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SAR EVALUATION REPORT

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

Date of Testing:
03/14/23 - 06/06/23
Test Site/Location:
Element, Columbia, MD, USA
Document Serial No.:
1M2303100026-24.A3L (R1)

FCC ID: **A3LSMF731U**

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

DUT Type: Portable Handset
Application Type: Certification
FCC Rule Part(s): CFR §2.1093
Model(s): SM-F731U, SM-F731U1

Equipment Class	Band & Mode	Tx Frequency	SAR			
			1g Head (W/kg)	1g Body-Worn (W/kg)	1g Hotspot (W/kg)	10g Phablet (W/kg)
PCE	GSM/GPRS/EDGE 850	824.20 - 848.80 MHz	0.18	0.20	0.57	N/A
PCE	GSM/GPRS/EDGE 1900	1850.20 - 1909.80 MHz	< 0.1	0.15	0.34	N/A
PCE	UMTS 850	826.40 - 846.60 MHz	0.18	0.38	0.80	N/A
PCE	UMTS 1750	1712.4 - 1752.6 MHz	< 0.1	0.26	0.76	2.03
PCE	UMTS 1900	1852.4 - 1907.6 MHz	0.10	0.33	0.51	1.72
PCE	LTE Band 71	665.5 - 695.5 MHz	0.19	0.31	0.76	N/A
PCE	LTE Band 12	699.7 - 715.3 MHz	0.29	0.18	0.53	N/A
PCE	LTE Band 13	779.5 - 784.5 MHz	0.30	0.15	0.54	N/A
PCE	LTE Band 14	790.5 - 795.5 MHz	0.29	0.19	0.69	N/A
PCE	LTE Band 26 (Cell)	814.7 - 848.3 MHz	0.25	0.40	0.76	N/A
PCE	LTE Band 5 (Cell)	824.7 - 848.3 MHz	0.24	0.36	0.71	N/A
PCE	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	< 0.1	0.32	0.77	2.73
PCE	LTE Band 4 (AWS)	1710.7 - 1754.3 MHz	N/A	N/A	N/A	N/A
PCE	LTE Band 25 (PCS)	1850.7 - 1914.3 MHz	< 0.1	0.43	1.03	2.50
PCE	LTE Band 2 (PCS)	1850.7 - 1909.3 MHz	N/A	N/A	N/A	N/A
PCE	LTE Band 30	2307.5 - 2312.5 MHz	< 0.1	0.36	1.13	2.60
PCE	LTE Band 7	2502.5 - 2567.5 MHz	< 0.1	0.12	0.53	1.13
PCE	LTE Band 41	2498.5 - 2687.5 MHz	< 0.1	0.25	1.08	1.91
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	0.81	0.36	0.41	2.98
PCE	NR Band n71	665.5 - 695.5 MHz	0.21	0.38	0.67	N/A
PCE	NR Band n12	701.5 - 713.5 MHz	0.19	0.27	0.67	N/A
PCE	NR Band n26	816.5 - 846.5 MHz	0.16	0.26	0.79	N/A
PCE	NR Band n5	826.5 - 846.5 MHz	N/A	N/A	N/A	N/A
PCE	NR Band n66	1712.5 - 1777.5 MHz	0.79	0.32	0.93	2.85
PCE	NR Band n25	1852.5 - 1912.5 MHz	0.70	0.39	0.99	2.60
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	1.16	0.23	0.90	2.03
PCE	NR Band n7	2502.5 - 2567.5 MHz	<0.1	0.22	0.75	N/A
PCE	NR Band n41	2501.01 - 2685 MHz	0.77	0.23	0.81	2.11
PCE	NR Band n38	2575 - 2615 MHz	N/A	N/A	N/A	N/A
CBE	NR Band n48	3555 - 3694.98 MHz	0.84	0.45	0.53	3.05
PCE	NR Band n77	3455.01 - 3544.98 MHz 3705 - 3975 MHz	0.66	0.30	0.69	2.14
DTS	2.4 GHz WLAN	2412 - 2462 MHz	0.31	< 0.1	0.29	N/A
NII	U-NII-1	5180 - 5240 MHz	N/A	N/A	N/A	N/A
NII	U-NII-2A	5260 - 5320 MHz	0.76*	0.17*	N/A	0.93*
NII	U-NII-2C	5500 - 5720 MHz	0.57*	0.14*	N/A	0.62*
NII	U-NII-3	5745 - 5825 MHz	0.48*	<0.1*	0.41*	N/A
NII	U-NII-4	5845 - 5885 MHz	0.56*	0.10*	N/A	0.66*
DSS/DTS	Bluetooth	2402 - 2480 MHz	1.17	< 0.1	0.32	0.80
DXX	NFC	13.56 MHz	N/A	N/A	N/A	< 0.1
Simultaneous SAR per KDB 690783 D01v01r03:			1.17	0.45	1.13	3.05

* Note: * SAR values represent RF exposure during MIMO operations.

Note: This revised test report supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

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 1.9 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.

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1 DEVICE UNDER TEST

1.1 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 (Cell)	Voice/Data	814.7 - 848.3 MHz
LTE Band 5 (Cell)	Voice/Data	824.7 - 848.3 MHz
LTE Band 66 (AWS)	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4 (AWS)	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25 (PCS)	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2 (PCS)	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 n26	Voice/Data	816.5 - 846.5 MHz
NR Band n5	Voice/Data	826.5 - 846.5 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 n77	Voice/Data	3455.01 - 3544.98 MHz 3705 - 3975 MHz
2.4 GHz WLAN	Voice/Data	2412 - 2462 MHz
U-NII-1	Voice/Data	5180 - 5240 MHz
U-NII-2A	Voice/Data	5260 - 5320 MHz
U-NII-2C	Voice/Data	5500 - 5720 MHz
U-NII-3	Voice/Data	5745 - 5825 MHz
U-NII-4	Voice/Data	5845 - 5885 MHz
U-NII-5	Voice/Data	5935 - 6415 MHz
U-NII-6	Voice/Data	6435 - 6515 MHz
U-NII-7	Voice/Data	6535 - 6875 MHz
U-NII-8	Voice/Data	6895 - 7115 MHz
Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 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

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1.2 Time-Averaging Algorithm for RF Exposure Compliance

This Device is enabled with the Qualcomm® Smart Transmit Gen2 feature with no antenna grouing. 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 1.11 – Bibliography).

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of *SAR_design_target*, below the predefined time-averaged power limit (i.e., P_{limit} for WWAN sub-6/WLAN/BT radio), for each characterized technology and band (see RF Exposure Part 0 Test Report, report SN could be found in Section 1.11 - Bibliography).

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 (see RF Exposure Part 0 Test Report, report SN can be found in Section 1.11 - Bibliography).

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.

All MIMO P_{max} and P_{limit} are defined per antenna chain.

SARCHAR for WIFI 6 GHz can be found in the WIFI 6 GHz RF Exposure Report (report SN can be found in Section 1.11 – Bibliography)

Exposure Scenario		Maximum Tune-Up Output Power*	Body-Worn	Phablet	Head	Hotspot	Earjack
Averaging Volume			1g	10g	1g	1g	1g/10g
Spacing			15 mm	0 mm	0 mm	10 mm, 5 mm	15 mm, 0 mm
DSI			0	0	2	3	4
Technology/Band	Antenna	Pmax					
GSM 850	A	25.3	28.9		32.3	21.8	28.9
GSM 1900	A	22.1	18.8		37.1	18.8	18.8
UMTS 850	A	25.0	30.2		24.0	23.0	30.2
UMTS 1750	A	25.0	21.0		23.5	19.0	21.0
UMTS 1900	A	25.0	21.0		23.5	18.0	21.0
LTE Band 71	A	25.0	28.8		33.1	24.0	28.8
LTE Band 12	A	25.0	23.0		31.4	23.0	23.0
LTE Band 13	A	25.0	22.0		31.2	22.0	22.0
LTE Band 14	A	25.0	23.0		31.4	23.0	23.0
LTE Band 26 (Cell)	A	25.0	29.4		31.9	23.0	29.4
LTE Band 5 (Cell)	A	25.0	29.5		32.2	23.0	29.5
LTE Band 66 (AWS)	A	25.3	21.8		38.2	19.8	21.8
LTE Band 66 (AWS)	I	25.0	21.0		N/A	17.5	21.0
LTE Band 4 (AWS)	A	24.8	21.3		38.2	19.3	21.3
LTE Band 4 (AWS)	I	25.0	20.5		N/A	17.5	20.5
LTE Band 25/2 (PCS)	A	25.3	22.3		37.3	19.3	22.3
LTE Band 25/2 (PCS)	I	24.5	21.0		N/A	15.5	21.0
LTE Band 30	B	24.0	21.0		38.6	17.0	21.0
LTE Band 30	I	22.0	20.5		N/A	17.0	20.5
LTE Band 7	B	25.3	21.3		24.8	18.3	21.3
LTE Band 41 (PC3)	B	23.0	23.0		23.0	19.0	23.0
LTE Band 41 (PC2)	B	23.4	23.0		23.0	19.0	23.0
LTE Band 41 (PC3)	I	22.5	20.5		N/A	18.5	20.5
LTE Band 41 (PC2)	I	22.9	20.5		N/A	18.5	20.5
LTE Band 38	B	23.0	22.5		23.0	19.0	22.5
LTE Band 48	F	20.5	18.5		13.0	13.0	18.5
NR Band n71	A	24.2	28.6		31.9	23.0	28.6
NR Band n12	A	24.5	29.8		32.7	23.5	29.8
NR Band n26	A	24.7	28.3		33.4	23.0	28.3
NR Band n5	A	24.3	28.3		33.4	23.0	28.3
NR Band n66	A	24.2	20.5		37.1	18.5	20.5
NR Band n66	I	24.7	21.0		17.5	17.5	21.0
NR Band n25	A	24.2	22.0		37.4	18.5	22.0
NR Band n25	I	24.3	21.0		14.5	15.5	21.0
NR Band n2	A	23.6	22.0		37.4	18.5	22.0
NR Band n2	I	24.5	21.0		14.5	15.5	21.0
NR Band n30	B	24.0	21.5		39.1	18.0	21.5
NR Band n30	I	22.0	20.5		14.5	17.0	20.5
NR Band n7	B	24.8	21.5		41.0	20.5	21.5
NR Band n41 (PC2)	I	27.0	20.5		13.5	18.5	20.5
NR Band n41 (PC2)	B	24.0	17.5		12.5	17.5	17.5
NR Band n41 (PC2)	F	21.5	15.0		10.0	15.0	15.0
NR Band n41 (PC2)	C	18.5	15.5		12.0	15.5	15.5
NR Band n38	I	24.0	20.5		13.5	18.5	20.5
NR Band n48	F	22.5	18.0		13.0	14.0	18.0
NR Band n48	I	18.0	12.0		7.0	8.0	12.0
NR Band n48	E	20.0	14.5		9.5	10.5	14.5
NR Band n48	C	20.0	16.0		11.0	12.0	16.0
NR Band n77 (PC2)	F	26.0	16.5		12.5	14.0	16.5
NR Band n77 (PC2)	I	23.5	14.5		10.0	11.5	14.5
NR Band n77 (PC2)	E	25.5	14.5		10.5	12.0	14.5
NR Band n77 (PC2)	C	20.0	14.0		10.5	12.0	14.0
2.4 GHz WLAN	2	18.0	21.7		11.0	21.7	21.7
2.4 GHz WLAN	MIMO	18.0	18.3		8.0	18.3	18.3
5 GHz WLAN	MIMO	15.0	18.9		17.2	18.9	18.9
2.4 GHz Bluetooth	1	15.3	20.9		17.2	20.3	20.9
2.4 GHz Bluetooth	2	16.9	20.9		15.4	N/A	20.9

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*Note 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.

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.

The purpose of this report (Part 1 test) is to demonstrate that the EUT meets FCC SAR limits when transmitting in static transmission scenario at maximum allowable time-averaged power levels.

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.

1.3 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 RU operations can be found in 802.11ax RU SAR Exclusion Appendix.

1.3.1 WWAN Output Power

Antenna A										
GSM/GPRS/EDGE 850										
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	34.0	34.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	33.0	33.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 0 (Body-Worn or Phablet)	Max Allowed Power	34.0	34.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	33.0	33.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 2 (Head)	Max Allowed Power	34.0	34.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	33.0	33.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 3 (Hotspot)	Max Allowed Power	N/A	32.0	29.0	27.2	26.0	28.0	26.0	24.0	23.0
	Nominal	N/A	31.0	28.0	26.2	25.0	27.0	25.0	23.0	22.0
DSI = 4 (Earjack)	Max Allowed Power	34.0	34.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	33.0	33.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
GSM/GPRS/EDGE 1900										
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	32.0	32.0	29.0	27.5	25.5	27.0	25.0	23.0	22.0
	Nominal	31.0	31.0	28.0	26.5	24.5	26.0	24.0	22.0	21.0
DSI = 0 (Body-Worn 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 = 2 (Head)	Max Allowed Power	32.0	32.0	29.0	27.5	25.5	27.0	25.0	23.0	22.0
	Nominal	31.0	31.0	28.0	26.5	24.5	26.0	24.0	22.0	21.0
DSI = 3 (Hotspot)	Max Allowed Power	N/A	29.0	26.0	24.2	23.0	27.0	25.0	23.0	22.0
	Nominal	N/A	28.0	25.0	23.2	22.0	26.0	24.0	22.0	21.0
DSI = 4 (Earjack)	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

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

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Antenna A					
UMTS Band 5 (850 MHz)					
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	26.0	25.0	25.0	25.0
	Nominal	25.0	24.0	24.0	24.0
DSI = 0 (Body-Worn or Phablet)	Max Allowed Power	26.0	25.0	25.0	25.0
	Nominal	25.0	24.0	24.0	24.0
DSI = 2 (Head)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 3 (Hotspot)	Max Allowed Power	24.0	23.0	23.0	23.0
	Nominal	23.0	22.0	22.0	22.0
DSI = 4 (Earjack)	Max Allowed Power	26.0	25.0	25.0	25.0
	Nominal	25.0	24.0	24.0	24.0
UMTS Band 4 (1750 MHz)					
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	26.0	25.0	25.0	25.0
	Nominal	25.0	24.0	24.0	24.0
DSI = 0 (Body-Worn or Phablet)	Max Allowed Power	22.0	21.0	21.0	21.0
	Nominal	21.0	20.0	20.0	20.0
DSI = 2 (Head)	Max Allowed Power	24.5	23.5	23.5	23.5
	Nominal	23.5	22.5	22.5	22.5
DSI = 3 (Hotspot)	Max Allowed Power	20.0	19.0	19.0	19.0
	Nominal	19.0	18.0	18.0	18.0
DSI = 4 (Earjack)	Max Allowed Power	22.0	21.0	21.0	21.0
	Nominal	21.0	20.0	20.0	20.0
UMTS Band 2 (1900 MHz)					
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	26.0	25.0	25.0	25.0
	Nominal	25.0	24.0	24.0	24.0
DSI = 0 (Body-Worn or Phablet)	Max Allowed Power	22.0	21.0	21.0	21.0
	Nominal	21.0	20.0	20.0	20.0
DSI = 2 (Head)	Max Allowed Power	24.5	23.5	23.5	23.5
	Nominal	23.5	22.5	22.5	22.5
DSI = 3 (Hotspot)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 4 (Earjack)	Max Allowed Power	22.0	21.0	21.0	21.0
	Nominal	21.0	20.0	20.0	20.0

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Mode / Band	Antenna		Modulated Average Output Power (in dBm)				
			Pmax	DSI = 0 (Body-Worn or Phablet)	DSI = 2 (Head)	DSI = 3 (Hotspot)	DSI = 4 (Earjack)
LTE Band 71	A	Max Allowed Power	26.0	26.0	26.0	25.0	26.0
		Nominal	25.0	25.0	25.0	24.0	25.0
LTE Band 12	A	Max Allowed Power	26.0	24.0	26.0	24.0	24.0
		Nominal	25.0	23.0	25.0	23.0	23.0
LTE Band 13	A	Max Allowed Power	26.0	23.0	26.0	23.0	23.0
		Nominal	25.0	22.0	25.0	22.0	22.0
LTE Band 14	A	Max Allowed Power	26.0	24.0	26.0	24.0	24.0
		Nominal	25.0	23.0	25.0	23.0	23.0
LTE Band 26 (Cell)	A	Max Allowed Power	26.0	26.0	26.0	24.0	26.0
		Nominal	25.0	25.0	25.0	23.0	25.0
LTE Band 5 (Cell)	A	Max Allowed Power	26.0	26.0	26.0	24.0	26.0
		Nominal	25.0	25.0	25.0	23.0	25.0
LTE Band 66 (AWS)	A	Max Allowed Power	26.3	22.8	26.3	20.8	22.8
		Nominal	25.3	21.8	25.3	19.8	21.8
LTE Band 66 (AWS)	I	Max Allowed Power	26.0	22.0	N/A	18.5	22.0
		Nominal	25.0	21.0	N/A	17.5	21.0
LTE Band 4 (AWS)	A	Max Allowed Power	25.8	22.3	25.8	20.3	22.3
		Nominal	24.8	21.3	24.8	19.3	21.3
LTE Band 4 (AWS)	I	Max Allowed Power	26.0	21.5	N/A	18.5	21.5
		Nominal	25.0	20.5	N/A	17.5	20.5
LTE Band 25 (PCS)	A	Max Allowed Power	26.3	23.3	26.3	20.3	23.3
		Nominal	25.3	22.3	25.3	19.3	22.3
LTE Band 25 (PCS)	I	Max Allowed Power	25.5	22.0	N/A	16.5	22.0
		Nominal	24.5	21.0	N/A	15.5	21.0
LTE Band 2 (PCS)	A	Max Allowed Power	26.3	23.3	26.3	20.3	23.3
		Nominal	25.3	22.3	25.3	19.3	22.3
LTE Band 2 (PCS)	I	Max Allowed Power	25.5	22.0	N/A	16.5	22.0
		Nominal	24.5	21.0	N/A	15.5	21.0
LTE Band 30	B	Max Allowed Power	25.0	22.0	25.0	18.0	22.0
		Nominal	24.0	21.0	24.0	17.0	21.0
LTE Band 30	I	Max Allowed Power	23.0	21.5	N/A	18.0	21.5
		Nominal	22.0	20.5	N/A	17.0	20.5
LTE Band 7	B	Max Allowed Power	26.3	22.3	25.8	19.3	22.3
		Nominal	25.3	21.3	24.8	18.3	21.3
LTE Band 41 (PC3)	B	Max Allowed Power	26.0	26.0	26.0	22.0	26.0
		Nominal	25.0	25.0	25.0	21.0	25.0
LTE Band 41 (PC2)	B	Max Allowed Power	28.0	27.6	27.6	23.6	27.6
		Nominal	27.0	26.6	26.6	22.6	26.6
LTE Band 41 (PC3)	I	Max Allowed Power	25.5	23.5	N/A	21.5	23.5
		Nominal	24.5	22.5	N/A	20.5	22.5
LTE Band 41 (PC2)	I	Max Allowed Power	27.5	25.1	N/A	23.1	25.1
		Nominal	26.5	24.1	N/A	22.1	24.1
LTE Band 38	B	Max Allowed Power	26.0	25.5	26.0	22.0	25.5
		Nominal	25.0	24.5	25.0	21.0	24.5
LTE Band 48	F	Max Allowed Power	23.5	21.5	16.0	16.0	21.5
		Nominal	22.5	20.5	15.0	15.0	20.5

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Mode / Band	Antenna		Modulated Average Output Power (in dBm)				
			Pmax	DSI = 0 (Body-Worn or Phablet)	DSI = 2 (Head)	DSI = 3 (Hotspot)	DSI = 4 (Earjack)
NR Band n71	A	Max Allowed Power	25.2	25.2	25.2	24.0	25.2
		Nominal	24.2	24.2	24.2	23.0	24.2
NR Band n12	A	Max Allowed Power	25.5	25.5	25.5	24.5	25.5
		Nominal	24.5	24.5	24.5	23.5	24.5
NR Band n26	A	Max Allowed Power	25.7	25.7	25.7	24.0	25.7
		Nominal	24.7	24.7	24.7	23.0	24.7
NR Band n5	A	Max Allowed Power	25.3	25.3	25.3	24.0	25.3
		Nominal	24.3	24.3	24.3	23.0	24.3
NR Band n66	A	Max Allowed Power	25.2	21.5	25.2	19.5	21.5
		Nominal	24.2	20.5	24.2	18.5	20.5
NR Band n66	I	Max Allowed Power	25.7	22.0	18.5	18.5	22.0
		Nominal	24.7	21.0	17.5	17.5	21.0
NR Band n25	A	Max Allowed Power	25.2	23.0	25.2	19.5	23.0
		Nominal	24.2	22.0	24.2	18.5	22.0
NR Band n25	I	Max Allowed Power	25.3	22.0	15.5	16.5	22.0
		Nominal	24.3	21.0	14.5	15.5	21.0
NR Band n2	A	Max Allowed Power	24.6	23.0	24.6	19.5	23.0
		Nominal	23.6	22.0	23.6	18.5	22.0
NR Band n2	I	Max Allowed Power	25.5	22.0	15.5	16.5	22.0
		Nominal	24.5	21.0	14.5	15.5	21.0
NR Band n30	B	Max Allowed Power	25.0	22.5	25.0	19.0	22.5
		Nominal	24.0	21.5	24.0	18.0	21.5
NR Band n30	I	Max Allowed Power	23.0	21.5	15.5	18.0	21.5
		Nominal	22.0	20.5	14.5	17.0	20.5
NR Band n7	B	Max Allowed Power	25.8	22.5	25.8	21.5	22.5
		Nominal	24.8	21.5	24.8	20.5	21.5
NR Band n41 (PC2)	I	Max Allowed Power	28.0	21.5	14.5	19.5	21.5
		Nominal	27.0	20.5	13.5	18.5	20.5
NR Band n41 (PC2)	B	Max Allowed Power	25.0	18.5	13.5	18.5	18.5
		Nominal	24.0	17.5	12.5	17.5	17.5
NR Band n41 (PC2)	F	Max Allowed Power	22.5	16.0	11.0	16.0	16.0
		Nominal	21.5	15.0	10.0	15.0	15.0
NR Band n41 (PC2)	C	Max Allowed Power	19.5	16.5	13.0	16.5	16.5
		Nominal	18.5	15.5	12.0	15.5	15.5
NR Band n38	I	Max Allowed Power	25.0	21.5	14.5	19.5	21.5
		Nominal	24.0	20.5	13.5	18.5	20.5
NR Band n48	F	Max Allowed Power	23.5	19.0	14.0	15.0	19.0
		Nominal	22.5	18.0	13.0	14.0	18.0
NR Band n48	I	Max Allowed Power	19.0	13.0	8.0	9.0	13.0
		Nominal	18.0	12.0	7.0	8.0	12.0
NR Band n48	E	Max Allowed Power	21.0	15.5	10.5	11.5	15.5
		Nominal	20.0	14.5	9.5	10.5	14.5
NR Band n48	C	Max Allowed Power	21.0	17.0	12.0	13.0	17.0
		Nominal	20.0	16.0	11.0	12.0	16.0
NR Band n77 (PC2)	F	Max Allowed Power	27.0	17.5	13.5	15.0	17.5
		Nominal	26.0	16.5	12.5	14.0	16.5
NR Band n77 (PC2)	I	Max Allowed Power	24.5	15.5	11.0	12.5	15.5
		Nominal	23.5	14.5	10.0	11.5	14.5
NR Band n77 (PC2)	E	Max Allowed Power	26.5	15.5	11.5	13.0	15.5
		Nominal	25.5	14.5	10.5	12.0	14.5
NR Band n77 (PC2)	C	Max Allowed Power	21.0	15.0	11.5	13.0	15.0
		Nominal	20.0	14.0	10.5	12.0	14.0

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

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1.3.2 2.4 GHz SISO/MIMO WLAN Output Power

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

- Pmax, DSI=0 (Body-worn or Phablet), DSI=3 (Hotspot), and/or DSI=4 (Earjack)

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																			
		SISO										MIMO									
		Antenna 2										Antenna 1 & Antenna 2 in MIMO									
		b		g		n		ac		ax (SU)		b CDD + STBC		g (CDD + STBC)		n (CDD+STBC, SDM)		ac (CDD+STBC, SDM)		ax (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.	Max	Nom.
2.4 GHz WIFI	2.45 GHz	19.0	18.0	18.0	17.0	18.0	17.0	17.0	16.0	17.0	16.0	19.0	18.0	18.0	17.0	18.0	17.0	17.0	16.0	17.0	16.0

(Upper tolerance: Target +1.0 dB)

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

- DSI=2 (RCV)

Mode	Band	IEEE 802.11 Modulated Output Power (in dBm)																			
		SISO										MIMO									
		Antenna 2										Antenna 1 & Antenna 2 in MIMO									
		b		g		n		ac		ax (SU)		b CDD + STBC		g (CDD + STBC)		n (CDD+STBC, SDM)		ac (CDD+STBC, SDM)		ax (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.	Max	Nom.
2.4 GHz WIFI	2.45 GHz	12.0	11.0	12.0	11.0	12.0	11.0	12.0	11.0	12.0	11.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0	9.0	8.0

(Upper tolerance: Target +1.0 dB)

1.3.3 5 GHz MIMO WLAN Output Power

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

- Pmax, DSI=0 (Body-worn or Phablet), DSI=2(RCV), DSI=3 (Hotspot), and/or DSI=4 (Earjack)

Mode	IEEE 802.11 Modulated Output Power (in dBm)							
	MIMO							
	Antenna 1 & Antenna 2 in MIMO							
	a (CDD + STBC)		n (CDD+STBC, SDM)		ac (CDD+STBC, SDM)		ax (SU) (CDD+STBC, SDM)	
Maximum / Nominal Power	Max	Nom.	Max	Nom.	Max	Nom.	Max	Nom.
5 GHz WIFI (20MHz BW)	16.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0
5 GHz WIFI (40MHz BW)			15.0	14.0	15.0	14.0	15.0	14.0
5 GHz WIFI (80MHz BW)					14.0	13.0	14.0	13.0
5 GHz WIFI (160MHz BW)					13.0	12.0	13.0	12.0

(Upper tolerance: Target +1.0 dB)

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1.3.4 2.4 GHz Maximum Bluetooth Output Power

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

- Pmax, DSI=0 (Body-worn or Phablet), and/or DSI=4 (Earjack)

Mode	Data Rate	Modulated Output Power (in dBm)			
		Single Antenna			
		Antenna 1		Antenna 2	
Maximum / Nominal Power		Max	Nom.	Max	Nom.
Bluetooth	1Mbps	16.5	15.5	17.0	16.0
Bluetooth EDR	2Mbps	13.5	12.5	14.5	13.5
Bluetooth EDR	3Mbps	13.5	12.5	14.5	13.5
Bluetooth LE	1Mbps	17.0	16.0	18.5	17.5
Bluetooth LE	2Mbps	17.0	16.0	18.5	17.5
Bluetooth LE	125kbps	7.5	6.5	8.0	7.0
Bluetooth LE	500kbps	7.5	6.5	8.0	7.0

(Upper tolerance: Target +1.0 dB)

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

- DSI=2 (RCV)

Mode	Data Rate	Modulated Output Power (in dBm)			
		Single Antenna			
		Antenna 1		Antenna 2	
Maximum / Nominal Power		Max	Nom.	Max	Nom.
Bluetooth	1Mbps	16.5	15.5	17.0	16.0
Bluetooth EDR	2Mbps	13.5	12.5	14.5	13.5
Bluetooth EDR	3Mbps	13.5	12.5	14.5	13.5
Bluetooth LE	1Mbps	17.0	16.0	17.0	16.0
Bluetooth LE	2Mbps	17.0	16.0	17.5	16.5
Bluetooth LE	125kbps	7.5	6.5	8.0	7.0
Bluetooth LE	500kbps	7.5	6.5	8.0	7.0

(Upper tolerance: Target +1.0 dB)

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

- DSI=3 (Hotspot)

Mode	Data Rate	Modulated Output Power (in dBm)			
		Single Antenna			
		Antenna 1		Antenna 2	
Maximum / Nominal Power		Max	Nom.	Max	Nom.
Bluetooth	1Mbps	16.5	15.5	N/A	N/A
Bluetooth EDR	2Mbps	13.5	12.5	N/A	N/A
Bluetooth EDR	3Mbps	13.5	12.5	N/A	N/A
Bluetooth LE	1Mbps	17.0	16.0	N/A	N/A
Bluetooth LE	2Mbps	17.0	16.0	N/A	N/A
Bluetooth LE	125kbps	7.5	6.5	N/A	N/A
Bluetooth LE	500kbps	7.5	6.5	N/A	N/A

(Upper tolerance: Target +1.0 dB)

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1.4 DUT Antenna Locations

A diagram showing the location of the device antennas for both open and closed configurations can be found in DUT Antenna Diagram and SAR Test Setup Photographs Appendix. When the device is open, the overall dimensions of this device are > 9 x 5 cm. Since the diagonal dimension of this device when open is > 160 mm and <200 mm, it is considered a “phablet.” and operates similar to a traditional portable handset. In the closed configuration, only a simple display/interaction of notifications occurs and overall dimensions are < 9 x 5 cm. Therefore, when the device is closed, the only testing considered is for body-worn and hotspot.

Table 1-1
Device Edges/Sides for Open Configuration SAR Testing

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

Table 1-2
Device Edges/Sides for Closed Configuration SAR Testing

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

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 D04v01r03. The distances between the transmit antennas and the edges of the device are included in the filing. When wireless router mode is enabled, U-NII-1, U-NII-2A, U-NII-2C, UNII-4, and WIFI6E operations are disabled.

1.5 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 and SAR Test Setup Photographs Appendix.

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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 procedures.

Table 1-3
Simultaneous Transmission Scenarios

No.	Capable Transmit Configuration	Head	Body-Worn Accessory	Wireless Router	Phablet	Notes
1	GSM voice + 2.4 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
2	GSM voice + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
3	GSM voice + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
4	GSM voice + 2.4 GHz Bluetooth Ant 1	Yes	Yes	N/A	Yes	
5	GSM voice + 2.4 GHz Bluetooth Ant 2	Yes	Yes	N/A	Yes	
6	GSM voice + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
7	GSM voice + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
8	GSM voice + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2	Yes	Yes	N/A	Yes	
9	GSM voice + 2.4 GHz Bluetooth Ant 1 + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
10	GSM voice + 2.4 GHz Bluetooth Ant 1 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
11	GSM voice + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
12	GSM voice + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
13	GSM voice + 2.4 GHz Bluetooth Ant 2 + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
14	GSM voice + 2.4 GHz Bluetooth Ant 2 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
15	UMTS + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
16	UMTS + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
17	UMTS + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
18	UMTS + 2.4 GHz Bluetooth Ant 1	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
19	UMTS + 2.4 GHz Bluetooth Ant 2	Yes	Yes	N/A	Yes	
20	UMTS + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
21	UMTS + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
22	UMTS + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
23	UMTS + 2.4 GHz Bluetooth Ant 1 + 5 GHz WLAN MIMO	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
24	UMTS + 2.4 GHz Bluetooth Ant 1 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
25	UMTS + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
26	UMTS + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
27	UMTS + 2.4 GHz Bluetooth Ant 2 + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
28	UMTS + 2.4 GHz Bluetooth Ant 2 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
29	LTE + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
30	LTE + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
31	LTE + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
32	LTE + 2.4 GHz Bluetooth Ant 1	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
33	LTE + 2.4 GHz Bluetooth Ant 2	Yes	Yes	N/A	Yes	
34	LTE + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
35	LTE + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
36	LTE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
37	LTE + 2.4 GHz Bluetooth Ant 1 + 5 GHz WLAN MIMO	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
38	LTE + 2.4 GHz Bluetooth Ant 1 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
39	LTE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
40	LTE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
41	LTE + 2.4 GHz Bluetooth Ant 2 + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
42	LTE + 2.4 GHz Bluetooth Ant 2 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
43	LTE + NR	Yes	Yes	N/A	Yes	
44	LTE + NR + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
45	LTE + NR + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
46	LTE + NR + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
47	LTE + NR + 2.4 GHz Bluetooth Ant 1	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
48	LTE + NR + 2.4 GHz Bluetooth Ant 2	Yes	Yes	N/A	Yes	
49	LTE + NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
50	LTE + NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
51	LTE + NR + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
52	LTE + NR + 2.4 GHz Bluetooth Ant 1 + 5 GHz WLAN MIMO	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
53	LTE + NR + 2.4 GHz Bluetooth Ant 1 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
54	LTE + NR + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
55	LTE + NR + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
56	LTE + NR + 2.4 GHz Bluetooth Ant 2 + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
57	LTE + NR + 2.4 GHz Bluetooth Ant 2 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
58	NR + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
59	NR + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
60	NR + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
61	NR + 2.4 GHz Bluetooth Ant 1	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
62	NR + 2.4 GHz Bluetooth Ant 2	Yes	Yes	N/A	Yes	
63	NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	
64	NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
65	NR + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
66	NR + 2.4 GHz Bluetooth Ant 1 + 5 GHz WLAN MIMO	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
67	NR + 2.4 GHz Bluetooth Ant 1 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
68	NR + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO	Yes	Yes	Yes^	Yes	^ Bluetooth Tethering is considered
69	NR + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
70	NR + 2.4 GHz Bluetooth Ant 2 + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
71	NR + 2.4 GHz Bluetooth Ant 2 + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	
72	GPRS/EDGE + 2.4 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
73	GPRS/EDGE + 5 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
74	GPRS/EDGE + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
75	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1	N/A	N/A	Yes^	Yes	^ Bluetooth Tethering is considered
76	GPRS/EDGE + 2.4 GHz Bluetooth Ant 2	N/A	N/A	N/A	Yes	
77	GPRS/EDGE + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	N/A	N/A	Yes	Yes	
78	GPRS/EDGE + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
79	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2	N/A	N/A	Yes^	Yes	^ Bluetooth Tethering is considered
80	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1 + 5 GHz WLAN MIMO	N/A	N/A	Yes^	Yes	^ Bluetooth Tethering is considered
81	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1 + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
82	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO	N/A	N/A	Yes^	Yes	^ Bluetooth Tethering is considered
83	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1 + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
84	GPRS/EDGE + 2.4 GHz Bluetooth Ant 2 + 5 GHz WLAN MIMO	N/A	N/A	N/A	Yes	
85	GPRS/EDGE + 2.4 GHz Bluetooth Ant 2 + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	

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1. No other simultaneous scenarios besides described above is supported for this model.
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. This device supports 2x2 MIMO Tx for WLAN 802.11a/b/g/n/ac/ax. 802.11a/b/g/n/ac/ax supports CDD and STBC and 802.11n/ac/ax additionally supports SDM.
6. This device supports VoWIFI.
7. This device supports Bluetooth Tethering on antenna 1 only.
8. This device supports VoLTE.
9. This device supports VoNR.
10. LTE + 5G NR FR1 Scenarios are limited to EN-DC combinations with anchor bands as shown in the NR FR1 checklist.
11. 5G NR FR2 n258, n260, and n261 cannot transmit simultaneously.
12. LTE + 5G NR FR2 Scenarios are limited to EN-DC combinations with anchor bands as shown in the NR FR2 checklist.
13. NFC was evaluated for phablet based on expected usage conditions.
14. 6 GHz Wireless Router is not supported, therefore it was not evaluated for wireless router conditions.

1.7 Miscellaneous SAR Test Considerations

When on the device dimensions when closed, hotspot SAR in the closed configuration was performed at 5mm per KDB Publication 941225 D06v02r01.

(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, and U-NII-4 WIFI, 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 with the following features:

a) Up to 160 MHz Bandwidth only for 5/6 GHz
b) Up to 20 MHz Bandwidth only for 2.4 GHz
c) 2 Tx antenna output
d) Up to 1024 QAM is supported
e) TDWR and Band gap channels are supported for 5 GHz
f) MU-MIMO UL Operations are not supported

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" in open configuration since the diagonal dimension is greater than 160mm 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, and U-NII-4 WLAN, phablet SAR tests were performed. Phablet SAR was not evaluated for 2.4 GHz and U-NII-3 WLAN operations since wireless router 1g SAR was < 1.2 W/kg.

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Per April 2019 TCB Workshop Notes, SAR testing was not required for 802.11ax when applying the initial test configuration procedures of KDB 248227, with 802.11ax considered a higher order 802.11 mode.

This device supports 6 GHz WIFI Operations. RF Exposure assessment for these bands can be found in the WIFI 6E RF Exposure Report (report SN can be found in Section 1.11 – Bibliography). Simultaneous transmission analysis is addressed in Multi-Tx and Antenna SAR Considerations Appendix of this report.

(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. The downlink carrier aggregation exclusion analysis can be found in Downlink LTE CA RF Conducted Powers Appendix.

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" when it is in an open configuration since the diagonal dimension is greater than 160mm 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 both Power Class 2 (PC2) and Power Class 3 (PC3) for LTE Band 41. Per May 2017 TCB Workshop Notes, SAR tests were performed with Power Class 3 (given the specific UL/DL limitations for Power Class 2). Additionally, SAR testing for the power class 2 condition was evaluated for the highest configuration in Power Class 3 for each test configuration to confirm the results were scalable linearly (See Section 13).

This device supports LTE Carrier Aggregation (CA) for LTE Band 41, LTE Band 66, and 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 I for LTE B2/4/25/30/41/66 and NR Band n2/25/30/66. SAR tests for antenna I was additionally performed for these LTE and NR bands to ensure compliance.

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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 1.11 – 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.

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).

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

1.8 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 D04v01r03 (Phablet Procedures)
- October 2013 TCB Workshop Notes (GPRS Testing Considerations)
- May 2017 TCB Workshop Notes (LTE 4x4 Downlink MIMO, LTE Band 41 Power Class 2/3)
- November 2017, April 2018, October 2018 TCB Workshop Notes (LTE Carrier Aggregation)
- April 2019 TCB Workshop Notes (IEEE 802.11ax)

1.9 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 11.

1.10 Bibliography

Report Type	Report Serial Number
Near Field PD Report (Part 1)	1M2303100026-28.A3L
Near Field PD Part 0 Report	
RF Exposure Part 2 Test Report	1M2303100026-29.A3L
RF Exposure Compliance Summary Report	1M2303100026-27.A3L
RF Exposure Part 0 Test Report	1M2303100026-25.A3L
WIFI 6 GHz RF Exposure	1M2303100026-26.A3L

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2 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 (Cell) (814.7 - 848.3 MHz)				
	LTE Band 5 (Cell) (824.7 - 848.3 MHz)				
	LTE Band 66 (AWS) (1710.7 - 1779.3 MHz)				
	LTE Band 4 (AWS) (1710.7 - 1754.3 MHz)				
	LTE Band 25 (PCS) (1850.7 - 1914.3 MHz)				
	LTE Band 2 (PCS) (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 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz				
	LTE Band 5 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 66 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 4 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 25 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 2 (PCS): 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 (Cell): 1.4 MHz	814.7 (26697)		831.5 (26865)	848.3 (27033)	
LTE Band 26 (Cell): 3 MHz	815.5 (26705)		831.5 (26865)	847.5 (27025)	
LTE Band 26 (Cell): 5 MHz	816.5 (26715)		831.5 (26865)	846.5 (27015)	
LTE Band 26 (Cell): 10 MHz	819 (26740)		831.5 (26865)	844 (26990)	
LTE Band 26 (Cell): 15 MHz	821.5 (26765)		831.5 (26865)	841.5 (26965)	
LTE Band 5 (Cell): 1.4 MHz	824.7 (20407)		836.5 (20525)	848.3 (20643)	
LTE Band 5 (Cell): 3 MHz	825.5 (20415)		836.5 (20525)	847.5 (20635)	
LTE Band 5 (Cell): 5 MHz	826.5 (20425)		836.5 (20525)	846.5 (20625)	
LTE Band 5 (Cell): 10 MHz	829 (20450)		836.5 (20525)	844 (20600)	
LTE Band 66 (AWS): 1.4 MHz	1710.7 (131979)		1745 (132322)	1779.3 (132665)	
LTE Band 66 (AWS): 3 MHz	1711.5 (131987)		1745 (132322)	1778.5 (132657)	
LTE Band 66 (AWS): 5 MHz	1712.5 (131997)		1745 (132322)	1777.5 (132647)	
LTE Band 66 (AWS): 10 MHz	1715 (132022)		1745 (132322)	1775 (132622)	
LTE Band 66 (AWS): 15 MHz	1717.5 (132047)		1745 (132322)	1772.5 (132597)	
LTE Band 66 (AWS): 20 MHz	1720 (132072)		1745 (132322)	1770 (132572)	
LTE Band 4 (AWS): 1.4 MHz	1710.7 (19957)		1732.5 (20175)	1754.3 (20393)	
LTE Band 4 (AWS): 3 MHz	1711.5 (19965)		1732.5 (20175)	1753.5 (20385)	
LTE Band 4 (AWS): 5 MHz	1712.5 (19975)		1732.5 (20175)	1752.5 (20375)	
LTE Band 4 (AWS): 10 MHz	1715 (20000)		1732.5 (20175)	1750 (20350)	
LTE Band 4 (AWS): 15 MHz	1717.5 (20025)		1732.5 (20175)	1747.5 (20325)	
LTE Band 4 (AWS): 20 MHz	1720 (20050)		1732.5 (20175)	1745 (20300)	
LTE Band 25 (PCS): 1.4 MHz	1850.7 (26047)		1882.5 (26365)	1914.3 (26683)	
LTE Band 25 (PCS): 3 MHz	1851.5 (26055)		1882.5 (26365)	1913.5 (26675)	
LTE Band 25 (PCS): 5 MHz	1852.5 (26065)		1882.5 (26365)	1912.5 (26665)	
LTE Band 25 (PCS): 10 MHz	1855 (26090)		1882.5 (26365)	1910 (26640)	
LTE Band 25 (PCS): 15 MHz	1857.5 (26115)		1882.5 (26365)	1907.5 (26615)	
LTE Band 25 (PCS): 20 MHz	1860 (26140)		1882.5 (26365)	1905 (26590)	
LTE Band 2 (PCS): 1.4 MHz	1850.7 (18607)		1880 (18900)	1909.3 (19193)	
LTE Band 2 (PCS): 3 MHz	1851.5 (18615)		1880 (18900)	1908.5 (19185)	
LTE Band 2 (PCS): 5 MHz	1852.5 (18625)		1880 (18900)	1907.5 (19175)	
LTE Band 2 (PCS): 10 MHz	1855 (18650)		1880 (18900)	1905 (19150)	
LTE Band 2 (PCS): 15 MHz	1857.5 (18675)		1880 (18900)	1902.5 (19125)	
LTE Band 2 (PCS): 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)		2405 (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)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 20 MHz	2506 (39750)	2549.5 (40185)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
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	DL UE Cat 20, UL UE Cat 18				
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, downlink MIMO, LAA features as shown in the RF Conducted Powers section of this report and the Downlink LTE CA RF Conducted Powers Appendix. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 16 Features are not supported: Relay, HetNet, Enhanced MIMO, eICIC, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

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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 n26 (816.5 - 846.5 MHz)					
	NR Band n5 (826.5 - 846.5 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 n77 (3455.01 - 3544.98 MHz; 3705 - 3975 MHz)					
Channel Bandwidths	NR Band n71: 5 MHz, 10 MHz, 15 MHz, 20 MHz					
	NR Band n12: 5 MHz, 10 MHz, 15 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 n66: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz					
	NR Band n25: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz					
	NR Band n2: 5 MHz, 10 MHz, 15 MHz, 20 MHz					
	NR Band n30: 5 MHz, 10 MHz					
	NR Band n7: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz					
	NR Band n41: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz					
	NR Band n38: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz					
	NR Band n48: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz					
	NR Band n77: 10 MHz, 15 MHz, 20 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 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 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 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 (354564)	
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: 40 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: 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 n30: 5 MHz	2307.5 (461500)		2310 (462000)		2312.5 (462500)	
NR Band n30: 10 MHz	N/A		2310 (462000)		N/A	
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)		680.5 (133297)		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: 40 MHz	2520 (504000)		2535 (507000)		2550 (510000)	
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: 30 MHz	2511 (502200)	2552.01 (510402)	2592.99 (518598)		2634 (526800)	2674.98 (534996)
NR Band n41: 40 MHz	2516.01 (503202)	2567.34 (513468)	N/A		2618.67 (523734)	2670 (534000)
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: 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 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: 30 MHz	3465 (631000)		3500.01 (633334)		3534.99 (635666)	
NR Band n77 DoD: 40 MHz	3470.01 (631334)		N/A		3470.01 (631334)	
NR Band n77 DoD: 50 MHz	3475.02 (631668)		N/A		3475.02 (631668)	
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)	3867 (657800)	3921 (661400)	3975 (665000)
NR Band n77: 15 MHz	3707.52 (647168)	3760.5 (650700)	3813.51 (654234)	3866.49 (657766)	3919.5 (661300)	3972.48 (664832)
NR Band n77: 20 MHz	3710.01 (647334)	3762 (650800)	3813.99 (654266)	3866.01 (657734)	3918 (661200)	3969.99 (664666)
NR Band n77: 30 MHz	3715.02 (647668)	3765 (651000)	3815.01 (654334)	3864.99 (657666)	3915 (661000)	3964.98 (664332)
NR Band n77: 40 MHz	3720 (648000)	3768 (651200)	3816 (654400)	3864 (657600)	3912 (660800)	3960 (664000)
NR Band n77: 50 MHz	3725.01 (648334)	3782.49 (652166)	3840 (656000)		3897.51 (659834)	3954.99 (663666)
NR Band n77: 60 MHz	3730.02 (648668)	3803.34 (653556)	N/A	N/A	3876.66 (658444)	3949.98 (663332)
NR Band n77: 70 MHz	3735 (649000)	3804.99 (653666)	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	N/A	3930 (662000)
SCS for NR Band: n71/n12/n26/n5/n66/n25/n2/n30/n7	15 kHz					
SCS for NR Band: n41/n38/n48/n77	30 kHz					
Modulations Supported in UL	DFT-s-OFDM: π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM					
A-MPR (Additional MPR) disabled for SAR Testing?	YES					
EN-DC 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	LTE Band 2/48/66					
LTE Anchor Bands for NR Band n26	N/A					
LTE Anchor Bands for NR Band n5	LTE Band 2/30/48/66					
LTE Anchor Bands for NR Band n66	LTE Band 2/5/12/13/14/30/48					
LTE Anchor Bands for NR Band n25	LTE Band 12/66					
LTE Anchor Bands for NR Band n2	LTE Band 4/5/12/13/14/30/48/66					
LTE Anchor Bands for NR Band n30	LTE Band 2/5/12/14/66					
LTE Anchor Bands for NR Band n7	N/A					
LTE Anchor Bands for NR Band n41	LTE Band 2/66					
LTE Anchor Bands for NR Band n38	N/A					
LTE Anchor Bands for NR Band n48	LTE Band 2/66					
LTE Anchor Bands for NR Band n77	LTE Band 2/5/12/13/14/30/66/71					

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3 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.

3.1 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 3-1).

Equation 3-1
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]

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4 DOSIMETRIC ASSESSMENT

4.1 Measurement Procedure

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

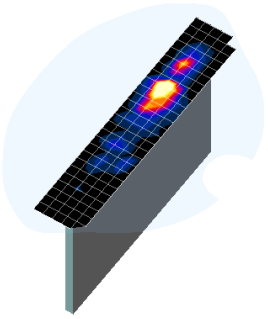

Figure 4-1
Sample SAR Area Scan

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 4-1) 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 4-1) 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 4-1. 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 4-1
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

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5 DEFINITION OF REFERENCE POINTS

5.1 EAR REFERENCE POINT

Figure 5-2 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 5-1. 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 5-1). 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].

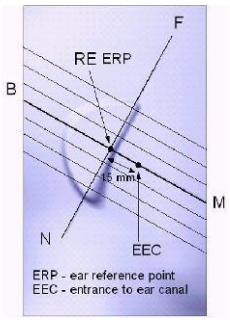

Figure 5-1
Close-Up Side view of ERP

5.2 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 5-3). The acoustic output was then 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 5-2
Front, back and side view of SAM Twin Phantom

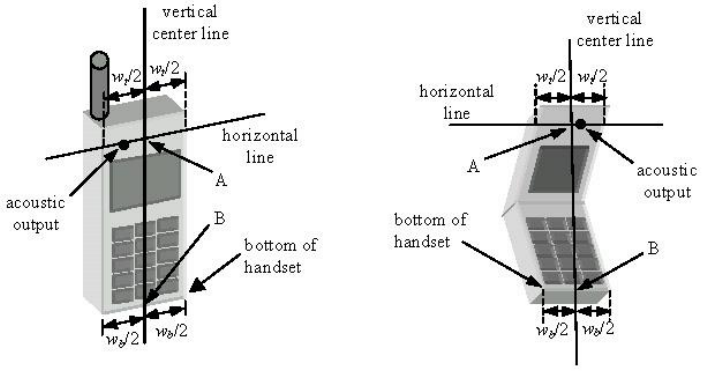

Figure 5-3
Handset Vertical Center & Horizontal Line Reference Points

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6 TEST CONFIGURATION POSITIONS

6.1 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.

6.2 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 6-1), 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.

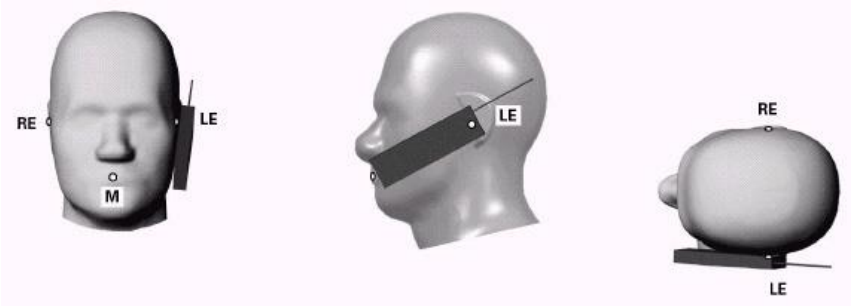

Figure 6-1 Front, Side and Top View of Cheek Position

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 6-2).

6.3 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 6-2).

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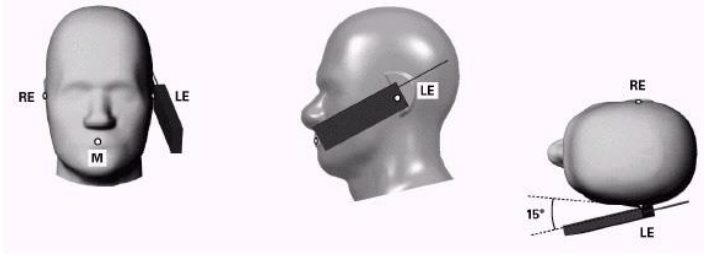

Figure 6-2 Front, Side and Top View of Ear/15º Tilt Position

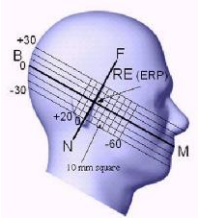

Figure 6-3
Side view w/ relevant markings

6.4 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 D04v01r03. 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.

6.5 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 6-4). Per FCC KDB Publication 648474 D04v01r03, 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.

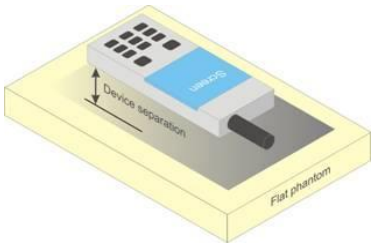

Figure 6-4
Sample Body-Worn Diagram

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

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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.

6.6 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.

6.7 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.

6.8 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 D04v01r03 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

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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.

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7 RF EXPOSURE LIMITS

7.1 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.

7.2 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 7-1
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.

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8 FCC MEASUREMENT PROCEDURES

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

8.1 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.

8.2 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.

8.3 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.

8.4 SAR Measurement Conditions for UMTS

8.4.1 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.

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8.4.2 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.

8.4.3 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.

8.4.4 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.

8.4.5 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.

8.4.6 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.

8.5 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).

8.5.1 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.

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8.5.2 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.

8.5.3 A-MPR

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

8.5.4 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.

8.5.5 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.

8.5.6 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

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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.

8.6 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.

8.6.1 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.

8.6.2 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.

8.6.3 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.

8.6.4 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.

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8.6.5 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.

8.6.6 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 guidance, 802.11ax 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.

8.6.7 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 8.6.6). When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.6.8 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

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subsequent test configurations are required. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.6.9 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.

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9 RF CONDUCTED POWERS

All conducted power measurements for WWAN sub6/WLAN/BT 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}).

9.1 GSM Conducted Powers

Table 9-1
Measured P_{max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack active) for GSM 850; Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), DSI = 3 (Hotspot Mode), or DSI = 4 (Earjack active) for GSM 1900

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	33.00	32.69	31.45	**29.33**	27.46	26.65	25.02	23.18	22.08
	190	32.56	32.52	31.54	**29.25**	27.46	26.81	25.13	23.22	22.23
	251	32.76	32.54	31.32	**29.09**	27.29	26.63	24.93	22.96	22.02
GSM 1900	512	27.64	27.71	24.74	22.79	**21.90**	25.13	23.94	22.03	21.03
	661	27.88	27.82	24.55	22.84	**21.92**	25.28	24.08	22.03	20.99
	810	28.02	27.96	24.80	23.12	**21.91**	25.45	24.17	22.25	21.30
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	23.80	23.49	25.26	**24.90**	24.28	17.45	18.83	18.75	18.90
	190	23.36	23.32	25.35	**24.82**	24.28	17.61	18.94	18.79	19.05
	251	23.56	23.34	25.13	**24.66**	24.11	17.43	18.74	18.53	18.84
GSM 1900	512	18.44	18.51	18.55	18.36	**18.72**	15.93	17.75	17.60	17.85
	661	18.68	18.62	18.36	18.41	**18.74**	16.08	17.89	17.60	17.81
	810	18.82	18.76	18.61	18.69	**18.73**	16.25	17.98	17.82	18.12
GSM 850	**Frame Avg.Targets:**	23.80	23.80	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

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Table 9-2
Measured P_{Max} for DSI = 2 (Head) for GSM 1900

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	30.97	30.99	27.93	**26.02**	24.01	25.13	23.94	22.03	21.03
	661	31.11	31.07	28.06	**26.29**	23.89	25.28	24.08	22.03	20.99
	810	31.15	31.17	28.16	**26.09**	24.04	25.45	24.17	22.25	21.30

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	21.77	21.79	21.74	**21.59**	20.83	15.93	17.75	17.60	17.85
	661	21.91	21.87	21.87	**21.86**	20.71	16.08	17.89	17.60	17.81
	810	21.95	21.97	21.97	**21.66**	20.86	16.25	17.98	17.82	18.12
GSM 1900	**Frame Avg.Targets:**	21.80	21.80	21.81	**22.07**	21.32	16.80	17.81	17.57	17.82

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Table 9-3
Measured P_{limit} for DSI = 3 (Hotspot Mode) for GSM 850

Maximum Burst-Averaged Output Power									
		GPRS/EDGE Data (GMSK)				*EDGE Data (8-PSK)*			
Band	**Channel**	**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	30.76	27.84	26.01	**24.45**	26.65	25.02	23.18	22.08
	190	30.82	27.79	25.94	**24.37**	26.81	25.13	23.22	22.23
	251	30.63	27.60	25.76	**24.21**	26.63	24.93	22.96	22.02
Calculated Maximum Frame-Averaged Output Power									
		GPRS/EDGE Data (GMSK)				*EDGE Data (8-PSK)*			
Band	**Channel**	**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	21.56	21.65	21.58	**21.27**	17.45	18.83	18.75	18.90
	190	21.62	21.60	21.51	**21.19**	17.61	18.94	18.79	19.05
	251	21.43	21.41	21.33	**21.03**	17.43	18.74	18.53	18.84
GSM 850	**Frame Avg.Targets:**	21.80	21.81	21.77	**21.82**	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 9-1
Power Measurement Setup

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9.2 UMTS Conducted Powers

Table 9-4
Measured P_{max} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack active) for UMTS 850
Measured P_{limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack active) for UMTS 1750 & UMTS 1900

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	24.94	24.97	24.77	20.63	20.19	20.49	20.64	20.66	20.88	-
99		12.2 kbps AMR	24.96	25.00	24.81	20.62	20.18	20.46	20.66	20.61	20.82	-
6	HSDPA	Subtest 1	24.16	24.35	24.16	19.44	19.10	19.47	19.45	19.55	19.77	0
6		Subtest 2	24.22	24.31	24.18	19.52	19.12	19.36	19.52	19.51	19.71	0
6		Subtest 3	23.70	23.79	23.71	19.05	18.65	18.89	18.95	19.02	19.30	0.5
6		Subtest 4	23.64	23.81	23.70	19.00	18.72	18.83	18.99	19.05	19.27	0.5
6	HSUPA	Subtest 1	23.90	24.04	23.99	19.50	19.16	19.38	19.42	19.50	19.84	0
6		Subtest 2	22.26	22.28	22.21	17.56	17.09	17.42	17.49	17.33	17.54	2
6		Subtest 3	23.18	23.30	23.26	18.44	18.14	18.42	18.48	18.51	18.83	1
6		Subtest 4	22.23	22.36	22.22	17.48	17.14	17.31	17.46	17.48	17.76	2
6		Subtest 5	24.26	24.37	24.21	19.51	19.07	19.36	19.42	19.45	19.76	0
8	DC-HSDPA	Subtest 1	24.15	24.23	24.32	19.52	19.06	19.32	19.41	19.51	19.77	0
8		Subtest 2	24.21	24.11	24.20	19.51	19.04	19.35	19.30	19.36	19.79	0
8		Subtest 3	23.66	23.78	23.76	18.84	18.67	19.15	18.91	18.83	19.20	0.5
8		Subtest 4	23.69	23.79	23.72	18.97	18.65	18.81	19.04	18.91	19.23	0.5

Table 9-5
Measured P_{limit} for DSI = 2 (Head)

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	24.11	24.13	23.95	23.08	22.66	22.84	23.10	23.15	23.63	-
99		12.2 kbps AMR	24.15	24.15	23.97	23.22	22.72	22.77	22.95	23.02	23.30	-
6	HSDPA	Subtest 1	23.76	23.88	23.72	22.26	21.82	22.10	22.31	22.30	22.59	0
6		Subtest 2	23.77	23.86	23.76	22.32	21.83	22.08	22.34	22.35	22.54	0
6		Subtest 3	23.20	23.37	23.21	21.84	21.35	21.62	21.77	21.83	22.14	0.5
6		Subtest 4	23.15	23.32	23.16	21.82	21.33	21.60	21.83	21.85	22.11	0.5
6	HSUPA	Subtest 1	23.71	23.78	23.71	22.30	21.76	22.07	22.19	22.34	22.57	0
6		Subtest 2	21.23	21.33	21.21	20.29	19.86	20.10	20.22	20.33	20.56	2
6		Subtest 3	22.29	22.34	22.21	21.29	20.85	21.10	21.21	21.29	21.62	1
6		Subtest 4	21.30	21.35	21.25	20.33	19.80	20.07	20.13	20.28	20.52	2
6		Subtest 5	23.28	23.36	23.29	22.31	21.86	22.05	22.24	22.30	22.62	0
8	DC-HSDPA	Subtest 1	23.77	23.79	23.65	22.18	21.59	21.76	22.09	22.00	22.20	0
8		Subtest 2	23.73	23.81	23.72	22.19	21.58	21.73	22.05	22.01	22.17	0
8		Subtest 3	23.22	23.32	23.17	21.69	21.10	21.25	21.58	21.49	21.67	0.5
8		Subtest 4	23.25	23.30	23.28	21.69	21.09	21.23	21.55	21.51	21.68	0.5

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Table 9-6
Measured P_{limit} for DSI = 3 (Hotspot mode)

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	22.93	22.92	22.74	18.72	18.26	18.54	17.70	17.68	17.94	-
99		12.2 kbps AMR	22.94	22.97	22.80	18.61	18.13	18.45	17.61	17.61	17.83	-
6	HSDPA	Subtest 1	22.21	22.20	22.04	17.89	17.43	17.75	16.85	16.83	16.97	0
6		Subtest 2	22.19	22.21	22.05	17.90	17.44	17.75	16.89	16.86	16.98	0
6		Subtest 3	21.68	21.69	21.54	17.39	16.93	17.24	16.36	16.35	16.58	0.5
6		Subtest 4	21.69	21.69	21.55	17.39	16.94	17.24	16.35	16.33	16.57	0.5
6	HSUPA	Subtest 1	22.21	22.20	22.02	17.91	17.47	17.75	16.87	16.87	16.89	0
6		Subtest 2	20.22	20.21	20.03	15.89	15.42	15.72	14.83	14.87	15.08	2
6		Subtest 3	21.19	21.19	21.02	16.88	16.42	16.72	15.85	15.86	16.09	1
6		Subtest 4	20.20	20.22	20.03	15.89	15.44	15.73	14.86	14.85	15.09	2
6		Subtest 5	22.22	22.23	22.06	17.92	17.47	17.81	16.91	16.90	16.93	0
8	DC-HSDPA	Subtest 1	22.19	22.17	22.01	17.89	17.42	17.74	16.86	16.84	16.87	0
8		Subtest 2	22.16	22.18	22.02	17.88	17.43	17.74	16.88	16.88	16.90	0
8		Subtest 3	21.67	21.66	21.52	17.37	16.93	17.23	16.38	16.36	16.59	0.5
8		Subtest 4	21.67	21.67	21.52	17.38	16.92	17.22	16.37	16.36	16.59	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 9-2
Power Measurement Setup

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9.3 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_66B, LTE CA_66C, LTE CA_ 48C, and LTE CA_41C 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.

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9.3.1 LTE Band 71

Table 9-7
LTE Band 71 Measured P_{Max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack Active) - 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	24.83	0	0
	1	50	**25.28**		0
	1	99	24.93		0
	50	0	**24.09**	0-1	1
	50	25	24.08		1
	50	50	24.00		1
	100	0	24.08		1
16QAM	1	0	24.10	0-1	1
	1	50	24.35		1
	1	99	23.91		1
	50	0	23.10	0-2	2
	50	25	23.10		2
	50	50	23.00		2
	100	0	23.07		2
64QAM	1	0	23.02	0-2	2
	1	50	23.28		2
	1	99	22.97		2
	50	0	22.05	0-3	3
	50	25	22.14		3
	50	50	22.07		3
	100	0	22.09		3
256QAM	1	0	20.13	0-5	5
	1	50	20.25		5
	1	99	20.09		5
	50	0	20.07		5
	50	25	20.07		5
	50	50	20.00		5
	100	0	20.08		5

Table 9-8
LTE Band 71 Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	24.12	0	0
	1	50	**24.25**		0
	1	99	24.03		0
	50	0	24.15	0-1	0
	50	25	**24.17**		0
	50	50	24.09		0
	100	0	24.15		0
16QAM	1	0	24.07	0-1	0
	1	50	24.28		0
	1	99	24.16		0
	50	0	23.20	0-2	1
	50	25	23.16		1
	50	50	23.11		1
	100	0	23.20		1
64QAM	1	0	23.17	0-2	1
	1	50	23.39		1
	1	99	23.12		1
	50	0	22.16	0-3	2
	50	25	22.14		2
	50	50	22.07		2
	100	0	22.19		2
256QAM	1	0	20.18	0-5	4
	1	50	20.31		4
	1	99	20.10		4
	50	0	20.17		4
	50	25	20.17		4
	50	50	20.12		4
	100	0	20.18		4

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9.3.2 LTE Band 12

Table 9-9
LTE Band 12 Measured P_{Max} for DSI = 2 (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	24.39	0	0
	1	25	**24.48**		0
	1	49	24.45		0
	25	0	23.51	0-1	1
	25	12	**23.54**		1
	25	25	23.52		1
	50	0	23.49		1
16QAM	1	0	23.86	0-1	1
	1	25	23.75		1
	1	49	23.55		1
	25	0	22.53	0-2	2
	25	12	22.48		2
	25	25	22.47		2
	50	0	22.55		2
64QAM	1	0	22.97	0-2	2
	1	25	22.79		2
	1	49	22.53		2
	25	0	21.53	0-3	3
	25	12	21.58		3
	25	25	21.45		3
	50	0	21.56		3
256QAM	1	0	19.69	0-5	5
	1	25	19.59		5
	1	49	19.33		5
	25	0	19.53		5
	25	12	19.56		5
	25	25	19.42		5
	50	0	19.48		5

Table 9-10
LTE Band 12 Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), DSI = 3 (Hotspot- Mode), or DSI = 4 (Earjack Active) - 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	22.70	0	0
	1	25	**22.77**		0
	1	49	22.62		0
	25	0	**22.79**	0-1	0
	25	12	22.78		0
	25	25	22.75		0
	50	0	22.76		0
16QAM	1	0	22.99	0-1	0
	1	25	22.92		0
	1	49	22.83		0
	25	0	22.81	0-2	0
	25	12	22.86		0
	25	25	22.75		0
	50	0	22.74		0
64QAM	1	0	22.95	0-2	0
	1	25	22.85		0
	1	49	22.81		0
	25	0	21.96	0-3	1
	25	12	21.86		1
	25	25	21.93		1
	50	0	21.90		1
256QAM	1	0	19.98	0-5	3
	1	25	19.95		3
	1	49	19.88		3
	25	0	19.91		3
	25	12	19.82		3
	25	25	19.79		3
	50	0	19.90		3

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9.3.3 LTE Band 13

Table 9-11
LTE Band 13 Measured P_{Max} for DSI = 2 (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	**24.66**	0	0
	1	25	24.64		0
	1	49	24.51		0
	25	0	**23.72**	0-1	1
	25	12	23.67		1
	25	25	23.67		1
	50	0	23.66		1
16QAM	1	0	23.94	0-1	1
	1	25	23.82		1
	1	49	23.75		1
	25	0	22.72	0-2	2
	25	12	22.62		2
	25	25	22.64		2
	50	0	22.65		2
64QAM	1	0	22.96	0-2	2
	1	25	23.05		2
	1	49	22.73		2
	25	0	21.60	0-3	3
	25	12	21.70		3
	25	25	21.64		3
	50	0	21.77		3
256QAM	1	0	19.72	0-5	5
	1	25	19.80		5
	1	49	19.59		5
	25	0	19.72		5
	25	12	19.69		5
	25	25	19.69		5
	50	0	19.55		5

Table 9-12
LTE Band 13 Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), DSI = 3 (Hotspot Mode), or DSI = 4 (Earjack Active) - 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	22.17	0	0
	1	25	**22.30**		0
	1	49	21.94		0
	25	0	**22.17**	0-1	0
	25	12	22.09		0
	25	25	22.02		0
	50	0	22.08		0
16QAM	1	0	22.40	0-1	0
	1	25	22.43		0
	1	49	22.16		0
	25	0	22.24	0-2	0
	25	12	22.16		0
	25	25	22.09		0
	50	0	22.18		0
64QAM	1	0	22.51	0-2	0
	1	25	22.31		0
	1	49	22.17		0
	25	0	22.24	0-3	0
	25	12	22.15		0
	25	25	22.08		0
	50	0	22.15		0
256QAM	1	0	20.17	0-5	2
	1	25	20.33		2
	1	49	20.13		2
	25	0	20.16		2
	25	12	20.22		2
	25	25	20.05		2
	50	0	20.02		2

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9.3.4 LTE Band 14

Table 9-13
LTE Band 14 Measured P_{Max} for DSI = 2 (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	**24.45**	0	0
	1	25	24.44		0
	1	49	24.05		0
	25	0	**23.51**	0-1	1
	25	12	23.40		1
	25	25	23.27		1
	50	0	23.29		1
16QAM	1	0	23.70	0-1	1
	1	25	23.76		1
	1	49	23.48		1
	25	0	22.53	0-2	2
	25	12	22.35		2
	25	25	22.31		2
	50	0	22.34		2
64QAM	1	0	22.62	0-2	2
	1	25	22.54		2
	1	49	22.22		2
	25	0	21.46	0-3	3
	25	12	21.36		3
	25	25	21.31		3
	50	0	21.37		3
256QAM	1	0	19.50	0-5	5
	1	25	19.61		5
	1	49	19.16		5
	25	0	19.47		5
	25	12	19.36		5
	25	25	19.31		5
	50	0	19.36		5

Table 9-14
LTE Band 14 Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), DSI = 3 (Hotspot Mode), or DSI = 4 (Earjack Active) - 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	**22.89**	0	0
	1	25	22.65		0
	1	49	22.49		0
	25	0	**22.82**	0-1	0
	25	12	22.69		0
	25	25	22.53		0
	50	0	22.68		0
16QAM	1	0	22.93	0-1	0
	1	25	22.82		0
	1	49	22.58		0
	25	0	22.78	0-2	0
	25	12	22.64		0
	25	25	22.58		0
	50	0	22.67		0
64QAM	1	0	23.01	0-2	0
	1	25	22.97		0
	1	49	22.55		0
	25	0	21.84	0-3	1
	25	12	21.77		1
	25	25	21.68		1
	50	0	21.84		1
256QAM	1	0	20.02	0-5	3
	1	25	19.93		3
	1	49	19.69		3
	25	0	19.91		3
	25	12	19.78		3
	25	25	19.70		3
	50	0	19.78		3

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9.3.5 LTE Band 26

Table 9-15
LTE Band 26 (Cell) Measured P_{Max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack Active) - 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	24.40	0	0
	1	36	**24.55**		0
	1	74	24.43		0
	36	0	23.54	0-1	1
	36	18	23.60		1
	36	37	**23.64**		1
	75	0	23.57		1
16QAM	1	0	23.81	0-1	1
	1	36	23.93		1
	1	74	23.77		1
	36	0	22.54	0-2	2
	36	18	22.61		2
	36	37	22.66		2
	75	0	22.60		2
64QAM	1	0	22.52	0-2	2
	1	36	22.67		2
	1	74	22.55		2
	36	0	21.53	0-3	3
	36	18	21.59		3
	36	37	21.68		3
	75	0	21.60		3
256QAM	1	0	19.57	0-5	5
	1	36	19.63		5
	1	74	19.81		5
	36	0	19.59		5
	36	18	19.62		5
	36	37	19.67		5
	75	0	19.61		5

Table 9-16
LTE Band 26 (Cell) Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	22.39	0	0
	1	36	**22.51**		0
	1	74	22.44		0
	36	0	22.54	0-1	0
	36	18	22.57		0
	36	37	**22.64**		0
	75	0	22.50		0
16QAM	1	0	22.76	0-1	0
	1	36	22.85		0
	1	74	22.77		0
	36	0	22.53	0-2	0
	36	18	22.56		0
	36	37	22.62		0
	75	0	22.56		0
64QAM	1	0	22.52	0-2	0
	1	36	22.69		0
	1	74	22.68		0
	36	0	21.61	0-3	1
	36	18	21.68		1
	36	37	21.72		1
	75	0	21.66		1
256QAM	1	0	19.59	0-5	3
	1	36	19.74		3
	1	74	19.86		3
	36	0	19.61		3
	36	18	19.66		3
	36	37	19.78		3
	75	0	19.68		3

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9.3.6 LTE Band 5

Table 9-17
LTE Band 5 (Cell) Measured P_{Max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack Active) - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.83**	0	0
	1	25	24.80		0
	1	49	24.72		0
	25	0	23.77	0-1	1
	25	12	23.80		1
	25	25	**23.81**		1
	50	0	23.79		1
16QAM	1	0	24.02	0-1	1
	1	25	24.04		1
	1	49	24.01		1
	25	0	22.82	0-2	2
	25	12	22.85		2
	25	25	22.81		2
	50	0	22.75		2
64QAM	1	0	23.17	0-2	2
	1	25	22.96		2
	1	49	23.08		2
	25	0	21.79	0-3	3
	25	12	21.79		3
	25	25	21.82		3
	50	0	21.74		3
256QAM	1	0	19.97	0-5	5
	1	25	20.09		5
	1	49	19.98		5
	25	0	19.77		5
	25	12	19.79		5
	25	25	19.79		5
	50	0	19.73		5

Table 9-18
LTE Band 5 (Cell) Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**22.57**	0	0
	1	25	22.56		0
	1	49	22.51		0
	25	0	22.64	0-1	0
	25	12	22.67		0
	25	25	**22.68**		0
	50	0	22.56		0
16QAM	1	0	22.89	0-1	0
	1	25	22.92		0
	1	49	22.81		0
	25	0	22.67	0-2	0
	25	12	22.72		0
	25	25	22.72		0
	50	0	22.66		0
64QAM	1	0	22.93	0-2	0
	1	25	22.91		0
	1	49	22.90		0
	25	0	21.78	0-3	1
	25	12	21.81		1
	25	25	21.85		1
	50	0	21.74		1
256QAM	1	0	19.96	0-5	3
	1	25	20.12		3
	1	49	19.76		3
	25	0	19.75		3
	25	12	19.84		3
	25	25	19.77		3
	50	0	19.74		3

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9.3.7 LTE Band 66 Antenna A

Table 9-19
LTE Band 66 (AWS) Antenna A Measured P_{Max} for DSI = 2 (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	**24.88**	24.80	24.82	0	0
	1	50	24.80	24.70	24.73		0
	1	99	24.73	24.69	24.86		0
	50	0	**24.14**	23.78	23.74	0-1	1
	50	25	24.07	23.80	23.79		1
	50	50	23.99	23.76	23.77		1
	100	0	24.06	23.76	23.75		1
16QAM	1	0	24.22	23.82	24.04	0-1	1
	1	50	24.15	23.85	23.88		1
	1	99	24.26	24.05	23.84		1
	50	0	23.18	22.75	22.77	0-2	2
	50	25	23.10	22.81	22.77		2
	50	50	23.00	22.74	22.76		2
	100	0	23.03	22.75	22.78		2
64QAM	1	0	23.44	22.95	22.79	0-2	2
	1	50	23.35	23.21	22.77		2
	1	99	23.39	22.81	22.79		2
	50	0	22.13	21.77	21.76	0-3	3
	50	25	22.09	21.76	21.78		3
	50	50	21.94	21.72	21.76		3
	100	0	22.03	21.69	21.73		3
256QAM	1	0	20.25	20.02	19.91	0-5	5
	1	50	20.26	19.82	19.85		5
	1	99	19.94	19.85	19.77		5
	50	0	20.13	19.68	19.69		5
	50	25	20.01	19.77	19.72		5
	50	50	19.97	19.64	19.67		5
	100	0	19.98	19.72	19.70		5

Table 9-20
LTE Band 66 (AWS) Antenna A Measured P_{Max} for DSI = 2 (Head) – 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	25.35	24.82	24.74	0	0
	1	25	25.27	24.75	24.82		0
	1	49	25.21	24.73	24.84		0
	25	0	24.31	23.88	23.89	0-1	1
	25	12	24.22	23.87	23.94		1
	25	25	24.22	23.86	23.90		1
	50	0	24.25	23.87	23.87		1
16QAM	1	0	24.60	23.94	24.21	0-1	1
	1	25	24.58	23.83	24.04		1
	1	49	24.33	24.00	24.16		1
	25	0	23.34	22.92	22.91	0-2	2
	25	12	23.29	22.96	22.96		2
	25	25	23.24	22.87	22.94		2
	50	0	23.24	22.91	22.95		2
64QAM	1	0	23.61	22.93	23.16	0-2	2
	1	25	23.58	23.20	23.07		2
	1	49	23.51	22.99	23.13		2
	25	0	22.33	21.91	21.91	0-3	3
	25	12	22.28	21.91	21.96		3
	25	25	22.21	21.77	21.93		3
	50	0	22.25	21.88	21.91		3
256QAM	1	0	20.38	19.95	19.88	0-5	5
	1	25	20.59	19.81	20.11		5
	1	49	20.27	19.95	19.95		5
	25	0	20.34	19.82	19.84		5
	25	12	20.25	19.82	19.91		5
	25	25	20.21	19.90	19.91		5
	50	0	20.21	19.84	19.89		5

Table 9-21
LTE Band 66 (AWS) Antenna A Uplink Carrier Aggregation Measured P_{Max} for DSI = 2 (Head)

Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (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_66C	LTE B66	20	132072	1720.0	66536	2120.0	QPSK	1	99	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	1	0	24.91	24.73
CA_66B	LTE B66	10	132022	1715.0	66486	2115.0	QPSK	1	49	LTE B66	10	132121	1724.9	66585	2124.9	QPSK	1	0	25.07	25.21

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Table 9-22
LTE Band 66 (AWS) Antenna A Measured P_{Limit} DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 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	**21.43**	21.15	21.09	0	0
	1	50	21.42	21.05	21.14		0
	1	99	21.33	21.09	21.03		0
	50	0	**21.51**	21.14	21.15	0-1	0
	50	25	21.43	21.14	21.26		0
	50	50	21.34	21.11	21.14		0
	100	0	21.39	21.10	21.10		0
16QAM	1	0	21.84	21.24	21.39	0-1	0
	1	50	21.58	21.23	21.41		0
	1	99	21.44	21.18	21.42		0
	50	0	21.45	21.11	21.12	0-2	0
	50	25	21.44	21.20	21.15		0
	50	50	21.36	21.11	21.09		0
	100	0	21.41	21.17	21.09		0
64QAM	1	0	21.87	21.09	21.09	0-2	0
	1	50	21.71	21.16	21.22		0
	1	99	21.66	21.25	21.25		0
	50	0	21.49	21.10	21.11	0-3	0
	50	25	21.45	21.19	21.11		0
	50	50	21.34	21.10	21.11		0
	100	0	21.39	21.13	21.06		0
256QAM	1	0	19.91	19.88	19.54	0-5	1.5
	1	50	20.06	19.90	19.76		1.5
	1	99	19.94	19.85	19.68		1.5
	50	0	19.98	19.61	19.62		1.5
	50	25	19.88	19.61	19.60		1.5
	50	50	19.81	19.60	19.57		1.5
	100	0	19.90	19.58	19.60		1.5

Table 9-23
LTE Band 66 (AWS) Antenna A Measured P_{Limit} DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	21.79	21.17	21.09	0	0
	1	25	21.70	21.11	21.23		0
	1	49	21.57	21.06	21.07		0
	25	0	21.68	21.22	21.24	0-1	0
	25	12	21.65	21.26	21.27		0
	25	25	21.55	21.24	21.25		0
	50	0	21.64	21.19	21.27		0
16QAM	1	0	21.90	21.28	21.39	0-1	0
	1	25	21.87	21.26	21.62		0
	1	49	21.86	21.46	21.54		0
	25	0	21.80	21.24	21.27	0-2	0
	25	12	21.66	21.25	21.28		0
	25	25	21.65	21.23	21.25		0
	50	0	21.58	21.27	21.27		0
64QAM	1	0	21.86	21.33	21.42	0-2	0
	1	25	21.92	21.54	21.56		0
	1	49	21.84	21.30	21.53		0
	25	0	21.71	21.30	21.29	0-3	0
	25	12	21.69	21.32	21.30		0
	25	25	21.61	21.25	21.27		0
	50	0	21.61	21.29	21.27		0
256QAM	1	0	20.40	19.66	19.86	0-5	1.5
	1	25	20.17	19.85	20.01		1.5
	1	49	20.20	19.78	19.93		1.5
	25	0	20.23	19.79	19.78		1.5
	25	12	20.14	19.78	19.76		1.5
	25	25	20.14	19.76	19.75		1.5
	50	0	20.17	19.76	19.72		1.5

Table 9-24
LTE Band 66 (AWS) Antenna A Uplink Carrier Aggregation Measured P_{Limit} DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active)

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (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_66C	LTE B66	20	132072	1720.0	66536	2120.0	QPSK	1	99	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	1	0	21.10	21.33
CA_66B	LTE B66	10	132022	1715.0	66486	2115.0	QPSK	1	49	LTE B66	10	132121	1724.9	66585	2124.9	QPSK	1	0	21.22	21.57

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Table 9-25
LTE Band 66 (AWS) Antenna A Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	**19.59**	19.22	19.19	0	0
	1	50	19.48	19.24	19.31		0
	1	99	19.41	19.15	19.12		0
	50	0	19.54	19.50	19.22	0-1	0
	50	25	**19.55**	19.36	19.45		0
	50	50	19.41	19.22	19.23		0
	100	0	19.50	19.27	19.28		0
16QAM	1	0	19.74	19.28	19.44	0-1	0
	1	50	19.83	19.10	19.50		0
	1	99	19.31	19.41	19.11		0
	50	0	19.56	19.12	19.06	0-2	0
	50	25	19.46	19.15	19.13		0
	50	50	19.38	19.08	19.08		0
	100	0	19.41	19.06	19.10		0
64QAM	1	0	19.60	19.35	19.13	0-2	0
	1	50	19.66	19.50	19.43		0
	1	99	19.70	19.26	19.12		0
	50	0	19.46	19.08	19.03	0-3	0
	50	25	19.38	19.13	19.13		0
	50	50	19.33	19.06	19.09		0
	100	0	19.41	19.15	19.11		0
256QAM	1	0	19.57	19.24	19.06	0-5	0
	1	50	19.61	19.23	19.26		0
	1	99	19.40	19.20	19.12		0
	50	0	19.51	19.15	19.08		0
	50	25	19.37	19.15	19.13		0
	50	50	19.32	19.05	19.05		0
	100	0	19.41	19.14	19.08		0

Table 9-26
LTE Band 66 (AWS) Antenna A Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.82	19.26	19.27	0	0
	1	25	19.76	19.29	19.34		0
	1	49	19.71	19.18	19.30		0
	25	0	19.78	19.38	19.40	0-1	0
	25	12	19.69	19.40	19.41		0
	25	25	19.70	19.40	19.39		0
	50	0	19.67	19.36	19.42		0
16QAM	1	0	20.04	19.50	19.62	0-1	0
	1	25	19.98	19.40	19.42		0
	1	49	19.81	19.48	19.56		0
	25	0	19.70	19.27	19.28	0-2	0
	25	12	19.70	19.31	19.33		0
	25	25	19.64	19.23	19.26		0
	50	0	19.61	19.26	19.31		0
64QAM	1	0	19.83	19.35	19.50	0-2	0
	1	25	19.90	19.38	19.51		0
	1	49	20.00	19.43	19.45		0
	25	0	19.71	19.29	19.26	0-3	0
	25	12	19.66	19.21	19.27		0
	25	25	19.61	19.27	19.30		0
	50	0	19.63	19.25	19.29		0
256QAM	1	0	19.89	19.13	19.56	0-5	0
	1	25	19.77	19.56	19.38		0
	1	49	19.72	19.31	19.33		0
	25	0	19.73	19.24	19.26		0
	25	12	19.62	19.25	19.29		0
	25	25	19.64	19.24	19.27		0
	50	0	19.61	19.19	19.26		0

Table 9-27
LTE Band 66 (AWS) Antenna A Uplink Carrier Aggregation Measured P_{Limit} for DSI = 3 (Hotspot Mode)

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (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_66C	LTE B66	20	132072	1720.0	66536	2120.0	QPSK	50	50	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	50	0	19.33	19.41
CA_66B	LTE B66	10	132022	1715.0	66486	2115.0	QPSK	25	25	LTE B66	10	132121	1724.9	66585	2124.9	QPSK	25	0	19.43	19.70

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9.3.8 LTE Band 66 Antenna I

Table 9-28
LTE Band 66 (AWS) Antenna I Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) – 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	20.56	20.23	**20.57**	0	0
	1	50	20.45	20.26	20.51		0
	1	99	20.34	20.26	20.47		0
	50	0	20.70	20.43	**20.74**	0-1	0
	50	25	20.68	20.52	20.70		0
	50	50	20.64	20.48	20.65		0
	100	0	20.51	20.46	20.55		0
16QAM	1	0	20.69	20.74	20.63	0-1	0
	1	50	20.84	20.71	20.98		0
	1	99	20.72	20.51	20.70		0
	50	0	20.71	20.43	20.58	0-2	0
	50	25	20.74	20.57	20.65		0
	50	50	20.65	20.45	20.65		0
	100	0	20.69	20.51	20.63		0
64QAM	1	0	20.80	20.71	20.76	0-2	0
	1	50	20.93	20.70	20.79		0
	1	99	20.80	20.63	20.74		0
	50	0	20.71	20.38	20.51	0-3	0
	50	25	20.74	20.57	20.64		0
	50	50	20.66	20.47	20.68		0
	100	0	20.69	20.47	20.64		0
256QAM	1	0	19.21	19.28	19.10	0-5	1
	1	50	19.38	19.32	19.22		1
	1	99	19.15	19.44	19.37		1
	50	0	19.33	19.04	19.14		1
	50	25	19.30	19.09	19.27		1
	50	50	19.24	19.03	19.22		1
	100	0	19.25	19.05	19.23		1

Table 9-29
LTE Band 66 (AWS) Antenna I Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) – 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.87	20.38	20.73	0	0
	1	25	20.76	20.41	20.75		0
	1	49	20.83	20.40	20.69		0
	25	0	20.83	20.49	20.75	0-1	0
	25	12	20.87	20.62	20.78		0
	25	25	20.80	20.54	20.84		0
	50	0	20.84	20.58	20.84		0
16QAM	1	0	20.94	20.70	21.04	0-1	0
	1	25	21.03	20.83	20.98		0
	1	49	21.04	20.78	21.07		0
	25	0	20.85	20.52	20.74	0-2	0
	25	12	20.90	20.67	20.83		0
	25	25	20.86	20.60	20.85		0
	50	0	20.81	20.61	20.82		0
64QAM	1	0	21.00	20.50	20.81	0-2	0
	1	25	20.97	20.77	20.98		0
	1	49	20.95	20.66	21.01		0
	25	0	20.91	20.48	20.77	0-3	0
	25	12	20.81	20.61	20.77		0
	25	25	20.86	20.56	20.81		0
	50	0	20.82	20.57	20.80		0
256QAM	1	0	19.57	19.01	19.37	0-5	1
	1	25	19.55	19.31	19.70		1
	1	49	19.58	19.28	19.64		1
	25	0	19.46	19.08	19.35		1
	25	12	19.44	19.21	19.42		1
	25	25	19.43	19.12	19.44		1
	50	0	19.45	19.19	19.44		1

Table 9-30
LTE Band 66 (AWS) Antenna I Uplink Carrier Aggregation Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active)

	PCC									SCC								Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (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_66C	LTE B66	20	132572	1770.0	67036	2170.0	QPSK	50	0	LTE B66	20	132374	1750.2	66838	2150.2	QPSK	50	50	20.55	20.74
CA_66B	LTE B66	10	132622	1775.0	67086	2175.0	QPSK	25	0	LTE B66	10	132523	1765.1	66987	2165.1	QPSK	25	25	20.73	20.75
CA_66C	LTE B66	20	132322	1745.0	66786	2145.0	QPSK	1	99	LTE B66	20	132520	1764.8	66984	2164.8	QPSK	1	0	20.38	20.26
CA_66B	LTE B66	10	132322	1745.0	66786	2145.0	QPSK	1	49	LTE B66	10	132421	1754.9	66885	2154.9	QPSK	1	0	20.38	20.40

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Table 9-31
LTE Band 66 (AWS) Antenna I Measured P_{Limit} for DSI = 3 (Hotspot Mode) – 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	17.08	17.11	17.12	0	0
	1	50	17.06	17.04	**17.30**		0
	1	99	16.99	17.07	17.19		0
	50	0	17.28	17.04	17.19	0-1	0
	50	25	17.26	17.13	**17.35**		0
	50	50	17.29	17.04	17.24		0
	100	0	17.26	17.07	17.21		0
16QAM	1	0	17.31	17.02	17.34	0-1	0
	1	50	17.40	17.13	17.65		0
	1	99	17.44	17.07	17.42		0
	50	0	17.31	17.00	17.18	0-2	0
	50	25	17.34	17.13	17.18		0
	50	50	17.27	17.08	17.26		0
	100	0	17.28	17.14	17.16		0
64QAM	1	0	17.31	17.33	17.13	0-2	0
	1	50	17.11	17.18	17.45		0
	1	99	17.48	17.30	17.39		0
	50	0	17.25	17.06	17.15	0-3	0
	50	25	17.36	17.12	17.22		0
	50	50	17.25	17.03	17.30		0
	100	0	17.28	17.07	17.16		0
256QAM	1	0	17.32	16.89	17.10	0-5	0
	1	50	17.36	17.12	17.10		0
	1	99	17.21	17.30	17.45		0
	50	0	17.25	16.96	17.11		0
	50	25	17.26	16.99	17.22		0
	50	50	17.16	17.02	17.14		0
	100	0	17.25	17.01	17.16		0

Table 9-32
LTE Band 66 (AWS) Antenna I Measured P_{Limit} DSI = 3 (Hotspot Mode) – 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.44	17.10	17.25	0	0
	1	25	17.49	17.07	17.35		0
	1	49	17.39	17.01	17.29		0
	25	0	17.47	17.06	17.35	0-1	0
	25	12	17.47	17.18	17.46		0
	25	25	17.47	17.19	17.44		0
	50	0	17.49	17.19	17.41		0
16QAM	1	0	17.72	17.48	17.65	0-1	0
	1	25	17.62	17.24	17.65		0
	1	49	17.49	17.26	17.52		0
	25	0	17.54	17.12	17.40	0-2	0
	25	12	17.55	17.21	17.46		0
	25	25	17.55	17.19	17.45		0
	50	0	17.47	17.24	17.45		0
64QAM	1	0	17.57	17.35	17.60	0-2	0
	1	25	17.56	17.51	17.64		0
	1	49	17.65	17.34	17.63		0
	25	0	17.48	17.21	17.38	0-3	0
	25	12	17.49	17.28	17.54		0
	25	25	17.44	17.17	17.43		0
	50	0	17.50	17.17	17.42		0
256QAM	1	0	17.61	17.13	17.53	0-5	0
	1	25	17.43	17.25	17.48		0
	1	49	17.48	17.05	17.53		0
	25	0	17.36	17.05	17.30		0
	25	12	17.44	17.17	17.32		0
	25	25	17.39	17.13	17.33		0
	50	0	17.46	17.16	17.37		0

Table 9-33
LTE Band 66 (AWS) Antenna I Uplink Carrier Aggregation Measured P_{Limit} for DSI = 3 (Hotspot Mode)

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (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_66C	LTE B66	20	132572	1770.0	67036	2170.0	QPSK	1	0	LTE B66	20	132374	1750.2	66838	2150.2	QPSK	1	99	16.97	17.12
CA_66B	LTE B66	10	132622	1775.0	67086	2175.0	QPSK	1	0	LTE B66	10	132523	1765.1	66987	2165.1	QPSK	1	49	17.08	17.25

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9.3.9 LTE Band 25 Antenna A

Table 9-34
LTE Band 25 (PCS) Antenna A Measured P_{Max} for DSI = 2 (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	24.52	24.46	24.60	0	0
	1	50	24.78	24.54	24.94		0
	1	99	24.66	24.88	**24.97**		0
	50	0	23.68	23.74	23.84	0-1	1
	50	25	23.74	23.74	23.91		1
	50	50	23.74	23.70	**23.95**		1
	100	0	23.70	23.72	23.94		1
16QAM	1	0	23.65	24.15	23.98	0-1	1
	1	50	23.83	23.85	23.93		1
	1	99	23.80	23.88	24.05		1
	50	0	22.76	22.74	22.94	0-2	2
	50	25	22.67	22.77	22.93		2
	50	50	22.74	22.65	22.99		2
	100	0	22.66	22.78	22.95		2
64QAM	1	0	22.65	22.84	22.85	0-2	2
	1	50	22.83	22.86	22.91		2
	1	99	22.95	22.89	23.03		2
	50	0	21.80	21.69	21.92	0-3	3
	50	25	21.72	21.77	21.94		3
	50	50	21.68	21.67	21.91		3
	100	0	21.77	21.78	21.87		3
256QAM	1	0	19.80	19.85	19.90	0-5	5
	1	50	19.73	19.85	19.82		5
	1	99	19.78	20.17	20.06		5
	50	0	19.66	19.66	19.92		5
	50	25	19.65	19.81	19.97		5
	50	50	19.71	19.78	20.03		5
	100	0	19.67	19.77	19.95		5

Table 9-35
LTE Band 25 (PCS) Antenna A Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 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	21.95	21.84	22.01	0	0
	1	50	22.00	22.27	22.19		0
	1	99	22.20	22.16	**22.50**		0
	50	0	22.01	22.05	22.17	0-1	0
	50	25	21.97	22.10	22.16		0
	50	50	22.02	22.02	**22.23**		0
	100	0	21.99	22.07	22.17		0
16QAM	1	0	22.01	22.01	22.27	0-1	0
	1	50	22.06	22.09	22.26		0
	1	99	22.24	22.18	22.42		0
	50	0	22.04	21.96	22.20	0-2	0
	50	25	22.03	22.03	22.20		0
	50	50	22.01	22.02	22.23		0
	100	0	22.02	22.10	22.20		0
64QAM	1	0	22.06	22.19	22.23	0-2	0
	1	50	22.19	22.28	22.25		0
	1	99	22.27	22.16	22.33		0
	50	0	22.01	22.06	22.20	0-3	0
	50	25	22.05	22.07	22.17		0
	50	50	22.01	21.99	22.22		0
	100	0	22.02	22.08	22.23		0
256QAM	1	0	20.13	20.13	20.40	0-5	2
	1	50	20.25	20.05	20.25		2
	1	99	20.17	20.13	20.37		2
	50	0	20.08	20.03	20.15		2
	50	25	20.03	20.05	20.16		2
	50	50	20.03	20.03	20.25		2
	100	0	19.95	20.07	20.26		2

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Table 9-36
LTE Band 25 (PCS) Antenna A Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	18.84	18.92	18.96	0	0
	1	50	18.89	19.02	19.09		0
	1	99	19.01	18.97	**19.27**		0
	50	0	18.92	18.92	19.13	0-1	0
	50	25	18.91	19.05	**19.19**		0
	50	50	18.95	18.98	19.15		0
	100	0	18.92	19.00	19.17		0
16QAM	1	0	18.95	18.96	19.30	0-1	0
	1	50	19.21	19.25	19.26		0
	1	99	19.07	19.11	19.31		0
	50	0	18.92	18.91	19.09	0-2	0
	50	25	18.87	19.01	19.15		0
	50	50	18.89	19.02	19.13		0
	100	0	18.91	18.94	19.13		0
64QAM	1	0	18.95	18.92	19.06	0-2	0
	1	50	19.19	19.02	19.04		0
	1	99	19.11	19.04	19.14		0
	50	0	18.85	18.85	19.03	0-3	0
	50	25	18.83	18.90	19.04		0
	50	50	18.83	18.85	19.07		0
	100	0	18.92	18.84	19.02		0
256QAM	1	0	18.84	18.88	19.05	0-5	0
	1	50	18.97	19.01	19.02		0
	1	99	18.88	18.86	19.17		0
	50	0	18.93	18.87	18.99		0
	50	25	18.86	18.86	19.05		0
	50	50	18.87	18.87	19.07		0
	100	0	18.85	18.90	19.03		0

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9.3.10 LTE Band 25 Antenna I

Table 9-37
LTE Band 25 (PCS) Antenna I Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 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	20.15	20.06	20.33	0	0
	1	50	20.28	20.14	20.40		0
	1	99	20.36	20.23	**20.72**		0
	50	0	20.25	20.09	20.52	0-1	0
	50	25	20.32	20.29	20.61		0
	50	50	20.38	20.28	**20.64**		0
	100	0	20.39	20.33	20.63		0
16QAM	1	0	20.54	20.37	20.68	0-1	0
	1	50	20.41	20.56	20.61		0
	1	99	20.64	20.49	20.95		0
	50	0	20.28	20.25	20.51	0-2	0
	50	25	20.38	20.26	20.64		0
	50	50	20.36	20.25	20.76		0
	100	0	20.32	20.34	20.63		0
64QAM	1	0	20.32	20.31	20.82	0-2	0
	1	50	20.30	20.53	20.71		0
	1	99	20.45	20.37	20.77		0
	50	0	20.29	20.24	20.59	0-3	0
	50	25	20.36	20.38	20.64		0
	50	50	20.35	20.24	20.62		0
	100	0	20.34	20.30	20.68		0
256QAM	1	0	18.91	19.12	19.16	0-5	1.5
	1	50	18.84	19.00	19.12		1.5
	1	99	19.06	19.11	19.29		1.5
	50	0	18.85	18.80	19.11		1.5
	50	25	18.93	18.90	19.22		1.5
	50	50	18.99	18.88	19.24		1.5
	100	0	18.91	18.97	19.23		1.5

Table 9-38
LTE Band 25 (PCS) Antenna I Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	14.60	14.50	14.77	0	0
	1	50	14.80	14.96	14.97		0
	1	99	14.58	14.90	**15.53**		0
	50	0	14.78	14.64	14.93	0-1	0
	50	25	14.74	14.74	14.99		0
	50	50	14.75	14.84	**15.12**		0
	100	0	14.70	14.69	14.97		0
16QAM	1	0	14.76	14.74	14.89	0-1	0
	1	50	14.91	14.90	15.45		0
	1	99	14.79	15.15	15.11		0
	50	0	14.77	14.71	14.92	0-2	0
	50	25	14.73	14.70	14.93		0
	50	50	14.75	14.83	15.10		0
	100	0	14.74	14.73	15.01		0
64QAM	1	0	14.77	14.74	15.08	0-2	0
	1	50	14.75	14.74	15.17		0
	1	99	14.86	14.90	15.22		0
	50	0	14.68	14.59	14.89	0-3	0
	50	25	14.75	14.71	14.97		0
	50	50	14.75	14.81	15.13		0
	100	0	14.65	14.75	14.99		0
256QAM	1	0	14.76	14.77	14.99	0-5	0
	1	50	14.84	14.79	14.98		0
	1	99	14.71	14.95	15.34		0
	50	0	14.75	14.63	14.90		0
	50	25	14.75	14.71	15.04		0
	50	50	14.82	14.69	15.07		0
	100	0	14.77	14.75	14.97		0

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9.3.11 LTE Band 30 Antenna B

Table 9-39
LTE Band 30 Antenna B Measured P_{Max} for DSI = 2 (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	23.47	0	0
	1	25	**23.52**		0
	1	49	23.42		0
	25	0	22.46	0-1	1
	25	12	**22.48**		1
	25	25	22.41		1
	50	0	22.44		1
16QAM	1	0	22.78	0-1	1
	1	25	22.75		1
	1	49	22.69		1
	25	0	21.49	0-2	2
	25	12	21.50		2
	25	25	21.43		2
	50	0	21.47		2
64QAM	1	0	21.61	0-2	2
	1	25	21.71		2
	1	49	21.56		2
	25	0	20.46	0-3	3
	25	12	20.49		3
	25	25	20.41		3
	50	0	20.43		3
256QAM	1	0	18.54	0-5	5
	1	25	18.64		5
	1	49	18.39		5
	25	0	18.48		5
	25	12	18.50		5
	25	25	18.41		5
	50	0	18.46		5

Table 9-40
LTE Band 30 Antenna B Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 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	20.55	0	0
	1	25	**20.57**		0
	1	49	20.37		0
	25	0	20.47	0-1	0
	25	12	**20.51**		0
	25	25	20.46		0
	50	0	20.48		0
16QAM	1	0	20.72	0-1	0
	1	25	20.69		0
	1	49	20.59		0
	25	0	20.36	0-2	0
	25	12	20.38		0
	25	25	20.32		0
	50	0	20.35		0
64QAM	1	0	20.53	0-2	0
	1	25	20.57		0
	1	49	20.39		0
	25	0	20.32	0-3	0
	25	12	20.41		0
	25	25	20.32		0
	50	0	20.36		0
256QAM	1	0	18.49	0-5	2
	1	25	18.65		2
	1	49	18.44		2
	25	0	18.45		2
	25	12	18.45		2
	25	25	18.41		2
	50	0	18.44		2

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Table 9-41
LTE Band 30 Antenna B Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	16.59	0	0
	1	25	**16.59**		0
	1	49	16.44		0
	25	0	16.57	0-1	0
	25	12	**16.60**		0
	25	25	16.53		0
	50	0	16.54		0
16QAM	1	0	16.97	0-1	0
	1	25	16.97		0
	1	49	16.77		0
	25	0	16.62	0-2	0
	25	12	16.62		0
	25	25	16.55		0
	50	0	16.59		0
64QAM	1	0	16.85	0-2	0
	1	25	16.85		0
	1	49	16.73		0
	25	0	16.63	0-3	0
	25	12	16.62		0
	25	25	16.58		0
	50	0	16.60		0
256QAM	1	0	16.62	0-5	0
	1	25	16.76		0
	1	49	16.49		0
	25	0	16.60		0
	25	12	16.62		0
	25	25	16.59		0
	50	0	16.59		0

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9.3.12 LTE Band 30 Antenna I

Table 9-42
LTE Band 30 Antenna I Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 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	19.93	0	0
	1	25	20.02		0
	1	49	**20.16**		0
	25	0	19.95	0-1	0
	25	12	20.09		0
	25	25	**20.13**		0
	50	0	20.00		0
16QAM	1	0	20.30	0-1	0
	1	25	20.14		0
	1	49	20.36		0
	25	0	19.46	0-2	0.5
	25	12	19.51		0.5
	25	25	19.59		0.5
	50	0	19.55		0.5
64QAM	1	0	19.56	0-2	0.5
	1	25	19.65		0.5
	1	49	19.66		0.5
	25	0	18.97	0-3	1.5
	25	12	19.00		1.5
	25	25	19.05		1.5
	50	0	18.97		1.5
256QAM	1	0	17.07	0-5	3.5
	1	25	17.08		3.5
	1	49	17.20		3.5
	25	0	17.05		3.5
	25	12	17.10		3.5
	25	25	17.16		3.5
	50	0	17.09		3.5

Table 9-43
LTE Band 30 Antenna I Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	16.42	0	0
	1	25	**16.48**		0
	1	49	16.38		0
	25	0	16.36	0-1	0
	25	12	16.43		0
	25	25	**16.45**		0
	50	0	16.38		0
16QAM	1	0	16.65	0-1	0
	1	25	16.57		0
	1	49	16.74		0
	25	0	16.37	0-2	0
	25	12	16.40		0
	25	25	16.46		0
	50	0	16.35		0
64QAM	1	0	16.39	0-2	0
	1	25	16.56		0
	1	49	16.49		0
	25	0	16.31	0-3	0
	25	12	16.29		0
	25	25	16.37		0
	50	0	16.29		0
256QAM	1	0	16.32	0-5	0
	1	25	16.53		0
	1	49	16.24		0
	25	0	16.27		0
	25	12	16.34		0
	25	25	16.37		0
	50	0	16.25		0

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9.3.13 LTE Band 7

Table 9-44
LTE Band 7 Measured P_{Limit} for DSI = 2 (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	24.40	24.09	24.32	0	0
	1	50	**24.41**	24.14	24.38		0
	1	99	24.29	24.09	24.32		0
	50	0	23.46	23.34	23.32	0-1	0.5
	50	25	**23.54**	23.40	23.39		0.5
	50	50	23.45	23.36	23.30		0.5
	100	0	23.49	23.37	23.35		0.5
16QAM	1	0	23.50	23.53	23.66	0-1	0.5
	1	50	23.52	23.66	23.60		0.5
	1	99	23.36	23.55	23.56		0.5
	50	0	22.46	22.37	22.32	0-2	1.5
	50	25	22.51	22.43	22.40		1.5
	50	50	22.46	22.30	22.30		1.5
	100	0	22.52	22.37	22.37		1.5
64QAM	1	0	22.62	22.40	22.38	0-2	1.5
	1	50	22.58	22.48	22.47		1.5
	1	99	22.49	22.32	22.43		1.5
	50	0	21.47	21.32	21.28	0-3	2.5
	50	25	21.52	21.37	21.35		2.5
	50	50	21.47	21.33	21.27		2.5
	100	0	21.50	21.36	21.33		2.5
256QAM	1	0	19.57	19.48	19.36	0-5	4.5
	1	50	19.55	19.48	19.39		4.5
	1	99	19.51	19.53	19.46		4.5
	50	0	19.45	19.32	19.28		4.5
	50	25	19.51	19.35	19.35		4.5
	50	50	19.49	19.33	19.31		4.5
	100	0	19.49	19.36	19.35		4.5

Table 9-45
LTE Band 7 Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 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	20.95	20.90	20.95	0	0
	1	50	**21.11**	21.10	20.93		0
	1	99	20.98	20.76	20.78		0
	50	0	21.03	20.92	20.88	0-1	0
	50	25	**21.04**	20.98	20.87		0
	50	50	20.98	20.87	20.77		0
	100	0	21.02	20.94	20.83		0
16QAM	1	0	21.06	21.16	21.13	0-1	0
	1	50	21.10	21.04	21.05		0
	1	99	21.02	21.03	20.91		0
	50	0	21.02	20.94	20.88	0-2	0
	50	25	21.06	20.98	20.93		0
	50	50	21.03	20.83	20.87		0
	100	0	21.10	20.97	20.89		0
64QAM	1	0	21.13	21.09	20.96	0-2	0
	1	50	21.14	21.20	21.12		0
	1	99	21.12	20.96	20.84		0
	50	0	20.98	20.92	20.88	0-3	0
	50	25	21.02	20.97	20.93		0
	50	50	21.01	20.88	20.79		0
	100	0	21.04	20.96	20.89		0
256QAM	1	0	19.65	19.63	19.47	0-5	1
	1	50	19.43	19.43	19.47		1
	1	99	19.42	19.41	19.29		1
	50	0	19.47	19.44	19.33		1
	50	25	19.56	19.46	19.38		1
	50	50	19.49	19.36	19.35		1
	100	0	19.52	19.46	19.40		1

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Table 9-46
LTE Band 7 Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	17.98	17.86	17.77	0	0
	1	50	17.99	17.90	17.81		0
	1	99	**18.06**	18.01	17.67		0
	50	0	17.97	17.86	17.80	0-1	0
	50	25	**18.02**	17.91	17.84		0
	50	50	17.97	17.80	17.75		0
	100	0	18.00	17.87	17.80		0
16QAM	1	0	18.06	18.03	17.97	0-1	0
	1	50	18.17	17.96	17.87		0
	1	99	18.05	17.95	17.78		0
	50	0	17.87	17.82	17.80	0-2	0
	50	25	17.94	17.90	17.79		0
	50	50	17.83	17.83	17.77		0
	100	0	17.89	17.80	17.78		0
64QAM	1	0	18.10	17.84	17.83	0-2	0
	1	50	18.04	17.93	17.84		0
	1	99	18.01	17.81	17.70		0
	50	0	17.87	17.86	17.73	0-3	0
	50	25	17.91	17.89	17.79		0
	50	50	17.94	17.79	17.70		0
	100	0	17.93	17.83	17.76		0
256QAM	1	0	18.08	17.81	17.82	0-5	0
	1	50	17.95	17.96	17.85		0
	1	99	17.80	17.86	17.74		0
	50	0	17.87	17.83	17.79		0
	50	25	17.94	17.82	17.81		0
	50	50	17.93	17.82	17.72		0
	100	0	17.93	17.78	17.77		0

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9.3.14 LTE Band 41 Antenna B

Table 9-47
LTE Band 41 PC3 Antenna B Measured P_{Max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack Active) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	**24.24**	24.04	24.02	24.10	24.10	0	0
	1	50	24.19	24.01	24.01	24.19	24.08		0
	1	99	24.00	24.09	24.09	24.15	24.04		0
	50	0	23.27	23.02	23.07	23.14	23.03	0-1	1
	50	25	**23.35**	23.01	23.23	23.29	23.15		1
	50	50	23.18	23.03	23.16	23.23	23.12		1
	100	0	23.24	23.07	23.16	23.23	23.10		1
16QAM	1	0	23.32	22.90	22.86	23.31	23.12	0-1	1
	1	50	23.24	23.23	23.34	23.47	23.31		1
	1	99	23.09	23.02	22.99	23.25	23.17		1
	50	0	22.24	22.01	22.13	22.18	21.98	0-2	2
	50	25	22.33	22.01	22.16	22.28	22.15		2
	50	50	22.13	21.95	22.10	22.23	22.05		2
	100	0	22.24	21.96	22.14	22.21	22.11		2
64QAM	1	0	22.09	21.77	21.93	22.06	22.33	0-2	2
	1	50	22.44	21.98	22.20	22.20	22.15		2
	1	99	21.88	21.69	22.21	22.09	21.90		2
	50	0	21.23	20.98	21.13	21.12	21.00	0-3	3
	50	25	21.26	21.00	21.16	21.26	21.15		3
	50	50	21.21	20.98	21.17	21.17	21.12		3
	100	0	21.29	20.92	21.11	21.27	21.10		3
256QAM	1	0	19.12	18.89	19.10	19.03	19.15	0-5	5
	1	50	19.33	18.72	19.18	19.01	19.02		5
	1	99	19.10	18.83	18.89	19.09	18.95		5
	50	0	19.16	18.95	19.06	19.16	18.99		5
	50	25	19.22	18.99	19.14	19.21	19.11		5
	50	50	19.21	18.98	19.11	19.18	19.05		5
	100	0	19.21	18.92	19.10	19.23	19.13		5

Table 9-48
LTE Band 41 PC3 Antenna B Uplink Carrier Aggregation Measured P_{Max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack Active)

	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_41C	LTE B41	20	39750	2506.0	QPSK	1	99	LTE B41	20	39948	2525.8	QPSK	1	0	24.27	24.00

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Table 9-49
LTE Band 41 PC2 Antenna B Measured P_{Max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack Active) - 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	26.25	26.08	25.94	26.17	26.16	0	0
	1	50	26.20	26.17	26.04	26.20	26.21		0
	1	99	26.02	26.08	26.04	26.13	26.18		0
	50	0	25.34	25.05	25.06	25.18	25.02	0-1	0.6
	50	25	25.25	25.07	25.18	25.30	25.17		0.6
	50	50	25.16	25.09	25.15	25.26	25.15		0.6
	100	0	25.24	25.00	25.14	25.27	25.10		0.6

Table 9-50
LTE Band 41 PC2 Antenna B Uplink Carrier Aggregation Measured P_{Max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack Active)

	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_41C	LTE B41 PC2	20	39750	2506.0	QPSK	1	99	LTE B41 PC2	20	39948	2525.8	QPSK	1	0	26.30	26.02

Table 9-51
LTE Band 41 PC3 Antenna B Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	**20.41**	20.19	20.14	20.38	20.18	0	0
	1	50	20.30	20.13	20.27	20.39	20.18		0
	1	99	20.29	20.03	20.33	20.33	20.35		0
	50	0	**20.53**	20.25	20.32	20.40	20.26	0-1	0
	50	25	20.49	20.20	20.36	20.49	20.33		0
	50	50	20.38	20.21	20.36	20.43	20.32		0
	100	0	20.37	20.20	20.33	20.36	20.34		0
16QAM	1	0	20.43	19.79	20.21	20.44	20.37	0-1	0
	1	50	20.48	20.11	20.56	20.45	20.75		0
	1	99	20.24	20.14	20.57	20.23	20.26		0
	50	0	20.42	20.22	20.30	20.36	20.19	0-2	0
	50	25	20.48	20.20	20.35	20.47	20.37		0
	50	50	20.37	20.20	20.33	20.37	20.31		0
	100	0	20.44	20.19	20.39	20.45	20.26		0
64QAM	1	0	20.29	20.21	20.03	20.04	20.15	0-2	0
	1	50	20.49	20.19	20.39	20.05	20.14		0
	1	99	20.37	20.03	20.20	20.15	20.14		0
	50	0	20.41	20.19	20.24	20.46	20.23	0-3	0
	50	25	20.40	20.20	20.37	20.52	20.36		0
	50	50	20.36	20.18	20.34	20.44	20.26		0
	100	0	20.39	20.14	20.33	20.45	20.28		0
256QAM	1	0	19.19	18.72	19.10	18.99	18.89	0-5	1
	1	50	19.08	18.82	19.11	18.87	19.04		1
	1	99	19.13	19.14	18.87	19.04	18.85		1
	50	0	19.19	18.97	19.06	19.13	18.97		1
	50	25	19.23	18.98	19.17	19.24	19.11		1
	50	50	19.18	19.03	19.18	19.20	19.06		1
	100	0	19.22	18.98	19.14	19.21	19.06		1

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Table 9-52
LTE Band 41 PC3 Antenna B Uplink Carrier Aggregation Measured P_{Limit} for DSI = 3 (Hotspot Mode)

	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_41C	LTE B41	20	39750	2506.0	QPSK	1	99	LTE B41	20	39948	2525.8	QPSK	1	0	20.21	20.29

Table 9-53
LTE Band 41 PC2 Antenna B Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	22.14	22.01	21.78	22.08	22.01	0	0
	1	50	22.07	22.06	21.92	22.12	22.08		0
	1	99	21.98	21.96	22.02	22.06	22.05		0
	50	0	22.21	21.94	21.98	22.06	21.91	0-1	0
	50	25	22.17	21.96	22.09	22.16	22.07		0
	50	50	22.12	21.92	22.09	22.10	21.97		0
	100	0	22.10	21.85	22.09	22.10	22.01		0

Table 9-54
LTE Band 41 PC2 Antenna B Uplink Carrier Aggregation Measured P_{Limit} for DSI = 3 (Hotspot Mode)

	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_41C	LTE B41 PC2	20	39750	2506.0	QPSK	1	99	LTE B41 PC2	20	39948	2525.8	QPSK	1	0	21.95	21.98

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9.3.15 LTE Band 41 Antenna I

Table 9-55
LTE Band 41 PC3 Antenna I Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	22.30	22.33	22.19	22.30	22.10	0	0
	1	50	22.34	22.25	22.36	22.39	22.23		0
	1	99	22.28	22.19	**22.41**	22.31	22.25		0
	50	0	22.36	22.29	22.34	22.37	22.24	0-1	0
	50	25	22.42	22.32	22.44	22.42	22.32		0
	50	50	22.30	22.24	**22.46**	22.39	22.31		0
	100	0	22.33	22.29	22.40	22.39	22.30		0
16QAM	1	0	22.08	22.23	22.29	22.49	22.11	0-1	0
	1	50	22.60	22.45	22.44	22.63	22.36		0
	1	99	22.39	22.01	22.31	22.60	21.94		0
	50	0	22.11	22.05	22.13	22.17	22.00	0-2	0
	50	25	22.19	22.11	22.25	22.26	22.17		0
	50	50	22.13	22.04	22.15	22.23	22.11		0
	100	0	22.18	22.08	22.19	22.19	22.09		0
64QAM	1	0	21.87	21.95	21.99	22.12	22.01	0-2	0
	1	50	22.44	22.11	22.45	22.08	22.06		0
	1	99	21.69	21.88	22.38	22.10	21.98		0
	50	0	21.08	21.06	21.05	21.17	21.02	0-3	1
	50	25	21.21	21.12	21.20	21.23	21.15		1
	50	50	21.16	21.04	21.21	21.22	21.06		1
	100	0	21.18	21.12	21.16	21.20	21.07		1
256QAM	1	0	18.70	18.68	19.08	18.96	19.15	0-5	3
	1	50	19.09	19.08	19.28	19.17	19.18		3
	1	99	19.11	18.97	19.04	19.08	19.09		3
	50	0	19.11	19.03	19.09	19.18	19.02		3
	50	25	19.16	19.09	19.24	19.27	19.11		3
	50	50	19.11	19.11	19.20	19.22	19.09		3
	100	0	19.15	19.11	19.18	19.24	19.05		3

Table 9-56
LTE Band 41 PC3 Antenna I Uplink Carrier Aggregation Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active)

	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_41C	LTE B41	20	40620	2593.0	QPSK	50	50	LTE B41	20	40818	2612.8	QPSK	50	0	22.40	22.46
CA_41C	LTE B41	20	39750	2506.0	QPSK	1	99	LTE B41	20	39948	2525.8	QPSK	1	0	22.18	22.28

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Table 9-57
LTE Band 41 PC2 Antenna I Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 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	24.01	24.04	23.94	24.06	24.03	0	0
	1	50	24.02	24.11	23.99	24.14	24.03		0
	1	99	23.94	23.91	23.94	24.00	23.96		0
	50	0	24.00	23.96	24.06	24.08	23.90	0-1	0
	50	25	24.14	24.06	24.16	24.14	24.00		0
	50	50	24.05	24.00	24.11	24.17	24.00		0
	100	0	24.09	24.00	24.10	24.12	24.00		0

Table 9-58
LTE Band 41 PC2 Antenna I Uplink Carrier Aggregation Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active)

	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_41C	LTE B41 PC2	20	40620	2593.0	QPSK	50	50	LTE B41 PC2	20	40818	2612.8	QPSK	50	0	24.11	24.11
CA_41C	LTE B41 PC2	20	39750	2506.0	QPSK	1	99	LTE B41 PC2	20	39948	2525.8	QPSK	1	0	23.90	23.94

Table 9-59
LTE Band 41 PC3 Antenna I Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	20.35	20.18	20.27	**20.41**	20.15	0	0
	1	50	20.31	20.27	20.35	20.35	20.29		0
	1	99	20.17	20.00	20.38	20.28	20.24		0
	50	0	20.28	20.24	20.32	**20.48**	20.24	0-1	0
	50	25	20.41	20.36	20.44	20.42	20.36		0
	50	50	20.29	20.25	20.43	20.40	20.30		0
	100	0	20.38	20.28	20.39	20.40	20.31		0
16QAM	1	0	20.25	20.36	20.32	20.29	20.52	0-1	0
	1	50	20.61	20.39	20.43	20.37	20.44		0
	1	99	20.28	20.03	20.45	20.34	20.45		0
	50	0	20.33	20.23	20.30	20.33	20.23	0-2	0
	50	25	20.40	20.42	20.42	20.48	20.35		0
	50	50	20.36	20.30	20.40	20.41	20.32		0
	100	0	20.38	20.37	20.41	20.42	20.30		0
64QAM	1	0	20.32	20.19	20.34	20.14	20.21	0-2	0
	1	50	20.30	20.05	20.42	20.34	20.00		0
	1	99	20.04	19.87	20.34	20.33	19.96		0
	50	0	20.32	20.30	20.32	20.35	20.23	0-3	0
	50	25	20.39	20.36	20.42	20.47	20.35		0
	50	50	20.23	20.32	20.41	20.38	20.31		0
	100	0	20.41	20.30	20.43	20.41	20.29		0
256QAM	1	0	19.38	19.33	19.14	19.18	19.04	0-5	1
	1	50	19.16	19.11	19.20	19.36	19.11		1
	1	99	19.20	19.21	19.21	19.25	19.22		1
	50	0	19.05	19.02	19.15	19.15	19.07		1
	50	25	19.15	19.18	19.27	19.26	19.21		1
	50	50	19.13	19.10	19.17	19.24	19.08		1
	100	0	19.07	19.11	19.19	19.26	19.13		1

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Table 9-60
LTE Band 41 PC3 Antenna I Uplink Carrier Aggregation Measured P_{Limit} for DSI = 3 (Hotspot Mode)

	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_41C	LTE B41	20	41055	2636.5	QPSK	1	0	LTE B41	20	40857	2616.7	QPSK	1	99	20.19	20.41

Table 9-61
LTE Band 41 PC2 Antenna I Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	22.03	22.05	21.93	22.07	21.95	0	0
	1	50	22.06	22.14	21.93	22.16	22.07		0
	1	99	21.94	21.97	22.04	22.04	22.01		0
	50	0	22.03	22.01	22.02	22.09	21.92	0-1	0
	50	25	22.14	22.07	22.14	22.16	22.00		0
	50	50	22.08	21.98	22.12	22.12	21.99		0
	100	0	22.07	21.99	22.13	22.18	21.99		0

Table 9-62
LTE Band 41 PC2 Antenna I Uplink Carrier Aggregation Measured P_{Limit} for DSI = 3 (Hotspot Mode)

	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_41C	LTE B41 PC2	20	41055	2636.5	QPSK	1	0	LTE B41 PC2	20	40857	2616.7	QPSK	1	99	21.92	22.07

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9.3.16 LTE Band 48

Table 9-63
LTE Band 48 Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 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	19.88	19.73	19.81	19.86	0	0
	1	50	20.02	19.77	**20.04**	19.91		0
	1	99	19.87	19.74	19.83	19.85		0
	50	0	20.02	19.84	19.99	19.96	0-1	0
	50	25	20.02	19.89	**20.06**	19.96		0
	50	50	19.99	19.83	20.00	19.88		0
	100	0	19.85	19.87	20.03	19.94		0
16QAM	1	0	20.04	19.70	19.86	19.80	0-1	0
	1	50	20.01	19.90	20.04	19.97		0
	1	99	20.01	19.81	20.08	19.77		0
	50	0	20.03	19.85	19.99	19.92	0-2	0
	50	25	20.01	19.88	20.03	19.96		0
	50	50	19.99	19.80	20.01	19.90		0
	100	0	20.03	19.85	20.04	19.96		0
64QAM	1	0	20.01	19.79	19.76	19.72	0-2	0
	1	50	20.21	19.79	19.95	19.96		0
	1	99	19.98	19.84	19.82	19.78		0
	50	0	19.38	19.14	19.28	19.25	0-3	0.5
	50	25	19.34	19.20	19.36	19.29		0.5
	50	50	19.33	19.13	19.33	19.20		0.5
	100	0	19.31	19.17	19.35	19.23		0.5
256QAM	1	0	17.19	16.93	17.16	17.15	0-5	2.5
	1	50	17.26	17.07	17.26	17.13		2.5
	1	99	17.21	17.08	17.33	17.19		2.5
	50	0	17.34	17.15	17.27	17.24		2.5
	50	25	17.31	17.21	17.36	17.24		2.5
	50	50	17.30	17.15	17.31	17.19		2.5
	100	0	17.32	17.16	17.32	17.24		2.5

Table 9-64
LTE Band 48 Uplink Carrier Aggregation Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active)

	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	56207	3646.7	QPSK	1	99	LTE B48	20	56405	3666.5	QPSK	1	0	19.87	19.83
CA_48C	LTE B48	20	55340	3560.0	QPSK	50	50	LTE B48	20	55538	3579.8	QPSK	50	0	20.06	19.99

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Table 9-65
LTE Band 48 Measured P_{Limit} for DSI = 2 (Head) or DSI = 3 (Hotspot Mode) - 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	14.42	14.17	14.11	14.04	0	0
	1	50	14.40	14.04	14.01	14.19		0
	1	99	**14.43**	14.00	14.00	14.20		0
	50	0	14.60	14.30	14.23	14.21	0-1	0
	50	25	14.57	14.29	14.31	14.35		0
	50	50	**14.67**	14.17	14.22	14.42		0
	100	0	14.40	14.31	14.30	14.34		0
16QAM	1	0	14.54	14.26	14.13	14.07	0-1	0
	1	50	14.67	14.29	14.23	14.22		0
	1	99	14.31	14.35	14.10	14.37		0
	50	0	14.71	14.35	14.25	14.21	0-2	0
	50	25	14.59	14.33	14.33	14.39		0
	50	50	14.51	14.23	14.21	14.40		0
	100	0	14.55	14.29	14.28	14.35		0
64QAM	1	0	14.71	14.28	14.18	14.06	0-2	0
	1	50	14.70	14.18	14.25	14.19		0
	1	99	14.37	14.20	14.11	14.44		0
	50	0	14.71	14.32	14.19	14.22	0-3	0
	50	25	14.61	14.30	14.31	14.37		0
	50	50	14.49	14.24	14.20	14.41		0
	100	0	14.59	14.29	14.26	14.33		0
256QAM	1	0	14.57	14.23	14.10	14.07	0-5	0
	1	50	14.50	14.22	14.21	14.18		0
	1	99	14.23	14.09	14.25	14.45		0
	50	0	14.66	14.31	14.22	14.24		0
	50	25	14.54	14.28	14.26	14.35		0
	50	50	14.45	14.17	14.22	14.41		0
	100	0	14.54	14.27	14.26	14.34		0

Table 9-66
LTE Band 48 Uplink Carrier Aggregation Measured P_{Limit} for DSI = 2 (Head) or DSI = 3 (Hotspot Mode)

	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	55340	3560.0	QPSK	1	99	LTE B48	20	55538	3579.8	QPSK	1	0	14.27	14.43
CA_48C	LTE B48	20	55773	3603.3	QPSK	50	0	LTE B48	20	55575	3583.5	QPSK	50	50	14.50	14.30

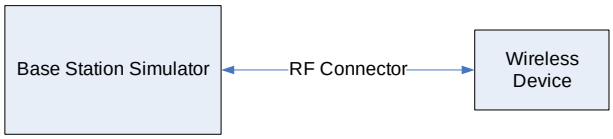

Figure 9-3
Power Measurement Setup

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9.4 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.

9.4.1 NR Band n71

Table 9-67
NR Band n71 Measured P_{Max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack Active) - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	24.51	0	0.0
	1	53	**24.55**		0.0
	1	104	24.45		0.0
	50	0	23.70	0-1	1.0
	50	28	**24.81**	0	0.0
	50	56	23.72	0-1	1.0
	100	0	23.73		1.0
DFT-s-OFDM 16QAM	1	1	23.76	0-1	1.0
CP-OFDM QPSK	1	1	23.12	0-1.5	1.5

Table 9-68
NR Band n71 Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	22.77	0	0.0
	1	53	**22.81**		0.0
	1	104	22.70		0.0
	50	0	22.90	0-1	0.0
	50	28	**23.01**	0	0.0
	50	56	22.91	0-1	0.0
	100	0	22.72		0.0
DFT-s-OFDM 16QAM	1	1	23.10	0-1	0.0
CP-OFDM QPSK	1	1	22.86	0-1.5	0.3

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9.4.2 NR Band n12

Table 9-69
NR Band n12 Measured P_{Max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack Active) - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	**24.30**	0	0.0
	1	40	24.16		0.0
	1	77	24.10		0.0
	36	0	23.40	0-1	1.0
	36	22	**24.32**	0	0.0
	36	43	23.27	0-1	1.0
	75	0	23.38		1.0
DFT-s-OFDM 16QAM	1	1	23.71	0-1	1.0
CP-OFDM QPSK	1	1	22.95	0-1.5	1.5

Table 9-70
NR Band n12 Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	**22.93**	0	0.0
	1	40	22.80		0.0
	1	77	22.73		0.0
	36	0	**22.99**	0-1	0.0
	36	22	22.96	0	0.0
	36	43	22.83	0-1	0.0
	75	0	22.90		0.0
DFT-s-OFDM 16QAM	1	1	23.30	0-1	0.0
CP-OFDM QPSK	1	1	22.63	0-1.5	0.5

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9.4.3 NR Band n26

Table 9-71
NR Band n26 Measured P_{Max} for DSI = 0 (Body-worn or Phablet), DSI = 2 (Head), or DSI = 4 (Earjack Active) - 20 MHz Bandwidth

NR Band n26 20 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	166300 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	24.16	0	0.0
	1	53	**24.28**		0.0
	1	104	23.95		0.0
	50	0	23.52	0-1	1.0
	50	28	**24.49**	0	0.0
	50	56	23.33	0-1	1.0
	100	0	23.50		1.0
DFT-s-OFDM 16QAM	1	1	23.75	0-1	1.0
CP-OFDM QPSK	1	1	22.88	0-1.5	1.5

Table 9-72
NR Band n26 Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 20 MHz Bandwidth

NR Band n26 20 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	166300 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	22.13	0	0.0
	1	53	**22.35**		0.0
	1	104	22.01		0.0
	50	0	**22.42**	0-1	0.0
	50	28	22.40	0	0.0
	50	56	22.24	0-1	0.0
	100	0	22.22		0.0
DFT-s-OFDM 16QAM	1	1	22.55	0-1	0.0
CP-OFDM QPSK	1	1	22.19	0-1.5	0.0

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9.4.4 NR Band n66 Antenna A

Table 9-73
NR Band n66 Antenna A Measured P_{Max} for DSI = 2 (Head) - 40 MHz Bandwidth

NR Band n66 40 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	24.27	0	0.0
	1	108	24.50		0.0
	1	214	**24.73**		0.0
	108	0	23.45	0-1	1.0
	108	54	**24.58**	0	0.0
	108	108	23.73	0-1	1.0
	216	0	23.56		1.0
DFT-s-OFDM 16QAM	1	1	23.15	0-1	1.0
CP-OFDM QPSK	1	1	22.81	0-1.5	1.5

Table 9-74
NR Band n66 Antenna A Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 40 MHz Bandwidth

NR Band n66 40 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	**19.78**	0	0.0
	1	108	19.70		0.0
	1	214	19.64		0.0
	108	0	19.88	0-1	0.0
	108	54	19.85	0	0.0
	108	108	**19.90**	0-1	0.0
	216	0	19.77		0.0
DFT-s-OFDM 16QAM	1	1	20.17	0-1	0.0
CP-OFDM QPSK	1	1	19.85	0-1.5	0.0

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Table 9-75
NR Band n66 Antenna A Measured P_{Limit} for DSI = 3 (Hotspot Mode) – 40 MHz Bandwidth

NR Band n66 40 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	**17.89**	0	0.0
	1	108	17.71		0.0
	1	214	17.76		0.0
	108	0	17.93	0-1	0.0
	108	54	17.94	0	0.0
	108	108	**17.96**	0-1	0.0
	216	0	17.87		0.0
DFT-s-OFDM 16QAM	1	1	18.33	0-1	0.0
CP-OFDM QPSK	1	1	17.91	0-1.5	0.0

9.4.5 NR Band n66 Antenna I

Table 9-76
NR Band n66 Antenna I Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) - 40 MHz Bandwidth

NR Band n66 40 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	**21.55**	0	0.0
	1	108	21.51		0.0
	1	214	21.43		0.0
	108	0	21.43	0-1	0.0
	108	54	**21.49**	0	0.0
	108	108	21.48	0-1	0.0
	216	0	21.47		0.0
DFT-s-OFDM 16QAM	1	1	21.57	0-1	0.0
CP-OFDM QPSK	1	1	21.52	0-1.5	0.0

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Table 9-77
NR Band n66 Antenna I Measured P_{Limit} for DSI = 2 (Head) or DSI = 3 (Hotspot Mode) - 40 MHz Bandwidth

NR Band n66 40 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	**17.21**	0	0.0
	1	108	17.20		0.0
	1	214	17.09		0.0
	108	0	17.37	0-1	0.0
	108	54	17.37	0	0.0
	108	108	**17.38**	0-1	0.0
	216	0	17.19		0.0
DFT-s-OFDM 16QAM	1	1	17.62	0-1	0.0
CP-OFDM QPSK	1	1	17.33	0-1.5	0.0

9.4.6 NR Band n25 Antenna A

Table 9-78
NR Band n25 Antenna A Measured P_{Max} for DSI = 2 (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	24.85	0	0.0
	1	108	24.90		0.0
	1	214	**25.13**		0.0
	108	0	24.10	0-1	1.0
	108	54	**25.13**	0	0.0
	108	108	24.18	0-1	1.0
	216	0	24.16		1.0
DFT-s-OFDM 16QAM	1	1	24.19	0-1	1.0
CP-OFDM QPSK	1	1	23.44	0-1.5	1.5

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Table 9-79
NR Band n25 Antenna A Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	21.69	0	0.0
	1	108	21.65		0.0
	1	214	**21.88**		0.0
	108	0	21.92	0-1	0.0
	108	54	21.89	0	0.0
	108	108	**21.98**	0-1	0.0
	216	0	21.85		0.0
DFT-s-OFDM 16QAM	1	1	22.16	0-1	0.0
CP-OFDM QPSK	1	1	21.84	0-1.5	0.0

Table 9-80
NR Band n25 Antenna A Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	17.96	0	0.0
	1	108	18.13		0.0
	1	214	**18.24**		0.0
	108	0	18.25	0-1	0.0
	108	54	18.27	0	0.0
	108	108	**18.39**	0-1	0.0
	216	0	18.20		0.0
DFT-s-OFDM 16QAM	1	1	18.46	0-1	0.0
CP-OFDM QPSK	1	1	18.15	0-1.5	0.0

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9.4.7 NR Band n25 Antenna I

Table 9-81
NR Band n25 Antenna I Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) - 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	20.85	0	0.0
	1	108	21.00		0.0
	1	214	**21.08**		0.0
	108	0	20.95	0-1	0.0
	108	54	20.93	0	0.0
	108	108	**21.01**	0-1	0.0
	216	0	20.94		0.0
DFT-s-OFDM 16QAM	1	1	21.16	0-1	0.0
CP-OFDM QPSK	1	1	21.12	0-1.5	0.0

Table 9-82
NR Band n25 Antenna I Measured P_{Limit} for DSI = 2 (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	14.31	0	0.0
	1	108	14.36		0.0
	1	214	**14.38**		0.0
	108	0	14.39	0-1	0.0
	108	54	14.35	0	0.0
	108	108	**14.47**	0-1	0.0
	216	0	14.36		0.0
DFT-s-OFDM 16QAM	1	1	14.34	0-1	0.0
CP-OFDM QPSK	1	1	14.32	0-1.5	0.0

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Table 9-83
NR Band n25 Antenna I Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	14.64	0	0.0
	1	108	14.61		0.0
	1	214	**14.79**		0.0
	108	0	14.74	0-1	0.0
	108	54	14.67	0	0.0
	108	108	**14.77**	0-1	0.0
	216	0	14.71		0.0
DFT-s-OFDM 16QAM	1	1	14.88	0-1	0.0
CP-OFDM QPSK	1	1	14.83	0-1.5	0.0

9.4.8 NR Band n30 Antenna B

Table 9-84
NR Band n30 Antenna B Measured P_{Max} for DSI = 2 (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	23.24	0	0.0
	1	26	**23.85**		0.0
	1	50	23.65		0.0
	25	0	22.82	0-1	1.0
	25	14	**23.79**	0	0.0
	25	27	22.69	0-1	1.0
	50	0	22.68		1.0
DFT-s-OFDM 16QAM	1	1	22.48	0-1	1.0
CP-OFDM QPSK	1	1	22.41	0-1.5	1.5

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Table 9-85
NR Band n30 Antenna B Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	21.39	0	0.0
	1	26	**21.41**		0.0
	1	50	21.18		0.0
	25	0	**21.37**	0-1	0.0
	25	14	21.35	0	0.0
	25	27	21.23	0-1	0.0
	50	0	21.23		0.0
DFT-s-OFDM 16QAM	1	1	21.50	0-1	0.0
CP-OFDM QPSK	1	1	21.41	0-1.5	0.0

Table 9-86
NR Band n30 Antenna B Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	17.76	0	0.0
	1	26	**17.78**		0.0
	1	50	17.66		0.0
	25	0	17.75	0-1	0.0
	25	14	**17.76**	0	0.0
	25	27	17.75	0-1	0.0
	50	0	17.71		0.0
DFT-s-OFDM 16QAM	1	1	17.80	0-1	0.0
CP-OFDM QPSK	1	1	17.73	0-1.5	0.0

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9.4.1 NR Band n30 Antenna I

Table 9-87
NR Band n30 Antenna I Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	20.71	0	0.0
	1	26	20.73		0.0
	1	50	**20.85**		0.0
	25	0	20.76	0-1	0.0
	25	14	**20.83**	0	0.0
	25	27	20.79	0-1	0.0
	50	0	20.82		0.0
DFT-s-OFDM 16QAM	1	1	20.95	0-1	0.0
CP-OFDM QPSK	1	1	20.96	0-1.5	0.0

Table 9-88
NR Band n30 Antenna I Measured P_{Limit} for DSI = 2 (Head) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	14.12	0	0.0
	1	26	**14.22**		0.0
	1	50	14.16		0.0
	25	0	14.21	0-1	0.0
	25	14	**14.31**	0	0.0
	25	27	14.28	0-1	0.0
	50	0	14.20		0.0
DFT-s-OFDM 16QAM	1	1	14.55	0-1	0.0
CP-OFDM QPSK	1	1	14.21	0-1.5	0.0

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Table 9-89
NR Band n30 Antenna I Measured P_{Limit} for DSI =3 (Hotspot Mode) - 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	16.38	0	0.0
	1	26	16.42		0.0
	1	50	**16.47**		0.0
	25	0	**16.41**	0-1	0.0
	25	14	16.36	0	0.0
	25	27	16.36	0-1	0.0
	50	0	16.35		0.0
DFT-s-OFDM 16QAM	1	1	16.59	0-1	0.0
CP-OFDM QPSK	1	1	16.55	0-1.5	0.0

9.4.1 NR Band n7 Antenna B

Table 9-90
NR Band n7 Antenna B Measured P_{Max} for DSI = 2 (Head) - 40 MHz Bandwidth

NR Band n7 40 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	**24.57**	0	0.0
	1	108	24.45		0.0
	1	214	24.44		0.0
	108	0	23.56	0-1	1.0
	108	54	**24.41**	0	0.0
	108	108	23.43	0-1	1.0
	216	0	23.50		1.0
DFT-s-OFDM 16QAM	1	1	23.12	0-1	1.0
CP-OFDM QPSK	1	1	23.08	0-1.5	1.5

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Table 9-91
NR Band n7 Antenna B Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 40 MHz Bandwidth

NR Band n7 40 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	**20.89**	0	0.0
	1	108	20.77		0.0
	1	214	20.71		0.0
	108	0	**20.95**	0-1	0.0
	108	54	20.84	0	0.0
	108	108	20.87	0-1	0.0
	216	0	20.85		0.0
DFT-s-OFDM 16QAM	1	1	21.19	0-1	0.0
CP-OFDM QPSK	1	1	20.88	0-1.5	0.0

Table 9-92
NR Band n7 Antenna B Measured P_{Limit} for DSI = 3 (Hotspot Mode) – 40 MHz Bandwidth

NR Band n7 40 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	**19.73**	0	0.0
	1	108	19.62		0.0
	1	214	19.57		0.0
	108	0	**19.80**	0-1	0.0
	108	54	19.77	0	0.0
	108	108	19.77	0-1	0.0
	216	0	19.70		0.0
DFT-s-OFDM 16QAM	1	1	20.03	0-1	0.0
CP-OFDM QPSK	1	1	19.80	0-1.5	0.0

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9.4.2 NR Band n41 Antenna I

Table 9-93
NR Band n41 Antenna I Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) - 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	20.02	0	0.0
	1	137	**20.17**		0.0
	1	271	19.99		0.0
	135	0	20.03	0-1	0.0
	135	69	**20.13**	0	0.0
	135	138	20.07	0-1	0.0
	270	0	20.05		0.0
DFT-s-OFDM 16QAM	1	1	19.77	0-1	0.0
CP-OFDM QPSK	1	1	19.97	0-1.5	0.0

Table 9-94
NR Band n41 Antenna I Measured P_{Limit} for DSI = 2 (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	13.13	0	0.0
	1	137	**13.23**		0.0
	1	271	13.03		0.0
	135	0	13.20	0-1	0.0
	135	69	13.24	0	0.0
	135	138	**13.26**	0-1	0.0
	270	0	13.16		0.0
DFT-s-OFDM 16QAM	1	1	13.27	0-1	0.0
CP-OFDM QPSK	1	1	13.23	0-1.5	0.0

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Table 9-95
NR Band n41 Antenna I Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	18.10	0	0.0
	1	137	**18.12**		0.0
	1	271	18.07		0.0
	135	0	18.04	0-1	0.0
	135	69	**18.07**	0	0.0
	135	138	18.02	0-1	0.0
	270	0	18.01		0.0
DFT-s-OFDM 16QAM	1	1	18.14	0-1	0.0
CP-OFDM QPSK	1	1	17.98	0-1.5	0.0

9.4.3 NR Band n41 Antenna B, F, C

Table 9-96
NR Band n41 Antenna B, F, C Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 3 (Hotspot Mode), or DSI = 4 (Earjack Active) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth		
	Channel	
Antenna	518598 (2592.99 MHz) Conducted Power [dBm]	
SRS #2 Ant B	17.01	
SRS #3 Ant F	15.06	
SRS #4 Ant C	15.97	

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Table 9-97
NR Band n41 Antenna B, F, C Measured P_{Limit} for DSI = 2 (Head) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth	
	Channel
Antenna	518598 (2592.99 MHz)
	Conducted Power [dBm]
SRS #2 Ant B	11.99
SRS #3 Ant F	10.13
SRS #4 Ant C	11.10

9.4.1 NR Band n48 Antenna F

Table 9-98
NR Band n48 Antenna F Measured P_{Limit} for DSI = 0 (Body-worn or Phablet), or DSI = 4 (Earjack Active) - 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	17.83	17.51	17.52	0	0.0
	1	53	17.87	17.24	17.63		0.0
	1	104	**17.98**	17.40	17.75		0.0
	50	0	**17.86**	17.38	17.59	0-1	0.0
	50	28	17.78	17.29	17.66	0	0.0
	50	56	17.70	17.30	17.80	0-1	0.0
	100	0	17.85	17.29	17.66		0.0
DFT-s-OFDM 16QAM	1	1	17.82	17.50	17.41	0-1	0.0
CP-OFDM QPSK	1	1	17.71	17.47	17.70	0-1.5	0.0

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Table 9-99
NR Band n48 Antenna F Measured P_{Limit} for DSI = 2 (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	12.59	12.15	12.00	0	0.0
	1	53	12.45	12.06	12.06		0.0
	1	104	**12.73**	12.04	12.15		0.0
	50	0	12.39	12.25	12.03	0-1	0.0
	50	28	12.40	12.16	12.07	0	0.0
	50	56	**12.53**	12.18	12.17	0-1	0.0
	100	0	12.42	12.13	12.06		0.0
DFT-s-OFDM 16QAM	1	1	12.13	12.01	11.95	0-1	0.0
CP-OFDM QPSK	1	1	12.33	12.24	11.80	0-1.5	0.0

Table 9-100
NR Band n48 Antenna F Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	**13.92**	13.77	13.77	0	0.0
	1	53	13.76	13.49	13.84		0.0
	1	104	13.77	13.68	13.80		0.0
	50	0	**13.90**	13.51	13.79	0-1	0.0
	50	28	13.73	13.47	13.89	0	0.0
	50	56	13.65	13.74	13.80	0-1	0.0
	100	0	13.69	13.52	13.88		0.0
DFT-s-OFDM 16QAM	1	1	13.66	13.51	13.41	0-1	0.0
CP-OFDM QPSK	1	1	13.75	13.50	13.64	0-1.5	0.0

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9.4.1 NR Band n48 Antenna I, E, C

Table 9-101
NR Band n48 Antenna I, E, C Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) – 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 I	**11.95**	11.81	11.72
SRS #3 Ant E	**14.64**	14.61	14.57
SRS #4 Ant C	**16.25**	16.17	16.00

Table 9-102
NR Band n48 Antenna I, E, C Measured P_{Limit} for DSI = 2 (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 I	**6.72**	6.69	6.60
SRS #3 Ant E	**9.63**	9.57	9.44
SRS #4 Ant C	**11.15**	11.14	10.95

Table 9-103
NR Band n48 Antenna I, E, C Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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 I	**7.87**	7.74	7.69
SRS #3 Ant E	**10.56**	10.54	10.51
SRS #4 Ant C	**12.20**	12.19	12.14

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9.4.2 NR Band n77 DoD Antenna F

Table 9-104
NR Band n77 DoD Antenna F Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) - 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	15.81	0	0.0
	1	137	15.76		0.0
	1	271	**16.23**		0.0
	135	0	15.80	0-1	0.0
	135	69	15.78	0	0.0
	135	138	**15.88**	0-1	0.0
	270	0	15.85		0.0
DFT-s-OFDM 16QAM	1	1	15.55	0-1	0.0
CP-OFDM QPSK	1	1	15.65	0-1.5	0.0

Table 9-105
NR Band n77 DoD Antenna F Measured P_{Limit} for DSI = 2 (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	11.98	0	0.0
	1	137	11.91		0.0
	1	271	**12.28**		0.0
	135	0	11.81	0-1	0.0
	135	69	11.85	0	0.0
	135	138	**11.93**	0-1	0.0
	270	0	11.91		0.0
DFT-s-OFDM 16QAM	1	1	11.90	0-1	0.0
CP-OFDM QPSK	1	1	11.77	0-1.5	0.0

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Table 9-106
NR Band n77 DoD Antenna F Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	13.36	0	0.0
	1	137	13.32		0.0
	1	271	**13.71**		0.0
	135	0	13.34	0-1	0.0
	135	69	13.36	0	0.0
	135	138	**13.46**	0-1	0.0
	270	0	13.42		0.0
DFT-s-OFDM 16QAM	1	1	13.31	0-1	0.0
CP-OFDM QPSK	1	1	13.28	0-1.5	0.0

9.4.1 NR Band n77 DoD Antenna I, E, C

Table 9-107
NR Band n77 DoD Antenna I, E, C Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth	
	Channel
Antenna	633334 (3500.01 MHz) Conducted Power [dBm]
SRS #2 Ant I	**14.08**
SRS #3 Ant E	**14.81**
SRS #4 Ant C	**14.30**

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Table 9-108
NR Band n77 DoD Antenna I, E, C Measured P_{Limit} for DSI = 2 (Head) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth	
	Channel
Antenna	633334 (3500.01 MHz)
	Conducted Power [dBm]
SRS #2 Ant I	10.10
SRS #3 Ant E	10.80
SRS #4 Ant C	10.30

Table 9-109
NR Band n77 DoD Antenna I, E, C Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth	
	Channel
Antenna	633334 (3500.01 MHz)
	Conducted Power [dBm]
SRS #2 Ant I	11.59
SRS #3 Ant E	12.36
SRS #4 Ant C	11.80

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9.4.2 NR Band n77 C-Band Antenna F

Table 9-110
NR Band n77 C-Band Antenna F Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) - 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	16.19	15.89	0	0.0
	1	137	16.73	16.15		0.0
	1	271	**17.13**	16.19		0.0
	135	0	16.54	16.15	0-1	0.0
	135	69	16.77	16.19	0	0.0
	135	138	**16.91**	16.25	0-1	0.0
	270	0	16.72	16.14		0.0
DFT-s-OFDM 16QAM	1	1	16.13	16.05	0-1	0.0
CP-OFDM QPSK	1	1	16.22	16.08	0-1.5	0.0

Table 9-111
NR Band n77 C-Band Antenna F Measured P_{Limit} for DSI = 2 (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	12.29	11.88	0	0.0
	1	137	12.81	12.17		0.0
	1	271	**13.28**	12.09		0.0
	135	0	12.57	12.06	0-1	0.0
	135	69	12.80	12.17	0	0.0
	135	138	**13.05**	12.19	0-1	0.0
	270	0	12.74	12.13		0.0
DFT-s-OFDM 16QAM	1	1	12.31	12.04	0-1	0.0
CP-OFDM QPSK	1	1	12.29	11.96	0-1.5	0.0

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Table 9-112
NR Band n77 C-Band Antenna F Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 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	13.68	13.37	0	0.0
	1	137	14.17	13.59		0.0
	1	271	**14.63**	13.52		0.0
	135	0	14.03	13.52	0-1	0.0
	135	69	14.26	13.62	0	0.0
	135	138	**14.40**	13.64	0-1	0.0
	270	0	14.20	13.61		0.0
DFT-s-OFDM 16QAM	1	1	13.63	13.57	0-1	0.0
CP-OFDM QPSK	1	1	13.75	13.43	0-1.5	0.0

9.4.3 NR Band n77 C-Band Antenna I, E, C

Table 9-113
NR Band n77 C-Band Antenna I, E, C Measured P_{Limit} for DSI = 0 (Body-worn or Phablet) or DSI = 4 (Earjack Active) - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth		
	Channel	
Antenna	650000 (3750 MHz)	662000 (3930 MHz)
	Conducted Power [dBm]	
SRS #2 Ant I	**15.19**	15.10
SRS #3 Ant E	**14.69**	14.36
SRS #4 Ant C	**14.83**	14.79

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Table 9-114
NR Band n77 C-Band Antenna I, E, C Measured P_{Limit} for DSI = 2 (Head) - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth		
	Channel	
Antenna	650000 (3750 MHz)	662000 (3930 MHz)
	Conducted Power [dBm]	
SRS #2 Ant I	**10.85**	10.66
SRS #3 Ant E	**10.75**	10.27
SRS #4 Ant C	**10.85**	10.53

Table 9-115
NR Band n77 C-Band Antenna I, E, C Measured P_{Limit} for DSI = 3 (Hotspot Mode) - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth		
	Channel	
Antenna	650000 (3750 MHz)	662000 (3930 MHz)
	Conducted Power [dBm]	
SRS #2 Ant I	**12.48**	12.36
SRS #3 Ant E	**12.20**	11.81
SRS #4 Ant C	**12.32**	12.06

Figure 9-4
Power Measurement Setup – NR FDD

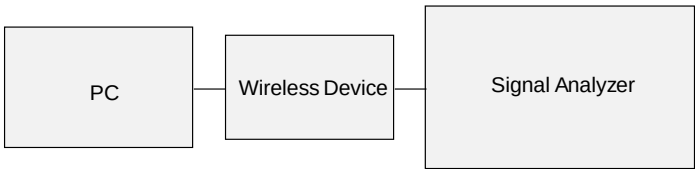

Figure 9-5
Power Measurement Setup – NR TDD

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9.5 WLAN Conducted Powers

Table 9-116
2.4 GHz WLAN Measured P_{Max} Average RF Power for DSI = 0 (Body-worn or Phablet), DSI = 3 (Hotspot) or DSI = 4 (Earjack Active) – Ant 2

2.4GHz Conducted Power [dBm]						
Freq [MHz]	Channel	IEEE Transmission Mode				
		802.11b	802.11g	802.11n	802.11ac	802.11ax
		Average	Average	Average	Average	Average
2412	1	18.63	17.49	17.60	16.60	16.66
2437	6	18.65	17.82	17.73	16.71	16.76
2462	11	18.81	17.67	17.62	16.78	16.58

Table 9-117
2.4 GHz WLAN Measured P_{Max} Average RF Power for DSI = 0 (Body-worn or Phablet), DSI = 3 (Hotspot) or DSI = 4 (Earjack Active) – MIMO

2.4GHz 802.11b Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
2412	1	18.91	18.99	21.96
2437	6	18.59	18.83	21.72
2462	11	18.61	18.90	21.77

Table 9-118
2.4 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 2 (Head) – Ant 2

2.4GHz Conducted Power [dBm]						
Freq [MHz]	Channel	IEEE Transmission Mode				
		802.11b	802.11g	802.11n	802.11ac	802.11ax
		Average	Average	Average	Average	Average
2412	1	11.89	11.92	11.85	11.68	11.65
2437	6	11.88	11.85	11.74	11.92	11.59
2462	11	11.77	11.77	11.92	11.82	11.72

Table 9-119
2.4 GHz WLAN Measured P_{Limit} Average RF Power for DSI = 2 (Head) – MIMO

2.4GHz 802.11n Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
2412	1	9.00	8.55	11.79
2437	6	8.93	8.74	11.85
2462	11	8.99	8.86	11.94

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Table 9-120
5 GHz WLAN Measured P_{Max} Average RF Power for all DSI – MIMO

5GHz (20MHz) 802.11n Conducted Power [dBm]				
Freq [MHz]	**Channel**	**ANT1**	**ANT2**	**MIMO**
5180	36	15.67	15.46	18.58
5200	40	15.61	15.52	18.58
5220	44	15.99	15.86	18.94
5240	48	15.98	15.78	18.89
5260	52	15.73	15.97	18.86
5280	56	15.69	15.87	18.79
5300	60	15.77	15.72	18.76
5320	64	15.84	15.67	18.77
5500	100	15.99	15.50	18.76
5600	120	15.96	15.94	18.96
5620	124	16.02	15.96	19.00
5720	144	15.76	15.94	18.86
5745	149	15.98	15.57	18.79
5785	157	15.93	15.28	18.63
5825	165	15.95	15.78	18.88
5845	169	15.87	15.63	18.76
5865	173	15.83	15.49	18.67
5885	177	15.82	15.66	18.75

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.

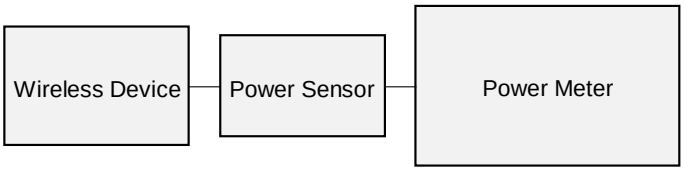

Figure 9-6
Power Measurement Setup

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9.6 Bluetooth Conducted Powers

Table 9-121
Bluetooth Measured P_{Max} Average RF Power for all DSI – Antenna 1

Frequency [MHz]	Data Rate [Mbps]	Mod.	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	1.0	GFSK	0	15.03	31.851
2441	1.0	GFSK	39	16.40	43.612
2480	1.0	GFSK	78	15.12	32.482
Frequency [MHz]	**Data Rate [Mbps]**	**Channel No.**	**Bluetooth Mode**	**Peak Conducted Power**	
				[dBm]	**[mW]**
2402	1.0	0	LE	15.26	33.574
2440	1.0	19	LE	16.42	43.863
2480	1.0	39	LE	15.17	32.847

Table 9-122
Bluetooth Measured P_{Max} Average RF Power for all DSI – Antenna 2

Frequency [MHz]	Data Rate [Mbps]	Mod.	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	1.0	GFSK	0	16.59	45.556
2441	1.0	GFSK	39	16.74	47.227
2480	1.0	GFSK	78	15.49	35.419
Frequency [MHz]	**Data Rate [Mbps]**	**Channel No.**	**Bluetooth Mode**	**Peak Conducted Power**	
				[dBm]	**[mW]**
2402	1.0	0	LE	18.29	67.391
2440	1.0	19	LE	18.23	66.481
2480	1.0	39	LE	17.12	51.523

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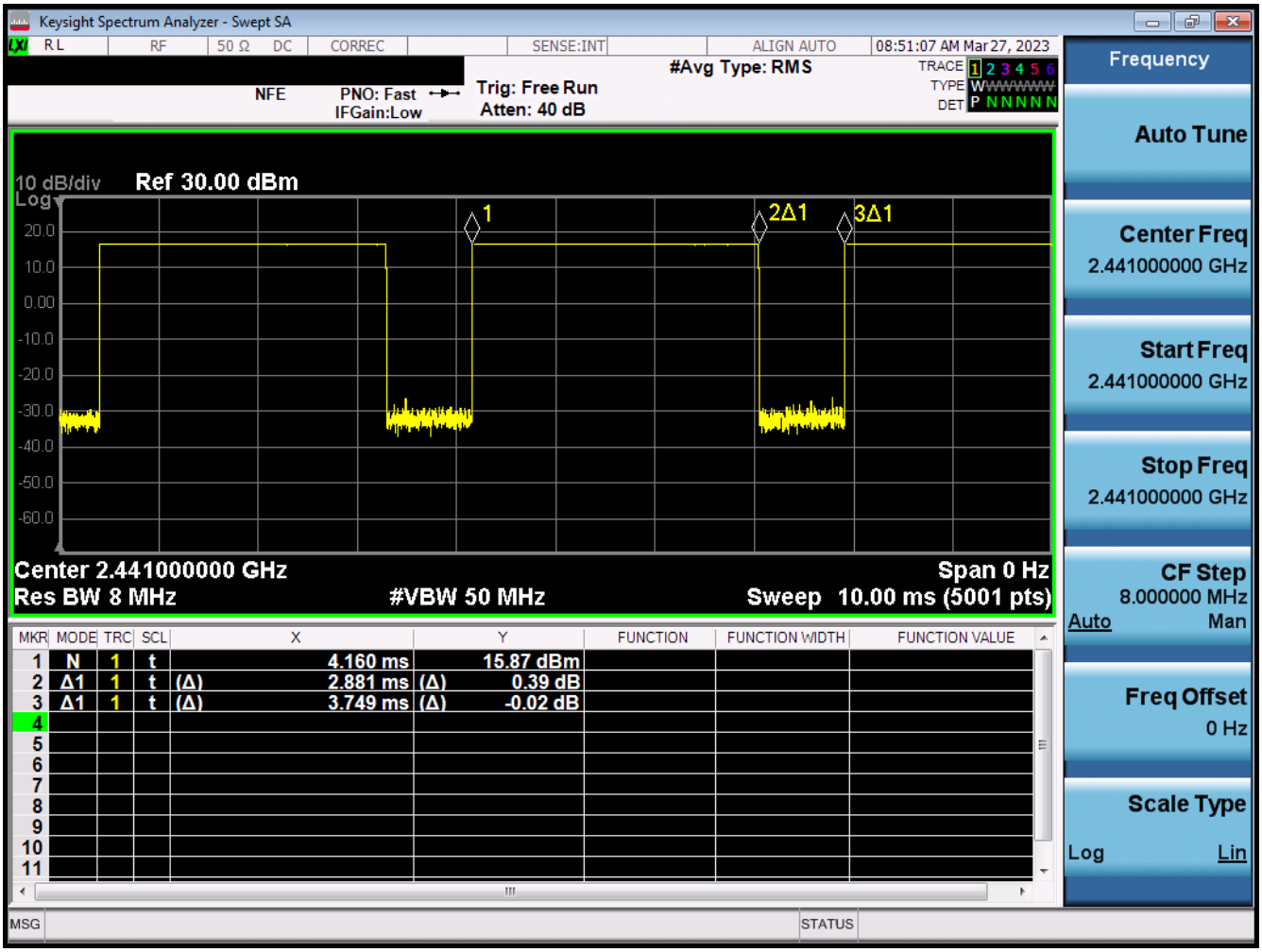

Figure 9-7
Bluetooth Antenna 1 Transmission Plot

Equation 9-1
Bluetooth Antenna 1 Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.881ms}{3.749ms} * 100\% = 76.8\%$$

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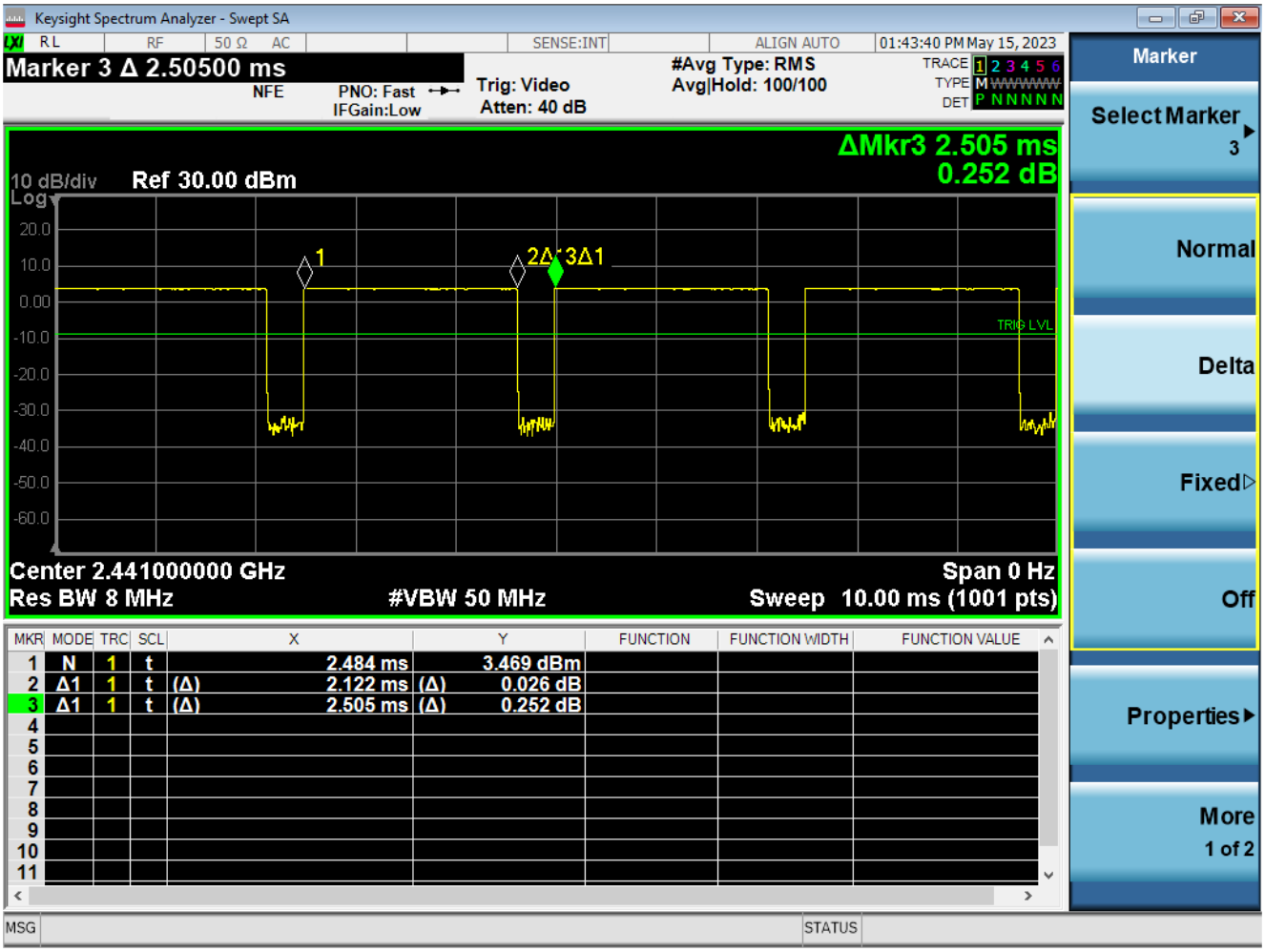

Figure 9-8
Bluetooth Low Energy Antenna 1 Transmission Plot

Equation 9-2
Bluetooth Low Energy Antenna 1 Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.122ms}{2.505ms} * 100\% = 84.7\%$$

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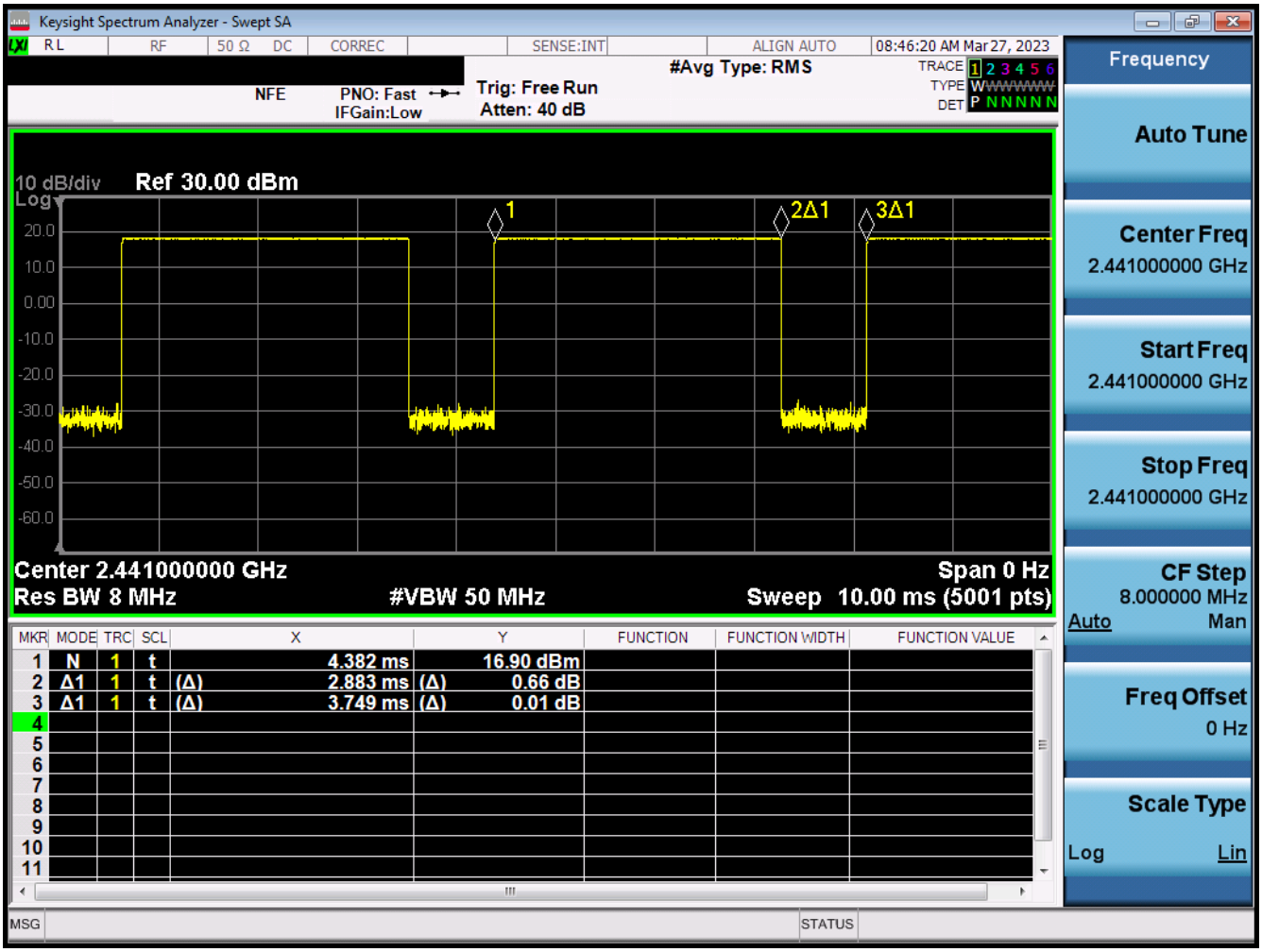

Figure 9-9
Bluetooth Antenna 2 Transmission Plot

Equation 9-3
Bluetooth Antenna 2 Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.883ms}{3.749ms} * 100\% = 76.9\%$$

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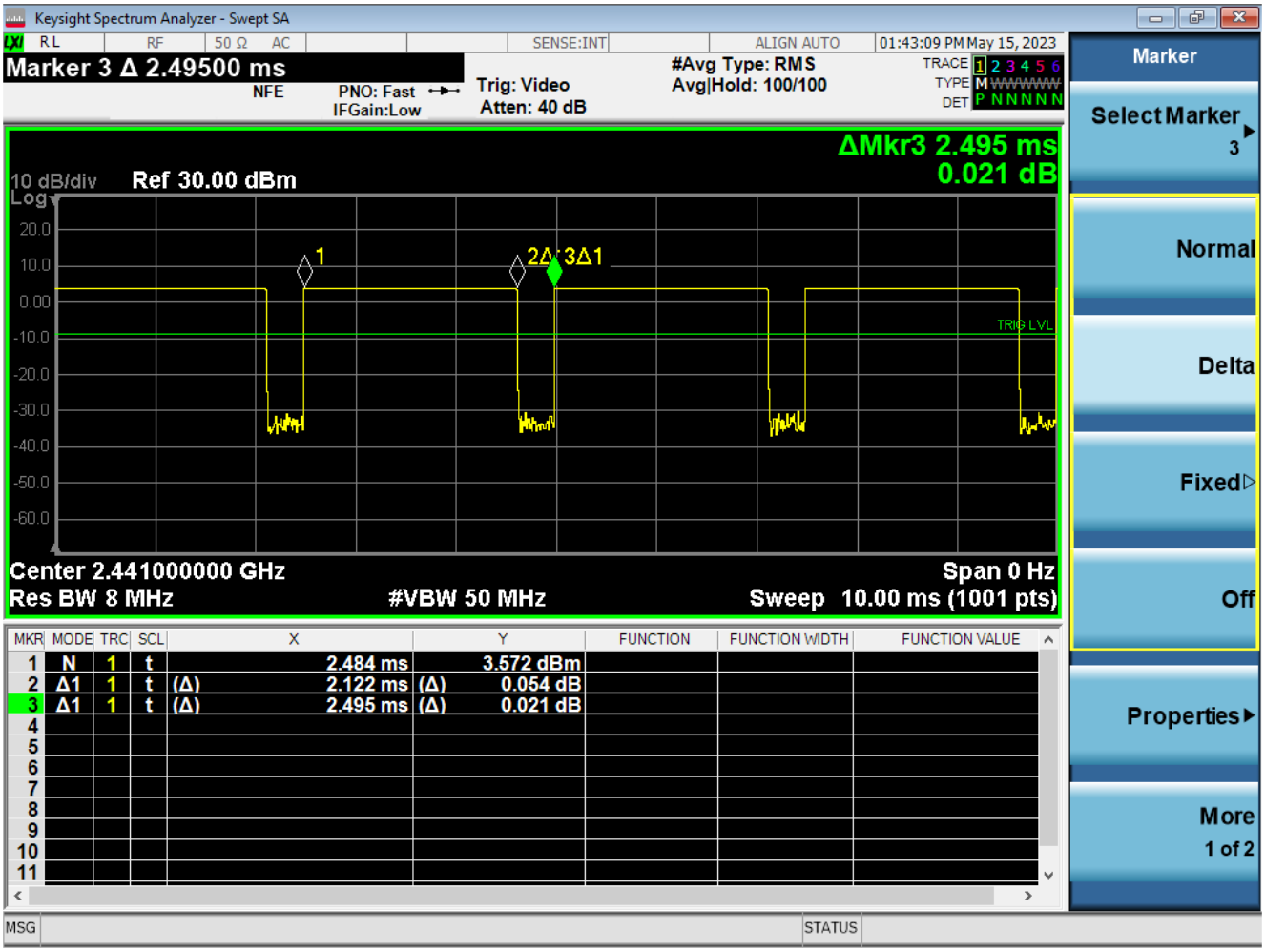

Figure 9-10
Bluetooth Low Energy Antenna 2 Transmission Plot

Equation 9-4
Bluetooth Low Energy Antenna 2 Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.122ms}{2.495ms} * 100\% = 85.1\%$$

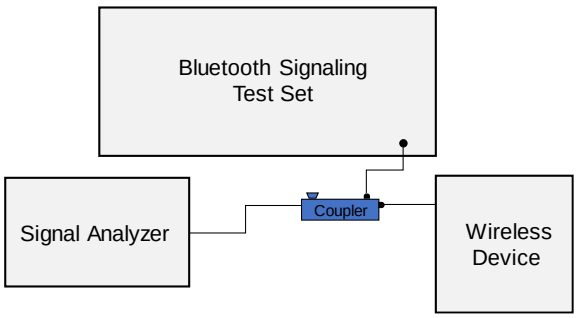

Figure 9-11
Power Measurement Setup

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10 SYSTEM VERIFICATION

10.1 Tissue Verification

Table 10-1
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
04/25/2023	30 Head	21.1	12	0.717	57.149	0.750	55.000	-4.40%	3.91%
			13	0.717	56.637	0.750	55.000	-4.40%	2.98%
			14	0.717	56.227	0.750	55.000	-4.40%	2.23%
03/16/2023	750 Head	21.5	680	0.847	42.550	0.888	42.305	-4.62%	0.58%
			695	0.852	42.504	0.889	42.227	-4.16%	0.66%
			700	0.854	42.489	0.889	42.201	-3.94%	0.68%
			710	0.857	42.463	0.890	42.149	-3.71%	0.74%
			725	0.862	42.422	0.891	42.071	-3.25%	0.83%
			750	0.871	42.365	0.894	41.942	-2.57%	1.01%
			770	0.878	42.315	0.895	41.838	-1.90%	1.14%
			785	0.883	42.267	0.896	41.760	-1.45%	1.21%
			800	0.889	42.217	0.897	41.682	-0.89%	1.28%
03/20/2023	750 Head	21.9	680	0.896	42.184	0.888	42.305	0.90%	-0.29%
			695	0.900	42.112	0.889	42.227	1.24%	-0.27%
			700	0.902	42.090	0.889	42.201	1.46%	-0.26%
			710	0.905	42.050	0.890	42.149	1.69%	-0.23%
			725	0.911	41.992	0.891	42.071	2.24%	-0.19%
			750	0.920	41.898	0.894	41.942	2.91%	-0.10%
			770	0.926	41.829	0.895	41.838	3.46%	-0.02%
			785	0.931	41.789	0.896	41.760	3.91%	0.07%
			800	0.936	41.756	0.897	41.682	4.35%	0.18%
04/17/2023	750 Head	21.0	680	0.861	40.501	0.888	42.305	-3.04%	-4.26%
			695	0.866	40.480	0.889	42.227	-2.59%	-4.14%
			700	0.868	40.473	0.889	42.201	-2.36%	-4.09%
			710	0.872	40.457	0.890	42.149	-2.02%	-4.01%
			725	0.877	40.422	0.891	42.071	-1.57%	-3.92%
			750	0.887	40.320	0.894	41.942	-0.78%	-3.87%
			770	0.893	40.241	0.895	41.838	-0.22%	-3.82%
			785	0.898	40.206	0.896	41.760	0.22%	-3.72%
			800	0.903	40.175	0.897	41.682	0.67%	-3.62%
03/14/2023	835 Head	19.8	815	0.860	42.645	0.898	41.594	-4.23%	2.53%
			820	0.862	42.631	0.899	41.578	-4.12%	2.53%
			835	0.869	42.606	0.900	41.500	-3.44%	2.67%
			850	0.875	42.586	0.916	41.500	-4.48%	2.62%
03/20/2023	835 Head	21.8	815	0.896	41.380	0.898	41.594	-0.22%	-0.51%
			820	0.898	41.364	0.899	41.578	-0.11%	-0.51%
			835	0.903	41.322	0.900	41.500	0.33%	-0.43%
			850	0.909	41.285	0.916	41.500	-0.76%	-0.52%
03/22/2023	835 Head	21.9	815	0.869	41.370	0.898	41.594	-3.23%	-0.54%
			820	0.870	41.356	0.899	41.578	-3.23%	-0.53%
			835	0.875	41.312	0.900	41.500	-2.78%	-0.45%
			850	0.880	41.272	0.916	41.500	-3.93%	-0.55%
04/17/2023	835 Head	23.3	815	0.932	41.086	0.898	41.594	3.79%	-1.22%
			820	0.934	41.069	0.899	41.578	3.89%	-1.22%
			835	0.939	41.026	0.900	41.500	4.33%	-1.14%
			850	0.943	40.988	0.916	41.500	2.95%	-1.23%
03/22/2023	1750 Head	19.7	1710	1.304	40.036	1.348	40.142	-3.26%	-0.26%
			1720	1.308	40.028	1.354	40.126	-3.40%	-0.24%
			1745	1.319	39.948	1.368	40.087	-3.58%	-0.35%
			1750	1.323	39.925	1.371	40.079	-3.50%	-0.38%
			1770	1.337	39.846	1.383	40.047	-3.33%	-0.50%
			1790	1.352	39.810	1.394	40.016	-3.01%	-0.51%
03/27/2023	1750 Head	19.4	1710	1.285	41.948	1.348	40.142	-4.67%	4.50%
			1720	1.291	41.933	1.354	40.126	-4.65%	4.50%
			1745	1.306	41.906	1.368	40.087	-4.53%	4.54%
			1750	1.308	41.900	1.371	40.079	-4.60%	4.54%
			1770	1.319	41.881	1.383	40.047	-4.63%	4.58%
			1790	1.329	41.855	1.394	40.016	-4.66%	4.60%

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Table 10-2
Measured Head Tissue Properties (Cont.)

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
03/20/2023	1900 Head	21.3	1850	1.386	39.558	1.400	40.000	-1.00%	-1.11%
			1860	1.392	39.537	1.400	40.000	-0.57%	-1.16%
			1880	1.405	39.495	1.400	40.000	0.36%	-1.26%
			1900	1.417	39.458	1.400	40.000	1.21%	-1.36%
			1905	1.420	39.450	1.400	40.000	1.43%	-1.37%
			1910	1.423	39.441	1.400	40.000	1.64%	-1.40%
			1920	1.428	39.421	1.400	40.000	2.00%	-1.45%
03/27/2023	1900 Head	19.4	1850	1.365	41.774	1.400	40.000	-2.50%	4.44%
			1860	1.370	41.763	1.400	40.000	-2.14%	4.41%
			1880	1.382	41.732	1.400	40.000	-1.29%	4.33%
			1900	1.395	41.685	1.400	40.000	-0.36%	4.21%
			1905	1.398	41.673	1.400	40.000	-0.14%	4.18%
			1910	1.401	41.663	1.400	40.000	0.07%	4.16%
			1920	1.408	41.647	1.400	40.000	0.57%	4.12%
04/19/2023	1900 Head	24.6	1850	1.341	39.539	1.400	40.000	-4.21%	-1.15%
			1860	1.349	39.481	1.400	40.000	-3.64%	-1.30%
			1880	1.367	39.379	1.400	40.000	-2.36%	-1.55%
			1900	1.389	39.314	1.400	40.000	-0.79%	-1.72%
			1905	1.395	39.303	1.400	40.000	-0.36%	-1.74%
			1910	1.401	39.295	1.400	40.000	0.07%	-1.76%
			1920	1.413	39.279	1.400	40.000	0.93%	-1.80%
03/23/2023	2450 Head	19.5	2300	1.663	38.512	1.670	39.500	-0.42%	-2.50%
			2310	1.671	38.489	1.679	39.480	-0.48%	-2.51%
			2320	1.678	38.468	1.687	39.460	-0.53%	-2.51%
			2400	1.736	38.319	1.756	39.289	-1.14%	-2.47%
			2450	1.776	38.219	1.800	39.200	-1.33%	-2.50%
			2480	1.801	38.195	1.833	39.162	-1.75%	-2.47%
			2500	1.818	38.153	1.855	39.136	-1.99%	-2.51%
			2510	1.826	38.129	1.866	39.123	-2.14%	-2.54%
			2535	1.846	38.074	1.893	39.092	-2.48%	-2.60%
			2550	1.858	38.056	1.909	39.073	-2.67%	-2.60%
			2560	1.867	38.048	1.920	39.060	-2.76%	-2.59%
			2600	1.899	37.990	1.964	39.009	-3.31%	-2.61%
			2650	1.936	37.886	2.018	38.945	-4.06%	-2.72%
			2680	1.962	37.844	2.051	38.907	-4.34%	-2.73%
			2700	1.976	37.810	2.073	38.882	-4.68%	-2.76%
03/27/2023	2450 Head	20.0	2300	1.654	38.357	1.670	39.500	-0.96%	-2.89%
			2310	1.661	38.347	1.679	39.480	-1.07%	-2.87%
			2320	1.667	38.334	1.687	39.460	-1.19%	-2.85%
			2400	1.727	38.234	1.756	39.289	-1.65%	-2.69%
			2450	1.766	38.147	1.800	39.200	-1.89%	-2.69%
			2480	1.789	38.114	1.833	39.162	-2.40%	-2.68%
			2500	1.804	38.097	1.855	39.136	-2.75%	-2.65%
			2510	1.812	38.083	1.866	39.123	-2.89%	-2.66%
			2535	1.833	38.035	1.893	39.092	-3.17%	-2.70%
			2550	1.846	38.005	1.909	39.073	-3.30%	-2.73%
			2560	1.855	37.987	1.920	39.060	-3.39%	-2.75%
			2600	1.890	37.938	1.964	39.009	-3.77%	-2.75%
			2650	1.927	37.822	2.018	38.945	-4.51%	-2.88%
			2680	1.953	37.770	2.051	38.907	-4.78%	-2.92%
03/31/2023	2450 Head	20.6	2300	1.659	40.008	1.670	39.500	-0.66%	1.29%
			2310	1.667	39.995	1.679	39.480	-0.71%	1.30%
			2320	1.675	39.981	1.687	39.460	-0.71%	1.32%
			2400	1.733	39.871	1.756	39.289	-1.31%	1.48%
			2450	1.770	39.789	1.800	39.200	-1.67%	1.50%
			2480	1.794	39.750	1.833	39.162	-2.13%	1.50%
			2500	1.810	39.722	1.855	39.136	-2.43%	1.50%
			2510	1.818	39.707	1.866	39.123	-2.57%	1.49%
			2535	1.838	39.662	1.893	39.092	-2.91%	1.46%
			2550	1.850	39.640	1.909	39.073	-3.09%	1.45%
			2560	1.858	39.628	1.920	39.060	-3.23%	1.45%
			2600	1.891	39.574	1.964	39.009	-3.72%	1.45%
			2650	1.930	39.484	2.018	38.945	-4.36%	1.38%
			2680	1.956	39.444	2.051	38.907	-4.63%	1.38%
			2700	1.970	39.412	2.073	38.882	-4.97%	1.36%

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Table 10-3
Measured Head Tissue Properties (Cont.)

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
04/03/2023	2450 Head	20.5	2300	1.655	40.348	1.670	39.500	-0.90%	2.15%
			2310	1.664	40.335	1.679	39.480	-0.89%	2.17%
			2320	1.671	40.315	1.687	39.460	-0.95%	2.17%
			2400	1.730	40.209	1.756	39.289	-1.48%	2.34%
			2450	1.766	40.122	1.800	39.200	-1.89%	2.35%
			2480	1.791	40.095	1.833	39.162	-2.29%	2.38%
			2500	1.808	40.080	1.855	39.136	-2.53%	2.41%
			2510	1.816	40.065	1.866	39.123	-2.68%	2.41%
			2535	1.834	40.015	1.893	39.092	-3.12%	2.36%
			2550	1.845	39.987	1.909	39.073	-3.35%	2.34%
			2560	1.854	39.975	1.920	39.060	-3.44%	2.34%
			2600	1.891	39.941	1.964	39.009	-3.72%	2.39%
			2650	1.925	39.858	2.018	38.945	-4.61%	2.34%
			2680	1.954	39.810	2.051	38.907	-4.73%	2.32%
			2700	1.970	39.794	2.073	38.882	-4.97%	2.35%
04/04/2023	2450 Head	20.1	2300	1.703	39.672	1.670	39.500	1.98%	0.44%
			2310	1.711	39.651	1.679	39.480	1.91%	0.43%
			2320	1.719	39.626	1.687	39.460	1.90%	0.42%
			2400	1.780	39.457	1.756	39.289	1.37%	0.43%
			2450	1.815	39.346	1.800	39.200	0.83%	0.37%
			2480	1.837	39.298	1.833	39.162	0.22%	0.35%
			2500	1.851	39.274	1.855	39.136	-0.22%	0.35%
			2510	1.858	39.264	1.866	39.123	-0.43%	0.36%
			2535	1.875	39.223	1.893	39.092	-0.95%	0.34%
			2550	1.886	39.192	1.909	39.073	-1.20%	0.30%
			2560	1.894	39.176	1.920	39.060	-1.35%	0.30%
			2600	1.931	39.146	1.964	39.009	-1.68%	0.35%
			2650	1.970	39.040	2.018	38.945	-2.38%	0.24%
			2680	1.997	38.990	2.051	38.907	-2.63%	0.21%
			2700	2.016	38.970	2.073	38.882	-2.75%	0.23%
05/02/2023	2450 Head	21.5	2300	1.679	40.479	1.670	39.500	0.54%	2.48%
			2310	1.687	40.468	1.679	39.480	0.48%	2.50%
			2320	1.695	40.458	1.687	39.460	0.47%	2.53%
			2400	1.758	40.342	1.756	39.289	0.11%	2.68%
			2450	1.796	40.270	1.800	39.200	-0.22%	2.73%
			2480	1.822	40.215	1.833	39.162	-0.60%	2.69%
			2500	1.838	40.182	1.855	39.136	-0.92%	2.67%
			2510	1.845	40.168	1.866	39.123	-1.13%	2.67%
			2535	1.861	40.127	1.893	39.092	-1.69%	2.65%
			2550	1.873	40.102	1.909	39.073	-1.89%	2.63%
			2560	1.881	40.083	1.920	39.060	-2.03%	2.62%
			2600	1.916	40.006	1.964	39.009	-2.44%	2.56%
			2650	1.953	39.932	2.018	38.945	-3.22%	2.53%
			2680	1.976	39.894	2.051	38.907	-3.66%	2.54%
			2700	1.992	39.861	2.073	38.882	-3.91%	2.52%
05/04/2023	2450 Head	20.9	2300	1.702	39.797	1.670	39.500	1.92%	0.75%
			2310	1.710	39.783	1.679	39.480	1.85%	0.77%
			2320	1.717	39.769	1.687	39.460	1.78%	0.78%
			2400	1.779	39.629	1.756	39.289	1.31%	0.87%
			2450	1.819	39.551	1.800	39.200	1.06%	0.90%
			2480	1.842	39.497	1.833	39.162	0.49%	0.86%
			2500	1.857	39.464	1.855	39.136	0.11%	0.84%
			2510	1.865	39.448	1.866	39.123	-0.05%	0.83%
			2535	1.886	39.401	1.893	39.092	-0.37%	0.79%
			2550	1.899	39.374	1.909	39.073	-0.52%	0.77%
			2560	1.908	39.356	1.920	39.060	-0.63%	0.76%
			2600	1.940	39.302	1.964	39.009	-1.22%	0.75%
			2650	1.981	39.190	2.018	38.945	-1.83%	0.63%
			2680	2.008	39.151	2.051	38.907	-2.10%	0.63%
			2700	2.023	39.136	2.073	38.882	-2.41%	0.65%

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Table 10-4
Measured Head Tissue Properties (Cont.)

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
			2300	1.706	39.725	1.670	39.500	2.16%	0.57%
			2310	1.713	39.719	1.679	39.480	2.03%	0.61%
			2560	1.899	39.361	1.920	39.060	-1.09%	0.77%
			2600	1.928	39.304	1.964	39.009	-1.83%	0.76%
			2650	1.963	39.214	2.018	38.945	-2.73%	0.69%
			2680	1.987	39.173	2.051	38.907	-3.12%	0.68%
			2700	2.001	39.156	2.073	38.882	-3.47%	0.70%
05/25/2023	2450 Head	21.6	2320	1.720	39.711	1.687	39.460	1.96%	0.64%
			2400	1.780	39.605	1.756	39.289	1.37%	0.80%
			2450	1.817	39.535	1.800	39.200	0.94%	0.85%
			2480	1.839	39.484	1.833	39.162	0.33%	0.82%
			2500	1.853	39.456	1.855	39.136	-0.11%	0.82%
			2510	1.860	39.442	1.866	39.123	-0.32%	0.82%
			2535	1.879	39.403	1.893	39.092	-0.74%	0.80%
			2550	1.891	39.379	1.909	39.073	-0.94%	0.78%
			2300	1.735	41.086	1.670	39.500	3.89%	4.02%
			2310	1.744	41.065	1.679	39.480	3.87%	4.01%
			2560	1.945	40.663	1.920	39.060	1.30%	4.10%
			2600	1.978	40.595	1.964	39.009	0.71%	4.07%
			2650	2.019	40.510	2.018	38.945	0.05%	4.02%
			2680	2.044	40.466	2.051	38.907	-0.34%	4.01%
			2700	2.059	40.425	2.073	38.882	-0.68%	3.97%
05/30/2023	2450 Head	21.5	2320	1.753	41.043	1.687	39.460	3.91%	4.01%
			2400	1.814	40.925	1.756	39.289	3.30%	4.16%
			2450	1.855	40.836	1.800	39.200	3.06%	4.17%
			2480	1.879	40.800	1.833	39.162	2.51%	4.18%
			2500	1.895	40.759	1.855	39.136	2.16%	4.15%
			2510	1.903	40.738	1.866	39.123	1.98%	4.13%
			2535	1.925	40.693	1.893	39.092	1.69%	4.10%
			2550	1.937	40.675	1.909	39.073	1.47%	4.10%
			3300	2.807	36.963	2.708	38.157	3.66%	-3.13%
			3350	2.845	36.898	2.759	38.100	3.12%	-3.15%
			3750	3.170	36.326	3.169	37.643	0.03%	-3.50%
			3900	3.303	36.093	3.323	37.471	-0.60%	-3.68%
			3930	3.331	36.054	3.353	37.437	-0.66%	-3.69%
			4100	3.484	35.822	3.528	37.243	-1.25%	-3.82%
			4150	3.528	35.786	3.579	37.186	-1.42%	-3.76%
03/27/2023	3600 Head	20.0	3450	2.923	36.736	2.861	37.986	2.17%	-3.29%
			3500	2.964	36.655	2.913	37.929	1.75%	-3.36%
			3550	3.008	36.588	2.964	37.871	1.48%	-3.39%
			3560	3.014	36.585	2.974	37.860	1.34%	-3.37%
			3600	3.046	36.505	3.015	37.814	1.03%	-3.46%
			3650	3.087	36.450	3.066	37.757	0.68%	-3.46%
			3690	3.121	36.382	3.107	37.711	0.45%	-3.52%
			3700	3.129	36.372	3.117	37.700	0.38%	-3.52%
			3300	2.621	38.965	2.708	38.157	-3.21%	2.12%
			3350	2.676	38.906	2.759	38.100	-3.01%	2.12%
			3750	3.038	38.223	3.169	37.643	-4.13%	1.54%
			3900	3.173	37.998	3.323	37.471	-4.51%	1.41%
			3930	3.201	37.944	3.353	37.437	-4.53%	1.35%
			4100	3.396	37.643	3.528	37.243	-3.74%	1.07%
			4150	3.445	37.606	3.579	37.186	-3.74%	1.13%
04/18/2023	3600 Head	19.0	3450	2.755	38.757	2.861	37.986	-3.70%	2.03%
			3500	2.791	38.654	2.913	37.929	-4.19%	1.91%
			3550	2.839	38.584	2.964	37.871	-4.22%	1.88%
			3560	2.848	38.562	2.974	37.860	-4.24%	1.85%
			3600	2.885	38.482	3.015	37.814	-4.31%	1.77%
			3650	2.940	38.383	3.066	37.757	-4.11%	1.66%
			3690	2.981	38.303	3.107	37.711	-4.06%	1.57%
			3700	2.992	38.287	3.117	37.700	-4.01%	1.56%
			3300	2.773	37.248	2.708	38.157	2.40%	-2.38%
			3350	2.810	37.187	2.759	38.100	1.85%	-2.40%
			3750	3.128	36.650	3.169	37.643	-1.29%	-2.64%
			3900	3.258	36.484	3.323	37.471	-1.96%	-2.63%
			3930	3.284	36.446	3.353	37.437	-2.06%	-2.65%
			4100	3.439	36.238	3.528	37.243	-2.52%	-2.70%
			4150	3.484	36.197	3.579	37.186	-2.65%	-2.66%
04/24/2023	3600 Head	20.2	3450	2.886	37.049	2.861	37.986	0.87%	-2.47%
			3500	2.929	36.958	2.913	37.929	0.55%	-2.56%
			3550	2.966	36.904	2.964	37.871	0.07%	-2.55%
			3560	2.975	36.886	2.974	37.860	0.03%	-2.57%
			3600	3.010	36.847	3.015	37.814	-0.17%	-2.56%
			3650	3.048	36.769	3.066	37.757	-0.59%	-2.62%
			3690	3.081	36.736	3.107	37.711	-0.84%	-2.59%
			3700	3.088	36.722	3.117	37.700	-0.93%	-2.59%
			3300	2.656	38.700	2.708	38.157	-1.92%	1.42%
			3350	2.704	38.635	2.759	38.100	-1.99%	1.40%
			3750	3.071	37.949	3.169	37.643	-3.09%	0.81%
			3900	3.226	37.711	3.323	37.471	-2.92%	0.64%
			3930	3.249	37.676	3.353	37.437	-3.10%	0.64%
			4100	3.431	37.386	3.528	37.243	-2.75%	0.38%
			4150	3.487	37.319	3.579	37.186	-2.57%	0.36%
06/05/2023	3600 Head	22.0	3450	2.794	38.471	2.861	37.986	-2.34%	1.28%
			3500	2.839	38.360	2.913	37.929	-2.54%	1.14%
			3550	2.883	38.285	2.964	37.871	-2.73%	1.09%
			3560	2.893	38.262	2.974	37.860	-2.72%	1.06%
			3600	2.935	38.204	3.015	37.814	-2.65%	1.03%
			3650	2.975	38.107	3.066	37.757	-2.97%	0.93%
			3690	3.018	38.052	3.107	37.711	-2.86%	0.90%
			3700	3.026	38.034	3.117	37.700	-2.92%	0.89%

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Table 10-5
Measured Head Tissue Properties (Cont.)

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
04/30/2023	5200-5800 Head	23.2	5180	4.559	36.469	4.635	36.009	-1.64%	1.28%
			5190	4.568	36.431	4.645	35.998	-1.66%	1.20%
			5200	4.579	36.395	4.655	35.986	-1.63%	1.14%
			5210	4.589	36.356	4.666	35.975	-1.65%	1.06%
			5220	4.601	36.325	4.676	35.963	-1.60%	1.01%
			5240	4.633	36.303	4.696	35.940	-1.34%	1.01%
			5250	4.645	36.294	4.706	35.929	-1.30%	1.02%
			5260	4.654	36.283	4.717	35.917	-1.34%	1.02%
			5270	4.663	36.279	4.727	35.906	-1.35%	1.04%
			5280	4.672	36.264	4.737	35.894	-1.37%	1.03%
			5290	4.684	36.237	4.748	35.883	-1.35%	0.99%
			5300	4.697	36.204	4.758	35.871	-1.28%	0.93%
			5310	4.710	36.176	4.768	35.860	-1.22%	0.88%
			5320	4.722	36.157	4.778	35.849	-1.17%	0.86%
			5500	4.936	35.864	4.963	35.643	-0.54%	0.62%
			5510	4.941	35.834	4.973	35.632	-0.64%	0.57%
			5520	4.947	35.814	4.983	35.620	-0.72%	0.54%
			5530	4.956	35.785	4.994	35.609	-0.76%	0.49%
			5540	4.973	35.751	5.004	35.597	-0.62%	0.43%
			5550	4.987	35.725	5.014	35.586	-0.54%	0.39%
			5560	5.003	35.714	5.024	35.574	-0.42%	0.39%
			5580	5.034	35.693	5.045	35.551	-0.22%	0.40%
			5600	5.052	35.647	5.065	35.529	-0.26%	0.33%
			5610	5.058	35.626	5.076	35.518	-0.35%	0.30%
			5620	5.068	35.598	5.086	35.506	-0.35%	0.26%
			5640	5.091	35.547	5.106	35.483	-0.29%	0.18%
			5660	5.118	35.502	5.127	35.460	-0.18%	0.12%
			5670	5.134	35.486	5.137	35.449	-0.06%	0.10%
			5680	5.152	35.481	5.147	35.437	0.10%	0.12%
			5690	5.168	35.474	5.158	35.426	0.19%	0.14%
			5700	5.181	35.460	5.168	35.414	0.25%	0.13%
			5710	5.189	35.447	5.178	35.403	0.21%	0.12%
			5720	5.197	35.437	5.188	35.391	0.17%	0.13%
			5745	5.214	35.376	5.214	35.363	0.00%	0.04%
			5750	5.220	35.363	5.219	35.357	0.02%	0.02%
			5755	5.226	35.347	5.224	35.351	0.04%	-0.01%
			5765	5.242	35.326	5.234	35.340	0.15%	-0.04%
			5775	5.261	35.313	5.245	35.329	0.31%	-0.05%
			5785	5.278	35.300	5.255	35.317	0.44%	-0.05%
			5795	5.294	35.282	5.265	35.305	0.55%	-0.07%
			5800	5.300	35.278	5.270	35.300	0.57%	-0.06%
			5800	5.300	35.278	5.270	35.300	0.57%	-0.06%
			5805	5.306	35.274	5.275	35.294	0.59%	-0.06%
			5825	5.317	35.242	5.296	35.271	0.40%	-0.08%
			5835	5.324	35.221	5.305	35.230	0.36%	-0.03%
			5845	5.338	35.197	5.315	35.210	0.43%	-0.04%
			5855	5.355	35.174	5.325	35.197	0.56%	-0.07%
			5865	5.369	35.140	5.336	35.190	0.62%	-0.14%
			5865	5.369	35.140	5.336	35.190	0.62%	-0.14%
			5865	5.369	35.140	5.336	35.190	0.62%	-0.14%
			5865	5.369	35.140	5.336	35.190	0.62%	-0.14%
			5875	5.381	35.117	5.347	35.183	0.64%	-0.19%
			5885	5.393	35.108	5.357	35.177	0.67%	-0.20%
			5905	5.418	35.088	5.379	35.163	0.73%	-0.21%

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Table 10-6
Measured Body 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
03/16/2023	750 Body	21.2	680	0.940	53.958	0.958	55.804	-1.88%	-3.31%
			695	0.945	53.920	0.959	55.745	-1.46%	-3.27%
			700	0.947	53.908	0.959	55.726	-1.25%	-3.26%
			710	0.950	53.888	0.960	55.687	-1.04%	-3.23%
			725	0.956	53.856	0.961	55.629	-0.52%	-3.19%
			750	0.965	53.808	0.964	55.531	0.10%	-3.10%
			770	0.973	53.769	0.965	55.453	0.83%	-3.04%
			785	0.979	53.730	0.966	55.395	1.35%	-3.01%
			800	0.985	53.684	0.967	55.336	1.86%	-2.99%
03/21/2023	750 Body	19.0	680	0.920	55.958	0.958	55.804	-3.97%	0.28%
			695	0.925	55.898	0.959	55.745	-3.55%	0.27%
			700	0.927	55.879	0.959	55.726	-3.34%	0.27%
			710	0.931	55.851	0.960	55.687	-3.02%	0.29%
			725	0.938	55.834	0.961	55.629	-2.39%	0.37%
			750	0.948	55.810	0.964	55.531	-1.66%	0.50%
			770	0.954	55.760	0.965	55.453	-1.14%	0.55%
			785	0.959	55.690	0.966	55.395	-0.72%	0.53%
			800	0.965	55.614	0.967	55.336	-0.21%	0.50%
03/27/2023	750 Body	20.9	680	0.931	53.784	0.958	55.804	-2.82%	-3.62%
			695	0.937	53.739	0.959	55.745	-2.29%	-3.60%
			700	0.939	53.724	0.959	55.726	-2.09%	-3.59%
			710	0.943	53.698	0.960	55.687	-1.77%	-3.57%
			725	0.948	53.662	0.961	55.629	-1.35%	-3.54%
			750	0.958	53.586	0.964	55.531	-0.62%	-3.50%
			770	0.965	53.523	0.965	55.453	0.00%	-3.48%
			785	0.971	53.480	0.966	55.395	0.52%	-3.46%
			800	0.977	53.445	0.967	55.336	1.03%	-3.42%
03/30/2023	750 Body	20.7	680	0.933	53.449	0.958	55.804	-2.61%	-4.22%
			695	0.939	53.419	0.959	55.745	-2.09%	-4.17%
			700	0.941	53.409	0.959	55.726	-1.88%	-4.16%
			710	0.944	53.388	0.960	55.687	-1.67%	-4.13%
			725	0.950	53.351	0.961	55.629	-1.14%	-4.09%
			750	0.959	53.289	0.964	55.531	-0.52%	-4.04%
			770	0.967	53.240	0.965	55.453	0.21%	-3.99%
			785	0.973	53.207	0.966	55.395	0.72%	-3.95%
			800	0.979	53.176	0.967	55.336	1.24%	-3.90%
04/05/2023	750 Body	21.0	680	0.954	53.129	0.958	55.804	-0.42%	-4.79%
			695	0.959	53.108	0.959	55.745	0.00%	-4.73%
			700	0.961	53.101	0.959	55.726	0.21%	-4.71%
			710	0.965	53.080	0.960	55.687	0.52%	-4.68%
			725	0.970	53.041	0.961	55.629	0.94%	-4.65%
			750	0.980	52.973	0.964	55.531	1.66%	-4.61%
			770	0.987	52.932	0.965	55.453	2.28%	-4.55%
			785	0.993	52.903	0.966	55.395	2.80%	-4.50%
			800	0.999	52.872	0.967	55.336	3.31%	-4.45%
04/10/2023	750 Body	22.2	680	0.957	53.455	0.958	55.804	-0.10%	-4.21%
			695	0.963	53.432	0.959	55.745	0.42%	-4.15%
			700	0.964	53.423	0.959	55.726	0.52%	-4.13%
			710	0.968	53.410	0.960	55.687	0.83%	-4.09%
			725	0.973	53.383	0.961	55.629	1.25%	-4.04%
			750	0.982	53.337	0.964	55.531	1.87%	-3.95%
			770	0.990	53.295	0.965	55.453	2.59%	-3.89%
			785	0.995	53.257	0.966	55.395	3.00%	-3.86%
			800	1.000	53.216	0.967	55.336	3.41%	-3.83%
04/12/2023	750 Body	22.1	680	0.961	53.236	0.958	55.804	0.31%	-4.60%
			695	0.967	53.211	0.959	55.745	0.83%	-4.55%
			700	0.968	53.203	0.959	55.726	0.94%	-4.53%
			710	0.972	53.184	0.960	55.687	1.25%	-4.49%
			725	0.977	53.147	0.961	55.629	1.66%	-4.46%
			750	0.986	53.079	0.964	55.531	2.28%	-4.42%
			770	0.994	53.038	0.965	55.453	3.01%	-4.36%
			785	1.000	53.010	0.966	55.395	3.52%	-4.31%
			800	1.005	52.975	0.967	55.336	3.93%	-4.27%
05/23/2023	750 Body	21.7	680	0.956	53.580	0.958	55.804	-0.21%	-3.99%
			695	0.961	53.554	0.959	55.745	0.21%	-3.93%
			700	0.962	53.542	0.959	55.726	0.31%	-3.92%
			710	0.966	53.516	0.960	55.687	0.63%	-3.90%
			725	0.972	53.464	0.961	55.629	1.14%	-3.89%
			750	0.981	53.395	0.964	55.531	1.76%	-3.85%
			770	0.988	53.349	0.965	55.453	2.38%	-3.79%
			785	0.994	53.309	0.966	55.395	2.90%	-3.77%
			800	1.000	53.264	0.967	55.336	3.41%	-3.74%

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Table 10-7
Measured Body Tissue Properties (Cont.)

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
03/14/2023	835 Body	19.8	815	0.934	54.996	0.968	55.271	-3.51%	-0.50%
			820	0.936	54.974	0.969	55.258	-3.41%	-0.51%
			835	0.942	54.914	0.970	55.200	-2.89%	-0.52%
			850	0.948	54.867	0.988	55.154	-4.05%	-0.52%
03/21/2023	835 Body	20.6	815	0.995	53.161	0.968	55.271	2.79%	-3.82%
			820	0.997	53.146	0.969	55.258	2.89%	-3.82%
			835	1.003	53.105	0.970	55.200	3.40%	-3.80%
			850	1.009	53.079	0.988	55.154	2.13%	-3.76%
03/23/2023	835 Body	21.4	815	0.943	55.120	0.968	55.271	-2.58%	-0.27%
			820	0.948	55.063	0.969	55.258	-2.17%	-0.35%
			835	0.963	54.899	0.970	55.200	-0.72%	-0.55%
			850	0.978	54.755	0.988	55.154	-1.01%	-0.72%
03/23/2023	835 Body	21.6	815	0.998	53.018	0.968	55.271	3.10%	-4.08%
			820	1.000	53.000	0.969	55.258	3.20%	-4.09%
			835	1.006	52.955	0.970	55.200	3.71%	-4.07%
			850	1.012	52.922	0.988	55.154	2.43%	-4.05%
03/27/2023	835 Body	21.7	815	0.996	53.455	0.968	55.271	2.89%	-3.29%
			820	0.997	53.444	0.969	55.258	2.89%	-3.28%
			835	1.004	53.414	0.970	55.200	3.51%	-3.24%
			850	1.010	53.386	0.988	55.154	2.23%	-3.21%
04/19/2023	835 Body	21.7	815	0.937	52.864	0.968	55.271	-3.20%	-4.35%
			820	0.942	52.804	0.969	55.258	-2.79%	-4.44%
			835	0.959	52.630	0.970	55.200	-1.13%	-4.66%
			850	0.975	52.468	0.988	55.154	-1.32%	-4.87%
03/21/2023	1750 Body	19.0	1710	1.435	54.036	1.463	53.537	-1.91%	0.93%
			1720	1.440	54.028	1.469	53.511	-1.97%	0.97%
			1745	1.455	53.962	1.485	53.445	-2.02%	0.97%
			1750	1.459	53.944	1.488	53.432	-1.95%	0.96%
			1770	1.475	53.890	1.501	53.379	-1.73%	0.96%
			1790	1.489	53.871	1.514	53.326	-1.65%	1.02%
03/22/2023	1750 Body	21.0	1710	1.472	51.725	1.463	53.537	0.62%	-3.38%
			1720	1.479	51.707	1.469	53.511	0.68%	-3.37%
			1745	1.497	51.652	1.485	53.445	0.81%	-3.35%
			1750	1.501	51.642	1.488	53.432	0.87%	-3.35%
			1770	1.515	51.608	1.501	53.379	0.93%	-3.32%
			1790	1.529	51.583	1.514	53.326	0.99%	-3.27%
03/27/2023	1750 Body	22.5	1710	1.419	52.343	1.463	53.537	-3.01%	-2.23%
			1720	1.429	52.309	1.469	53.511	-2.72%	-2.25%
			1745	1.455	52.194	1.485	53.445	-2.02%	-2.34%
			1750	1.460	52.167	1.488	53.432	-1.88%	-2.37%
			1770	1.484	52.081	1.501	53.379	-1.13%	-2.43%
			1790	1.506	52.027	1.514	53.326	-0.53%	-2.44%
03/30/2023	1750 Body	22.5	1710	1.474	51.303	1.463	53.537	0.75%	-4.17%
			1720	1.480	51.288	1.469	53.511	0.75%	-4.15%
			1745	1.496	51.244	1.485	53.445	0.74%	-4.12%
			1750	1.499	51.236	1.488	53.432	0.74%	-4.11%
			1770	1.512	51.205	1.501	53.379	0.73%	-4.07%
			1790	1.525	51.180	1.514	53.326	0.73%	-4.02%
04/18/2023	1750 Body	22.4	1710	1.464	51.378	1.463	53.537	0.07%	-4.03%
			1720	1.471	51.362	1.469	53.511	0.14%	-4.02%
			1745	1.486	51.323	1.485	53.445	0.07%	-3.97%
			1750	1.490	51.317	1.488	53.432	0.13%	-3.96%
			1770	1.502	51.292	1.501	53.379	0.07%	-3.91%
			1790	1.514	51.270	1.514	53.326	0.00%	-3.86%
05/11/2023	1750 Body	20.8	1710	1.459	51.723	1.463	53.537	-0.27%	-3.39%
			1720	1.466	51.712	1.469	53.511	-0.20%	-3.36%
			1745	1.485	51.675	1.485	53.445	0.00%	-3.31%
			1750	1.489	51.667	1.488	53.432	0.07%	-3.30%
			1770	1.505	51.642	1.501	53.379	0.27%	-3.25%
			1790	1.519	51.612	1.514	53.326	0.33%	-3.21%
05/18/2023	1750 Body	20.8	1710	1.446	51.336	1.463	53.537	-1.16%	-4.11%
			1720	1.452	51.319	1.469	53.511	-1.16%	-4.10%
			1745	1.471	51.279	1.485	53.445	-0.94%	-4.05%
			1750	1.475	51.272	1.488	53.432	-0.87%	-4.04%
			1770	1.488	51.248	1.501	53.379	-0.87%	-3.99%
			1790	1.502	51.225	1.514	53.326	-0.79%	-3.94%

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Table 10-8
Measured Body Tissue Properties (Cont.)

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
03/21/2023	1900 Body	20.9	1850	1.445	51.884	1.520	53.300	-4.93%	-2.66%
			1860	1.452	51.862	1.520	53.300	-4.47%	-2.70%
			1880	1.467	51.806	1.520	53.300	-3.49%	-2.80%
			1900	1.484	51.753	1.520	53.300	-2.37%	-2.90%
			1905	1.488	51.741	1.520	53.300	-2.11%	-2.92%
			1910	1.492	51.731	1.520	53.300	-1.84%	-2.94%
			1920	1.501	51.712	1.520	53.300	-1.25%	-2.98%
03/22/2023	1900 Body	22.0	1850	1.509	51.927	1.520	53.300	-0.72%	-2.58%
			1860	1.519	51.893	1.520	53.300	-0.07%	-2.64%
			1880	1.539	51.817	1.520	53.300	1.25%	-2.78%
			1900	1.560	51.740	1.520	53.300	2.63%	-2.93%
			1905	1.566	51.722	1.520	53.300	3.03%	-2.96%
			1910	1.571	51.703	1.520	53.300	3.36%	-3.00%
			1920	1.583	51.665	1.520	53.300	4.14%	-3.07%
03/29/2023	1900 Body	20.7	1850	1.449	51.201	1.520	53.300	-4.67%	-3.94%
			1860	1.457	51.178	1.520	53.300	-4.14%	-3.98%
			1880	1.474	51.143	1.520	53.300	-3.03%	-4.05%
			1900	1.491	51.108	1.520	53.300	-1.91%	-4.11%
			1905	1.495	51.099	1.520	53.300	-1.64%	-4.13%
			1910	1.500	51.088	1.520	53.300	-1.32%	-4.15%
			1920	1.508	51.068	1.520	53.300	-0.79%	-4.19%
04/05/2023	1900 Body	21.3	1850	1.499	51.381	1.520	53.300	-1.38%	-3.60%
			1860	1.509	51.348	1.520	53.300	-0.72%	-3.66%
			1880	1.530	51.283	1.520	53.300	0.66%	-3.78%
			1900	1.553	51.211	1.520	53.300	2.17%	-3.92%
			1905	1.559	51.194	1.520	53.300	2.57%	-3.95%
			1910	1.564	51.176	1.520	53.300	2.89%	-3.98%
			1920	1.576	51.137	1.520	53.300	3.68%	-4.06%
04/05/2023	1900 Body	21.5	1850	1.510	51.384	1.520	53.300	-0.66%	-3.59%
			1860	1.521	51.340	1.520	53.300	0.07%	-3.68%
			1880	1.543	51.256	1.520	53.300	1.51%	-3.83%
			1900	1.565	51.183	1.520	53.300	2.96%	-3.97%
			1905	1.570	51.165	1.520	53.300	3.29%	-4.01%
			1910	1.576	51.149	1.520	53.300	3.68%	-4.04%
			1920	1.588	51.114	1.520	53.300	4.47%	-4.10%
			3750	3.679	48.688	3.606	50.982	2.02%	-4.50%
04/17/2023	1900 Body	24.0	1850	1.515	52.129	1.520	53.300	-0.33%	-2.20%
			1860	1.526	52.088	1.520	53.300	0.39%	-2.27%
			1880	1.547	52.019	1.520	53.300	1.78%	-2.40%
			1900	1.568	51.944	1.520	53.300	3.16%	-2.54%
			1905	1.573	51.921	1.520	53.300	3.49%	-2.59%
			1910	1.579	51.900	1.520	53.300	3.88%	-2.63%
			1920	1.589	51.857	1.520	53.300	4.54%	-2.71%
05/18/2023	1900 Body	21.3	1850	1.537	53.423	1.520	53.300	1.12%	0.23%
			1860	1.542	53.407	1.520	53.300	1.45%	0.20%
			1880	1.554	53.370	1.520	53.300	2.24%	0.13%
			1900	1.567	53.346	1.520	53.300	3.09%	0.09%
			1905	1.571	53.343	1.520	53.300	3.36%	0.08%
			1910	1.574	53.341	1.520	53.300	3.55%	0.08%
			1920	1.580	53.331	1.520	53.300	3.95%	0.06%
05/18/2023	1900 Body	22.0	1850	1.491	51.430	1.520	53.300	-1.91%	-3.51%
			1860	1.503	51.388	1.520	53.300	-1.12%	-3.59%
			1880	1.525	51.305	1.520	53.300	0.33%	-3.74%
			1900	1.547	51.218	1.520	53.300	1.78%	-3.91%
			1905	1.553	51.198	1.520	53.300	2.17%	-3.94%
			1910	1.558	51.180	1.520	53.300	2.50%	-3.98%
			1920	1.569	51.143	1.520	53.300	3.22%	-4.05%
05/18/2023	1900 Body	21.3	1850	1.537	53.423	1.520	53.300	1.12%	0.23%
			1860	1.542	53.407	1.520	53.300	1.45%	0.20%
			1880	1.554	53.370	1.520	53.300	2.24%	0.13%
			1900	1.567	53.346	1.520	53.300	3.09%	0.09%
			1905	1.571	53.343	1.520	53.300	3.36%	0.08%
			1910	1.574	53.341	1.520	53.300	3.55%	0.08%
			1920	1.580	53.331	1.520	53.300	3.95%	0.06%
03/28/2023	2450 Body	23.3	2300	1.790	53.190	1.809	52.900	-1.05%	0.55%
			2310	1.803	53.149	1.816	52.887	-0.72%	0.50%
			2560	2.159	52.279	2.106	52.560	2.52%	-0.53%
			2600	2.211	52.151	2.163	52.509	2.22%	-0.68%
			2650	2.278	51.962	2.234	52.445	1.97%	-0.92%
			2680	2.317	51.853	2.277	52.407	1.76%	-1.06%
			2700	2.341	51.770	2.305	52.382	1.56%	-1.17%
			2320	1.817	53.107	1.826	52.873	-0.49%	0.44%
			2400	1.929	52.823	1.902	52.767	1.42%	0.11%
			2450	2.001	52.647	1.950	52.700	2.62%	-0.10%
			2480	2.044	52.547	1.993	52.662	2.56%	-0.22%
			2500	2.071	52.474	2.021	52.636	2.47%	-0.31%
			2510	2.086	52.438	2.035	52.623	2.51%	-0.35%
			2535	2.123	52.351	2.071	52.592	2.51%	-0.46%
			2550	2.145	52.306	2.092	52.573	2.53%	-0.51%

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Table 10-9
Measured Body Tissue Properties (Cont.)

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
03/28/2023	2450 Body	21.5	2300	1.894	52.078	1.809	52.900	4.70%	-1.55%
			2310	1.903	52.063	1.816	52.887	4.79%	-1.56%
			2320	1.912	52.044	1.826	52.873	4.71%	-1.57%
			2400	1.982	51.950	1.902	52.767	4.21%	-1.55%
			2450	2.030	51.876	1.950	52.700	4.10%	-1.56%
			2480	2.058	51.847	1.993	52.662	3.26%	-1.55%
			2500	2.077	51.816	2.021	52.636	2.77%	-1.56%
			2510	2.086	51.799	2.035	52.623	2.51%	-1.57%
			2535	2.111	51.756	2.071	52.592	1.93%	-1.59%
			2550	2.126	51.736	2.092	52.573	1.63%	-1.59%
			2560	2.136	51.724	2.106	52.560	1.42%	-1.59%
			2600	2.174	51.667	2.163	52.509	0.51%	-1.60%
			2650	2.224	51.562	2.234	52.445	-0.45%	-1.68%
			2680	2.254	51.513	2.277	52.407	-1.01%	-1.71%
			2700	2.272	51.478	2.305	52.382	-1.43%	-1.73%
03/31/2023	2450 Body	23.9	2300	1.803	52.865	1.809	52.900	-0.33%	-0.07%
			2310	1.815	52.824	1.816	52.887	-0.06%	-0.12%
			2320	1.828	52.767	1.826	52.873	0.11%	-0.20%
			2400	1.938	52.490	1.902	52.767	1.89%	-0.52%
			2450	2.008	52.203	1.950	52.700	2.97%	-0.94%
			2480	2.054	52.121	1.993	52.662	3.06%	-1.03%
			2500	2.077	52.096	2.021	52.636	2.77%	-1.03%
			2510	2.088	52.066	2.035	52.623	2.60%	-1.06%
			2535	2.120	51.934	2.071	52.592	2.37%	-1.25%
			2550	2.143	51.849	2.092	52.573	2.44%	-1.38%
			2560	2.160	51.800	2.106	52.560	2.56%	-1.45%
			2600	2.215	51.740	2.163	52.509	2.40%	-1.46%
			2650	2.277	51.492	2.234	52.445	1.92%	-1.82%
			2680	2.325	51.389	2.277	52.407	2.11%	-1.94%
			2700	2.351	51.378	2.305	52.382	2.00%	-1.92%
04/03/2023	2450 Body	20.7	2300	1.831	52.392	1.809	52.900	1.22%	-0.96%
			2310	1.845	52.370	1.816	52.887	1.60%	-0.98%
			2320	1.858	52.350	1.826	52.873	1.75%	-0.99%
			2400	1.967	52.112	1.902	52.767	3.42%	-1.24%
			2450	2.034	51.975	1.950	52.700	4.31%	-1.38%
			2480	2.077	51.864	1.993	52.662	4.21%	-1.52%
			2500	2.105	51.807	2.021	52.636	4.16%	-1.57%
			2510	2.119	51.782	2.035	52.623	4.13%	-1.60%
			2535	2.153	51.707	2.071	52.592	3.96%	-1.68%
			2550	2.174	51.651	2.092	52.573	3.92%	-1.75%
			2560	2.188	51.612	2.106	52.560	3.89%	-1.80%
			2600	2.247	51.477	2.163	52.509	3.88%	-1.97%
			2650	2.316	51.307	2.234	52.445	3.67%	-2.17%
			2680	2.358	51.187	2.277	52.407	3.56%	-2.33%
			2700	2.387	51.116	2.305	52.382	3.56%	-2.42%
04/05/2023	2450 Body	23.9	2300	1.796	52.549	1.809	52.900	-0.72%	-0.66%
			2310	1.808	52.518	1.816	52.887	-0.44%	-0.70%
			2320	1.821	52.488	1.826	52.873	-0.27%	-0.73%
			2400	1.927	52.223	1.902	52.767	1.31%	-1.03%
			2450	1.994	52.047	1.950	52.700	2.26%	-1.24%
			2480	2.037	51.934	1.993	52.662	2.21%	-1.38%
			2500	2.064	51.862	2.021	52.636	2.13%	-1.47%
			2510	2.077	51.822	2.035	52.623	2.06%	-1.52%
			2535	2.111	51.712	2.071	52.592	1.93%	-1.67%
			2550	2.132	51.643	2.092	52.573	1.91%	-1.77%
			2560	2.146	51.605	2.106	52.560	1.90%	-1.82%
			2600	2.202	51.452	2.163	52.509	1.80%	-2.01%
			2650	2.273	51.255	2.234	52.445	1.75%	-2.27%
			2680	2.313	51.141	2.277	52.407	1.58%	-2.42%
			2700	2.339	51.056	2.305	52.382	1.48%	-2.53%
04/10/2023	2450 Body	23.1	2300	1.897	51.757	1.809	52.900	4.86%	-2.16%
			2310	1.906	51.740	1.816	52.887	4.96%	-2.17%
			2320	1.915	51.718	1.826	52.873	4.87%	-2.18%
			2400	1.984	51.607	1.902	52.767	4.31%	-2.20%
			2450	2.027	51.523	1.950	52.700	3.95%	-2.23%
			2480	2.057	51.509	1.993	52.662	3.21%	-2.19%
			2500	2.076	51.486	2.021	52.636	2.72%	-2.18%
			2510	2.085	51.472	2.035	52.623	2.46%	-2.19%
			2535	2.106	51.425	2.071	52.592	1.69%	-2.22%
			2550	2.120	51.401	2.092	52.573	1.34%	-2.23%
			2560	2.131	51.391	2.106	52.560	1.19%	-2.22%
			2600	2.172	51.345	2.163	52.509	0.42%	-2.22%
			2650	2.214	51.238	2.234	52.445	-0.90%	-2.30%
			2680	2.248	51.185	2.277	52.407	-1.27%	-2.33%
			2700	2.266	51.162	2.305	52.382	-1.69%	-2.33%
04/12/2023	2450 Body	22.5	2300	1.895	50.883	1.809	52.900	4.75%	-3.81%
			2310	1.904	50.864	1.816	52.887	4.85%	-3.83%
			2320	1.913	50.840	1.826	52.873	4.76%	-3.85%
			2400	1.986	50.726	1.902	52.767	4.42%	-3.87%
			2450	2.032	50.641	1.950	52.700	4.21%	-3.91%
			2480	2.062	50.609	1.993	52.662	3.46%	-3.90%
			2500	2.082	50.587	2.021	52.636	3.02%	-3.89%
			2510	2.091	50.570	2.035	52.623	2.75%	-3.90%
			2535	2.111	50.520	2.071	52.592	1.93%	-3.94%
			2550	2.124	50.492	2.092	52.573	1.53%	-3.96%
			2560	2.134	50.477	2.106	52.560	1.33%	-3.96%
			2600	2.174	50.423	2.163	52.509	0.51%	-3.97%
			2650	2.213	50.319	2.234	52.445	-0.94%	-4.05%
			2680	2.245	50.258	2.277	52.407	-1.41%	-4.10%
			2700	2.262	50.234	2.305	52.382	-1.87%	-4.10%

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Table 10-10
Measured Body Tissue Properties (Cont.)

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
04/13/2023	2450 Body	22.8	2300	1.898	50.679	1.809	52.900	4.92%	-4.20%
			2310	1.906	50.664	1.816	52.887	4.96%	-4.20%
			2320	1.915	50.647	1.826	52.873	4.87%	-4.21%
			2400	1.986	50.541	1.902	52.767	4.42%	-4.22%
			2450	2.032	50.462	1.950	52.700	4.21%	-4.25%
			2480	2.058	50.431	1.993	52.662	3.26%	-4.24%
			2500	2.077	50.402	2.021	52.636	2.77%	-4.24%
			2510	2.087	50.386	2.035	52.623	2.56%	-4.25%
			2535	2.110	50.340	2.071	52.592	1.88%	-4.28%
			2550	2.124	50.318	2.092	52.573	1.53%	-4.29%
			2560	2.133	50.304	2.106	52.560	1.28%	-4.29%
			2600	2.169	50.243	2.163	52.509	0.28%	-4.32%
			2650	2.216	50.139	2.234	52.445	-0.81%	-4.40%
			2680	2.243	50.089	2.277	52.407	-1.49%	-4.42%
			2700	2.260	50.052	2.305	52.382	-1.95%	-4.45%
04/19/2023	2450 Body	19.9	2300	1.826	52.389	1.809	52.900	0.94%	-0.97%
			2310	1.838	52.364	1.816	52.887	1.21%	-0.99%
			2320	1.850	52.338	1.826	52.873	1.31%	-1.01%
			2400	1.955	52.069	1.902	52.767	2.79%	-1.32%
			2450	2.018	51.875	1.950	52.700	3.49%	-1.57%
			2480	2.062	51.754	1.993	52.662	3.46%	-1.72%
			2500	2.088	51.693	2.021	52.636	3.32%	-1.79%
			2510	2.100	51.655	2.035	52.623	3.19%	-1.84%
			2535	2.130	51.532	2.071	52.592	2.85%	-2.02%
			2550	2.152	51.452	2.092	52.573	2.87%	-2.13%
			2560	2.168	51.404	2.106	52.560	2.94%	-2.20%
			2600	2.224	51.272	2.163	52.509	2.82%	-2.36%
			2650	2.287	51.046	2.234	52.445	2.37%	-2.67%
			2680	2.334	50.920	2.277	52.407	2.50%	-2.84%
			2700	2.361	50.866	2.305	52.382	2.43%	-2.89%
04/30/2023	2450 Body	24.5	2300	1.885	50.429	1.809	52.900	4.20%	-4.67%
			2310	1.894	50.412	1.816	52.887	4.30%	-4.68%
			2320	1.903	50.400	1.826	52.873	4.22%	-4.68%
			2400	1.971	50.317	1.902	52.767	3.63%	-4.64%
			2450	2.017	50.232	1.950	52.700	3.44%	-4.68%
			2480	2.044	50.207	1.993	52.662	2.56%	-4.66%
			2500	2.059	50.175	2.021	52.636	1.88%	-4.68%
			2510	2.067	50.153	2.035	52.623	1.57%	-4.69%
			2535	2.089	50.088	2.071	52.592	0.87%	-4.76%
			2550	2.104	50.061	2.092	52.573	0.57%	-4.78%
			2560	2.115	50.048	2.106	52.560	0.43%	-4.78%
			2600	2.152	50.014	2.163	52.509	-0.51%	-4.75%
			2650	2.191	49.886	2.234	52.445	-1.92%	-4.88%
			2680	2.221	49.854	2.277	52.407	-2.46%	-4.87%
			2700	2.239	49.852	2.305	52.382	-2.86%	-4.83%
05/02/2023	2450 Body	23.9	2300	1.892	51.799	1.809	52.900	4.59%	-2.08%
			2310	1.901	51.791	1.816	52.887	4.68%	-2.07%
			2320	1.909	51.781	1.826	52.873	4.55%	-2.07%
			2400	1.977	51.657	1.902	52.767	3.94%	-2.10%
			2450	2.022	51.592	1.950	52.700	3.69%	-2.10%
			2480	2.046	51.555	1.993	52.662	2.66%	-2.10%
			2500	2.063	51.528	2.021	52.636	2.08%	-2.11%
			2510	2.073	51.511	2.035	52.623	1.87%	-2.11%
			2535	2.099	51.468	2.071	52.592	1.35%	-2.14%
			2550	2.114	51.447	2.092	52.573	1.05%	-2.14%
			2560	2.123	51.433	2.106	52.560	0.81%	-2.14%
			2600	2.156	51.388	2.163	52.509	-0.32%	-2.13%
			2650	2.204	51.282	2.234	52.445	-1.34%	-2.22%
			2680	2.232	51.261	2.277	52.407	-1.98%	-2.19%
			2700	2.248	51.249	2.305	52.382	-2.47%	-2.16%
05/09/2023	2450 Body	24.2	2300	1.823	51.465	1.809	52.900	0.77%	-2.71%
			2310	1.836	51.431	1.816	52.887	1.10%	-2.75%
			2320	1.849	51.394	1.826	52.873	1.26%	-2.80%
			2400	1.957	51.080	1.902	52.767	2.89%	-3.20%
			2450	2.026	50.887	1.950	52.700	3.90%	-3.44%
			2480	2.066	50.765	1.993	52.662	3.66%	-3.60%
			2500	2.093	50.689	2.021	52.636	3.56%	-3.70%
			2510	2.107	50.651	2.035	52.623	3.54%	-3.75%
			2535	2.142	50.547	2.071	52.592	3.43%	-3.89%
			2550	2.164	50.489	2.092	52.573	3.44%	-3.96%
			2560	2.178	50.451	2.106	52.560	3.42%	-4.01%
			2600	2.232	50.300	2.163	52.509	3.19%	-4.21%
			2650	2.301	50.075	2.234	52.445	3.00%	-4.52%
			2680	2.344	49.974	2.277	52.407	2.94%	-4.64%
			2700	2.370	49.910	2.305	52.382	2.82%	-4.72%
05/25/2023	2450 Body	23.1	2300	1.813	52.734	1.809	52.900	0.22%	-0.31%
			2310	1.826	52.696	1.816	52.887	0.55%	-0.36%
			2320	1.839	52.654	1.826	52.873	0.71%	-0.41%
			2400	1.946	52.347	1.902	52.767	2.31%	-0.80%
			2450	2.016	52.175	1.950	52.700	3.38%	-1.00%
			2480	2.058	52.065	1.993	52.662	3.26%	-1.13%
			2500	2.088	51.993	2.021	52.636	3.32%	-1.22%
			2510	2.103	51.960	2.035	52.623	3.34%	-1.26%
			2535	2.140	51.881	2.071	52.592	3.33%	-1.35%
			2550	2.162	51.836	2.092	52.573	3.35%	-1.40%
			2560	2.176	51.804	2.106	52.560	3.32%	-1.44%
			2600	2.229	51.655	2.163	52.509	3.05%	-1.63%
			2650	2.299	51.471	2.234	52.445	2.91%	-1.86%
			2680	2.336	51.339	2.277	52.407	2.59%	-2.04%
			2700	2.365	51.239	2.305	52.382	2.60%	-2.18%
05/29/2023	2450 Body	22.4	2300	1.897	52.011	1.809	52.900	4.86%	-1.68%
			2310	1.905	51.997	1.816	52.887	4.90%	-1.69%
			2320	1.913	51.979	1.826	52.873	4.76%	-1.69%
			2400	1.981	51.870	1.902	52.767	4.15%	-1.70%
			2450	2.025	51.802	1.950	52.700	3.85%	-1.70%
			2480	2.051	51.773	1.993	52.662	2.91%	-1.69%
			2500	2.069	51.745	2.021	52.636	2.38%	-1.69%
			2510	2.078	51.728	2.035	52.623	2.11%	-1.70%
			2535	2.102	51.681	2.071	52.592	1.50%	-1.73%
			2550	2.118	51.659	2.092	52.573	1.24%	-1.74%
			2560	2.128	51.646	2.106	52.560	1.04%	-1.74%
			2600	2.164	51.599	2.163	52.509	0.05%	-1.73%
			2650	2.212	51.485	2.234	52.445	-0.98%	-1.83%
			2680	2.243	51.457	2.277	52.407	-1.49%	-1.81%
			2700	2.259	51.436	2.305	52.382	-2.00%	-1.81%

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Table 10-11
Measured Body Tissue Properties (Cont.)

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
03/23/2023	3600 Body	20.3	3450	3.415	50.331	3.256	51.389	4.88%	-2.06%
			3500	3.465	50.221	3.314	51.321	4.56%	-2.14%
			3930	3.966	49.533	3.816	50.738	3.93%	-2.37%
			4100	4.205	49.209	4.015	50.507	4.73%	-2.57%
			4150	4.271	49.139	4.073	50.439	4.86%	-2.58%
			3550	3.522	50.119	3.372	51.254	4.45%	-2.21%
			3560	3.532	50.086	3.384	51.240	4.37%	-2.25%
			3600	3.583	49.997	3.431	51.186	4.43%	-2.32%
			3650	3.649	49.894	3.489	51.118	4.59%	-2.39%
			3690	3.700	49.831	3.536	51.063	4.64%	-2.41%
			3700	3.711	49.816	3.548	51.050	4.59%	-2.42%
			3750	3.763	49.802	3.606	50.982	4.35%	-2.31%
			3900	3.926	49.584	3.781	50.779	3.83%	-2.35%
03/27/2023	3600 Body	23.0	3300	3.198	50.020	3.080	51.593	3.83%	-3.05%
			3350	3.246	49.955	3.139	51.525	3.41%	-3.05%
			3750	3.662	49.353	3.606	50.982	1.55%	-3.20%
			3900	3.837	49.107	3.781	50.779	1.48%	-3.29%
			3930	3.874	49.066	3.816	50.738	1.52%	-3.30%
			4100	4.074	48.814	4.015	50.507	1.47%	-3.35%
			4150	4.135	48.776	4.073	50.439	1.52%	-3.30%
			3450	3.346	49.775	3.256	51.389	2.76%	-3.14%
			3500	3.399	49.688	3.314	51.321	2.56%	-3.18%
			3550	3.453	49.623	3.372	51.254	2.40%	-3.18%
			3560	3.461	49.622	3.384	51.240	2.28%	-3.16%
			3600	3.504	49.539	3.431	51.186	2.13%	-3.22%
			3650	3.554	49.486	3.489	51.118	1.86%	-3.19%
			3690	3.600	49.403	3.536	51.063	1.81%	-3.25%
			3700	3.611	49.392	3.548	51.050	1.78%	-3.25%
03/30/2023	3600 Body	21.3	3300	3.220	49.523	3.080	51.593	4.55%	-4.01%
			3350	3.269	49.445	3.139	51.525	4.14%	-4.04%
			3900	3.877	48.608	3.781	50.779	2.54%	-4.28%
			3930	3.914	48.560	3.816	50.738	2.57%	-4.29%
			4100	4.118	48.299	4.015	50.507	2.57%	-4.37%
			4150	4.185	48.238	4.073	50.439	2.75%	-4.36%
			3450	3.373	49.304	3.256	51.389	3.59%	-4.06%
			3500	3.426	49.209	3.314	51.321	3.38%	-4.12%
			3550	3.483	49.136	3.372	51.254	3.29%	-4.13%
			3600	3.534	49.056	3.431	51.186	3.00%	-4.16%
			3650	3.588	48.999	3.489	51.118	2.84%	-4.15%
			3690	3.631	48.916	3.536	51.063	2.69%	-4.20%
			3700	3.643	48.903	3.548	51.050	2.68%	-4.21%
			3750	3.699	48.852	3.606	50.982	2.58%	-4.18%
04/03/2023	3600 Body	24.0	3300	3.187	50.230	3.080	51.593	3.47%	-2.64%
			3350	3.240	50.173	3.139	51.525	3.22%	-2.62%
			3750	3.651	49.580	3.606	50.982	1.25%	-2.75%
			3900	3.822	49.374	3.781	50.779	1.08%	-2.77%
			3930	3.859	49.324	3.816	50.738	1.13%	-2.79%
			4100	4.060	49.111	4.015	50.507	1.12%	-2.76%
			4150	4.118	49.050	4.073	50.439	1.10%	-2.75%
			3450	3.341	49.995	3.256	51.389	2.61%	-2.71%
			3500	3.388	49.923	3.314	51.321	2.23%	-2.72%
			3550	3.444	49.832	3.372	51.254	2.14%	-2.77%
			3560	3.451	49.832	3.384	51.240	1.98%	-2.75%
			3600	3.492	49.775	3.431	51.186	1.78%	-2.76%
			3650	3.543	49.702	3.489	51.118	1.55%	-2.77%
			3690	3.586	49.654	3.536	51.063	1.41%	-2.76%
			3700	3.597	49.640	3.548	51.050	1.38%	-2.76%
04/05/2023	3600 Body	23.1	3300	3.218	49.408	3.080	51.593	4.48%	-4.24%
			3350	3.262	49.366	3.139	51.525	3.92%	-4.19%
			3750	3.671	48.728	3.606	50.982	1.80%	-4.42%
			3900	3.838	48.505	3.781	50.779	1.51%	-4.48%
			3930	3.877	48.458	3.816	50.738	1.60%	-4.49%
			4100	4.071	48.203	4.015	50.507	1.39%	-4.56%
			4150	4.126	48.167	4.073	50.439	1.30%	-4.50%
			3450	3.360	49.182	3.256	51.389	3.19%	-4.29%
			3500	3.415	49.075	3.314	51.321	3.05%	-4.38%
			3550	3.466	49.034	3.372	51.254	2.79%	-4.33%
			3560	3.475	49.023	3.384	51.240	2.69%	-4.33%
			3600	3.516	48.940	3.431	51.186	2.48%	-4.39%
			3650	3.566	48.879	3.489	51.118	2.21%	-4.38%
			3690	3.609	48.794	3.536	51.063	2.06%	-4.44%
			3700	3.622	48.782	3.548	51.050	2.09%	-4.44%
05/31/2023	3600 Body	20.3	3300	3.173	49.572	3.080	51.593	3.02%	-3.92%
			3350	3.218	49.472	3.139	51.525	2.52%	-3.98%
			3750	3.679	48.688	3.606	50.982	2.02%	-4.50%
			3900	3.865	48.426	3.781	50.779	2.22%	-4.63%
			3930	3.909	48.403	3.816	50.738	2.44%	-4.60%
			4100	4.114	48.097	4.015	50.507	2.47%	-4.77%
			4150	4.190	47.990	4.073	50.439	2.87%	-4.86%
			3450	3.320	49.283	3.256	51.389	1.97%	-4.10%
			3500	3.382	49.141	3.314	51.321	2.05%	-4.25%
			3550	3.427	49.042	3.372	51.254	1.63%	-4.32%
			3560	3.439	49.014	3.384	51.240	1.63%	-4.34%
			3600	3.497	48.910	3.431	51.186	1.92%	-4.45%
			3650	3.551	48.848	3.489	51.118	1.78%	-4.44%
			3690	3.601	48.741	3.536	51.063	1.84%	-4.55%
			3700	3.623	48.729	3.548	51.050	2.11%	-4.55%

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Table 10-12
Measured Body Tissue Properties (Cont.)

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
04/27/2023	5200-5800 Body	21.1	5180	5.341	47.793	5.276	49.041	1.23%	-2.54%
			5190	5.358	47.768	5.288	49.028	1.32%	-2.57%
			5290	5.507	47.535	5.404	48.892	1.91%	-2.78%
			5300	5.524	47.520	5.416	48.879	1.99%	-2.78%
			5310	5.538	47.511	5.428	48.865	2.03%	-2.77%
			5320	5.553	47.497	5.439	48.851	2.10%	-2.77%
			5500	5.801	47.178	5.650	48.607	2.67%	-2.94%
			5510	5.816	47.154	5.661	48.594	2.74%	-2.96%
			5520	5.831	47.125	5.673	48.580	2.79%	-3.00%
			5530	5.846	47.107	5.685	48.566	2.83%	-3.00%
			5540	5.863	47.088	5.696	48.553	2.93%	-3.02%
			5550	5.878	47.072	5.708	48.539	2.98%	-3.02%
			5200	5.373	47.742	5.299	49.014	1.40%	-2.60%
			5560	5.890	47.047	5.720	48.526	2.97%	-3.05%
			5580	5.923	46.999	5.743	48.499	3.13%	-3.09%
			5600	5.955	46.950	5.766	48.471	3.28%	-3.14%
			5610	5.969	46.931	5.778	48.458	3.31%	-3.15%
			5620	5.989	46.910	5.790	48.444	3.44%	-3.17%
			5640	6.020	46.877	5.813	48.417	3.56%	-3.18%
			5660	6.042	46.855	5.837	48.390	3.51%	-3.17%
			5670	6.055	46.835	5.848	48.376	3.54%	-3.19%
			5680	6.071	46.807	5.860	48.363	3.60%	-3.22%
			5690	6.087	46.775	5.872	48.349	3.66%	-3.26%
			5210	5.387	47.718	5.311	49.001	1.43%	-2.62%
			5700	6.106	46.745	5.883	48.336	3.79%	-3.29%
			5710	6.126	46.721	5.895	48.322	3.92%	-3.31%
			5720	6.143	46.709	5.907	48.309	4.00%	-3.31%
			5745	6.180	46.682	5.936	48.275	4.11%	-3.30%
			5750	6.184	46.675	5.942	48.268	4.07%	-3.30%
			5755	6.189	46.667	5.947	48.261	4.07%	-3.30%
			5765	6.199	46.643	5.959	48.248	4.03%	-3.33%
			5775	6.216	46.619	5.971	48.234	4.10%	-3.35%
			5785	6.237	46.594	5.982	48.220	4.26%	-3.37%
			5795	6.251	46.571	5.994	48.207	4.29%	-3.39%
			5220	5.399	47.693	5.323	48.987	1.43%	-2.64%
			5800	6.258	46.566	6.000	48.200	4.30%	-3.39%
			5805	6.266	46.562	6.006	48.193	4.33%	-3.38%
			5825	6.301	46.529	6.029	48.166	4.51%	-3.40%
			5835	6.317	46.517	6.042	48.130	4.55%	-3.35%
			5845	6.326	46.498	6.054	48.110	4.49%	-3.35%
			5855	6.332	46.489	6.066	48.093	4.39%	-3.34%
			5865	6.343	46.471	6.077	48.080	4.38%	-3.35%
			5875	6.355	46.458	6.088	48.067	4.39%	-3.35%
			5885	6.370	46.444	6.100	48.053	4.43%	-3.35%
			5905	6.406	46.404	6.122	48.027	4.64%	-3.38%
			5240	5.428	47.659	5.346	48.960	1.53%	-2.66%
			5250	5.444	47.639	5.358	48.947	1.61%	-2.67%
			5260	5.459	47.614	5.369	48.933	1.68%	-2.70%
			5270	5.473	47.585	5.381	48.919	1.71%	-2.73%
			5280	5.489	47.555	5.393	48.906	1.78%	-2.76%
06/06/2023	5200-5800 Body	22.0	5180	5.288	47.978	5.276	49.041	0.23%	-2.17%
			5190	5.308	47.944	5.288	49.028	0.38%	-2.21%
			5290	5.474	47.675	5.404	48.892	1.30%	-2.49%
			5300	5.488	47.664	5.416	48.879	1.33%	-2.49%
			5310	5.500	47.652	5.428	48.865	1.33%	-2.48%
			5320	5.513	47.634	5.439	48.851	1.36%	-2.49%
			5500	5.735	47.408	5.650	48.607	1.50%	-2.47%
			5510	5.752	47.376	5.661	48.594	1.61%	-2.51%
			5520	5.763	47.341	5.673	48.580	1.59%	-2.55%
			5530	5.774	47.300	5.685	48.566	1.57%	-2.61%
			5540	5.790	47.272	5.696	48.553	1.65%	-2.64%
			5550	5.811	47.238	5.708	48.539	1.80%	-2.68%
			5200	5.329	47.905	5.299	49.014	0.57%	-2.26%
			5560	5.832	47.203	5.720	48.526	1.96%	-2.73%
			5580	5.866	47.173	5.743	48.499	2.14%	-2.73%
			5600	5.897	47.148	5.766	48.471	2.27%	-2.73%
			5610	5.914	47.106	5.778	48.458	2.35%	-2.79%
			5620	5.931	47.073	5.790	48.444	2.44%	-2.83%
			5640	5.970	47.017	5.813	48.417	2.70%	-2.89%
			5660	6.001	46.987	5.837	48.390	2.81%	-2.90%
			5670	6.017	46.985	5.848	48.376	2.89%	-2.88%
			5680	6.034	46.979	5.860	48.363	2.97%	-2.86%
			5690	6.050	46.961	5.872	48.349	3.03%	-2.87%
			5210	5.347	47.870	5.311	49.001	0.68%	-2.31%
			5700	6.064	46.944	5.883	48.336	3.08%	-2.89%
			5710	6.080	46.928	5.895	48.322	3.14%	-2.89%
			5720	6.096	46.910	5.907	48.309	3.20%	-2.90%
			5745	6.128	46.879	5.936	48.275	3.23%	-2.89%
			5750	6.132	46.879	5.942	48.268	3.20%	-2.89%
			5755	6.137	46.878	5.947	48.261	3.19%	-2.87%
			5765	6.151	46.869	5.959	48.248	3.22%	-2.86%
			5775	6.165	46.859	5.971	48.234	3.25%	-2.85%
			5785	6.176	46.854	5.982	48.220	3.24%	-2.83%
			5795	6.185	46.855	5.994	48.207	3.19%	-2.80%
			5220	5.359	47.848	5.323	48.987	0.68%	-2.33%
			5800	6.191	46.854	6.000	48.200	3.18%	-2.79%
			5805	6.199	46.851	6.006	48.193	3.21%	-2.78%
			5825	6.225	46.795	6.029	48.166	3.25%	-2.85%
			5835	6.232	46.770	6.042	48.130	3.14%	-2.83%
			5845	6.240	46.758	6.054	48.110	3.07%	-2.81%
			5855	6.250	46.758	6.066	48.093	3.03%	-2.78%
			5865	6.265	46.760	6.077	48.080	3.09%	-2.75%
			5875	6.277	46.756	6.088	48.067	3.10%	-2.73%
			5885	6.288	46.750	6.100	48.053	3.08%	-2.71%
			5905	6.303	46.724	6.122	48.027	2.96%	-2.71%
			5240	5.388	47.809	5.346	48.960	0.79%	-2.35%
			5250	5.404	47.777	5.358	48.947	0.86%	-2.39%
			5260	5.421	47.743	5.369	48.933	0.97%	-2.43%
			5270	5.437	47.714	5.381	48.919	1.04%	-2.46%
			5280	5.456	47.694	5.393	48.906	1.17%	-2.48%

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.

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10.2 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 10-13
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 (%)
G	13	HEAD	04/25/2023	23.0	20.5	1.00	1002	7417	665	0.544	0.557	0.544	-2.33%	0.336	0.346	0.336	-2.89%
K1	750	HEAD	03/16/2023	21.3	21.5	0.20	1003	7491	1532	1.730	8.590	8.650	0.70%	1.150	5.660	5.750	1.59%
K	750	HEAD	03/20/2023	22.3	21.9	0.20	1161	7659	1407	1.770	8.440	8.850	4.86%	1.160	5.510	5.800	5.26%
S	750	HEAD	04/17/2023	20.9	21.1	0.20	1054	7713	1530	1.680	8.520	8.400	-1.41%	1.110	5.600	5.550	-0.89%
L	835	HEAD	03/14/2023	19.6	19.8	0.20	4d132	7410	1583	2.040	9.660	10.200	5.59%	1.340	6.270	6.700	6.86%
K1	835	HEAD	03/20/2023	21.4	21.8	0.20	4d180	7491	1532	2.050	9.750	10.250	5.13%	1.350	6.370	6.750	5.97%
K5	835	HEAD	03/22/2023	22.2	21.9	0.20	4d119	7402	1502	1.800	9.660	9.000	-6.83%	1.190	6.340	5.950	-6.15%
L	835	HEAD	04/17/2023	23.3	22.6	0.20	4d133	7410	1583	2.100	9.760	10.500	7.58%	1.380	6.370	6.900	8.32%
C	1750	HEAD	03/22/2023	21.3	19.0	0.10	1148	7406	1677	3.640	37.200	36.400	-2.15%	1.930	19.400	19.300	-0.52%
K2	1750	HEAD	03/27/2023	19.3	20.4	0.10	1092	7565	1466	3.370	36.300	33.700	-7.16%	1.820	19.100	18.200	-4.71%
K2	1900	HEAD	03/20/2023	20.1	21.3	0.10	5d026	7565	1466	4.020	39.900	40.200	0.75%	2.080	20.400	20.800	1.96%
K2	1900	HEAD	03/27/2023	19.3	20.4	0.10	5d026	7565	1466	3.900	39.900	39.000	-2.26%	2.040	20.400	20.400	0.00%
L	1900	HEAD	04/19/2023	22.5	24.5	0.10	5d149	7410	1583	4.290	40.500	42.900	5.93%	2.240	21.200	22.400	5.66%
K2	2300	HEAD	03/23/2023	20.4	21.0	0.10	1008	7565	1466	5.140	49.500	51.400	3.84%	2.470	23.700	24.700	4.22%
P	2300	HEAD	05/25/2023	23.1	21.8	0.10	1116	7409	1334	4.940	49.600	49.400	-0.40%	2.360	23.800	23.600	-0.84%
K2	2450	HEAD	03/23/2023	20.4	21.0	0.10	882	7565	1466	5.300	51.700	53.000	2.51%	2.470	24.200	24.700	2.07%
K2	2450	HEAD	03/31/2023	21.2	20.6	0.10	882	7565	1466	5.480	51.700	54.800	6.00%	2.570	24.200	25.700	6.20%
K2	2450	HEAD	04/03/2023	20.8	20.5	0.10	882	7565	1466	5.430	51.700	54.300	5.03%	2.540	24.200	25.400	4.96%
L	2450	HEAD	05/02/2023	23.1	20.9	0.10	981	7410	1583	5.460	53.900	54.600	1.30%	2.540	25.400	25.400	0.00%
L	2450	HEAD	05/04/2023	22.0	21.0	0.10	981	7410	1583	5.330	53.900	53.300	-1.11%	2.490	25.400	24.900	-1.97%
K2	2450	HEAD	05/30/2023	20.5	21.5	0.10	882	7565	1466	5.120	51.700	51.200	-0.97%	2.360	24.200	23.600	-2.48%
K2	2600	HEAD	03/23/2023	20.4	21.0	0.10	1126	7565	1466	5.520	55.900	55.200	-1.25%	2.490	25.200	24.900	-1.19%
L	2600	HEAD	03/27/2023	22.1	20.5	0.10	1071	7410	1583	5.790	56.500	57.900	2.48%	2.620	25.400	26.200	3.15%
K2	2600	HEAD	03/31/2023	21.2	20.6	0.10	1126	7565	1466	5.580	55.900	55.800	-0.18%	2.530	25.200	25.300	0.40%
K2	2600	HEAD	04/03/2023	20.8	20.5	0.10	1126	7565	1466	5.350	55.900	53.500	-4.29%	2.420	25.200	24.200	-3.97%
AM8	2600	HEAD	04/04/2023	21.5	21.1	0.10	1069	7421	604	5.790	55.600	57.900	4.14%	2.620	24.900	26.200	5.22%
AM4	3500	HEAD	03/27/2023	21.7	19.8	0.10	1126	7490	1644	6.470	67.000	64.700	-3.43%	2.440	25.000	24.400	-2.40%
C	3500	HEAD	04/18/2023	20.0	20.0	0.10	1097	7406	1677	6.480	65.400	64.800	-0.92%	2.490	24.700	24.900	0.81%
AM3	3500	HEAD	04/24/2023	21.6	20.8	0.10	1055	3837	793	6.980	66.000	69.800	5.76%	2.610	24.900	26.100	4.82%
AM6	3500	HEAD	06/05/2023	20.1	22.0	0.10	1126	7638	1408	6.900	67.000	69.000	2.99%	2.570	25.000	25.700	2.80%
AM4	3700	HEAD	03/27/2023	21.7	19.8	0.10	1097	7490	1644	6.720	68.100	67.200	-1.32%	2.470	24.500	24.700	0.82%
C	3700	HEAD	04/18/2023	20.0	20.0	0.10	1018	7406	1677	6.130	67.000	61.300	-8.51%	2.330	24.200	23.300	-3.72%
AM3	3700	HEAD	04/24/2023	21.6	20.8	0.10	1002	3837	793	7.120	67.900	71.200	4.86%	2.570	24.700	25.700	4.05%
AM6	3700	HEAD	06/05/2023	20.1	22.0	0.10	1097	7638	1408	6.620	68.100	66.200	-2.79%	2.400	24.500	24.000	-2.04%
AM3	3900	HEAD	04/24/2023	21.6	20.8	0.10	1062	3837	793	7.030	68.600	70.300	2.48%	2.440	23.800	24.400	2.52%
O	5250	HEAD	04/30/2023	23.3	23.2	0.05	1057	7570	1558	3.730	81.200	74.600	-8.13%	1.080	23.200	21.600	-6.90%
O	5600	HEAD	04/30/2023	23.3	23.2	0.05	1057	7570	1558	4.230	84.200	84.600	0.48%	1.210	23.900	24.200	1.26%
O	5750	HEAD	04/30/2023	23.3	23.2	0.05	1057	7570	1558	4.160	80.800	83.200	2.97%	1.190	22.900	23.800	3.93%
O	5800	HEAD	04/30/2023	23.3	23.2	0.05	1057	7570	1558	4.170	82.100	83.400	1.58%	1.200	23.000	24.000	4.35%

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Table 10-14
System Verification Results – Body

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 (%)
K3	750	BODY	03/16/2023	21.5	21.2	0.20	1046	7547	1322	1.820	8.700	9.100	4.60%	1.210	5.750	6.050	5.22%
P	750	BODY	03/21/2023	20.5	19.0	0.20	1054	7409	1334	1.760	8.630	8.800	1.97%	1.180	5.720	5.900	3.15%
K	750	BODY	03/27/2023	21.8	20.9	0.20	1161	7659	1407	1.720	8.790	8.600	-2.16%	1.140	5.840	5.700	-2.40%
K1	750	BODY	03/30/2023	20.8	20.7	0.20	1003	7491	1532	1.620	8.800	8.100	-7.95%	1.080	5.840	5.400	-7.53%
K1	750	BODY	04/05/2023	21.0	21.0	0.20	1003	7491	1532	1.730	8.800	8.650	-1.70%	1.130	5.840	5.650	-3.25%
K1	750	BODY	04/10/2023	21.8	22.2	0.20	1003	7491	1532	1.750	8.800	8.750	-0.57%	1.150	5.840	5.750	-1.54%
K1	750	BODY	04/12/2023	21.6	22.1	0.20	1003	7491	1532	1.720	8.800	8.600	-2.27%	1.130	5.840	5.650	-3.25%
O	750	BODY	05/23/2023	22.5	21.7	0.20	1054	7570	1558	1.760	8.630	8.800	1.97%	1.150	5.720	5.750	0.52%
C	835	BODY	03/14/2023	22.9	19.7	0.20	4d132	7406	1677	1.860	9.810	9.300	-5.20%	1.220	6.440	6.100	-5.28%
K1	835	BODY	03/21/2023	21.2	20.6	0.20	4d180	7491	1532	2.070	9.710	10.350	6.59%	1.350	6.390	6.750	5.63%
K5	835	BODY	03/23/2023	22.4	21.4	0.20	4d119	7402	1502	1.930	9.910	9.650	-2.62%	1.280	6.590	6.400	-2.88%
K1	835	BODY	03/23/2023	21.5	21.6	0.20	4d180	7491	1532	2.080	9.710	10.400	7.11%	1.360	6.390	6.800	6.42%
K1	835	BODY	03/27/2023	21.0	21.7	0.20	4d180	7491	1532	2.050	9.710	10.250	5.56%	1.340	6.390	6.700	4.85%
K1	835	BODY	04/19/2023	21.7	21.7	0.20	4d180	7491	1532	1.990	9.710	9.950	2.47%	1.320	6.390	6.600	3.29%
P	1750	BODY	03/21/2023	20.5	19.0	0.10	1008	7409	1334	3.640	37.800	36.400	-3.70%	1.950	19.900	19.500	-2.01%
K3	1750	BODY	03/22/2023	21.5	21.0	0.10	1051	7547	1322	3.930	37.500	39.300	4.80%	2.090	19.900	20.900	5.03%
P	1750	BODY	03/27/2023	20.8	22.5	0.10	1150	7409	1334	4.000	37.800	40.000	5.82%	2.140	20.000	21.400	7.00%
K3	1750	BODY	03/30/2023	21.8	21.0	0.10	1051	7547	1322	3.860	37.500	38.600	2.93%	2.050	19.900	20.500	3.02%
K3	1750	BODY	04/18/2023	22.3	22.4	0.10	1092	7547	1322	3.940	37.600	39.400	4.79%	2.090	20.100	20.900	3.98%
P	1750	BODY	05/11/2023	22.2	20.9	0.10	1150	7409	1334	3.920	37.800	39.200	3.70%	2.100	20.000	21.000	5.00%
P	1750	BODY	05/18/2023	22.3	20.8	0.10	1150	7409	1334	3.720	37.800	37.200	-1.59%	1.990	20.000	19.900	-0.50%
K2	1900	BODY	03/21/2023	20.1	21.4	0.10	5d026	7565	1466	3.830	39.300	38.300	-2.54%	2.020	20.600	20.200	-1.94%
D	1900	BODY	03/22/2023	22.1	21.2	0.10	5d148	7551	1323	4.120	39.900	41.200	3.26%	2.140	20.900	21.400	2.39%
K2	1900	BODY	03/29/2023	19.3	20.7	0.10	5d026	7565	1466	3.950	39.300	39.500	0.51%	2.070	20.600	20.700	0.49%
P	1900	BODY	04/05/2023	23.1	21.3	0.10	5d080	7409	1334	4.090	40.700	40.900	0.49%	2.120	21.300	21.200	-0.47%
AM4	1900	BODY	04/05/2023	21.8	22.3	0.10	5d030	7490	1644	4.170	39.300	41.700	6.11%	2.170	20.600	21.700	5.34%
AM1	1900	BODY	04/17/2023	21.3	22.7	0.10	5d181	7420	1333	4.180	39.700	41.800	5.29%	2.160	21.000	21.600	2.86%
O	1900	BODY	05/18/2023	22.5	21.3	0.10	5d149	7570	1558	4.130	40.400	41.300	2.23%	2.120	21.100	21.200	0.47%
AM3	1900	BODY	05/18/2023	21.0	20.5	0.10	5d030	3837	793	3.920	39.300	39.200	-0.25%	2.010	20.600	20.100	-2.43%
AM1	2300	BODY	04/05/2023	23.7	22.4	0.10	1064	7420	1333	4.840	48.400	48.400	0.00%	2.290	23.300	22.900	-1.72%
AM3	2300	BODY	04/19/2023	21.6	22.1	0.10	1064	3837	793	4.530	48.400	45.300	-6.40%	2.170	23.300	21.700	-6.87%
S	2300	BODY	05/25/2023	21.3	21.3	0.10	1073	7713	1530	4.910	48.100	49.100	2.08%	2.360	23.600	23.600	0.00%
O	2300	BODY	05/29/2023	22.7	22.4	0.10	1116	7570	1558	4.940	49.200	49.400	0.41%	2.350	23.700	23.500	-0.84%
K3	2450	BODY	03/28/2023	21.3	20.0	0.10	945	7547	1322	5.030	49.600	50.300	1.41%	2.320	23.400	23.200	-0.85%
K3	2450	BODY	04/10/2023	22.3	21.5	0.10	945	7547	1322	5.080	49.600	50.800	2.42%	2.350	23.400	23.500	0.43%
K3	2450	BODY	04/12/2023	22.7	22.5	0.10	945	7547	1322	5.070	49.600	50.700	2.22%	2.350	23.400	23.500	0.43%
K3	2450	BODY	04/13/2023	22.6	21.5	0.10	945	7547	1322	5.180	49.600	51.800	4.44%	2.400	23.400	24.000	2.56%
G	2450	BODY	04/30/2023	22.2	23.0	0.10	719	7417	665	4.980	52.000	49.800	-4.23%	2.280	24.700	22.800	-7.69%
G	2450	BODY	05/02/2023	22.3	23.0	0.10	719	7417	665	4.860	52.000	48.600	-6.54%	2.230	24.700	22.300	-9.72%
L	2450	BODY	05/09/2023	23.3	23.1	0.10	981	7410	1583	5.370	50.300	53.700	6.76%	2.490	23.700	24.900	5.06%
P	2600	BODY	03/28/2023	23.6	22.3	0.10	1071	7409	1334	5.300	54.300	53.000	-2.39%	2.320	24.300	23.200	-4.53%
K3	2600	BODY	03/28/2023	21.3	20.0	0.10	1126	7547	1322	5.580	54.700	55.800	2.01%	2.480	24.700	24.800	0.40%
P	2600	BODY	03/31/2023	21.7	22.3	0.10	1064	7409	1334	5.550	54.600	55.500	1.65%	2.450	24.400	24.500	0.41%
AM1	2600	BODY	04/03/2023	20.0	20.5	0.10	1042	7420	1333	5.480	53.700	54.800	2.05%	2.390	24.000	23.900	-0.42%
AM7	2600	BODY	04/05/2023	23.1	22.2	0.10	1042	7416	701	5.220	53.700	52.200	-2.79%	2.300	24.000	23.000	-4.17%
K3	2600	BODY	04/10/2023	22.3	21.5	0.10	1009	7547	1322	5.510	54.200	55.100	1.66%	2.460	24.300	24.600	1.23%
K3	2600	BODY	04/12/2023	22.7	22.5	0.10	1009	7547	1322	5.700	54.200	57.000	5.17%	2.540	24.300	25.400	4.53%
K3	2600	BODY	04/13/2023	22.6	21.5	0.10	1009	7547	1322	5.560	54.200	55.600	2.58%	2.480	24.300	24.800	2.06%
C	3500	BODY	03/23/2023	21.7	20.3	0.10	1097	7406	1677	6.160	63.100	61.600	-2.38%	2.300	23.600	23.000	-2.54%
AM3	3500	BODY	03/27/2023	20.2	21.8	0.10	1126	3837	793	6.650	63.600	66.500	4.56%	2.440	23.600	24.400	3.39%
AM3	3500	BODY	03/30/2023	22.5	21.6	0.10	1126	3837	793	6.740	63.600	67.400	5.97%	2.470	23.600	24.700	4.66%
AM3	3500	BODY	04/03/2023	21.5	22.9	0.10	1126	3837	793	6.680	63.600	66.800	5.03%	2.450	23.600	24.500	3.81%
AM3	3500	BODY	04/05/2023	22.3	21.5	0.10	1126	3837	793	6.510	63.600	65.100	2.36%	2.410	23.600	24.100	2.12%
AM3	3500	BODY	05/31/2023	20.1	20.3	0.10	1126	3837	793	6.750	63.600	67.500	6.13%	2.520	23.600	25.200	6.78%
C	3700	BODY	03/23/2023	21.7	20.3	0.10	1018	7406	1677	6.570	63.500	65.700	3.46%	2.410	22.500	24.100	7.11%
AM3	3700	BODY	03/27/2023	20.2	21.8	0.10	1097	3837	793	6.620	62.300	66.200	6.26%	2.360	22.200	23.600	6.31%
AM3	3700	BODY	03/30/2023	22.5	21.6	0.10	1097	3837	793	5.850	62.300	58.500	-6.10%	2.080	22.200	20.800	-6.31%
AM3	3700	BODY	04/03/2023	21.5	22.9	0.10	1097	3837	793	6.250	62.300	62.500	0.32%	2.250	22.200	22.500	1.35%
AM3	3700	BODY	04/05/2023	22.3	21.5	0.10	1097	3837	793	6.540	62.300	65.400	4.98%	2.350	22.200	23.500	5.86%
AM3	3700	BODY	05/31/2023	20.1	20.3	0.10	1097	3837	793	6.710	62.300	67.100	7.70%	2.430	22.200	24.300	9.46%
AM3	3900	BODY	03/27/2023	20.2	21.8	0.10	1062	3837	793	6.850	66.300	68.500	3.32%	2.340	23.100	23.400	1.30%
AM3	3900	BODY	03/30/2023	22.5	21.6	0.10	1062	3837	793	6.770	66.300	67.700	2.11%	2.300	23.100	23.000	-0.43%
O	5250	BODY	04/27/2023	22.8	21.1	0.05	1191	7570	1558	3.380	74.600	67.600	-9.38%	0.958	20.700	19.160	-7.44%
G	5250	BODY	06/06/2023	22.7	21.5	0.05	1191	7417	665	3.470	74.600	69.400	-6.97%	0.968	20.700	19.360	-6.47%
O	5600	BODY	04/27/2023	22.8	21.1	0.05	1191	7570	1558	3.650	78.600	73.000	-7.12%	1.030	21.800	20.600	-5.50%
G	5600	BODY	06/06/2023	22.7	21.5	0.05	1191	7417	665	4.130	78.600	82.600	5.09%	1.170	21.800	23.400	7.34%
O	5750	BODY	04/27/2023	22.8	21.1	0.05	1191	7570	1558	3.410	74.900	68.200	-8.95%	0.958	20.700	19.160	-7.44%
G	5750	BODY	06/06/2023	22.7	21.5	0.05	1057	7417	665	3.540	74.900	70.800	-5.47%	0.996	20.700	19.920	-3.77%
O	5800	BODY	04/27/2023	22.8	21.1	0.05	1191	7570	1558	3.590	72.200	71.800	-0.55%	1.010	20.000	20.200	1.00%
G	5800	BODY	06/06/2023	22.7	21.5	0.05	1057	7417	665	3.550	74.800	71.000	-5.08%	0.979	20.500	19.580	-4.49%

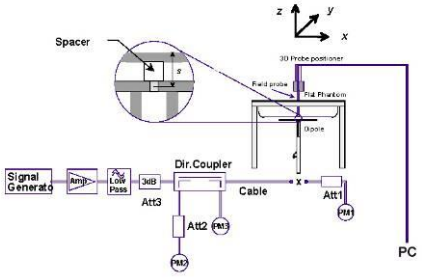

Figure 10-1
System Verification Setup Diagram

Figure 10-2
System Verification Setup Photo

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11 SAR DATA SUMMARY

11.1 Standalone Head SAR Data

Table 11-1
GSM 850 Head SAR

MEASUREMENT RESULTS																
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.												(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
824.20	128	Right	Cheek	GSM 850	GSM	A	Open	0076M	34.0	33.00	-0.03	1:8.3	0.140	1.259	0.176	0.176	A1
824.20	128	Right	Tilt	GSM 850	GSM	A	Open	0076M	34.0	33.00	-0.06	1:8.3	0.076	1.259	0.096	0.096	
824.20	128	Left	Cheek	GSM 850	GSM	A	Open	0076M	34.0	33.00	-0.07	1:8.3	0.125	1.259	0.157	0.157	
824.20	128	Left	Tilt	GSM 850	GSM	A	Open	0076M	34.0	33.00	0.04	1:8.3	0.071	1.259	0.089	0.089	
ICNIRP 1998 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Head 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-2
GSM 1900 Head SAR

MEASUREMENT RESULTS																
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.												(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1909.80	810	Right	Cheek	GSM 1900	GSM	A	Open	0034M	32.0	31.15	-0.14	1:8.3	0.016	1.216	0.019	0.019	
1909.80	810	Right	Tilt	GSM 1900	GSM	A	Open	0034M	32.0	31.15	-0.19	1:8.3	0.013	1.216	0.016	0.016	
1909.80	810	Left	Cheek	GSM 1900	GSM	A	Open	0034M	32.0	31.15	-0.02	1:8.3	0.023	1.216	0.028	0.028	A2
1909.80	810	Left	Tilt	GSM 1900	GSM	A	Open	0034M	32.0	31.15	0.06	1:8.3	0.019	1.216	0.023	0.023	
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 11-3
UMTS 850 Head SAR

MEASUREMENT RESULTS																
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.												(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
826.40	4132	Right	Cheek	UMTS 850	RMC	A	Open	0245M	25.0	24.13	0.05	1:1	0.147	1.222	0.180	0.180	A3
826.40	4132	Right	Tilt	UMTS 850	RMC	A	Open	0245M	25.0	24.13	0.15	1:1	0.070	1.222	0.086	0.086	
826.40	4132	Left	Cheek	UMTS 850	RMC	A	Open	0245M	25.0	24.13	0.00	1:1	0.141	1.222	0.172	0.172	
826.40	4132	Left	Tilt	UMTS 850	RMC	A	Open	0245M	25.0	24.13	0.10	1:1	0.086	1.222	0.105	0.105	
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 11-4
UMTS 1750 Head SAR

MEASUREMENT RESULTS																
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.												(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1712.40	1312	Right	Cheek	UMTS 1750	RMC	A	Open	0034M	24.5	23.08	0.01	1:1	0.063	1.387	0.087	0.087	A4
1712.40	1312	Right	Tilt	UMTS 1750	RMC	A	Open	0034M	24.5	23.08	-0.14	1:1	0.036	1.387	0.050	0.050	
1712.40	1312	Left	Cheek	UMTS 1750	RMC	A	Open	0034M	24.5	23.08	-0.02	1:1	0.058	1.387	0.080	0.080	
1712.40	1312	Left	Tilt	UMTS 1750	RMC	A	Open	0034M	24.5	23.08	0.04	1:1	0.018	1.387	0.025	0.025	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Head 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 11-5
UMTS 1900 Head SAR

MEASUREMENT RESULTS																
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.												(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1907.60	9538	Right	Cheek	UMTS 1900	RMC	A	Open	0034M	24.5	23.63	0.00	1:1	0.043	1.222	0.053	0.053	
1907.60	9538	Right	Tilt	UMTS 1900	RMC	A	Open	0034M	24.5	23.63	-0.09	1:1	0.038	1.222	0.046	0.046	
1907.60	9538	Left	Cheek	UMTS 1900	RMC	A	Open	0034M	24.5	23.63	0.05	1:1	0.082	1.222	0.100	0.100	A5
1907.60	9538	Left	Tilt	UMTS 1900	RMC	A	Open	0034M	24.5	23.63	0.00	1:1	0.041	1.222	0.050	0.050	
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 11-6
LTE Band 71 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
680.50	133297	Mid	Right	Cheek	LTE Band 71	A	Open	0027M	20	QPSK	1	50	26.0	25.28	0	0.17	1:1	0.151	1.180	0.178	0.178	
680.50	133297	Mid	Right	Cheek	LTE Band 71	A	Open	0027M	20	QPSK	50	0	25.0	24.09	1	0.18	1:1	0.106	1.233	0.131	0.131	
680.50	133297	Mid	Right	Tilt	LTE Band 71	A	Open	0027M	20	QPSK	1	50	26.0	25.28	0	0.14	1:1	0.089	1.180	0.105	0.105	
680.50	133297	Mid	Right	Tilt	LTE Band 71	A	Open	0027M	20	QPSK	50	0	25.0	24.09	1	0.14	1:1	0.059	1.233	0.073	0.073	
680.50	133297	Mid	Left	Cheek	LTE Band 71	A	Open	0027M	20	QPSK	1	50	26.0	25.28	0	0.07	1:1	0.164	1.180	0.194	0.194	A6
680.50	133297	Mid	Left	Cheek	LTE Band 71	A	Open	0027M	20	QPSK	50	0	25.0	24.09	1	0.15	1:1	0.116	1.233	0.143	0.143	
680.50	133297	Mid	Left	Tilt	LTE Band 71	A	Open	0027M	20	QPSK	1	50	26.0	25.28	0	0.07	1:1	0.093	1.180	0.110	0.110	
680.50	133297	Mid	Left	Tilt	LTE Band 71	A	Open	0027M	20	QPSK	50	0	25.0	24.09	1	0.07	1:1	0.067	1.233	0.083	0.083	
ICNIRP 1998 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-7
LTE Band 12 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
707.50	23095	Mid	Right	Cheek	LTE Band 12	A	Open	0076M	10	QPSK	1	25	26.0	24.48	0	-0.04	1:1	0.181	1.419	0.257	0.257	
707.50	23095	Mid	Right	Cheek	LTE Band 12	A	Open	0076M	10	QPSK	25	12	25.0	23.54	1	-0.07	1:1	0.135	1.400	0.189	0.189	
707.50	23095	Mid	Right	Tilt	LTE Band 12	A	Open	0076M	10	QPSK	1	25	26.0	24.48	0	0.02	1:1	0.098	1.419	0.139	0.139	
707.50	23095	Mid	Right	Tilt	LTE Band 12	A	Open	0076M	10	QPSK	25	12	25.0	23.54	1	0.06	1:1	0.080	1.400	0.112	0.112	
707.50	23095	Mid	Left	Cheek	LTE Band 12	A	Open	0076M	10	QPSK	1	25	26.0	24.48	0	0.02	1:1	0.205	1.419	0.291	0.291	A7
707.50	23095	Mid	Left	Cheek	LTE Band 12	A	Open	0076M	10	QPSK	25	12	25.0	23.54	1	-0.14	1:1	0.154	1.400	0.216	0.216	
707.50	23095	Mid	Left	Tilt	LTE Band 12	A	Open	0076M	10	QPSK	1	25	26.0	24.48	0	-0.04	1:1	0.112	1.419	0.159	0.159	
707.50	23095	Mid	Left	Tilt	LTE Band 12	A	Open	0076M	10	QPSK	25	12	25.0	23.54	1	-0.02	1:1	0.086	1.400	0.120	0.120	
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 11-8
LTE Band 13 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
782.00	23230	Mid	Right	Cheek	LTE Band 13	A	Open	0076M	10	QPSK	1	0	26.0	24.66	0	0.05	1:1	0.220	1.361	0.299	0.299	
782.00	23230	Mid	Right	Cheek	LTE Band 13	A	Open	0076M	10	QPSK	25	0	25.0	23.72	1	0.07	1:1	0.174	1.343	0.234	0.234	
782.00	23230	Mid	Right	Tilt	LTE Band 13	A	Open	0076M	10	QPSK	1	0	26.0	24.66	0	-0.05	1:1	0.101	1.361	0.137	0.137	
782.00	23230	Mid	Right	Tilt	LTE Band 13	A	Open	0076M	10	QPSK	25	0	25.0	23.72	1	0.02	1:1	0.080	1.343	0.107	0.107	
782.00	23230	Mid	Left	Cheek	LTE Band 13	A	Open	0076M	10	QPSK	1	0	26.0	24.66	0	0.19	1:1	0.221	1.361	0.301	0.301	A8
782.00	23230	Mid	Left	Cheek	LTE Band 13	A	Open	0076M	10	QPSK	25	0	25.0	23.72	1	0.10	1:1	0.161	1.343	0.216	0.216	
782.00	23230	Mid	Left	Tilt	LTE Band 13	A	Open	0076M	10	QPSK	1	0	26.0	24.66	0	0.02	1:1	0.124	1.361	0.169	0.169	
782.00	23230	Mid	Left	Tilt	LTE Band 13	A	Open	0076M	10	QPSK	25	0	25.0	23.72	1	0.10	1:1	0.095	1.343	0.128	0.128	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-9
LTE Band 14 Head SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
793.00	23330	Mid	Right	Cheek	LTE Band 14	A	Open	0076M	10	QPSK	1	0	26.0	24.45	0	0.03	1:1	0.202	1.429	0.289	0.289	A9
793.00	23330	Mid	Right	Cheek	LTE Band 14	A	Open	0076M	10	QPSK	25	0	25.0	23.51	1	0.20	1:1	0.159	1.409	0.224	0.224	
793.00	23330	Mid	Right	Tilt	LTE Band 14	A	Open	0076M	10	QPSK	1	0	26.0	24.45	0	0.16	1:1	0.105	1.429	0.150	0.150	
793.00	23330	Mid	Right	Tilt	LTE Band 14	A	Open	0076M	10	QPSK	25	0	25.0	23.51	1	0.06	1:1	0.085	1.409	0.120	0.120	
793.00	23330	Mid	Left	Cheek	LTE Band 14	A	Open	0076M	10	QPSK	1	0	26.0	24.45	0	-0.09	1:1	0.162	1.429	0.231	0.231	
793.00	23330	Mid	Left	Cheek	LTE Band 14	A	Open	0076M	10	QPSK	25	0	25.0	23.51	1	0.11	1:1	0.132	1.409	0.186	0.186	
793.00	23330	Mid	Left	Tilt	LTE Band 14	A	Open	0076M	10	QPSK	1	0	26.0	24.45	0	-0.04	1:1	0.111	1.429	0.159	0.159	
793.00	23330	Mid	Left	Tilt	LTE Band 14	A	Open	0076M	10	QPSK	25	0	25.0	23.51	1	0.05	1:1	0.084	1.409	0.118	0.118	
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 11-10
LTE Band 26 (Cell) Head SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
831.50	26865	Mid	Right	Cheek	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	1	36	26.0	24.55	0	0.02	1:1	0.176	1.396	0.246	0.246	A10
831.50	26865	Mid	Right	Cheek	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	36	37	25.0	23.64	1	0.08	1:1	0.149	1.368	0.204	0.204	
831.50	26865	Mid	Right	Tilt	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	1	36	26.0	24.55	0	0.03	1:1	0.114	1.396	0.159	0.159	
831.50	26865	Mid	Right	Tilt	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	36	37	25.0	23.64	1	0.04	1:1	0.086	1.368	0.118	0.118	
831.50	26865	Mid	Left	Cheek	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	1	36	26.0	24.55	0	0.16	1:1	0.149	1.396	0.208	0.208	
831.50	26865	Mid	Left	Cheek	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	36	37	25.0	23.64	1	0.03	1:1	0.125	1.368	0.171	0.171	
831.50	26865	Mid	Left	Tilt	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	1	36	26.0	24.55	0	0.02	1:1	0.113	1.396	0.158	0.158	
831.50	26865	Mid	Left	Tilt	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	36	37	25.0	23.64	1	0.11	1:1	0.085	1.368	0.116	0.116	
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 11-11
LTE Band 5 (Cell) Head SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
836.50	20525	Mid	Right	Cheek	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	1	0	26.0	24.83	0	0.15	1:1	0.180	1.309	0.236	0.236	A11
836.50	20525	Mid	Right	Cheek	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	25	25	25.0	23.81	1	0.05	1:1	0.142	1.315	0.187	0.187	
836.50	20525	Mid	Right	Tilt	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	1	0	26.0	24.83	0	0.19	1:1	0.087	1.309	0.114	0.114	
836.50	20525	Mid	Right	Tilt	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	25	25	25.0	23.81	1	0.07	1:1	0.064	1.315	0.084	0.084	
836.50	20525	Mid	Left	Cheek	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	1	0	26.0	24.83	0	0.04	1:1	0.168	1.309	0.220	0.220	
836.50	20525	Mid	Left	Cheek	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	25	25	25.0	23.81	1	0.18	1:1	0.144	1.315	0.189	0.189	
836.50	20525	Mid	Left	Tilt	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	1	0	26.0	24.83	0	0.05	1:1	0.105	1.309	0.137	0.137	
836.50	20525	Mid	Left	Tilt	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	25	25	25.0	23.81	1	0.16	1:1	0.085	1.315	0.112	0.112	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Head 1.6 W/kg (mW/g) averaged over 1 gram						

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Table 11-12
LTE Band 66 (AWS) Head SAR

MEASUREMENT RESULTS																										
# CC Uplink	Component Carrier	FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
		MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1 CC Uplink	N/A	1720.00	132072	Low	Right	Cheek	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	26.3	24.88	0	-0.03	1:1	0.019	1.387	0.026	0.026	
1 CC Uplink	N/A	1720.00	132072	Low	Right	Cheek	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	0	25.3	24.14	1	-0.04	1:1	0.013	1.306	0.017	0.017	
1 CC Uplink	N/A	1720.00	132072	Low	Right	Tilt	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	26.3	24.88	0	0.02	1:1	0.006	1.387	0.008	0.008	
1 CC Uplink	N/A	1720.00	132072	Low	Right	Tilt	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	0	25.3	24.14	1	-0.20	1:1	0.004	1.306	0.005	0.005	
1 CC Uplink	N/A	1720.00	132072	Low	Left	Cheek	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	26.3	24.88	0	-0.05	1:1	0.047	1.387	0.065	0.065	
1 CC Uplink	N/A	1720.00	132072	Low	Left	Cheek	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	99	26.3	24.73	0	-0.12	1:1	0.044	1.435	0.063	0.063	
1 CC Uplink	N/A	1720.00	132072	Low	Left	Cheek	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	0	25.3	24.14	1	0.03	1:1	0.028	1.306	0.037	0.037	
1 CC Uplink	N/A	1715.00	132022	Low	Left	Cheek	LTE Band 66 (AWS)	A	Open	0250M	10	QPSK	1	49	26.3	25.21	0	0.01	1:1	0.049	1.285	0.063	0.063	
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	Left	Cheek	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	99	26.3	24.91	0	-0.05	1:1	0.047	1.377	0.065	0.065	
	SCC	1739.80	132270											0										
2 CC Uplink CA_66B	PCC	1715.00	132022	Low	Left	Cheek	LTE Band 66 (AWS)	A	Open	0250M	10	QPSK	1	49	26.3	25.07	0	0.09	1:1	0.050	1.327	0.066	0.066	A12
	SCC	1724.90	132121											0										
1 CC Uplink	N/A	1720.00	132072	Low	Left	Tilt	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	26.3	24.88	0	-0.07	1:1	0.009	1.387	0.012	0.012	
1 CC Uplink	N/A	1720.00	132072	Low	Left	Tilt	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	0	25.3	24.14	1	0.03	1:1	0.006	1.306	0.008	0.008	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Head
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 11-13
LTE Band 25 (PCS) Head SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1905.00	26590	High	Right	Cheek	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	26.3	24.97	0	0.06	1:1	0.043	1.358	0.058	0.058	
1905.00	26590	High	Right	Cheek	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	50	25.3	23.95	1	0.00	1:1	0.040	1.365	0.055	0.055	
1905.00	26590	High	Right	Tilt	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	26.3	24.97	0	0.04	1:1	0.023	1.358	0.031	0.031	
1905.00	26590	High	Right	Tilt	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	50	25.3	23.95	1	0.05	1:1	0.018	1.365	0.025	0.025	
1905.00	26590	High	Left	Cheek	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	26.3	24.97	0	-0.09	1:1	0.057	1.358	0.077	0.077	A13
1905.00	26590	High	Left	Cheek	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	50	25.3	23.95	1	-0.05	1:1	0.046	1.365	0.063	0.063	
1905.00	26590	High	Left	Tilt	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	26.3	24.97	0	0.15	1:1	0.033	1.358	0.045	0.045	
1905.00	26590	High	Left	Tilt	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	50	25.3	23.95	1	0.05	1:1	0.032	1.365	0.044	0.044	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Head
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

Table 11-14
LTE Band 30 Head SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2310.00	27710	Mid	Right	Cheek	LTE Band 30	B	Open	0034M	10	QPSK	1	25	25.0	23.52	0	0.03	1:1	0.015	1.406	0.021	0.021	
2310.00	27710	Mid	Right	Cheek	LTE Band 30	B	Open	0034M	10	QPSK	25	12	24.0	22.48	1	-0.07	1:1	0.010	1.419	0.014	0.014	
2310.00	27710	Mid	Right	Tilt	LTE Band 30	B	Open	0034M	10	QPSK	1	25	25.0	23.52	0	0.06	1:1	0.008	1.406	0.011	0.011	
2310.00	27710	Mid	Right	Tilt	LTE Band 30	B	Open	0034M	10	QPSK	25	12	24.0	22.48	1	0.06	1:1	0.007	1.419	0.010	0.010	
2310.00	27710	Mid	Left	Cheek	LTE Band 30	B	Open	0034M	10	QPSK	1	25	25.0	23.52	0	0.10	1:1	0.031	1.406	0.044	0.044	A14
2310.00	27710	Mid	Left	Cheek	LTE Band 30	B	Open	0034M	10	QPSK	25	12	24.0	22.48	1	-0.06	1:1	0.019	1.419	0.027	0.027	
2310.00	27710	Mid	Left	Tilt	LTE Band 30	B	Open	0034M	10	QPSK	1	25	25.0	23.52	0	0.13	1:1	0.009	1.406	0.013	0.013	
2310.00	27710	Mid	Left	Tilt	LTE Band 30	B	Open	0034M	10	QPSK	25	12	24.0	22.48	1	0.09	1:1	0.006	1.419	0.009	0.009	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Head
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

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Table 11-15
LTE Band 7 Head SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2510.00	20850	Low	Right	Cheek	LTE Band 7	B	Open	0034M	20	QPSK	1	50	25.8	24.41	0	0.04	1:1	0.022	1.377	0.030	0.030	
2510.00	20850	Low	Right	Cheek	LTE Band 7	B	Open	0034M	20	QPSK	50	25	25.3	23.54	0.5	-0.12	1:1	0.012	1.500	0.018	0.018	
2510.00	20850	Low	Right	Tilt	LTE Band 7	B	Open	0034M	20	QPSK	1	50	25.8	24.41	0	-0.01	1:1	0.018	1.377	0.025	0.025	
2510.00	20850	Low	Right	Tilt	LTE Band 7	B	Open	0034M	20	QPSK	50	25	25.3	23.54	0.5	0.07	1:1	0.012	1.500	0.018	0.018	
2510.00	20850	Low	Left	Cheek	LTE Band 7	B	Open	0034M	20	QPSK	1	50	25.8	24.41	0	-0.06	1:1	0.025	1.377	0.034	0.034	A15
2510.00	20850	Low	Left	Cheek	LTE Band 7	B	Open	0034M	20	QPSK	50	25	25.3	23.54	0.5	-0.10	1:1	0.019	1.500	0.029	0.029	
2510.00	20850	Low	Left	Tilt	LTE Band 7	B	Open	0034M	20	QPSK	1	50	25.8	24.41	0	0.01	1:1	0.011	1.377	0.015	0.015	
2510.00	20850	Low	Left	Tilt	LTE Band 7	B	Open	0034M	20	QPSK	50	25	25.3	23.54	0.5	-0.14	1:1	0.007	1.500	0.011	0.011	
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 11-16
LTE Band 41 Head SAR

MEASUREMENT RESULTS																							
# CC Uplink, Power Class	Component Carrier	FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
		MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	Right	Cheek	LTE Band 41	B	Open	0221M	20	QPSK	1	0	26.0	24.24	0	0.04	1:1.58	0.005	1.500	0.008	0.008	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	Right	Cheek	LTE Band 41	B	Open	0221M	20	QPSK	50	25	25.0	23.35	1	0.01	1:1.58	0.006	1.462	0.009	0.009	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	Right	Tilt	LTE Band 41	B	Open	0221M	20	QPSK	1	0	26.0	24.24	0	-0.09	1:1.58	0.011	1.500	0.017	0.017	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	Right	Tilt	LTE Band 41	B	Open	0221M	20	QPSK	1	99	26.0	24.00	0	0.05	1:1.58	0.007	1.585	0.011	0.011	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	Right	Tilt	LTE Band 41	B	Open	0221M	20	QPSK	50	25	25.0	23.35	1	0.06	1:1.58	0.007	1.462	0.010	0.010	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	Right	Tilt	LTE Band 41	B	Open	0221M	20	QPSK	1	0	27.6	26.25	0	0.08	1:2.31	0.012	1.365	0.016	0.016	A16
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	Right	Tilt	LTE Band 41	B	Open	0221M	20	QPSK	1	99	27.6	26.02	0	0.08	1:2.31	0.007	1.439	0.010	0.010	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	Right	Tilt	LTE Band 41	B	Open	0221M	20	QPSK	1	99	26.0	24.27	0	0.07	1:1.58	0.007	1.489	0.010	0.010	
	SCC	2525.80	39948											0										
2 CC Uplink - Power Class 2	PCC	2506.00	39750	Low	Right	Tilt	LTE Band 41	B	Open	0221M	20	QPSK	1	99	27.6	26.30	0	0.01	1:2.31	0.007	1.349	0.009	0.009	
	SCC	2525.80	39948											0										
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	Left	Cheek	LTE Band 41	B	Open	0221M	20	QPSK	1	0	26.0	24.24	0	0.01	1:1.58	0.011	1.500	0.017	0.017	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	Left	Cheek	LTE Band 41	B	Open	0221M	20	QPSK	50	25	25.0	23.35	1	-0.19	1:1.58	0.009	1.462	0.013	0.013	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	Left	Tilt	LTE Band 41	B	Open	0221M	20	QPSK	1	0	26.0	24.24	0	0.03	1:1.58	0.008	1.500	0.012	0.012	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	Left	Tilt	LTE Band 41	B	Open	0221M	20	QPSK	50	25	25.0	23.35	1	0.09	1:1.58	0.004	1.462	0.006	0.006	
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 11-17
LTE Band 48 Head SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Test Position	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
		MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1 CC Uplink	N/A	3560.00	55340	Low	Right	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	1	99	16.0	14.43	0	-0.03	1:1.58	0.521	1.435	0.748	0.748	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	Right	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	1	0	16.0	14.17	0	0.00	1:1.58	0.516	1.524	0.786	0.786	
1 CC Uplink	N/A	3646.70	56207	Mid-High	Right	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	1	0	16.0	14.11	0	0.05	1:1.58	0.503	1.545	0.777	0.777	
1 CC Uplink	N/A	3690.00	56640	High	Right	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	1	99	16.0	14.20	0	0.03	1:1.58	0.449	1.514	0.680	0.680	
1 CC Uplink	N/A	3560.00	55340	Low	Right	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	50	50	16.0	14.67	0	0.02	1:1.58	0.534	1.358	0.725	0.725	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	Right	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	50	0	16.0	14.30	0	0.01	1:1.58	0.550	1.479	0.813	0.813	
1 CC Uplink	N/A	3646.70	56207	Mid-High	Right	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	50	25	16.0	14.31	0	-0.01	1:1.58	0.551	1.476	0.813	0.813	A17
1 CC Uplink	N/A	3690.00	56640	High	Right	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	50	50	16.0	14.42	0	-0.01	1:1.58	0.478	1.439	0.688	0.688	
1 CC Uplink	N/A	3560.00	55340	Low	Right	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	100	0	16.0	14.40	0	0.00	1:1.58	0.537	1.445	0.776	0.776	
2 CC Uplink	PCC	3603.30	55773	Low-Mid	Right	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	50	0	16.0	14.50	0	0.00	1:1.58	0.547	1.413	0.773	0.773	
	SCC	3583.50	55575											50										
1 CC Uplink	N/A	3560.00	55340	Low	Right	Tilt	LTE Band 48	F	Open	0071M	20	QPSK	1	99	16.0	14.43	0	0.07	1:1.58	0.417	1.435	0.598	0.598	
1 CC Uplink	N/A	3560.00	55340	Low	Right	Tilt	LTE Band 48	F	Open	0071M	20	QPSK	50	50	16.0	14.67	0	0.01	1:1.58	0.415	1.358	0.564	0.564	
1 CC Uplink	N/A	3560.00	55340	Low	Left	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	1	99	16.0	14.43	0	0.03	1:1.58	0.094	1.435	0.135	0.135	
1 CC Uplink	N/A	3560.00	55340	Low	Left	Cheek	LTE Band 48	F	Open	0071M	20	QPSK	50	50	16.0	14.67	0	-0.02	1:1.58	0.094	1.358	0.128	0.128	
1 CC Uplink	N/A	3560.00	55340	Low	Left	Tilt	LTE Band 48	F	Open	0071M	20	QPSK	1	99	16.0	14.43	0	0.06	1:1.58	0.082	1.435	0.118	0.118	
1 CC Uplink	N/A	3560.00	55340	Low	Left	Tilt	LTE Band 48	F	Open	0071M	20	QPSK	50	50	16.0	14.67	0	-0.07	1:1.58	0.087	1.358	0.118	0.118	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 11-18
NR Band n71 Head SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Test Position	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
680.50	136100	Mid	Right	Cheek	NR Band n71	A	Open	0199M	20	DFT-S-OFDM	QPSK	1	53	25.2	24.55	0	0.03	1:1	0.173	1.161	0.201	0.201	
680.50	136100	Mid	Right	Cheek	NR Band n71	A	Open	0199M	20	DFT-S-OFDM	QPSK	50	28	25.2	24.81	0	0.06	1:1	0.175	1.094	0.191	0.191	
680.50	136100	Mid	Right	Tilt	NR Band n71	A	Open	0199M	20	DFT-S-OFDM	QPSK	1	53	25.2	24.55	0	0.09	1:1	0.105	1.161	0.122	0.122	
680.50	136100	Mid	Right	Tilt	NR Band n71	A	Open	0199M	20	DFT-S-OFDM	QPSK	50	28	25.2	24.81	0	0.02	1:1	0.097	1.094	0.106	0.106	
680.50	136100	Mid	Left	Cheek	NR Band n71	A	Open	0199M	20	DFT-S-OFDM	QPSK	1	53	25.2	24.55	0	0.04	1:1	0.179	1.161	0.208	0.208	
680.50	136100	Mid	Left	Cheek	NR Band n71	A	Open	0199M	20	DFT-S-OFDM	QPSK	50	28	25.2	24.81	0	0.01	1:1	0.194	1.094	0.212	0.212	A18
680.50	136100	Mid	Left	Cheek	NR Band n71	A	Open	0199M	20	CP-OFDM	QPSK	1	1	23.7	23.12	1.5	-0.01	1:1	0.099	1.143	0.113	0.113	
680.50	136100	Mid	Left	Tilt	NR Band n71	A	Open	0199M	20	DFT-S-OFDM	QPSK	1	53	25.2	24.55	0	-0.18	1:1	0.098	1.161	0.114	0.114	
680.50	136100	Mid	Left	Tilt	NR Band n71	A	Open	0199M	20	DFT-S-OFDM	QPSK	50	28	25.2	24.81	0	0.03	1:1	0.101	1.094	0.110	0.110	
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 11-19
NR Band n12 Head SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Test Position	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
707.50	141500	Mid	Right	Cheek	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.30	0	-0.08	1:1	0.144	1.318	0.190	0.190	
707.50	141500	Mid	Right	Cheek	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.32	0	0.01	1:1	0.143	1.312	0.188	0.188	
707.50	141500	Mid	Right	Tilt	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.30	0	-0.03	1:1	0.075	1.318	0.099	0.099	
707.50	141500	Mid	Right	Tilt	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.32	0	0.05	1:1	0.071	1.312	0.093	0.093	
707.50	141500	Mid	Left	Cheek	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.30	0	-0.02	1:1	0.145	1.318	0.191	0.191	A19
707.50	141500	Mid	Left	Cheek	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.32	0	-0.07	1:1	0.145	1.312	0.190	0.190	
707.50	141500	Mid	Left	Cheek	NR Band n12	A	Open	0024M	15	CP-OFDM	QPSK	1	1	24.0	22.95	1.5	0.13	1:1	0.103	1.274	0.131	0.131	
707.50	141500	Mid	Left	Tilt	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.30	0	0.03	1:1	0.081	1.318	0.107	0.107	
707.50	141500	Mid	Left	Tilt	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.32	0	0.04	1:1	0.080	1.312	0.105	0.105	
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 11-20
NR Band n26 Head SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Test Position	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
831.50	166300	Mid	Right	Cheek	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	1	53	25.7	24.28	0	-0.03	1:1	0.117	1.387	0.162	0.162	
831.50	166300	Mid	Right	Cheek	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	50	28	25.7	24.49	0	0.01	1:1	0.122	1.321	0.161	0.161	A20
831.50	166300	Mid	Right	Cheek	NR Band n26	A	Open	0024M	20	CP-OFDM	QPSK	1	1	24.2	22.88	1.5	-0.03	1:1	0.089	1.355	0.121	0.121	
831.50	166300	Mid	Right	Tilt	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	1	53	25.7	24.28	0	-0.02	1:1	0.084	1.387	0.117	0.117	
831.50	166300	Mid	Right	Tilt	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	50	28	25.7	24.49	0	-0.04	1:1	0.088	1.321	0.116	0.116	
831.50	166300	Mid	Left	Cheek	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	1	53	25.7	24.28	0	-0.04	1:1	0.102	1.387	0.141	0.141	
831.50	166300	Mid	Left	Cheek	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	50	28	25.7	24.49	0	-0.02	1:1	0.107	1.321	0.141	0.141	
831.50	166300	Mid	Left	Tilt	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	1	53	25.7	24.28	0	-0.03	1:1	0.072	1.387	0.100	0.100	
831.50	166300	Mid	Left	Tilt	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	50	28	25.7	24.49	0	0.02	1:1	0.076	1.321	0.100	0.100	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 11-21
NR Band n66 Head SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Test Position	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1745.00	349000	Mid	Right	Cheek	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	214	25.2	24.73	0	0.12	1:1	0.030	1.114	0.033	0.033	
1745.00	349000	Mid	Right	Cheek	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.2	24.58	0	0.11	1:1	0.046	1.153	0.053	0.053	
1745.00	349000	Mid	Right	Cheek	NR Band n66	A	Open	0100M	40	CP-OFDM	QPSK	1	1	23.7	22.81	1.5	0.08	1:1	0.037	1.227	0.045	0.045	
1745.00	349000	Mid	Right	Tilt	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	214	25.2	24.73	0	0.05	1:1	0.020	1.114	0.022	0.022	
1745.00	349000	Mid	Right	Tilt	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.2	24.58	0	0.09	1:1	0.011	1.153	0.013	0.013	
1745.00	349000	Mid	Left	Cheek	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	214	25.2	24.73	0	0.09	1:1	0.014	1.114	0.016	0.016	
1745.00	349000	Mid	Left	Cheek	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.2	24.58	0	-0.02	1:1	0.013	1.153	0.015	0.015	
1745.00	349000	Mid	Left	Tilt	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	214	25.2	24.73	0	0.03	1:1	0.014	1.114	0.016	0.016	
1745.00	349000	Mid	Left	Tilt	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.2	24.58	0	-0.14	1:1	0.012	1.153	0.014	0.014	
1745.00	349000	Mid	Right	Cheek	NR Band n66	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	0.01	1:1	0.230	1.346	0.310	0.310	
1745.00	349000	Mid	Right	Cheek	NR Band n66	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	0.01	1:1	0.263	1.294	0.340	0.340	
1745.00	349000	Mid	Right	Tilt	NR Band n66	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	-0.02	1:1	0.061	1.346	0.082	0.082	
1745.00	349000	Mid	Right	Tilt	NR Band n66	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	-0.03	1:1	0.072	1.294	0.093	0.093	
1745.00	349000	Mid	Left	Cheek	NR Band n66	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	-0.02	1:1	0.498	1.346	0.670	0.670	
1745.00	349000	Mid	Left	Cheek	NR Band n66	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	0.00	1:1	0.596	1.294	0.771	0.771	
1745.00	349000	Mid	Left	Cheek	NR Band n66	I	Open	0015M	40	CP-OFDM	QPSK	1	1	18.5	17.33	0	-0.09	1:1	0.602	1.309	0.788	0.788	A21
1745.00	349000	Mid	Left	Tilt	NR Band n66	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	-0.01	1:1	0.126	1.346	0.170	0.170	
1745.00	349000	Mid	Left	Tilt	NR Band n66	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	-0.01	1:1	0.141	1.294	0.182	0.182	
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 11-22
NR Band n25 Head SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Test Position	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1882.50	376500	Mid	Right	Cheek	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	214	25.2	25.13	0	0.08	1:1	0.049	1.016	0.050	0.050	
1882.50	376500	Mid	Right	Cheek	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.2	25.13	0	-0.19	1:1	0.040	1.016	0.041	0.041	
1882.50	376500	Mid	Right	Tilt	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	214	25.2	25.13	0	0.08	1:1	0.014	1.016	0.014	0.014	
1882.50	376500	Mid	Right	Tilt	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.2	25.13	0	0.02	1:1	0.018	1.016	0.018	0.018	
1882.50	376500	Mid	Left	Cheek	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	214	25.2	25.13	0	0.06	1:1	0.059	1.016	0.060	0.060	
1882.50	376500	Mid	Left	Cheek	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.2	25.13	0	0.01	1:1	0.043	1.016	0.044	0.044	
1882.50	376500	Mid	Left	Cheek	NR Band n25	A	Open	0100M	40	CP-OFDM	QPSK	1	1	23.7	23.44	1.5	-0.10	1:1	0.031	1.062	0.033	0.033	
1882.50	376500	Mid	Left	Tilt	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	214	25.2	25.13	0	0.09	1:1	0.012	1.016	0.012	0.012	
1882.50	376500	Mid	Left	Tilt	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.2	25.13	0	0.04	1:1	0.026	1.016	0.026	0.026	
1882.50	376500	Mid	Right	Cheek	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	214	15.5	14.38	0	-0.02	1:1	0.324	1.294	0.419	0.419	
1882.50	376500	Mid	Right	Cheek	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	15.5	14.47	0	-0.02	1:1	0.339	1.268	0.430	0.430	
1882.50	376500	Mid	Right	Tilt	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	214	15.5	14.38	0	-0.02	1:1	0.071	1.294	0.092	0.092	
1882.50	376500	Mid	Right	Tilt	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	15.5	14.47	0	0.03	1:1	0.072	1.268	0.091	0.091	
1882.50	376500	Mid	Left	Cheek	NR Band n25	I	Open	0012M	40	DFT-S-OFDM	QPSK	1	214	15.5	14.38	0	0.04	1:1	0.540	1.294	0.699	0.699	A22
1882.50	376500	Mid	Left	Cheek	NR Band n25	I	Open	0012M	40	DFT-S-OFDM	QPSK	108	108	15.5	14.47	0	0.02	1:1	0.535	1.268	0.678	0.678	
1882.50	376500	Mid	Left	Cheek	NR Band n25	I	Open	0012M	40	CP-OFDM	QPSK	1	1	15.5	14.32	0	0.01	1:1	0.503	1.312	0.660	0.660	
1882.50	376500	Mid	Left	Tilt	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	214	15.5	14.38	0	0.01	1:1	0.160	1.294	0.207	0.207	
1882.50	376500	Mid	Left	Tilt	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	15.5	14.47	0	-0.01	1:1	0.161	1.268	0.204	0.204	
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Table 11-23
NR Band n30 Head SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Test Position	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2310.00	462000	Mid	Right	Cheek	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	1	26	25.0	23.85	0	0.02	1:1	0.020	1.303	0.026	0.026	
2310.00	462000	Mid	Right	Cheek	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	25	14	25.0	23.79	0	0.01	1:1	0.020	1.321	0.026	0.026	
2310.00	462000	Mid	Right	Tilt	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	1	26	25.0	23.85	0	0.09	1:1	0.009	1.303	0.012	0.012	
2310.00	462000	Mid	Right	Tilt	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	25	14	25.0	23.79	0	0.01	1:1	0.006	1.321	0.008	0.008	
2310.00	462000	Mid	Left	Cheek	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	1	26	25.0	23.85	0	0.03	1:1	0.030	1.303	0.039	0.039	
2310.00	462000	Mid	Left	Cheek	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	25	14	25.0	23.79	0	-0.05	1:1	0.029	1.321	0.038	0.038	
2310.00	462000	Mid	Left	Cheek	NR Band n30	B	Open	0078M	10	CP-OFDM	QPSK	1	1	23.5	22.41	1.5	-0.17	1:1	0.021	1.285	0.027	0.027	
2310.00	462000	Mid	Left	Tilt	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	1	26	25.0	23.85	0	0.01	1:1	0.005	1.303	0.007	0.007	
2310.00	462000	Mid	Left	Tilt	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	25	14	25.0	23.79	0	0.19	1:1	0.011	1.321	0.015	0.015	
2310.00	462000	Mid	Right	Cheek	NR Band n30	I	Open	0033M	10	DFT-S-OFDM	QPSK	1	26	15.5	14.22	0	-0.02	1:1	0.234	1.343	0.314	0.314	
2310.00	462000	Mid	Right	Cheek	NR Band n30	I	Open	0033M	10	DFT-S-OFDM	QPSK	25	14	15.5	14.31	0	0.09	1:1	0.231	1.315	0.304	0.304	
2310.00	462000	Mid	Right	Tilt	NR Band n30	I	Open	0033M	10	DFT-S-OFDM	QPSK	1	26	15.5	14.22	0	-0.01	1:1	0.055	1.343	0.074	0.074	
2310.00	462000	Mid	Right	Tilt	NR Band n30	I	Open	0033M	10	DFT-S-OFDM	QPSK	25	14	15.5	14.31	0	0.00	1:1	0.055	1.315	0.072	0.072	
2310.00	462000	Mid	Left	Cheek	NR Band n30	I	Open	0163G	10	DFT-S-OFDM	QPSK	1	26	15.5	14.22	0	-0.02	1:1	0.860	1.343	1.155	1.155	
2310.00	462000	Mid	Left	Cheek	NR Band n30	I	Open	0163G	10	DFT-S-OFDM	QPSK	25	14	15.5	14.31	0	-0.03	1:1	0.871	1.315	1.145	1.145	A23
2310.00	462000	Mid	Left	Cheek	NR Band n30	I	Open	0163G	10	DFT-S-OFDM	QPSK	50	0	15.5	14.20	0	-0.03	1:1	0.857	1.349	1.156	1.156	
2310.00	462000	Mid	Left	Cheek	NR Band n30	I	Open	0163G	10	CP-OFDM	QPSK	1	1	15.5	14.21	0	0.06	1:1	0.845	1.346	1.137	1.137	
2310.00	462000	Mid	Left	Tilt	NR Band n30	I	Open	0033M	10	DFT-S-OFDM	QPSK	1	26	15.5	14.22	0	-0.05	1:1	0.135	1.343	0.181	0.181	
2310.00	462000	Mid	Left	Tilt	NR Band n30	I	Open	0033M	10	DFT-S-OFDM	QPSK	25	14	15.5	14.31	0	0.00	1:1	0.131	1.315	0.172	0.172	
2310.00	462000.00	Mid	Left	Cheek	NR Band n30	I	Open	0163G	10	DFT-S-OFDM	QPSK	25	14	15.5	14.31	0	0.01	1:1	0.868	1.315	1.141	1.141	
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 11-24
NR Band n7 Head SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Test Position	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2535.00	507000	Mid	Right	Cheek	NR Band n7	B	Open	0100M	40	DFT-S-OFDM	QPSK	1	1	25.8	24.57	0	0.07	1:1	0.023	1.327	0.031	0.031	A24
2535.00	507000	Mid	Right	Cheek	NR Band n7	B	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.8	24.41	0	0.01	1:1	0.021	1.377	0.029	0.029	
2535.00	507000	Mid	Right	Cheek	NR Band n7	B	Open	0100M	40	CP-OFDM	QPSK	1	1	24.3	23.08	1.5	0.20	1:1	0.002	1.324	0.003	0.003	
2535.00	507000	Mid	Right	Tilt	NR Band n7	B	Open	0100M	40	DFT-S-OFDM	QPSK	1	1	25.8	24.57	0	0.06	1:1	0.020	1.327	0.027	0.027	
2535.00	507000	Mid	Right	Tilt	NR Band n7	B	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.8	24.41	0	-0.02	1:1	0.020	1.377	0.028	0.028	
2535.00	507000	Mid	Left	Cheek	NR Band n7	B	Open	0100M	40	DFT-S-OFDM	QPSK	1	1	25.8	24.57	0	0.07	1:1	0.016	1.327	0.021	0.021	
2535.00	507000	Mid	Left	Cheek	NR Band n7	B	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.8	24.41	0	0.07	1:1	0.022	1.377	0.030	0.030	
2535.00	507000	Mid	Left	Tilt	NR Band n7	B	Open	0100M	40	DFT-S-OFDM	QPSK	1	1	25.8	24.57	0	0.06	1:1	0.006	1.327	0.008	0.008	
2535.00	507000	Mid	Left	Tilt	NR Band n7	B	Open	0100M	40	DFT-S-OFDM	QPSK	108	54	25.8	24.41	0	0.06	1:1	0.009	1.377	0.012	0.012	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Head 1.6 W/kg (mW/g) averaged over 1 gram											

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Table 11-25
NR Band n41 Head SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Test Position	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2592.99	518598	Mid	Right	Cheek	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	14.5	13.23	0	-0.06	1:1	0.162	1.340	0.217	0.217	
2592.99	518598	Mid	Right	Cheek	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	138	14.5	13.26	0	0.11	1:1	0.155	1.330	0.206	0.206	
2592.99	518598	Mid	Right	Tilt	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	14.5	13.23	0	0.06	1:1	0.059	1.340	0.079	0.079	
2592.99	518598	Mid	Right	Tilt	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	138	14.5	13.26	0	-0.06	1:1	0.055	1.330	0.073	0.073	
2592.99	518598	Mid	Left	Cheek	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	14.5	13.23	0	0.08	1:1	0.553	1.340	0.741	0.741	
2592.99	518598	Mid	Left	Cheek	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	138	14.5	13.26	0	0.01	1:1	0.540	1.330	0.718	0.718	
2592.99	518598	Mid	Left	Cheek	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	270	0	14.5	13.16	0	0.01	1:1	0.540	1.361	0.735	0.735	
2592.99	518598	Mid	Left	Cheek	NR Band n41	I	Open	0023M	100	CP-OFDM	QPSK	1	1	14.5	13.23	0	-0.07	1:1	0.574	1.340	0.769	0.769	A25
2592.99	518598	Mid	Left	Tilt	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	14.5	13.23	0	0.08	1:1	0.127	1.340	0.170	0.170	
2592.99	518598	Mid	Left	Tilt	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	138	14.5	13.26	0	-0.03	1:1	0.125	1.330	0.166	0.166	
2592.99	518598	Mid	Right	Cheek	NR Band n41	B	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.5	11.99	N/A	0.20	1:1	0.000	1.416	0.000	0.000	
2592.99	518598	Mid	Right	Tilt	NR Band n41	B	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.5	11.99	N/A	0.20	1:1	0.000	1.416	0.000	0.000	
2592.99	518598	Mid	Left	Cheek	NR Band n41	B	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.5	11.99	N/A	0.05	1:1	0.000	1.416	0.000	0.000	
2592.99	518598	Mid	Left	Tilt	NR Band n41	B	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.5	11.99	N/A	0.03	1:1	0.000	1.416	0.000	0.000	
2592.99	518598	Mid	Right	Cheek	NR Band n41	F	Open	0020M	100	CW/SRS	N/A	N/A	N/A	11.0	10.13	N/A	0.17	1:1	0.102	1.222	0.125	0.125	
2592.99	518598	Mid	Right	Tilt	NR Band n41	F	Open	0020M	100	CW/SRS	N/A	N/A	N/A	11.0	10.13	N/A	0.16	1:1	0.074	1.222	0.090	0.090	
2592.99	518598	Mid	Left	Cheek	NR Band n41	F	Open	0020M	100	CW/SRS	N/A	N/A	N/A	11.0	10.13	N/A	-0.08	1:1	0.020	1.222	0.024	0.024	
2592.99	518598	Mid	Left	Tilt	NR Band n41	F	Open	0020M	100	CW/SRS	N/A	N/A	N/A	11.0	10.13	N/A	-0.04	1:1	0.015	1.222	0.018	0.018	
2592.99	518598	Mid	Right	Cheek	NR Band n41	C	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	11.10	N/A	0.06	1:1	0.000	1.549	0.000	0.000	
2592.99	518598	Mid	Right	Tilt	NR Band n41	C	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	11.10	N/A	0.02	1:1	0.000	1.549	0.000	0.000	
2592.99	518598	Mid	Left	Cheek	NR Band n41	C	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	11.10	N/A	0.08	1:1	0.000	1.549	0.000	0.000	
2592.99	518598	Mid	Left	Tilt	NR Band n41	C	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	11.10	N/A	0.03	1:1	0.000	1.549	0.000	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-26
NR Band n48 Head SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Test Position	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
3570.00	638000	Low	Right	Cheek	NR Band n48	F	Open	1168M	40	DFT-S-OFDM	QPSK	1	104	14.0	12.73	0	-0.05	1:1	0.623	1.340	**0.835**	0.835	A26
3624.99	641666	Mid	Right	Cheek	NR Band n48	F	Open	1168M	40	DFT-S-OFDM	QPSK	1	1	14.0	12.15	0	0.04	1:1	0.452	1.531	0.692	0.692	
3679.98	645332	High	Right	Cheek	NR Band n48	F	Open	1168M	40	DFT-S-OFDM	QPSK	1	104	14.0	12.15	0	-0.04	1:1	0.291	1.531	0.446	0.446	
3570.00	638000	Low	Right	Cheek	NR Band n48	F	Open	1168M	40	DFT-S-OFDM	QPSK	50	56	14.0	12.53	0	0.04	1:1	0.577	1.403	0.810	0.810	
3624.99	641666	Mid	Right	Cheek	NR Band n48	F	Open	1168M	40	DFT-S-OFDM	QPSK	50	0	14.0	12.25	0	0.07	1:1	0.419	1.496	0.627	0.627	
3679.98	645332	High	Right	Cheek	NR Band n48	F	Open	1168M	40	DFT-S-OFDM	QPSK	50	56	14.0	12.17	0	-0.03	1:1	0.301	1.524	0.459	0.459	
3570.00	638000	Low	Right	Cheek	NR Band n48	F	Open	1168M	40	DFT-S-OFDM	QPSK	100	0	14.0	12.42	0	0.04	1:1	0.585	1.439	**0.842**	0.842	
3570.00	638000	Low	Right	Cheek	NR Band n48	F	Open	1168M	40	CP-OFDM	QPSK	1	1	14.0	12.33	0	-0.03	1:1	0.405	1.469	0.595	0.595	
3570.00	638000	Low	Right	Tilt	NR Band n48	F	Open	1168M	40	DFT-S-OFDM	QPSK	1	104	14.0	12.73	0	0.08	1:1	0.426	1.340	0.571	0.571	
3570.00	638000	Low	Right	Tilt	NR Band n48	F	Open	1168M	40	DFT-S-OFDM	QPSK	50	56	14.0	12.53	0	-0.11	1:1	0.409	1.403	0.574	0.574	
3570.00	638000	Low	Left	Cheek	NR Band n48	F	Open	0023M	40	DFT-S-OFDM	QPSK	1	104	14.0	12.73	0	-0.06	1:1	0.159	1.340	0.213	0.213	
3570.00	638000	Low	Left	Cheek	NR Band n48	F	Open	0023M	40	DFT-S-OFDM	QPSK	50	56	14.0	12.53	0	-0.14	1:1	0.158	1.403	0.222	0.222	
3570.00	638000	Low	Left	Tilt	NR Band n48	F	Open	0023M	40	DFT-S-OFDM	QPSK	1	104	14.0	12.73	0	-0.07	1:1	0.198	1.340	0.265	0.265	
3570.00	638000	Low	Left	Tilt	NR Band n48	F	Open	0023M	40	DFT-S-OFDM	QPSK	50	56	14.0	12.53	0	-0.06	1:1	0.204	1.403	0.286	0.286	
3570.00	638000	Low	Right	Cheek	NR Band n48	I	Open	0023M	40	CW/SRS	N/A	N/A	N/A	8.0	6.72	N/A	-0.09	1:1	0.331	1.343	0.445	0.445	
3570.00	638000	Low	Right	Tilt	NR Band n48	I	Open	0023M	40	CW/SRS	N/A	N/A	N/A	8.0	6.72	N/A	0.02	1:1	0.022	1.343	0.030	0.030	
3570.00	638000	Low	Left	Cheek	NR Band n48	I	Open	0023M	40	CW/SRS	N/A	N/A	N/A	8.0	6.72	N/A	0.06	1:1	0.207	1.343	0.278	0.278	
3570.00	638000	Low	Left	Tilt	NR Band n48	I	Open	0023M	40	CW/SRS	N/A	N/A	N/A	8.0	6.72	N/A	0.04	1:1	0.039	1.343	0.052	0.052	
3570.00	638000	Low	Right	Cheek	NR Band n48	E	Open	0023M	40	CW/SRS	N/A	N/A	N/A	10.5	9.63	N/A	0.03	1:1	0.217	1.222	0.265	0.265	
3570.00	638000	Low	Right	Tilt	NR Band n48	E	Open	0023M	40	CW/SRS	N/A	N/A	N/A	10.5	9.63	N/A	0.02	1:1	0.067	1.222	0.082	0.082	
3570.00	638000	Low	Left	Cheek	NR Band n48	E	Open	0023M	40	CW/SRS	N/A	N/A	N/A	10.5	9.63	N/A	0.03	1:1	0.434	1.222	0.530	0.530	
3570.00	638000	Low	Left	Tilt	NR Band n48	E	Open	0023M	40	CW/SRS	N/A	N/A	N/A	10.5	9.63	N/A	0.03	1:1	0.031	1.222	0.038	0.038	
3570.00	638000	Low	Right	Cheek	NR Band n48	C	Open	0023M	40	CW/SRS	N/A	N/A	N/A	12.0	11.15	N/A	0.04	1:1	0.000	1.216	0.000	0.000	
3570.00	638000	Low	Right	Tilt	NR Band n48	C	Open	0023M	40	CW/SRS	N/A	N/A	N/A	12.0	11.15	N/A	0.02	1:1	0.002	1.216	0.002	0.002	
3570.00	638000	Low	Left	Cheek	NR Band n48	C	Open	0023M	40	CW/SRS	N/A	N/A	N/A	12.0	11.15	N/A	-0.11	1:1	0.017	1.216	0.021	0.021	
3570.00	638000	Low	Left	Tilt	NR Band n48	C	Open	0023M	40	CW/SRS	N/A	N/A	N/A	12.0	11.15	N/A	0.20	1:1	0.000	1.216	0.000	0.000	
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 11-27
NR Band n77 Head SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Test Position	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
3750.00	650000	Low	Right	Cheek	NR Band n77	F	Open	0126M	100	DFT-S-OFDM	QPSK	1	271	13.5	13.28	0	0.20	1:1	0.302	1.052	0.318	0.318	
3750.00	650000	Low	Right	Cheek	NR Band n77	F	Open	0126M	100	DFT-S-OFDM	QPSK	135	138	13.5	13.05	0	0.02	1:1	0.302	1.109	0.335	0.335	
3750.00	650000	Low	Right	Cheek	NR Band n77	F	Open	0126M	100	CP-OFDM	QPSK	1	1	13.5	12.29	0	-0.04	1:1	0.391	1.321	0.517	0.517	
3500.01	633334	Mid	Right	Cheek	NR Band n77 DoD	F	Open	0064M	100	DFT-S-OFDM	QPSK	1	271	13.5	12.28	0	0.03	1:1	0.500	1.324	0.662	0.662	A27
3750.00	650000	Low	Right	Tilt	NR Band n77	F	Open	0126M	100	DFT-S-OFDM	QPSK	1	271	13.5	13.28	0	-0.03	1:1	0.194	1.052	0.204	0.204	
3750.00	650000	Low	Right	Tilt	NR Band n77	F	Open	0126M	100	DFT-S-OFDM	QPSK	135	138	13.5	13.05	0	-0.03	1:1	0.212	1.109	0.235	0.235	
3750.00	650000	Low	Left	Cheek	NR Band n77	F	Open	0023M	100	DFT-S-OFDM	QPSK	1	271	13.5	13.28	0	0.02	1:1	0.093	1.052	0.098	0.098	
3750.00	650000	Low	Left	Cheek	NR Band n77	F	Open	0023M	100	DFT-S-OFDM	QPSK	135	138	13.5	13.05	0	-0.10	1:1	0.107	1.109	0.119	0.119	
3750.00	650000	Low	Left	Tilt	NR Band n77	F	Open	0023M	100	DFT-S-OFDM	QPSK	1	271	13.5	13.28	0	0.04	1:1	0.081	1.052	0.085	0.085	
3750.00	650000	Low	Left	Tilt	NR Band n77	F	Open	0023M	100	DFT-S-OFDM	QPSK	135	138	13.5	13.05	0	0.03	1:1	0.085	1.109	0.094	0.094	
3750.00	650000	Low	Right	Cheek	NR Band n77	I	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.0	10.85	N/A	-0.05	1:1	0.322	1.035	0.333	0.333	
3500.01	633334	Mid	Right	Cheek	NR Band n77 DoD	I	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.0	10.10	N/A	0.00	1:1	0.401	1.230	0.493	0.493	
3750.00	650000	Low	Right	Tilt	NR Band n77	I	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.0	10.85	N/A	0.21	1:1	0.028	1.035	0.029	0.029	
3750.00	650000	Low	Left	Cheek	NR Band n77	I	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.0	10.85	N/A	-0.03	1:1	0.209	1.035	0.216	0.216	
3750.00	650000	Low	Left	Tilt	NR Band n77	I	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.0	10.85	N/A	0.05	1:1	0.017	1.035	0.018	0.018	
3750.00	650000	Low	Right	Cheek	NR Band n77	E	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.5	10.75	N/A	0.04	1:1	0.060	1.189	0.071	0.071	
3750.00	650000	Low	Right	Tilt	NR Band n77	E	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.5	10.75	N/A	0.20	1:1	0.006	1.189	0.007	0.007	
3750.00	650000	Low	Left	Cheek	NR Band n77	E	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.5	10.75	N/A	0.12	1:1	0.187	1.189	0.222	0.222	
3500.01	633334	Mid	Left	Cheek	NR Band n77 DoD	E	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.5	10.80	N/A	-0.15	1:1	0.237	1.175	0.278	0.278	
3750.00	650000	Low	Left	Tilt	NR Band n77	E	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.5	10.75	N/A	0.09	1:1	0.013	1.189	0.015	0.015	
3750.00	650000	Low	Right	Cheek	NR Band n77	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.5	10.85	N/A	-0.18	1:1	0.003	1.161	0.003	0.003	
3750.00	650000	Low	Right	Tilt	NR Band n77	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.5	10.85	N/A	0.20	1:1	0.000	1.161	0.000	0.000	
3750.00	650000	Low	Left	Cheek	NR Band n77	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.5	10.85	N/A	0.20	1:1	0.024	1.161	0.028	0.028	
3500.01	633334	Mid	Left	Cheek	NR Band n77 DoD	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.5	10.30	N/A	0.03	1:1	0.013	1.318	0.017	0.017	
3750.00	650000	Low	Left	Tilt	NR Band n77	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	11.5	10.85	N/A	0.07	1:1	0.004	1.161	0.005	0.005	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 11-28
DTS Head SISO SAR

MEASUREMENT RESULTS																					
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.															(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
2412	1	Right	Cheek	802.11b	DSSS	2	Open	1166M	22	1	12.0	11.89	-0.06	100.00	98.74	0.118	1.026	1.013	0.123	0.123	
2412	1	Right	Tilt	802.11b	DSSS	2	Open	1166M	22	1	12.0	11.89	0.10	100.00	98.74	0.088	1.026	1.013	0.091	0.091	
2412	1	Left	Cheek	802.11b	DSSS	2	Open	1166M	22	1	12.0	11.89	0.03	100.00	98.74	0.295	1.026	1.013	**0.307**	0.307	A28
2412	1	Left	Tilt	802.11b	DSSS	2	Open	1166M	22	1	12.0	11.89	0.00	100.00	98.74	0.165	1.026	1.013	0.171	0.171	
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 11-29
DTS Head MIMO SAR

MEASUREMENT RESULTS																						
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
2462	11	Right	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	9.0	8.99	9.0	8.86	0.00	100.00	98.00	0.083	1.033	1.020	0.087	0.087	
2462	11	Right	Tilt	802.11n	OFDM	MIMO	Open	0091M	20	13	9.0	8.99	9.0	8.86	0.02	100.00	98.00	0.053	1.033	1.020	0.056	0.056	
2462	11	Left	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	9.0	8.99	9.0	8.86	0.10	100.00	98.00	0.084	1.033	1.020	0.089	0.089	
2462	11	Left	Tilt	802.11n	OFDM	MIMO	Open	0091M	20	13	9.0	8.99	9.0	8.86	-0.17	100.00	98.00	0.048	1.033	1.020	0.051	0.051	
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 11.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 8.0 dBm.

Table 11-30
NII MIMO Head SAR

MEASUREMENT RESULTS																						
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
5260	52	Right	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.73	16.0	15.97	0.01	100.00	98.11	0.659	1.064	1.019	0.714	0.714	
5280	56	Right	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.69	16.0	15.87	0.02	100.00	98.11	0.696	1.074	1.019	**0.762**	0.762	A29
5320	64	Right	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.84	16.0	15.67	0.00	100.00	98.11	0.687	1.079	1.019	0.755	0.755	
5260	52	Right	Tilt	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.73	16.0	15.97	0.04	100.00	98.11	0.617	1.064	1.019	0.669	0.669	
5260	52	Left	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.73	16.0	15.97	0.03	100.00	98.11	0.658	1.064	1.019	0.713	0.713	
5260	52	Left	Tilt	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.73	16.0	15.97	0.02	100.00	98.11	0.611	1.064	1.019	0.662	0.662	
5600	120	Right	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.96	16.0	15.94	-0.03	100.00	98.11	0.527	1.014	1.019	0.545	0.545	
5600	120	Right	Tilt	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.96	16.0	15.94	-0.07	100.00	98.11	0.556	1.014	1.019	0.574	0.574	
5600	120	Left	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.96	16.0	15.94	-0.06	100.00	98.11	0.467	1.014	1.019	0.483	0.483	
5600	120	Left	Tilt	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.96	16.0	15.94	-0.02	100.00	98.11	0.481	1.014	1.019	0.497	0.497	
5825	165	Right	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.95	16.0	15.78	-0.01	100.00	98.11	0.404	1.052	1.019	0.433	0.433	
5825	165	Right	Tilt	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.95	16.0	15.78	0.07	100.00	98.11	0.252	1.052	1.019	0.270	0.270	
5825	165	Left	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.95	16.0	15.78	0.00	100.00	98.11	0.446	1.052	1.019	0.478	0.478	
5825	165	Left	Tilt	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.95	16.0	15.78	-0.06	100.00	98.11	0.374	1.052	1.019	0.401	0.401	
5845	169	Right	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.87	16.0	15.63	-0.02	100.00	98.11	0.428	1.089	1.019	0.475	0.475	
5845	169	Right	Tilt	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.87	16.0	15.63	0.03	100.00	98.11	0.189	1.089	1.019	0.210	0.210	
5845	169	Left	Cheek	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.87	16.0	15.63	-0.05	100.00	98.11	0.502	1.089	1.019	0.557	0.557	
5845	169	Left	Tilt	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.87	16.0	15.63	-0.07	100.00	98.11	0.400	1.089	1.019	0.444	0.444	
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 19.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 16.0 dBm.

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Table 11-31
DSS Head SISO SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.														(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
2402	0	Right	Cheek	Bluetooth	FHSS	1	Open	0058M	1	16.5	15.03	0.10	78.00	76.85	0.378	1.403	1.015	0.538	0.538	
2441	39	Right	Cheek	Bluetooth	FHSS	1	Open	0058M	1	16.5	16.40	0.00	78.00	76.85	0.639	1.023	1.015	0.664	0.664	
2480	78	Right	Cheek	Bluetooth	FHSS	1	Open	0058M	1	16.5	15.12	-0.06	78.00	76.85	0.394	1.374	1.015	0.549	0.549	
2440	19	Right	Cheek	Bluetooth LE	DSSS	1	Open	0058M	1	17.0	16.42	-0.10	86.00	84.71	0.041	1.143	1.015	0.048	0.048	
2441	39	Right	Tilt	Bluetooth	FHSS	1	Open	0058M	1	16.5	16.40	-0.07	78.00	76.85	0.408	1.023	1.015	0.424	0.424	
2441	39	Left	Cheek	Bluetooth	FHSS	1	Open	0058M	1	16.5	16.40	0.16	78.00	76.85	0.124	1.023	1.015	0.129	0.129	
2441	39	Left	Tilt	Bluetooth	FHSS	1	Open	0058M	1	16.5	16.40	0.01	78.00	76.85	0.093	1.023	1.015	0.097	0.097	
2441	39	Right	Cheek	Bluetooth	FHSS	2	Open	0058M	1	17.0	16.74	-0.15	78.00	76.90	0.440	1.062	1.014	0.474	0.474	
2441	39	Right	Tilt	Bluetooth	FHSS	2	Open	0058M	1	17.0	16.74	-0.16	78.00	76.90	0.322	1.062	1.014	0.347	0.347	
2402	0	Left	Cheek	Bluetooth	FHSS	2	Open	0058M	1	17.0	16.59	-0.07	78.00	76.90	0.698	1.099	1.014	0.778	0.778	
2441	39	Left	Cheek	Bluetooth	FHSS	2	Open	0058M	1	17.0	16.74	0.05	78.00	76.90	1.040	1.062	1.014	1.120	1.120	A30
2480	78	Left	Cheek	Bluetooth	FHSS	2	Open	0058M	1	17.0	15.49	0.02	78.00	76.90	0.814	1.416	1.014	1.169	1.169	
2402	0	Left	Cheek	Bluetooth LE	DSSS	2	Open	0058M	1	18.5	18.29	0.00	87.00	85.05	0.061	1.050	1.023	0.066	0.066	
2441	39	Left	Tilt	Bluetooth	FHSS	2	Open	0058M	1	17.0	16.74	-0.03	78.00	76.90	0.525	1.062	1.014	0.565	0.565	
2441	39	Left	Cheek	Bluetooth	FHSS	2	Open	0058M	1	17.0	16.74	0.08	78.00	76.90	0.973	1.062	1.014	1.048	1.048	
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: 1) Light green entries indicate an additional check on the worst case exposure condition for BT LE that is not fully evaluated. 2) BT LE Antenna 2 was tested at a higher level than listed in the tune-up and is therefore a more conservative result. 3) Blue entry represents variability measurement.

11.2 Standalone Body-Worn SAR Data

Table 11-32
GSM Body-Worn SAR Data

MEASUREMENT RESULTS																	
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.												(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
824.20	128	back	15 mm	GSM 850	GSM	A	Open	0027M	34.0	33.00	0.03	1:8.3	0.108	1.259	0.136	0.136	
824.20	128	back	15 mm	GSM 850	GSM	A	Closed	0027M	34.0	33.00	-0.04	1:8.3	0.162	1.259	0.204	0.204	A31
1909.80	810	back	15 mm	GSM 1900	GSM	A	Open	0034M	29.0	28.02	-0.02	1:8.3	0.117	1.253	0.147	0.147	A32
1909.80	810	back	15 mm	GSM 1900	GSM	A	Closed	0034M	29.0	28.02	0.01	1:8.3	0.023	1.253	0.029	0.029	
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 11-33
UMTS Body-Worn SAR Data

MEASUREMENT RESULTS																	
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.												(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
836.60	4183	back	15 mm	UMTS 850	RMC	A	Open	0245M	26.0	24.97	0.01	1:1	0.189	1.268	0.240	0.240	
836.60	4183	back	15 mm	UMTS 850	RMC	A	Closed	0245M	26.0	24.97	-0.03	1:1	0.296	1.268	0.375	0.375	A33
1712.40	1312	back	15 mm	UMTS 1750	RMC	A	Open	0011M	22.0	20.63	0.00	1:1	0.186	1.371	0.255	0.255	A34
1712.40	1312	back	15 mm	UMTS 1750	RMC	A	Closed	0011M	22.0	20.63	-0.02	1:1	0.059	1.371	0.081	0.081	
1907.60	9538	back	15 mm	UMTS 1900	RMC	A	Open	0034M	22.0	20.88	-0.01	1:1	0.258	1.294	0.334	0.334	A35
1907.60	9538	back	15 mm	UMTS 1900	RMC	A	Closed	0034M	22.0	20.88	0.00	1:1	0.056	1.294	0.072	0.072	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram							

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Table 11-34
LTE Body-Worn SAR

MEASUREMENT RESULTS																									
# CC Uplink, Power Class	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
		MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1 CC Uplink	N/A	680.50	133297	Mid	back	15 mm	LTE Band 71	A	Open	0245M	20	QPSK	1	50	26.0	25.28	0	-0.01	1:1	0.259	1.180	0.306	0.306	A36
1 CC Uplink	N/A	680.50	133297	Mid	back	15 mm	LTE Band 71	A	Open	0245M	20	QPSK	50	0	25.0	24.09	1	0.00	1:1	0.207	1.233	0.255	0.255	
1 CC Uplink	N/A	680.50	133297	Mid	back	15 mm	LTE Band 71	A	Closed	0245M	20	QPSK	1	50	26.0	25.28	0	-0.04	1:1	0.229	1.180	0.270	0.270	
1 CC Uplink	N/A	680.50	133297	Mid	back	15 mm	LTE Band 71	A	Closed	0245M	20	QPSK	50	0	25.0	24.09	1	0.02	1:1	0.160	1.233	0.197	0.197	
1 CC Uplink	N/A	707.50	23095	Mid	back	15 mm	LTE Band 12	A	Open	0245M	10	QPSK	1	25	24.0	22.77	0	0.07	1:1	0.134	1.327	0.178	0.178	A37
1 CC Uplink	N/A	707.50	23095	Mid	back	15 mm	LTE Band 12	A	Open	0245M	10	QPSK	25	0	24.0	22.79	0	0.06	1:1	0.130	1.321	0.172	0.172	
1 CC Uplink	N/A	707.50	23095	Mid	back	15 mm	LTE Band 12	A	Closed	0245M	10	QPSK	1	25	24.0	22.77	0	0.06	1:1	0.075	1.327	0.100	0.100	
1 CC Uplink	N/A	707.50	23095	Mid	back	15 mm	LTE Band 12	A	Closed	0245M	10	QPSK	25	0	24.0	22.79	0	-0.01	1:1	0.080	1.321	0.106	0.106	
1 CC Uplink	N/A	782.00	23230	Mid	back	15 mm	LTE Band 13	A	Open	0027M	10	QPSK	1	25	23.0	22.30	0	0.07	1:1	0.121	1.175	0.142	0.142	
1 CC Uplink	N/A	782.00	23230	Mid	back	15 mm	LTE Band 13	A	Open	0027M	10	QPSK	25	0	23.0	22.17	0	0.01	1:1	0.116	1.211	0.140	0.140	
1 CC Uplink	N/A	782.00	23230	Mid	back	15 mm	LTE Band 13	A	Closed	0027M	10	QPSK	1	25	23.0	22.30	0	0.03	1:1	0.123	1.175	0.145	0.145	A38
1 CC Uplink	N/A	782.00	23230	Mid	back	15 mm	LTE Band 13	A	Closed	0027M	10	QPSK	25	0	23.0	22.17	0	0.06	1:1	0.120	1.211	0.145	0.145	
1 CC Uplink	N/A	793.00	23330	Mid	back	15 mm	LTE Band 14	A	Open	0027M	10	QPSK	1	0	24.0	22.89	0	0.06	1:1	0.139	1.291	0.179	0.179	
1 CC Uplink	N/A	793.00	23330	Mid	back	15 mm	LTE Band 14	A	Open	0027M	10	QPSK	25	0	24.0	22.82	0	0.04	1:1	0.135	1.312	0.177	0.177	
1 CC Uplink	N/A	793.00	23330	Mid	back	15 mm	LTE Band 14	A	Closed	0027M	10	QPSK	1	0	24.0	22.89	0	0.02	1:1	0.145	1.291	0.187	0.187	
1 CC Uplink	N/A	793.00	23330	Mid	back	15 mm	LTE Band 14	A	Closed	0027M	10	QPSK	25	0	24.0	22.82	0	0.06	1:1	0.147	1.312	0.193	0.193	A39
1 CC Uplink	N/A	831.50	26865	Mid	back	15 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	1	36	26.0	24.55	0	0.04	1:1	0.174	1.396	0.243	0.243	
1 CC Uplink	N/A	831.50	26865	Mid	back	15 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	36	37	25.0	23.64	1	0.07	1:1	0.147	1.368	0.201	0.201	
1 CC Uplink	N/A	831.50	26865	Mid	back	15 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	1	36	26.0	24.55	0	0.04	1:1	0.284	1.396	0.396	0.396	A40
1 CC Uplink	N/A	831.50	26865	Mid	back	15 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	36	37	25.0	23.64	1	0.00	1:1	0.234	1.368	0.320	0.320	
1 CC Uplink	N/A	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	1	0	26.0	24.83	0	0.00	1:1	0.196	1.309	0.257	0.257	
1 CC Uplink	N/A	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	25	25	25.0	23.81	1	0.02	1:1	0.155	1.315	0.204	0.204	
1 CC Uplink	N/A	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	1	0	26.0	24.83	0	0.14	1:1	0.277	1.309	0.363	0.363	A41
1 CC Uplink	N/A	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	25	25	25.0	23.81	1	-0.02	1:1	0.220	1.315	0.289	0.289	
1 CC Uplink	N/A	1720.00	132072	Low	back	15 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	22.8	21.43	0	-0.05	1:1	0.216	1.371	0.296	0.296	
1 CC Uplink	N/A	1720.00	132072	Low	back	15 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	99	22.8	21.33	0	-0.02	1:1	0.215	1.403	0.302	0.302	
1 CC Uplink	N/A	1720.00	132072	Low	back	15 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	0	22.8	21.51	0	-0.01	1:1	0.216	1.346	0.291	0.291	
1 CC Uplink	N/A	1715.00	132022	Low	back	15 mm	LTE Band 66 (AWS)	A	Open	0250M	10	QPSK	1	49	22.8	21.57	0	-0.01	1:1	0.229	1.327	0.304	0.304	A42
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	back	15 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	99	22.8	21.10	0	0.01	1:1	0.217	1.479	0.321	0.321	
	SCC	1739.80	132270											0										
2 CC Uplink CA_66B	PCC	1715.00	132022	Low	back	15 mm	LTE Band 66 (AWS)	A	Open	0250M	10	QPSK	1	49	22.8	21.22	0	0.01	1:1	0.220	1.439	0.317	0.317	
	SCC	1724.90	132121											0										
1 CC Uplink	N/A	1720.00	132072	Low	back	15 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	1	0	22.8	21.43	0	-0.02	1:1	0.089	1.371	0.122	0.122	
1 CC Uplink	N/A	1720.00	132072	Low	back	15 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	50	0	22.8	21.51	0	0.01	1:1	0.088	1.346	0.118	0.118	
1 CC Uplink	N/A	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	1	0	22.0	20.57	0	-0.03	1:1	0.168	1.390	0.234	0.234	
1 CC Uplink	N/A	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	50	0	22.0	20.74	0	0.02	1:1	0.176	1.337	0.235	0.235	
1 CC Uplink	N/A	1775.00	132622	High	back	15 mm	LTE Band 66 (AWS)	I	Open	0250M	10	QPSK	25	0	22.0	20.75	0	0.00	1:1	0.169	1.334	0.225	0.225	
2 CC Uplink CA_66C	PCC	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	50	0	22.0	20.55	0	-0.01	1:1	0.179	1.396	0.250	0.250	
	SCC	1750.20	132374											50										
2 CC Uplink CA_66B	PCC	1775.00	132622	High	back	15 mm	LTE Band 66 (AWS)	I	Open	0250M	10	QPSK	25	0	22.0	20.73	0	0.04	1:1	0.177	1.340	0.237	0.237	
	SCC	1765.10	132523											25										
1 CC Uplink	N/A	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	1	0	22.0	20.57	0	0.00	1:1	0.013	1.390	0.018	0.018	
1 CC Uplink	N/A	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	50	0	22.0	20.74	0	0.01	1:1	0.014	1.337	0.019	0.019	
1 CC Uplink	N/A	1905.00	26590	High	back	15 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	23.3	22.50	0	-0.02	1:1	0.334	1.202	0.401	0.401	
1 CC Uplink	N/A	1905.00	26590	High	back	15 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	50	23.3	22.23	0	-0.02	1:1	0.336	1.279	**0.430**	0.430	A43
1 CC Uplink	N/A	1905.00	26590	High	back	15 mm	LTE Band 25 (PCS)	A	Closed	0034M	20	QPSK	1	99	23.3	22.50	0	-0.04	1:1	0.146	1.202	0.175	0.175	
1 CC Uplink	N/A	1905.00	26590	High	back	15 mm	LTE Band 25 (PCS)	A	Closed	0034M	20	QPSK	50	50	23.3	22.23	0	-0.03	1:1	0.161	1.279	0.206	0.206	
1 CC Uplink	N/A	1905.00	26590	High	back	15 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	22.0	20.72	0	0.03	1:1	0.256	1.343	0.344	0.344	
1 CC Uplink	N/A	1905.00	26590	High	back	15 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	22.0	20.64	0	-0.01	1:1	0.255	1.368	0.349	0.349	
1 CC Uplink	N/A	1905.00	26590	High	back	15 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	1	99	22.0	20.72	0	0.11	1:1	0.037	1.343	0.050	0.050	
1 CC Uplink	N/A	1905.00	26590	High	back	15 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	50	50	22.0	20.64	0	-0.12	1:1	0.036	1.368	0.049	0.049	
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	B	Open	0011M	10	QPSK	1	25	22.0	20.57	0	0.02	1:1	0.094	1.390	0.131	0.131	
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	B	Open	0011M	10	QPSK	25	12	22.0	20.51	0	-0.05	1:1	0.090	1.409	0.127	0.127	
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	B	Closed	0011M	10	QPSK	1	25	22.0	20.57	0	0.00	1:1	0.057	1.390	0.079	0.079	
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	B	Closed	0011M	10	QPSK	25	12	22.0	20.51	0	-0.04	1:1	0.054	1.409	0.076	0.076	
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	I	Open	0242M	10	QPSK	1	49	21.5	20.16	0	0.04	1:1	0.264	1.361	0.359	0.359	A44
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	I	Open	0242M	10	QPSK	25	25	21.5	20.13	0	-0.01	1:1	0.263	1.371	0.361	0.361	
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	I	Closed	0242M	10	QPSK	1	49	21.5	20.16	0	-0.02	1:1	0.073	1.361	0.099	0.099	
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	I	Closed	0242M	10	QPSK	25	25	21.5	20.13	0	0.07	1:1	0.071	1.371	0.097	0.097	
1 CC Uplink	N/A	2510.00	20850	Low	back	15 mm	LTE Band 7	B	Open	0011M	20	QPSK	1	50	22.3	21.11	0	0.03	1:1	0.087	1.315	0.114	0.114	
1 CC Uplink	N/A	2510.00	20850	Low	back	15 mm	LTE Band 7	B	Open	0011M	20	QPSK	50	25	22.3	21.04	0	0.00	1:1	0.087	1.337	0.116	0.116	A45
1 CC Uplink	N/A	2510.00	20850	Low	back	15 mm	LTE Band 7	B	Closed	0011M	20	QPSK	1	50	22.3	21.11	0	0.00	1:1	0.064	1.315	0.084	0.084	
1 CC Uplink	N/A	2510.00	20850	Low	back	15 mm	LTE Band 7	B	Closed	0011M	20	QPSK	50	25	22.3	21.04	0	0.07	1:1	0.066	1.337	0.088	0.088	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population	Body 1.6 W/kg (mW/g) averaged over 1 gram

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Table 11-35
LTE Body-Worn SAR

MEASUREMENT RESULTS																								
# CC Uplink, Power Class	Component Carrier	FREQUENCY		Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	back	15 mm	LTE Band 41	B	Open	0221M	20	QPSK	1	0	26.0	24.24	0	-0.07	1:1.58	0.086	1.500	0.129	0.129	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	back	15 mm	LTE Band 41	B	Open	0221M	20	QPSK	1	99	26.0	24.00	0	0.04	1:1.58	0.083	1.585	0.132	0.132	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	back	15 mm	LTE Band 41	B	Open	0221M	20	QPSK	50	25	25.0	23.35	1	-0.03	1:1.58	0.068	1.462	0.099	0.099	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	back	15 mm	LTE Band 41	B	Open	0221M	20	QPSK	1	0	27.6	26.25	0	0.04	1:2.31	0.096	1.365	0.131	0.131	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	back	15 mm	LTE Band 41	B	Open	0221M	20	QPSK	1	99	27.6	26.02	0	-0.05	1:2.31	0.094	1.439	0.135	0.135	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	back	15 mm	LTE Band 41	B	Open	0221M	20	QPSK	1	99	26.0	24.27	0	0.01	1:1.58	0.090	1.489	0.134	0.134	
	SCC	2525.80	39948											0										
2 CC Uplink - Power Class 2	PCC	2506.00	39750	Low	back	15 mm	LTE Band 41	B	Open	0221M	20	QPSK	1	99	27.6	26.30	0	0.03	1:2.31	0.101	1.349	0.136	0.136	
	SCC	2525.80	39948											0										
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	back	15 mm	LTE Band 41	B	Closed	0221M	20	QPSK	1	0	26.0	24.24	0	0.00	1:1.58	0.074	1.500	0.111	0.111	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	back	15 mm	LTE Band 41	B	Closed	0221M	20	QPSK	50	25	25.0	23.35	1	0.02	1:1.58	0.060	1.462	0.088	0.088	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	15 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	99	23.5	22.41	0	-0.05	1:1.58	0.193	1.285	0.248	0.248	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	15 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	50	23.5	22.46	0	-0.04	1:1.58	0.198	1.271	0.252	0.252	A46
1 CC Uplink - Power Class 2	N/A	2593.00	40620	Mid	back	15 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	50	25.1	24.11	0	-0.02	1:2.31	0.192	1.256	0.241	0.241	
2 CC Uplink - Power Class 3	PCC	2593.00	40620	Mid	back	15 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	50	23.5	22.40	0	0.02	1:1.58	0.194	1.288	0.250	0.250	
	SCC	2612.80	40818											0										
2 CC Uplink - Power Class 2	PCC	2593.00	40620	Mid	back	15 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	50	25.1	24.11	0	-0.02	1:2.31	0.187	1.256	0.235	0.235	
	SCC	2612.80	40818											0										
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	15 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	99	23.5	22.41	0	0.14	1:1.58	0.058	1.285	0.075	0.075	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	15 mm	LTE Band 41	I	Closed	0221M	20	QPSK	50	50	23.5	22.46	0	-0.08	1:1.58	0.056	1.271	0.071	0.071	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	15 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	50	21.5	20.04	0	0.00	1:1.58	0.248	1.400	0.347	0.347	A47
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	15 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	99	21.5	19.83	0	-0.02	1:1.58	0.243	1.469	0.357	0.357	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	15 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	25	21.5	20.06	0	-0.04	1:1.58	0.235	1.393	0.327	0.327	
2 CC Uplink	PCC	3646.70	56207	Mid-High	back	15 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	99	21.5	19.87	0	-0.06	1:1.58	0.231	1.455	0.336	0.336	
	SCC	3666.50	56405											0										
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	15 mm	LTE Band 48	F	Closed	0209M	20	QPSK	1	50	21.5	20.04	0	0.05	1:1.58	0.030	1.400	0.042	0.042	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	15 mm	LTE Band 48	F	Closed	0209M	20	QPSK	50	25	21.5	20.06	0	0.00	1:1.58	0.029	1.393	0.040	0.040	

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Table 11-36
NR Body-Worn SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
680.50	136100	Mid	back	15 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	1	53	25.2	24.55	0	0.07	1:1	0.214	1.161	0.248	0.248	
680.50	136100	Mid	back	15 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	50	28	25.2	24.81	0	0.03	1:1	0.233	1.094	0.255	0.255	
680.50	136100	Mid	back	15 mm	NR Band n71	A	Open	0014M	20	CP-OFDM	QPSK	1	1	23.7	23.12	1.5	0.00	1:1	0.146	1.143	0.167	0.167	
680.50	136100	Mid	back	15 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	25.2	24.55	0	-0.03	1:1	0.324	1.161	0.376	0.376	
680.50	136100	Mid	back	15 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	28	25.2	24.81	0	0.01	1:1	0.326	1.094	0.357	0.357	A48
680.50	136100	Mid	back	15 mm	NR Band n71	A	Closed	0024M	20	CP-OFDM	QPSK	1	1	23.7	23.12	1.5	-0.08	1:1	0.179	1.143	0.205	0.205	
707.50	141500	Mid	back	15 mm	NR Band n12	A	Open	0014M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.30	0	-0.06	1:1	0.164	1.318	0.216	0.216	
707.50	141500	Mid	back	15 mm	NR Band n12	A	Open	0014M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.32	0	-0.04	1:1	0.204	1.312	0.268	0.268	A49
707.50	141500	Mid	back	15 mm	NR Band n12	A	Open	0014M	15	CP-OFDM	QPSK	1	1	24.0	22.95	1.5	0.00	1:1	0.119	1.274	0.152	0.152	
707.50	141500	Mid	back	15 mm	NR Band n12	A	Closed	0014M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.30	0	-0.11	1:1	0.127	1.318	0.167	0.167	
707.50	141500	Mid	back	15 mm	NR Band n12	A	Closed	0014M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.32	0	-0.04	1:1	0.105	1.312	0.138	0.138	
707.50	141500	Mid	back	15 mm	NR Band n12	A	Closed	0014M	15	CP-OFDM	QPSK	1	1	24.0	22.95	1.5	-0.04	1:1	0.088	1.274	0.112	0.112	
831.50	166300	Mid	back	15 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	1	53	25.7	24.28	0	-0.02	1:1	0.137	1.387	0.190	0.190	
831.50	166300	Mid	back	15 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	50	28	25.7	24.49	0	-0.01	1:1	0.130	1.321	0.172	0.172	
831.50	166300	Mid	back	15 mm	NR Band n26	A	Open	0024M	20	CP-OFDM	QPSK	1	1	24.2	22.88	1.5	0.06	1:1	0.100	1.355	0.136	0.136	
831.50	166300	Mid	back	15 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	25.7	24.28	0	0.02	1:1	0.186	1.387	0.258	0.258	A50
831.50	166300	Mid	back	15 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	28	25.7	24.49	0	-0.03	1:1	0.170	1.321	0.225	0.225	
831.50	166300	Mid	back	15 mm	NR Band n26	A	Closed	0024M	20	CP-OFDM	QPSK	1	1	24.2	22.88	1.5	0.00	1:1	0.120	1.355	0.163	0.163	
1745.00	349000	Mid	back	15 mm	NR Band n66	A	Open	0168G	40	DFT-S-OFDM	QPSK	1	1	21.5	19.78	0	-0.06	1:1	0.200	1.486	0.297	0.297	
1745.00	349000	Mid	back	15 mm	NR Band n66	A	Open	0168G	40	DFT-S-OFDM	QPSK	108	108	21.5	19.90	0	-0.01	1:1	0.218	1.445	0.315	0.315	
1745.00	349000	Mid	back	15 mm	NR Band n66	A	Open	0168G	40	CP-OFDM	QPSK	1	1	21.5	19.85	0	-0.02	1:1	0.204	1.462	0.298	0.298	
1745.00	349000	Mid	back	15 mm	NR Band n66	A	Closed	0168G	40	DFT-S-OFDM	QPSK	1	1	21.5	19.78	0	0.01	1:1	0.073	1.486	0.108	0.108	
1745.00	349000	Mid	back	15 mm	NR Band n66	A	Closed	0168G	40	DFT-S-OFDM	QPSK	108	108	21.5	19.90	0	0.00	1:1	0.083	1.445	0.120	0.120	
1745.00	349000	Mid	back	15 mm	NR Band n66	A	Closed	0168G	40	CP-OFDM	QPSK	1	1	21.5	19.85	0	0.03	1:1	0.074	1.462	0.108	0.108	
1745.00	349000	Mid	back	15 mm	NR Band n66	I	Open	0168G	40	DFT-S-OFDM	QPSK	1	1	22.0	21.55	0	-0.03	1:1	0.236	1.109	0.262	0.262	
1745.00	349000	Mid	back	15 mm	NR Band n66	I	Open	0168G	40	DFT-S-OFDM	QPSK	108	54	22.0	21.49	0	0.01	1:1	0.239	1.125	0.269	0.269	A51
1745.00	349000	Mid	back	15 mm	NR Band n66	I	Open	0168G	40	CP-OFDM	QPSK	1	1	22.0	21.52	0	0.06	1:1	0.238	1.117	0.266	0.266	
1745.00	349000	Mid	back	15 mm	NR Band n66	I	Closed	0168G	40	DFT-S-OFDM	QPSK	1	1	22.0	21.55	0	0.05	1:1	0.019	1.109	0.021	0.021	
1745.00	349000	Mid	back	15 mm	NR Band n66	I	Closed	0168G	40	DFT-S-OFDM	QPSK	108	54	22.0	21.49	0	0.06	1:1	0.020	1.125	0.023	0.023	
1745.00	349000	Mid	back	15 mm	NR Band n66	I	Closed	0168G	40	CP-OFDM	QPSK	1	1	22.0	21.52	0	0.04	1:1	0.020	1.117	0.022	0.022	

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Table 11-37
NR Body-Worn SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1882.50	376500	Mid	back	15 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	1	214	23.0	21.88	0	0.01	1:1	0.304	1.294	0.393	0.393	A52
1882.50	376500	Mid	back	15 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	108	108	23.0	21.98	0	0.03	1:1	0.296	1.265	0.374	0.374	
1882.50	376500	Mid	back	15 mm	NR Band n25	A	Open	0248M	40	CP-OFDM	QPSK	1	1	23.0	21.84	0	-0.09	1:1	0.228	1.306	0.298	0.298	
1882.50	376500	Mid	back	15 mm	NR Band n25	A	Closed	0248M	40	DFT-S-OFDM	QPSK	1	214	23.0	21.88	0	0.02	1:1	0.180	1.294	0.233	0.233	
1882.50	376500	Mid	back	15 mm	NR Band n25	A	Closed	0248M	40	DFT-S-OFDM	QPSK	108	108	23.0	21.98	0	-0.01	1:1	0.176	1.265	0.223	0.223	
1882.50	376500	Mid	back	15 mm	NR Band n25	A	Closed	0248M	40	CP-OFDM	QPSK	1	1	23.0	21.84	0	0.04	1:1	0.131	1.306	0.171	0.171	
1882.50	376500	Mid	back	15 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	214	22.0	21.08	0	0.03	1:1	0.252	1.236	0.311	0.311	
1882.50	376500	Mid	back	15 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	22.0	21.01	0	-0.03	1:1	0.252	1.256	0.317	0.317	
1882.50	376500	Mid	back	15 mm	NR Band n25	I	Open	0015M	40	CP-OFDM	QPSK	1	1	22.0	21.12	0	0.00	1:1	0.268	1.225	0.328	0.328	
1882.50	376500	Mid	back	15 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	1	214	22.0	21.08	0	0.00	1:1	0.046	1.236	0.057	0.057	
1882.50	376500	Mid	back	15 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	108	108	22.0	21.01	0	0.13	1:1	0.043	1.256	0.054	0.054	
1882.50	376500	Mid	back	15 mm	NR Band n25	I	Closed	0015M	40	CP-OFDM	QPSK	1	1	22.0	21.12	0	0.14	1:1	0.044	1.225	0.054	0.054	
2310.00	462000	Mid	back	15 mm	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	1	26	22.5	21.41	0	0.03	1:1	0.097	1.285	0.125	0.125	
2310.00	462000	Mid	back	15 mm	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	25	0	22.5	21.37	0	-0.04	1:1	0.098	1.297	0.127	0.127	
2310.00	462000	Mid	back	15 mm	NR Band n30	B	Open	0078M	10	CP-OFDM	QPSK	1	1	22.5	21.41	0	0.01	1:1	0.105	1.285	0.135	0.135	
2310.00	462000	Mid	back	15 mm	NR Band n30	B	Closed	0078M	10	DFT-S-OFDM	QPSK	1	26	22.5	21.41	0	-0.12	1:1	0.073	1.285	0.094	0.094	
2310.00	462000	Mid	back	15 mm	NR Band n30	B	Closed	0078M	10	DFT-S-OFDM	QPSK	25	0	22.5	21.37	0	0.11	1:1	0.071	1.297	0.092	0.092	
2310.00	462000	Mid	back	15 mm	NR Band n30	B	Closed	0078M	10	CP-OFDM	QPSK	1	1	22.5	21.41	0	0.12	1:1	0.071	1.285	0.091	0.091	
2310.00	462000	Mid	back	15 mm	NR Band n30	I	Open	0163G	10	DFT-S-OFDM	QPSK	1	50	21.5	20.85	0	0.04	1:1	0.193	1.161	0.224	0.224	
2310.00	462000	Mid	back	15 mm	NR Band n30	I	Open	0163G	10	DFT-S-OFDM	QPSK	25	14	21.5	20.83	0	-0.01	1:1	0.198	1.167	0.231	0.231	
2310.00	462000	Mid	back	15 mm	NR Band n30	I	Open	0163G	10	CP-OFDM	QPSK	1	1	21.5	20.96	0	-0.12	1:1	0.200	1.132	0.226	0.226	A53
2310.00	462000	Mid	back	15 mm	NR Band n30	I	Closed	0036M	10	DFT-S-OFDM	QPSK	1	50	21.5	20.85	0	0.03	1:1	0.049	1.161	0.057	0.057	
2310.00	462000	Mid	back	15 mm	NR Band n30	I	Closed	0036M	10	DFT-S-OFDM	QPSK	25	14	21.5	20.83	0	-0.10	1:1	0.053	1.167	0.062	0.062	
2310.00	462000	Mid	back	15 mm	NR Band n30	I	Closed	0036M	10	CP-OFDM	QPSK	1	1	21.5	20.96	0	0.04	1:1	0.054	1.132	0.061	0.061	
2535.00	507000	Mid	back	15 mm	NR Band n7	B	Open	0248M	40	DFT-S-OFDM	QPSK	1	1	22.5	20.89	0	0.02	1:1	0.088	1.449	0.128	0.128	
2535.00	507000	Mid	back	15 mm	NR Band n7	B	Open	0248M	40	DFT-S-OFDM	QPSK	108	0	22.5	20.95	0	0.12	1:1	0.090	1.429	0.129	0.129	
2535.00	507000	Mid	back	15 mm	NR Band n7	B	Open	0248M	40	CP-OFDM	QPSK	1	1	22.5	20.88	0	-0.02	1:1	0.089	1.452	0.129	0.129	
2535.00	507000	Mid	back	15 mm	NR Band n7	B	Closed	0248M	40	DFT-S-OFDM	QPSK	1	1	22.5	20.89	0	0.03	1:1	0.147	1.449	0.213	0.213	
2535.00	507000	Mid	back	15 mm	NR Band n7	B	Closed	0248M	40	DFT-S-OFDM	QPSK	108	0	22.5	20.95	0	0.07	1:1	0.148	1.429	0.211	0.211	
2535.00	507000	Mid	back	15 mm	NR Band n7	B	Closed	0248M	40	CP-OFDM	QPSK	1	1	22.5	20.88	0	0.01	1:1	0.152	1.452	0.221	0.221	A54
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 11-38
NR Band n41/n48 Body-Worn SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2592.99	518598	Mid	back	15 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	21.5	20.17	0	0.03	1:1	0.168	1.358	0.228	0.228	
2592.99	518598	Mid	back	15 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	69	21.5	20.13	0	0.02	1:1	0.169	1.371	0.232	0.232	A55
2592.99	518598	Mid	back	15 mm	NR Band n41	I	Open	0023M	100	CP-OFDM	QPSK	1	1	21.5	19.97	0	-0.06	1:1	0.164	1.422	0.233	0.233	
2592.99	518598	Mid	back	15 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	QPSK	1	137	21.5	20.17	0	-0.11	1:1	0.044	1.358	0.060	0.060	
2592.99	518598	Mid	back	15 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	QPSK	135	69	21.5	20.13	0	0.00	1:1	0.044	1.371	0.060	0.060	
2592.99	518598	Mid	back	15 mm	NR Band n41	I	Closed	0023M	100	CP-OFDM	QPSK	1	1	21.5	19.97	0	0.06	1:1	0.047	1.422	0.067	0.067	
2592.99	518598	Mid	back	15 mm	NR Band n41	B	Open	0023M	100	CW/SRS	N/A	N/A	N/A	18.5	17.01	N/A	0.01	1:1	0.028	1.409	0.039	0.039	
2592.99	518598	Mid	back	15 mm	NR Band n41	B	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	18.5	17.01	N/A	0.20	1:1	0.019	1.409	0.027	0.027	
2592.99	518598	Mid	back	15 mm	NR Band n41	F	Open	0023M	100	CW/SRS	N/A	N/A	N/A	16.0	15.06	N/A	-0.09	1:1	0.012	1.242	0.015	0.015	
2592.99	518598	Mid	back	15 mm	NR Band n41	F	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.0	15.06	N/A	0.06	1:1	0.004	1.242	0.005	0.005	
2592.99	518598	Mid	back	15 mm	NR Band n41	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	0.06	1:1	0.002	1.130	0.002	0.002	
2592.99	518598	Mid	back	15 mm	NR Band n41	C	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	0.20	1:1	0.005	1.130	0.006	0.006	
3570.00	638000	Low	back	15 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	104	19.0	17.98	0	-0.01	1:1	0.314	1.265	0.397	0.397	
3570.00	638000	Low	back	15 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	19.0	17.86	0	-0.01	1:1	0.312	1.300	0.406	0.406	
3570.00	638000	Low	back	15 mm	NR Band n48	F	Open	0020M	40	CP-OFDM	QPSK	1	1	19.0	17.71	0	0.09	1:1	0.331	1.346	**0.446**	0.446	A56
3570.00	638000	Low	back	15 mm	NR Band n48	F	Closed	0020M	40	DFT-s-OFDM	QPSK	1	104	19.0	17.98	0	-0.05	1:1	0.026	1.265	0.033	0.033	
3570.00	638000	Low	back	15 mm	NR Band n48	F	Closed	0020M	40	DFT-s-OFDM	QPSK	50	0	19.0	17.86	0	0.08	1:1	0.039	1.300	0.051	0.051	
3570.00	638000	Low	back	15 mm	NR Band n48	F	Closed	0020M	40	CP-OFDM	QPSK	1	1	19.0	17.71	0	0.09	1:1	0.036	1.346	0.048	0.048	
3570.00	638000	Low	back	15 mm	NR Band n48	I	Open	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	11.95	N/A	-0.09	1:1	0.078	1.274	0.099	0.099	
3570.00	638000	Low	back	15 mm	NR Band n48	I	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	11.95	N/A	0.06	1:1	0.015	1.274	0.019	0.019	
3570.00	638000	Low	back	15 mm	NR Band n48	E	Open	0023M	40	CW/SRS	N/A	N/A	N/A	15.5	14.64	N/A	-0.06	1:1	0.063	1.219	0.077	0.077	
3570.00	638000	Low	back	15 mm	NR Band n48	E	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	15.5	14.64	N/A	0.01	1:1	0.017	1.219	0.021	0.021	
3570.00	638000	Low	back	15 mm	NR Band n48	C	Open	0023M	40	CW/SRS	N/A	N/A	N/A	17.0	16.25	N/A	0.06	1:1	0.043	1.189	0.051	0.051	
3570.00	638000	Low	back	15 mm	NR Band n48	C	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	17.0	16.25	N/A	-0.19	1:1	0.027	1.189	0.032	0.032	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-39
NR Band 77 Body-Worn SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
3750.00	650000	Low	back	15 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	17.5	17.13	0	0.08	1:1	0.122	1.089	0.133	0.133	
3750.00	650000	Low	back	15 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	135	138	17.5	16.91	0	0.07	1:1	0.127	1.146	0.146	0.146	
3750.00	650000	Low	back	15 mm	NR Band n77	F	Open	0020M	100	CP-OFDM	QPSK	1	1	17.5	16.22	0	-0.08	1:1	0.166	1.343	0.223	0.223	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	17.5	16.23	0	0.06	1:1	0.225	1.340	0.302	0.302	A57
3750.00	650000	Low	back	15 mm	NR Band n77	F	Closed	0020M	100	DFT-S-OFDM	QPSK	1	271	17.5	17.13	0	0.03	1:1	0.011	1.089	0.012	0.012	
3750.00	650000	Low	back	15 mm	NR Band n77	F	Closed	0020M	100	DFT-S-OFDM	QPSK	135	138	17.5	16.91	0	0.02	1:1	0.007	1.146	0.008	0.008	
3750.00	650000	Low	back	15 mm	NR Band n77	F	Closed	0020M	100	CP-OFDM	QPSK	1	1	17.5	16.22	0	0.05	1:1	0.019	1.343	0.026	0.026	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	F	Closed	0020M	100	DFT-S-OFDM	QPSK	1	271	17.5	16.23	0	-0.08	1:1	0.017	1.340	0.023	0.023	
3750.00	650000	Low	back	15 mm	NR Band n77	I	Open	0020M	100	CW/SRS	N/A	NA	NA	15.5	15.19	N/A	0.05	1:1	0.045	1.074	0.048	0.048	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	I	Open	0023M	100	CW/SRS	N/A	NA	NA	15.5	14.08	N/A	0.02	1:1	0.058	1.387	0.080	0.080	
3750.00	650000	Low	back	15 mm	NR Band n77	I	Closed	0020M	100	CW/SRS	N/A	NA	NA	15.5	15.19	N/A	0.04	1:1	0.002	1.074	0.002	0.002	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	I	Closed	0023M	100	CW/SRS	N/A	NA	NA	15.5	14.08	N/A	0.03	1:1	0.014	1.387	0.019	0.019	
3750.00	650000	Low	back	15 mm	NR Band n77	E	Open	0020M	100	CW/SRS	N/A	N/A	N/A	15.5	14.69	N/A	0.06	1:1	0.016	1.205	0.019	0.019	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	E	Open	0023M	100	CW/SRS	N/A	N/A	N/A	15.5	14.81	N/A	-0.04	1:1	0.038	1.172	0.045	0.045	
3750.00	650000	Low	back	15 mm	NR Band n77	E	Closed	0020M	100	CW/SRS	N/A	NA	NA	15.5	14.69	N/A	0.08	1:1	0.009	1.205	0.011	0.011	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	E	Closed	0023M	100	CW/SRS	N/A	NA	NA	15.5	14.81	N/A	0.02	1:1	0.005	1.172	0.006	0.006	
3750.00	650000	Low	back	15 mm	NR Band n77	C	Open	0020M	100	CW/SRS	N/A	NA	NA	15.0	14.83	N/A	0.08	1:1	0.020	1.040	0.021	0.021	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	C	Open	0023M	100	CW/SRS	N/A	NA	NA	15.0	14.30	N/A	0.08	1:1	0.012	1.175	0.014	0.014	
3750.00	650000	Low	back	15 mm	NR Band n77	C	Closed	0020M	100	CW/SRS	N/A	NA	NA	15.0	14.83	N/A	0.09	1:1	0.015	1.040	0.016	0.016	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	C	Closed	0023M	100	CW/SRS	N/A	NA	NA	15.0	14.30	N/A	0.08	1:1	0.006	1.175	0.007	0.007	
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 11-40
DTS SISO Body-Worn SAR

MEASUREMENT RESULTS																		
FREQUENCY		Side	Spacing	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.													(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
2462	11	back	15 mm	2	Open	0058M	22	1	19.0	18.81	0.05	100.00	98.74	0.042	1.045	1.013	**0.044**	0.044	
2462	11	back	15 mm	2	Closed	0058M	22	1	19.0	18.81	-0.18	100.00	98.74	0.020	1.045	1.013	0.021	0.021	
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 11-41
DTS MIMO Body-Worn SAR

MEASUREMENT RESULTS																							
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
2412	1	back	15 mm	802.11b	DSSS	MIMO	Open	0058M	22	1	19.0	18.91	19.0	19.00	0.03	100.00	98.90	0.193	1.021	1.011	0.199	0.199	A58
2412	1	back	15 mm	802.11b	DSSS	MIMO	Closed	0058M	22	1	19.0	18.91	19.0	19.00	-0.13	100.00	98.90	0.063	1.021	1.011	0.065	0.065	
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 22.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 19.0 dBm.

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Table 11-42
NII MIMO Body-Worn SAR

MEASUREMENT RESULTS																							
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
5260	52	back	15 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.73	16.0	15.97	-0.01	100.00	98.11	0.152	1.064	1.019	0.165	0.165	A59
5260	52	back	15 mm	802.11n	OFDM	MIMO	Closed	0091M	20	13	16.0	15.73	16.0	15.97	0.08	100.00	98.11	0.022	1.064	1.019	0.024	0.024	
5600	120	back	15 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.96	16.0	15.94	-0.12	100.00	98.11	0.132	1.014	1.019	0.136	0.136	
5600	120	back	15 mm	802.11n	OFDM	MIMO	Closed	0091M	20	13	16.0	15.96	16.0	15.94	0.08	100.00	98.11	0.011	1.014	1.019	0.011	0.011	
5825	165	back	15 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.95	16.0	15.78	-0.13	100.00	98.11	0.088	1.052	1.019	0.094	0.094	
5825	165	back	15 mm	802.11n	OFDM	MIMO	Closed	0091M	20	13	16.0	15.95	16.0	15.78	0.04	100.00	98.11	0.018	1.052	1.019	0.019	0.019	
5845	169	back	15 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.87	16.0	15.63	0.04	100.00	98.11	0.091	1.089	1.019	0.101	0.101	
5845	169	back	15 mm	802.11n	OFDM	MIMO	Closed	0091M	20	13	16.0	15.87	16.0	15.63	-0.13	100.00	98.11	0.014	1.089	1.019	0.016	0.016	
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 19.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 16.0 dBm.

Table 11-43
DSS SISO Body-Worn SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.														(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
2441	39	back	15 mm	Bluetooth	FHSS	1	Open	0058M	1	16.5	16.40	0.00	78.00	76.85	0.045	1.023	1.015	0.047	0.047	A60
2441	39	back	15 mm	Bluetooth	FHSS	1	Closed	0058M	1	16.5	16.40	-0.11	78.00	76.85	0.013	1.023	1.015	0.013	0.013	
2441	39	back	15 mm	Bluetooth	FHSS	2	Open	0234M	1	17.0	16.74	0.19	78.00	76.90	0.032	1.062	1.014	0.034	0.034	
2441	39	back	15 mm	Bluetooth	FHSS	2	Closed	0234M	1	17.0	16.74	0.09	78.00	76.90	0.010	1.062	1.014	0.011	0.011	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram									

11.3 Standalone Hotspot SAR Data

Table 11-44
GPRS Hotspot SAR Data

MEASUREMENT RESULTS																			
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	# of Time Slots	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.													(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
824.20	128	back	10 mm	GSM 850	GPRS	A	Open	0027M	4	26.0	24.45	0.07	1:2.076	0.115	1.429	0.164	0.164	
824.20	128	front	10 mm	GSM 850	GPRS	A	Open	0027M	4	26.0	24.45	-0.06	1:2.076	0.088	1.429	0.126	0.126	
824.20	128	bottom	10 mm	GSM 850	GPRS	A	Open	0027M	4	26.0	24.45	-0.04	1:2.076	0.028	1.429	0.040	0.040	
824.20	128	right	10 mm	GSM 850	GPRS	A	Open	0027M	4	26.0	24.45	0.06	1:2.076	0.085	1.429	0.121	0.121	
824.20	128	left	10 mm	GSM 850	GPRS	A	Open	0027M	4	26.0	24.45	0.18	1:2.076	0.055	1.429	0.079	0.079	
824.20	128	back	5 mm	GSM 850	GPRS	A	Closed	0027M	4	26.0	24.45	0.01	1:2.076	0.400	1.429	0.572	0.572	A61
824.20	128	front	5 mm	GSM 850	GPRS	A	Closed	0027M	4	26.0	24.45	0.19	1:2.076	0.047	1.429	0.067	0.067	
824.20	128	bottom	5 mm	GSM 850	GPRS	A	Closed	0027M	4	26.0	24.45	-0.07	1:2.076	0.075	1.429	0.107	0.107	
824.20	128	right	5 mm	GSM 850	GPRS	A	Closed	0027M	4	26.0	24.45	0.15	1:2.076	0.035	1.429	0.050	0.050	
824.20	128	left	5 mm	GSM 850	GPRS	A	Closed	0027M	4	26.0	24.45	0.00	1:2.076	0.074	1.429	0.106	0.106	
1880.00	661	back	10 mm	GSM 1900	GPRS	A	Open	0034M	4	23.0	21.92	-0.04	1:2.076	0.187	1.282	0.240	0.240	
1880.00	661	front	10 mm	GSM 1900	GPRS	A	Open	0034M	4	23.0	21.92	0.03	1:2.076	0.147	1.282	0.188	0.188	
1880.00	661	bottom	10 mm	GSM 1900	GPRS	A	Open	0034M	4	23.0	21.92	0.03	1:2.076	0.252	1.282	0.323	0.323	
1880.00	661	right	10 mm	GSM 1900	GPRS	A	Open	0034M	4	23.0	21.92	0.06	1:2.076	0.012	1.282	0.015	0.015	
1880.00	661	left	10 mm	GSM 1900	GPRS	A	Open	0034M	4	23.0	21.92	-0.03	1:2.076	0.044	1.282	0.056	0.056	
1880.00	661	back	5 mm	GSM 1900	GPRS	A	Closed	0034M	4	23.0	21.92	-0.03	1:2.076	0.109	1.282	0.140	0.140	
1880.00	661	front	5 mm	GSM 1900	GPRS	A	Closed	0034M	4	23.0	21.92	-0.07	1:2.076	0.139	1.282	0.178	0.178	
1880.00	661	bottom	5 mm	GSM 1900	GPRS	A	Closed	0159G	4	23.0	21.92	0.08	1:2.076	0.263	1.282	0.337	0.337	A62
1880.00	661	right	5 mm	GSM 1900	GPRS	A	Closed	0034M	4	23.0	21.92	-0.11	1:2.076	0.010	1.282	0.013	0.013	
1880.00	661	left	5 mm	GSM 1900	GPRS	A	Closed	0034M	4	23.0	21.92	0.16	1:2.076	0.012	1.282	0.015	0.015	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 11-45
UMTS Hotspot SAR Data

MEASUREMENT RESULTS																	
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.												(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
826.40	4132	back	10 mm	UMTS 850	RMC	A	Open	0245M	24.0	22.93	-0.02	1:1	0.216	1.279	0.276	0.276	
826.40	4132	front	10 mm	UMTS 850	RMC	A	Open	0245M	24.0	22.93	-0.02	1:1	0.134	1.279	0.171	0.171	
826.40	4132	bottom	10 mm	UMTS 850	RMC	A	Open	0245M	24.0	22.93	-0.04	1:1	0.063	1.279	0.081	0.081	
826.40	4132	right	10 mm	UMTS 850	RMC	A	Open	0245M	24.0	22.93	-0.02	1:1	0.146	1.279	0.187	0.187	
826.40	4132	left	10 mm	UMTS 850	RMC	A	Open	0245M	24.0	22.93	0.08	1:1	0.089	1.279	0.114	0.114	
826.40	4132	back	5 mm	UMTS 850	RMC	A	Closed	0245M	24.0	22.93	-0.02	1:1	0.600	1.279	0.767	0.767	
836.60	4183	back	5 mm	UMTS 850	RMC	A	Closed	0245M	24.0	22.92	0.01	1:1	0.625	1.282	0.801	0.801	A63
846.60	4233	back	5 mm	UMTS 850	RMC	A	Closed	0245M	24.0	22.74	-0.03	1:1	0.595	1.337	0.796	0.796	
826.40	4132	front	5 mm	UMTS 850	RMC	A	Closed	0245M	24.0	22.93	0.00	1:1	0.081	1.279	0.104	0.104	
826.40	4132	bottom	5 mm	UMTS 850	RMC	A	Closed	0245M	24.0	22.93	0.04	1:1	0.134	1.279	0.171	0.171	
826.40	4132	right	5 mm	UMTS 850	RMC	A	Closed	0245M	24.0	22.93	0.09	1:1	0.062	1.279	0.079	0.079	
826.40	4132	left	5 mm	UMTS 850	RMC	A	Closed	0245M	24.0	22.93	0.02	1:1	0.123	1.279	0.157	0.157	
1712.40	1312	back	10 mm	UMTS 1750	RMC	A	Open	0011M	20.0	18.72	0.00	1:1	0.266	1.343	0.357	0.357	
1712.40	1312	front	10 mm	UMTS 1750	RMC	A	Open	0011M	20.0	18.72	-0.01	1:1	0.186	1.343	0.250	0.250	
1712.40	1312	bottom	10 mm	UMTS 1750	RMC	A	Open	0011M	20.0	18.72	0.01	1:1	0.338	1.343	0.454	0.454	
1712.40	1312	right	10 mm	UMTS 1750	RMC	A	Open	0011M	20.0	18.72	0.00	1:1	0.024	1.343	0.032	0.032	
1712.40	1312	left	10 mm	UMTS 1750	RMC	A	Open	0011M	20.0	18.72	0.01	1:1	0.053	1.343	0.071	0.071	
1712.40	1312	back	5 mm	UMTS 1750	RMC	A	Closed	0011M	20.0	18.72	0.00	1:1	0.345	1.343	0.463	0.463	
1712.40	1312	front	5 mm	UMTS 1750	RMC	A	Closed	0011M	20.0	18.72	0.00	1:1	0.163	1.343	0.219	0.219	
1712.40	1312	bottom	5 mm	UMTS 1750	RMC	A	Closed	0011M	20.0	18.72	-0.02	1:1	0.451	1.343	0.606	0.606	
1732.40	1412	bottom	5 mm	UMTS 1750	RMC	A	Closed	0011M	20.0	18.26	0.01	1:1	0.468	1.493	0.699	0.699	
1752.60	1513	bottom	5 mm	UMTS 1750	RMC	A	Closed	0011M	20.0	18.54	0.04	1:1	0.543	1.400	0.760	0.760	A64
1712.40	1312	right	5 mm	UMTS 1750	RMC	A	Closed	0011M	20.0	18.72	0.11	1:1	0.020	1.343	0.027	0.027	
1712.40	1312	left	5 mm	UMTS 1750	RMC	A	Closed	0011M	20.0	18.72	-0.02	1:1	0.081	1.343	0.109	0.109	
1907.60	9538	back	10 mm	UMTS 1900	RMC	A	Open	0034M	19.0	17.94	-0.02	1:1	0.261	1.276	0.333	0.333	
1907.60	9538	front	10 mm	UMTS 1900	RMC	A	Open	0034M	19.0	17.94	0.00	1:1	0.202	1.276	0.258	0.258	
1907.60	9538	bottom	10 mm	UMTS 1900	RMC	A	Open	0034M	19.0	17.94	0.02	1:1	0.359	1.276	0.458	0.458	
1907.60	9538	right	10 mm	UMTS 1900	RMC	A	Open	0034M	19.0	17.94	-0.14	1:1	0.017	1.276	0.022	0.022	
1907.60	9538	left	10 mm	UMTS 1900	RMC	A	Open	0034M	19.0	17.94	-0.01	1:1	0.054	1.276	0.069	0.069	
1907.60	9538	back	5 mm	UMTS 1900	RMC	A	Closed	0034M	19.0	17.94	-0.09	1:1	0.154	1.276	0.197	0.197	
1907.60	9538	front	5 mm	UMTS 1900	RMC	A	Closed	0034M	19.0	17.94	-0.05	1:1	0.199	1.276	0.254	0.254	
1907.60	9538	bottom	5 mm	UMTS 1900	RMC	A	Closed	0159G	19.0	17.94	0.00	1:1	0.402	1.276	0.513	0.513	A65
1907.60	9538	right	5 mm	UMTS 1900	RMC	A	Closed	0034M	19.0	17.94	-0.10	1:1	0.005	1.276	0.006	0.006	
1907.60	9538	left	5 mm	UMTS 1900	RMC	A	Closed	0034M	19.0	17.94	-0.16	1:1	0.016	1.276	0.020	0.020	
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Table 11-46
LTE Band 71 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
680.50	133297	Mid	back	10 mm	LTE Band 71	A	Open	0245M	20	QPSK	1	50	25.0	24.25	0	-0.04	1:1	0.182	1.189	0.216	0.216	
680.50	133297	Mid	back	10 mm	LTE Band 71	A	Open	0245M	20	QPSK	50	25	25.0	24.17	0	0.02	1:1	0.184	1.211	0.223	0.223	
680.50	133297	Mid	front	10 mm	LTE Band 71	A	Open	0245M	20	QPSK	1	50	25.0	24.25	0	0.07	1:1	0.160	1.189	0.190	0.190	
680.50	133297	Mid	front	10 mm	LTE Band 71	A	Open	0245M	20	QPSK	50	25	25.0	24.17	0	0.05	1:1	0.162	1.211	0.196	0.196	
680.50	133297	Mid	bottom	10 mm	LTE Band 71	A	Open	0245M	20	QPSK	1	50	25.0	24.25	0	0.16	1:1	0.031	1.189	0.037	0.037	
680.50	133297	Mid	bottom	10 mm	LTE Band 71	A	Open	0245M	20	QPSK	50	25	25.0	24.17	0	-0.02	1:1	0.031	1.211	0.038	0.038	
680.50	133297	Mid	right	10 mm	LTE Band 71	A	Open	0245M	20	QPSK	1	50	25.0	24.25	0	0.16	1:1	0.180	1.189	0.214	0.214	
680.50	133297	Mid	right	10 mm	LTE Band 71	A	Open	0245M	20	QPSK	50	25	25.0	24.17	0	0.00	1:1	0.189	1.211	0.229	0.229	
680.50	133297	Mid	left	10 mm	LTE Band 71	A	Open	0245M	20	QPSK	1	50	25.0	24.25	0	0.03	1:1	0.144	1.189	0.171	0.171	
680.50	133297	Mid	left	10 mm	LTE Band 71	A	Open	0245M	20	QPSK	50	25	25.0	24.17	0	0.02	1:1	0.150	1.211	0.182	0.182	
680.50	133297	Mid	back	5 mm	LTE Band 71	A	Closed	0245M	20	QPSK	1	50	25.0	24.25	0	0.09	1:1	0.627	1.189	0.746	0.746	
680.50	133297	Mid	back	5 mm	LTE Band 71	A	Closed	0245M	20	QPSK	50	25	25.0	24.17	0	-0.02	1:1	0.629	1.211	0.762	0.762	A66
680.50	133297	Mid	front	5 mm	LTE Band 71	A	Closed	0245M	20	QPSK	1	50	25.0	24.25	0	0.02	1:1	0.203	1.189	0.241	0.241	
680.50	133297	Mid	front	5 mm	LTE Band 71	A	Closed	0245M	20	QPSK	50	25	25.0	24.17	0	-0.01	1:1	0.203	1.211	0.246	0.246	
680.50	133297	Mid	bottom	5 mm	LTE Band 71	A	Closed	0245M	20	QPSK	1	50	25.0	24.25	0	0.01	1:1	0.090	1.189	0.107	0.107	
680.50	133297	Mid	bottom	5 mm	LTE Band 71	A	Closed	0245M	20	QPSK	50	25	25.0	24.17	0	0.06	1:1	0.087	1.211	0.105	0.105	
680.50	133297	Mid	right	5 mm	LTE Band 71	A	Closed	0245M	20	QPSK	1	50	25.0	24.25	0	0.13	1:1	0.042	1.189	0.050	0.050	
680.50	133297	Mid	right	5 mm	LTE Band 71	A	Closed	0245M	20	QPSK	50	25	25.0	24.17	0	0.12	1:1	0.039	1.211	0.047	0.047	
680.50	133297	Mid	left	5 mm	LTE Band 71	A	Closed	0245M	20	QPSK	1	50	25.0	24.25	0	0.12	1:1	0.082	1.189	0.097	0.097	
680.50	133297	Mid	left	5 mm	LTE Band 71	A	Closed	0245M	20	QPSK	50	25	25.0	24.17	0	0.18	1:1	0.082	1.211	0.099	0.099	
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Table 11-47
LTE Band 12 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
707.50	23095	Mid	back	10 mm	LTE Band 12	A	Open	0245M	10	QPSK	1	25	24.0	22.77	0	-0.02	1:1	0.174	1.327	0.231	0.231	
707.50	23095	Mid	back	10 mm	LTE Band 12	A	Open	0245M	10	QPSK	25	0	24.0	22.79	0	0.01	1:1	0.174	1.321	0.230	0.230	
707.50	23095	Mid	front	10 mm	LTE Band 12	A	Open	0245M	10	QPSK	1	25	24.0	22.77	0	0.01	1:1	0.139	1.327	0.184	0.184	
707.50	23095	Mid	front	10 mm	LTE Band 12	A	Open	0245M	10	QPSK	25	0	24.0	22.79	0	0.00	1:1	0.141	1.321	0.186	0.186	
707.50	23095	Mid	bottom	10 mm	LTE Band 12	A	Open	0245M	10	QPSK	1	25	24.0	22.77	0	-0.01	1:1	0.029	1.327	0.038	0.038	
707.50	23095	Mid	bottom	10 mm	LTE Band 12	A	Open	0245M	10	QPSK	25	0	24.0	22.79	0	-0.14	1:1	0.028	1.321	0.037	0.037	
707.50	23095	Mid	right	10 mm	LTE Band 12	A	Open	0245M	10	QPSK	1	25	24.0	22.77	0	0.01	1:1	0.169	1.327	0.224	0.224	
707.50	23095	Mid	right	10 mm	LTE Band 12	A	Open	0245M	10	QPSK	25	0	24.0	22.79	0	0.00	1:1	0.176	1.321	0.232	0.232	
707.50	23095	Mid	left	10 mm	LTE Band 12	A	Open	0245M	10	QPSK	1	25	24.0	22.77	0	0.02	1:1	0.120	1.327	0.159	0.159	
707.50	23095	Mid	left	10 mm	LTE Band 12	A	Open	0245M	10	QPSK	25	0	24.0	22.79	0	0.00	1:1	0.133	1.321	0.176	0.176	
707.50	23095	Mid	back	5 mm	LTE Band 12	A	Closed	0245M	10	QPSK	1	25	24.0	22.77	0	-0.07	1:1	0.396	1.327	0.525	0.525	A67
707.50	23095	Mid	back	5 mm	LTE Band 12	A	Closed	0245M	10	QPSK	25	0	24.0	22.79	0	0.00	1:1	0.373	1.321	0.493	0.493	
707.50	23095	Mid	front	5 mm	LTE Band 12	A	Closed	0245M	10	QPSK	1	25	24.0	22.77	0	-0.02	1:1	0.116	1.327	0.154	0.154	
707.50	23095	Mid	front	5 mm	LTE Band 12	A	Closed	0245M	10	QPSK	25	0	24.0	22.79	0	-0.01	1:1	0.100	1.321	0.132	0.132	
707.50	23095	Mid	bottom	5 mm	LTE Band 12	A	Closed	0245M	10	QPSK	1	25	24.0	22.77	0	-0.04	1:1	0.066	1.327	0.088	0.088	
707.50	23095	Mid	bottom	5 mm	LTE Band 12	A	Closed	0245M	10	QPSK	25	0	24.0	22.79	0	0.00	1:1	0.063	1.321	0.083	0.083	
707.50	23095	Mid	right	5 mm	LTE Band 12	A	Closed	0245M	10	QPSK	1	25	24.0	22.77	0	-0.15	1:1	0.031	1.327	0.041	0.041	
707.50	23095	Mid	right	5 mm	LTE Band 12	A	Closed	0245M	10	QPSK	25	0	24.0	22.79	0	-0.07	1:1	0.031	1.321	0.041	0.041	
707.50	23095	Mid	left	5 mm	LTE Band 12	A	Closed	0245M	10	QPSK	1	25	24.0	22.77	0	0.02	1:1	0.080	1.327	0.106	0.106	
707.50	23095	Mid	left	5 mm	LTE Band 12	A	Closed	0245M	10	QPSK	25	0	24.0	22.79	0	-0.02	1:1	0.078	1.321	0.103	0.103	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-48
LTE Band 13 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
782.00	23230	Mid	back	10 mm	LTE Band 13	A	Open	0027M	10	QPSK	1	25	23.0	22.30	0	0.01	1:1	0.175	1.175	0.206	0.206	
782.00	23230	Mid	back	10 mm	LTE Band 13	A	Open	0027M	10	QPSK	25	0	23.0	22.17	0	-0.01	1:1	0.172	1.211	0.208	0.208	
782.00	23230	Mid	front	10 mm	LTE Band 13	A	Open	0027M	10	QPSK	1	25	23.0	22.30	0	0.00	1:1	0.122	1.175	0.143	0.143	
782.00	23230	Mid	front	10 mm	LTE Band 13	A	Open	0027M	10	QPSK	25	0	23.0	22.17	0	-0.04	1:1	0.122	1.211	0.148	0.148	
782.00	23230	Mid	bottom	10 mm	LTE Band 13	A	Open	0027M	10	QPSK	1	25	23.0	22.30	0	0.05	1:1	0.053	1.175	0.062	0.062	
782.00	23230	Mid	bottom	10 mm	LTE Band 13	A	Open	0027M	10	QPSK	25	0	23.0	22.17	0	-0.01	1:1	0.058	1.211	0.070	0.070	
782.00	23230	Mid	right	10 mm	LTE Band 13	A	Open	0027M	10	QPSK	1	25	23.0	22.30	0	0.07	1:1	0.138	1.175	0.162	0.162	
782.00	23230	Mid	right	10 mm	LTE Band 13	A	Open	0027M	10	QPSK	25	0	23.0	22.17	0	-0.02	1:1	0.137	1.211	0.166	0.166	
782.00	23230	Mid	left	10 mm	LTE Band 13	A	Open	0027M	10	QPSK	1	25	23.0	22.30	0	0.02	1:1	0.095	1.175	0.112	0.112	
782.00	23230	Mid	left	10 mm	LTE Band 13	A	Open	0027M	10	QPSK	25	0	23.0	22.17	0	0.02	1:1	0.090	1.211	0.109	0.109	
782.00	23230	Mid	back	5 mm	LTE Band 13	A	Closed	0027M	10	QPSK	1	25	23.0	22.30	0	-0.11	1:1	0.451	1.175	0.530	0.530	A68
782.00	23230	Mid	back	5 mm	LTE Band 13	A	Closed	0027M	10	QPSK	25	0	23.0	22.17	0	-0.07	1:1	0.447	1.211	0.541	0.541	
782.00	23230	Mid	front	5 mm	LTE Band 13	A	Closed	0027M	10	QPSK	1	25	23.0	22.30	0	0.17	1:1	0.052	1.175	0.061	0.061	
782.00	23230	Mid	front	5 mm	LTE Band 13	A	Closed	0027M	10	QPSK	25	0	23.0	22.17	0	0.11	1:1	0.051	1.211	0.062	0.062	
782.00	23230	Mid	bottom	5 mm	LTE Band 13	A	Closed	0027M	10	QPSK	1	25	23.0	22.30	0	0.03	1:1	0.100	1.175	0.118	0.118	
782.00	23230	Mid	bottom	5 mm	LTE Band 13	A	Closed	0027M	10	QPSK	25	0	23.0	22.17	0	0.00	1:1	0.103	1.211	0.125	0.125	
782.00	23230	Mid	right	5 mm	LTE Band 13	A	Closed	0027M	10	QPSK	1	25	23.0	22.30	0	0.08	1:1	0.057	1.175	0.067	0.067	
782.00	23230	Mid	right	5 mm	LTE Band 13	A	Closed	0027M	10	QPSK	25	0	23.0	22.17	0	0.15	1:1	0.054	1.211	0.065	0.065	
782.00	23230	Mid	left	5 mm	LTE Band 13	A	Closed	0027M	10	QPSK	1	25	23.0	22.30	0	0.02	1:1	0.086	1.175	0.101	0.101	
782.00	23230	Mid	left	5 mm	LTE Band 13	A	Closed	0027M	10	QPSK	25	0	23.0	22.17	0	0.11	1:1	0.080	1.211	0.097	0.097	
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 11-49
LTE Band 14 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
793.00	23330	Mid	back	10 mm	LTE Band 14	A	Open	0027M	10	QPSK	1	0	24.0	22.89	0	-0.05	1:1	0.213	1.291	0.275	0.275	
793.00	23330	Mid	back	10 mm	LTE Band 14	A	Open	0027M	10	QPSK	25	0	24.0	22.82	0	0.00	1:1	0.209	1.312	0.274	0.274	
793.00	23330	Mid	front	10 mm	LTE Band 14	A	Open	0027M	10	QPSK	1	0	24.0	22.89	0	-0.03	1:1	0.145	1.291	0.187	0.187	
793.00	23330	Mid	front	10 mm	LTE Band 14	A	Open	0027M	10	QPSK	25	0	24.0	22.82	0	0.00	1:1	0.141	1.312	0.185	0.185	
793.00	23330	Mid	bottom	10 mm	LTE Band 14	A	Open	0027M	10	QPSK	1	0	24.0	22.89	0	-0.03	1:1	0.069	1.291	0.089	0.089	
793.00	23330	Mid	bottom	10 mm	LTE Band 14	A	Open	0027M	10	QPSK	25	0	24.0	22.82	0	0.05	1:1	0.069	1.312	0.091	0.091	
793.00	23330	Mid	right	10 mm	LTE Band 14	A	Open	0027M	10	QPSK	1	0	24.0	22.89	0	0.06	1:1	0.141	1.291	0.182	0.182	
793.00	23330	Mid	right	10 mm	LTE Band 14	A	Open	0027M	10	QPSK	25	0	24.0	22.82	0	-0.02	1:1	0.143	1.312	0.188	0.188	
793.00	23330	Mid	left	10 mm	LTE Band 14	A	Open	0027M	10	QPSK	1	0	24.0	22.89	0	-0.06	1:1	0.107	1.291	0.138	0.138	
793.00	23330	Mid	left	10 mm	LTE Band 14	A	Open	0027M	10	QPSK	25	0	24.0	22.82	0	0.03	1:1	0.104	1.312	0.136	0.136	
793.00	23330	Mid	back	5 mm	LTE Band 14	A	Closed	0027M	10	QPSK	1	0	24.0	22.89	0	-0.08	1:1	0.527	1.291	0.680	0.680	A69
793.00	23330	Mid	back	5 mm	LTE Band 14	A	Closed	0027M	10	QPSK	25	0	24.0	22.82	0	-0.05	1:1	0.527	1.312	0.691	0.691	
793.00	23330	Mid	front	5 mm	LTE Band 14	A	Closed	0027M	10	QPSK	1	0	24.0	22.89	0	0.19	1:1	0.063	1.291	0.081	0.081	
793.00	23330	Mid	front	5 mm	LTE Band 14	A	Closed	0027M	10	QPSK	25	0	24.0	22.82	0	0.11	1:1	0.063	1.312	0.083	0.083	
793.00	23330	Mid	bottom	5 mm	LTE Band 14	A	Closed	0027M	10	QPSK	1	0	24.0	22.89	0	0.05	1:1	0.114	1.291	0.147	0.147	
793.00	23330	Mid	bottom	5 mm	LTE Band 14	A	Closed	0027M	10	QPSK	25	0	24.0	22.82	0	0.02	1:1	0.118	1.312	0.155	0.155	
793.00	23330	Mid	right	5 mm	LTE Band 14	A	Closed	0027M	10	QPSK	1	0	24.0	22.89	0	0.16	1:1	0.057	1.291	0.074	0.074	
793.00	23330	Mid	right	5 mm	LTE Band 14	A	Closed	0027M	10	QPSK	25	0	24.0	22.82	0	0.17	1:1	0.057	1.312	0.075	0.075	
793.00	23330	Mid	left	5 mm	LTE Band 14	A	Closed	0027M	10	QPSK	1	0	24.0	22.89	0	0.01	1:1	0.104	1.291	0.134	0.134	
793.00	23330	Mid	left	5 mm	LTE Band 14	A	Closed	0027M	10	QPSK	25	0	24.0	22.82	0	-0.01	1:1	0.104	1.312	0.136	0.136	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram												

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Table 11-50
LTE Band 26 (Cell) Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
831.50	26865	Mid	back	10 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	1	36	24.0	22.51	0	0.00	1:1	0.213	1.409	0.300	0.300	
831.50	26865	Mid	back	10 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	36	37	24.0	22.64	0	0.03	1:1	0.222	1.368	0.304	0.304	
831.50	26865	Mid	front	10 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	1	36	24.0	22.51	0	0.00	1:1	0.134	1.409	0.189	0.189	
831.50	26865	Mid	front	10 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	36	37	24.0	22.64	0	0.02	1:1	0.131	1.368	0.179	0.179	
831.50	26865	Mid	bottom	10 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	1	36	24.0	22.51	0	0.02	1:1	0.055	1.409	0.077	0.077	
831.50	26865	Mid	bottom	10 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	36	37	24.0	22.64	0	0.12	1:1	0.058	1.368	0.079	0.079	
831.50	26865	Mid	right	10 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	1	36	24.0	22.51	0	0.01	1:1	0.114	1.409	0.161	0.161	
831.50	26865	Mid	right	10 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	36	37	24.0	22.64	0	0.06	1:1	0.123	1.368	0.168	0.168	
831.50	26865	Mid	left	10 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	1	36	24.0	22.51	0	0.03	1:1	0.089	1.409	0.125	0.125	
831.50	26865	Mid	left	10 mm	LTE Band 26 (Cell)	A	Open	0027M	15	QPSK	36	37	24.0	22.64	0	0.08	1:1	0.092	1.368	0.126	0.126	
831.50	26865	Mid	back	5 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	1	36	24.0	22.51	0	-0.10	1:1	0.536	1.409	0.755	0.755	
831.50	26865	Mid	back	5 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	36	37	24.0	22.64	0	-0.03	1:1	0.555	1.368	0.759	0.759	A70
831.50	26865	Mid	front	5 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	1	36	24.0	22.51	0	0.08	1:1	0.075	1.409	0.106	0.106	
831.50	26865	Mid	front	5 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	36	37	24.0	22.64	0	0.01	1:1	0.080	1.368	0.109	0.109	
831.50	26865	Mid	bottom	5 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	1	36	24.0	22.51	0	-0.03	1:1	0.124	1.409	0.175	0.175	
831.50	26865	Mid	bottom	5 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	36	37	24.0	22.64	0	-0.01	1:1	0.129	1.368	0.176	0.176	
831.50	26865	Mid	right	5 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	1	36	24.0	22.51	0	-0.02	1:1	0.054	1.409	0.076	0.076	
831.50	26865	Mid	right	5 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	36	37	24.0	22.64	0	0.09	1:1	0.053	1.368	0.073	0.073	
831.50	26865	Mid	left	5 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	1	36	24.0	22.51	0	-0.02	1:1	0.116	1.409	0.163	0.163	
831.50	26865	Mid	left	5 mm	LTE Band 26 (Cell)	A	Closed	0027M	15	QPSK	36	37	24.0	22.64	0	0.07	1:1	0.113	1.368	0.155	0.155	
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 11-51
LTE Band 5 (Cell) Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	1	0	24.0	22.57	0	-0.02	1:1	0.247	1.390	0.343	0.343	
836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	25	25	24.0	22.68	0	-0.04	1:1	0.247	1.355	0.335	0.335	
836.50	20525	Mid	front	10 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	1	0	24.0	22.57	0	0.09	1:1	0.152	1.390	0.211	0.211	
836.50	20525	Mid	front	10 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	25	25	24.0	22.68	0	0.01	1:1	0.150	1.355	0.203	0.203	
836.50	20525	Mid	bottom	10 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	1	0	24.0	22.57	0	0.11	1:1	0.057	1.390	0.079	0.079	
836.50	20525	Mid	bottom	10 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	25	25	24.0	22.68	0	0.01	1:1	0.061	1.355	0.083	0.083	
836.50	20525	Mid	right	10 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	1	0	24.0	22.57	0	0.05	1:1	0.126	1.390	0.175	0.175	
836.50	20525	Mid	right	10 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	25	25	24.0	22.68	0	0.02	1:1	0.137	1.355	0.186	0.186	
836.50	20525	Mid	left	10 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	1	0	24.0	22.57	0	0.11	1:1	0.046	1.390	0.064	0.064	
836.50	20525	Mid	left	10 mm	LTE Band 5 (Cell)	A	Open	0016M	10	QPSK	25	25	24.0	22.68	0	0.04	1:1	0.066	1.355	0.089	0.089	
836.50	20525	Mid	back	5 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	1	0	24.0	22.57	0	0.09	1:1	0.513	1.390	0.713	0.713	
836.50	20525	Mid	back	5 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	25	25	24.0	22.68	0	0.00	1:1	0.522	1.355	0.707	0.707	A71
836.50	20525	Mid	front	5 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	1	0	24.0	22.57	0	0.13	1:1	0.079	1.390	0.110	0.110	
836.50	20525	Mid	front	5 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	25	25	24.0	22.68	0	0.07	1:1	0.065	1.355	0.088	0.088	
836.50	20525	Mid	bottom	5 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	1	0	24.0	22.57	0	-0.05	1:1	0.121	1.390	0.168	0.168	
836.50	20525	Mid	bottom	5 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	25	25	24.0	22.68	0	0.08	1:1	0.134	1.355	0.182	0.182	
836.50	20525	Mid	right	5 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	1	0	24.0	22.57	0	0.17	1:1	0.061	1.390	0.085	0.085	
836.50	20525	Mid	right	5 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	25	25	24.0	22.68	0	0.06	1:1	0.062	1.355	0.084	0.084	
836.50	20525	Mid	left	5 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	1	0	24.0	22.57	0	0.10	1:1	0.088	1.390	0.122	0.122	
836.50	20525	Mid	left	5 mm	LTE Band 5 (Cell)	A	Closed	0016M	10	QPSK	25	25	24.0	22.68	0	-0.11	1:1	0.094	1.355	0.127	0.127	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram												

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Table 11-52
LTE Band 66 (AWS) Hotspot SAR

MEASUREMENT RESULTS																									
# CC Uplink	Component Carrier	FREQUENCY		Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1 CC Uplink	N/A	1720.00	132072	Low	back	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	20.8	19.59	0	0.00	1:1	0.309	1.321	0.408	0.408	
1 CC Uplink	N/A	1720.00	132072	Low	back	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	25	20.8	19.55	0	-0.01	1:1	0.318	1.334	0.424	0.424	
1 CC Uplink	N/A	1720.00	132072	Low	front	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	20.8	19.59	0	-0.02	1:1	0.234	1.321	0.309	0.309	
1 CC Uplink	N/A	1720.00	132072	Low	front	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	25	20.8	19.55	0	0.02	1:1	0.233	1.334	0.311	0.311	
1 CC Uplink	N/A	1720.00	132072	Low	bottom	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	20.8	19.59	0	0.02	1:1	0.447	1.321	0.590	0.590	
1 CC Uplink	N/A	1720.00	132072	Low	bottom	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	25	20.8	19.55	0	0.01	1:1	0.464	1.334	0.619	0.619	
1 CC Uplink	N/A	1745.00	132322	Mid	bottom	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	0	20.8	19.50	0	0.01	1:1	0.440	1.349	0.594	0.594	
1 CC Uplink	N/A	1770.00	132572	High	bottom	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	25	20.8	19.45	0	-0.02	1:1	0.483	1.365	0.659	0.659	
1 CC Uplink	N/A	1720.00	132072	Low	right	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	20.8	19.59	0	0.01	1:1	0.028	1.321	0.037	0.037	
1 CC Uplink	N/A	1720.00	132072	Low	right	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	25	20.8	19.55	0	0.04	1:1	0.028	1.334	0.037	0.037	
1 CC Uplink	N/A	1720.00	132072	Low	left	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	20.8	19.59	0	-0.11	1:1	0.070	1.321	0.092	0.092	
1 CC Uplink	N/A	1720.00	132072	Low	left	10 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	25	20.8	19.55	0	0.03	1:1	0.072	1.334	0.096	0.096	
1 CC Uplink	N/A	1720.00	132072	Low	back	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	1	0	20.8	19.59	0	-0.02	1:1	0.431	1.321	0.569	0.569	
1 CC Uplink	N/A	1720.00	132072	Low	back	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	50	25	20.8	19.55	0	-0.01	1:1	0.435	1.334	0.580	0.580	
1 CC Uplink	N/A	1720.00	132072	Low	front	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	1	0	20.8	19.59	0	-0.01	1:1	0.102	1.321	0.135	0.135	
1 CC Uplink	N/A	1720.00	132072	Low	front	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	50	25	20.8	19.55	0	-0.02	1:1	0.103	1.334	0.137	0.137	
1 CC Uplink	N/A	1720.00	132072	Low	bottom	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	1	0	20.8	19.59	0	0.00	1:1	0.557	1.321	0.736	0.736	
1 CC Uplink	N/A	1720.00	132072	Low	bottom	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	50	25	20.8	19.55	0	0.00	1:1	0.575	1.334	0.767	0.767	A72
1 CC Uplink	N/A	1720.00	132072	Low	bottom	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	50	50	20.8	19.41	0	-0.04	1:1	0.561	1.377	0.772	0.772	
1 CC Uplink	N/A	1745.00	132322	Mid	bottom	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	50	0	20.8	19.50	0	-0.01	1:1	0.564	1.349	0.761	0.761	
1 CC Uplink	N/A	1770.00	132572	High	bottom	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	50	25	20.8	19.45	0	-0.02	1:1	0.552	1.365	0.753	0.753	
1 CC Uplink	N/A	1715.00	132022	Low	bottom	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	10	QPSK	25	25	20.8	19.70	0	0.01	1:1	0.556	1.288	0.716	0.716	
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	bottom	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	50	50	20.8	19.33	0	-0.05	1:1	0.543	1.403	0.762	0.762	
	SCC	1739.80	132270											0										
2 CC Uplink CA_66B	PCC	1715.00	132022	Low	bottom	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	10	QPSK	25	25	20.8	19.43	0	-0.03	1:1	0.541	1.371	0.742	0.742	
	SCC	1724.90	132121											0										
1 CC Uplink	N/A	1720.00	132072	Low	right	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	1	0	20.8	19.59	0	0.02	1:1	0.014	1.321	0.018	0.018	
1 CC Uplink	N/A	1720.00	132072	Low	right	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	50	25	20.8	19.55	0	0.20	1:1	0.012	1.334	0.016	0.016	
1 CC Uplink	N/A	1720.00	132072	Low	left	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	1	0	20.8	19.59	0	-0.02	1:1	0.129	1.321	0.170	0.170	
1 CC Uplink	N/A	1720.00	132072	Low	left	5 mm	LTE Band 66 (AWS)	A	Closed	0250M	20	QPSK	50	25	20.8	19.55	0	-0.07	1:1	0.118	1.334	0.157	0.157	
1 CC Uplink	N/A	1770.00	132572	High	back	10 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	1	50	18.5	17.30	0	0.02	1:1	0.180	1.318	0.237	0.237	
1 CC Uplink	N/A	1770.00	132572	High	back	10 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	50	25	18.5	17.35	0	0.01	1:1	0.179	1.303	0.233	0.233	
1 CC Uplink	N/A	1770.00	132572	High	front	10 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	1	50	18.5	17.30	0	-0.06	1:1	0.128	1.318	0.169	0.169	
1 CC Uplink	N/A	1770.00	132572	High	front	10 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	50	25	18.5	17.35	0	0.00	1:1	0.132	1.303	0.172	0.172	
1 CC Uplink	N/A	1770.00	132572	High	top	10 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	1	50	18.5	17.30	0	0.09	1:1	0.015	1.318	0.020	0.020	
1 CC Uplink	N/A	1770.00	132572	High	top	10 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	50	25	18.5	17.35	0	0.07	1:1	0.016	1.303	0.021	0.021	
1 CC Uplink	N/A	1770.00	132572	High	right	10 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	1	50	18.5	17.30	0	0.02	1:1	0.346	1.318	0.456	0.456	
1 CC Uplink	N/A	1770.00	132572	High	right	10 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	50	25	18.5	17.35	0	0.03	1:1	0.349	1.303	0.455	0.455	
1 CC Uplink	N/A	1770.00	132572	High	back	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	1	50	18.5	17.30	0	-0.01	1:1	0.021	1.318	0.028	0.028	
1 CC Uplink	N/A	1770.00	132572	High	back	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	50	25	18.5	17.35	0	0.00	1:1	0.021	1.303	0.027	0.027	
1 CC Uplink	N/A	1770.00	132572	High	front	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	1	50	18.5	17.30	0	0.02	1:1	0.273	1.318	0.360	0.360	
1 CC Uplink	N/A	1770.00	132572	High	front	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	50	25	18.5	17.35	0	0.02	1:1	0.269	1.303	0.351	0.351	
1 CC Uplink	N/A	1770.00	132572	High	top	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	1	50	18.5	17.30	0	0.15	1:1	0.011	1.318	0.014	0.014	
1 CC Uplink	N/A	1770.00	132572	High	top	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	50	25	18.5	17.35	0	-0.03	1:1	0.012	1.303	0.016	0.016	
1 CC Uplink	N/A	1770.00	132572	High	bottom	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	1	50	18.5	17.30	0	0.00	1:1	0.031	1.318	0.041	0.041	
1 CC Uplink	N/A	1770.00	132572	High	bottom	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	50	25	18.5	17.35	0	0.03	1:1	0.031	1.303	0.040	0.040	
1 CC Uplink	N/A	1770.00	132572	High	right	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	1	0	18.5	17.12	0	-0.03	1:1	0.409	1.374	0.562	0.562	
1 CC Uplink	N/A	1770.00	132572	High	right	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	1	50	18.5	17.30	0	0.01	1:1	0.453	1.318	0.597	0.597	
1 CC Uplink	N/A	1770.00	132572	High	right	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	50	25	18.5	17.35	0	0.02	1:1	0.452	1.303	0.589	0.589	
1 CC Uplink	N/A	1775.00	132622	High	right	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	10	QPSK	1	0	18.5	17.25	0	-0.03	1:1	0.462	1.334	0.616	0.616	
2 CC Uplink CA_66C	PCC	1770.00	132572	High	right	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	20	QPSK	1	0	18.5	16.97	0	0.02	1:1	0.420	1.422	0.597	0.597	
	SCC	1750.20	132374											99										
2 CC Uplink CA_66B	PCC	1775.00	132622	High	right	5 mm	LTE Band 66 (AWS)	I	Closed	0250M	10	QPSK	1	0	18.5	17.08	0	-0.02	1:1	0.463	1.387	0.642	0.642	
	SCC	1765.10	132523											49										

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Body
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 1 gram

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Table 11-53
LTE Band 25 (PCS) Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1905.00	26590	High	back	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	20.3	19.27	0	-0.02	1:1	0.346	1.268	0.439	0.439	
1905.00	26590	High	back	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	25	20.3	19.19	0	-0.02	1:1	0.344	1.291	0.444	0.444	
1905.00	26590	High	front	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	20.3	19.27	0	0.00	1:1	0.243	1.268	0.308	0.308	
1905.00	26590	High	front	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	25	20.3	19.19	0	0.01	1:1	0.243	1.291	0.314	0.314	
1905.00	26590	High	bottom	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	20.3	19.27	0	0.02	1:1	0.492	1.268	0.624	0.624	
1860.00	26140	Low	bottom	10 mm	LTE Band 25 (PCS)	A	Open	0163G	20	QPSK	50	50	20.3	18.95	0	0.01	1:1	0.409	1.365	0.558	0.558	
1882.50	26365	Mid	bottom	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	25	20.3	19.05	0	0.02	1:1	0.412	1.334	0.550	0.550	
1905.00	26590	High	bottom	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	25	20.3	19.19	0	0.02	1:1	0.485	1.291	0.626	0.626	
1905.00	26590	High	right	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	20.3	19.27	0	0.01	1:1	0.022	1.268	0.028	0.028	
1905.00	26590	High	right	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	25	20.3	19.19	0	-0.11	1:1	0.023	1.291	0.030	0.030	
1905.00	26590	High	left	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	20.3	19.27	0	-0.01	1:1	0.069	1.268	0.087	0.087	
1905.00	26590	High	left	10 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	25	20.3	19.19	0	0.07	1:1	0.063	1.291	0.081	0.081	
1905.00	26590	High	back	5 mm	LTE Band 25 (PCS)	A	Closed	0163G	20	QPSK	1	99	20.3	19.27	0	-0.10	1:1	0.336	1.268	0.426	0.426	
1905.00	26590	High	back	5 mm	LTE Band 25 (PCS)	A	Closed	0163G	20	QPSK	50	25	20.3	19.19	0	-0.03	1:1	0.316	1.291	0.408	0.408	
1905.00	26590	High	front	5 mm	LTE Band 25 (PCS)	A	Closed	0034M	20	QPSK	1	99	20.3	19.27	0	0.02	1:1	0.236	1.268	0.299	0.299	
1905.00	26590	High	front	5 mm	LTE Band 25 (PCS)	A	Closed	0034M	20	QPSK	50	25	20.3	19.19	0	-0.01	1:1	0.188	1.291	0.243	0.243	
1905.00	26590	High	bottom	5 mm	LTE Band 25 (PCS)	A	Closed	0163G	20	QPSK	1	99	20.3	19.27	0	-0.03	1:1	0.471	1.268	0.597	0.597	
1905.00	26590	High	bottom	5 mm	LTE Band 25 (PCS)	A	Closed	0163G	20	QPSK	50	25	20.3	19.19	0	0.00	1:1	0.447	1.291	0.577	0.577	
1905.00	26590	High	right	5 mm	LTE Band 25 (PCS)	A	Closed	0034M	20	QPSK	1	99	20.3	19.27	0	-0.11	1:1	0.011	1.268	0.014	0.014	
1905.00	26590	High	right	5 mm	LTE Band 25 (PCS)	A	Closed	0034M	20	QPSK	50	25	20.3	19.19	0	-0.03	1:1	0.013	1.291	0.017	0.017	
1905.00	26590	High	left	5 mm	LTE Band 25 (PCS)	A	Closed	0034M	20	QPSK	1	99	20.3	19.27	0	0.03	1:1	0.082	1.268	0.104	0.104	
1905.00	26590	High	left	5 mm	LTE Band 25 (PCS)	A	Closed	0034M	20	QPSK	50	25	20.3	19.19	0	-0.04	1:1	0.088	1.291	0.114	0.114	
1905.00	26590	High	back	10 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	16.5	15.53	0	0.00	1:1	0.147	1.250	0.184	0.184	
1905.00	26590	High	back	10 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	16.5	15.12	0	0.02	1:1	0.149	1.374	0.205	0.205	
1905.00	26590	High	front	10 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	16.5	15.53	0	0.02	1:1	0.126	1.250	0.158	0.158	
1905.00	26590	High	front	10 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	16.5	15.12	0	0.04	1:1	0.131	1.374	0.180	0.180	
1905.00	26590	High	top	10 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	16.5	15.53	0	-0.03	1:1	0.030	1.250	0.038	0.038	
1905.00	26590	High	top	10 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	16.5	15.12	0	-0.06	1:1	0.033	1.374	0.045	0.045	
1905.00	26590	High	right	10 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	16.5	15.53	0	0.01	1:1	0.398	1.250	0.498	0.498	
1905.00	26590	High	right	10 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	16.5	15.12	0	0.01	1:1	0.406	1.374	0.558	0.558	
1905.00	26590	High	back	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	1	99	16.5	15.53	0	0.01	1:1	0.034	1.250	0.043	0.043	
1905.00	26590	High	back	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	50	50	16.5	15.12	0	-0.11	1:1	0.034	1.374	0.047	0.047	
1905.00	26590	High	front	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	1	99	16.5	15.53	0	0.02	1:1	0.398	1.250	0.498	0.498	
1905.00	26590	High	front	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	50	50	16.5	15.12	0	0.00	1:1	0.401	1.374	0.551	0.551	
1905.00	26590	High	top	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	1	99	16.5	15.53	0	-0.01	1:1	0.016	1.250	0.020	0.020	
1905.00	26590	High	top	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	50	50	16.5	15.12	0	0.16	1:1	0.017	1.374	0.023	0.023	
1905.00	26590	High	bottom	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	1	99	16.5	15.53	0	0.19	1:1	0.028	1.250	0.035	0.035	
1905.00	26590	High	bottom	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	50	50	16.5	15.12	0	-0.12	1:1	0.023	1.374	0.032	0.032	
1860.00	26140	Low	right	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	1	50	16.5	14.80	0	0.00	1:1	0.476	1.479	0.704	0.704	
1882.50	26365	Mid	right	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	1	50	16.5	14.96	0	-0.04	1:1	0.555	1.426	0.791	0.791	
1905.00	26590	High	right	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	1	99	16.5	15.53	0	-0.05	1:1	0.660	1.250	0.825	0.825	
1860.00	26140	Low	right	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	50	0	16.5	14.78	0	-0.05	1:1	0.467	1.486	0.694	0.694	
1882.50	26365	Mid	right	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	50	50	16.5	14.84	0	-0.06	1:1	0.571	1.466	0.837	0.837	
1905.00	26590	High	right	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	50	50	16.5	15.12	0	0.07	1:1	0.748	1.374	1.028	1.028	A73
1905.00	26590	High	right	5 mm	LTE Band 25 (PCS)	I	Closed	0039M	20	QPSK	100	0	16.5	14.97	0	-0.01	1:1	0.583	1.422	0.829	0.829	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-54
LTE Band 30 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2310.00	27710	Mid	back	10 mm	LTE Band 30	B	Open	0011M	10	QPSK	1	25	18.0	16.59	0	-0.02	1:1	0.072	1.384	0.100	0.100	
2310.00	27710	Mid	back	10 mm	LTE Band 30	B	Open	0011M	10	QPSK	25	12	18.0	16.60	0	-0.04	1:1	0.071	1.380	0.098	0.098	
2310.00	27710	Mid	front	10 mm	LTE Band 30	B	Open	0011M	10	QPSK	1	25	18.0	16.59	0	0.04	1:1	0.056	1.384	0.078	0.078	
2310.00	27710	Mid	front	10 mm	LTE Band 30	B	Open	0011M	10	QPSK	25	12	18.0	16.60	0	0.02	1:1	0.059	1.380	0.081	0.081	
2310.00	27710	Mid	bottom	10 mm	LTE Band 30	B	Open	0011M	10	QPSK	1	25	18.0	16.59	0	0.00	1:1	0.149	1.384	0.206	0.206	
2310.00	27710	Mid	bottom	10 mm	LTE Band 30	B	Open	0011M	10	QPSK	25	12	18.0	16.60	0	-0.02	1:1	0.149	1.380	0.206	0.206	
2310.00	27710	Mid	left	10 mm	LTE Band 30	B	Open	0011M	10	QPSK	1	25	18.0	16.59	0	-0.01	1:1	0.044	1.384	0.061	0.061	
2310.00	27710	Mid	left	10 mm	LTE Band 30	B	Open	0011M	10	QPSK	25	12	18.0	16.60	0	-0.01	1:1	0.044	1.380	0.061	0.061	
2310.00	27710	Mid	back	5 mm	LTE Band 30	B	Closed	0011M	10	QPSK	1	25	18.0	16.59	0	-0.01	1:1	0.124	1.384	0.172	0.172	
2310.00	27710	Mid	back	5 mm	LTE Band 30	B	Closed	0011M	10	QPSK	25	12	18.0	16.60	0	0.00	1:1	0.123	1.380	0.170	0.170	
2310.00	27710	Mid	front	5 mm	LTE Band 30	B	Closed	0011M	10	QPSK	1	25	18.0	16.59	0	-0.11	1:1	0.017	1.384	0.024	0.024	
2310.00	27710	Mid	front	5 mm	LTE Band 30	B	Closed	0011M	10	QPSK	25	12	18.0	16.60	0	-0.13	1:1	0.016	1.380	0.022	0.022	
2310.00	27710	Mid	bottom	5 mm	LTE Band 30	B	Closed	0011M	10	QPSK	1	25	18.0	16.59	0	0.00	1:1	0.236	1.384	0.327	0.327	
2310.00	27710	Mid	bottom	5 mm	LTE Band 30	B	Closed	0011M	10	QPSK	25	12	18.0	16.60	0	0.00	1:1	0.234	1.380	0.323	0.323	
2310.00	27710	Mid	left	5 mm	LTE Band 30	B	Closed	0011M	10	QPSK	1	25	18.0	16.59	0	0.06	1:1	0.073	1.384	0.101	0.101	
2310.00	27710	Mid	left	5 mm	LTE Band 30	B	Closed	0011M	10	QPSK	25	12	18.0	16.60	0	0.07	1:1	0.073	1.380	0.101	0.101	
2310.00	27710	Mid	back	10 mm	LTE Band 30	I	Open	0242M	10	QPSK	1	25	18.0	16.48	0	-0.02	1:1	0.217	1.419	0.308	0.308	
2310.00	27710	Mid	back	10 mm	LTE Band 30	I	Open	0242M	10	QPSK	25	25	18.0	16.45	0	0.01	1:1	0.209	1.429	0.299	0.299	
2310.00	27710	Mid	front	10 mm	LTE Band 30	I	Open	0242M	10	QPSK	1	25	18.0	16.48	0	-0.03	1:1	0.236	1.419	0.335	0.335	
2310.00	27710	Mid	front	10 mm	LTE Band 30	I	Open	0242M	10	QPSK	25	25	18.0	16.45	0	0.02	1:1	0.228	1.429	0.326	0.326	
2310.00	27710	Mid	top	10 mm	LTE Band 30	I	Open	0242M	10	QPSK	1	25	18.0	16.48	0	-0.06	1:1	0.111	1.419	0.158	0.158	
2310.00	27710	Mid	top	10 mm	LTE Band 30	I	Open	0242M	10	QPSK	25	25	18.0	16.45	0	0.02	1:1	0.103	1.429	0.147	0.147	
2310.00	27710	Mid	bottom	10 mm	LTE Band 30	I	Open	0242M	10	QPSK	1	25	18.0	16.48	0	0.03	1:1	0.023	1.419	0.033	0.033	
2310.00	27710	Mid	bottom	10 mm	LTE Band 30	I	Open	0242M	10	QPSK	25	25	18.0	16.45	0	0.14	1:1	0.023	1.429	0.033	0.033	
2310.00	27710	Mid	right	10 mm	LTE Band 30	I	Open	0242M	10	QPSK	1	25	18.0	16.48	0	-0.04	1:1	0.384	1.419	0.545	0.545	
2310.00	27710	Mid	right	10 mm	LTE Band 30	I	Open	0242M	10	QPSK	25	25	18.0	16.45	0	-0.03	1:1	0.365	1.429	0.522	0.522	
2310.00	27710	Mid	back	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	1	25	18.0	16.48	0	0.03	1:1	0.115	1.419	0.163	0.163	
2310.00	27710	Mid	back	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	25	25	18.0	16.45	0	-0.02	1:1	0.114	1.429	0.163	0.163	
2310.00	27710	Mid	front	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	1	25	18.0	16.48	0	-0.02	1:1	0.472	1.419	0.670	0.670	
2310.00	27710	Mid	front	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	25	25	18.0	16.45	0	-0.06	1:1	0.443	1.429	0.633	0.633	
2310.00	27710	Mid	top	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	1	25	18.0	16.48	0	-0.12	1:1	0.027	1.419	0.038	0.038	
2310.00	27710	Mid	top	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	25	25	18.0	16.45	0	0.01	1:1	0.026	1.429	0.037	0.037	
2310.00	27710	Mid	bottom	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	1	25	18.0	16.48	0	-0.05	1:1	0.058	1.419	0.082	0.082	
2310.00	27710	Mid	bottom	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	25	25	18.0	16.45	0	0.03	1:1	0.053	1.429	0.076	0.076	
2310.00	27710	Mid	right	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	1	25	18.0	16.48	0	0.04	1:1	0.796	1.419	**1.130**	1.130	A74
2310.00	27710	Mid	right	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	25	25	18.0	16.45	0	0.00	1:1	0.779	1.429	1.113	1.113	
2310.00	27710	Mid	right	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	50	0	18.0	16.38	0	0.02	1:1	0.777	1.452	**1.128**	1.128	
2310.00	27710	Mid	left	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	1	25	18.0	16.48	0	0.00	1:1	0.016	1.419	0.023	0.023	
2310.00	27710	Mid	left	5 mm	LTE Band 30	I	Closed	0242M	10	QPSK	25	25	18.0	16.45	0	-0.11	1:1	0.015	1.429	0.021	0.021	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**	**Body** **1.6 W/kg (mW/g)** averaged over 1 gram

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Table 11-55
LTE Band 7 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2510.00	20850	Low	back	10 mm	LTE Band 7	B	Open	0011M	20	QPSK	1	99	19.3	18.06	0	0.03	1:1	0.078	1.330	0.104	0.104	
2510.00	20850	Low	back	10 mm	LTE Band 7	B	Open	0011M	20	QPSK	50	25	19.3	18.02	0	0.00	1:1	0.081	1.343	0.109	0.109	
2510.00	20850	Low	front	10 mm	LTE Band 7	B	Open	0011M	20	QPSK	1	99	19.3	18.06	0	0.08	1:1	0.074	1.330	0.098	0.098	
2510.00	20850	Low	front	10 mm	LTE Band 7	B	Open	0011M	20	QPSK	50	25	19.3	18.02	0	-0.03	1:1	0.076	1.343	0.102	0.102	
2510.00	20850	Low	bottom	10 mm	LTE Band 7	B	Open	0011M	20	QPSK	1	99	19.3	18.06	0	0.07	1:1	0.176	1.330	0.234	0.234	
2510.00	20850	Low	bottom	10 mm	LTE Band 7	B	Open	0011M	20	QPSK	50	25	19.3	18.02	0	0.00	1:1	0.184	1.343	0.247	0.247	
2510.00	20850	Low	left	10 mm	LTE Band 7	B	Open	0011M	20	QPSK	1	99	19.3	18.06	0	-0.08	1:1	0.031	1.330	0.041	0.041	
2510.00	20850	Low	left	10 mm	LTE Band 7	B	Open	0011M	20	QPSK	50	25	19.3	18.02	0	0.05	1:1	0.034	1.343	0.046	0.046	
2510.00	20850	Low	back	5 mm	LTE Band 7	B	Closed	0011M	20	QPSK	1	99	19.3	18.06	0	0.00	1:1	0.172	1.330	0.229	0.229	
2510.00	20850	Low	back	5 mm	LTE Band 7	B	Closed	0011M	20	QPSK	50	25	19.3	18.02	0	0.01	1:1	0.172	1.343	0.231	0.231	
2510.00	20850	Low	front	5 mm	LTE Band 7	B	Closed	0011M	20	QPSK	1	99	19.3	18.06	0	-0.01	1:1	0.016	1.330	0.021	0.021	
2510.00	20850	Low	front	5 mm	LTE Band 7	B	Closed	0011M	20	QPSK	50	25	19.3	18.02	0	-0.11	1:1	0.017	1.343	0.023	0.023	
2510.00	20850	Low	bottom	5 mm	LTE Band 7	B	Closed	0011M	20	QPSK	1	99	19.3	18.06	0	-0.03	1:1	0.386	1.330	0.513	0.513	
2510.00	20850	Low	bottom	5 mm	LTE Band 7	B	Closed	0011M	20	QPSK	50	25	19.3	18.02	0	-0.01	1:1	0.394	1.343	0.529	0.529	A75
2510.00	20850	Low	left	5 mm	LTE Band 7	B	Closed	0011M	20	QPSK	1	99	19.3	18.06	0	-0.05	1:1	0.087	1.330	0.116	0.116	
2510.00	20850	Low	left	5 mm	LTE Band 7	B	Closed	0011M	20	QPSK	50	25	19.3	18.02	0	-0.03	1:1	0.088	1.343	0.118	0.118	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram												

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Table 11-56
LTE Band 41 Hotspot SAR

MEASUREMENT RESULTS

# CC Uplink, Power Class	Component Carrier	FREQUENCY MHz	FREQUENCY Ch.	Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Reported SAR (1g) with Multi-Tx Factor Limit: 1.6 (W/kg)	Plot #
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	back	10 mm	LTE Band 41	B	Open	0221M	20	QPSK	1	0	22.0	20.41	0	0.02	1:1.58	0.076	1.442	0.110	0.110	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	back	10 mm	LTE Band 41	B	Open	0221M	20	QPSK	50	0	22.0	20.53	0	-0.02	1:1.58	0.074	1.403	0.104	0.104	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	front	10 mm	LTE Band 41	B	Open	0221M	20	QPSK	1	0	22.0	20.41	0	-0.01	1:1.58	0.063	1.442	0.091	0.091	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	front	10 mm	LTE Band 41	B	Open	0221M	20	QPSK	50	0	22.0	20.53	0	-0.09	1:1.58	0.064	1.403	0.090	0.090	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	bottom	10 mm	LTE Band 41	B	Open	0221M	20	QPSK	1	0	22.0	20.41	0	-0.01	1:1.58	0.187	1.442	0.270	0.270	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	bottom	10 mm	LTE Band 41	B	Open	0221M	20	QPSK	50	0	22.0	20.53	0	-0.05	1:1.58	0.184	1.403	0.258	0.258	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	left	10 mm	LTE Band 41	B	Open	0221M	20	QPSK	1	0	22.0	20.41	0	0.18	1:1.58	0.033	1.442	0.048	0.048	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	left	10 mm	LTE Band 41	B	Open	0221M	20	QPSK	50	0	22.0	20.53	0	0.04	1:1.58	0.031	1.403	0.043	0.043	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	back	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	1	0	22.0	20.41	0	0.08	1:1.58	0.155	1.442	0.224	0.224	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	back	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	50	0	22.0	20.53	0	0.00	1:1.58	0.155	1.403	0.217	0.217	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	front	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	1	0	22.0	20.41	0	0.01	1:1.58	0.016	1.442	0.023	0.023	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	front	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	50	0	22.0	20.53	0	0.02	1:1.58	0.016	1.403	0.022	0.022	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	bottom	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	1	0	22.0	20.41	0	0.01	1:1.58	0.362	1.442	0.522	0.522	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	bottom	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	1	99	22.0	20.29	0	0.15	1:1.58	0.371	1.483	0.550	0.550	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	bottom	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	50	0	22.0	20.53	0	0.00	1:1.58	0.356	1.403	0.499	0.499	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	bottom	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	1	0	23.6	22.14	0	-0.01	1:2.31	0.338	1.400	0.473	0.473	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	bottom	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	1	99	23.6	21.98	0	-0.03	1:2.31	0.353	1.452	0.513	0.513	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	bottom	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	1	99	22.0	20.21	0	0.00	1:1.58	0.362	1.510	0.547	0.547	
	SCC	2525.80	39948						Closed					0										
2 CC Uplink - Power Class 2	PCC	2506.00	39750	Low	bottom	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	1	99	23.6	21.95	0	-0.07	1:2.31	0.366	1.462	0.535	0.535	
	SCC	2525.80	39948						Closed					0										
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	left	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	1	0	22.0	20.41	0	0.08	1:1.58	0.081	1.442	0.117	0.117	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	left	5 mm	LTE Band 41	B	Closed	0221M	20	QPSK	50	0	22.0	20.53	0	-0.01	1:1.58	0.079	1.403	0.111	0.111	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	back	10 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	0	21.5	20.41	0	-0.01	1:1.58	0.231	1.285	0.297	0.297	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	back	10 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	0	21.5	20.48	0	0.00	1:1.58	0.229	1.265	0.290	0.290	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	front	10 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	0	21.5	20.41	0	0.03	1:1.58	0.189	1.285	0.243	0.243	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	front	10 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	0	21.5	20.48	0	0.04	1:1.58	0.185	1.265	0.234	0.234	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	top	10 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	0	21.5	20.41	0	0.05	1:1.58	0.039	1.285	0.050	0.050	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	top	10 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	0	21.5	20.48	0	0.01	1:1.58	0.038	1.265	0.048	0.048	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	right	10 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	0	21.5	20.41	0	0.05	1:1.58	0.415	1.285	0.533	0.533	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	right	10 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	0	21.5	20.48	0	0.00	1:1.58	0.407	1.265	0.515	0.515	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	back	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	21.5	20.41	0	-0.02	1:1.58	0.178	1.285	0.229	0.229	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	back	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	50	0	21.5	20.48	0	0.03	1:1.58	0.173	1.265	0.219	0.219	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	front	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	21.5	20.35	0	0.07	1:1.58	0.449	1.303	0.585	0.585	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	front	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	50	21.5	20.27	0	0.01	1:1.58	0.557	1.327	0.739	0.739	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	front	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	99	21.5	20.38	0	0.04	1:1.58	0.491	1.294	0.635	0.635	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	front	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	21.5	20.41	0	-0.05	1:1.58	0.473	1.285	0.608	0.608	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	front	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	50	21.5	20.29	0	-0.02	1:1.58	0.391	1.321	0.517	0.517	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	front	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	50	0	21.5	20.48	0	0.00	1:1.58	0.454	1.265	0.574	0.574	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	front	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	100	0	21.5	20.40	0	0.00	1:1.58	0.508	1.288	0.654	0.654	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	top	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	21.5	20.41	0	-0.12	1:1.58	0.035	1.285	0.045	0.045	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	top	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	50	0	21.5	20.48	0	0.00	1:1.58	0.033	1.265	0.042	0.042	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	bottom	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	21.5	20.41	0	-0.13	1:1.58	0.081	1.285	0.104	0.104	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	bottom	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	50	0	21.5	20.48	0	-0.05	1:1.58	0.079	1.265	0.100	0.100	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	21.5	20.35	0	0.00	1:1.58	0.645	1.303	0.840	0.840	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	50	21.5	20.27	0	-0.05	1:1.58	0.756	1.327	1.003	1.003	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	99	21.5	20.38	0	-0.07	1:1.58	0.770	1.294	0.996	0.996	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	21.5	20.41	0	0.00	1:1.58	0.811	1.285	1.042	1.042	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	50	21.5	20.29	0	-0.10	1:1.58	0.730	1.321	0.964	0.964	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	50	25	21.5	20.41	0	0.03	1:1.58	0.660	1.285	0.848	0.848	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	50	25	21.5	20.36	0	0.02	1:1.58	0.765	1.300	0.995	0.995	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	50	25	21.5	20.44	0	0.00	1:1.58	0.801	1.276	1.022	1.022	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	50	0	21.5	20.48	0	0.01	1:1.58	0.787	1.265	0.996	0.996	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	50	25	21.5	20.36	0	-0.01	1:1.58	0.747	1.300	0.971	0.971	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	100	0	21.5	20.40	0	0.00	1:1.58	0.785	1.288	1.011	1.011	
1 CC Uplink - Power Class 2	N/A	2636.50	41055	Mid-High	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	23.1	22.07	0	-0.05	1:2.31	0.819	1.268	1.038	1.038	A76
2 CC Uplink - Power Class 3	PCC	2636.50	41055	Mid-High	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	21.5	20.19	0	0.03	1:1.58	0.797	1.352	1.078	1.078	
	SCC	2616.70	40857											99										
2 CC Uplink - Power Class 2	PCC	2636.50	41055	Mid-High	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	23.1	21.92	0	0.00	1:2.31	0.813	1.312	1.067	1.067	
	SCC	2616.70	40857											99										
1 CC Uplink - Power Class 2	N/A	2636.50	41055	Mid-High	right	5 mm	LTE Band 41	I	Closed	0221M	20	QPSK	1	0	23.1	22.07	0	0.01	1:2.31	0.775	1.268	0.983	0.983	

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.

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Table 11-57
LTE Band 48 Hotspot SAR

MEASUREMENT RESULTS																									
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
		MHz	Ch.																	(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1 CC Uplink	N/A	3560.00	55340	Low	back	10 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	99	16.0	14.43	0	0.00	1:1.58	0.144	1.435	0.207	0.207	
1 CC Uplink	N/A	3560.00	55340	Low	back	10 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	50	16.0	14.67	0	0.00	1:1.58	0.147	1.358	0.200	0.200	
1 CC Uplink	N/A	3560.00	55340	Low	front	10 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	99	16.0	14.43	0	-0.07	1:1.58	0.094	1.435	0.135	0.135	
1 CC Uplink	N/A	3560.00	55340	Low	front	10 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	50	16.0	14.67	0	-0.01	1:1.58	0.098	1.358	0.133	0.133	
1 CC Uplink	N/A	3560.00	55340	Low	top	10 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	99	16.0	14.43	0	-0.09	1:1.58	0.099	1.435	0.142	0.142	
1 CC Uplink	N/A	3560.00	55340	Low	top	10 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	50	16.0	14.67	0	-0.04	1:1.58	0.101	1.358	0.137	0.137	
1 CC Uplink	N/A	3560.00	55340	Low	left	10 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	99	16.0	14.43	0	-0.03	1:1.58	0.161	1.435	0.231	0.231	
1 CC Uplink	N/A	3560.00	55340	Low	left	10 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	50	16.0	14.67	0	-0.06	1:1.58	0.165	1.358	0.224	0.224	
1 CC Uplink	N/A	3560.00	55340	Low	back	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	1	99	16.0	14.43	0	0.02	1:1.58	0.028	1.435	0.040	0.040	
1 CC Uplink	N/A	3560.00	55340	Low	back	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	50	50	16.0	14.67	0	0.05	1:1.58	0.028	1.358	0.038	0.038	
1 CC Uplink	N/A	3560.00	55340	Low	front	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	1	99	16.0	14.43	0	-0.04	1:1.58	0.254	1.435	0.364	0.364	
1 CC Uplink	N/A	3560.00	55340	Low	front	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	50	50	16.0	14.67	0	-0.08	1:1.58	0.255	1.358	0.346	0.346	
1 CC Uplink	N/A	3560.00	55340	Low	top	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	1	99	16.0	14.43	0	-0.02	1:1.58	0.010	1.435	0.014	0.014	
1 CC Uplink	N/A	3560.00	55340	Low	top	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	50	50	16.0	14.67	0	0.01	1:1.58	0.011	1.358	0.015	0.015	
1 CC Uplink	N/A	3560.00	55340	Low	bottom	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	1	99	16.0	14.43	0	0.05	1:1.58	0.150	1.435	0.215	0.215	
1 CC Uplink	N/A	3560.00	55340	Low	bottom	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	50	50	16.0	14.67	0	-0.05	1:1.58	0.151	1.358	0.205	0.205	
1 CC Uplink	N/A	3560.00	55340	Low	left	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	1	99	16.0	14.43	0	0.00	1:1.58	0.280	1.435	0.402	0.402	
1 CC Uplink	N/A	3560.00	55340	Low	left	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	50	50	16.0	14.67	0	-0.03	1:1.58	0.287	1.358	0.390	0.390	A77
2 CC Uplink	PCC	3560.00	55340	Low	left	5 mm	LTE Band 48	F	Closed	0209M	20	QPSK	1	99	16.0	14.27	0	0.05	1:1.58	0.278	1.489	0.414	0.414	
	SCC	3579.80	55538											0										
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Table 11-58
NR Band n71 Hotspot SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
680.50	136100	Mid	back	10 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.81	0	0.00	1:1	0.156	1.315	0.205	0.205	
680.50	136100	Mid	back	10 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	50	28	24.0	23.01	0	-0.01	1:1	0.160	1.256	0.201	0.201	
680.50	136100	Mid	back	10 mm	NR Band n71	A	Open	0014M	20	CP-OFDM	QPSK	1	1	24.0	22.86	0	0.01	1:1	0.139	1.300	0.181	0.181	
680.50	136100	Mid	front	10 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.81	0	-0.02	1:1	0.125	1.315	0.164	0.164	
680.50	136100	Mid	front	10 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	50	28	24.0	23.01	0	0.02	1:1	0.127	1.256	0.160	0.160	
680.50	136100	Mid	bottom	10 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.81	0	-0.18	1:1	0.027	1.315	0.036	0.036	
680.50	136100	Mid	bottom	10 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	50	28	24.0	23.01	0	0.08	1:1	0.026	1.256	0.033	0.033	
680.50	136100	Mid	right	10 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.81	0	0.08	1:1	0.136	1.315	0.179	0.179	
680.50	136100	Mid	right	10 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	50	28	24.0	23.01	0	-0.11	1:1	0.141	1.256	0.177	0.177	
680.50	136100	Mid	left	10 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.81	0	-0.04	1:1	0.114	1.315	0.150	0.150	
680.50	136100	Mid	left	10 mm	NR Band n71	A	Open	0014M	20	DFT-S-OFDM	QPSK	50	28	24.0	23.01	0	-0.03	1:1	0.118	1.256	0.148	0.148	
680.50	136100	Mid	back	5 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.81	0	-0.10	1:1	0.506	1.315	0.665	0.665	
680.50	136100	Mid	back	5 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	28	24.0	23.01	0	-0.03	1:1	0.515	1.256	0.647	0.647	A78
680.50	136100	Mid	back	5 mm	NR Band n71	A	Closed	0024M	20	CP-OFDM	QPSK	1	1	24.0	22.86	0	0.00	1:1	0.411	1.300	0.534	0.534	
680.50	136100	Mid	front	5 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.81	0	-0.03	1:1	0.153	1.315	0.201	0.201	
680.50	136100	Mid	front	5 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	28	24.0	23.01	0	-0.01	1:1	0.151	1.256	0.190	0.190	
680.50	136100	Mid	bottom	5 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.81	0	0.00	1:1	0.072	1.315	0.095	0.095	
680.50	136100	Mid	bottom	5 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	28	24.0	23.01	0	0.04	1:1	0.067	1.256	0.084	0.084	
680.50	136100	Mid	right	5 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.81	0	-0.17	1:1	0.036	1.315	0.047	0.047	
680.50	136100	Mid	right	5 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	28	24.0	23.01	0	-0.06	1:1	0.035	1.256	0.044	0.044	
680.50	136100	Mid	left	5 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.81	0	0.02	1:1	0.083	1.315	0.109	0.109	
680.50	136100	Mid	left	5 mm	NR Band n71	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	28	24.0	23.01	0	-0.01	1:1	0.084	1.256	0.106	0.106	
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Table 11-59
NR Band n12 Hotspot SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
707.50	141500	Mid	back	10 mm	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	1	1	24.5	22.93	0	-0.07	1:1	0.184	1.435	0.264	0.264	
707.50	141500	Mid	back	10 mm	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	36	0	24.5	22.99	0	-0.04	1:1	0.180	1.416	0.255	0.255	
707.50	141500	Mid	back	10 mm	NR Band n12	A	Open	0024M	15	CP-OFDM	QPSK	1	1	24.5	22.63	0	-0.01	1:1	0.165	1.538	0.254	0.254	
707.50	141500	Mid	front	10 mm	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	1	1	24.5	22.93	0	0.04	1:1	0.137	1.435	0.197	0.197	
707.50	141500	Mid	front	10 mm	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	36	0	24.5	22.99	0	-0.01	1:1	0.143	1.416	0.202	0.202	
707.50	141500	Mid	bottom	10 mm	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	1	1	24.5	22.93	0	-0.13	1:1	0.025	1.435	0.036	0.036	
707.50	141500	Mid	bottom	10 mm	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	36	0	24.5	22.99	0	-0.11	1:1	0.025	1.416	0.035	0.035	
707.50	141500	Mid	right	10 mm	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	1	1	24.5	22.93	0	0.04	1:1	0.144	1.435	0.207	0.207	
707.50	141500	Mid	right	10 mm	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	36	0	24.5	22.99	0	0.02	1:1	0.150	1.416	0.212	0.212	
707.50	141500	Mid	left	10 mm	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	1	1	24.5	22.93	0	0.01	1:1	0.105	1.435	0.151	0.151	
707.50	141500	Mid	left	10 mm	NR Band n12	A	Open	0024M	15	DFT-S-OFDM	QPSK	36	0	24.5	22.99	0	0.01	1:1	0.122	1.416	0.173	0.173	
707.50	141500	Mid	back	5 mm	NR Band n12	A	Closed	0163G	15	DFT-S-OFDM	QPSK	1	1	24.5	22.93	0	0.02	1:1	0.465	1.435	0.667	0.667	A79
707.50	141500	Mid	back	5 mm	NR Band n12	A	Closed	0163G	15	DFT-S-OFDM	QPSK	36	0	24.5	22.99	0	0.04	1:1	0.381	1.416	0.539	0.539	
707.50	141500	Mid	back	5 mm	NR Band n12	A	Closed	0163G	15	CP-OFDM	QPSK	1	1	24.5	22.63	0	0.01	1:1	0.333	1.538	0.512	0.512	
707.50	141500	Mid	front	5 mm	NR Band n12	A	Closed	0024M	15	DFT-S-OFDM	QPSK	1	1	24.5	22.93	0	-0.01	1:1	0.069	1.435	0.099	0.099	
707.50	141500	Mid	front	5 mm	NR Band n12	A	Closed	0024M	15	DFT-S-OFDM	QPSK	36	0	24.5	22.99	0	-0.05	1:1	0.056	1.416	0.079	0.079	
707.50	141500	Mid	bottom	5 mm	NR Band n12	A	Closed	0024M	15	DFT-S-OFDM	QPSK	1	1	24.5	22.93	0	0.00	1:1	0.047	1.435	0.067	0.067	
707.50	141500	Mid	bottom	5 mm	NR Band n12	A	Closed	0024M	15	DFT-S-OFDM	QPSK	36	0	24.5	22.99	0	0.02	1:1	0.044	1.416	0.062	0.062	
707.50	141500	Mid	right	5 mm	NR Band n12	A	Closed	0024M	15	DFT-S-OFDM	QPSK	1	1	24.5	22.93	0	-0.08	1:1	0.029	1.435	0.042	0.042	
707.50	141500	Mid	right	5 mm	NR Band n12	A	Closed	0024M	15	DFT-S-OFDM	QPSK	36	0	24.5	22.99	0	-0.11	1:1	0.029	1.416	0.041	0.041	
707.50	141500	Mid	left	5 mm	NR Band n12	A	Closed	0024M	15	DFT-S-OFDM	QPSK	1	1	24.5	22.93	0	-0.03	1:1	0.067	1.435	0.096	0.096	
707.50	141500	Mid	left	5 mm	NR Band n12	A	Closed	0024M	15	DFT-S-OFDM	QPSK	36	0	24.5	22.99	0	0.00	1:1	0.061	1.416	0.086	0.086	
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Table 11-60
NR Band n26 Hotspot SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
831.50	166300	Mid	back	10 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.35	0	0.00	1:1	0.304	1.462	0.444	0.444	
831.50	166300	Mid	back	10 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	50	0	24.0	22.42	0	-0.02	1:1	0.238	1.439	0.342	0.342	
831.50	166300	Mid	back	10 mm	NR Band n26	A	Open	0024M	20	CP-OFDM	QPSK	1	1	24.0	22.19	0	-0.16	1:1	0.195	1.517	0.296	0.296	
831.50	166300	Mid	front	10 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.35	0	-0.01	1:1	0.117	1.462	0.171	0.171	
831.50	166300	Mid	front	10 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	50	0	24.0	22.42	0	0.01	1:1	0.122	1.439	0.176	0.176	
831.50	166300	Mid	bottom	10 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.35	0	0.11	1:1	0.129	1.462	0.189	0.189	
831.50	166300	Mid	bottom	10 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	50	0	24.0	22.42	0	0.00	1:1	0.142	1.439	0.204	0.204	
831.50	166300	Mid	right	10 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.35	0	0.04	1:1	0.111	1.462	0.162	0.162	
831.50	166300	Mid	right	10 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	50	0	24.0	22.42	0	0.03	1:1	0.108	1.439	0.155	0.155	
831.50	166300	Mid	left	10 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.35	0	-0.04	1:1	0.077	1.462	0.113	0.113	
831.50	166300	Mid	left	10 mm	NR Band n26	A	Open	0024M	20	DFT-S-OFDM	QPSK	50	0	24.0	22.42	0	-0.02	1:1	0.068	1.439	0.098	0.098	
831.50	166300	Mid	back	5 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.35	0	0.03	1:1	0.543	1.462	0.794	0.794	A80
831.50	166300	Mid	back	5 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	0	24.0	22.42	0	0.01	1:1	0.542	1.439	0.780	0.780	
831.50	166300	Mid	back	5 mm	NR Band n26	A	Closed	0024M	20	CP-OFDM	QPSK	1	1	24.0	22.19	0	0.03	1:1	0.516	1.517	0.783	0.783	
831.50	166300	Mid	front	5 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.35	0	0.01	1:1	0.064	1.462	0.094	0.094	
831.50	166300	Mid	front	5 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	0	24.0	22.42	0	-0.02	1:1	0.065	1.439	0.094	0.094	
831.50	166300	Mid	bottom	5 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.35	0	0.00	1:1	0.244	1.462	0.357	0.357	
831.50	166300	Mid	bottom	5 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	0	24.0	22.42	0	0.00	1:1	0.243	1.439	0.350	0.350	
831.50	166300	Mid	right	5 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.35	0	0.02	1:1	0.045	1.462	0.066	0.066	
831.50	166300	Mid	right	5 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	0	24.0	22.42	0	-0.09	1:1	0.044	1.439	0.063	0.063	
831.50	166300	Mid	left	5 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	1	53	24.0	22.35	0	-0.19	1:1	0.051	1.462	0.075	0.075	
831.50	166300	Mid	left	5 mm	NR Band n26	A	Closed	0024M	20	DFT-S-OFDM	QPSK	50	0	24.0	22.42	0	0.01	1:1	0.050	1.439	0.072	0.072	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram				

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Table 11-61
NR Band n66 Hotspot SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1745.00	349000	Mid	back	10 mm	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	1	19.5	17.89	0	0.02	1:1	0.167	1.449	0.242	0.242	
1745.00	349000	Mid	back	10 mm	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	108	19.5	17.96	0	0.17	1:1	0.196	1.426	0.279	0.279	
1745.00	349000	Mid	front	10 mm	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	1	19.5	17.89	0	0.00	1:1	0.096	1.449	0.139	0.139	
1745.00	349000	Mid	front	10 mm	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	108	19.5	17.96	0	0.07	1:1	0.113	1.426	0.161	0.161	
1745.00	349000	Mid	bottom	10 mm	NR Band n66	A	Open	0168G	40	DFT-S-OFDM	QPSK	1	1	19.5	17.89	0	0.01	1:1	0.425	1.449	0.616	0.616	
1745.00	349000	Mid	bottom	10 mm	NR Band n66	A	Open	0168G	40	DFT-S-OFDM	QPSK	108	108	19.5	17.96	0	-0.05	1:1	0.448	1.426	0.639	0.639	
1745.00	349000	Mid	bottom	10 mm	NR Band n66	A	Open	0168G	40	CP-OFDM	QPSK	1	1	19.5	17.91	0	-0.04	1:1	0.424	1.442	0.611	0.611	
1745.00	349000	Mid	right	10 mm	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	1	19.5	17.89	0	0.13	1:1	0.017	1.449	0.025	0.025	
1745.00	349000	Mid	right	10 mm	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	108	19.5	17.96	0	0.09	1:1	0.015	1.426	0.021	0.021	
1745.00	349000	Mid	left	10 mm	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	1	19.5	17.89	0	-0.02	1:1	0.049	1.449	0.071	0.071	
1745.00	349000	Mid	left	10 mm	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	108	19.5	17.96	0	0.05	1:1	0.054	1.426	0.077	0.077	
1745.00	349000	Mid	back	5 mm	NR Band n66	A	Closed	0100M	40	DFT-S-OFDM	QPSK	1	1	19.5	17.89	0	-0.07	1:1	0.275	1.449	0.398	0.398	
1745.00	349000	Mid	back	5 mm	NR Band n66	A	Closed	0100M	40	DFT-S-OFDM	QPSK	108	108	19.5	17.96	0	0.03	1:1	0.278	1.426	0.396	0.396	
1745.00	349000	Mid	front	5 mm	NR Band n66	A	Closed	0100M	40	DFT-S-OFDM	QPSK	1	1	19.5	17.89	0	-0.09	1:1	0.047	1.449	0.068	0.068	
1745.00	349000	Mid	front	5 mm	NR Band n66	A	Closed	0100M	40	DFT-S-OFDM	QPSK	108	108	19.5	17.96	0	0.06	1:1	0.048	1.426	0.068	0.068	
1745.00	349000	Mid	bottom	5 mm	NR Band n66	A	Closed	0168G	40	DFT-S-OFDM	QPSK	1	1	19.5	17.89	0	0.01	1:1	0.617	1.449	0.894	0.894	
1745.00	349000	Mid	bottom	5 mm	NR Band n66	A	Closed	0168G	40	DFT-S-OFDM	QPSK	108	108	19.5	17.96	0	-0.03	1:1	0.640	1.426	0.913	0.913	
1745.00	349000	Mid	bottom	5 mm	NR Band n66	A	Closed	0168G	40	DFT-S-OFDM	QPSK	216	0	19.5	17.87	0	0.00	1:1	0.640	1.455	0.931	0.931	A81
1745.00	349000	Mid	bottom	5 mm	NR Band n66	A	Closed	0168G	40	CP-OFDM	QPSK	1	1	19.5	17.91	0	-0.02	1:1	0.625	1.442	0.901	0.901	
1745.00	349000	Mid	right	5 mm	NR Band n66	A	Closed	0100M	40	DFT-S-OFDM	QPSK	1	1	19.5	17.89	0	0.07	1:1	0.007	1.449	0.010	0.010	
1745.00	349000	Mid	right	5 mm	NR Band n66	A	Closed	0100M	40	DFT-S-OFDM	QPSK	108	108	19.5	17.96	0	-0.05	1:1	0.007	1.426	0.010	0.010	
1745.00	349000	Mid	left	5 mm	NR Band n66	A	Closed	0100M	40	DFT-S-OFDM	QPSK	1	1	19.5	17.89	0	0.03	1:1	0.094	1.449	0.136	0.136	
1745.00	349000	Mid	left	5 mm	NR Band n66	A	Closed	0100M	40	DFT-S-OFDM	QPSK	108	108	19.5	17.96	0	0.00	1:1	0.082	1.426	0.117	0.117	
1745.00	349000	Mid	back	10 mm	NR Band n66	I	Open	0036M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	-0.04	1:1	0.126	1.346	0.170	0.170	
1745.00	349000	Mid	back	10 mm	NR Band n66	I	Open	0036M	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	-0.01	1:1	0.149	1.294	0.193	0.193	
1745.00	349000	Mid	front	10 mm	NR Band n66	I	Open	0036M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	-0.01	1:1	0.108	1.346	0.145	0.145	
1745.00	349000	Mid	front	10 mm	NR Band n66	I	Open	0036M	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	-0.04	1:1	0.123	1.294	0.159	0.159	
1745.00	349000	Mid	top	10 mm	NR Band n66	I	Open	0036M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	-0.21	1:1	0.013	1.346	0.017	0.017	
1745.00	349000	Mid	top	10 mm	NR Band n66	I	Open	0036M	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	0.20	1:1	0.024	1.294	0.031	0.031	
1745.00	349000	Mid	right	10 mm	NR Band n66	I	Open	0168G	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	-0.06	1:1	0.328	1.346	0.441	0.441	
1745.00	349000	Mid	right	10 mm	NR Band n66	I	Open	0168G	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	0.01	1:1	0.378	1.294	0.489	0.489	
1745.00	349000	Mid	right	10 mm	NR Band n66	I	Open	0168G	40	CP-OFDM	QPSK	1	1	18.5	17.33	0	-0.01	1:1	0.332	1.309	0.435	0.435	
1745.00	349000	Mid	back	5 mm	NR Band n66	I	Closed	0036M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	0.04	1:1	0.016	1.346	0.022	0.022	
1745.00	349000	Mid	back	5 mm	NR Band n66	I	Closed	0036M	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	0.07	1:1	0.020	1.294	0.026	0.026	
1745.00	349000	Mid	front	5 mm	NR Band n66	I	Closed	0036M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	-0.06	1:1	0.162	1.346	0.218	0.218	
1745.00	349000	Mid	front	5 mm	NR Band n66	I	Closed	0036M	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	-0.04	1:1	0.197	1.294	0.255	0.255	
1745.00	349000	Mid	bottom	5 mm	NR Band n66	I	Closed	0036M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	0.03	1:1	0.026	1.346	0.035	0.035	
1745.00	349000	Mid	bottom	5 mm	NR Band n66	I	Closed	0036M	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	0.12	1:1	0.038	1.294	0.049	0.049	
1745.00	349000	Mid	right	5 mm	NR Band n66	I	Closed	0168G	40	DFT-S-OFDM	QPSK	1	1	18.5	17.21	0	-0.02	1:1	0.418	1.346	0.563	0.563	
1745.00	349000	Mid	right	5 mm	NR Band n66	I	Closed	0168G	40	DFT-S-OFDM	QPSK	108	108	18.5	17.38	0	-0.08	1:1	0.505	1.294	0.653	0.653	
1745.00	349000	Mid	right	5 mm	NR Band n66	I	Closed	0168G	40	CP-OFDM	QPSK	1	1	18.5	17.33	0	0.01	1:1	0.413	1.309	0.541	0.541	
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Table 11-62
NR Band n25 Hotspot SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
1882.50	376500	Mid	back	10 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	1	214	19.5	18.24	0	0.06	1:1	0.263	1.337	0.352	0.352	
1882.50	376500	Mid	back	10 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	108	108	19.5	18.39	0	-0.02	1:1	0.252	1.291	0.325	0.325	
1882.50	376500	Mid	front	10 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	1	214	19.5	18.24	0	0.06	1:1	0.169	1.337	0.226	0.226	
1882.50	376500	Mid	front	10 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	108	108	19.5	18.39	0	0.02	1:1	0.163	1.291	0.210	0.210	
1882.50	376500	Mid	bottom	10 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	1	214	19.5	18.24	0	0.01	1:1	0.366	1.337	0.489	0.489	
1882.50	376500	Mid	bottom	10 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	108	108	19.5	18.39	0	0.03	1:1	0.339	1.291	0.438	0.438	
1882.50	376500	Mid	bottom	10 mm	NR Band n25	A	Open	0248M	40	CP-OFDM	QPSK	1	1	19.5	18.15	0	0.04	1:1	0.266	1.365	0.363	0.363	
1882.50	376500	Mid	right	10 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	1	214	19.5	18.24	0	0.02	1:1	0.020	1.337	0.027	0.027	
1882.50	376500	Mid	right	10 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	108	108	19.5	18.39	0	0.10	1:1	0.020	1.291	0.026	0.026	
1882.50	376500	Mid	left	10 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	1	214	19.5	18.24	0	-0.01	1:1	0.049	1.337	0.066	0.066	
1882.50	376500	Mid	left	10 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	108	108	19.5	18.39	0	-0.03	1:1	0.046	1.291	0.059	0.059	
1882.50	376500	Mid	back	5 mm	NR Band n25	A	Closed	0248M	40	DFT-S-OFDM	QPSK	1	214	19.5	18.24	0	-0.01	1:1	0.395	1.337	0.528	0.528	
1882.50	376500	Mid	back	5 mm	NR Band n25	A	Closed	0248M	40	DFT-S-OFDM	QPSK	108	108	19.5	18.39	0	-0.10	1:1	0.386	1.291	0.498	0.498	
1882.50	376500	Mid	front	5 mm	NR Band n25	A	Closed	0248M	40	DFT-S-OFDM	QPSK	1	214	19.5	18.24	0	0.08	1:1	0.119	1.337	0.159	0.159	
1882.50	376500	Mid	front	5 mm	NR Band n25	A	Closed	0248M	40	DFT-S-OFDM	QPSK	108	108	19.5	18.39	0	0.01	1:1	0.094	1.291	0.121	0.121	
1882.50	376500	Mid	bottom	5 mm	NR Band n25	A	Closed	0248M	40	DFT-S-OFDM	QPSK	1	214	19.5	18.24	0	0.06	1:1	0.604	1.337	0.808	0.808	
1882.50	376500	Mid	bottom	5 mm	NR Band n25	A	Closed	0248M	40	DFT-S-OFDM	QPSK	108	108	19.5	18.39	0	-0.02	1:1	0.583	1.291	0.753	0.753	
1882.50	376500	Mid	bottom	5 mm	NR Band n25	A	Closed	0248M	40	DFT-S-OFDM	QPSK	216	0	19.5	18.20	0	0.00	1:1	0.534	1.349	0.720	0.720	
1882.50	376500	Mid	bottom	5 mm	NR Band n25	A	Closed	0248M	40	CP-OFDM	QPSK	1	1	19.5	18.15	0	-0.12	1:1	0.462	1.365	0.631	0.631	
1882.50	376500	Mid	right	5 mm	NR Band n25	A	Closed	0100M	40	DFT-S-OFDM	QPSK	1	214	19.5	18.24	0	0.09	1:1	0.012	1.337	0.016	0.016	
1882.50	376500	Mid	right	5 mm	NR Band n25	A	Closed	0100M	40	DFT-S-OFDM	QPSK	108	108	19.5	18.39	0	0.11	1:1	0.012	1.291	0.015	0.015	
1882.50	376500	Mid	left	5 mm	NR Band n25	A	Closed	0100M	40	DFT-S-OFDM	QPSK	1	214	19.5	18.24	0	0.02	1:1	0.079	1.337	0.106	0.106	
1882.50	376500	Mid	left	5 mm	NR Band n25	A	Closed	0100M	40	DFT-S-OFDM	QPSK	108	108	19.5	18.39	0	-0.01	1:1	0.070	1.291	0.090	0.090	
1882.50	376500	Mid	back	10 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	214	16.5	14.79	0	-0.06	1:1	0.149	1.483	0.221	0.221	
1882.50	376500	Mid	back	10 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	16.5	14.77	0	-0.01	1:1	0.146	1.489	0.217	0.217	
1882.50	376500	Mid	front	10 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	214	16.5	14.79	0	-0.05	1:1	0.133	1.483	0.197	0.197	
1882.50	376500	Mid	front	10 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	16.5	14.77	0	-0.04	1:1	0.135	1.489	0.201	0.201	
1882.50	376500	Mid	top	10 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	214	16.5	14.79	0	0.05	1:1	0.028	1.483	0.042	0.042	
1882.50	376500	Mid	top	10 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	16.5	14.77	0	0.08	1:1	0.032	1.489	0.048	0.048	
1882.50	376500	Mid	right	10 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	214	16.5	14.79	0	-0.02	1:1	0.347	1.483	0.515	0.515	
1882.50	376500	Mid	right	10 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	16.5	14.77	0	0.01	1:1	0.343	1.489	0.511	0.511	
1882.50	376500	Mid	right	10 mm	NR Band n25	I	Open	0015M	40	CP-OFDM	QPSK	1	1	16.5	14.83	0	-0.03	1:1	0.321	1.469	0.472	0.472	
1882.50	376500	Mid	back	5 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	1	214	16.5	14.79	0	-0.14	1:1	0.036	1.483	0.053	0.053	
1882.50	376500	Mid	back	5 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	108	108	16.5	14.77	0	-0.13	1:1	0.032	1.489	0.048	0.048	
1882.50	376500	Mid	front	5 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	1	214	16.5	14.79	0	-0.02	1:1	0.312	1.483	0.463	0.463	
1882.50	376500	Mid	front	5 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	108	108	16.5	14.77	0	-0.02	1:1	0.292	1.489	0.435	0.435	
1882.50	376500	Mid	bottom	5 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	1	214	16.5	14.79	0	-0.04	1:1	0.031	1.483	0.046	0.046	
1882.50	376500	Mid	bottom	5 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	108	108	16.5	14.77	0	-0.16	1:1	0.037	1.489	0.055	0.055	
1882.50	376500	Mid	right	5 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	1	214	16.5	14.79	0	0.00	1:1	0.669	1.483	0.992	0.992	A82
1882.50	376500	Mid	right	5 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	108	108	16.5	14.77	0	0.05	1:1	0.627	1.489	0.934	0.934	
1882.50	376500	Mid	right	5 mm	NR Band n25	I	Closed	0015M	40	DFT-S-OFDM	QPSK	216	0	16.5	14.71	0	0.03	1:1	0.615	1.510	0.929	0.929	
1882.50	376500	Mid	right	5 mm	NR Band n25	I	Closed	0015M	40	CP-OFDM	QPSK	1	1	16.5	14.83	0	-0.04	1:1	0.539	1.469	0.792	0.792	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population	Body 1.6 W/kg (mW/g) averaged over 1 gram

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Table 11-63
NR Band n30 Hotspot SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2310.00	462000	Mid	back	10 mm	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	1	26	19.0	17.78	0	-0.06	1:1	0.089	1.324	0.118	0.118	
2310.00	462000	Mid	back	10 mm	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	25	14	19.0	17.76	0	0.09	1:1	0.086	1.330	0.114	0.114	
2310.00	462000	Mid	front	10 mm	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	1	26	19.0	17.78	0	-0.03	1:1	0.075	1.324	0.099	0.099	
2310.00	462000	Mid	front	10 mm	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	25	14	19.0	17.76	0	0.05	1:1	0.075	1.330	0.100	0.100	
2310.00	462000	Mid	bottom	10 mm	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	1	26	19.0	17.78	0	0.00	1:1	0.192	1.324	0.254	0.254	
2310.00	462000	Mid	bottom	10 mm	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	25	14	19.0	17.76	0	0.01	1:1	0.193	1.330	0.257	0.257	
2310.00	462000	Mid	bottom	10 mm	NR Band n30	B	Open	0078M	10	CP-OFDM	QPSK	1	1	19.0	17.73	0	-0.01	1:1	0.198	1.340	0.265	0.265	
2310.00	462000	Mid	left	10 mm	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	1	26	19.0	17.78	0	-0.04	1:1	0.056	1.324	0.074	0.074	
2310.00	462000	Mid	left	10 mm	NR Band n30	B	Open	0078M	10	DFT-S-OFDM	QPSK	25	14	19.0	17.76	0	-0.08	1:1	0.056	1.330	0.074	0.074	
2310.00	462000	Mid	back	5 mm	NR Band n30	B	Closed	0078M	10	DFT-S-OFDM	QPSK	1	26	19.0	17.78	0	-0.06	1:1	0.161	1.324	0.213	0.213	
2310.00	462000	Mid	back	5 mm	NR Band n30	B	Closed	0078M	10	DFT-S-OFDM	QPSK	25	14	19.0	17.76	0	-0.02	1:1	0.159	1.330	0.211	0.211	
2310.00	462000	Mid	front	5 mm	NR Band n30	B	Closed	0078M	10	DFT-S-OFDM	QPSK	1	26	19.0	17.78	0	0.13	1:1	0.018	1.324	0.024	0.024	
2310.00	462000	Mid	front	5 mm	NR Band n30	B	Closed	0078M	10	DFT-S-OFDM	QPSK	25	14	19.0	17.76	0	0.03	1:1	0.019	1.330	0.025	0.025	
2310.00	462000	Mid	bottom	5 mm	NR Band n30	B	Closed	0078M	10	DFT-S-OFDM	QPSK	1	26	19.0	17.78	0	-0.06	1:1	0.245	1.324	0.324	0.324	
2310.00	462000	Mid	bottom	5 mm	NR Band n30	B	Closed	0078M	10	DFT-S-OFDM	QPSK	25	14	19.0	17.76	0	0.04	1:1	0.239	1.330	0.318	0.318	
2310.00	462000	Mid	bottom	5 mm	NR Band n30	B	Closed	0078M	10	CP-OFDM	QPSK	1	1	19.0	17.73	0	0.00	1:1	0.241	1.340	0.323	0.323	
2310.00	462000	Mid	left	5 mm	NR Band n30	B	Closed	0078M	10	DFT-S-OFDM	QPSK	1	26	19.0	17.78	0	0.06	1:1	0.086	1.324	0.114	0.114	
2310.00	462000	Mid	left	5 mm	NR Band n30	B	Closed	0078M	10	DFT-S-OFDM	QPSK	25	14	19.0	17.76	0	0.00	1:1	0.085	1.330	0.113	0.113	
2310.00	462000	Mid	back	10 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	1	50	18.0	16.47	0	-0.03	1:1	0.218	1.422	0.310	0.310	
2310.00	462000	Mid	back	10 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	25	0	18.0	16.41	0	-0.10	1:1	0.222	1.442	0.320	0.320	
2310.00	462000	Mid	front	10 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	1	50	18.0	16.47	0	-0.02	1:1	0.197	1.422	0.280	0.280	
2310.00	462000	Mid	front	10 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	25	0	18.0	16.41	0	0.05	1:1	0.209	1.442	0.301	0.301	
2310.00	462000	Mid	top	10 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	1	50	18.0	16.47	0	-0.18	1:1	0.035	1.422	0.050	0.050	
2310.00	462000	Mid	top	10 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	25	0	18.0	16.41	0	-0.04	1:1	0.036	1.442	0.052	0.052	
2310.00	462000	Mid	right	10 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	1	50	18.0	16.47	0	-0.05	1:1	0.278	1.422	0.395	0.395	
2310.00	462000	Mid	right	10 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	25	0	18.0	16.41	0	0.01	1:1	0.286	1.442	0.412	0.412	
2310.00	462000	Mid	right	10 mm	NR Band n30	I	Open	0030M	10	CP-OFDM	QPSK	1	1	18.0	16.55	0	-0.04	1:1	0.287	1.396	0.401	0.401	
2310.00	462000	Mid	back	5 mm	NR Band n30	I	Closed	0036M	10	DFT-S-OFDM	QPSK	1	50	18.0	16.47	0	0.04	1:1	0.083	1.422	0.118	0.118	
2310.00	462000	Mid	back	5 mm	NR Band n30	I	Closed	0036M	10	DFT-S-OFDM	QPSK	25	0	18.0	16.41	0	-0.01	1:1	0.087	1.442	0.125	0.125	
2310.00	462000	Mid	front	5 mm	NR Band n30	I	Closed	0036M	10	DFT-S-OFDM	QPSK	1	50	18.0	16.47	0	0.03	1:1	0.419	1.422	0.596	0.596	
2310.00	462000	Mid	front	5 mm	NR Band n30	I	Closed	0036M	10	DFT-S-OFDM	QPSK	25	0	18.0	16.41	0	0.00	1:1	0.432	1.442	0.623	0.623	
2310.00	462000	Mid	bottom	5 mm	NR Band n30	I	Closed	0036M	10	DFT-S-OFDM	QPSK	1	50	18.0	16.47	0	0.10	1:1	0.045	1.422	0.064	0.064	
2310.00	462000	Mid	bottom	5 mm	NR Band n30	I	Closed	0036M	10	DFT-S-OFDM	QPSK	25	0	18.0	16.41	0	-0.02	1:1	0.050	1.442	0.072	0.072	
2310.00	462000	Mid	right	5 mm	NR Band n30	I	Closed	0163G	10	DFT-S-OFDM	QPSK	1	50	18.0	16.47	0	-0.05	1:1	0.594	1.422	0.845	0.845	
2310.00	462000	Mid	right	5 mm	NR Band n30	I	Closed	0163G	10	DFT-S-OFDM	QPSK	25	0	18.0	16.41	0	-0.02	1:1	0.605	1.442	0.872	0.872	
2310.00	462000	Mid	right	5 mm	NR Band n30	I	Closed	0163G	10	DFT-S-OFDM	QPSK	50	0	18.0	16.35	0	0.04	1:1	0.613	1.462	0.896	0.896	A83
2310.00	462000	Mid	right	5 mm	NR Band n30	I	Closed	0163G	10	CP-OFDM	QPSK	1	1	18.0	16.55	0	-0.01	1:1	0.605	1.396	0.845	0.845	
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 11-64
NR Band n7 Hotspot SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2535.00	507000	Mid	back	10 mm	NR Band n7	B	Open	0248M	40	DFT-S-OFDM	QPSK	1	1	21.5	19.73	0	0.00	1:1	0.136	1.503	0.204	0.204	
2535.00	507000	Mid	back	10 mm	NR Band n7	B	Open	0248M	40	DFT-S-OFDM	QPSK	108	0	21.5	19.80	0	0.02	1:1	0.141	1.479	0.209	0.209	
2535.00	507000	Mid	front	10 mm	NR Band n7	B	Open	0248M	40	DFT-S-OFDM	QPSK	1	1	21.5	19.73	0	0.02	1:1	0.084	1.503	0.126	0.126	
2535.00	507000	Mid	front	10 mm	NR Band n7	B	Open	0248M	40	DFT-S-OFDM	QPSK	108	0	21.5	19.80	0	0.08	1:1	0.087	1.479	0.129	0.129	
2535.00	507000	Mid	bottom	10 mm	NR Band n7	B	Open	0248M	40	DFT-S-OFDM	QPSK	1	1	21.5	19.73	0	0.02	1:1	0.278	1.503	0.418	0.418	
2535.00	507000	Mid	bottom	10 mm	NR Band n7	B	Open	0248M	40	DFT-S-OFDM	QPSK	108	0	21.5	19.80	0	0.01	1:1	0.283	1.479	0.419	0.419	
2535.00	507000	Mid	bottom	10 mm	NR Band n7	B	Open	0248M	40	CP-OFDM	QPSK	1	1	21.5	19.80	0	-0.02	1:1	0.281	1.479	0.416	0.416	
2535.00	507000	Mid	left	10 mm	NR Band n7	B	Open	0248M	40	DFT-S-OFDM	QPSK	1	1	21.5	19.73	0	-0.10	1:1	0.044	1.503	0.066	0.066	
2535.00	507000	Mid	left	10 mm	NR Band n7	B	Open	0248M	40	DFT-S-OFDM	QPSK	108	0	21.5	19.80	0	0.07	1:1	0.039	1.479	0.058	0.058	
2535.00	507000	Mid	back	5 mm	NR Band n7	B	Closed	0248M	40	DFT-S-OFDM	QPSK	1	1	21.5	19.73	0	0.03	1:1	0.214	1.503	0.322	0.322	
2535.00	507000	Mid	back	5 mm	NR Band n7	B	Closed	0248M	40	DFT-S-OFDM	QPSK	108	0	21.5	19.80	0	-0.02	1:1	0.225	1.479	0.333	0.333	
2535.00	507000	Mid	front	5 mm	NR Band n7	B	Closed	0248M	40	DFT-S-OFDM	QPSK	1	1	21.5	19.73	0	-0.04	1:1	0.027	1.503	0.041	0.041	
2535.00	507000	Mid	front	5 mm	NR Band n7	B	Closed	0248M	40	DFT-S-OFDM	QPSK	108	0	21.5	19.80	0	0.01	1:1	0.028	1.479	0.041	0.041	
2535.00	507000	Mid	bottom	5 mm	NR Band n7	B	Closed	0248M	40	DFT-S-OFDM	QPSK	1	1	21.5	19.73	0	0.02	1:1	0.489	1.503	0.735	0.735	
2535.00	507000	Mid	bottom	5 mm	NR Band n7	B	Closed	0248M	40	DFT-S-OFDM	QPSK	108	0	21.5	19.80	0	0.05	1:1	0.506	1.479	0.748	0.748	A84
2535.00	507000	Mid	bottom	5 mm	NR Band n7	B	Closed	0248M	40	CP-OFDM	QPSK	1	1	21.5	19.80	0	0.04	1:1	0.501	1.479	0.741	0.741	
2535.00	507000	Mid	left	5 mm	NR Band n7	B	Closed	0248M	40	DFT-S-OFDM	QPSK	1	1	21.5	19.73	0	0.06	1:1	0.172	1.503	0.259	0.259	
2535.00	507000	Mid	left	5 mm	NR Band n7	B	Closed	0248M	40	DFT-S-OFDM	QPSK	108	0	21.5	19.80	0	0.03	1:1	0.169	1.479	0.250	0.250	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram				

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Table 11-65
NR Band n41 Hotspot SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
2592.99	518598	Mid	back	10 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	19.5	18.12	0	-0.01	1:1	0.307	1.374	0.422	0.422	
2592.99	518598	Mid	back	10 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	69	19.5	18.07	0	0.02	1:1	0.274	1.390	0.381	0.381	
2592.99	518598	Mid	front	10 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	19.5	18.12	0	0.00	1:1	0.251	1.374	0.345	0.345	
2592.99	518598	Mid	front	10 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	69	19.5	18.07	0	-0.01	1:1	0.255	1.390	0.354	0.354	
2592.99	518598	Mid	top	10 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	19.5	18.12	0	-0.19	1:1	0.042	1.374	0.058	0.058	
2592.99	518598	Mid	top	10 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	69	19.5	18.07	0	0.03	1:1	0.042	1.390	0.058	0.058	
2592.99	518598	Mid	right	10 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	19.5	18.12	0	-0.08	1:1	0.399	1.374	0.548	0.548	
2592.99	518598	Mid	right	10 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	69	19.5	18.07	0	-0.02	1:1	0.395	1.390	0.549	0.549	
2592.99	518598	Mid	right	10 mm	NR Band n41	I	Open	0023M	100	CP-OFDM	QPSK	1	1	19.5	17.98	0	-0.04	1:1	0.330	1.419	0.468	0.468	
2592.99	518598	Mid	back	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	1	137	19.5	18.12	0	-0.13	1:1	0.144	1.374	0.198	0.198	
2592.99	518598	Mid	back	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	135	69	19.5	18.07	0	0.03	1:1	0.142	1.390	0.197	0.197	
2592.99	518598	Mid	front	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	1	137	19.5	18.12	0	0.01	1:1	0.401	1.374	0.551	0.551	
2592.99	518598	Mid	front	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	135	69	19.5	18.07	0	-0.01	1:1	0.406	1.390	0.564	0.564	
2592.99	518598	Mid	top	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	1	137	19.5	18.12	0	0.02	1:1	0.032	1.374	0.044	0.044	
2592.99	518598	Mid	top	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	135	69	19.5	18.07	0	-0.18	1:1	0.029	1.390	0.040	0.040	
2592.99	518598	Mid	bottom	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	1	137	19.5	18.12	0	-0.07	1:1	0.085	1.374	0.117	0.117	
2592.99	518598	Mid	bottom	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	135	69	19.5	18.07	0	0.01	1:1	0.085	1.390	0.118	0.118	
2592.99	518598	Mid	right	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	1	137	19.5	18.12	0	0.02	1:1	0.502	1.374	0.690	0.690	
2592.99	518598	Mid	right	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	135	69	19.5	18.07	0	0.02	1:1	0.518	1.390	0.720	0.720	
2592.99	518598	Mid	right	5 mm	NR Band n41	I	Closed	0023M	100	DFT-s-OFDM	N/A	270	0	19.5	18.01	0	0.04	1:1	0.533	1.409	0.751	0.751	
2592.99	518598	Mid	right	5 mm	NR Band n41	I	Closed	0023M	100	CP-OFDM	N/A	1	1	19.5	17.98	0	0.05	1:1	0.572	1.419	0.812	0.812	A85
2592.99	518598	Mid	back	10 mm	NR Band n41	B	Open	0023M	100	CW/SRS	N/A	N/A	N/A	18.5	17.01	N/A	0.00	1:1	0.077	1.409	0.108	0.108	
2592.99	518598	Mid	front	10 mm	NR Band n41	B	Open	0023M	100	CW/SRS	N/A	N/A	N/A	18.5	17.01	N/A	0.02	1:1	0.066	1.409	0.093	0.093	
2592.99	518598	Mid	bottom	10 mm	NR Band n41	B	Open	0023M	100	CW/SRS	N/A	N/A	N/A	18.5	17.01	N/A	0.01	1:1	0.147	1.409	0.207	0.207	
2592.99	518598	Mid	left	10 mm	NR Band n41	B	Open	0023M	100	CW/SRS	N/A	N/A	N/A	18.5	17.01	N/A	0.16	1:1	0.013	1.409	0.018	0.018	
2592.99	518598	Mid	back	5 mm	NR Band n41	B	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	18.5	17.01	N/A	-0.07	1:1	0.104	1.409	0.147	0.147	
2592.99	518598	Mid	front	5 mm	NR Band n41	B	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	18.5	17.01	N/A	0.09	1:1	0.007	1.409	0.010	0.010	
2592.99	518598	Mid	bottom	5 mm	NR Band n41	B	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	18.5	17.01	N/A	0.00	1:1	0.247	1.409	0.348	0.348	
2592.99	518598	Mid	left	5 mm	NR Band n41	B	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	18.5	17.01	N/A	-0.08	1:1	0.022	1.409	0.031	0.031	
2592.99	518598	Mid	back	10 mm	NR Band n41	F	Open	0023M	100	CW/SRS	N/A	N/A	N/A	16.0	15.06	N/A	-0.07	1:1	0.038	1.242	0.047	0.047	
2592.99	518598	Mid	front	10 mm	NR Band n41	F	Open	0023M	100	CW/SRS	N/A	N/A	N/A	16.0	15.06	N/A	0.02	1:1	0.051	1.242	0.063	0.063	
2592.99	518598	Mid	top	10 mm	NR Band n41	F	Open	0023M	100	CW/SRS	N/A	N/A	N/A	16.0	15.06	N/A	0.03	1:1	0.025	1.242	0.031	0.031	
2592.99	518598	Mid	left	10 mm	NR Band n41	F	Open	0023M	100	CW/SRS	N/A	N/A	N/A	16.0	15.06	N/A	0.11	1:1	0.080	1.242	0.099	0.099	
2592.99	518598	Mid	back	5 mm	NR Band n41	F	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.0	15.06	N/A	-0.11	1:1	0.015	1.242	0.019	0.019	
2592.99	518598	Mid	front	5 mm	NR Band n41	F	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.0	15.06	N/A	-0.01	1:1	0.077	1.242	0.096	0.096	
2592.99	518598	Mid	bottom	5 mm	NR Band n41	F	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.0	15.06	N/A	0.03	1:1	0.036	1.242	0.045	0.045	
2592.99	518598	Mid	left	5 mm	NR Band n41	F	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.0	15.06	N/A	-0.02	1:1	0.145	1.242	0.180	0.180	
2592.99	518598	Mid	back	10 mm	NR Band n41	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	0.00	1:1	0.010	1.130	0.011	0.011	
2592.99	518598	Mid	front	10 mm	NR Band n41	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	0.21	1:1	0.012	1.130	0.014	0.014	
2592.99	518598	Mid	bottom	10 mm	NR Band n41	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	0.01	1:1	0.003	1.130	0.003	0.003	
2592.99	518598	Mid	left	10 mm	NR Band n41	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	-0.10	1:1	0.020	1.130	0.023	0.023	
2592.99	518598	Mid	back	5 mm	NR Band n41	C	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	0.05	1:1	0.043	1.130	0.049	0.049	
2592.99	518598	Mid	front	5 mm	NR Band n41	C	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	0.09	1:1	0.006	1.130	0.007	0.007	
2592.99	518598	Mid	top	5 mm	NR Band n41	C	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	0.04	1:1	0.004	1.130	0.005	0.005	
2592.99	518598	Mid	bottom	5 mm	NR Band n41	C	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	0.08	1:1	0.011	1.130	0.012	0.012	
2592.99	518598	Mid	left	5 mm	NR Band n41	C	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	16.5	15.97	N/A	0.05	1:1	0.073	1.130	0.082	0.082	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-66
NR Band n48 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
3570.00	638000	Low	back	10 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	1	15.0	13.92	0	0.09	1:1	0.207	1.282	0.265	0.265	
3570.00	638000	Low	back	10 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	15.0	13.90	0	0.02	1:1	0.209	1.288	0.269	0.269	
3570.00	638000	Low	front	10 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	1	15.0	13.92	0	0.01	1:1	0.154	1.282	0.197	0.197	
3570.00	638000	Low	front	10 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	15.0	13.90	0	0.18	1:1	0.152	1.288	0.196	0.196	
3570.00	638000	Low	top	10 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	1	15.0	13.92	0	0.12	1:1	0.179	1.282	0.229	0.229	
3570.00	638000	Low	top	10 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	15.0	13.90	0	0.10	1:1	0.179	1.288	0.231	0.231	
3570.00	638000	Low	left	10 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	1	15.0	13.92	0	0.06	1:1	0.270	1.282	0.346	0.346	
3570.00	638000	Low	left	10 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	15.0	13.90	0	0.11	1:1	0.271	1.288	0.349	0.349	
3570.00	638000	Low	left	10 mm	NR Band n48	F	Open	0020M	40	CP-OFDM	QPSK	1	1	15.0	13.75	0	0.08	1:1	0.266	1.334	0.355	0.355	
3570.00	638000	Low	back	5 mm	NR Band n48	F	Closed	0154G	40	DFT-s-OFDM	QPSK	1	1	15.0	13.92	0	0.12	1:1	0.052	1.282	0.067	0.067	
3570.00	638000	Low	back	5 mm	NR Band n48	F	Closed	0154G	40	DFT-s-OFDM	QPSK	50	0	15.0	13.90	0	-0.04	1:1	0.045	1.288	0.058	0.058	
3570.00	638000	Low	front	5 mm	NR Band n48	F	Closed	0154G	40	DFT-s-OFDM	QPSK	1	1	15.0	13.92	0	0.02	1:1	0.412	1.282	**0.528**	0.528	A86
3570.00	638000	Low	front	5 mm	NR Band n48	F	Closed	0154G	40	DFT-s-OFDM	QPSK	50	0	15.0	13.90	0	0.00	1:1	0.382	1.288	0.492	0.492	
3570.00	638000	Low	front	5 mm	NR Band n48	F	Closed	0154G	40	CP-OFDM	QPSK	1	1	15.0	13.75	0	-0.01	1:1	0.324	1.334	0.432	0.432	
3570.00	638000	Low	bottom	5 mm	NR Band n48	F	Closed	0154G	40	DFT-s-OFDM	QPSK	1	1	15.0	13.92	0	-0.05	1:1	0.187	1.282	0.240	0.240	
3570.00	638000	Low	bottom	5 mm	NR Band n48	F	Closed	0154G	40	DFT-s-OFDM	QPSK	50	0	15.0	13.90	0	0.05	1:1	0.179	1.288	0.231	0.231	
3570.00	638000	Low	left	5 mm	NR Band n48	F	Closed	0154G	40	DFT-s-OFDM	QPSK	1	1	15.0	13.92	0	-0.03	1:1	0.393	1.282	0.504	0.504	
3570.00	638000	Low	left	5 mm	NR Band n48	F	Closed	0154G	40	DFT-s-OFDM	QPSK	50	0	15.0	13.90	0	-0.01	1:1	0.395	1.288	0.509	0.509	
3570.00	638000	Low	back	10 mm	NR Band n48	I	Open	0023M	40	CW/SRS	N/A	N/A	N/A	9.0	7.87	N/A	0.11	1:1	0.075	1.297	0.097	0.097	
3570.00	638000	Low	front	10 mm	NR Band n48	I	Open	0023M	40	CW/SRS	N/A	N/A	N/A	9.0	7.87	N/A	-0.05	1:1	0.067	1.297	0.087	0.087	
3570.00	638000	Low	top	10 mm	NR Band n48	I	Open	0023M	40	CW/SRS	N/A	N/A	N/A	9.0	7.87	N/A	0.03	1:1	0.015	1.297	0.019	0.019	
3570.00	638000	Low	right	10 mm	NR Band n48	I	Open	0023M	40	CW/SRS	N/A	N/A	N/A	9.0	7.87	N/A	-0.05	1:1	0.163	1.297	0.211	0.211	
3570.00	638000	Low	back	5 mm	NR Band n48	I	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	9.0	7.87	N/A	-0.03	1:1	0.022	1.297	0.029	0.029	
3570.00	638000	Low	front	5 mm	NR Band n48	I	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	9.0	7.87	N/A	-0.05	1:1	0.319	1.297	0.414	0.414	
3570.00	638000	Low	top	5 mm	NR Band n48	I	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	9.0	7.87	N/A	0.12	1:1	0.043	1.297	0.056	0.056	
3570.00	638000	Low	bottom	5 mm	NR Band n48	I	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	9.0	7.87	N/A	0.08	1:1	0.026	1.297	0.034	0.034	
3570.00	638000	Low	right	5 mm	NR Band n48	I	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	9.0	7.87	N/A	0.03	1:1	0.384	1.297	0.498	0.498	
3570.00	638000	Low	back	10 mm	NR Band n48	E	Open	0023M	40	CW/SRS	N/A	N/A	N/A	11.5	10.56	N/A	-0.07	1:1	0.044	1.242	0.055	0.055	
3570.00	638000	Low	front	10 mm	NR Band n48	E	Open	0023M	40	CW/SRS	N/A	N/A	N/A	11.5	10.56	N/A	0.19	1:1	0.055	1.242	0.068	0.068	
3570.00	638000	Low	top	10 mm	NR Band n48	E	Open	0023M	40	CW/SRS	N/A	N/A	N/A	11.5	10.56	N/A	0.20	1:1	0.004	1.242	0.005	0.005	
3570.00	638000	Low	left	10 mm	NR Band n48	E	Open	0023M	40	CW/SRS	N/A	N/A	N/A	11.5	10.56	N/A	-0.07	1:1	0.094	1.242	0.117	0.117	
3570.00	638000	Low	back	5 mm	NR Band n48	E	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	11.5	10.56	N/A	0.06	1:1	0.041	1.242	0.051	0.051	
3570.00	638000	Low	front	5 mm	NR Band n48	E	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	11.5	10.56	N/A	0.03	1:1	0.128	1.242	0.159	0.159	
3570.00	638000	Low	top	5 mm	NR Band n48	E	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	11.5	10.56	N/A	0.01	1:1	0.009	1.242	0.011	0.011	
3570.00	638000	Low	bottom	5 mm	NR Band n48	E	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	11.5	10.56	N/A	0.03	1:1	0.038	1.242	0.047	0.047	
3570.00	638000	Low	left	5 mm	NR Band n48	E	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	11.5	10.56	N/A	0.05	1:1	0.211	1.242	0.262	0.262	
3570.00	638000	Low	back	10 mm	NR Band n48	C	Open	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.06	1:1	0.027	1.202	0.032	0.032	
3570.00	638000	Low	front	10 mm	NR Band n48	C	Open	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.17	1:1	0.022	1.202	0.026	0.026	
3570.00	638000	Low	bottom	10 mm	NR Band n48	C	Open	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.04	1:1	0.010	1.202	0.012	0.012	
3570.00	638000	Low	left	10 mm	NR Band n48	C	Open	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	-0.13	1:1	0.054	1.202	0.065	0.065	
3570.00	638000	Low	back	5 mm	NR Band n48	C	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.02	1:1	0.049	1.202	0.059	0.059	
3570.00	638000	Low	front	5 mm	NR Band n48	C	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.06	1:1	0.007	1.202	0.008	0.008	
3570.00	638000	Low	top	5 mm	NR Band n48	C	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.08	1:1	0.003	1.202	0.004	0.004	
3570.00	638000	Low	bottom	5 mm	NR Band n48	C	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.04	1:1	0.014	1.202	0.017	0.017	
3570.00	638000	Low	left	5 mm	NR Band n48	C	Closed	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.06	1:1	0.128	1.202	0.154	0.154	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram									

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Table 11-67
NR Band n77 Hotspot SAR

MEASUREMENT RESULTS																								
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 1.6 (W/kg)	
3750.00	650000	Low	back	10 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	15.0	14.63	0	0.10	1:1	0.099	1.089	0.108	0.108	
3750.00	650000	Low	back	10 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	135	138	15.0	14.40	0	0.11	1:1	0.105	1.148	0.121	0.121	
3750.00	650000	Low	front	10 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	15.0	14.63	0	0.12	1:1	0.080	1.089	0.087	0.087	
3750.00	650000	Low	front	10 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	135	138	15.0	14.40	0	0.07	1:1	0.069	1.148	0.079	0.079	
3750.00	650000	Low	top	10 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	15.0	14.63	0	-0.09	1:1	0.075	1.089	0.082	0.082	
3750.00	650000	Low	top	10 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	135	138	15.0	14.40	0	-0.02	1:1	0.087	1.148	0.100	0.100	
3750.00	650000	Low	left	10 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	15.0	14.63	0	0.04	1:1	0.168	1.089	0.183	0.183	
3750.00	650000	Low	left	10 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	135	138	15.0	14.40	0	-0.14	1:1	0.168	1.148	0.193	0.193	
3750.00	650000	Low	left	10 mm	NR Band n77	F	Open	0020M	100	CP-OFDM	QPSK	1	1	15.0	13.75	0	0.04	1:1	0.193	1.334	0.257	0.257	
3500.01	633334	Mid	left	10 mm	NR Band n77 DoD	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	15.0	13.71	0	0.02	1:1	0.289	1.346	0.389	0.389	
3750.00	650000	Low	back	5 mm	NR Band n77	F	Closed	0020M	100	DFT-S-OFDM	QPSK	1	271	15.0	14.63	0	0.01	1:1	0.030	1.089	0.033	0.033	
3750.00	650000	Low	back	5 mm	NR Band n77	F	Closed	0020M	100	DFT-S-OFDM	QPSK	135	138	15.0	14.40	0	0.21	1:1	0.035	1.148	0.040	0.040	
3750.00	650000	Low	front	5 mm	NR Band n77	F	Closed	0020M	100	DFT-S-OFDM	QPSK	1	271	15.0	14.63	0	-0.06	1:1	0.355	1.089	0.387	0.387	
3750.00	650000	Low	front	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	135	138	15.0	14.40	0	0.01	1:1	0.365	1.148	0.419	0.419	
3930.00	662000	High	front	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	135	138	15.0	13.64	0	-0.12	1:1	0.165	1.368	0.226	0.226	
3750.00	650000	Low	front	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	270	0	15.0	14.20	0	0.12	1:1	0.371	1.202	0.446	0.446	
3750.00	650000	Low	top	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	1	271	15.0	14.63	0	0.05	1:1	0.008	1.089	0.009	0.009	
3750.00	650000	Low	top	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	135	138	15.0	14.40	0	0.09	1:1	0.010	1.148	0.011	0.011	
3750.00	650000	Low	bottom	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	1	271	15.0	14.63	0	0.07	1:1	0.223	1.089	0.243	0.243	
3750.00	650000	Low	bottom	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	135	138	15.0	14.40	0	0.00	1:1	0.202	1.148	0.232	0.232	
3750.00	650000	Low	left	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	1	271	15.0	14.63	0	0.09	1:1	0.438	1.089	0.477	0.477	
3930.00	662000	High	left	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	1	137	15.0	13.59	0	0.07	1:1	0.251	1.384	0.347	0.347	
3750.00	650000	Low	left	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	135	138	15.0	14.40	0	0.00	1:1	0.417	1.148	0.479	0.479	
3930.00	662000	High	left	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	135	138	15.0	13.64	0	0.02	1:1	0.245	1.368	0.335	0.335	
3750.00	650000	Low	left	5 mm	NR Band n77	F	Closed	0020M	100	DFT-s-OFDM	QPSK	270	0	15.0	14.20	0	-0.10	1:1	0.394	1.202	0.474	0.474	
3750.00	650000	Low	left	5 mm	NR Band n77	F	Closed	0020M	100	CP-OFDM	QPSK	1	1	15.0	13.75	0	-0.10	1:1	0.439	1.334	0.586	0.586	
3500.01	633334	Mid	left	5 mm	NR Band n77 DoD	F	Closed	0020M	100	DFT-S-OFDM	QPSK	1	271	15.0	13.71	0	-0.17	1:1	0.512	1.346	0.689	0.689	A87
3750.00	650000	Low	back	10 mm	NR Band n77	I	Open	0020M	100	CW/SRS	N/A	N/A	N/A	12.5	12.48	N/A	-0.01	1:1	0.057	1.005	0.057	0.057	
3750.00	650000	Low	front	10 mm	NR Band n77	I	Open	0020M	100	CW/SRS	N/A	N/A	N/A	12.5	12.48	N/A	0.06	1:1	0.028	1.005	0.028	0.028	
3750.00	650000	Low	top	10 mm	NR Band n77	I	Open	0020M	100	CW/SRS	N/A	N/A	N/A	12.5	12.48	N/A	0.08	1:1	0.000	1.005	0.000	0.000	
3750.00	650000	Low	right	10 mm	NR Band n77	I	Open	0020M	100	CW/SRS	N/A	N/A	N/A	12.5	12.48	N/A	0.03	1:1	0.080	1.005	0.080	0.080	
3500.01	633334	Mid	right	10 mm	NR Band n77 DoD	I	Open	0023M	100	CW/SRS	N/A	N/A	N/A	12.5	11.59	N/A	0.09	1:1	0.146	1.233	0.180	0.180	
3750.00	650000	Low	back	5 mm	NR Band n77	I	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	12.5	12.48	N/A	0.02	1:1	0.012	1.005	0.012	0.012	
3750.00	650000	Low	front	5 mm	NR Band n77	I	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	12.5	12.48	N/A	0.01	1:1	0.182	1.005	0.183	0.183	
3750.00	650000	Low	top	5 mm	NR Band n77	I	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	12.5	12.48	N/A	0.20	1:1	0.003	1.005	0.003	0.003	
3750.00	650000	Low	bottom	5 mm	NR Band n77	I	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	12.5	12.48	N/A	0.20	1:1	0.004	1.005	0.004	0.004	
3750.00	650000	Low	right	5 mm	NR Band n77	I	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	12.5	12.48	N/A	0.04	1:1	0.264	1.005	0.265	0.265	
3500.01	633334	Mid	right	5 mm	NR Band n77 DoD	I	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	12.5	11.59	N/A	-0.09	1:1	0.457	1.233	0.563	0.563	
3750.00	650000	Low	back	10 mm	NR Band n77	E	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.06	1:1	0.014	1.202	0.017	0.017	
3750.00	650000	Low	front	10 mm	NR Band n77	E	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.08	1:1	0.021	1.202	0.025	0.025	
3750.00	650000	Low	top	10 mm	NR Band n77	E	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.05	1:1	0.030	1.202	0.036	0.036	
3750.00	650000	Low	left	10 mm	NR Band n77	E	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	-0.03	1:1	0.032	1.202	0.038	0.038	
3500.01	633334	Mid	left	10 mm	NR Band n77 DoD	E	Open	0023M	100	CW/SRS	N/A	N/A	N/A	13.0	12.36	N/A	0.14	1:1	0.079	1.159	0.092	0.092	
3750.00	650000	Low	back	5 mm	NR Band n77	E	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.08	1:1	0.044	1.202	0.053	0.053	
3750.00	650000	Low	front	5 mm	NR Band n77	E	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.01	1:1	0.053	1.202	0.064	0.064	
3750.00	650000	Low	top	5 mm	NR Band n77	E	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.03	1:1	0.000	1.202	0.000	0.000	
3750.00	650000	Low	bottom	5 mm	NR Band n77	E	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.20	1:1	0.005	1.202	0.006	0.006	
3750.00	650000	Low	left	5 mm	NR Band n77	E	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.20	N/A	0.14	1:1	0.094	1.202	0.113	0.113	
3500.01	633334	Mid	left	5 mm	NR Band n77 DoD	E	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	13.0	12.36	N/A	-0.11	1:1	0.142	1.159	0.165	0.165	
3750.00	650000	Low	back	10 mm	NR Band n77	C	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.32	N/A	0.02	1:1	0.017	1.169	0.020	0.020	
3750.00	650000	Low	front	10 mm	NR Band n77	C	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.32	N/A	0.03	1:1	0.015	1.169	0.018	0.018	
3750.00	650000	Low	bottom	10 mm	NR Band n77	C	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.32	N/A	0.09	1:1	0.005	1.169	0.006	0.006	
3750.00	650000	Low	left	10 mm	NR Band n77	C	Open	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.32	N/A	0.12	1:1	0.059	1.169	0.069	0.069	
3500.01	633334	Mid	left	10 mm	NR Band n77 DoD	C	Open	0023M	100	CW/SRS	N/A	N/A	N/A	13.0	11.80	N/A	-0.14	1:1	0.029	1.318	0.038	0.038	
3750.00	650000	Low	back	5 mm	NR Band n77	C	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.32	N/A	0.03	1:1	0.068	1.169	0.079	0.079	
3750.00	650000	Low	front	5 mm	NR Band n77	C	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.32	N/A	0.20	1:1	0.006	1.169	0.007	0.007	
3750.00	650000	Low	top	5 mm	NR Band n77	C	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.32	N/A	0.09	1:1	0.001	1.169	0.001	0.001	
3750.00	650000	Low	bottom	5 mm	NR Band n77	C	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.32	N/A	0.00	1:1	0.023	1.169	0.027	0.027	
3750.00	650000	Low	left	5 mm	NR Band n77	C	Closed	0020M	100	CW/SRS	N/A	N/A	N/A	13.0	12.32	N/A	0.01	1:1	0.179	1.169	0.209	0.209	
3500.01	633334	Mid	left	5 mm	NR Band n77 DoD	C	Closed	0023M	100	CW/SRS	N/A	N/A	N/A	13.0	11.80	N/A	-0.02	1:1	0.080	1.318	0.105	0.105	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram								

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Table 11-68
DTS SISO WLAN Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.															(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
2462	11	back	10 mm	802.11b	DSSS	2	Open	0058M	22	1	19.0	18.81	0.00	100.00	98.74	0.118	1.045	1.013	0.125	0.125	
2462	11	front	10 mm	802.11b	DSSS	2	Open	0058M	22	1	19.0	18.81	-0.12	100.00	98.74	0.158	1.045	1.013	0.167	0.167	
2462	11	top	10 mm	802.11b	DSSS	2	Open	0058M	22	1	19.0	18.81	-0.10	100.00	98.74	0.107	1.045	1.013	0.113	0.113	
2462	11	right	10 mm	802.11b	DSSS	2	Open	0058M	22	1	19.0	18.81	0.20	100.00	98.74	0.073	1.045	1.013	0.077	0.077	
2462	11	back	5 mm	802.11b	DSSS	2	Closed	0058M	22	1	19.0	18.81	-0.05	100.00	98.74	0.056	1.045	1.013	0.059	0.059	
2462	11	front	5 mm	802.11b	DSSS	2	Closed	0058M	22	1	19.0	18.81	-0.04	100.00	98.74	0.269	1.045	1.013	0.285	0.285	
2462	11	bottom	5 mm	802.11b	DSSS	2	Closed	0058M	22	1	19.0	18.81	0.04	100.00	98.74	0.188	1.045	1.013	0.199	0.199	
2462	11	right	5 mm	802.11b	DSSS	2	Closed	0058M	22	1	19.0	18.81	-0.06	100.00	98.74	0.188	1.045	1.013	0.199	0.199	
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 11-69
WLAN MIMO Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
2412	1	back	10 mm	802.11b	DSSS	MIMO	Open	0058M	22	1	19.0	18.91	19.0	19.00	0.09	100.00	98.90	0.342	1.021	1.011	0.353	0.353	
2412	1	front	10 mm	802.11b	DSSS	MIMO	Open	0058M	22	1	19.0	18.91	19.0	19.00	-0.02	100.00	98.90	0.299	1.021	1.011	0.309	0.309	
2412	1	top	10 mm	802.11b	DSSS	MIMO	Open	0058M	22	1	19.0	18.91	19.0	19.00	0.01	100.00	98.90	0.228	1.021	1.011	0.235	0.235	
2412	1	right	10 mm	802.11b	DSSS	MIMO	Open	0058M	22	1	19.0	18.91	19.0	19.00	0.02	100.00	98.90	0.097	1.021	1.011	0.100	0.100	
2412	1	left	10 mm	802.11b	DSSS	MIMO	Open	0058M	22	1	19.0	18.91	19.0	19.00	-0.10	100.00	98.90	0.368	1.021	1.011	0.380	0.380	
2412	1	back	5 mm	802.11b	DSSS	MIMO	Closed	0058M	22	1	19.0	18.91	19.0	19.00	0.07	100.00	98.90	0.199	1.021	1.011	0.205	0.205	
2412	1	front	5 mm	802.11b	DSSS	MIMO	Closed	0058M	22	1	19.0	18.91	19.0	19.00	-0.04	100.00	98.90	0.565	1.021	1.011	0.583	0.583	
2412	1	bottom	5 mm	802.11b	DSSS	MIMO	Closed	0058M	22	1	19.0	18.91	19.0	19.00	-0.10	100.00	98.90	0.547	1.021	1.011	0.565	0.565	
2412	1	right	5 mm	802.11b	DSSS	MIMO	Closed	0058M	22	1	19.0	18.91	19.0	19.00	-0.03	100.00	98.90	0.149	1.021	1.011	0.154	0.154	
2412	1	left	5 mm	802.11b	DSSS	MIMO	Closed	0058M	22	1	19.0	18.91	19.0	19.00	-0.01	100.00	98.90	0.768	1.021	1.011	0.793	0.793	A88
2437	6	left	5 mm	802.11b	DSSS	MIMO	Closed	0058M	22	1	19.0	18.59	19.0	18.83	0.02	100.00	98.90	0.631	1.099	1.011	0.701	0.701	
2462	11	left	5 mm	802.11b	DSSS	MIMO	Closed	0058M	22	1	19.0	18.61	19.0	18.90	-0.05	100.00	98.90	0.561	1.094	1.011	0.620	0.620	
5825	165	back	10 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.95	16.0	15.78	-0.03	100.00	98.11	0.125	1.052	1.019	0.134	0.134	
5825	165	front	10 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.95	16.0	15.78	0.01	100.00	98.11	0.049	1.052	1.019	0.053	0.053	
5825	165	top	10 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.95	16.0	15.78	0.05	100.00	98.11	0.031	1.052	1.019	0.033	0.033	
5825	165	right	10 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.95	16.0	15.78	0.05	100.00	98.11	0.034	1.052	1.019	0.036	0.036	
5825	165	left	10 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.95	16.0	15.78	0.09	100.00	98.11	0.111	1.052	1.019	0.119	0.119	
5825	165	back	5 mm	802.11n	OFDM	MIMO	Closed	0091M	20	13	16.0	15.95	16.0	15.78	0.10	100.00	98.11	0.048	1.052	1.019	0.051	0.051	
5825	165	front	5 mm	802.11n	OFDM	MIMO	Closed	0091M	20	13	16.0	15.95	16.0	15.78	-0.03	100.00	98.11	0.379	1.052	1.019	0.406	0.406	A89
5825	165	bottom	5 mm	802.11n	OFDM	MIMO	Closed	0091M	20	13	16.0	15.95	16.0	15.78	-0.06	100.00	98.11	0.094	1.052	1.019	0.101	0.101	
5825	165	right	5 mm	802.11n	OFDM	MIMO	Closed	0091M	20	13	16.0	15.95	16.0	15.78	0.10	100.00	98.11	0.213	1.052	1.019	0.228	0.228	
5825	165	left	5 mm	802.11n	OFDM	MIMO	Closed	0091M	20	13	16.0	15.95	16.0	15.78	-0.01	100.00	98.11	0.341	1.052	1.019	0.366	0.366	
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: For 2.4 GHz WLAN, to achieve the 22.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 19.0 dBm. For 5 GHz WLAN, to achieve the 19.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 16.0 dBm.

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Table 11-70
DSS Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Reported SAR (1g) with Multi-Tx Factor	Plot #
MHz	Ch.														(W/kg)			(W/kg)	Limit: 1.6 (W/kg)	
2441	39	back	10 mm	Bluetooth	FHSS	1	Open	0234M	1	16.5	16.40	0.11	78.00	76.85	0.029	1.023	1.015	0.030	0.030	
2441	39	front	10 mm	Bluetooth	FHSS	1	Open	0234M	1	16.5	16.40	0.03	78.00	76.85	0.021	1.023	1.015	0.022	0.022	
2441	39	top	10 mm	Bluetooth	FHSS	1	Open	0234M	1	16.5	16.40	-0.02	78.00	76.85	0.021	1.023	1.015	0.022	0.022	
2441	39	left	10 mm	Bluetooth	FHSS	1	Open	0058M	1	16.5	16.40	0.03	78.00	76.85	0.121	1.023	1.015	0.126	0.126	
2440	19	left	10 mm	Bluetooth LE	DSSS	1	Open	0234M	1	17.0	16.42	0.08	86.00	84.71	0.004	1.143	1.015	0.005	0.005	
2441	39	back	5 mm	Bluetooth	FHSS	1	Closed	0234M	1	16.5	16.40	-0.16	78.00	76.85	0.018	1.023	1.015	0.019	0.019	
2441	39	front	5 mm	Bluetooth	FHSS	1	Closed	0234M	1	16.5	16.40	-0.14	78.00	76.85	0.073	1.023	1.015	0.076	0.076	
2441	39	bottom	5 mm	Bluetooth	FHSS	1	Closed	0234M	1	16.5	16.40	-0.04	78.00	76.85	0.049	1.023	1.015	0.051	0.051	
2441	39	left	5 mm	Bluetooth	FHSS	1	Closed	0058M	1	16.5	16.40	0.09	78.00	76.85	0.311	1.023	1.015	0.323	0.323	A90
2440	19	left	5 mm	Bluetooth LE	DSSS	1	Closed	0234M	1	17.0	16.42	0.11	86.00	84.71	0.009	1.143	1.015	0.010	0.010	
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: 1) Light green entries indicate an additional check on the worst case exposure condition for BT LE that is not fully evaluated.

11.4 Standalone Phablet SAR Data

Table 11-71
UMTS Phablet SAR Data

MEASUREMENT RESULTS																		
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
MHz	Ch.												(W/kg)		(W/kg)	Limit: 4.0 (W/kg)	
1712.40	1312	back	0 mm	UMTS 1750	RMC	A	Open	0011M	22.0	20.63	0.03	1:1	1.450	1.371	1.988	1.988	A91
1732.40	1412	back	0 mm	UMTS 1750	RMC	A	Open	0011M	22.0	20.19	0.00	1:1	1.340	1.517	2.033	2.033	
1752.60	1513	back	0 mm	UMTS 1750	RMC	A	Open	0011M	22.0	20.49	0.01	1:1	1.430	1.416	2.025	2.025	
1712.40	1312	bottom	0 mm	UMTS 1750	RMC	A	Open	0011M	22.0	20.63	0.04	1:1	0.900	1.371	1.234	1.234	
1852.40	9262	back	0 mm	UMTS 1900	RMC	A	Open	0034M	22.0	20.64	-0.01	1:1	1.120	1.368	1.532	1.532	
1880.00	9400	back	0 mm	UMTS 1900	RMC	A	Open	0034M	22.0	20.66	0.05	1:1	1.190	1.361	1.620	1.620	
1907.60	9538	back	0 mm	UMTS 1900	RMC	A	Open	0034M	22.0	20.88	0.00	1:1	1.330	1.294	1.721	1.721	A92
1907.60	9538	front	0 mm	UMTS 1900	RMC	A	Open	0034M	22.0	20.88	-0.01	1:1	1.160	1.294	1.501	1.501	
1907.60	9538	bottom	0 mm	UMTS 1900	RMC	A	Open	0034M	22.0	20.88	0.01	1:1	0.537	1.294	0.695	0.695	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Phablet 4.0 W/kg (mW/g) averaged over 10 grams							

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Table 11-72
LTE Band 66 (AWS) Phablet SAR

MEASUREMENT RESULTS																								
# CC Uplink	Component Carrier	FREQUENCY		Side	Spacing	Mode	Antenna Config.	Form Factor	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	Limit: 4.0 (W/kg)	
1 CC Uplink	N/A	1720.00	132072	Low	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	22.8	21.43	0	-0.01	1:1	1.650	1.371	2.262	2.262	
1 CC Uplink	N/A	1720.00	132072	Low	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	99	22.8	21.33	0	0.06	1:1	1.680	1.403	2.357	2.357	
1 CC Uplink	N/A	1745.00	132322	Mid	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	22.8	21.15	0	0.01	1:1	1.470	1.462	2.149	2.149	
1 CC Uplink	N/A	1770.00	132572	High	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	50	22.8	21.14	0	0.06	1:1	1.530	1.466	2.243	2.243	
1 CC Uplink	N/A	1720.00	132072	Low	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	0	22.8	21.51	0	0.00	1:1	1.650	1.346	2.221	2.221	
1 CC Uplink	N/A	1745.00	132322	Mid	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	0	22.8	21.14	0	0.03	1:1	1.500	1.466	2.199	2.199	
1 CC Uplink	N/A	1770.00	132572	High	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	25	22.8	21.26	0	0.00	1:1	1.570	1.426	2.239	2.239	
1 CC Uplink	N/A	1720.00	132072	Low	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	100	0	22.8	21.39	0	0.05	1:1	1.480	1.384	2.048	2.048	
1 CC Uplink	N/A	1715.00	132022	Low	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	10	QPSK	1	49	22.8	21.57	0	0.06	1:1	1.790	1.327	2.375	2.375	
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	99	22.8	21.10	0	0.00	1:1	1.660	1.479	2.455	2.455	
	SCC	1739.80	132270											0										
2 CC Uplink CA_66B	PCC	1715.00	132022	Low	back	0 mm	LTE Band 66 (AWS)	A	Open	0250M	10	QPSK	1	49	22.8	21.22	0	0.00	1:1	1.710	1.439	2.461	2.461	
	SCC	1724.90	132121											0										
1 CC Uplink	N/A	1720.00	132072	Low	bottom	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	1	0	22.8	21.43	0	0.02	1:1	1.270	1.371	1.741	1.741	
1 CC Uplink	N/A	1720.00	132072	Low	bottom	0 mm	LTE Band 66 (AWS)	A	Open	0250M	20	QPSK	50	0	22.8	21.51	0	0.01	1:1	1.290	1.346	1.736	1.736	
1 CC Uplink	N/A	1770.00	132572	High	back	0 mm	LTE Band 66 (AWS)	I	Open	1515M	20	QPSK	1	0	22.0	20.57	0	0.07	1:1	1.360	1.390	1.890	1.890	
1 CC Uplink	N/A	1770.00	132572	High	back	0 mm	LTE Band 66 (AWS)	I	Open	1515M	20	QPSK	50	0	22.0	20.74	0	0.02	1:1	1.410	1.337	1.885	1.885	
1 CC Uplink	N/A	1720.00	132072	Low	right	0 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	1	0	22.0	20.56	0	-0.08	1:1	1.940	1.393	2.702	2.702	
1 CC Uplink	N/A	1745.00	132322	Mid	right	0 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	1	99	22.0	20.26	0	0.03	1:1	1.820	1.493	2.717	2.717	
1 CC Uplink	N/A	1770.00	132572	High	right	0 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	1	0	22.0	20.57	0	0.00	1:1	1.900	1.390	2.641	2.641	
1 CC Uplink	N/A	1720.00	132072	Low	right	0 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	50	0	22.0	20.70	0	0.15	1:1	1.920	1.349	2.590	2.590	
1 CC Uplink	N/A	1745.00	132322	Mid	right	0 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	50	25	22.0	20.52	0	-0.04	1:1	1.830	1.406	2.573	2.573	
1 CC Uplink	N/A	1770.00	132572	High	right	0 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	50	0	22.0	20.74	0	0.01	1:1	1.950	1.337	2.607	2.607	A93
1 CC Uplink	N/A	1770.00	132572	High	right	0 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	100	0	22.0	20.55	0	0.03	1:1	1.910	1.396	2.666	2.666	
1 CC Uplink	N/A	1745.00	132322	Mid	right	0 mm	LTE Band 66 (AWS)	I	Open	0250M	10	QPSK	1	49	22.0	20.40	0	0.01	1:1	1.890	1.445	2.731	2.731	
2 CC Uplink CA_66C	PCC	1745.00	132322	Mid	right	0 mm	LTE Band 66 (AWS)	I	Open	0250M	20	QPSK	1	99	22.0	20.38	0	-0.03	1:1	1.850	1.452	2.686	2.686	
	SCC	1764.80	132520											0										
2 CC Uplink CA_66B	PCC	1745.00	132322	Mid	right	0 mm	LTE Band 66 (AWS)	I	Open	0250M	10	QPSK	1	49	22.0	20.38	0	0.00	1:1	1.840	1.452	2.672	2.672	
	SCC	1754.90	132421											0										

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Phablet
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 grams

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Table 11-73
LTE Band 25 (PCS) Phablet SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 4.0 (W/kg)	
1905.00	26590	High	back	0 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	23.3	22.50	0	0.03	1:1	1.660	1.202	1.995	1.995	
1860.00	26140	Low	back	0 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	50	23.3	22.02	0	0.03	1:1	1.600	1.343	2.149	2.149	
1882.50	26365	Mid	back	0 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	25	23.3	22.10	0	0.03	1:1	1.670	1.318	2.201	2.201	
1905.00	26590	High	back	0 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	50	23.3	22.23	0	0.03	1:1	1.690	1.279	2.162	2.162	
1905.00	26590	High	back	0 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	100	0	23.3	22.17	0	0.03	1:1	1.760	1.297	2.283	2.283	
1905.00	26590	High	front	0 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	23.3	22.50	0	0.04	1:1	1.500	1.202	1.803	1.803	
1905.00	26590	High	front	0 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	50	23.3	22.23	0	-0.03	1:1	1.530	1.279	1.957	1.957	
1905.00	26590	High	bottom	0 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	1	99	23.3	22.50	0	-0.02	1:1	0.827	1.202	0.994	0.994	
1905.00	26590	High	bottom	0 mm	LTE Band 25 (PCS)	A	Open	0034M	20	QPSK	50	50	23.3	22.23	0	0.00	1:1	0.854	1.279	1.092	1.092	
1860.00	26140	Low	back	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	22.0	20.36	0	0.01	1:1	1.570	1.459	2.291	2.291	
1882.50	26365	Mid	back	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	22.0	20.23	0	0.02	1:1	1.620	1.503	2.435	2.435	
1905.00	26590	High	back	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	22.0	20.72	0	0.00	1:1	1.740	1.343	2.337	2.337	
1860.00	26140	Low	back	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	22.0	20.38	0	0.00	1:1	1.610	1.452	2.338	2.338	
1882.50	26365	Mid	back	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	25	22.0	20.29	0	0.00	1:1	1.650	1.483	2.447	2.447	
1905.00	26590	High	back	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	22.0	20.64	0	0.00	1:1	1.750	1.368	2.394	2.394	
1905.00	26590	High	back	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	100	0	22.0	20.63	0	0.02	1:1	1.820	1.371	2.495	2.495	A94
1860.00	26140	Low	front	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	22.0	20.36	0	0.00	1:1	1.520	1.459	2.218	2.218	
1882.50	26365	Mid	front	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	22.0	20.23	0	0.00	1:1	1.530	1.503	2.300	2.300	
1905.00	26590	High	front	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	22.0	20.72	0	0.04	1:1	1.640	1.343	2.203	2.203	
1860.00	26140	Low	front	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	22.0	20.38	0	0.01	1:1	1.580	1.452	2.294	2.294	
1882.50	26365	Mid	front	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	25	22.0	20.29	0	-0.05	1:1	1.580	1.483	2.343	2.343	
1905.00	26590	High	front	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	22.0	20.64	0	-0.02	1:1	1.660	1.368	2.271	2.271	
1905.00	26590	High	front	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	100	0	22.0	20.63	0	-0.01	1:1	1.660	1.371	2.276	2.276	
1860.00	26140	Low	right	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	22.0	20.36	0	0.01	1:1	1.640	1.459	2.393	2.393	
1882.50	26365	Mid	right	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	22.0	20.23	0	0.02	1:1	1.540	1.503	2.315	2.315	
1905.00	26590	High	right	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	1	99	22.0	20.72	0	-0.11	1:1	1.640	1.343	2.203	2.203	
1860.00	26140	Low	right	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	22.0	20.38	0	0.00	1:1	1.700	1.452	2.468	2.468	
1882.50	26365	Mid	right	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	25	22.0	20.29	0	-0.03	1:1	1.630	1.483	2.417	2.417	
1905.00	26590	High	right	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	50	50	22.0	20.64	0	-0.01	1:1	1.640	1.368	2.244	2.244	
1905.00	26590	High	right	0 mm	LTE Band 25 (PCS)	I	Open	0039M	20	QPSK	100	0	22.0	20.63	0	0.06	1:1	1.690	1.371	2.317	2.317	
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 11-74
LTE Band 30 Phablet SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 4.0 (W/kg)	
2310.00	27710	Mid	back	0 mm	LTE Band 30	I	Open	0242M	10	QPSK	1	49	21.5	20.16	0	-0.05	1:1	1.320	1.361	1.797	1.797	
2310.00	27710	Mid	back	0 mm	LTE Band 30	I	Open	0242M	10	QPSK	25	25	21.5	20.13	0	0.02	1:1	1.310	1.371	1.796	1.796	
2310.00	27710	Mid	front	0 mm	LTE Band 30	I	Open	0242M	10	QPSK	1	49	21.5	20.16	0	-0.01	1:1	1.840	1.361	2.504	2.504	
2310.00	27710	Mid	front	0 mm	LTE Band 30	I	Open	0242M	10	QPSK	25	25	21.5	20.13	0	-0.01	1:1	1.830	1.371	2.509	2.509	
2310.00	27710	Mid	front	0 mm	LTE Band 30	I	Open	0242M	10	QPSK	50	0	21.5	20.00	0	-0.01	1:1	1.840	1.413	2.600	2.600	A95
2310.00	27710	Mid	right	0 mm	LTE Band 30	I	Open	0242M	10	QPSK	1	49	21.5	20.16	0	0.03	1:1	1.670	1.361	2.273	2.273	
2310.00	27710	Mid	right	0 mm	LTE Band 30	I	Open	0242M	10	QPSK	25	25	21.5	20.13	0	0.03	1:1	1.640	1.371	2.248	2.248	
2310.00	27710	Mid	right	0 mm	LTE Band 30	I	Open	0242M	10	QPSK	50	0	21.5	20.00	0	-0.03	1:1	1.630	1.413	2.303	2.303	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Phablet 4.0 W/kg (mW/g) averaged over 10 grams				

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Table 11-75
LTE Band 7 Phablet SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	Limit: 4.0 (W/kg)	
2510.00	20850	Low	bottom	0 mm	LTE Band 7	B	Open	0011M	20	QPSK	1	50	22.3	21.11	0	-0.05	1:1	0.850	1.315	1.118	1.118	A96
2510.00	20850	Low	bottom	0 mm	LTE Band 7	B	Open	0011M	20	QPSK	50	25	22.3	21.04	0	-0.01	1:1	0.848	1.337	1.134	1.134	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Phablet
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 grams

Table 11-76
LTE Band 41 Phablet SAR

MEASUREMENT RESULTS																									
# CC Uplink, Power Class	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
		MHz	Ch.																	(W/kg)		(W/kg)	Limit: 4.0 (W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	50	23.5	22.34	0	-0.12	1:1.58	1.450	1.306	1.894	1.894	A97
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	99	23.5	22.28	0	0.02	1:1.58	1.380	1.324	1.827	1.827	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	0	23.5	22.33	0	0.03	1:1.58	1.390	1.309	1.820	1.820	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	99	23.5	22.41	0	0.07	1:1.58	1.370	1.285	1.760	1.760	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	50	23.5	22.39	0	0.01	1:1.58	1.290	1.291	1.665	1.665	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	99	23.5	22.25	0	0.04	1:1.58	1.090	1.334	1.454	1.454	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	25	23.5	22.42	0	-0.02	1:1.58	1.380	1.282	1.769	1.769	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	25	23.5	22.32	0	0.03	1:1.58	1.400	1.312	1.837	1.837	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	50	23.5	22.46	0	-0.03	1:1.58	1.360	1.271	1.729	1.729	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	25	23.5	22.42	0	0.04	1:1.58	1.330	1.282	1.705	1.705	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	50	25	23.5	22.32	0	0.00	1:1.58	1.190	1.312	1.561	1.561	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	100	0	23.5	22.40	0	0.00	1:1.58	1.390	1.288	1.790	1.790	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	50	25.1	24.02	0	0.05	1:2.31	1.390	1.282	1.782	1.782	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	99	25.1	23.94	0	0.02	1:2.31	1.350	1.306	1.763	1.763	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	99	23.5	22.18	0	-0.03	1:1.58	1.410	1.355	1.911	1.911	
	SCC	2525.80	39948											0										
2 CC Uplink - Power Class 2	PCC	2506.00	39750	Low	right	0 mm	LTE Band 41	I	Open	0221M	20	QPSK	1	99	25.1	23.90	0	0.02	1:2.31	1.400	1.318	1.845	1.845	
	SCC	2525.80	39948											0										

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Phablet
Spatial Peak	4.0 W/kg (mW/g)
Uncontrolled Exposure/General Population	averaged over 10 grams

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Table 11-77
LTE Band 48 Phablet SAR

MEASUREMENT RESULTS																								
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Form Factor	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
		MHz	Ch.																	(W/kg)		(W/kg)	Limit: 4.0 (W/kg)	
1 CC Uplink	N/A	3560.00	55340	Low	back	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	50	21.5	20.02	0	-0.09	1:1.58	1.390	1.406	1.954	1.954	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	back	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	50	21.5	19.77	0	0.01	1:1.58	1.330	1.489	1.980	1.980	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	50	21.5	20.04	0	-0.03	1:1.58	1.190	1.400	1.666	1.666	
1 CC Uplink	N/A	3690.00	56640	High	back	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	50	21.5	19.91	0	-0.12	1:1.58	1.390	1.442	2.004	2.004	
1 CC Uplink	N/A	3560.00	55340	Low	back	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	25	21.5	20.02	0	-0.08	1:1.58	1.330	1.406	1.870	1.870	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	back	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	25	21.5	19.89	0	-0.01	1:1.58	1.320	1.449	1.913	1.913	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	25	21.5	20.06	0	-0.06	1:1.58	1.210	1.393	1.686	1.686	
1 CC Uplink	N/A	3690.00	56640	High	back	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	0	21.5	19.96	0	0.02	1:1.58	1.410	1.426	2.011	2.011	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	100	0	21.5	20.03	0	-0.05	1:1.58	1.180	1.403	1.656	1.656	
1 CC Uplink	N/A	3560.00	55340	Low	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	50	21.5	20.02	0	0.06	1:1.58	2.050	1.406	2.882	2.882	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	50	21.5	19.77	0	-0.02	1:1.58	1.850	1.489	2.755	2.755	
1 CC Uplink	N/A	3646.70	56207	Mid-High	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	50	21.5	20.04	0	-0.11	1:1.58	1.680	1.400	2.352	2.352	
1 CC Uplink	N/A	3690.00	56640	High	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	1	50	21.5	19.91	0	-0.05	1:1.58	1.720	1.442	2.480	2.480	
1 CC Uplink	N/A	3560.00	55340	Low	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	25	21.5	20.02	0	0.07	1:1.58	2.080	1.406	2.924	2.924	
1 CC Uplink	N/A	3560.00	55340	Low	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	50	21.5	19.99	0	-0.01	1:1.58	2.100	1.416	2.974	2.974	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	25	21.5	19.89	0	-0.01	1:1.58	1.920	1.449	2.782	2.782	
1 CC Uplink	N/A	3646.70	56207	Mid-High	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	25	21.5	20.06	0	-0.15	1:1.58	1.690	1.393	2.354	2.354	
1 CC Uplink	N/A	3690.00	56640	High	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	0	21.5	19.96	0	-0.03	1:1.58	1.760	1.426	2.510	2.510	
1 CC Uplink	N/A	3646.70	56207	Mid-High	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	100	0	21.5	20.03	0	-0.02	1:1.58	1.800	1.403	2.525	2.525	
2 CC Uplink	PCC	3560.00	55340	Low	left	0 mm	LTE Band 48	F	Open	0209M	20	QPSK	50	50	21.5	20.06	0	-0.05	1:1.58	2.140	1.393	2.981	2.981	A98
	SCC	3579.80	55538											0										

ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population	Phablet 4.0 W/kg (mW/g) averaged over 10 grams

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Table 11-78
NR Band n66 Phablet SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g) (W/kg)	Scaling Factor	Reported SAR (10g) (W/kg)	Reported SAR (10g) with Multi-Tx Factor Limit: 4.0 (W/kg)	Plot #
MHz	Ch.																						
1745.00	349000	Mid	back	0 mm	NR Band n66	A	Open	0168G	40	DFT-S-OFDM	QPSK	1	1	21.5	19.78	0	0.01	1:1	1.420	1.486	2.110	2.110	
1745.00	349000	Mid	back	0 mm	NR Band n66	A	Open	0168G	40	DFT-S-OFDM	QPSK	108	108	21.5	19.90	0	0.00	1:1	1.430	1.445	2.066	2.066	
1745.00	349000	Mid	back	0 mm	NR Band n66	A	Open	0163G	40	DFT-S-OFDM	QPSK	216	0	21.5	19.77	0	0.00	1:1	1.320	1.489	1.965	1.965	
1745.00	349000	Mid	back	0 mm	NR Band n66	A	Open	0168G	40	CP-OFDM	QPSK	1	1	21.5	19.85	0	0.02	1:1	1.460	1.462	2.135	2.135	
1745.00	349000	Mid	bottom	0 mm	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	1	21.5	19.78	0	0.05	1:1	1.160	1.486	1.724	1.724	
1745.00	349000	Mid	bottom	0 mm	NR Band n66	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	108	21.5	19.90	0	0.01	1:1	1.100	1.445	1.590	1.590	
1745.00	349000	Mid	right	0 mm	NR Band n66	I	Open	0153G	40	DFT-S-OFDM	QPSK	1	1	22.0	21.55	0	-0.02	1:1	2.420	1.109	2.684	2.684	
1745.00	349000	Mid	right	0 mm	NR Band n66	I	Open	0153G	40	DFT-S-OFDM	QPSK	108	54	22.0	21.49	0	-0.01	1:1	2.440	1.125	2.745	2.745	
1745.00	349000	Mid	right	0 mm	NR Band n66	I	Open	0168G	40	DFT-S-OFDM	QPSK	216	0	22.0	21.47	0	-0.02	1:1	2.490	1.130	2.814	2.814	
1745.00	349000	Mid	right	0 mm	NR Band n66	I	Open	0168G	40	CP-OFDM	QPSK	1	1	22.0	21.52	0	-0.01	1:1	2.550	1.117	**2.848**	2.848	A99
1745.00	349000	Mid	right	0 mm	NR Band n66	I	Open	0153G	40	CP-OFDM	QPSK	1	1	22.0	21.52	0	-0.02	1:1	2.250	1.117	2.513	2.513	
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.

Table 11-79
NR Band n25 Phablet SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g) (W/kg)	Scaling Factor	Reported SAR (10g) (W/kg)	Reported SAR (10g) with Multi-Tx Factor Limit: 4.0 (W/kg)	Plot #
MHz	Ch.																						
1882.50	376500	Mid	back	0 mm	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	1	214	23.0	21.88	0	0.11	1:1	1.560	1.294	2.019	2.019	
1882.50	376500	Mid	back	0 mm	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	108	108	23.0	21.98	0	0.03	1:1	1.560	1.265	1.973	1.973	
1882.50	376500	Mid	back	0 mm	NR Band n25	A	Open	0100M	40	DFT-S-OFDM	QPSK	216	0	23.0	21.85	0	0.00	1:1	1.540	1.303	2.007	2.007	
1882.50	376500	Mid	back	0 mm	NR Band n25	A	Open	0100M	40	CP-OFDM	QPSK	1	1	23.0	21.84	0	-0.01	1:1	1.510	1.306	1.972	1.972	
1882.50	376500	Mid	bottom	0 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	1	214	23.0	21.88	0	-0.03	1:1	1.210	1.294	1.566	1.566	
1882.50	376500	Mid	bottom	0 mm	NR Band n25	A	Open	0248M	40	DFT-S-OFDM	QPSK	108	108	23.0	21.98	0	0.04	1:1	1.240	1.265	1.569	1.569	
1882.50	376500	Mid	back	0 mm	NR Band n25	I	Open	0036M	40	DFT-S-OFDM	QPSK	1	214	22.0	21.08	0	0.05	1:1	1.600	1.236	1.978	1.978	
1882.50	376500	Mid	back	0 mm	NR Band n25	I	Open	0036M	40	DFT-S-OFDM	QPSK	108	108	22.0	21.01	0	0.04	1:1	1.590	1.256	1.997	1.997	
1882.50	376500	Mid	front	0 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	1	214	22.0	21.08	0	-0.01	1:1	1.630	1.236	2.015	2.015	
1882.50	376500	Mid	front	0 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	108	108	22.0	21.01	0	-0.02	1:1	1.620	1.256	2.035	2.035	
1882.50	376500	Mid	front	0 mm	NR Band n25	I	Open	0015M	40	DFT-S-OFDM	QPSK	216	0	22.0	20.94	0	-0.01	1:1	1.620	1.276	2.067	2.067	
1882.50	376500	Mid	right	0 mm	NR Band n25	I	Open	0036M	40	DFT-S-OFDM	QPSK	1	214	22.0	21.08	0	0.02	1:1	1.860	1.236	2.299	2.299	
1882.50	376500	Mid	right	0 mm	NR Band n25	I	Open	0036M	40	DFT-S-OFDM	QPSK	108	108	22.0	21.01	0	0.02	1:1	1.940	1.256	2.437	2.437	
1882.50	376500	Mid	right	0 mm	NR Band n25	I	Open	0036M	40	DFT-S-OFDM	QPSK	216	0	22.0	20.94	0	0.02	1:1	2.030	1.276	2.590	2.590	
1882.50	376500	Mid	right	0 mm	NR Band n25	I	Open	0163G	40	CP-OFDM	QPSK	1	1	22.0	21.12	0	0.00	1:1	2.120	1.225	2.597	2.597	A100
1882.50	376500	Mid	right	0 mm	NR Band n25	I	Open	0015M	40	CP-OFDM	QPSK	1	1	22.0	21.12	0	0.05	1:1	2.110	1.225	2.585	2.585	
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.

Table 11-80
NR Band n30 Phablet SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g) (W/kg)	Scaling Factor	Reported SAR (10g) (W/kg)	Reported SAR (10g) with Multi-Tx Factor Limit: 4.0 (W/kg)	Plot #
MHz	Ch.																						
2310.00	462000	Mid	back	0 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	1	50	21.5	20.85	0	-0.16	1:1	1.460	1.161	1.695	1.695	
2310.00	462000	Mid	back	0 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	25	14	21.5	20.83	0	-0.04	1:1	1.700	1.167	1.984	1.984	
2310.00	462000	Mid	front	0 mm	NR Band n30	I	Open	0163G	10	DFT-S-OFDM	QPSK	1	50	21.5	20.85	0	-0.08	1:1	1.720	1.161	1.997	1.997	
2310.00	462000	Mid	front	0 mm	NR Band n30	I	Open	0163G	10	DFT-S-OFDM	QPSK	25	14	21.5	20.83	0	-0.06	1:1	1.740	1.167	2.031	2.031	A101
2310.00	462000	Mid	front	0 mm	NR Band n30	I	Open	0163G	10	DFT-S-OFDM	QPSK	50	0	21.5	20.82	0	-0.04	1:1	1.710	1.169	1.999	1.999	
2310.00	462000	Mid	front	0 mm	NR Band n30	I	Open	0163G	10	CP-OFDM	QPSK	1	1	21.5	20.96	0	0.01	1:1	1.690	1.132	1.913	1.913	
2310.00	462000	Mid	right	0 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	1	50	21.5	20.85	0	0.04	1:1	1.570	1.161	1.823	1.823	
2310.00	462000	Mid	right	0 mm	NR Band n30	I	Open	0030M	10	DFT-S-OFDM	QPSK	25	14	21.5	20.83	0	-0.04	1:1	1.640	1.167	1.914	1.914	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**										**Phablet** **4.0 W/kg (mW/g)** averaged over 10 grams													

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Table 11-81
NR Band n41 Phablet SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 4.0 (W/kg)	
2592.99	518598	Mid	back	0 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	21.5	20.17	0	0.01	1:1	1.110	1.358	1.507	1.507	
2592.99	518598	Mid	back	0 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	69	21.5	20.13	0	0.00	1:1	1.130	1.371	1.549	1.549	
2592.99	518598	Mid	back	0 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	270	0	21.5	20.05	0	-0.04	1:1	1.100	1.396	1.536	1.536	
2592.99	518598	Mid	front	0 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	21.5	20.17	0	0.02	1:1	1.510	1.358	2.051	2.051	
2592.99	518598	Mid	front	0 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	69	21.5	20.13	0	0.02	1:1	1.530	1.371	2.098	2.098	A102
2592.99	518598	Mid	front	0 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	270	0	21.5	20.05	0	0.02	1:1	1.490	1.396	2.080	2.080	
2592.99	518598	Mid	front	0 mm	NR Band n41	I	Open	0023M	100	CP-OFDM	QPSK	1	1	21.5	19.97	0	0.04	1:1	1.480	1.422	2.105	2.105	
2592.99	518598	Mid	right	0 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	1	137	21.5	20.17	0	0.05	1:1	1.280	1.358	1.738	1.738	
2592.99	518598	Mid	right	0 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	135	69	21.5	20.13	0	0.07	1:1	1.300	1.371	1.782	1.782	
2592.99	518598	Mid	right	0 mm	NR Band n41	I	Open	0023M	100	DFT-S-OFDM	QPSK	270	0	21.5	20.05	0	-0.02	1:1	1.310	1.396	1.829	1.829	
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 11-82
NR Band n48 Phablet SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 4.0 (W/kg)	
3570.00	638000	Low	back	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	104	19.0	17.98	0	0.08	1:1	1.870	1.265	2.366	2.366	
3624.99	641666	Mid	back	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	1	19.0	17.51	0	-0.01	1:1	1.820	1.409	2.564	2.564	
3679.98	645332	High	back	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	104	19.0	17.75	0	0.04	1:1	1.450	1.334	1.934	1.934	
3570.00	638000	Low	back	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	19.0	17.86	0	0.05	1:1	1.850	1.300	2.405	2.405	
3624.99	641666	Mid	back	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	19.0	17.38	0	0.01	1:1	1.770	1.452	2.570	2.570	
3679.98	645332	High	back	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	56	19.0	17.80	0	0.02	1:1	1.430	1.318	1.885	1.885	
3570.00	638000	Low	back	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	100	0	19.0	17.85	0	0.01	1:1	1.920	1.303	2.502	2.502	
3570.00	638000	Low	front	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	104	19.0	17.98	0	0.02	1:1	1.580	1.265	1.999	1.999	
3624.99	641666	Mid	front	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	1	19.0	17.51	0	-0.02	1:1	1.350	1.409	1.902	1.902	
3679.98	645332	High	front	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	104	19.0	17.75	0	-0.01	1:1	0.945	1.334	1.261	1.261	
3570.00	638000	Low	front	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	19.0	17.86	0	0.04	1:1	1.610	1.300	2.093	2.093	
3624.99	641666	Mid	front	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	19.0	17.38	0	0.03	1:1	1.310	1.452	1.902	1.902	
3679.98	645332	High	front	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	56	19.0	17.80	0	-0.07	1:1	0.968	1.318	1.276	1.276	
3570.00	638000	Low	front	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	100	0	19.0	17.85	0	0.03	1:1	1.580	1.303	2.059	2.059	
3570.00	638000	Low	top	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	104	19.0	17.98	0	0.00	1:1	0.780	1.265	0.987	0.987	
3570.00	638000	Low	top	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	19.0	17.86	0	0.03	1:1	0.984	1.300	1.279	1.279	
3570.00	638000	Low	left	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	104	19.0	17.98	0	-0.02	1:1	2.360	1.265	2.985	2.985	A103
3624.99	641666	Mid	left	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	1	19.0	17.51	0	0.06	1:1	2.120	1.409	2.987	2.987	
3679.98	645332	High	left	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	104	19.0	17.75	0	0.02	1:1	1.780	1.334	2.375	2.375	
3570.00	638000	Low	left	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	19.0	17.86	0	-0.01	1:1	2.290	1.300	2.977	2.977	
3624.99	641666	Mid	left	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	0	19.0	17.38	0	-0.01	1:1	2.050	1.452	2.977	2.977	
3679.98	645332	High	left	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	50	56	19.0	17.80	0	-0.01	1:1	1.780	1.318	2.346	2.346	
3570.00	638000	Low	left	0 mm	NR Band n48	F	Open	0154G	40	DFT-S-OFDM	QPSK	100	0	19.0	17.85	0	0.01	1:1	2.340	1.303	**3.049**	3.049	
3570.00	638000	Low	left	0 mm	NR Band n48	F	Open	0020M	40	CP-OFDM	QPSK	1	1	19.0	17.71	0	0.04	1:1	2.240	1.346	3.015	3.015	
3570.00	638000	Low	right	0 mm	NR Band n48	I	Open	0023M	40	CW/SRS	N/A	N/A	N/A	13.0	11.95	N/A	0.20	1:1	1.170	1.274	1.491	1.491	
3570.00	638000	Low	left	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	104	19.0	17.98	0	-0.01	1:1	2.270	1.265	2.872	2.872	
3624.99	641666	Mid	left	0 mm	NR Band n48	F	Open	0020M	40	DFT-S-OFDM	QPSK	1	1	19.0	17.51	0	0.02	1:1	1.950	1.409	2.748	2.748	
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.

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Table 11-83
NR Band n77 Phablet SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Form Factor	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	Limit: 4.0 (W/kg)	
3750.00	650000	Low	back	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	17.5	17.13	0	-0.04	1:1	0.783	1.089	0.853	0.853	
3750.00	650000	Low	back	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	135	138	17.5	16.91	0	-0.03	1:1	0.818	1.146	0.937	0.937	
3750.00	650000	Low	front	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	17.5	17.13	0	-0.01	1:1	0.554	1.089	0.603	0.603	
3750.00	650000	Low	front	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	135	138	17.5	16.91	0	-0.06	1:1	0.553	1.146	0.634	0.634	
3750.00	650000	Low	top	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	17.5	17.13	0	-0.05	1:1	0.377	1.089	0.411	0.411	
3750.00	650000	Low	top	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	135	138	17.5	16.91	0	0.00	1:1	0.379	1.146	0.434	0.434	
3750.00	650000	Low	left	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	17.5	17.13	0	0.01	1:1	1.510	1.089	1.644	1.644	
3930.00	662000	High	left	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	17.5	16.19	0	0.13	1:1	1.170	1.352	1.582	1.582	
3750.00	650000	Low	left	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	135	138	17.5	16.91	0	0.00	1:1	1.350	1.146	1.547	1.547	
3930.00	662000	High	left	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	135	138	17.5	16.25	0	-0.13	1:1	1.210	1.334	1.614	1.614	
3750.00	650000	Low	left	0 mm	NR Band n77	F	Open	0020M	100	DFT-S-OFDM	QPSK	270	0	17.5	16.72	0	-0.04	1:1	1.150	1.197	1.377	1.377	
3750.00	650000	Low	left	0 mm	NR Band n77	F	Open	0020M	100	CP-OFDM	QPSK	1	1	17.5	16.22	0	-0.16	1:1	1.310	1.343	1.759	1.759	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD	F	Open	0020M	100	DFT-S-OFDM	QPSK	1	271	17.5	16.23	0	-0.01	1:1	1.600	1.340	2.144	2.144	A104
3750.00	650000	Low	right	0 mm	NR Band n77	I	Open	0020M	100	CW/SRS	N/A	N/A	N/A	15.5	15.19	N/A	-0.01	1:1	0.386	1.074	0.415	0.415	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD	I	Open	0023M	100	CW/SRS	N/A	N/A	N/A	15.5	14.08	N/A	0.02	1:1	0.709	1.387	0.983	0.983	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD	E	Open	0023M	100	CW/SRS	N/A	N/A	N/A	15.5	14.81	N/A	0.02	1:1	0.568	1.172	0.666	0.666	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Phablet 4 W/kg (mW/g) averaged over 10 grams								

Table 11-84
WLAN MIMO Phablet SAR

MEASUREMENT RESULTS																							
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
MHz	Ch.																	(W/kg)			(W/kg)	Limit: 4.0 (W/kg)	
5260	52	back	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.73	16.0	15.97	-0.01	100.00	98.11	0.539	1.064	1.019	0.584	0.584	
5260	52	front	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.73	16.0	15.97	0.05	100.00	98.11	0.356	1.064	1.019	0.386	0.386	
5260	52	top	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.73	16.0	15.97	-0.10	100.00	98.11	0.472	1.064	1.019	0.512	0.512	
5260	52	right	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.73	16.0	15.97	0.07	100.00	98.11	0.225	1.064	1.019	0.244	0.244	
5260	52	left	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.73	16.0	15.97	-0.06	100.00	98.11	0.859	1.064	1.019	**0.931**	0.931	A105
5600	120	back	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.96	16.0	15.94	0.00	100.00	98.11	0.387	1.014	1.019	0.400	0.400	
5600	120	front	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.96	16.0	15.94	0.00	100.00	98.11	0.287	1.014	1.019	0.297	0.297	
5600	120	top	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.96	16.0	15.94	0.00	100.00	98.11	0.200	1.014	1.019	0.207	0.207	
5600	120	right	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.96	16.0	15.94	-0.04	100.00	98.11	0.128	1.014	1.019	0.132	0.132	
5600	120	left	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.96	16.0	15.94	0.10	100.00	98.11	0.596	1.014	1.019	0.616	0.616	
5845	169	back	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.87	16.0	15.63	0.02	100.00	98.11	0.243	1.089	1.019	0.270	0.270	
5845	169	front	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.87	16.0	15.63	-0.02	100.00	98.11	0.214	1.089	1.019	0.237	0.237	
5845	169	top	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.87	16.0	15.63	-0.13	100.00	98.11	0.079	1.089	1.019	0.088	0.088	
5845	169	right	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.87	16.0	15.63	-0.11	100.00	98.11	0.096	1.089	1.019	0.107	0.107	
5845	169	left	0 mm	802.11n	OFDM	MIMO	Open	0091M	20	13	16.0	15.87	16.0	15.63	0.03	100.00	98.11	0.598	1.089	1.019	0.664	0.664	
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 19.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 16.0 dBm.

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Table 11-85
DSS Phablet SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Form Factor	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift	Maximum Duty Cycle (%)	Duty Cycle (%)	SAR (10g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Reported SAR (10g) with Multi-Tx Factor	Plot #
MHz	Ch.														(W/kg)			(W/kg)	Limit: 4.0 (W/kg)	
2441	39	back	0 mm	Bluetooth	FHSS	2	Open	0058M	1	17.0	16.74	-0.04	78.00	76.90	0.514	1.062	1.014	0.554	0.554	
2441	39	front	0 mm	Bluetooth	FHSS	2	Open	0058M	1	17.0	16.74	0.01	78.00	76.90	0.744	1.062	1.014	0.801	**0.801**	A106
2402	0	front	0 mm	Bluetooth LE	DSSS	2	Open	0058M	1	18.5	18.29	-0.12	87.00	85.05	0.046	1.050	1.023	0.049	0.049	
2441	39	top	0 mm	Bluetooth	FHSS	2	Open	0058M	1	17.0	16.74	0.02	78.00	76.90	0.639	1.062	1.014	0.688	0.688	
2441	39	right	0 mm	Bluetooth	FHSS	2	Open	0058M	1	17.0	16.74	0.05	78.00	76.90	0.138	1.062	1.014	0.149	0.149	
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: 1) Light green entries indicate an additional check on the worst case exposure condition for BT LE that is not fully evaluated.

Table 11-86
NFC Phablet SAR

MEASUREMENT RESULTS										
FREQUENCY		Side	Test Position	Mode	Type	Form Factor	Device Serial Number	Power Drift	SAR (10g)	Plot #
MHz	Ch.								(W/kg)	
13.56	N/A	back	0 mm	NFC	B	Open	0127M	-0.04	**0.011**	A107
13.56	N/A	front	0 mm	NFC	B	Open	0127M	0.02	0.000	
13.56	N/A	bottom	0 mm	NFC	B	Open	0127M	0.05	0.000	
13.56	N/A	right	0 mm	NFC	B	Open	0127M	0.15	0.000	
13.56	N/A	left	0 mm	NFC	B	Open	0127M	0.01	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				

11.5 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 15 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 D04v01r03, 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 12 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 6.7 for more details).
10. Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" when it is in open configuration since the diagonal dimension is > 160 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.

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11. Additional SAR tests for phablet SAR were evaluated per KDB 616217 Section 6 (See Section 6.9 for more information).
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. This device has an open and closed configuration. When closed, 1g SAR test are required for back side at a test separation distance of 15mm for Body-worn and on all surfaces and edges with an antenna <=25 mm from that surface or edge at a test separation distance 5mm for hotspot.

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 8.5.4.
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.

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7. This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per FCC Guidance, all SAR tests were performed using Power Class 3. SAR with power class 2 at the available duty factor was additionally performed for the power class 3 configuration with the highest SAR configuration for each exposure conditions. Please see Section 13 for linearity results.
8. For LTE Band 66, LTE Band 48, and LTE Band 41, 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.
9. This device supports LTE Band 41 ULCA active with Power Class 2. Highest SAR test configuration for each exposure condition in Power Class 3 with ULCA active was repeated with Power Class 2 with ULCA active.

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 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).

WLAN Notes:

1. For held-to-ear, and 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 8.6.5 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

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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 8.6.6 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 Consideration 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.

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 78% transmission duty factor for Bluetooth and 86% transmission duty factor for Bluetooth LE to determine compliance. See Section 9 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.

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12 SAR MEASUREMENT VARIABILITY

12.1 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 12-1
Head SAR Measurement Variability Results

HEAD VARIABILITY RESULTS															
Band	FREQUENCY		Mode	Service	Side	Test Position	Antenna Config	Form Factor	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)	
2300	2310.00	462000	NR Band n30, 10 MHz Bandwidth	DFT-S-OFDM, QPSK, 25 RB, 14 RB Offset	Left	Cheek	I	Open	0.871	0.868	1.00	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 12-2
Head SAR Measurement Variability Results

HEAD VARIABILITY RESULTS																
Band	FREQUENCY		Mode	Service	Data Rate (Mbps)	Side	Test Position	Antenna Config	Form Factor	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)	
2450	2441.00	39	Bluetooth	FHSS	1	Left	Cheek	2	Open	1.040	0.973	1.07	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										

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Table 12-3
Body SAR Measurement Variability Results

BODY VARIABILITY RESULTS														
Band	FREQUENCY		Mode	Service	Side	Spacing	Antenna Config	Cover Type	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)	
2600	2636.50	41055	LTE Band 41, 20 MHz Bandwidth	QPSK, 1 RB, 0 RB Offset	right	5 mm	I	Closed	0.819	0.775	1.06	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 12-4
Phablet SAR Measurement Variability Results

PHABLET VARIABILITY RESULTS															
Band	FREQUENCY		Mode	Service	Side	Spacing	Antenna Config	Form Factor	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)	
1750	1745.00	349000	NR Band n66, 40 MHz Bandwidth	CP-OFDM, QPSK, 1 RB, 1 RB Offset	right	0 mm	I	Open	2.550	2.250	1.13	N/A	N/A	N/A	N/A
1900	1882.50	376500	NR Band n25, 40 MHz Bandwidth	CP-OFDM, QPSK, 1 RB, 1 RB Offset	right	0 mm	I	Open	2.120	2.110	1.00	N/A	N/A	N/A	N/A
3500	3570.00	638000	NR Band n48, 40 MHz Bandwidth	DFT-S-OFDM, QPSK, 1 RB, 104 RB Offset	left	0 mm	F	Open	2.360	2.270	1.04	N/A	N/A	N/A	N/A
3700	3624.99	641666	NR Band n48, 40 MHz Bandwidth	DFT-S-OFDM, QPSK, 1 RB, 1 RB Offset	left	0 mm	F	Open	2.120	1.950	1.09	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										

12.2 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.

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13 ADDITIONAL TESTING PER FCC GUIDANCE

13.1 LTE Band 41 Power Class 2 and Power Class 3 Linearity

This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per May 2017 TCB Workshop Notes based on the device behavior, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the highest power and available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR for each exposure condition. The linearity between the Power Class 2 and Power Class 3 SAR results and the respective frame averaged powers was calculated to determine that the results were linear. When ULCA is active, the linearity between the Power Class 2 with ULCA active and Power Class 3 with ULCA active SAR results and the respective frame averaged powers was calculated to determine that the results were linear. Per May 2017 TCB Workshop, no additional SAR measurements were required since the linearity between power classes was < 10% and all reported SAR values were < 1.4 W/kg for 1g and < 3.5 W/kg for 10g.

Table 13-1
LTE Band 41 Antenna B Head Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	26.00	27.60
Measured Output Power (dBm)	24.00	26.02
Measured SAR (W/kg)	0.007	0.007
Measured Power (mW)	251.19	399.94
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	159.00	173.18
% deviation from expected linearity		-8.18%

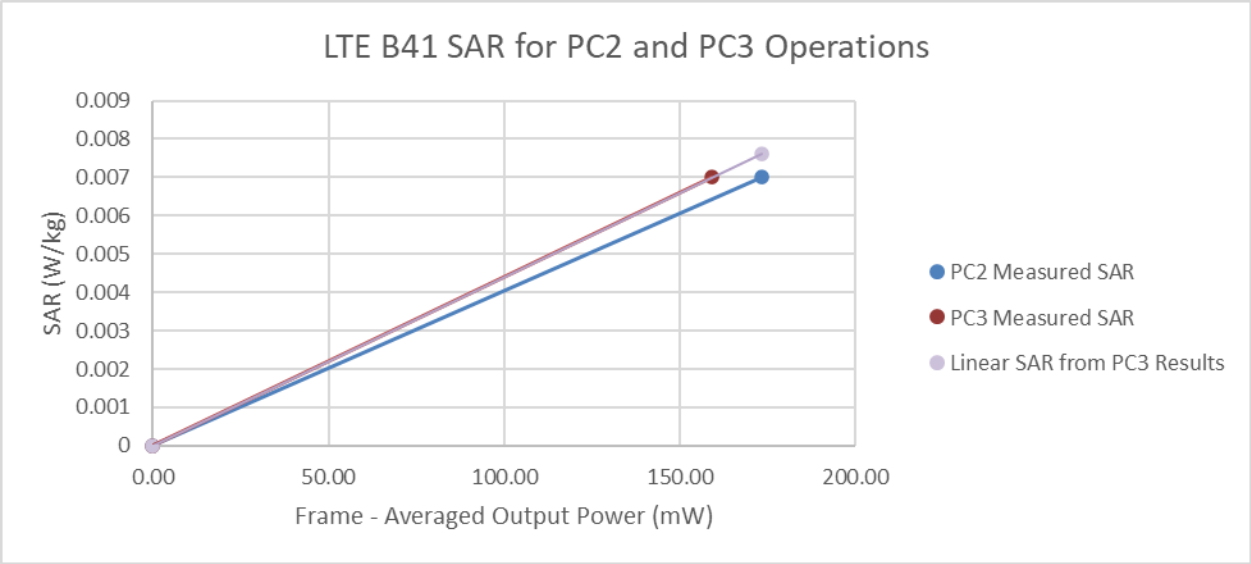

Figure 13-1
LTE Band 41 Antenna B Head Linearity

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Table 13-2
LTE Band 41 Antenna B ULCA Head Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	26.0	27.6
Measured Output Power (dBm)	24.27	26.30
Measured SAR (W/kg)	0.007	0.007
Measured Power (mW)	267.30	426.58
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	169.20	184.71
% deviation from expected linearity		-8.40%

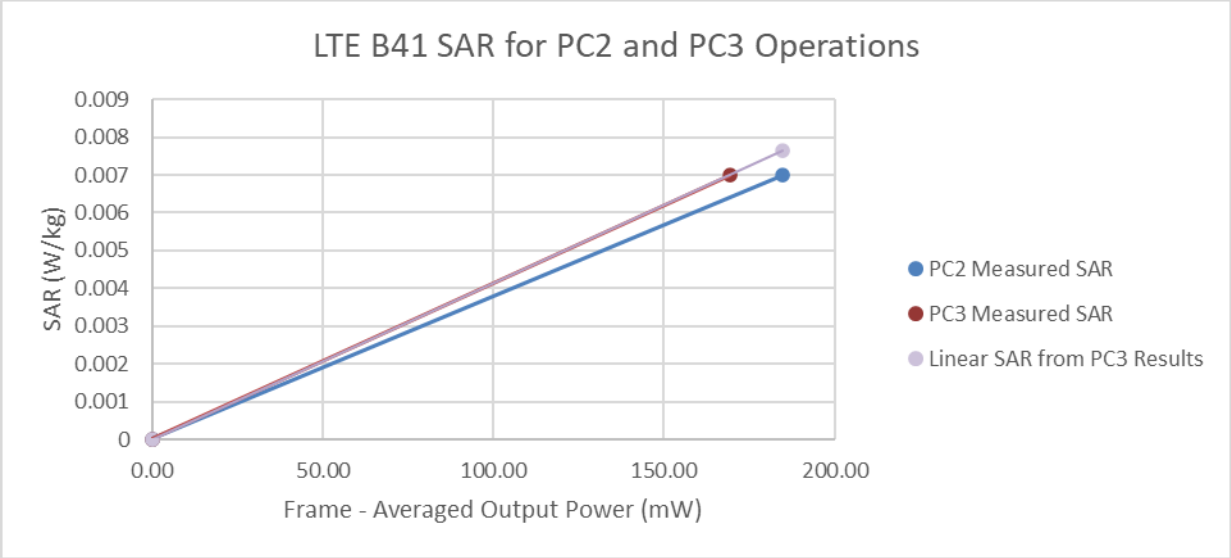

Figure 13-2
LTE Band 41 Antenna B ULCA Head Linearity

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Table 13-3
LTE Band 41 Antenna B Body-Worn Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	26.00	27.60
Measured Output Power (dBm)	24.00	26.02
Measured SAR (W/kg)	0.083	0.094
Measured Power (mW)	251.19	399.94
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	159.00	173.18
% deviation from expected linearity		3.98%

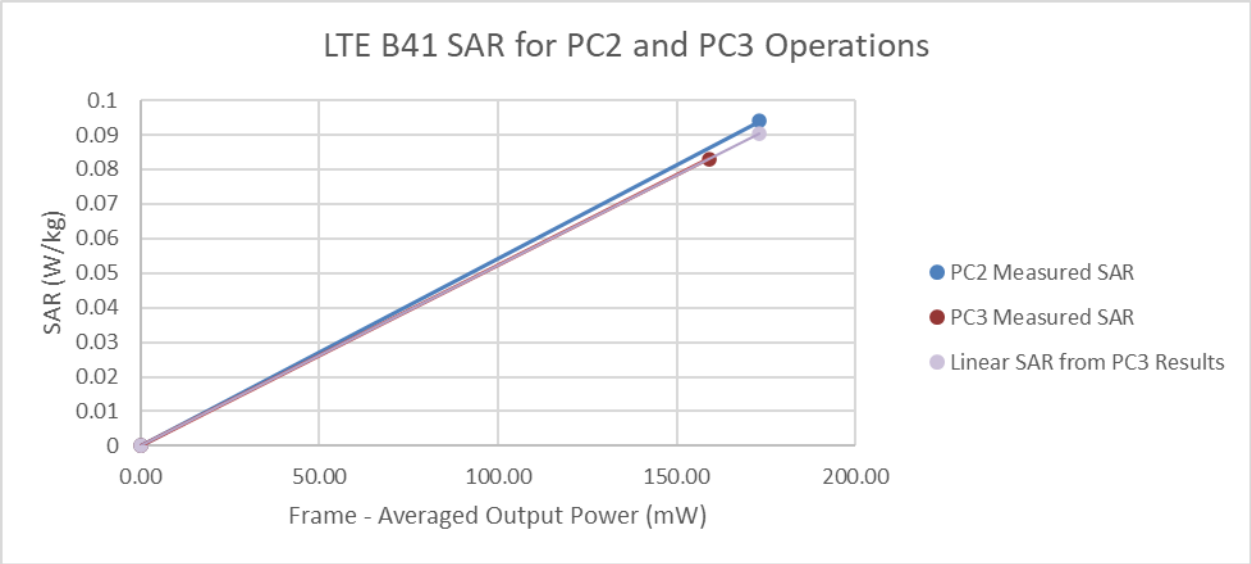

Figure 13-3
LTE Band 41 Antenna B Body-Worn Linearity

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Table 13-4
LTE Band 41 Antenna B ULCA Body-Worn Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	26.0	27.6
Measured Output Power (dBm)	24.27	26.30
Measured SAR (W/kg)	0.090	0.101
Measured Power (mW)	267.30	426.58
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	169.20	184.71
% deviation from expected linearity		2.80%

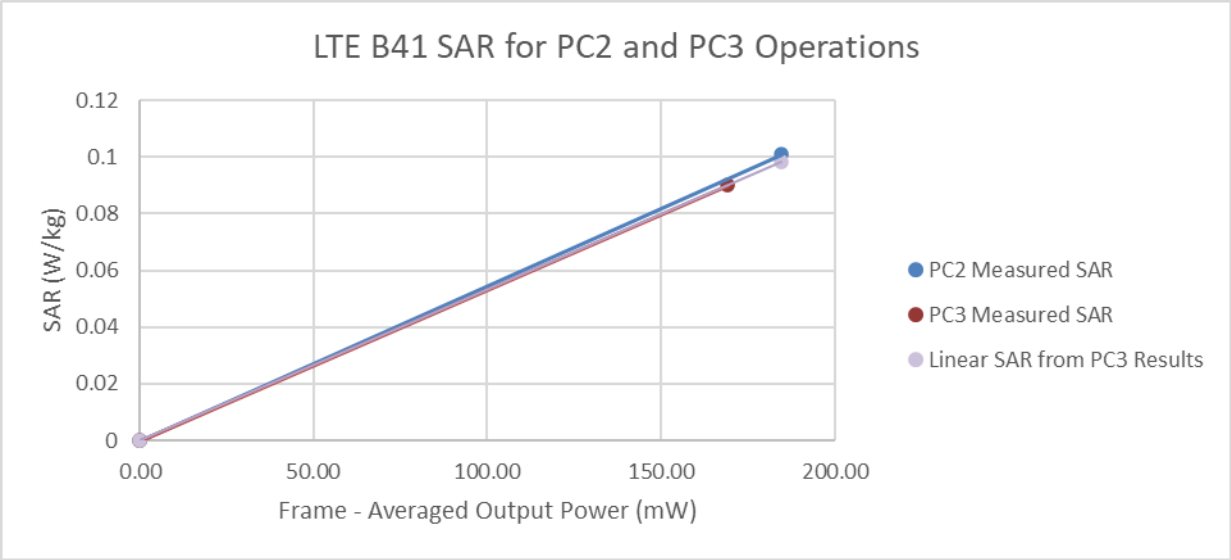

Figure 13-4
LTE Band 41 Antenna B ULCA Body-Worn Linearity

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Table 13-5
LTE Band 41 Antenna I Body-Worn Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	23.50	25.10
Measured Output Power (dBm)	22.46	24.11
Measured SAR (W/kg)	0.198	0.192
Measured Power (mW)	176.20	257.63
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	111.53	111.55
% deviation from expected linearity		-3.05%

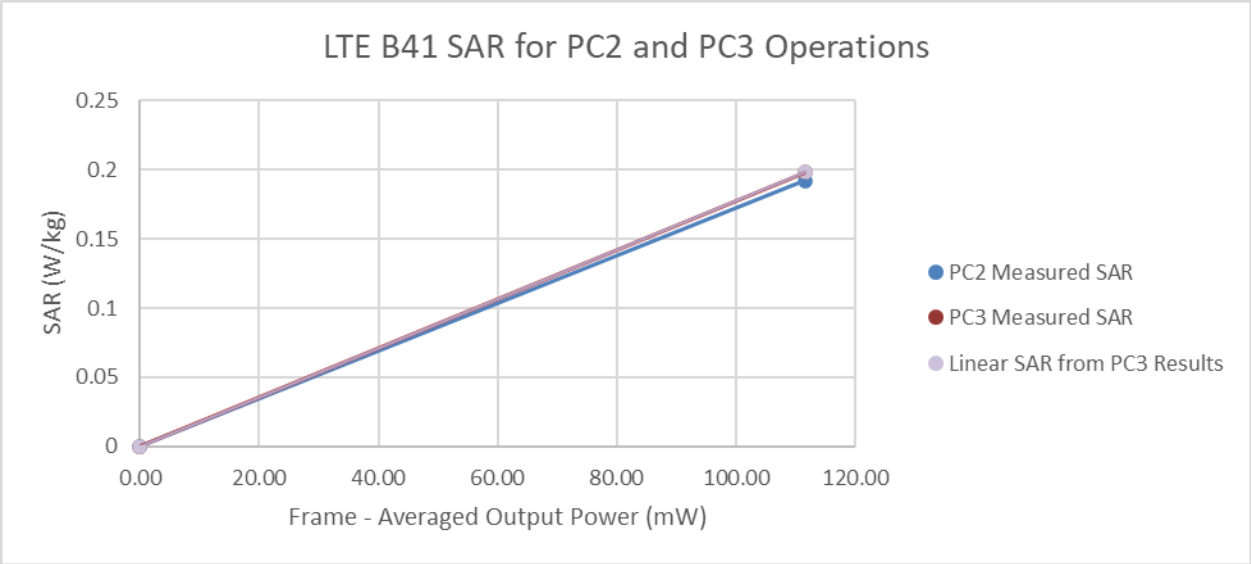

Figure 13-5
LTE Band 41 Antenna I Body-Worn Linearity

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Table 13-6
LTE Band 41 Antenna I ULCA Body-Worn Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	23.5	25.1
Measured Output Power (dBm)	22.40	24.11
Measured SAR (W/kg)	0.194	0.187
Measured Power (mW)	173.78	257.63
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	110.00	111.55
% deviation from expected linearity		-4.95%

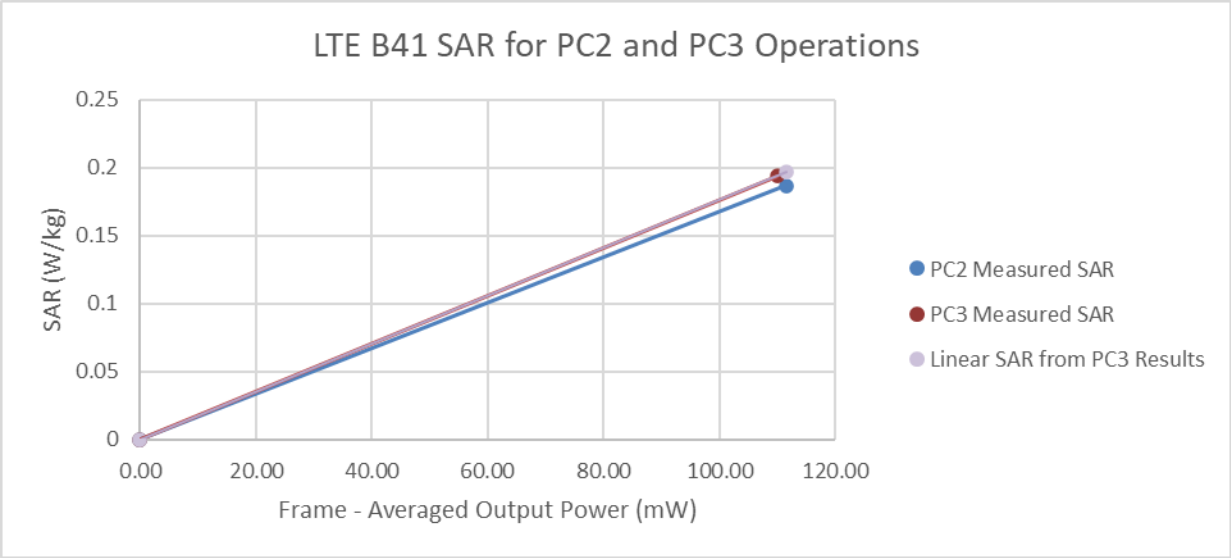

Figure 13-6
LTE Band 41 Antenna I ULCA Body-Worn Linearity

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Table 13-7
LTE Band 41 Antenna B Hotspot Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	22.0	23.6
Measured Output Power (dBm)	20.41	22.14
Measured SAR (W/kg)	0.362	0.338
Measured Power (mW)	109.90	163.68
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	69.57	70.87
% deviation from expected linearity		-8.35%

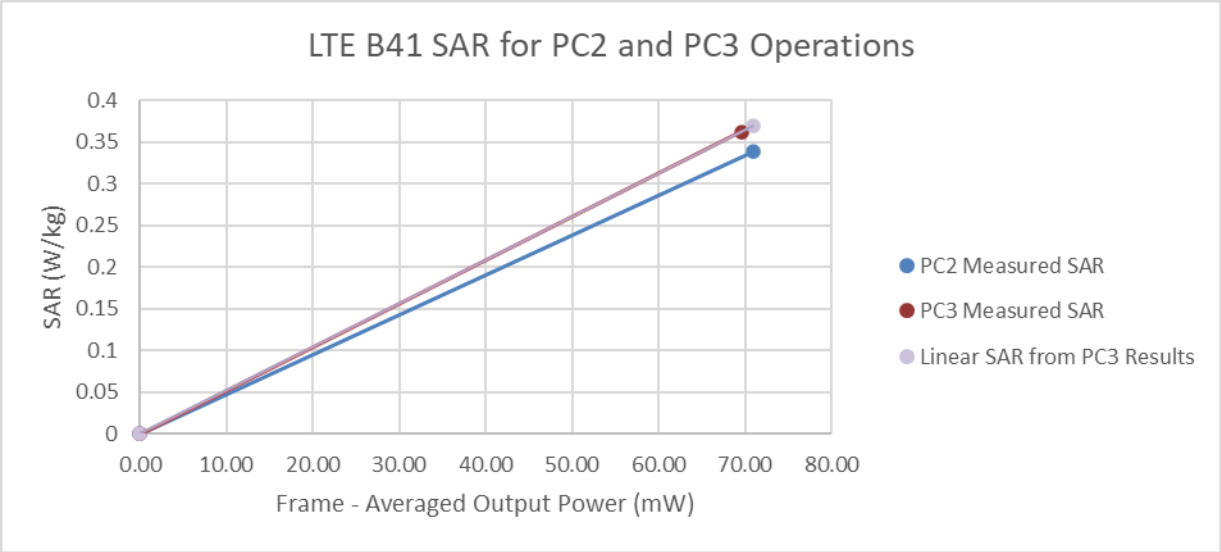

Figure 13-7
LTE Band 41 Antenna B Hotspot Linearity

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Table 13-8
LTE Band 41 Antenna B ULCA Hotspot Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	22.0	23.6
Measured Output Power (dBm)	20.21	21.95
Measured SAR (W/kg)	0.362	0.366
Measured Power (mW)	104.95	156.68
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	66.44	67.84
% deviation from expected linearity		-0.99%

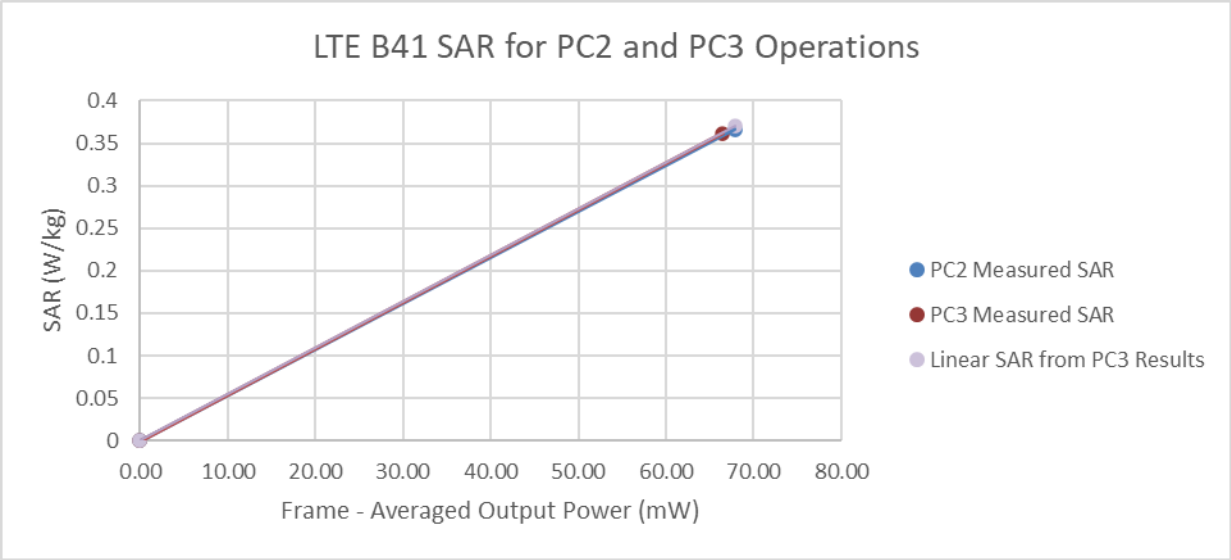

Figure 13-8
LTE Band 41 Antenna B ULCA Hotspot Linearity

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Table 13-9
LTE Band 41 Antenna I Hotspot Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	21.5	23.1
Measured Output Power (dBm)	20.41	22.07
Measured SAR (W/kg)	0.811	0.775
Measured Power (mW)	109.90	161.06
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	69.57	69.74
% deviation from expected linearity		-4.68%

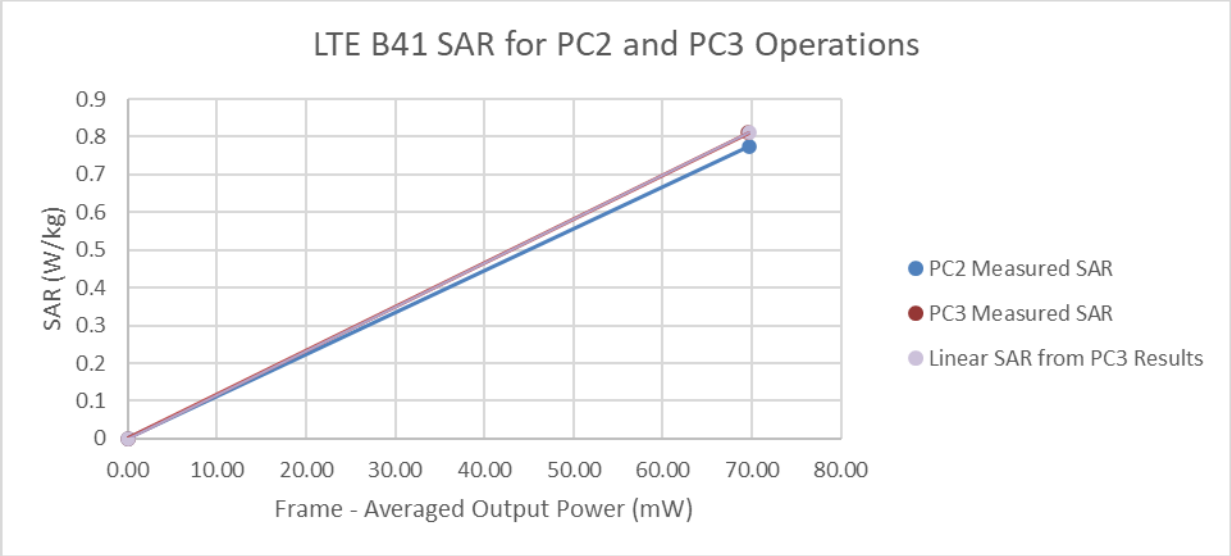

Figure 13-9
LTE Band 41 Antenna I Hotspot Linearity

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Table 13-10
LTE Band 41 Antenna I ULCA Hotspot Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	21.5	23.1
Measured Output Power (dBm)	20.19	21.92
Measured SAR (W/kg)	0.797	0.813
Measured Power (mW)	104.47	155.60
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	66.13	67.37
% deviation from expected linearity		0.13%

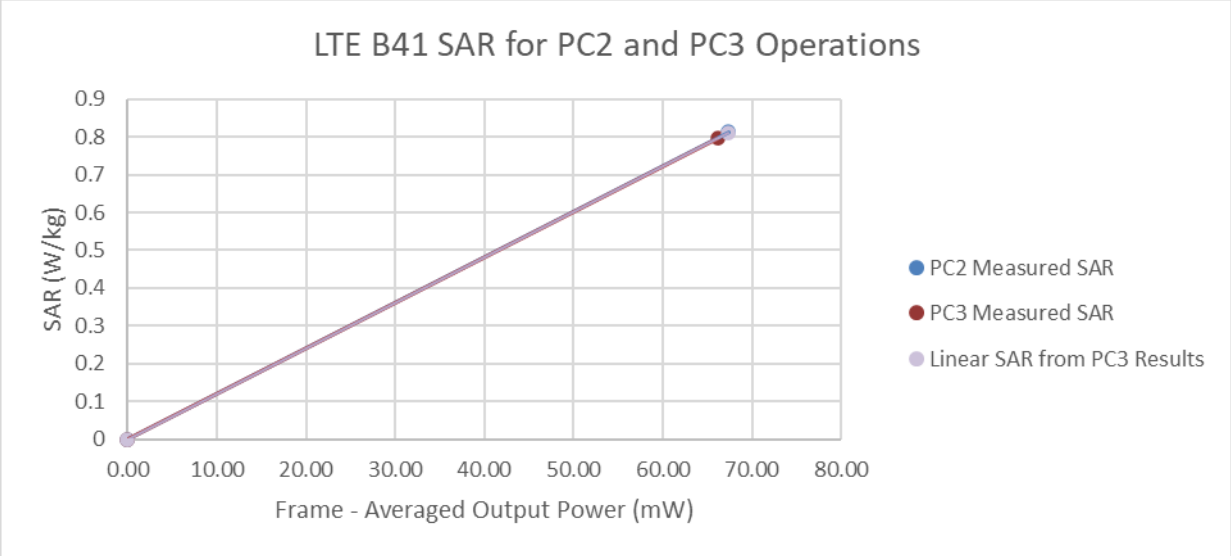

Figure 13-10
LTE Band 41 Antenna I ULCA Hotspot Linearity

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Table 13-11
LTE Band 41 Antenna I Phablet Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	23.5	25.1
Measured Output Power (dBm)	22.34	24.02
Measured SAR (W/kg)	1.450	1.390
Measured Power (mW)	171.40	252.35
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	108.49	109.27
% deviation from expected linearity		-4.82%

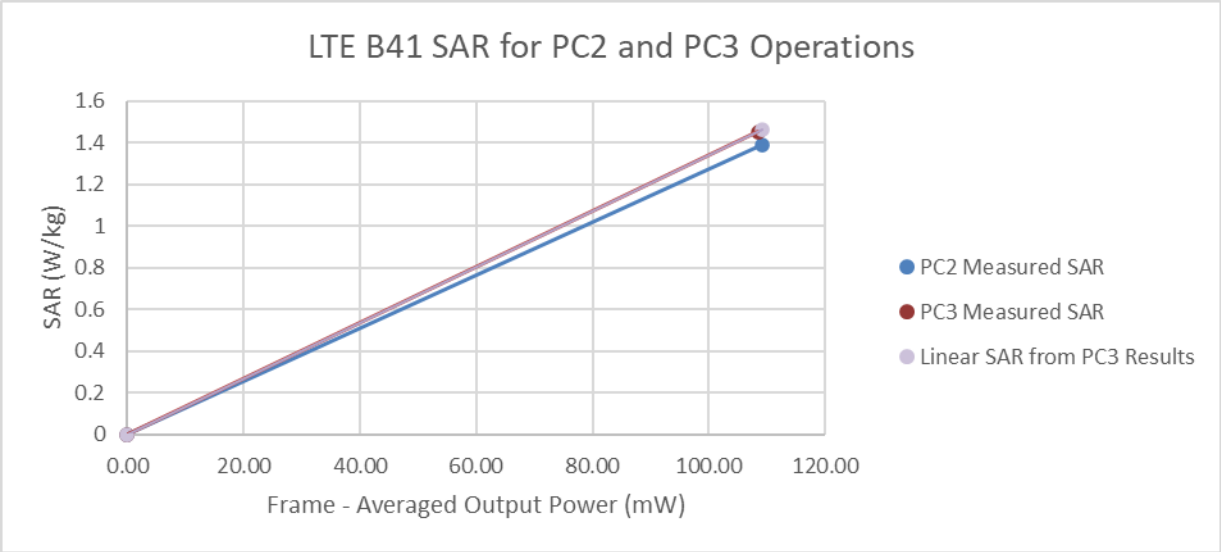

Figure 13-11
LTE Band 41 Antenna I Phablet Linearity

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Table 13-12
LTE Band 41 Antenna I ULCA Phablet Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	23.5	25.1
Measured Output Power (dBm)	22.18	23.90
Measured SAR (W/kg)	1.410	1.400
Measured Power (mW)	165.20	245.47
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	104.57	106.29
% deviation from expected linearity		-2.32%

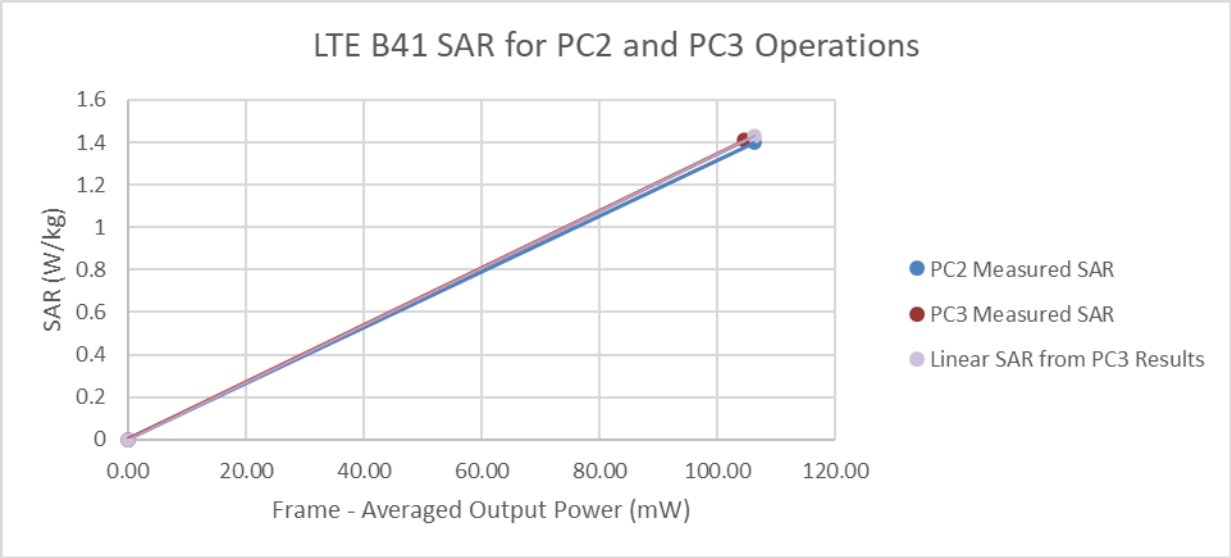

Figure 13-12
LTE Band 41 Antenna I ULCA Phablet Linearity

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14 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	1/18/2023	Annual	1/18/2024	MY47270002
Agilent	E4438C	ESG Vector Signal Generator	4/25/2023	Annual	4/25/2024	US41460739
Agilent	N5182A	MXG Vector Signal Generator	11/30/2022	Annual	11/30/2023	MY47420603
Agilent	N5182A	MXG Vector Signal Generator	4/1/2023	Annual	4/1/2024	MY47420837
Agilent	N5182A	MXG Vector Signal Generator	7/4/2022	Annual	7/4/2023	MY48180366
Agilent	8753ES	S-Parameter Vector Network Analyzer	1/12/2023	Annual	1/12/2024	MY40001472
Agilent	8753ES	S-Parameter Vector Network Analyzer	6/14/2022	Annual	6/14/2023	US39170118
Agilent	E5515C	Wireless Communications Test Set	5/12/2022	Annual	5/12/2023	GB43304278
Agilent	E5515C	Wireless Communications Test Set	5/4/2021	Biennial	5/4/2023	GB41450275
Agilent	E5515C	Wireless Communications Test Set	1/12/2023	Annual	1/12/2024	MY50262130
Agilent	N4010A	Wireless Connectivity Test Set	N/A	N/A	N/A	GB46170464
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433972
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343972
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433971
Amplifier Research	150A100C	Amplifier	CBT	N/A	CBT	350132
Anritsu	ML2496A	Power Meter	8/16/2022	Annual	8/16/2023	1351001
Anritsu	ML2496A	Power Meter	3/31/2022	Annual	3/31/2023	1138001
Anritsu	MA2411B	Pulse Power Sensor	1/10/2023	Annual	1/10/2024	1315051
Anritsu	MA2411B	Pulse Power Sensor	3/28/2022	Annual	3/28/2023	1339007
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	1/10/2023	Annual	1/10/2024	6201524637
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	3/31/2023	Annual	3/31/2024	6201381794
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	11/28/2022	Annual	11/28/2023	6262150047
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	6/27/2022	Annual	6/27/2023	6261895213
Anritsu	MT8000A	Radio Communication Test Station	3/1/2023	Annual	3/1/2024	6272337419
Anritsu	MT8000A	Radio Communication Test Station	3/30/2022	Annual	3/30/2023	6261914237
Anritsu	MT8000A	Radio Communication Test Station	2/9/2023	Annual	2/9/2024	6272337408
Anritsu	MA24106A	USB Power Sensor	2/9/2023	Annual	2/9/2024	1520505
Anritsu	MA24106A	USB Power Sensor	4/21/2023	Annual	4/21/2024	1244515
Anritsu	MA24106A	USB Power Sensor	1/13/2023	Annual	1/13/2024	1344557
Mini-Circuits	PWR-4GHS	USB Power Sensor	11/11/2022	Annual	11/11/2023	11710030062
Control Company	4352	Long Stem Thermometer	9/10/2021	Biennial	9/10/2023	210774678
Control Company	4352	Long Stem Thermometer	9/10/2021	Biennial	9/10/2023	210774685
Control Company	4352	Long Stem Thermometer	9/10/2021	Biennial	9/10/2023	210774675
Control Company	4040	Therm./ Clock/ Humidity Monitor	1/17/2023	Annual	1/17/2024	160574418
Control Company	4410	Therm./ Clock/ Humidity Monitor	5/13/2021	Biennial	5/13/2023	210403099
Control Company	4410	Therm./ Clock/ Humidity Monitor	5/13/2021	Biennial	5/13/2023	2104031313
Mitutoyo	500-196-30	CD-6"ASX 6Inch Digital Caliper	2/16/2022	Triennial	2/16/2025	A20238413
Keysight Technologies	N6705B	DC Power Analyzer	5/5/2021	Triennial	5/5/2024	MY53004059
Keysight Technologies	N9020A	MXA Signal Analyzer	3/15/2023	Annual	3/15/2024	US46470561
Keysight Technologies	N9020A	MXA Signal Analyzer	4/6/2023	Annual	4/6/2024	MY48010233
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	31634
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	CBT	N/A	CBT	N/A
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
Mini-Circuits	ZUDC10-83-S+	Directional Coupler	CBT	N/A	CBT	2111
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Seekonk	TSF-100	Torque Wrench	7/11/2022	Annual	7/11/2023	47639-29
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	3/8/2023	Annual	3/8/2024	128635
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/5/2023	Annual	4/5/2024	167284
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/12/2023	Annual	1/12/2024	150117
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	2/17/2023	Annual	2/17/2024	164948
SPEAG	DAK-3.5	Dielectric Assessment Kit	12/15/2022	Annual	12/15/2023	1278
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	8/15/2022	Annual	8/15/2023	1041
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	7/5/2022	Annual	7/5/2023	1039
SPEAG	DAK-12	Dielectric Assessment Kit (4MHz - 3GHz)	3/13/2023	Annual	3/13/2024	1102
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1379
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1243
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1237
SPEAG	CLA-13	Confined Loop Antenna	9/13/2022	Annual	9/13/2023	1002
SPEAG	D750V3	750 MHz SAR Dipole	2/13/2023	Annual	2/13/2024	1046
SPEAG	D750V3	750 MHz SAR Dipole	3/14/2022	Biennial	3/14/2024	1054
SPEAG	D750V3	750 MHz SAR Dipole	10/19/2021	Biennial	10/19/2023	1161
SPEAG	D750V3	750 MHz SAR Dipole	5/9/2022	Annual	5/9/2023	1003
SPEAG	D835V2	835 MHz SAR Dipole	1/21/2021	Triennial	1/21/2024	4d132
SPEAG	D835V2	835 MHz SAR Dipole	5/9/2022	Annual	5/9/2023	4d180
SPEAG	D835V2	835 MHz SAR Dipole	4/29/2022	Annual	4/29/2023	4d119
SPEAG	D835V2	835 MHz SAR Dipole	10/19/2021	Biennial	10/19/2023	4d133

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Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
SPEAG	D1750V2	1750 MHz SAR Dipole	4/20/2022	Annual	4/20/2023	1051
SPEAG	D1750V2	1750 MHz SAR Dipole	10/22/2021	Biennial	10/22/2023	1150
SPEAG	D1750V2	1750 MHz SAR Dipole	5/10/2022	Annual	5/10/2023	1092
SPEAG	D1750V2	1750 MHz SAR Dipole	1/18/2022	Biennial	1/18/2024	1148
SPEAG	D1750V2	1750 MHz SAR Dipole	5/14/2021	Biennial	5/14/2023	1008
SPEAG	D1900V2	1900 MHz SAR Dipole	5/16/2022	Annual	5/16/2023	5d026
SPEAG	D1900V2	1900 MHz SAR Dipole	2/21/2022	Biennial	2/21/2024	5d148
SPEAG	D1900V2	1900 MHz SAR Dipole	8/8/2022	Annual	8/8/2023	5d080
SPEAG	D1900V2	1900 MHz SAR Dipole	9/10/2020	Triennial	9/10/2023	5d181
SPEAG	D1900V2	1900 MHz SAR Dipole	9/21/2021	Biennial	9/21/2023	5d149
SPEAG	D1900V2	1900 MHz SAR Dipole	6/1/2022	Annual	6/1/2023	5d030
SPEAG	D2300V2	2300 MHz SAR Dipole	6/3/2021	Biennial	6/3/2023	1116
SPEAG	D2300V2	2300 MHz SAR Dipole	2/13/2023	Annual	2/13/2024	1008
SPEAG	D2300V2	2300 MHz SAR Dipole	11/10/2020	Triennial	11/10/2023	1064
SPEAG	D2300V2	2300 MHz SAR Dipole	8/25/2022	Annual	8/25/2023	1073
SPEAG	D2450V2	2450 MHz SAR Dipole	5/9/2022	Annual	5/9/2023	945
SPEAG	D2450V2	2450 MHz SAR Dipole	8/18/2021	Biennial	8/18/2023	719
SPEAG	D2450V2	2450 MHz SAR Dipole	11/25/2021	Biennial	11/25/2023	981
SPEAG	D2450V2	2450 MHz SAR Dipole	2/13/2023	Annual	2/13/2024	882
SPEAG	D2600V2	2600 MHz SAR Dipole	6/13/2022	Annual	6/13/2023	1064
SPEAG	D2600V2	2600 MHz SAR Dipole	11/15/2022	Annual	11/15/2023	1071
SPEAG	D2600V2	2600 MHz SAR Dipole	5/11/2022	Annual	5/11/2023	1042
SPEAG	D2600V2	2600 MHz SAR Dipole	6/13/2022	Annual	6/13/2023	1009
SPEAG	D2600V2	2600 MHz SAR Dipole	9/9/2020	Triennial	9/9/2023	1069
SPEAG	D2600V2	2600 MHz SAR Dipole	8/18/2022	Annual	8/18/2023	1126
SPEAG	D3500V2	3500 MHz SAR Dipole	1/10/2023	Annual	1/10/2024	1097
SPEAG	D3500V2	3500 MHz SAR Dipole	6/9/2021	Biennial	6/9/2023	1126
SPEAG	D3500V2	3500 MHz SAR Dipole	8/17/2022	Annual	8/17/2023	1055
SPEAG	D3700V2	3700 MHz SAR Dipole	6/9/2021	Biennial	6/9/2023	1097
SPEAG	D3700V2	3700 MHz SAR Dipole	1/19/2021	Triennial	1/19/2024	1018
SPEAG	D3700V2	3700 MHz SAR Dipole	10/21/2022	Annual	10/21/2023	1002
SPEAG	D3900V2	3900 MHz SAR Dipole	11/13/2020	Triennial	11/13/2023	1062
SPEAG	D5GHzV2	5 GHz SAR Dipole	1/18/2023	Annual	1/18/2024	1191
SPEAG	D5GHzV2	5 GHz SAR Dipole	1/10/2022	Biennial	1/10/2024	1057
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/17/2022	Annual	10/17/2023	1322
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/14/2022	Annual	6/14/2023	1334
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/14/2023	Annual	4/14/2024	1407
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/14/2022	Annual	6/14/2023	1532
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/18/2022	Annual	7/18/2023	1677
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/16/2022	Annual	5/16/2023	1502
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/20/2023	Annual	1/20/2024	1466
SPEAG	DAE4	Dasy Data Acquisition Electronics	11/10/2022	Annual	11/10/2023	1323
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/13/2022	Annual	10/13/2023	1333
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/17/2023	Annual	1/17/2024	793
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/15/2023	Annual	2/15/2024	665
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/18/2022	Annual	7/18/2023	1583
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/16/2022	Annual	5/16/2023	701
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/17/2023	Annual	1/17/2024	1558
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/18/2023	Annual	1/18/2024	1530
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/15/2023	Annual	3/15/2024	604
SPEAG	DAE4	Dasy Data Acquisition Electronics	12/13/2022	Annual	12/13/2023	1644
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/13/2023	Annual	3/13/2024	1408
SPEAG	EX3DV4	SAR Probe	10/19/2022	Annual	10/19/2023	7547
SPEAG	EX3DV4	SAR Probe	6/16/2022	Annual	6/16/2023	7409
SPEAG	EX3DV4	SAR Probe	4/20/2022	Annual	4/20/2023	7659
SPEAG	EX3DV4	SAR Probe	6/29/2022	Annual	6/29/2023	7491
SPEAG	EX3DV4	SAR Probe	7/18/2022	Annual	7/18/2023	7406
SPEAG	EX3DV4	SAR Probe	6/9/2022	Annual	6/9/2023	7402
SPEAG	EX3DV4	SAR Probe	1/12/2023	Annual	1/12/2024	7565
SPEAG	EX3DV4	SAR Probe	11/11/2022	Annual	11/11/2023	7551
SPEAG	EX3DV4	SAR Probe	10/20/2022	Annual	10/20/2023	7420
SPEAG	EX3DV4	SAR Probe	1/17/2023	Annual	1/17/2024	3837
SPEAG	EX3DV4	SAR Probe	2/8/2023	Annual	2/8/2024	7417
SPEAG	EX3DV4	SAR Probe	7/19/2022	Annual	7/19/2023	7410
SPEAG	EX3DV4	SAR Probe	5/18/2022	Annual	5/18/2023	7416
SPEAG	EX3DV4	SAR Probe	1/11/2023	Annual	1/11/2024	7570
SPEAG	EX3DV4	SAR Probe	1/11/2023	Annual	1/11/2024	7713
SPEAG	EX3DV4	SAR Probe	3/16/2023	Annual	3/16/2024	7421
SPEAG	EX3DV4	SAR Probe	12/9/2022	Annual	12/9/2023	7490
SPEAG	EX3DV4	SAR Probe	3/16/2023	Annual	3/16/2024	7638

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.

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15 MEASUREMENT UNCERTAINTIES

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

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16 CONCLUSION

16.1 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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