	NR Band n14	10	QPSK	E	0085M	1:1	0.01	793.00	158600	DFT-s-OFDM	0.0	22.5	21.20	50	0	Right Cheek	0	0.610	1.349	0.823	0.823	0.514		23.3		
Head	NR Band n14	10	QPSK	E	0085M	1:1	0.02	793.00	158600	DFT-s-OFDM	0.0	22.5	21.46	1	50	Right Tilt	0	0.503	1.271	0.639	0.639	0.399		24.4		
Head	NR Band n14	10	QPSK	E	0085M	1:1	-0.01	793.00	158600	DFT-s-OFDM	0.0	22.5	21.36	25	14	Right Tilt	0	0.543	1.300	0.706	0.706	0.441		24.0		
Head	NR Band n14	10	QPSK	E	0078M	1:1	0.01	793.00	158600	DFT-s-OFDM	0.0	22.5	21.46	1	50	Left Cheek	0	0.587	1.271	0.746	0.746	0.466		23.7	23.2	21.5
Head	NR Band n14	10	QPSK	E	0078M	1:1	0.04	793.00	158600	DFT-s-OFDM	0.0	22.5	21.36	25	14	Left Cheek	0	0.621	1.300	0.807	0.807	0.504		23.4		
Head	NR Band n14	10	QPSK	E	0078M	1:1	-0.01	793.00	158600	DFT-s-OFDM	0.0	22.5	21.20	50	0	Left Cheek	0	0.619	1.349	0.835	0.835	0.522		23.2		
Head	NR Band n14	10	QPSK	E	0078M	1:1	-0.08	793.00	158600	CP-OFDM	0.0	22.5	21.51	1	1	Left Cheek	0	0.673	1.256	0.845	0.845	0.528	AS2	23.2		
Head	NR Band n14	10	QPSK	E	0078M	1:1	0.04	793.00	158600	DFT-s-OFDM	0.0	22.5	21.46	1	50	Left Tilt	0	0.589	1.271	0.749	0.749	0.468		23.7		
Head	NR Band n14	10	QPSK	E	0078M	1:1	0.11	793.00	158600	DFT-s-OFDM	0.0	22.5	21.36	25	14	Left Tilt	0	0.621	1.300	0.807	0.807	0.504		23.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-67

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	0.00	793.00	158600	DFT-s-OFDM	0.0	25.0	23.84	1	1	Back	10	117	0.266	1.306	0.347	0.514	0.321		29.5		
Body-worn/Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	0.00	793.00	158600	DFT-s-OFDM	0.0	25.0	23.58	25	14	Back	10	117	0.281	1.387	0.390	0.576	0.360		29.0		
Body-worn/Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	-0.05	793.00	158600	CP-OFDM	1.5	23.5	22.35	1	1	Back	10	117	0.188	1.303	0.245	0.512	0.320		29.6		
Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	0.14	793.00	158600	DFT-s-OFDM	0.0	25.0	23.84	1	1	Front	10	117	0.166	1.306	0.217	0.321	0.201		31.6		
Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	0.06	793.00	158600	DFT-s-OFDM	0.0	25.0	23.58	25	14	Front	10	117	0.175	1.387	0.243	0.359	0.224		31.1		
Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	0.00	793.00	158600	DFT-s-OFDM	0.0	25.0	23.84	1	1	Bottom	10	117	0.072	1.306	0.094	0.139	0.087		35.2	29.0	26.7
Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	0.03	793.00	158600	DFT-s-OFDM	0.0	25.0	23.58	25	14	Bottom	10	117	0.067	1.387	0.093	0.137	0.086		35.3		
Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	-0.19	793.00	158600	DFT-s-OFDM	0.0	25.0	23.84	1	1	Right	10	117	0.098	1.306	0.128	0.189	0.118		33.9		
Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	0.07	793.00	158600	DFT-s-OFDM	0.0	25.0	23.58	25	14	Right	10	117	0.083	1.387	0.115	0.170	0.106		34.3		
Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	-0.08	793.00	158600	DFT-s-OFDM	0.0	25.0	23.84	1	1	Left	10	117	0.153	1.306	0.200	0.296	0.185		31.9		
Hotspot	NR Band n14	10	QPSK	A	0078M	1:1	-0.12	793.00	158600	DFT-s-OFDM	0.0	25.0	23.58	25	14	Left	10	117	0.158	1.387	0.219	0.324	0.203		31.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-68

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n14	10	QPSK	E	0078M	1:1	-0.04	793.00	158600	DFT-s-OFDM	0.0	25.0	24.07	1	1	Back	10	0.417	1.239	0.517	0.800	0.500	AS3	27.8		
Body-worn/Hotspot	NR Band n14	10	QPSK	E	0078M	1:1	-0.13	793.00	158600	DFT-s-OFDM	0.0	25.0	23.92	25	14	Back	10	0.414	1.282	0.531	0.822	0.514		27.7		
Hotspot	NR Band n14	10	QPSK	E	0085M	1:1	-0.01	793.00	158600	DFT-s-OFDM	0.0	25.0	24.07	1	1	Front	10	0.458	1.239	0.567	0.879	0.549		27.4		
Hotspot	NR Band n14	10	QPSK	E	0085M	1:1	0.01	793.00	158600	DFT-s-OFDM	0.0	25.0	23.92	25	14	Front	10	0.461	1.282	0.591	0.916	0.573		27.2		
Hotspot	NR Band n14	10	QPSK	E	0078M	1:1	0.05	793.00	158600	DFT-s-OFDM	0.0	25.0	24.07	1	1	Top	10	0.488	1.239	0.605	0.936	0.585		27.1	26.9	26.9
Hotspot	NR Band n14	10	QPSK	E	0078M	1:1	0.01	793.00	158600	DFT-s-OFDM	0.0	25.0	23.92	25	14	Top	10	0.483	1.282	0.619	0.959	0.599		27.0		
Hotspot	NR Band n14	10	QPSK	E	0085M	1:1	-0.01	793.00	158600	DFT-s-OFDM	0.0	25.0	24.07	1	1	Right	10	0.506	1.239	0.627	0.971	0.607	AS4	27.0		
Hotspot	NR Band n14	10	QPSK	E	0085M	1:1	-0.05	793.00	158600	DFT-s-OFDM	0.0	25.0	23.92	25	14	Right	10	0.494	1.282	0.633	0.981	0.613		26.9		
Hotspot	NR Band n14	10	QPSK	E	0085M	1:1	0.05	793.00	158600	CP-OFDM	1.5	23.5	22.51	1	1	Right	10	0.354	1.256	0.445	0.973	0.608		27.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.20 NR Band n26 Standalone SAR

Table 12-69

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n26	20	QPSK	A	0078M	1:1	0.07	831.50	166300	DFT-s-OFDM	0.0	25.0	24.22	1	53	Right Cheek	0	63	0.077	1.197	0.092	0.305	0.191		35.3		
Head	NR Band n26	20	QPSK	A	0078M	1:1	-0.05	831.50	166300	DFT-s-OFDM	0.0	25.0	24.11	50	28	Right Cheek	0	63	0.078	1.227	0.096	0.317	0.198		35.1		
Head	NR Band n26	20	QPSK	A	0095M	1:1	-0.15	831.50	166300	DFT-s-OFDM	0.0	25.0	24.22	1	53	Right Tilt	0	63	0.024	1.197	0.029	0.095	0.059		40.4		
Head	NR Band n26	20	QPSK	A	0095M	1:1	-0.09	831.50	166300	DFT-s-OFDM	0.0	25.0	24.11	50	28	Right Tilt	0	63	0.022	1.227	0.027	0.089	0.056		40.6		
Head	NR Band n26	20	QPSK	A	0078M	1:1	0.02	831.50	166300	DFT-s-OFDM	0.0	25.0	24.22	1	53	Left Cheek	0	63	0.088	1.197	0.105	0.349	0.218		34.7	34.5	30.2
Head	NR Band n26	20	QPSK	A	0078M	1:1	-0.12	831.50	166300	DFT-s-OFDM	0.0	25.0	24.11	50	28	Left Cheek	0	63	0.090	1.227	0.110	0.366	0.229		34.5		
Head	NR Band n26	20	QPSK	A	0078M	1:1	0.02	831.50	166300	CP-OFDM	1.5	23.5	22.65	1	1	Left Cheek	0	63	0.050	1.216	0.061	0.284	0.178		35.6		
Head	NR Band n26	20	QPSK	A	0095M	1:1	-0.14	831.50	166300	DFT-s-OFDM	0.0	25.0	24.22	1	53	Left Tilt	0	63	0.024	1.197	0.029	0.095	0.059		40.4		
Head	NR Band n26	20	QPSK	A	0095M	1:1	0.06	831.50	166300	DFT-s-OFDM	0.0	25.0	24.11	50	28	Left Tilt	0	63	0.023	1.227	0.028	0.093	0.058		40.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-70

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n26	20	QPSK	E	0085M	1:1	0.03	831.50	166300	DFT-s-OFDM	0.0	22.0	21.23	1	1	Right Cheek	0	0.639	1.194	0.763	0.763	0.477		23.1		
Head	NR Band n26	20	QPSK	E	0085M	1:1	-0.01	831.50	166300	DFT-s-OFDM	0.0	22.0	21.06	50	28	Right Cheek	0	0.651	1.242	0.809	0.809	0.506		22.9		
Head	NR Band n26	20	QPSK	E	0085M	1:1	0.04	831.50	166300	DFT-s-OFDM	0.0	22.0	21.05	100	0	Right Cheek	0	0.629	1.245	0.783	0.783	0.489		23.0		
Head	NR Band n26	20	QPSK	E	0085M	1:1	-0.05	831.50	166300	DFT-s-OFDM	0.0	22.0	21.23	1	1	Right Tilt	0	0.482	1.194	0.576	0.576	0.360		24.3		
Head	NR Band n26	20	QPSK	E	0085M	1:1	0.01	831.50	166300	DFT-s-OFDM	0.0	22.0	21.06	50	28	Right Tilt	0	0.531	1.242	0.660	0.660	0.413		23.8		
Head	NR Band n26	20	QPSK	E	0078M	1:1	0.06	831.50	166300	DFT-s-OFDM	0.0	22.0	21.23	1	1	Left Cheek	0	0.755	1.194	0.901	0.901	0.563		22.4	22.1	21.0
Head	NR Band n26	20	QPSK	E	0078M	1:1	-0.01	831.50	166300	DFT-s-OFDM	0.0	22.0	21.06	50	28	Left Cheek	0	0.777	1.242	0.965	0.965	0.603	A55	22.1		
Head	NR Band n26	20	QPSK	E	0078M	1:1	-0.03	831.50	166300	DFT-s-OFDM	0.0	22.0	21.05	100	0	Left Cheek	0	0.759	1.245	0.945	0.945	0.591		22.2		
Head	NR Band n26	20	QPSK	E	0078M	1:1	0.08	831.50	166300	CP-OFDM	0.0	22.0	21.24	1	1	Left Cheek	0	0.743	1.191	0.885	0.885	0.553		22.5		
Head	NR Band n26	20	QPSK	E	0078M	1:1	0.06	831.50	166300	DFT-s-OFDM	0.0	22.0	21.23	1	1	Left Tilt	0	0.666	1.194	0.795	0.795	0.497		22.9		
Head	NR Band n26	20	QPSK	E	0078M	1:1	0.07	831.50	166300	DFT-s-OFDM	0.0	22.0	21.06	50	28	Left Tilt	0	0.714	1.242	0.887	0.887	0.554		22.5		
Head	NR Band n26	20	QPSK	E	0078M	1:1	0.02	831.50	166300	DFT-s-OFDM	0.0	22.0	21.05	100	0	Left Tilt	0	0.679	1.245	0.845	0.845	0.528		22.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-71

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	-0.06	831.50	166300	DFT-s-OFDM	0.0	25.0	24.22	1	53	Back	10	63	0.234	1.197	0.280	0.572	0.358		30.5		
Body-worn/Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	-0.05	831.50	166300	DFT-s-OFDM	0.0	25.0	24.11	50	28	Back	10	63	0.234	1.227	0.287	0.586	0.366		30.4		
Body-worn/Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	0.00	831.50	166300	CP-OFDM	1.5	23.5	22.65	1	1	Back	10	63	0.149	1.216	0.181	0.523	0.327		30.9		
Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	0.01	831.50	166300	DFT-s-OFDM	0.0	25.0	24.22	1	53	Front	10	63	0.158	1.197	0.189	0.386	0.241		32.2		
Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	-0.05	831.50	166300	DFT-s-OFDM	0.0	25.0	24.11	50	28	Front	10	63	0.160	1.227	0.196	0.401	0.251		32.0		
Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	-0.02	831.50	166300	DFT-s-OFDM	0.0	25.0	24.22	1	53	Bottom	10	63	0.062	1.197	0.074	0.151	0.094		36.2		
Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	-0.05	831.50	166300	DFT-s-OFDM	0.0	25.0	24.11	50	28	Bottom	10	63	0.063	1.227	0.077	0.158	0.099		36.1		
Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	-0.14	831.50	166300	DFT-s-OFDM	0.0	25.0	24.22	1	53	Right	10	63	0.078	1.197	0.093	0.191	0.119		35.2		
Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	-0.20	831.50	166300	DFT-s-OFDM	0.0	25.0	24.11	50	28	Right	10	63	0.080	1.227	0.098	0.200	0.125		35.0		
Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	0.02	831.50	166300	DFT-s-OFDM	0.0	25.0	24.22	1	53	Left	10	63	0.130	1.197	0.156	0.318	0.199		33.0		
Hotspot	NR Band n26	20	QPSK	A	0078M	1:1	-0.04	831.50	166300	DFT-s-OFDM	0.0	25.0	24.11	50	28	Left	10	63	0.127	1.227	0.156	0.318	0.199		33.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-72

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n26	20	QPSK	E	0078M	1:1	-0.01	831.50	166300	DFT-s-OFDM	0.0	25.0	24.36	1	53	Back	10	0.411	1.159	0.476	0.847	0.529		28.2		
Body-worn/Hotspot	NR Band n26	20	QPSK	E	0078M	1:1	-0.05	831.50	166300	DFT-s-OFDM	0.0	25.0	24.42	50	28	Back	10	0.422	1.143	0.482	0.858	0.536	A56	28.1		
Hotspot	NR Band n26	20	QPSK	E	0085M	1:1	-0.02	831.50	166300	DFT-s-OFDM	0.0	25.0	24.36	1	53	Front	10	0.354	1.159	0.410	0.730	0.456		28.8		
Hotspot	NR Band n26	20	QPSK	E	0085M	1:1	0.04	831.50	166300	DFT-s-OFDM	0.0	25.0	24.42	50	28	Front	10	0.417	1.143	0.477	0.847	0.529		28.2		
Hotspot	NR Band n26	20	QPSK	E	0078M	1:1	-0.02	831.50	166300	DFT-s-OFDM	0.0	25.0	24.36	1	53	Top	10	0.475	1.159	0.551	0.979	0.612		27.5	27.5	27.5
Hotspot	NR Band n26	20	QPSK	E	0078M	1:1	-0.02	831.50	166300	DFT-s-OFDM	0.0	25.0	24.42	50	28	Top	10	0.483	1.143	0.552	0.981	0.613	A57	27.5		
Hotspot	NR Band n26	20	QPSK	E	0085M	1:1	-0.06	831.50	166300	CP-OFDM	1.5	23.5	22.83	1	1	Top	10	0.286	1.167	0.334	0.838	0.524		28.2		
Hotspot	NR Band n26	20	QPSK	E	0085M	1:1	-0.06	831.50	166300	DFT-s-OFDM	0.0	25.0	24.36	1	53	Right	10	0.294	1.159	0.341	0.606	0.379		29.6		
Hotspot	NR Band n26	20	QPSK	E	0085M	1:1	0.01	831.50	166300	DFT-s-OFDM	0.0	25.0	24.42	50	28	Right	10	0.307	1.143	0.351	0.624	0.390		29.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.21 NR Band n70 Standalone SAR

Table 12-73

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n70	15	QPSK	A	0085M	1:1	0.17	1702.50	340500	DFT-s-OFDM	0.0	24.5	23.67	1	1	Right Cheek	0	100	0.098	1.211	0.119	0.334	0.209		33.7		
Head	NR Band n70	15	QPSK	A	0085M	1:1	0.13	1702.50	340500	DFT-s-OFDM	0.0	24.5	23.66	36	22	Right Cheek	0	100	0.118	1.213	0.143	0.404	0.253		32.9		
Head	NR Band n70	15	QPSK	A	0085M	1:1	0.09	1702.50	340500	CP-OFDM	1.5	23.0	22.33	1	1	Right Cheek	0	100	0.087	1.167	0.102	0.404	0.253		32.9		
Head	NR Band n70	15	QPSK	A	0085M	1:1	0.08	1702.50	340500	DFT-s-OFDM	0.0	24.5	23.67	1	1	Right Tilt	0	100	0.063	1.211	0.076	0.215	0.134		35.6		
Head	NR Band n70	15	QPSK	A	0085M	1:1	0.08	1702.50	340500	DFT-s-OFDM	0.0	24.5	23.66	36	22	Right Tilt	0	100	0.060	1.213	0.073	0.205	0.128		35.8	32.9	29.0
Head	NR Band n70	15	QPSK	A	0085M	1:1	-0.04	1702.50	340500	DFT-s-OFDM	0.0	24.5	23.67	1	1	Left Cheek	0	100	0.066	1.211	0.080	0.225	0.141		35.4		
Head	NR Band n70	15	QPSK	A	0085M	1:1	0.06	1702.50	340500	DFT-s-OFDM	0.0	24.5	23.66	36	22	Left Cheek	0	100	0.077	1.213	0.093	0.263	0.164		34.7		
Head	NR Band n70	15	QPSK	A	0085M	1:1	0.03	1702.50	340500	DFT-s-OFDM	0.0	24.5	23.67	1	1	Left Tilt	0	100	0.056	1.211	0.068	0.191	0.119		36.1		
Head	NR Band n70	15	QPSK	A	0085M	1:1	0.07	1702.50	340500	DFT-s-OFDM	0.0	24.5	23.66	36	22	Left Tilt	0	100	0.062	1.213	0.075	0.212	0.133		35.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-74

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n70	15	QPSK	F	0058M	1:1	0.05	1702.50	340500	DFT-s-OFDM	0.0	19.5	18.82	1	77	Right Cheek	0	0.724	1.169	0.846	0.846	0.529		20.2		
Head	NR Band n70	15	QPSK	F	0058M	1:1	0.01	1702.50	340500	DFT-s-OFDM	0.0	19.5	18.52	36	43	Right Cheek	0	0.704	1.253	0.882	0.882	0.551		20.0		
Head	NR Band n70	15	QPSK	F	0058M	1:1	0.00	1702.50	340500	DFT-s-OFDM	0.0	19.5	18.44	75	0	Right Cheek	0	0.709	1.276	0.905	0.905	0.566		19.9		
Head	NR Band n70	15	QPSK	F	0058M	1:1	0.02	1702.50	340500	DFT-s-OFDM	0.0	19.5	18.82	1	77	Right Tilt	0	0.800	1.169	0.935	0.935	0.584	A58	19.7		
Head	NR Band n70	15	QPSK	F	0058M	1:1	-0.01	1702.50	340500	DFT-s-OFDM	0.0	19.5	18.52	36	43	Right Tilt	0	0.789	1.253	0.989	0.989	0.618		19.5		
Head	NR Band n70	15	QPSK	F	0058M	1:1	0.01	1702.50	340500	DFT-s-OFDM	0.0	19.5	18.44	75	0	Right Tilt	0	0.771	1.276	0.984	0.984	0.615		19.5	19.5	18.5
Head	NR Band n70	15	QPSK	F	0058M	1:1	0.02	1702.50	340500	CP-OFDM	0.0	19.5	18.49	1	1	Right Tilt	0	0.779	1.262	0.983	0.983	0.614		19.5		
Head	NR Band n70	15	QPSK	F	0058M	1:1	-0.02	1702.50	340500	DFT-s-OFDM	0.0	19.5	18.82	1	77	Left Cheek	0	0.477	1.169	0.558	0.558	0.349		22.0		
Head	NR Band n70	15	QPSK	F	0058M	1:1	-0.03	1702.50	340500	DFT-s-OFDM	0.0	19.5	18.52	36	43	Left Cheek	0	0.462	1.253	0.579	0.579	0.362		21.8		
Head	NR Band n70	15	QPSK	F	0058M	1:1	-0.05	1702.50	340500	DFT-s-OFDM	0.0	19.5	18.82	1	77	Left Tilt	0	0.607	1.169	0.710	0.710	0.444		20.9		
Head	NR Band n70	15	QPSK	F	0058M	1:1	-0.01	1702.50	340500	DFT-s-OFDM	0.0	19.5	18.52	36	43	Left Tilt	0	0.585	1.253	0.733	0.733	0.458		20.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-75

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n70	15	QPSK	A	0085M	1:1	-0.01	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.93	1	40	Back	10	27	0.447	1.279	0.572	0.572	0.358		22.4		
Body-worn/Hotspot	NR Band n70	15	QPSK	A	0085M	1:1	-0.05	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.94	36	0	Back	10	27	0.469	1.276	0.598	0.598	0.374	A59	22.2		
Hotspot	NR Band n70	15	QPSK	A	0085M	1:1	-0.07	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.93	1	40	Front	10	105	0.388	1.279	0.496	0.496	0.310		23.0		
Hotspot	NR Band n70	15	QPSK	A	0085M	1:1	-0.08	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.94	36	0	Front	10	105	0.407	1.276	0.519	0.519	0.324		22.8		
Hotspot	NR Band n70	15	QPSK	A	0085M	1:1	-0.05	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.93	1	40	Bottom	10	28	0.866	1.279	1.108	1.108	0.693		19.5		
Hotspot	NR Band n70	15	QPSK	A	0085M	1:1	0.00	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.94	36	0	Bottom	10	28	0.903	1.276	1.152	1.152	0.720		19.3	19.2	19.0
Hotspot	NR Band n70	15	QPSK	A	0085M	1:1	0.03	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.88	75	0	Bottom	10	28	0.919	1.294	1.189	1.189	0.743	A60	19.2		
Hotspot	NR Band n70	15	QPSK	A	0085M	1:1	0.12	1702.50	340500	CP-OFDM	0.0	20.0	19.01	1	1	Bottom	10	28	0.899	1.256	1.129	1.129	0.706		19.4		
Hotspot	NR Band n70	15	QPSK	A	0058M	1:1	-0.05	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.93	1	40	Right	10	9	0.060	1.279	0.077	0.077	0.048		31.1		
Hotspot	NR Band n70	15	QPSK	A	0058M	1:1	0.07	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.94	36	0	Right	10	9	0.064	1.276	0.082	0.082	0.051		30.8		
Hotspot	NR Band n70	15	QPSK	A	0058M	1:1	0.10	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.93	1	40	Left	10	9	0.048	1.279	0.061	0.061	0.038		32.1		
Hotspot	NR Band n70	15	QPSK	A	0058M	1:1	-0.09	1702.50	340500	DFT-s-OFDM	0.0	20.0	18.94	36	0	Left	10	9	0.053	1.276	0.068	0.068	0.043		31.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-76

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n70	15	QPSK	F	0085M	1:1	0.00	1702.50	340500	DFT-s-OFDM	0.0	22.0	21.15	1	77	Back	10	10	0.351	1.216	0.427	0.427	0.267		25.6		
Body-worn/Hotspot	NR Band n70	15	QPSK	F	0085M	1:1	0.00	1702.50	340500	DFT-s-OFDM	0.0	22.0	21.05	36	43	Back	10	10	0.346	1.245	0.431	0.431	0.269		25.6		
Hotspot	NR Band n70	15	QPSK	F	0085M	1:1	-0.06	1702.50	340500	DFT-s-OFDM	0.0	22.0	21.15	1	77	Front	10	10	0.187	1.216	0.227	0.227	0.142		28.4		
Hotspot	NR Band n70	15	QPSK	F	0085M	1:1	0.03	1702.50	340500	DFT-s-OFDM	0.0	22.0	21.05	36	43	Front	10	10	0.178	1.245	0.222	0.222	0.139		28.5		
Hotspot	NR Band n70	15	QPSK	F	0085M	1:1	0.04	1702.50	340500	DFT-s-OFDM	0.0	22.0	21.15	1	77	Top	10	10	0.527	1.216	0.641	0.641	0.401		23.9	23.3	21.0
Hotspot	NR Band n70	15	QPSK	F	0085M	1:1	0.03	1702.50	340500	DFT-s-OFDM	0.0	22.0	21.05	36	43	Top	10	10	0.588	1.245	0.732	0.732	0.458		23.3		
Hotspot	NR Band n70	15	QPSK	F	0085M	1:1	0.01	1702.50	340500	CP-OFDM	0.0	22.0	21.14	1	1	Top	10	10	0.531	1.219	0.647	0.647	0.404		23.8		
Hotspot	NR Band n70	15	QPSK	F	0085M	1:1	-0.04	1702.50	340500	DFT-s-OFDM	0.0	22.0	21.15	1	77	Left	10	10	0.160	1.216	0.195	0.195	0.122		29.1		
Hotspot	NR Band n70	15	QPSK	F	0085M	1:1	0.04	1702.50	340500	DFT-s-OFDM	0.0	22.0	21.05	36	43	Left	10	10	0.156	1.245	0.194	0.194	0.121		29.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.22 NR Band n66 Standalone SAR

Table 12-77

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n66	45	QPSK	A	0058M	1:1	0.01	1745.00	349000	DFT-s-OFDM	0.0	24.5	23.63	1	121	Right Cheek	0	99	0.108	1.222	0.132	0.389	0.243		33.2		
Head	NR Band n66	45	QPSK	A	0058M	1:1	-0.06	1745.00	349000	DFT-s-OFDM	0.0	24.5	23.74	120	61	Right Cheek	0	99	0.102	1.191	0.121	0.359	0.224		33.6		
Head	NR Band n66	45	QPSK	A	0058M	1:1	0.02	1745.00	349000	CP-OFDM	1.5	23.0	21.80	1	1	Right Cheek	0	99	0.074	1.318	0.098	0.407	0.254		33.1		
Head	NR Band n66	45	QPSK	A	0058M	1:1	0.02	1745.00	349000	DFT-s-OFDM	0.0	24.5	23.63	1	121	Right Tilt	0	99	0.068	1.222	0.083	0.245	0.153		35.3		
Head	NR Band n66	45	QPSK	A	0058M	1:1	-0.01	1745.00	349000	DFT-s-OFDM	0.0	24.5	23.74	120	61	Right Tilt	0	99	0.061	1.191	0.073	0.214	0.134		35.8	33.1	29.2
Head	NR Band n66	45	QPSK	A	0058M	1:1	0.03	1745.00	349000	DFT-s-OFDM	0.0	24.5	23.63	1	121	Left Cheek	0	99	0.059	1.222	0.072	0.213	0.133		35.9		
Head	NR Band n66	45	QPSK	A	0058M	1:1	-0.06	1745.00	349000	DFT-s-OFDM	0.0	24.5	23.74	120	61	Left Cheek	0	99	0.061	1.191	0.073	0.214	0.134		35.8		
Head	NR Band n66	45	QPSK	A	0058M	1:1	0.06	1745.00	349000	DFT-s-OFDM	0.0	24.5	23.63	1	121	Left Tilt	0	99	0.066	1.222	0.081	0.238	0.149		35.4		
Head	NR Band n66	45	QPSK	A	0058M	1:1	-0.16	1745.00	349000	DFT-s-OFDM	0.0	24.5	23.74	120	61	Left Tilt	0	99	0.070	1.191	0.083	0.246	0.154		35.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-78

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n66	45	QPSK	F	0058M	1:1	0.05	1745.00	349000	DFT-s-OFDM	0.0	19.5	18.87	1	1	Right Cheek	0	0	0.684	1.156	0.791	0.791	0.494		20.5		
Head	NR Band n66	45	QPSK	F	0058M	1:1	0.03	1745.00	349000	DFT-s-OFDM	0.0	19.5	18.64	120	0	Right Cheek	0	0	0.642	1.219	0.783	0.783	0.489		20.5		
Head	NR Band n66	45	QPSK	F	0058M	1:1	0.06	1745.00	349000	DFT-s-OFDM	0.0	19.5	18.87	1	1	Right Tilt	0	0	0.742	1.156	0.858	0.858	0.536		20.1		
Head	NR Band n66	45	QPSK	F	0058M	1:1	0.01	1745.00	349000	DFT-s-OFDM	0.0	19.5	18.64	120	0	Right Tilt	0	0	0.715	1.219	0.872	0.872	0.545		20.0		
Head	NR Band n66	45	QPSK	F	0058M	1:1	0.03	1745.00	349000	DFT-s-OFDM	0.0	19.5	18.57	240	0	Right Tilt	0	0	0.679	1.239	0.841	0.841	0.526		20.2		
Head	NR Band n66	45	QPSK	F	0058M	1:1	-0.11	1745.00	349000	CP-OFDM	0.0	19.5	18.87	1	1	Right Tilt	0	0	0.782	1.156	0.904	0.904	0.565	A61	19.9	19.9	18.5
Head	NR Band n66	45	QPSK	F	0058M	1:1	-0.09	1745.00	349000	DFT-s-OFDM	0.0	19.5	18.87	1	1	Left Cheek	0	0	0.463	1.156	0.535	0.535	0.334		22.2		
Head	NR Band n66	45	QPSK	F	0058M	1:1	-0.01	1745.00	349000	DFT-s-OFDM	0.0	19.5	18.64	120	0	Left Cheek	0	0	0.425	1.219	0.518	0.518	0.324		22.3		
Head	NR Band n66	45	QPSK	F	0058M	1:1	-0.20	1745.00	349000	DFT-s-OFDM	0.0	19.5	18.87	1	1	Left Tilt	0	0	0.571	1.156	0.660	0.660	0.413		21.3		
Head	NR Band n66	45	QPSK	F	0058M	1:1	0.00	1745.00	349000	DFT-s-OFDM	0.0	19.5	18.64	120	0	Left Tilt	0	0	0.533	1.219	0.650	0.650	0.406		21.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-79

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n66	45	QPSK	A	0085M	1:1	-0.04	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.20	1	240	Back	10	99	0.509	1.202	0.612	0.612	0.383	A62	22.1		
Body-worn/Hotspot	NR Band n66	45	QPSK	A	0085M	1:1	-0.02	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.23	120	0	Back	10	18	0.499	1.194	0.596	0.596	0.373		22.2		
Hotspot	NR Band n66	45	QPSK	A	0085M	1:1	-0.04	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.20	1	240	Front	10	99	0.372	1.202	0.447	0.447	0.279		23.4		
Hotspot	NR Band n66	45	QPSK	A	0085M	1:1	-0.06	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.23	120	0	Front	10	99	0.400	1.194	0.478	0.478	0.299		23.2		
Hotspot	NR Band n66	45	QPSK	A	0085M	1:1	-0.03	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.20	1	240	Bottom	10	27	0.853	1.202	1.025	1.025	0.641		19.8		
Hotspot	NR Band n66	45	QPSK	A	0085M	1:1	0.13	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.23	120	0	Bottom	10	27	0.957	1.194	1.143	1.143	0.714		19.4		
Hotspot	NR Band n66	45	QPSK	A	0085M	1:1	-0.02	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.19	240	0	Bottom	10	27	0.942	1.205	1.135	1.135	0.709		19.4		
Hotspot	NR Band n66	45	QPSK	A	0085M	1:1	0.01	1745.00	349000	CP-OFDM	0.0	20.0	19.16	1	1	Bottom	10	28	0.980	1.213	1.189	1.189	0.743	A63	19.2	19.2	19.0
Hotspot	NR Band n66	45	QPSK	A	0085M	1:1	0.02	1745.00	349000	CP-OFDM	0.0	20.0	19.16	1	1	Bottom	10	28	0.984	1.213	1.193	1.193	0.708		19.4		
Hotspot	NR Band n66	45	QPSK	A	0058M	1:1	-0.05	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.20	1	240	Right	10	99	0.078	1.202	0.094	0.094	0.059		30.2		
Hotspot	NR Band n66	45	QPSK	A	0058M	1:1	-0.10	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.23	120	0	Right	10	99	0.071	1.194	0.085	0.085	0.053		30.7		
Hotspot	NR Band n66	45	QPSK	A	0058M	1:1	0.07	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.20	1	240	Left	10	99	0.053	1.202	0.064	0.064	0.040		31.9		
Hotspot	NR Band n66	45	QPSK	A	0058M	1:1	0.07	1745.00	349000	DFT-s-OFDM	0.0	20.0	19.23	120	0	Left	10	99	0.053	1.194	0.063	0.063	0.039		31.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

Note: Blue entry represents variability measurement

Table 12-80

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n66	45	QPSK	F	0085M	1:1	-0.05	1745.00	349000	DFT-s-OFDM	0.0	21.5	21.43	1	1	Back	10	0.334	1.016	0.339	0.339	0.212		26.1		
Body-worn/Hotspot	NR Band n66	45	QPSK	F	0085M	1:1	-0.02	1745.00	349000	DFT-s-OFDM	0.0	21.5	21.19	120	0	Back	10	0.306	1.074	0.329	0.329	0.206		26.3		
Hotspot	NR Band n66	45	QPSK	F	0085M	1:1	-0.05	1745.00	349000	DFT-s-OFDM	0.0	21.5	21.43	1	1	Front	10	0.162	1.016	0.165	0.165	0.103		29.3		
Hotspot	NR Band n66	45	QPSK	F	0085M	1:1	0.01	1745.00	349000	DFT-s-OFDM	0.0	21.5	21.19	120	0	Front	10	0.149	1.074	0.160	0.160	0.100		29.4		
Hotspot	NR Band n66	45	QPSK	F	0085M	1:1	0.00	1745.00	349000	DFT-s-OFDM	0.0	21.5	21.43	1	1	Top	10	0.491	1.016	0.499	0.499	0.312		24.5	24.3	20.5
Hotspot	NR Band n66	45	QPSK	F	0085M	1:1	0.00	1745.00	349000	DFT-s-OFDM	0.0	21.5	21.19	120	0	Top	10	0.467	1.074	0.502	0.502	0.314		24.4		
Hotspot	NR Band n66	45	QPSK	F	0085M	1:1	0.00	1745.00	349000	CP-OFDM	0.0	21.5	21.31	1	1	Top	10	0.502	1.045	0.525	0.525	0.328		24.3		
Hotspot	NR Band n66	45	QPSK	F	0085M	1:1	0.01	1745.00	349000	DFT-s-OFDM	0.0	21.5	21.43	1	1	Left	10	0.139	1.016	0.141	0.141	0.088		29.9		
Hotspot	NR Band n66	45	QPSK	F	0085M	1:1	-0.05	1745.00	349000	DFT-s-OFDM	0.0	21.5	21.19	120	0	Left	10	0.128	1.074	0.137	0.137	0.086		30.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.23 NR Band n25 Standalone SAR

Table 12-81

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n25	40	QPSK	A	0058M	1:1	-0.02	1882.50	376500	DFT-s-OFDM	0.0	24.5	23.61	1	108	Right Cheek	0	112	0.093	1.227	0.114	0.329	0.206		33.9		
Head	NR Band n25	40	QPSK	A	0058M	1:1	0.01	1882.50	376500	DFT-s-OFDM	0.0	24.5	23.56	108	54	Right Cheek	0	112	0.101	1.242	0.125	0.362	0.226		33.5		
Head	NR Band n25	40	QPSK	A	0058M	1:1	0.03	1882.50	376500	CP-OFDM	1.5	23.0	22.04	1	1	Right Cheek	0	112	0.065	1.247	0.081	0.330	0.206		33.9		
Head	NR Band n25	40	QPSK	A	0058M	1:1	-0.07	1882.50	376500	DFT-s-OFDM	0.0	24.5	23.61	1	108	Right Tilt	0	112	0.052	1.227	0.064	0.184	0.115		36.4		
Head	NR Band n25	40	QPSK	A	0058M	1:1	-0.11	1882.50	376500	DFT-s-OFDM	0.0	24.5	23.56	108	54	Right Tilt	0	112	0.057	1.242	0.071	0.204	0.128		36.0	33.5	29.1
Head	NR Band n25	40	QPSK	A	0058M	1:1	0.03	1882.50	376500	DFT-s-OFDM	0.0	24.5	23.61	1	108	Left Cheek	0	112	0.086	1.227	0.106	0.304	0.190		34.2		
Head	NR Band n25	40	QPSK	A	0058M	1:1	-0.09	1882.50	376500	DFT-s-OFDM	0.0	24.5	23.56	108	54	Left Cheek	0	112	0.097	1.242	0.120	0.347	0.217		33.6		
Head	NR Band n25	40	QPSK	A	0058M	1:1	0.08	1882.50	376500	DFT-s-OFDM	0.0	24.5	23.61	1	108	Left Tilt	0	112	0.094	1.227	0.115	0.333	0.208		33.8		
Head	NR Band n25	40	QPSK	A	0058M	1:1	0.08	1882.50	376500	DFT-s-OFDM	0.0	24.5	23.56	108	54	Left Tilt	0	112	0.078	1.242	0.097	0.279	0.174		34.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-82

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n25	40	QPSK	F	0058M	1:1	0.01	1882.50	376500	DFT-s-OFDM	0.0	19.5	18.61	1	1	Right Cheek	0	0.502	1.227	0.616	0.616	0.385		21.6		
Head	NR Band n25	40	QPSK	F	0058M	1:1	-0.02	1882.50	376500	DFT-s-OFDM	0.0	19.5	18.48	108	54	Right Cheek	0	0.504	1.265	0.638	0.638	0.399		21.4		
Head	NR Band n25	40	QPSK	F	0058M	1:1	0.02	1882.50	376500	DFT-s-OFDM	0.0	19.5	18.61	1	1	Right Tilt	0	0.630	1.227	0.773	0.773	0.483		20.6		
Head	NR Band n25	40	QPSK	F	0058M	1:1	0.00	1882.50	376500	DFT-s-OFDM	0.0	19.5	18.48	108	54	Right Tilt	0	0.653	1.265	0.826	0.826	0.516		20.3		
Head	NR Band n25	40	QPSK	F	0058M	1:1	0.00	1882.50	376500	DFT-s-OFDM	0.0	19.5	18.47	216	0	Right Tilt	0	0.691	1.268	0.876	0.876	0.548	A64	20.0	20.0	18.5
Head	NR Band n25	40	QPSK	F	0058M	1:1	0.00	1882.50	376500	CP-OFDM	0.0	19.5	18.73	1	1	Right Tilt	0	0.652	1.194	0.778	0.778	0.486		20.5		
Head	NR Band n25	40	QPSK	F	0058M	1:1	-0.03	1882.50	376500	DFT-s-OFDM	0.0	19.5	18.61	1	1	Left Cheek	0	0.411	1.227	0.504	0.504	0.315		22.4		
Head	NR Band n25	40	QPSK	F	0058M	1:1	-0.05	1882.50	376500	DFT-s-OFDM	0.0	19.5	18.48	108	54	Left Cheek	0	0.418	1.265	0.529	0.529	0.331		22.2		
Head	NR Band n25	40	QPSK	F	0058M	1:1	-0.12	1882.50	376500	DFT-s-OFDM	0.0	19.5	18.61	1	1	Left Tilt	0	0.512	1.227	0.628	0.628	0.393		21.5		
Head	NR Band n25	40	QPSK	F	0058M	1:1	-0.03	1882.50	376500	DFT-s-OFDM	0.0	19.5	18.48	108	54	Left Tilt	0	0.544	1.265	0.688	0.688	0.430		21.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-83

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Tune state	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n25	40	QPSK	A	0085M	1:1	-0.03	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.87	1	108	Back	10	109	0.397	1.297	0.515	0.515	0.322		21.8		
Body-worn/Hotspot	NR Band n25	40	QPSK	A	0085M	1:1	-0.05	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.86	108	0	Back	10	109	0.406	1.300	0.528	0.528	0.330	A65	21.7		
Hotspot	NR Band n25	40	QPSK	A	0085M	1:1	-0.09	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.87	1	108	Front	10	109	0.319	1.297	0.414	0.414	0.259		22.8		
Hotspot	NR Band n25	40	QPSK	A	0085M	1:1	-0.09	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.86	108	0	Front	10	109	0.332	1.300	0.432	0.432	0.270		22.6		
Hotspot	NR Band n25	40	QPSK	A	0085M	1:1	0.01	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.87	1	108	Bottom	10	99	0.851	1.297	1.104	1.104	0.690		18.5		
Hotspot	NR Band n25	40	QPSK	A	0085M	1:1	0.00	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.86	108	0	Bottom	10	99	0.873	1.300	1.135	1.135	0.709	A66	18.4	18.3	18.0
Hotspot	NR Band n25	40	QPSK	A	0085M	1:1	-0.01	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.74	216	0	Bottom	10	99	0.866	1.337	1.158	1.158	0.724		18.3		
Hotspot	NR Band n25	40	QPSK	A	0085M	1:1	-0.03	1882.50	376500	CP-OFDM	0.0	19.0	17.92	1	1	Bottom	10	99	0.871	1.282	1.117	1.117	0.698		18.5		
Hotspot	NR Band n25	40	QPSK	A	0058M	1:1	-0.21	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.87	1	108	Right	10	109	0.046	1.297	0.060	0.060	0.038		31.2		
Hotspot	NR Band n25	40	QPSK	A	0058M	1:1	0.03	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.86	108	0	Right	10	109	0.050	1.300	0.065	0.065	0.041		30.8		
Hotspot	NR Band n25	40	QPSK	A	0058M	1:1	0.02	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.87	1	108	Left	10	109	0.041	1.297	0.053	0.053	0.033		31.7		
Hotspot	NR Band n25	40	QPSK	A	0058M	1:1	-0.06	1882.50	376500	DFT-s-OFDM	0.0	19.0	17.86	108	0	Left	10	109	0.043	1.300	0.056	0.056	0.035		31.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-84

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n25	40	QPSK	F	0085M	1:1	-0.03	1882.50	376500	DFT-s-OFDM	0.0	21.0	20.14	1	1	Back	10	0.234	1.219	0.285	0.285	0.178		26.4		
Body-worn/Hotspot	NR Band n25	40	QPSK	F	0085M	1:1	0.03	1882.50	376500	DFT-s-OFDM	0.0	21.0	20.00	108	54	Back	10	0.237	1.259	0.298	0.298	0.186		26.2		
Hotspot	NR Band n25	40	QPSK	F	0085M	1:1	0.04	1882.50	376500	DFT-s-OFDM	0.0	21.0	20.14	1	1	Front	10	0.097	1.219	0.118	0.118	0.074		30.2		
Hotspot	NR Band n25	40	QPSK	F	0085M	1:1	-0.03	1882.50	376500	DFT-s-OFDM	0.0	21.0	20.00	108	54	Front	10	0.096	1.259	0.121	0.121	0.076		30.1		
Hotspot	NR Band n25	40	QPSK	F	0067M	1:1	-0.02	1882.50	376500	DFT-s-OFDM	0.0	21.0	20.14	1	1	Top	10	0.432	1.219	0.527	0.527	0.329		23.7	23.4	20.0
Hotspot	NR Band n25	40	QPSK	F	0067M	1:1	-0.03	1882.50	376500	DFT-s-OFDM	0.0	21.0	20.00	108	54	Top	10	0.447	1.259	0.563	0.563	0.352		23.4		
Hotspot	NR Band n25	40	QPSK	F	0067M	1:1	0.06	1882.50	376500	CP-OFDM	0.0	21.0	20.20	1	1	Top	10	0.462	1.202	0.555	0.555	0.347		23.5		
Hotspot	NR Band n25	40	QPSK	F	0085M	1:1	-0.09	1882.50	376500	DFT-s-OFDM	0.0	21.0	20.14	1	1	Left	10	0.045	1.219	0.055	0.055	0.034		33.6		
Hotspot	NR Band n25	40	QPSK	F	0085M	1:1	0.04	1882.50	376500	DFT-s-OFDM	0.0	21.0	20.00	108	54	Left	10	0.050	1.259	0.063	0.063	0.039		33.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.24 NR Band n30 Standalone SAR

Table 12-85

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n30	10	QPSK	A	0042M	1:1	0.01	2310.00	462000	DFT-s-OFDM	0.0	23.5	22.19	1	1	Right Cheek	0	0.004	1.352	0.005	0.059	0.037		46.1		
Head	NR Band n30	10	QPSK	A	0042M	1:1	0.01	2310.00	462000	DFT-s-OFDM	0.0	23.5	22.20	25	14	Right Cheek	0	0.008	1.349	0.011	0.118	0.074		43.1		
Head	NR Band n30	10	QPSK	A	0042M	1:1	0.02	2310.00	462000	DFT-s-OFDM	0.0	23.5	22.19	1	1	Right Tilt	0	0.004	1.352	0.005	0.059	0.037		46.1		
Head	NR Band n30	10	QPSK	A	0042M	1:1	0.06	2310.00	462000	DFT-s-OFDM	0.0	23.5	22.20	25	14	Right Tilt	0	0.004	1.349	0.005	0.059	0.037		46.1		
Head	NR Band n30	10	QPSK	A	0042M	1:1	0.01	2310.00	462000	DFT-s-OFDM	0.0	23.5	22.19	1	1	Left Cheek	0	0.023	1.352	0.031	0.341	0.213		38.5	38.2	33.9
Head	NR Band n30	10	QPSK	A	0042M	1:1	0.02	2310.00	462000	DFT-s-OFDM	0.0	23.5	22.20	25	14	Left Cheek	0	0.025	1.349	0.034	0.370	0.231		38.2		
Head	NR Band n30	10	QPSK	A	0042M	1:1	0.09	2310.00	462000	CP-OFDM	1.5	22.0	20.87	1	1	Left Cheek	0	0.016	1.297	0.021	0.321	0.201		38.8		
Head	NR Band n30	10	QPSK	A	0042M	1:1	0.05	2310.00	462000	DFT-s-OFDM	0.0	23.5	22.19	1	1	Left Tilt	0	0.012	1.352	0.016	0.178	0.111		41.3		
Head	NR Band n30	10	QPSK	A	0042M	1:1	0.06	2310.00	462000	DFT-s-OFDM	0.0	23.5	22.20	25	14	Left Tilt	0	0.014	1.349	0.019	0.207	0.129		40.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-86

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n30	10	QPSK	F	0042M	1:1	0.05	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.28	1	26	Right Cheek	0	0.732	1.486	1.088	1.088	0.680		17.6		
Head	NR Band n30	10	QPSK	F	0042M	1:1	-0.12	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.41	25	14	Right Cheek	0	0.753	1.442	1.086	1.086	0.679		17.6		
Head	NR Band n30	10	QPSK	F	0042M	1:1	-0.01	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.25	50	0	Right Cheek	0	0.755	1.496	1.129	1.129	0.706		17.4		
Head	NR Band n30	10	QPSK	F	0042M	1:1	0.07	2310.00	462000	CP-OFDM	0.0	18.0	16.08	1	1	Right Cheek	0	0.763	1.556	1.187	1.187	0.742	A67	17.2		
Head	NR Band n30	10	QPSK	F	0042M	1:1	-0.01	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.28	1	26	Right Tilt	0	0.708	1.486	1.052	1.052	0.658		17.7		
Head	NR Band n30	10	QPSK	F	0042M	1:1	0.00	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.41	25	14	Right Tilt	0	0.717	1.442	1.034	1.034	0.646		17.8	17.2	17.0
Head	NR Band n30	10	QPSK	F	0042M	1:1	0.04	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.25	50	0	Right Tilt	0	0.760	1.496	1.137	1.137	0.711		17.4		
Head	NR Band n30	10	QPSK	F	0042M	1:1	-0.01	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.28	1	26	Left Cheek	0	0.374	1.486	0.556	0.556	0.348		20.5		
Head	NR Band n30	10	QPSK	F	0042M	1:1	-0.02	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.41	25	14	Left Cheek	0	0.386	1.442	0.557	0.557	0.348		20.5		
Head	NR Band n30	10	QPSK	F	0042M	1:1	0.00	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.28	1	26	Left Tilt	0	0.551	1.486	0.819	0.819	0.512		18.8		
Head	NR Band n30	10	QPSK	F	0042M	1:1	-0.03	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.41	25	14	Left Tilt	0	0.549	1.442	0.792	0.792	0.495		19.0		
Head	NR Band n30	10	QPSK	F	0042M	1:1	0.07	2310.00	462000	DFT-s-OFDM	0.0	18.0	16.25	50	0	Left Tilt	0	0.568	1.496	0.850	0.850	0.531		18.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-87

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	0.02	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.29	1	1	Back	10	0.307	1.321	0.406	0.406	0.254		24.4		
Body-worn/Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	0.05	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.26	25	14	Back	10	0.309	1.330	0.411	0.411	0.257	A68	24.3		
Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	-0.02	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.29	1	1	Front	10	0.248	1.321	0.328	0.328	0.205		25.3		
Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	0.08	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.26	25	14	Front	10	0.265	1.330	0.352	0.352	0.220		25.0		
Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	-0.03	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.29	1	1	Bottom	10	0.779	1.321	1.029	1.029	0.643		20.3		
Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	-0.03	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.26	25	14	Bottom	10	0.759	1.330	1.009	1.009	0.631		20.4		
Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	-0.09	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.13	50	0	Bottom	10	0.772	1.371	1.058	1.058	0.661		20.2		
Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	0.03	2310.00	462000	CP-OFDM	0.0	20.5	19.40	1	1	Bottom	10	0.781	1.288	1.006	1.006	0.629	A69	20.4		
Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	0.01	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.29	1	1	Right	10	0.051	1.321	0.067	0.067	0.042		32.2		
Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	0.03	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.26	25	14	Right	10	0.052	1.330	0.069	0.069	0.043		32.0		
Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	-0.04	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.29	1	1	Left	10	0.054	1.321	0.071	0.071	0.044		31.9		
Hotspot	NR Band n30	10	QPSK	A	0042M	1:1	0.02	2310.00	462000	DFT-s-OFDM	0.0	20.5	19.26	25	14	Left	10	0.052	1.330	0.069	0.069	0.043		32.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-88

xposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n30	10	QPSK	F	0042M	1:1	0.03	2310.00	462000	DFT-s-OFDM	0.0	21.0	19.20	1	26	Back	10	0.225	1.514	0.341	0.341	0.213		25.6		
Body-worn/Hotspot	NR Band n30	10	QPSK	F	0042M	1:1	0.02	2310.00	462000	DFT-s-OFDM	0.0	21.0	19.27	25	0	Back	10	0.239	1.489	0.356	0.356	0.223		25.4		
Hotspot	NR Band n30	10	QPSK	F	0042M	1:1	0.02	2310.00	462000	DFT-s-OFDM	0.0	21.0	19.20	1	26	Front	10	0.233	1.514	0.353	0.353	0.221		25.5		
Hotspot	NR Band n30	10	QPSK	F	0042M	1:1	0.01	2310.00	462000	DFT-s-OFDM	0.0	21.0	19.27	25	0	Front	10	0.229	1.489	0.341	0.341	0.213		25.6		
Hotspot	NR Band n30	10	QPSK	F	0042M	1:1	-0.01	2310.00	462000	DFT-s-OFDM	0.0	21.0	19.20	1	26	Top	10	0.606	1.514	0.917	0.917	0.573		21.3		
Hotspot	NR Band n30	10	QPSK	F	0042M	1:1	0.05	2310.00	462000	DFT-s-OFDM	0.0	21.0	19.27	25	0	Top	10	0.632	1.489	0.941	0.941	0.588		21.2		
Hotspot	NR Band n30	10	QPSK	F	0042M	1:1	0.01	2310.00	462000	DFT-s-OFDM	0.0	21.0	19.19	50	0	Top	10	0.625	1.517	0.948	0.948	0.593		21.2		
Hotspot	NR Band n30	10	QPSK	F	0042M	1:1	-0.18	2310.00	462000	CP-OFDM	0.0	21.0	19.33	1	1	Top	10	0.626	1.469	0.920	0.920	0.575		21.3		
Hotspot	NR Band n30	10	QPSK	F	0042M	1:1	0.05	2310.00	462000	DFT-s-OFDM	0.0	21.0	19.20	1	26	Left	10	0.063	1.514	0.095	0.095	0.059		31.2		
Hotspot	NR Band n30	10	QPSK	F	0042M	1:1	0.00	2310.00	462000	DFT-s-OFDM	0.0	21.0	19.27	25	0	Left	10	0.066	1.489	0.098	0.098	0.061		31.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

12.25 NR Band n7 Standalone SAR

Table 12-89

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n7	50	QPSK	B	0042M	1:1	0.02	2535.00	507000	DFT-s-OFDM	0.0	24.5	23.56	1	1	Right Cheek	0	0.127	1.242	0.158	0.370	0.231		32.5		
Head	NR Band n7	50	QPSK	B	0042M	1:1	0.06	2535.00	507000	DFT-s-OFDM	0.0	24.5	23.28	135	68	Right Cheek	0	0.120	1.324	0.159	0.373	0.233		32.4		
Head	NR Band n7	50	QPSK	B	0042M	1:1	0.03	2535.00	507000	CP-OFDM	1.5	23.0	22.17	1	1	Right Cheek	0	0.100	1.211	0.121	0.401	0.251		32.1		
Head	NR Band n7	50	QPSK	B	0042M	1:1	-0.19	2535.00	507000	DFT-s-OFDM	0.0	24.5	23.56	1	1	Right Tilt	0	0.055	1.242	0.068	0.160	0.100		36.1		
Head	NR Band n7	50	QPSK	B	0042M	1:1	-0.07	2535.00	507000	DFT-s-OFDM	0.0	24.5	23.28	135	68	Right Tilt	0	0.058	1.324	0.077	0.180	0.113		35.6	32.1	28.2
Head	NR Band n7	50	QPSK	B	0042M	1:1	0.01	2535.00	507000	DFT-s-OFDM	0.0	24.5	23.56	1	1	Left Cheek	0	0.055	1.242	0.068	0.160	0.100		36.1		
Head	NR Band n7	50	QPSK	B	0042M	1:1	0.06	2535.00	507000	DFT-s-OFDM	0.0	24.5	23.28	135	68	Left Cheek	0	0.059	1.324	0.078	0.183	0.114		35.5		
Head	NR Band n7	50	QPSK	B	0042M	1:1	0.02	2535.00	507000	DFT-s-OFDM	0.0	24.5	23.56	1	1	Left Tilt	0	0.072	1.242	0.089	0.210	0.131		34.9		
Head	NR Band n7	50	QPSK	B	0042M	1:1	0.04	2535.00	507000	DFT-s-OFDM	0.0	24.5	23.28	135	68	Left Tilt	0	0.069	1.324	0.091	0.214	0.134		34.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 12-90

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n7	50	QPSK	F	0042M	1:1	-0.02	2535.00	507000	DFT-s-OFDM	0.0	17.0	16.31	1	1	Right Cheek	0	0.726	1.172	0.851	0.851	0.532		17.7		
Head	NR Band n7	50	QPSK	F	0042M	1:1	0.00	2535.00	507000	DFT-s-OFDM	0.0	17.0	16.24	135	0	Right Cheek	0	0.647	1.191	0.771	0.771	0.482		18.1		
Head	NR Band n7	50	QPSK	F	0042M	1:1	-0.01	2535.00	507000	DFT-s-OFDM	0.0	17.0	16.15	270	0	Right Cheek	0	0.629	1.216	0.765	0.765	0.478		18.1		
Head	NR Band n7	50	QPSK	F	0042M	1:1	0.00	2535.00	507000	DFT-s-OFDM	0.0	17.0	16.31	1	1	Right Tilt	0	0.909	1.172	1.065	1.065	0.666		16.7		
Head	NR Band n7	50	QPSK	F	0042M	1:1	-0.01	2535.00	507000	DFT-s-OFDM	0.0	17.0	16.24	135	0	Right Tilt	0	0.840	1.191	1.000	1.000	0.625		16.9		
Head	NR Band n7	50	QPSK	F	0042M	1:1	0.01	2535.00	507000	DFT-s-OFDM	0.0	17.0	16.15	270	0	Right Tilt	0	0.790	1.216	0.961	0.961	0.601		17.1	16.5	16.0
Head	NR Band n7	50	QPSK	F	0042M	1:1	0.01	2535.00	507000	CP-OFDM	0.0	17.0	16.38	1	1	Right Tilt	0	0.872	1.153	1.006	1.006	0.629		16.6		
Head	NR Band n7	50	QPSK	F	0042M	1:1	0.01	2535.00	507000	CP-OFDM	0.0	17.0	16.38	1	1	Right Tilt	0	0.966	1.153	1.114	1.114	0.696	A70	16.5		
Head	NR Band n7	50	QPSK	F	0042M	1:1	-0.02	2535.00	507000	DFT-s-OFDM	0.0	17.0	16.31	1	1	Left Cheek	0	0.367	1.172	0.430	0.430	0.269		20.6		
Head	NR Band n7	50	QPSK	F	0042M	1:1	-0.03	2535.00	507000	DFT-s-OFDM	0.0	17.0	16.24	135	0	Left Cheek	0	0.324	1.191	0.386	0.386	0.241		21.1		
Head	NR Band n7	50	QPSK	F	0042M	1:1	-0.03	2535.00	507000	DFT-s-OFDM	0.0	17.0	16.31	1	1	Left Tilt	0	0.404	1.172	0.473	0.473	0.296		20.2		
Head	NR Band n7	50	QPSK	F	0042M	1:1	-0.04	2535.00	507000	DFT-s-OFDM	0.0	17.0	16.24	135	0	Left Tilt	0	0.350	1.191	0.417	0.417	0.261		20.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram									

Note: Blue entry represents variability measurement

Table 12-91

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n7	50	QPSK	B	0042M	1:1	0.01	2535.00	507000	DFT-s-OFDM	0.0	21.0	20.41	1	1	Back	10	0.369	1.146	0.423	0.423	0.264		24.7		
Body-worn/Hotspot	NR Band n7	50	QPSK	B	0042M	1:1	-0.01	2535.00	507000	DFT-s-OFDM	0.0	21.0	20.35	135	0	Back	10	0.375	1.161	0.435	0.435	0.272	A71	24.6		
Hotspot	NR Band n7	50	QPSK	B	0042M	1:1	0.11	2535.00	507000	DFT-s-OFDM	0.0	21.0	20.41	1	1	Front	10	0.205	1.146	0.235	0.235	0.147		27.2		
Hotspot	NR Band n7	50	QPSK	B	0042M	1:1	-0.05	2535.00	507000	DFT-s-OFDM	0.0	21.0	20.35	135	0	Front	10	0.205	1.161	0.238	0.238	0.149		27.2		
Hotspot	NR Band n7	50	QPSK	B	0042M	1:1	0.01	2535.00	507000	DFT-s-OFDM	0.0	21.0	20.41	1	1	Bottom	10	0.361	1.146	0.414	0.414	0.259		24.8	24.4	20.0
Hotspot	NR Band n7	50	QPSK	B	0042M	1:1	0.02	2535.00	507000	DFT-s-OFDM	0.0	21.0	20.35	135	0	Bottom	10	0.385	1.161	0.447	0.447	0.279		24.4		
Hotspot	NR Band n7	50	QPSK	B	0042M	1:1	0.02	2535.00	507000	CP-OFDM	0.0	21.0	20.68	1	1	Bottom	10	0.392	1.076	0.422	0.422	0.264		24.7		
Hotspot	NR Band n7	50	QPSK	B	0042M	1:1	-0.07	2535.00	507000	DFT-s-OFDM	0.0	21.0	20.41	1	1	Right	10	0.302	1.146	0.346	0.346	0.216		25.6		
Hotspot	NR Band n7	50	QPSK	B	0042M	1:1	-0.09	2535.00	507000	DFT-s-OFDM	0.0	21.0	20.35	135	0	Right	10	0.321	1.161	0.373	0.373	0.233		25.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 12-92

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n7	50	QPSK	F	0042M	1:1	0.03	2535.00	507000	DFT-s-OFDM	0.0	20.5	19.79	1	1	Back	10	0.158	1.178	0.186	0.186	0.116		27.8		
Body-worn/Hotspot	NR Band n7	50	QPSK	F	0042M	1:1	0.03	2535.00	507000	DFT-s-OFDM	0.0	20.5	19.74	135	68	Back	10	0.143	1.191	0.170	0.170	0.106		28.1		
Hotspot	NR Band n7	50	QPSK	F	0042M	1:1	0.08	2535.00	507000	DFT-s-OFDM	0.0	20.5	19.79	1	1	Front	10	0.228	1.178	0.269	0.269	0.168		26.2		
Hotspot	NR Band n7	50	QPSK	F	0042M	1:1	0.07	2535.00	507000	DFT-s-OFDM	0.0	20.5	19.74	135	68	Front	10	0.208	1.191	0.248	0.248	0.155		26.5		
Hotspot	NR Band n7	50	QPSK	F	0042M	1:1	0.00	2535.00	507000	DFT-s-OFDM	0.0	20.5	19.79	1	1	Top	10	0.423	1.178	0.498	0.498	0.311		23.5	23.3	19.5
Hotspot	NR Band n7	50	QPSK	F	0042M	1:1	0.05	2535.00	507000	DFT-s-OFDM	0.0	20.5	19.74	135	68	Top	10	0.377	1.191	0.449	0.449	0.281		23.9		
Hotspot	NR Band n7	50	QPSK	F	0042M	1:1	0.04	2535.00	507000	CP-OFDM	0.0	20.5	20.07	1	1	Top	10	0.473	1.104	0.522	0.522	0.326	A72	23.3		
Hotspot	NR Band n7	50	QPSK	F	0042M	1:1	0.05	2535.00	507000	DFT-s-OFDM	0.0	20.5	19.79	1	1	Left	10	0.054	1.178	0.064	0.064	0.040		32.4		
Hotspot	NR Band n7	50	QPSK	F	0042M	1:1	0.08	2535.00	507000	DFT-s-OFDM	0.0	20.5	19.74	135	68	Left	10	0.042	1.191	0.050	0.050	0.031		33.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram									

12.26 NR Band n41 Standalone SAR

Table 12-93

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n41	100	QPSK	B	2	0044M	1:1	0.19	2592.99	518598	DFT-s-OFDM	0.0	22.0	22.00	1	271	Right Cheek	0	0.046	1.000	0.046	0.046	0.029		35.3		
Head	NR Band n41	100	QPSK	B	2	0044M	1:1	0.15	2592.99	518598	DFT-s-OFDM	0.0	22.0	21.98	135	0	Right Cheek	0	0.059	1.005	0.059	0.059	0.037		34.2		
Head	NR Band n41	100	QPSK	B	2	0044M	1:1	0.08	2592.99	518598	CP-OFDM	0.0	22.0	21.98	1	1	Right Cheek	0	0.072	1.005	0.072	0.072	0.045		33.4		
Head	NR Band n41	100	QPSK	B	2	0044M	1:1	-0.20	2592.99	518598	DFT-s-OFDM	0.0	22.0	22.00	1	271	Right Tilt	0	0.020	1.000	0.020	0.020	0.013		38.9		
Head	NR Band n41	100	QPSK	B	2	0044M	1:1	0.05	2592.99	518598	DFT-s-OFDM	0.0	22.0	21.98	135	0	Right Tilt	0	0.021	1.005	0.021	0.021	0.013		38.7	33.4	21.0
Head	NR Band n41	100	QPSK	B	2	0044M	1:1	0.03	2592.99	518598	DFT-s-OFDM	0.0	22.0	22.00	1	271	Left Cheek	0	0.004	1.000	0.004	0.004	0.003		45.9		
Head	NR Band n41	100	QPSK	B	2	0044M	1:1	0.03	2592.99	518598	DFT-s-OFDM	0.0	22.0	21.98	135	0	Left Cheek	0	0.006	1.005	0.006	0.006	0.004		44.1		
Head	NR Band n41	100	QPSK	B	2	0044M	1:1	0.03	2592.99	518598	DFT-s-OFDM	0.0	22.0	22.00	1	271	Left Tilt	0	0.012	1.000	0.012	0.012	0.008		41.2		
Head	NR Band n41	100	QPSK	B	2	0044M	1:1	-0.12	2592.99	518598	DFT-s-OFDM	0.0	22.0	21.98	135	0	Left Tilt	0	0.021	1.005	0.021	0.021	0.013		38.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram									

Table 12-94

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	0.00	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.33	1	137	Right Cheek	0	0.787	1.040	0.818	0.818	0.511		18.3		
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	0.04	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.29	135	69	Right Cheek	0	0.793	1.050	0.833	0.833	0.521		18.2		
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	-0.02	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.26	270	0	Right Cheek	0	0.813	1.057	0.859	0.859	0.537		18.1		
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	0.10	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.33	1	137	Right Tilt	0	0.784	1.040	0.815	0.815	0.509		18.3		
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	0.04	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.29	135	69	Right Tilt	0	0.787	1.050	0.826	0.826	0.516		18.3		
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	-0.01	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.26	270	0	Right Tilt	0	0.823	1.057	0.870	0.870	0.544		18.1	17.9	16.5
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	-0.01	2592.99	518598	CP-OFDM	0.0	17.5	17.25	1	1	Right Tilt	0	0.843	1.059	0.893	0.893	0.558	A73	17.9		
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	0.04	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.33	1	137	Left Cheek	0	0.333	1.040	0.346	0.346	0.216		22.1		
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	0.04	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.29	135	69	Left Cheek	0	0.344	1.050	0.361	0.361	0.226		21.9		
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	0.04	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.33	1	137	Left Tilt	0	0.330	1.040	0.343	0.343	0.214		22.1		
Head	NR Band n41	100	QPSK	F	1	0044M	1:1	0.03	2592.99	518598	DFT-s-OFDM	0.0	17.5	17.29	135	69	Left Tilt	0	0.332	1.050	0.349	0.349	0.218		22.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram									

Table 12-95

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n41	100	D	2	0044M	1:1	0.05	2592.99	518598	CW/SRS	22.0	21.24	Right Cheek	0	0.001	1.191	0.001	0.001	0.001		51.2	51.2	21.0
Head	NR Band n41	100	D	2	0044M	1:1	0.05	2592.99	518598	CW/SRS	22.0	21.24	Right Tilt	0	0.000	1.191	0.000	0.000	0.000		61.2		
Head	NR Band n41	100	D	2	0044M	1:1	0.01	2592.99	518598	CW/SRS	22.0	21.24	Left Cheek	0	0.000	1.191	0.000	0.000	0.000		61.2		
Head	NR Band n41	100	D	2	0044M	1:1	0.07	2592.99	518598	CW/SRS	22.0	21.24	Left Tilt	0	0.000	1.191	0.000	0.000	0.000		61.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-96

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n41	100	E	1	0044M	1:1	-0.10	2592.99	518598	CW/SRS	18.5	18.07	Right Cheek	0	0.278	1.104	0.307	0.307	0.192		23.6	19.9	17.5
Head	NR Band n41	100	E	1	0044M	1:1	-0.05	2592.99	518598	CW/SRS	18.5	18.07	Right Tilt	0	0.323	1.104	0.357	0.357	0.223		22.9		
Head	NR Band n41	100	E	1	0044M	1:1	-0.03	2592.99	518598	CW/SRS	18.5	18.07	Left Cheek	0	0.647	1.104	0.714	0.714	0.446		19.9		
Head	NR Band n41	100	E	1	0044M	1:1	-0.11	2592.99	518598	CW/SRS	18.5	18.07	Left Tilt	0	0.565	1.104	0.624	0.624	0.390		20.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-97

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n41	100	QPSK	B	2	0044M	1:1	0.03	2592.99	518598	DFT-s-OFDM	0.0	21.0	20.96	1	137	Back	10	0.281	1.009	0.284	0.284	0.178		26.4	25.3	20.0
Body-worn/Hotspot	NR Band n41	100	QPSK	B	2	0044M	1:1	0.03	2592.99	518598	DFT-s-OFDM	0.0	21.0	20.95	135	138	Back	10	0.247	1.012	0.250	0.250	0.156		27.0		
Body-worn/Hotspot	NR Band n41	100	QPSK	B	2	0044M	1:1	0.03	2592.99	518598	CP-OFDM	0.0	21.0	20.97	1	1	Back	10	0.364	1.007	0.367	0.367	0.229	A74	25.3		
Hotspot	NR Band n41	100	QPSK	B	2	0044M	1:1	-0.01	2592.99	518598	DFT-s-OFDM	0.0	21.0	20.96	1	137	Front	10	0.230	1.009	0.232	0.232	0.145		27.3		
Hotspot	NR Band n41	100	QPSK	B	2	0044M	1:1	0.03	2592.99	518598	DFT-s-OFDM	0.0	21.0	20.95	135	138	Front	10	0.227	1.012	0.230	0.230	0.144		27.3		
Hotspot	NR Band n41	100	QPSK	B	2	0044M	1:1	-0.05	2592.99	518598	DFT-s-OFDM	0.0	21.0	20.96	1	137	Bottom	10	0.227	1.009	0.229	0.229	0.143		27.3		
Hotspot	NR Band n41	100	QPSK	B	2	0044M	1:1	0.01	2592.99	518598	DFT-s-OFDM	0.0	21.0	20.95	135	138	Bottom	10	0.220	1.012	0.223	0.223	0.139		27.5		
Hotspot	NR Band n41	100	QPSK	B	2	0044M	1:1	0.03	2592.99	518598	DFT-s-OFDM	0.0	21.0	20.96	1	137	Right	10	0.175	1.009	0.177	0.177	0.111		28.5		
Hotspot	NR Band n41	100	QPSK	B	2	0044M	1:1	0.10	2592.99	518598	DFT-s-OFDM	0.0	21.0	20.95	135	138	Right	10	0.177	1.012	0.179	0.179	0.112		28.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-98

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n41	100	QPSK	F	1	0044M	1:1	0.08	2592.99	518598	DFT-s-OFDM	0.0	20.5	20.27	1	137	Back	10	0.198	1.054	0.209	0.209	0.131		27.3	23.1	19.5
Body-worn/Hotspot	NR Band n41	100	QPSK	F	1	0044M	1:1	0.05	2592.99	518598	DFT-s-OFDM	0.0	20.5	20.33	135	69	Back	10	0.198	1.040	0.206	0.206	0.129		27.3		
Hotspot	NR Band n41	100	QPSK	F	1	0044M	1:1	0.10	2592.99	518598	DFT-s-OFDM	0.0	20.5	20.27	1	137	Front	10	0.289	1.054	0.305	0.305	0.191		25.6		
Hotspot	NR Band n41	100	QPSK	F	1	0044M	1:1	0.05	2592.99	518598	DFT-s-OFDM	0.0	20.5	20.33	135	69	Front	10	0.284	1.040	0.295	0.295	0.184		25.7		
Hotspot	NR Band n41	100	QPSK	F	1	0044M	1:1	-0.03	2592.99	518598	DFT-s-OFDM	0.0	20.5	20.27	1	137	Top	10	0.437	1.054	0.461	0.461	0.288		23.8		
Hotspot	NR Band n41	100	QPSK	F	1	0044M	1:1	-0.05	2592.99	518598	DFT-s-OFDM	0.0	20.5	20.33	135	69	Top	10	0.436	1.040	0.453	0.453	0.283		23.9		
Hotspot	NR Band n41	100	QPSK	F	1	0044M	1:1	0.01	2592.99	518598	CP-OFDM	0.0	20.5	20.24	1	1	Top	10	0.513	1.062	0.545	0.545	0.341	A75	23.1		
Hotspot	NR Band n41	100	QPSK	F	1	0044M	1:1	-0.07	2592.99	518598	DFT-s-OFDM	0.0	20.5	20.27	1	137	Left	10	0.058	1.054	0.061	0.061	0.038		32.6		
Hotspot	NR Band n41	100	QPSK	F	1	0044M	1:1	-0.03	2592.99	518598	DFT-s-OFDM	0.0	20.5	20.33	135	69	Left	10	0.061	1.040	0.063	0.063	0.039		32.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-99

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n41	100	D	2	0044M	1:1	-0.08	2592.99	518598	CW/SRS	21.0	20.26	Back	10	0.358	1.186	0.425	0.425	0.266		24.7	24.7	20.0
Hotspot	NR Band n41	100	D	2	0044M	1:1	0.15	2592.99	518598	CW/SRS	21.0	20.26	Front	10	0.018	1.186	0.021	0.021	0.013		37.7		
Hotspot	NR Band n41	100	D	2	0044M	1:1	0.07	2592.99	518598	CW/SRS	21.0	20.26	Bottom	10	0.057	1.186	0.068	0.068	0.043		32.7		
Hotspot	NR Band n41	100	D	2	0044M	1:1	0.02	2592.99	518598	CW/SRS	21.0	20.26	Left	10	0.025	1.186	0.030	0.030	0.019		36.2		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-100

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n41	100	E	1	0044M	1:1	-0.04	2592.99	518598	CW/SRS	19.0	18.63	Back	10	0.109	1.089	0.119	0.119	0.074		28.2	24.6	18.0
Hotspot	NR Band n41	100	E	1	0044M	1:1	0.07	2592.99	518598	CW/SRS	19.0	18.63	Front	10	0.169	1.089	0.184	0.184	0.115		26.3		
Hotspot	NR Band n41	100	E	1	0044M	1:1	0.09	2592.99	518598	CW/SRS	19.0	18.63	Top	10	0.252	1.089	0.274	0.274	0.171		24.6		
Hotspot	NR Band n41	100	E	1	0044M	1:1	-0.04	2592.99	518598	CW/SRS	19.0	18.63	Right	10	0.156	1.089	0.170	0.170	0.106		26.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram										

12.27 NR Band n48 Standalone SAR

Table 12-101

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n48	40	QPSK	F	0080M	1:1	-0.04	3570.00	638000	DFT-s-OFDM	0.0	17.0	16.75	1	104	Right Cheek	0	0.949	1.059	1.005	1.005	0.628		16.9		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.04	3624.99	641666	DFT-s-OFDM	0.0	17.0	16.81	1	1	Right Cheek	0	1.010	1.045	1.055	1.055	0.659		16.7		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.00	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.84	1	104	Right Cheek	0	1.040	1.038	1.080	1.080	0.675		16.6		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.03	3570.00	638000	DFT-s-OFDM	0.0	17.0	16.77	50	56	Right Cheek	0	1.010	1.054	1.065	1.065	0.666		16.7		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.00	3624.99	641666	DFT-s-OFDM	0.0	17.0	16.81	50	0	Right Cheek	0	0.991	1.045	1.036	1.036	0.648		16.8		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.02	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.83	50	28	Right Cheek	0	1.070	1.040	1.113	1.113	0.696	A76	16.5		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.02	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.83	50	28	Right Cheek	0	1.030	1.040	1.069	1.069	0.668		16.7		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.06	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.77	100	0	Right Cheek	0	1.020	1.054	1.075	1.075	0.672		16.6		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.02	3679.98	645332	CP-OFDM	0.0	17.0	16.79	1	1	Right Cheek	0	0.999	1.050	1.049	1.049	0.656		16.7		
Head	NR Band n48	40	QPSK	F	0080M	1:1	-0.03	3570.00	638000	DFT-s-OFDM	0.0	17.0	16.75	1	104	Right Tilt	0	0.954	1.059	1.010	1.010	0.631		16.9	16.5	16.0
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.08	3624.99	641666	DFT-s-OFDM	0.0	17.0	16.81	1	1	Right Tilt	0	0.971	1.045	1.015	1.015	0.634		16.9		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.00	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.84	1	104	Right Tilt	0	1.010	1.038	1.048	1.048	0.655		16.7		
Head	NR Band n48	40	QPSK	F	0080M	1:1	-0.03	3570.00	638000	DFT-s-OFDM	0.0	17.0	16.77	50	56	Right Tilt	0	0.982	1.054	1.035	1.035	0.647		16.8		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.01	3624.99	641666	DFT-s-OFDM	0.0	17.0	16.81	50	0	Right Tilt	0	0.969	1.045	1.013	1.013	0.633		16.9		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.00	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.83	50	28	Right Tilt	0	1.050	1.040	1.092	1.092	0.683		16.6		
Head	NR Band n48	40	QPSK	F	0080M	1:1	-0.12	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.77	100	0	Right Tilt	0	1.040	1.054	1.096	1.096	0.685		16.5		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.00	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.84	1	104	Left Cheek	0	0.402	1.038	0.417	0.417	0.261		20.7		
Head	NR Band n48	40	QPSK	F	0080M	1:1	-0.01	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.83	50	28	Left Cheek	0	0.417	1.040	0.434	0.434	0.271		20.6		
Head	NR Band n48	40	QPSK	F	0080M	1:1	0.00	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.84	1	104	Left Tilt	0	0.479	1.038	0.497	0.497	0.311		20.0		
Head	NR Band n48	40	QPSK	F	0080M	1:1	-0.06	3679.98	645332	DFT-s-OFDM	0.0	17.0	16.83	50	28	Left Tilt	0	0.502	1.040	0.522	0.522	0.326		19.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram										

Note: Blue entry represents variability measurement

Table 12-102

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n48	40	C	0080M	1:1	-0.05	3624.99	641666	CW/SRS	12.0	11.90	Right Cheek	0	0.017	1.023	0.017	0.017	0.011		29.5		
Head	NR Band n48	40	C	0080M	1:1	0.01	3624.99	641666	CW/SRS	12.0	11.90	Right Tilt	0	0.011	1.023	0.011	0.011	0.007		31.4	29.1	11.0
Head	NR Band n48	40	C	0080M	1:1	0.03	3624.99	641666	CW/SRS	12.0	11.90	Left Cheek	0	0.008	1.023	0.008	0.008	0.005		32.8		
Head	NR Band n48	40	C	0080M	1:1	0.16	3624.99	641666	CW/SRS	12.0	11.90	Left Tilt	0	0.019	1.023	0.019	0.019	0.012		29.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-103

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n48	40	I	0080M	1:1	-0.05	3624.99	641666	CW/SRS	16.5	16.01	Right Cheek	0	0.473	1.119	0.529	0.529	0.331		19.2		
Head	NR Band n48	40	I	0080M	1:1	0.06	3624.99	641666	CW/SRS	16.5	16.01	Right Tilt	0	0.056	1.119	0.063	0.063	0.039		28.5	18.8	15.5
Head	NR Band n48	40	I	0080M	1:1	-0.05	3624.99	641666	CW/SRS	16.5	16.01	Left Cheek	0	0.522	1.119	0.584	0.584	0.365		18.8		
Head	NR Band n48	40	I	0080M	1:1	0.03	3624.99	641666	CW/SRS	16.5	16.01	Left Tilt	0	0.067	1.119	0.075	0.075	0.047		27.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-104

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n48	40	D	0080M	1:1	0.04	3679.98	645332	CW/SRS	12.0	11.62	Right Cheek	0	0.001	1.091	0.001	0.001	0.001		41.6		
Head	NR Band n48	40	D	0080M	1:1	0.08	3679.98	645332	CW/SRS	12.0	11.62	Right Tilt	0	0.000	1.091	0.000	0.000	0.000		51.6	41.6	11.0
Head	NR Band n48	40	D	0080M	1:1	0.03	3679.98	645332	CW/SRS	12.0	11.62	Left Cheek	0	0.000	1.091	0.000	0.000	0.000		51.6		
Head	NR Band n48	40	D	0080M	1:1	0.09	3679.98	645332	CW/SRS	12.0	11.62	Left Tilt	0	0.000	1.091	0.000	0.000	0.000		51.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-105

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	-0.04	3679.98	645332	DFT-s-OFDM	0.0	20.5	20.37	1	104	Back	10	0.480	1.030	0.494	0.494	0.309	A77	23.5		
Body-worn/Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	0.02	3679.98	645332	DFT-s-OFDM	0.0	20.5	20.38	50	28	Back	10	0.469	1.028	0.482	0.482	0.301		23.6		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	-0.06	3679.98	645332	DFT-s-OFDM	0.0	20.5	20.37	1	104	Front	10	0.251	1.030	0.259	0.259	0.162		26.3		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	-0.03	3679.98	645332	DFT-s-OFDM	0.0	20.5	20.38	50	28	Front	10	0.257	1.028	0.264	0.264	0.165		26.2		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	-0.03	3570.00	638000	DFT-s-OFDM	0.0	20.5	20.29	1	104	Top	10	0.601	1.050	0.631	0.631	0.394		22.5		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	0.02	3624.99	641666	DFT-s-OFDM	0.0	20.5	20.35	1	1	Top	10	0.624	1.035	0.646	0.646	0.404		22.3		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	-0.01	3679.98	645332	DFT-s-OFDM	0.0	20.5	20.37	1	104	Top	10	0.608	1.030	0.626	0.626	0.391		22.5		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	0.07	3570.00	638000	DFT-s-OFDM	0.0	20.5	20.20	50	56	Top	10	0.633	1.072	0.679	0.679	0.424		22.1		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	-0.04	3624.99	641666	DFT-s-OFDM	0.0	20.5	20.37	50	0	Top	10	0.629	1.030	0.648	0.648	0.405		22.3		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	0.02	3679.98	645332	DFT-s-OFDM	0.0	20.5	20.38	50	28	Top	10	0.657	1.028	0.675	0.675	0.422		22.2		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	0.01	3679.98	645332	DFT-s-OFDM	0.0	20.5	20.33	100	0	Top	10	0.658	1.040	0.684	0.684	0.428	A78	22.1	22.1	19.5
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	0.04	3624.99	641666	CP-OFDM	0.0	20.5	20.31	1	1	Top	10	0.601	1.045	0.628	0.628	0.393		22.5		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	0.16	3679.98	645332	DFT-s-OFDM	0.0	20.5	20.37	1	104	Left	10	0.125	1.030	0.129	0.129	0.081		29.4		
Hotspot	NR Band n48	40	QPSK	F	0080M	1:1	0.05	3679.98	645332	DFT-s-OFDM	0.0	20.5	20.38	50	28	Left	10	0.120	1.028	0.123	0.123	0.077		29.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-106

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n48	40	C	0080M	1:1	-0.17	3570.00	638000	CW/SRS	15.5	15.36	Back	10	0.144	1.033	0.149	0.149	0.093		23.7	21.4	14.5
Hotspot	NR Band n48	40	C	0080M	1:1	-0.05	3570.00	638000	CW/SRS	15.5	15.36	Front	10	0.098	1.033	0.101	0.101	0.063		25.4		
Hotspot	NR Band n48	40	C	0080M	1:1	0.10	3570.00	638000	CW/SRS	15.5	15.36	Bottom	10	0.044	1.033	0.045	0.045	0.028		28.9		
Hotspot	NR Band n48	40	C	0080M	1:1	-0.01	3570.00	638000	CW/SRS	15.5	15.36	Right	10	0.247	1.033	0.255	0.255	0.159		21.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-107

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n48	40	I	0080M	1:1	-0.09	3679.98	645332	CW/SRS	20.0	19.50	Back	10	0.173	1.122	0.194	0.194	0.121		27.1	24.5	19.0
Hotspot	NR Band n48	40	I	0080M	1:1	0.01	3679.98	645332	CW/SRS	20.0	19.50	Front	10	0.315	1.122	0.353	0.353	0.221		24.5		
Hotspot	NR Band n48	40	I	0080M	1:1	-0.06	3679.98	645332	CW/SRS	20.0	19.50	Left	10	0.151	1.122	0.169	0.169	0.106		27.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-108

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n48	40	D	0080M	1:1	-0.03	3679.98	645332	CW/SRS	15.5	15.16	Back	10	0.089	1.081	0.096	0.096	0.060		25.6	25.6	14.5
Hotspot	NR Band n48	40	D	0080M	1:1	0.01	3679.98	645332	CW/SRS	15.5	15.16	Front	10	0.008	1.081	0.009	0.009	0.006		36.1		
Hotspot	NR Band n48	40	D	0080M	1:1	0.02	3679.98	645332	CW/SRS	15.5	15.16	Bottom	10	0.026	1.081	0.028	0.028	0.018		31.0		
Hotspot	NR Band n48	40	D	0080M	1:1	0.02	3679.98	645332	CW/SRS	15.5	15.16	Left	10	0.005	1.081	0.005	0.005	0.003		38.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram										

12.28 NR Band n77 Standalone SAR

Table 12-109

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.02	3750.00	650000	DFT-s-OFDM	0.0	17.0	16.52	1	271	Right Cheek	0	0.817	1.117	0.913	0.913	0.571		17.3	16.3	16.0
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.11	3930.00	662000	DFT-s-OFDM	0.0	17.0	16.94	1	1	Right Cheek	0	0.864	1.014	0.876	0.876	0.548		17.5		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.03	3750.00	650000	DFT-s-OFDM	0.0	17.0	16.47	135	0	Right Cheek	0	0.893	1.130	1.009	1.009	0.631		16.9		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.02	3930.00	662000	DFT-s-OFDM	0.0	17.0	16.84	135	138	Right Cheek	0	0.782	1.038	0.812	0.812	0.508		17.9		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.00	3930.00	662000	DFT-s-OFDM	0.0	17.0	16.73	270	0	Right Cheek	0	0.797	1.064	0.848	0.848	0.530		17.7		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.03	3750.00	650000	DFT-s-OFDM	0.0	17.0	16.52	1	271	Right Tilt	0	0.956	1.117	1.068	1.068	0.668		16.7		
Head	NR Band n77	100	QPSK	F	0045M	1:1	-0.03	3930.00	662000	DFT-s-OFDM	0.0	17.0	16.94	1	1	Right Tilt	0	0.916	1.014	0.929	0.929	0.581		17.3		
Head	NR Band n77 DoD	100	QPSK	F	0045M	1:1	0.08	3500.01	633334	DFT-s-OFDM	0.0	17.0	17.00	135	138	Right Tilt	0	1.100	1.000	1.100	1.100	0.688	A79	16.5		
Head	NR Band n77 DoD	100	QPSK	F	0045M	1:1	-0.01	3500.01	633334	DFT-s-OFDM	0.0	17.0	17.00	135	138	Right Tilt	0	1.020	1.000	1.020	1.020	0.638		16.9		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.06	3750.00	650000	DFT-s-OFDM	0.0	17.0	16.47	135	0	Right Tilt	0	1.020	1.130	1.153	1.153	0.721		16.3		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.00	3930.00	662000	DFT-s-OFDM	0.0	17.0	16.84	135	138	Right Tilt	0	0.841	1.038	0.873	0.873	0.546		17.5		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.04	3930.00	662000	DFT-s-OFDM	0.0	17.0	16.73	270	0	Right Tilt	0	0.869	1.064	0.925	0.925	0.578		17.3		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.03	3930.00	662000	CP-OFDM	0.0	17.0	16.81	1	1	Right Tilt	0	0.986	1.045	1.030	1.030	0.644		16.8		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.00	3930.00	662000	CP-OFDM	0.0	17.0	16.81	1	1	Right Tilt	0	0.827	1.045	0.930	0.930	0.619		17.0		
Head	NR Band n77	100	QPSK	F	0045M	1:1	-0.07	3930.00	662000	DFT-s-OFDM	0.0	17.0	16.94	1	1	Left Cheek	0	0.376	1.014	0.381	0.381	0.238		21.1		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.04	3930.00	662000	DFT-s-OFDM	0.0	17.0	16.84	135	138	Left Cheek	0	0.339	1.038	0.352	0.352	0.220		21.5		
Head	NR Band n77	100	QPSK	F	0045M	1:1	-0.08	3930.00	662000	DFT-s-OFDM	0.0	17.0	16.94	1	1	Left Tilt	0	0.382	1.014	0.387	0.387	0.242		21.1		
Head	NR Band n77	100	QPSK	F	0045M	1:1	0.07	3930.00	662000	DFT-s-OFDM	0.0	17.0	16.84	135	138	Left Tilt	0	0.370	1.038	0.384	0.384	0.240		21.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Head 1.6 W/kg (mW/g) averaged over 1 gram								

Note: Blue entry represents variability measurement

Table 12-110

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n77 DoD	100	C	0045M	1:1	-0.18	3500.01	633334	CW/SRS	12.0	11.82	Right Cheek	0	0.028	1.042	0.029	0.029	0.018		27.3	27.1	11.0
Head	NR Band n77	100	C	0045M	1:1	-0.01	3930.00	662000	CW/SRS	12.0	11.73	Right Cheek	0	0.029	1.064	0.031	0.031	0.019		27.1		
Head	NR Band n77	100	C	0045M	1:1	0.05	3930.00	662000	CW/SRS	12.0	11.73	Right Tilt	0	0.011	1.064	0.012	0.012	0.008		31.3		
Head	NR Band n77	100	C	0045M	1:1	0.07	3930.00	662000	CW/SRS	12.0	11.73	Left Cheek	0	0.013	1.064	0.014	0.014	0.009		30.5		
Head	NR Band n77	100	C	0045M	1:1	0.04	3930.00	662000	CW/SRS	12.0	11.73	Left Tilt	0	0.024	1.064	0.026	0.026	0.016		27.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-111

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n77 DoD	100	I	0045	1:1	-0.02	3500.01	633334	CW/SRS	16.5	15.54	Right Cheek	0	0.246	1.247	0.307	0.307	0.192		21.6	19.6	15.5
Head	NR Band n77	100	I	0045	1:1	-0.07	3750.00	650000	CW/SRS	16.5	15.11	Right Cheek	0	0.349	1.377	0.481	0.481	0.301		19.6		
Head	NR Band n77	100	I	0045	1:1	-0.07	3930.00	662000	CW/SRS	16.5	16.27	Right Cheek	0	0.410	1.054	0.432	0.432	0.270		20.1		
Head	NR Band n77	100	I	0045	1:1	0.02	3930.00	662000	CW/SRS	16.5	16.27	Right Tilt	0	0.057	1.054	0.060	0.060	0.038		28.7		
Head	NR Band n77	100	I	0045	1:1	-0.16	3930.00	662000	CW/SRS	16.5	16.27	Left Cheek	0	0.014	1.054	0.015	0.015	0.009		34.8		
Head	NR Band n77	100	I	0045	1:1	0.07	3930.00	662000	CW/SRS	16.5	16.27	Left Tilt	0	0.024	1.054	0.025	0.025	0.016		32.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-112

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	NR Band n77 DoD	100	D	0045M	1:1	0.05	3500.01	633334	CW/SRS	11.5	11.19	Right Cheek	0	0.002	1.074	0.002	0.002	0.001		38.1		
Head	NR Band n77	100	D	0045M	1:1	0.06	3930.00	662000	CW/SRS	11.5	10.85	Right Cheek	0	0.000	1.161	0.000	0.000	0.000		50.8		
Head	NR Band n77	100	D	0045M	1:1	0.09	3930.00	662000	CW/SRS	11.5	10.85	Right Tilt	0	0.000	1.161	0.000	0.000	0.000		50.8	38.1	10.5
Head	NR Band n77	100	D	0045M	1:1	0.09	3930.00	662000	CW/SRS	11.5	10.85	Left Cheek	0	0.000	1.161	0.000	0.000	0.000		50.8		
Head	NR Band n77	100	D	0045M	1:1	0.04	3930.00	662000	CW/SRS	11.5	10.85	Left Tilt	0	0.000	1.161	0.000	0.000	0.000		50.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-113

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Max Allowed Power [dBm]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.03	3750.00	650000	DFT-s-OFDM	0.0	19.0	18.51	1	271	Back	10	0.420	1.119	0.470	0.470	0.294		22.2		
Body-worn/Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.01	3930.00	662000	DFT-s-OFDM	0.0	19.0	18.94	1	1	Back	10	0.536	1.014	0.544	0.544	0.340		21.6		
Body-worn/Hotspot	NR Band n77 DoD	100	QPSK	F	0045M	1:1	-0.02	3500.01	633334	DFT-s-OFDM	0.0	19.0	19.00	135	138	Back	10	0.276	1.000	0.276	0.276	0.173		24.5		
Body-worn/Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.02	3750.00	650000	DFT-s-OFDM	0.0	19.0	18.56	135	0	Back	10	0.372	1.107	0.412	0.412	0.258		22.8		
Body-worn/Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.03	3930.00	662000	DFT-s-OFDM	0.0	19.0	18.90	135	138	Back	10	0.589	1.023	0.603	0.603	0.377		21.1		
Body-worn/Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.01	3930.00	662000	DFT-s-OFDM	0.0	19.0	18.85	270	0	Back	10	0.591	1.035	0.612	0.612	0.383	A80	21.1		
Body-worn/Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.00	3930.00	662000	CP-OFDM	0.0	19.0	18.86	1	1	Back	10	0.548	1.033	0.566	0.566	0.354		21.4	21.1	18.0
Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.10	3930.00	662000	DFT-s-OFDM	0.0	19.0	18.94	1	1	Front	10	0.122	1.014	0.124	0.124	0.078		28.0		
Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.04	3930.00	662000	DFT-s-OFDM	0.0	19.0	18.90	135	138	Front	10	0.135	1.023	0.138	0.138	0.086		27.5		
Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.02	3930.00	662000	DFT-s-OFDM	0.0	19.0	18.94	1	1	Top	10	0.318	1.014	0.322	0.322	0.201		23.9		
Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.00	3930.00	662000	DFT-s-OFDM	0.0	19.0	18.90	135	138	Top	10	0.326	1.023	0.333	0.333	0.208		23.7		
Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.06	3930.00	662000	DFT-s-OFDM	0.0	19.0	18.94	1	1	Left	10	0.125	1.014	0.127	0.127	0.079		27.9		
Hotspot	NR Band n77	100	QPSK	F	0045M	1:1	0.00	3930.00	662000	DFT-s-OFDM	0.0	19.0	18.90	135	138	Left	10	0.120	1.023	0.123	0.123	0.077		28.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-114

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n77 DoD	100	C	0045M	1:1	0.16	3500.01	633334	CW/SRS	14.5	14.32	Back	10	0.074	1.042	0.077	0.077	0.048		25.6		
Body-worn/Hotspot	NR Band n77	100	C	0045M	1:1	-0.07	3930.00	662000	CW/SRS	14.5	14.29	Back	10	0.092	1.050	0.097	0.097	0.061		24.6		
Hotspot	NR Band n77	100	C	0045M	1:1	0.00	3930.00	662000	CW/SRS	14.5	14.29	Front	10	0.137	1.050	0.144	0.144	0.090		22.9		
Hotspot	NR Band n77	100	C	0045M	1:1	0.12	3930.00	662000	CW/SRS	14.5	14.29	Bottom	10	0.058	1.050	0.061	0.061	0.038		26.6		
Hotspot	NR Band n77 DoD	100	C	0045M	1:1	0.05	3500.01	633334	CW/SRS	14.5	14.32	Right	10	0.156	1.042	0.163	0.163	0.102		22.3		
Hotspot	NR Band n77	100	C	0045M	1:1	-0.09	3930.00	662000	CW/SRS	14.5	14.29	Right	10	0.210	1.050	0.221	0.221	0.138		21.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-115

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n77 DoD	100	I	0045M	1:1	0.04	3500.01	633334	CW/SRS	19.0	17.90	Back	10	0.128	1.288	0.165	0.165	0.103		26.8		
Body-worn/Hotspot	NR Band n77	100	I	0045M	1:1	0.17	3930.00	662000	CW/SRS	19.0	18.87	Back	10	0.162	1.030	0.167	0.167	0.104		26.7		
Hotspot	NR Band n77	100	I	0045M	1:1	0.08	3930.00	662000	CW/SRS	19.0	18.87	Front	10	0.153	1.030	0.158	0.158	0.099		27.0	26.7	18.0
Hotspot	NR Band n77	100	I	0045M	1:1	-0.03	3930.00	662000	CW/SRS	19.0	18.87	Left	10	0.104	1.030	0.107	0.107	0.067		28.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 12-116

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	NR Band n77 DoD	100	D	0045M	1:1	-0.02	3500.01	633334	CW/SRS	14.0	13.65	Back	10	0.079	1.084	0.086	0.086	0.054		24.6		
Body-worn/Hotspot	NR Band n77	100	D	0045M	1:1	0.00	3930.00	662000	CW/SRS	14.0	13.40	Back	10	0.115	1.148	0.132	0.132	0.083		22.7		
Hotspot	NR Band n77	100	D	0045M	1:1	0.01	3930.00	662000	CW/SRS	14.0	13.40	Front	10	0.004	1.148	0.005	0.005	0.003		37.3	22.7	13.0
Hotspot	NR Band n77	100	D	0045M	1:1	-0.18	3930.00	662000	CW/SRS	14.0	13.40	Bottom	10	0.031	1.148	0.036	0.036	0.023		28.4		
Hotspot	NR Band n77	100	D	0045M	1:1	0.09	3930.00	662000	CW/SRS	14.0	13.40	Left	10	0.000	1.148	0.000	0.000	0.000		53.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram										

12.29 2.4 GHz WIFI SISO Standalone SAR

Table 12-117

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	H	0105M	98.74	0.00	2412.00	1	1	17.0	16.88	Right Cheek	0	0.753	1.028	1.013	0.784	0.784	0.490	A81	18.0	18.0	16.0
Head	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	H	0105M	98.74	-0.01	2412.00	1	1	17.0	16.88	Right Tilt	0	0.333	1.028	1.013	0.347	0.347	0.217		21.6		
Head	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	H	0105M	98.74	0.04	2412.00	1	1	17.0	16.88	Left Cheek	0	0.153	1.028	1.013	0.159	0.159	0.099		24.9		
Head	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	H	0105M	98.74	0.00	2412.00	1	1	17.0	16.88	Left Tilt	0	0.088	1.028	1.013	0.092	0.092	0.058		27.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-118

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	J	0105M	97.51	0.02	2412.00	1	1	17.0	16.82	Right Cheek	0	0.165	1.043	1.026	0.177	0.177	0.111		24.5	20.6	16.0
Head	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	J	0105M	97.51	0.11	2412.00	1	1	17.0	16.82	Right Tilt	0	0.023	1.043	1.026	0.025	0.025	0.016		33.0		
Head	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	J	0105M	97.51	-0.04	2412.00	1	1	17.0	16.82	Left Cheek	0	0.403	1.043	1.026	0.431	0.431	0.269		20.6		
Head	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	J	0105M	97.51	0.06	2412.00	1	1	17.0	16.82	Left Tilt	0	0.037	1.043	1.026	0.040	0.040	0.025		31.0		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-119

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	H	0105M	98.74	0.01	2462.00	11	1	20.0	19.97	Back	10	0.386	1.007	1.013	0.394	0.394	0.246	A82	24.0	20.9	19.5
Hotspot	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	H	0105M	98.74	-0.03	2462.00	11	1	20.0	19.97	Front	10	0.266	1.007	1.013	0.271	0.271	0.169		25.6		
Hotspot	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	H	0105M	98.74	0.02	2462.00	11	1	20.0	19.97	Top	10	0.255	1.007	1.013	0.260	0.260	0.163		25.8		
Hotspot	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	H	0105M	98.74	0.00	2462.00	11	1	20.0	19.97	Left	10	0.779	1.007	1.013	0.795	0.795	0.497	A83	20.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-120

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	2.4 GHz WiFi/ IEEE 802.11b	DSSS	J	0105M	97.51	-0.04	2412.00	1	1	20.0	19.55	Back	10	0.062	1.109	1.026	0.071	0.245	0.153		31.5	31.0	25.4
Hotspot	2.4 GHz WiFi/ IEEE 802.11b	DSSS	J	0105M	97.51	0.10	2412.00	1	1	20.0	19.55	Front	10	0.069	1.109	1.026	0.079	0.272	0.170		31.0		
Hotspot	2.4 GHz WiFi/ IEEE 802.11b	DSSS	J	0105M	97.51	0.09	2412.00	1	1	20.0	19.55	Top	10	0.002	1.109	1.026	0.002	0.008	0.005		46.4		
Hotspot	2.4 GHz WiFi/ IEEE 802.11b	DSSS	J	0105M	97.51	0.01	2412.00	1	1	20.0	19.55	Right	10	0.024	1.109	1.026	0.027	0.095	0.059		35.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram											

12.30 2.4 GHz WIFI MIMO Standalone SAR

Table 12-121

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Peak Number	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	N/A	0105M	97.64	0.00	2412.00	1	6	17.0	16.47	17.0	16.21	Right Cheek	0	0.517	1.199	1.024	0.635	0.635	0.397		18.9	18.9	16.0
Head	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	N/A	0105M	97.64	0.00	2412.00	1	6	17.0	16.47	17.0	16.21	Right Tilt	0	0.295	1.199	1.024	0.362	0.362	0.226		21.4		
Head	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	N/A	0105M	97.64	-0.06	2412.00	1	6	17.0	16.47	17.0	16.21	Left Cheek	0	0.256	1.199	1.024	0.314	0.314	0.196		22.0		
Head	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	N/A	0105M	97.64	0.08	2412.00	1	6	17.0	16.47	17.0	16.21	Left Tilt	0	0.109	1.199	1.024	0.134	0.134	0.084		25.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 20 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 17 dBm.

Table 12-122

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	0105M	97.64	-0.02	2412.00	1	6	18.0	17.96	18.0	17.77	Back	10	0.254	1.054	1.024	0.274	0.378	0.236		23.6		
Hotspot	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	0105M	97.64	-0.04	2412.00	1	6	18.0	17.96	18.0	17.77	Front	10	0.199	1.054	1.024	0.215	0.296	0.185		24.6		
Hotspot	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	0105M	97.64	0.00	2412.00	1	6	18.0	17.96	18.0	17.77	Top	10	0.136	1.054	1.024	0.147	0.203	0.127		26.3	21.3	19.4
Hotspot	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	0105M	97.64	-0.12	2412.00	1	6	18.0	17.96	18.0	17.77	Right	10	0.013	1.054	1.024	0.014	0.019	0.012		36.5		
Hotspot	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	0105M	97.64	-0.01	2412.00	1	6	18.0	17.96	18.0	17.77	Left	10	0.433	1.054	1.024	0.467	0.645	0.403		21.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 21 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18 dBm.

12.31 5 GHz WIFI SISO Standalone SAR

Table 12-123

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.07	5290.00	58	U-NII-2A	29.3	16.0	15.95	Right Cheek	0	0.468	1.012	1.095	0.519	0.519	0.324		18.8	16.9	15.0
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.01	5610.00	122	U-NII-2C	29.3	16.0	16.00	Right Cheek	0	0.729	1.000	1.095	0.798	0.798	0.499	A84	16.9		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.12	5775.00	155	U-NII-3	29.3	16.0	15.66	Right Cheek	0	0.433	1.083	1.095	0.513	0.513	0.321		18.8		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.03	5855.00	171	U-NII-4	29.3	16.0	15.89	Right Cheek	0	0.500	1.025	1.095	0.561	0.561	0.351		18.5		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.03	5290.00	58	U-NII-2A	29.3	16.0	15.95	Right Tilt	0	0.212	1.012	1.095	0.235	0.235	0.147		22.2		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.21	5610.00	122	U-NII-2C	29.3	16.0	16.00	Right Tilt	0	0.267	1.000	1.095	0.292	0.292	0.183		21.3		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.20	5775.00	155	U-NII-3	29.3	16.0	15.66	Right Tilt	0	0.183	1.083	1.095	0.217	0.217	0.136		22.6		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.08	5855.00	171	U-NII-4	29.3	16.0	15.89	Right Tilt	0	0.243	1.025	1.095	0.273	0.273	0.171		21.6		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.02	5290.00	58	U-NII-2A	29.3	16.0	15.95	Left Cheek	0	0.163	1.012	1.095	0.181	0.181	0.113		23.4		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.13	5610.00	122	U-NII-2C	29.3	16.0	16.00	Left Cheek	0	0.109	1.000	1.095	0.119	0.119	0.074		25.2		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.04	5775.00	155	U-NII-3	29.3	16.0	15.66	Left Cheek	0	0.053	1.083	1.095	0.063	0.063	0.039		28.0		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.02	5855.00	171	U-NII-4	29.3	16.0	15.89	Left Cheek	0	0.058	1.025	1.095	0.065	0.065	0.041		27.8		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.02	5290.00	58	U-NII-2A	29.3	16.0	15.95	Left Tilt	0	0.078	1.012	1.095	0.086	0.086	0.054		26.6		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.06	5610.00	122	U-NII-2C	29.3	16.0	16.00	Left Tilt	0	0.096	1.000	1.095	0.105	0.105	0.066		25.7		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.18	5775.00	155	U-NII-3	29.3	16.0	15.66	Left Tilt	0	0.059	1.083	1.095	0.070	0.070	0.044		27.5		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.05	5855.00	171	U-NII-4	29.3	16.0	15.89	Left Tilt	0	0.071	1.025	1.095	0.080	0.080	0.050		26.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-124

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.03	5290.00	58	U-NII-2A	29.3	16.0	15.60	Right Cheek	0	0.406	1.097	1.031	0.459	0.459	0.287		19.3	18.9	15.0
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.08	5690.00	138	U-NII-2C	29.3	16.0	15.96	Right Cheek	0	0.102	1.009	1.031	0.106	0.106	0.066		25.7		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.09	5775.00	155	U-NII-3	29.3	16.0	15.69	Right Cheek	0	0.165	1.074	1.031	0.183	0.183	0.114		23.3		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.04	5855.00	171	U-NII-4	29.3	16.0	15.97	Right Cheek	0	0.217	1.007	1.031	0.225	0.225	0.141		22.4		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.16	5290.00	58	U-NII-2A	29.3	16.0	15.60	Right Tilt	0	0.449	1.097	1.031	0.508	0.508	0.318		18.9		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.16	5690.00	138	U-NII-2C	29.3	16.0	15.96	Right Tilt	0	0.139	1.009	1.031	0.145	0.145	0.091		24.3		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.05	5775.00	155	U-NII-3	29.3	16.0	15.69	Right Tilt	0	0.118	1.074	1.031	0.131	0.131	0.082		24.8		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.05	5855.00	171	U-NII-4	29.3	16.0	15.97	Right Tilt	0	0.121	1.007	1.031	0.126	0.126	0.079		25.0		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.02	5290.00	58	U-NII-2A	29.3	16.0	15.60	Left Cheek	0	0.431	1.097	1.031	0.487	0.487	0.304		19.1		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.05	5690.00	138	U-NII-2C	29.3	16.0	15.96	Left Cheek	0	0.366	1.009	1.031	0.381	0.381	0.238		20.1		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.05	5775.00	155	U-NII-3	29.3	16.0	15.69	Left Cheek	0	0.294	1.074	1.031	0.326	0.326	0.204		20.8		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	-0.10	5855.00	171	U-NII-4	29.3	16.0	15.97	Left Cheek	0	0.332	1.007	1.031	0.345	0.345	0.216		20.6		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.05	5290.00	58	U-NII-2A	29.3	16.0	15.60	Left Tilt	0	0.383	1.097	1.031	0.433	0.433	0.271		19.6		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.12	5690.00	138	U-NII-2C	29.3	16.0	15.96	Left Tilt	0	0.281	1.009	1.031	0.292	0.292	0.183		21.3		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.03	5775.00	155	U-NII-3	29.3	16.0	15.69	Left Tilt	0	0.181	1.074	1.031	0.200	0.200	0.125		22.9		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.05	5855.00	171	U-NII-4	29.3	16.0	15.97	Left Tilt	0	0.171	1.007	1.031	0.178	0.178	0.111		23.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-125

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.09	5290.00	58	U-NII-2A	29.3	16.0	15.95	Back	10	0.147	1.012	1.095	0.163	0.163	0.102		23.8	19.9	15.0
Body-worn	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.02	5610.00	122	U-NII-2C	29.3	16.0	15.82	Back	10	0.203	1.042	1.095	0.232	0.232	0.145		22.3		
Body-worn	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.14	5855.00	171	U-NII-4	29.3	16.0	15.89	Back	10	0.155	1.025	1.095	0.174	0.174	0.109		23.5		
Body-worn/Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.03	5775.00	155	U-NII-3	29.3	16.0	15.66	Back	10	0.180	1.083	1.095	0.213	0.213	0.133		22.7		
Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.02	5775.00	155	U-NII-3	29.3	16.0	15.66	Front	10	0.084	1.083	1.095	0.100	0.100	0.063		26.0		
Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.05	5775.00	155	U-NII-3	29.3	16.0	15.66	Top	10	0.080	1.083	1.095	0.095	0.095	0.059		26.2		
Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.19	5775.00	155	U-NII-3	29.3	16.0	15.66	Left	10	0.339	1.083	1.095	0.402	0.402	0.251	A86	19.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-126

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.01	5290.00	58	U-NII-2A	29.3	16.0	15.60	Back	10	0.150	1.097	1.031	0.170	0.170	0.106		23.7	20.1	15.0
Body-worn	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.02	5690.00	138	U-NII-2C	29.3	16.0	15.96	Back	10	0.264	1.009	1.031	0.275	0.275	0.172		21.6		
Body-worn	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	-0.02	5855.00	171	U-NII-4	29.3	16.0	15.97	Back	10	0.369	1.007	1.031	0.383	0.383	0.239		20.1		
Body-worn/Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	-0.07	5775.00	155	U-NII-3	29.3	16.0	15.69	Back	10	0.265	1.074	1.031	0.293	0.293	0.183		21.3		
Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.08	5775.00	155	U-NII-3	29.3	16.0	15.69	Front	10	0.027	1.074	1.031	0.030	0.030	0.019		31.2		
Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.04	5775.00	155	U-NII-3	29.3	16.0	15.69	Top	10	0.150	1.074	1.031	0.166	0.166	0.104		23.7		
Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.03	5775.00	155	U-NII-3	29.3	16.0	15.69	Right	10	0.075	1.074	1.031	0.083	0.083	0.052		26.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-127

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 10g SAR [W/kg]	Adjusted 10g SAR [W/kg]	Exposure Ratio (10g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.01	5290.00	58	U-NII-2A	29.3	16.0	15.95	Back	0	0.535	1.012	1.095	0.593	0.593	0.148		22.2	17.2	15.0
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.02	5610.00	122	U-NII-2C	29.3	16.0	15.82	Back	0	0.836	1.042	1.095	0.954	0.954	0.239		20.1		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.07	5855.00	171	U-NII-4	29.3	16.0	15.89	Back	0	0.365	1.025	1.095	0.410	0.410	0.103		23.8		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.13	5290.00	58	U-NII-2A	29.3	16.0	15.95	Front	0	0.586	1.012	1.095	0.649	0.649	0.162		21.8		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.02	5610.00	122	U-NII-2C	29.3	16.0	15.82	Front	0	0.621	1.042	1.095	0.709	0.709	0.177		21.4		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.04	5855.00	171	U-NII-4	29.3	16.0	15.89	Front	0	0.478	1.025	1.095	0.536	0.536	0.134		22.6		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.13	5290.00	58	U-NII-2A	29.3	16.0	15.95	Top	0	0.168	1.012	1.095	0.186	0.186	0.047		27.2		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.02	5610.00	122	U-NII-2C	29.3	16.0	15.82	Top	0	0.242	1.042	1.095	0.276	0.276	0.069		25.5		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.02	5855.00	171	U-NII-4	29.3	16.0	15.89	Top	0	0.189	1.025	1.095	0.212	0.212	0.053		26.7		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.07	5290.00	58	U-NII-2A	29.3	16.0	15.95	Left	0	1.200	1.012	1.095	1.330	1.330	0.333		18.7		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	0.06	5610.00	122	U-NII-2C	29.3	16.0	15.82	Left	0	1.640	1.042	1.095	1.871	1.871	0.468	A87	17.2		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	H	0120M	91.35	-0.06	5855.00	171	U-NII-4	29.3	16.0	15.89	Left	0	1.640	1.025	1.095	1.841	1.841	0.460		17.3		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Phablet 4.0 W/kg (mW/g) averaged over 10 grams											

Table 12-128

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 10g SAR [W/kg]	Adjusted 10g SAR [W/kg]	Exposure Ratio (10g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	-0.04	5290.00	58	U-NII-2A	29.3	16.0	15.60	Back	0	0.218	1.097	1.031	0.247	0.247	0.062		26.0		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	-0.04	5690.00	138	U-NII-2C	29.3	16.0	15.96	Back	0	0.308	1.009	1.031	0.320	0.320	0.080		24.9		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	-0.05	5855.00	171	U-NII-4	29.3	16.0	15.97	Back	0	0.369	1.007	1.031	0.383	0.383	0.096		24.1		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.00	5290.00	58	U-NII-2A	29.3	16.0	15.60	Front	0	0.204	1.097	1.031	0.231	0.231	0.058		26.3		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.01	5690.00	138	U-NII-2C	29.3	16.0	15.96	Front	0	0.240	1.009	1.031	0.250	0.250	0.063		26.0		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	-0.19	5855.00	171	U-NII-4	29.3	16.0	15.97	Front	0	0.209	1.007	1.031	0.217	0.217	0.054		26.6	24.1	15.0
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.06	5290.00	58	U-NII-2A	29.3	16.0	15.60	Top	0	0.182	1.097	1.031	0.206	0.206	0.052		26.8		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.02	5690.00	138	U-NII-2C	29.3	16.0	15.96	Top	0	0.206	1.009	1.031	0.214	0.214	0.054		26.6		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	-0.04	5855.00	171	U-NII-4	29.3	16.0	15.97	Top	0	0.226	1.007	1.031	0.235	0.235	0.059		26.2		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.00	5290.00	58	U-NII-2A	29.3	16.0	15.60	Right	0	0.083	1.097	1.031	0.094	0.094	0.024		30.2		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.04	5690.00	138	U-NII-2C	29.3	16.0	15.96	Right	0	0.189	1.009	1.031	0.197	0.197	0.049		27.0		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	E	0120M	96.96	0.04	5855.00	171	U-NII-4	29.3	16.0	15.97	Right	0	0.147	1.007	1.031	0.153	0.153	0.038		28.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Phablet 4.0 W/kg (mW/g) averaged over 10 grams											

12.32 5 GHz WIFI MIMO Standalone SAR

Table 12-129

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power [2nd ant] [dBm]	Conducted Power [2nd ant] [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.13	5290.00	58	U-NII-2A	58.5	16.0	15.98	16.0	15.45	Right Cheek	0	0.549	1.136	1.084	0.676	0.676	0.423		17.7		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.03	5530.00	106	U-NII-2C	58.5	16.0	15.83	16.0	15.80	Right Cheek	0	0.702	1.048	1.084	0.797	0.797	0.498		16.9		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.21	5775.00	155	U-NII-3	58.5	16.0	15.20	16.0	15.61	Right Cheek	0	0.456	1.202	1.084	0.594	0.594	0.371		18.2		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.20	5855.00	171	U-NII-4	58.5	16.0	15.38	16.0	15.87	Right Cheek	0	0.442	1.153	1.084	0.552	0.552	0.345		18.5		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.18	5290.00	58	U-NII-2A	58.5	16.0	15.98	16.0	15.45	Right Tilt	0	0.431	1.136	1.084	0.531	0.531	0.332		18.7		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.16	5530.00	106	U-NII-2C	58.5	16.0	15.83	16.0	15.80	Right Tilt	0	0.254	1.048	1.084	0.289	0.289	0.181		21.3		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.08	5775.00	155	U-NII-3	58.5	16.0	15.20	16.0	15.61	Right Tilt	0	0.187	1.202	1.084	0.244	0.244	0.153		22.1		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.06	5855.00	171	U-NII-4	58.5	16.0	15.38	16.0	15.87	Right Tilt	0	0.191	1.153	1.084	0.239	0.239	0.149		22.2		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.09	5290.00	58	U-NII-2A	58.5	16.0	15.98	16.0	15.45	Left Cheek	0	0.447	1.136	1.084	0.550	0.550	0.344		18.5		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.05	5530.00	106	U-NII-2C	58.5	16.0	15.83	16.0	15.80	Left Cheek	0	0.356	1.048	1.084	0.404	0.404	0.253		19.9		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.05	5775.00	155	U-NII-3	58.5	16.0	15.20	16.0	15.61	Left Cheek	0	0.263	1.202	1.084	0.343	0.343	0.214		20.6		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.06	5855.00	171	U-NII-4	58.5	16.0	15.38	16.0	15.87	Left Cheek	0	0.177	1.153	1.084	0.221	0.221	0.138		22.5		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.03	5290.00	58	U-NII-2A	58.5	16.0	15.98	16.0	15.45	Left Tilt	0	0.400	1.136	1.084	0.493	0.493	0.308		19.0		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.15	5530.00	106	U-NII-2C	58.5	16.0	15.83	16.0	15.80	Left Tilt	0	0.351	1.048	1.084	0.399	0.399	0.249		19.9		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.04	5775.00	155	U-NII-3	58.5	16.0	15.20	16.0	15.61	Left Tilt	0	0.162	1.202	1.084	0.211	0.211	0.132		22.7		
Head	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.05	5855.00	171	U-NII-4	58.5	16.0	15.38	16.0	15.87	Left Tilt	0	0.135	1.153	1.084	0.169	0.169	0.106		23.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 19 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 16 dBm.

Table 12-130

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power [2nd ant] [dBm]	Conducted Power [2nd ant] [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.01	5290.00	58	U-NII-2A	58.5	16.0	15.98	16.0	15.45	Back	10	0.161	1.136	1.084	0.198	0.198	0.124		23.0		
Body-worn	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.05	5530.00	106	U-NII-2C	58.5	16.0	15.83	16.0	15.80	Back	10	0.353	1.048	1.084	0.401	0.401	0.251		19.9		
Body-worn	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.05	5855.00	171	U-NII-4	58.5	16.0	15.38	16.0	15.87	Back	10	0.397	1.153	1.084	0.496	0.496	0.310	A85	19.0		
Body-worn/Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.06	5775.00	155	U-NII-3	58.5	16.0	15.20	16.0	15.61	Back	10	0.315	1.202	1.084	0.410	0.410	0.256	A86	19.8		
Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.03	5775.00	155	U-NII-3	58.5	16.0	15.20	16.0	15.61	Front	10	0.071	1.202	1.084	0.093	0.093	0.058		26.3	19.0	15.0
Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.19	5775.00	155	U-NII-3	58.5	16.0	15.20	16.0	15.61	Top	10	0.166	1.202	1.084	0.216	0.216	0.135		22.6		
Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.13	5775.00	155	U-NII-3	58.5	16.0	15.20	16.0	15.61	Right	10	0.101	1.202	1.084	0.132	0.132	0.083		24.8		
Hotspot	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.17	5775.00	155	U-NII-3	58.5	16.0	15.20	16.0	15.61	Left	10	0.295	1.202	1.084	0.384	0.384	0.240		20.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 19 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 16 dBm.

Table 12-131

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	U-NII band	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power [2nd ant] [dBm]	Conducted Power [2nd ant] [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 10g SAR [W/kg]	Adjusted 10g SAR [W/kg]	Exposure Ratio (10g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.04	5290.00	58	U-NII-2A	58.5	16.0	15.98	16.0	15.45	Back	0	0.504	1.136	1.084	0.621	0.621	0.155		22.0		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.01	5530.00	106	U-NII-2C	58.5	16.0	15.83	16.0	15.80	Back	0	0.652	1.048	1.084	0.741	0.741	0.185		21.2		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.02	5855.00	171	U-NII-4	58.5	16.0	15.38	16.0	15.87	Back	0	0.420	1.153	1.084	0.525	0.525	0.131		22.7		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.06	5290.00	58	U-NII-2A	58.5	16.0	15.98	16.0	15.45	Front	0	0.570	1.136	1.084	0.702	0.702	0.176		21.5		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.07	5530.00	106	U-NII-2C	58.5	16.0	15.83	16.0	15.80	Front	0	0.651	1.048	1.084	0.740	0.740	0.185		21.2		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.02	5855.00	171	U-NII-4	58.5	16.0	15.38	16.0	15.87	Front	0	0.352	1.153	1.084	0.440	0.440	0.110		23.5		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.03	5290.00	58	U-NII-2A	58.5	16.0	15.98	16.0	15.45	Top	0	0.221	1.136	1.084	0.272	0.272	0.068		25.6		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.01	5530.00	106	U-NII-2C	58.5	16.0	15.83	16.0	15.80	Top	0	0.257	1.048	1.084	0.292	0.292	0.073		25.3	17.3	15.0
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.13	5855.00	171	U-NII-4	58.5	16.0	15.38	16.0	15.87	Top	0	0.214	1.153	1.084	0.267	0.267	0.067		25.7		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.05	5290.00	58	U-NII-2A	58.5	16.0	15.98	16.0	15.45	Right	0	0.077	1.136	1.084	0.095	0.095	0.024		30.2		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.09	5530.00	106	U-NII-2C	58.5	16.0	15.83	16.0	15.80	Right	0	0.159	1.048	1.084	0.181	0.181	0.045		27.4		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.14	5855.00	171	U-NII-4	58.5	16.0	15.38	16.0	15.87	Right	0	0.143	1.153	1.084	0.179	0.179	0.045		27.4		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.02	5290.00	58	U-NII-2A	58.5	16.0	15.98	16.0	15.45	Left	0	1.340	1.136	1.084	1.650	1.650	0.413		17.8		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	-0.03	5530.00	106	U-NII-2C	58.5	16.0	15.83	16.0	15.80	Left	0	1.620	1.048	1.084	1.840	1.840	0.460		17.3		
Phablet	5 GHz WIFI / IEEE 802.11ac	80	OFDM	MIMO	0120M	92.29	0.03	5855.00	171	U-NII-4	58.5	16.0	15.38	16.0	15.87	Left	0	1.400	1.153	1.084	1.750	1.750	0.438		17.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Phablet 4.0 W/kg (mW/g) averaged over 10 grams											

Note: To achieve the 19 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 16 dBm.

12.33 6 GHz WIFI SISO Standalone SAR and APD

Table 12-132

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0108M	99.67	-0.09	5965.00	3	32.5	17.0	16.99	Right Cheek	0	0.511	1.002	1.003	0.514	0.709	0.443		19.8	18.4	18.4
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0108M	99.67	0.02	6285.00	67	32.5	17.0	16.54	Right Cheek	0	0.559	1.112	1.003	0.623	0.861	0.538		19.0		
Head	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	H	0108M	99.67	-0.13	6465.00	103	68.1	16.0	15.89	Right Cheek	0	0.555	1.026	1.003	0.571	0.992	0.620		18.4		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0108M	99.67	-0.13	6685.00	147	32.5	17.0	16.92	Right Cheek	0	0.552	1.019	1.003	0.564	0.778	0.486		19.4		
Head	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	H	0108M	99.67	0.02	7025.00	215	68.1	15.5	15.24	Right Cheek	0	0.123	1.062	1.003	0.131	0.255	0.159		24.3		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0079M	99.67	0.10	5965.00	3	32.5	17.0	16.99	Right Tilt	0	0.357	1.002	1.003	0.359	0.496	0.310		21.4		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0079M	99.67	0.17	5965.00	3	32.5	17.0	16.99	Left Cheek	0	0.196	1.002	1.003	0.197	0.272	0.170		24.0		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0079M	99.67	0.07	5965.00	3	32.5	17.0	16.99	Left Tilt	0	0.192	1.002	1.003	0.193	0.267	0.167		24.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram											

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0108M	99.67	-0.09	5965.00	3	32.5	17.0	16.99	Right Cheek	0	3.320	1.002	1.003	3.337	4.609	0.230		23.8	22.2	18.4
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0108M	99.67	0.02	6285.00	67	32.5	17.0	16.54	Right Cheek	0	3.690	1.112	1.003	4.116	5.681	0.284		22.9		
Head	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	H	0108M	99.67	-0.13	6465.00	103	68.1	16.0	15.89	Right Cheek	0	3.700	1.026	1.003	3.808	6.613	0.331		22.2		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0108M	99.67	-0.13	6685.00	147	32.5	17.0	16.92	Right Cheek	0	3.060	1.019	1.003	3.127	4.315	0.216		24.1		
Head	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	H	0108M	99.67	0.02	7025.00	215	68.1	15.5	15.24	Right Cheek	0	0.614	1.062	1.003	0.654	1.275	0.064		29.4		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0079M	99.67	0.10	5965.00	3	32.5	17.0	16.99	Right Tilt	0	2.320	1.002	1.003	2.332	3.221	0.161		25.4		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0079M	99.67	0.17	5965.00	3	32.5	17.0	16.99	Left Cheek	0	1.470	1.002	1.003	1.477	2.041	0.102		27.3		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	H	0079M	99.67	0.07	5965.00	3	32.5	17.0	16.99	Left Tilt	0	1.420	1.002	1.003	1.427	1.971	0.099		27.5		

Table 12-133

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0079M	99.67	-0.11	5965.00	3	32.5	17.0	16.99	Right Cheek	0	0.218	1.002	1.003	0.219	0.853	0.533		23.5	22.9	22.9
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0079M	99.67	-0.07	6285.00	67	32.5	17.0	16.98	Right Cheek	0	0.211	1.005	1.003	0.213	0.827	0.517		23.7		
Head	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	E	0108M	99.67	0.05	6465.00	103	68.1	16.0	15.50	Right Cheek	0	0.091	1.122	1.003	0.102	0.502	0.314		25.8		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0079M	99.67	-0.01	6685.00	147	32.5	17.0	16.89	Right Cheek	0	0.249	1.026	1.003	0.256	0.996	0.623		22.9		
Head	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	E	0108M	99.67	0.02	7025.00	215	68.1	15.5	15.00	Right Cheek	0	0.144	1.122	1.003	0.162	0.891	0.557		23.4		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0079M	99.67	0.04	5965.00	3	32.5	17.0	16.99	Right Tilt	0	0.200	1.002	1.003	0.201	0.782	0.489		23.9		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0108M	99.67	0.02	5965.00	3	32.5	17.0	16.99	Left Cheek	0	0.169	1.002	1.003	0.170	0.661	0.413		24.6		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0108M	99.67	0.19	5965.00	3	32.5	17.0	16.99	Left Tilt	0	0.141	1.002	1.003	0.142	0.551	0.344		25.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram											

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0079M	99.67	-0.11	5965.00	3	32.5	17.0	16.99	Right Cheek	0	1.800	1.002	1.003	1.809	7.039	0.352		26.5	26.5	22.9
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0079M	99.67	-0.07	6285.00	67	32.5	17.0	16.98	Right Cheek	0	1.550	1.005	1.003	1.562	6.076	0.304		27.1		
Head	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	E	0108M	99.67	0.05	6465.00	103	68.1	16.0	15.50	Right Cheek	0	0.666	1.122	1.003	0.749	3.671	0.184		29.3		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0079M	99.67	-0.01	6685.00	147	32.5	17.0	16.89	Right Cheek	0	1.440	1.026	1.003	1.482	5.763	0.288		27.3		
Head	6 GHz WIFI/ IEEE 802.11ax	80	OFDM	E	0108M	99.67	0.02	7025.00	215	68.1	15.5	15.00	Right Cheek	0	0.982	1.122	1.003	1.105	6.073	0.304		27.1		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0079M	99.67	0.04	5965.00	3	32.5	17.0	16.99	Right Tilt	0	1.390	1.002	1.003	1.397	5.436	0.272		27.6		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0108M	99.67	0.02	5965.00	3	32.5	17.0	16.99	Left Cheek	0	1.080	1.002	1.003	1.085	4.224	0.211		28.7		
Head	6 GHz WIFI/ IEEE 802.11ax	40	OFDM	E	0108M	99.67	0.19	5965.00	3	32.5	17.0	16.99	Left Tilt	0	1.060	1.002	1.003	1.065	4.145	0.207		28.8		

Table 12-134

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.04	6985.00	207	68.1	9.0	8.89	Back	10	0.004	1.026	1.003	0.004	0.004	0.003		32.8	32.8	8.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram											

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.04	6985.00	207	68.1	9.0	8.89	Back	10	0.055	1.026	1.003	0.057	0.057	0.003		33.5	33.5	8.0

Table 12-135

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	0.05	6025.00	15	68.1	9.0	8.93	Back	10	0.063	1.016	1.003	0.064	0.064	0.040	A89	20.9	20.9	8.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram											

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	0.05	6025.00	15	68.1	9.0	8.93	Back	10	0.507	1.016	1.003	0.517	0.517	0.026	A89	22.8	22.8	8.0

Table 12-136

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 10g SAR [W/kg]	Adjusted 10g SAR [W/kg]	Exposure Ratio (10g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.09	6985.00	207	68.1	9.0	8.89	Back	0	0.015	1.026	1.003	0.015	0.015	0.004		31.0		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.07	6985.00	207	68.1	9.0	8.89	Front	0	0.043	1.026	1.003	0.044	0.044	0.011		26.5		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.05	6985.00	207	68.1	9.0	8.89	Top	0	0.000	1.026	1.003	0.000	0.000	0.000		52.8		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.01	6985.00	207	68.1	9.0	8.89	Right	0	0.000	1.026	1.003	0.000	0.000	0.000		52.8		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	-0.17	6025.00	15	68.1	9.0	8.81	Left	0	0.351	1.045	1.003	0.368	0.368	0.092		17.3	17.2	8.0
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	-0.08	6345.00	79	68.1	9.0	8.73	Left	0	0.301	1.064	1.003	0.321	0.321	0.080		17.9		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.00	6505.00	111	68.1	9.0	8.88	Left	0	0.366	1.028	1.003	0.377	0.377	0.094	A90	17.2		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	-0.06	6825.00	175	68.1	9.0	8.83	Left	0	0.175	1.040	1.003	0.183	0.183	0.046		20.3		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	-0.09	6985.00	207	68.1	9.0	8.89	Left	0	0.094	1.026	1.003	0.097	0.097	0.024		23.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Phablet 4.0 W/kg (mW/g) averaged over 10 grams											

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.09	6985.00	207	68.1	9.0	8.89	Back	0	0.331	1.026	1.003	0.341	0.341	0.017		24.6		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.07	6985.00	207	68.1	9.0	8.89	Front	0	0.991	1.026	1.003	1.020	1.020	0.051		19.9		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.05	6985.00	207	68.1	9.0	8.89	Top	0	0.000	1.026	1.003	0.000	0.000	0.000		59.8		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.01	6985.00	207	68.1	9.0	8.89	Right	0	0.002	1.026	1.003	0.002	0.002	0.000		46.8		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	-0.17	6025.00	15	68.1	9.0	8.81	Left	0	8.420	1.045	1.003	8.825	8.825	0.441		10.5	10.4	8.0
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	-0.08	6345.00	79	68.1	9.0	8.73	Left	0	7.210	1.064	1.003	7.694	7.694	0.385		11.1		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	0.00	6505.00	111	68.1	9.0	8.88	Left	0	8.670	1.028	1.003	8.939	8.939	0.447	A90	10.4		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	-0.06	6825.00	175	68.1	9.0	8.83	Left	0	4.210	1.040	1.003	4.392	4.392	0.220		13.5		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	H	0079M	99.67	-0.09	6985.00	207	68.1	9.0	8.89	Left	0	2.270	1.026	1.003	2.336	2.336	0.117		16.3		

Table 12-137

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 10g SAR [W/kg]	Adjusted 10g SAR [W/kg]	Exposure Ratio (10g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.06	6025.00	15	68.1	9.0	8.93	Back	0	0.094	1.016	1.003	0.096	0.096	0.024		23.1		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.05	6345.00	79	68.1	9.0	8.51	Back	0	0.078	1.119	1.003	0.088	0.088	0.022		23.5		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.13	6505.00	111	68.1	9.0	8.90	Back	0	0.063	1.023	1.003	0.065	0.065	0.016		24.8		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.13	6825.00	175	68.1	9.0	8.91	Back	0	0.048	1.021	1.003	0.049	0.049	0.012		26.0		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.11	6985.00	207	68.1	9.0	8.68	Back	0	0.057	1.076	1.003	0.062	0.062	0.016		25.0	23.1	8.0
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.19	6025.00	15	68.1	9.0	8.93	Front	0	0.034	1.016	1.003	0.035	0.035	0.009		27.5		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.10	6025.00	15	68.1	9.0	8.93	Top	0	0.036	1.016	1.003	0.037	0.037	0.009		27.3		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	0.06	6025.00	15	68.1	9.0	8.93	Right	0	0.036	1.016	1.003	0.037	0.037	0.009		27.3		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	0.09	6025.00	15	68.1	9.0	8.93	Left	0	0.006	1.016	1.003	0.006	0.006	0.002		35.1		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Phablet 4.0 W/kg (mW/g) averaged over 10 grams											

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.06	6025.00	15	68.1	9.0	8.93	Back	0	2.190	1.016	1.003	2.232	2.232	0.112		16.5		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.05	6345.00	79	68.1	9.0	8.51	Back	0	1.810	1.119	1.003	2.031	2.031	0.102		16.9		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.13	6505.00	111	68.1	9.0	8.90	Back	0	1.460	1.023	1.003	1.498	1.498	0.075		18.2		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.13	6825.00	175	68.1	9.0	8.91	Back	0	1.130	1.021	1.003	1.157	1.157	0.058		19.3		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.11	6985.00	207	68.1	9.0	8.68	Back	0	1.340	1.076	1.003	1.446	1.446	0.072		18.4	16.5	8.0
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.19	6025.00	15	68.1	9.0	8.93	Front	0	0.790	1.016	1.003	0.805	0.805	0.040		20.9		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	-0.10	6025.00	15	68.1	9.0	8.93	Top	0	0.847	1.016	1.003	0.863	0.863	0.043		20.6		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	0.06	6025.00	15	68.1	9.0	8.93	Right	0	0.849	1.016	1.003	0.865	0.865	0.043		20.6		
Phablet	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	E	0079M	99.67	0.09	6025.00	15	68.1	9.0	8.93	Left	0	0.135	1.016	1.003	0.138	0.138	0.007		28.6		

12.34 6 GHz WIFI MIMO Standalone SAR and APD

Table 12-138

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	-0.06	5965.00	3	32.5	17.0	16.86	17.0	16.65	Right Cheek	0	0.576	1.084	1.003	0.626	0.626	0.391		19.0		
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	-0.11	6285.00	67	32.5	17.0	16.59	17.0	15.95	Right Cheek	0	0.631	1.274	1.003	0.806	0.806	0.504		17.9		
Head	6 GHz WiFi/ IEEE 802.11ax	80	OFDM	MIMO	0073M	99.67	0.04	6465.00	103	68.1	16.0	15.41	16.0	15.79	Right Cheek	0	0.680	1.146	1.003	0.782	0.984	0.615	A88	17.0		
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	0.01	6685.00	147	32.5	17.0	16.90	17.0	16.60	Right Cheek	0	0.277	1.096	1.003	0.305	0.305	0.191		22.1	17.0	17.0
Head	6 GHz WiFi/ IEEE 802.11ax	80	OFDM	MIMO	0073M	99.67	0.14	7025.00	215	68.1	15.5	14.84	15.5	15.20	Right Cheek	0	0.135	1.164	1.003	0.158	0.223	0.139		23.5		
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	0.12	5965.00	3	32.5	17.0	16.86	17.0	16.65	Right Tilt	0	0.418	1.084	1.003	0.454	0.454	0.284		20.4		
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	0.17	5965.00	3	32.5	17.0	16.86	17.0	16.65	Left Cheek	0	0.240	1.084	1.003	0.261	0.261	0.163		22.8		
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	0.18	5965.00	3	32.5	17.0	16.86	17.0	16.65	Left Tilt	0	0.233	1.084	1.003	0.253	0.253	0.158		22.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Head 1.6 W/kg (mW/g) averaged over 1 gram							

Note: To achieve the 20 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 17 dBm.

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	-0.06	5965.00	3	32.5	17.0	16.86	17.0	16.65	Right Cheek	0	3.670	1.084	1.003	3.990	3.990	0.200		23.0		
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	-0.11	6285.00	67	32.5	17.0	16.59	17.0	15.95	Right Cheek	0	3.880	1.274	1.003	4.958	4.958	0.248		22.1		
Head	6 GHz WiFi/ IEEE 802.11ax	80	OFDM	MIMO	0073M	99.67	0.04	6465.00	103	68.1	16.0	15.41	16.0	15.79	Right Cheek	0	4.050	1.146	1.003	4.655	5.858	0.293	A88	21.4		
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	0.01	6685.00	147	32.5	17.0	16.90	17.0	16.60	Right Cheek	0	1.760	1.096	1.003	1.935	1.935	0.097		26.2		
Head	6 GHz WiFi/ IEEE 802.11ax	80	OFDM	MIMO	0073M	99.67	0.14	7025.00	215	68.1	15.5	14.84	15.5	15.20	Right Cheek	0	0.922	1.164	1.003	1.076	1.520	0.076		27.2		
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	0.12	5965.00	3	32.5	17.0	16.86	17.0	16.65	Right Tilt	0	3.020	1.084	1.003	3.284	3.284	0.164		23.9		
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	0.17	5965.00	3	32.5	17.0	16.86	17.0	16.65	Left Cheek	0	1.590	1.084	1.003	1.729	1.729	0.086		26.7	21.4	17.0
Head	6 GHz WiFi/ IEEE 802.11ax	40	OFDM	MIMO	0073M	99.67	0.18	5965.00	3	32.5	17.0	16.86	17.0	16.65	Left Tilt	0	1.700	1.084	1.003	1.848	1.848	0.092		26.4		

Note: To achieve the 20 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 17 dBm.

Table 12-139

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	MIMO	0076M	99.67	0.04	6025.00	15	136.1	9.0	8.70	9.0	8.56	Back	10	0.057	1.107	1.003	0.063	0.063	0.039		20.9	20.9	8.0
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																				Body 1.6 W/kg (mW/g) averaged over 1 gram						

Note: To achieve the 12 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 9 dBm.

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn	6 GHz WiFi/ IEEE 802.11ax	160	OFDM	MIMO	0076M	99.67	0.04	6025.00	15	136.1	9.0	8.70	9.0	8.56	Back	10	0.462	1.107	1.003	0.513	0.513	0.026		23.9	23.9	8.0

Table 12-140

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 10g SAR [W/kg]	Adjusted 10g SAR [W/kg]	Exposure Ratio (10g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0073M	99.67	0.11	6025.00	15	136.1	9.0	8.70	9.0	8.56	Back	0	0.063	1.107	1.003	0.070	0.070	0.018		24.5		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0073M	99.67	-0.12	6025.00	15	136.1	9.0	8.70	9.0	8.56	Front	0	0.064	1.107	1.003	0.071	0.071	0.018		24.4		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0073M	99.67	0.07	6025.00	15	136.1	9.0	8.70	9.0	8.56	Top	0	0.033	1.107	1.003	0.037	0.037	0.009		27.3		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0073M	99.67	0.05	6025.00	15	136.1	9.0	8.70	9.0	8.56	Right	0	0.023	1.107	1.003	0.026	0.026	0.007		28.9		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0108M	99.67	0.02	6025.00	15	136.1	9.0	8.70	9.0	8.56	Left	0	0.253	1.107	1.003	0.281	0.281	0.070		18.4	17.5	8.0
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0108M	99.67	0.05	6345.00	79	136.1	9.0	8.60	9.0	8.59	Left	0	0.294	1.099	1.003	0.324	0.324	0.081		17.8		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0108M	99.67	0.01	6505.00	111	136.1	9.0	8.49	9.0	8.72	Left	0	0.307	1.125	1.003	0.346	0.346	0.087		17.5		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0108M	99.67	0.06	6825.00	175	136.1	9.0	8.02	9.0	8.98	Left	0	0.146	1.253	1.003	0.183	0.183	0.046		20.3		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0108M	99.67	0.03	6985.00	207	136.1	9.0	8.29	9.0	8.81	Left	0	0.117	1.178	1.003	0.138	0.138	0.035		21.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Phablet 4.0 W/kg (mW/g) averaged over 10 grams											

Note: To achieve the 12 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 9 dBm.

Exposure	Band/ Mode	Bandwidth [MHz]	Service/ Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported APD [W/m² (4cm²)]	Adjusted APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0073M	99.67	0.11	6025.00	15	136.1	9.0	8.70	9.0	8.56	Back	0	1.430	1.107	1.003	1.588	1.588	0.079		19.0		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0073M	99.67	-0.12	6025.00	15	136.1	9.0	8.70	9.0	8.56	Front	0	1.480	1.107	1.003	1.643	1.643	0.082		18.9		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0073M	99.67	0.07	6025.00	15	136.1	9.0	8.70	9.0	8.56	Top	0	0.740	1.107	1.003	0.822	0.822	0.041		21.9		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0073M	99.67	0.05	6025.00	15	136.1	9.0	8.70	9.0	8.56	Right	0	0.519	1.107	1.003	0.576	0.576	0.029		23.4		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0108M	99.67	0.02	6025.00	15	136.1	9.0	8.70	9.0	8.56	Left	0	5.930	1.107	1.003	6.584	6.584	0.329		12.9	11.9	8.0
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0108M	99.67	0.05	6345.00	79	136.1	9.0	8.60	9.0	8.59	Left	0	6.920	1.099	1.003	7.628	7.628	0.381		12.2		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0108M	99.67	0.01	6505.00	111	136.1	9.0	8.49	9.0	8.72	Left	0	7.230	1.125	1.003	8.158	8.158	0.408		11.9		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0108M	99.67	0.06	6825.00	175	136.1	9.0	8.02	9.0	8.98	Left	0	3.440	1.253	1.003	4.323	4.323	0.216		14.7		
Phablet	6 GHz WIFI/ IEEE 802.11ax	160	OFDM	MIMO	0108M	99.67	0.03	6985.00	207	136.1	9.0	8.29	9.0	8.81	Left	0	2.770	1.178	1.003	3.273	3.273	0.164		15.9		

Note: To achieve the 12 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 9 dBm.

12.35 2.4 GHz Bluetooth SISO Standalone SAR

Table 12-141

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	2.4 GHz Bluetooth	FHSS	H	0120M	76.80	0.04	2441.00	39	1	19.5	18.64	Right Cheek	0	0.743	1.218	1.016	0.919	1.031	0.644		18.7		
Head	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	0.02	2402.00	0	1	20.5	19.25	Right Cheek	0	0.594	1.334	1.020	0.808	0.808	0.505		20.8		
Head	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	-0.01	2440.00	19	1	20.5	19.94	Right Cheek	0	0.757	1.138	1.020	0.879	0.879	0.549	A91	20.4		
Head	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	-0.01	2480.00	39	1	20.5	19.16	Right Cheek	0	0.633	1.361	1.020	0.879	0.879	0.549		20.4	18.7	18.9
Head	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	0.00	2440.00	19	1	20.5	19.94	Right Tilt	0	0.484	1.138	1.020	0.562	0.562	0.351		22.4		
Head	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	0.15	2440.00	19	1	20.5	19.94	Left Cheek	0	0.193	1.138	1.020	0.224	0.224	0.140		26.3		
Head	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	0.05	2440.00	19	1	20.5	19.94	Left Tilt	0	0.179	1.138	1.020	0.208	0.208	0.130		26.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-142

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	0.02	2440.00	19	1	20.0	19.37	Right Cheek	0	0.329	1.156	1.018	0.387	0.487	0.304		23.5		
Head	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	0.06	2440.00	19	1	20.0	19.37	Right Tilt	0	0.041	1.156	1.018	0.048	0.061	0.038		32.5		
Head	2.4 GHz Bluetooth	FHSS	J	0120M	76.80	0.04	2441.00	39	1	19.5	18.68	Left Cheek	0	0.514	1.209	1.016	0.631	1.001	0.626		20.4	20.4	20.4
Head	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	0.04	2440.00	19	1	20.0	19.37	Left Cheek	0	0.597	1.156	1.018	0.703	0.884	0.553		20.9		
Head	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	0.02	2440.00	19	1	20.0	19.37	Left Tilt	0	0.061	1.156	1.018	0.072	0.090	0.056		30.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-143

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	0.01	2440.00	19	1	20.5	19.94	Back	10	0.181	1.138	1.020	0.210	0.290	0.181	A92	26.6		
Hotspot	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	-0.03	2440.00	19	1	20.5	19.94	Front	10	0.190	1.138	1.020	0.221	0.304	0.190		26.4		
Hotspot	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	-0.04	2440.00	19	1	20.5	19.94	Top	10	0.154	1.138	1.020	0.179	0.247	0.154		27.3	21.6	21.3
Hotspot	2.4 GHz Bluetooth	FHSS	H	0120M	76.80	0.02	2441.00	39	1	19.5	18.64	Left	10	0.380	1.218	1.016	0.470	0.917	0.573		21.6		
Hotspot	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	-0.01	2440.00	19	1	20.5	19.94	Left	10	0.422	1.138	1.020	0.490	0.676	0.423	A93	22.9		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 12-144

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	0.03	2440.00	19	1	20.0	19.37	Back	10	0.044	1.156	1.018	0.052	0.231	0.144		32.2		
Hotspot	2.4 GHz Bluetooth	FHSS	J	0120M	76.80	0.03	2441.00	39	1	19.5	18.68	Front	10	0.067	1.209	1.016	0.082	0.463	0.289		29.2		
Hotspot	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	-0.03	2440.00	19	1	20.0	19.37	Front	10	0.074	1.156	1.018	0.087	0.389	0.243		29.9	29.2	25.9
Hotspot	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	0.08	2440.00	19	1	20.0	19.37	Top	10	0.003	1.156	1.018	0.004	0.016	0.010		43.9		
Hotspot	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	0.01	2440.00	19	1	20.0	19.37	Right	10	0.020	1.156	1.018	0.024	0.105	0.066		35.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram											

12.36 2.4 GHz Bluetooth MIMO Standalone SAR

Table 12-145

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Head	2.4 GHz Bluetooth	FHSS	MIMO	0120M	77.07	-0.02	2441.00	39	1	15.5	15.15	15.5	15.39	Right Cheek	0	0.298	1.083	1.025	0.331	0.707	0.442		19.2		
Head	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.02	2440.00	19	1	15.5	15.44	14.0	13.92	Right Cheek	0	0.349	1.019	1.018	0.362	0.997	0.623		17.8		
Head	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	-0.01	2440.00	19	1	15.5	15.44	14.0	13.92	Right Tilt	0	0.241	1.019	1.018	0.250	0.688	0.430		19.4	17.8	17.8
Head	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.09	2440.00	19	1	15.5	15.44	14.0	13.92	Left Cheek	0	0.170	1.019	1.018	0.176	0.485	0.303		20.9		
Head	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.17	2440.00	19	1	15.5	15.44	14.0	13.92	Left Tilt	0	0.074	1.019	1.018	0.077	0.211	0.132		24.5		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 18.5 dBm maximum allowed MIMO power for Bluetooth LE shown in the documentation, Antenna H transmits at a maximum allowed power of 15.5 dBm, and Antenna J transmits at a maximum allowed power of 14.0 dBm. To achieve the 18.5 dBm maximum allowed MIMO power for Bluetooth BDR shown in the documentation, each antenna transmits at a maximum allowed power of 15.5 dBm.

Table 12-146

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Max Allowed Power [dBm]	Conducted Power [dBm]	Max Allowed Power (2nd ant) [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Adjusted 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Body-worn/Hotspot	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.05	2440.00	19	1	15.5	15.44	14.0	13.92	Back	10	0.110	1.019	1.018	0.114	0.386	0.241		22.8		
Hotspot	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.09	2440.00	19	1	15.5	15.44	14.0	13.92	Front	10	0.098	1.019	1.018	0.102	0.344	0.215		23.3		
Hotspot	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.07	2440.00	19	1	15.5	15.44	14.0	13.92	Top	10	0.074	1.019	1.018	0.077	0.260	0.163		24.5		
Hotspot	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.18	2440.00	19	1	15.5	15.44	14.0	13.92	Right	10	0.018	1.019	1.018	0.019	0.063	0.039		30.6	19.8	18.7
Hotspot	2.4 GHz Bluetooth	FHSS	MIMO	0120M	77.07	0.01	2441.00	39	1	15.5	15.15	15.5	15.39	Left	10	0.178	1.083	1.025	0.198	0.520	0.325		21.5		
Hotspot	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.03	2440.00	19	1	15.5	15.44	14.0	13.92	Left	10	0.219	1.019	1.018	0.227	0.769	0.481		19.8		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 18.5 dBm maximum allowed MIMO power for Bluetooth LE shown in the documentation, Antenna H transmits at a maximum allowed power of 15.5 dBm, and Antenna J transmits at a maximum allowed power of 14.0 dBm. To achieve the 18.5 dBm maximum allowed MIMO power for Bluetooth BDR shown in the documentation, each antenna transmits at a maximum allowed power of 15.5 dBm.

12.37 UWB Standalone SAR

Table 12-147

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Exposure Ratio (10g SAR)	Plot #
Phablet	UWB	CW	1	0024M	1:1	0.08	6489.60	5	Back	0	0.000	0.000	
Phablet	UWB	CW	1	0024M	1:1	0.07	7987.20	9	Back	0	0.002	0.001	
Phablet	UWB	CW	1	0024M	1:1	0.07	6489.60	5	Front	0	0.000	0.000	
Phablet	UWB	CW	1	0024M	1:1	0.03	7987.20	9	Front	0	0.002	0.001	A94
Phablet	UWB	CW	1	0024M	1:1	0.03	6489.60	5	Left	0	0.001	0.000	
Phablet	UWB	CW	1	0024M	1:1	0.01	7987.20	9	Left	0	0.000	0.000	
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Phablet 4.0 W/kg (mW/g) averaged over 10 grams				

Exposure	Band/ Mode	Service/ Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Test Position	Spacing [mm]	Measured APD [W/m² (4cm²)]	APD Exposure Ratio	Plot #
Phablet	UWB	CW	1	0024M	1:1	0.08	6489.60	5	Back	0	0.005	0.001	
Phablet	UWB	CW	1	0024M	1:1	0.07	7987.20	9	Back	0	0.044	0.011	
Phablet	UWB	CW	1	0024M	1:1	0.07	6489.60	5	Front	0	0.008	0.002	
Phablet	UWB	CW	1	0024M	1:1	0.03	7987.20	9	Front	0	0.050	0.013	A94
Phablet	UWB	CW	1	0024M	1:1	0.03	6489.60	5	Left	0	0.027	0.007	
Phablet	UWB	CW	1	0024M	1:1	0.01	7987.20	9	Left	0	0.016	0.004	
Health Canada Safety Code 6 Spatial Peak Uncontrolled Exposure/ General Population									Body 20 W/m² average over 4 cm^2				

12.38 NFC Standalone SAR

Table 12-148

Exposure	Band / Mode	Signal Type	Ant.	Serial Number	Power Drift [dB]	Frequency [MHz]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Exposure Ratio (10g SAR)	Plot #
Phablet	NFC	B	NFC	0129M	-0.04	13.60	Back	0	0.012	0.003	A95
Phablet	NFC	B	NFC	0129M	0.09	13.60	Front	0	0.000	0.000	
Phablet	NFC	B	NFC	0129M	0.06	13.60	Top	0	0.000	0.000	
Phablet	NFC	B	NFC	0129M	0.04	13.60	Left	0	0.000	0.000	
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Phablet 4.0 W/kg (mW/g) averaged over 10 grams				

12.39 NTN Band 255 Standalone SAR

Table 12-149

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	# Tones	Tone Start	Test Position	Spacing [mm]	Measured 1g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 1g SAR [W/kg]	Exposure Ratio (1g SAR)	Plot #
Body-worn	NTN Band 255	CW	F	0089M	1:1	-0.02	1626.60	261505	23.0	22.76	1	5	Back	10	0.466	1.057	0.710	0.350	0.219	A96
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 12-150

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Max Allowed Power [dBm]	Conducted Power [dBm]	# Tones	Tone Start	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Power Scaling Factor	Duty Cycle Scaling Factor	Reported 10g SAR [W/kg]	Exposure Ratio (10g SAR)	Plot #
Phablet	NTN Band 255	CW	F	0089M	71.00	0.06	1626.60	261505	23.0	22.76	1	5	Back	0	1.340	1.057	0.710	1.006	0.252	
Phablet	NTN Band 255	CW	F	0089M	71.00	0.09	1626.60	261505	23.0	22.76	1	5	Front	0	1.600	1.057	0.710	1.201	0.300	
Phablet	NTN Band 255	CW	F	0089M	71.00	0.01	1626.60	261505	23.0	22.76	1	5	Top	0	3.600	1.057	0.710	2.702	0.676	A97
Phablet	NTN Band 255	CW	F	0089M	71.00	0.01	1626.60	261505	23.0	22.76	1	5	Top	0	3.600	1.057	0.710	2.702	0.676	
Phablet	NTN Band 255	CW	F	0089M	71.00	-0.01	1643.50	261674	23.0	22.53	1	5	Top	0	3.540	1.114	0.710	2.800	0.700	
Phablet	NTN Band 255	CW	F	0089M	71.00	-0.01	1660.40	261843	23.0	22.49	1	5	Top	0	3.360	1.125	0.710	2.684	0.671	
Phablet	NTN Band 255	CW	F	0089M	71.00	-0.07	1626.60	261505	23.0	22.76	1	5	Left	0	0.489	1.057	0.710	0.367	0.092	
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Phablet 4.0 W/kg (mW/g) averaged over 10 grams							

Note: Blue entry represents variability measurement

SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, and FCC KDB Publication 447498 D01v06.
2. Batteries are fully charged at the beginning of the SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D01v06.
6. Device was tested using a fixed spacing for body-worn accessory testing. A separation distance of 10 mm was considered because the manufacturer has determined that there will be body-worn accessories available in the marketplace for users to support this separation distance.
7. Per FCC KDB Publication 648474 D01v06r03, body-worn SAR was evaluated without a headset connected to the device. Since the standalone reported body-worn SAR was ≤ 1.2 W/kg, no additional body-worn SAR evaluations using a headset cable were required.
8. Per FCC KDB 865664 D01v01r04, variability SAR tests were performed when the measured SAR results for a frequency band were greater than or equal to 0.8 W/kg. Repeated SAR measurements are highlighted in the tables above for clarity. Please see Section 14 for variability analysis.

9. During SAR Testing for the Wireless Router conditions per FCC KDB Publication 941225 D06v02r01, the actual Portable Hotspot operation (with actual simultaneous transmission of a transmitter with WIFI) was not activated (See Section 7.7 for more details).
10. Per FCC KDB Publication 648474 D01v06r03, this device is considered a "phablet" since the display diagonal dimension is > 150 mm and < 200 mm. Therefore, phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg.
11. This device supports dynamic antenna tuning for some bands. Per FCC Guidance, SAR was measured according to the normally required SAR measurement configurations with tuner active. The auto-tune state determined by the device was verified before and after each SAR measurement and is listed in tables above. Please see Section 15 for supplemental data.
12. Unless otherwise noted, when 10g SAR measurement is considered, a factor of 2.5 is applied to the 1g thresholds for the equivalent test cases.
13. This device uses Qualcomm Smart Transmit for WWAN/WLAN/BT operations to control and manage transmitting power in real time to ensure RF Exposure compliance. Per FCC Guidance, compliance for was assessed at the minimum of the time averaged power and the maximum output power for each band/mode/exposure condition (DSI).
14. Per October 2020 TCB Workshop notes, absorbed power density (APD) using a 4cm2 averaging area is reported based on SAR measurements.

GSM Test Notes:

1. Body-Worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn SAR.
2. Justification for reduced test configurations per KDB Publication 941225 D01v03r01 and October 2013 TCB Workshop Notes: The source-based frame-averaged output power was evaluated for all GPRS/EDGE slot configurations. The configuration with the highest target frame averaged output power was evaluated for hotspot SAR. When the maximum frame-averaged powers are equivalent across two or more slots (within 0.25 dB), the configuration with the most number of time slots was tested.
3. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s).

UMTS Notes:

1. UMTS mode was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
2. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s).

LTE Notes:

1. LTE test configurations are determined according to SAR Evaluation Considerations for LTE Devices in FCC KDB Publication 941225 D05v02r04. The general test procedures used for testing can be found in Section 9.5.4.
2. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.
3. A-MPR was disabled for all SAR tests by setting NS=01 and MCC=001 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).
4. Per FCC KDB Publication 447498 D01v06, when the reported 1g SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for LTE B41/48, testing at the other channels was required for such test configurations.

5. TDD LTE was tested per the guidance provided in FCC KDB Publication 941225 D05v02r04. Testing was performed using UL-DL configuration 0 with 6 UL subframes and 2 S subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4, the duty factor for special subframe configuration 6 using extended cyclic prefix is 0.633.
6. Per KDB Publication 941225 D05Av01r02, SAR for downlink only LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive.
7. For LTE Band 48 per FCC guidance, SAR was first measured with only a single carrier active in the uplink (carrier aggregation not active). For each exposure condition, the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when carrier aggregation was not active. The SCC was configured with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power.

NR Notes:

1. NR implementation supports SA and NSA mode. In EN-DC mode, NR operates with the LTE Bands shown in the NR FR1 checklist acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.
2. Due to test setup limitations, SAR testing for NR TDD was performed using test mode software to establish the connection.
3. Simultaneous transmission analysis for EN-DC operations is addressed in the Part 2 Test Report (Serial Number can be found in the bibliography).
4. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
5. Per FCC Guidance, NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power were evaluated for SAR tests.
6. Per FCC KDB Publication 447498 D01v06, when the reported NR Band n77 C-Band SAR measured at the highest output power channel in a given a test configuration was > 0.4 W/kg for 1g evaluations and > 1 W/kg for 10g evaluation, testing at the other channels was required for such test configurations.
7. Per FCC KDB Publication 447498 D01v06, when the reported NR Band n41/48 SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for 1g evaluations and > 1.5 W/kg for 10g evaluation, testing at the other channels was required for such test configurations.
8. SRS was tested with CW signal per Qualcomm guidance in 80-w2112-4.
9. For final implementation, NR Band n38, n41, n48 and n77 slot configuration is synchronized using maximum duty cycle of 100%. SAR testing was performed using FTM mode with a 100% duty cycle applied to match final duty cycle.
10. Per FCC Guidance, C-Band for NR n77 (3705 – 3975 MHz) was fully tested according to FCC procedures. For each exposure condition and antenna, the worst-case position was additionally evaluated for the NR n77 DoD (3455.01 – 3544.98 MHz).
11. This device uses two transmit pathways for n41 operations (Path 1 and Path 2). For each exposure condition, the pathway with the highest target power was fully evaluated. The worst case for each antenna and exposure condition was additionally evaluated using the other path.

WLAN Notes:

1. For held-to-ear, hotspot, and phablet operations, the initial test position procedures were applied. The test position with the highest extrapolated peak SAR will be used as the initial test position. When reported SAR for the initial test position is ≤ 0.4 W/kg for 1g evaluations, no additional testing for the remaining test positions was required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured.
2. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 2.4 GHz WIFI single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11g/n/ax) was not required due

to the maximum allowed powers and the highest reported DSSS SAR. See Section 9.6.5 for more information.

3. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission modes were not investigated since the highest reported SAR for initial test configuration adjusted by the ratio of maximum output powers is less than 1.2 W/kg for 1g evaluations. See Section 9.6.6 for more information.
4. Per KDB Publication 248227 D01v02r02, SAR for MIMO was evaluated by following the simultaneous SAR provisions from KDB Publication 447498 D01v06 by either evaluating the sum of the 1g SAR values of each antenna transmitting independently or making a SAR measurement with both antennas transmitting simultaneously. Please see Multi-TX and Antenna SAR Considerations Appendix for complete analysis.
5. When the maximum reported 1g averaged SAR is ≤0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg for 1g evaluations or all test channels were measured.
6. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated EMC test reports.
7. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.
8. Per FCC guidance, SAR was performed using 6.5 GHz SAR probe calibration factor for WIFI 6E. Per October 2020 TCB Workshop notes, 5 channels were tested for WIFI 6E.

Bluetooth Notes

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests test mode type. Per October 2016 TCB Workshop Notes, the reported SAR was scaled to the 79% transmission duty factor for Bluetooth and 87% transmission duty factor for Bluetooth LE to determine compliance. See RF Conducted Power Section for the time domain plot and calculation for the duty factor of the device.
2. Head and Hotspot Bluetooth SAR were evaluated for BT BDR tethering applications.
3. The highest frame average power configurations for both Bluetooth and Bluetooth LE were evaluated for SAR. The worst case configuration was used for the remaining test positions as the most conservative scenario.

UWB Notes:

1. UWB was evaluated for phablet based on expected usage conditions.
2. Per FCC guidance, SAR was performed using 6.5 GHz/8GHz probe calibration factor for UWB.

NTN Notes:

1. Due to equipment limitations, NTN was tested using factory test mode software transmitting CW at 100% duty cycle. The results were scaled down to the maximum duty cycle of 71%, declared by the manufacturer.

NTN NB-IoT only supports data transmission, therefore only body-worn and phablet exposure conditions were evaluated.

13 POWER DENSITY DATA SUMMARY

13.1 6 GHz WIFI Power Density Results

Table 13-1

MEASUREMENT RESULTS																												
Frequency (MHz)	Channel	Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant H) [dBm]	Conducted Power (Ant H) [dBm]	Maximum Allowed Power (Ant E) [dBm]	Conducted Power (Ant E) [dBm]	Power Drift (dB)	Spacing (mm)	Antenna Config.	Keyboard Variant	DUT Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Grid Step (λ)	IPD (W/m²)	Scaling Factor for Measurement Uncertainty per IEC 62479	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Normal psPD (W/m²)	Scaled Normal psPD (W/m²)	Total psPD (W/m²)	Scaled Total psPD (W/m²)	Plot #
6985.00	207	802.11ax	OFDM	160	9.00	8.89	-	-	3.63	2	H	1	0066M	MCS0	Back	99.67	0.125	0.554	1.554	1.026	1.003	0.220	0.352	0.290	0.464	
6985.00	207	802.11ax	OFDM	160	9.00	8.89	-	-	0.37	2	H	1	0066M	MCS0	Front	99.67	0.125	0.677	1.554	1.026	1.003	0.227	0.363	0.269	0.430	
6985.00	207	802.11ax	OFDM	160	9.00	8.89	-	-	-2.19	2	H	1	0066M	MCS0	Top	99.67	0.125	0.380	1.554	1.026	1.003	0.174	0.278	0.195	0.312	
6985.00	207	802.11ax	OFDM	160	9.00	8.89	-	-	-0.20	2	H	1	0066M	MCS0	Left	99.67	0.125	0.624	1.554	1.026	1.003	0.690	1.103	0.869	1.390	
6025.00	15	802.11ax	OFDM	160	9.00	8.81	-	-	-0.32	2	H	1	0066M	MCS0	Left	99.67	0.125	0.665	1.554	1.045	1.003	1.450	2.362	1.800	2.932	
6345.00	79	802.11ax	OFDM	160	9.00	8.73	-	-	0.07	2	H	1	0066M	MCS0	Left	99.67	0.125	0.939	1.554	1.064	1.003	1.810	3.002	2.080	3.450	
6505.00	111	802.11ax	OFDM	160	9.00	8.88	-	-	0.10	2	H	1	0066M	MCS0	Left	99.67	0.125	2.060	1.554	1.028	1.003	2.660	4.262	3.190	5.111	
6825.00	175	802.11ax	OFDM	160	9.00	8.83	-	-	-0.60	2	H	1	0066M	MCS0	Left	99.67	0.125	0.624	1.554	1.040	1.003	1.630	2.642	2.000	3.242	
6985.00	207	802.11ax	OFDM	160	9.00	8.89	-	-	0.89	8.58	H	1	0066M	MCS0	Left	99.67	0.125	0.731	1.554	1.026	1.003	0.373	0.596	0.397	0.635	
6025.00	15	802.11ax	OFDM	160	-	-	9.00	8.93	0.02	2	E	1	0066M	MCS0	Back	99.67	0.125	1.870	1.554	1.016	1.003	1.990	3.151	2.100	3.326	
6025.00	15	802.11ax	OFDM	160	-	-	9.00	8.93	0.81	2	E	1	0066M	MCS0	Front	99.67	0.125	0.420	1.554	1.016	1.003	0.207	0.328	0.222	0.352	
6025.00	15	802.11ax	OFDM	160	-	-	9.00	8.93	3.06	2	E	1	0066M	MCS0	Top	99.67	0.125	0.516	1.554	1.016	1.003	0.317	0.502	0.391	0.619	
6025.00	15	802.11ax	OFDM	160	-	-	9.00	8.93	-6.99	2	E	1	0066M	MCS0	Right	99.67	0.125	4.240	1.554	1.016	1.003	0.392	0.621	0.444	0.703	
6345.00	79	802.11ax	OFDM	160	-	-	9.00	8.51	0.00	2	E	1	0066M	MCS0	Back	99.67	0.125	0.777	1.554	1.119	1.003	0.841	1.467	1.000	1.744	
6505.00	111	802.11ax	OFDM	160	-	-	9.00	8.90	7.37	2	E	1	0066M	MCS0	Back	99.67	0.125	0.870	1.554	1.023	1.003	0.617	0.984	0.799	1.274	
6825.00	175	802.11ax	OFDM	160	-	-	9.00	8.91	0.66	2	E	1	0066M	MCS0	Back	99.67	0.125	0.849	1.554	1.021	1.003	0.637	1.014	0.716	1.139	
6985.00	207	802.11ax	OFDM	160	-	-	9.00	8.68	0.30	2	E	1	0066M	MCS0	Back	99.67	0.125	0.589	1.554	1.076	1.003	0.415	0.696	0.658	1.104	
6025.00	15	802.11ax	OFDM	160	-	-	9.00	8.93	0.33	9.95	E	1	0066M	MCS0	Back	99.67	0.125	1.540	1.554	1.016	1.003	1.230	1.948	1.280	2.027	
6345.00	79	802.11ax	OFDM	160	9.00	8.60	9.00	8.59	0.14	2	MIMO	1	0076M	MCS0	Back	99.67	0.125	-	1.554	1.099	1.003	1.380	2.364	1.650	2.826	
6345.00	79	802.11ax	OFDM	160	9.00	8.60	9.00	8.59	0.14	2	MIMO	1	0076M	MCS0	Front	99.67	0.125	-	1.554	1.099	1.003	0.754	1.292	1.040	1.781	
6345.00	79	802.11ax	OFDM	160	9.00	8.60	9.00	8.59	0.11	2	MIMO	1	0076M	MCS0	Top	99.67	0.125	-	1.554	1.099	1.003	0.539	0.923	0.915	1.567	
6345.00	79	802.11ax	OFDM	160	9.00	8.60	9.00	8.59	0.13	2	MIMO	1	0076M	MCS0	Right	99.67	0.125	-	1.554	1.099	1.003	0.579	0.992	0.618	1.059	
6025.00	15	802.11ax	OFDM	160	9.00	8.70	9.00	8.56	0.15	2	MIMO	1	0076M	MCS0	Left	99.67	0.125	-	1.554	1.107	1.003	2.070	3.572	2.760	4.762	
6345.00	79	802.11ax	OFDM	160	9.00	8.60	9.00	8.59	-0.07	2	MIMO	1	0076M	MCS0	Left	99.67	0.125	-	1.554	1.099	1.003	2.070	3.546	3.280	5.619	A88
6505.00	111	802.11ax	OFDM	160	9.00	8.49	9.00	8.72	0.06	2	MIMO	1	0076M	MCS0	Left	99.67	0.125	-	1.554	1.125	1.003	1.920	3.367	2.600	4.559	
6825.00	175	802.11ax	OFDM	160	9.00	8.02	9.00	8.98	0.04	2	MIMO	1	0076M	MCS0	Left	99.67	0.125	-	1.554	1.253	1.003	1.000	1.953	1.340	2.617	
6825.00	207	802.11ax	OFDM	160	9.00	8.29	9.00	8.81	-0.13	2	MIMO	1	0076M	MCS0	Left	99.67	0.125	-	1.554	1.178	1.003	0.583	1.070	1.050	1.928	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population																				Power Density 10 W/m² averaged over 4 cm31							

13.2 UWB Power Density Results

Table 13-2

MEASUREMENT RESULTS															
Frequency (MHz)	Channel	Mode	Power Drift (dB)	Spacing (mm)	Antenna Config.	DUT Serial Number	Side	Grid Step (λ)	iPD (W/m²)	Scaling Factor for Measurement Uncertainty per IEC 62479	Normal psPD (W/m²)	Scaled Normal psPD (W/m²)	Total psPD (W/m²)	Scaled Total psPD (W/m²)	Plot #
6489.60	5	CW	-0.14	2	1	0024M	Back	0.125	-	1.554	0.279	0.434	0.313	0.486	A99
6489.60	5	CW	0.17	2	1	0024M	Front	0.125	-	1.554	0.128	0.199	0.133	0.207	
6489.60	5	CW	0.18	2	1	0024M	Top	0.125	0.253	1.554	0.166	0.258	0.213	0.331	
6489.60	5	CW	-0.12	2	9.24	0024M	Top	0.125	0.148	1.554	0.077	0.120	0.089	0.138	
6489.60	5	CW	-0.16	2	1	0024M	Left	0.125	-	1.554	0.069	0.107	0.076	0.118	
7987.20	9	CW	0.17	2	1	0024M	Back	0.125	-	1.554	0.107	0.166	0.125	0.194	
7987.20	9	CW	-0.12	2	1	0024M	Front	0.125	-	1.554	0.148	0.230	0.153	0.238	
7987.20	9	CW	-0.14	2	1	0024M	Top	0.125	-	1.554	0.085	0.132	0.099	0.154	
7987.20	9	CW	0.18	2	1	0024M	Left	0.125	-	1.554	0.062	0.096	0.073	0.113	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population						Power Density 10 W/m² averaged over 4 cm²									

Power Density General Notes

1. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements. The DUT was connected to a wall charger for some measurements due to the test duration. It was confirmed that the charger plugged into this DUT did not impact the near-field PD test results.
3. Power density was calculated by repeated E-field measurements on two measurement planes separated by λ/4.
4. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
5. Per FCC guidance and equipment manufacturer guidance, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty > 30%. Total expanded uncertainty of 2.68 dB (85.4%) was used to determine the psPD measurement scaling factor.
6. Per equipment manufacturer guidance, power density was measured at d=2mm and d=λ/5mm using the same grid size and grid step size for some frequencies and surfaces. The integrated Power Density (iPD) was calculated based on these measurements. Since iPD ratio between the two distances is ≥ -1dB, the grid step was sufficient for determining compliance at d=2mm.
7. psPD for MIMO was evaluated by making a measurement with both antennas transmitting simultaneously.
8. PTP-PR algorithm was used during psPD measurement and calculations.
9. PD results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D04.

14 SAR MEASUREMENT VARIABILITY

14.1 Measurement Variability

Per FCC KDB Publication 865664 D01v01r04, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1g SAR limit).
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg
5) When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

Table 14-1
Head SAR Measurement Variability Results

HEAD VARIABILITY RESULTS														
Band	FREQUENCY		Mode	Service	Side	Test Position	Antenna Config	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.						(W/kg)	(W/kg)		(W/kg)		(W/kg)	
750	782.00	23230	LTE Band 13, 10 MHz Bandwidth	QPSK, 50 RB, 0 RB Offset	Left	Tilt	E	0.870	0.825	1.05	N/A	N/A	N/A	N/A
835	836.60	4183	UMTS 850	RMC	Left	Cheek	E	0.895	0.888	1.01	N/A	N/A	N/A	N/A
2600	2535.00	507000	NR Band n7, 50 MHz Bandwidth	CP-OFDM, 1 RB, 1 RB Offset	Right	Tilt	F	0.966	0.937	1.03	N/A	N/A	N/A	N/A
3500	3500.01	633334	NR Band n77 DoD, 100 MHz Bandwidth	DFT-s-OFDM, QPSK, 135 RB, 138 RB Offset	Right	Tilt	F	1.100	1.020	1.08	N/A	N/A	N/A	N/A
3700	3679.98	645332	NR Band n48, 40 MHz Bandwidth	DFT-s-OFDM, QPSK, 50 RB, 28 RB Offset	Right	Cheek	F	1.070	1.010	1.06	N/A	N/A	N/A	N/A
3900	3930.00	662000	NR Band n77, 100 MHz Bandwidth	CP-OFDM, 1 RB, 1 RB Offset	Right	Tilt	F	0.986	0.947	1.04	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**					**Head** **1.6 W/kg (mW/g)** averaged over 1 gram									

Table 14-2
Body SAR Measurement Variability Results

BODY VARIABILITY RESULTS														
Band	FREQUENCY		Mode	Service	Side	Spacing	Antenna Config	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.						(W/kg)	(W/kg)		(W/kg)		(W/kg)	
1750	1745.00	349000	NR Band n66, 45 MHz Bandwidth	CP-OFDM, QPSK, 1 RB, 1 RB Offset	Bottom	10	A	0.980	0.934	1.05	N/A	N/A	N/A	N/A
1900	1907.60	9538	UMTS 1900	RMC	Bottom	10	A	0.943	0.941	1.00	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**					**Body** **1.6 W/kg (mW/g)** averaged over 1 gram									

Table 14-3
Phablet SAR Measurement Variability Results

PHABLET VARIABILITY RESULTS														
Band	FREQUENCY		Mode	Service	Side	Spacing	Antenna Config	Measured SAR (10g)	1st Repeated SAR (10g)	Ratio	2nd Repeated SAR (10g)	Ratio	3rd Repeated SAR (10g)	Ratio
	MHz	Ch.						(W/kg)	(W/kg)		(W/kg)		(W/kg)	
1640	1626.60	261505	NTN Band 255	CW	Top	0	F	3.600	3.600	1.00	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Phablet 4.0 W/kg (mW/g) averaged over 10 grams						

14.2 Measurement Uncertainty

The measured SAR was <1.5 W/kg for 1g and <3.75 W/kg for 10g for all frequency bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE 1528-2013 was not required.

15 ADDITIONAL TESTING PER FCC GUIDANCE

15.1 Tuner Testing

Per April 2019 TCB Workshop Notes, the following test procedures were followed to demonstrate that the SAR results in Section 12 represented the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR was measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence on the antenna characteristics, other than impedance matching.

To evaluate all the tuner states, the 143 tuner states were divided among the aggregate band, mode and exposure combinations. Single point time-sweep measurements were performed at the peak SAR location determined by the zoom scan of the configuration with the highest measured SAR for each combination. The tuner state was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination. When the single point SAR or 1g SAR was > 1.2 W/kg for a particular band/mode/exposure condition, point SAR measurements were made for all 143 states.

The operational description contains more information about the design and implementation of the dynamic antenna tuning.

Table 15-1
UMTS Supplemental Head SAR Data

Supplemental Head SAR Data					
UMTS B5		UMTS B4		UMTS B2	
RMC		RMC		RMC	
Test Position	Left Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	836.60	Frequency (MHz)	1752.60	Frequency (MHz)	1907.60
Channel	4183	Channel	1513	Channel	9538
Measured 1g SAR (W/kg)	0.109	Measured 1g SAR (W/kg)	0.098	Measured 1g SAR (W/kg)	0.095
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 63)	0.116	Auto-tune (State 99)	0.107	Auto-tune (State 115)	0.112
Default (State 0)	0.092	Default (State 0)	0.081	Default (State 0)	0.080
State 0	0.092	State 1	0.069	State 2	0.072
State 47	0.072	State 46	0.098	State 45	0.092
State 63	0.103	State 94	0.019	State 93	0.012
State 95	0.072	State 97	0.014	State 98	0.008
State 96	0.066	State 99	0.118	State 115	0.086
State 117	0.093	State 118	0.100	State 119	0.012
State 141	0.089	State 142	0.091	State 141	0.101

Table 15-2
LTE Supplemental Head SAR Data

Supplemental Head SAR Data							
LTE B71		LTE B12		LTE B13		LTE B14	
QPSK, 20 MHz Bandwidth, 1 RB, 50 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset	
Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Left Cheek
Frequency (MHz)	680.50	Frequency (MHz)	707.50	Frequency (MHz)	782.00	Frequency (MHz)	793.00
Channel	133297	Channel	23095	Channel	23230	Channel	23330
Measured 1g SAR (W/kg)	0.128	Measured 1g SAR (W/kg)	0.139	Measured 1g SAR (W/kg)	0.132	Measured 1g SAR (W/kg)	0.130
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 28)	0.121	Auto-tune (State 124)	0.121	Auto-tune (State 0)	0.127	Auto-tune (State 117)	0.117
Default (State 0)	0.101	Default (State 0)	0.112	Default (State 0)	0.097	Default (State 0)	0.119
State 3	0.063	State 4	0.067	State 0	0.097	State 6	0.075
State 19	0.066	State 43	0.043	State 5	0.081	State 22	0.080
State 28	0.127	State 91	0.123	State 42	0.036	State 41	0.055
State 44	0.034	State 99	0.113	State 90	0.051	State 54	0.080
State 51	0.040	State 120	0.133	State 100	0.055	State 82	0.084
State 79	0.044	State 124	0.137	State 121	0.083	State 89	0.015
State 92	0.116	State 140	0.101	State 139	0.035	State 117	0.118

Supplemental Head SAR Data					
LTE B26		LTE B66		LTE B25	
QPSK, 15 MHz Bandwidth, 1 RB, 36 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 50 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 50 RB Offset	
Test Position	Left Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	831.50	Frequency (MHz)	1720.00	Frequency (MHz)	1860.00
Channel	26865	Channel	132072	Channel	26140
Measured 1g SAR (W/kg)	0.115	Measured 1g SAR (W/kg)	0.113	Measured 1g SAR (W/kg)	0.129
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 63)	0.114	Auto-tune (State 99)	0.117	Auto-tune (State 109)	0.136
Default (State 0)	0.101	Default (State 0)	0.085	Default (State 0)	0.088
State 7	0.051	State 11	0.096	State 13	0.114
State 40	0.063	State 36	0.018	State 34	0.092
State 63	0.107	State 84	0.096	State 82	0.130
State 88	0.034	State 99	0.120	State 104	0.120
State 101	0.090	State 103	0.112	State 109	0.125
State 122	0.053	State 124	0.097	State 125	0.015
State 138	0.053	State 136	0.031	State 135	0.132

Table 15-3
NR Supplemental Head SAR Data

Supplemental Head SAR Data							
NR Band n71		NR Band n12		NR Band n14		NR Band n26	
DFT-s-OFDM QPSK, 35 MHz Bandwidth, 90 RB, 49 RB Offset		DFT-s-OFDM QPSK, 15 MHz Bandwidth, 1 RB, 40 RB Offset		DFT-s-OFDM QPSK, 10 MHz Bandwidth, 1 RB, 1 RB Offset		DFT-OFDM QPSK, 20 MHz Bandwidth, 50 RB, 28 RB Offset	
Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Left Cheek
Frequency (MHz)	680.50	Frequency (MHz)	707.50	Frequency (MHz)	793.00	Frequency (MHz)	831.50
Channel	136100	Channel	141500	Channel	158600	Channel	166300
Measured 1g SAR (W/kg)	0.101	Measured 1g SAR (W/kg)	0.143	Measured 1g SAR (W/kg)	0.102	Measured 1g SAR (W/kg)	0.090
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 137)	0.099	Auto-tune (State 27)	0.149	Auto-tune (State 117)	0.109	Auto-tune (State 63)	0.093
Default (State 0)	0.088	Default (State 0)	0.125	Default (State 0)	0.101	Default (State 0)	0.083
State 15	0.013	State 16	0.013	State 17	0.016	State 18	0.075
State 31	0.093	State 27	0.144	State 30	0.089	State 29	0.084
State 32	0.086	State 31	0.118	State 33	0.068	State 34	0.059
State 63	0.104	State 32	0.108	State 65	0.091	State 63	0.085
State 80	0.025	State 64	0.132	State 78	0.039	State 66	0.079
State 94	0.061	State 79	0.039	State 94	0.074	State 77	0.036
State 137	0.105	State 95	0.067	State 117	0.100	State 93	0.066

Supplemental Head SAR Data					
NR Band n70		NR Band n66		NR Band n25	
DFTs-OFDM QPSK, 15 MHz Bandwidth, 36 RB, 22 RB Offset		DFT-s-OFDM QPSK, 45 MHz Bandwidth, 1 RB, 121 RB Offset		DFT-S-OFDM QPSK, 40 MHz Bandwidth, 108 RB, 54 RB Offset	
Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	1702.50	Frequency (MHz)	1745.00	Frequency (MHz)	1882.50
Channel	340500	Channel	349000	Channel	376500
Measured 1g SAR (W/kg)	0.118	Measured 1g SAR (W/kg)	0.108	Measured 1g SAR (W/kg)	0.101
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 100)	0.131	Auto-tune (State 99)	0.122	Auto-tune (State 112)	0.115
Default (State 0)	0.104	Default (State 0)	0.087	Default (State 0)	0.106
State 20	0.017	State 21	0.009	State 22	0.010
State 27	0.130	State 26	0.001	State 25	0.004
State 36	0.017	State 74	0.007	State 73	0.010
State 68	0.104	State 99	0.116	State 107	0.076
State 75	0.011	State 106	0.093	State 112	0.104
State 91	0.128	State 127	0.022	State 128	0.105
State 100	0.134	State 133	0.100	State 132	0.019

Table 15-4
UMTS Supplemental Body SAR Data

Supplemental Body SAR Data					
UMTS B5		UMTS B4		UMTS B2	
RMC		RMC		RMC	
Test Position	Back	Test Position	Bottom	Test Position	Bottom
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	836.60	Frequency (MHz)	1752.60	Frequency (MHz)	1907.60
Channel	4183	Channel	1513	Channel	9538
Measured 1g SAR (W/kg)	0.206	Measured 1g SAR (W/kg)	0.938	Measured 1g SAR (W/kg)	0.943
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 133)	0.225	Auto-tune (State 99)	1.030	Auto-tune (State 49)	1.040
Default (State 0)	0.194	Default (State 0)	0.721	Default (State 0)	0.751
State 23	0.121	State 22	0.146	State 21	0.130
State 24	0.107	State 25	0.110	State 26	0.071
State 72	0.165	State 70	0.721	State 49	1.030
State 108	0.094	State 99	1.050	State 69	0.615
State 129	0.094	State 109	0.683	State 110	0.867
State 131	0.165	State 130	0.716	State 129	0.843
State 133	0.212	State 132	0.206	State 133	0.828

Table 15-5
LTE Supplemental Body SAR Data

Supplemental Body SAR Data							
LTE B71		LTE B12		LTE B13		LTE B14	
QPSK, 20 MHz Bandwidth, 1 RB, 50 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset	
Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Back
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	680.50	Frequency (MHz)	707.50	Frequency (MHz)	782.00	Frequency (MHz)	793.00
Channel	133297	Channel	23095	Channel	23230	Channel	23330
Measured 1g SAR (W/kg)	0.229	Measured 1g SAR (W/kg)	0.235	Measured 1g SAR (W/kg)	0.289	Measured 1g SAR (W/kg)	0.291
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 137)	0.204	Auto-tune (State 124)	0.222	Auto-tune (State 0)	0.269	Auto-tune (State 117)	0.295
Default (State 0)	0.168	Default (State 0)	0.184	Default (State 0)	0.306	Default (State 0)	0.293
State 20	0.103	State 19	0.140	State 0	0.306	State 17	0.046
State 27	0.188	State 28	0.200	State 18	0.181	State 30	0.249
State 43	0.070	State 67	0.156	State 29	0.202	State 46	0.208
State 68	0.151	State 111	0.137	State 66	0.211	State 65	0.264
State 75	0.116	State 124	0.258	State 112	0.163	State 78	0.114
State 84	0.094	State 128	0.181	State 127	0.137	State 81	0.152
State 137	0.239	State 134	0.185	State 135	0.084	State 117	0.289

Supplemental Body SAR Data					
LTE B26		LTE B66		LTE B25	
QPSK, 15 MHz Bandwidth, 1 RB, 36 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 50 RB Offset	
Test Position	Back	Test Position	Bottom	Test Position	Bottom
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	831.50	Frequency (MHz)	1770.00	Frequency (MHz)	1905.00
Channel	26865	Channel	132572	Channel	26590
Measured 1g SAR (W/kg)	0.243	Measured 1g SAR (W/kg)	0.953	Measured 1g SAR (W/kg)	0.888
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 63)	0.277	Auto-tune (State 99)	0.965	Auto-tune (State 112)	0.958
Default (State 0)	0.267	Default (State 0)	0.743	Default (State 0)	0.704
State 16	0.065	State 12	0.831	State 10	0.945
State 31	0.257	State 35	0.773	State 37	0.138
State 63	0.281	State 60	0.196	State 58	0.167
State 64	0.276	State 99	0.965	State 112	0.943
State 113	0.183	State 115	0.784	State 116	0.807
State 126	0.157	State 124	0.85	State 123	0.204
State 136	0.201	State 138	0.155	State 139	0.954

Table 15-6
NR Supplemental Body SAR Data

Supplemental Body SAR Data							
NR Band n71		NR Band n12		NR Band n14		NR Band n26	
DFT-OFDM QPSK, 35 MHz Bandwidth, 90 RB, 49 RB Offset		DFT-OFDM QPSK, 15 MHz Bandwidth, 36 RB, 22 RB Offset		DFT-OFDM QPSK, 10 MHz Bandwidth, 25 RB, 14 RB Offset		DFT-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 53 RB Offset	
Test Position	Right	Test Position	Back	Test Position	Back	Test Position	Back
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	680.50	Frequency (MHz)	707.50	Frequency (MHz)	793.00	Frequency (MHz)	831.50
Channel	136100	Channel	141500	Channel	158600	Channel	166300
Measured 1g SAR (W/kg)	0.218	Measured 1g SAR (W/kg)	0.215	Measured 1g SAR (W/kg)	0.281	Measured 1g SAR (W/kg)	0.234
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 64)	0.235	Auto-tune (State 63)	0.242	Auto-tune (State 117)	0.306	Auto-tune (State 63)	0.207
Default (State 0)	0.193	Default (State 0)	0.249	Default (State 0)	0.322	Default (State 0)	0.228
State 8	0.053	State 7	0.089	State 6	0.202	State 5	0.151
State 39	0.140	State 40	0.144	State 41	0.142	State 42	0.109
State 55	0.149	State 55	0.209	State 54	0.215	State 53	0.060
State 56	0.150	State 56	0.205	State 57	0.263	State 58	0.199
State 64	0.218	State 63	0.282	State 70	0.183	State 63	0.247
State 72	0.184	State 71	0.114	State 89	0.045	State 69	0.194
State 87	0.056	State 88	0.032	State 117	0.324	State 90	0.193

Supplemental Body SAR Data					
NR Band n70		NR Band n66		NR Band n25	
DFTs-OFDM QPSK, 15 MHz Bandwidth, 75 RB, 0 RB Offset		CP-OFDM QPSK, 45 MHz Bandwidth, 1 RB, 1 RB Offset		DFTs-OFDM QPSK, 40 MHz Bandwidth, 108 RB, 0 RB Offset	
Test Position	Bottom	Test Position	Bottom	Test Position	Bottom
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	1702.50	Frequency (MHz)	1745.00	Frequency (MHz)	1882.50
Channel	340500	Channel	349000	Channel	376500
Measured 1g SAR (W/kg)	0.919	Measured 1g SAR (W/kg)	0.980	Measured 1g SAR (W/kg)	0.873
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 28)	1.030	Auto-tune (State 28)	1.060	Auto-tune (State 99)	0.984
Default (State 0)	0.748	Default (State 0)	0.872	Default (State 0)	0.672
State 3	0.642	State 2	0.797	State 1	0.626
State 28	0.996	State 28	1.050	State 46	0.913
State 44	0.154	State 61	0.215	State 62	0.101
State 51	0.620	State 101	0.887	State 99	0.968
State 60	0.247	State 118	0.826	State 119	0.144
State 67	0.779	State 121	0.154	State 120	0.896
State 92	0.224	State 141	0.833	State 142	0.854

16 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4404B	Spectrum Analyzer	N/A	N/A	N/A	MY45113242
Agilent	E4438C	ESG Vector Signal Generator	11/14/2023	Annual	11/14/2024	MY45093852
Agilent	E4438C	ESG Vector Signal Generator	11/15/2023	Annual	11/15/2024	MY45092078
Agilent	N5182A	MXG Vector Signal Generator	10/12/2023	Annual	10/12/2024	MY47400015
Agilent	N5182A	MXG Vector Signal Generator	1/7/2024	Annual	1/7/2025	MY47420603
Agilent	8753ES	S-Parameter Vector Network Analyzer	1/10/2024	Annual	1/30/2025	MY40001472
Agilent	8753ES	S-Parameter Vector Network Analyzer	7/21/2023	Annual	7/21/2024	US39170118
Agilent	E5515C	Wireless Communications Test Set	CBT	N/A	CBT	GB46310798
Agilent	E5515C	Wireless Communications Test Set	CBT	N/A	CBT	US41140256
Agilent	N4010A	Wireless Connectivity Test Set	N/A	N/A	N/A	GB46170464
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433973
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433974
Amplifier Research	150A100C	Amplifier	CBT	N/A	CBT	350132
Anritsu	MN81108	I/O Adaptor	CBT	N/A	CBT	6261747881
Anritsu	ML2496A	Power Meter	6/24/2024	Annual	6/24/2025	1840205
Anritsu	ML2495A	Power Meter	7/8/2024	Annual	7/8/2025	1039008
Anritsu	MA2411B	Pulse Power Sensor	8/22/2023	Annual	8/22/2024	1726262
Anritsu	MA2411B	Pulse Power Sensor	11/8/2023	Annual	11/8/2024	1027293
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	12/15/2023	Annual	12/15/2024	6200901190
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	5/15/2024	Annual	5/15/2025	6262150047
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	5/30/2024	Annual	5/30/2025	6263044715
Anritsu	MT8800A	Radio Communication Test Station	CBT	N/A	CBT	626196-7072
Anritsu	MT8000A	Radio Communication Test Station	4/10/2024	Annual	4/10/2025	6261987983
Anritsu	MT8000A	Radio Communication Test Station	5/2/2024	Annual	5/2/2025	6272337436
Anritsu	MA24106A	USB Power Sensor	12/4/2023	Annual	12/4/2024	1520501
Anritsu	MA24106A	USB Power Sensor	4/15/2024	Annual	4/15/2025	1827528
Mini-Circuits	PWR-4GHS	USB Power Sensor	6/12/2024	Annual	6/12/2025	12001070013
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240174346
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240171096
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240172059
Control Company	4040	Therm / Clock/ Humidity Monitor	4/15/2024	Biennial	4/15/2026	240310280
Control Company	4040	Therm / Clock/ Humidity Monitor	4/15/2024	Biennial	4/15/2026	240310282
Control Company	56G2Y9	Therm / Clock/ Humidity Monitor	2/16/2024	Biennial	2/16/2026	240140051
Mitutoyo	500-196-30	CD-6"ASX 6Inch Digital Caliper	2/16/2022	Triennial	2/16/2025	A20238413
Keysight Technologies	N9020A	MXA Signal Analyzer	4/11/2024	Annual	4/11/2025	MY54500644
Agilent	N9020A	MXA Signal Analyzer	6/24/2024	Annual	6/24/2025	MY56470202
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
Mini-Circuits	VLF-800D+	Low Pass Filter DC to 6000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	VLF-800D+	Low Pass Filter DC to 6000 MHz	7/5/2023	Annual	7/5/2024	31634
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	ZUDC10-83-S+	Directional Coupler	CBT	N/A	CBT	2050
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Seekonk	NC-100	Torque Wrench	CBT	N/A	CBT	22217
Seekonk	NC-100	Torque Wrench	4/2/2024	Biennial	4/2/2026	1262
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/11/2024	Annual	1/11/2025	150117
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/10/2024	Annual	1/10/2025	131454
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	8/10/2023	Annual	8/10/2024	140144
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	8/9/2023	Annual	8/9/2024	162125
SPEAG	DAK-3.5	Dielectric Assessment Kit	11/13/2023	Annual	11/13/2024	1277
SPEAG	DAK5-3.5	Portable Dielectric Assessment Kit	8/14/2023	Annual	8/14/2024	1041
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1237
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1331
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1330
SPEAG	DAK-12	Dielectric Assessment Kit (4MHz - 3GHz)	3/11/2024	Annual	3/11/2025	1102
SPEAG	CLA-13	Confined Loop Antenna	11/8/2023	Annual	11/8/2024	1004
SPEAG	D750V3	750 MHz SAR Dipole	10/19/2021	Triennial	10/19/2024	1161
SPEAG	D750V3	750 MHz SAR Dipole	3/14/2022	Triennial	3/14/2025	1054
SPEAG	D750V3	750 MHz SAR Dipole	9/13/2023	Biennial	9/13/2025	1097
SPEAG	D835V2	835 MHz SAR Dipole	11/18/2022	Biennial	11/18/2024	4d108
SPEAG	D835V2	835 MHz SAR Dipole	5/16/2022	Triennial	5/16/2025	4d040
SPEAG	D835V2	835 MHz SAR Dipole	4/8/2024	Annual	4/8/2025	4d119
SPEAG	D835V2	835 MHz SAR Dipole	3/14/2022	Triennial	3/14/2025	4d047
SPEAG	D1640V2	1640 MHz SAR Dipole	12/13/2022	Biennial	12/13/2024	321
SPEAG	D1750V2	1750 MHz SAR Dipole	10/22/2021	Triennial	10/22/2024	1150
SPEAG	D1750V2	1750 MHz SAR Dipole	4/15/2024	Annual	4/15/2025	1051
SPEAG	D1750V2	1750 MHz SAR Dipole	1/8/2024	Triennial	1/8/2025	1148
SPEAG	D1900V2	1900 MHz SAR Dipole	8/8/2022	Triennial	8/8/2025	5d080
SPEAG	D1900V2	1900 MHz SAR Dipole	2/21/2022	Triennial	2/21/2025	5d148
SPEAG	D1900V2	1900 MHz SAR Dipole	4/12/2024	Annual	4/12/2025	5d141
SPEAG	D1900V2	1900 MHz SAR Dipole	5/10/2024	Annual	5/10/2025	5d026
SPEAG	D2300V2	2300 MHz SAR Dipole	11/14/2023	Annual	11/14/2024	1064
SPEAG	D2300V2	2300 MHz SAR Dipole	3/11/2024	Annual	3/11/2025	1038
SPEAG	D2450V2	2450 MHz SAR Dipole	2/8/2024	Annual	2/8/2025	882
SPEAG	D2450V2	2450 MHz SAR Dipole	5/10/2024	Annual	5/10/2025	945
SPEAG	D2450V2	2450 MHz SAR Dipole	5/11/2022	Triennial	5/11/2025	750
SPEAG	D2450V2	2450 MHz SAR Dipole	11/15/2022	Biennial	11/15/2024	855
SPEAG	D2600V2	2600 MHz SAR Dipole	5/11/2022	Triennial	5/11/2025	1042
SPEAG	D2600V2	2600 MHz SAR Dipole	11/15/2022	Biennial	11/15/2024	1068
SPEAG	D2600V2	2600 MHz SAR Dipole	9/12/2023	Biennial	9/12/2025	1069
SPEAG	D2600V2	2600 MHz SAR Dipole	6/14/2024	Annual	6/14/2025	1009
SPEAG	D3500V2	3500 MHz SAR Dipole	12/13/2023	Annual	12/13/2024	1068
SPEAG	D3500V2	3500 MHz SAR Dipole	1/10/2023	Biennial	1/10/2025	1097
SPEAG	D3700V2	3700 MHz SAR Dipole	12/13/2023	Annual	12/13/2024	1029
SPEAG	D3700V2	3700 MHz SAR Dipole	1/13/2023	Biennial	1/13/2025	1087
SPEAG	D3900V2	3900 MHz SAR Dipole	10/19/2023	Annual	10/19/2024	1056
SPEAG	D3900V2	3900 MHz SAR Dipole	6/10/2024	Annual	6/10/2025	1073
SPEAG	D5GHzV2	5 GHz SAR Dipole	4/8/2024	Annual	4/9/2025	1237
SPEAG	D6.5GHzV2	6.5 GHz SAR Dipole	10/11/2023	Annual	10/11/2024	1019
SPEAG	D8GHzV2	8GHz SAR Dipole	3/4/2024	Annual	3/4/2025	1007
SPEAG	5G Verification Source 10GHz	10GHz System Verification Antenna	3/5/2024	Annual	3/5/2025	1002
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/16/2024	Annual	1/16/2025	1582
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/8/2024	Annual	7/8/2025	1677
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/9/2024	Annual	4/9/2025	1415
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2024	Annual	5/8/2025	701
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2024	Annual	5/8/2025	1678
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2024	Annual	5/8/2025	728
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/10/2024	Annual	9/10/2025	1449
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/10/2024	Annual	9/10/2025	1364
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/16/2024	Annual	1/16/2025	1466
SPEAG	DAE4	Dasy Data Acquisition Electronics	8/8/2024	Annual	8/8/2025	1532
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/11/2024	Annual	6/11/2025	1334
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/8/2024	Annual	7/8/2025	1583
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/18/2024	Annual	4/18/2025	1407
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/9/2024	Annual	2/9/2025	467
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2024	Annual	5/8/2025	1683
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/9/2024	Annual	4/9/2025	1652
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/9/2024	Annual	2/9/2025	1645
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2024	Annual	5/8/2025	1502
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/4/2024	Annual	5/4/2025	1682
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/6/2024	Annual	3/6/2025	604
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/6/2024	Annual	3/6/2025	534
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/12/2024	Annual	3/12/2025	1272
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/16/2024	Annual	1/16/2025	1530
SPEAG	EX3DV4	SAR Probe	4/16/2024	Annual	4/16/2025	7357
SPEAG	EX3DV4	SAR Probe	7/18/2024	Annual	7/18/2025	7406
SPEAG	EX3DV4	SAR Probe	9/11/2024	Annual	9/11/2025	7558
SPEAG	EX3DV4	SAR Probe	5/13/2024	Annual	5/13/2025	7416
SPEAG	EX3DV4	SAR Probe	1/16/2024	Annual	1/16/2025	7365
SPEAG	EX3DV4	SAR Probe	9/2/2024	Annual	9/2/2025	7491
SPEAG	EX3DV4	SAR Probe	3/8/2024	Annual	3/8/2025	7488
SPEAG	EX3DV4	SAR Probe	6/17/2024	Annual	6/17/2025	7409
SPEAG	EX3DV4	SAR Probe	5/8/2024	Annual	5/8/2025	7660
SPEAG	EX3DV4	SAR Probe	6/28/2024	Annual	6/28/2025	7803
SPEAG	EX3DV4	SAR Probe	2/9/2024	Annual	2/9/2025	7427
SPEAG	EX3DV4	SAR Probe	4/17/2024	Annual	4/17/2025	7659
SPEAG	EX3DV4	SAR Probe	5/13/2024	Annual	5/13/2025	7682
SPEAG	EX3DV4	SAR Probe	4/17/2024	Annual	4/17/2025	7637
SPEAG	EX3DV4	SAR Probe	2/9/2024	Annual	2/9/2025	7640
SPEAG	EX3DV4	SAR Probe	5/10/2024	Annual	5/10/2025	7402
SPEAG	EX3DV4	SAR Probe	9/9/2024	Annual	9/9/2025	3949
SPEAG	EX3DV4	SAR Probe	3/11/2024	Annual	3/11/2025	7421
SPEAG	EX3DV4	SAR Probe	3/8/2024	Annual	3/8/2025	7527
SPEAG	EX3DV4	SAR Probe	2/9/2024	Annual	2/9/2025	7308
SPEAG	EX3DV4	SAR Probe	1/15/2024	Annual	1/15/2025	7570
SPEAG	EX3DV4	SAR Probe	5/10/2024	Annual	5/10/2025	3914
SPEAG	EUmmWV4	EUmmWV4 Probe	2/2/2024	Annual	2/2/2025	9622
SPEAG	EUmmWV4	EUmmWV4 Probe	3/4/2024	Annual	3/4/2025	9421

Note: CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to the system verification and output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements.
Note: All equipment was used solely within its respective calibration period.

17 MEASUREMENT UNCERTAINTIES

Note: The tables below represent the worst-case uncertainty budget among the uncertainty budgets of all testing laboratories listed in Section 1.2

Applicable for SAR measurements < 6GHz:

a	b	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
Uncertainty Component	IEEE 1528 Sec.	Tol. (± %)	Prob. Dist.	Div.	c_i 1gm	c_i 10 gms	1gm u_i (± %)	10gms u_i (± %)	v_i
Measurement System									
Probe Calibration	E.2.1	7	N	1	1	1	7.0	7.0	∞
Axial Isotropy	E.2.2	0.25	N	1	0.7	0.7	0.2	0.2	∞
Hemishperical Isotropy	E.2.2	1.3	N	1	0.7	0.7	0.9	0.9	∞
Boundary Effect	E.2.3	2	R	1.73	1	1	1.2	1.2	∞
Linearity	E.2.4	0.3	N	1	1	1	0.3	0.3	∞
System Detection Limits	E.2.4	0.25	R	1.73	1	1	0.1	0.1	∞
Modulation Response	E.2.5	4.8	R	1.73	1	1	2.8	2.8	∞
Readout Electronics	E.2.6	0.3	N	1	1	1	0.3	0.3	∞
Response Time	E.2.7	0.8	R	1.73	1	1	0.5	0.5	∞
Integration Time	E.2.8	2.6	R	1.73	1	1	1.5	1.5	∞
RF Ambient Conditions - Noise	E.6.1	3	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	3	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.8	R	1.73	1	1	0.5	0.5	∞
Probe Positioning w/ respect to Phantom	E.6.3	6.7	R	1.73	1	1	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	E.5	4	R	1.73	1	1	2.3	2.3	∞
Test Sample Related									
Test Sample Positioning	E.4.2	3.12	N	1	1	1	3.1	3.1	35
Device Holder Uncertainty	E.4.1	1.67	N	1	1	1	1.7	1.7	5
Output Power Variation - SAR drift measurement	E.2.9	5	R	1.73	1	1	2.9	2.9	∞
SAR Scaling	E.6.5	0	R	1.73	1	1	0.0	0.0	∞
Phantom & Tissue Parameters									
Phantom Uncertainty (Shape & Thickness tolerances)	E.3.1	7.6	R	1.73	1.0	1.0	4.4	4.4	∞
Liquid Conductivity - measurement uncertainty	E.3.3	4.3	N	1	0.78	0.71	3.3	3.0	76
Liquid Permittivity - measurement uncertainty	E.3.3	4.2	N	1	0.23	0.26	1.0	1.1	75
Liquid Conductivity - Temperature Uncertainty	E.3.4	3.4	R	1.73	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Unceritainty	E.3.4	0.6	R	1.73	0.23	0.26	0.1	0.1	∞
Liquid Conductivity - deviation from target values	E.3.2	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Permittivity - deviation from target values	E.3.2	5.0	R	1.73	0.60	0.49	1.7	1.4	∞
Combined Standard Uncertainty (k=1)			RSS				12.2	12.0	191
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				24.4	24.0	

The above measurement uncertainties are according to IEEE Std. 1528-2013

Applicable for SAR measurements > 6GHz:

a	b	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
Uncertainty Component	IEEE 1528 Sec.	Tol. (± %)	Prob. Dist.	Div.	c_i 1gm	c_i 10 gms	1gm u_i (± %)	10gms u_i (± %)	v_i
Measurement System									
Probe Calibration	E.2.1	9.3	N	1	1	1	9.3	9.3	∞
Axial Isotropy	E.2.2	0.25	N	1	0.7	0.7	0.2	0.2	∞
Hemishperical Isotropy	E.2.2	1.3	N	1	0.7	0.7	0.9	0.9	∞
Boundary Effect	E.2.3	2	R	1.73	1	1	1.2	1.2	∞
Linearity	E.2.4	0.3	N	1	1	1	0.3	0.3	∞
System Detection Limits	E.2.4	0.25	R	1.73	1	1	0.1	0.1	∞
Modulation Response	E.2.5	4.8	R	1.73	1	1	2.8	2.8	∞
Readout Electronics	E.2.6	0.3	N	1	1	1	0.3	0.3	∞
Response Time	E.2.7	0.8	R	1.73	1	1	0.5	0.5	∞
Integration Time	E.2.8	2.6	R	1.73	1	1	1.5	1.5	∞
RF Ambient Conditions - Noise	E.6.1	3	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	3	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.8	R	1.73	1	1	0.5	0.5	∞
Probe Positioning w/ respect to Phantom	E.6.3	6.7	R	1.73	1	1	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	E.5	4	R	1.73	1	1	2.3	2.3	∞
Test Sample Related									
Test Sample Positioning	E.4.2	3.12	N	1	1	1	3.1	3.1	35
Device Holder Uncertainty	E.4.1	1.67	N	1	1	1	1.7	1.7	5
Output Power Variation - SAR drift measurement	E.2.9	5	R	1.73	1	1	2.9	2.9	∞
SAR Scaling	E.6.5	0	R	1.73	1	1	0.0	0.0	∞
Phantom & Tissue Parameters									
Phantom Uncertainty (Shape & Thickness tolerances)	E.3.1	7.6	R	1.73	1.0	1.0	4.4	4.4	∞
Liquid Conductivity - measurement uncertainty	E.3.3	4.3	N	1	0.78	0.71	3.3	3.0	76
Liquid Permittivity - measurement uncertainty	E.3.3	4.2	N	1	0.23	0.26	1.0	1.1	75
Liquid Conductivity - Temperature Uncertainty	E.3.4	3.4	R	1.73	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Unceritainty	E.3.4	0.6	R	1.73	0.23	0.26	0.1	0.1	∞
Liquid Conductivity - deviation from target values	E.3.2	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Permittivity - deviation from target values	E.3.2	5.0	R	1.73	0.60	0.49	1.7	1.4	∞
Combined Standard Uncertainty (k=1)			RSS				13.8	13.6	191
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				27.6	27.1	

The above measurement uncertainties are according to IEEE Std. 1528-2013

Applicable for Power Density Measurements:

a	b	c	d	e	f = c x f/e	g
Uncertainty Component	Unc. (± dB)	Prob. Dist.	Div.	c_i	u_i (± dB)	v_i
Measurement System						
Calibration	0.49	N	1	1	0.49	∞
Probe Correction	0.00	R	1.73	1	0.00	∞
Frequency Response	0.20	R	1.73	1	0.12	∞
Sensor Cross Coupling	0.00	R	1.73	1	0.00	∞
Isotropy	0.50	R	1.73	1	0.29	∞
Linearity	0.20	R	1.73	1	0.12	∞
Probe Scattering	0.00	R	1.73	1	0.00	∞
Probe Positioning offset	0.30	R	1.73	1	0.17	∞
Probe Positioning Repeatability	0.04	R	1.73	1	0.02	∞
Sensor MechanicalOffset	0.00	R	1.73	1	0.00	∞
Probe Spatial Resolution	0.00	R	1.73	1	0.00	∞
Field Impedence Dependance	0.00	R	1.73	1	0.00	∞
Amplitude and Phase Drift	0.00	R	1.73	1	0.00	∞
Amplitude and Phase Noise	0.04	R	1.73	1	0.02	∞
Measurement Area Truncation	0.00	R	1.73	1	0.00	∞
Data Acquisition	0.03	N	1	1	0.03	∞
Sampling	0.00	R	1.73	1	0.00	∞
Field Reconstruction	2.00	R	1.73	1	1.15	∞
Forward Transformation	0.00	R	1.73	1	0.00	∞
Power Density Scaling	0.00	R	1.73	1	0.00	∞
Spatial Averaging	0.10	R	1.73	1	0.06	∞
System Detection Limit	0.04	R	1.73	1	0.02	∞
Test Sample Related						
Probe Coupling with DUT	0.00	R	1.73	1	0.00	∞
Modulation Response	0.40	R	1.73	1	0.23	∞
Integration Time	0.00	R	1.73	1	0.00	∞
Response Time	0.00	R	1.73	1	0.00	∞
Device Holder Influence	0.10	R	1.73	1	0.06	∞
DUT alignment	0.00	R	1.73	1	0.00	∞
RF Ambient Conditions	0.04	R	1.73	1	0.02	∞
Ambient Reflections	0.04	R	1.73	1	0.02	∞
Immunity/Secondary Reception	0.00	R	1.73	1	0.00	∞
Drift of DUT	0.21	R	1.73	1	0.12	∞
Combined Standard Uncertainty (k=1)		RSS			1.34	∞
Expanded Uncertainty (95% CONFIDENCE LEVEL)		k=2			2.68	

18 CONCLUSION

18.1 Measurement Conclusion

The SAR evaluation indicates that the EUT complies with the RF radiation exposure limits of the FCC and Innovation, Science, and Economic Development Canada, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables. [3]

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COMPLIANCE SUMMARY REPORT

Applicant Name:
Samsung Electronics Co., Ltd.
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Gyeonggi-do, 16677, Korea

Test Site/Location:
Element, Columbia, MD, USA
Document Serial No.:
1M2408260067-26.A3L

FCC ID:	**A3LSMS938U**
APPLICANT:	**SAMSUNG ELECTRONICS CO., LTD**

Report Type:	Compliance Summary
DUT Type:	Portable Handset
Model:	SM-S938U
Additional Model(s):	SM-S938U1

ACCREDITED
CERT #2041.01

TABLE OF CONTENTS

1 STRATEGY FOR COMPLIANCE DEMONSTRATION

1.1 RF Exposure Evaluation Strategy

The FCC RF exposure limits defined based on time-averaged RF exposure. The device under test (DUT) uses the Qualcomm Smart Transmit Gen2 feature to control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is in compliance with the FCC requirement for 2G/3G/4G/5G NR, WLAN, and Bluetooth operations. Additionally, this device supports NTN/UWB and NFC non Smart Tx Radio technologies but the output power of these modems is not controlled by the smart transmit algorithm.

Demonstrating compliance of DUT enabled with Qualcomm Smart Transmit feature is completed in three parts:

0. **RF Exposure Compliance Test Report Part 0: SAR Characterization and PD Characterization**

   The SAR and PD Characterization, denoted as SAR Char and PD Char, determines the power limit that meets FCC exposure requirement after accounting for device design related uncertainties for each supported radio configuration and RF exposure usage scenario. The determined power limits will be loaded and stored in the EUT via the Embedded File System (EFS), and then used as inputs for Smart Transmit to operate.

   For 2G/3G/4G/5G Sub6, WLAN, and Bluetooth, SAR Char is derived from SAR test measurements and conducted power measurements to determine P_{Limit} for each technology/band. For 5G mmW NR, PD Char is derived using simulation in combination with measurement as validation to determine the *input.power.limit* for each radio/antenna configuration (each beam). The P_{Limit} and *input.power.limit* represents the maximum time-averaged power level for the corresponding radio/antenna configuration.

1. **RF Exposure Compliance Test Report Part 1: Test in Static Transmission Condition**

   Part 1 demonstrates that DUT meets FCC SAR and PD limits when transmitting at pre-determined maximum time-averaged power level: P_{Limit} for 2G/3G/4G/5G Sub6 NR, WLAN, and Bluetooth, and *input.power.limit* for 5G mmW NR. The SAR and PD measurement in Part 1 is under static transmission condition.

   The exposure from the simultaneous transmission of WWAN and WLAN/BT is evaluated in Part 2 report.

2. **RF Exposure Compliance Test Report Part 2: Test in Dynamic Transmission Condition**

   Part 2 demonstrates compliance in Tx varying transmission conditions and validates Qualcomm Smart Transmit algorithm. The test results reported in Part 2 demonstrates that DUT complies with FCC RF exposure requirement under Tx varying transmission scenarios, thereby validity of Qualcomm Smart Transmit algorithm.

1.2 Nomenclature

Applicable Technologies	Term	Description
2G/3G/4G/5G Sub6/WLAN/BT	P_{Limit}	Power level that corresponds to the exposure design target (*SAR_design_target)* after accounting for all device design related uncertainties
	P_{Max}	Maximum tune up output power
	T_{SAR}	Defined time averaging window for $f < 6$ GHz
	SAR_design_target	Target SAR level resulting in maximum time-averaged exposure optimized from total uncertainty
	SAR Char	Table containing *Plimit* for all technologies
5G mmW NR	*input.power.limit*	Power level at antenna element for each beam corresponding to the exposure design target (*PD_design_target)*
	T_{PD}	Defined time averaging window for $f > 6$ GHz
	PD_design_target	Target PD level resulting in maximum time-averaged exposure optimized from total uncertainty
	PD Char	Table containing *input.power.limit* for all beams
2G/3G/4G/5G Sub6/5G mmW NR/WLAN/BT	*regulatory body*	Regulatory body that the algorithm is designed to comply. Algorithm's time averaging window is dependent on either FCC or ICNIRP requirements.
	reserve_power_margin	Margin below P_{Limit} reserved for future transmission
	$P_{reserve}$	Minimum transmit power with a designated margin below P_{Limit}

1.3 Bibliography

Report Type	Report Serial Number
SAR Evaluation Report (Part 1)	1M2408260067-23.A3L
PD Evaluation Report (Part 1)	1M2408260067-25.A3L
SAR Evaluation Report (Part 0)	1M2408260067-31.A3L
PD Evaluation Report (Part 0)	
RF Exposure Part 2 Test Report	1M2408260067-24.A3L

2 TIME AVERAGING ALGORITHM

2.1 Algorithm Description

The FCC RF exposure limit is defined based on time-averaged RF exposure. When running in a wireless device, Qualcomm Smart Transmit algorithm enables more elegant power control mechanisms for RF exposure management. It ensures at all times the wireless device is in compliance with the FCC limit of RF exposure time-averaged over a defined time window, denoted as T_{SAR} and T_{PD} for specific absorption rate (SAR for transmit frequency < 6 GHz) and power density (PD for transmit frequency > 6 GHz) time windows, respectively.

The Smart Transmit algorithm not only ensures the wireless device complies with RF exposure requirement, but also improves the user experience and network performance.

For a given wireless device, RF exposure is proportional to the transmitting power.

- Once the SAR and PD of the wireless device is characterized at a transmit power level, RF exposure at a different power level for the characterized configurations can be scaled by the change in the corresponding power level.
- Therefore, for a characterized device, RF exposure compliance can be achieved through transmit power control and management.

The Smart Transmit algorithm embedded in Qualcomm modems reliably controls the transmit power of the wireless device in real time to maintain the time-averaged transmit power, in turn, time-averaged RF exposure, below the predefined time-averaged power limit for each characterized technology and band.

- This predefined time-averaged power limit is denoted as P_{Limit} corresponding SAR limit (frequency < 6 GHz) and *input.power.limit* corresponding PD limit (frequency > 6 GHz) in this report.
- The wireless device continuously transmitting at P_{Limit} level or *input.power.limit* level complies with the FCC RF exposure requirement.

In a simultaneous transmission scenario, the algorithm manages all active transmitters and make sure the total exposure ratio from each transmitter not exceeding to 1.

2.2 Basic concept of the algorithm

The Smart Transmit algorithm controls and manages the instantaneous transmit power (Tx) to maintain the time-averaged Tx power and therefore, time-averaged RF exposure in compliance with FCC limits.

- If time-averaged transmit power approaches P_{Limit} or *input.power.limit*, then the modem needs to limit instantaneous transmit power to ensure the time-averaged transmit power does not exceed P_{Limit} or *input.power.limit* in any T_{SAR} and T_{PD} time windows since the time-averaged RF exposure is required to comply with the FCC RF exposure limit in any T_{SAR} or T_{PD} time window.
- The wireless device can instantaneously transmit at high transmit powers and exceed the P_{Limit} or *input.power.limit* level for a short duration before limiting the power to maintain the time-averaged transmit power under P_{Limit} or *input.power.limit*.
- If the wireless device transmits at high power for a long time, then the radio link needs to be dropped to be compliant with time-averaged Tx power requirement (see Figure 2-1).
- To avoid dropping the radio link, Smart Transmit algorithm starts the power limiting enforcement earlier in time to back off the Tx power to a reserve level (denoted as $P_{reserve}$), so the wireless device can maintain the radio link at a minimum reserve power level for as long as needed, and at the same time ensure the time-averaged Tx power over any defined time window is less than P_{Limit} at all times (see Figure 2-2). At all times, Smart Transmit meets the below equation:

$$time.avg.Tx\ power = \frac{1}{T_{SAR}} \int_{t-T_{SAR}}^{t} inst.Tx\ power(t)\, dt \leq P_{limit}$$

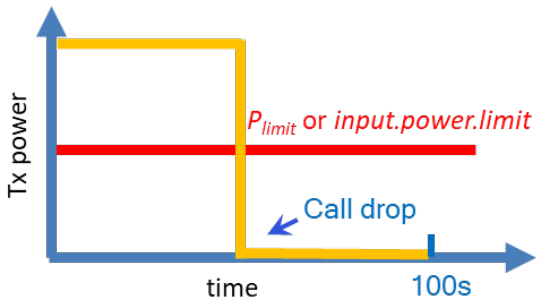
Equation 2-1

where, $time.avg.Tx\ power$ is the transmit power averaged between t-T_{SAR} and t time period; T_{SAR} is the time window defined by FCC for time-averaging RF exposure for Tx frequency less than 6GHz (sub6); *inst. Tx power (t)* is the instantaneous transmit power at t time instant; P_{Limit} is the predefined time-averaged power limit. Similarly, Smart Transmit meets the below equation for mmW transmission:

$$mmW\_time.avg.Tx\ power = \frac{1}{T_{PD}} \int_{t-T_{PD}}^{t} mmW\_Tx\ power(t)\, dt \leq input.power.limit$$

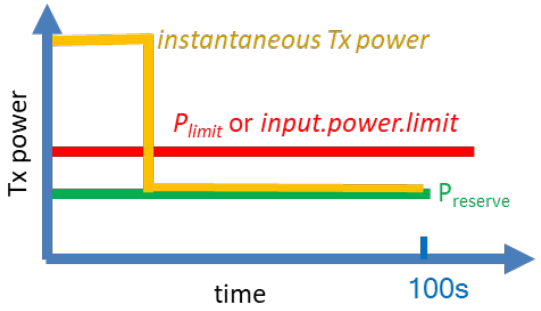
Equation 2-2

where, $mmW\_time.avg.Tx\ power$ is the mmW transmit power averaged between t-T_{PD} and t time period; T_{PD} is the time window defined by FCC for time-averaging RF exposure for mmW bands; *mmW_Tx power (t)* is the instantaneous mmW transmit power at t time instant; $input.power.limit$ is the predefined time-averaged power limit for the beam under test.



(a)

Figure 2-1
Transmit at high power when needed and permitted



(b)

Figure 2-2
Transmit with reserve power to support continuous transmission at a minimum power level ($P_{reserve}$)

- In the case of simultaneous transmission, Smart Transmit manages all active transmitters and make sure the total exposure ratio is less than 1

$$\sum \frac{\frac{1}{T_{SAR}} \int_{t-T_{SAR}}^{t} SAR(t)\, dt}{FCC\ SAR\ limit} + \sum \frac{\frac{1}{T_{PD}} \int_{t-T_{psPD}}^{t} 4cm^2 psPD(t)\, dt}{FCC\ psPD\ limit} \leq 1$$

Equation 2-3

2.3 Configurable Parameters

The following input parameters are required for functionality of Qualcomm Smart Transmit algorithm. These parameters cannot be accessed by the end user, because at the factory they are entered through the embedded file system (EFS) entries by the OEM

Input Parameter	Description
regulatory body	• Inputs of "0" and "1" corresponding to FCC and ICNIRP requirements for the averaging time windows. • For FCC, algorithm uses an averaging window of 100 seconds for *f* < 3 GHz, 60 seconds for 3 GHz < *f* < 6 GHz, and 4 seconds for 24 GHz < *f* < 42 GHz.
Tx_power_at_SAR_design_target (P_{Limit} *in dBm)* *f* < 6 GHz	The maximum time-averaged transmit power, in dBm, corresponding to the *SAR_design_targe*t. *SAR_design_target* is pre-determined for this DUT and it is less than regulatory SAR limit after accounting for all design related tolerances. The time-averaged SAR is assessed against this *SAR_design_target* in real time to determine the compliance. P_{Limit} could vary with technology, band and Device State Index (DSI) and therefore, it has the unique value for each technology, band and DSI.
reserve_power_margin ($P_{reserve}$ *in dBm)*	The margin below P_{Limit} reserved for future transmission with a minimum transmit power $P_{reserve}$ $P_{reserve}\,(\mathrm{dBm}) = P_{limit}\,(\mathrm{dBm}) - Reserve\_power\_margin\,(\mathrm{dB})$ When the *Reserve_power_margin* is set to 0 dB, Smart Transmit effectively limits the upper bound of the transmit power to P_{limit} and the DUT transmits continuously at P_{limit} without utilizing Smart Transmit dynamic control feature.
input.power.limit in *dBm* *f* ≥ 6 GHz	Maximum time-averaged power at the input of antenna element port at which each antenna configuration/beam meets *PD_design_target.*

3 DUT DESCRIPTION

3.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
GSM/GPRS/EDGE 850	Voice/Data	824.20 - 848.80 MHz
GSM/GPRS/EDGE 1900	Voice/Data	1850.20 - 1909.80 MHz
UMTS 850	Voice/Data	826.40 - 846.60 MHz
UMTS 1750	Voice/Data	1712.4 - 1752.6 MHz
UMTS 1900	Voice/Data	1852.4 - 1907.6 MHz
LTE Band 71	Voice/Data	665.5 - 695.5 MHz
LTE Band 12	Voice/Data	699.7 - 715.3 MHz
LTE Band 13	Voice/Data	779.5 - 784.5 MHz
LTE Band 14	Voice/Data	790.5 - 795.5 MHz
LTE Band 26	Voice/Data	814.7 - 848.3 MHz
LTE Band 5	Voice/Data	824.7 - 848.3 MHz
LTE Band 66	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2	Voice/Data	1850.7 - 1909.3 MHz
LTE Band 30	Voice/Data	2307.5 - 2312.5 MHz
LTE Band 7	Voice/Data	2502.5 - 2567.5 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
LTE Band 38	Voice/Data	2572.5 - 2617.5 MHz
LTE Band 48	Voice/Data	3552.5 - 3697.5 MHz
NR Band n71	Voice/Data	665.5 - 695.5 MHz
NR Band n12	Voice/Data	701.5 - 713.5 MHz
NR Band n14	Voice/Data	790.5 - 795.5 MHz
NR Band n26	Voice/Data	816.5 - 846.5 MHz
NR Band n5	Voice/Data	826.5 - 846.5 MHz
NR Band n70	Voice/Data	1697.5 - 1707.5 MHz
NR Band n66	Voice/Data	1712.5 - 1777.5 MHz
NR Band n25	Voice/Data	1852.5 - 1912.5 MHz
NR Band n2	Voice/Data	1852.5 - 1907.5 MHz
NR Band n30	Voice/Data	2307.5 - 2312.5 MHz
NR Band n7	Voice/Data	2502.5 - 2567.5 MHz
NR Band n41	Voice/Data	2501.01 - 2685 MHz
NR Band n38	Voice/Data	2575 - 2615 MHz
NR Band n48	Voice/Data	3555 - 3694.98 MHz
NR Band n78	Voice/Data	3455.01 - 3544.98 MHz; 3705 - 3795 MHz
NR Band n77	Voice/Data	3455.01 - 3544.98 MHz; 3705 - 3975 MHz
NTN Band 255	Data	1629 - 1658 MHz
NR Band n258	Data	24250 - 24450 MHz; 24750 - 25250 MHz
NR Band n260	Data	37000 - 40000 MHz
NR Band n261	Data	27500 - 28350 MHz
2.4 GHz WIFI	Voice/Data	2412 - 2462 MHz
5 GHz WIFI	Voice/Data	U-NII-1: 5180 - 5240 MHz U-NII-2A: 5260 - 5320 MHz U-NII-2C: 5500 - 5720 MHz U-NII-3: 5745 - 5825 MHz U-NII-4: 5845 - 5885 MHz
6 GHz WIFI	Voice/Data	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz
2.4 GHz Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
UWB	Data	6489.6 - 7987.2 MHz

This device uses the Qualcomm Smart Transmit feature to control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is in compliance with the FCC requirement for 2G/3G/4G/5G/WLAN/Bluetooth operations. Additionally, this device supports NFC/UWB/NTN technologies but the output power of these modems is not controlled by the smart transmit algorithm.

4 COMPLIANCE SUMMARY

4.1 RF Exposure Compliance Summary

All transmission scenarios that the DUT supports comply with FCC time-averaged RF exposure requirements, as shown in Table 4-1.

Table 4-1
Reported RF Exposure Levels

	RFx Evaluation	Power Level	FCC Limit	***Reported*** RF Exposure Level	Test Report
SAR (W/kg)	Standalone 1g SAR	P_{limit}	1.6	1.26	FCC SAR Evaluation Report (Part 1)
	Standalone 10g SAR	P_{limit}	4.0	2.80	
	Simultaneous Tx 1g SAR	P_{limit}	1.6	1.59	
	Simultaneous Tx 10g SAR	P_{limit}	4.0	1.87	
psPD (mW/cm^2)	Standalone $4cm^2$ psPD	*input.power.limit*	1.0	0.891	FCC PD Evaluation Report (Part 1)
	Simultaneous Tx $4cm^2$ psPD	*input.power.limit*	1.0	0.895	FCC SAR Evaluation Report (Part 1)
TER	Total Exposure Ratio	P_{limit} for SAR, *input.power.limit* for psPD	1.0	0.996	FCC SAR Evaluation Report (Part 1)

TABLE OF CONTENTS

1 DEVICE UNDER TEST

1.1 NR FR2 Checklist

NR FR2 Operations Information	
Form Factor	Portable Handset
Subcarrier Spacing (kHz)	120
Total Number of Supported Uplink CCs (SISO)	4
Total Number of Supported Uplink CCs (MIMO)	4
Total Number of Supported DL CCs	8
CP-OFDM Modulations Supported in UL	PI/2 BPSK, QPSK, 16QAM, 64QAM
DFT-s-OFDM Modulations Supported in UL	PI/2 BPSK, QPSK, 16QAM, 64QAM
LTE Anchor Bands	n258: 2/5/12/66/71, n261: 2/5/12/13/48/66, n260: 2/5/12/13/14/30/48/66
NR FR1 Anchor Bands	n258: 2/12/25/41/66/77, n261: 2/5/25/41/48/66/77, n260: 2/5/12/25/30/41/48/66/77
Duplex Type (mmWave)	TDD

NR FR2 Channels & Frequencies							
NR Band	Bandwidth (MHz)	Low		Mid		High	
		Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
n258	100	2018333	24350.04	2025833	24800.04	2032499	25200.00
n258	50	2018333	24350.04	2025833	24800.04	2032915	25224.96
n261	100	2071667	27550.08	2077915	27924.96	2084165	28299.96
n261	50	2071249	27525.00	2077915	27924.96	2084581	28324.92
n260	100	2229999	37050.00	2254165	38499.96	2278331	39949.92
n260	50	2229599	37026.00	2254165	38499.96	2278749	39975.00

1.2 Time-Averaging Algorithm for RF Exposure Compliance

The device is enabled with Qualcomm® Smart Transmit GEN2 feature. This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit.

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of *SAR_design_target* or *PD_design_target*, below the predefined time-averaged power limit (i.e., P_{limit} for sub-6 radio and WLAN radio, and *input.power.limit* for 5G mmW NR), for each characterized technology and band (see RF Exposure Part 0 Test Report).

Smart Transmit allows the device to transmit at higher power instantaneously when needed, but manages power limiting to maintain time-averaged transmit power to *input.power.limit*.

The purpose of this report (Part 1 test) is to demonstrate that the EUT meets FCC PD limits when transmitting in static transmission scenario at maximum allowable time-averaged power level given by *input.power.limit.*

1.3 Power Density Design Target and Uncertainty

Power Density Design Specifications	
PD_design_target **(mW/m^2)**	0.724
Design Related Total Uncertainty (dB)	1.4

1.4 Input Power Specifications

All power density measurements for this device were performed at the *input.power.limit* given in below tables. Input power is per antenna element and polarization for each antenna module. When input.power.limit is calculated to be above the maximum input power, the device is limited to the maximum input power.

Table 1-1
5G mmWave NR n258 Antenna M Patch input.power.limit

Band	Beam ID	Paired With	input.power.limit
n258	0		13.7
n258	1		12.8
n258	2		13.3
n258	3		13.1
n258	4		13.0
n258	5		10.5
n258	6		10.3
n258	7		11.0
n258	8		11.9
n258	9		10.9
n258	10		10.7
n258	11		11.0
n258	12		6.1
n258	13		5.4
n258	14		6.8
n258	15		6.5
n258	16		6.0
n258	17		5.8
n258	18		5.9
n258	19		6.8
n258	20		6.4
n258	256		14.9
n258	257		15.6
n258	258		14.6
n258	259		12.8
n258	260		13.9
n258	261		9.8
n258	262		10.4
n258	263		10.2
n258	264		10.5
n258	265		9.7
n258	266		8.8
n258	267		10.5
n258	268		6.5
n258	269		6.6
n258	270		6.8
n258	271		5.6
n258	272		6.6
n258	273		6.7
n258	274		6.5
n258	275		6.4
n258	276		5.5
n258	0	256	9.5
n258	1	257	10.7
n258	2	258	10.7
n258	3	259	10.3
n258	4	260	10.6
n258	5	261	7.9
n258	6	262	6.7
n258	7	263	6.6
n258	8	264	7.9
n258	9	265	7.4
n258	10	266	7.2
n258	11	267	8.2
n258	12	268	3.6
n258	13	269	3.8
n258	14	270	3.8
n258	15	271	2.7
n258	16	272	3.5
n258	17	273	3.9
n258	18	274	4.0
n258	19	275	3.1
n258	20	276	2.9

Table 1-2
5G mmWave NR n261 Antenna M Patch *input.power.limit*

Band	Beam ID	Paired With	input.power.limit
n261	0		12.9
n261	1		12.6
n261	2		12.3
n261	3		13.5
n261	4		13.9
n261	5		10.1
n261	6		8.5
n261	7		9.1
n261	8		10.0
n261	9		8.7
n261	10		9.1
n261	11		9.8
n261	12		6.9
n261	13		6.0
n261	14		4.8
n261	15		5.4
n261	16		7.7
n261	17		6.4
n261	18		5.4
n261	19		5.0
n261	20		6.2
n261	256		14.0
n261	257		15.2
n261	258		16.1
n261	259		15.4
n261	260		15.6
n261	261		11.7
n261	262		11.9
n261	263		13.5
n261	264		11.9
n261	265		11.5
n261	266		11.3
n261	267		11.4
n261	268		6.7
n261	269		8.6
n261	270		8.8
n261	271		9.1
n261	272		8.9
n261	273		7.1
n261	274		8.3
n261	275		9.1
n261	276		8.9
n261	0	256	9.8
n261	1	257	10.2
n261	2	258	9.8
n261	3	259	11.2
n261	4	260	11.0
n261	5	261	7.5
n261	6	262	6.3
n261	7	263	7.1
n261	8	264	7.6
n261	9	265	6.4
n261	10	266	7.2
n261	11	267	7.1
n261	12	268	3.5
n261	13	269	4.2
n261	14	270	2.6
n261	15	271	3.0
n261	16	272	4.5
n261	17	273	3.1
n261	18	274	2.9
n261	19	275	3.4
n261	20	276	3.3

Table 1
5G mmWave NR n260 Antenna M Patch *input.power.limit*

Band	Beam ID	Paired With	input.power.limit
n260	0		12.9
n260	1		13.2
n260	2		11.1
n260	3		11.5
n260	4		13.1
n260	5		8.4
n260	6		11.1
n260	7		9.5
n260	8		9.8
n260	9		8.0
n260	10		10.2
n260	11		8.8
n260	12		5.2
n260	13		6.4
n260	14		6.9
n260	15		5.8
n260	16		5.1
n260	17		4.9
n260	18		6.7
n260	19		6.0
n260	20		4.9
n260	256		12.1
n260	257		12.6
n260	258		11.8
n260	259		10.8
n260	260		12.1
n260	261		9.0
n260	262		8.5
n260	263		8.8
n260	264		8.7
n260	265		7.6
n260	266		9.7
n260	267		8.1
n260	268		5.3
n260	269		5.0
n260	270		6.5
n260	271		5.9
n260	272		5.4
n260	273		5.0
n260	274		5.2
n260	275		5.4
n260	276		5.4
n260	0	256	9.1
n260	1	257	8.9
n260	2	258	8.8
n260	3	259	7.3
n260	4	260	9.0
n260	5	261	6.5
n260	6	262	7.4
n260	7	263	6.5
n260	8	264	5.5
n260	9	265	4.8
n260	10	266	6.4
n260	11	267	4.7
n260	12	268	2.3
n260	13	269	2.4
n260	14	270	3.7
n260	15	271	2.2
n260	16	272	1.1
n260	17	273	2.0
n260	18	274	2.5
n260	19	275	2.2
n260	20	276	1.6

1.5 DUT Antenna Locations

The table below indicates the surfaces evaluated for near field power density (part 1) evaluation. Refer to RF Exposure Part 0 Test Report for justification of these worst-surfaces.

Table 1-3
Device Surfaces

Band	Antenna	Back	Front	Top	Bottom	Right	Left
n258	M	Yes	No	No	No	No	Yes
n261	M	Yes	No	No	No	No	Yes
n260	M	Yes	Yes	No	No	No	Yes

1.6 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D01v06, transmitters are considered to be operating simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds.

This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB Publication 447498 D01v06 4.3.2 procedures. Please see Part 1 SAR Multi-TX and Antenna SAR Considerations Appendix for simultaneous transmission analysis.

1.7 Guidance Applied

- November 2017, October 2018, April 2019, November 2019 TCBC Workshop Notes
- SPEAG DASY6 System Handbook
- IEC/IEEE 63195-1:2022
- FCC KDB 865664 D02 v01r04
- FCC KDB 447498 D01 v02r01

1.8 Bibliography

Table 1-4
Bibliography

Report Type	Report Serial Number
FCC SAR Evaluation Report (Part 1)	1M2408260067-23.A3L
Power Density Part 0 Test Report	
RF Exposure Part 2 Test Report	1M2408260067-24.A3L
RF Exposure Compliance Summary Report	1M2408260067-26.A3L
Power Density Simulation Report	

2 MEASUREMENT SYSTEM

2.1 Measurement Setup

Peak spatially averaged power density (psPD) measurements for mmWave frequencies were performed using the DASY6 with cDASY6 5G module. The DASY6 is made by Schmid & Partner Engineering AG (SPEAG) in Zurich, Switzerland and consists of a high precision robotics system (Staubli), robot controller, desktop computer, near-field probe, probe alignment sensor, and the 5G phantom. The robot is a six-axis industrial robot, performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF).

2.2 SPEAG EUmmWVx Probe / E-Field 5G Probe

The EUmmWVx probe consists of two dipoles optimally arranged to obtain pseudo-vector information.

Frequency Range	750 MHz – 110 GHz
Dynamic Range	< 20 V/m – 10,000 V/m with PRE-10 (min < 50 V/m – 3,000 V/m)
Position Precision	< 0.2 mm (cDASY6)
Dimensions	Probe Overall Length: 320 mm Probe Body Diameter: 8 mm Probe Tip Length: 23 mm Probe Tip Diameter: Encapsulation 8 mm Distance from Probe Tip to Sensor X Calibration Point: 1.5 mm Distance from Probe Tip to Sensor Y Calibration Point: 1.5 mm
Applications	E-field measurements of 5G devices and other mm-wave transmitters operating above 10 GHz in < 2 mm distance from device (free-space) Power density, H-field and far-field analysis using total field reconstruction
Compatibility	cDASY6 + 5G-Module SW

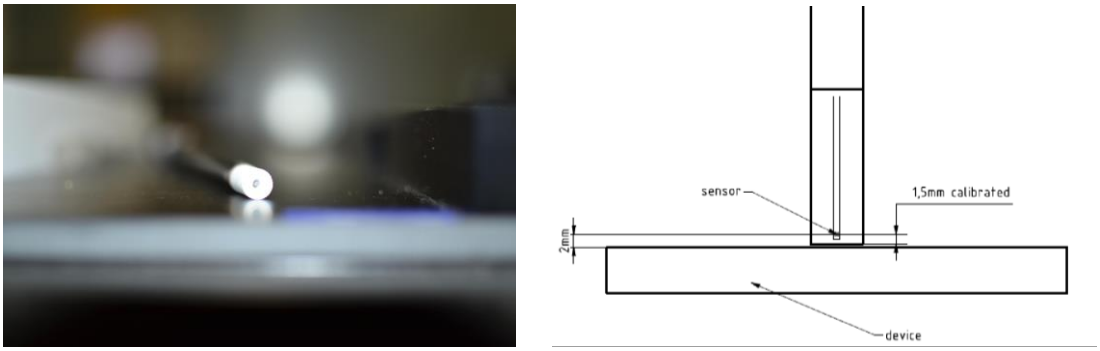


Figure 2-1
EUmmWVx Probe

2.3 Peak Spatially Averaged Power Density Assessment Based on E-field Measurements

Within a short distance from the transmitting source, power density was determined based on both electric and magnetic fields. Generally, the magnitude and phase of two components of either the E-field or H-field were needed on a sufficiently large surface to fully characterize the total E-field and H-field distributions. Nevertheless, solutions based on direct measurement of E-field and H-field can be used to compute power density. The general measurement approach used for this device was:

a) The local E field on the measurement surface was measured at a reference location where the field is well above the noise level. This reference level was used at the end of this procedure to assess output power drift of the DUT during the measurement.

b) The electric field on the measurement surface was scanned. Measurements are conducted according to the instructions provided by the measurement system manufacturer. Measurement spatial resolution can depend on the measured field characteristic and measurement methodology used by the system. The planar scan step size was configured at λ/4.

c) For cDASY6, H-field was calculated from the measured E-field using a reconstruction algorithm. As the power density calculation requires knowledge of both amplitude and phase, reconstruction algorithms can also be used to obtain field information from the measured E-field data (e.g. the phase from the amplitude if only the amplitude is measured). H-field and phase data was reconstructed from repeated measurements (three per measurement point) on two measurement planes separated by λ/4.

d) The total Peak spatially averaged power density (psPD) distribution on the evaluation surface is determined per the below equation. The spatial averaging area, *A*, is specified by the applicable exposure limits or regulatory requirements. A circular shape was used.

$$psPD = \frac{1}{2A_{av}} \iint_{A_{av}} || Re\{E \times H^*\} || \, dA$$

e) The maximum spatial-average on the evaluation surface is the final quantity to determine compliance against applicable limits.

f) The local E field reference value, at the same location as step 2, was re-measured after the scan was complete to calculate the power drift. If the drift deviated by more than 5%, the power density test and drift measurements were repeated.

2.4 Reconstruction Algorithm

Computation of the power density in general requires measurement information from the both E-field and H-field amplitudes and phases in the plane of incidence. Reconstruction of these quantities from pseudo-vector E-field measurements is feasible according to the manufacturer, as they are determined via Maxwell's equations. As such, the SPEAG reconstruction approach was based on the Gerchberg-Saxton algorithm, which benefits from the availability of the E-field polarization ellipse information obtained with the EUmmWVx probe.

3 RF EXPOSURE LIMITS FOR POWER DENSITY

3.1 Uncontrolled Environment

UNCONTROLLED ENVIRONMENTS are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

3.2 Controlled Environment

CONTROLLED ENVIRONMENTS are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

3.3 RF Exposure Limits for Frequencies Above 6 GHz

Per §1.1310 (d)(3), the MPE limits are applied for frequencies above 6 GHz. Power Density is expressed in units of W/m^2 or mW/cm^2.

Peak Spatially Averaged Power Density was evaluated over a circular area of 4 cm^2 per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes.

Table 3-1
Human Exposure Limits Specified in FCC 47 CFR §1.1310

Human Exposure to Radiofrequency (RF) Radiation Limits		
Frequency Range [MHz]	**Power Density** [mW/cm^2]	**Average Time** [Minutes]
(A) Limits For Occupational / Controlled Environments		
1,500 – 100,000	5.0	6
(B) Limits For General Population / Uncontrolled Environments		
1,500 – 100,000	1.0	30

Note: 1.0 mW/cm^2 is 10 W/m^2

4 SYSTEM VERIFICATION

4.1 Test System Verification

The system was verified to be within ±0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

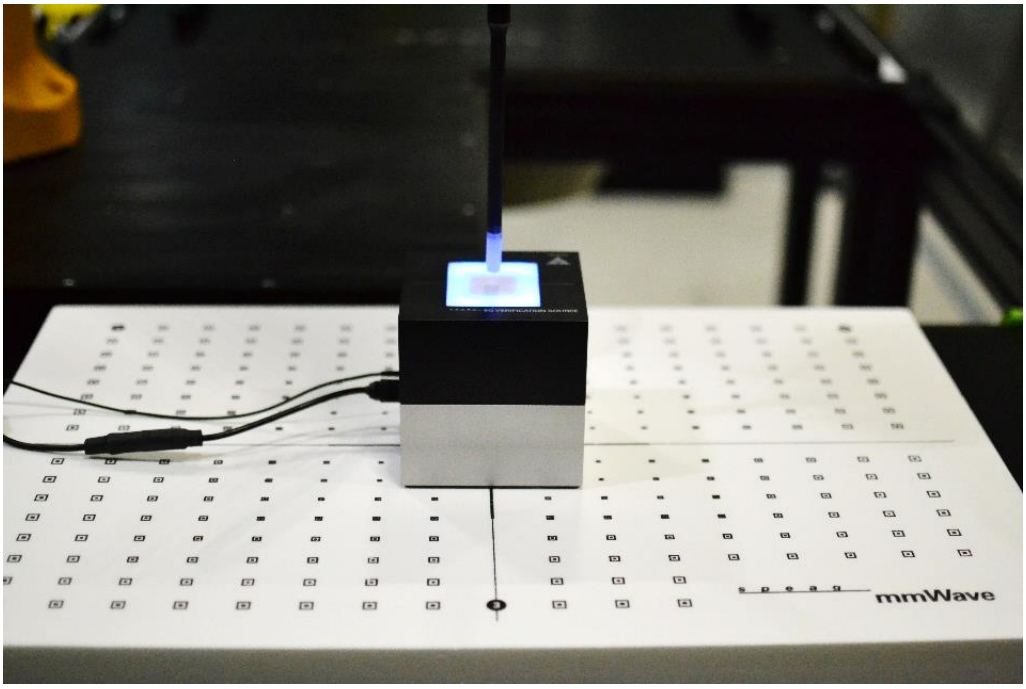


Figure 4-1
System Verification Setup Photo

Table 4-2
30 GHz Verifications

System	Frequency	Date	Source S/N	Probe S/N	Normal psPD (W/m² over 4 cm²)		Deviation (dB)	Total psPD (W/m² over 4 cm²)		Deviation (dB)	Plot #
					Measured	Target		Measured	Target		
Q	30	10/06/2024	1044	9622	38.30	34.00	0.52	38.90	34.00	0.58	B1
Q	30	10/13/2024	1035	9622	34.00	33.80	0.03	34.50	34.30	0.03	B2

Note: A **10 mm distance spacing** was used from the reference horn antenna aperture to the probe element.
This includes 4.45 mm from the reference antenna horn aperture to the surface of the verification source plus 5.55 mm from the surface to the probe. The SPEAG software requires a setting of “5.55 mm” for the correct set up.

5 POWER DENSITY DATA @ INPUT.POWER.LIMIT

5.1 Power Density Results

Power density measurements were performed with DUT transmitting at *input.power.limit* for one single beam for each polarization (H & V) and one beam-pair, for each antenna on each worst-surface.

Table 5-1
5G mmWave NR Band n258

MEASUREMENT RESULTS															
Band	Module	Antenna Type	Frequency	Channel	Beam ID 1	Beam ID 2	input.power.limit	Signal Type	DUT S/N	Power Drift	Distance	DUT Surface	Normal psPD	Total psPD	Plot #
			MHz		V	H	dBm			dB	mm		mW/cm²	mW/cm²	
n258	M	Patch	24800.04	Mid	15	-	6.5	CW	1161M	-0.03	2	Back	0.457	0.587	A1
n258	M	Patch	24350.04	Low	-	276	5.5	CW	1161M	0.00	2	Back	0.423	0.564	
n258	M	Patch	24350.04	Low	15	271	2.7	CW	1161M	-0.16	2	Back	0.369	0.419	
n258	M	Patch	24800.04	Mid	13	-	5.4	CW	1161M	-0.05	2	Left	0.415	0.585	
n258	M	Patch	24350.04	Low	-	272	6.6	CW	1161M	-0.17	2	Left	0.223	0.300	
n258	M	Patch	24350.04	Low	16	272	3.5	CW	1161M	-0.06	2	Left	0.240	0.320	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population									**Power Density 1 mW/cm² averaged over 4 cm²**						

Table 5-2
5G mmWave NR Band n261

MEASUREMENT RESULTS															
Band	Module	Antenna Type	Frequency	Channel	Beam ID 1	Beam ID 2	input.power.limit	Signal Type	DUT S/N	Power Drift	Distance	DUT Surface	Normal psPD	Total psPD	Plot #
			MHz		V	H	dBm			dB	mm		mW/cm²	mW/cm²	
n261	M	Patch	28299.96	High	19		5.0	CW	1222M	-0.03	2	Back	0.320	0.397	
n261	M	Patch	27550.08	Low	-	268	6.7	CW	1222M	0.07	2	Back	0.304	0.409	
n261	M	Patch	27924.96	Mid	15	271	3.0	CW	1222M	0.13	2	Back	0.271	0.375	
n261	M	Patch	28299.96	High	14	-	4.8	CW	1222M	0.09	2	Left	0.470	0.653	
n261	M	Patch	28299.96	High	-	268	6.7	CW	1222M	-0.13	2	Left	0.399	0.726	A2
n261	M	Patch	28299.96	High	14	270	2.6	CW	1222M	-0.07	2	Left	0.304	0.338	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population									**Power Density 1 mW/cm² averaged over 4 cm²**						

Table 5-3
5G mmWave NR Band n260

MEASUREMENT RESULTS															
Band	Module	Antenna Type	Frequency	Channel	Beam ID 1	Beam ID 2	input.power.limit	Signal Type	DUT S/N	Power Drift	Distance	DUT Surface	Normal psPD	Total psPD	Plot #
			MHz		V	H	dBm			dB	mm		mW/cm²	mW/cm²	
n260	M	Patch	39949.92	High	20	-	4.9	CW	1161M	0.02	2	Back	0.267	0.324	
n260	M	Patch	39949.92	High	20	276	1.6	CW	1161M	0.13	2	Back	0.187	0.222	
n260	M	Patch	37050.00	Low	-	274	5.2	CW	1161M	0.05	2	Front	0.245	0.398	
n260	M	Patch	37050.00	Low	13	269	2.4	CW	1161M	0.07	2	Front	0.253	0.329	
n260	M	Patch	39949.92	High	17	-	4.9	CW	1161M	-0.01	2	Left	0.376	0.522	
n260	M	Patch	38499.96	Mid	-	269	5.0	CW	1161M	0.12	2	Left	0.441	0.673	A3
n260	M	Patch	39949.92	High	16	272	1.1	CW	1161M	0.01	2	Left	0.419	0.665	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population									Power Density 1 mW/cm² averaged over 4 cm²						

5.2 Power Density Test Notes

General Notes:

1. The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements. The DUT was connected to a wall charger for some measurements due to the test duration. It was confirmed that the charger plugged into this DUT did not impact the near-field PD test results.
3. Power density was calculated by repeated E-field measurements on two measurement planes separated by λ/4.
4. DUT was configured to transmit with a manufacturer provided test software to control specific antenna(s), Beam ID(s), and signal type to ensure the test configurations constant for the entire evaluation.
5. *Input.power.limit* parameter for 5G mmW NR radio was calculated in RF Exposure Part 0 test report.
6. This device is enabled with Qualcomm® Smart Transmit feature to control and manage transmitting power in real time and to ensure that the time-averaged RF exposure from WWAN and WLAN is in compliance with FCC requirements. Per FCC guidance for devices enabled with Qualcomm® Smart Transmit feature, 4G LTE/5G NR FR1, WLAN/BT, and 5G mmW NR FR2 simultaneous transmission scenario does not need to be evaluated under Total Exposure Ratio (TER). The validation of the time-averaging algorithm and compliance under the Tx varying transmission scenario for WWAN and WLAN technologies are reported in Part 2 report.
7. Per FCC guidance for devices enabled with Qualcomm® Smart Transmit feature, simultaneous transmission analysis is evaluated by combining the exposure from each WWAN and WLAN antenna. 5G mmW NR and NFC/UWB simultaneous transmission scenario is evaluated under the SAR Part 1 Multi-TX and Antenna SAR Considerations Appendix.
8. The Beam IDs with one of the highest initial simulated power density for that surface and distance was selected for Part 1 Power Density measurements.
9. The device was configured to transmit CW wave signal for testing. Per FCC guidance for devices enabled with Qualcomm® Smart Transmit feature, additional testing was not required for different modulations (CP-OFDM: QPSK, 16QAM, 64QAM, DFT-s-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM), RB configurations, component carriers, channel configurations (low channel, mid channel, high channel) since the smart transmit algorithm monitors powers on a per symbol basis, which is independent of these signal characteristics.
10. The device was configured to MIMO configuration with H and V polarization beams transmitting together.

6 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	WL25-1	Conducted Cable Set (25GHz)	N/A	N/A	N/A	WL25-1
-	WL40-1	Conducted Cable Set (40GHz)	N/A	N/A	N/A	WL40-1
Agilent	N9038A	MXE EMI Receiver	N/A	N/A	N/A	MY51210133
EMCO	3160-09	Small Horn (18 - 26.5GHz)	N/A	N/A	N/A	00135427
Emco	3116	Horn Antenna (18 - 40GHz)	N/A	N/A	N/A	9203-2178
Rohde & Schwarz	SFUNIT-Rx	Shielded Filter Unit	N/A	N/A	N/A	102133
Rohde & Schwarz	FSW67	Signal / Spectrum Analyzer	N/A	N/A	N/A	103200
SPEAG	EUmmWV4	EUmmWV4 Probe	02/02/2024	Annual	02/02/2025	9622
SPEAG	SM 003 100 AA	30GHz System Verification Ka- Band Source Antenna	02/07/2024	Annual	02/07/2025	1035
SPEAG	SM 003 100 AA	30GHz System Verification Ka- Band Source Antenna	05/07/2024	Annual	05/07/2025	1044
SPEAG	DAE4ip	Dasy Data Acquisition Electronics	11/15/2023	Annual	11/15/2024	1639
Agilent	N9030A	PXA Signal Analyzer (44GHz)	N/A	N/A	N/A	MY52350166
Emco	3115	Horn Antenna (1-18GHz)	N/A	N/A	N/A	9704-5182
Keysight Technologies	N9030A	3Hz-44GHz PXA Signal Analyzer	N/A	N/A	N/A	MY49430494
Rohde & Schwarz	180-442-KF	Horn (Small)	N/A	N/A	N/A	U157403-01
Rohde & Schwarz	ESU26	EMI Test Receiver (26.5GHz)	N/A	N/A	N/A	100342
Rohde & Schwarz	SFUNIT-Rx	Shielded Filter Unit	N/A	N/A	N/A	102134
Sunol	JB5	Bi-Log Antenna (30M - 5GHz)	N/A	N/A	N/A	A051107
Virginia Diodes Inc	SAX252	Spectrum Analyzer Extension Module	N/A	N/A	N/A	SAX252
Virginia Diodes Inc	SAX253	Spectrum Analyzer Extension Module	N/A	N/A	N/A	SAX253
Virginia Diodes Inc	SAX254	Spectrum Analyzer Extension Module	N/A	N/A	N/A	SAX254

Note:
1. Each equipment item was used solely within its respective calibration period.

7 MEASUREMENT UNCERTAINTIES

a	b	c	d	e	f = c x f/e	g
Uncertainty Component	Unc. (± dB)	Prob. Dist.	Div.	c_i	u_i (± dB)	v_i
Measurement System						
Calibration	0.49	N	1	1	0.49	∞
Probe Correction	0.00	R	1.73	1	0.00	∞
Frequency Response	0.20	R	1.73	1	0.12	∞
Sensor Cross Coupling	0.00	R	1.73	1	0.00	∞
Isotropy	0.50	R	1.73	1	0.29	∞
Linearity	0.20	R	1.73	1	0.12	∞
Probe Scattering	0.00	R	1.73	1	0.00	∞
Probe Positioning offset	0.30	R	1.73	1	0.17	∞
Probe Positioning Repeatability	0.04	R	1.73	1	0.02	∞
Sensor MechanicalOffset	0.00	R	1.73	1	0.00	∞
Probe Spatial Resolution	0.00	R	1.73	1	0.00	∞
Field Impedence Dependance	0.00	R	1.73	1	0.00	∞
Amplitude and Phase Drift	0.00	R	1.73	1	0.00	∞
Amplitude and Phase Noise	0.04	R	1.73	1	0.02	∞
Measurement Area Truncation	0.00	R	1.73	1	0.00	∞
Data Acquisition	0.03	N	1	1	0.03	∞
Sampling	0.00	R	1.73	1	0.00	∞
Field Reconstruction	0.60	R	1.73	1	0.35	∞
Forward Transformation	0.00	R	1.73	1	0.00	∞
Power Density Scaling	0.00	R	1.73	1	0.00	∞
Spatial Averaging	0.10	R	1.73	1	0.06	∞
System Detection Limit	0.04	R	1.73	1	0.02	∞
Test Sample Related						
Probe Coupling with DUT	0.00	R	1.73	1	0.00	∞
Modulation Response	0.40	R	1.73	1	0.23	∞
Integration Time	0.00	R	1.73	1	0.00	∞
Response Time	0.00	R	1.73	1	0.00	∞
Device Holder Influence	0.10	R	1.73	1	0.06	∞
DUT alignment	0.00	R	1.73	1	0.00	∞
RF Ambient Conditions	0.04	R	1.73	1	0.02	∞
Ambient Reflections	0.04	R	1.73	1	0.02	∞
Immunity/Secondary Reception	0.00	R	1.73	1	0.00	∞
Drift of DUT	0.21	R	1.73	1	0.12	∞
Combined Standard Uncertainty (k=1)		RSS			0.76	∞
Expanded Uncertainty (95% CONFIDENCE LEVEL)		k=2			1.52	

8 CONCLUSION

8.1 Measurement Conclusion

The power density measurements and total exposure ratio analysis indicate that the DUT complies with the RF radiation exposure limits of the FCC, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the RF Exposure and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

9 REFERENCES

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[8] FCC KDB 447498 D01 v02r01: RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices. Federal Communications Commission – Office of Engineering and Technology, Laboratory Division.

[9] November 2017 Telecommunications Certification Body Council (TCBC) Workshop Notes

[10] October 2018 Telecommunications Certification Body Council (TCBC) Workshop Notes

[11] April 2019 Telecommunications Certification Body Council (TCBC) Workshop Notes

[12] November 2019 Telecommunications Certification Body Council (TCBC) Workshop Notes

[13] SPEAG DASY6 System Handbook (September 2019)

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PART 0 SAR CHAR REPORT

Applicant Name:
Samsung Electronics Co., Ltd.
129, Samsung-ro, Maetan dong,
Yeongtong-gu, Suwon-si
Gyeonggi-do, 16677, Korea

Date of Testing:
09/11/2024 - 10/24/2024
Test Site/Location:
Element, Columbia, MD, USA
Element Morgan Hill, CA, USA
Element, Suwon, Korea
Document Serial No.:
1M2408260067-31.A3L

FCC ID:	**A3LSMS938U**
APPLICANT:	**SAMSUNG ELECTRONICS CO., LTD**

Report Type:	Part 0 SAR Characterization
DUT Type:	Portable Handset
Model(s):	SM-S938U
Additional Model:	SM-S938U1

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Test results reported herein relate only to the item(s) tested.

RJ Ortanez
Executive Vice President

ACCREDITED
CERT #2041.01

TABLE OF CONTENTS

1 DEVICE UNDER TEST

1.1 Device Overview

This device uses the Qualcomm® Gen2 Smart Transmit feature to control and manage transmitting power in real time and to ensure the time-averaged RF exposure is in compliance with the FCC requirement at all times for 2G/3G/4G/5G WWAN operations. Additionally, this device supports WLAN/BT/NFC/MST technologies, but the output power of these modems is not controlled by the Smart Transmit algorithm.

Band & Mode	Operating Modes	Tx Frequency
GSM/GPRS/EDGE 850	Voice/Data	824.20 - 848.80 MHz
GSM/GPRS/EDGE 1900	Voice/Data	1850.20 - 1909.80 MHz
UMTS 850	Voice/Data	826.40 - 846.60 MHz
UMTS 1750	Voice/Data	1712.4 - 1752.6 MHz
UMTS 1900	Voice/Data	1852.4 - 1907.6 MHz
LTE Band 71	Voice/Data	665.5 - 695.5 MHz
LTE Band 12	Voice/Data	699.7 - 715.3 MHz
LTE Band 13	Voice/Data	779.5 - 784.5 MHz
LTE Band 14	Voice/Data	790.5 - 795.5 MHz
LTE Band 26	Voice/Data	814.7 - 848.3 MHz
LTE Band 5	Voice/Data	824.7 - 848.3 MHz
LTE Band 66	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2	Voice/Data	1850.7 - 1909.3 MHz
LTE Band 30	Voice/Data	2307.5 - 2312.5 MHz
LTE Band 7	Voice/Data	2502.5 - 2567.5 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
LTE Band 38	Voice/Data	2572.5 - 2617.5 MHz
LTE Band 48	Voice/Data	3552.5 - 3697.5 MHz
NR Band n71	Voice/Data	665.5 - 695.5 MHz
NR Band n12	Voice/Data	701.5 - 713.5 MHz
NR Band n14	Voice/Data	790.5 - 795.5 MHz
NR Band n26	Voice/Data	816.5 - 846.5 MHz
NR Band n5	Voice/Data	826.5 - 846.5 MHz
NR Band n70	Voice/Data	1697.5 - 1707.5 MHz
NR Band n66	Voice/Data	1712.5 - 1777.5 MHz
NR Band n25	Voice/Data	1852.5 - 1912.5 MHz
NR Band n2	Voice/Data	1852.5 - 1907.5 MHz
NR Band n30	Voice/Data	2307.5 - 2312.5 MHz
NR Band n7	Voice/Data	2502.5 - 2567.5 MHz
NR Band n41	Voice/Data	2501.01 - 2685 MHz
NR Band n38	Voice/Data	2575 - 2615 MHz
NR Band n48	Voice/Data	3555 - 3694.98 MHz
NR Band n78	Voice/Data	3455.01 - 3544.98 MHz; 3705 - 3795 MHz
NR Band n77	Voice/Data	3455.01 - 3544.98 MHz; 3705 - 3975 MHz
NTN Band 255	Data	1629 - 1658 MHz
NR Band n258	Data	24250 - 24450 MHz; 24750 - 25250 MHz
NR Band n260	Data	37000 - 40000 MHz
NR Band n261	Data	27500 - 28350 MHz
2.4 GHz WIFI	Voice/Data	2412 - 2462 MHz
5 GHz WIFI	Voice/Data	U-NII-1: 5180 - 5240 MHz U-NII-2A: 5260 - 5320 MHz U-NII-2C: 5500 - 5720 MHz U-NII-3: 5745 - 5825 MHz U-NII-4: 5845 - 5885 MHz
6 GHz WIFI	Voice/Data	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz
2.4 GHz Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
UWB	Data	6489.6 - 7987.2 MHz

1.2 Time-Averaging for SAR and Power Density

This device is enabled with Qualcomm® Gen2 Smart Transmit algorithm to control and manage transmitting power in real time and to ensure that the time-averaged RF exposure from 2G/3G/4G/5G Sub-6 NR WWAN is in compliance with FCC requirements. This Part 0 report shows SAR characterization of WWAN radios for 2G/3G/4G/5G Sub-6 NR. Characterization is achieved by determining P_{Limit} for 2G/3G/4G/5G Sub-6 NR that corresponds to the exposure design targets after accounting for all device design related uncertainties, i.e., SAR_design_target (< FCC SAR limit) for sub-6 radio. The SAR characterization is denoted as SAR Char in this report. Section 1.3 includes a nomenclature of the specific terms used in this report.

The compliance test under the static transmission scenario and simultaneous transmission analysis are reported in Part 1 report. The validation of the time-averaging algorithm and compliance under the dynamic (time- varying) transmission scenario for WWAN technologies are reported in Part 2 report (report SN could be found in Section 1.4 – Bibliography).

1.3 Nomenclature for Part 0 Report

Technology	Term	Description
2G/3G/4G/5G Sub-6 NR	P_{limit}	Power level that corresponds to the exposure design target (*SAR_design_target)* after accounting for all device design related uncertainties
	P_{max}	Maximum tune up output power
	SAR_design_target	Target SAR level < FCC SAR limit after accounting for all device design related uncertainties
	SAR Char	Table containing *Plimit* for all technologies and bands

1.4 Bibliography

Report Type	Report Serial Number
Near Field PD Report (Part 0)	
RF Exposure SAR Evaluation Report (Part 1)	1M2408260067-23.A3L
Near Field PD Report (Part 1)	1M2408260067-25.A3L
RF Exposure Part 2 Test Report	1M2408260067-24.A3L
RF Exposure Compliance Summary	1M2408260067-26.A3L

2 SAR AND POWER DENSITY MEASUREMENTS

2.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 2-1).

Equation 2-1
SAR Mathematical Equation

$$SAR = \frac{d}{dt}\left(\frac{dU}{dm}\right) = \frac{d}{dt}\left(\frac{dU}{\rho dv}\right)$$

SAR is expressed in units of Watts per Kilogram (W/kg).

$$SAR = \frac{\sigma \cdot E^2}{\rho}$$

where:

σ	=	conductivity of the tissue-simulating material (S/m)
ρ	=	mass density of the tissue-simulating material (kg/m^3)
E	=	Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]

2.2 SAR Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 2-1) and IEEE 1528-2013.
2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.

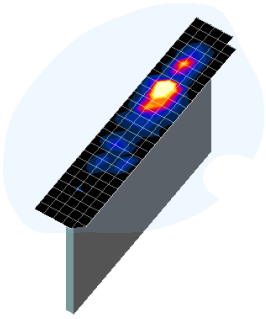

Figure 2-1
Sample SAR Area Scan

3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 2-1) and IEEE 1528-2013. On the

basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):

a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 2-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).

b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the “Not a knot” condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.

c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

Table 2-1
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

Frequency	Maximum Area Scan Resolution (mm) (Δx_{area}, Δy_{area})	Maximum Zoom Scan Resolution (mm) (Δx_{zoom}, Δy_{zoom})	Maximum Zoom Scan Spatial Resolution (mm)			Minimum Zoom Scan Volume (mm) (x,y,z)
			Uniform Grid	Graded Grid		
			$\Delta z_{zoom}(n)$	$\Delta z_{zoom}(1)$*	$\Delta z_{zoom}(n>1)$*	
≤ 2 GHz	≤ 15	≤ 8	≤ 5	≤ 4	≤ 1.5*$\Delta z_{zoom}(n-1)$	≥ 30
2-3 GHz	≤ 12	≤ 5	≤ 5	≤ 4	≤ 1.5*$\Delta z_{zoom}(n-1)$	≥ 30
3-4 GHz	≤ 12	≤ 5	≤ 4	≤ 3	≤ 1.5*$\Delta z_{zoom}(n-1)$	≥ 28
4-5 GHz	≤ 10	≤ 4	≤ 3	≤ 2.5	≤ 1.5*$\Delta z_{zoom}(n-1)$	≥ 25
5-6 GHz	≤ 10	≤ 4	≤ 2	≤ 2	≤ 1.5*$\Delta z_{zoom}(n-1)$	≥ 22

*Also compliant to IEEE 1528-2013 Table 6

3 SAR CHARACTERIZATION

3.1 DSI and SAR Determination

This device uses different Device State Index (DSI) to configure different time averaged power levels based on certain exposure scenarios. Depending on the detection scheme implemented in the smartphone, the worst-case SAR was determined by measurements for the relevant exposure conditions for that DSI. Detailed descriptions of the detection mechanisms are included in the operational description.

When 1g SAR and 10g SAR exposure comparison is needed, the worst-case was determined from SAR normalized to 1g or 10g SAR limit.

The device state index (DSI) conditions used in Table 3-1 represent different exposure scenarios.

Table 3-1
DSI and Corresponding Exposure Scenarios

Scenario	Description	SAR Test Cases
Head (DSI = 1)	▪ Device positioned next to head ▪ Receiver Active	*Head SAR per KDB Publication 648474 D04*
Hotspot mode (DSI = 0)	▪ Device transmits in hotspot mode near body ▪ Hotspot Mode Active	*Hotspot SAR per KDB Publication 941225 D06*
Phablet (DSI = 0)	▪ Device is held with hand.	*Phablet SAR per KDB Publication 648474 D04 & KDB Publication 616217 D04*
Body-worn (DSI = 0)	▪ Device being used with a body-worn accessory	*Body-worn SAR per KDB Publication 648474 D04*

3.2 SAR Design Target

SAR_design_target is determined by ensuring that it is less than FCC SAR limit after accounting for total device designed related uncertainties specified by the manufacturer (see Table 3-2).

Table 3-2
***SAR_design_target* Calculations**

SAR_design_target			
$SAR\_design\_target < SAR\_regulatory\_limit \times 10^{\frac{-Total\ Uncertainty}{10}}$			
1g SAR (W/kg)		**10g SAR (W/kg)**	
Total Uncertainty	1.0 dB	*Total Uncertainty*	1.0 dB
SAR_regulatory_limit	1.6 W/kg	*SAR_regulatory_limit*	4.0 W/kg
SAR_design_target	1.0 W/kg	*SAR_design_target*	2.5 W/kg

3.3 SAR Char

SAR test results corresponding to *Pmax* for each antenna/technology/band/DSI can be found in Appendix A.

Plimit is calculated by linearly scaling with the measured SAR at the Ppart0 to correspond to the *SAR_design_target*. When *Plimit* < *Pmax*, *Ppart0* was used as Plimit in the Smart Transmit EFS. When *Plimit* > *Pmax* and *Ppart0*=Pmax, calculated *Plimit* was used in the Smart Transmit EFS. All reported SAR obtained from the Ppart0 SAR tests was less than *SAR_Design_targe*t+ 1 dB Uncertainty. The final *Plimit* determination for each exposure scenario corresponding to *SAR_design_target* are shown in Table 3-3.

Table 3-3
***PLimit* Determination**

Device State Index (DSI)	*PLimit* Determination Scenarios
0	The worst-case SAR exposure is determined as maximum SAR normalized to the limit (i.e. lowest P_{limit}) among: 1. Body Worn SAR 2. Extremity SAR measured at 0 mm spacing for back, front, top, bottom, right and left.
1	P_{limit} is calculated based on 1g Head SAR

Notes:

- When $P_{max} < P_{limit}$ EFS, the DUT will operate at a power level up to P_{max}

- All P_{limit} EFS and maximum tune up output power P_{max} levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of TDD, GMSK, or OFDM modulation schemes (e.g. GSM, LTE TDD and WLAN/BT).

- Maximum tune up output power P_{max} is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum Tune up output power + 1dB device design uncertainty.

- All MIMO P_{max} and P_{limit} are defined per antenna chain.

Measurement Condition: All conducted power and SAR measurements in this report (Part 1 test) were performed by setting Reserve_power_margin (Smart Transmit EFS entry) to 0dB.

Table 3-4
SAR Characterizations

Exposure Scenario			Maximum Tune-Up Output Power*	Body-Worn, Hotspot, or Phablet	Head
Averaging Volume				1g/10g	1g
Spacing				10mm, 0mm	0mm
DSI				0	1
Technology/Band	Antenna	Antenna Group	P_{max}	P_{limit}	P_{limit}
GSM 850	A	AG0	25.3	29.7	31.5
GSM 850	E	AG1	25.3	27.7	20.3
GSM 1900	A	AG0	22.1	18.8	28.8
UMTS 850	A	AG0	24.0	25.9	29.0
UMTS 850	E	AG1	24.0	26.9	20.5
UMTS 1750	A	AG0	23.0	19.0	29.4
UMTS 1900	A	AG0	23.0	18.0	29.0
LTE Band 71	A	AG0	24.0	27.2	28.6
LTE Band 71	E	AG1	24.0	27.0	21.5
LTE Band 12	A	AG0	24.0	27.0	28.5
LTE Band 12	E	AG1	24.0	26.2	21.5
LTE Band 13	A	AG0	24.0	27.0	28.0
LTE Band 13	E	AG1	24.0	25.9	21.5
LTE Band 14	A	AG0	24.0	26.7	28.3
LTE Band 14	E	AG1	24.0	26.2	21.5
LTE Band 26/5	A	AG0	24.0	27.1	29.3
LTE Band 26/5	E	AG1	24.0	26.4	21.0
LTE Band 66/4	A	AG0	23.5	19.0	29.0
LTE Band 66/4	F	AG1	23.5	20.5	18.5
LTE Band 25/2	A	AG0	23.5	18.0	28.5
LTE Band 25/2	F	AG1	23.5	20.0	18.5
LTE Band 30	A	AG0	22.5	19.5	34.2
LTE Band 30	F	AG1	22.0	20.0	17.0
LTE Band 7	B	AG0	23.5	20.0	29.2
LTE Band 7	F	AG1	23.5	19.5	16.0
LTE Band 41/38	B	AG0	22.0	20.0	30.1
LTE Band 41/38	F	AG1	22.0	19.5	16.0
LTE Band 48	F	AG1	20.0	19.5	16.0
NR Band n71	A	AG0	24.0	26.4	29.5
NR Band n71	E	AG1	24.0	27.6	21.5
NR Band n12	A	AG0	24.0	26.2	28.2
NR Band n12	E	AG1	24.0	27.0	21.5
NR Band n14	A	AG0	24.0	26.7	29.3
NR Band n14	E	AG1	24.0	26.9	21.5
NR Band n26/n5	A	AG0	24.0	28.1	30.2
NR Band n26/n5	E	AG1	24.0	27.3	21.0
NR Band n70	A	AG0	23.5	19.0	29.0
NR Band n70	F	AG1	23.5	21.0	18.5
NR Band n66	A	AG0	23.5	19.0	29.2
NR Band n66	F	AG1	23.5	20.5	18.5
NR Band n25/n2	A	AG0	23.5	18.0	29.1
NR Band n25/n2	F	AG1	23.5	20.0	18.5
NR Band n30	A	AG0	22.5	19.5	33.9
NR Band n30	F	AG1	22.0	20.0	17.0
NR Band n7	B	AG0	23.5	20.0	28.2
NR Band n7	F	AG1	23.5	19.5	16.0
NR Band n41 PC2 (Path 1)	F	AG1	26.0	19.5	16.5
NR Band n41 PC2 (Path 1)	B	AG0	23.0	19.5	16.5
NR Band n41 PC2 (Path 1)	E	AG1	23.5	18.0	15.0
NR Band n41 PC2 (Path 1)	D	AG0	22.0	19.5	16.5
NR Band n41 PC2 (Path 2)	B	AG0	26.0	20.0	21.0
NR Band n41 PC2 (Path 2)	F	AG1	21.5	19.5	16.5
NR Band n41 PC2 (Path 2)	D	AG0	25.0	20.0	21.0
NR Band n41 PC2 (Path 2)	E	AG1	20.0	17.5	17.5
NR Band n38 (Path 1)	F	AG1	24.0	19.5	16.5
NR Band n38 (Path 2)	B	AG0	24.0	20.0	21.0
NR Band n48	F	AG1	22.0	19.5	16.0
NR Band n48	C	AG0	16.5	14.5	11.0
NR Band n48	I	AG1	21.0	19.0	15.5
NR Band n48	D	AG0	16.5	14.5	11.0
NR Band n78 PC2	F	AG1	26.0	18.0	16.0
NR Band n78 PC2	C	AG0	21.0	13.5	11.0
NR Band n78 PC2	I	AG1	25.5	18.0	15.5
NR Band n78 PC2	D	AG0	20.0	13.0	10.5
NR Band n77 PC2	F	AG1	26.0	18.0	16.0
NR Band n77 PC2	C	AG0	21.0	13.5	11.0
NR Band n77 PC2	I	AG1	25.5	18.0	15.5
NR Band n77 PC2	D	AG0	20.0	13.0	10.5
2.4 GHz WIFI	H	AG1	19.0	19.5	16.0
2.4 GHz WIFI	J	AG1	19.0	25.4	16.0
2.4 GHz WIFI	MIMO	AG1	19.0	19.4	16.0
5 GHz WIFI	H	AG1	17.0	15.0	15.0
5 GHz WIFI	E	AG1	17.0	15.0	15.0
5 GHz WIFI	MIMO	AG1	17.0	15.0	15.0
6 GHz WIFI	H	AG1	16.0	8.0	18.4
6 GHz WIFI	E	AG1	16.0	8.0	19.3
6 GHz WIFI	MIMO	AG1	16.0	8.0	17.0
2.4 GHz Bluetooth	H	AG1	18.9	21.3	18.9
2.4 GHz Bluetooth	J	AG1	18.4	25.9	20.4
2.4 GHz Bluetooth	MIMO	AG1	16.9	18.7	17.8

4 EQUIPMENT LIST

For SAR measurements

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4404B	Spectrum Analyzer	N/A	N/A	N/A	MY45113242
Agilent	E4438C	ESG Vector Signal Generator	11/14/2023	Annual	11/14/2024	MY45093852
Agilent	E4438C	ESG Vector Signal Generator	11/15/2023	Annual	11/15/2024	MY45092078
Agilent	N5182A	MXG Vector Signal Generator	10/12/2023	Annual	10/12/2024	MY47400015
Agilent	N5182A	MXG Vector Signal Generator	1/7/2024	Annual	1/7/2025	MY47402669
Agilent	8753ES	S-Parameter Vector Network Analyzer	1/10/2024	Annual	1/10/2025	MY40001472
Agilent	8753ES	S-Parameter Vector Network Analyzer	7/21/2023	Annual	7/21/2024	US39170118
Agilent	E5515C	Wireless Communications Test Set	CBT	N/A	CBT	GB46310798
Agilent	E5515C	Wireless Communications Test Set	CBT	N/A	CBT	US41140256
Agilent	N4010A	Wireless Connectivity Test Set	N/A	N/A	N/A	GB46170464
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433973
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433974
Amplifier Research	150A100C	Amplifier	CBT	N/A	CBT	350132
Anritsu	MN81108	I/O Adaptor	CBT	N/A	CBT	6261747881
Anritsu	ML2496A	Power Meter	6/24/2024	Annual	6/24/2025	1840005
Anritsu	ML2495A	Power Meter	7/8/2024	Annual	7/8/2025	1039008
Anritsu	MA2411B	Pulse Power Sensor	8/22/2023	Annual	8/22/2024	1726262
Anritsu	MA2411B	Pulse Power Sensor	11/8/2023	Annual	11/8/2024	1027293
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	12/15/2023	Annual	12/15/2024	6200001190
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	5/15/2024	Annual	5/15/2025	6262150047
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	5/30/2024	Annual	5/30/2025	6262044715
Anritsu	MT8800A	Radio Communication Test Station	CBT	N/A	CBT	626198-7072
Anritsu	MT8000A	Radio Communication Test Station	4/10/2024	Annual	4/10/2025	6261987983
Anritsu	MT8000A	Radio Communication Test Station	5/2/2024	Annual	5/2/2025	6272337436
Anritsu	MA2418A	USB Power Sensor	12/4/2023	Annual	12/4/2024	1520501
Anritsu	MA2418A	USB Power Sensor	4/15/2024	Annual	4/15/2025	1827528
Mini-Circuits	PWR-4GHS	USB Power Sensor	6/12/2024	Annual	6/12/2025	12001070013
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240176346
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240171096
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240171059
Control Company	4040	Therm./ Clock/ Humidity Monitor	4/15/2024	Biennial	4/15/2026	240310280
Control Company	4040	Therm./ Clock/ Humidity Monitor	4/15/2024	Biennial	4/15/2026	240310282
Control Company	S66279	Therm./ Clock/ Humidity Monitor	2/16/2024	Biennial	2/16/2026	240140051
Mitutoyo	500-196-30	CD-6"ASX Ginch Digital Caliper	2/16/2022	Triennial	2/16/2025	A20238413
Keysight Technologies	N9020A	MXA Signal Analyzer	4/11/2024	Annual	4/11/2025	MY54500644
Agilent	N9020A	MXA Signal Analyzer	6/14/2024	Annual	6/14/2025	MY56470202
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	7/5/2023	Annual	7/5/2024	31634
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	ZUDC10-83-S+	Directional Coupler	CBT	N/A	CBT	2050
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Seekonk	NC-100	Torque Wrench	CBT	N/A	CBT	22217
Seekonk	NC-100	Torque Wrench	4/2/2024	Biennial	4/2/2026	1262
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/11/2024	Annual	1/11/2025	150117
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/10/2024	Annual	1/10/2025	131454
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	8/10/2023	Annual	8/10/2024	140144
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	8/8/2023	Annual	8/8/2024	162125
SPEAG	DAK-3.5	Dielectric Assessment Kit	11/13/2023	Annual	11/13/2024	1277
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	8/14/2023	Annual	8/14/2024	1041
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1237
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1331
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1300
SPEAG	DAE-12	Dielectric Assessment Kit (4MHz - 3GHz)	3/11/2024	Annual	3/11/2025	1102
SPEAG	CLA-13	Confined Loop Antenna	11/9/2023	Annual	11/9/2024	1004
SPEAG	D750V3	750 MHz SAR Dipole	10/19/2021	Triennial	10/19/2024	1161
SPEAG	D750V3	750 MHz SAR Dipole	3/14/2022	Triennial	3/14/2025	1054
SPEAG	D750V3	750 MHz SAR Dipole	9/13/2023	Biennial	9/13/2025	1097
SPEAG	D835V2	835 MHz SAR Dipole	11/18/2022	Biennial	11/18/2024	4d108
SPEAG	D835V2	835 MHz SAR Dipole	5/16/2022	Triennial	5/16/2025	4d040
SPEAG	D835V2	835 MHz SAR Dipole	4/8/2024	Annual	4/8/2025	4d119
SPEAG	D835V2	835 MHz SAR Dipole	3/14/2022	Triennial	3/14/2025	4d047
SPEAG	D1640V2	1640 MHz SAR Dipole	12/13/2022	Biennial	12/13/2024	321
SPEAG	D1750V2	1750 MHz SAR Dipole	10/22/2021	Triennial	10/22/2024	1150
SPEAG	D1750V2	1750 MHz SAR Dipole	4/15/2024	Annual	4/15/2025	1051
SPEAG	D1900V2	1900 MHz SAR Dipole	8/8/2022	Triennial	8/8/2025	5d080
SPEAG	D1900V2	1900 MHz SAR Dipole	2/21/2022	Triennial	2/21/2025	5d148
SPEAG	D1900V2	1900 MHz SAR Dipole	4/12/2024	Annual	4/12/2025	5d141
SPEAG	D1900V2	1900 MHz SAR Dipole	5/10/2024	Annual	5/10/2025	5d026
SPEAG	D2300V2	2300 MHz SAR Dipole	11/14/2023	Annual	11/14/2024	1064
SPEAG	D2300V2	2300 MHz SAR Dipole	3/11/2024	Annual	3/11/2025	1038
SPEAG	D2450V2	2450 MHz SAR Dipole	2/8/2024	Annual	2/8/2025	882
SPEAG	D2450V2	2450 MHz SAR Dipole	5/10/2024	Annual	5/10/2025	945
SPEAG	D2450V2	2450 MHz SAR Dipole	5/11/2022	Triennial	5/11/2025	750
SPEAG	D2450V2	2450 MHz SAR Dipole	11/15/2022	Biennial	11/15/2024	855
SPEAG	D2600V2	2600 MHz SAR Dipole	5/11/2022	Triennial	5/11/2025	1042
SPEAG	D2600V2	2600 MHz SAR Dipole	11/15/2022	Biennial	11/15/2024	1068
SPEAG	D2600V2	2600 MHz SAR Dipole	9/12/2023	Biennial	9/12/2025	1089
SPEAG	D2600V2	2600 MHz SAR Dipole	6/14/2024	Annual	6/14/2025	1089
SPEAG	D3500V2	3500 MHz SAR Dipole	12/13/2023	Annual	12/13/2024	1068
SPEAG	D3500V2	3500 MHz SAR Dipole	1/10/2023	Biennial	1/10/2025	1097
SPEAG	D3700V2	3700 MHz SAR Dipole	12/13/2023	Annual	12/13/2024	1029
SPEAG	D3700V2	3700 MHz SAR Dipole	1/13/2023	Biennial	1/13/2025	1067
SPEAG	D3900V2	3900 MHz SAR Dipole	10/19/2023	Annual	10/19/2024	1056
SPEAG	D3900V2	3900 MHz SAR Dipole	6/10/2024	Annual	6/10/2025	1073
SPEAG	D5GHzV2	5 GHz SAR Dipole	4/9/2024	Annual	4/9/2025	1237
SPEAG	D6.5GHzV2	6.5 GHz SAR Dipole	10/11/2023	Annual	10/11/2024	1019
SPEAG	D8GHzV2	8GHz SAR Dipole	3/4/2024	Annual	3/4/2025	1037
SPEAG	5G Verification Source 10GHz	10GHz System Verification Antenna	3/5/2024	Annual	3/5/2025	1002
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/16/2024	Annual	1/16/2025	1582
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/8/2024	Annual	7/8/2025	1677
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/9/2024	Annual	4/9/2025	1415
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2024	Annual	5/8/2025	701
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2024	Annual	5/8/2025	1678
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/10/2024	Annual	9/10/2025	1449
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/10/2024	Annual	9/10/2025	1364
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/16/2024	Annual	1/16/2025	1466
SPEAG	DAE4	Dasy Data Acquisition Electronics	8/8/2024	Annual	8/8/2025	1532
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/11/2024	Annual	6/11/2025	1334
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/8/2024	Annual	7/8/2025	1583
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/18/2024	Annual	4/18/2025	1407
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/9/2024	Annual	2/9/2025	467
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2024	Annual	5/8/2025	1683
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/9/2024	Annual	4/9/2025	1652
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/9/2024	Annual	2/9/2025	1645
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2024	Annual	5/8/2025	1502
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/4/2024	Annual	9/4/2025	1682
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/6/2024	Annual	3/6/2025	604
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/6/2024	Annual	3/6/2025	534
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/12/2024	Annual	3/12/2025	1272
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/16/2024	Annual	1/16/2025	1530
SPEAG	EX3DV4	SAR Probe	4/16/2024	Annual	4/16/2025	7357
SPEAG	EX3DV4	SAR Probe	7/18/2024	Annual	7/18/2025	7406
SPEAG	EX3DV4	SAR Probe	9/11/2024	Annual	9/11/2025	7558
SPEAG	EX3DV4	SAR Probe	5/13/2024	Annual	5/13/2025	7416
SPEAG	EX3DV4	SAR Probe	1/16/2024	Annual	1/16/2025	7565
SPEAG	EX3DV4	SAR Probe	9/2/2024	Annual	9/2/2025	7491
SPEAG	EX3DV4	SAR Probe	3/8/2024	Annual	3/8/2025	7488
SPEAG	EX3DV4	SAR Probe	6/17/2024	Annual	6/17/2025	7409
SPEAG	EX3DV4	SAR Probe	5/8/2024	Annual	5/8/2025	7660
SPEAG	EX3DV4	SAR Probe	6/28/2024	Annual	6/28/2025	7803
SPEAG	EX3DV4	SAR Probe	2/9/2024	Annual	2/9/2025	7427
SPEAG	EX3DV4	SAR Probe	4/17/2024	Annual	4/17/2025	7659
SPEAG	EX3DV4	SAR Probe	5/13/2024	Annual	5/13/2025	7682
SPEAG	EX3DV4	SAR Probe	4/17/2024	Annual	4/17/2025	7637
SPEAG	EX3DV4	SAR Probe	2/9/2024	Annual	2/9/2025	7640
SPEAG	EX3DV4	SAR Probe	5/10/2024	Annual	5/10/2025	7402
SPEAG	EX3DV4	SAR Probe	9/9/2024	Annual	9/9/2025	3949
SPEAG	EX3DV4	SAR Probe	3/11/2024	Annual	3/11/2025	7421
SPEAG	EX3DV4	SAR Probe	3/8/2024	Annual	3/8/2025	7527
SPEAG	EX3DV4	SAR Probe	2/9/2024	Annual	2/9/2025	7308
SPEAG	EX3DV4	SAR Probe	1/15/2024	Annual	1/15/2025	7570
SPEAG	EUmmWV4	EUmmWV4 Probe	2/2/2024	Annual	2/2/2025	9622
SPEAG	EUmmWV4	EUmmWV4 Probe	3/4/2024	Annual	3/4/2025	9421

Note:

1. CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to the system verification and output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements.
2. Each equipment item was used solely within its respective calibration period.

5 MEASUREMENT UNCERTAINTIES

For SAR Measurements

a	b	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
Uncertainty Component	IEEE 1528 Sec.	Tol. (± %)	Prob. Dist.	Div.	c_i 1gm	c_i 10 gms	1gm u_i (± %)	10gms u_i (± %)	v_i
Measurement System									
Probe Calibration	E.2.1	7	N	1	1	1	7.0	7.0	∞
Axial Isotropy	E.2.2	0.25	N	1	0.7	0.7	0.2	0.2	∞
Hemishperical Isotropy	E.2.2	1.3	N	1	0.7	0.7	0.9	0.9	∞
Boundary Effect	E.2.3	2	R	1.732	1	1	1.2	1.2	∞
Linearity	E.2.4	0.3	N	1	1	1	0.3	0.3	∞
System Detection Limits	E.2.4	0.25	R	1.732	1	1	0.1	0.1	∞
Modulation Response	E.2.5	4.8	R	1.732	1	1	2.8	2.8	∞
Readout Electronics	E.2.6	0.3	N	1	1	1	0.3	0.3	∞
Response Time	E.2.7	0.8	R	1.732	1	1	0.5	0.5	∞
Integration Time	E.2.8	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Conditions - Noise	E.6.1	3	R	1.732	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	3	R	1.732	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.8	R	1.732	1	1	0.5	0.5	∞
Probe Positioning w/ respect to Phantom	E.6.3	6.7	R	1.732	1	1	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	E.5	4	R	1.732	1	1	2.3	2.3	∞
Test Sample Related									
Test Sample Positioning	E.4.2	3.12	N	1	1	1	3.1	3.1	35
Device Holder Uncertainty	E.4.1	1.67	N	1	1	1	1.7	1.7	5
Output Power Variation - SAR drift measurement	E.2.9	5	R	1.732	1	1	2.9	2.9	∞
SAR Scaling	E.6.5	0	R	1.732	1	1	0.0	0.0	∞
Phantom & Tissue Parameters									
Phantom Uncertainty (Shape & Thickness tolerances)	E.3.1	7.6	R	1.73	1.0	1.0	4.4	4.4	∞
Liquid Conductivity - measurement uncertainty	E.3.3	4.3	N	1	0.78	0.71	3.3	3.0	76
Liquid Permittivity - measurement uncertainty	E.3.3	4.2	N	1	0.23	0.26	1.0	1.1	75
Liquid Conductivity - Temperature Uncertainty	E.3.4	3.4	R	1.732	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Unceritainty	E.3.4	0.6	R	1.732	0.23	0.26	0.1	0.1	∞
Liquid Conductivity - deviation from target values	E.3.2	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Permittivity - deviation from target values	E.3.2	5.0	R	1.73	0.60	0.49	1.7	1.4	∞
Combined Standard Uncertainty (k=1)			RSS				12.2	12.0	191
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				24.4	24.0	

The above measurement uncertainties are according to IEEE Std. 1528-2013

Applicable for SAR measurements > 6GHz:

a	b	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
Uncertainty Component	IEEE 1528 Sec.	Tol. (± %)	Prob. Dist.	Div.	c_i 1gm	c_i 10 gms	1gm u_i (± %)	10gms u_i (± %)	v_i
Measurement System									
Probe Calibration	E.2.1	9.3	N	1	1	1	9.3	9.3	∞
Axial Isotropy	E.2.2	0.25	N	1	0.7	0.7	0.2	0.2	∞
Hemishperical Isotropy	E.2.2	1.3	N	1	0.7	0.7	0.9	0.9	∞
Boundary Effect	E.2.3	2	R	1.73	1	1	1.2	1.2	∞
Linearity	E.2.4	0.3	N	1	1	1	0.3	0.3	∞
System Detection Limits	E.2.4	0.25	R	1.73	1	1	0.1	0.1	∞
Modulation Response	E.2.5	4.8	R	1.73	1	1	2.8	2.8	∞
Readout Electronics	E.2.6	0.3	N	1	1	1	0.3	0.3	∞
Response Time	E.2.7	0.8	R	1.73	1	1	0.5	0.5	∞
Integration Time	E.2.8	2.6	R	1.73	1	1	1.5	1.5	∞
RF Ambient Conditions - Noise	E.6.1	3	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	3	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.8	R	1.73	1	1	0.5	0.5	∞
Probe Positioning w/ respect to Phantom	E.6.3	6.7	R	1.73	1	1	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	E.5	4	R	1.73	1	1	2.3	2.3	∞
Test Sample Related									
Test Sample Positioning	E.4.2	3.12	N	1	1	1	3.1	3.1	35
Device Holder Uncertainty	E.4.1	1.67	N	1	1	1	1.7	1.7	5
Output Power Variation - SAR drift measurement	E.2.9	5	R	1.73	1	1	2.9	2.9	∞
SAR Scaling	E.6.5	0	R	1.73	1	1	0.0	0.0	∞
Phantom & Tissue Parameters									
Phantom Uncertainty (Shape & Thickness tolerances)	E.3.1	7.6	R	1.73	1.0	1.0	4.4	4.4	∞
Liquid Conductivity - measurement uncertainty	E.3.3	4.3	N	1	0.78	0.71	3.3	3.0	76
Liquid Permittivity - measurement uncertainty	E.3.3	4.2	N	1	0.23	0.26	1.0	1.1	75
Liquid Conductivity - Temperature Uncertainty	E.3.4	3.4	R	1.73	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Unceritainty	E.3.4	0.6	R	1.73	0.23	0.26	0.1	0.1	∞
Liquid Conductivity - deviation from target values	E.3.2	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Permittivity - deviation from target values	E.3.2	5.0	R	1.73	0.60	0.49	1.7	1.4	∞
Combined Standard Uncertainty (k=1)			RSS				13.8	13.6	191
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				27.6	27.1	

The above measurement uncertainties are according to IEEE Std. 1528-2013

APPENDIX A: SAR TEST RESULTS FOR P_{LIMIT} CALCULATIONS

For some bands/modes, a lower P_{Limit} was selected as a more conservative evaluation.
See RF Exposure SAR Evaluation Report (Part 1) section 12 for 5/6 GHz WLAN SAR data.

Table A-1
DSI = 0 P_{Limit} Calculations – GPRS 850 Phablet SAR

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	GPRS 850	GPRS 3 Tx Slots	A	0015M	1:2.76	-0.05	836.60	190	29.77	Back	0	0.562	31.8	30.2	29.7
Phablet	GPRS 850	GPRS 3 Tx Slots	A	0015M	1:2.76	0.04	836.60	190	29.77	Front	0	0.539	32.0		
Phablet	GPRS 850	GPRS 3 Tx Slots	A	0015M	1:2.76	-0.03	836.60	190	29.77	Bottom	0	0.620	31.3		
Phablet	GPRS 850	GPRS 3 Tx Slots	A	0015M	1:2.76	-0.02	836.60	190	29.77	Right	0	0.812	30.2		
Phablet	GPRS 850	GPRS 3 Tx Slots	A	0015M	1:2.76	-0.01	836.60	190	29.77	Left	0	0.078	40.3		
Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	GPRS 850	GPRS 3 Tx Slots	E	0015M	1:2.76	-0.08	836.60	190	29.77	Back	0	0.853	30.0	27.7	27.7
Phablet	GPRS 850	GPRS 3 Tx Slots	E	0015M	1:2.76	-0.01	836.60	190	29.77	Front	0	1.430	27.7		
Phablet	GPRS 850	GPRS 3 Tx Slots	E	0015M	1:2.76	0.06	836.60	190	29.77	Top	0	0.708	30.8		
Phablet	GPRS 850	GPRS 3 Tx Slots	E	0015M	1:2.76	-0.04	836.60	190	29.77	Right	0	1.090	28.9		

Table A-2
DSI = 0 P_{Limit} Calculations – GPRS 1900 Phablet SAR

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	GPRS 1900	GPRS 4 Tx Slots	A	0015M	1:2.076	-0.06	1850.20	512	21.75	Back	0	0.865	23.1	23.1	18.8
Phablet	GPRS 1900	GPRS 4 Tx Slots	A	0015M	1:2.076	0.09	1850.20	512	21.75	Front	0	0.806	23.4		
Phablet	GPRS 1900	GPRS 4 Tx Slots	A	0015M	1:2.076	-0.01	1850.20	512	21.75	Bottom	0	0.433	26.1		
Phablet	GPRS 1900	GPRS 4 Tx Slots	A	0015M	1:2.076	-0.10	1850.20	512	21.75	Right	0	0.085	33.2		
Phablet	GPRS 1900	GPRS 4 Tx Slots	A	0015M	1:2.076	-0.01	1850.20	512	21.75	Left	0	0.081	33.4		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Phablet 4.0 W/kg (mW/g) averaged over 10 grams					

Table A-3
DSI = 0 P_{Limit} Calculations – UMTS 850 Phablet SAR

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	UMTS 850	RMC	A	0015M	1:1	0.03	836.60	4183	23.79	Back	0	0.806	28.7	25.9	25.9
Phablet	UMTS 850	RMC	A	0015M	1:1	0.02	836.60	4183	23.79	Front	0	0.939	28.0		
Phablet	UMTS 850	RMC	A	0015M	1:1	0.02	836.60	4183	23.79	Bottom	0	1.130	27.2		
Phablet	UMTS 850	RMC	A	0015M	1:1	-0.01	836.60	4183	23.79	Right	0	1.520	25.9		
Phablet	UMTS 850	RMC	A	0015M	1:1	-0.01	836.60	4183	23.79	Left	0	0.104	37.5		
Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	UMTS 850	RMC	E	0015M	1:1	-0.14	836.60	4183	24.32	Back	0	1.010	28.2	26.9	26.9
Phablet	UMTS 850	RMC	E	0015M	1:1	0.02	836.60	4183	24.32	Front	0	1.370	26.9		
Phablet	UMTS 850	RMC	E	0015M	1:1	-0.12	836.60	4183	24.32	Top	0	0.704	29.8		
Phablet	UMTS 850	RMC	E	0015M	1:1	-0.04	836.60	4183	24.32	Right	0	1.320	27.0		

Table A-4
DSI = 0 P_{Limit} Calculations – UMTS 1750 Phablet SAR

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	UMTS 1750	RMC	A	0015M	1:1	-0.01	1752.60	1513	19.69	Back	0	1.560	21.7		
Phablet	UMTS 1750	RMC	A	0015M	1:1	0.04	1752.60	1513	19.69	Front	0	1.410	22.1		
Phablet	UMTS 1750	RMC	A	0015M	1:1	0.03	1752.60	1513	19.69	Bottom	0	1.560	21.7	21.7	19.0
Phablet	UMTS 1750	RMC	A	0015M	1:1	-0.01	1752.60	1513	19.69	Right	0	0.186	30.9		
Phablet	UMTS 1750	RMC	A	0015M	1:1	0.01	1752.60	1513	19.69	Left	0	0.118	32.9		

Table A-5
DSI = 0 P_{Limit} Calculations – UMTS 1900 Phablet SAR

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	UMTS 1900	RMC	A	0015M	1:1	0.02	1907.60	9538	18.52	Back	0	1.180	21.7		
Phablet	UMTS 1900	RMC	A	0015M	1:1	0.03	1907.60	9538	18.52	Front	0	1.030	22.3		
Phablet	UMTS 1900	RMC	A	0015M	1:1	-0.01	1907.60	9538	18.52	Bottom	0	1.240	21.5	21.5	18.0
Phablet	UMTS 1900	RMC	A	0015M	1:1	0.05	1907.60	9538	18.52	Right	0	0.111	32.0		
Phablet	UMTS 1900	RMC	A	0015M	1:1	0.00	1907.60	9538	18.52	Left	0	0.090	32.9		

Table A-6
DSI = 0 P_{Limit} Calculations – LTE Band 71 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 71	20	QPSK	A	0058M	1:1	-0.02	680.50	133297	0.0	24.08	1	50	Back	0	0.925	28.3		
Phablet	LTE Band 71	20	QPSK	A	0058M	1:1	0.05	680.50	133297	0.0	24.08	1	50	Front	0	0.896	28.5		
Phablet	LTE Band 71	20	QPSK	A	0058M	1:1	-0.05	680.50	133297	0.0	24.08	1	50	Bottom	0	0.524	30.8	27.2	27.2
Phablet	LTE Band 71	20	QPSK	A	0058M	1:1	-0.04	680.50	133297	0.0	24.08	1	50	Right	0	1.200	27.2		
Phablet	LTE Band 71	20	QPSK	A	0058M	1:1	-0.04	680.50	133297	0.0	24.08	1	50	Left	0	0.089	38.5		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 71	20	QPSK	E	0058M	1:1	-0.05	680.50	133297	0.0	24.49	1	0	Back	0	0.854	29.1		
Phablet	LTE Band 71	20	QPSK	E	0058M	1:1	-0.05	680.50	133297	0.0	24.49	1	0	Front	0	1.300	27.3		
Phablet	LTE Band 71	20	QPSK	E	0058M	1:1	0.07	680.50	133297	0.0	24.49	1	0	Top	0	1.250	27.5	27.2	27.0
Phablet	LTE Band 71	20	QPSK	E	0058M	1:1	-0.04	680.50	133297	0.0	24.49	1	0	Right	0	1.310	27.2		

Table A-7
DSI = 0 P_{Limit} Calculations – LTE Band 12 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 12	10	QPSK	A	0058M	1:1	0.01	707.50	23095	0.0	24.01	1	25	Back	0	0.988	28.0	27.0	27.0
Phablet	LTE Band 12	10	QPSK	A	0058M	1:1	0.01	707.50	23095	0.0	24.01	1	25	Front	0	0.850	28.6		
Phablet	LTE Band 12	10	QPSK	A	0058M	1:1	0.04	707.50	23095	0.0	24.01	1	25	Bottom	0	0.618	30.0		
Phablet	LTE Band 12	10	QPSK	A	0058M	1:1	-0.02	707.50	23095	0.0	24.01	1	25	Right	0	1.250	27.0		
Phablet	LTE Band 12	10	QPSK	A	0058M	1:1	0.00	707.50	23095	0.0	24.01	1	25	Left	0	0.100	37.9		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 12	10	QPSK	E	0058M	1:1	-0.01	707.50	23095	0.0	24.06	1	49	Back	0	0.978	28.1	26.2	26.2
Phablet	LTE Band 12	10	QPSK	E	0058M	1:1	0.00	707.50	23095	0.0	24.06	1	49	Front	0	1.230	27.1		
Phablet	LTE Band 12	10	QPSK	E	0058M	1:1	0.09	707.50	23095	0.0	24.06	1	49	Top	0	1.380	26.6		
Phablet	LTE Band 12	10	QPSK	E	0058M	1:1	-0.02	707.50	23095	0.0	24.06	1	49	Right	0	1.510	26.2		

Table A-8
DSI = 0 P_{Limit} Calculations – LTE Band 13 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 13	10	QPSK	A	0058M	1:1	-0.03	782.00	23230	0.0	23.85	1	0	Back	0	0.977	27.9	27.7	27.0
Phablet	LTE Band 13	10	QPSK	A	0058M	1:1	-0.06	782.00	23230	0.0	23.85	1	0	Front	0	0.731	29.1		
Phablet	LTE Band 13	10	QPSK	A	0058M	1:1	-0.04	782.00	23230	0.0	23.85	1	0	Bottom	0	0.790	28.8		
Phablet	LTE Band 13	10	QPSK	A	0058M	1:1	0.03	782.00	23230	0.0	23.85	1	0	Right	0	1.010	27.7		
Phablet	LTE Band 13	10	QPSK	A	0058M	1:1	-0.05	782.00	23230	0.0	23.85	1	0	Left	0	0.142	36.3		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 13	10	QPSK	E	0058M	1:1	0.02	782.00	23230	0.0	23.94	1	49	Back	0	1.100	27.5	26.7	25.9
Phablet	LTE Band 13	10	QPSK	E	0058M	1:1	-0.02	782.00	23230	0.0	23.94	1	49	Front	0	1.030	27.7		
Phablet	LTE Band 13	10	QPSK	E	0058M	1:1	-0.09	782.00	23230	0.0	23.94	1	49	Top	0	1.310	26.7		
Phablet	LTE Band 13	10	QPSK	E	0058M	1:1	0.00	782.00	23230	0.0	23.94	1	49	Right	0	1.110	27.4		

Table A-9
DSI = 0 P_{Limit} Calculations – LTE Band 14 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 14	10	QPSK	A	0058M	1:1	0.04	793.00	23330	0.0	23.83	1	25	Back	0	1.040	27.6	27.6	26.7
Phablet	LTE Band 14	10	QPSK	A	0058M	1:1	-0.06	793.00	23330	0.0	23.83	1	25	Front	0	0.775	28.9		
Phablet	LTE Band 14	10	QPSK	A	0058M	1:1	-0.01	793.00	23330	0.0	23.83	1	25	Bottom	0	0.828	28.6		
Phablet	LTE Band 14	10	QPSK	A	0058M	1:1	0.08	793.00	23330	0.0	23.83	1	25	Right	0	0.893	28.3		
Phablet	LTE Band 14	10	QPSK	A	0058M	1:1	-0.02	793.00	23330	0.0	23.83	1	25	Left	0	0.135	36.5		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 14	10	QPSK	E	0058M	1:1	-0.01	793.00	23330	0.0	23.97	1	25	Back	0	1.080	27.6	27.2	26.2
Phablet	LTE Band 14	10	QPSK	E	0058M	1:1	-0.02	793.00	23330	0.0	23.97	1	25	Front	0	0.960	28.1		
Phablet	LTE Band 14	10	QPSK	E	0058M	1:1	0.03	793.00	23330	0.0	23.97	1	25	Top	0	1.170	27.2		
Phablet	LTE Band 14	10	QPSK	E	0058M	1:1	0.01	793.00	23330	0.0	23.97	1	25	Right	0	1.030	27.8		

Table A-10
DSI = 0 P_{Limit} Calculations – LTE Band 26 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 26	15	QPSK	A	0058M	1:1	0.01	831.50	26865	0.0	24.46	1	36	Back	0	0.993	28.4	27.1	27.1
Phablet	LTE Band 26	15	QPSK	A	0058M	1:1	-0.11	831.50	26865	0.0	24.46	1	36	Front	0	0.790	29.4		
Phablet	LTE Band 26	15	QPSK	A	0058M	1:1	0.02	831.50	26865	0.0	24.46	1	36	Bottom	0	0.841	29.1		
Phablet	LTE Band 26	15	QPSK	A	0058M	1:1	-0.04	831.50	26865	0.0	24.46	1	36	Right	0	1.360	27.1		
Phablet	LTE Band 26	15	QPSK	A	0058M	1:1	-0.09	831.50	26865	0.0	24.46	1	36	Left	0	0.097	38.5		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 26	15	QPSK	E	0058M	1:1	-0.06	831.50	26865	0.0	24.60	1	36	Back	0	1.250	27.6	26.9	26.4
Phablet	LTE Band 26	15	QPSK	E	0058M	1:1	-0.05	831.50	26865	0.0	24.60	1	36	Front	0	1.450	26.9		
Phablet	LTE Band 26	15	QPSK	E	0058M	1:1	0.02	831.50	26865	0.0	24.60	1	36	Top	0	1.140	28.0		
Phablet	LTE Band 26	15	QPSK	E	0058M	1:1	-0.01	831.50	26865	0.0	24.60	1	36	Right	0	1.420	27.0		

Table A-11
DSI = 0 P_{Limit} Calculations – LTE Band 66 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 66	20	QPSK	A	0068M	1:1	0.01	1770.00	132572	0.0	19.10	1	0	Back	0	0.860	23.7	21.6	19.0
Phablet	LTE Band 66	20	QPSK	A	0068M	1:1	0.01	1770.00	132572	0.0	19.10	1	0	Front	0	0.944	23.3		
Phablet	LTE Band 66	20	QPSK	A	0068M	1:1	0.00	1770.00	132572	0.0	19.10	1	0	Bottom	0	1.390	21.6		
Phablet	LTE Band 66	20	QPSK	A	0068M	1:1	-0.07	1770.00	132572	0.0	19.10	1	0	Right	0	0.116	32.4		
Phablet	LTE Band 66	20	QPSK	A	0068M	1:1	0.06	1770.00	132572	0.0	19.10	1	0	Left	0	0.068	34.7		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Phablet 4.0 W/kg (mW/g) averaged over 10 grams						

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 66	20	QPSK	F	0087M	1:1	-0.13	1770.00	132572	0.0	21.09	1	50	Back	0	0.833	25.8	22.9	21.0
Phablet	LTE Band 66	20	QPSK	F	0087M	1:1	0.01	1770.00	132572	0.0	21.09	1	50	Front	0	1.030	24.9		
Phablet	LTE Band 66	20	QPSK	F	0087M	1:1	0.01	1770.00	132572	0.0	21.09	1	50	Top	0	1.640	22.9		
Phablet	LTE Band 66	20	QPSK	F	0087M	1:1	-0.07	1770.00	132572	0.0	21.09	1	50	Left	0	0.349	29.6		

Table A-12
DSI = 0 P_{Limit} Calculations – LTE Band 25 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 25	20	QPSK	A	0068M	1:1	0.02	1860.00	26140	0.0	17.85	1	50	Back	0	0.707	23.3	20.7	18.0
Phablet	LTE Band 25	20	QPSK	A	0068M	1:1	0.01	1860.00	26140	0.0	17.85	1	50	Front	0	0.842	22.5		
Phablet	LTE Band 25	20	QPSK	A	0068M	1:1	0.09	1860.00	26140	0.0	17.85	1	50	Bottom	0	1.290	20.7		
Phablet	LTE Band 25	20	QPSK	A	0068M	1:1	0.05	1860.00	26140	0.0	17.85	1	50	Right	0	0.081	32.7		
Phablet	LTE Band 25	20	QPSK	A	0068M	1:1	0.02	1860.00	26140	0.0	17.85	1	50	Left	0	0.068	33.5		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 25	20	QPSK	F	0087M	1:1	-0.11	1882.50	26365	0.0	20.19	50	50	Back	0	0.794	25.1	22.2	20.0
Phablet	LTE Band 25	20	QPSK	F	0087M	1:1	0.01	1882.50	26365	0.0	20.19	50	50	Front	0	0.986	24.2		
Phablet	LTE Band 25	20	QPSK	F	0087M	1:1	0.02	1882.50	26365	0.0	20.19	50	50	Top	0	1.550	22.2		
Phablet	LTE Band 25	20	QPSK	F	0087M	1:1	-0.12	1882.50	26365	0.0	20.19	50	50	Left	0	0.130	33.0		

Table A-13
DSI = 0 P_{Limit} Calculations – LTE Band 30 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 30	10	QPSK	A	0055M	1:1	-0.02	2310.00	27710	0.0	19.84	25	0	Back	0	1.260	22.8	22.8	19.5
Phablet	LTE Band 30	10	QPSK	A	0055M	1:1	0.01	2310.00	27710	0.0	19.84	25	0	Front	0	0.671	25.5		
Phablet	LTE Band 30	10	QPSK	A	0055M	1:1	-0.04	2310.00	27710	0.0	19.84	25	0	Bottom	0	0.953	24.0		
Phablet	LTE Band 30	10	QPSK	A	0055M	1:1	-0.01	2310.00	27710	0.0	19.84	25	0	Right	0	0.226	30.2		
Phablet	LTE Band 30	10	QPSK	A	0055M	1:1	0.03	2310.00	27710	0.0	19.84	25	0	Left	0	0.140	32.3		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 30	10	QPSK	F	0055M	1:1	0.02	2310.00	27710	0.0	19.46	1	0	Back	0	0.851	24.1	19.5	20.0
Phablet	LTE Band 30	10	QPSK	F	0055M	1:1	0.01	2310.00	27710	0.0	19.46	1	0	Front	0	1.160	22.7		
Phablet	LTE Band 30	10	QPSK	F	0055M	1:1	-0.10	2310.00	27710	0.0	19.46	1	0	Top	0	2.440	19.5		
Phablet	LTE Band 30	10	QPSK	F	0055M	1:1	-0.15	2310.00	27710	0.0	19.46	1	0	Left	0	0.204	30.3		

Table A-14
DSI = 0 P_{Limit} Calculations – LTE Band 7 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 7	20	QPSK	F	0055M	1:1	0.01	2510.00	20850	0.0	19.72	1	0	Back	0	1.070	23.4	20.2	19.5
Phablet	LTE Band 7	20	QPSK	F	0055M	1:1	0.01	2510.00	20850	0.0	19.72	1	0	Front	0	1.180	22.9		
Phablet	LTE Band 7	20	QPSK	F	0055M	1:1	0.00	2510.00	20850	0.0	19.72	1	0	Top	0	2.230	20.2		
Phablet	LTE Band 7	20	QPSK	F	0055M	1:1	-0.13	2510.00	20850	0.0	19.72	1	0	Left	0	0.205	30.5		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 7	20	QPSK	B	0055M	1:1	0.01	2510.00	20850	0.0	20.49	50	25	Back	0	1.890	21.7	20.8	20.0
Phablet	LTE Band 7	20	QPSK	B	0055M	1:1	0.05	2510.00	20850	0.0	20.49	50	25	Front	0	1.230	23.5		
Phablet	LTE Band 7	20	QPSK	B	0055M	1:1	-0.06	2510.00	20850	0.0	20.49	50	25	Bottom	0	2.290	20.8		
Phablet	LTE Band 7	20	QPSK	B	0055M	1:1	0.02	2510.00	20850	0.0	20.49	50	25	Right	0	1.860	21.7		

Table A-15
DSI = 0 P_{Limit} Calculations – LTE Band 41 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.06	2506.00	39750	0.0	22.62	50	50	Back	0	2.420	20.7	20.7	20.0
Phablet	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.06	2506.00	39750	0.0	22.62	50	50	Front	0	1.450	23.0		
Phablet	LTE Band 41	20	QPSK	B	0088M	1:1.58	0.06	2506.00	39750	0.0	22.62	50	50	Bottom	0	2.320	20.9		
Phablet	LTE Band 41	20	QPSK	B	0088M	1:1.58	-0.12	2506.00	39750	0.0	22.62	50	50	Right	0	1.610	22.5		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.02	2549.50	40185	0.0	21.97	1	0	Back	0	0.807	24.8	20.6	19.5
Phablet	LTE Band 41	20	QPSK	F	0088M	1:1.58	-0.02	2549.50	40185	0.0	21.97	1	0	Front	0	1.090	23.5		
Phablet	LTE Band 41	20	QPSK	F	0088M	1:1.58	0.00	2549.50	40185	0.0	21.97	1	0	Top	0	2.140	20.6		
Phablet	LTE Band 41	20	QPSK	F	0088M	1:1.58	0.04	2549.50	40185	0.0	21.97	1	0	Left	0	0.248	30.0		

Table A-16
DSI = 0 P_{Limit} Calculations – LTE Band 48 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.05	3646.70	56207	0.0	21.90	1	0	Back	0	0.743	25.1	20.1	19.5
Phablet	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.00	3646.70	56207	0.0	21.90	1	0	Front	0	1.210	23.0		
Phablet	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.00	3646.70	56207	0.0	21.90	1	0	Top	0	2.350	20.1		
Phablet	LTE Band 48	20	QPSK	F	0078M	1:1.58	0.06	3646.70	56207	0.0	21.90	1	0	Left	0	0.209	30.6		
ANSI/IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Phablet 4.0 W/kg (mW/g) averaged over 10 grams					

Table A-17
DSI = 0 P_{Limit} Calculations – NR Band n71 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n71	35	QPSK	A	0085M	1:1	0.04	680.50	136100	DFT-s-OFDM	0.0	24.11	90	49	Back	0	0.844	28.8	26.4	26.4
Phablet	NR Band n71	35	QPSK	A	0085M	1:1	0.10	680.50	136100	DFT-s-OFDM	0.0	24.11	90	49	Front	0	0.681	29.7		
Phablet	NR Band n71	35	QPSK	A	0085M	1:1	-0.13	680.50	136100	DFT-s-OFDM	0.0	24.11	90	49	Bottom	0	0.789	29.1		
Phablet	NR Band n71	35	QPSK	A	0085M	1:1	0.06	680.50	136100	DFT-s-OFDM	0.0	24.11	90	49	Right	0	1.470	26.4		
Phablet	NR Band n71	35	QPSK	A	0085M	1:1	-0.01	680.50	136100	DFT-s-OFDM	0.0	24.11	90	49	Left	0	0.093	38.4		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n71	35	QPSK	E	0085M	1:1	0.04	680.50	136100	DFT-s-OFDM	0.0	24.39	1	94	Back	0	0.773	29.4	27.6	27.6
Phablet	NR Band n71	35	QPSK	E	0085M	1:1	-0.01	680.50	136100	DFT-s-OFDM	0.0	24.39	1	94	Front	0	1.110	27.9		
Phablet	NR Band n71	35	QPSK	E	0085M	1:1	0.02	680.50	136100	DFT-s-OFDM	0.0	24.39	1	94	Top	0	1.190	27.6		
Phablet	NR Band n71	35	QPSK	E	0085M	1:1	-0.04	680.50	136100	DFT-s-OFDM	0.0	24.39	1	94	Right	0	0.936	28.6		

Table A-18
DSI = 0 P_{Limit} Calculations – NR Band n12 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n12	15	QPSK	A	0085M	1:1	0.01	707.50	141500	DFT-s-OFDM	0.0	24.15	36	22	Back	0	0.921	28.4	26.2	26.2
Phablet	NR Band n12	15	QPSK	A	0085M	1:1	-0.06	707.50	141500	DFT-s-OFDM	0.0	24.15	36	22	Front	0	0.734	29.4		
Phablet	NR Band n12	15	QPSK	A	0085M	1:1	-0.12	707.50	141500	DFT-s-OFDM	0.0	24.15	36	22	Bottom	0	0.821	28.9		
Phablet	NR Band n12	15	QPSK	A	0085M	1:1	0.05	707.50	141500	DFT-s-OFDM	0.0	24.15	36	22	Right	0	1.530	26.2		
Phablet	NR Band n12	15	QPSK	A	0085M	1:1	-0.03	707.50	141500	DFT-s-OFDM	0.0	24.15	36	22	Left	0	0.097	38.2		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n12	15	QPSK	E	0085M	1:1	-0.01	707.50	141500	DFT-s-OFDM	0.0	24.44	1	40	Back	0	0.787	29.4	27.0	27.0
Phablet	NR Band n12	15	QPSK	E	0085M	1:1	0.03	707.50	141500	DFT-s-OFDM	0.0	24.44	1	40	Front	0	1.370	27.0		
Phablet	NR Band n12	15	QPSK	E	0085M	1:1	-0.05	707.50	141500	DFT-s-OFDM	0.0	24.44	1	40	Top	0	1.330	27.1		
Phablet	NR Band n12	15	QPSK	E	0085M	1:1	0.02	707.50	141500	DFT-s-OFDM	0.0	24.44	1	40	Right	0	1.220	27.5		

Table A-19
DSI = 0 P_{Limit} Calculations – NR Band n14 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n14	10	QPSK	A	0085M	1:1	0.01	793.00	158600	DFT-s-OFDM	0.0	23.84	1	1	Back	0	1.020	27.7	27.7	27.7
Phablet	NR Band n14	10	QPSK	A	0085M	1:1	0.03	793.00	158600	DFT-s-OFDM	0.0	23.84	1	1	Front	0	0.778	28.9		
Phablet	NR Band n14	10	QPSK	A	0085M	1:1	-0.03	793.00	158600	DFT-s-OFDM	0.0	23.84	1	1	Bottom	0	1.020	27.7		
Phablet	NR Band n14	10	QPSK	A	0085M	1:1	-0.06	793.00	158600	DFT-s-OFDM	0.0	23.84	1	1	Right	0	0.675	29.5		
Phablet	NR Band n14	10	QPSK	A	0085M	1:1	0.02	793.00	158600	DFT-s-OFDM	0.0	23.84	1	1	Left	0	0.136	36.4		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n14	10	QPSK	E	0085M	1:1	-0.02	793.00	158600	DFT-s-OFDM	0.0	24.07	1	1	Back	0	0.911	28.4	27.2	26.9
Phablet	NR Band n14	10	QPSK	E	0085M	1:1	0.08	793.00	158600	DFT-s-OFDM	0.0	24.07	1	1	Front	0	0.958	28.2		
Phablet	NR Band n14	10	QPSK	E	0085M	1:1	-0.07	793.00	158600	DFT-s-OFDM	0.0	24.07	1	1	Top	0	1.190	27.2		
Phablet	NR Band n14	10	QPSK	E	0085M	1:1	-0.06	793.00	158600	DFT-s-OFDM	0.0	24.07	1	1	Right	0	0.997	28.0		

Table A-20
DSI = 0 P_{Limit} Calculations – NR Band n26 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n26	20	QPSK	A	0085M	1:1	0.02	831.50	166300	DFT-s-OFDM	0.0	24.22	1	53	Front	0	0.728	29.5	28.1	28.1
Phablet	NR Band n26	20	QPSK	A	0085M	1:1	0.07	831.50	166300	DFT-s-OFDM	0.0	24.22	1	53	Bottom	0	1.010	28.1		
Phablet	NR Band n26	20	QPSK	A	0085M	1:1	-0.04	831.50	166300	DFT-s-OFDM	0.0	24.22	1	53	Right	0	0.895	28.6		
Phablet	NR Band n26	20	QPSK	A	0085M	1:1	0.11	831.50	166300	DFT-s-OFDM	0.0	24.22	1	53	Left	0	0.099	38.2		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n26	20	QPSK	E	0085M	1:1	-0.01	831.50	166300	DFT-s-OFDM	0.0	24.42	50	28	Back	0	0.908	28.8	27.3	27.3
Phablet	NR Band n26	20	QPSK	E	0085M	1:1	-0.04	831.50	166300	DFT-s-OFDM	0.0	24.42	50	28	Front	0	1.260	27.3		
Phablet	NR Band n26	20	QPSK	E	0085M	1:1	-0.13	831.50	166300	DFT-s-OFDM	0.0	24.42	50	28	Top	0	1.080	28.0		
Phablet	NR Band n26	20	QPSK	E	0085M	1:1	0.02	831.50	166300	DFT-s-OFDM	0.0	24.42	50	28	Right	0	1.230	27.5		

Table A-21
DSI = 0 P_{Limit} Calculations – NR Band n70 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n70	15	QPSK	A	0085M	1:1	0.06	1702.50	340500	CP-OFDM	0.0	19.01	1	1	Back	0	1.390	21.5	20.2	19.0
Phablet	NR Band n70	15	QPSK	A	0085M	1:1	0.01	1702.50	340500	CP-OFDM	0.0	19.01	1	1	Front	0	1.060	22.7		
Phablet	NR Band n70	15	QPSK	A	0085M	1:1	-0.03	1702.50	340500	CP-OFDM	0.0	19.01	1	1	Bottom	0	1.900	20.2		
Phablet	NR Band n70	15	QPSK	A	0085M	1:1	-0.05	1702.50	340500	CP-OFDM	0.0	19.01	1	1	Right	0	0.158	31.0		
Phablet	NR Band n70	15	QPSK	A	0078M	1:1	-0.05	1702.50	340500	CP-OFDM	0.0	19.01	1	1	Left	0	0.090	33.4		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n70	15	QPSK	F	0085M	1:1	-0.01	1702.50	340500	DFT-s-OFDM	0.0	21.15	1	77	Back	0	0.803	26.0	21.6	21.0
Phablet	NR Band n70	15	QPSK	F	0085M	1:1	0.02	1702.50	340500	DFT-s-OFDM	0.0	21.15	1	77	Front	0	1.070	24.8		
Phablet	NR Band n70	15	QPSK	F	0085M	1:1	0.01	1702.50	340500	DFT-s-OFDM	0.0	21.15	1	77	Top	0	2.240	21.6		
Phablet	NR Band n70	15	QPSK	F	0085M	1:1	-0.04	1702.50	340500	DFT-s-OFDM	0.0	21.15	1	77	Left	0	0.359	29.5		

Table A-22
DSI = 0 P_{Limit} Calculations – NR Band n66 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n66	45	QPSK	A	0085M	1:1	0.01	1745.00	349000	DFT-s-OFDM	0.0	19.23	120	0	Back	0	1.410	21.7	20.6	19.0
Phablet	NR Band n66	45	QPSK	A	0085M	1:1	0.00	1745.00	349000	DFT-s-OFDM	0.0	19.23	120	0	Front	0	1.040	23.0		
Phablet	NR Band n66	45	QPSK	A	0085M	1:1	-0.01	1745.00	349000	DFT-s-OFDM	0.0	19.23	120	0	Bottom	0	1.800	20.6		
Phablet	NR Band n66	45	QPSK	A	0085M	1:1	-0.01	1745.00	349000	DFT-s-OFDM	0.0	19.23	120	0	Right	0	0.177	30.7		
Phablet	NR Band n66	45	QPSK	A	0078M	1:1	-0.02	1745.00	349000	DFT-s-OFDM	0.0	19.23	120	0	Left	0	0.099	33.2		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n66	45	QPSK	F	0085M	1:1	-0.03	1745.00	349000	DFT-s-OFDM	0.0	21.43	1	1	Back	0	0.748	26.6	22.1	20.5
Phablet	NR Band n66	45	QPSK	F	0085M	1:1	0.01	1745.00	349000	DFT-s-OFDM	0.0	21.43	1	1	Front	0	1.030	25.2		
Phablet	NR Band n66	45	QPSK	F	0085M	1:1	-0.06	1745.00	349000	DFT-s-OFDM	0.0	21.43	1	1	Top	0	2.140	22.1		
Phablet	NR Band n66	45	QPSK	F	0085M	1:1	-0.09	1745.00	349000	DFT-s-OFDM	0.0	21.43	1	1	Left	0	0.339	30.1		

Table A-23
DSI = 0 P_{Limit} Calculations – NR Band n25 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n25	40	QPSK	A	0085M	1:1	0.02	1882.50	376500	CP-OFDM	0.0	17.92	1	1	Back	0	1.070	21.6	20.1	18.0
Phablet	NR Band n25	40	QPSK	A	0085M	1:1	-0.01	1882.50	376500	CP-OFDM	0.0	17.92	1	1	Front	0	0.859	22.5		
Phablet	NR Band n25	40	QPSK	A	0085M	1:1	-0.04	1882.50	376500	CP-OFDM	0.0	17.92	1	1	Bottom	0	1.490	20.1		
Phablet	NR Band n25	40	QPSK	A	0085M	1:1	0.05	1882.50	376500	CP-OFDM	0.0	17.92	1	1	Right	0	0.122	31.0		
Phablet	NR Band n25	40	QPSK	A	0078M	1:1	-0.06	1882.50	376500	CP-OFDM	0.0	17.92	1	1	Left	0	0.089	32.4		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n25	40	QPSK	F	0085M	1:1	0.03	1882.50	376500	CP-OFDM	0.0	20.20	1	1	Back	0	0.528	26.9	21.7	20.0
Phablet	NR Band n25	40	QPSK	F	0085M	1:1	0.00	1882.50	376500	CP-OFDM	0.0	20.20	1	1	Front	0	0.675	25.8		
Phablet	NR Band n25	40	QPSK	F	0085M	1:1	-0.03	1882.50	376500	CP-OFDM	0.0	20.20	1	1	Top	0	1.750	21.7		
Phablet	NR Band n25	40	QPSK	F	0085M	1:1	-0.11	1882.50	376500	CP-OFDM	0.0	20.20	1	1	Left	0	0.092	34.5		

Table A-24
DSI = 0 P_{Limit} Calculations – NR Band n30 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n30	10	QPSK	A	0129M	1:1	0.09	2310.00	462000	CP-OFDM	0.0	19.40	1	1	Back	0	1.030	23.2	23.2	19.5
Phablet	NR Band n30	10	QPSK	A	0129M	1:1	0.01	2310.00	462000	CP-OFDM	0.0	19.40	1	1	Front	0	0.692	24.9		
Phablet	NR Band n30	10	QPSK	A	0129M	1:1	-0.06	2310.00	462000	CP-OFDM	0.0	19.40	1	1	Bottom	0	0.878	23.9		
Phablet	NR Band n30	10	QPSK	A	0129M	1:1	-0.07	2310.00	462000	CP-OFDM	0.0	19.40	1	1	Right	0	0.191	30.5		
Phablet	NR Band n30	10	QPSK	A	0129M	1:1	0.06	2310.00	462000	CP-OFDM	0.0	19.40	1	1	Left	0	0.127	32.3		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n30	10	QPSK	F	0129M	1:1	0.05	2310.00	462000	CP-OFDM	0.0	19.33	1	1	Back	0	0.631	25.3	19.1	20.0
Phablet	NR Band n30	10	QPSK	F	0129M	1:1	0.04	2310.00	462000	CP-OFDM	0.0	19.33	1	1	Front	0	1.370	21.9		
Phablet	NR Band n30	10	QPSK	F	0129M	1:1	-0.04	2310.00	462000	CP-OFDM	0.0	19.33	1	1	Top	0	2.600	19.1		
Phablet	NR Band n30	10	QPSK	F	0129M	1:1	0.01	2310.00	462000	CP-OFDM	0.0	19.33	1	1	Left	0	0.215	29.9		

Table A-25
DSI = 0 P_{Limit} Calculations – NR Band n7 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n7	50	QPSK	B	0129M	1:1	0.05	2535.00	507000	CP-OFDM	0.0	20.68	1	1	Back	0	2.090	21.4	20.8	20.0
Phablet	NR Band n7	50	QPSK	B	0129M	1:1	0.01	2535.00	507000	CP-OFDM	0.0	20.68	1	1	Front	0	1.100	24.2		
Phablet	NR Band n7	50	QPSK	B	0129M	1:1	-0.05	2535.00	507000	CP-OFDM	0.0	20.68	1	1	Bottom	0	2.420	20.8		
Phablet	NR Band n7	50	QPSK	B	0129M	1:1	-0.09	2535.00	507000	CP-OFDM	0.0	20.68	1	1	Right	0	1.880	21.9		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n7	50	QPSK	F	0129M	1:1	0.09	2535.00	507000	CP-OFDM	0.0	20.07	1	1	Back	0	0.852	24.7	20.2	19.5
Phablet	NR Band n7	50	QPSK	F	0129M	1:1	0.01	2535.00	507000	CP-OFDM	0.0	20.07	1	1	Front	0	1.300	22.9		
Phablet	NR Band n7	50	QPSK	F	0129M	1:1	-0.01	2535.00	507000	CP-OFDM	0.0	20.07	1	1	Top	0	2.410	20.2		
Phablet	NR Band n7	50	QPSK	F	0129M	1:1	0.08	2535.00	507000	CP-OFDM	0.0	20.07	1	1	Left	0	0.282	29.5		

Table A-26
DSI = 0 P_{Limit} Calculations – NR Band n41 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n41	100	QPSK	F	1	0044M	1:1	0.02	2592.99	518598	CP-OFDM	0.0	20.24	1	1	Back	0	0.708	25.7	22.1	19.5
Phablet	NR Band n41	100	QPSK	F	1	0044M	1:1	-0.01	2592.99	518598	CP-OFDM	0.0	20.24	1	1	Front	0	1.250	23.2		
Phablet	NR Band n41	100	QPSK	F	1	0044M	1:1	-0.03	2592.99	518598	CP-OFDM	0.0	20.24	1	1	Top	0	1.600	22.1		
Phablet	NR Band n41	100	QPSK	F	1	0044M	1:1	0.04	2592.99	518598	CP-OFDM	0.0	20.24	1	1	Left	0	0.234	30.5		

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n41	100	QPSK	B	2	0044M	1:1	0.02	2592.99	518598	CP-OFDM	0.0	20.97	1	1	Back	0	1.920	22.1	20.1	20.0
Phablet	NR Band n41	100	QPSK	B	2	0044M	1:1	-0.01	2592.99	518598	CP-OFDM	0.0	20.97	1	1	Front	0	1.850	22.2		
Phablet	NR Band n41	100	QPSK	B	2	0044M	1:1	-0.07	2592.99	518598	CP-OFDM	0.0	20.97	1	1	Bottom	0	3.050	20.1		
Phablet	NR Band n41	100	QPSK	B	2	0044M	1:1	0.03	2592.99	518598	CP-OFDM	0.0	20.97	1	1	Right	0	2.280	21.3		

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n41	100	E	1	0044M	1:1	0.10	2592.99	518598	CW/SRS	18.63	Back	0	0.438	26.1	23.0	18.0
Phablet	NR Band n41	100	E	1	0044M	1:1	-0.08	2592.99	518598	CW/SRS	18.63	Front	0	0.502	25.6		
Phablet	NR Band n41	100	E	1	0044M	1:1	-0.03	2592.99	518598	CW/SRS	18.63	Top	0	0.470	25.8		
Phablet	NR Band n41	100	E	1	0044M	1:1	0.06	2592.99	518598	CW/SRS	18.63	Right	0	0.901	23.0		

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n41	100	D	2	0044M	1:1	-0.06	2592.99	518598	CW/SRS	20.26	Back	0	1.050	24.0	24.0	20.0
Phablet	NR Band n41	100	D	2	0044M	1:1	-0.03	2592.99	518598	CW/SRS	20.26	Front	0	0.138	32.8		
Phablet	NR Band n41	100	D	2	0044M	1:1	-0.05	2592.99	518598	CW/SRS	20.26	Bottom	0	0.480	27.4		
Phablet	NR Band n41	100	D	2	0044M	1:1	0.01	2592.99	518598	CW/SRS	20.26	Left	0	0.084	34.9		

Table A-27
DSI = 0 P_{Limit} Calculations – NR Band n48 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n48	40	QPSK	F	0080M	1:1	0.06	3570.00	638000	DFT-s-OFDM	0.0	20.20	50	56	Back	0	0.568	26.6	20.2	19.5
Phablet	NR Band n48	40	QPSK	F	0080M	1:1	-0.07	3570.00	638000	DFT-s-OFDM	0.0	20.20	50	56	Front	0	1.120	23.6		
Phablet	NR Band n48	40	QPSK	F	0080M	1:1	0.02	3570.00	638000	DFT-s-OFDM	0.0	20.20	50	56	Top	0	2.500	20.2		
Phablet	NR Band n48	40	QPSK	F	0080M	1:1	-0.02	3570.00	638000	DFT-s-OFDM	0.0	20.20	50	56	Left	0	0.193	31.3		

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n48	40	C	0080M	1:1	-0.03	3570.00	638000	CW/SRS	15.36	Back	0	0.846	20.0	18.0	14.5
Phablet	NR Band n48	40	C	0080M	1:1	-0.01	3570.00	638000	CW/SRS	15.36	Front	0	0.492	22.4		
Phablet	NR Band n48	40	C	0080M	1:1	-0.05	3570.00	638000	CW/SRS	15.36	Bottom	0	0.110	28.9		
Phablet	NR Band n48	40	C	0080M	1:1	-0.03	3570.00	638000	CW/SRS	15.36	Right	0	1.340	18.0		

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n48	40	I	0080M	1:1	0.01	3679.98	645332	CW/SRS	19.50	Back	0	0.581	25.8	22.2	19.0
Phablet	NR Band n48	40	I	0080M	1:1	0.00	3679.98	645332	CW/SRS	19.50	Front	0	1.330	22.2		
Phablet	NR Band n48	40	I	0080M	1:1	0.02	3679.98	645332	CW/SRS	19.50	Left	0	0.422	27.2		

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n48	40	D	0080M	1:1	0.01	3679.98	645332	CW/SRS	15.16	Back	0	0.386	23.2	23.2	14.5
Phablet	NR Band n48	40	D	0080M	1:1	0.02	3679.98	645332	CW/SRS	15.16	Front	0	0.049	32.2		
Phablet	NR Band n48	40	D	0080M	1:1	0.05	3679.98	645332	CW/SRS	15.16	Bottom	0	0.061	31.2		
Phablet	NR Band n48	40	D	0080M	1:1	0.03	3679.98	645332	CW/SRS	15.16	Left	0	0.005	42.1		

Table A-28
DSI = 0 P_{Limit} Calculations – NR Band n77 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n77	100	QPSK	F	0045M	1:1	0.04	3930.00	662000	DFT-s-OFDM	0.0	18.94	1	1	Back	0	1.240	21.9	20.4	18.0
Phablet	NR Band n77	100	QPSK	F	0045M	1:1	0.00	3930.00	662000	DFT-s-OFDM	0.0	18.94	1	1	Front	0	0.413	26.7		
Phablet	NR Band n77 DoD	100	QPSK	F	0045M	1:1	-0.01	3500.01	633334	DFT-s-OFDM	0.0	18.99	1	271	Top	0	1.800	20.4		
Phablet	NR Band n77	100	QPSK	F	0045M	1:1	-0.09	3930.00	662000	DFT-s-OFDM	0.0	18.94	1	1	Top	0	1.510	21.1		
Phablet	NR Band n77	100	QPSK	F	0045M	1:1	-0.03	3930.00	662000	DFT-s-OFDM	0.0	18.94	1	1	Left	0	0.194	30.0		

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n77	100	C	0045M	1:1	-0.11	3930.00	662000	CW/SRS	14.29	Back	0	0.271	23.9	17.9	13.5
Phablet	NR Band n77	100	C	0045M	1:1	0.02	3930.00	662000	CW/SRS	14.29	Front	0	0.261	24.1		
Phablet	NR Band n77	100	C	0045M	1:1	-0.11	3930.00	662000	CW/SRS	14.29	Bottom	0	0.153	26.4		
Phablet	NR Band n77 DoD	100	C	0045M	1:1	-0.04	3500.01	633334	CW/SRS	14.32	Right	0	1.090	17.9		
Phablet	NR Band n77	100	C	0045M	1:1	0.04	3930.00	662000	CW/SRS	14.29	Right	0	1.050	18.0		

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n77 DoD	100	I	0045M	1:1	-0.04	3500.01	633334	CW/SRS	17.90	Back	0	0.505	24.8	23.7	18.0
Phablet	NR Band n77	100	I	0045M	1:1	-0.01	3930.00	662000	CW/SRS	18.87	Back	0	0.807	23.7		
Phablet	NR Band n77	100	I	0045M	1:1	0.03	3930.00	662000	CW/SRS	18.87	Front	0	0.346	27.4		
Phablet	NR Band n77	100	I	0045M	1:1	0.07	3930.00	662000	CW/SRS	18.87	Left	0	0.249	28.8		

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n77 DoD	100	D	0045M	1:1	-0.06	3500.01	633334	CW/SRS	13.65	Back	0	0.367	21.9	21.9	13.0
Phablet	NR Band n77	100	D	0045M	1:1	0.00	3930.00	662000	CW/SRS	13.40	Back	0	0.267	23.1		
Phablet	NR Band n77	100	D	0045M	1:1	-0.07	3930.00	662000	CW/SRS	13.40	Front	0	0.009	37.8		
Phablet	NR Band n77	100	D	0045M	1:1	0.11	3930.00	662000	CW/SRS	13.40	Bottom	0	0.050	30.3		
Phablet	NR Band n77	100	D	0045M	1:1	0.01	3930.00	662000	CW/SRS	13.40	Left	0	0.001	47.3		

Table A-29
DSI = 0 P_{Limit} Calculations – 2.4 GHz WLAN Phablet SAR

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	2.4 GHz WIFI/ IEEE 802.11b	DSSS	H	0105M	98.74	-0.01	2462.00	11	1	19.97	Back	0	0.902	24.3	19.5	19.5
Phablet	2.4 GHz WIFI/ IEEE 802.11b	DSSS	H	0105M	98.74	-0.02	2462.00	11	1	19.97	Front	0	1.360	22.5		
Phablet	2.4 GHz WIFI/ IEEE 802.11b	DSSS	H	0105M	98.74	-0.01	2462.00	11	1	19.97	Top	0	0.805	24.8		
Phablet	2.4 GHz WIFI/ IEEE 802.11b	DSSS	H	0105M	98.74	0.00	2462.00	11	1	19.97	Left	0	2.690	19.5		

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	2.4 GHz WIFI/ IEEE 802.11b	DSSS	J	0105M	97.51	-0.03	2412.00	1	1	19.55	Back	0	0.285	28.8	25.4	25.4
Phablet	2.4 GHz WIFI/ IEEE 802.11b	DSSS	J	0105M	97.51	0.02	2412.00	1	1	19.55	Front	0	0.626	25.4		
Phablet	2.4 GHz WIFI/ IEEE 802.11b	DSSS	J	0105M	97.51	0.08	2412.00	1	1	19.55	Top	0	0.003	48.6		
Phablet	2.4 GHz WIFI/ IEEE 802.11b	DSSS	J	0105M	97.51	-0.02	2412.00	1	1	19.55	Right	0	0.106	33.1		

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Conducted Power [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	2.4 GHz WIFI/ IEEE 802.11g	OFDM	MIMO	0105M	97.64	-0.01	2412.00	1	6	17.96	17.77	Back	0	0.927	21.9	19.4	19.4
Phablet	2.4 GHz WIFI/ IEEE 802.11g	OFDM	MIMO	0105M	97.64	-0.01	2412.00	1	6	17.96	17.77	Front	0	0.898	22.1		
Phablet	2.4 GHz WIFI/ IEEE 802.11g	OFDM	MIMO	0105M	97.64	0.03	2412.00	1	6	17.96	17.77	Top	0	0.415	25.4		
Phablet	2.4 GHz WIFI/ IEEE 802.11g	OFDM	MIMO	0105M	97.64	0.04	2412.00	1	6	17.96	17.77	Right	0	0.074	32.9		
Phablet	2.4 GHz WIFI/ IEEE 802.11g	OFDM	MIMO	0105M	97.64	-0.03	2412.00	1	6	17.96	17.77	Left	0	1.640	19.4		

Note: To achieve the 21 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18 dBm.

Table A-30
DSI = 0 P_{Limit} Calculations – 2.4 GHz Bluetooth Phablet SAR

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	0.03	2440.00	19	1	19.94	Back	0	0.798	24.2	21.3	21.3
Phablet	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	0.04	2440.00	19	1	19.94	Front	0	0.753	24.4		
Phablet	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	0.01	2440.00	19	1	19.94	Top	0	0.460	26.6		
Phablet	2.4 GHz Bluetooth LE	DSSS	H	0120M	85.33	-0.01	2440.00	19	1	19.94	Left	0	1.540	21.3		

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	-0.02	2440.00	19	1	19.37	Back	0	0.217	29.3	25.9	25.9
Phablet	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	0.02	2440.00	19	1	19.37	Front	0	0.469	25.9		
Phablet	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	0.05	2440.00	19	1	19.37	Top	0	0.003	47.8		
Phablet	2.4 GHz Bluetooth LE	DSSS	J	0120M	85.43	-0.03	2440.00	19	1	19.37	Right	0	0.088	33.2		

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Conducted Power [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	-0.02	2440.00	19	1	15.44	13.92	Back	0	0.392	21.2	18.7	18.7
Phablet	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.00	2440.00	19	1	15.44	13.92	Front	0	0.402	21.1		
Phablet	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.02	2440.00	19	1	15.44	13.92	Top	0	0.224	23.7		
Phablet	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.06	2440.00	19	1	15.44	13.92	Right	0	0.032	32.1		
Phablet	2.4 GHz Bluetooth LE	DSSS	MIMO	0120M	85.45	0.00	2440.00	19	1	15.44	13.92	Left	0	0.698	18.7		

Note: To achieve the 18.5 dBm maximum allowed MIMO power for Bluetooth LE shown in the documentation, Antenna H transmits at a maximum allowed power of 15.5 dBm, and Antenna J transmits at a maximum allowed power of 14.0 dBm. To achieve the 18.5 dBm maximum allowed MIMO power for Bluetooth BDR shown in the documentation, each antenna transmits at a maximum allowed power of 15.5 dBm.