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SAR EVALUATION REPORT

Applicant Name:
Apple Inc.
One Apple Park Way
Cupertino, CA 95014 USA

Date of Testing:
12/07/2021 – 01/03/2022
Test Site/Location:
PCTEST Lab, Morgan Hill, CA, USA
Document Serial No.:
1C2111150079-26.BCG (Rev 3)

FCC ID:	**BCGA2589**
APPLICANT:	**APPLE, INC.**

DUT Type:	Tablet Device
Application Type:	Certification
FCC Rule Part(s):	CFR §2.1093
Models:	A2589, A2591

Equipment Class	Band & Mode	Tx Frequency	SAR 1g Body (W/kg)
PCB	UMTS 850	826.40 - 846.60 MHz	0.99
PCB	UMTS 1750	1712.4 - 1752.6 MHz	0.99
PCB	UMTS 1900	1852.4 - 1907.6 MHz	0.99
PCB	LTE Band 71	665.5 - 695.5 MHz	0.94
PCB	LTE Band 12	699.7 - 715.3 MHz	0.91
PCB	LTE Band 17	706.5 - 713.5 MHz	N/A
PCB	LTE Band 13	779.5 - 784.5 MHz	0.98
PCB	LTE Band 14	790.5 - 795.5 MHz	0.90
PCB	LTE Band 26 (Cell)	814.7 - 848.3 MHz	0.99
PCB	LTE Band 5 (Cell)	824.7 - 848.3 MHz	0.98
PCB	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	1.00
PCB	LTE Band 4 (AWS)	1710.7 - 1754.3 MHz	N/A
PCB	LTE Band 25 (PCS)	1850.7 - 1914.3 MHz	0.98
PCB	LTE Band 2 (PCS)	1850.7 - 1909.3 MHz	N/A
PCB	LTE Band 30	2307.5 - 2312.5 MHz	1.00
PCB	LTE Band 7	2502.5 - 2567.5 MHz	1.00
PCB	LTE Band 41	2496.5 - 2687.5 MHz	0.99
CBE	LTE Band 48	3552.5 - 3697.5 MHz	0.99
PCB	NR Band n71	665.5 - 695.5 MHz	0.94
PCB	NR Band n12	701.5 - 713.5 MHz	0.96
PCB	NR Band n5 (Cell)	826.5 - 846.5 MHz	0.99
PCB	NR Band n66 (AWS)	1712.5 - 1777.5 MHz	0.98
PCB	NR Band n25 (PCS)	1852.5 - 1912.5 MHz	0.99
PCB	NR Band n2 (PCS)	1852.5 - 1907.5 MHz	N/A
PCB	NR Band n30	2307.5 - 2312.5 MHz	0.99
PCB	NR Band n7	2502.5 - 2567.5 MHz	1.00
PCB	NR Band n41	2506.02 - 2679.99 MHz	1.00
PCB	NR Band n77 DoD	3460.02 - 3540 MHz	1.00
PCB	NR Band n77 C	3710.01 - 3969.99 MHz	0.99
DTS	2.4 GHz WLAN	2412 - 2472 MHz	1.09
NII	U-NII-1	5180 - 5240 MHz	1.05
NII	U-NII-2A	5260 - 5320 MHz	1.09
NII	U-NII-2C	5500 - 5720 MHz	1.09
NII	U-NII-3	5745 - 5825 MHz	1.07
DSS/DTS	Bluetooth	2402 - 2480 MHz	1.08
Simultaneous SAR per KDB 690783 D01v01r03:			1.57

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 1.8 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
UMTS 850	Data	826.40 - 846.60 MHz
UMTS 1750	Data	1712.4 - 1752.6 MHz
UMTS 1900	Data	1852.4 - 1907.6 MHz
LTE Band 71	Data	665.5 - 695.5 MHz
LTE Band 12	Data	699.7 - 715.3 MHz
LTE Band 17	Data	706.5 - 713.5 MHz
LTE Band 13	Data	779.5 - 784.5 MHz
LTE Band 14	Data	790.5 - 795.5 MHz
LTE Band 26 (Cell)	Data	814.7 - 848.3 MHz
LTE Band 5 (Cell)	Data	824.7 - 848.3 MHz
LTE Band 4 (AWS)	Data	1710.7 - 1754.3 MHz
LTE Band 66 (AWS)	Data	1710.7 - 1779.3 MHz
LTE Band 2 (PCS)	Data	1850.7 - 1909.3 MHz
LTE Band 25 (PCS)	Data	1850.7 - 1914.3 MHz
LTE Band 30	Data	2307.5 - 2312.5 MHz
LTE Band 7	Data	2502.5 - 2567.5 MHz
LTE Band 41	Data	2498.5 - 2687.5 MHz
LTE Band 48	Data	3552.5 - 3697.5 MHz
NR Band n71	Data	665.5 - 695.5 MHz
NR Band n12	Data	701.5 - 713.5 MHz
NR Band n5 (Cell)	Data	826.5 - 846.5 MHz
NR Band n66 (AWS)	Data	1712.5 - 1777.5 MHz
NR Band n2 (PCS)	Data	1852.5 - 1907.5 MHz
NR Band n25 (PCS)	Data	1852.5 - 1912.5 MHz
NR Band n30	Data	2307.5 - 2312.5 MHz
NR Band n7	Data	2502.5 - 2567.5 MHz
NR Band n41	Data	2506.02 - 2679.99 MHz
NR Band n77 DoD	Data	3460.02 - 3540 MHz
NR Band n77 C	Data	3710.01 - 3969.99 MHz
2.4 GHz WLAN	Voice/Data	2412 - 2472 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
Bluetooth	Data	2402 - 2480 MHz

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1.2 Time-Averaging Algorithm for RF Exposure Compliance

This device is enabled with the Qualcomm® Smart Transmit feature. This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit feature (report SN could be found in Section 1.10 – Bibliography).

Note that WLAN operations are not enabled with Smart Transmit.

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of SAR design_target, below the predefined time-averaged power limit (i.e., Plimit for sub-6 radio), for each characterized technology and band (see RF Exposure Part 0 Test Report, report SN could be found in Section 1.10 - Bibliography).

Exposure Scenario:	Ant 1a/1b Body	Ant 1a/1b Maximum Tune-up Output Power*	Ant 2a/2b Body	Ant 2a/2b Maximum Tune-up Output Power*	Ant 3a/3b Body	Ant 3a/3b Maximum Tune-up Output Power*	Ant 4 Body	Ant 4 Maximum Tune-up Output Power*	Manufacturer's Smart Transmit Uncertainty (dB)	Pmax target Tolerance (dB)	Plimit target Tolerance (dB)
Averaging Volume:	1g		1g		1g		1g				
Spacing:	0 mm		0 mm		0 mm		0 mm				
DSI:	1		1		1		1				
Technology/Band	**Plimit corresponding to 0.8 W/kg**	Pmax	**Plimit corresponding to 0.8 W/kg**	Pmax	**Plimit corresponding to 0.8 W/kg**	Pmax	**Plimit corresponding to 0.8 W/kg**	Pmax			
UMTS 850	N/A	N/A	N/A	N/A	16.40	24.50	19.30	25.00			
UMTS 1750	14.30	22.70	12.50	23.20	12.70	24.00	14.30	24.70			
UMTS 1900	13.50	22.70	12.70	23.20	12.50	24.00	14.40	24.70			
LTE Band 71	N/A	N/A	N/A	N/A	18.40	24.50	21.10	25.00			
LTE Band 12	N/A	N/A	N/A	N/A	17.30	24.50	20.40	25.00			
LTE Band 17	N/A	N/A	N/A	N/A	17.30	24.50	20.40	25.00			
LTE Band 13	N/A	N/A	N/A	N/A	16.50	24.50	20.20	25.00			
LTE Band 14	N/A	N/A	N/A	N/A	16.50	24.50	20.20	25.00			
LTE Band 26 (Cell)	N/A	N/A	N/A	N/A	16.40	24.50	19.30	25.00			
LTE Band 5 (Cell)	N/A	N/A	N/A	N/A	16.40	24.50	19.30	25.00			
LTE Band 5 ULCA (Cell)	N/A	N/A	N/A	N/A	16.40	24.50	19.30	25.00			
LTE Band 66 (AWS)	14.30	22.70	12.50	23.20	12.70	24.00	14.30	24.70			
LTE Band 66 ULCA (AWS)	14.30	23.00	12.50	23.50	12.70	24.30	14.30	25.00			
LTE Band 4 (AWS)	14.30	22.70	12.50	23.20	12.70	24.00	14.30	24.70			
LTE Band 25 (PCS)	13.50	22.70	12.70	23.20	12.50	24.00	14.40	24.70			
LTE Band 2 (PCS)	13.50	22.70	12.70	23.20	12.50	24.00	14.40	24.70			
LTE Band 30	13.00	21.70	11.50	21.40	11.40	22.00	13.40	20.80			
LTE Band 7	12.00	22.20	13.00	23.20	11.10	23.70	13.40	24.70			
LTE Band 7 ULCA	12.00	22.80	13.00	23.30	11.10	24.00	13.40	25.00	+/- 1.0	+0.7 /- 1.0	+/- 1.0
LTE Band 41 PC3	12.4	22.01	13.0	23.01	11.7	23.01	13.0	23.01			
LTE Band 41 ULCA PC3	12.4	22.31	13.0	23.01	11.7	23.01	13.0	23.01			
LTE Band 41 PC2	12.4	20.36	13.0	21.36	11.7	21.86	13.0	22.86			
LTE Band 41 ULCA PC2	12.4	20.66	13.0	21.66	11.7	22.16	13.0	23.16			
LTE Band 48	10.81	20.01	12.21	18.51	12.51	17.11	11.71	15.71			
LTE Band 48 ULCA	10.81	20.31	12.21	18.81	12.51	17.11	11.71	15.71			
NR Band n71	N/A	N/A	N/A	N/A	18.40	24.50	21.10	25.00			
NR Band n12	N/A	N/A	N/A	N/A	17.30	24.50	20.40	25.00			
NR Band n5 (Cell)	N/A	N/A	N/A	N/A	16.40	24.50	19.30	25.00			
NR Band n66 (AWS)	14.30	22.70	12.50	23.20	12.70	24.00	14.30	24.70			
NR Band n25 (PCS)	13.50	22.70	12.70	23.20	12.50	24.00	14.40	24.70			
NR Band n2 (PCS)	13.50	22.70	12.70	23.20	12.50	24.00	14.40	24.70			
NR Band n30	13.00	18.00	11.50	19.00	11.40	19.50	13.40	20.50			
NR Band n7	12.00	22.20	13.00	23.20	11.10	23.70	13.40	24.70			
NR Band n41 PC3	13.30	25.00	12.50	25.00	11.80	23.50	13.00	24.00			
NR Band n41 PC2	13.30	25.50	12.50	27.00	11.80	23.50	13.00	24.00			
NR Band n77 PC3	11.70	22.00	11.50	22.00	13.40	25.00	10.60	24.00			
NR Band n77 PC2	11.70	22.00	11.50	22.00	13.40	25.20	10.60	25.50			

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 sub-6GHz WWAN is +1.0/-1.0 dB for this EUT.

*Maximum tune up output power Pmax is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum Tune up output power +0.7/-1.0 dB tolerance.

*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 modulation schemes (for e.g., LTE TDD).

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The maximum time-averaged output power (dBm) for any 3G/4G/5G WWAN technology, band, and DSI = minimum of "P_{limit} EFS" and "Maximum tune up output power P_{max}" +1.0/-1.0 dB 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 0 dB.

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1.3 Power Reduction for SAR

This device additionally utilizes a power reduction mechanism for Bluetooth and WLAN operations. When WLAN/Bluetooth is operating simultaneously with certain combinations of 3G/4G and 5 GHz WLAN antennas, the output power of is permanently reduced. SAR evaluations were additionally performed at the maximum allowed output power for these scenarios to evaluate simultaneous transmission compliance.

Additionally, this device uses an independent mechanism that limits WIFI powers to a time-averaged output power. For the purposes of this test report, all SAR measurements were performed with the algorithm disabled at the maximum time-averaged output power level. Appendix J includes verification data for this time-averaged SAR mechanism.

1.4 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.

1.4.1 3G/4G/5G Output Power for Portable Use Conditions

Table 1-1
UMTS B5 (850 MHz)

Mode/Band	Antenna		Modulated Average Output Power (in dBm)			
			3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
UMTS Band 5 (850 MHz)	Ant 4	Max allowed power	20.30	20.30	20.30	20.30
		Nominal	19.30	19.30	19.30	19.30
	Ant 3B	Max allowed power	17.40	17.40	17.40	17.40
		Nominal	16.40	16.40	16.40	16.40

Table 1-2
UMTS B4 (1750 MHz)

Mode/Band	Antenna		Modulated Average Output Power (in dBm)			
			3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
UMTS Band 4 (1750 MHz)	Ant 4	Max allowed power	15.30	15.30	15.30	15.30
		Nominal	14.30	14.30	14.30	14.30
	Ant 2a	Max allowed power	13.50	13.50	13.50	13.50
		Nominal	12.50	12.50	12.50	12.50
	Ant 3A	Max allowed power	13.70	13.70	13.70	13.70
		Nominal	12.70	12.70	12.70	12.70
	Ant 1a	Max allowed power	15.30	15.30	15.30	15.30
		Nominal	14.30	14.30	14.30	14.30

Table 1-3
UMTS B2 (1900 MHz)

Mode/Band	Antenna		Modulated Average Output Power (in dBm)			
			3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
UMTS Band 2 (1900 MHz)	Ant 4	Max allowed power	15.40	15.40	15.40	15.40
		Nominal	14.40	14.40	14.40	14.40
	Ant 2a	Max allowed power	13.70	13.70	13.70	13.70
		Nominal	12.70	12.70	12.70	12.70
	Ant 3A	Max allowed power	13.50	13.50	13.50	13.50
		Nominal	12.50	12.50	12.50	12.50
	Ant 1a	Max allowed power	14.50	14.50	14.50	14.50
		Nominal	13.50	13.50	13.50	13.50

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Table 1-4
LTE Bands

Mode / Band		Modulated Average Output Power (in dBm)						
		Ant 4	Ant 3B	Ant 3A	Ant 2a	Ant 2b	Ant 1a	Ant 1b
LTE FDD Band 71	Max allowed power	22.10	19.40					
	Nominal	21.10	18.40					
LTE FDD Band 12	Max allowed power	21.40	18.30					
	Nominal	20.40	17.30					
LTE FDD Band 17	Max allowed power	21.40	18.30					
	Nominal	20.40	17.30					
LTE FDD Band 13	Max allowed power	21.20	17.50					
	Nominal	20.20	16.50					
LTE FDD Band 14	Max allowed power	21.20	17.50					
	Nominal	20.20	16.50					
LTE FDD Band 26	Max allowed power	20.30	17.40					
	Nominal	19.30	16.40					
LTE FDD Band 5	Max allowed power	20.30	17.40					
	Nominal	19.30	16.40					
LTE FDD Band 5 Intra-band ULCA	Max allowed power	20.30	17.40					
	Nominal	19.30	16.40					
LTE FDD Band 4	Max allowed power	15.30		13.70	13.50		15.30	
	Nominal	14.30		12.70	12.50		14.30	
LTE FDD Band 66	Max allowed power	15.30		13.70	13.50		15.30	
	Nominal	14.30		12.70	12.50		14.30	
LTE FDD Band 66 Intra-band ULCA	Max allowed power	15.30		13.70	13.50		15.30	
	Nominal	14.30		12.70	12.50		14.30	
LTE FDD Band 2	Max allowed power	15.40		13.50	13.70		14.50	
	Nominal	14.40		12.50	12.70		13.50	
LTE FDD Band 25	Max allowed power	15.40		13.50	13.70		14.50	
	Nominal	14.40		12.50	12.70		13.50	
LTE FDD Band 30	Max allowed power	14.40		12.40	12.50		14.00	
	Nominal	13.40		11.40	11.50		13.00	
LTE FDD Band 7	Max allowed power	14.40		12.10	14.00		13.00	
	Nominal	13.40		11.10	13.00		12.00	
LTE FDD Band 7 Intra-band ULCA	Max allowed power	14.40		12.10	14.00		13.00	
	Nominal	13.40		11.10	13.00		12.00	
LTE TDD Band 41 (PC3)	Max allowed power	16.00		14.70	16.00		15.40	
	Nominal	15.00		13.70	15.00		14.40	
LTE TDD Band 41 (PC3) Intra-band ULCA	Max allowed power	16.00		14.70	16.00		15.40	
	Nominal	15.00		13.70	15.00		14.40	
LTE TDD Band 41 (PC2)	Max allowed power	17.60		16.30	17.60		17.00	
	Nominal	16.60		15.30	16.60		16.00	
LTE TDD Band 41 (PC2) Intra-band ULCA	Max allowed power	17.60		16.30	17.60		17.00	
	Nominal	16.60		15.30	16.60		16.00	
LTE TDD Band 48	Max allowed power	14.70	15.50			15.20		13.80
	Nominal	13.70	14.50			14.20		12.80
LTE TDD Band 48 Intra-band ULCA	Max allowed power	14.70	15.50			15.20		13.80
	Nominal	13.70	14.50			14.20		12.80

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Table 1-5
NR Bands

Mode / Band		Modulated Average Output Power (in dBm)						
		Ant 4	Ant 3B	Ant 3A	Ant 2a	Ant 2b	Ant 1a	Ant 1b
NR FDD Band n71	Max allowed power	22.10	19.40					
	Nominal	21.10	18.40					
NR FDD Band n12	Max allowed power	21.40	18.30					
	Nominal	20.40	17.30					
NR FDD Band n5	Max allowed power	20.30	17.40					
	Nominal	19.30	16.40					
NR FDD Band n66	Max allowed power	15.30		13.70	13.50		15.30	
	Nominal	14.30		12.70	12.50		14.30	
NR FDD Band n2	Max allowed power	15.40		13.50	13.70		14.50	
	Nominal	14.40		12.50	12.70		13.50	
NR FDD Band n25	Max allowed power	15.40		13.50	13.70		14.50	
	Nominal	14.40		12.50	12.70		13.50	
NR FDD Band n30	Max allowed power	14.40		12.40	12.50		14.00	
	Nominal	13.40		11.40	11.50		13.00	
NR FDD Band n7	Max allowed power	14.40		12.10	14.00		13.00	
	Nominal	13.40		11.10	13.00		12.00	
NR TDD Band n41 (PC3)	Max allowed power	14.00		12.80	13.50		14.30	
[Burst Averaged]	Nominal	13.00		11.80	12.50		13.30	
NR TDD Band n41 (PC2)	Max allowed power	14.00		12.80	13.50		14.30	
[Burst Averaged]	Nominal	13.00		11.80	12.50		13.30	
NR TDD Band n77 DOD (PC3)	Max allowed power	11.60	14.40			12.50		12.70
[Burst Averaged]	Nominal	10.60	13.40			11.50		11.70
NR TDD Band n77 DOD (PC2)	Max allowed power	11.60	14.40			12.50		12.70
[Burst Averaged]	Nominal	10.60	13.40			11.50		11.70
NR TDD Band n77 (PC3)	Max allowed power	11.60	14.40			12.50		12.70
[Burst Averaged]	Nominal	10.60	13.40			11.50		11.70
NR TDD Band n77 (PC2)	Max allowed power	11.60	14.40			12.50		12.70
[Burst Averaged]	Nominal	10.60	13.40			11.50		11.70

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1.4.2 Maximum WLAN Time-Averaged Output Power

Note: Targets for 802.11ax RU operations can be found in Appendix H.

Mode/ Band			IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Antenna 1a	20 MHz Bandwidth	1	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		2	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		3	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		4	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		5	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		6	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		7	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		8	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		9	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		10	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		11	13.50	12.00	13.50	12.00	13.50	12.00	13.50	12.00
		12	13.50	12.00	12.25	10.75	12.25	10.75	12.25	10.75
		13	13.50	12.00	9.00	7.50	9.00	7.50	N/A	N/A

Mode/ Band			IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) - Antenna 1a	20 MHz Bandwidth	1	13.50	12.00	13.50	12.00	13.00	11.50
		2	13.50	12.00	13.50	12.00	13.50	12.00
		3	13.50	12.00	13.50	12.00	13.50	12.00
		4	13.50	12.00	13.50	12.00	13.50	12.00
		5	13.50	12.00	13.50	12.00	13.50	12.00
		6	13.50	12.00	13.50	12.00	13.50	12.00
		7	13.50	12.00	13.50	12.00	13.50	12.00
		8	13.50	12.00	13.50	12.00	13.50	12.00
		9	13.50	12.00	13.50	12.00	13.50	12.00
		10	13.50	12.00	13.50	12.00	13.50	12.00
		11	13.50	12.00	13.50	12.00	13.50	12.00
		12	12.25	10.75	12.25	10.75	12.00	10.50
		13	7.50	6.00	7.50	6.00	N/A	N/A

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band			IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Antenna 3a	20 MHz Bandwidth	1	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		2	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		3	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		4	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		5	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		6	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		7	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		8	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		9	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		10	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		11	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		12	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		13	12.25	10.75	9.00	7.50	9.00	7.50	N/A	N/A

Mode/ Band			IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) - Antenna 3a	20 MHz Bandwidth	1	12.25	10.75	12.25	10.75	12.25	10.75
		2	12.25	10.75	12.25	10.75	12.25	10.75
		3	12.25	10.75	12.25	10.75	12.25	10.75
		4	12.25	10.75	12.25	10.75	12.25	10.75
		5	12.25	10.75	12.25	10.75	12.25	10.75
		6	12.25	10.75	12.25	10.75	12.25	10.75
		7	12.25	10.75	12.25	10.75	12.25	10.75
		8	12.25	10.75	12.25	10.75	12.25	10.75
		9	12.25	10.75	12.25	10.75	12.25	10.75
		10	12.25	10.75	12.25	10.75	12.25	10.75
		11	12.25	10.75	12.25	10.75	12.25	10.75
		12	12.25	10.75	12.25	10.75	12.00	10.50
		13	7.50	6.00	7.50	6.00	N/A	N/A

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - 5GHz Antenna 1b	20 MHz Bandwidth	36	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		40	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		44	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		48	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		52	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		56	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		60	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		64	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		100	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		104	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		108	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		112	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		116	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		120	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		124	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		128	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		132	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		136	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		140	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		144	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		149	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		153	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		157	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		161	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		165	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
	40 MHz Bandwidth	38			10.50	9.00	10.50	9.00	10.50	9.00
		46			10.50	9.00	10.50	9.00	10.50	9.00
		54			10.50	9.00	10.50	9.00	10.50	9.00
		62			10.50	9.00	10.50	9.00	10.50	9.00
		102			10.25	8.75	10.25	8.75	10.25	8.75
		110			10.25	8.75	10.25	8.75	10.25	8.75
		118			10.25	8.75	10.25	8.75	10.25	8.75
		126			10.25	8.75	10.25	8.75	10.25	8.75
		134			10.25	8.75	10.25	8.75	10.25	8.75
		142			10.25	8.75	10.25	8.75	10.25	8.75
		151			10.00	8.50	10.00	8.50	10.00	8.50
		159			10.00	8.50	10.00	8.50	10.00	8.50
	80 MHz Bandwidth	42					10.50	9.00	10.50	9.00
		58					10.50	9.00	10.50	9.00
		106					10.25	8.75	10.25	8.75
		122					10.25	8.75	10.25	8.75
		138					10.25	8.75	10.25	8.75
		155					10.00	8.50	10.00	8.50

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Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - 5GHz Antenna 1b	20 MHz Bandwidth	36	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		40	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		44	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		48	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		52	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		56	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		60	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		64	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		100	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		104	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		108	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		112	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		116	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		120	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		124	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		128	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		132	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		136	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		140	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		144	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		149	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		153	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		157	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		161	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		165	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
	40 MHz Bandwidth	38			10.50	9.00	10.50	9.00	10.50	9.00
		46			10.50	9.00	10.50	9.00	10.50	9.00
		54			10.50	9.00	10.50	9.00	10.50	9.00
		62			10.50	9.00	10.50	9.00	10.50	9.00
		102			10.25	8.75	10.25	8.75	10.25	8.75
		110			10.25	8.75	10.25	8.75	10.25	8.75
		118			10.25	8.75	10.25	8.75	10.25	8.75
		126			10.25	8.75	10.25	8.75	10.25	8.75
		134			10.25	8.75	10.25	8.75	10.25	8.75
		142			10.25	8.75	10.25	8.75	10.25	8.75
		151			10.00	8.50	10.00	8.50	10.00	8.50
		159			10.00	8.50	10.00	8.50	10.00	8.50
	80 MHz Bandwidth	42					10.50	9.00	10.50	9.00
		58					10.50	9.00	10.50	9.00
		106					10.25	8.75	10.25	8.75
		122					10.25	8.75	10.25	8.75
		138					10.25	8.75	10.25	8.75
		155					10.00	8.50	10.00	8.50

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - 5GHz Antenna 1b	20 MHz Bandwidth	36	10.50	9.00	10.50	9.00	10.50	9.00
		40	10.50	9.00	10.50	9.00	10.50	9.00
		44	10.50	9.00	10.50	9.00	10.50	9.00
		48	10.50	9.00	10.50	9.00	10.50	9.00
		52	10.50	9.00	10.50	9.00	10.50	9.00
		56	10.50	9.00	10.50	9.00	10.50	9.00
		60	10.50	9.00	10.50	9.00	10.50	9.00
		64	10.50	9.00	10.50	9.00	10.50	9.00
		100	10.25	8.75	10.25	8.75	10.25	8.75
		104	10.25	8.75	10.25	8.75	10.25	8.75
		108	10.25	8.75	10.25	8.75	10.25	8.75
		112	10.25	8.75	10.25	8.75	10.25	8.75
		116	10.25	8.75	10.25	8.75	10.25	8.75
		120	10.25	8.75	10.25	8.75	10.25	8.75
		124	10.25	8.75	10.25	8.75	10.25	8.75
		128	10.25	8.75	10.25	8.75	10.25	8.75
		132	10.25	8.75	10.25	8.75	10.25	8.75
		136	10.25	8.75	10.25	8.75	10.25	8.75
		140	10.25	8.75	10.25	8.75	10.25	8.75
		144	10.25	8.75	10.25	8.75	10.25	8.75
		149	10.00	8.50	10.00	8.50	10.00	8.50
		153	10.00	8.50	10.00	8.50	10.00	8.50
		157	10.00	8.50	10.00	8.50	10.00	8.50
		161	10.00	8.50	10.00	8.50	10.00	8.50
		165	10.00	8.50	10.00	8.50	10.00	8.50
	40 MHz Bandwidth	38	10.50	9.00	10.50	9.00	10.50	9.00
		46	10.50	9.00	10.50	9.00	10.50	9.00
		54	10.50	9.00	10.50	9.00	10.50	9.00
		62	10.50	9.00	10.50	9.00	10.50	9.00
		102	10.25	8.75	10.25	8.75	10.25	8.75
		110	10.25	8.75	10.25	8.75	10.25	8.75
		118	10.25	8.75	10.25	8.75	10.25	8.75
		126	10.25	8.75	10.25	8.75	10.25	8.75
		134	10.25	8.75	10.25	8.75	10.25	8.75
		142	10.25	8.75	10.25	8.75	10.25	8.75
		151	10.00	8.50	10.00	8.50	10.00	8.50
		159	10.00	8.50	10.00	8.50	10.00	8.50
	80 MHz Bandwidth	42	[redacted]		10.50	9.00	10.50	9.00
		58			10.50	9.00	10.50	9.00
		106			10.25	8.75	10.25	8.75
		122			10.25	8.75	10.25	8.75
		138			10.25	8.75	10.25	8.75
		155			10.00	8.50	10.00	8.50

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - 5GHz Antenna 2b	20 MHz Bandwidth	36	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		40	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		44	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		48	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		52	9.50	8.00	9.50	8.00	9.50	8.00	9.50	8.00
		56	9.50	8.00	9.50	8.00	9.50	8.00	9.50	8.00
		60	9.50	8.00	9.50	8.00	9.50	8.00	9.50	8.00
		64	9.50	8.00	9.50	8.00	9.50	8.00	9.50	8.00
		100	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		104	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		108	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		112	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		116	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		120	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		124	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		128	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		132	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		136	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		140	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		144	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		149	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		153	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		157	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		161	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		165	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
	40 MHz Bandwidth	38			10.25	8.75	10.25	8.75	10.25	8.75
		46			10.25	8.75	10.25	8.75	10.25	8.75
		54			9.50	8.00	9.50	8.00	9.50	8.00
		62			9.50	8.00	9.50	8.00	9.50	8.00
		102			10.00	8.50	10.00	8.50	10.00	8.50
		110			10.00	8.50	10.00	8.50	10.00	8.50
		118			10.00	8.50	10.00	8.50	10.00	8.50
		126			10.00	8.50	10.00	8.50	10.00	8.50
		134			10.00	8.50	10.00	8.50	10.00	8.50
		142			10.00	8.50	10.00	8.50	10.00	8.50
		151			10.00	8.50	10.00	8.50	10.00	8.50
		159			10.00	8.50	10.00	8.50	10.00	8.50
	80 MHz Bandwidth	42					10.25	8.75	10.25	8.75
		58					9.50	8.00	9.50	8.00
		106					10.00	8.50	10.00	8.50
		122					10.00	8.50	10.00	8.50
		138					10.00	8.50	10.00	8.50
		155					10.00	8.50	10.00	8.50

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Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - 5GHz Antenna 2b	20 MHz Bandwidth	36	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		40	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		44	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		48	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		52	9.50	8.00	9.50	8.00	9.50	8.00	9.50	8.00
		56	9.50	8.00	9.50	8.00	9.50	8.00	9.50	8.00
		60	9.50	8.00	9.50	8.00	9.50	8.00	9.50	8.00
		64	9.50	8.00	9.50	8.00	9.50	8.00	9.50	8.00
		100	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		104	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		108	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		112	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		116	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		120	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		124	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		128	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		132	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		136	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		140	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		144	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		149	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		153	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		157	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		161	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
		165	10.00	8.50	10.00	8.50	10.00	8.50	10.00	8.50
	40 MHz Bandwidth	38			10.25	8.75	10.25	8.75	10.25	8.75
		46			10.25	8.75	10.25	8.75	10.25	8.75
		54			9.50	8.00	9.50	8.00	9.50	8.00
		62			9.50	8.00	9.50	8.00	9.50	8.00
		102			10.00	8.50	10.00	8.50	10.00	8.50
		110			10.00	8.50	10.00	8.50	10.00	8.50
		118			10.00	8.50	10.00	8.50	10.00	8.50
		126			10.00	8.50	10.00	8.50	10.00	8.50
		134			10.00	8.50	10.00	8.50	10.00	8.50
		142			10.00	8.50	10.00	8.50	10.00	8.50
		151			10.00	8.50	10.00	8.50	10.00	8.50
		159			10.00	8.50	10.00	8.50	10.00	8.50
	80 MHz Bandwidth	42					10.25	8.75	10.25	8.75
		58					9.50	8.00	9.50	8.00
		106					10.00	8.50	10.00	8.50
		122					10.00	8.50	10.00	8.50
		138					10.00	8.50	10.00	8.50
		155					10.00	8.50	10.00	8.50

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - 5GHz Antenna 2b	20 MHz Bandwidth	36	10.25	8.75	10.25	8.75	10.25	8.75
		40	10.25	8.75	10.25	8.75	10.25	8.75
		44	10.25	8.75	10.25	8.75	10.25	8.75
		48	10.25	8.75	10.25	8.75	10.25	8.75
		52	9.50	8.00	9.50	8.00	9.50	8.00
		56	9.50	8.00	9.50	8.00	9.50	8.00
		60	9.50	8.00	9.50	8.00	9.50	8.00
		64	9.50	8.00	9.50	8.00	9.50	8.00
		100	10.00	8.50	10.00	8.50	10.00	8.50
		104	10.00	8.50	10.00	8.50	10.00	8.50
		108	10.00	8.50	10.00	8.50	10.00	8.50
		112	10.00	8.50	10.00	8.50	10.00	8.50
		116	10.00	8.50	10.00	8.50	10.00	8.50
		120	10.00	8.50	10.00	8.50	10.00	8.50
		124	10.00	8.50	10.00	8.50	10.00	8.50
		128	10.00	8.50	10.00	8.50	10.00	8.50
		132	10.00	8.50	10.00	8.50	10.00	8.50
		136	10.00	8.50	10.00	8.50	10.00	8.50
		140	10.00	8.50	10.00	8.50	10.00	8.50
		144	10.00	8.50	10.00	8.50	10.00	8.50
		149	10.00	8.50	10.00	8.50	10.00	8.50
		153	10.00	8.50	10.00	8.50	10.00	8.50
		157	10.00	8.50	10.00	8.50	10.00	8.50
		161	10.00	8.50	10.00	8.50	10.00	8.50
		165	10.00	8.50	10.00	8.50	10.00	8.50
	40 MHz Bandwidth	38	10.25	8.75	10.25	8.75	10.25	8.75
		46	10.25	8.75	10.25	8.75	10.25	8.75
		54	9.50	8.00	9.50	8.00	9.50	8.00
		62	9.50	8.00	9.50	8.00	9.50	8.00
		102	10.00	8.50	10.00	8.50	10.00	8.50
		110	10.00	8.50	10.00	8.50	10.00	8.50
		118	10.00	8.50	10.00	8.50	10.00	8.50
		126	10.00	8.50	10.00	8.50	10.00	8.50
		134	10.00	8.50	10.00	8.50	10.00	8.50
		142	10.00	8.50	10.00	8.50	10.00	8.50
		151	10.00	8.50	10.00	8.50	10.00	8.50
		159	10.00	8.50	10.00	8.50	10.00	8.50
	80 MHz Bandwidth	42			10.25	8.75	10.25	8.75
		58			9.50	8.00	9.50	8.00
		106			10.00	8.50	10.00	8.50
		122			10.00	8.50	10.00	8.50
		138			10.00	8.50	10.00	8.50
		155			10.00	8.50	10.00	8.50

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - 5GHz Antenna 3a	20 MHz Bandwidth	36	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		40	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		44	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		48	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		52	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		56	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		60	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		64	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		100	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		104	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		108	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		112	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		116	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		120	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		124	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		128	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		132	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		136	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		140	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		144	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		149	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		153	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		157	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		161	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		165	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
	40 MHz Bandwidth	38			10.25	8.75	10.25	8.75	10.25	8.75
		46			10.25	8.75	10.25	8.75	10.25	8.75
		54			10.50	9.00	10.50	9.00	10.50	9.00
		62			10.50	9.00	10.50	9.00	10.50	9.00
		102			11.00	9.50	11.00	9.50	11.00	9.50
		110			11.00	9.50	11.00	9.50	11.00	9.50
		118			11.00	9.50	11.00	9.50	11.00	9.50
		126			11.00	9.50	11.00	9.50	11.00	9.50
		134			11.00	9.50	11.00	9.50	11.00	9.50
		142			11.00	9.50	11.00	9.50	11.00	9.50
		151			10.25	8.75	10.25	8.75	10.25	8.75
		159			10.25	8.75	10.25	8.75	10.25	8.75
	80 MHz Bandwidth	42					10.25	8.75	10.25	8.75
		58					10.50	9.00	10.50	9.00
		106					11.00	9.50	11.00	9.50
		122					11.00	9.50	11.00	9.50
		138					11.00	9.50	11.00	9.50
		155					10.25	8.75	10.25	8.75

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Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - 5GHz Antenna 3a	20 MHz Bandwidth	36	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		40	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		44	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		48	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		52	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		56	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		60	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		64	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		100	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		104	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		108	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		112	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		116	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		120	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		124	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		128	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		132	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		136	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		140	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		144	11.00	9.50	11.00	9.50	11.00	9.50	11.00	9.50
		149	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		153	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		157	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		161	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		165	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
	40 MHz Bandwidth	38			10.25	8.75	10.25	8.75	10.25	8.75
		46			10.25	8.75	10.25	8.75	10.25	8.75
		54			10.50	9.00	10.50	9.00	10.50	9.00
		62			10.50	9.00	10.50	9.00	10.50	9.00
		102			11.00	9.50	11.00	9.50	11.00	9.50
		110			11.00	9.50	11.00	9.50	11.00	9.50
		118			11.00	9.50	11.00	9.50	11.00	9.50
		126			11.00	9.50	11.00	9.50	11.00	9.50
		134			11.00	9.50	11.00	9.50	11.00	9.50
		142			11.00	9.50	11.00	9.50	11.00	9.50
		151			10.25	8.75	10.25	8.75	10.25	8.75
		159			10.25	8.75	10.25	8.75	10.25	8.75
	80 MHz Bandwidth	42					10.25	8.75	10.25	8.75
		58					10.50	9.00	10.50	9.00
		106					11.00	9.50	11.00	9.50
		122					11.00	9.50	11.00	9.50
		138					11.00	9.50	11.00	9.50
		155					10.25	8.75	10.25	8.75

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - 5GHz Antenna 3a	20 MHz Bandwidth	36	10.25	8.75	10.25	8.75	10.25	8.75
		40	10.25	8.75	10.25	8.75	10.25	8.75
		44	10.25	8.75	10.25	8.75	10.25	8.75
		48	10.25	8.75	10.25	8.75	10.25	8.75
		52	10.50	9.00	10.50	9.00	10.50	9.00
		56	10.50	9.00	10.50	9.00	10.50	9.00
		60	10.50	9.00	10.50	9.00	10.50	9.00
		64	10.50	9.00	10.50	9.00	10.50	9.00
		100	11.00	9.50	11.00	9.50	11.00	9.50
		104	11.00	9.50	11.00	9.50	11.00	9.50
		108	11.00	9.50	11.00	9.50	11.00	9.50
		112	11.00	9.50	11.00	9.50	11.00	9.50
		116	11.00	9.50	11.00	9.50	11.00	9.50
		120	11.00	9.50	11.00	9.50	11.00	9.50
		124	11.00	9.50	11.00	9.50	11.00	9.50
		128	11.00	9.50	11.00	9.50	11.00	9.50
		132	11.00	9.50	11.00	9.50	11.00	9.50
		136	11.00	9.50	11.00	9.50	11.00	9.50
		140	11.00	9.50	11.00	9.50	11.00	9.50
		144	11.00	9.50	11.00	9.50	11.00	9.50
		149	10.25	8.75	10.25	8.75	10.25	8.75
		153	10.25	8.75	10.25	8.75	10.25	8.75
		157	10.25	8.75	10.25	8.75	10.25	8.75
		161	10.25	8.75	10.25	8.75	10.25	8.75
		165	10.25	8.75	10.25	8.75	10.25	8.75
	40 MHz Bandwidth	38	10.25	8.75	10.25	8.75	10.25	8.75
		46	10.25	8.75	10.25	8.75	10.25	8.75
		54	10.50	9.00	10.50	9.00	10.50	9.00
		62	10.50	9.00	10.50	9.00	10.50	9.00
		102	11.00	9.50	11.00	9.50	11.00	9.50
		110	11.00	9.50	11.00	9.50	11.00	9.50
		118	11.00	9.50	11.00	9.50	11.00	9.50
		126	11.00	9.50	11.00	9.50	11.00	9.50
		134	11.00	9.50	11.00	9.50	11.00	9.50
		142	11.00	9.50	11.00	9.50	11.00	9.50
		151	10.25	8.75	10.25	8.75	10.25	8.75
		159	10.25	8.75	10.25	8.75	10.25	8.75
	80 MHz Bandwidth	42			10.25	8.75	10.25	8.75
		58			10.50	9.00	10.50	9.00
		106			11.00	9.50	11.00	9.50
		122			11.00	9.50	11.00	9.50
		138			11.00	9.50	11.00	9.50
		155			10.25	8.75	10.25	8.75

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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1.4.3 Reduced WLAN Time-Averaged Output Power

Note: Targets for 802.11ax RU operations can be found in Appendix H.

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b active
-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Antenna 1a	20 MHz Bandwidth	1	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		2	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		3	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		4	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		5	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		6	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		7	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		8	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		9	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		10	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		11	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		12	10.50	9.00	10.50	9.00	10.50	9.00	10.50	9.00
		13	10.50	9.00	9.00	7.50	9.00	7.50	N/A	N/A

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b active
-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) - Antenna 1a	20 MHz Bandwidth	1	10.50	9.00	10.50	9.00	10.50	9.00
		2	10.50	9.00	10.50	9.00	10.50	9.00
		3	10.50	9.00	10.50	9.00	10.50	9.00
		4	10.50	9.00	10.50	9.00	10.50	9.00
		5	10.50	9.00	10.50	9.00	10.50	9.00
		6	10.50	9.00	10.50	9.00	10.50	9.00
		7	10.50	9.00	10.50	9.00	10.50	9.00
		8	10.50	9.00	10.50	9.00	10.50	9.00
		9	10.50	9.00	10.50	9.00	10.50	9.00
		10	10.50	9.00	10.50	9.00	10.50	9.00
		11	10.50	9.00	10.50	9.00	10.50	9.00
		12	10.50	9.00	10.50	9.00	10.50	9.00
		13	7.50	6.00	7.50	6.00	N/A	N/A

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3a/3b active
-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Antenna 3a	20 MHz Bandwidth	1	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		2	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		3	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		4	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		5	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		6	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		7	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		8	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		9	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		10	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		11	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		12	9.25	7.75	9.25	7.75	9.25	7.75	9.25	7.75
		13	9.25	7.75	9.00	7.50	9.00	7.50	N/A	N/A

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3a/3b active
-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) - Antenna 3a	20 MHz Bandwidth	1	9.25	7.75	9.25	7.75	9.25	7.75
		2	9.25	7.75	9.25	7.75	9.25	7.75
		3	9.25	7.75	9.25	7.75	9.25	7.75
		4	9.25	7.75	9.25	7.75	9.25	7.75
		5	9.25	7.75	9.25	7.75	9.25	7.75
		6	9.25	7.75	9.25	7.75	9.25	7.75
		7	9.25	7.75	9.25	7.75	9.25	7.75
		8	9.25	7.75	9.25	7.75	9.25	7.75
		9	9.25	7.75	9.25	7.75	9.25	7.75
		10	9.25	7.75	9.25	7.75	9.25	7.75
		11	9.25	7.75	9.25	7.75	9.25	7.75
		12	9.25	7.75	9.25	7.75	9.25	7.75
		13	7.50	6.00	7.50	6.00	N/A	N/A

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - 5GHz Antenna 1b	20 MHz Bandwidth	36	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		40	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		44	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		48	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		52	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		56	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		60	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		64	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		100	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		104	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		108	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		112	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		116	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		120	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		124	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		128	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		132	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		136	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		140	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		144	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		149	4.00	2.50	4.00	2.50	4.00	2.50	4.00	2.50
		153	4.00	2.50	4.00	2.50	4.00	2.50	4.00	2.50
		157	4.00	2.50	4.00	2.50	4.00	2.50	4.00	2.50
		161	4.00	2.50	4.00	2.50	4.00	2.50	4.00	2.50
		165	4.00	2.50	4.00	2.50	4.00	2.50	4.00	2.50
	40 MHz Bandwidth	38			4.50	3.00	4.50	3.00	4.50	3.00
		46			4.50	3.00	4.50	3.00	4.50	3.00
		54			4.50	3.00	4.50	3.00	4.50	3.00
		62			4.50	3.00	4.50	3.00	4.50	3.00
		102			4.25	2.75	4.25	2.75	4.25	2.75
		110			4.25	2.75	4.25	2.75	4.25	2.75
		118			4.25	2.75	4.25	2.75	4.25	2.75
		126			4.25	2.75	4.25	2.75	4.25	2.75
		134			4.25	2.75	4.25	2.75	4.25	2.75
		142			4.25	2.75	4.25	2.75	4.25	2.75
		151			4.00	2.50	4.00	2.50	4.00	2.50
		159			4.00	2.50	4.00	2.50	4.00	2.50
	80 MHz Bandwidth	42					4.50	3.00	4.50	3.00
		58					4.50	3.00	4.50	3.00
		106					4.25	2.75	4.25	2.75
		122					4.25	2.75	4.25	2.75
		138					4.25	2.75	4.25	2.75
		155					4.00	2.50	4.00	2.50

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-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - 5GHz Antenna 1b	20 MHz Bandwidth	36	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		40	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		44	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		48	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		52	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		56	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		60	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		64	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		100	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		104	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		108	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		112	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		116	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		120	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		124	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		128	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		132	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		136	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		140	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		144	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		149	4.00	2.50	4.00	2.50	4.00	2.50	4.00	2.50
		153	4.00	2.50	4.00	2.50	4.00	2.50	4.00	2.50
		157	4.00	2.50	4.00	2.50	4.00	2.50	4.00	2.50
		161	4.00	2.50	4.00	2.50	4.00	2.50	4.00	2.50
		165	4.00	2.50	4.00	2.50	4.00	2.50	4.00	2.50
	40 MHz Bandwidth	38			4.50	3.00	4.50	3.00	4.50	3.00
		46			4.50	3.00	4.50	3.00	4.50	3.00
		54			4.50	3.00	4.50	3.00	4.50	3.00
		62			4.50	3.00	4.50	3.00	4.50	3.00
		102			4.25	2.75	4.25	2.75	4.25	2.75
		110			4.25	2.75	4.25	2.75	4.25	2.75
		118			4.25	2.75	4.25	2.75	4.25	2.75
		126			4.25	2.75	4.25	2.75	4.25	2.75
		134			4.25	2.75	4.25	2.75	4.25	2.75
		142			4.25	2.75	4.25	2.75	4.25	2.75
		151			4.00	2.50	4.00	2.50	4.00	2.50
		159			4.00	2.50	4.00	2.50	4.00	2.50
	80 MHz Bandwidth	42					4.50	3.00	4.50	3.00
		58					4.50	3.00	4.50	3.00
		106					4.25	2.75	4.25	2.75
		122					4.25	2.75	4.25	2.75
		138					4.25	2.75	4.25	2.75
		155					4.00	2.50	4.00	2.50

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - 5GHz Antenna 1b	20 MHz Bandwidth	36	4.50	3.00	4.50	3.00	4.50	3.00
		40	4.50	3.00	4.50	3.00	4.50	3.00
		44	4.50	3.00	4.50	3.00	4.50	3.00
		48	4.50	3.00	4.50	3.00	4.50	3.00
		52	4.50	3.00	4.50	3.00	4.50	3.00
		56	4.50	3.00	4.50	3.00	4.50	3.00
		60	4.50	3.00	4.50	3.00	4.50	3.00
		64	4.50	3.00	4.50	3.00	4.50	3.00
		100	4.25	2.75	4.25	2.75	4.25	2.75
		104	4.25	2.75	4.25	2.75	4.25	2.75
		108	4.25	2.75	4.25	2.75	4.25	2.75
		112	4.25	2.75	4.25	2.75	4.25	2.75
		116	4.25	2.75	4.25	2.75	4.25	2.75
		120	4.25	2.75	4.25	2.75	4.25	2.75
		124	4.25	2.75	4.25	2.75	4.25	2.75
		128	4.25	2.75	4.25	2.75	4.25	2.75
		132	4.25	2.75	4.25	2.75	4.25	2.75
		136	4.25	2.75	4.25	2.75	4.25	2.75
		140	4.25	2.75	4.25	2.75	4.25	2.75
		144	4.25	2.75	4.25	2.75	4.25	2.75
		149	4.00	2.50	4.00	2.50	4.00	2.50
		153	4.00	2.50	4.00	2.50	4.00	2.50
		157	4.00	2.50	4.00	2.50	4.00	2.50
		161	4.00	2.50	4.00	2.50	4.00	2.50
		165	4.00	2.50	4.00	2.50	4.00	2.50
	40 MHz Bandwidth	38	4.50	3.00	4.50	3.00	4.50	3.00
		46	4.50	3.00	4.50	3.00	4.50	3.00
		54	4.50	3.00	4.50	3.00	4.50	3.00
		62	4.50	3.00	4.50	3.00	4.50	3.00
		102	4.25	2.75	4.25	2.75	4.25	2.75
		110	4.25	2.75	4.25	2.75	4.25	2.75
		118	4.25	2.75	4.25	2.75	4.25	2.75
		126	4.25	2.75	4.25	2.75	4.25	2.75
		134	4.25	2.75	4.25	2.75	4.25	2.75
		142	4.25	2.75	4.25	2.75	4.25	2.75
		151	4.00	2.50	4.00	2.50	4.00	2.50
		159	4.00	2.50	4.00	2.50	4.00	2.50
	80 MHz Bandwidth	42			4.50	3.00	4.50	3.00
		58			4.50	3.00	4.50	3.00
		106			4.25	2.75	4.25	2.75
		122			4.25	2.75	4.25	2.75
		138			4.25	2.75	4.25	2.75
		155			4.00	2.50	4.00	2.50

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - 5GHz Antenna 2b	20 MHz Bandwidth	36	7.25	5.75	7.25	5.75	7.25	5.75	7.25	5.75
		40	7.25	5.75	7.25	5.75	7.25	5.75	7.25	5.75
		44	7.25	5.75	7.25	5.75	7.25	5.75	7.25	5.75
		48	7.25	5.75	7.25	5.75	7.25	5.75	7.25	5.75
		52	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		56	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		60	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		64	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		100	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		104	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		108	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		112	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		116	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		120	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		124	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		128	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		132	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		136	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		140	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		144	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		149	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		153	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		157	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		161	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		165	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
	40 MHz Bandwidth	38			7.25	5.75	7.25	5.75	7.25	5.75
		46			7.25	5.75	7.25	5.75	7.25	5.75
		54			6.50	5.00	6.50	5.00	6.50	5.00
		62			6.50	5.00	6.50	5.00	6.50	5.00
		102			7.00	5.50	7.00	5.50	7.00	5.50
		110			7.00	5.50	7.00	5.50	7.00	5.50
		118			7.00	5.50	7.00	5.50	7.00	5.50
		126			7.00	5.50	7.00	5.50	7.00	5.50
		134			7.00	5.50	7.00	5.50	7.00	5.50
		142			7.00	5.50	7.00	5.50	7.00	5.50
		151			7.00	5.50	7.00	5.50	7.00	5.50
		159			7.00	5.50	7.00	5.50	7.00	5.50
	80 MHz Bandwidth	42					7.25	5.75	7.25	5.75
		58					6.50	5.00	6.50	5.00
		106					7.00	5.50	7.00	5.50
		122					7.00	5.50	7.00	5.50
		138					7.00	5.50	7.00	5.50
		155					7.00	5.50	7.00	5.50

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-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - 5GHzAntenna 2b	20 MHz Bandwidth	36	7.25	5.75	7.25	5.75	7.25	5.75	7.25	5.75
		40	7.25	5.75	7.25	5.75	7.25	5.75	7.25	5.75
		44	7.25	5.75	7.25	5.75	7.25	5.75	7.25	5.75
		48	7.25	5.75	7.25	5.75	7.25	5.75	7.25	5.75
		52	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		56	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		60	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		64	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		100	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		104	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		108	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		112	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		116	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		120	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		124	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		128	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		132	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		136	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		140	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		144	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		149	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		153	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		157	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		161	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
		165	7.00	5.50	7.00	5.50	7.00	5.50	7.00	5.50
	40 MHz Bandwidth	38			7.25	5.75	7.25	5.75	7.25	5.75
		46			7.25	5.75	7.25	5.75	7.25	5.75
		54			6.50	5.00	6.50	5.00	6.50	5.00
		62			6.50	5.00	6.50	5.00	6.50	5.00
		102			7.00	5.50	7.00	5.50	7.00	5.50
		110			7.00	5.50	7.00	5.50	7.00	5.50
		118			7.00	5.50	7.00	5.50	7.00	5.50
		126			7.00	5.50	7.00	5.50	7.00	5.50
		134			7.00	5.50	7.00	5.50	7.00	5.50
		142			7.00	5.50	7.00	5.50	7.00	5.50
		151			7.00	5.50	7.00	5.50	7.00	5.50
		159			7.00	5.50	7.00	5.50	7.00	5.50
	80 MHz Bandwidth	42					7.25	5.75	7.25	5.75
		58					6.50	5.00	6.50	5.00
		106					7.00	5.50	7.00	5.50
		122					7.00	5.50	7.00	5.50
		138					7.00	5.50	7.00	5.50
		155					7.00	5.50	7.00	5.50

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - 5GHz Antenna 2b	20 MHz Bandwidth	36	7.25	5.75	7.25	5.75	7.25	5.75
		40	7.25	5.75	7.25	5.75	7.25	5.75
		44	7.25	5.75	7.25	5.75	7.25	5.75
		48	7.25	5.75	7.25	5.75	7.25	5.75
		52	6.50	5.00	6.50	5.00	6.50	5.00
		56	6.50	5.00	6.50	5.00	6.50	5.00
		60	6.50	5.00	6.50	5.00	6.50	5.00
		64	6.50	5.00	6.50	5.00	6.50	5.00
		100	7.00	5.50	7.00	5.50	7.00	5.50
		104	7.00	5.50	7.00	5.50	7.00	5.50
		108	7.00	5.50	7.00	5.50	7.00	5.50
		112	7.00	5.50	7.00	5.50	7.00	5.50
		116	7.00	5.50	7.00	5.50	7.00	5.50
		120	7.00	5.50	7.00	5.50	7.00	5.50
		124	7.00	5.50	7.00	5.50	7.00	5.50
		128	7.00	5.50	7.00	5.50	7.00	5.50
		132	7.00	5.50	7.00	5.50	7.00	5.50
		136	7.00	5.50	7.00	5.50	7.00	5.50
		140	7.00	5.50	7.00	5.50	7.00	5.50
		144	7.00	5.50	7.00	5.50	7.00	5.50
		149	7.00	5.50	7.00	5.50	7.00	5.50
		153	7.00	5.50	7.00	5.50	7.00	5.50
		157	7.00	5.50	7.00	5.50	7.00	5.50
		161	7.00	5.50	7.00	5.50	7.00	5.50
		165	7.00	5.50	7.00	5.50	7.00	5.50
	40 MHz Bandwidth	38	7.25	5.75	7.25	5.75	7.25	5.75
		46	7.25	5.75	7.25	5.75	7.25	5.75
		54	6.50	5.00	6.50	5.00	6.50	5.00
		62	6.50	5.00	6.50	5.00	6.50	5.00
		102	7.00	5.50	7.00	5.50	7.00	5.50
		110	7.00	5.50	7.00	5.50	7.00	5.50
		118	7.00	5.50	7.00	5.50	7.00	5.50
		126	7.00	5.50	7.00	5.50	7.00	5.50
		134	7.00	5.50	7.00	5.50	7.00	5.50
		142	7.00	5.50	7.00	5.50	7.00	5.50
		151	7.00	5.50	7.00	5.50	7.00	5.50
		159	7.00	5.50	7.00	5.50	7.00	5.50
	80 MHz Bandwidth	42	[redacted]		7.25	5.75	7.25	5.75
		58			6.50	5.00	6.50	5.00
		106			7.00	5.50	7.00	5.50
		122			7.00	5.50	7.00	5.50
		138			7.00	5.50	7.00	5.50
		155			7.00	5.50	7.00	5.50

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-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - 5GHz Antenna 3a	20 MHz Bandwidth	36	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		40	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		44	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		48	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		52	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		56	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		60	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		64	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		100	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		104	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		108	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		112	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		116	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		120	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		124	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		128	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		132	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		136	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		140	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		144	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		149	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		153	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		157	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		161	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		165	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
	40 MHz Bandwidth	38			4.25	2.75	4.25	2.75	4.25	2.75
		46			4.25	2.75	4.25	2.75	4.25	2.75
		54			4.50	3.00	4.50	3.00	4.50	3.00
		62			4.50	3.00	4.50	3.00	4.50	3.00
		102			5.00	3.50	5.00	3.50	5.00	3.50
		110			5.00	3.50	5.00	3.50	5.00	3.50
		118			5.00	3.50	5.00	3.50	5.00	3.50
		126			5.00	3.50	5.00	3.50	5.00	3.50
		134			5.00	3.50	5.00	3.50	5.00	3.50
		142			5.00	3.50	5.00	3.50	5.00	3.50
		151			4.25	2.75	4.25	2.75	4.25	2.75
		159			4.25	2.75	4.25	2.75	4.25	2.75
	80 MHz Bandwidth	42					4.25	2.75	4.25	2.75
		58					4.50	3.00	4.50	3.00
		106					5.00	3.50	5.00	3.50
		122					5.00	3.50	5.00	3.50
		138					5.00	3.50	5.00	3.50
		155					4.25	2.75	4.25	2.75

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-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - 5GHz Antenna 3a	20 MHz Bandwidth	36	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		40	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		44	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		48	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		52	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		56	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		60	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		64	4.50	3.00	4.50	3.00	4.50	3.00	4.50	3.00
		100	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		104	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		108	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		112	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		116	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		120	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		124	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		128	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		132	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		136	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		140	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		144	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		149	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		153	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		157	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		161	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		165	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
	40 MHz Bandwidth	38	[redacted]		4.25	2.75	4.25	2.75	4.25	2.75
		46			4.25	2.75	4.25	2.75	4.25	2.75
		54			4.50	3.00	4.50	3.00	4.50	3.00
		62			4.50	3.00	4.50	3.00	4.50	3.00
		102			5.00	3.50	5.00	3.50	5.00	3.50
		110			5.00	3.50	5.00	3.50	5.00	3.50
		118			5.00	3.50	5.00	3.50	5.00	3.50
		126			5.00	3.50	5.00	3.50	5.00	3.50
		134			5.00	3.50	5.00	3.50	5.00	3.50
		142			5.00	3.50	5.00	3.50	5.00	3.50
		151			4.25	2.75	4.25	2.75	4.25	2.75
		159			4.25	2.75	4.25	2.75	4.25	2.75
	80 MHz Bandwidth	42	[redacted]				4.25	2.75	4.25	2.75
		58					4.50	3.00	4.50	3.00
		106					5.00	3.50	5.00	3.50
		122					5.00	3.50	5.00	3.50
		138					5.00	3.50	5.00	3.50
		155					4.25	2.75	4.25	2.75

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-Simultaneous conditions with Licensed Bands Antenna 3a/3b active
-Simultaneous conditions with Inter-Band ULCA active

Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - 5GHz Antenna 3a	20 MHz Bandwidth	36	4.25	2.75	4.25	2.75	4.25	2.75
		40	4.25	2.75	4.25	2.75	4.25	2.75
		44	4.25	2.75	4.25	2.75	4.25	2.75
		48	4.25	2.75	4.25	2.75	4.25	2.75
		52	4.50	3.00	4.50	3.00	4.50	3.00
		56	4.50	3.00	4.50	3.00	4.50	3.00
		60	4.50	3.00	4.50	3.00	4.50	3.00
		64	4.50	3.00	4.50	3.00	4.50	3.00
		100	5.00	3.50	5.00	3.50	5.00	3.50
		104	5.00	3.50	5.00	3.50	5.00	3.50
		108	5.00	3.50	5.00	3.50	5.00	3.50
		112	5.00	3.50	5.00	3.50	5.00	3.50
		116	5.00	3.50	5.00	3.50	5.00	3.50
		120	5.00	3.50	5.00	3.50	5.00	3.50
		124	5.00	3.50	5.00	3.50	5.00	3.50
		128	5.00	3.50	5.00	3.50	5.00	3.50
		132	5.00	3.50	5.00	3.50	5.00	3.50
		136	5.00	3.50	5.00	3.50	5.00	3.50
		140	5.00	3.50	5.00	3.50	5.00	3.50
		144	5.00	3.50	5.00	3.50	5.00	3.50
		149	4.25	2.75	4.25	2.75	4.25	2.75
		153	4.25	2.75	4.25	2.75	4.25	2.75
		157	4.25	2.75	4.25	2.75	4.25	2.75
		161	4.25	2.75	4.25	2.75	4.25	2.75
		165	4.25	2.75	4.25	2.75	4.25	2.75
	40 MHz Bandwidth	38	4.25	2.75	4.25	2.75	4.25	2.75
		46	4.25	2.75	4.25	2.75	4.25	2.75
		54	4.50	3.00	4.50	3.00	4.50	3.00
		62	4.50	3.00	4.50	3.00	4.50	3.00
		102	5.00	3.50	5.00	3.50	5.00	3.50
		110	5.00	3.50	5.00	3.50	5.00	3.50
		118	5.00	3.50	5.00	3.50	5.00	3.50
		126	5.00	3.50	5.00	3.50	5.00	3.50
		134	5.00	3.50	5.00	3.50	5.00	3.50
		142	5.00	3.50	5.00	3.50	5.00	3.50
		151	4.25	2.75	4.25	2.75	4.25	2.75
		159	4.25	2.75	4.25	2.75	4.25	2.75
	80 MHz Bandwidth	42	[redacted]		4.25	2.75	4.25	2.75
		58			4.50	3.00	4.50	3.00
		106			5.00	3.50	5.00	3.50
		122			5.00	3.50	5.00	3.50
		138			5.00	3.50	5.00	3.50
		155			4.25	2.75	4.25	2.75

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above.

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1.4.4 Bluetooth Maximum and Reduced Output Power

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 1a
Bluetooth BDR/LE	Maximum	**14.00**
	Nominal	**12.50**
Bluetooth EDR	Maximum	**13.50**
	Nominal	**12.00**
Bluetooth HDR	Maximum	**11.00**
	Nominal	**9.50**

Mode / Band		Modulated Average - TXBF (dBm) - Ant 1a
Bluetooth BDR/LE	Maximum	**14.00**
	Nominal	**12.50**
Bluetooth EDR	Maximum	**13.50**
	Nominal	**12.00**
Bluetooth HDR	Maximum	**11.00**
	Nominal	**9.50**

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 3a
Bluetooth BDR/LE	Maximum	**12.50**
	Nominal	**11.00**
Bluetooth EDR	Maximum	**12.50**
	Nominal	**11.00**
Bluetooth HDR	Maximum	**11.00**
	Nominal	**9.50**

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Mode / Band		Modulated Average - TXBF (dBm) - Ant 3a
Bluetooth BDR/LE	Maximum	**12.50**
	Nominal	**11.00**
Bluetooth EDR	Maximum	**12.50**
	Nominal	**11.00**
Bluetooth HDR	Maximum	**11.00**
	Nominal	**9.50**

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 1a
Bluetooth BDR/LE Reduced	Maximum	**10.50**
	Nominal	**9.00**
Bluetooth EDR Reduced	Maximum	**10.50**
	Nominal	**9.00**
Bluetooth HDR Reduced	Maximum	**10.50**
	Nominal	**9.00**

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 1a
Bluetooth BDR/LE Reduced	Maximum	**10.50**
	Nominal	**9.00**
Bluetooth EDR Reduced	Maximum	**10.50**
	Nominal	**9.00**
Bluetooth HDR Reduced	Maximum	**10.50**
	Nominal	**9.00**

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

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Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2a/2b/3a/3b/4 and 5GHz WLAN active
-Simultaneous conditions with 5GHz WLAN active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 1a
Bluetooth BDR/LE Reduced	Maximum	**9.50**
	Nominal	**8.00**
Bluetooth EDR Reduced	Maximum	**9.50**
	Nominal	**8.00**
Bluetooth HDR Reduced	Maximum	**9.50**
	Nominal	**8.00**

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2a/2b/3a/3b/4 and 5GHz WLAN active
-Simultaneous conditions with 5GHz WLAN active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 1a
Bluetooth BDR/LE Reduced	Maximum	**9.50**
	Nominal	**8.00**
Bluetooth EDR Reduced	Maximum	**9.50**
	Nominal	**8.00**
Bluetooth HDR Reduced	Maximum	**9.50**
	Nominal	**8.00**

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b and 5GHz WLAN active
-Simultaneous conditions with Inter-Band ULCA active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 1a
Bluetooth BDR/LE Reduced	Maximum	**7.00**
	Nominal	**5.50**
Bluetooth EDR Reduced	Maximum	**7.00**
	Nominal	**5.50**
Bluetooth HDR Reduced	Maximum	**7.00**
	Nominal	**5.50**

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Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b and 5GHz WLAN active
-Simultaneous conditions with Inter-Band ULCA active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 1a
Bluetooth BDR/LE Reduced	Maximum	**7.00**
	Nominal	**5.50**
Bluetooth EDR Reduced	Maximum	**7.00**
	Nominal	**5.50**
Bluetooth HDR Reduced	Maximum	**7.00**
	Nominal	**5.50**

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3a/3b active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 3a
Bluetooth BDR/LE Reduced	Maximum	**9.00**
	Nominal	**7.50**
Bluetooth EDR Reduced	Maximum	**9.00**
	Nominal	**7.50**
Bluetooth HDR Reduced	Maximum	**9.00**
	Nominal	**7.50**

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3a/3b active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 3a
Bluetooth BDR/LE Reduced	Maximum	**9.00**
	Nominal	**7.50**
Bluetooth EDR Reduced	Maximum	**9.00**
	Nominal	**7.50**
Bluetooth HDR Reduced	Maximum	**9.00**
	Nominal	**7.50**

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

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Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b/2a/2b/4 and 5GHz WLAN active
-Simultaneous conditions with 5GHz WLAN active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 3a
Bluetooth BDR/LE Reduced	Maximum	**8.00**
	Nominal	**6.50**
Bluetooth EDR Reduced	Maximum	**8.00**
	Nominal	**6.50**
Bluetooth HDR Reduced	Maximum	**8.00**
	Nominal	**6.50**

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b/2a/2b/4 and 5GHz WLAN active
-Simultaneous conditions with 5GHz WLAN active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 3a
Bluetooth BDR/LE Reduced	Maximum	**8.00**
	Nominal	**6.50**
Bluetooth EDR Reduced	Maximum	**8.00**
	Nominal	**6.50**
Bluetooth HDR Reduced	Maximum	**8.00**
	Nominal	**6.50**

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

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Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3a/3b and 5GHz WLAN active
-Simultaneous conditions with Inter-Band ULCA active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 3a
Bluetooth BDR/LE Reduced	Maximum	**5.50**
	Nominal	**4.00**
Bluetooth EDR Reduced	Maximum	**5.50**
	Nominal	**4.00**
Bluetooth HDR Reduced	Maximum	**5.50**
	Nominal	**4.00**

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3a/3b and 5GHz WLAN active
-Simultaneous conditions with Inter-Band ULCA active

Mode / Band		Modulated Average - TXBF (dBm) - Ant 3a
Bluetooth BDR/LE Reduced	Maximum	**5.50**
	Nominal	**4.00**
Bluetooth EDR Reduced	Maximum	**5.50**
	Nominal	**4.00**
Bluetooth HDR Reduced	Maximum	**5.50**
	Nominal	**4.00**

Note: In TxBF operations, each antenna transmits at maximum allowed powers as indicated above.

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1.5 DUT Antenna Locations

The overall diagonal dimension of the device is > 200 mm. A diagram showing the location of the device antennas can be found in Appendix E. Exact antenna dimensions and separation distances are shown in the Technical Descriptions in the FCC filings.

Table 1-6
Device Edges/Sides for SAR Testing

Device Sides/Edges for SAR Testing					
Mode	Back	Top	Bottom	Right	Left
UMTS 850 Antenna 4	Yes	Yes	No	No	Yes
UMTS 1750 Antenna 4	Yes	Yes	No	No	Yes
UMTS 1900 Antenna 4	Yes	Yes	No	No	Yes
LTE Band 71 Antenna 4	Yes	Yes	No	No	Yes
LTE Band 12 Antenna 4	Yes	Yes	No	No	Yes
LTE Band 13 Antenna 4	Yes	Yes	No	No	Yes
LTE Ban 14 Antenna 4	Yes	Yes	No	No	Yes
LTE Band 26 (Cell) Antenna 4	Yes	Yes	No	No	Yes
LTE Band 5 (Cell) Antenna 4	Yes	Yes	No	No	Yes
LTE Band 66 (AWS) Antenna 4	Yes	Yes	No	No	Yes
LTE Band 25 (PCS) Antenna 4	Yes	Yes	No	No	Yes
LTE Band 30 Antenna 4	Yes	Yes	No	No	Yes
LTE Band 7 Antenna 4	Yes	Yes	No	No	Yes
LTE Band 41 Antenna 4	Yes	Yes	No	No	Yes
LTE Band 48 Antenna 4	Yes	Yes	No	No	Yes
NR Band n71 Antenna 4	Yes	Yes	No	No	Yes
NR Band n12 Antenna 4	Yes	Yes	No	No	Yes
NR Band n5 (Cell) Antenna 4	Yes	Yes	No	No	Yes
NR Band n66 (AWS) Antenna 4	Yes	Yes	No	No	Yes
NR Band n25 (PCS) Antenna 4	Yes	Yes	No	No	Yes
NR Band n30 Antenna 4	Yes	Yes	No	No	Yes
NR Band n7 Antenna 4	Yes	Yes	No	No	Yes
NR Band n41 Antenna 4	Yes	Yes	No	No	Yes
NR Band n77 C Antenna 4	Yes	Yes	No	No	Yes
NR Band n77 DoD Antenna 4	Yes	Yes	No	No	Yes
UMTS 850 Antenna 3b	Yes	Yes	No	No	No
UMTS 1750 Antenna 3a	Yes	Yes	No	Yes	No
UMTS 1900 Antenna 3a	Yes	Yes	No	Yes	No
LTE Band 71 Antenna 3b	Yes	Yes	No	Yes	No
LTE Band 12 Antenna 3b	Yes	Yes	No	No	No
LTE Band 13 Antenna 3b	Yes	Yes	No	No	No
LTE Ban 14 Antenna 3b	Yes	Yes	No	No	No
LTE Band 26 (Cell) Antenna 3b	Yes	Yes	No	No	No
LTE Band 5 (Cell) Antenna 3b	Yes	Yes	No	No	No
LTE Band 66 (AWS) Antenna 3a	Yes	Yes	No	Yes	No
LTE Band 25 (PCS) Antenna 3a	Yes	Yes	No	Yes	No
LTE Band 30 Antenna 3a	Yes	Yes	No	Yes	No
LTE Band 7 Antenna 3a	Yes	Yes	No	Yes	No
LTE Band 41 Antenna 3a	Yes	Yes	No	Yes	No
LTE Band 48 Antenna 3b	Yes	Yes	No	No	No
NR Band n71 Antenna 3b	Yes	Yes	No	Yes	No
NR Band n12 Antenna 3b	Yes	Yes	No	No	No
NR Band n5 (Cell) Antenna 3b	Yes	Yes	No	No	No
NR Band n66 (AWS) Antenna 3a	Yes	Yes	No	Yes	No
NR Band n25 (PCS) Antenna 3a	Yes	Yes	No	Yes	No
NR Band n30 Antenna 3a	Yes	Yes	No	Yes	No
NR Band n7 Antenna 3a	Yes	Yes	No	Yes	No
NR Band n41 Antenna 3a	Yes	Yes	No	Yes	No
NR Band n77 C Antenna 3b	Yes	Yes	No	No	No
NR Band n77 DoD Antenna 3b	Yes	Yes	No	No	No
2.4 GHz WLAN Ant 3a	Yes	Yes	No	Yes	No
5 GHz WLAN Antenna 3a	Yes	Yes	No	Yes	No
Bluetooth Antenna 3a	Yes	Yes	No	Yes	No

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Table 1-7
Device Edges/Sides for SAR Testing Cont'd

Device Sides/Edges for SAR Testing					
Mode	Back	Top	Bottom	Right	Left
UMTS 1750 Antenna 2a	Yes	No	Yes	Yes	No
UMTS 1900 Antenna 2a	Yes	No	Yes	Yes	No
LTE Band 66 (AWS) Antenna 2a	Yes	No	Yes	Yes	No
LTE Band 25 (PCS) Antenna 2a	Yes	No	Yes	Yes	No
LTE Band 30 Antenna 2a	Yes	No	Yes	Yes	No
LTE Band 7 Antenna 2a	Yes	No	Yes	Yes	No
LTE Band 41 Antenna 2a	Yes	No	Yes	Yes	No
LTE Band 48 Antenna 2b	Yes	No	Yes	No	No
NR Band n66 (AWS) Antenna 2a	Yes	No	Yes	Yes	No
NR Band n25 (PCS) Antenna 2a	Yes	No	Yes	Yes	No
NR Band n30 Antenna 2a	Yes	No	Yes	Yes	No
NR Band n7 Antenna 2a	Yes	No	Yes	Yes	No
NR Band n41 Antenna 2a	Yes	No	Yes	Yes	No
NR Band n77 C Antenna 2b	Yes	No	Yes	No	No
NR Band n77 DoD Antenna 2b	Yes	No	Yes	No	No
UMTS 1750 Antenna 1a	Yes	No	Yes	No	Yes
UMTS 1900 Antenna 1a	Yes	No	Yes	No	Yes
LTE Band 66 (AWS) Antenna 1a	Yes	No	Yes	No	Yes
LTE Band 25 (PCS) Antenna 1a	Yes	No	Yes	No	Yes
LTE Band 30 Antenna 1a	Yes	No	Yes	No	Yes
LTE Band 7 Antenna 1a	Yes	No	Yes	No	Yes
LTE Band 41 Antenna 1a	Yes	No	Yes	No	Yes
LTE Band 48 Antenna 1b	Yes	No	Yes	No	No
NR Band n66 (AWS) Antenna 1a	Yes	No	Yes	No	Yes
NR Band n25 (PCS) Antenna 1a	Yes	No	Yes	No	Yes
NR Band n30 Antenna 1a	Yes	No	Yes	No	Yes
NR Band n7 Antenna 1a	Yes	No	Yes	No	Yes
NR Band n41 Antenna 1a	Yes	No	Yes	No	Yes
NR Band n77 C Antenna 1b	Yes	No	Yes	No	No
NR Band n77 DoD Antenna 1b	Yes	No	Yes	No	No
2.4 GHz WLAN Ant 1a	Yes	No	Yes	No	Yes
5 GHz WLAN Antenna 2b	Yes	No	Yes	No	No
5 GHz WLAN Antenna 1b	Yes	No	Yes	No	No
Bluetooth Antenna 1a	Yes	No	Yes	No	Yes

Note: Per FCC KDB Publication 616217 D04v01r01, particular edges were not required to be evaluated for SAR based on the SAR exclusion threshold in KDB 447498 D01V06. Additional edges may have been evaluated for simultaneous transmission analysis.

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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 4.3.2 procedures.

Table 1-8
Simultaneous Transmission Scenarios

No.	Capable Transmit Configuration	Body
1	Cellular Band + 2.4 GHz WI-FI	Yes
2	Cellular Band + 5 GHz WI-FI	Yes
3	Cellular Band + 2.4 GHz Bluetooth	Yes
4	Cellular Band + 2.4 GHz Bluetooth Antenna 1a + 2.4 GHz WLAN Antenna 3a	Yes
5	Cellular Band + 2.4 GHz WI-FI MIMO	Yes
6	Cellular Band + 5 GHz WI-FI MIMO	Yes
7	Cellular Band + 2.4 GHz Bluetooth (TxBF)	Yes
8	Cellular Band + 2.4 GHz Bluetooth + 5 GHz WI-FI	Yes
9	Cellular Band + 2.4 GHz Bluetooth (TxBF) + 5 GHz WI-FI	Yes
10	Cellular Band + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO	Yes
11	Cellular Band + 2.4 GHz Bluetooth (TxBF) + 5 GHz WI-FI MIMO	Yes
12	2.4 GHz Bluetooth Antenna 1a + 2.4 GHz WLAN Antenna 3a	Yes
13	2.4 GHz Bluetooth + 5 GHz WI-FI	Yes
14	2.4 GHz Bluetooth (TxBF) + 5 GHz WI-FI	Yes
15	2.4 GHz Bluetooth + 5 GHz WI-FI MIMO	Yes
16	2.4 GHz Bluetooth (TxBF) + 5 GHz WI-FI MIMO	Yes

Table 1-9
Simultaneous Transmission Scenarios of Inter-Band ULCA

No.	Capable Transmit Configuration	Body	Notes
1	Cellular Ant 4 LB + Cellular Ant 1a MB/HB	Yes	LTE Bands transmitting from Ant 4 LB: LTE B12/13/5 LTE Bands transmitting from Ant 1a MB/HB: LTE B4/66/2/7
2	Cellular Ant 4 LB + Cellular Ant 2a MB/HB	Yes	LTE Bands transmitting from Ant 4 LB: LTE B12/13/5 LTE Bands transmitting from Ant 2a MB/HB: LTE B4/66/2/7
3	Cellular Ant 4 LB + Cellular Ant 3a MB/HB	Yes	LTE Bands transmitting from Ant 4 LB: LTE B12/13/5 LTE Bands transmitting from Ant 3a MB/HB: LTE B4/66/2/7
4	Cellular Ant 3b LB + Cellular Ant 1a MB/HB	Yes	LTE Bands transmitting from Ant 3b LB: LTE B12/13/5 LTE Bands transmitting from Ant 1a MB/HB: LTE B4/66/2/7
5	Cellular Ant 3b LB + Cellular Ant 2a MB/HB	Yes	LTE Bands transmitting from Ant 3b LB: LTE B12/13/5 LTE Bands transmitting from Ant 2a MB/HB: LTE B4/66/2/7
6	Cellular Ant 3b LB + Cellular Ant 3a MB/HB	Yes	LTE Bands transmitting from Ant 3b LB: LTE B12/13/5 LTE Bands transmitting from Ant 3a MB/HB: LTE B4/66/2/7
7	Cellular Ant 3b LB + Cellular Ant 4 MB/HB	Yes	LTE Bands transmitting from Ant 3b LB: LTE B12/13/5 LTE Bands transmitting from Ant 4 MB/HB: LTE B4/66/2/7

Note: The technical description includes all the possible Inter-band ULCA combinations.

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Table 1-10
Simultaneous Transmission Scenarios with Inter-Band ULCA Active

No.	Capable Transmit Configuration	Body
1	LTE Inter-Band ULCA + 2.4 GHz WI-FI	Yes
2	LTE Inter-Band ULCA + 5 GHz WI-FI	Yes
3	LTE Inter-Band ULCA + 2.4 GHz Bluetooth	Yes
4	LTE Inter-Band ULCA + 2.4 GHz WI-FI + 2.4 GHz Bluetooth	Yes
5	LTE Inter-Band ULCA + 2.4 GHz WI-FI MIMO	Yes
6	LTE Inter-Band ULCA + 5 GHz WI-FI MIMO	Yes
7	LTE Inter-Band ULCA + 2.4 GHz Bluetooth (TxBF)	Yes
8	LTE Inter-Band ULCA + 2.4 GHz Bluetooth + 5 GHz WI-FI	Yes
9	LTE Inter-Band ULCA + 2.4 GHz Bluetooth (TxBF) + 5 GHz WI-FI	Yes
10	LTE Inter-Band ULCA + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO	Yes
11	LTE Inter-Band ULCA + 2.4 GHz Bluetooth (TxBF) + 5 GHz WI-FI MIMO	Yes

Note: LTE inter-band ULCA can operate in any of the combinations in Table 1-9

1. There are no limitations in the above listed simultaneous transmission scenarios between cellular antennas and BT/WI-FI antennas.
2. Wi-Fi 2.4GHz and Bluetooth 2.4 GHz can transmit simultaneously on separate antennas. 2.4 GHz WLAN Antenna 3a can only transmit simultaneously with 2.4GHz Bluetooth Antenna 1a. In this scenario Wi-Fi max power will not exceed minimum of (13.5dBm, SAR max cap, Reg max cap) power.
3. This device supports 2x2 MIMO Tx for WLAN 802.11a/g/n/ac/ax. 802.11a/g/n/ac/ax supports CDD and STBC and 802.11n/ac/ax additionally supports SDM. Each WLAN antenna can transmit independently or together when operating with MIMO.
4. EN-DC operation is supported with LTE + 5G NR FR1 scenarios. The LTE anchor bands are shown in the NR FR1 checklist.
5. This device supports VoWIFI.

1.7 Miscellaneous SAR Test Considerations

(A) WIFI/BT

Based on the maximum allowed power for the respective antennas, U-NII-1 was evaluated for Antenna 2b and U-NII-2A was evaluated for Antenna 1b and Antenna 3a. Additional testing for U-NII-2A Antenna 2b and for U-NII-1 Antenna 1b and Antenna 3a SAR was not required since all reported SAR was less than 1.2 W/kg per FCC KDB Publication 248227 D01v02r02.

The WLAN/Bluetooth chipset in this device is produced by two different suppliers. The electrically identical modules are manufactured with the identical mechanical structure to meet the same specifications and functions. Two device variants are referenced as Variant 1 and Variant 2 in this report. WLAN/Bluetooth SAR worst case configuration was spotchecked on Variant 1 and Variant 2. The Variant with the highest reported SAR value was evaluated for the remaining WLAN/Bluetooth configurations.

This device supports channel 1-13 for 2.4 GHz WLAN. However, because channel 12/13 targets are not higher than that of channels 1-11, channels 1, 6, and 11 were considered for SAR testing per FCC KDB 248227 D01V02r02.

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This device supports IEEE 802.11ac with the following features:

a) Up to 80 MHz Bandwidth only
b) No aggregate channel configurations
c) 3 Tx antenna output
d) 256 QAM is supported
e) TDWR and Band gap channels are supported

This device supports IEEE 802.11ax with the following features:

a) Up to 80 MHz Bandwidth only for 5 GHz
b) Up to 20 MHz Bandwidth only for 2.4 GHz
c) No aggregate channel configurations
d) 3 Tx antenna output
e) Up to 1024 QAM is supported
f) TDWR and Band gap channels are supported for 5 GHz
g) MU-MIMO UL Operations are not supported

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.

(B) Licensed Transmitter(s)

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.

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.

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 Appendix F.

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

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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 and NR Band n41/77. 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 48, LTE Band 5, LTE Band 66, and LTE Band 7 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per 2017 Fall TCB Workshop Notes.

This device supports inter-band LTE Carrier Aggregation (CA) for LTE Bands 2/4/5/7/12/13/14/66 with two component carriers in the uplink

1.8 Guidance Applied

- FCC KDB Publication 941225 D01v03r01, D05v02r04, D05Av01r02 (3G/4G)
- 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 616217 D04v01r02 (Tablet)
- May 2017 TCB Workshop Notes (LTE 4x4 Downlink MIMO, LTE Band 41 Power Class 2/3)
- April 2018 TCB Workshop Notes (LTE Carrier Aggregation)
- April 2019 TCB Workshop Notes (IEEE 802.11ax)
- October 2018 TCB Workshop Notes (Inter-band Uplink Carrier Aggregation)

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 10.

1.10 Bibliography

Report Type	Report Serial Number
SAR Part 0 Test Report	1C2111150079-28.BCG
RF Exposure Part 2 Test Report	1C2111150079-29.BCG
Compliance summary	1C2111150079-31.BCG

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2 LTE INFORMATION

LTE Information					
Form Factor	Tablet Device				
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 17 (706.5 - 713.5 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 4 (AWS) (1710.7 - 1754.3 MHz)				
	LTE Band 66 (AWS) (1710.7 - 1779.3 MHz)				
	LTE Band 2 (PCS) (1850.7 - 1909.3 MHz)				
	LTE Band 25 (PCS) (1850.7 - 1914.3 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 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 17: 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				
	LTE Band 5 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 4 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 66 (AWS): 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 25 (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 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 17: 5 MHz	706.5 (23755)		710 (23790)	713.5 (23825)	
LTE Band 17: 10 MHz	709 (23780)		710 (23790)	711 (23800)	
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 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 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 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 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 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 30: 5 MHz	2307.5 (27685)		2310 (27710)	2312.5 (27735)	
LTE Band 30: 10 MHz	N/A		2310 (27710)	N/A	
LTE Band 7: 5 MHz	2502.5 (20775)		2535 (21100)	2567.5 (21425)	
LTE Band 7: 10 MHz	2505 (20800)		2535 (21100)	2565 (21400)	
LTE Band 7: 15 MHz	2507.5 (20825)		2535 (21100)	2562.5 (21375)	
LTE Band 7: 20 MHz	2510 (20850)		2535 (21100)	2560 (21350)	
LTE Band 41: 5 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 20 MHz	2510 (39790)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
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 (QPSK, 16QAM, 64QAM, 256QAM) UL UE Cat 18 (QPSK, 16QAM, 64QAM, 256QAM)				
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 15. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 15 Features are not supported: Relay, HetNet, Enhanced MIMO, eICIC, WIFI Offloading, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

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NR Information						
Form Factor	Tablet Device					
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 n5 (Cell) (826.5 - 846.5 MHz)					
	NR Band n66 (AWS) (1712.5 - 1777.5 MHz)					
	NR Band n2 (PCS) (1852.5 - 1907.5 MHz)					
	NR Band n25 (PCS) (1852.5 - 1912.5 MHz)					
	NR Band n30 (2307.5 - 2312.5 MHz)					
	NR Band n7 (2502.5 - 2567.5 MHz)					
	NR Band n41 (2506.02 - 2679.99 MHz)					
	NR Band n77 DoD (3640.02 - 3540 MHz)					
	NR Band n77 C (3710.01 - 3969.99 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 n5 (Cell): 5 MHz, 10 MHz, 15 MHz, 20 MHz					
	NR Band n66 (AWS): 5 MHz, 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz					
	NR Band n25 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz					
	NR Band n2 (PCS): 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: 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz, 100 MHz					
	NR Band n77 DoD: 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz					
	NR Band n77 C: 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz					
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid		Mid-High	High
NR Band n71: 5 MHz	665.5 (133147)		680.5 (136100)		695.5 (133447)	
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 n5 (Cell): 5 MHz	826.5 (165300)		836.5 (167300)		846.5 (169300)	
NR Band n5 (Cell): 10 MHz	829 (165800)		836.5 (167300)		844 (168800)	
NR Band n5 (Cell): 15 MHz	831.5 (166300)		836.5 (167300)		841.5 (168300)	
NR Band n5 (Cell): 20 MHz	834 (166800)		836.5 (167300)		839 (167800)	
NR Band n66 (AWS): 5 MHz	1712.5 (342500)		1745 (349000)		1777.5 (355500)	
NR Band n66 (AWS): 10 MHz	1715 (343000)		1745 (349000)		1775 (355000)	
NR Band n66 (AWS): 15 MHz	1717.5 (343500)		1745 (349000)		1772.5 (354500)	
NR Band n66 (AWS): 20 MHz	1720 (344000)		1745 (349000)		1770 (354000)	
NR Band n66 (AWS): 30 MHz	1725 (345000)		1745 (349000)		1765 (353000)	
NR Band n66 (AWS): 40 MHz	1730 (346000)		1745 (349000)		1760 (352000)	
NR Band n25 (PCS): 5 MHz	1852.5 (370500)		1882.5 (376500)		1912.5 (382500)	
NR Band n25 (PCS): 10 MHz	1855 (371000)		1882.5 (376500)		1910 (382000)	
NR Band n25 (PCS): 15 MHz	1857.5 (371500)		1882.5 (376500)		1907.5 (381500)	
NR Band n25 (PCS): 20 MHz	1860 (372000)		1882.5 (376500)		1905 (381000)	
NR Band n25 (PCS): 25 MHz	1862.5 (372500)		1882.5 (376500)		1902.5 (380500)	
NR Band n25 (PCS): 30 MHz	1865 (373000)		1882.5 (376500)		1900 (380000)	
NR Band n25 (PCS): 40 MHz	1870 (374000)		1882.5 (376500)		1895 (379000)	
NR Band n2 (PCS): 5 MHz	1852.5 (370500)		1880 (376000)		1907.5 (381500)	
NR Band n2 (PCS): 10 MHz	1855 (371000)		1880 (376000)		1905 (381000)	
NR Band n2 (PCS): 15 MHz	1857.5 (371500)		1880 (376000)		1902.5 (380500)	
NR Band n2 (PCS): 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)		2535 (507000)		2562.5 (512500)	
NR Band n7: 20 MHz	2510 (502000)		2535 (507000)		2560 (512000)	
NR Band n7: 25 MHz	2512.5 (502500)		2535 (507000)		2557.5 (511500)	
NR Band n7: 30 MHz	2515 (503000)		2535 (507000)		2555 (511000)	
NR Band n7: 40 MHz	2520 (504000)		2535 (507000)		2550 (510000)	
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: 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 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		3529.98 (635332)	
NR Band n77 DoD: 50 MHz	3475.02 (631668)		N/A		3525 (635000)	
NR Band n77 DoD: 60 MHz	N/A		3500.01 (633334)		N/A	
NR Band n77 DoD: 70 MHz	N/A		3500.01 (633334)		N/A	
NR Band n77 DoD: 80 MHz	N/A		3500.01 (633334)		N/A	
NR Band n77 DoD: 90 MHz	N/A		3500.01 (633334)		N/A	
NR Band n77 DoD: 100 MHz	N/A		3500.01 (633334)		N/A	
NR Band n77 C: 20 MHz	3710.01 (647334)	3762 (650800)	3813.99 (654266)	3866.01 (657734)	3918 (661200)	3969.99 (664666)
NR Band n77 C: 30 MHz	3715.02 (647668)	3765 (651000)	3815.01 (654334)	3864.99 (657666)	3915 (661000)	3964.98 (664332)
NR Band n77 C: 40 MHz	3720 (648000)	3768 (651200)	3816 (654400)	3864 (657600)	3912 (660800)	3960 (664000)
NR Band n77 C: 50 MHz	3725.01 (648334)	3782.49 (652166)	3840 (656000)		3897.51 (659834)	3954.99 (663666)
NR Band n77 C: 60 MHz	3730.02 (648668)	3803.34 (653556)	N/A	N/A	3876.66 (658444)	3949.98 (663332)
NR Band n77 C: 70 MHz	3735 (649000)	3804.99 (653666)	N/A		3875.01 (658334)	3945 (663000)
NR Band n77 C: 80 MHz	3740.01 (649334)	N/A	3840 (656000)		N/A	3939.99 (662666)
NR Band n77 C: 90 MHz	3745.02 (649668)	N/A	3840 (656000)		N/A	3934.98 (662332)
NR Band n77 C: 100 MHz	3750 (650000)	N/A	N/A	N/A	N/A	3930 (662000)
SCS for NR Band n71/n12/n5/n66/n2/n25/n30/n7	15 kHz					
SCS for NR Band n41/n77 DoD/n77 C	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 66/2/7					
LTE Anchor Bands for NR Band n12	LTE Band 66/2					
LTE Anchor Bands for NR Band n5 (Cell)	LTE Band 66/2/30/7/48					
LTE Anchor Bands for NR Band n66 (AWS)	LTE Band 71/12/13/14/5/2/30/7/48					
LTE Anchor Bands for NR Band n2 (PCS)	LTE Band 12/13/14/5/66/48					
LTE Anchor Bands for NR Band n25 (PCS)	LTE Band 12/66/48					
LTE Anchor Bands for NR Band n30	LTE Band 12/14/5/66					
LTE Anchor Bands for NR Band n7	LTE Band 12/5/66					
LTE Anchor Bands for NR Band n41	LTE Band 4/66/2/25					
LTE Anchor Bands for NR Band n77 DoD	LTE Band 7/41					
LTE Anchor Bands for NR Band n77 C	LTE Band 7/41					

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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:

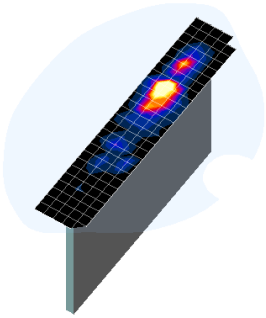

Figure 4-1
Sample SAR Area Scan

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 TEST CONFIGURATION POSITIONS

5.1 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.

5.2 SAR Testing for Tablet per KDB Publication 616217 D04v01r02

Per FCC KDB Publication 616217 D04v01r02, the back surface and edges of the tablet should be tested for SAR compliance with the tablet touching the phantom. The SAR Exclusion Threshold in KDB 447498 D01v06 can be applied to determine SAR test exclusion for adjacent edge configurations. The closest distance from the antenna to an adjacent tablet edge is used to determine if SAR testing is required for the adjacent edges, with the adjacent edge positioned against the phantom and the edge containing the antenna positioned perpendicular to the phantom.

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6 RF EXPOSURE LIMITS

6.1 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.

6.2 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 6-1
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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7 FCC MEASUREMENT PROCEDURES

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

7.1 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.

7.2 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.

7.3 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.

7.4 SAR Measurement Conditions for UMTS

7.4.1 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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7.4.2 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.

7.4.3 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.

7.4.4 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.

7.4.5 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.

7.5 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).

7.5.1 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.

7.5.2 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.

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7.5.3 A-MPR

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

7.5.4 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.

7.5.5 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.

7.5.6 Downlink Only Carrier Aggregation

Conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band. Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for downlink only carrier aggregation configurations when the average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive.

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7.6 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.

7.6.1 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.

7.6.2 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.

7.6.3 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.

7.6.4 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.

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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.

7.6.5 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.

7.6.6 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 7.6.5). When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

7.6.7 Subsequent Test Configuration Procedures

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

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7.6.8 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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8 RF CONDUCTED POWERS

All conducted power measurements for 3G/4G/5G Sub6 WWAN technologies and bands in this section were performed by setting Reserve power margin (Qualcomm® Smart Transmit EFS entry) to 0dB, so that the EUT transmits continuously at minimum (Plimit, maximum tune up output power Pmax).

8.1 UMTS Plimit Conducted Powers

Table 8-1
Measured *Plimit* Antenna 4

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	20.27	20.18	20.15	15.18	15.19	15.25	14.53	14.60	14.59	-
6	HSDPA	Subtest 1	19.25	19.21	19.22	15.10	15.11	15.14	14.14	14.18	14.14	0
6		Subtest 2	19.28	19.24	19.23	15.13	15.11	15.18	14.21	14.17	14.12	0
6		Subtest 3	18.78	18.61	18.73	14.61	14.60	14.64	13.68	13.70	13.63	0.5
6		Subtest 4	18.75	18.73	18.76	14.63	14.60	14.64	13.68	13.71	13.65	0.5
6	HSUPA	Subtest 1	19.44	19.39	19.44	14.77	14.66	14.71	14.19	14.19	14.24	0
6		Subtest 2	17.40	17.38	17.39	12.75	12.65	12.73	12.17	12.19	12.13	2
6		Subtest 3	18.59	18.42	18.30	13.73	13.65	13.64	13.18	13.21	13.10	1
6		Subtest 4	17.45	17.39	17.39	12.71	12.66	12.72	12.21	12.19	12.12	2
6		Subtest 5	19.44	19.41	19.31	14.72	14.68	14.71	14.21	14.18	14.10	0
8	DC-HSDPA	Subtest 1	19.20	19.30	19.32	14.40	14.27	14.34	14.60	14.62	14.62	0
8		Subtest 2	18.83	18.89	18.80	14.39	14.27	14.33	13.90	13.80	13.90	0
8		Subtest 3	18.15	18.13	18.20	13.86	13.73	13.79	13.31	13.27	13.32	0.5
8		Subtest 4	18.35	18.25	18.21	14.70	14.80	14.80	13.26	13.22	13.26	0.5

Table 8-2
Measured *Plimit* Antenna 3b

3GPP Release Version	Mode	3GPP 34.121 Subtest	Cellular Band [dBm]			3GPP MPR [dB]
			4132	4183	4233	
99	WCDMA	12.2 kbps RMC	16.30	16.19	16.27	-
6	HSDPA	Subtest 1	16.20	16.25	16.20	0
6		Subtest 2	16.18	16.23	16.15	0
6		Subtest 3	15.64	15.70	15.65	0.5
6		Subtest 4	15.65	15.70	15.62	0.5
6	HSUPA	Subtest 1	16.23	16.25	16.26	0
6		Subtest 2	14.23	14.25	14.18	2
6		Subtest 3	15.22	15.26	15.20	1
6		Subtest 4	14.22	14.24	14.19	2
6		Subtest 5	16.23	16.26	16.18	0
8	DC-HSDPA	Subtest 1	16.22	16.21	16.16	0
8		Subtest 2	16.19	16.24	16.17	0
8		Subtest 3	15.70	15.82	15.71	0.5
8		Subtest 4	15.76	15.75	15.74	0.5

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Table 8-3
Measured P_{limit} Antenna 3a

3GPP Release Version	Mode	3GPP 34.121 Subtest	AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	12.82	12.83	12.90	12.63	12.67	12.45	-
6	HSDPA	Subtest 1	12.31	12.36	12.37	12.69	12.63	12.57	0
6		Subtest 2	12.28	12.31	12.36	12.66	12.66	12.57	0
6		Subtest 3	11.75	11.80	11.84	12.20	12.14	12.06	0.5
6		Subtest 4	11.78	11.90	11.84	12.18	12.14	12.05	0.5
6	HSUPA	Subtest 1	13.69	13.68	13.70	13.49	13.50	13.48	0
6		Subtest 2	11.78	11.85	11.86	11.72	11.67	11.58	2
6		Subtest 3	12.78	12.86	12.86	12.66	12.65	12.60	1
6		Subtest 4	11.81	11.88	11.89	11.70	11.64	11.60	2
6		Subtest 5	13.69	13.70	13.68	13.50	13.45	13.43	0
8	DC-HSDPA	Subtest 1	12.79	12.84	12.82	12.66	12.62	12.53	0
8		Subtest 2	12.82	12.87	12.86	12.73	12.63	12.60	0
8		Subtest 3	12.29	12.34	12.35	12.17	12.13	12.08	0.5
8		Subtest 4	12.28	12.24	12.33	12.16	12.13	12.11	0.5

Table 8-4
Measured P_{limit} Antenna 2a

3GPP Release Version	Mode	3GPP 34.121 Subtest	AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	12.97	13.03	13.30	12.78	12.75	12.69	-
6	HSDPA	Subtest 1	13.05	13.06	13.20	12.68	12.53	12.61	0
6		Subtest 2	13.06	13.02	13.22	12.70	12.54	12.54	0
6		Subtest 3	12.54	12.52	12.70	12.39	12.38	12.31	0.5
6		Subtest 4	12.48	12.52	12.73	12.18	12.05	12.12	0.5
6	HSUPA	Subtest 1	13.20	13.22	13.26	12.35	12.34	12.31	0
6		Subtest 2	11.23	11.27	11.35	11.22	11.21	11.20	2
6		Subtest 3	12.20	12.30	12.32	12.22	12.21	12.17	1
6		Subtest 4	11.23	11.30	11.42	11.22	11.20	11.15	2
6		Subtest 5	13.22	13.31	13.40	13.20	13.18	13.16	0
8	DC-HSDPA	Subtest 1	12.53	12.58	12.68	12.37	12.38	12.36	0
8		Subtest 2	12.54	12.57	12.72	12.01	12.26	12.05	0
8		Subtest 3	12.02	12.11	12.20	11.66	11.75	11.58	0.5
8		Subtest 4	12.06	12.08	12.21	11.55	11.58	11.62	0.5

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Table 8-5
Measured P_{limit} Antenna 1a

3GPP Release Version	Mode	3GPP 34.121 Subtest	AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	14.41	14.39	14.49	13.04	13.13	13.19	-
6	HSDPA	Subtest 1	14.30	14.20	14.22	13.92	14.01	13.93	0
6		Subtest 2	14.33	14.23	14.35	13.92	14.03	13.94	0
6		Subtest 3	13.89	13.75	13.89	13.93	14.00	13.95	0.5
6		Subtest 4	13.90	13.76	13.88	13.92	13.98	13.96	0.5
6	HSUPA	Subtest 1	15.30	15.28	15.29	14.13	14.18	14.14	0
6		Subtest 2	13.40	13.31	13.42	12.52	12.51	12.54	2
6		Subtest 3	14.40	14.30	14.40	13.14	13.22	13.18	1
6		Subtest 4	13.42	13.33	13.43	12.50	12.53	12.51	2
6		Subtest 5	13.92	13.82	13.92	12.66	12.72	12.74	0
8	DC-HSDPA	Subtest 1	14.35	14.31	14.35	13.66	13.62	13.65	0
8		Subtest 2	14.36	14.25	14.33	13.29	13.22	13.21	0
8		Subtest 3	13.87	13.78	13.87	13.08	13.05	13.09	0.5
8		Subtest 4	13.86	13.75	13.87	13.07	13.11	13.00	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

Figure 8-1
Power Measurement Setup

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8.2 LTE Conducted Powers

Notes: 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 appendix I.

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.

8.2.1 LTE Band 71

Table 8-5
LTE Band 71 Measured P_{limit} Antenna 4 - 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	**20.65**	0	0
	1	50	20.56		0
	1	99	20.47		0
	50	0	**20.70**	0-1	0
	50	25	20.68		0
	50	50	20.55		0
	100	0	20.63		0
16QAM	1	0	21.14	0-1	0
	1	50	21.15		0
	1	99	20.95		0
	50	0	20.66	0-2	0
	50	25	20.68		0
	50	50	20.60		0
	100	0	20.67		0
64QAM	1	0	20.65	0-2	0
	1	50	20.66		0
	1	99	20.48		0
	50	0	20.69	0-3	0
	50	25	20.71		0
	50	50	20.57		0
	100	0	20.70		0
256QAM	1	0	19.71	0-5	1.4
	1	50	19.85		1.4
	1	99	19.61		1.4
	50	0	19.87		1.4
	50	25	19.97		1.4
	50	50	19.75		1.4
	100	0	19.91		1.4

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Table 8-6
LTE Band 71 Measured P_{limit} Antenna 3b - 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	**18.71**	0	0
	1	50	18.62		0
	1	99	18.64		0
	50	0	18.07	0-1	0
	50	25	**18.72**		0
	50	50	18.66		0
	100	0	18.70		0
16QAM	1	0	18.69	0-1	0
	1	50	18.54		0
	1	99	18.43		0
	50	0	17.77	0-2	0
	50	25	17.73		0
	50	50	17.74		0
	100	0	17.73		0
64QAM	1	0	18.60	0-2	0
	1	50	18.44		0
	1	99	18.35		0
	50	0	17.73	0-3	0
	50	25	17.75		0
	50	50	17.73		0
	100	0	17.74		0
256QAM	1	0	18.40	0-5	0
	1	50	18.42		0
	1	99	18.39		0
	50	0	17.73		0
	50	25	17.78		0
	50	50	17.82		0
	100	0	17.73		0

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8.2.2 LTE Band 12

Table 8-7
LTE Band 12 Measured P_{limit} Antenna 4 - 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	**19.96**	0	0
	1	25	19.75		0
	1	49	19.85		0
	25	0	20.07	0-1	0
	25	12	**20.12**		0
	25	25	20.07		0
	50	0	19.95		0
16QAM	1	0	20.38	0-1	0
	1	25	20.23		0
	1	49	20.24		0
	25	0	20.17	0-2	0
	25	12	20.19		0
	25	25	20.14		0
	50	0	20.11		0
64QAM	1	0	20.17	0-2	0
	1	25	20.21		0
	1	49	20.16		0
	25	0	20.15	0-3	0
	25	12	20.23		0
	25	25	20.16		0
	50	0	20.17		0
256QAM	1	0	19.34	0-5	0.7
	1	25	19.44		0.7
	1	49	19.31		0.7
	25	0	19.23		0.7
	25	12	19.36		0.7
	25	25	19.42		0.7
	50	0	19.37		0.7

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Table 8-8
LTE Band 12 Measured P_{limit} Antenna 3b - 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	16.90	0	0
	1	25	**16.95**		0
	1	49	16.88		0
	25	0	16.98	0-1	0
	25	12	16.97		0
	25	25	**16.99**		0
	50	0	16.93		0
16QAM	1	0	17.04	0-1	0
	1	25	17.02		0
	1	49	17.02		0
	25	0	17.01	0-2	0
	25	12	17.02		0
	25	25	17.03		0
	50	0	17.02		0
64QAM	1	0	17.02	0-2	0
	1	25	17.03		0
	1	49	17.03		0
	25	0	17.04	0-3	0
	25	12	17.03		0
	25	25	17.03		0
	50	0	17.04		0
256QAM	1	0	16.59	0-5	0
	1	25	16.62		0
	1	49	16.60		0
	25	0	17.00		0
	25	12	17.08		0
	25	25	17.02		0
	50	0	17.01		0

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8.2.3 LTE Band 13

Table 8-9
LTE Band 13 Measured P_{limit} Antenna 4 - 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	**19.56**	0	0
	1	25	19.38		0
	1	49	19.31		0
	25	0	19.53	0-1	0
	25	12	19.56		0
	25	25	**19.60**		0
	50	0	19.55		0
16QAM	1	0	20.15	0-1	0
	1	25	20.02		0
	1	49	19.94		0
	25	0	19.65	0-2	0
	25	12	19.73		0
	25	25	19.66		0
	50	0	19.64		0
64QAM	1	0	19.62	0-2	0
	1	25	19.57		0
	1	49	19.32		0
	25	0	19.63	0-3	0
	25	12	19.76		0
	25	25	19.64		0
	50	0	19.63		0
256QAM	1	0	19.43	0-5	0.5
	1	25	19.52		0.5
	1	49	19.64		0.5
	25	0	19.62		0.5
	25	12	19.70		0.5
	25	25	19.64		0.5
	50	0	19.58		0.5

Table 8-10
LTE Band 13 Measured P_{limit} Antenna 3b - 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	**16.17**	0	0
	1	25	16.06		0
	1	49	16.03		0
	25	0	16.22	0-1	0
	25	12	**16.27**		0
	25	25	16.23		0
	50	0	16.15		0
16QAM	1	0	16.11	0-1	0
	1	25	16.16		0
	1	49	16.21		0
	25	0	16.22	0-2	0
	25	12	16.28		0
	25	25	16.33		0
	50	0	16.20		0
64QAM	1	0	16.12	0-2	0
	1	25	16.14		0
	1	49	16.10		0
	25	0	16.38	0-3	0
	25	12	16.39		0
	25	25	16.33		0
	50	0	16.28		0
256QAM	1	0	16.70	0-5	0
	1	25	16.63		0
	1	49	16.69		0
	25	0	16.20		0
	25	12	16.29		0
	25	25	16.23		0
	50	0	16.28		0

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8.2.4 LTE Band 14

Table 8-11
LTE Band 14 Measured P_{limit} Antenna 4 - 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	**19.58**	0	0
	1	25	19.35		0
	1	49	19.39		0
	25	0	19.51	0-1	0
	25	12	**19.61**		0
	25	25	19.54		0
	50	0	19.55		0
16QAM	1	0	20.09	0-1	0
	1	25	19.98		0
	1	49	19.97		0
	25	0	19.63	0-2	0
	25	12	19.72		0
	25	25	19.67		0
	50	0	19.61		0
64QAM	1	0	19.52	0-2	0
	1	25	19.46		0
	1	49	19.47		0
	25	0	19.63	0-3	0
	25	12	19.71		0
	25	25	19.66		0
	50	0	19.65		0
256QAM	1	0	19.67	0-5	0.5
	1	25	19.63		0.5
	1	49	19.60		0.5
	25	0	19.61		0.5
	25	12	19.57		0.5
	25	25	19.70		0.5
	50	0	19.67		0.5

Table 8-12
LTE Band 14 Measured P_{limit} Antenna 3b - 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	**16.05**	0	0
	1	25	16.02		0
	1	49	16.00		0
	25	0	16.03	0-1	0
	25	12	**16.15**		0
	25	25	16.05		0
	50	0	16.00		0
16QAM	1	0	16.40	0-1	0
	1	25	16.27		0
	1	49	16.23		0
	25	0	15.82	0-2	0
	25	12	15.93		0
	25	25	15.86		0
	50	0	15.81		0
64QAM	1	0	16.13	0-2	0
	1	25	16.09		0
	1	49	16.01		0
	25	0	16.15	0-3	0
	25	12	16.23		0
	25	25	16.17		0
	50	0	16.13		0
256QAM	1	0	16.31	0-5	0
	1	25	16.38		0
	1	49	16.39		0
	25	0	15.87		0
	25	12	15.93		0
	25	25	15.89		0
	50	0	15.91		0

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8.2.5 LTE Band 26

Table 8-13
LTE Band 26 Measured P_{limit} Antenna 4 - 10 MHz Bandwidth

LTE Band 26 (Cell) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26740 (819.0 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 26990 (844.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.85	20.11	**20.20**	0	0
	1	25	19.94	20.02	20.03		0
	1	49	19.98	20.09	19.94		0
	25	0	20.16	20.20	20.15	0-1	0
	25	12	**20.30**	20.25	20.21		0
	25	25	20.12	20.14	20.13		0
	50	0	20.16	20.19	20.12		0
16QAM	1	0	20.06	20.28	20.29	0-1	0
	1	25	20.01	20.22	20.21		0
	1	49	20.00	20.21	20.14		0
	25	0	19.84	19.83	19.81	0-2	0
	25	12	19.92	19.89	19.83		0
	25	25	19.86	19.82	19.79		0
	50	0	19.78	19.78	19.68		0
64QAM	1	0	20.24	19.94	19.94	0-2	0
	1	25	20.23	19.95	19.95		0
	1	49	20.18	19.91	19.92		0
	25	0	20.14	20.09	20.08	0-3	0
	25	12	20.20	20.17	20.11		0
	25	25	20.14	20.11	20.13		0
	50	0	20.13	20.08	20.01		0
256QAM	1	0	20.28	19.98	19.57	0-5	0
	1	25	20.29	20.03	19.67		0
	1	49	20.27	19.95	19.64		0
	25	0	20.01	20.03	19.97		0
	25	12	20.08	20.08	19.98		0
	25	25	19.99	19.95	19.96		0
	50	0	20.01	19.93	19.89		0

Table 8-14
LTE Band 26 Measured P_{limit} Antenna 3b - 10 MHz Bandwidth

LTE Band 26 (Cell) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26740 (819.0 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 26990 (844.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	15.97	**16.03**	16.02	0	0
	1	25	15.89	15.93	15.97		0
	1	49	15.80	16.00	15.95		0
	25	0	16.10	16.16	16.11	0-1	0
	25	12	16.18	**16.20**	16.12		0
	25	25	16.06	16.09	16.09		0
	50	0	15.95	16.00	16.02		0
16QAM	1	0	16.06	16.12	16.42	0-1	0
	1	25	16.10	16.09	16.35		0
	1	49	16.09	16.12	16.22		0
	25	0	15.90	15.96	15.91	0-2	0
	25	12	15.98	16.03	15.92		0
	25	25	15.92	15.94	15.90		0
	50	0	15.87	15.89	15.78		0
64QAM	1	0	15.98	16.01	15.74	0-2	0
	1	25	16.00	16.06	15.69		0
	1	49	15.96	16.03	15.88		0
	25	0	15.94	15.98	15.91	0-3	0
	25	12	15.96	16.04	15.89		0
	25	25	15.93	15.97	15.87		0
	50	0	15.90	15.91	15.80		0
256QAM	1	0	15.66	15.95	16.46	0-5	0
	1	25	15.74	16.00	16.42		0
	1	49	15.70	15.96	16.44		0
	25	0	16.05	16.05	16.04		0
	25	12	16.11	16.09	16.12		0
	25	25	16.05	15.97	15.96		0
	50	0	16.03	15.98	16.01		0

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8.2.6 LTE Band 5

Table 8-15
LTE Band 5 Measured P_{limit} Antenna 4 - 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	**19.50**	0	0
	1	25	19.34		0
	1	49	19.36		0
	25	0	19.47	0-1	0
	25	12	**19.55**		0
	25	25	19.50		0
	50	0	19.49		0
16QAM	1	0	19.44	0-1	0
	1	25	19.28		0
	1	49	19.23		0
	25	0	19.31	0-2	0
	25	12	19.34		0
	25	25	19.27		0
	50	0	19.38		0
64QAM	1	0	19.15	0-2	0
	1	25	19.20		0
	1	49	19.33		0
	25	0	19.34	0-3	0
	25	12	19.41		0
	25	25	19.31		0
	50	0	19.32		0
256QAM	1	0	19.13	0-5	0
	1	25	19.21		0
	1	49	19.16		0
	25	0	19.25		0
	25	12	19.33		0
	25	25	19.26		0
	50	0	19.31		0

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Table 8-16
LTE Band 5 Measured P_{limit} Antenna 3b - 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	**16.02**	0	0
	1	25	15.97		0
	1	49	16.00		0
	25	0	16.12	0-1	0
	25	12	**16.21**		0
	25	25	16.18		0
	50	0	16.00		0
16QAM	1	0	16.13	0-1	0
	1	25	16.08		0
	1	49	16.01		0
	25	0	16.17	0-2	0
	25	12	16.23		0
	25	25	16.22		0
	50	0	16.12		0
64QAM	1	0	16.04	0-2	0
	1	25	16.03		0
	1	49	16.02		0
	25	0	16.22	0-3	0
	25	12	16.29		0
	25	25	16.24		0
	50	0	16.23		0
256QAM	1	0	15.71	0-5	0
	1	25	15.80		0
	1	49	15.80		0
	25	0	16.18		0
	25	12	16.22		0
	25	25	16.15		0
	50	0	16.17		0

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8.2.7 LTE Band 66

Table 8-17
LTE Band 66 Measured P_{limit} Antenna 4 - 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	15.19	15.20	15.06	0	0
	1	50	15.10	**15.22**	14.93		0
	1	99	15.16	15.15	14.84		0
	50	0	15.24	15.21	15.25	0-1	0
	50	25	15.25	**15.26**	15.26		0
	50	50	15.20	15.25	15.21		0
	100	0	15.21	15.20	15.17		0
16QAM	1	0	15.10	14.90	15.30	0-1	0
	1	50	15.06	14.87	15.28		0
	1	99	15.15	14.83	15.04		0
	50	0	14.94	15.13	14.98	0-2	0
	50	25	15.06	15.23	14.98		0
	50	50	15.02	15.14	15.02		0
	100	0	15.00	15.10	15.00		0
64QAM	1	0	15.29	15.21	15.23	0-2	0
	1	50	15.19	15.24	15.24		0
	1	99	15.14	15.20	15.13		0
	50	0	15.04	15.12	15.10	0-3	0
	50	25	15.13	15.22	15.10		0
	50	50	15.09	15.15	15.11		0
	100	0	15.05	15.08	15.03		0
256QAM	1	0	15.14	14.90	15.17	0-5	0
	1	50	15.20	14.96	15.21		0
	1	99	15.21	14.87	15.10		0
	50	0	14.95	15.07	15.02		0
	50	25	15.07	15.19	15.01		0
	50	50	15.05	15.12	15.03		0
	100	0	15.00	15.09	15.00		0

Table 8-18
LTE Band 66 Measured P_{limit} Antenna 4 - 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	14.87	14.99	14.95	0	0
	1	25	14.86	15.02	14.87		0
	1	49	14.86	14.92	14.84		0
	25	0	14.97	15.13	15.04	0-1	0
	25	12	15.06	15.21	15.04		0
	25	25	15.03	15.17	15.00		0
	50	0	15.07	15.20	15.07		0
16QAM	1	0	14.93	15.20	15.22	0-1	0
	1	25	15.11	15.18	15.24		0
	1	49	15.01	15.09	15.14		0
	25	0	15.05	15.01	14.75	0-2	0
	25	12	14.92	15.12	14.79		0
	25	25	14.88	15.03	14.80		0
	50	0	14.90	14.99	14.69		0
64QAM	1	0	14.83	14.90	14.86	0-2	0
	1	25	14.72	15.15	14.79		0
	1	49	14.69	15.09	14.76		0
	25	0	14.77	14.87	14.78	0-3	0
	25	12	14.84	15.00	14.83		0
	25	25	14.80	14.90	14.87		0
	50	0	14.79	14.89	14.76		0
256QAM	1	0	15.05	14.78	15.10	0-5	0
	1	25	15.03	14.84	15.01		0
	1	49	15.09	14.83	15.04		0
	25	0	14.93	14.92	14.95		0
	25	12	14.99	14.90	14.98		0
	25	25	14.86	14.91	14.82		0
	50	0	14.89	14.88	14.86		0

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Table 8-19
LTE Band 66 Measured P_{limit} Antenna 3a - 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	12.68	**12.72**	12.70	0	0
	1	50	12.55	12.64	12.58		0
	1	99	12.61	12.63	12.58		0
	50	0	12.64	12.67	12.62	0-1	0
	50	25	12.68	**12.74**	12.64		0
	50	50	12.65	12.63	12.63		0
	100	0	12.64	12.70	12.55		0
16QAM	1	0	12.5	12.6	12.56	0-1	0
	1	50	12.62	12.56	12.52		0
	1	99	12.57	12.47	12.36		0
	50	0	12.2	12.2	12.01	0-2	0
	50	25	12.26	12.27	12		0
	50	50	12.21	12.22	11.93		0
	100	0	12.19	12.21	11.99		0
64QAM	1	0	11.86	11.98	12.11	0-2	0
	1	50	11.96	11.96	12.04		0
	1	99	11.92	11.85	11.88		0
	50	0	12.28	12.24	12.07	0-3	0
	50	25	12.32	12.3	12.05		0
	50	50	12.33	12.25	11.97		0
	100	0	12.26	12.24	12.04		0
256QAM	1	0	12.64	12.66	12.41	0-5	0
	1	50	12.63	12.62	12.39		0
	1	99	12.62	12.64	12.43		0
	50	0	12.45	12.50	12.41		0
	50	25	12.53	12.54	12.42		0
	50	50	12.51	12.54	12.50		0
	100	0	12.49	12.48	12.47		0

Table 8-20
LTE Band 66 Measured P_{limit} Antenna 3a - 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	12.19	12.29	12.40	0	0
	1	25	12.19	12.25	12.32		0
	1	49	12.14	12.23	12.23		0
	25	0	12.41	12.50	12.44	0-1	0
	25	12	12.42	12.45	12.42		0
	25	25	12.39	12.40	12.48		0
	50	0	12.39	12.45	12.45		0
16QAM	1	0	12.78	12.47	12.98	0-1	0
	1	25	12.67	12.41	12.92		0
	1	49	12.72	12.41	12.71		0
	25	0	12.57	12.56	12.50	0-2	0
	25	12	12.53	12.50	12.41		0
	25	25	12.51	12.50	12.40		0
	50	0	12.42	12.49	12.40		0
64QAM	1	0	12.35	12.23	12.27	0-2	0
	1	25	12.46	12.26	12.38		0
	1	49	12.41	12.26	12.27		0
	25	0	12.57	12.56	12.50	0-3	0
	25	12	12.53	12.50	12.51		0
	25	25	12.51	12.50	12.46		0
	50	0	12.42	12.49	12.40		0
256QAM	1	0	12.15	12.50	12.88	0-5	0
	1	25	12.17	12.42	12.79		0
	1	49	12.22	12.38	12.79		0
	25	0	12.61	12.52	12.42		0
	25	12	12.65	12.48	12.47		0
	25	25	12.59	12.40	12.53		0
	50	0	12.56	12.45	12.46		0

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Table 8-21
LTE Band 66 Measured P_{limit} Antenna 2a - 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	13.20	13.06	13.15	0	0
	1	50	**13.46**	12.96	13.45		0
	1	99	13.16	12.90	13.08		0
	50	0	13.30	13.24	13.24	0-1	0
	50	25	13.32	**13.47**	13.23		0
	50	50	13.21	13.26	13.22		0
	100	0	13.18	13.32	13.19		0
16QAM	1	0	13.47	13.04	13.49	0-1	0
	1	50	13.50	13.02	13.43		0
	1	99	13.49	12.95	13.46		0
	50	0	13.25	13.24	13.20	0-2	0
	50	25	13.28	13.34	13.19		0
	50	50	13.24	13.25	13.22		0
	100	0	13.26	13.27	13.19		0
64QAM	1	0	13.41	12.95	13.26	0-2	0
	1	50	13.45	12.99	13.29		0
	1	99	13.48	12.96	13.19		0
	50	0	13.30	13.28	13.25	0-3	0
	50	25	13.28	13.38	13.27		0
	50	50	13.25	13.32	13.26		0
	100	0	13.22	13.33	13.22		0
256QAM	1	0	13.20	13.25	13.12	0-5	0
	1	50	13.21	13.21	13.12		0
	1	99	13.27	13.23	13.08		0
	50	0	13.06	13.12	13.17		0
	50	25	13.15	13.19	13.28		0
	50	50	13.13	13.15	13.20		0
	100	0	13.00	13.14	13.17		0

Table 8-22
LTE Band 66 Measured P_{limit} Antenna 2a - 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	12.92	12.95	13.05	0	0
	1	25	12.96	12.98	13.06		0
	1	49	12.95	12.88	13.04		0
	25	0	13.01	13.12	13.15	0-1	0
	25	12	13.11	13.18	13.15		0
	25	25	13.04	13.13	13.17		0
	50	0	13.09	13.14	13.14		0
16QAM	1	0	13.17	13.43	13.50	0-1	0
	1	25	13.24	13.40	13.48		0
	1	49	13.20	13.41	13.49		0
	25	0	13.06	13.18	13.24	0-2	0
	25	12	13.15	13.31	13.28		0
	25	25	13.09	13.24	13.29		0
	50	0	13.08	13.17	13.12		0
64QAM	1	0	13.16	13.41	13.49	0-2	0
	1	25	13.17	13.44	13.48		0
	1	49	13.08	13.44	13.49		0
	25	0	13.05	13.22	13.24	0-3	0
	25	12	13.15	13.34	13.28		0
	25	25	13.08	13.23	13.27		0
	50	0	13.08	13.19	13.11		0
256QAM	1	0	12.79	13.11	13.49	0-5	0
	1	25	12.77	13.19	13.49		0
	1	49	12.82	13.13	13.45		0
	25	0	13.04	13.11	13.22		0
	25	12	13.13	13.22	13.23		0
	25	25	13.11	13.11	13.22		0
	50	0	13.11	13.14	13.17		0

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Table 8-23
LTE Band 66 Measured P_{limit} Antenna 1a - 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	14.65	14.58	14.72	0	0
	1	50	14.63	14.54	14.62		0
	1	99	14.53	**14.86**	14.58		0
	50	0	14.51	14.54	14.78	0-1	0
	50	25	14.77	14.88	**14.90**		0
	50	50	14.58	14.53	14.63		0
	100	0	14.57	14.54	14.85		0
16QAM	1	0	14.48	14.22	14.32	0-1	0
	1	50	14.49	14.16	14.32		0
	1	99	14.41	14.15	14.28		0
	50	0	13.91	14.00	14.04	0-2	0
	50	25	14.00	14.10	14.00		0
	50	50	13.98	14.01	14.00		0
	100	0	14.01	14.00	14.00		0
64QAM	1	0	14.21	14.03	14.08	0-2	0
	1	50	14.21	14.00	14.08		0
	1	99	14.22	14.01	14.00		0
	50	0	14.04	14.04	14.11	0-3	0
	50	25	14.10	14.14	14.08		0
	50	50	14.08	14.07	14.10		0
	100	0	14.05	14.02	14.07		0
256QAM	1	0	13.83	14.11	14.13	0-5	0
	1	50	13.84	14.15	14.04		0
	1	99	13.86	14.18	14.12		0
	50	0	13.86	14.01	14.00		0
	50	25	13.96	14.02	14.09		0
	50	50	13.94	13.99	14.06		0
	100	0	13.94	14.00	13.98		0

Table 8-24
LTE Band 66 Measured P_{limit} Antenna 1a - 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	14.36	14.48	14.52	0	0
	1	25	14.33	14.50	14.42		0
	1	49	14.35	14.42	14.39		0
	25	0	14.51	14.66	14.59	0-1	0
	25	12	14.49	14.63	14.61		0
	25	25	14.46	14.60	14.59		0
	50	0	14.46	14.63	14.82		0
16QAM	1	0	14.22	14.62	14.73	0-1	0
	1	25	14.15	14.52	14.64		0
	1	49	14.14	14.46	14.60		0
	25	0	14.31	14.35	14.28	0-2	0
	25	12	14.28	14.34	14.34		0
	25	25	14.23	14.36	14.25		0
	50	0	14.22	14.24	14.19		0
64QAM	1	0	14.16	14.02	13.94	0-2	0
	1	25	14.26	14.03	13.91		0
	1	49	14.18	14.04	13.87		0
	25	0	14.10	14.14	14.07	0-3	0
	25	12	14.22	14.21	14.08		0
	25	25	14.14	14.18	14.14		0
	50	0	14.12	14.20	13.99		0
256QAM	1	0	13.55	14.07	14.55	0-5	0
	1	25	13.61	14.00	14.52		0
	1	49	13.60	13.97	14.55		0
	25	0	13.93	13.96	14.06		0
	25	12	14.02	14.08	14.05		0
	25	25	13.95	14.05	14.11		0
	50	0	13.95	14.03	14.03		0

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8.2.8 LTE Band 25

Table 8-25
LTE Band 25 Measured P_{limit} Antenna 4 - 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	13.91	**14.06**	14.02	0	0
	1	50	14.00	14.05	14.03		0
	1	99	14.05	14.00	13.91		0
	50	0	14.08	14.15	14.08	0-1	0
	50	25	14.12	14.16	14.09		0
	50	50	14.13	**14.17**	14.07		0
	100	0	14.00	14.04	14.03		0
16QAM	1	0	14.32	14.35	13.65	0-1	0
	1	50	14.39	14.49	13.64		0
	1	99	14.35	14.42	13.60		0
	50	0	14.01	14.12	13.98	0-2	0
	50	25	14.08	14.14	14.01		0
	50	50	14.03	14.12	13.95		0
	100	0	14.06	14.11	13.90		0
64QAM	1	0	13.88	13.74	14.28	0-2	0
	1	50	14.02	13.83	14.35		0
	1	99	13.94	13.77	14.28		0
	50	0	13.86	14.13	13.93	0-3	0
	50	25	13.97	14.15	14.02		0
	50	50	13.94	14.13	13.98		0
	100	0	14.03	14.11	13.96		0
256QAM	1	0	14.30	13.80	14.17	0-5	0
	1	50	14.40	13.89	14.26		0
	1	99	14.29	13.75	14.02		0
	50	0	13.99	14.04	13.92		0
	50	25	14.08	14.04	13.98		0
	50	50	14.06	14.03	13.94		0
	100	0	14.05	14.06	13.93		0

Table 8-26
LTE Band 25 Measured P_{limit} Antenna 3a - 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	**12.47**	12.45	12.07	0	0
	1	50	12.31	12.41	11.97		0
	1	99	12.34	12.32	11.92		0
	50	0	**12.54**	12.47	12.38	0-1	0
	50	25	12.47	12.51	12.40		0
	50	50	12.39	12.44	12.29		0
	100	0	12.38	12.43	12.28		0
16QAM	1	0	12.59	12.64	11.70	0-1	0
	1	50	12.68	12.68	11.77		0
	1	99	12.57	12.58	11.76		0
	50	0	12.25	12.18	12.11	0-2	0
	50	25	12.29	12.24	12.17		0
	50	50	12.19	12.12	12.04		0
	100	0	12.26	12.21	12.13		0
64QAM	1	0	12.41	12.48	12.43	0-2	0
	1	50	12.41	12.47	12.36		0
	1	99	12.38	12.43	12.37		0
	50	0	12.46	12.36	12.34	0-3	0
	50	25	12.41	12.36	12.36		0
	50	50	12.41	12.37	12.33		0
	100	0	12.39	12.35	12.35		0
256QAM	1	0	12.32	12.53	12.48	0-5	0
	1	50	12.33	12.48	12.41		0
	1	99	12.38	12.40	12.33		0
	50	0	12.33	12.41	12.35		0
	50	25	12.31	12.38	12.34		0
	50	50	12.27	12.38	12.25		0
	100	0	12.34	12.37	12.30		0

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Table 8-27
LTE Band 25 Measured P_{limit} Antenna 2a - 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	12.47	12.76	12.74	0	0
	1	50	12.63	**12.85**	12.79		0
	1	99	12.46	12.77	12.73		0
	50	0	12.90	12.78	12.84	0-1	0
	50	25	12.78	12.86	**12.97**		0
	50	50	12.79	12.85	12.93		0
	100	0	12.73	12.80	12.84		0
16QAM	1	0	13.24	12.49	13.19	0-1	0
	1	50	13.32	12.55	13.25		0
	1	99	13.30	12.53	13.19		0
	50	0	12.84	12.75	12.83	0-2	0
	50	25	12.81	12.81	12.91		0
	50	50	12.76	12.84	12.94		0
	100	0	12.78	12.82	12.86		0
64QAM	1	0	13.19	12.78	12.50	0-2	0
	1	50	13.28	12.85	12.59		0
	1	99	13.19	12.83	12.57		0
	50	0	12.78	12.80	12.88	0-3	0
	50	25	12.78	12.92	12.94		0
	50	50	12.83	12.88	12.88		0
	100	0	12.72	12.88	12.94		0
256QAM	1	0	12.86	12.91	12.58	0-5	0
	1	50	13.01	13.01	12.66		0
	1	99	12.95	12.90	12.60		0
	50	0	12.78	12.81	12.82		0
	50	25	12.89	12.94	12.89		0
	50	50	12.87	12.87	12.83		0
	100	0	12.86	12.83	12.94		0

Table 8-28
LTE Band 25 Measured P_{limit} Antenna 1a - 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	12.78	13.17	13.18	0	0
	1	50	12.92	**13.32**	13.25		0
	1	99	12.91	13.25	13.27		0
	50	0	13.21	13.34	13.31	0-1	0
	50	25	13.26	**13.39**	13.29		0
	50	50	13.29	13.36	13.37		0
	100	0	13.22	13.30	13.25		0
16QAM	1	0	13.09	13.49	13.50	0-1	0
	1	50	12.80	13.51	13.57		0
	1	99	12.73	13.53	13.54		0
	50	0	13.08	13.15	13.20	0-2	0
	50	25	13.13	13.22	13.16		0
	50	50	13.14	13.19	13.27		0
	100	0	13.09	13.17	13.18		0
64QAM	1	0	12.70	13.04	13.14	0-2	0
	1	50	12.82	13.17	13.23		0
	1	99	12.85	13.21	13.22		0
	50	0	13.07	13.20	13.21	0-3	0
	50	25	13.13	13.25	13.25		0
	50	50	13.16	13.23	13.29		0
	100	0	13.08	13.21	13.23		0
256QAM	1	0	13.09	13.25	12.95	0-5	0
	1	50	13.20	13.38	13.03		0
	1	99	13.21	13.29	13.00		0
	50	0	13.02	13.14	13.15		0
	50	25	13.13	13.16	13.23		0
	50	50	13.10	13.20	13.14		0
	100	0	13.06	13.14	13.17		0

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8.2.9 LTE Band 30

Table 8-29
LTE Band 30 Measured P_{limit} Antenna 4 - 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	**13.31**	0	0
	1	25	13.18		0
	1	49	13.25		0
	25	0	13.46	0-1	0
	25	12	13.51		0
	25	25	**13.54**		0
	50	0	13.30		0
16QAM	1	0	13.24	0-1	0
	1	25	13.26		0
	1	49	13.29		0
	25	0	13.57	0-2	0
	25	12	13.60		0
	25	25	13.64		0
	50	0	13.61		0
64QAM	1	0	13.35	0-2	0
	1	25	13.42		0
	1	49	13.41		0
	25	0	13.58	0-3	0
	25	12	13.68		0
	25	25	13.67		0
	50	0	13.61		0
256QAM	1	0	13.28	0-5	0
	1	25	13.26		0
	1	49	13.36		0
	25	0	13.43		0
	25	12	13.53		0
	25	25	13.51		0
	50	0	13.52		0

Table 8-30
LTE Band 30 Measured P_{limit} Antenna 3a - 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	10.86	0	0
	1	25	10.89		0
	1	49	**11.10**		0
	25	0	11.07	0-1	0
	25	12	11.11		0
	25	25	**11.24**		0
	50	0	10.90		0
16QAM	1	0	11.15	0-1	0
	1	25	11.17		0
	1	49	11.13		0
	25	0	10.70	0-2	0
	25	12	10.80		0
	25	25	10.81		0
	50	0	10.62		0
64QAM	1	0	10.51	0-2	0
	1	25	10.61		0
	1	49	10.59		0
	25	0	10.65	0-3	0
	25	12	10.81		0
	25	25	10.80		0
	50	0	10.62		0
256QAM	1	0	11.10	0-5	0
	1	25	11.29		0
	1	49	11.16		0
	25	0	10.69		0
	25	12	10.84		0
	25	25	10.83		0
	50	0	10.72		0

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Table 8-31
LTE Band 30 Measured P_{limit} Antenna 2a - 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	**10.81**	0	0
	1	25	10.64		0
	1	49	10.70		0
	25	0	**10.87**	0-1	0
	25	12	10.84		0
	25	25	10.86		0
	50	0	10.65		0
16QAM	1	0	10.98	0-1	0
	1	25	10.77		0
	1	49	10.75		0
	25	0	10.84	0-2	0
	25	12	10.92		0
	25	25	10.88		0
	50	0	10.82		0
64QAM	1	0	10.76	0-2	0
	1	25	10.71		0
	1	49	10.74		0
	25	0	10.93	0-3	0
	25	12	10.95		0
	25	25	10.91		0
	50	0	10.93		0
256QAM	1	0	10.69	0-5	0
	1	25	10.60		0
	1	49	10.62		0
	25	0	10.61		0
	25	12	10.62		0
	25	25	10.62		0
	50	0	10.63		0

Table 8-32
LTE Band 30 Measured P_{limit} Antenna 1a - 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	12.29	0	0
	1	25	**12.42**		0
	1	49	12.30		0
	25	0	12.31	0-1	0
	25	12	12.43		0
	25	25	**12.46**		0
	50	0	12.37		0
16QAM	1	0	12.39	0-1	0
	1	25	12.37		0
	1	49	12.35		0
	25	0	12.05	0-2	0
	25	12	12.07		0
	25	25	12.06		0
	50	0	12.11		0
64QAM	1	0	12.33	0-2	0
	1	25	12.33		0
	1	49	12.35		0
	25	0	12.47	0-3	0
	25	12	12.59		0
	25	25	12.53		0
	50	0	12.47		0
256QAM	1	0	12.65	0-5	0
	1	25	12.74		0
	1	49	12.66		0
	25	0	12.17		0
	25	12	12.26		0
	25	25	12.17		0
	50	0	12.15		0

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8.2.10 LTE Band 7

Table 8-33
LTE Band 7 Measured P_{limit} Antenna 4 - 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	13.13	13.06	12.90	0	0
	1	50	**13.45**	13.41	13.40		0
	1	99	13.39	12.99	12.97		0
	50	0	13.22	13.16	13.16	0-1	0
	50	25	**13.48**	13.25	13.22		0
	50	50	13.12	13.19	13.20		0
	100	0	13.33	13.07	13.04		0
16QAM	1	0	13.34	13.46	12.76	0-1	0
	1	50	13.37	13.55	12.81		0
	1	99	13.38	13.45	12.77		0
	50	0	13.05	13.00	13.09	0-2	0
	50	25	13.10	13.07	13.13		0
	50	50	13.00	13.06	13.11		0
	100	0	12.96	13.09	13.06		0
64QAM	1	0	13.49	13.46	12.74	0-2	0
	1	50	13.11	13.51	12.83		0
	1	99	13.05	13.45	12.77		0
	50	0	13.06	13.07	13.12	0-3	0
	50	25	13.11	13.13	13.20		0
	50	50	12.99	13.12	13.14		0
	100	0	13.01	13.06	13.15		0
256QAM	1	0	13.13	13.11	12.94	0-5	0
	1	50	13.15	13.16	13.05		0
	1	99	13.20	13.22	13.08		0
	50	0	13.06	13.06	13.12		0
	50	25	13.12	13.12	13.12		0
	50	50	13.11	13.10	13.18		0
	100	0	13.13	13.12	13.10		0

Table 8-34
LTE Band 7 Measured P_{limit} Antenna 3a - 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	10.82	11.09	10.82	0	0
	1	50	10.94	**11.11**	10.76		0
	1	99	11.00	11.02	10.79		0
	50	0	10.93	11.10	11.07	0-1	0
	50	25	11.02	**11.12**	11.11		0
	50	50	11.00	11.03	11.00		0
	100	0	10.99	11.02	10.98		0
16QAM	1	0	10.82	10.93	10.77	0-1	0
	1	50	10.93	10.95	10.76		0
	1	99	11.05	11.00	10.78		0
	50	0	10.62	10.45	10.63	0-2	0
	50	25	10.67	10.50	10.68		0
	50	50	10.67	10.47	10.61		0
	100	0	10.60	10.50	10.63		0
64QAM	1	0	10.75	10.98	11.04	0-2	0
	1	50	10.95	10.97	11.07		0
	1	99	10.99	10.91	11.05		0
	50	0	10.89	11.00	10.91	0-3	0
	50	25	10.92	11.04	10.93		0
	50	50	10.97	10.96	10.89		0
	100	0	10.93	10.98	10.88		0
256QAM	1	0	10.85	10.91	10.96	0-5	0
	1	50	11.19	10.92	10.97		0
	1	99	11.17	10.84	11.02		0
	50	0	10.94	11.00	10.91		0
	50	25	10.93	11.02	10.95		0
	50	50	10.96	10.97	10.88		0
	100	0	10.87	11.01	10.93		0

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Table 8-35
LTE Band 7 Measured P_{limit} Antenna 2a - 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	12.64	12.92	13.02	0	0
	1	50	12.70	12.95	**13.05**		0
	1	99	12.66	12.94	13.01		0
	50	0	12.87	13.00	13.08	0-1	0
	50	25	12.85	13.04	**13.11**		0
	50	50	12.84	12.99	13.04		0
	100	0	12.82	12.98	13.04		0
16QAM	1	0	12.85	12.72	13.01	0-1	0
	1	50	12.87	12.78	13.06		0
	1	99	12.90	12.81	12.98		0
	50	0	12.55	12.63	12.51	0-2	0
	50	25	12.58	12.65	12.52		0
	50	50	12.52	12.62	12.48		0
	100	0	12.59	12.58	12.55		0
64QAM	1	0	12.65	12.78	12.52	0-2	0
	1	50	12.58	12.82	12.57		0
	1	99	12.55	12.78	12.48		0
	50	0	12.62	12.64	12.56	0-3	0
	50	25	12.62	12.64	12.64		0
	50	50	12.58	12.62	12.58		0
	100	0	12.61	12.59	12.60		0
256QAM	1	0	12.59	12.64	12.46	0-5	0
	1	50	12.78	12.74	12.50		0
	1	99	12.70	12.69	12.48		0
	50	0	12.53	12.62	12.58		0
	50	25	12.61	12.69	12.63		0
	50	50	12.59	12.70	12.60		0
	100	0	12.57	12.61	12.62		0

Table 8-36
LTE Band 7 Measured P_{limit} Antenna 1a - 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	11.86	12.35	12.28	0	0
	1	50	12.29	12.35	12.34		0
	1	99	12.45	12.36	**12.47**		0
	50	0	12.32	12.42	12.49	0-1	0
	50	25	12.44	12.48	**12.54**		0
	50	50	12.40	12.41	12.45		0
	100	0	12.31	12.35	12.36		0
16QAM	1	0	12.02	12.28	12.09	0-1	0
	1	50	12.26	12.24	12.09		0
	1	99	12.31	12.31	12.12		0
	50	0	11.73	11.93	11.94	0-2	0
	50	25	11.85	11.98	11.98		0
	50	50	11.84	11.91	11.92		0
	100	0	11.78	11.93	11.93		0
64QAM	1	0	11.48	11.82	12.24	0-2	0
	1	50	11.64	11.81	12.32		0
	1	99	11.65	11.85	12.38		0
	50	0	11.46	11.70	11.63	0-3	0
	50	25	11.59	11.74	11.67		0
	50	50	11.58	11.70	11.62		0
	100	0	11.51	11.67	11.68		0
256QAM	1	0	11.60	11.97	12.06	0-5	0
	1	50	11.72	12.12	12.12		0
	1	99	11.76	12.09	12.14		0
	50	0	11.63	11.65	11.65		0
	50	25	11.65	11.65	11.66		0
	50	50	11.60	11.63	11.62		0
	100	0	11.71	11.65	11.64		0

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8.2.11 LTE Band 41 PC3

Table 8-37
LTE Band 41 PC3 Measured P_{limit} Antenna 4 - 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	15.02	15.00	**15.20**	15.14	15.13	0	0
	1	50	14.90	14.95	15.10	14.95	15.01		0
	1	99	14.92	14.89	15.12	15.03	15.04		0
	50	0	15.07	15.15	15.22	15.20	15.18	0-1	0
	50	25	15.18	15.16	**15.26**	15.24	15.20		0
	50	50	15.08	15.07	15.21	15.19	15.15		0
	100	0	15.09	15.10	15.18	15.19	15.14		0
16QAM	1	0	14.84	14.96	15.43	15.08	15.07	0-1	0
	1	50	14.88	15.12	15.44	15.08	15.08		0
	1	99	14.86	15.09	15.39	15.09	15.14		0
	50	0	14.94	14.95	15.05	15.06	14.96	0-2	0
	50	25	15.01	15.03	15.14	15.07	15.00		0
	50	50	14.97	15.04	15.13	15.07	15.03		0
	100	0	15.01	15.00	15.02	15.08	14.98		0
64QAM	1	0	14.75	14.93	14.83	15.06	15.05	0-2	0
	1	50	14.80	15.01	14.93	15.07	15.03		0
	1	99	14.74	14.99	14.87	15.06	15.06		0
	50	0	15.02	15.00	15.02	15.07	14.99	0-3	0
	50	25	15.10	15.02	15.12	15.09	15.05		0
	50	50	15.07	15.04	15.10	15.07	15.06		0
	100	0	15.08	15.03	15.06	15.07	15.01		0
256QAM	1	0	15.06	14.97	15.07	15.13	15.00	0-5	0
	1	50	15.06	15.01	15.14	15.08	14.99		0
	1	99	15.12	15.03	15.12	15.13	15.03		0
	50	0	14.99	14.98	15.09	15.03	15.04		0
	50	25	15.10	15.06	15.17	15.07	15.08		0
	50	50	15.08	15.02	15.13	15.08	15.01		0
	100	0	15.00	15.02	15.05	14.97	15.01		0

Table 8-38
LTE Band 41 PC3 Measured P_{limit} Antenna 3a - 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	13.10	13.38	13.37	13.31	13.45	0	0
	1	50	13.45	13.37	13.25	13.30	13.46		0
	1	99	**13.60**	13.29	13.28	13.28	13.49		0
	50	0	13.50	13.55	13.35	13.41	13.56	0-1	0
	50	25	**13.68**	13.57	13.40	13.44	13.58		0
	50	50	13.62	13.47	13.31	13.37	13.51		0
	100	0	13.54	13.54	13.36	13.39	13.55		0
16QAM	1	0	13.06	13.74	13.42	13.77	13.70	0-1	0
	1	50	13.58	13.80	13.34	13.71	13.79		0
	1	99	13.64	13.70	13.42	13.73	13.86		0
	50	0	13.56	13.66	13.47	13.54	13.64	0-2	0
	50	25	13.70	13.68	13.51	13.60	13.69		0
	50	50	13.68	13.62	13.44	13.52	13.60		0
	100	0	13.67	13.63	13.49	13.57	13.64		0
64QAM	1	0	13.11	13.68	13.37	13.23	13.58	0-2	0
	1	50	13.52	13.67	13.26	13.25	13.62		0
	1	99	13.54	13.54	13.28	13.24	13.67		0
	50	0	13.63	13.68	13.56	13.42	13.56	0-3	0
	50	25	13.75	13.64	13.54	13.47	13.57		0
	50	50	13.76	13.63	13.52	13.51	13.66		0
	100	0	13.74	13.62	13.53	13.47	13.58		0
256QAM	1	0	13.30	13.65	13.32	13.38	13.34	0-5	0
	1	50	13.63	13.60	13.24	13.41	13.42		0
	1	99	13.79	13.45	13.27	13.48	13.45		0
	50	0	13.56	13.63	13.30	13.33	13.41		0
	50	25	13.70	13.54	13.33	13.38	13.41		0
	50	50	13.61	13.51	13.27	13.42	13.51		0
	100	0	13.54	13.48	13.28	13.27	13.36		0

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Table 8-39
LTE Band 41 PC3 Measured P_{limit} Antenna 2a - 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	14.83	14.98	15.13	15.08	**15.16**	0	0
	1	50	15.04	14.92	14.94	14.91	15.10		0
	1	99	14.85	15.11	14.99	14.96	15.13		0
	50	0	15.05	15.04	15.15	15.12	15.19	0-1	0
	50	25	15.09	15.16	15.18	15.13	**15.21**		0
	50	50	15.08	15.15	15.13	15.14	15.20		0
	100	0	15.03	15.10	15.12	15.07	15.15		0
16QAM	1	0	14.96	15.04	15.16	15.38	15.36	0-1	0
	1	50	15.01	15.09	15.13	15.37	15.34		0
	1	99	15.03	15.03	15.16	15.47	15.39		0
	50	0	15.02	15.13	15.21	15.10	15.19	0-2	0
	50	25	15.11	15.22	15.27	15.16	15.27		0
	50	50	15.08	15.19	15.18	15.18	15.24		0
	100	0	15.15	15.23	15.21	15.13	15.21		0
64QAM	1	0	14.97	14.88	14.92	15.04	15.05	0-2	0
	1	50	15.03	14.86	14.96	15.07	15.00		0
	1	99	15.01	14.85	14.91	15.09	15.04		0
	50	0	14.99	15.08	15.13	15.08	15.30	0-3	0
	50	25	15.08	15.13	15.21	15.14	15.35		0
	50	50	15.07	15.10	15.12	15.13	15.33		0
	100	0	15.06	15.18	15.17	15.11	15.32		0
256QAM	1	0	15.16	15.22	15.23	15.33	15.52	0-5	0
	1	50	15.09	15.19	15.29	15.23	15.52		0
	1	99	15.14	15.18	15.24	15.27	15.50		0
	50	0	15.13	15.21	15.27	15.26	15.47		0
	50	25	15.19	15.28	15.38	15.32	15.51		0
	50	50	15.16	15.25	15.35	15.29	15.49		0
	100	0	15.15	15.20	15.22	15.25	15.44		0

Table 8-40
LTE Band 41 PC3 Measured P_{limit} Antenna 1a - 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	14.35	14.64	14.44	14.65	14.84	0	0
	1	50	14.67	**14.94**	14.34	14.52	14.59		0
	1	99	14.93	14.59	14.42	14.52	14.60		0
	50	0	14.60	14.82	14.58	14.77	14.70	0-1	0
	50	25	14.80	**15.00**	14.61	14.99	14.91		0
	50	50	14.79	14.77	14.54	14.72	14.70		0
	100	0	14.66	14.74	14.58	14.67	14.72		0
16QAM	1	0	14.02	14.71	14.61	14.46	14.35	0-1	0
	1	50	14.52	14.72	14.61	14.41	14.32		0
	1	99	14.68	14.67	14.62	14.46	14.41		0
	50	0	14.26	14.51	14.33	14.28	14.42	0-2	0
	50	25	14.41	14.52	14.35	14.36	14.46		0
	50	50	14.48	14.41	14.36	14.36	14.50		0
	100	0	14.34	14.48	14.36	14.31	14.47		0
64QAM	1	0	13.96	14.30	14.09	14.27	14.20	0-2	0
	1	50	14.32	14.31	14.05	14.29	14.22		0
	1	99	14.50	14.20	14.02	14.24	14.23		0
	50	0	14.27	14.62	14.28	14.27	14.46	0-3	0
	50	25	14.40	14.61	14.32	14.32	14.55		0
	50	50	14.50	14.51	14.31	14.35	14.55		0
	100	0	14.38	14.58	14.35	14.32	14.52		0
256QAM	1	0	14.01	14.71	14.30	14.29	14.54	0-5	0
	1	50	14.42	14.63	14.31	14.29	14.51		0
	1	99	14.56	14.60	14.30	14.21	14.54		0
	50	0	14.32	14.61	14.37	14.31	14.47		0
	50	25	14.45	14.62	14.42	14.37	14.53		0
	50	50	14.49	14.51	14.38	14.33	14.54		0
	100	0	14.36	14.54	14.35	14.30	14.45		0

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8.2.12 LTE Band 41 PC2

Table 8-41
LTE Band 41 PC2 Measured P_{limit} Antenna 4 - 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	16.64	16.58	16.67	**16.74**	16.59	0	0
	1	50	16.59	16.56	16.59	16.64	16.47		0
	1	99	16.61	16.52	16.66	16.70	16.51		0
	50	0	16.58	16.65	16.72	16.71	16.74	0-1	0
	50	25	16.66	16.70	**16.77**	16.72	16.71		0
	50	50	16.64	16.68	16.73	16.69	16.70		0
	100	0	16.65	16.71	16.68	16.72	16.71		0

Table 8-42
LTE Band 41 PC2 Measured P_{limit} Antenna 3a - 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	15.11	15.35	15.32	15.37	15.22	0	0
	1	50	15.48	15.25	15.16	15.31	15.12		0
	1	99	**15.51**	15.19	15.21	15.34	15.23		0
	50	0	15.47	15.45	15.25	15.33	15.35	0-1	0
	50	25	15.57	15.55	15.26	15.32	15.39		0
	50	50	**15.59**	15.48	15.23	15.29	15.34		0
	100	0	15.50	15.50	15.20	15.34	15.36		0

Table 8-43
LTE Band 41 PC2 Measured P_{limit} Antenna 2a - 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	16.44	16.56	16.58	16.57	16.77	0	0
	1	50	16.57	16.62	16.51	16.53	16.73		0
	1	99	16.46	16.57	16.50	16.57	**16.80**		0
	50	0	16.59	16.64	16.68	16.65	16.75	0-1	0
	50	25	16.67	16.69	16.78	16.69	**16.82**		0
	50	50	16.62	16.64	16.67	16.68	16.80		0
	100	0	16.55	16.60	16.57	16.56	16.79		0

Table 8-44
LTE Band 41 PC2 Measured P_{limit} Antenna 1a - 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	16.21	**16.96**	16.86	16.60	16.80	0	0
	1	50	16.62	16.93	16.74	16.52	16.70		0
	1	99	16.85	16.86	16.78	16.56	16.76		0
	50	0	16.71	**16.99**	16.80	16.78	16.82	0-1	0
	50	25	16.93	16.98	16.79	16.81	16.87		0
	50	50	16.94	16.96	16.76	16.77	16.85		0
	100	0	16.86	16.93	16.78	16.74	16.83		0

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8.2.13 LTE Band 48

Table 8-45
LTE Band 48 Measured P_{limit} Antenna 4 - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 55340 (3560.0 MHz)	Low-Mid Channel 55773 (3603.3 MHz)	Mid-High Channel 56207 (3646.7 MHz)	High Channel 56640 (3690.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	13.32	13.07	13.22	13.31	0	0
	1	50	**13.34**	13.12	13.20	13.33		0
	1	99	13.28	13.20	13.24	13.19		0
	50	0	13.40	13.34	13.31	13.32	0-1	0
	50	25	**13.45**	13.31	13.44	13.29		0
	50	50	13.37	13.27	13.40	13.30		0
	100	0	13.31	13.28	13.29	13.28		0
16QAM	1	0	13.62	13.65	13.55	13.43	0-1	0
	1	50	13.53	13.60	13.50	13.30		0
	1	99	13.60	13.60	13.51	13.30		0
	50	0	13.44	13.37	13.34	13.37	0-2	0
	50	25	13.45	13.29	13.43	13.39		0
	50	50	13.43	13.28	13.37	13.40		0
	100	0	13.43	13.25	13.35	13.36		0
64QAM	1	0	13.60	13.23	13.43	13.32	0-2	0
	1	50	13.57	13.19	13.51	13.30		0
	1	99	13.54	13.18	13.50	13.31		0
	50	0	13.58	13.45	13.40	13.51	0-3	0
	50	25	13.64	13.49	13.44	13.54		0
	50	50	13.52	13.39	13.53	13.56		0
	100	0	13.57	13.45	13.46	13.52		0
256QAM	1	0	12.31	12.46	12.50	12.51	0-5	1.3
	1	50	12.63	12.42	12.40	12.42		1.3
	1	99	12.59	12.39	12.40	12.45		1.3
	50	0	12.59	12.44	12.46	12.41		1.3
	50	25	12.62	12.48	12.48	12.43		1.3
	50	50	12.51	12.34	12.42	12.37		1.3
	100	0	12.55	12.42	12.44	12.37		1.3

Table 8-46
LTE Band 48 Measured P_{limit} Antenna 3b - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 55340 (3560.0 MHz)	Low-Mid Channel 55773 (3603.3 MHz)	Mid-High Channel 56207 (3646.7 MHz)	High Channel 56640 (3690.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	14.06	**14.07**	14.02	13.99	0	0
	1	50	14.00	14.01	13.95	13.96		0
	1	99	14.03	14.04	13.94	13.92		0
	50	0	14.19	14.12	14.04	14.10	0-1	0
	50	25	**14.24**	14.17	14.09	14.08		0
	50	50	14.17	14.12	14.11	14.11		0
	100	0	14.00	14.06	14.05	14.04		0
16QAM	1	0	14.14	14.44	14.32	14.09	0-1	0
	1	50	14.07	14.42	14.24	14.03		0
	1	99	14.10	14.45	14.25	14.04		0
	50	0	14.23	14.14	14.04	14.10	0-2	0
	50	25	14.21	14.16	14.07	14.09		0
	50	50	14.19	14.14	14.12	14.15		0
	100	0	14.21	14.13	14.03	14.10		0
64QAM	1	0	14.15	14.01	14.25	14.12	0-2	0
	1	50	14.13	14.02	14.27	14.03		0
	1	99	14.17	14.06	14.29	14.06		0
	50	0	14.47	14.31	14.20	14.36	0-3	0
	50	25	14.59	14.33	14.21	14.35		0
	50	50	14.45	14.29	14.26	14.33		0
	100	0	14.44	14.35	14.23	14.34		0
256QAM	1	0	13.26	13.29	13.27	13.64	0-5	0.7
	1	50	13.20	13.30	13.20	13.27		0.7
	1	99	13.36	13.36	13.33	13.28		0.7
	50	0	13.87	13.84	13.66	13.72		0.7
	50	25	13.75	13.86	13.67	13.72		0.7
	50	50	13.84	13.85	13.73	13.83		0.7
	100	0	13.66	13.75	13.65	13.71		0.7

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Table 8-47
LTE Band 48 Measured P_{limit} Antenna 2b - 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	14.03	13.99	**14.14**	14.13	0	0
	1	50	13.96	13.96	14.07	14.09		0
	1	99	13.97	14.05	14.09	14.11		0
	50	0	14.12	14.11	14.21	14.23	0-1	0
	50	25	14.08	14.15	**14.30**	14.22		0
	50	50	14.10	14.16	14.25	14.26		0
	100	0	13.92	14.04	14.13	14.12		0
16QAM	1	0	14.08	14.26	14.02	14.29	0-1	0
	1	50	14.04	14.20	13.96	14.23		0
	1	99	14.02	14.25	13.95	14.16		0
	50	0	13.82	13.86	14.01	14.02	0-2	0
	50	25	13.91	13.99	14.00	14.00		0
	50	50	13.90	13.98	14.02	14.05		0
	100	0	13.87	13.95	14.04	14.00		0
64QAM	1	0	14.00	14.08	14.39	14.21	0-2	0
	1	50	13.98	14.08	14.39	14.22		0
	1	99	14.01	14.17	14.40	14.20		0
	50	0	14.21	14.36	14.35	14.43	0-3	0
	50	25	14.29	14.48	14.43	14.46		0
	50	50	14.22	14.42	14.40	14.47		0
	100	0	14.32	14.39	14.47	14.38		0
256QAM	1	0	14.07	14.02	14.19	14.28	0-5	0
	1	50	14.09	14.06	14.28	14.23		0
	1	99	14.09	14.12	14.16	14.23		0
	50	0	14.02	14.03	14.18	14.16		0
	50	25	14.12	14.12	14.23	14.20		0
	50	50	14.09	14.14	14.20	14.18		0
	100	0	14.05	14.09	14.24	14.09		0

Table 8-48
LTE Band 48 Measured P_{limit} Antenna 1b - 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	12.62	12.57	12.71	12.70	0	0
	1	50	12.56	12.52	12.68	12.67		0
	1	99	12.61	12.58	**12.77**	12.62		0
	50	0	12.72	12.68	12.77	12.79	0-1	0
	50	25	12.84	12.70	**12.85**	12.84		0
	50	50	12.77	12.69	12.82	12.81		0
	100	0	12.74	12.68	12.76	12.75		0
16QAM	1	0	12.94	12.76	13.24	13.13	0-1	0
	1	50	12.88	12.75	13.17	13.02		0
	1	99	12.95	12.80	13.16	12.97		0
	50	0	12.76	12.88	12.85	12.83	0-2	0
	50	25	12.81	12.90	13.00	12.80		0
	50	50	12.80	12.87	12.92	12.80		0
	100	0	12.76	12.87	12.92	12.83		0
64QAM	1	0	12.50	12.52	12.86	12.70	0-2	0
	1	50	12.54	12.54	12.87	12.66		0
	1	99	12.62	12.58	12.86	12.64		0
	50	0	12.87	12.86	12.83	12.93	0-3	0
	50	25	12.90	12.89	12.88	12.91		0
	50	50	12.91	12.85	12.85	12.93		0
	100	0	12.89	12.91	12.90	12.87		0
256QAM	1	0	12.82	13.00	12.99	12.94	0-5	0
	1	50	12.87	13.03	12.97	12.96		0
	1	99	12.95	13.10	13.02	12.95		0
	50	0	12.90	13.05	13.01	12.92		0
	50	25	12.91	13.04	13.04	13.02		0
	50	50	12.91	13.07	13.03	12.94		0
	100	0	12.87	13.01	13.02	12.92		0

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8.2.14 LTE Uplink Carrier Aggregation Conducted Powers

Table 8-49
LTE Uplink Carrier Aggregation Measured P_{limit} – Antenna 4

	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_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	50	0	LTE B5	5	20453	829.3	2453	874.3	QPSK	25	0	19.30	19.49

	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	132322	1745.0	66786	2145.0	QPSK	50	0	LTE B66	20	132124	1725.2	66588	2125.2	QPSK	50	50	15.24	15.21
CA_66B	LTE B66	10	132322	1745.0	66786	2145.0	QPSK	25	0	LTE B66	10	132223	1735.1	66687	2135.1	QPSK	25	25	15.18	15.13

	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_7C	LTE B7	20	20850	2510.0	2850	2630.0	QPSK	1	99	LTE B7	20	21048	2529.8	3048	2649.8	QPSK	1	0	13.46	13.39

	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	41490	2680.0	QPSK	1	0	LTE B41	20	41292	2660.2	QPSK	1	99	15.21	15.13

	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	41490	2680.0	QPSK	1	0	LTE B41 PC2	20	41292	2660.2	QPSK	1	99	16.65	16.59

	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	55773	3603.3	QPSK	1	99	LTE B48	20	55971	3623.1	QPSK	1	0	13.66	13.20

Table 8-50
LTE Uplink Carrier Aggregation Measured P_{limit} – Antenna 3a

	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	12.60	12.62
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	12.34	12.44

	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_7C	LTE B7	20	20850	2510.0	2850	2630.0	QPSK	50	50	LTE B7	20	21048	2529.8	3048	2649.8	QPSK	50	0	11.76	10.75

	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	14.42	13.60

	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	15.43	15.51

Table 8-51
LTE Uplink Carrier Aggregation Measured P_{limit} – Antenna 3b

	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_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	50	0	LTE B5	5	20453	829.3	2453	874.3	QPSK	25	0	16.11	16.00

	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	14.20	14.03

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Table 8-52
LTE Uplink Carrier Aggregation Measured P_{limit} – Antenna 2a

	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	12.82	13.24
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	12.65	13.15

	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_7C	LTE B7	20	20850	2510.0	2850	2630.0	QPSK	1	99	LTE B7	20	21048	2529.8	3048	2649.8	QPSK	1	0	12.90	12.66

	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	50	50	LTE B41	20	39948	2525.8	QPSK	50	0	15.00	15.08

	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	39790	2510.0	QPSK	50	50	LTE B41 PC2	20	39988	2529.8	QPSK	50	0	16.30	16.62

Table 8-53
LTE Uplink Carrier Aggregation Measured P_{limit} – Antenna 2b

	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	14.00	13.97

Table 8-54
LTE Uplink Carrier Aggregation Measured P_{limit} – Antenna 1a

	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	14.46	14.78
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	14.64	14.59

	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_7C	LTE B7	20	20850	2510.0	2850	2630.0	QPSK	1	99	LTE B7	20	21048	2529.8	3048	2649.8	QPSK	1	0	12.57	12.45

	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	41490	2680.0	QPSK	1	0	LTE B41	20	41292	2660.2	QPSK	1	99	14.97	14.84

	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	41490	2680.0	QPSK	1	0	LTE B41 PC2	20	41292	2660.2	QPSK	1	99	16.78	16.80

Table 8-55
LTE Uplink Carrier Aggregation Measured P_{limit} – Antenna 1b

	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	12.95	12.61

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Notes:

1. This device supports uplink carrier aggregation for LTE CA_7C, LTE CA_5B, LTE CA_66C, LTE CA_66B, LTE CA_41C and LTE CA_48C with a maximum of two component carriers. For intra-band 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.

Figure 8-2
Power Measurement Setup

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8.3 NR Plimit Conducted Powers

Notes: 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 appendix I.

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.

8.3.1 NR Band n71

Table 8-56
NR Band n71 Measured P_{limit} Antenna 4 - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	20.70	0	0.0
	1	53	20.68		0.0
	1	104	20.65		0.0
	50	0	20.66	0-0.5	0.0
	50	28	20.62	0	0.0
	50	56	20.50	0-0.5	0.0
	100	0	20.64		0.0
DFT-s-OFDM QPSK	1	1	**20.70**	0	0.0
	1	53	20.65		0.0
	1	104	20.64		0.0
	50	0	**20.73**	0-1	0.0
	50	28	20.66	0	0.0
	50	56	20.53	0-1	0.0
	100	0	20.69		0.0
DFT-s-OFDM 16QAM	1	1	20.86	0-1	0.0
CP-OFDM QPSK	1	1	20.66	0-1.5	0.0

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Table 8-57
NR Band n71 Measured P_{limit} Antenna 3b - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	18.43	0	0.0
	1	53	18.21		0.0
	1	104	18.10		0.0
	50	0	18.32	0-0.5	0.0
	50	28	18.15	0	0.0
	50	56	18.04	0-0.5	0.0
	100	0	18.17		0.0
DFT-s-OFDM QPSK	1	1	**18.50**	0	0.0
	1	53	18.21		0.0
	1	104	18.11		0.0
	50	0	**18.30**	0-1	0.0
	50	28	18.18	0	0.0
	50	56	18.06	0-1	0.0
	100	0	18.20		0.0
DFT-s-OFDM 16QAM	1	1	18.57	0-1	0.0
CP-OFDM QPSK	1	1	18.45	0-1.5	0.0

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8.3.2 NR Band n12

Table 8-58
NR Band n12 Measured P_{limit} Antenna 4 - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM $\pi/2$ BPSK	1	1	19.95	0	0.0
	1	40	19.84		0.0
	1	77	19.88		0.0
	36	0	19.82	0-0.5	0.0
	36	22	19.75	0	0.0
	36	43	19.77	0-0.5	0.0
	75	0	19.88		0.0
DFT-s-OFDM QPSK	1	1	**19.92**	0	0.0
	1	40	19.86		0.0
	1	77	19.87		0.0
	36	0	**19.90**	0-1	0.0
	36	22	19.83	0	0.0
	36	43	19.75	0-1	0.0
	75	0	19.85		0.0
DFT-s-OFDM 16QAM	1	1	19.73	0-1	0.0
CP-OFDM QPSK	1	1	19.83	0-1.5	0.0

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Table 8-59
NR Band n12 Measured P_{limit} Antenna 3b - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz)		
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	17.40	0	0.0
	1	40	17.38		0.0
	1	77	17.29		0.0
	36	0	17.40	0-0.5	0.0
	36	22	17.25	0	0.0
	36	43	17.20	0-0.5	0.0
	75	0	17.30		0.0
DFT-s-OFDM QPSK	1	1	**17.42**	0	0.0
	1	40	17.35		0.0
	1	77	17.20		0.0
	36	0	**17.37**	0-1	0.0
	36	22	17.31	0	0.0
	36	43	17.24	0-1	0.0
	75	0	17.27		0.0
DFT-s-OFDM 16QAM	1	1	17.50	0-1	0.0
CP-OFDM QPSK	1	1	17.35	0-1.5	0.0

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8.3.3 NR Band n5

Table 8-60
NR Band n5 Measured P_{limit} Antenna 4 - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	20.02	0	0.0
	1	53	19.94		0.0
	1	104	19.85		0.0
	50	0	19.86	0-0.5	0.0
	50	28	19.85	0	0.0
	50	56	19.74	0-0.5	0.0
	100	0	19.82		0.0
DFT-s-OFDM QPSK	1	1	**19.91**	0	0.0
	1	53	19.86		0.0
	1	104	19.72		0.0
	50	0	**19.79**	0-1	0.0
	50	28	19.74	0	0.0
	50	56	19.67	0-1	0.0
	100	0	19.77		0.0
DFT-s-OFDM 16QAM	1	1	20.08	0-1	0.0
CP-OFDM QPSK	1	1	19.91	0-1.5	0.0

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Table 8-61
NR Band n5 Measured P_{limit} Antenna 3b - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	16.20	0	0.0
	1	53	16.10		0.0
	1	104	15.90		0.0
	50	0	16.00	0-0.5	0.0
	50	28	16.05	0	0.0
	50	56	15.95	0-0.5	0.0
	100	0	16.00		0.0
DFT-s-OFDM QPSK	1	1	**16.22**	0	0.0
	1	53	16.12		0.0
	1	104	15.94		0.0
	50	0	**15.97**	0-1	0.0
	50	28	15.94	0	0.0
	50	56	15.84	0-1	0.0
	100	0	15.91		0.0
DFT-s-OFDM 16QAM	1	1	16.15	0-1	0.0
CP-OFDM QPSK	1	1	16.21	0-1.5	0.0

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8.3.4 NR Band n66

Table 8-62
NR Band n66 Measured P_{limit} Antenna 4 - 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 $\pi/2$ BPSK	1	1	14.38	0	0.0
	1	108	14.36		0.0
	1	214	14.42		0.0
	108	0	14.34	0-0.5	0.0
	108	54	14.38	0	0.0
	108	108	14.44	0-0.5	0.0
	216	0	14.41		0.0
DFT-s-OFDM QPSK	1	1	14.34	0	0.0
	1	108	**14.42**		0.0
	1	214	14.28		0.0
	108	0	14.36	0-1	0.0
	108	54	14.25	0	0.0
	108	108	**14.40**	0-1	0.0
	216	0	14.32		0.0
DFT-s-OFDM 16QAM	1	1	14.30	0-1	0.0
CP-OFDM QPSK	1	1	14.65	0-1.5	0.0

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Table 8-63
NR Band n66 Measured P_{limit} Antenna 3a - 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 π/2 BPSK	1	1	13.10	0	0.0
	1	108	13.05		0.0
	1	214	12.98		0.0
	108	0	13.06	0-0.5	0.0
	108	54	13.05	0	0.0
	108	108	13.08	0-0.5	0.0
	216	0	13.14		0.0
DFT-s-OFDM QPSK	1	1	12.91	0	0.0
	1	108	**12.99**		0.0
	1	214	12.94		0.0
	108	0	12.91	0-1	0.0
	108	54	**13.11**	0	0.0
	108	108	12.91	0-1	0.0
	216	0	12.90		0.0
DFT-s-OFDM 16QAM	1	1	12.89	0-1	0.0
CP-OFDM QPSK	1	1	13.10	0-1.5	0.0

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Table 8-64
NR Band n66 Measured P_{limit} Antenna 2a - 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 π/2 BPSK	1	1	13.48	0	0.0
	1	108	13.42		0.0
	1	214	13.30		0.0
	108	0	13.47	0-0.5	0.0
	108	54	13.41	0	0.0
	108	108	13.44	0-0.5	0.0
	216	0	13.48		0.0
DFT-s-OFDM QPSK	1	1	**13.49**	0	0.0
	1	108	13.35		0.0
	1	214	13.31		0.0
	108	0	13.24	0-1	0.0
	108	54	**13.37**	0	0.0
	108	108	13.22	0-1	0.0
	216	0	13.18		0.0
DFT-s-OFDM 16QAM	1	1	13.13	0-1	0.0
CP-OFDM QPSK	1	1	13.30	0-1.5	0.0

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Table 8-65
NR Band n66 Measured P_{limit} Antenna 1a - 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 π/2 BPSK	1	1	14.80	0	0.0
	1	108	14.81		0.0
	1	214	14.83		0.0
	108	0	14.79	0-0.5	0.0
	108	54	14.84	0	0.0
	108	108	14.87	0-0.5	0.0
	216	0	14.89		0.0
DFT-s-OFDM QPSK	1	1	14.61	0	0.0
	1	108	**14.78**		0.0
	1	214	14.65		0.0
	108	0	14.77	0-1	0.0
	108	54	**14.83**	0	0.0
	108	108	14.80	0-1	0.0
	216	0	14.72		0.0
DFT-s-OFDM 16QAM	1	1	14.88	0-1	0.0
CP-OFDM QPSK	1	1	14.76	0-1.5	0.0

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8.3.5 NR Band n25

Table 8-66
NR Band n25 Measured P_{limit} Antenna 4 - 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 π/2 BPSK	1	1	14.53	0	0.0
	1	108	14.38		0.0
	1	214	14.50		0.0
	108	0	14.40	0-0.5	0.0
	108	54	14.35	0	0.0
	108	108	14.44	0-0.5	0.0
	216	0	14.39		0.0
DFT-s-OFDM QPSK	1	1	**14.55**	0	0.0
	1	108	14.20		0.0
	1	214	14.22		0.0
	108	0	**14.29**	0-1	0.0
	108	54	14.22	0	0.0
	108	108	14.20	0-1	0.0
	216	0	14.21		0.0
DFT-s-OFDM 16QAM	1	1	14.69	0-1	0.0
CP-OFDM QPSK	1	1	14.38	0-1.5	0.0

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Table 8-67
NR Band n25 Measured P_{limit} Antenna 3a – 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 π/2 BPSK	1	1	12.40	0	0.0
	1	108	12.11		0.0
	1	214	12.31		0.0
	108	0	12.21	0-0.5	0.0
	108	54	12.09	0	0.0
	108	108	12.18	0-0.5	0.0
	216	0	12.17		0.0
DFT-s-OFDM QPSK	1	1	**12.21**	0	0.0
	1	108	12.19		0.0
	1	214	12.17		0.0
	108	0	**12.13**	0-1	0.0
	108	54	12.09	0	0.0
	108	108	12.10	0-1	0.0
	216	0	12.12		0.0
DFT-s-OFDM 16QAM	1	1	12.52	0-1	0.0
CP-OFDM QPSK	1	1	12.13	0-1.5	0.0

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Table 8-68
NR Band n25 Measured P_{limit} Antenna 2a - 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 π/2 BPSK	1	1	12.78	0	0.0
	1	108	12.50		0.0
	1	214	12.75		0.0
	108	0	12.53	0-0.5	0.0
	108	54	12.55	0	0.0
	108	108	12.62	0-0.5	0.0
	216	0	12.61		0.0
DFT-s-OFDM QPSK	1	1	12.70	0	0.0
	1	108	12.55		0.0
	1	214	**12.73**		0.0
	108	0	12.51	0-1	0.0
	108	54	12.52	0	0.0
	108	108	**12.62**	0-1	0.0
	216	0	12.60		0.0
DFT-s-OFDM 16QAM	1	1	12.66	0-1	0.0
CP-OFDM QPSK	1	1	12.64	0-1.5	0.0

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Table 8-69
NR Band n25 Measured P_{limit} Antenna 1a - 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 π/2 BPSK	1	1	13.10	0	0.0
	1	108	12.93		0.0
	1	214	13.05		0.0
	108	0	12.97	0-0.5	0.0
	108	54	13.02	0	0.0
	108	108	12.99	0-0.5	0.0
	216	0	13.01		0.0
DFT-s-OFDM QPSK	1	1	**13.31**	0	0.0
	1	108	13.08		0.0
	1	214	13.27		0.0
	108	0	**13.03**	0-1	0.0
	108	54	13.01	0	0.0
	108	108	12.99	0-1	0.0
	216	0	13.00		0.0
DFT-s-OFDM 16QAM	1	1	13.40	0-1	0.0
CP-OFDM QPSK	1	1	13.22	0-1.5	0.0

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8.3.6 NR Band n30

Table 8-70
NR Band n30 Measured P_{limit} Antenna 4 - 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 π/2 BPSK	1	1	13.71	0	0.0
	1	26	13.63		0.0
	1	50	13.73		0.0
	25	0	13.59	0-0.5	0.0
	25	14	13.67	0	0.0
	25	27	13.72	0-0.5	0.0
	50	0	13.64		0.0
DFT-s-OFDM QPSK	1	1	13.67	0	0.0
	1	26	13.69		0.0
	1	50	**13.71**		0.0
	25	0	13.52	0-1	0.0
	25	14	**13.60**	0	0.0
	25	27	13.59	0-1	0.0
	50	0	13.58		0.0
DFT-s-OFDM 16QAM	1	1	13.76	0-1	0.0
CP-OFDM QPSK	1	1	13.59	0-1.5	0.0

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Table 8-71
NR Band n30 Measured P_{limit} Antenna 3a - 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 π/2 BPSK	1	1	10.77	0	0.0
	1	26	10.82		0.0
	1	50	10.86		0.0
	25	0	10.73	0-0.5	0.0
	25	14	10.75	0	0.0
	25	27	10.87	0-0.5	0.0
	50	0	10.80		0.0
DFT-s-OFDM QPSK	1	1	10.78	0	0.0
	1	26	10.89		0.0
	1	50	**10.92**		0.0
	25	0	10.73	0-1	0.0
	25	14	10.78	0	0.0
	25	27	**10.83**	0-1	0.0
	50	0	10.75		0.0
DFT-s-OFDM 16QAM	1	1	10.86	0-1	0.0
CP-OFDM QPSK	1	1	10.68	0-1.5	0.0

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Table 8-72
NR Band n30 Measured P_{limit} Antenna 2a - 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 π/2 BPSK	1	1	11.21	0	0.0
	1	26	11.27		0.0
	1	50	11.19		0.0
	25	0	11.08	0-0.5	0.0
	25	14	11.03	0	0.0
	25	27	11.05	0-0.5	0.0
	50	0	11.07		0.0
DFT-s-OFDM QPSK	1	1	11.07	0	0.0
	1	26	**11.11**		0.0
	1	50	10.94		0.0
	25	0	10.95	0-1	0.0
	25	14	10.98	0	0.0
	25	27	**11.03**	0-1	0.0
	50	0	11.02		0.0
DFT-s-OFDM 16QAM	1	1	11.16	0-1	0.0
CP-OFDM QPSK	1	1	10.76	0-1.5	0.0

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Table 8-73
NR Band n30 Measured P_{limit} Antenna 1a - 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 π/2 BPSK	1	1	12.68	0	0.0
	1	26	12.64		0.0
	1	50	12.56		0.0
	25	0	12.52	0-0.5	0.0
	25	14	12.49	0	0.0
	25	27	12.48	0-0.5	0.0
	50	0	12.55		0.0
DFT-s-OFDM QPSK	1	1	12.42	0	0.0
	1	26	**12.57**		0.0
	1	50	12.43		0.0
	25	0	12.31	0-1	0.0
	25	14	12.37	0	0.0
	25	27	**12.46**	0-1	0.0
	50	0	12.38		0.0
DFT-s-OFDM 16QAM	1	1	12.58	0-1	0.0
CP-OFDM QPSK	1	1	12.47	0-1.5	0.0

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8.3.7 NR Band n7

Table 8-74
NR Band n7 Measured P_{limit} Antenna 4 - 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 π/2 BPSK	1	1	13.33	0	0.0
	1	108	13.27		0.0
	1	214	13.36		0.0
	108	0	13.34	0-0.5	0.0
	108	54	13.30	0	0.0
	108	108	13.37	0-0.5	0.0
	216	0	13.34		0.0
DFT-s-OFDM QPSK	1	1	**13.44**	0	0.0
	1	108	13.38		0.0
	1	214	13.32		0.0
	108	0	**13.36**	0-1	0.0
	108	54	13.31	0	0.0
	108	108	13.35	0-1	0.0
	216	0	13.35		0.0
DFT-s-OFDM 16QAM	1	1	13.18	0-1	0.0
CP-OFDM QPSK	1	1	13.22	0-1.5	0.0

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Table 8-75
NR Band n7 Measured P_{limit} Antenna 3a - 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 π/2 BPSK	1	1	11.07	0	0.0
	1	108	11.05		0.0
	1	214	11.04		0.0
	108	0	11.10	0-0.5	0.0
	108	54	11.07	0	0.0
	108	108	11.06	0-0.5	0.0
	216	0	11.09		0.0
DFT-s-OFDM QPSK	1	1	**11.07**	0	0.0
	1	108	10.96		0.0
	1	214	11.04		0.0
	108	0	11.04	0-1	0.0
	108	54	**11.10**	0	0.0
	108	108	11.00	0-1	0.0
	216	0	11.06		0.0
DFT-s-OFDM 16QAM	1	1	10.95	0-1	0.0
CP-OFDM QPSK	1	1	10.97	0-1.5	0.0

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Table 8-76
NR Band n7 Measured P_{limit} Antenna 2a - 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 π/2 BPSK	1	1	12.98	0	0.0
	1	108	13.08		0.0
	1	214	13.05		0.0
	108	0	13.10	0-0.5	0.0
	108	54	13.05	0	0.0
	108	108	13.14	0-0.5	0.0
	216	0	13.12		0.0
DFT-s-OFDM QPSK	1	1	13.01	0	0.0
	1	108	**13.08**		0.0
	1	214	13.02		0.0
	108	0	13.10	0-1	0.0
	108	54	13.06	0	0.0
	108	108	**13.11**	0-1	0.0
	216	0	13.04		0.0
DFT-s-OFDM 16QAM	1	1	12.98	0-1	0.0
CP-OFDM QPSK	1	1	13.03	0-1.5	0.0

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Table 8-77
NR Band n7 Measured P_{limit} Antenna 1a - 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 π/2 BPSK	1	1	12.15	0	0.0
	1	108	12.20		0.0
	1	214	12.17		0.0
	108	0	12.29	0-0.5	0.0
	108	54	12.30	0	0.0
	108	108	12.25	0-0.5	0.0
	216	0	12.19		0.0
DFT-s-OFDM QPSK	1	1	12.25	0	0.0
	1	108	**12.30**		0.0
	1	214	12.23		0.0
	108	0	**12.33**	0-1	0.0
	108	54	12.25	0	0.0
	108	108	12.30	0-1	0.0
	216	0	12.24		0.0
DFT-s-OFDM 16QAM	1	1	12.30	0-1	0.0
CP-OFDM QPSK	1	1	12.05	0-1.5	0.0

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8.3.8 NR Band n41 PC2

Table 8-78
NR Band n41 PC2 Measured P_{limit} Antenna 4 - 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 π/2 BPSK	1	1	12.50	0	0.0
	1	137	12.38		0.0
	1	271	12.33		0.0
	135	0	12.35	0-0.5	0.0
	135	69	12.37	0	0.0
	135	138	12.32	0-0.5	0.0
	270	0	12.40		0.0
DFT-s-OFDM QPSK	1	1	**12.52**	0	0.0
	1	137	12.40		0.0
	1	271	12.35		0.0
	135	0	**12.40**	0-1	0.0
	135	69	12.38	0	0.0
	135	138	12.35	0-1	0.0
	270	0	12.38		0.0
DFT-s-OFDM 16QAM	1	1	12.42	0-1	0.0
CP-OFDM QPSK	1	1	12.38	0-1.5	0.0

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Table 8-79
NR Band n41 PC2 Measured P_{limit} Antenna 3a - 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 π/2 BPSK	1	1	11.93	0	0.0
	1	137	11.97		0.0
	1	271	11.94		0.0
	135	0	11.89	0-0.5	0.0
	135	69	11.92	0	0.0
	135	138	11.94	0-0.5	0.0
	270	0	11.93		0.0
DFT-s-OFDM QPSK	1	1	**12.12**	0	0.0
	1	137	11.91		0.0
	1	271	11.73		0.0
	135	0	11.82	0-1	0.0
	135	69	**11.86**	0	0.0
	135	138	11.75	0-1	0.0
	270	0	11.80		0.0
DFT-s-OFDM 16QAM	1	1	11.77	0-1	0.0
CP-OFDM QPSK	1	1	11.96	0-1.5	0.0

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Table 8-80
NR Band n41 PC2 Measured P_{limit} Antenna 2a - 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 $\pi/2$ BPSK	1	1	12.36	0	0.0
	1	137	12.37		0.0
	1	271	12.41		0.0
	135	0	12.31	0-0.5	0.0
	135	69	12.33	0	0.0
	135	138	12.30	0-0.5	0.0
	270	0	12.33		0.0
DFT-s-OFDM QPSK	1	1	12.45	0	0.0
	1	137	**12.48**		0.0
	1	271	12.42		0.0
	135	0	12.33	0-1	0.0
	135	69	**12.35**	0	0.0
	135	138	12.32	0-1	0.0
	270	0	12.34		0.0
DFT-s-OFDM 16QAM	1	1	12.37	0-1	0.0
CP-OFDM QPSK	1	1	12.39	0-1.5	0.0

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Table 8-81
NR Band n41 PC2 Measured P_{limit} Antenna 1a - 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 π/2 BPSK	1	1	13.30	0	0.0
	1	137	13.22		0.0
	1	271	13.21		0.0
	135	0	13.29	0-0.5	0.0
	135	69	13.25	0	0.0
	135	138	13.20	0-0.5	0.0
	270	0	13.29		0.0
DFT-s-OFDM QPSK	1	1	**13.40**	0	0.0
	1	137	13.29		0.0
	1	271	13.17		0.0
	135	0	**13.30**	0-1	0.0
	135	69	13.20	0	0.0
	135	138	13.17	0-1	0.0
	270	0	13.20		0.0
DFT-s-OFDM 16QAM	1	1	13.25	0-1	0.0
CP-OFDM QPSK	1	1	13.26	0-1.5	0.0

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8.3.9 NR Band n77 DoD PC2

Table 8-82
NR Band n77 DoD PC2 Measured P_{limit} Antenna 4 - 100 MHz Bandwidth

NR Band n77 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 π/2 BPSK	1	1	10.57	0	0.0
	1	137	10.55		0.0
	1	271	10.52		0.0
	135	0	10.47	0-0.5	0.0
	135	69	10.50	0	0.0
	135	138	10.40	0-0.5	0.0
	270	0	10.48		0.0
DFT-s-OFDM QPSK	1	1	**10.60**	0	0.0
	1	137	10.58		0.0
	1	271	10.53		0.0
	135	0	10.48	0-1	0.0
	135	69	**10.54**	0	0.0
	135	138	10.45	0-1	0.0
	270	0	10.44		0.0
DFT-s-OFDM 16QAM	1	1	10.46	0-1	0.0
CP-OFDM QPSK	1	1	10.53	0-1.5	0.5

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Table 8-83
NR Band n77 DoD PC2 Measured P_{limit} Antenna 3b - 100 MHz Bandwidth

NR Band n77 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 π/2 BPSK	1	1	13.31	0	0.0
	1	137	13.43		0.0
	1	271	13.36		0.0
	135	0	13.31	0-0.5	0.0
	135	69	13.36	0	0.0
	135	138	13.23	0-0.5	0.0
	270	0	13.20		0.0
DFT-s-OFDM QPSK	1	1	13.31	0	0.0
	1	137	**13.40**		0.0
	1	271	13.28		0.0
	135	0	13.30	0-1	0.0
	135	69	**13.35**	0	0.0
	135	138	13.25	0-1	0.0
	270	0	13.20		0.0
DFT-s-OFDM 16QAM	1	1	13.60	0-1	0.0
CP-OFDM QPSK	1	1	13.21	0-1.5	0.0

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Table 8-84
NR Band n77 DoD PC2 Measured P_{limit} Antenna 2b - 100 MHz Bandwidth

NR Band n77 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 π/2 BPSK	1	1	11.25	0	0.0
	1	137	11.59		0.0
	1	271	11.24		0.0
	135	0	11.48	0-0.5	0.0
	135	69	11.47	0	0.0
	135	138	11.42	0-0.5	0.0
	270	0	11.41		0.0
DFT-s-OFDM QPSK	1	1	11.60	0	0.0
	1	137	**12.05**		0.0
	1	271	11.68		0.0
	135	0	11.67	0-1	0.0
	135	69	**11.83**	0	0.0
	135	138	11.56	0-1	0.0
	270	0	11.82		0.0
DFT-s-OFDM 16QAM	1	1	11.54	0-1	0.0
CP-OFDM QPSK	1	1	11.77	0-1.5	0.0

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Table 8-85
NR Band n77 DoD PC2 Measured P_{limit} Antenna 1b - 100 MHz Bandwidth

NR Band n77 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 $\pi/2$ BPSK	1	1	11.53	0	0.0
	1	137	11.69		0.0
	1	271	11.73		0.0
	135	0	11.60	0-0.5	0.0
	135	69	11.57	0	0.0
	135	138	11.60	0-0.5	0.0
	270	0	11.59		0.0
DFT-s-OFDM QPSK	1	1	11.61	0	0.0
	1	137	11.67		0.0
	1	271	**11.95**		0.0
	135	0	11.64	0-1	0.0
	135	69	**11.92**	0	0.0
	135	138	11.65	0-1	0.0
	270	0	11.91		0.0
DFT-s-OFDM 16QAM	1	1	11.50	0-1	0.0
CP-OFDM QPSK	1	1	11.81	0-1.5	0.0

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8.3.10 NR Band n77 C PC2

Table 8-86
NR Band n77 C PC2 Measured P_{limit} Antenna 4 - 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 π/2 BPSK	1	1	10.65	10.39	0	0.0
	1	137	10.72	10.91		0.0
	1	271	10.72	10.69		0.0
	135	0	10.52	10.75	0-0.5	0.0
	135	69	10.58	10.87	0	0.0
	135	138	10.71	10.86	0-0.5	0.0
	270	0	10.60	10.83		0.0
DFT-s-OFDM QPSK	1	1	10.53	10.75	0	0.0
	1	137	10.52	10.90		0.0
	1	271	10.67	**10.95**		0.0
	135	0	10.63	10.75	0-1	0.0
	135	69	10.56	10.84	0	0.0
	135	138	10.60	**10.99**	0-1	0.0
	270	0	10.62	10.77		0.0
DFT-s-OFDM 16QAM	1	1	10.54	10.29	0-1	0.0
CP-OFDM QPSK	1	1	10.61	10.74	0-1.5	0.0

Table 8-87
NR Band n77 C PC2 Measured P_{limit} Antenna 3b - 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 π/2 BPSK	1	1	13.49	12.98	0	0.0
	1	137	13.71	13.46		0.0
	1	271	13.60	13.40		0.0
	135	0	13.45	13.03	0-0.5	0.0
	135	69	13.62	13.31	0	0.0
	135	138	13.50	13.46	0-0.5	0.0
	270	0	13.52	13.17		0.0
DFT-s-OFDM QPSK	1	1	13.38	13.01	0	0.0
	1	137	**13.68**	13.40		0.0
	1	271	13.55	13.44		0.0
	135	0	13.52	13.05	0-1	0.0
	135	69	**13.64**	13.30	0	0.0
	135	138	13.53	13.40	0-1	0.0
	270	0	13.56	13.19		0.0
DFT-s-OFDM 16QAM	1	1	13.65	13.22	0-1	0.0
CP-OFDM QPSK	1	1	13.40	13.00	0-1.5	0.0

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Table 8-88
NR Band n77 C PC2 Measured P_{limit} Antenna 2b - 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 π/2 BPSK	1	1	10.94	11.23	0	0.0
	1	137	11.19	11.48		0.0
	1	271	11.24	11.32		0.0
	135	0	11.11	11.42	0-0.5	0.0
	135	69	11.21	11.47	0	0.0
	135	138	11.33	11.41	0-0.5	0.0
	270	0	11.19	11.40		0.0
DFT-s-OFDM QPSK	1	1	11.50	11.62	0	0.0
	1	137	11.33	**11.75**		0.0
	1	271	11.60	11.56		0.0
	135	0	11.47	11.45	0-1	0.0
	135	69	11.37	11.51	0	0.0
	135	138	11.35	**11.55**	0-1	0.0
	270	0	11.39	11.67		0.0
DFT-s-OFDM 16QAM	1	1	10.89	11.15	0-1	0.0
CP-OFDM QPSK	1	1	11.37	11.10	0-1.5	0.0

Table 8-89
NR Band n77 C PC2 Measured P_{limit} Antenna 1b - 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 π/2 BPSK	1	1	11.21	11.36	0	0.0
	1	137	11.68	11.29		0.0
	1	271	11.65	11.25		0.0
	135	0	11.33	11.26	0-0.5	0.0
	135	69	11.57	11.36	0	0.0
	135	138	11.64	11.28	0-0.5	0.0
	270	0	11.49	11.23		0.0
DFT-s-OFDM QPSK	1	1	11.35	11.52	0	0.0
	1	137	11.75	11.51		0.0
	1	271	**11.81**	11.26		0.0
	135	0	11.35	11.28	0-1	0.0
	135	69	11.55	11.34	0	0.0
	135	138	**11.63**	11.24	0-1	0.0
	270	0	11.49	11.22		0.0
DFT-s-OFDM 16QAM	1	1	11.21	11.36	0-1	0.0
CP-OFDM QPSK	1	1	11.37	11.55	0-1.5	0.0

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8.4 WLAN Maximum Time-Averaged Conducted Powers

Table 8-90
2.4 GHz WLAN Maximum Average RF Power – Antenna 1a, Variant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	12.48	12.42	12.50	12.62
2437	6	12.51	12.50	12.44	12.65
2462	11	12.41	12.51	12.63	12.40

Table 8-91
2.4 GHz WLAN Maximum Average RF Power – Antenna 1a, Variant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	12.77	12.55	12.55	12.47
2437	6	12.88	12.30	12.46	12.53
2462	11	12.79	12.49	12.47	12.51

Table 8-92
2.4 GHz WLAN Maximum Average RF Power – Antenna 3a, Variant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	11.15	11.20	11.34	11.26
2437	6	11.06	11.24	11.36	11.44
2462	11	11.10	11.13	11.14	11.15

Table 8-93
2.4 GHz WLAN Maximum Average RF Power – Antenna 3a, Variant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	11.15	11.29	11.25	11.37
2437	6	11.06	11.30	11.19	11.34
2462	11	11.13	11.18	11.26	11.30

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Table 8-94
5 GHz WLAN Maximum Average RF Power – Antenna 1b, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	9.52	9.54
5290	58	9.75	9.57
5530	106	9.95	9.31
5610	122	10.14	9.36
5690	138	10.12	9.34
5775	155	8.63	8.92

Table 8-95
5 GHz WLAN Maximum Average RF Power – Antenna 1b, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	9.61	9.58
5290	58	9.57	9.53
5530	106	9.92	9.40
5610	122	10.06	9.23
5690	138	10.20	9.36
5775	155	8.55	8.93

Table 8-96
5 GHz WLAN Maximum Average RF Power – Antenna 2b, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	9.30	9.20
5290	58	8.29	8.48
5530	106	8.53	8.89
5610	122	8.47	9.00
5690	138	8.56	8.98
5775	155	8.90	8.91

Table 8-97
5 GHz WLAN Maximum Average RF Power – Antenna 2b, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	8.94	9.30
5290	58	8.57	8.58
5530	106	8.69	9.03
5610	122	8.21	9.01
5690	138	8.50	8.98
5775	155	9.02	8.93

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Table 8-98
5 GHz WLAN Maximum Average RF Power – Antenna 3a, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	9.33	9.23
5290	58	9.49	9.54
5530	106	10.03	10.03
5610	122	9.98	9.90
5690	138	10.11	10.08
5775	155	9.09	9.25

Table 8-99
5 GHz WLAN Maximum Average RF Power – Antenna 3a, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	9.30	9.26
5290	58	9.47	9.45
5530	106	10.15	9.94
5610	122	10.18	10.14
5690	138	10.20	9.95
5775	155	9.05	9.27

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8.5 WLAN Reduced Time-Averaged Conducted Powers

Table 8-100
2.4 GHz WLAN 3dB Reduced Average RF Power – Antenna 1a, Variant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	9.35	9.45	9.39	9.56
2437	6	9.56	9.53	9.56	9.53
2462	11	9.52	9.43	9.45	9.40

Table 8-101
2.4 GHz WLAN 3dB Reduced Average RF Power – Antenna 1a, Variant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	9.51	9.55	9.49	9.45
2437	6	9.45	9.62	9.48	9.54
2462	11	9.60	9.48	9.51	9.44

Table 8-102
2.4 GHz WLAN 3dB Reduced Average RF Power – Antenna 3a, Variant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	8.25	8.29	8.30	8.35
2437	6	8.16	8.28	8.28	8.28
2462	11	8.28	8.25	8.26	8.31

Table 8-103
2.4 GHz WLAN 3dB Reduced Average RF Power – Antenna 3a, Variant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax (SU)
		Average	Average	Average	Average
2412	1	8.20	8.21	8.24	8.25
2437	6	8.34	8.35	8.33	8.32
2462	11	8.25	8.27	8.26	8.27

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Table 8-104
5 GHz WLAN 6dB Reduced Average RF Power – Antenna 1b, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	3.58	3.47
5290	58	3.67	3.53
5530	106	3.35	3.26
5610	122	3.50	3.20
5690	138	3.59	3.43
5775	155	3.00	3.24

Table 8-105
5 GHz WLAN 6dB Reduced Average RF Power – Antenna 1b, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	3.62	3.47
5290	58	3.53	3.45
5530	106	3.50	3.31
5610	122	3.53	3.29
5690	138	3.72	3.50
5775	155	3.04	3.28

Table 8-106
5 GHz WLAN 3dB Reduced Average RF Power – Antenna 2b, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	6.15	6.14
5290	58	5.44	5.43
5530	106	6.15	6.02
5610	122	6.10	5.98
5690	138	6.03	6.06
5775	155	6.20	6.03

Table 8-107
5 GHz WLAN 3dB Reduced Average RF Power – Antenna 2b, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	6.30	6.15
5290	58	5.49	5.55
5530	106	6.05	5.94
5610	122	6.09	5.92
5690	138	6.11	5.89
5775	155	6.10	5.96

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Table 8-108
5 GHz WLAN 6dB Reduced Average RF Power – Antenna 3a, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	3.30	3.34
5290	58	3.46	3.50
5530	106	4.13	4.05
5610	122	4.01	4.00
5690	138	3.98	4.03
5775	155	3.27	3.32

Table 8-109
5 GHz WLAN 6dB Reduced Average RF Power – Antenna 3a, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	3.20	3.15
5290	58	3.55	3.44
5530	106	4.07	4.02
5610	122	3.97	3.99
5690	138	4.03	3.94
5775	155	3.20	3.16

8.6 WLAN Power Reduction Verification Summary

Table 8-110
WLAN Power Reduction Verification

Antenna	Mode/Band	Condition (s)	Maximum Scenario Maximum Allowed Tune Up Power [dBm]	Reduced Scenario Maximum Allowed Tune Up Power [dBm]	Maximum Target Power [dBm]	Reduced Target Power [dBm]	Maximum Measured Power	Reduced Measured Power	Verdict
					(Tolerance [dB])	(Tolerance [dB])	[dBm]	[dBm]	
Ant 3A	2.4 GHz WLAN	Main Band 3A ON	12.25	9.25	10.75 (+1.5/-1.5)	7.75 (+1.5/-1.5)	11.70	8.43	PASS
	2.4 GHz WLAN	Main Band 3B ON	12.25	9.25	10.75 (+1.5/-1.5)	7.75 (+1.5/-1.5)	11.70	7.92	PASS
	2.4 GHz WLAN	ULCA ON	12.25	9.25	10.75 (+1.5/-1.5)	7.75 (+1.5/-1.5)	11.70	8.51	PASS
Ant 1A	2.4 GHz WLAN	Main Band 1A ON	13.50	10.50	12.00 (+1.5/-1.5)	9.00 (+1.5/-1.5)	13.10	9.98	PASS
	2.4 GHz WLAN	Main Band 1B ON	13.50	10.50	12.00 (+1.5/-1.5)	9.00 (+1.5/-1.5)	13.10	10.11	PASS
	2.4 GHz WLAN	ULCA ON	13.50	10.50	12.00 (+1.5/-1.5)	9.00 (+1.5/-1.5)	13.10	10.31	PASS
Ant 2b	5 GHz WLAN	Main Band Ant 2A ON	10.25	7.25	8.75 (+1.5/-1.5)	5.75 (+1.5/-1.5)	9.71	6.37	PASS
	5 GHz WLAN	Main Band Ant 2B ON	10.25	7.25	8.75 (+1.5/-1.5)	5.75 (+1.5/-1.5)	9.71	6.55	PASS
	5 GHz WLAN	ULCA ON	10.25	7.25	8.75 (+1.5/-1.5)	5.75 (+1.5/-1.5)	9.71	6.13	PASS
Ant 1b	5 GHz WLAN	Main Band Ant 1A ON	10.50	4.50	9.00 (+1.5/-1.5)	3.00 (+1.5/-1.5)	10.47	4.12	PASS
	5 GHz WLAN	Main Band Ant 1B ON	10.50	4.50	9.00 (+1.5/-1.5)	3.00 (+1.5/-1.5)	10.47	3.15	PASS
	5 GHz WLAN	ULCA ON	10.50	4.50	9.00 (+1.5/-1.5)	3.00 (+1.5/-1.5)	10.47	3.65	PASS
Ant 3A	5 GHz WLAN	Main Band Ant 3B ON	11.00	5.00	9.50 (+1.5/-1.5)	3.50 (+1.5/-1.5)	9.00	4.90	PASS
	5 GHz WLAN	Main Band Ant 3A ON	11.00	5.00	9.50 (+1.5/-1.5)	3.50 (+1.5/-1.5)	9.32	4.80	PASS
	5 GHz WLAN	ULCA ON	11.00	5.00	9.50 (+1.5/-1.5)	3.50 (+1.5/-1.5)	9.75	4.78	PASS

Conducted powers were measured for each Mode/Band and applied condition. All conducted power measurements were verified to be within tolerance.

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8.7 Notes for WLAN

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.
- The WLAN chipset in this device is produced by two different suppliers. The electrically identical modules are manufactured with the identical mechanical structure to meet the same specifications and functions.
- Two device variants are referenced as Variant 1 and Variant 2 in this report.
- WLAN SAR worst case configuration was spotchecked on Variant 1 and Variant 2. The Variant with the highest reported SAR value was evaluated for the remaining WLAN configurations.

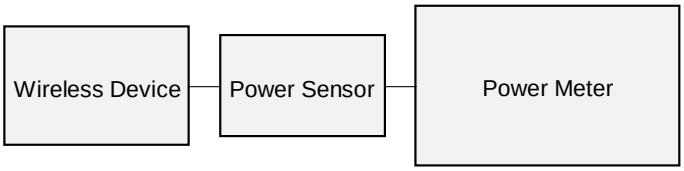

Figure 8-3
Power Measurement Setup

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8.8 Bluetooth Maximum Conducted Powers

Table 8-111
Bluetooth Average RF Power – Antenna 1a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	12.51	17.824
2441	GFSK	1.0	39	13.66	23.227
2480	GFSK	1.0	78	13.10	20.417

Table 8-112
Bluetooth Average RF Power – Antenna 1a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	13.26	21.184
2441	GFSK	1.0	39	13.69	23.388
2480	GFSK	1.0	78	13.52	22.491

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Table 8-113
Bluetooth Average RF Power – Antenna 3a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	12.05	16.032
2441	GFSK	1.0	39	12.48	17.701
2480	GFSK	1.0	78	11.23	13.274

Table 8-114
Bluetooth Average RF Power – Antenna 3a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	12.37	17.258
2441	GFSK	1.0	39	12.50	17.783
2480	GFSK	1.0	78	11.65	14.622

8.9 Bluetooth Reduced Conducted Powers

Table 8-115
Bluetooth 3.5dB Reduced Average RF Power – Antenna 1a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	10.06	10.139
2441	GFSK	1.0	39	9.88	9.727
2480	GFSK	1.0	78	9.91	9.795

Table 8-116
Bluetooth 3.5dB Reduced Average RF Power – Antenna 1a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	9.97	9.931
2441	GFSK	1.0	39	10.10	10.233
2480	GFSK	1.0	78	10.12	10.280

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Table 8-117
Bluetooth 4.5dB Reduced Average RF Power – Antenna 1a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	8.88	7.727
2441	GFSK	1.0	39	8.73	7.464
2480	GFSK	1.0	78	9.07	8.072

Table 8-118
Bluetooth 4.5dB Reduced Average RF Power – Antenna 1a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	8.98	7.907
2441	GFSK	1.0	39	8.63	7.295
2480	GFSK	1.0	78	8.90	7.762

Table 8-119
Bluetooth 7dB Reduced Average RF Power – Antenna 1a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	6.40	4.365
2441	GFSK	1.0	39	6.58	4.550
2480	GFSK	1.0	78	6.33	4.295

Table 8-120
Bluetooth 7dB Reduced Average RF Power – Antenna 1a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	6.20	4.169
2441	GFSK	1.0	39	6.57	4.539
2480	GFSK	1.0	78	6.30	4.266

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Table 8-121
Bluetooth 3.5dB Reduced Average RF Power – Antenna 3a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	8.59	7.228
2441	GFSK	1.0	39	8.36	6.855
2480	GFSK	1.0	78	8.77	7.534

Table 8-122
Bluetooth 3.5dB Reduced Average RF Power – Antenna 3a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	8.68	7.379
2441	GFSK	1.0	39	8.52	7.112
2480	GFSK	1.0	78	8.50	7.079

Table 8-123
Bluetooth 4.5dB Reduced Average RF Power – Antenna 3a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	7.60	5.754
2441	GFSK	1.0	39	7.31	5.383
2480	GFSK	1.0	78	7.35	5.433

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Table 8-124
Bluetooth 4.5dB Reduced Average RF Power – Antenna 3a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	7.73	5.929
2441	GFSK	1.0	39	7.55	5.689
2480	GFSK	1.0	78	7.60	5.754

Table 8-125
Bluetooth 7dB Reduced Average RF Power – Antenna 3a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	5.08	3.221
2441	GFSK	1.0	39	5.18	3.296
2480	GFSK	1.0	78	4.44	2.780

Table 8-126
Bluetooth 7dB Reduced Average RF Power – Antenna 3a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	4.85	3.055
2441	GFSK	1.0	39	4.63	2.904
2480	GFSK	1.0	78	4.77	2.999

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8.10 Bluetooth Duty Cycle Plots

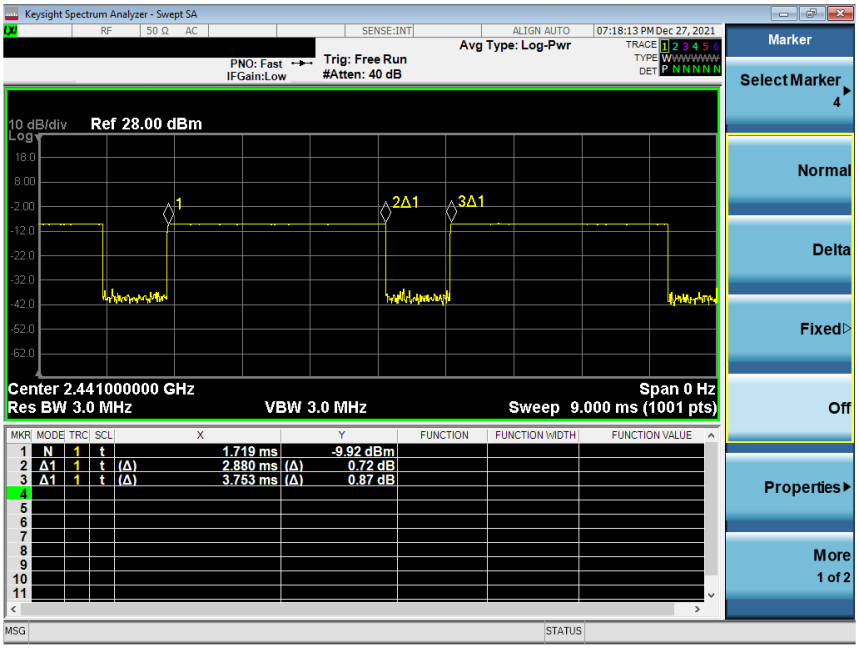

Figure 8-4
Bluetooth Transmission Plot – Antenna 1a, Variant 1

Equation 8-1
Bluetooth Duty Cycle Calculation – Antenna 1a, Variant 1

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.880ms}{3.753ms} * 100\% = 76.7\%$$

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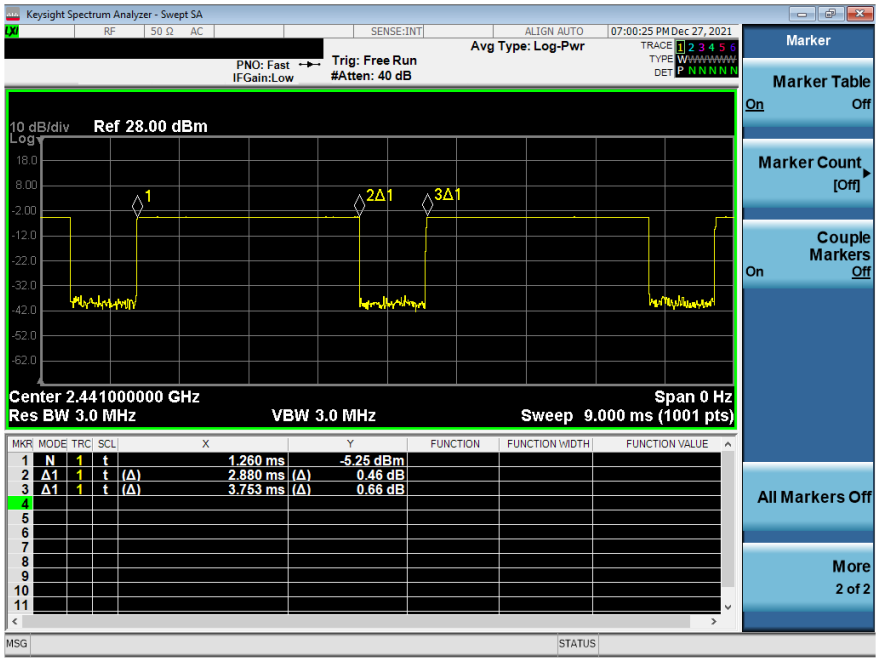

Figure 8-5
Bluetooth Transmission Plot – Antenna 1a, Variant 2

Equation 8-2
Bluetooth Duty Cycle Calculation – Antenna 1a, Variant 2

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.880ms}{3.753ms} * 100\% = 76.7\%$$

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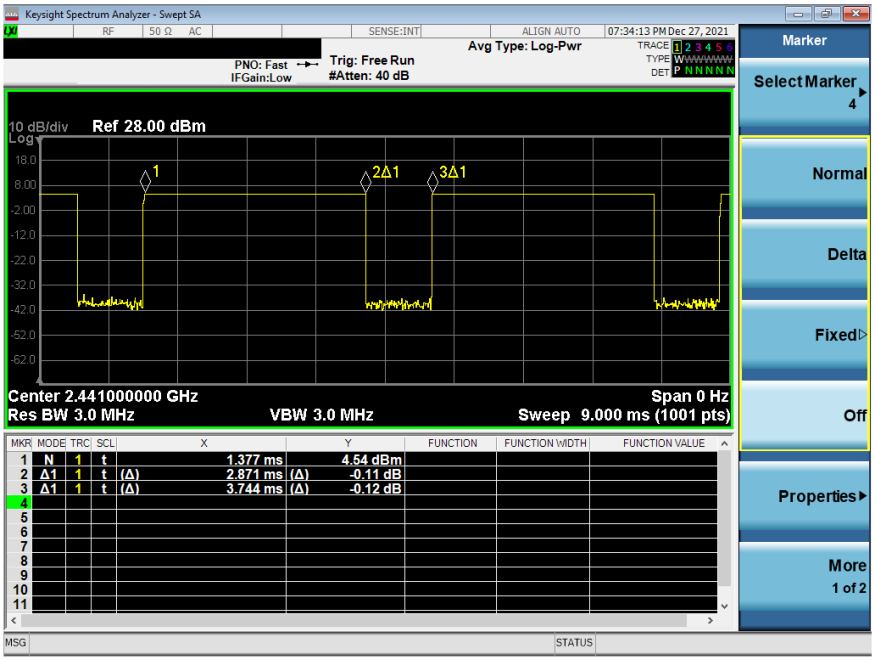

Figure 8-6
Bluetooth Transmission Plot – Antenna 3a, Variant 1

Equation 8-3
Bluetooth Duty Cycle Calculation – Antenna 3a, Variant 1

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.871ms}{3.744ms} * 100\% = 76.7\%$$

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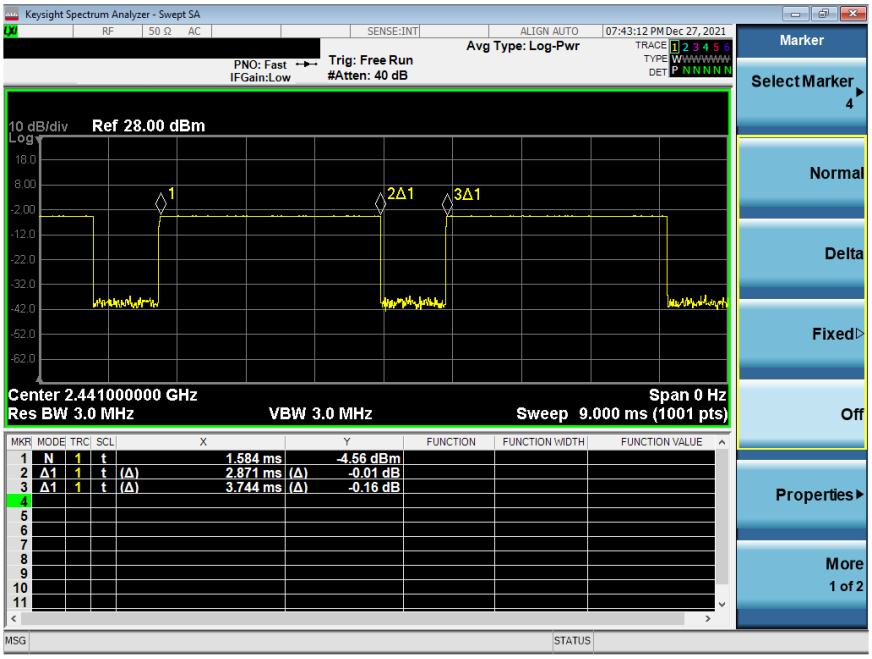

Figure 8-7
Bluetooth Transmission Plot – Antenna 3a, Variant 2

Equation 8-4
Bluetooth Duty Cycle Calculation – Antenna 3a, Variant 2

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.871ms}{3.744ms} * 100\% = 76.7\%$$

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8.11 Bluetooth Power Reduction Verification Summary

Table 8-55
Bluetooth Power Reduction Verification

Antenna	Mode/Band	Condition (s)	Maximum Scenario Maximum Allowed Tune Up Power [dBm]	Reduced Scenario Maximum Allowed Tune Up Power [dBm]	Maximum Target Power [dBm] (Tolerance [dB])	Reduced Target Power [dBm] (Tolerance [dB])	Maximum Measured Power [dBm]	Reduced Measured Power [dBm]	Verdict
Ant 3A	2.4 GHz Bluetooth	Main Band 3B ON	12.5	9	11.00 (+1.5/-2)	7.50 (+1.5/-2)	11.51	8.33	PASS
	2.4 GHz Bluetooth	Main Band 3A ON	12.5	9	11.00 (+1.5/-2)	7.50 (+1.5/-2)	11.51	8.52	PASS
	2.4 GHz Bluetooth	ULCA ON	12.5	5.5	11.00 (+1.5/-2)	4.00 (+1.5/-2)	11.51	3.88	PASS
	2.4 GHz Bluetooth	ULCA ON and 5 GHZ WLAN 2B/1B/3A ON	12.5	5.5	11.00 (+1.5/-2)	4.00 (+1.5/-2)	11.51	3.81	PASS
	2.4 GHz Bluetooth	Main band Ant 4 ON and 5 GHz WLAN Ant 2B/1B/3A ON	12.5	8	11.00 (+1.5/-2)	6.50 (+1.5/-2)	11.51	7.24	PASS
	2.4 GHz Bluetooth	Main band Ant 3A ON and 5 GHz WLAN Ant 2B/1B/3A ON	12.5	5.5	11.00 (+1.5/-2)	4.00 (+1.5/-2)	11.51	3.70	PASS
	2.4 GHz Bluetooth	Main band Ant 3B ON and 5 GHz WLAN Ant 2B/1B/3A ON	12.5	5.5	11.00 (+1.5/-2)	4.00 (+1.5/-2)	11.51	3.31	PASS
	2.4 GHz Bluetooth	Main Band Ant 1A ON and 5 GHz WLAN Ant 2B/1B/3A ON	12.5	8	11.00 (+1.5/-2)	6.50 (+1.5/-2)	11.51	7.81	PASS
	2.4 GHz Bluetooth	Main Band Ant 2A ON and 5 GHz WLAN Ant 2B/1B/3A ON	12.5	8	11.00 (+1.5/-2)	6.50 (+1.5/-2)	11.51	7.91	PASS
	2.4 GHz Bluetooth	Main Band Ant 2B ON and 5 GHz WLAN Ant 2B/1B/3A ON	12.5	8	11.00 (+1.5/-2)	6.50 (+1.5/-2)	11.51	7.78	PASS
	2.4 GHz Bluetooth	Main Band Ant 1B ON and 5 GHz WLAN Ant 2B/1B/3A ON	12.5	8	11.00 (+1.5/-2)	6.50 (+1.5/-2)	11.51	7.95	PASS
	2.4 GHz Bluetooth	5 GHz WLAN Ant 2B/1B/3A ON	12.5	8	11.00 (+1.5/-2)	6.50 (+1.5/-2)	11.51	7.97	PASS
Ant 1A	2.4 GHz Bluetooth	Main Band 1A ON	14	10.5	12.50 (+1.5/-2)	9.00 (+1.5/-2)	13.61	10.21	PASS
	2.4 GHz Bluetooth	Main Band 1B ON	14	10.5	12.50 (+1.5/-2)	9.00 (+1.5/-2)	13.61	10.25	PASS
	2.4 GHz Bluetooth	ULCA ON	14	7	12.50 (+1.5/-2)	5.50 (+1.5/-2)	13.61	5.60	PASS
	2.4 GHz Bluetooth	ULCA ON and 5 GHZ WLAN 2B/1B/3A ON	14	7	12.50 (+1.5/-2)	5.50 (+1.5/-2)	13.61	6.94	PASS
	2.4 GHz Bluetooth	Main band Ant 4 ON and 5 GHz WLAN Ant 2B/1B/3A ON	14	9.5	12.50 (+1.5/-2)	8.00 (+1.5/-2)	13.61	8.95	PASS
	2.4 GHz Bluetooth	Main band Ant 3A ON and 5 GHz WLAN Ant 2B/1B/3A ON	14	9.5	12.50 (+1.5/-2)	8.00 (+1.5/-2)	13.61	9.10	PASS
	2.4 GHz Bluetooth	Main band Ant 3B ON and 5 GHz WLAN Ant2B/1B/3A ON	14	9.5	12.50 (+1.5/-2)	8.00 (+1.5/-2)	13.61	8.74	PASS
	2.4 GHz Bluetooth	Main Band Ant 1a ON and 5 GHz WLAN Ant 2B/1B/3A ON	14	7	12.50 (+1.5/-2)	5.50 (+1.5/-2)	13.61	6.82	PASS
	2.4 GHz Bluetooth	Main Band Ant 2a ON and 5 GHz WLAN Ant 2B/1B/3A ON	14	9.5	12.50 (+1.5/-2)	8.00 (+1.5/-2)	13.61	8.69	PASS
	2.4 GHz Bluetooth	Main Band Ant 2B ON and 5 GHz WLAN Ant 2B/1B/3A ON	14	9.5	12.50 (+1.5/-2)	8.00 (+1.5/-2)	13.61	8.62	PASS
	2.4 GHz Bluetooth	Main Band Ant 1B ON and 5 GHz WLAN Ant 2B/1B/3A ON	14	7	12.50 (+1.5/-2)	5.50 (+1.5/-2)	13.61	6.48	PASS
	2.4 GHz Bluetooth	5 GHz WLAN Ant 2B/1B/3A ON	14	9.5	12.50 (+1.5/-2)	8.00 (+1.5/-2)	13.61	8.81	PASS

Conducted powers were measured for each Mode/Band and applied condition. All conducted power measurements were verified to be within tolerance.

8.12 Notes for Bluetooth

- The Bluetooth chipset in this device is produced by two different suppliers. The electrically identical modules are manufactured with the identical mechanical structure to meet the same specifications and functions. Two device variants are referenced as Variant 1 and Variant 2 in this report.
- Bluetooth SAR worst case configuration was spotchecked on Variant 1 and Variant 2. The Variant with the highest reported SAR value was evaluated for the remaining Bluetooth configurations.
- Full power measurements were performed for Variant 1 and Variant 2 per FCC KDB Procedures 248227.

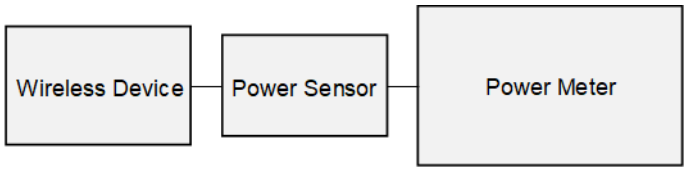

Figure 8-8
Power Measurement Setup

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9 SYSTEM VERIFICATION

9.1 Tissue Verification

Table 9-1
Measured 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
12/09/2021	750 Body	23.2	680	0.913	54.101	0.958	55.804	-4.70%	-3.05%
			695	0.918	54.079	0.959	55.745	-4.28%	-2.99%
			700	0.919	54.071	0.959	55.726	-4.17%	-2.97%
			710	0.922	54.053	0.960	55.687	-3.96%	-2.93%
			725	0.927	54.010	0.961	55.629	-3.54%	-2.91%
			750	0.935	53.927	0.964	55.531	-3.01%	-2.89%
			770	0.943	53.898	0.965	55.453	-2.28%	-2.80%
			785	0.948	53.881	0.966	55.395	-1.86%	-2.73%
			800	0.953	53.852	0.967	55.336	-1.45%	-2.68%
12/11/2021	750 Body	22.9	680	0.917	53.893	0.958	55.804	-4.28%	-3.42%
			695	0.922	53.870	0.959	55.745	-3.86%	-3.36%
			700	0.924	53.859	0.959	55.726	-3.65%	-3.35%
			710	0.928	53.832	0.960	55.687	-3.33%	-3.33%
			725	0.934	53.779	0.961	55.629	-2.81%	-3.33%
			750	0.942	53.697	0.964	55.531	-2.28%	-3.30%
			770	0.949	53.658	0.965	55.453	-1.66%	-3.24%
			785	0.955	53.627	0.966	55.395	-1.14%	-3.19%
			800	0.960	53.584	0.967	55.336	-0.72%	-3.17%
12/18/2021	750 Body	22.7	680	0.916	53.746	0.958	55.804	-4.38%	-3.69%
			695	0.921	53.707	0.959	55.745	-3.96%	-3.66%
			700	0.922	53.693	0.959	55.726	-3.86%	-3.65%
			710	0.926	53.667	0.960	55.687	-3.54%	-3.63%
			725	0.931	53.628	0.961	55.629	-3.12%	-3.60%
			750	0.940	53.574	0.964	55.531	-2.49%	-3.52%
			770	0.947	53.529	0.965	55.453	-1.87%	-3.47%
			785	0.951	53.498	0.966	55.395	-1.55%	-3.42%
			800	0.956	53.468	0.967	55.336	-1.14%	-3.38%
12/20/2021	750 Body	23.4	680	0.922	54.538	0.958	55.804	-3.76%	-2.27%
			695	0.927	54.517	0.959	55.745	-3.34%	-2.20%
			700	0.928	54.512	0.959	55.726	-3.23%	-2.18%
			710	0.932	54.495	0.960	55.687	-2.92%	-2.14%
			725	0.937	54.465	0.961	55.629	-2.50%	-2.09%
			750	0.947	54.410	0.964	55.531	-1.76%	-2.02%
			770	0.953	54.368	0.965	55.453	-1.24%	-1.96%
			785	0.958	54.339	0.966	55.395	-0.83%	-1.91%
			800	0.963	54.302	0.967	55.336	-0.41%	-1.87%
01/03/2022	750 Body	25	680	0.921	53.505	0.958	55.804	-3.86%	-4.12%
			695	0.926	53.471	0.959	55.745	-3.44%	-4.08%
			700	0.928	53.459	0.959	55.726	-3.23%	-4.07%
			710	0.931	53.441	0.960	55.687	-3.02%	-4.03%
			725	0.936	53.424	0.961	55.629	-2.60%	-3.96%
			750	0.944	53.384	0.964	55.531	-2.07%	-3.87%
			770	0.950	53.331	0.965	55.453	-1.55%	-3.83%
			785	0.955	53.294	0.966	55.395	-1.14%	-3.79%
			800	0.960	53.261	0.967	55.336	-0.72%	-3.75%
12/12/2021	835 Body	20.4	815	0.973	54.159	0.968	55.271	0.52%	-2.01%
			820	0.975	54.148	0.969	55.258	0.62%	-2.01%
			835	0.982	54.110	0.970	55.200	1.24%	-1.97%
			850	0.988	54.077	0.988	55.154	0.00%	-1.95%
12/14/2021	835 Body	20.2	815	0.983	53.167	0.968	55.271	1.55%	-3.81%
			820	0.985	53.154	0.969	55.258	1.65%	-3.81%
			835	0.991	53.114	0.970	55.200	2.16%	-3.78%
			850	0.997	53.082	0.988	55.154	0.91%	-3.76%
12/16/2021	835 Body	20.6	815	1.006	52.755	0.968	55.271	3.93%	-4.55%
			820	1.008	52.741	0.969	55.258	4.02%	-4.55%
			835	1.014	52.706	0.970	55.200	4.54%	-4.52%
			850	1.020	52.679	0.988	55.154	3.24%	-4.49%
12/09/2021	1750 Body	20.8	1710	1.500	52.297	1.463	53.537	2.53%	-2.32%
			1720	1.510	52.267	1.469	53.511	2.79%	-2.32%
			1745	1.534	52.192	1.485	53.445	3.30%	-2.34%
			1750	1.539	52.175	1.488	53.432	3.43%	-2.35%
			1770	1.557	52.103	1.501	53.379	3.73%	-2.39%
			1790	1.576	52.024	1.514	53.326	4.10%	-2.44%
12/14/2021	1750 Body	19.7	1710	1.507	52.903	1.463	53.537	3.01%	-1.18%
			1720	1.517	52.866	1.469	53.511	3.27%	-1.21%
			1745	1.542	52.784	1.485	53.445	3.84%	-1.24%
			1750	1.547	52.768	1.488	53.432	3.97%	-1.24%
			1770	1.565	52.696	1.501	53.379	4.26%	-1.28%
			1790	1.583	52.622	1.514	53.326	4.56%	-1.32%
12/19/2021	1750 Body	21.2	1710	1.454	51.769	1.463	53.537	-0.62%	-3.30%
			1720	1.464	51.743	1.469	53.511	-0.34%	-3.30%
			1745	1.488	51.675	1.485	53.445	0.20%	-3.31%
			1750	1.493	51.659	1.488	53.432	0.34%	-3.32%
			1770	1.512	51.600	1.501	53.379	0.73%	-3.33%
			1790	1.531	51.540	1.514	53.326	1.12%	-3.35%
12/11/2021	1900 Body	21.7	1850	1.523	52.892	1.520	53.300	0.20%	-0.77%
			1860	1.533	52.850	1.520	53.300	0.86%	-0.84%
			1880	1.555	52.768	1.520	53.300	2.30%	-1.00%
			1900	1.578	52.702	1.520	53.300	3.82%	-1.12%
			1905	1.583	52.686	1.520	53.300	4.14%	-1.15%
			1910	1.589	52.670	1.520	53.300	4.54%	-1.18%
12/15/2021	1900 Body	19.7	1850	1.524	51.602	1.520	53.300	0.26%	-3.19%
			1860	1.534	51.576	1.520	53.300	0.92%	-3.23%
			1880	1.553	51.520	1.520	53.300	2.17%	-3.34%
			1900	1.573	51.466	1.520	53.300	3.49%	-3.44%
			1905	1.578	51.455	1.520	53.300	3.82%	-3.46%
			1910	1.583	51.444	1.520	53.300	4.14%	-3.48%
12/19/2021	1900 Body	21.2	1850	1.514	51.423	1.520	53.300	-0.39%	-3.52%
			1860	1.523	51.393	1.520	53.300	0.20%	-3.58%
			1880	1.542	51.326	1.520	53.300	1.45%	-3.70%
			1900	1.562	51.264	1.520	53.300	2.76%	-3.82%
			1905	1.567	51.250	1.520	53.300	3.09%	-3.85%
			1910	1.572	51.236	1.520	53.300	3.42%	-3.87%

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Table 9-2
Measured 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
12/07/2021	2300 Body	23.1	2300	1.758	52.424	1.809	52.900	-2.82%	-0.90%
			2310	1.771	52.393	1.816	52.887	-2.48%	-0.93%
			2320	1.785	52.363	1.826	52.873	-2.25%	-0.96%
			2400	1.888	52.080	1.902	52.767	-0.74%	-1.30%
			2450	1.956	51.934	1.950	52.700	0.31%	-1.45%
			2480	1.993	51.804	1.993	52.662	0.00%	-1.63%
			2500	2.023	51.718	2.021	52.636	0.10%	-1.74%
			2510	2.038	51.683	2.035	52.623	0.15%	-1.79%
			2535	2.071	51.605	2.071	52.592	0.00%	-1.88%
			2550	2.089	51.553	2.092	52.573	-0.14%	-1.94%
			2560	2.102	51.508	2.106	52.560	-0.19%	-2.00%
			2600	2.163	51.329	2.163	52.509	0.00%	-2.25%
			2650	2.230	51.155	2.234	52.445	-0.18%	-2.46%
			2680	2.273	51.002	2.277	52.407	-0.18%	-2.68%
			2700	2.304	50.920	2.305	52.382	-0.04%	-2.79%
12/09/2021	2300 Body	22.9	2300	1.800	52.201	1.809	52.900	-0.50%	-1.32%
			2310	1.813	52.163	1.816	52.887	-0.17%	-1.37%
			2320	1.827	52.127	1.826	52.873	0.05%	-1.41%
			2400	1.935	51.852	1.902	52.767	1.74%	-1.73%
			2450	2.005	51.671	1.950	52.700	2.82%	-1.95%
			2480	2.047	51.555	1.993	52.662	2.71%	-2.10%
			2500	2.074	51.475	2.021	52.636	2.62%	-2.21%
			2510	2.088	51.440	2.035	52.623	2.60%	-2.25%
			2535	2.123	51.353	2.071	52.592	2.51%	-2.36%
			2550	2.144	51.297	2.092	52.573	2.49%	-2.43%
			2560	2.158	51.254	2.106	52.560	2.47%	-2.48%
			2600	2.213	51.092	2.163	52.509	2.31%	-2.70%
			2650	2.284	50.895	2.234	52.445	2.24%	-2.96%
			2680	2.325	50.782	2.277	52.407	2.11%	-3.10%
			2700	2.351	50.700	2.305	52.382	2.00%	-3.21%
12/23/2021	2450 Body	21	2300	1.867	50.556	1.809	52.900	3.21%	-4.43%
			2310	1.876	50.551	1.816	52.887	3.30%	-4.42%
			2320	1.884	50.545	1.826	52.873	3.18%	-4.40%
			2400	1.958	50.433	1.902	52.767	2.94%	-4.42%
			2450	2.002	50.348	1.950	52.700	2.67%	-4.46%
			2480	2.032	50.299	1.993	52.662	1.96%	-4.49%
			2500	2.050	50.277	2.021	52.636	1.43%	-4.48%
			2510	2.059	50.262	2.035	52.623	1.18%	-4.49%
			2535	2.081	50.214	2.071	52.592	0.48%	-4.52%
			2550	2.095	50.180	2.092	52.573	0.14%	-4.55%
			2560	2.107	50.160	2.106	52.560	0.05%	-4.57%
			2600	2.147	50.103	2.163	52.509	-0.74%	-4.58%
			2650	2.192	49.992	2.234	52.445	-1.88%	-4.68%
			2680	2.223	49.948	2.277	52.407	-2.37%	-4.69%
			2700	2.240	49.920	2.305	52.382	-2.82%	-4.70%
12/31/2021	2450 Body	21.5	2300	1.878	51.655	1.809	52.900	3.81%	-2.35%
			2310	1.887	51.643	1.816	52.887	3.91%	-2.35%
			2320	1.895	51.632	1.826	52.873	3.78%	-2.35%
			2400	1.968	51.510	1.902	52.767	3.47%	-2.38%
			2450	2.011	51.426	1.950	52.700	3.13%	-2.42%
			2480	2.040	51.381	1.993	52.662	2.36%	-2.43%
			2500	2.058	51.358	2.021	52.636	1.83%	-2.43%
			2510	2.066	51.344	2.035	52.623	1.52%	-2.43%
			2535	2.088	51.301	2.071	52.592	0.82%	-2.45%
			2550	2.102	51.269	2.092	52.573	0.48%	-2.48%
			2560	2.112	51.251	2.106	52.560	0.28%	-2.49%
			2600	2.152	51.204	2.163	52.509	-0.51%	-2.49%
			2650	2.197	51.097	2.234	52.445	-1.66%	-2.57%
			2680	2.229	51.056	2.277	52.407	-2.11%	-2.58%
			2700	2.248	51.022	2.305	52.382	-2.47%	-2.60%
12/23/2021	2450-2600 Body	22.3	2300	1.887	53.083	1.809	52.900	4.31%	0.35%
			2310	1.897	53.068	1.816	52.887	4.46%	0.34%
			2320	1.905	53.055	1.826	52.873	4.33%	0.34%
			2400	1.977	52.929	1.902	52.767	3.94%	0.31%
			2450	2.022	52.865	1.950	52.700	3.69%	0.31%
			2480	2.049	52.820	1.993	52.662	2.81%	0.30%
			2500	2.068	52.794	2.021	52.636	2.33%	0.30%
			2510	2.077	52.781	2.035	52.623	2.06%	0.30%
			2535	2.101	52.745	2.071	52.592	1.45%	0.29%
			2550	2.115	52.724	2.092	52.573	1.10%	0.29%
			2560	2.125	52.709	2.106	52.560	0.90%	0.28%
			2600	2.166	52.660	2.163	52.509	0.14%	0.29%
			2650	2.213	52.569	2.234	52.445	-0.94%	0.24%
			2680	2.245	52.516	2.277	52.407	-1.41%	0.21%
			2700	2.266	52.473	2.305	52.382	-1.69%	0.17%
01/03/2022	2450-2600 Body	22.7	2300	1.800	53.906	1.809	52.900	-0.50%	1.90%
			2310	1.813	53.876	1.816	52.887	-0.17%	1.87%
			2320	1.826	53.846	1.826	52.873	0.00%	1.84%
			2400	1.936	53.569	1.902	52.767	1.79%	1.52%
			2450	2.002	53.380	1.950	52.700	2.67%	1.29%
			2480	2.046	53.272	1.993	52.662	2.66%	1.16%
			2500	2.074	53.205	2.021	52.636	2.62%	1.08%
			2510	2.087	53.167	2.035	52.623	2.56%	1.03%
			2535	2.120	53.068	2.071	52.592	2.37%	0.91%
			2550	2.143	53.004	2.092	52.573	2.44%	0.82%
			2560	2.158	52.964	2.106	52.560	2.47%	0.77%
			2600	2.216	52.833	2.163	52.509	2.45%	0.62%
			2650	2.285	52.624	2.234	52.445	2.28%	0.34%
			2680	2.330	52.515	2.277	52.407	2.33%	0.21%
			2700	2.357	52.440	2.305	52.382	2.26%	0.11%
01/03/2022	2450-2600 Body	19.6	2300	1.859	50.807	1.809	52.900	2.76%	-3.96%
			2310	1.868	50.795	1.816	52.887	2.86%	-3.96%
			2320	1.877	50.782	1.826	52.873	2.79%	-3.95%
			2400	1.950	50.653	1.902	52.767	2.52%	-4.01%
			2450	1.994	50.574	1.950	52.700	2.26%	-4.03%
			2480	2.023	50.522	1.993	52.662	1.51%	-4.06%
			2500	2.041	50.495	2.021	52.636	0.99%	-4.07%
			2510	2.051	50.480	2.035	52.623	0.79%	-4.07%
			2535	2.074	50.434	2.071	52.592	0.14%	-4.10%
			2550	2.088	50.403	2.092	52.573	-0.19%	-4.13%
			2560	2.099	50.384	2.106	52.560	-0.33%	-4.14%
			2600	2.139	50.337	2.163	52.509	-1.11%	-4.14%
			2650	2.185	50.229	2.234	52.445	-2.19%	-4.23%
			2680	2.216	50.180	2.277	52.407	-2.68%	-4.25%
			2700	2.235	50.149	2.305	52.382	-3.04%	-4.26%

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Table 9-3
Measured 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
12/9/2021	3500-3900 Body	24.4	3300	3.088	52.872	3.080	51.593	0.26%	2.48%
			3350	3.141	52.782	3.139	51.525	0.06%	2.44%
			3450	3.241	52.654	3.256	51.389	-0.46%	2.46%
			3500	3.290	52.579	3.314	51.321	-0.72%	2.45%
			3550	3.342	52.523	3.372	51.254	-0.89%	2.48%
			3560	3.352	52.512	3.384	51.240	-0.95%	2.48%
			3600	3.389	52.444	3.431	51.186	-1.22%	2.46%
			3650	3.445	52.373	3.489	51.118	-1.26%	2.46%
			3690	3.482	52.325	3.536	51.063	-1.53%	2.47%
			3700	3.493	52.313	3.548	51.050	-1.55%	2.47%
			3750	3.555	52.228	3.606	50.982	-1.41%	2.44%
			3900	3.728	52.029	3.781	50.779	-1.40%	2.46%
			3930	3.759	52.016	3.816	50.738	-1.49%	2.52%
			4100	3.966	51.798	4.015	50.507	-1.22%	2.56%
			4150	4.018	51.792	4.073	50.439	-1.35%	2.68%
12/22/2021	3500-3900 Body	20.1	3300	3.214	49.840	3.080	51.593	4.35%	-3.40%
			3350	3.276	49.791	3.139	51.525	4.36%	-3.37%
			3450	3.387	49.669	3.256	51.389	4.02%	-3.35%
			3500	3.439	49.589	3.314	51.321	3.77%	-3.37%
			3550	3.494	49.549	3.372	51.254	3.62%	-3.33%
			3560	3.505	49.528	3.384	51.240	3.58%	-3.34%
			3600	3.547	49.432	3.431	51.186	3.38%	-3.43%
			3650	3.611	49.380	3.489	51.118	3.50%	-3.40%
			3690	3.650	49.310	3.536	51.063	3.22%	-3.43%
			3700	3.663	49.292	3.548	51.050	3.24%	-3.44%
			3750	3.728	49.267	3.606	50.982	3.38%	-3.36%
			3900	3.917	49.072	3.781	50.779	3.60%	-3.36%
			3930	3.953	49.068	3.816	50.738	3.59%	-3.29%
			4100	4.168	48.884	4.015	50.507	3.81%	-3.21%
			4150	4.219	48.873	4.073	50.439	3.58%	-3.10%
12/27/2021	3500-3900 Body	20	3300	3.147	50.091	3.080	51.593	2.18%	-2.91%
			3350	3.200	50.010	3.139	51.525	1.94%	-2.94%
			3450	3.305	49.870	3.256	51.389	1.50%	-2.96%
			3500	3.355	49.783	3.314	51.321	1.24%	-3.00%
			3550	3.408	49.715	3.372	51.254	1.07%	-3.00%
			3560	3.418	49.695	3.384	51.240	1.00%	-3.02%
			3600	3.458	49.639	3.431	51.186	0.79%	-3.02%
			3650	3.517	49.555	3.489	51.118	0.80%	-3.06%
			3690	3.555	49.493	3.536	51.063	0.54%	-3.07%
			3700	3.566	49.475	3.548	51.050	0.51%	-3.09%
			3750	3.626	49.417	3.606	50.982	0.55%	-3.07%
			3900	3.798	49.185	3.781	50.779	0.45%	-3.14%
			3930	3.829	49.148	3.816	50.738	0.34%	-3.13%
			4100	4.033	48.848	4.015	50.507	0.45%	-3.28%
			4150	4.085	48.798	4.073	50.439	0.29%	-3.25%
12/27/2021	5200-5800 Body	22.1	5180	5.287	49.661	5.276	49.041	0.21%	1.26%
			5190	5.297	49.648	5.288	49.028	0.17%	1.26%
			5200	5.311	49.636	5.299	49.014	0.23%	1.27%
			5210	5.327	49.613	5.311	49.001	0.30%	1.25%
			5220	5.344	49.580	5.323	48.987	0.39%	1.21%
			5240	5.377	49.515	5.346	48.960	0.58%	1.13%
			5250	5.391	49.508	5.358	48.947	0.62%	1.15%
			5260	5.399	49.498	5.369	48.933	0.56%	1.15%
			5270	5.414	49.474	5.381	48.919	0.61%	1.13%
			5280	5.432	49.457	5.393	48.906	0.72%	1.13%
			5290	5.447	49.436	5.404	48.892	0.80%	1.11%
			5300	5.461	49.430	5.416	48.879	0.83%	1.13%
			5310	5.474	49.400	5.428	48.865	0.85%	1.09%
			5320	5.490	49.365	5.439	48.851	0.94%	1.05%
			5500	5.753	49.050	5.650	48.607	1.82%	0.91%
			5510	5.769	49.030	5.661	48.594	1.91%	0.90%
			5520	5.784	49.017	5.673	48.580	1.96%	0.90%
			5530	5.798	48.993	5.685	48.566	1.99%	0.88%
			5540	5.811	48.963	5.696	48.553	2.02%	0.84%
			5550	5.829	48.940	5.708	48.539	2.12%	0.83%
			5560	5.845	48.920	5.720	48.526	2.19%	0.81%
			5580	5.874	48.905	5.743	48.499	2.28%	0.84%
			5600	5.902	48.879	5.766	48.471	2.36%	0.84%
			5610	5.916	48.852	5.778	48.458	2.39%	0.81%
			5620	5.930	48.825	5.790	48.444	2.42%	0.79%
			5640	5.966	48.784	5.813	48.417	2.63%	0.76%
			5660	6.000	48.742	5.837	48.390	2.79%	0.73%
			5670	6.014	48.726	5.848	48.376	2.84%	0.72%
			5680	6.027	48.712	5.860	48.363	2.85%	0.72%
			5690	6.039	48.703	5.872	48.349	2.84%	0.73%
			5700	6.053	48.695	5.883	48.336	2.89%	0.74%
			5710	6.067	48.669	5.895	48.322	2.92%	0.72%
			5720	6.084	48.639	5.907	48.309	3.00%	0.68%
			5745	6.126	48.593	5.936	48.275	3.20%	0.66%
			5750	6.132	48.590	5.942	48.268	3.20%	0.67%
			5755	6.139	48.586	5.947	48.261	3.23%	0.67%
			5765	6.152	48.574	5.959	48.248	3.24%	0.68%
			5775	6.167	48.561	5.971	48.234	3.28%	0.68%
			5785	6.183	48.537	5.982	48.220	3.36%	0.66%
			5795	6.199	48.504	5.994	48.207	3.42%	0.62%
			5800	6.207	48.494	6.000	48.200	3.45%	0.61%
			5805	6.214	48.488	6.006	48.193	3.46%	0.61%
			5825	6.247	48.453	6.029	48.166	3.62%	0.60%
			5835	6.263	48.422	6.042	48.130	3.66%	0.61%
			5845	6.276	48.393	6.054	48.110	3.67%	0.59%
			5855	6.289	48.379	6.066	48.093	3.68%	0.59%
			5865	6.306	48.372	6.077	48.080	3.77%	0.61%
			5875	6.323	48.358	6.088	48.067	3.86%	0.61%
			5885	6.337	48.342	6.100	48.053	3.89%	0.60%
			5905	6.362	48.316	6.122	48.027	3.92%	0.60%

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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9.2 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 Appendix D.

Table 9-4
System Verification Results – 1g

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	Measured SAR_{1g} (W/kg)	1 W Target SAR_{1g} (W/kg)	1 W Normalized SAR_{1g} (W/kg)	$Deviation_{1g}$ (%)
AM4	750	BODY	12/09/2021	21.9	21.3	0.200	1097	7427	1.580	8.410	7.900	-6.06%
AM4	750	BODY	12/11/2021	22.4	21.3	0.200	1097	7427	1.660	8.410	8.300	-1.31%
AM4	750	BODY	12/18/2021	21.6	21.7	0.200	1097	7427	1.680	8.410	8.400	-0.12%
AM4	750	BODY	12/20/2021	20.9	21.5	0.200	1097	7427	1.760	8.410	8.800	4.64%
AM4	750	BODY	01/03/2022	23.1	23.1	0.200	1097	7427	1.700	8.410	8.500	1.07%
AM6	835	BODY	12/12/2021	20.3	20.8	0.200	4d040	7416	2.040	9.530	10.200	7.03%
AM6	835	BODY	12/14/2021	24.2	21.2	0.200	4d040	7416	2.020	9.530	10.100	5.98%
AM6	835	BODY	12/16/2021	23.1	20.6	0.200	4d040	7416	2.010	9.530	10.050	5.46%
AM3	1750	BODY	12/09/2021	22.9	20.8	0.100	1083	7421	3.940	37.100	39.400	6.20%
AM3	1750	BODY	12/14/2021	22.9	20.4	0.100	1104	7421	3.740	36.300	37.400	3.03%
AM3	1750	BODY	12/19/2021	20.3	19.6	0.100	1083	7421	3.760	37.100	37.600	1.35%
AM5	1900	BODY	12/11/2021	21.1	20.3	0.100	5d030	7546	4.170	39.900	41.700	4.51%
AM10	1900	BODY	12/15/2021	23.3	21.6	0.100	5d180	7420	4.100	39.000	41.000	5.13%
AM10	1900	BODY	12/19/2021	21.1	21.2	0.100	5d180	7420	4.070	39.000	40.700	4.36%
AM10	2300	BODY	12/07/2021	21.2	21.9	0.100	1064	7420	4.800	48.400	48.000	-0.83%
AM10	2300	BODY	12/09/2021	22.2	22.0	0.100	1064	7420	4.960	48.400	49.600	2.48%
AM1	2450	BODY	12/23/2021	22.6	20.4	0.100	750	3837	5.170	51.000	51.700	1.37%
AM6	2450	BODY	12/23/2021	21.8	21.1	0.100	750	7416	4.950	51.000	49.500	-2.94%
AM1	2450	BODY	12/31/2021	22.1	21.5	0.100	750	3837	4.930	51.000	49.300	-3.33%
AM3	2450	BODY	01/03/2022	23.5	21.7	0.100	750	7421	4.850	51.000	48.500	-4.90%
AM1	2450	BODY	01/03/2022	20.0	19.6	0.100	750	3837	5.120	51.000	51.200	0.39%
AM1	2600	BODY	12/23/2021	22.6	20.4	0.100	1042	3837	5.770	55.200	57.700	4.53%
AM3	2600	BODY	01/03/2022	23.5	21.7	0.100	1042	7421	5.560	55.200	55.600	0.72%
AM1	2600	BODY	01/03/2022	20.0	19.6	0.100	1042	3837	5.880	55.200	58.800	6.52%
AM7	3500	BODY	12/09/2021	22.0	22.4	0.100	1055	7674	6.180	65.000	61.800	-4.92%
AM5	3500	BODY	12/27/2021	21.0	20.0	0.100	1055	7546	6.830	65.000	68.300	5.08%
AM7	3700	BODY	12/09/2021	22.0	22.4	0.100	1002	7674	6.530	64.700	65.300	0.93%
AM5	3700	BODY	12/22/2021	20.8	20.5	0.100	1097	7546	6.630	62.300	66.300	6.42%
AM5	3700	BODY	12/27/2021	21.0	20.0	0.100	1002	7546	6.190	64.700	61.900	-4.33%
AM5	3900	BODY	12/22/2021	20.8	20.5	0.100	1062	7546	6.570	66.300	65.700	-0.90%
AM2	5250	BODY	12/27/2021	22.7	21.4	0.050	1123	7532	3.530	73.500	70.600	-3.95%
AM2	5600	BODY	12/27/2021	22.7	21.4	0.050	1123	7532	3.870	77.400	77.400	0.00%
AM2	5750	BODY	12/27/2021	22.7	21.4	0.050	1123	7532	3.590	73.100	71.800	-1.78%

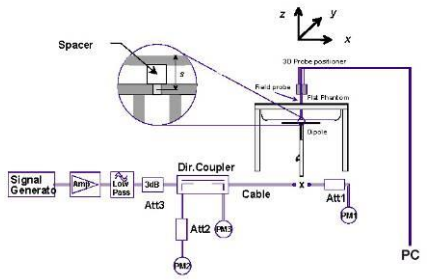

Figure 9-1
System Verification Setup Diagram

Figure 9-2
System Verification Setup Photo

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10 SAR DATA SUMMARY

10.1 Standalone SAR Data

Table 10-1
UMTS 850 MHz Antenna 4 Body SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
826.40	4132	UMTS 850	RMC	20.30	20.27	0.00	Body	0 mm	Ant 4	T56JJ392YN	1:1	back	0.786	1.007	0.792	0.399	0.402	
836.60	4183	UMTS 850	RMC	20.30	20.18	-0.02	Body	0 mm	Ant 4	T56JJ392YN	1:1	back	0.717	1.028	0.737	0.364	0.374	
846.60	4233	UMTS 850	RMC	20.30	20.15	-0.03	Body	0 mm	Ant 4	T56JJ392YN	1:1	back	0.672	1.035	0.696	0.339	0.351	
826.40	4132	UMTS 850	RMC	20.30	20.27	0.00	Body	0 mm	Ant 4	T56JJ392YN	1:1	top	0.682	1.007	0.687	0.295	0.297	
826.40	4132	UMTS 850	RMC	20.30	20.27	-0.09	Body	0 mm	Ant 4	T56JJ392YN	1:1	bottom	0.019	1.007	0.019	0.011	0.011	
826.40	4132	UMTS 850	RMC	20.30	20.27	-0.02	Body	0 mm	Ant 4	T56JJ392YN	1:1	right	0.011	1.007	0.011	0.005	0.005	
826.40	4132	UMTS 850	RMC	20.30	20.27	0.01	Body	0 mm	Ant 4	T56JJ392YN	1:1	left	0.948	1.007	0.955	0.357	0.359	A1
836.60	4183	UMTS 850	RMC	20.30	20.18	0.01	Body	0 mm	Ant 4	T56JJ392YN	1:1	left	0.945	1.028	0.971	0.359	0.369	
846.60	4233	UMTS 850	RMC	20.30	20.15	0.00	Body	0 mm	Ant 4	T56JJ392YN	1:1	left	0.890	1.035	0.921	0.335	0.347	
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 10-2
UMTS 850 MHz Antenna 3b Body SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
826.40	4132	UMTS 850	RMC	17.40	16.30	-0.03	Body	0 mm	Ant 3b	T56JJ392YN	1:1	back	0.634	1.288	0.817	0.307	0.395	
836.60	4183	UMTS 850	RMC	17.40	16.19	-0.07	Body	0 mm	Ant 3b	T56JJ392YN	1:1	back	0.672	1.321	0.888	0.325	0.429	
846.60	4233	UMTS 850	RMC	17.40	16.27	-0.01	Body	0 mm	Ant 3b	T56JJ392YN	1:1	back	0.731	1.297	0.948	0.354	0.459	
826.40	4132	UMTS 850	RMC	17.40	16.30	0.09	Body	0 mm	Ant 3b	T56JJ392YN	1:1	top	0.751	1.288	0.967	0.348	0.448	
836.60	4183	UMTS 850	RMC	17.40	16.19	0.04	Body	0 mm	Ant 3b	T56JJ392YN	1:1	top	0.747	1.321	0.987	0.345	0.456	
846.60	4233	UMTS 850	RMC	17.40	16.27	-0.07	Body	0 mm	Ant 3b	T56JJ392YN	1:1	top	0.765	1.297	0.992	0.359	0.466	
826.40	4132	UMTS 850	RMC	17.40	16.30	-0.03	Body	0 mm	Ant 3b	T56JJ392YN	1:1	bottom	0.002	1.288	0.003	0.001	0.001	
826.40	4132	UMTS 850	RMC	17.40	16.30	-0.06	Body	0 mm	Ant 3b	T56JJ392YN	1:1	right	0.062	1.288	0.080	0.027	0.035	
826.40	4132	UMTS 850	RMC	17.40	16.30	0.13	Body	0 mm	Ant 3b	T56JJ392YN	1:1	left	0.006	1.288	0.008	0.002	0.003	
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 10-3
UMTS 1750 MHz Antenna 4 Body SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1712.40	1312	UMTS 1750	RMC	15.30	15.18	0.01	Body	0 mm	Ant 4	J27H7DW5VK	1:1	back	0.843	1.028	0.867	0.348	0.358	
1732.40	1412	UMTS 1750	RMC	15.30	15.19	-0.01	Body	0 mm	Ant 4	J27H7DW5VK	1:1	back	0.843	1.026	0.865	0.334	0.343	
1752.60	1513	UMTS 1750	RMC	15.30	15.25	0.01	Body	0 mm	Ant 4	J27H7DW5VK	1:1	back	0.834	1.012	0.844	0.330	0.334	
1712.40	1312	UMTS 1750	RMC	15.30	15.18	-0.01	Body	0 mm	Ant 4	J27H7DW5VK	1:1	top	0.845	1.028	0.869	0.358	0.368	
1732.40	1412	UMTS 1750	RMC	15.30	15.19	0.00	Body	0 mm	Ant 4	J27H7DW5VK	1:1	top	0.857	1.026	0.879	0.360	0.369	
1752.60	1513	UMTS 1750	RMC	15.30	15.25	-0.01	Body	0 mm	Ant 4	J27H7DW5VK	1:1	top	0.882	1.012	0.893	0.367	0.371	
1752.60	1513	UMTS 1750	RMC	15.30	15.25	0.02	Body	0 mm	Ant 4	J27H7DW5VK	1:1	bottom	0.000	1.012	0.000	0.000	0.000	
1752.60	1513	UMTS 1750	RMC	15.30	15.25	0.17	Body	0 mm	Ant 4	J27H7DW5VK	1:1	right	0.019	1.012	0.019	0.007	0.007	
1752.60	1513	UMTS 1750	RMC	15.30	15.25	0.00	Body	0 mm	Ant 4	J27H7DW5VK	1:1	left	0.646	1.012	0.654	0.243	0.246	
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 10-4
UMTS 1750 MHz Antenna 3a Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1752.60	1513	UMTS 1750	RMC	13.70	12.90	0.01	Body	0 mm	Ant 3a	Y0X4T66QY6	1:1	back	0.458	1.202	0.551	0.203	0.244	
1752.60	1513	UMTS 1750	RMC	13.70	12.90	-0.07	Body	0 mm	Ant 3a	Y0X4T66QY6	1:1	top	0.313	1.202	0.376	0.099	0.119	
1752.60	1513	UMTS 1750	RMC	13.70	12.90	-0.04	Body	0 mm	Ant 3a	Y0X4T66QY6	1:1	bottom	0.006	1.202	0.007	0.002	0.002	
1712.40	1312	UMTS 1750	RMC	13.70	12.82	-0.02	Body	0 mm	Ant 3a	Y0X4T66QY6	1:1	right	0.720	1.225	0.882	0.301	0.369	
1732.40	1412	UMTS 1750	RMC	13.70	12.83	0.00	Body	0 mm	Ant 3a	Y0X4T66QY6	1:1	right	0.745	1.222	0.910	0.309	0.378	
1752.60	1513	UMTS 1750	RMC	13.70	12.90	-0.01	Body	0 mm	Ant 3a	Y0X4T66QY6	1:1	right	0.755	1.202	0.908	0.312	0.375	
1752.60	1513	UMTS 1750	RMC	13.70	12.90	0.03	Body	0 mm	Ant 3a	Y0X4T66QY6	1:1	left	0.004	1.202	0.005	0.001	0.001	
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 10-5
UMTS 1750 MHz Antenna 2a Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1712.40	1312	UMTS 1750	RMC	13.50	12.97	0.00	Body	0 mm	Ant 2a	RRFNYFJ9CV	1:1	back	0.769	1.130	0.869	0.350	0.396	
1732.40	1412	UMTS 1750	RMC	13.50	13.03	0.01	Body	0 mm	Ant 2a	RRFNYFJ9CV	1:1	back	0.812	1.114	0.905	0.371	0.413	
1752.60	1513	UMTS 1750	RMC	13.50	13.30	0.02	Body	0 mm	Ant 2a	RRFNYFJ9CV	1:1	back	0.948	1.047	0.993	0.430	0.450	A2
1752.60	1513	UMTS 1750	RMC	13.50	13.30	-0.06	Body	0 mm	Ant 2a	RRFNYFJ9CV	1:1	top	0.005	1.047	0.005	0.001	0.001	
1752.60	1513	UMTS 1750	RMC	13.50	13.30	-0.02	Body	0 mm	Ant 2a	RRFNYFJ9CV	1:1	bottom	0.304	1.047	0.318	0.092	0.096	
1712.40	1312	UMTS 1750	RMC	13.50	12.97	-0.01	Body	0 mm	Ant 2a	RRFNYFJ9CV	1:1	right	0.676	1.130	0.764	0.269	0.304	
1732.40	1412	UMTS 1750	RMC	13.50	13.03	0.01	Body	0 mm	Ant 2a	RRFNYFJ9CV	1:1	right	0.686	1.114	0.764	0.275	0.306	
1752.60	1513	UMTS 1750	RMC	13.50	13.30	-0.02	Body	0 mm	Ant 2a	RRFNYFJ9CV	1:1	right	0.700	1.047	0.733	0.275	0.288	
1752.60	1513	UMTS 1750	RMC	13.50	13.30	0.06	Body	0 mm	Ant 2a	RRFNYFJ9CV	1:1	left	0.000	1.047	0.000	0.000	0.000	
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 10-6
UMTS 1750 MHz Antenna 1a Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1712.40	1312	UMTS 1750	RMC	15.30	14.41	-0.01	Body	0 mm	Ant 1a	RRFNYFJ9CV	1:1	back	0.769	1.227	0.944	0.374	0.459	
1732.40	1412	UMTS 1750	RMC	15.30	14.39	-0.03	Body	0 mm	Ant 1a	RRFNYFJ9CV	1:1	back	0.742	1.233	0.915	0.362	0.446	
1752.60	1513	UMTS 1750	RMC	15.30	14.49	-0.05	Body	0 mm	Ant 1a	RRFNYFJ9CV	1:1	back	0.761	1.205	0.917	0.372	0.448	
1752.60	1513	UMTS 1750	RMC	15.30	14.49	-0.03	Body	0 mm	Ant 1a	RRFNYFJ9CV	1:1	top	0.025	1.205	0.030	0.011	0.013	
1752.60	1513	UMTS 1750	RMC	15.30	14.49	-0.01	Body	0 mm	Ant 1a	RRFNYFJ9CV	1:1	bottom	0.405	1.205	0.488	0.139	0.167	
1752.60	1513	UMTS 1750	RMC	15.30	14.49	-0.05	Body	0 mm	Ant 1a	RRFNYFJ9CV	1:1	right	0.005	1.205	0.006	0.002	0.002	
1712.40	1312	UMTS 1750	RMC	15.30	14.41	0.00	Body	0 mm	Ant 1a	RRFNYFJ9CV	1:1	left	0.779	1.227	0.956	0.308	0.378	
1732.40	1412	UMTS 1750	RMC	15.30	14.39	0.00	Body	0 mm	Ant 1a	RRFNYFJ9CV	1:1	left	0.780	1.233	0.962	0.307	0.379	
1752.60	1513	UMTS 1750	RMC	15.30	14.49	0.00	Body	0 mm	Ant 1a	RRFNYFJ9CV	1:1	left	0.825	1.205	0.994	0.323	0.389	
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 10-7
UMTS 1900 MHz Antenna 4 Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1852.40	9262	UMTS 1900	RMC	15.40	14.53	0.01	Body	0 mm	Ant 4	CWW4WJJKVG	1:1	back	0.747	1.222	0.913	0.292	0.357	
1880.00	9400	UMTS 1900	RMC	15.40	14.60	-0.03	Body	0 mm	Ant 4	CWW4WJJKVG	1:1	back	0.744	1.202	0.894	0.290	0.349	
1907.60	9538	UMTS 1900	RMC	15.40	14.59	0.02	Body	0 mm	Ant 4	CWW4WJJKVG	1:1	back	0.741	1.205	0.893	0.285	0.343	
1880.00	9400	UMTS 1900	RMC	15.40	14.60	0.00	Body	0 mm	Ant 4	CWW4WJJKVG	1:1	top	0.601	1.202	0.722	0.249	0.299	
1880.00	9400	UMTS 1900	RMC	15.40	14.60	-0.02	Body	0 mm	Ant 4	CWW4WJJKVG	1:1	bottom	0.000	1.202	0.000	0.000	0.000	
1880.00	9400	UMTS 1900	RMC	15.40	14.60	-0.04	Body	0 mm	Ant 4	CWW4WJJKVG	1:1	right	0.018	1.202	0.022	0.008	0.010	
1880.00	9400	UMTS 1900	RMC	15.40	14.60	0.05	Body	0 mm	Ant 4	CWW4WJJKVG	1:1	left	0.200	1.202	0.240	0.069	0.083	
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 10-8
UMTS 1900 MHz Antenna 3a Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1880.00	9400	UMTS 1900	RMC	13.50	12.67	0.01	Body	0 mm	Ant 3a	H4P42VGK7F	1:1	back	0.348	1.211	0.421	0.153	0.185	
1880.00	9400	UMTS 1900	RMC	13.50	12.67	0.07	Body	0 mm	Ant 3a	H4P42VGK7F	1:1	top	0.236	1.211	0.286	0.075	0.091	
1880.00	9400	UMTS 1900	RMC	13.50	12.67	-0.01	Body	0 mm	Ant 3a	H4P42VGK7F	1:1	bottom	0.001	1.211	0.001	0.000	0.000	
1852.40	9262	UMTS 1900	RMC	13.50	12.63	0.00	Body	0 mm	Ant 3a	H4P42VGK7F	1:1	right	0.766	1.222	0.936	0.290	0.354	
1880.00	9400	UMTS 1900	RMC	13.50	12.67	-0.03	Body	0 mm	Ant 3a	H4P42VGK7F	1:1	right	0.762	1.211	0.923	0.285	0.345	
1907.60	9538	UMTS 1900	RMC	13.50	12.45	0.01	Body	0 mm	Ant 3a	H4P42VGK7F	1:1	right	0.778	1.274	0.991	0.289	0.368	A3
1880.00	9400	UMTS 1900	RMC	13.50	12.67	-0.09	Body	0 mm	Ant 3a	H4P42VGK7F	1:1	left	0.009	1.211	0.011	0.004	0.005	
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 10-9
UMTS 1900 MHz Antenna 2a Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1852.40	9262	UMTS 1900	RMC	13.70	12.78	-0.08	Body	0 mm	Ant 2a	K0V2HLHF2L	1:1	back	0.774	1.236	0.957	0.361	0.446	
1880.00	9400	UMTS 1900	RMC	13.70	12.75	0.06	Body	0 mm	Ant 2a	K0V2HLHF2L	1:1	back	0.759	1.245	0.945	0.358	0.446	
1907.60	9538	UMTS 1900	RMC	13.70	12.69	-0.05	Body	0 mm	Ant 2a	K0V2HLHF2L	1:1	back	0.724	1.262	0.914	0.339	0.428	
1852.40	9262	UMTS 1900	RMC	13.70	12.78	-0.05	Body	0 mm	Ant 2a	K0V2HLHF2L	1:1	top	0.012	1.236	0.015	0.005	0.006	
1852.40	9262	UMTS 1900	RMC	13.70	12.78	0.02	Body	0 mm	Ant 2a	K0V2HLHF2L	1:1	bottom	0.366	1.236	0.452	0.116	0.143	
1852.40	9262	UMTS 1900	RMC	13.70	12.78	-0.05	Body	0 mm	Ant 2a	K0V2HLHF2L	1:1	right	0.539	1.236	0.666	0.206	0.255	
1852.40	9262	UMTS 1900	RMC	13.70	12.78	0.02	Body	0 mm	Ant 2a	K0V2HLHF2L	1:1	left	0.001	1.236	0.001	0.000	0.000	
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 10-10
UMTS 1900 MHz Antenna 1a Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1852.40	9262	UMTS 1900	RMC	14.50	13.04	0.01	Body	0 mm	Ant 1a	Y0X4T66QY6	1:1	back	0.687	1.400	0.962	0.337	0.472	
1880.00	9400	UMTS 1900	RMC	14.50	13.13	0.00	Body	0 mm	Ant 1a	Y0X4T66QY6	1:1	back	0.687	1.371	0.942	0.335	0.459	
1907.60	9538	UMTS 1900	RMC	14.50	13.19	0.00	Body	0 mm	Ant 1a	Y0X4T66QY6	1:1	back	0.669	1.352	0.904	0.329	0.445	
1907.60	9538	UMTS 1900	RMC	14.50	13.19	-0.20	Body	0 mm	Ant 1a	Y0X4T66QY6	1:1	top	0.014	1.352	0.019	0.005	0.007	
1907.60	9538	UMTS 1900	RMC	14.50	13.19	0.00	Body	0 mm	Ant 1a	Y0X4T66QY6	1:1	bottom	0.330	1.352	0.446	0.111	0.150	
1907.60	9538	UMTS 1900	RMC	14.50	13.19	0.04	Body	0 mm	Ant 1a	Y0X4T66QY6	1:1	right	0.005	1.352	0.007	0.001	0.001	
1852.40	9262	UMTS 1900	RMC	14.50	13.04	0.01	Body	0 mm	Ant 1a	Y0X4T66QY6	1:1	left	0.620	1.400	0.868	0.243	0.340	
1880.00	9400	UMTS 1900	RMC	14.50	13.13	0.01	Body	0 mm	Ant 1a	Y0X4T66QY6	1:1	left	0.627	1.371	0.860	0.246	0.337	
1907.60	9538	UMTS 1900	RMC	14.50	13.19	-0.03	Body	0 mm	Ant 1a	Y0X4T66QY6	1:1	left	0.669	1.352	0.904	0.259	0.350	
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 10-11
LTE Band 71 Antenna 4 Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
680.50	133297	Mid	LTE Band 71	20	22.10	20.65	0.09	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	back	1:1	0.571	1.396	0.797	0.277	0.387	
680.50	133297	Mid	LTE Band 71	20	22.10	20.70	0.00	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	back	1:1	0.538	1.380	0.742	0.265	0.366	
680.50	133297	Mid	LTE Band 71	20	22.10	20.65	0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	top	1:1	0.463	1.396	0.646	0.215	0.300	
680.50	133297	Mid	LTE Band 71	20	22.10	20.70	0.03	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	top	1:1	0.467	1.380	0.644	0.211	0.291	
680.50	133297	Mid	LTE Band 71	20	22.10	20.65	0.09	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	bottom	1:1	0.016	1.396	0.022	0.006	0.008	
680.50	133297	Mid	LTE Band 71	20	22.10	20.70	-0.17	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	bottom	1:1	0.012	1.380	0.017	0.004	0.006	
680.50	133297	Mid	LTE Band 71	20	22.10	20.65	0.04	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	right	1:1	0.030	1.396	0.042	0.014	0.020	
680.50	133297	Mid	LTE Band 71	20	22.10	20.70	-0.07	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	right	1:1	0.026	1.380	0.036	0.012	0.017	
680.50	133297	Mid	LTE Band 71	20	22.10	20.65	0.14	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	left	1:1	0.587	1.396	0.819	0.204	0.285	
680.50	133297	Mid	LTE Band 71	20	22.10	20.70	-0.06	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	left	1:1	0.539	1.380	0.744	0.194	0.268	
680.50	133297	Mid	LTE Band 71	20	22.10	20.63	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	100	0	0 mm	left	1:1	0.521	1.403	0.731	0.190	0.267	
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 10-12
LTE Band 71 Antenna 3b Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
680.50	133297	Mid	LTE Band 71	20	19.40	18.71	0.00	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	back	1:1	0.805	1.172	0.943	0.393	0.461	A4
680.50	133297	Mid	LTE Band 71	20	19.40	18.72	0.00	0	Ant 3b	T56JJ392YN	QPSK	50	25	0 mm	back	1:1	0.750	1.169	0.877	0.365	0.427	
680.50	133297	Mid	LTE Band 71	20	19.40	18.70	-0.02	0	Ant 3b	T56JJ392YN	QPSK	100	0	0 mm	back	1:1	0.749	1.175	0.880	0.364	0.428	
680.50	133297	Mid	LTE Band 71	20	19.40	18.71	0.00	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	top	1:1	0.712	1.172	0.834	0.331	0.388	
680.50	133297	Mid	LTE Band 71	20	19.40	18.72	0.01	0	Ant 3b	T56JJ392YN	QPSK	50	25	0 mm	top	1:1	0.655	1.169	0.766	0.303	0.354	
680.50	133297	Mid	LTE Band 71	20	19.40	18.70	0.00	0	Ant 3b	T56JJ392YN	QPSK	100	0	0 mm	top	1:1	0.664	1.175	0.780	0.307	0.361	
680.50	133297	Mid	LTE Band 71	20	19.40	18.71	-0.03	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	bottom	1:1	0.007	1.172	0.008	0.002	0.002	
680.50	133297	Mid	LTE Band 71	20	19.40	18.72	-0.02	0	Ant 3b	T56JJ392YN	QPSK	50	25	0 mm	bottom	1:1	0.004	1.169	0.005	0.000	0.000	
680.50	133297	Mid	LTE Band 71	20	19.40	18.71	-0.09	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	right	1:1	0.085	1.172	0.100	0.039	0.046	
680.50	133297	Mid	LTE Band 71	20	19.40	18.72	0.00	0	Ant 3b	T56JJ392YN	QPSK	50	25	0 mm	right	1:1	0.072	1.169	0.084	0.033	0.039	
680.50	133297	Mid	LTE Band 71	20	19.40	18.71	0.02	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	left	1:1	0.012	1.172	0.014	0.005	0.006	
680.50	133297	Mid	LTE Band 71	20	19.40	18.72	-0.07	0	Ant 3b	T56JJ392YN	QPSK	50	25	0 mm	left	1:1	0.008	1.169	0.009	0.004	0.005	
680.50	133297	Mid	LTE Band 71	20	19.40	18.71	-0.02	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	back	1:1	0.797	1.172	0.934	0.388	0.455	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram							

Note: Blue entry represents variability measurement.

Table 10-13
LTE Band 12 Antenna 4 Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
707.50	23095	Mid	LTE Band 12	10	21.40	19.96	0.08	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	back	1:1	0.654	1.393	0.911	0.329	0.458	
707.50	23095	Mid	LTE Band 12	10	21.40	20.12	0.00	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	back	1:1	0.637	1.343	0.855	0.320	0.430	
707.50	23095	Mid	LTE Band 12	10	21.40	19.95	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	back	1:1	0.641	1.396	0.895	0.319	0.445	
707.50	23095	Mid	LTE Band 12	10	21.40	19.96	0.02	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	top	1:1	0.523	1.393	0.729	0.243	0.338	
707.50	23095	Mid	LTE Band 12	10	21.40	20.12	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	top	1:1	0.552	1.343	0.741	0.262	0.352	
707.50	23095	Mid	LTE Band 12	10	21.40	19.96	-0.03	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	bottom	1:1	0.017	1.393	0.024	0.008	0.011	
707.50	23095	Mid	LTE Band 12	10	21.40	20.12	-0.02	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	bottom	1:1	0.017	1.343	0.023	0.008	0.011	
707.50	23095	Mid	LTE Band 12	10	21.40	19.96	0.00	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	right	1:1	0.029	1.393	0.040	0.014	0.020	
707.50	23095	Mid	LTE Band 12	10	21.40	20.12	-0.06	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	right	1:1	0.028	1.343	0.038	0.013	0.017	
707.50	23095	Mid	LTE Band 12	10	21.40	19.96	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	left	1:1	0.629	1.393	0.876	0.222	0.309	
707.50	23095	Mid	LTE Band 12	10	21.40	20.12	0.01	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	left	1:1	0.624	1.343	0.838	0.223	0.299	
707.50	23095	Mid	LTE Band 12	10	21.40	19.95	-0.06	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	left	1:1	0.564	1.396	0.787	0.218	0.304	
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 10-14
LTE Band 12 Antenna 3b Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
707.50	23095	Mid	LTE Band 12	10	18.30	16.95	0.01	0	Ant 3b	T56JJ392YN	QPSK	1	25	0 mm	back	1:1	0.544	1.365	0.743	0.262	0.358	
707.50	23095	Mid	LTE Band 12	10	18.30	16.99	0.00	0	Ant 3b	T56JJ392YN	QPSK	25	25	0 mm	back	1:1	0.575	1.352	0.777	0.279	0.377	
707.50	23095	Mid	LTE Band 12	10	18.30	16.95	0.00	0	Ant 3b	T56JJ392YN	QPSK	1	25	0 mm	top	1:1	0.625	1.365	0.853	0.301	0.411	
707.50	23095	Mid	LTE Band 12	10	18.30	16.99	-0.01	0	Ant 3b	T56JJ392YN	QPSK	25	25	0 mm	top	1:1	0.635	1.352	0.859	0.306	0.414	
707.50	23095	Mid	LTE Band 12	10	18.30	16.93	-0.02	0	Ant 3b	T56JJ392YN	QPSK	50	0	0 mm	top	1:1	0.655	1.371	0.898	0.315	0.432	A5
707.50	23095	Mid	LTE Band 12	10	18.30	16.95	0.05	0	Ant 3b	T56JJ392YN	QPSK	1	25	0 mm	bottom	1:1	0.004	1.365	0.005	0.001	0.001	
707.50	23095	Mid	LTE Band 12	10	18.30	16.99	-0.16	0	Ant 3b	T56JJ392YN	QPSK	25	25	0 mm	bottom	1:1	0.005	1.352	0.007	0.002	0.003	
707.50	23095	Mid	LTE Band 12	10	18.30	16.95	0.00	0	Ant 3b	T56JJ392YN	QPSK	1	25	0 mm	right	1:1	0.041	1.365	0.056	0.019	0.026	
707.50	23095	Mid	LTE Band 12	10	18.30	16.99	0.06	0	Ant 3b	T56JJ392YN	QPSK	25	25	0 mm	right	1:1	0.043	1.352	0.058	0.020	0.027	
707.50	23095	Mid	LTE Band 12	10	18.30	16.95	0.19	0	Ant 3b	T56JJ392YN	QPSK	1	25	0 mm	left	1:1	0.009	1.365	0.012	0.003	0.004	
707.50	23095	Mid	LTE Band 12	10	18.30	16.99	-0.03	0	Ant 3b	T56JJ392YN	QPSK	25	25	0 mm	left	1:1	0.009	1.352	0.012	0.003	0.004	
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 10-15
LTE Band 13 Antenna 4 Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
782.00	23230	Mid	LTE Band 13	10	21.20	19.56	0.02	0	Ant 4	JFPF0XQ24V	QPSK	1	0	0 mm	back	1:1	0.556	1.459	0.811	0.296	0.432	
782.00	23230	Mid	LTE Band 13	10	21.20	19.60	0.01	0	Ant 4	JFPF0XQ24V	QPSK	25	25	0 mm	back	1:1	0.557	1.445	0.805	0.280	0.405	
782.00	23230	Mid	LTE Band 13	10	21.20	19.55	0.00	0	Ant 4	JFPF0XQ24V	QPSK	50	0	0 mm	back	1:1	0.597	1.462	0.873	0.303	0.443	
782.00	23230	Mid	LTE Band 13	10	21.20	19.56	0.03	0	Ant 4	JFPF0XQ24V	QPSK	1	0	0 mm	top	1:1	0.525	1.459	0.766	0.230	0.336	
782.00	23230	Mid	LTE Band 13	10	21.20	19.60	0.02	0	Ant 4	JFPF0XQ24V	QPSK	25	25	0 mm	top	1:1	0.548	1.445	0.792	0.248	0.358	
782.00	23230	Mid	LTE Band 13	10	21.20	19.56	-0.02	0	Ant 4	JFPF0XQ24V	QPSK	1	0	0 mm	bottom	1:1	0.019	1.459	0.028	0.009	0.013	
782.00	23230	Mid	LTE Band 13	10	21.20	19.60	0.16	0	Ant 4	JFPF0XQ24V	QPSK	25	25	0 mm	bottom	1:1	0.019	1.445	0.027	0.009	0.013	
782.00	23230	Mid	LTE Band 13	10	21.20	19.56	-0.10	0	Ant 4	JFPF0XQ24V	QPSK	1	0	0 mm	right	1:1	0.029	1.459	0.042	0.014	0.020	
782.00	23230	Mid	LTE Band 13	10	21.20	19.60	0.05	0	Ant 4	JFPF0XQ24V	QPSK	25	25	0 mm	right	1:1	0.023	1.445	0.033	0.012	0.017	
782.00	23230	Mid	LTE Band 13	10	21.20	19.56	-0.06	0	Ant 4	JFPF0XQ24V	QPSK	1	0	0 mm	left	1:1	0.588	1.459	0.858	0.226	0.330	
782.00	23230	Mid	LTE Band 13	10	21.20	19.60	0.00	0	Ant 4	JFPF0XQ24V	QPSK	25	25	0 mm	left	1:1	0.578	1.445	0.835	0.215	0.311	
782.00	23230	Mid	LTE Band 13	10	21.20	19.55	-0.03	0	Ant 4	JFPF0XQ24V	QPSK	50	0	0 mm	left	1:1	0.669	1.462	0.978	0.253	0.370	A6
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 10-16
LTE Band 13 Antenna 3b Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
782.00	23230	Mid	LTE Band 13	10	17.50	16.17	-0.01	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	back	1:1	0.636	1.358	0.864	0.314	0.426	
782.00	23230	Mid	LTE Band 13	10	17.50	16.27	-0.01	0	Ant 3b	T56JJ392YN	QPSK	25	12	0 mm	back	1:1	0.652	1.327	0.865	0.324	0.430	
782.00	23230	Mid	LTE Band 13	10	17.50	16.15	-0.01	0	Ant 3b	T56JJ392YN	QPSK	50	0	0 mm	back	1:1	0.647	1.365	0.883	0.320	0.437	
782.00	23230	Mid	LTE Band 13	10	17.50	16.17	0.01	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	top	1:1	0.512	1.358	0.695	0.254	0.345	
782.00	23230	Mid	LTE Band 13	10	17.50	16.27	-0.01	0	Ant 3b	T56JJ392YN	QPSK	25	12	0 mm	top	1:1	0.539	1.327	0.715	0.269	0.357	
782.00	23230	Mid	LTE Band 13	10	17.50	16.17	-0.04	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	bottom	1:1	0.007	1.358	0.010	0.003	0.004	
782.00	23230	Mid	LTE Band 13	10	17.50	16.27	-0.03	0	Ant 3b	T56JJ392YN	QPSK	25	12	0 mm	bottom	1:1	0.006	1.327	0.008	0.003	0.004	
782.00	23230	Mid	LTE Band 13	10	17.50	16.17	0.01	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	right	1:1	0.071	1.358	0.096	0.034	0.046	
782.00	23230	Mid	LTE Band 13	10	17.50	16.27	-0.06	0	Ant 3b	T56JJ392YN	QPSK	25	12	0 mm	right	1:1	0.078	1.327	0.104	0.037	0.049	
782.00	23230	Mid	LTE Band 13	10	17.50	16.17	-0.03	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	left	1:1	0.004	1.358	0.005	0.002	0.003	
782.00	23230	Mid	LTE Band 13	10	17.50	16.27	-0.12	0	Ant 3b	T56JJ392YN	QPSK	25	12	0 mm	left	1:1	0.006	1.327	0.008	0.003	0.004	
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 10-17
LTE Band 14 Antenna 4 Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
793.00	23330	Mid	LTE Band 14	10	21.20	19.58	-0.01	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	back	1:1	0.529	1.452	0.768	0.272	0.395	
793.00	23330	Mid	LTE Band 14	10	21.20	19.61	0.01	0	Ant 4	T56JJ392YN	QPSK	25	12	0 mm	back	1:1	0.522	1.442	0.753	0.268	0.386	
793.00	23330	Mid	LTE Band 14	10	21.20	19.58	0.01	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	top	1:1	0.562	1.452	0.816	0.271	0.393	
793.00	23330	Mid	LTE Band 14	10	21.20	19.61	0.02	0	Ant 4	T56JJ392YN	QPSK	25	12	0 mm	top	1:1	0.591	1.442	0.852	0.284	0.410	
793.00	23330	Mid	LTE Band 14	10	21.20	19.55	0.03	0	Ant 4	T56JJ392YN	QPSK	50	0	0 mm	top	1:1	0.573	1.462	0.838	0.276	0.404	
793.00	23330	Mid	LTE Band 14	10	21.20	19.58	0.18	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	bottom	1:1	0.022	1.452	0.032	0.010	0.015	
793.00	23330	Mid	LTE Band 14	10	21.20	19.61	0.03	0	Ant 4	T56JJ392YN	QPSK	25	12	0 mm	bottom	1:1	0.021	1.442	0.030	0.010	0.014	
793.00	23330	Mid	LTE Band 14	10	21.20	19.58	-0.08	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	right	1:1	0.025	1.452	0.036	0.012	0.017	
793.00	23330	Mid	LTE Band 14	10	21.20	19.61	0.18	0	Ant 4	T56JJ392YN	QPSK	25	12	0 mm	right	1:1	0.025	1.442	0.036	0.012	0.017	
793.00	23330	Mid	LTE Band 14	10	21.20	19.58	0.02	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	left	1:1	0.594	1.452	0.862	0.229	0.333	
793.00	23330	Mid	LTE Band 14	10	21.20	19.61	0.04	0	Ant 4	T56JJ392YN	QPSK	25	12	0 mm	left	1:1	0.568	1.442	0.819	0.222	0.320	
793.00	23330	Mid	LTE Band 14	10	21.20	19.55	0.04	0	Ant 4	T56JJ392YN	QPSK	50	0	0 mm	left	1:1	0.565	1.462	0.826	0.221	0.323	
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 10-18
LTE Band 14 Antenna 3b Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
793.00	23330	Mid	LTE Band 14	10	17.50	16.05	-0.01	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	back	1:1	0.628	1.396	0.877	0.309	0.431	
793.00	23330	Mid	LTE Band 14	10	17.50	16.15	-0.01	0	Ant 3b	T56JJ392YN	QPSK	25	12	0 mm	back	1:1	0.623	1.365	0.850	0.310	0.423	
793.00	23330	Mid	LTE Band 14	10	17.50	16.00	0.00	0	Ant 3b	T56JJ392YN	QPSK	50	0	0 mm	back	1:1	0.639	1.413	0.903	0.313	0.442	A7
793.00	23330	Mid	LTE Band 14	10	17.50	16.05	0.01	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	top	1:1	0.489	1.396	0.683	0.250	0.349	
793.00	23330	Mid	LTE Band 14	10	17.50	16.15	-0.03	0	Ant 3b	T56JJ392YN	QPSK	25	12	0 mm	top	1:1	0.487	1.365	0.665	0.251	0.343	
793.00	23330	Mid	LTE Band 14	10	17.50	16.05	0.04	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	bottom	1:1	0.004	1.396	0.006	0.002	0.003	
793.00	23330	Mid	LTE Band 14	10	17.50	16.15	0.03	0	Ant 3b	T56JJ392YN	QPSK	25	12	0 mm	bottom	1:1	0.005	1.365	0.007	0.002	0.003	
793.00	23330	Mid	LTE Band 14	10	17.50	16.05	-0.05	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	right	1:1	0.073	1.396	0.102	0.034	0.047	
793.00	23330	Mid	LTE Band 14	10	17.50	16.15	0.04	0	Ant 3b	T56JJ392YN	QPSK	25	12	0 mm	right	1:1	0.077	1.365	0.105	0.037	0.051	
793.00	23330	Mid	LTE Band 14	10	17.50	16.05	0.20	0	Ant 3b	T56JJ392YN	QPSK	1	0	0 mm	left	1:1	0.005	1.396	0.007	0.002	0.003	
793.00	23330	Mid	LTE Band 14	10	17.50	16.15	0.15	0	Ant 3b	T56JJ392YN	QPSK	25	12	0 mm	left	1:1	0.005	1.365	0.007	0.003	0.004	
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 10-19
LTE Band 26 (Cell) Antenna 4 Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
819.00	26740	Low	LTE Band 26 (Cell)	10	20.30	19.98	-0.05	0	Ant 4	LVX4YX3VT0	QPSK	1	49	0 mm	back	1:1	0.790	1.076	0.850	0.401	0.431	
831.50	26865	Mid	LTE Band 26 (Cell)	10	20.30	20.11	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	back	1:1	0.794	1.045	0.830	0.398	0.416	
844.00	26990	High	LTE Band 26 (Cell)	10	20.30	20.20	0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	back	1:1	0.754	1.023	0.771	0.382	0.391	
819.00	26740	Low	LTE Band 26 (Cell)	10	20.30	20.30	-0.05	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	back	1:1	0.892	1.000	0.892	0.457	0.457	
831.50	26865	Mid	LTE Band 26 (Cell)	10	20.30	20.25	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	back	1:1	0.777	1.012	0.786	0.388	0.393	
844.00	26990	High	LTE Band 26 (Cell)	10	20.30	20.21	-0.03	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	back	1:1	0.712	1.021	0.727	0.368	0.376	
831.50	26865	Mid	LTE Band 26 (Cell)	10	20.30	20.19	0.00	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	back	1:1	0.819	1.026	0.840	0.418	0.429	
819.00	26740	Low	LTE Band 26 (Cell)	10	20.30	19.98	0.06	0	Ant 4	LVX4YX3VT0	QPSK	1	49	0 mm	top	1:1	0.681	1.076	0.733	0.298	0.321	
831.50	26865	Mid	LTE Band 26 (Cell)	10	20.30	20.11	0.00	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	top	1:1	0.686	1.045	0.717	0.298	0.311	
844.00	26990	High	LTE Band 26 (Cell)	10	20.30	20.20	0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	top	1:1	0.688	1.023	0.704	0.297	0.304	
819.00	26740	Low	LTE Band 26 (Cell)	10	20.30	20.30	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	top	1:1	0.715	1.000	0.715	0.313	0.313	
831.50	26865	Mid	LTE Band 26 (Cell)	10	20.30	20.25	-0.03	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	top	1:1	0.708	1.012	0.716	0.306	0.310	
844.00	26990	High	LTE Band 26 (Cell)	10	20.30	20.21	0.00	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	top	1:1	0.711	1.021	0.726	0.306	0.312	
831.50	26865	Mid	LTE Band 26 (Cell)	10	20.30	20.19	-0.04	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	top	1:1	0.701	1.026	0.719	0.303	0.311	
844.00	26990	High	LTE Band 26 (Cell)	10	20.30	20.20	0.09	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	bottom	1:1	0.023	1.023	0.024	0.012	0.012	
819.00	26740	Low	LTE Band 26 (Cell)	10	20.30	20.30	0.04	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	bottom	1:1	0.024	1.000	0.024	0.012	0.012	
844.00	26990	High	LTE Band 26 (Cell)	10	20.30	20.20	-0.19	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	right	1:1	0.015	1.023	0.015	0.008	0.008	
819.00	26740	Low	LTE Band 26 (Cell)	10	20.30	20.30	0.00	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	right	1:1	0.016	1.000	0.016	0.008	0.008	
819.00	26740	Low	LTE Band 26 (Cell)	10	20.30	19.98	-0.03	0	Ant 4	LVX4YX3VT0	QPSK	1	49	0 mm	left	1:1	0.893	1.076	0.961	0.340	0.366	
831.50	26865	Mid	LTE Band 26 (Cell)	10	20.30	20.11	0.12	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	left	1:1	0.943	1.045	0.985	0.340	0.355	
844.00	26990	High	LTE Band 26 (Cell)	10	20.30	20.20	-0.04	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	left	1:1	0.917	1.023	0.938	0.346	0.354	
819.00	26740	Low	LTE Band 26 (Cell)	10	20.30	20.30	0.01	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	left	1:1	0.942	1.000	0.942	0.354	0.354	
831.50	26865	Mid	LTE Band 26 (Cell)	10	20.30	20.25	-0.04	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	left	1:1	0.951	1.012	0.962	0.359	0.363	A8
844.00	26990	High	LTE Band 26 (Cell)	10	20.30	20.21	0.09	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	left	1:1	0.918	1.021	0.937	0.351	0.358	
831.50	26865	Mid	LTE Band 26 (Cell)	10	20.30	20.19	0.03	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	left	1:1	0.845	1.026	0.867	0.329	0.338	
831.50	26865	Mid	LTE Band 26 (Cell)	10	20.3	20.25	0.16	0	Ant 4	LVX4YX3VT0	QPSK	25	12	0 mm	left	1:1	0.817	1.012	0.827	0.323	0.327	
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 10-20
LTE Band 26 (Cell) Antenna 3b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
831.50	26865	Mid	LTE Band 26 (Cell)	10	17.40	16.03	0.03	0	Ant 3b	RRFNYFJ9CV	QPSK	1	0	0 mm	back	1:1	0.559	1.371	0.766	0.269	0.369	
831.50	26865	Mid	LTE Band 26 (Cell)	10	17.40	16.20	0.01	0	Ant 3b	RRFNYFJ9CV	QPSK	25	12	0 mm	back	1:1	0.590	1.318	0.778	0.284	0.374	
819.00	26740	Low	LTE Band 26 (Cell)	10	17.40	15.97	0.01	0	Ant 3b	RRFNYFJ9CV	QPSK	1	0	0 mm	top	1:1	0.640	1.390	0.890	0.305	0.424	
831.50	26865	Mid	LTE Band 26 (Cell)	10	17.40	16.03	-0.01	0	Ant 3b	RRFNYFJ9CV	QPSK	1	0	0 mm	top	1:1	0.653	1.371	0.895	0.312	0.428	
844.00	26990	High	LTE Band 26 (Cell)	10	17.40	16.02	0.01	0	Ant 3b	RRFNYFJ9CV	QPSK	1	0	0 mm	top	1:1	0.651	1.374	0.894	0.307	0.422	
819.00	26740	Low	LTE Band 26 (Cell)	10	17.40	16.18	0.05	0	Ant 3b	RRFNYFJ9CV	QPSK	25	12	0 mm	top	1:1	0.670	1.324	0.887	0.318	0.421	
831.50	26865	Mid	LTE Band 26 (Cell)	10	17.40	16.20	-0.12	0	Ant 3b	RRFNYFJ9CV	QPSK	25	12	0 mm	top	1:1	0.667	1.318	0.879	0.317	0.418	
844.00	26990	High	LTE Band 26 (Cell)	10	17.40	16.12	0.00	0	Ant 3b	RRFNYFJ9CV	QPSK	25	12	0 mm	top	1:1	0.667	1.343	0.896	0.318	0.427	
844.00	26990	High	LTE Band 26 (Cell)	10	17.40	16.02	0.03	0	Ant 3b	RRFNYFJ9CV	QPSK	50	0	0 mm	top	1:1	0.667	1.374	0.916	0.318	0.437	
831.50	26865	Mid	LTE Band 26 (Cell)	10	17.40	16.03	0.20	0	Ant 3b	RRFNYFJ9CV	QPSK	1	0	0 mm	bottom	1:1	0.002	1.371	0.003	0.000	0.000	
831.50	26865	Mid	LTE Band 26 (Cell)	10	17.40	16.20	-0.05	0	Ant 3b	RRFNYFJ9CV	QPSK	25	12	0 mm	bottom	1:1	0.003	1.318	0.004	0.002	0.003	
831.50	26865	Mid	LTE Band 26 (Cell)	10	17.40	16.03	-0.05	0	Ant 3b	RRFNYFJ9CV	QPSK	1	0	0 mm	right	1:1	0.057	1.371	0.078	0.026	0.036	
831.50	26865	Mid	LTE Band 26 (Cell)	10	17.40	16.20	0.02	0	Ant 3b	RRFNYFJ9CV	QPSK	25	12	0 mm	right	1:1	0.058	1.318	0.076	0.026	0.034	
831.50	26865	Mid	LTE Band 26 (Cell)	10	17.40	16.03	-0.03	0	Ant 3b	RRFNYFJ9CV	QPSK	1	0	0 mm	left	1:1	0.007	1.371	0.010	0.003	0.004	
831.50	26865	Mid	LTE Band 26 (Cell)	10	17.40	16.20	0.06	0	Ant 3b	RRFNYFJ9CV	QPSK	25	12	0 mm	left	1:1	0.006	1.318	0.008	0.003	0.004	
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 10-21
LTE Band 5 (Cell) Antenna 4 Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.50	0.02	0	Ant 4	V046Y0K0HR	QPSK	1	0	0 mm	back	1:1	0.624	1.202	0.750	0.301	0.362	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.55	-0.11	0	Ant 4	V046Y0K0HR	QPSK	25	12	0 mm	back	1:1	0.641	1.189	0.762	0.309	0.367	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.49	0.00	0	Ant 4	V046Y0K0HR	QPSK	50	0	0 mm	back	1:1	0.633	1.205	0.763	0.305	0.368	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.50	-0.18	0	Ant 4	V046Y0K0HR	QPSK	1	0	0 mm	top	1:1	0.604	1.202	0.726	0.258	0.310	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.55	-0.01	0	Ant 4	V046Y0K0HR	QPSK	25	12	0 mm	top	1:1	0.616	1.189	0.732	0.261	0.310	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.50	0.11	0	Ant 4	V046Y0K0HR	QPSK	1	0	0 mm	bottom	1:1	0.017	1.202	0.020	0.009	0.011	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.55	0.04	0	Ant 4	V046Y0K0HR	QPSK	25	12	0 mm	bottom	1:1	0.013	1.189	0.015	0.006	0.007	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.50	0.07	0	Ant 4	V046Y0K0HR	QPSK	1	0	0 mm	right	1:1	0.009	1.202	0.011	0.005	0.006	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.55	-0.01	0	Ant 4	V046Y0K0HR	QPSK	25	12	0 mm	right	1:1	0.011	1.189	0.013	0.006	0.007	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.50	-0.05	0	Ant 4	V046Y0K0HR	QPSK	1	0	0 mm	left	1:1	0.754	1.202	0.906	0.287	0.345	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.55	-0.05	0	Ant 4	V046Y0K0HR	QPSK	25	12	0 mm	left	1:1	0.734	1.189	0.873	0.283	0.336	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.49	0.17	0	Ant 4	V046Y0K0HR	QPSK	50	0	0 mm	left	1:1	0.775	1.205	0.934	0.291	0.351	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	20.30	19.30	0.00	0	Ant 4	V046Y0K0HR	QPSK	50	0	0 mm	left	1:1	0.777	1.259	0.978	0.284	0.358	A9
2 CC Uplink	SCC	829.30	20453	Mid	LTE Band 5 (Cell)	5								25	0									
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 10-22
LTE Band 5 (Cell) Antenna 3b Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.02	0.08	0	Ant 3b	H4P42VGK7F	QPSK	1	0	0 mm	back	1:1	0.548	1.374	0.753	0.265	0.364	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.21	-0.05	0	Ant 3b	H4P42VGK7F	QPSK	25	12	0 mm	back	1:1	0.578	1.315	0.760	0.280	0.368	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.02	-0.01	0	Ant 3b	H4P42VGK7F	QPSK	1	0	0 mm	top	1:1	0.640	1.374	0.879	0.297	0.408	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.21	0.04	0	Ant 3b	H4P42VGK7F	QPSK	25	12	0 mm	top	1:1	0.688	1.315	0.905	0.313	0.412	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.00	0.02	0	Ant 3b	H4P42VGK7F	QPSK	50	0	0 mm	top	1:1	0.698	1.380	0.963	0.328	0.453	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.11	-0.03	0	Ant 3b	H4P42VGK7F	QPSK	50	0	0 mm	top	1:1	0.723	1.346	0.973	0.332	0.447	
2 CC Uplink	SCC	829.30	20453	Mid	LTE Band 5 (Cell)	5								25	0									
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.02	-0.02	0	Ant 3b	H4P42VGK7F	QPSK	1	0	0 mm	bottom	1:1	0.002	1.374	0.003	0.001	0.001	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.21	-0.06	0	Ant 3b	H4P42VGK7F	QPSK	25	12	0 mm	bottom	1:1	0.004	1.315	0.005	0.002	0.003	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.02	-0.04	0	Ant 3b	H4P42VGK7F	QPSK	1	0	0 mm	right	1:1	0.060	1.374	0.082	0.028	0.038	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.21	0.00	0	Ant 3b	H4P42VGK7F	QPSK	25	12	0 mm	right	1:1	0.034	1.315	0.045	0.013	0.017	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.02	0.00	0	Ant 3b	H4P42VGK7F	QPSK	1	0	0 mm	left	1:1	0.006	1.374	0.008	0.003	0.004	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	17.40	16.21	-0.02	0	Ant 3b	H4P42VGK7F	QPSK	25	12	0 mm	left	1:1	0.007	1.315	0.009	0.004	0.005	
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 10-23
LTE Band 66 (AWS) Antenna 4 Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	15.19	-0.04	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	back	1:1	0.773	1.026	0.793	0.311	0.319	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.22	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	back	1:1	0.760	1.019	0.774	0.300	0.306	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	15.06	0.02	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	back	1:1	0.763	1.057	0.806	0.299	0.316	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	15.25	0.03	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	back	1:1	0.778	1.012	0.787	0.312	0.316	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.21	0.00	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	back	1:1	0.769	1.021	0.785	0.305	0.311	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.26	0.02	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	back	1:1	0.811	1.009	0.818	0.319	0.319	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	15.26	0.00	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	back	1:1	0.766	1.009	0.773	0.308	0.311	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	15.21	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	100	0	0 mm	back	1:1	0.778	1.021	0.794	0.331	0.338	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	10	15.30	15.13	0.01	0	Ant 4	LVX4YX3VT0	QPSK	25	0	0 mm	back	1:1	0.767	1.040	0.798	0.304	0.316	
2 CC Uplink	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.24	0.02	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	back	1:1	0.786	1.014	0.797	0.312	0.316	
2 CC Uplink	SCC	1725.20	132124	Mid	LTE Band 66 (AWS)	20								50	50									
2 CC Uplink	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	10	15.30	15.18	-0.02	0	Ant 4	LVX4YX3VT0	QPSK	25	0	0 mm	back	1:1	0.780	1.028	0.802	0.309	0.318	
2 CC Uplink	SCC	1735.10	132223	Mid	LTE Band 66 (AWS)	10								25	25									
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	15.19	0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	top	1:1	0.725	1.026	0.744	0.309	0.317	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.22	0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	top	1:1	0.652	1.019	0.664	0.275	0.280	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	15.06	0.00	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	top	1:1	0.767	1.057	0.811	0.322	0.340	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	15.25	0.00	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	top	1:1	0.643	1.012	0.651	0.272	0.275	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.26	0.02	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	top	1:1	0.667	1.009	0.673	0.282	0.285	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	15.26	0.00	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	top	1:1	0.775	1.009	0.782	0.328	0.331	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	15.21	0.00	0	Ant 4	LVX4YX3VT0	QPSK	100	0	0 mm	top	1:1	0.753	1.021	0.769	0.320	0.327	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.22	0.04	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	bottom	1:1	0.000	1.019	0.000	0.000	0.000	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.26	-0.05	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	bottom	1:1	0.000	1.009	0.000	0.000	0.000	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.22	-0.02	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	right	1:1	0.014	1.019	0.014	0.005	0.005	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.26	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	right	1:1	0.015	1.009	0.015	0.005	0.005	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.22	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	left	1:1	0.564	1.019	0.575	0.211	0.215	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	15.26	0.01	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	left	1:1	0.594	1.009	0.599	0.224	0.226	
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 10-24
LTE Band 66 (AWS) Antenna 3a Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.72	0.08	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	back	1:1	0.341	1.253	0.427	0.149	0.187	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.74	0.02	0	Ant 3a	T56JJ392YN	QPSK	50	25	0 mm	back	1:1	0.351	1.247	0.438	0.153	0.191	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.72	0.00	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	top	1:1	0.243	1.253	0.304	0.078	0.098	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.74	0.02	0	Ant 3a	T56JJ392YN	QPSK	50	25	0 mm	top	1:1	0.248	1.247	0.309	0.080	0.100	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.72	-0.08	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	bottom	1:1	0.005	1.253	0.006	0.002	0.003	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.74	-0.01	0	Ant 3a	T56JJ392YN	QPSK	50	25	0 mm	bottom	1:1	0.005	1.247	0.006	0.000	0.000	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.72	0.06	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	right	1:1	0.629	1.253	0.788	0.259	0.325	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	13.70	12.68	0.01	0	Ant 3a	T56JJ392YN	QPSK	50	25	0 mm	right	1:1	0.654	1.265	0.827	0.268	0.339	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.74	-0.02	0	Ant 3a	T56JJ392YN	QPSK	50	25	0 mm	right	1:1	0.639	1.247	0.797	0.260	0.324	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	13.70	12.62	0.03	0	Ant 3a	T56JJ392YN	QPSK	50	0	0 mm	right	1:1	0.638	1.282	0.818	0.261	0.335	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	13.70	12.64	0.00	0	Ant 3a	T56JJ392YN	QPSK	50	25	0 mm	right	1:1	0.650	1.276	0.829	0.265	0.338	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.70	0.01	0	Ant 3a	T56JJ392YN	QPSK	100	0	0 mm	right	1:1	0.628	1.259	0.791	0.259	0.326	
1 CC Uplink	N/A	1775.00	132622	High	LTE Band 66 (AWS)	10	13.70	12.44	0.01	0	Ant 3a	T56JJ392YN	QPSK	25	0	0 mm	right	1:1	0.638	1.337	0.853	0.261	0.349	
2 CC Uplink	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	13.70	12.60	0.00	0	Ant 3a	T56JJ392YN	QPSK	50	0	0 mm	right	1:1	0.662	1.288	0.853	0.272	0.350	
2 CC Uplink	SCC	1750.20	132374	High	LTE Band 66 (AWS)	20								50	50									
2 CC Uplink	PCC	1775.00	132622	High	LTE Band 66 (AWS)	10	13.70	12.34	0.01	0	Ant 3a	T56JJ392YN	QPSK	25	0	0 mm	right	1:1	0.648	1.368	0.886	0.265	0.363	
2 CC Uplink	SCC	1765.10	132523	High	LTE Band 66 (AWS)	10								25	25									
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.72	-0.02	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	left	1:1	0.000	1.253	0.000	0.000	0.000	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.74	-0.05	0	Ant 3a	T56JJ392YN	QPSK	50	25	0 mm	left	1:1	0.002	1.247	0.002	0.000	0.000	
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 10-25
LTE Band 66 (AWS) Antenna 2a Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																							
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	13.50	13.46	-0.04	0	Ant 2a	RP04M6VR9H	QPSK	1	50	0 mm	back	1:1	0.689	1.009	0.695	0.314	0.317	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.50	13.06	-0.06	0	Ant 2a	RP04M6VR9H	QPSK	1	0	0 mm	back	1:1	0.762	1.107	0.844	0.348	0.385	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	13.50	13.45	-0.02	0	Ant 2a	RP04M6VR9H	QPSK	1	50	0 mm	back	1:1	0.837	1.012	0.847	0.383	0.388	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	13.50	13.32	-0.04	0	Ant 2a	RP04M6VR9H	QPSK	50	25	0 mm	back	1:1	0.726	1.042	0.756	0.335	0.349	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.50	13.47	-0.01	0	Ant 2a	RP04M6VR9H	QPSK	50	25	0 mm	back	1:1	0.783	1.007	0.788	0.359	0.362	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	13.50	13.24	-0.01	0	Ant 2a	RP04M6VR9H	QPSK	50	0	0 mm	back	1:1	0.871	1.062	0.925	0.400	0.425	
1 CC Uplink	N/A	1775.00	132622	High	LTE Band 66 (AWS)	10	13.50	13.15	-0.02	0	Ant 2a	RP04M6VR9H	QPSK	25	0	0 mm	back	1:1	0.871	1.084	0.944	0.394	0.427	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.50	13.32	0.00	0	Ant 2a	RP04M6VR9H	QPSK	100	0	0 mm	back	1:1	0.806	1.042	0.840	0.281	0.293	
2 CC Uplink	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	13.50	12.82	-0.02	0	Ant 2a	RP04M6VR9H	QPSK	50	0	0 mm	back	1:1	0.825	1.169	0.964	0.370	0.433	
2 CC Uplink	SCC	1750.20	132374	High	LTE Band 66 (AWS)	20								50	50									
2 CC Uplink	PCC	1775.00	132622	High	LTE Band 66 (AWS)	10	13.50	12.65	-0.10	0	Ant 2a	RP04M6VR9H	QPSK	25	0	0 mm	back	1:1	0.807	1.216	0.981	0.366	0.445	
2 CC Uplink	SCC	1765.10	132523	High	LTE Band 66 (AWS)	10								25	25									
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	13.50	13.46	0.04	0	Ant 2a	RP04M6VR9H	QPSK	1	50	0 mm	top	1:1	0.000	1.009	0.000	0.000	0.000	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.50	13.47	-0.13	0	Ant 2a	RP04M6VR9H	QPSK	50	25	0 mm	top	1:1	0.004	1.007	0.004	0.001	0.001	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	13.50	13.46	-0.08	0	Ant 2a	RP04M6VR9H	QPSK	1	50	0 mm	bottom	1:1	0.217	1.009	0.219	0.065	0.066	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.50	13.47	0.03	0	Ant 2a	RP04M6VR9H	QPSK	50	25	0 mm	bottom	1:1	0.265	1.007	0.267	0.078	0.079	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	13.50	13.46	0.03	0	Ant 2a	RP04M6VR9H	QPSK	1	50	0 mm	right	1:1	0.575	1.009	0.580	0.240	0.242	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.50	13.47	0.01	0	Ant 2a	RP04M6VR9H	QPSK	50	25	0 mm	right	1:1	0.647	1.007	0.652	0.263	0.265	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	13.50	13.46	0.02	0	Ant 2a	RP04M6VR9H	QPSK	1	50	0 mm	left	1:1	0.000	1.009	0.000	0.000	0.000	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.50	13.47	0.09	0	Ant 2a	RP04M6VR9H	QPSK	50	25	0 mm	left	1:1	0.000	1.007	0.000	0.000	0.000	
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 10-26
LTE Band 66 (AWS) Antenna 1a Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																							
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.65	0.02	0	Ant 1a	RRFNYFJ9CV	QPSK	1	0	0 mm	back	1:1	0.817	1.161	0.949	0.398	0.462	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	14.86	-0.04	0	Ant 1a	RRFNYFJ9CV	QPSK	1	99	0 mm	back	1:1	0.806	1.107	0.892	0.394	0.436	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.72	0.01	0	Ant 1a	RRFNYFJ9CV	QPSK	1	0	0 mm	back	1:1	0.818	1.143	0.935	0.389	0.445	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.77	0.01	0	Ant 1a	RRFNYFJ9CV	QPSK	50	25	0 mm	back	1:1	0.831	1.130	0.939	0.405	0.458	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	14.88	-0.01	0	Ant 1a	RRFNYFJ9CV	QPSK	50	25	0 mm	back	1:1	0.843	1.102	0.929	0.400	0.441	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.90	-0.01	0	Ant 1a	RRFNYFJ9CV	QPSK	50	25	0 mm	back	1:1	0.834	1.096	0.914	0.405	0.444	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.85	0.00	0	Ant 1a	RRFNYFJ9CV	QPSK	100	0	0 mm	back	1:1	0.825	1.109	0.915	0.403	0.447	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	14.86	-0.05	0	Ant 1a	RRFNYFJ9CV	QPSK	1	99	0 mm	top	1:1	0.015	1.107	0.017	0.005	0.006	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.90	-0.10	0	Ant 1a	RRFNYFJ9CV	QPSK	50	25	0 mm	top	1:1	0.017	1.096	0.019	0.006	0.007	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	14.86	-0.06	0	Ant 1a	RRFNYFJ9CV	QPSK	1	99	0 mm	bottom	1:1	0.382	1.107	0.423	0.128	0.142	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.90	-0.03	0	Ant 1a	RRFNYFJ9CV	QPSK	50	25	0 mm	bottom	1:1	0.411	1.096	0.450	0.138	0.151	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	14.86	0.06	0	Ant 1a	RRFNYFJ9CV	QPSK	1	99	0 mm	right	1:1	0.004	1.107	0.004	0.000	0.000	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.90	-0.09	0	Ant 1a	RRFNYFJ9CV	QPSK	50	25	0 mm	right	1:1	0.001	1.096	0.001	0.000	0.000	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.65	-0.04	0	Ant 1a	RRFNYFJ9CV	QPSK	1	0	0 mm	left	1:1	0.820	1.161	0.952	0.327	0.380	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	14.86	0.07	0	Ant 1a	RRFNYFJ9CV	QPSK	1	99	0 mm	left	1:1	0.863	1.107	0.955	0.340	0.376	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.72	-0.02	0	Ant 1a	RRFNYFJ9CV	QPSK	1	0	0 mm	left	1:1	0.865	1.143	0.989	0.342	0.391	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.77	-0.05	0	Ant 1a	RRFNYFJ9CV	QPSK	50	25	0 mm	left	1:1	0.868	1.130	0.981	0.342	0.386	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	14.88	0.02	0	Ant 1a	RRFNYFJ9CV	QPSK	50	25	0 mm	left	1:1	0.891	1.102	0.982	0.350	0.386	
1 CC Uplink	N/A	1775.00	132622	High	LTE Band 66 (AWS)	10	15.30	14.59	0.00	0	Ant 1a	RRFNYFJ9CV	QPSK	25	0	0 mm	left	1:1	0.829	1.178	0.977	0.339	0.399	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.78	-0.02	0	Ant 1a	RRFNYFJ9CV	QPSK	50	0	0 mm	left	1:1	0.881	1.127	0.993	0.350	0.394	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.90	0.01	0	Ant 1a	RRFNYFJ9CV	QPSK	50	25	0 mm	left	1:1	0.911	1.096	**0.998**	0.358	0.392	A10
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.85	0.02	0	Ant 1a	RRFNYFJ9CV	QPSK	100	0	0 mm	left	1:1	0.899	1.109	**0.997**	0.352	0.390	
2 CC Uplink	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.46	-0.08	0	Ant 1a	RRFNYFJ9CV	QPSK	50	0	0 mm	left	1:1	0.798	1.213	0.968	0.324	0.393	
2 CC Uplink	SCC	1750.20	132374	High	LTE Band 66 (AWS)	20								50	50									
2 CC Uplink	PCC	1775.00	132622	High	LTE Band 66 (AWS)	10	15.30	14.64	0.00	0	Ant 1a	RRFNYFJ9CV	QPSK	25	0	0 mm	left	1:1	0.857	1.164	**0.998**	0.337	0.392	
2 CC Uplink	SCC	1765.10	132523	High	LTE Band 66 (AWS)	10								25	25									
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 10-27
LTE Band 25 (PCS) Antenna 4 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.40	14.05	-0.06	0	Ant 4	WX69TQ05VJ	QPSK	1	99	0 mm	back	1:1	0.656	1.365	0.895	0.259	0.354	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.06	0.02	0	Ant 4	WX69TQ05VJ	QPSK	1	0	0 mm	back	1:1	0.697	1.361	0.949	0.277	0.377	
1905.00	26590	High	LTE Band 25 (PCS)	20	15.40	14.03	-0.02	0	Ant 4	WX69TQ05VJ	QPSK	1	50	0 mm	back	1:1	0.639	1.371	0.876	0.250	0.343	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.40	14.13	-0.08	0	Ant 4	WX69TQ05VJ	QPSK	50	50	0 mm	back	1:1	0.552	1.340	0.740	0.216	0.289	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.17	0.00	0	Ant 4	WX69TQ05VJ	QPSK	50	50	0 mm	back	1:1	0.700	1.327	0.929	0.275	0.365	
1905.00	26590	High	LTE Band 25 (PCS)	20	15.40	14.09	0.06	0	Ant 4	WX69TQ05VJ	QPSK	50	25	0 mm	back	1:1	0.573	1.352	0.775	0.220	0.297	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.04	0.02	0	Ant 4	WX69TQ05VJ	QPSK	100	0	0 mm	back	1:1	0.572	1.368	0.782	0.220	0.301	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.06	0.00	0	Ant 4	WX69TQ05VJ	QPSK	1	0	0 mm	top	1:1	0.512	1.361	0.697	0.211	0.287	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.17	0.06	0	Ant 4	WX69TQ05VJ	QPSK	50	50	0 mm	top	1:1	0.520	1.327	0.690	0.214	0.284	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.06	0.04	0	Ant 4	WX69TQ05VJ	QPSK	1	0	0 mm	bottom	1:1	0.000	1.361	0.000	0.000	0.000	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.17	0.01	0	Ant 4	WX69TQ05VJ	QPSK	50	50	0 mm	bottom	1:1	0.000	1.327	0.000	0.000	0.000	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.06	-0.10	0	Ant 4	WX69TQ05VJ	QPSK	1	0	0 mm	right	1:1	0.009	1.361	0.012	0.004	0.005	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.17	-0.01	0	Ant 4	WX69TQ05VJ	QPSK	50	50	0 mm	right	1:1	0.010	1.327	0.013	0.005	0.007	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.06	0.01	0	Ant 4	WX69TQ05VJ	QPSK	1	0	0 mm	left	1:1	0.249	1.361	0.339	0.086	0.117	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.40	14.17	0.03	0	Ant 4	WX69TQ05VJ	QPSK	50	50	0 mm	left	1:1	0.239	1.327	0.317	0.077	0.102	
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 10-28
LTE Band 25 (PCS) Antenna 3a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.50	12.47	-0.02	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	back	1:1	0.309	1.268	0.392	0.137	0.174	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.50	12.54	0.00	0	Ant 3a	T56JJ392YN	QPSK	50	0	0 mm	back	1:1	0.311	1.247	0.388	0.140	0.175	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.50	12.47	-0.03	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	top	1:1	0.222	1.268	0.281	0.070	0.089	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.50	12.54	0.00	0	Ant 3a	T56JJ392YN	QPSK	50	0	0 mm	top	1:1	0.222	1.247	0.277	0.069	0.086	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.50	12.47	-0.02	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	bottom	1:1	0.000	1.268	0.000	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.50	12.54	0.00	0	Ant 3a	T56JJ392YN	QPSK	50	0	0 mm	bottom	1:1	0.002	1.247	0.002	0.001	0.001	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.50	12.47	0.01	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	right	1:1	0.653	1.268	0.828	0.252	0.320	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.50	12.45	-0.05	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	right	1:1	0.629	1.274	0.801	0.241	0.307	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.50	12.07	0.01	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	right	1:1	0.636	1.390	0.884	0.241	0.335	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.50	12.54	-0.01	0	Ant 3a	T56JJ392YN	QPSK	50	0	0 mm	right	1:1	0.657	1.247	0.819	0.253	0.315	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.50	12.51	0.00	0	Ant 3a	T56JJ392YN	QPSK	50	25	0 mm	right	1:1	0.649	1.256	0.815	0.246	0.309	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.50	12.40	-0.02	0	Ant 3a	T56JJ392YN	QPSK	50	25	0 mm	right	1:1	0.659	1.288	0.849	0.248	0.319	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.50	12.43	-0.01	0	Ant 3a	T56JJ392YN	QPSK	100	0	0 mm	right	1:1	0.647	1.279	0.828	0.246	0.315	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.50	12.47	-0.06	0	Ant 3a	T56JJ392YN	QPSK	1	0	0 mm	left	1:1	0.002	1.268	0.003	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.50	12.54	-0.10	0	Ant 3a	T56JJ392YN	QPSK	50	0	0 mm	left	1:1	0.003	1.247	0.004	0.001	0.001	
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 10-29
LTE Band 25 (PCS) Antenna 2a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.63	0.02	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	back	1:1	0.761	1.279	0.973	0.360	0.460	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.70	12.85	0.12	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	back	1:1	0.751	1.216	0.913	0.354	0.430	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.70	12.79	0.08	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	back	1:1	0.728	1.233	0.898	0.344	0.424	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.90	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	50	0	0 mm	back	1:1	0.819	1.202	0.984	0.386	0.464	A11
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.70	12.86	-0.17	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	back	1:1	0.773	1.213	0.938	0.363	0.440	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.70	12.97	0.01	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	back	1:1	0.755	1.183	0.893	0.356	0.421	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.70	12.84	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	100	0	0 mm	back	1:1	0.765	1.219	0.933	0.360	0.439	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.70	12.85	-0.01	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	top	1:1	0.011	1.216	0.013	0.005	0.006	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.70	12.97	-0.06	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	top	1:1	0.013	1.183	0.015	0.005	0.006	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.70	12.85	-0.01	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	bottom	1:1	0.373	1.216	0.454	0.118	0.143	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.70	12.97	-0.02	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	bottom	1:1	0.409	1.183	0.484	0.128	0.151	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.70	12.85	-0.07	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	right	1:1	0.506	1.216	0.615	0.201	0.244	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.70	12.97	0.02	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	right	1:1	0.508	1.183	0.601	0.200	0.237	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.70	12.85	0.12	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	left	1:1	0.004	1.216	0.005	0.001	0.001	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.70	12.97	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	left	1:1	0.001	1.183	0.001	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.90	-0.02	0	Ant 2a	K0V2HLHF2L	QPSK	50	0	0 mm	back	1:1	0.780	1.202	0.938	0.370	0.445	
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 10-30
LTE Band 25 (PCS) Antenna 1a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.50	12.92	0.00	0	Ant 1a	K0V2HLHF2L	QPSK	1	50	0 mm	back	1:1	0.550	1.439	0.791	0.260	0.374	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.32	-0.03	0	Ant 1a	K0V2HLHF2L	QPSK	1	50	0 mm	back	1:1	0.649	1.312	0.851	0.305	0.400	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.50	13.27	-0.10	0	Ant 1a	K0V2HLHF2L	QPSK	1	99	0 mm	back	1:1	0.520	1.327	0.690	0.260	0.345	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.50	13.29	-0.03	0	Ant 1a	K0V2HLHF2L	QPSK	50	50	0 mm	back	1:1	0.671	1.321	0.886	0.320	0.423	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.39	0.01	0	Ant 1a	K0V2HLHF2L	QPSK	50	25	0 mm	back	1:1	0.666	1.291	0.860	0.319	0.412	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.50	13.37	0.00	0	Ant 1a	K0V2HLHF2L	QPSK	50	50	0 mm	back	1:1	0.653	1.297	0.847	0.312	0.405	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.30	0.00	0	Ant 1a	K0V2HLHF2L	QPSK	100	0	0 mm	back	1:1	0.655	1.318	0.863	0.314	0.414	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.32	-0.05	0	Ant 1a	K0V2HLHF2L	QPSK	1	50	0 mm	top	1:1	0.015	1.312	0.020	0.007	0.009	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.39	-0.04	0	Ant 1a	K0V2HLHF2L	QPSK	50	25	0 mm	top	1:1	0.014	1.291	0.018	0.007	0.009	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.32	0.02	0	Ant 1a	K0V2HLHF2L	QPSK	1	50	0 mm	bottom	1:1	0.285	1.312	0.374	0.096	0.126	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.39	0.03	0	Ant 1a	K0V2HLHF2L	QPSK	50	25	0 mm	bottom	1:1	0.300	1.291	0.387	0.101	0.130	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.32	-0.05	0	Ant 1a	K0V2HLHF2L	QPSK	1	50	0 mm	right	1:1	0.006	1.312	0.008	0.002	0.003	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.39	0.00	0	Ant 1a	K0V2HLHF2L	QPSK	50	25	0 mm	right	1:1	0.006	1.291	0.008	0.002	0.003	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.50	12.92	0.01	0	Ant 1a	K0V2HLHF2L	QPSK	1	50	0 mm	left	1:1	0.628	1.439	0.904	0.243	0.350	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.32	0.02	0	Ant 1a	K0V2HLHF2L	QPSK	1	50	0 mm	left	1:1	0.671	1.312	0.880	0.257	0.337	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.50	13.27	-0.01	0	Ant 1a	K0V2HLHF2L	QPSK	1	99	0 mm	left	1:1	0.670	1.327	0.889	0.257	0.341	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.50	13.29	0.00	0	Ant 1a	K0V2HLHF2L	QPSK	50	50	0 mm	left	1:1	0.658	1.321	0.869	0.256	0.338	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.39	0.01	0	Ant 1a	K0V2HLHF2L	QPSK	50	25	0 mm	left	1:1	0.670	1.291	0.865	0.258	0.333	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.50	13.37	-0.01	0	Ant 1a	K0V2HLHF2L	QPSK	50	50	0 mm	left	1:1	0.693	1.297	0.899	0.266	0.345	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.50	13.30	0.01	0	Ant 1a	K0V2HLHF2L	QPSK	100	0	0 mm	left	1:1	0.673	1.318	0.887	0.260	0.343	
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 10-31
LTE Band 30 Antenna 4 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.31	0.00	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	back	1:1	0.687	1.285	0.883	0.288	0.370	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.54	-0.07	0	Ant 4	LVX4YX3VT0	QPSK	25	25	0 mm	back	1:1	0.722	1.219	0.880	0.301	0.367	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.30	0.05	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	back	1:1	0.707	1.288	0.911	0.300	0.386	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.31	0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	top	1:1	0.407	1.285	0.523	0.152	0.195	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.54	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	25	25	0 mm	top	1:1	0.421	1.219	0.513	0.156	0.190	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.31	-0.03	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	bottom	1:1	0.009	1.285	0.012	0.004	0.005	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.54	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	25	25	0 mm	bottom	1:1	0.014	1.219	0.017	0.007	0.009	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.31	0.05	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	right	1:1	0.006	1.285	0.008	0.003	0.004	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.54	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	25	25	0 mm	right	1:1	0.006	1.219	0.007	0.002	0.002	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.31	0.02	0	Ant 4	LVX4YX3VT0	QPSK	1	0	0 mm	left	1:1	0.736	1.285	0.946	0.266	0.342	
2310.00	27710	Mid	LTE Band 30	10	14.40	13.54	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	25	25	0 mm	left	1:1	0.775	1.219	0.945	0.280	0.341	A12
2310.00	27710	Mid	LTE Band 30	10	14.40	13.30	-0.02	0	Ant 4	LVX4YX3VT0	QPSK	50	0	0 mm	left	1:1	0.773	1.288	0.996	0.280	0.361	
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 10-32
LTE Band 30 Antenna 3a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	12.40	11.10	-0.02	0	Ant 3a	LVX4YX3VT0	QPSK	1	49	0 mm	back	1:1	0.253	1.349	0.341	0.119	0.161	
2310.00	27710	Mid	LTE Band 30	10	12.40	11.24	-0.02	0	Ant 3a	LVX4YX3VT0	QPSK	25	25	0 mm	back	1:1	0.266	1.306	0.347	0.125	0.163	
2310.00	27710	Mid	LTE Band 30	10	12.40	11.10	-0.02	0	Ant 3a	LVX4YX3VT0	QPSK	1	49	0 mm	top	1:1	0.170	1.349	0.229	0.053	0.071	
2310.00	27710	Mid	LTE Band 30	10	12.40	11.24	0.03	0	Ant 3a	LVX4YX3VT0	QPSK	25	25	0 mm	top	1:1	0.182	1.306	0.238	0.056	0.073	
2310.00	27710	Mid	LTE Band 30	10	12.40	11.10	0.04	0	Ant 3a	LVX4YX3VT0	QPSK	1	49	0 mm	bottom	1:1	0.004	1.349	0.005	0.001	0.001	
2310.00	27710	Mid	LTE Band 30	10	12.40	11.24	0.02	0	Ant 3a	LVX4YX3VT0	QPSK	25	25	0 mm	bottom	1:1	0.004	1.306	0.005	0.002	0.003	
2310.00	27710	Mid	LTE Band 30	10	12.40	11.10	-0.01	0	Ant 3a	LVX4YX3VT0	QPSK	1	49	0 mm	right	1:1	0.643	1.349	0.867	0.243	0.328	
2310.00	27710	Mid	LTE Band 30	10	12.40	11.24	-0.01	0	Ant 3a	LVX4YX3VT0	QPSK	25	25	0 mm	right	1:1	0.669	1.306	0.874	0.253	0.330	
2310.00	27710	Mid	LTE Band 30	10	12.40	10.90	0.04	0	Ant 3a	LVX4YX3VT0	QPSK	50	0	0 mm	right	1:1	0.663	1.413	0.937	0.249	0.352	
2310.00	27710	Mid	LTE Band 30	10	12.40	11.10	0.03	0	Ant 3a	LVX4YX3VT0	QPSK	1	49	0 mm	left	1:1	0.003	1.349	0.004	0.001	0.001	
2310.00	27710	Mid	LTE Band 30	10	12.40	11.24	-0.02	0	Ant 3a	LVX4YX3VT0	QPSK	25	25	0 mm	left	1:1	0.003	1.306	0.004	0.000	0.000	
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 10-33
LTE Band 30 Antenna 2a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.81	-0.01	0	Ant 2a	RRFNYFJ9CV	QPSK	1	0	0 mm	back	1:1	0.581	1.476	0.858	0.246	0.363	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.87	0.00	0	Ant 2a	RRFNYFJ9CV	QPSK	25	0	0 mm	back	1:1	0.591	1.455	0.860	0.251	0.365	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.65	0.02	0	Ant 2a	RRFNYFJ9CV	QPSK	50	0	0 mm	back	1:1	0.604	1.531	0.925	0.248	0.380	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.81	-0.06	0	Ant 2a	RRFNYFJ9CV	QPSK	1	0	0 mm	top	1:1	0.003	1.476	0.004	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.87	0.08	0	Ant 2a	RRFNYFJ9CV	QPSK	25	0	0 mm	top	1:1	0.002	1.455	0.003	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.81	0.00	0	Ant 2a	RRFNYFJ9CV	QPSK	1	0	0 mm	bottom	1:1	0.208	1.476	0.307	0.063	0.093	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.87	-0.05	0	Ant 2a	RRFNYFJ9CV	QPSK	25	0	0 mm	bottom	1:1	0.211	1.455	0.307	0.065	0.095	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.81	0.02	0	Ant 2a	RRFNYFJ9CV	QPSK	1	0	0 mm	right	1:1	0.328	1.476	0.484	0.120	0.177	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.87	0.00	0	Ant 2a	RRFNYFJ9CV	QPSK	25	0	0 mm	right	1:1	0.330	1.455	0.480	0.121	0.176	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.81	0.01	0	Ant 2a	RRFNYFJ9CV	QPSK	1	0	0 mm	left	1:1	0.000	1.476	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	12.50	10.87	0.02	0	Ant 2a	RRFNYFJ9CV	QPSK	25	0	0 mm	left	1:1	0.000	1.455	0.000	0.000	0.000	
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 10-34
LTE Band 30 Antenna 1a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.42	-0.02	0	Ant 1a	H4P42VGK7F	QPSK	1	25	0 mm	back	1:1	0.599	1.439	0.862	0.271	0.390	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.46	-0.01	0	Ant 1a	H4P42VGK7F	QPSK	25	25	0 mm	back	1:1	0.638	1.426	0.910	0.285	0.406	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.37	-0.01	0	Ant 1a	H4P42VGK7F	QPSK	50	0	0 mm	back	1:1	0.646	1.455	0.940	0.288	0.419	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.42	-0.02	0	Ant 1a	H4P42VGK7F	QPSK	1	25	0 mm	top	1:1	0.017	1.439	0.024	0.008	0.012	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.46	0.03	0	Ant 1a	H4P42VGK7F	QPSK	25	25	0 mm	top	1:1	0.017	1.426	0.024	0.007	0.010	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.42	0.01	0	Ant 1a	H4P42VGK7F	QPSK	1	25	0 mm	bottom	1:1	0.295	1.439	0.425	0.092	0.132	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.46	-0.01	0	Ant 1a	H4P42VGK7F	QPSK	25	25	0 mm	bottom	1:1	0.304	1.426	0.434	0.095	0.135	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.42	-0.06	0	Ant 1a	H4P42VGK7F	QPSK	1	25	0 mm	right	1:1	0.000	1.439	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.46	-0.05	0	Ant 1a	H4P42VGK7F	QPSK	25	25	0 mm	right	1:1	0.002	1.426	0.003	0.001	0.001	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.42	-0.01	0	Ant 1a	H4P42VGK7F	QPSK	1	25	0 mm	left	1:1	0.573	1.439	0.825	0.209	0.301	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.46	-0.01	0	Ant 1a	H4P42VGK7F	QPSK	25	25	0 mm	left	1:1	0.610	1.426	0.870	0.222	0.317	
2310.00	27710	Mid	LTE Band 30	10	14.00	12.37	0.01	0	Ant 1a	H4P42VGK7F	QPSK	50	0	0 mm	left	1:1	0.624	1.455	0.908	0.223	0.324	
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 10-35
LTE Band 7 Antenna 4 Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.45	0.02	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	back	1:1	0.802	1.245	**0.998**	0.295	0.367	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.39	0.02	0	Ant 4	LVX4YX3VT0	QPSK	1	99	0 mm	back	1:1	0.786	1.262	0.992	0.287	0.362	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.40	13.41	0.00	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	back	1:1	0.746	1.256	0.937	0.276	0.347	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.40	13.40	-0.04	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	back	1:1	0.718	1.259	0.904	0.267	0.336	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.48	0.02	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	back	1:1	0.806	1.236	**0.996**	0.296	0.366	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.40	13.25	0.02	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	back	1:1	0.763	1.303	0.994	0.281	0.366	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.40	13.22	0.02	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	back	1:1	0.750	1.312	0.984	0.274	0.359	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.33	0.03	0	Ant 4	LVX4YX3VT0	QPSK	100	0	0 mm	back	1:1	0.727	1.279	0.930	0.267	0.341	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	14.40	13.46	-0.02	0	Ant 4	LVX4YX3VT0	QPSK	1	99	0 mm	back	1:1	0.802	1.242	**0.996**	0.295	0.366	
2 CC Uplink	SCC	2529.80	21048	Low	LTE Band 7	20								1	0									
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.45	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	top	1:1	0.387	1.245	0.482	0.148	0.184	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.48	0.00	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	top	1:1	0.421	1.236	0.520	0.158	0.195	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.45	0.00	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	bottom	1:1	0.000	1.245	0.000	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.48	0.12	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	bottom	1:1	0.010	1.236	0.012	0.004	0.005	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.45	-0.15	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	right	1:1	0.018	1.245	0.022	0.008	0.010	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.48	-0.07	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	right	1:1	0.018	1.236	0.022	0.007	0.009	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.45	-0.05	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	left	1:1	0.741	1.245	0.923	0.250	0.311	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.40	13.41	0.01	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	left	1:1	0.717	1.256	0.901	0.242	0.304	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.40	13.40	-0.02	0	Ant 4	LVX4YX3VT0	QPSK	1	50	0 mm	left	1:1	0.707	1.259	0.890	0.239	0.301	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.48	0.03	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	left	1:1	0.763	1.236	0.943	0.258	0.319	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.40	13.25	0.01	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	left	1:1	0.739	1.303	0.963	0.249	0.324	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.40	13.22	-0.01	0	Ant 4	LVX4YX3VT0	QPSK	50	25	0 mm	left	1:1	0.735	1.312	0.964	0.247	0.324	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.40	13.33	0.01	0	Ant 4	LVX4YX3VT0	QPSK	100	0	0 mm	left	1:1	0.753	1.279	0.963	0.256	0.327	
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 10-36
LTE Band 7 Antenna 3a Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.11	0.02	0	Ant 3a	Y0X4T66QY6	QPSK	1	50	0 mm	back	1:1	0.431	1.256	0.541	0.188	0.236	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.12	0.04	0	Ant 3a	Y0X4T66QY6	QPSK	50	25	0 mm	back	1:1	0.450	1.253	0.564	0.197	0.247	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.11	0.00	0	Ant 3a	Y0X4T66QY6	QPSK	1	50	0 mm	top	1:1	0.304	1.256	0.382	0.094	0.118	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.12	0.01	0	Ant 3a	Y0X4T66QY6	QPSK	50	25	0 mm	top	1:1	0.313	1.253	0.392	0.097	0.122	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.11	0.02	0	Ant 3a	Y0X4T66QY6	QPSK	1	50	0 mm	bottom	1:1	0.005	1.256	0.006	0.002	0.003	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.12	0.05	0	Ant 3a	Y0X4T66QY6	QPSK	50	25	0 mm	bottom	1:1	0.005	1.253	0.006	0.002	0.003	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.10	11.00	0.03	0	Ant 3a	Y0X4T66QY6	QPSK	1	99	0 mm	right	1:1	0.679	1.288	0.875	0.234	0.301	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.11	-0.02	0	Ant 3a	Y0X4T66QY6	QPSK	1	50	0 mm	right	1:1	0.657	1.256	0.825	0.229	0.288	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	12.10	10.82	0.00	0	Ant 3a	Y0X4T66QY6	QPSK	1	0	0 mm	right	1:1	0.670	1.343	0.900	0.229	0.308	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.10	11.02	-0.02	0	Ant 3a	Y0X4T66QY6	QPSK	50	25	0 mm	right	1:1	0.707	1.282	0.906	0.244	0.313	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.10	11.00	-0.04	0	Ant 3a	Y0X4T66QY6	QPSK	50	50	0 mm	right	1:1	0.693	1.288	0.893	0.245	0.316	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.12	-0.01	0	Ant 3a	Y0X4T66QY6	QPSK	50	25	0 mm	right	1:1	0.684	1.253	0.857	0.238	0.298	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	12.10	11.11	0.02	0	Ant 3a	Y0X4T66QY6	QPSK	50	25	0 mm	right	1:1	0.686	1.256	0.862	0.233	0.293	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.02	0.02	0	Ant 3a	Y0X4T66QY6	QPSK	100	0	0 mm	right	1:1	0.694	1.282	0.890	0.237	0.304	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	12.10	11.76	-0.02	0	Ant 3a	Y0X4T66QY6	QPSK	50	50	0 mm	right	1:1	0.841	1.081	0.909	0.296	0.320	
2 CC Uplink	SCC	2529.80	21048	Low	LTE Band 7	20								50	0									
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.11	0.03	0	Ant 3a	Y0X4T66QY6	QPSK	1	50	0 mm	left	1:1	0.012	1.256	0.015	0.004	0.005	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.12	-0.11	0	Ant 3a	Y0X4T66QY6	QPSK	50	25	0 mm	left	1:1	0.012	1.253	0.015	0.003	0.004	
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 10-37
LTE Band 7 Antenna 2a Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.00	12.70	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	back	1:1	0.730	1.349	0.985	0.295	0.398	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.00	12.66	0.02	0	Ant 2a	K0V2HLHF2L	QPSK	1	99	0 mm	back	1:1	0.708	1.361	0.964	0.295	0.401	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.00	12.95	-0.01	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	back	1:1	0.692	1.274	0.882	0.278	0.354	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.05	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	back	1:1	0.693	1.245	0.863	0.278	0.346	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.00	12.87	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	50	0	0 mm	back	1:1	0.751	1.297	0.974	0.307	0.398	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.00	13.04	-0.03	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	back	1:1	0.717	1.247	0.894	0.288	0.359	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.11	0.01	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	back	1:1	0.717	1.227	0.880	0.287	0.352	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.04	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	100	0	0 mm	back	1:1	0.719	1.247	0.897	0.289	0.360	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	14.00	12.90	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	1	99	0 mm	back	1:1	0.771	1.288	0.993	0.323	0.416	
2 CC Uplink	SCC	2529.80	21048	Low	LTE Band 7	20								1	0									
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.05	-0.03	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	top	1:1	0.020	1.245	0.025	0.007	0.009	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.11	-0.03	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	top	1:1	0.021	1.227	0.026	0.008	0.010	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.05	0.01	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	bottom	1:1	0.440	1.245	0.548	0.135	0.168	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.11	0.02	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	bottom	1:1	0.459	1.227	0.563	0.142	0.174	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.05	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	right	1:1	0.452	1.245	0.563	0.155	0.193	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.11	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	right	1:1	0.466	1.227	0.572	0.160	0.196	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.05	0.00	0	Ant 2a	K0V2HLHF2L	QPSK	1	50	0 mm	left	1:1	0.003	1.245	0.004	0.000	0.000	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.00	13.11	0.02	0	Ant 2a	K0V2HLHF2L	QPSK	50	25	0 mm	left	1:1	0.004	1.227	0.005	0.001	0.001	
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 10-38
LTE Band 7 Antenna 1a Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	13.00	12.45	-0.21	0	Ant 1a	RP04M6VR9H	QPSK	1	99	0 mm	back	1:1	0.871	1.135	0.989	0.360	0.409	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	13.00	12.36	-0.08	0	Ant 1a	RP04M6VR9H	QPSK	1	99	0 mm	back	1:1	0.662	1.159	0.767	0.275	0.319	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.47	0.03	0	Ant 1a	RP04M6VR9H	QPSK	1	99	0 mm	back	1:1	0.678	1.130	0.766	0.283	0.320	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	13.00	12.44	-0.01	0	Ant 1a	RP04M6VR9H	QPSK	50	25	0 mm	back	1:1	0.741	1.138	0.843	0.318	0.362	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	13.00	12.48	-0.05	0	Ant 1a	RP04M6VR9H	QPSK	50	25	0 mm	back	1:1	0.654	1.127	0.737	0.276	0.311	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.54	-0.03	0	Ant 1a	RP04M6VR9H	QPSK	50	25	0 mm	back	1:1	0.697	1.112	0.775	0.291	0.324	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.36	-0.01	0	Ant 1a	RP04M6VR9H	QPSK	100	0	0 mm	back	1:1	0.676	1.159	0.783	0.280	0.325	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	13.00	12.57	0.03	0	Ant 1a	RP04M6VR9H	QPSK	1	99	0 mm	back	1:1	0.883	1.104	0.975	0.371	0.410	A13
2 CC Uplink	SCC	2529.80	21048	Low	LTE Band 7	20								1	0									
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.47	0.03	0	Ant 1a	RP04M6VR9H	QPSK	1	99	0 mm	top	1:1	0.006	1.130	0.007	0.001	0.001	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.54	0.02	0	Ant 1a	RP04M6VR9H	QPSK	50	25	0 mm	top	1:1	0.005	1.112	0.006	0.002	0.002	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.47	0.03	0	Ant 1a	RP04M6VR9H	QPSK	1	99	0 mm	bottom	1:1	0.331	1.130	0.374	0.096	0.108	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.54	-0.08	0	Ant 1a	RP04M6VR9H	QPSK	50	25	0 mm	bottom	1:1	0.333	1.112	0.370	0.096	0.107	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.47	0.06	0	Ant 1a	RP04M6VR9H	QPSK	1	99	0 mm	right	1:1	0.007	1.130	0.008	0.001	0.001	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.54	0.08	0	Ant 1a	RP04M6VR9H	QPSK	50	25	0 mm	right	1:1	0.010	1.112	0.011	0.001	0.001	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.47	0.00	0	Ant 1a	RP04M6VR9H	QPSK	1	99	0 mm	left	1:1	0.575	1.130	0.650	0.196	0.221	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.00	12.54	-0.15	0	Ant 1a	RRFNYFJ9CV	QPSK	50	25	0 mm	left	1:1	0.572	1.112	0.636	0.195	0.217	
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 10-39
LTE Band 41 Antenna 4 Body SAR

MEASUREMENT RESULTS																												
1 CC Uplink / 2CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																						
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.02	0.01	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	back	1:1.58	0.433	1.253	0.543	0.160	0.200	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.00	-0.03	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	back	1:1.58	0.475	1.259	0.598	0.176	0.222	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.20	-0.06	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	back	1:1.58	0.731	1.202	0.879	0.270	0.325	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.14	-0.02	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	back	1:1.58	0.701	1.219	0.855	0.266	0.324	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.13	0.01	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	back	1:1.58	0.737	1.222	0.901	0.276	0.337	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.18	-0.03	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	back	1:1.58	0.522	1.208	0.631	0.193	0.233	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.16	-0.02	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	back	1:1.58	0.580	1.213	0.704	0.216	0.262	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.26	-0.05	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	back	1:1.58	0.740	1.186	0.878	0.274	0.325	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.24	0.00	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	back	1:1.58	0.701	1.191	0.835	0.264	0.314	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.20	0.04	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	back	1:1.58	0.669	1.202	0.804	0.255	0.307	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.19	0.01	0	Ant 4	T56JJ392YN	QPSK	100	0	0 mm	back	1:1.58	0.702	1.205	0.846	0.264	0.318	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.02	-0.01	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	top	1:1.58	0.459	1.253	0.575	0.177	0.222	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.00	0.01	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	top	1:1.58	0.493	1.259	0.621	0.188	0.237	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.20	0.02	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	top	1:1.58	0.536	1.202	0.644	0.202	0.243	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.14	-0.03	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	top	1:1.58	0.522	1.219	0.636	0.195	0.238	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.13	0.00	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	top	1:1.58	0.508	1.222	0.621	0.187	0.229	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.18	-0.01	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	top	1:1.58	0.464	1.208	0.561	0.179	0.216	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.16	0.01	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	top	1:1.58	0.526	1.213	0.638	0.198	0.240	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.26	0.05	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	top	1:1.58	0.543	1.186	0.644	0.204	0.242	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.24	-0.02	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	top	1:1.58	0.524	1.191	0.624	0.195	0.232	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.20	-0.02	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	top	1:1.58	0.495	1.202	0.595	0.182	0.219	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.19	0.01	0	Ant 4	T56JJ392YN	QPSK	100	0	0 mm	top	1:1.58	0.525	1.205	0.633	0.195	0.235	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.20	-0.04	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	bottom	1:1.58	0.006	1.202	0.007	0.002	0.002	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.26	0.04	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	bottom	1:1.58	0.009	1.186	0.011	0.004	0.005	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.20	-0.06	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	right	1:1.58	0.015	1.202	0.018	0.006	0.007	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.26	-0.05	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	right	1:1.58	0.018	1.186	0.021	0.008	0.009	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.02	-0.02	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	left	1:1.58	0.378	1.253	0.474	0.136	0.170	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.00	-0.01	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	left	1:1.58	0.527	1.259	0.663	0.184	0.232	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.20	0.00	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	left	1:1.58	0.642	1.202	0.772	0.221	0.266	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.14	-0.03	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	left	1:1.58	0.679	1.219	0.828	0.234	0.285	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.13	0.08	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	left	1:1.58	0.753	1.222	0.920	0.256	0.313	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.18	0.01	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	left	1:1.58	0.414	1.208	0.500	0.148	0.179	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.16	-0.01	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	left	1:1.58	0.555	1.213	0.673	0.191	0.232	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.26	-0.02	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	left	1:1.58	0.657	1.186	0.779	0.229	0.272	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.24	0.02	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	left	1:1.58	0.703	1.191	0.837	0.242	0.288	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.20	0.02	0	Ant 4	T56JJ392YN	QPSK	50	25	0 mm	left	1:1.58	0.735	1.202	0.883	0.247	0.297	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.19	0.00	0	Ant 4	T56JJ392YN	QPSK	100	0	0 mm	left	1:1.58	0.699	1.205	0.842	0.241	0.290	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	17.60	16.59	0.00	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	left	1:2.31	0.673	1.262	0.849	0.227	0.286	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	16.00	15.21	0.01	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	left	1:1.58	0.776	1.199	0.930	0.260	0.312	
2 CC Uplink - Power Class 3	SCC	2660.20	41292	High	LTE Band 41	20								1	99									
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	17.60	16.65	0.00	0	Ant 4	T56JJ392YN	QPSK	1	0	0 mm	left	1:2.31	0.716	1.245	0.891	0.241	0.300	
2 CC Uplink - Power Class 2	SCC	2660.20	41292	High	LTE Band 41	20								1	99									
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-40
LTE Band 41 Antenna 3a Body SAR

MEASUREMENT RESULTS																												
1 CC Uplink / 2CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																						
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.70	13.60	0.00	0	Ant 3a	WX69TQ05VJ	QPSK	1	99	0 mm	back	1:1.58	0.447	1.288	0.576	0.196	0.252	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.70	13.68	-0.01	0	Ant 3a	WX69TQ05VJ	QPSK	50	25	0 mm	back	1:1.58	0.448	1.265	0.567	0.199	0.252	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.70	13.60	-0.04	0	Ant 3a	WX69TQ05VJ	QPSK	1	99	0 mm	top	1:1.58	0.325	1.288	0.419	0.103	0.133	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.70	13.68	0.00	0	Ant 3a	WX69TQ05VJ	QPSK	50	25	0 mm	top	1:1.58	0.323	1.265	0.409	0.102	0.129	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.70	13.60	-0.07	0	Ant 3a	WX69TQ05VJ	QPSK	1	99	0 mm	bottom	1:1.58	0.005	1.288	0.006	0.002	0.003	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.70	13.68	0.06	0	Ant 3a	WX69TQ05VJ	QPSK	50	25	0 mm	bottom	1:1.58	0.006	1.265	0.008	0.003	0.004	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.70	13.60	-0.01	0	Ant 3a	WX69TQ05VJ	QPSK	1	99	0 mm	right	1:1.58	0.709	1.288	0.913	0.257	0.331	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.70	13.38	0.01	0	Ant 3a	WX69TQ05VJ	QPSK	1	0	0 mm	right	1:1.58	0.638	1.355	0.864	0.231	0.313	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.70	13.37	0.01	0	Ant 3a	WX69TQ05VJ	QPSK	1	0	0 mm	right	1:1.58	0.604	1.358	0.820	0.218	0.296	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.70	13.31	-0.10	0	Ant 3a	WX69TQ05VJ	QPSK	1	0	0 mm	right	1:1.58	0.552	1.377	0.760	0.196	0.270	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.70	13.49	0.01	0	Ant 3a	WX69TQ05VJ	QPSK	1	99	0 mm	right	1:1.58	0.527	1.321	0.696	0.184	0.243	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.70	13.68	0.01	0	Ant 3a	WX69TQ05VJ	QPSK	50	25	0 mm	right	1:1.58	0.718	1.265	0.908	0.264	0.334	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.70	13.57	0.00	0	Ant 3a	WX69TQ05VJ	QPSK	50	25	0 mm	right	1:1.58	0.634	1.297	0.822	0.229	0.297	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.70	13.40	-0.03	0	Ant 3a	WX69TQ05VJ	QPSK	50	25	0 mm	right	1:1.58	0.579	1.349	0.781	0.208	0.281	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.70	13.44	0.00	0	Ant 3a	WX69TQ05VJ	QPSK	50	25	0 mm	right	1:1.58	0.562	1.337	0.751	0.199	0.266	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.70	13.58	0.01	0	Ant 3a	WX69TQ05VJ	QPSK	50	25	0 mm	right	1:1.58	0.548	1.294	0.709	0.192	0.248	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.70	13.55	0.02	0	Ant 3a	WX69TQ05VJ	QPSK	100	0	0 mm	right	1:1.58	0.553	1.303	0.721	0.194	0.253	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	16.30	15.51	0.02	0	Ant 3a	WX69TQ05VJ	QPSK	1	99	0 mm	right	1:2.31	0.679	1.199	0.814	0.245	0.294	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	LTE Band 41	20	14.70	14.42	0.03	0	Ant 3a	WX69TQ05VJ	QPSK	1	99	0 mm	right	1:1.58	0.891	1.067	0.951	0.319	0.340	
2 CC Uplink - Power Class 3	SCC	2525.80	39948	Low	LTE Band 41	20								1	0									
2 CC Uplink - Power Class 2	PCC	2506.00	39750	Low	LTE Band 41	20	16.30	15.43	-0.02	0	Ant 3a	WX69TQ05VJ	QPSK	1	99	0 mm	right	1:2.31	0.696	1.222	0.851	0.249	0.304	
2 CC Uplink - Power Class 2	SCC	2525.80	39948	Low	LTE Band 41	20								1	0									
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.70	13.60	0.00	0	Ant 3a	WX69TQ05VJ	QPSK	1	99	0 mm	left	1:1.58	0.006	1.288	0.008	0.003	0.004	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.70	13.68	-0.01	0	Ant 3a	WX69TQ05VJ	QPSK	50	25	0 mm	left	1:1.58	0.005	1.265	0.006	0.000	0.000	
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 10-41
LTE Band 41 Antenna 2a Body SAR

MEASUREMENT RESULTS																										
LTE CC Uplink [1CC Uplink, Power Class]	Component Carrier	FREQUENCY MHz	FREQUENCY Ch.	Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.04	0.10	0	Ant 2a	H4P42VGK7F	QPSK	1	50	0 mm	back	1:1.58	0.740	1.247	0.923	0.295	0.368			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.11	0.06	0	Ant 2a	H4P42VGK7F	QPSK	1	99	0 mm	back	1:1.58	0.686	1.227	0.842	0.269	0.330			
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.13	0.00	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	back	1:1.58	0.713	1.222	0.871	0.279	0.341			
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.08	0.12	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	back	1:1.58	0.722	1.236	0.892	0.280	0.346			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.16	0.01	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	back	1:1.58	0.703	1.213	0.853	0.270	0.328			
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.09	0.01	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	back	1:1.58	0.774	1.233	0.954	0.305	0.376			
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.08	0.00	0	Ant 2a	H4P42VGK7F	QPSK	50	50	0 mm	back	1:1.58	0.760	1.236	0.939	0.302	0.373			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.16	0.00	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	back	1:1.58	0.727	1.213	0.882	0.285	0.346			
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.18	-0.02	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	back	1:1.58	0.728	1.208	0.879	0.284	0.343			
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.14	0.01	0	Ant 2a	H4P42VGK7F	QPSK	50	50	0 mm	back	1:1.58	0.711	1.219	0.867	0.274	0.334			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.21	0.01	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	back	1:1.58	0.713	1.199	0.855	0.274	0.329			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.15	-0.07	0	Ant 2a	H4P42VGK7F	QPSK	100	0	0 mm	back	1:1.58	0.707	1.216	0.860	0.272	0.331			
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	17.60	16.67	0.00	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	back	1:2.31	0.733	1.239	0.908	0.274	0.339			
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	17.60	16.62	-0.04	0	Ant 2a	H4P42VGK7F	QPSK	50	50	0 mm	back	1:2.31	0.712	1.253	0.892	0.282	0.353			
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	LTE Band 41	20	16.00	15.00	0.00	0	Ant 2a	H4P42VGK7F	QPSK	50	50	0 mm	back	1:1.58	0.709	1.259	0.893	0.279	0.351			
2 CC Uplink - Power Class 3	SCC	2525.80	39948	Low	LTE Band 41	20								50	0											
2 CC Uplink - Power Class 2	PCC	2506.00	39750	Low	LTE Band 41	20	17.60	16.30	0.04	0	Ant 2a	H4P42VGK7F	QPSK	50	50	0 mm	back	1:2.31	0.662	1.349	0.893	0.260	0.351			
2 CC Uplink - Power Class 2	SCC	2525.80	39948	Low	LTE Band 41	20								50	0											
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.16	-0.01	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	top	1:1.58	0.004	1.213	0.005	0.000	0.000			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.21	-0.08	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	top	1:1.58	0.005	1.199	0.006	0.000	0.000			
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.04	-0.06	0	Ant 2a	H4P42VGK7F	QPSK	1	50	0 mm	bottom	1:1.58	0.505	1.247	0.630	0.157	0.196			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.11	0.05	0	Ant 2a	H4P42VGK7F	QPSK	1	99	0 mm	bottom	1:1.58	0.486	1.227	0.596	0.151	0.185			
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.13	0.01	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	bottom	1:1.58	0.480	1.222	0.587	0.148	0.181			
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.08	0.03	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	bottom	1:1.58	0.465	1.236	0.575	0.137	0.169			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.16	0.00	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	bottom	1:1.58	0.501	1.213	0.608	0.150	0.182			
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.09	-0.09	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	bottom	1:1.58	0.536	1.233	0.661	0.168	0.207			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.16	-0.02	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	bottom	1:1.58	0.506	1.213	0.614	0.157	0.190			
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.18	0.05	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	bottom	1:1.58	0.489	1.208	0.591	0.148	0.179			
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.14	0.01	0	Ant 2a	H4P42VGK7F	QPSK	50	50	0 mm	bottom	1:1.58	0.483	1.219	0.589	0.143	0.174			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.21	0.00	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	bottom	1:1.58	0.502	1.199	0.602	0.150	0.180			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.15	-0.04	0	Ant 2a	H4P42VGK7F	QPSK	100	0	0 mm	bottom	1:1.58	0.492	1.216	0.598	0.149	0.181			
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.04	-0.04	0	Ant 2a	H4P42VGK7F	QPSK	1	50	0 mm	right	1:1.58	0.527	1.247	0.657	0.180	0.224			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.11	-0.02	0	Ant 2a	H4P42VGK7F	QPSK	1	99	0 mm	right	1:1.58	0.516	1.227	0.633	0.174	0.213			
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.13	0.04	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	right	1:1.58	0.533	1.222	0.651	0.177	0.216			
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.08	-0.15	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	right	1:1.58	0.564	1.236	0.697	0.186	0.230			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.16	-0.01	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	right	1:1.58	0.558	1.213	0.677	0.183	0.222			
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.09	-0.01	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	right	1:1.58	0.540	1.233	0.666	0.185	0.228			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.16	0.02	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	right	1:1.58	0.537	1.213	0.651	0.181	0.220			
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	15.18	-0.01	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	right	1:1.58	0.539	1.208	0.651	0.179	0.216			
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.14	0.01	0	Ant 2a	H4P42VGK7F	QPSK	50	50	0 mm	right	1:1.58	0.554	1.219	0.675	0.183	0.223			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.21	0.01	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	right	1:1.58	0.566	1.199	0.679	0.185	0.222			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.15	-0.01	0	Ant 2a	H4P42VGK7F	QPSK	100	0	0 mm	right	1:1.58	0.564	1.216	0.686	0.185	0.225			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.16	-0.09	0	Ant 2a	H4P42VGK7F	QPSK	1	0	0 mm	left	1:1.58	0.000	1.213	0.000	0.000	0.000			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	15.21	-0.07	0	Ant 2a	H4P42VGK7F	QPSK	50	25	0 mm	left	1:1.58	0.000	1.199	0.000	0.000	0.000			
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 10-42
LTE Band 41 Antenna 1a Body SAR

MEASUREMENT RESULTS																										
LTE CC Uplink [1CC Uplink, Power Class]	Component Carrier	FREQUENCY MHz	FREQUENCY Ch.	Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	15.40	14.93	0.03	0	Ant 1a	RP04MVR9H	QPSK	1	99	0 mm	back	1:1.58	0.889	1.114	0.990	0.283	0.427			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	14.96	0.08	0	Ant 1a	RP04MVR9H	QPSK	1	50	0 mm	back	1:1.58	0.693	1.107	0.767	0.295	0.327			
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.40	14.44	-0.02	0	Ant 1a	RP04MVR9H	QPSK	1	0	0 mm	back	1:1.58	0.727	1.247	0.907	0.309	0.385			
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	15.40	14.65	0.01	0	Ant 1a	RP04MVR9H	QPSK	1	0	0 mm	back	1:1.58	0.833	1.189	0.990	0.346	0.411			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	15.40	14.84	0.08	0	Ant 1a	RP04MVR9H	QPSK	1	0	0 mm	back	1:1.58	0.872	1.138	0.992	0.367	0.418			
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	15.40	14.80	0.09	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	back	1:1.58	0.739	1.148	0.848	0.309	0.355			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	15.00	0.00	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	back	1:1.58	0.734	1.096	0.804	0.312	0.342			
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.40	14.61	-0.01	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	back	1:1.58	0.760	1.199	0.911	0.322	0.386			
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	15.40	14.99	0.00	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	back	1:1.58	0.900	1.099	0.989	0.379	0.417			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	15.40	14.91	-0.02	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	back	1:1.58	0.876	1.119	0.980	0.368	0.412			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	14.74	0.03	0	Ant 1a	RP04MVR9H	QPSK	100	0	0 mm	back	1:1.58	0.762	1.164	0.887	0.313	0.364			
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.80	-0.04	0	Ant 1a	RP04MVR9H	QPSK	1	0	0 mm	back	1:2.31	0.922	1.047	0.965	0.385	0.403			
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	15.40	14.97	0.03	0	Ant 1a	RP04MVR9H	QPSK	1	0	0 mm	back	1:1.58	0.900	1.104	0.994	0.367	0.405			
2 CC Uplink - Power Class 3	SCC	2660.20	41292	High	LTE Band 41	20								1	99											
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	17.00	16.78	-0.05	0	Ant 1a	RP04MVR9H	QPSK	1	0	0 mm	back	1:2.31	0.933	1.052	0.982	0.377	0.397	A14		
2 CC Uplink - Power Class 2	SCC	2660.20	41292	High	LTE Band 41	20								1	99											
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	14.96	0.10	0	Ant 1a	RP04MVR9H	QPSK	1	50	0 mm	top	1:1.58	0.004	1.107	0.004	0.000	0.000			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	15.00	-0.07	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	top	1:1.58	0.006	1.096	0.007	0.001	0.001			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	14.96	0.02	0	Ant 1a	RP04MVR9H	QPSK	1	50	0 mm	bottom	1:1.58	0.361	1.107	0.400	0.104	0.115			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	15.00	0.00	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	bottom	1:1.58	0.361	1.096	0.396	0.098	0.107			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	14.96	0.02	0	Ant 1a	RP04MVR9H	QPSK	1	50	0 mm	right	1:1.58	0.000	1.107	0.000	0.000	0.000			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	15.00	0.01	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	right	1:1.58	0.000	1.096	0.000	0.000	0.000			
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	15.40	14.93	-0.01	0	Ant 1a	RP04MVR9H	QPSK	1	99	0 mm	left	1:1.58	0.704	1.114	0.784	0.242	0.270			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	14.96	-0.03	0	Ant 1a	RP04MVR9H	QPSK	1	50	0 mm	left	1:1.58	0.597	1.107	0.661	0.203	0.225			
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.40	14.44	0.00	0	Ant 1a	RP04MVR9H	QPSK	1	0	0 mm	left	1:1.58	0.671	1.247	0.837	0.226	0.282			
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	15.40	14.65	0.08	0	Ant 1a	RP04MVR9H	QPSK	1	0	0 mm	left	1:1.58	0.797	1.189	0.948	0.266	0.316			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	15.40	14.84	0.02	0	Ant 1a	RP04MVR9H	QPSK	1	0	0 mm	left	1:1.58	0.809	1.138	0.921	0.263	0.299			
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	15.40	14.80	-0.03	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	left	1:1.58	0.845	1.148	0.970	0.288	0.331			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	15.00	0.01	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	left	1:1.58	0.601	1.096	0.659	0.204	0.224			
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.40	14.61	-0.01	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	left	1:1.58	0.782	1.199	0.938	0.261	0.313			
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	15.40	14.99	0.02	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	left	1:1.58	0.878	1.099	0.965	0.287	0.315			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	15.40	14.91	-0.06	0	Ant 1a	RP04MVR9H	QPSK	50	25	0 mm	left	1:1.58	0.770	1.119	0.862	0.253	0.283			
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	14.74	0.00	0	Ant 1a	RP04MVR9H	QPSK	100	0	0 mm	left	1:1.58	0.680	1.164	0.792	0.226	0.263			
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	17.00	16.78	0.00	0	Ant 1a	RP04MVR9H	QPSK	1	0	0 mm	back	1:2.31	0.886	1.052	0.932	0.350	0.368			
2 CC Uplink - Power Class 2	SCC	2660.20	41292	High	LTE Band 41	20								1	99											
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram								

Note: Blue entry represents variability measurement.

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Table 10-43
LTE Band 48 Antenna 4 Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																						
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.34	0.00	0	Ant 4	Y0X4T66QY6	QPSK	1	50	0 mm	back	1:1	0.589	1.368	0.806	0.174	0.238	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.70	13.20	-0.07	0	Ant 4	Y0X4T66QY6	QPSK	1	99	0 mm	back	1:1	0.694	1.413	0.981	0.199	0.281	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.70	13.24	0.03	0	Ant 4	Y0X4T66QY6	QPSK	1	99	0 mm	back	1:1	0.686	1.400	0.960	0.198	0.277	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.70	13.33	-0.06	0	Ant 4	Y0X4T66QY6	QPSK	1	50	0 mm	back	1:1	0.596	1.371	0.817	0.170	0.233	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.45	-0.01	0	Ant 4	Y0X4T66QY6	QPSK	50	25	0 mm	back	1:1	0.645	1.334	0.860	0.186	0.248	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.70	13.34	-0.01	0	Ant 4	Y0X4T66QY6	QPSK	50	0	0 mm	back	1:1	0.691	1.368	0.945	0.198	0.271	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.70	13.44	-0.01	0	Ant 4	Y0X4T66QY6	QPSK	50	25	0 mm	back	1:1	0.704	1.337	0.941	0.201	0.269	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.70	13.32	-0.04	0	Ant 4	Y0X4T66QY6	QPSK	50	0	0 mm	back	1:1	0.622	1.374	0.855	0.178	0.245	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.31	-0.03	0	Ant 4	Y0X4T66QY6	QPSK	100	0	0 mm	back	1:1	0.649	1.377	0.894	0.186	0.256	
2 CC Uplink	PCC	3603.30	55773	Low-Mid	LTE Band 48	20	14.70	13.66	0.00	0	Ant 4	Y0X4T66QY6	QPSK	1	99	0 mm	back	1:1	0.773	1.271	0.982	0.224	0.285	A15
2 CC Uplink	SCC	3623.10	55971	Low-Mid	LTE Band 48	20								1	0									
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.34	0.06	0	Ant 4	Y0X4T66QY6	QPSK	1	50	0 mm	top	1:1	0.201	1.368	0.275	0.066	0.090	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.45	-0.03	0	Ant 4	Y0X4T66QY6	QPSK	50	25	0 mm	top	1:1	0.213	1.334	0.284	0.070	0.093	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.34	-0.01	0	Ant 4	Y0X4T66QY6	QPSK	1	50	0 mm	bottom	1:1	0.007	1.368	0.010	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.45	0.05	0	Ant 4	Y0X4T66QY6	QPSK	50	25	0 mm	bottom	1:1	0.011	1.334	0.015	0.002	0.003	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.34	0.02	0	Ant 4	Y0X4T66QY6	QPSK	1	50	0 mm	right	1:1	0.000	1.368	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.45	0.02	0	Ant 4	Y0X4T66QY6	QPSK	50	25	0 mm	right	1:1	0.000	1.334	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.34	0.03	0	Ant 4	Y0X4T66QY6	QPSK	1	50	0 mm	left	1:1	0.418	1.368	0.572	0.117	0.160	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.70	13.45	0.02	0	Ant 4	Y0X4T66QY6	QPSK	50	25	0 mm	left	1:1	0.436	1.334	0.582	0.120	0.160	
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 10-44
LTE Band 48 Antenna 3b Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																						
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.50	14.06	0.00	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	back	1:1	0.592	1.393	0.825	0.166	0.231	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.50	14.03	-0.10	0	Ant 3b	V046Y0K0HR	QPSK	1	99	0 mm	back	1:1	0.525	1.403	0.737	0.149	0.209	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.50	14.07	-0.01	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	back	1:1	0.513	1.390	0.713	0.148	0.206	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.50	14.02	0.06	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	back	1:1	0.487	1.406	0.685	0.139	0.195	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.50	13.99	-0.02	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	back	1:1	0.470	1.416	0.666	0.136	0.193	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.50	14.24	0.08	0	Ant 3b	V046Y0K0HR	QPSK	50	25	0 mm	back	1:1	0.567	1.337	0.758	0.159	0.213	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.50	14.17	0.03	0	Ant 3b	V046Y0K0HR	QPSK	50	25	0 mm	back	1:1	0.490	1.358	0.665	0.141	0.191	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.50	14.11	0.03	0	Ant 3b	V046Y0K0HR	QPSK	50	50	0 mm	back	1:1	0.489	1.377	0.673	0.142	0.196	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.50	14.11	-0.04	0	Ant 3b	V046Y0K0HR	QPSK	50	50	0 mm	back	1:1	0.491	1.377	0.676	0.143	0.197	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.50	14.06	0.06	0	Ant 3b	V046Y0K0HR	QPSK	100	0	0 mm	back	1:1	0.496	1.393	0.691	0.143	0.199	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	15.50	14.20	-0.02	0	Ant 3b	V046Y0K0HR	QPSK	1	99	0 mm	back	1:1	0.569	1.349	0.768	0.159	0.214	
2 CC Uplink	SCC	3579.80	55538	Low	LTE Band 48									1	0									
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.50	14.06	0.03	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	top	1:1	0.521	1.393	0.726	0.154	0.215	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.50	14.07	0.01	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	top	1:1	0.506	1.390	0.703	0.150	0.209	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.50	14.02	0.04	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	top	1:1	0.522	1.406	0.734	0.156	0.219	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.50	13.99	-0.02	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	top	1:1	0.537	1.416	0.760	0.159	0.225	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.50	14.24	0.01	0	Ant 3b	V046Y0K0HR	QPSK	50	25	0 mm	top	1:1	0.571	1.337	0.763	0.170	0.227	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.50	14.17	-0.05	0	Ant 3b	V046Y0K0HR	QPSK	50	25	0 mm	top	1:1	0.515	1.358	0.699	0.155	0.210	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.50	14.11	0.04	0	Ant 3b	V046Y0K0HR	QPSK	50	50	0 mm	top	1:1	0.522	1.377	0.719	0.154	0.212	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.50	14.11	-0.01	0	Ant 3b	V046Y0K0HR	QPSK	50	50	0 mm	top	1:1	0.550	1.377	0.757	0.161	0.222	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.50	14.06	-0.01	0	Ant 3b	V046Y0K0HR	QPSK	100	0	0 mm	top	1:1	0.521	1.393	0.726	0.156	0.217	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.50	14.07	0.08	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	bottom	1:1	0.000	1.390	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.50	14.24	0.04	0	Ant 3b	V046Y0K0HR	QPSK	50	25	0 mm	bottom	1:1	0.000	1.337	0.000	0.000	0.000	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.50	14.07	-0.03	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	right	1:1	0.064	1.390	0.089	0.017	0.024	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.50	14.24	-0.05	0	Ant 3b	V046Y0K0HR	QPSK	50	25	0 mm	right	1:1	0.064	1.337	0.086	0.016	0.021	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.50	14.07	-0.08	0	Ant 3b	V046Y0K0HR	QPSK	1	0	0 mm	left	1:1	0.010	1.390	0.014	0.002	0.003	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.50	14.24	0.03	0	Ant 3b	V046Y0K0HR	QPSK	50	25	0 mm	left	1:1	0.007	1.337	0.009	0.000	0.000	
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 10-45
LTE Band 48 Antenna 2b Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																						
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.20	14.03	0.00	0	Ant 2b	JFPF0XQ24V	QPSK	1	0	0 mm	back	1:1	0.663	1.309	0.868	0.182	0.238	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.20	14.05	-0.02	0	Ant 2b	JFPF0XQ24V	QPSK	1	99	0 mm	back	1:1	0.529	1.303	0.689	0.143	0.186	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.14	-0.08	0	Ant 2b	JFPF0XQ24V	QPSK	1	0	0 mm	back	1:1	0.563	1.276	0.718	0.153	0.195	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.20	14.13	-0.04	0	Ant 2b	JFPF0XQ24V	QPSK	1	0	0 mm	back	1:1	0.676	1.279	0.865	0.181	0.231	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.20	14.12	-0.01	0	Ant 2b	JFPF0XQ24V	QPSK	50	0	0 mm	back	1:1	0.663	1.282	0.850	0.181	0.232	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.20	14.16	-0.04	0	Ant 2b	JFPF0XQ24V	QPSK	50	50	0 mm	back	1:1	0.541	1.271	0.688	0.146	0.186	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.30	0.01	0	Ant 2b	JFPF0XQ24V	QPSK	50	25	0 mm	back	1:1	0.569	1.230	0.700	0.154	0.189	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.20	14.26	-0.08	0	Ant 2b	JFPF0XQ24V	QPSK	50	50	0 mm	back	1:1	0.720	1.242	0.894	0.191	0.237	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.13	-0.03	0	Ant 2b	JFPF0XQ24V	QPSK	100	0	0 mm	back	1:1	0.575	1.279	0.735	0.155	0.198	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.14	-0.04	0	Ant 2b	JFPF0XQ24V	QPSK	1	0	0 mm	top	1:1	0.000	1.276	0.000	0.000	0.000	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.30	0.03	0	Ant 2b	JFPF0XQ24V	QPSK	50	25	0 mm	top	1:1	0.000	1.230	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.20	14.03	-0.01	0	Ant 2b	JFPF0XQ24V	QPSK	1	0	0 mm	bottom	1:1	0.759	1.309	0.994	0.216	0.283	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.20	13.97	0.03	0	Ant 2b	JFPF0XQ24V	QPSK	1	99	0 mm	bottom	1:1	0.647	1.327	0.859	0.192	0.255	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.20	14.05	0.00	0	Ant 2b	JFPF0XQ24V	QPSK	1	99	0 mm	bottom	1:1	0.644	1.303	0.839	0.179	0.233	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.14	0.04	0	Ant 2b	JFPF0XQ24V	QPSK	1	0	0 mm	bottom	1:1	0.675	1.276	0.861	0.186	0.237	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.20	14.13	-0.01	0	Ant 2b	JFPF0XQ24V	QPSK	1	0	0 mm	bottom	1:1	0.759	1.279	0.971	0.211	0.270	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.20	14.12	-0.02	0	Ant 2b	JFPF0XQ24V	QPSK	50	0	0 mm	bottom	1:1	0.758	1.282	0.972	0.213	0.273	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.20	14.16	-0.05	0	Ant 2b	JFPF0XQ24V	QPSK	50	50	0 mm	bottom	1:1	0.647	1.271	0.822	0.181	0.230	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.30	0.02	0	Ant 2b	JFPF0XQ24V	QPSK	50	25	0 mm	bottom	1:1	0.689	1.230	0.847	0.191	0.235	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.20	14.26	-0.03	0	Ant 2b	JFPF0XQ24V	QPSK	50	50	0 mm	bottom	1:1	0.711	1.242	0.883	0.198	0.246	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.13	-0.04	0	Ant 2b	JFPF0XQ24V	QPSK	100	0	0 mm	bottom	1:1	0.693	1.279	0.886	0.193	0.247	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	15.20	14.00	0.03	0	Ant 2b	JFPF0XQ24V	QPSK	1	99	0 mm	bottom	1:1	0.621	1.318	0.818	0.184	0.243	
2 CC Uplink	SCC	3579.80	55538	Low										1	0									
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.14	0.01	0	Ant 2b	JFPF0XQ24V	QPSK	1	0	0 mm	right	1:1	0.009	1.276	0.011	0.002	0.003	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.30	0.01	0	Ant 2b	JFPF0XQ24V	QPSK	50	25	0 mm	right	1:1	0.005	1.230	0.006	0.000	0.000	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.14	0.03	0	Ant 2b	JFPF0XQ24V	QPSK	1	0	0 mm	left	1:1	0.002	1.276	0.003	0.000	0.000	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.20	14.30	0.00	0	Ant 2b	JFPF0XQ24V	QPSK	50	25	0 mm	left	1:1	0.003	1.230	0.004	0.000	0.000	

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Table 10-46
LTE Band 48 Antenna 1b Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																						
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	12.62	0.03	0	Ant 1b	JFPF0XQ24V	QPSK	1	0	0 mm	back	1:1	0.595	1.312	0.781	0.158	0.207	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	12.58	-0.04	0	Ant 1b	JFPF0XQ24V	QPSK	1	99	0 mm	back	1:1	0.608	1.324	0.805	0.162	0.214	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.77	0.04	0	Ant 1b	JFPF0XQ24V	QPSK	1	99	0 mm	back	1:1	0.536	1.268	0.680	0.138	0.175	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	12.70	0.08	0	Ant 1b	JFPF0XQ24V	QPSK	1	0	0 mm	back	1:1	0.534	1.288	0.688	0.138	0.178	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	12.84	0.02	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	back	1:1	0.596	1.247	0.743	0.158	0.197	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	12.70	0.06	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	back	1:1	0.633	1.288	0.815	0.172	0.222	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.85	-0.06	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	back	1:1	0.561	1.245	0.698	0.148	0.184	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	12.84	0.03	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	back	1:1	0.521	1.247	0.650	0.134	0.167	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.76	0.01	0	Ant 1b	JFPF0XQ24V	QPSK	100	0	0 mm	back	1:1	0.558	1.271	0.709	0.147	0.187	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.77	0.05	0	Ant 1b	JFPF0XQ24V	QPSK	1	99	0 mm	top	1:1	0.000	1.268	0.000	0.000	0.000	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.85	-0.17	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	top	1:1	0.000	1.245	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	12.62	0.03	0	Ant 1b	JFPF0XQ24V	QPSK	1	0	0 mm	bottom	1:1	0.655	1.312	0.859	0.177	0.232	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	12.61	0.03	0	Ant 1b	JFPF0XQ24V	QPSK	1	99	0 mm	bottom	1:1	0.615	1.315	0.809	0.165	0.217	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	12.58	-0.05	0	Ant 1b	JFPF0XQ24V	QPSK	1	99	0 mm	bottom	1:1	0.556	1.324	0.736	0.147	0.195	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.77	0.03	0	Ant 1b	JFPF0XQ24V	QPSK	1	99	0 mm	bottom	1:1	0.550	1.268	0.697	0.146	0.185	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	12.70	0.03	0	Ant 1b	JFPF0XQ24V	QPSK	1	0	0 mm	bottom	1:1	0.547	1.288	0.705	0.147	0.189	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	12.84	-0.03	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	bottom	1:1	0.664	1.247	0.828	0.182	0.227	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	12.70	0.01	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	bottom	1:1	0.589	1.288	0.759	0.157	0.202	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.85	0.04	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	bottom	1:1	0.568	1.245	0.707	0.152	0.189	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	12.84	0.01	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	bottom	1:1	0.555	1.247	0.692	0.150	0.187	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.76	-0.01	0	Ant 1b	JFPF0XQ24V	QPSK	100	0	0 mm	bottom	1:1	0.564	1.271	0.717	0.149	0.189	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	13.80	12.95	-0.02	0	Ant 1b	JFPF0XQ24V	QPSK	1	99	0 mm	bottom	1:1	0.633	1.216	0.770	0.175	0.213	
2 CC Uplink	SCC	3579.80	55538	Low	LTE Band 48	20								1	0									
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.77	0.00	0	Ant 1b	JFPF0XQ24V	QPSK	1	99	0 mm	right	1:1	0.002	1.268	0.003	0.000	0.000	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.85	0.01	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	right	1:1	0.000	1.245	0.000	0.000	0.000	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.77	0.05	0	Ant 1b	JFPF0XQ24V	QPSK	1	99	0 mm	left	1:1	0.005	1.268	0.006	0.000	0.000	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.85	0.01	0	Ant 1b	JFPF0XQ24V	QPSK	50	25	0 mm	left	1:1	0.004	1.245	0.005	0.000	0.000	

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 10-47
NR n71 Antenna 4 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
680.50	136100	Mid	NR Band n71	20	22.10	20.70	0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.545	1.380	0.752	0.264	0.364	
680.50	136100	Mid	NR Band n71	20	22.10	20.73	0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.572	1.371	0.784	0.277	0.380	
680.50	136100	Mid	NR Band n71	20	22.10	20.70	-0.06	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.502	1.380	0.693	0.228	0.315	
680.50	136100	Mid	NR Band n71	20	22.10	20.73	0.03	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.454	1.371	0.622	0.208	0.285	
680.50	136100	Mid	NR Band n71	20	22.10	20.70	-0.08	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.013	1.380	0.018	0.005	0.007	
680.50	136100	Mid	NR Band n71	20	22.10	20.73	-0.20	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.015	1.371	0.021	0.006	0.008	
680.50	136100	Mid	NR Band n71	20	22.10	20.70	0.00	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.033	1.380	0.046	0.016	0.022	
680.50	136100	Mid	NR Band n71	20	22.10	20.73	-0.03	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.030	1.371	0.041	0.014	0.019	
680.50	136100	Mid	NR Band n71	20	22.10	20.70	-0.01	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.661	1.380	0.912	0.233	0.322	
680.50	136100	Mid	NR Band n71	20	22.10	20.73	0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.582	1.371	0.798	0.212	0.291	
680.50	136100	Mid	NR Band n71	20	22.10	20.69	0.08	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	100	0	0 mm	left	1:1	0.534	1.384	0.739	0.194	0.268	
680.50	136100	Mid	NR Band n71	20	22.10	20.66	-0.04	0.0	Ant 4	LVX4YX3VT0	CP-OFDM	QPSK	1	1	0 mm	left	1:1	0.618	1.393	0.861	0.222	0.309	
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 10-48
NR n71 Antenna 3b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
680.50	136100	Mid	NR Band n71	20	19.40	18.50	0.05	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.727	1.230	0.894	0.355	0.437	
680.50	136100	Mid	NR Band n71	20	19.40	18.30	-0.04	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.676	1.288	0.871	0.329	0.424	
680.50	136100	Mid	NR Band n71	20	19.40	18.20	0.00	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	100	0	0 mm	back	1:1	0.654	1.318	0.862	0.318	0.419	
680.50	136100	Mid	NR Band n71	20	19.40	18.45	-0.02	0.0	Ant 3b	T56JJ392YN	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.754	1.245	0.939	0.364	0.453	A16
680.50	136100	Mid	NR Band n71	20	19.40	18.50	0.10	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.633	1.230	0.779	0.298	0.367	
680.50	136100	Mid	NR Band n71	20	19.40	18.30	0.01	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.620	1.288	0.799	0.290	0.374	
680.50	136100	Mid	NR Band n71	20	19.40	18.20	0.02	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	100	0	0 mm	top	1:1	0.581	1.318	0.766	0.271	0.357	
680.50	136100	Mid	NR Band n71	20	19.40	18.50	0.04	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.003	1.230	0.004	0.000	0.000	
680.50	136100	Mid	NR Band n71	20	19.40	18.30	0.02	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.003	1.288	0.004	0.001	0.001	
680.50	136100	Mid	NR Band n71	20	19.40	18.50	-0.02	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.082	1.230	0.101	0.038	0.047	
680.50	136100	Mid	NR Band n71	20	19.40	18.30	-0.02	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.073	1.288	0.094	0.033	0.043	
680.50	136100	Mid	NR Band n71	20	19.40	18.50	0.03	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.010	1.230	0.012	0.005	0.006	
680.50	136100	Mid	NR Band n71	20	19.40	18.30	-0.03	0.0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.007	1.288	0.009	0.003	0.004	
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 10-49
NR n12 Antenna 4 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
707.50	141500	Mid	NR Band n12	15	21.40	19.92	-0.01	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.541	1.406	0.761	0.301	0.423	
707.50	141500	Mid	NR Band n12	15	21.40	19.90	-0.03	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	36	0	0 mm	back	1:1	0.497	1.413	0.702	0.282	0.398	
707.50	141500	Mid	NR Band n12	15	21.40	19.92	-0.05	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.502	1.406	0.706	0.233	0.328	
707.50	141500	Mid	NR Band n12	15	21.40	19.90	0.02	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	36	0	0 mm	top	1:1	0.496	1.413	0.701	0.231	0.326	
707.50	141500	Mid	NR Band n12	15	21.40	19.92	-0.07	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.017	1.406	0.024	0.007	0.010	
707.50	141500	Mid	NR Band n12	15	21.40	19.90	-0.06	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	36	0	0 mm	bottom	1:1	0.016	1.413	0.023	0.007	0.010	
707.50	141500	Mid	NR Band n12	15	21.40	19.92	0.05	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.025	1.406	0.035	0.011	0.015	
707.50	141500	Mid	NR Band n12	15	21.40	19.90	-0.18	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	36	0	0 mm	right	1:1	0.022	1.413	0.031	0.011	0.016	
707.50	141500	Mid	NR Band n12	15	21.40	19.92	0.07	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.643	1.406	0.904	0.220	0.309	
707.50	141500	Mid	NR Band n12	15	21.40	19.90	0.01	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	36	0	0 mm	left	1:1	0.636	1.413	0.899	0.219	0.309	
707.50	141500	Mid	NR Band n12	15	21.40	19.85	-0.07	0.0	Ant 4	WX69TQ05VJ	DFT-S-OFDM	QPSK	75	0	0 mm	left	1:1	0.592	1.429	0.846	0.209	0.299	
707.50	141500	Mid	NR Band n12	15	21.40	19.83	0.04	0.0	Ant 4	WX69TQ05VJ	CP-OFDM	QPSK	1	1	0 mm	left	1:1	0.614	1.435	0.881	0.213	0.306	
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 10-50
NR n12 Antenna 3b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
707.50	141500	Mid	NR Band n12	15	18.30	17.42	-0.02	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.597	1.225	0.731	0.292	0.358	
707.50	141500	Mid	NR Band n12	15	18.30	17.37	0.00	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	36	0	0 mm	back	1:1	0.581	1.239	0.720	0.288	0.357	
707.50	141500	Mid	NR Band n12	15	18.30	17.42	0.03	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.765	1.225	0.937	0.364	0.446	
707.50	141500	Mid	NR Band n12	15	18.30	17.37	-0.01	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	36	0	0 mm	top	1:1	0.757	1.239	0.938	0.360	0.446	
707.50	141500	Mid	NR Band n12	15	18.30	17.27	-0.03	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	75	0	0 mm	top	1:1	0.732	1.268	0.928	0.349	0.443	
707.50	141500	Mid	NR Band n12	15	18.30	17.35	0.00	0.0	Ant 3b	H9TXRFVC3X	CP-OFDM	QPSK	1	1	0 mm	top	1:1	0.774	1.245	0.964	0.365	0.454	A17
707.50	141500	Mid	NR Band n12	15	18.30	17.42	-0.05	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.004	1.225	0.005	0.002	0.002	
707.50	141500	Mid	NR Band n12	15	18.30	17.37	-0.06	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	36	0	0 mm	bottom	1:1	0.004	1.239	0.005	0.001	0.001	
707.50	141500	Mid	NR Band n12	15	18.30	17.42	0.02	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.060	1.225	0.074	0.027	0.033	
707.50	141500	Mid	NR Band n12	15	18.30	17.37	0.02	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	36	0	0 mm	right	1:1	0.061	1.239	0.076	0.027	0.033	
707.50	141500	Mid	NR Band n12	15	18.30	17.42	-0.02	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.008	1.225	0.010	0.003	0.004	
707.50	141500	Mid	NR Band n12	15	18.30	17.37	-0.03	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	36	0	0 mm	left	1:1	0.010	1.239	0.012	0.004	0.005	
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 10-51
NR n5 Antenna 4 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.91	0.00	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.684	1.094	0.748	0.336	0.368	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.79	0.03	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.664	1.125	0.747	0.328	0.369	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.91	0.02	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.659	1.094	0.721	0.287	0.314	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.79	0.03	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.603	1.125	0.678	0.270	0.304	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.91	0.00	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.021	1.094	0.023	0.011	0.012	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.79	0.06	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.018	1.125	0.020	0.008	0.009	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.91	0.04	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.013	1.094	0.014	0.006	0.007	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.79	-0.13	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.009	1.125	0.010	0.005	0.006	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.91	-0.08	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.865	1.094	0.946	0.313	0.342	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.79	0.12	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.859	1.125	0.966	0.312	0.351	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.77	-0.03	0	Ant 4	RP04M6VR9H	DFT-S-OFDM	QPSK	100	0	0 mm	left	1:1	0.820	1.130	0.927	0.316	0.357	
836.50	167300	Mid	NR Band n5 (Cell)	20	20.30	19.91	0.07	0	Ant 4	RP04M6VR9H	CP-OFDM	QPSK	1	1	0 mm	left	1:1	0.906	1.094	0.991	0.339	0.371	A18
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 10-52
NR n5 Antenna 3b Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																								
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	16.22	-0.04	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.557	1.312	0.731	0.267	0.350	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	15.97	-0.03	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.578	1.390	0.803	0.278	0.386	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	15.91	0.09	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	100	0	0 mm	back	1:1	0.595	1.409	0.838	0.287	0.404	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	16.22	0.00	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.642	1.312	0.842	0.309	0.405	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	15.97	0.05	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.655	1.390	0.910	0.312	0.434	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	15.91	-0.02	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	100	0	0 mm	top	1:1	0.637	1.409	0.898	0.305	0.430	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	16.21	-0.03	0	Ant 3b	T56JJ392YN	CP-OFDM	QPSK	1	1	0 mm	top	1:1	0.664	1.315	0.873	0.315	0.414	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	16.22	-0.06	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.003	1.312	0.004	0.000	0.000	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	15.97	-0.02	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.003	1.390	0.004	0.002	0.003	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	16.22	-0.10	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.055	1.312	0.072	0.025	0.033	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	15.97	0.00	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.058	1.390	0.081	0.026	0.036	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	16.22	-0.03	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.006	1.312	0.008	0.003	0.004	
836.50	167300	Mid	NR Band n5 (Cell)	20	17.40	15.97	0.07	0	Ant 3b	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.004	1.390	0.006	0.002	0.003	
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 10-53
NR n66 Antenna 4 Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																								
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.42	0.02	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	1	108	0 mm	back	1:1	0.693	1.225	0.849	0.278	0.341	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.40	0.06	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	108	108	0 mm	back	1:1	0.607	1.230	0.747	0.243	0.299	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.32	-0.02	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	216	0	0 mm	back	1:1	0.596	1.253	0.747	0.239	0.299	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.65	-0.09	0	Ant 4	YQCTXY6FV5	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.622	1.161	0.722	0.251	0.291	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.42	0.04	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	1	108	0 mm	top	1:1	0.640	1.225	0.784	0.272	0.333	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.40	0.00	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	108	108	0 mm	top	1:1	0.524	1.230	0.645	0.223	0.274	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.42	-0.09	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	1	108	0 mm	bottom	1:1	0.000	1.225	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.40	0.02	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	108	108	0 mm	bottom	1:1	0.000	1.230	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.42	0.07	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	1	108	0 mm	right	1:1	0.008	1.225	0.010	0.003	0.004	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.40	0.04	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	108	108	0 mm	right	1:1	0.016	1.230	0.020	0.007	0.009	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.42	-0.01	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	1	108	0 mm	left	1:1	0.460	1.225	0.564	0.165	0.202	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.40	0.01	0	Ant 4	YQCTXY6FV5	DFT-S-OFDM	QPSK	108	108	0 mm	left	1:1	0.467	1.230	0.574	0.170	0.209	
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 10-54
NR n66 Antenna 3a Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																								
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	12.99	0.02	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	1	108	0 mm	back	1:1	0.394	1.178	0.464	0.177	0.209	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	13.11	-0.19	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	108	54	0 mm	back	1:1	0.390	1.146	0.447	0.172	0.197	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	12.99	-0.01	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	1	108	0 mm	top	1:1	0.274	1.178	0.323	0.088	0.104	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	13.11	0.01	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	108	54	0 mm	top	1:1	0.274	1.146	0.314	0.088	0.101	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	12.99	0.08	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	1	108	0 mm	bottom	1:1	0.007	1.178	0.008	0.003	0.004	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	13.11	-0.03	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	108	54	0 mm	bottom	1:1	0.000	1.146	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	12.99	-0.04	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	1	108	0 mm	right	1:1	0.801	1.178	0.944	0.325	0.383	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	13.11	-0.02	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	108	54	0 mm	right	1:1	0.814	1.146	0.933	0.329	0.377	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	12.90	0.00	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	216	0	0 mm	right	1:1	0.812	1.202	0.976	0.329	0.395	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	13.10	0.00	0	Ant 3a	J27H7DW5VK	CP-OFDM	QPSK	1	1	0 mm	right	1:1	0.715	1.148	0.821	0.297	0.341	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	12.99	0.02	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	1	108	0 mm	left	1:1	0.003	1.178	0.004	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.70	13.11	0.09	0	Ant 3a	J27H7DW5VK	DFT-S-OFDM	QPSK	108	54	0 mm	left	1:1	0.002	1.146	0.002	0.000	0.000	
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 10-55
NR n66 Antenna 2a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.49	0.04	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.974	1.002	0.976	0.431	0.432	A19
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.37	-0.01	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	54	0 mm	back	1:1	0.902	1.030	0.929	0.407	0.419	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.18	-0.05	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	216	0	0 mm	back	1:1	0.816	1.076	0.878	0.375	0.404	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.30	-0.03	0.0	Ant 2a	RRFNYFJ9CV	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.859	1.047	0.899	0.386	0.404	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.49	-0.05	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.004	1.002	0.004	0.002	0.002	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.37	-0.08	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	54	0 mm	top	1:1	0.003	1.030	0.003	0.001	0.001	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.49	-0.02	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.237	1.002	0.237	0.071	0.071	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.37	0.00	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	54	0 mm	bottom	1:1	0.260	1.030	0.268	0.077	0.079	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.49	-0.04	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.673	1.002	0.674	0.272	0.273	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.37	-0.01	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	54	0 mm	right	1:1	0.654	1.030	0.674	0.265	0.273	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.49	-0.04	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.000	1.002	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.37	-0.10	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	54	0 mm	left	1:1	0.000	1.030	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	40	13.50	13.49	-0.01	0.0	Ant 2a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.847	1.002	0.849	0.400	0.401	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram																

Note: Blue entry represents variability measurement.

Table 10-56
NR n66 Antenna 1a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.78	-0.01	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	108	0 mm	back	1:1	0.784	1.127	0.884	0.387	0.436	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.83	-0.06	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	54	0 mm	back	1:1	0.771	1.114	0.859	0.380	0.423	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.72	-0.02	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	216	0	0 mm	back	1:1	0.781	1.143	0.893	0.384	0.439	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.78	0.07	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	108	0 mm	top	1:1	0.024	1.127	0.027	0.010	0.011	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.83	0.07	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	54	0 mm	top	1:1	0.024	1.114	0.027	0.010	0.011	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.78	-0.06	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	108	0 mm	bottom	1:1	0.361	1.127	0.407	0.122	0.137	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.83	-0.06	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	54	0 mm	bottom	1:1	0.360	1.114	0.401	0.121	0.135	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.78	0.10	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	108	0 mm	right	1:1	0.002	1.127	0.002	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.83	-0.04	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	54	0 mm	right	1:1	0.003	1.114	0.003	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.78	-0.04	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	108	0 mm	left	1:1	0.796	1.127	0.897	0.316	0.356	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.83	-0.02	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	54	0 mm	left	1:1	0.814	1.114	0.907	0.320	0.356	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.72	0.00	0.0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	216	0	0 mm	left	1:1	0.810	1.143	0.926	0.327	0.374	
1745.00	349000	Mid	NR Band n66 (AWS)	40	15.30	14.76	-0.03	0.0	Ant 1a	RRFNYFJ9CV	CP-OFDM	QPSK	1	1	0 mm	left	1:1	0.774	1.132	0.876	0.313	0.354	
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 10-57
NR n25 Antenna 4 Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.55	-0.01	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.812	1.216	0.987	0.321	0.390	A20
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.29	0.05	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	108	0	0 mm	back	1:1	0.675	1.291	0.871	0.264	0.341	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.21	0.05	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	216	0	0 mm	back	1:1	0.669	1.315	0.880	0.260	0.342	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.38	0.02	0	Ant 4	CWW4WJJKVG	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.756	1.265	0.956	0.296	0.374	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.55	0.04	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.730	1.216	0.888	0.304	0.370	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.29	-0.06	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	108	0	0 mm	top	1:1	0.656	1.291	0.847	0.271	0.350	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.21	-0.05	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	216	0	0 mm	top	1:1	0.527	1.315	0.693	0.216	0.284	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.55	0.03	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.000	1.216	0.000	0.000	0.000	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.29	0.00	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	108	0	0 mm	bottom	1:1	0.000	1.291	0.000	0.000	0.000	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.55	-0.03	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.025	1.216	0.030	0.010	0.012	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.29	-0.03	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	108	0	0 mm	right	1:1	0.021	1.291	0.027	0.008	0.010	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.55	-0.01	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.262	1.216	0.319	0.094	0.114	
1882.50	376500	Mid	NR Band n25 (PCS)	40	15.40	14.29	0.07	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	108	0	0 mm	left	1:1	0.227	1.291	0.293	0.079	0.102	
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 10-58
NR n25 Antenna 3a Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.21	-0.02	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.312	1.346	0.420	0.139	0.187	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.13	0.06	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	108	0	0 mm	back	1:1	0.302	1.371	0.414	0.134	0.184	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.21	-0.02	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.222	1.346	0.299	0.070	0.094	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.13	0.04	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	108	0	0 mm	top	1:1	0.206	1.371	0.282	0.064	0.088	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.21	-0.06	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.004	1.346	0.005	0.002	0.003	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.13	0.06	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	108	0	0 mm	bottom	1:1	0.000	1.371	0.000	0.000	0.000	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.21	0.02	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.597	1.346	0.804	0.233	0.314	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.13	-0.02	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	108	0	0 mm	right	1:1	0.573	1.371	0.786	0.221	0.303	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.12	0.01	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	216	0	0 mm	right	1:1	0.572	1.374	0.786	0.220	0.302	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.13	0.02	0	Ant 3a	Y0X4T66QY6	CP-OFDM	QPSK	1	1	0 mm	right	1:1	0.633	1.371	0.868	0.244	0.335	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.21	-0.02	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.006	1.346	0.008	0.002	0.003	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.50	12.13	-0.01	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	108	0	0 mm	left	1:1	0.003	1.371	0.004	0.000	0.000	
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 10-59
NR n25 Antenna 2a Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.73	-0.04	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	1	214	0 mm	back	1:1	0.686	1.250	0.858	0.318	0.398	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.62	-0.03	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	108	108	0 mm	back	1:1	0.680	1.282	0.872	0.314	0.403	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.60	0.01	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	216	0	0 mm	back	1:1	0.700	1.288	0.902	0.328	0.422	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.64	-0.01	0.0	Ant 2a	K0V2HLHF2L	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.714	1.276	0.911	0.334	0.426	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.73	-0.08	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	1	214	0 mm	top	1:1	0.011	1.250	0.014	0.004	0.005	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.62	0.07	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	108	108	0 mm	top	1:1	0.014	1.282	0.018	0.006	0.008	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.73	0.00	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	1	214	0 mm	bottom	1:1	0.369	1.250	0.461	0.116	0.145	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.62	0.08	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	108	108	0 mm	bottom	1:1	0.359	1.282	0.460	0.113	0.145	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.73	-0.04	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	1	214	0 mm	right	1:1	0.461	1.250	0.576	0.179	0.224	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.62	0.05	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	108	108	0 mm	right	1:1	0.455	1.282	0.583	0.179	0.229	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.73	0.07	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	1	214	0 mm	left	1:1	0.000	1.250	0.000	0.000	0.000	
1882.50	376500	Mid	NR Band n25 (PCS)	40	13.70	12.62	-0.04	0.0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	108	108	0 mm	left	1:1	0.000	1.282	0.000	0.000	0.000	
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 10-60
NR n25 Antenna 1a Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.31	0.01	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.676	1.315	0.889	0.316	0.416	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.03	0.11	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	108	0	0 mm	back	1:1	0.562	1.403	0.788	0.284	0.398	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.00	0.00	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	216	0	0 mm	back	1:1	0.599	1.413	0.846	0.288	0.407	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.22	-0.04	0.0	Ant 1a	V046Y0K0HR	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.648	1.343	0.870	0.316	0.424	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.31	-0.05	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.010	1.315	0.013	0.004	0.005	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.03	-0.04	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	108	0	0 mm	top	1:1	0.011	1.403	0.015	0.004	0.006	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.31	-0.06	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.267	1.315	0.351	0.093	0.122	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.03	0.02	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	108	0	0 mm	bottom	1:1	0.258	1.403	0.362	0.090	0.126	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.31	-0.04	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.001	1.315	0.001	0.000	0.000	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.03	0.00	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	108	0	0 mm	right	1:1	0.001	1.403	0.001	0.000	0.000	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.31	-0.02	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.551	1.315	0.725	0.222	0.292	
1882.50	376500	Mid	NR Band n25 (PCS)	40	14.50	13.03	-0.08	0.0	Ant 1a	V046Y0K0HR	DFT-S-OFDM	QPSK	108	0	0 mm	left	1:1	0.539	1.403	0.756	0.219	0.307	
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 10-61
NR n30 Antenna 4 Body SAR

MEAS+C2:AB663UREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	462000	Mid	NR Band n30	10	14.40	13.71	0.00	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	50	0 mm	back	1:1	0.703	1.172	0.824	0.301	0.353	
2310.00	462000	Mid	NR Band n30	10	14.40	13.60	0.03	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	25	14	0 mm	back	1:1	0.752	1.202	0.904	0.317	0.381	
2310.00	462000	Mid	NR Band n30	10	14.40	13.58	0.08	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.757	1.208	0.914	0.314	0.379	
2310.00	462000	Mid	NR Band n30	10	14.40	13.71	0.04	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	50	0 mm	top	1:1	0.406	1.172	0.476	0.153	0.179	
2310.00	462000	Mid	NR Band n30	10	14.40	13.60	0.02	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	25	14	0 mm	top	1:1	0.429	1.202	0.516	0.162	0.195	
2310.00	462000	Mid	NR Band n30	10	14.40	13.71	-0.17	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	50	0 mm	bottom	1:1	0.015	1.172	0.018	0.007	0.008	
2310.00	462000	Mid	NR Band n30	10	14.40	13.60	0.02	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	25	14	0 mm	bottom	1:1	0.012	1.202	0.014	0.005	0.006	
2310.00	462000	Mid	NR Band n30	10	14.40	13.71	0.05	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	50	0 mm	right	1:1	0.010	1.172	0.012	0.004	0.005	
2310.00	462000	Mid	NR Band n30	10	14.40	13.60	-0.02	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	25	14	0 mm	right	1:1	0.010	1.202	0.012	0.004	0.005	
2310.00	462000	Mid	NR Band n30	10	14.40	13.71	0.04	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	50	0 mm	left	1:1	0.786	1.172	0.921	0.286	0.335	
2310.00	462000	Mid	NR Band n30	10	14.40	13.60	0.01	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	25	14	0 mm	left	1:1	0.775	1.202	0.932	0.282	0.339	
2310.00	462000	Mid	NR Band n30	10	14.40	13.58	-0.02	0	Ant 4	JFPF0XQ24V	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.786	1.208	0.949	0.287	0.347	
2310.00	462000	Mid	NR Band n30	10	14.40	13.59	0.08	0	Ant 4	JFPF0XQ24V	CP-OFDM	QPSK	1	1	0 mm	left	1:1	0.798	1.205	0.962	0.290	0.349	A21
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 10-62
NR n30 Antenna 3a Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	462000	Mid	NR Band n30	10	12.40	10.92	0.05	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	50	0 mm	back	1:1	0.271	1.406	0.381	0.128	0.180	
2310.00	462000	Mid	NR Band n30	10	12.40	10.83	0.03	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	25	27	0 mm	back	1:1	0.273	1.435	0.392	0.127	0.182	
2310.00	462000	Mid	NR Band n30	10	12.40	10.92	0.08	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	50	0 mm	top	1:1	0.191	1.406	0.269	0.060	0.084	
2310.00	462000	Mid	NR Band n30	10	12.40	10.83	0.00	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	25	27	0 mm	top	1:1	0.178	1.435	0.255	0.055	0.079	
2310.00	462000	Mid	NR Band n30	10	12.40	10.92	-0.05	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	50	0 mm	bottom	1:1	0.002	1.406	0.003	0.000	0.000	
2310.00	462000	Mid	NR Band n30	10	12.40	10.83	0.06	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	25	27	0 mm	bottom	1:1	0.002	1.435	0.003	0.000	0.000	
2310.00	462000	Mid	NR Band n30	10	12.40	10.92	-0.03	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	50	0 mm	right	1:1	0.662	1.406	0.931	0.250	0.352	
2310.00	462000	Mid	NR Band n30	10	12.40	10.83	-0.05	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	25	27	0 mm	right	1:1	0.689	1.435	0.989	0.258	0.370	
2310.00	462000	Mid	NR Band n30	10	12.40	10.75	-0.03	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.639	1.462	0.934	0.243	0.355	
2310.00	462000	Mid	NR Band n30	10	12.40	10.68	0.00	0	Ant 3a	RP04M6VR9H	CP-OFDM	QPSK	1	1	0 mm	right	1:1	0.600	1.486	0.892	0.229	0.340	
2310.00	462000	Mid	NR Band n30	10	12.40	10.92	-0.02	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	50	0 mm	left	1:1	0.002	1.406	0.003	0.000	0.000	
2310.00	462000	Mid	NR Band n30	10	12.40	10.83	-0.07	0	Ant 3a	RP04M6VR9H	DFT-S-OFDM	QPSK	25	27	0 mm	left	1:1	0.003	1.435	0.004	0.000	0.000	
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 10-63
NR n30 Antenna 2a Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	462000	Mid	NR Band n30	10	12.50	11.11	0.10	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	1	26	0 mm	back	1:1	0.584	1.377	0.804	0.244	0.336	
2310.00	462000	Mid	NR Band n30	10	12.50	11.03	-0.08	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	25	27	0 mm	back	1:1	0.584	1.403	0.819	0.248	0.348	
2310.00	462000	Mid	NR Band n30	10	12.50	11.02	0.00	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.626	1.406	0.880	0.268	0.377	
2310.00	462000	Mid	NR Band n30	10	12.50	10.76	0.00	0	Ant 2a	T56JJ392YN	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.631	1.493	0.942	0.267	0.399	
2310.00	462000	Mid	NR Band n30	10	12.50	11.11	-0.08	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	1	26	0 mm	top	1:1	0.003	1.377	0.004	0.000	0.000	
2310.00	462000	Mid	NR Band n30	10	12.50	11.03	-0.04	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	25	27	0 mm	top	1:1	0.003	1.403	0.004	0.000	0.000	
2310.00	462000	Mid	NR Band n30	10	12.50	11.11	0.16	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	1	26	0 mm	bottom	1:1	0.223	1.377	0.307	0.069	0.095	
2310.00	462000	Mid	NR Band n30	10	12.50	11.03	0.09	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	25	27	0 mm	bottom	1:1	0.237	1.403	0.333	0.073	0.102	
2310.00	462000	Mid	NR Band n30	10	12.50	11.11	0.00	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	1	26	0 mm	right	1:1	0.336	1.377	0.463	0.124	0.171	
2310.00	462000	Mid	NR Band n30	10	12.50	11.03	0.01	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	25	27	0 mm	right	1:1	0.332	1.403	0.466	0.122	0.171	
2310.00	462000	Mid	NR Band n30	10	12.50	11.11	-0.02	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	1	26	0 mm	left	1:1	0.000	1.377	0.000	0.000	0.000	
2310.00	462000	Mid	NR Band n30	10	12.50	11.03	0.02	0	Ant 2a	T56JJ392YN	DFT-S-OFDM	QPSK	25	27	0 mm	left	1:1	0.001	1.403	0.001	0.000	0.000	
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 10-64
NR n30 Antenna 1a Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	462000	Mid	NR Band n30	10	14.00	12.57	0.01	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	26	0 mm	back	1:1	0.650	1.390	0.904	0.299	0.416	
2310.00	462000	Mid	NR Band n30	10	14.00	12.46	-0.06	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	25	27	0 mm	back	1:1	0.662	1.426	0.944	0.299	0.426	
2310.00	462000	Mid	NR Band n30	10	14.00	12.38	0.01	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.666	1.452	0.967	0.300	0.436	
2310.00	462000	Mid	NR Band n30	10	14.00	12.47	0.04	0	Ant 1a	RRFNYFJ9CV	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.660	1.422	0.939	0.293	0.417	
2310.00	462000	Mid	NR Band n30	10	14.00	12.57	-0.13	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	26	0 mm	top	1:1	0.031	1.390	0.043	0.012	0.017	
2310.00	462000	Mid	NR Band n30	10	14.00	12.46	0.15	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	25	27	0 mm	top	1:1	0.027	1.426	0.039	0.010	0.014	
2310.00	462000	Mid	NR Band n30	10	14.00	12.57	-0.07	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	26	0 mm	bottom	1:1	0.325	1.390	0.452	0.104	0.145	
2310.00	462000	Mid	NR Band n30	10	14.00	12.46	-0.02	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	25	27	0 mm	bottom	1:1	0.314	1.426	0.448	0.100	0.143	
2310.00	462000	Mid	NR Band n30	10	14.00	12.57	-0.01	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	26	0 mm	right	1:1	0.008	1.390	0.011	0.002	0.003	
2310.00	462000	Mid	NR Band n30	10	14.00	12.46	0.02	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	25	27	0 mm	right	1:1	0.007	1.426	0.010	0.001	0.001	
2310.00	462000	Mid	NR Band n30	10	14.00	12.57	0.00	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	26	0 mm	left	1:1	0.599	1.390	0.833	0.224	0.311	
2310.00	462000	Mid	NR Band n30	10	14.00	12.46	-0.01	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	25	27	0 mm	left	1:1	0.607	1.426	0.866	0.223	0.318	
2310.00	462000	Mid	NR Band n30	10	14.00	12.38	0.00	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.636	1.452	0.923	0.228	0.331	
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 10-65
NR n7 Antenna 4 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2535.00	507000	Mid	NR Band n7	40	14.40	13.44	0.09	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.798	1.247	0.995	0.290	0.362	A22
2535.00	507000	Mid	NR Band n7	40	14.40	13.36	-0.02	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	108	0	0 mm	back	1:1	0.765	1.271	0.972	0.277	0.352	
2535.00	507000	Mid	NR Band n7	40	14.40	13.35	0.00	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	216	0	0 mm	back	1:1	0.747	1.274	0.952	0.274	0.349	
2535.00	507000	Mid	NR Band n7	40	14.40	13.22	-0.09	0	Ant 4	CWW4WJJKVG	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.756	1.312	0.992	0.277	0.363	
2535.00	507000	Mid	NR Band n7	40	14.40	13.44	-0.02	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.396	1.247	0.494	0.121	0.151	
2535.00	507000	Mid	NR Band n7	40	14.40	13.36	0.06	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	108	0	0 mm	top	1:1	0.374	1.271	0.475	0.136	0.173	
2535.00	507000	Mid	NR Band n7	40	14.40	13.44	-0.02	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.006	1.247	0.007	0.002	0.002	
2535.00	507000	Mid	NR Band n7	40	14.40	13.36	0.04	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	108	0	0 mm	bottom	1:1	0.008	1.271	0.010	0.003	0.004	
2535.00	507000	Mid	NR Band n7	40	14.40	13.44	-0.20	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.019	1.247	0.024	0.008	0.010	
2535.00	507000	Mid	NR Band n7	40	14.40	13.36	-0.05	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	108	0	0 mm	right	1:1	0.021	1.271	0.027	0.008	0.010	
2535.00	507000	Mid	NR Band n7	40	14.40	13.44	-0.01	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.701	1.247	0.874	0.241	0.301	
2535.00	507000	Mid	NR Band n7	40	14.40	13.36	-0.04	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	108	0	0 mm	left	1:1	0.682	1.271	0.867	0.232	0.295	
2535.00	507000	Mid	NR Band n7	40	14.40	13.35	-0.02	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	216	0	0 mm	left	1:1	0.679	1.274	0.865	0.231	0.294	
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 10-66
NR n7 Antenna 3a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2535.00	507000	Mid	NR Band n7	40	12.10	11.07	0.00	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.451	1.268	0.572	0.195	0.247	
2535.00	507000	Mid	NR Band n7	40	12.10	11.10	0.01	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	108	54	0 mm	back	1:1	0.464	1.259	0.584	0.199	0.251	
2535.00	507000	Mid	NR Band n7	40	12.10	11.07	0.02	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.297	1.268	0.377	0.094	0.119	
2535.00	507000	Mid	NR Band n7	40	12.10	11.10	0.07	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	108	54	0 mm	top	1:1	0.314	1.259	0.395	0.099	0.125	
2535.00	507000	Mid	NR Band n7	40	12.10	11.07	0.20	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.003	1.268	0.004	0.000	0.000	
2535.00	507000	Mid	NR Band n7	40	12.10	11.10	-0.01	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	108	54	0 mm	bottom	1:1	0.003	1.259	0.004	0.000	0.000	
2535.00	507000	Mid	NR Band n7	40	12.10	11.07	-0.05	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.707	1.268	0.896	0.252	0.320	
2535.00	507000	Mid	NR Band n7	40	12.10	11.10	-0.03	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	108	54	0 mm	right	1:1	0.654	1.259	0.823	0.235	0.296	
2535.00	507000	Mid	NR Band n7	40	12.10	11.06	0.02	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	216	0	0 mm	right	1:1	0.675	1.271	0.858	0.239	0.304	
2535.00	507000	Mid	NR Band n7	40	12.10	10.97	-0.02	0	Ant 3a	LVX4YX3VT0	CP-OFDM	QPSK	1	1	0 mm	right	1:1	0.737	1.297	0.956	0.263	0.341	
2535.00	507000	Mid	NR Band n7	40	12.10	11.07	-0.06	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.015	1.268	0.019	0.003	0.004	
2535.00	507000	Mid	NR Band n7	40	12.10	11.10	-0.02	0	Ant 3a	LVX4YX3VT0	DFT-S-OFDM	QPSK	108	54	0 mm	left	1:1	0.013	1.259	0.016	0.004	0.005	
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 10-67
NR n7 Antenna 2a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2535.00	507000	Mid	NR Band n7	40	14.00	13.08	0.07	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	1	108	0 mm	back	1:1	0.723	1.236	0.894	0.310	0.383	
2535.00	507000	Mid	NR Band n7	40	14.00	13.11	-0.05	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	108	108	0 mm	back	1:1	0.715	1.227	0.877	0.304	0.373	
2535.00	507000	Mid	NR Band n7	40	14.00	13.04	0.00	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	216	0	0 mm	back	1:1	0.731	1.247	0.912	0.299	0.373	
2535.00	507000	Mid	NR Band n7	40	14.00	13.03	0.01	0	Ant 2a	K0V2HLHF2L	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.704	1.250	0.880	0.298	0.373	
2535.00	507000	Mid	NR Band n7	40	14.00	13.08	-0.10	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	1	108	0 mm	top	1:1	0.016	1.236	0.020	0.006	0.007	
2535.00	507000	Mid	NR Band n7	40	14.00	13.11	-0.01	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	108	108	0 mm	top	1:1	0.016	1.227	0.020	0.007	0.009	
2535.00	507000	Mid	NR Band n7	40	14.00	13.08	0.03	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	1	108	0 mm	bottom	1:1	0.495	1.236	0.612	0.157	0.194	
2535.00	507000	Mid	NR Band n7	40	14.00	13.11	-0.05	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	108	108	0 mm	bottom	1:1	0.475	1.227	0.583	0.148	0.182	
2535.00	507000	Mid	NR Band n7	40	14.00	13.08	0.00	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	1	108	0 mm	right	1:1	0.445	1.236	0.550	0.154	0.190	
2535.00	507000	Mid	NR Band n7	40	14.00	13.11	0.05	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	108	108	0 mm	right	1:1	0.470	1.227	0.577	0.162	0.199	
2535.00	507000	Mid	NR Band n7	40	14.00	13.08	0.06	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	1	108	0 mm	left	1:1	0.000	1.236	0.000	0.000	0.000	
2535.00	507000	Mid	NR Band n7	40	14.00	13.11	-0.04	0	Ant 2a	K0V2HLHF2L	DFT-S-OFDM	QPSK	108	108	0 mm	left	1:1	0.000	1.227	0.000	0.000	0.000	
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 10-68
NR n7 Antenna 1a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2535.00	507000	Mid	NR Band n7	40	13.00	12.30	0.01	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	108	0 mm	back	1:1	0.619	1.175	0.727	0.270	0.317	
2535.00	507000	Mid	NR Band n7	40	13.00	12.33	-0.02	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	0	0 mm	back	1:1	0.681	1.167	0.795	0.294	0.343	
2535.00	507000	Mid	NR Band n7	40	13.00	12.24	-0.03	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	216	0	0 mm	back	1:1	0.674	1.191	0.803	0.287	0.342	
2535.00	507000	Mid	NR Band n7	40	13.00	12.05	0.04	0	Ant 1a	RRFNYFJ9CV	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.762	1.245	0.949	0.331	0.412	
2535.00	507000	Mid	NR Band n7	40	13.00	12.30	-0.21	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	108	0 mm	top	1:1	0.016	1.175	0.019	0.007	0.008	
2535.00	507000	Mid	NR Band n7	40	13.00	12.33	0.06	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	0	0 mm	top	1:1	0.013	1.167	0.015	0.005	0.006	
2535.00	507000	Mid	NR Band n7	40	13.00	12.30	-0.06	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	108	0 mm	bottom	1:1	0.320	1.175	0.376	0.093	0.109	
2535.00	507000	Mid	NR Band n7	40	13.00	12.33	0.05	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	0	0 mm	bottom	1:1	0.358	1.167	0.418	0.103	0.120	
2535.00	507000	Mid	NR Band n7	40	13.00	12.30	-0.05	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	108	0 mm	right	1:1	0.013	1.175	0.015	0.004	0.005	
2535.00	507000	Mid	NR Band n7	40	13.00	12.33	-0.04	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	0	0 mm	right	1:1	0.012	1.167	0.014	0.004	0.005	
2535.00	507000	Mid	NR Band n7	40	13.00	12.30	0.01	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	1	108	0 mm	left	1:1	0.506	1.175	0.595	0.169	0.199	
2535.00	507000	Mid	NR Band n7	40	13.00	12.33	0.03	0	Ant 1a	RRFNYFJ9CV	DFT-S-OFDM	QPSK	108	0	0 mm	left	1:1	0.510	1.167	0.595	0.181	0.211	
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 10-69
NR n41 PC2 Antenna 4 Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2592.99	518598	Mid	NR Band n41	100	14.00	12.52	0.06	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.589	1.406	0.828	0.209	0.294	
2592.99	518598	Mid	NR Band n41	100	14.00	12.40	0.00	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:1	0.663	1.445	0.958	0.236	0.341	
2592.99	518598	Mid	NR Band n41	100	14.00	12.38	0.02	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.655	1.452	0.951	0.235	0.341	
2592.99	518598	Mid	NR Band n41	100	14.00	12.38	-0.03	0	Ant 4	CWW4WJJKVG	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.635	1.452	0.922	0.228	0.331	
2592.99	518598	Mid	NR Band n41	100	14.00	12.52	-0.03	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.511	1.406	0.718	0.191	0.269	
2592.99	518598	Mid	NR Band n41	100	14.00	12.40	0.01	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	135	0	0 mm	top	1:1	0.500	1.445	0.723	0.187	0.270	
2592.99	518598	Mid	NR Band n41	100	14.00	12.38	-0.02	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	270	0	0 mm	top	1:1	0.489	1.452	0.710	0.180	0.261	
2592.99	518598	Mid	NR Band n41	100	14.00	12.52	-0.01	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.010	1.406	0.014	0.004	0.006	
2592.99	518598	Mid	NR Band n41	100	14.00	12.40	-0.04	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	135	0	0 mm	bottom	1:1	0.014	1.445	0.020	0.005	0.007	
2592.99	518598	Mid	NR Band n41	100	14.00	12.52	-0.04	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.007	1.406	0.010	0.002	0.003	
2592.99	518598	Mid	NR Band n41	100	14.00	12.40	-0.02	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	135	0	0 mm	right	1:1	0.012	1.445	0.017	0.005	0.007	
2592.99	518598	Mid	NR Band n41	100	14.00	12.52	0.01	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.501	1.406	0.704	0.171	0.240	
2592.99	518598	Mid	NR Band n41	100	14.00	12.40	0.03	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	135	0	0 mm	left	1:1	0.541	1.445	0.782	0.183	0.264	
2592.99	518598	Mid	NR Band n41	100	14.00	12.38	-0.05	0	Ant 4	CWW4WJJKVG	DFT-S-OFDM	QPSK	270	0	0 mm	left	1:1	0.569	1.452	0.826	0.192	0.279	
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 10-70
NR n41 PC2 Antenna 3a Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2592.99	518598	Mid	NR Band n41	100	12.80	12.12	-0.01	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.488	1.169	0.570	0.220	0.257	
2592.99	518598	Mid	NR Band n41	100	12.80	11.86	0.03	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.333	1.242	0.414	0.144	0.179	
2592.99	518598	Mid	NR Band n41	100	12.80	12.12	0.01	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.409	1.169	0.478	0.127	0.148	
2592.99	518598	Mid	NR Band n41	100	12.80	11.86	-0.04	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	135	69	0 mm	top	1:1	0.251	1.242	0.312	0.077	0.096	
2592.99	518598	Mid	NR Band n41	100	12.80	12.12	0.02	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.008	1.169	0.009	0.002	0.002	
2592.99	518598	Mid	NR Band n41	100	12.80	11.86	0.07	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	135	69	0 mm	bottom	1:1	0.009	1.242	0.011	0.003	0.004	
2592.99	518598	Mid	NR Band n41	100	12.80	12.12	0.00	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.851	1.169	**0.995**	0.302	0.353	A23
2592.99	518598	Mid	NR Band n41	100	12.80	11.86	0.04	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.699	1.242	0.868	0.243	0.302	
2592.99	518598	Mid	NR Band n41	100	12.80	11.80	0.03	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	270	0	0 mm	right	1:1	0.714	1.259	0.899	0.248	0.312	
2592.99	518598	Mid	NR Band n41	100	12.80	11.96	0.04	0	Ant 3a	Y0X4T66QY6	CP-OFDM	QPSK	1	1	0 mm	right	1:1	0.819	1.213	0.993	0.291	0.353	
2592.99	518598	Mid	NR Band n41	100	12.80	12.12	0.01	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.000	1.169	0.000	0.000	0.000	
2592.99	518598	Mid	NR Band n41	100	12.80	11.86	0.04	0	Ant 3a	Y0X4T66QY6	DFT-S-OFDM	QPSK	135	69	0 mm	left	1:1	0.000	1.242	0.000	0.000	0.000	
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 10-71
NR n41 PC2 Antenna 2a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2592.99	518598	Mid	NR Band n41	100	13.50	12.48	0.10	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.740	1.265	0.936	0.299	0.378	
2592.99	518598	Mid	NR Band n41	100	13.50	12.35	0.00	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.720	1.303	0.938	0.293	0.382	
2592.99	518598	Mid	NR Band n41	100	13.50	12.34	0.03	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.732	1.306	0.956	0.294	0.384	
2592.99	518598	Mid	NR Band n41	100	13.50	12.39	-0.03	0	Ant 2a	RP04M6VR9H	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.768	1.291	0.991	0.318	0.411	
2592.99	518598	Mid	NR Band n41	100	13.50	12.48	-0.04	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	137	0 mm	top	1:1	0.016	1.265	0.020	0.005	0.006	
2592.99	518598	Mid	NR Band n41	100	13.50	12.35	-0.03	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	135	69	0 mm	top	1:1	0.014	1.303	0.018	0.005	0.007	
2592.99	518598	Mid	NR Band n41	100	13.50	12.48	0.06	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	137	0 mm	bottom	1:1	0.461	1.265	0.583	0.142	0.180	
2592.99	518598	Mid	NR Band n41	100	13.50	12.35	-0.02	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	135	69	0 mm	bottom	1:1	0.447	1.303	0.582	0.138	0.180	
2592.99	518598	Mid	NR Band n41	100	13.50	12.48	0.03	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	137	0 mm	right	1:1	0.506	1.265	0.640	0.174	0.220	
2592.99	518598	Mid	NR Band n41	100	13.50	12.35	0.00	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.498	1.303	0.649	0.170	0.222	
2592.99	518598	Mid	NR Band n41	100	13.50	12.34	0.09	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	270	0	0 mm	right	1:1	0.513	1.306	0.670	0.175	0.229	
2592.99	518598	Mid	NR Band n41	100	13.50	12.48	0.08	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	137	0 mm	left	1:1	0.002	1.265	0.003	0.000	0.000	
2592.99	518598	Mid	NR Band n41	100	13.50	12.35	-0.18	0	Ant 2a	RP04M6VR9H	DFT-S-OFDM	QPSK	135	69	0 mm	left	1:1	0.000	1.303	0.000	0.000	0.000	
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 10-72
NR n41 PC2 Antenna 1a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2592.99	518598	Mid	NR Band n41	100	14.30	13.40	-0.02	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.806	1.230	0.991	0.350	0.431	
2592.99	518598	Mid	NR Band n41	100	14.30	13.30	-0.06	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:1	0.750	1.259	0.944	0.322	0.405	
2592.99	518598	Mid	NR Band n41	100	14.30	13.20	0.00	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.732	1.288	0.943	0.315	0.406	
2592.99	518598	Mid	NR Band n41	100	14.30	13.26	0.01	0	Ant 1a	RP04M6VR9H	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.786	1.271	0.999	0.340	0.432	
2592.99	518598	Mid	NR Band n41	100	14.30	13.40	-0.04	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.014	1.230	0.017	0.005	0.006	
2592.99	518598	Mid	NR Band n41	100	14.30	13.30	0.06	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	135	0	0 mm	top	1:1	0.009	1.259	0.011	0.003	0.004	
2592.99	518598	Mid	NR Band n41	100	14.30	13.40	-0.01	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.359	1.230	0.442	0.106	0.130	
2592.99	518598	Mid	NR Band n41	100	14.30	13.30	0.08	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	135	0	0 mm	bottom	1:1	0.360	1.259	0.453	0.105	0.132	
2592.99	518598	Mid	NR Band n41	100	14.30	13.40	-0.07	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.000	1.230	0.000	0.000	0.000	
2592.99	518598	Mid	NR Band n41	100	14.30	13.30	-0.01	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	135	0	0 mm	right	1:1	0.000	1.259	0.000	0.000	0.000	
2592.99	518598	Mid	NR Band n41	100	14.30	13.40	0.02	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.658	1.230	0.809	0.226	0.278	
2592.99	518598	Mid	NR Band n41	100	14.30	13.30	-0.02	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	135	0	0 mm	left	1:1	0.665	1.259	0.837	0.229	0.288	
2592.99	518598	Mid	NR Band n41	100	14.30	13.20	-0.06	0	Ant 1a	RP04M6VR9H	DFT-S-OFDM	QPSK	270	0	0 mm	left	1:1	0.728	1.288	0.938	0.250	0.322	
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 10-73
NR n77 DoD PC2 Antenna 4 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3500.01	633334	Mid	NR Band n77	100	11.60	10.60	0.00	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.557	1.259	0.701	0.161	0.203	
3500.01	633334	Mid	NR Band n77	100	11.60	10.54	-0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.439	1.276	0.560	0.131	0.167	
3500.01	633334	Mid	NR Band n77	100	11.60	10.44	0.03	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.519	1.306	0.678	0.149	0.195	
3500.01	633334	Mid	NR Band n77	100	11.60	10.53	-0.04	0.0	Ant 4	LVX4YX3VT0	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.384	1.279	0.491	0.116	0.148	
3500.01	633334	Mid	NR Band n77	100	11.60	10.60	0.00	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.122	1.259	0.154	0.040	0.050	
3500.01	633334	Mid	NR Band n77	100	11.60	10.54	0.10	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	69	0 mm	top	1:1	0.138	1.276	0.176	0.045	0.057	
3500.01	633334	Mid	NR Band n77	100	11.60	10.60	-0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.003	1.259	0.004	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	11.60	10.54	0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	69	0 mm	bottom	1:1	0.005	1.276	0.006	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	11.60	10.60	0.03	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.000	1.259	0.000	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	11.60	10.54	0.03	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.000	1.276	0.000	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	11.60	10.60	0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.239	1.259	0.301	0.065	0.082	
3500.01	633334	Mid	NR Band n77	100	11.60	10.54	-0.01	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	69	0 mm	left	1:1	0.239	1.276	0.305	0.064	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 10-74
NR n77 DoD PC2 Antenna 3b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3500.01	633334	Mid	NR Band n77	100	14.40	13.40	0.01	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.719	1.259	0.905	0.203	0.256	
3500.01	633334	Mid	NR Band n77	100	14.40	13.35	0.04	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.716	1.274	0.912	0.201	0.256	
3500.01	633334	Mid	NR Band n77	100	14.40	13.20	0.02	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.755	1.318	0.995	0.213	0.281	
3500.01	633334	Mid	NR Band n77	100	14.40	13.21	0.01	0.0	Ant 3b	H9TXRFVC3X	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.710	1.315	0.934	0.200	0.263	
3500.01	633334	Mid	NR Band n77	100	14.40	13.40	0.01	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	1	137	0 mm	top	1:1	0.608	1.259	0.765	0.186	0.234	
3500.01	633334	Mid	NR Band n77	100	14.40	13.35	0.03	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	135	69	0 mm	top	1:1	0.635	1.274	0.809	0.193	0.246	
3500.01	633334	Mid	NR Band n77	100	14.40	13.20	-0.07	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	270	0	0 mm	top	1:1	0.631	1.318	0.832	0.195	0.257	
3500.01	633334	Mid	NR Band n77	100	14.40	13.40	0.01	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	1	137	0 mm	bottom	1:1	0.001	1.259	0.001	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	14.40	13.35	-0.09	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	135	69	0 mm	bottom	1:1	0.002	1.274	0.003	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	14.40	13.40	0.03	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	1	137	0 mm	right	1:1	0.082	1.259	0.103	0.021	0.026	
3500.01	633334	Mid	NR Band n77	100	14.40	13.35	0.01	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.084	1.274	0.107	0.022	0.028	
3500.01	633334	Mid	NR Band n77	100	14.40	13.40	0.05	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	1	137	0 mm	left	1:1	0.013	1.259	0.016	0.003	0.004	
3500.01	633334	Mid	NR Band n77	100	14.40	13.35	0.06	0.0	Ant 3b	H9TXRFVC3X	DFT-S-OFDM	QPSK	135	69	0 mm	left	1:1	0.008	1.274	0.010	0.000	0.000	
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 10-75
NR n77 DoD PC2 Antenna 2b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3500.01	633334	Mid	NR Band n77	100	12.50	12.05	-0.03	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.861	1.109	0.955	0.241	0.267	A24
3500.01	633334	Mid	NR Band n77	100	12.50	11.83	0.01	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.824	1.167	0.962	0.228	0.266	
3500.01	633334	Mid	NR Band n77	100	12.50	11.82	-0.02	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.798	1.169	0.933	0.224	0.262	
3500.01	633334	Mid	NR Band n77	100	12.50	11.77	0.01	0.0	Ant 2b	Y0X4T66QY6	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.797	1.183	0.943	0.221	0.261	
3500.01	633334	Mid	NR Band n77	100	12.50	12.05	0.03	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	137	0 mm	top	1:1	0.000	1.109	0.000	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	12.50	11.83	0.08	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	135	69	0 mm	top	1:1	0.000	1.167	0.000	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	12.50	12.05	0.03	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	137	0 mm	bottom	1:1	0.643	1.109	0.713	0.184	0.204	
3500.01	633334	Mid	NR Band n77	100	12.50	11.83	0.04	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	135	69	0 mm	bottom	1:1	0.631	1.167	0.736	0.181	0.211	
3500.01	633334	Mid	NR Band n77	100	12.50	11.82	0.03	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	270	0	0 mm	bottom	1:1	0.781	1.169	0.913	0.219	0.256	
3500.01	633334	Mid	NR Band n77	100	12.50	12.05	-0.07	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	137	0 mm	right	1:1	0.010	1.109	0.011	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	12.50	11.83	0.01	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.010	1.167	0.012	0.001	0.001	
3500.01	633334	Mid	NR Band n77	100	12.50	12.05	0.08	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	137	0 mm	left	1:1	0.007	1.109	0.008	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	12.50	11.83	0.01	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	135	69	0 mm	left	1:1	0.006	1.167	0.007	0.000	0.000	
3500.01	633334	Mid	NR Band n77	100	12.50	12.05	-0.06	0.0	Ant 2b	Y0X4T66QY6	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.832	1.109	0.923	0.229	0.254	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram										

Note: Blue entry represents variability measurement.

Table 10-76
NR n77 DoD PC2 Antenna 1b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3500.01	633334	Low	NR Band n77	100	12.70	11.95	0.00	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	271	0 mm	back	1:1	0.833	1.189	0.990	0.217	0.258	
3500.01	633334	Low	NR Band n77	100	12.70	11.92	-0.06	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.825	1.197	0.988	0.219	0.262	
3500.01	633334	Low	NR Band n77	100	12.70	11.91	-0.04	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.783	1.199	0.939	0.206	0.247	
3500.01	633334	Low	NR Band n77	100	12.70	11.95	-0.03	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	271	0 mm	top	1:1	0.000	1.189	0.000	0.000	0.000	
3500.01	633334	Low	NR Band n77	100	12.70	11.92	0.02	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	69	0 mm	top	1:1	0.000	1.197	0.000	0.000	0.000	
3500.01	633334	Low	NR Band n77	100	12.70	11.95	-0.02	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	271	0 mm	bottom	1:1	0.797	1.189	0.948	0.227	0.270	
3500.01	633334	Low	NR Band n77	100	12.70	11.92	-0.04	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	69	0 mm	bottom	1:1	0.647	1.197	0.774	0.184	0.220	
3500.01	633334	Low	NR Band n77	100	12.70	11.91	0.00	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	270	0	0 mm	bottom	1:1	0.829	1.199	0.994	0.235	0.282	
3500.01	633334	Low	NR Band n77	100	12.70	11.81	0.00	0.0	Ant 1b	T56JJ392YN	CP-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.744	1.227	0.913	0.211	0.259	
3500.01	633334	Low	NR Band n77	100	12.70	11.95	0.08	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	271	0 mm	right	1:1	0.007	1.189	0.008	0.000	0.000	
3500.01	633334	Low	NR Band n77	100	12.70	11.92	-0.05	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.008	1.197	0.010	0.001	0.001	
3500.01	633334	Low	NR Band n77	100	12.70	11.95	-0.13	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	271	0 mm	left	1:1	0.014	1.189	0.017	0.001	0.001	
3500.01	633334	Low	NR Band n77	100	12.70	11.92	-0.03	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	69	0 mm	left	1:1	0.011	1.197	0.013	0.001	0.001	
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 10-77
NR n77 C PC2 Antenna 4 Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	NR Band n77	100	11.60	10.67	-0.09	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	271	0 mm	back	1:1	0.495	1.239	0.613	0.133	0.165	
3930.00	662000	High	NR Band n77	100	11.60	10.95	0.01	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	271	0 mm	back	1:1	0.853	1.161	0.990	0.240	0.279	A25
3750.00	650000	Low	NR Band n77	100	11.60	10.63	0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:1	0.490	1.250	0.613	0.137	0.171	
3930.00	662000	High	NR Band n77	100	11.60	10.99	0.05	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	138	0 mm	back	1:1	0.821	1.151	0.945	0.228	0.262	
3930.00	662000	High	NR Band n77	100	11.60	10.77	0.00	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.770	1.211	0.932	0.222	0.269	
3930.00	662000	High	NR Band n77	100	11.60	10.74	0.03	0.0	Ant 4	LVX4YX3VT0	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.632	1.219	0.770	0.178	0.217	
3930.00	662000	High	NR Band n77	100	11.60	10.95	0.01	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	271	0 mm	top	1:1	0.298	1.161	0.346	0.080	0.093	
3930.00	662000	High	NR Band n77	100	11.60	10.99	-0.07	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	138	0 mm	top	1:1	0.283	1.151	0.326	0.078	0.090	
3930.00	662000	High	NR Band n77	100	11.60	10.95	0.05	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	271	0 mm	bottom	1:1	0.005	1.161	0.006	0.000	0.000	
3930.00	662000	High	NR Band n77	100	11.60	10.99	-0.06	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	138	0 mm	bottom	1:1	0.004	1.151	0.005	0.000	0.000	
3930.00	662000	High	NR Band n77	100	11.60	10.95	0.01	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	271	0 mm	right	1:1	0.000	1.161	0.000	0.000	0.000	
3930.00	662000	High	NR Band n77	100	11.60	10.99	0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	138	0 mm	right	1:1	0.000	1.151	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	11.60	10.67	0.03	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	271	0 mm	left	1:1	0.259	1.239	0.321	0.066	0.082	
3930.00	662000	High	NR Band n77	100	11.60	10.95	0.05	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	271	0 mm	left	1:1	0.705	1.161	0.819	0.177	0.205	
3750.00	650000	Low	NR Band n77	100	11.60	10.63	-0.09	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	0	0 mm	left	1:1	0.267	1.250	0.334	0.069	0.086	
3930.00	662000	High	NR Band n77	100	11.60	10.99	-0.03	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	135	138	0 mm	left	1:1	0.657	1.151	0.756	0.165	0.190	
3930.00	662000	High	NR Band n77	100	11.60	10.77	-0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	270	0	0 mm	left	1:1	0.554	1.211	0.671	0.145	0.176	
3930.00	662000	High	NR Band n77	100	11.60	10.95	-0.02	0.0	Ant 4	LVX4YX3VT0	DFT-S-OFDM	QPSK	1	271	0 mm	back	1:1	0.816	1.161	0.947	0.242	0.281	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Body 1.6 W/kg (mW/g) averaged over 1 gram					

Note: Blue entry represents variability measurement.

Table 10-78
NR n77 C PC2 Antenna 3b Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	NR Band n77	100	14.40	13.68	-0.08	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.586	1.180	0.691	0.172	0.203	
3930.00	662000	High	NR Band n77	100	14.40	13.44	0.00	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	1	271	0 mm	back	1:1	0.575	1.247	0.717	0.187	0.233	
3750.00	650000	Low	NR Band n77	100	14.40	13.64	0.03	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.579	1.191	0.690	0.170	0.202	
3930.00	662000	High	NR Band n77	100	14.40	13.40	-0.06	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	135	138	0 mm	back	1:1	0.576	1.259	0.725	0.184	0.232	
3750.00	650000	Low	NR Band n77	100	14.40	13.56	0.00	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.585	1.213	0.710	0.171	0.207	
3750.00	650000	Low	NR Band n77	100	14.40	13.68	0.00	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	1	137	0 mm	top	1:1	0.587	1.180	0.693	0.176	0.208	
3930.00	662000	High	NR Band n77	100	14.40	13.44	0.04	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	1	271	0 mm	top	1:1	0.617	1.247	0.769	0.182	0.227	
3750.00	650000	Low	NR Band n77	100	14.40	13.64	-0.04	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	135	69	0 mm	top	1:1	0.587	1.191	0.699	0.176	0.210	
3930.00	662000	High	NR Band n77	100	14.40	13.40	0.00	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	135	138	0 mm	top	1:1	0.621	1.259	0.782	0.159	0.200	
3750.00	650000	Low	NR Band n77	100	14.40	13.56	0.17	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	270	0	0 mm	top	1:1	0.559	1.213	0.678	0.170	0.206	
3750.00	650000	Low	NR Band n77	100	14.40	13.40	-0.06	0.0	Ant 3b	RP04M6VR9H	CP-OFDM	QPSK	1	1	0 mm	top	1:1	0.548	1.259	0.690	0.162	0.204	
3750.00	650000	Low	NR Band n77	100	14.40	13.68	-0.03	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	1	137	0 mm	bottom	1:1	0.000	1.180	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	14.40	13.64	0.08	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	135	69	0 mm	bottom	1:1	0.000	1.191	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	14.40	13.68	-0.19	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	1	137	0 mm	right	1:1	0.090	1.180	0.106	0.024	0.028	
3750.00	650000	Low	NR Band n77	100	14.40	13.64	-0.08	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.084	1.191	0.100	0.023	0.027	
3750.00	650000	Low	NR Band n77	100	14.40	13.68	-0.14	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	1	137	0 mm	left	1:1	0.017	1.180	0.020	0.003	0.004	
3750.00	650000	Low	NR Band n77	100	14.40	13.64	-0.06	0.0	Ant 3b	RP04M6VR9H	DFT-S-OFDM	QPSK	135	69	0 mm	left	1:1	0.019	1.191	0.023	0.005	0.006	
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 10-79
NR n77 C PC2 Antenna 2b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	NR Band n77	100	12.50	11.60	0.00	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	271	0 mm	back	1:1	0.773	1.230	0.951	0.212	0.261	
3930.00	662000	High	NR Band n77	100	12.50	11.75	-0.05	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.799	1.189	0.950	0.216	0.257	
3750.00	650000	Low	NR Band n77	100	12.50	11.47	-0.01	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:1	0.725	1.268	0.919	0.201	0.255	
3930.00	662000	High	NR Band n77	100	12.50	11.55	-0.03	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	135	138	0 mm	back	1:1	0.766	1.245	0.954	0.207	0.258	
3930.00	662000	High	NR Band n77	100	12.50	11.67	0.01	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.786	1.211	0.952	0.215	0.260	
3930.00	662000	High	NR Band n77	100	12.50	11.75	0.02	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	137	0 mm	top	1:1	0.000	1.189	0.000	0.000	0.000	
3930.00	662000	High	NR Band n77	100	12.50	11.55	0.01	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	135	138	0 mm	top	1:1	0.000	1.245	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	12.50	11.60	-0.01	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	271	0 mm	bottom	1:1	0.735	1.230	0.904	0.207	0.255	
3930.00	662000	High	NR Band n77	100	12.50	11.75	0.09	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	137	0 mm	bottom	1:1	0.823	1.189	0.979	0.227	0.270	
3750.00	650000	Low	NR Band n77	100	12.50	11.47	-0.02	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	135	0	0 mm	bottom	1:1	0.718	1.268	0.910	0.205	0.260	
3930.00	662000	High	NR Band n77	100	12.50	11.55	0.02	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	135	138	0 mm	bottom	1:1	0.775	1.245	0.965	0.212	0.264	
3930.00	662000	High	NR Band n77	100	12.50	11.67	-0.02	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	270	0	0 mm	bottom	1:1	0.785	1.211	0.951	0.217	0.263	
3750.00	650000	Low	NR Band n77	100	12.50	11.37	0.01	0.0	Ant 2b	JFPF0XQ24V	CP-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.701	1.297	0.909	0.199	0.258	
3930.00	662000	High	NR Band n77	100	12.50	11.75	0.04	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	137	0 mm	right	1:1	0.017	1.189	0.020	0.002	0.002	
3930.00	662000	High	NR Band n77	100	12.50	11.55	0.20	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	135	138	0 mm	right	1:1	0.018	1.245	0.022	0.003	0.004	
3930.00	662000	High	NR Band n77	100	12.50	11.75	0.02	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	1	137	0 mm	left	1:1	0.002	1.189	0.002	0.000	0.000	
3930.00	662000	High	NR Band n77	100	12.50	11.55	-0.01	0.0	Ant 2b	JFPF0XQ24V	DFT-S-OFDM	QPSK	135	138	0 mm	left	1:1	0.004	1.245	0.005	0.000	0.000	
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 10-80
NR n77 C PC2 Antenna 1b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna config	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	NR Band n77	100	12.70	11.81	-0.06	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	271	0 mm	back	1:1	0.393	1.227	0.482	0.098	0.120	
3930.00	662000	High	NR Band n77	100	12.70	11.52	-0.02	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.567	1.312	0.744	0.142	0.186	
3750.00	650000	Low	NR Band n77	100	12.70	11.63	-0.02	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	138	0 mm	back	1:1	0.393	1.279	0.503	0.098	0.125	
3930.00	662000	High	NR Band n77	100	12.70	11.34	-0.02	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.557	1.368	0.762	0.142	0.194	
3750.00	650000	Low	NR Band n77	100	12.70	11.49	-0.06	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.555	1.321	0.733	0.139	0.184	
3750.00	650000	Low	NR Band n77	100	12.70	11.81	0.02	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	271	0 mm	top	1:1	0.000	1.227	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	12.70	11.63	-0.04	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	138	0 mm	top	1:1	0.000	1.279	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	12.70	11.81	-0.09	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	271	0 mm	bottom	1:1	0.469	1.227	0.575	0.127	0.156	
3930.00	662000	High	NR Band n77	100	12.70	11.52	0.00	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.622	1.312	0.816	0.167	0.219	
3750.00	650000	Low	NR Band n77	100	12.70	11.63	-0.03	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	138	0 mm	bottom	1:1	0.467	1.279	0.597	0.127	0.162	
3930.00	662000	High	NR Band n77	100	12.70	11.34	-0.01	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	69	0 mm	bottom	1:1	0.629	1.368	0.860	0.169	0.231	
3750.00	650000	Low	NR Band n77	100	12.70	11.49	-0.02	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	270	0	0 mm	bottom	1:1	0.588	1.321	0.777	0.156	0.206	
3930.00	662000	High	NR Band n77	100	12.70	11.55	-0.13	0.0	Ant 1b	T56JJ392YN	CP-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.602	1.303	0.784	0.161	0.210	
3750.00	650000	Low	NR Band n77	100	12.70	11.81	0.01	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	271	0 mm	right	1:1	0.002	1.227	0.002	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	12.70	11.63	0.05	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	138	0 mm	right	1:1	0.005	1.279	0.006	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	12.70	11.81	-0.08	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	1	271	0 mm	left	1:1	0.003	1.227	0.004	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	12.70	11.63	-0.06	0.0	Ant 1b	T56JJ392YN	DFT-S-OFDM	QPSK	135	138	0 mm	left	1:1	0.002	1.279	0.003	0.000	0.000	
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 10-81
2.4 GHz WLAN Antenna 1a Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	(W/kg)	(W/kg)	
2412	1	802.11b	DSSS	22	13.50	12.77	-0.12	0 mm	Ant 1a	V2	Y0X4T66QY6	1	back	99.7	0.799	1.183	1.003	0.948	0.357	0.424	
2437	6	802.11b	DSSS	22	13.50	12.88	0.07	0 mm	Ant 1a	V2	Y0X4T66QY6	1	back	99.7	0.826	1.153	1.003	0.955	0.363	0.420	
2462	11	802.11b	DSSS	22	13.50	12.79	0.00	0 mm	Ant 1a	V2	Y0X4T66QY6	1	back	99.7	0.786	1.178	1.003	0.929	0.347	0.410	
2437	6	802.11b	DSSS	22	13.50	12.51	0.02	0 mm	Ant 1a	V1	RP04M6VR9H	1	top	99.7	0.019	1.256	1.003	0.024	0.007	0.009	
2437	6	802.11b	DSSS	22	13.50	12.51	0.00	0 mm	Ant 1a	V1	RP04M6VR9H	1	bottom	99.7	0.338	1.256	1.003	0.426	0.104	0.131	
2437	6	802.11b	DSSS	22	13.50	12.51	0.06	0 mm	Ant 1a	V1	RP04M6VR9H	1	right	99.7	0.000	1.256	1.003	0.000	0.000	0.000	
2412	1	802.11b	DSSS	22	13.50	12.77	-0.01	0 mm	Ant 1a	V2	Y0X4T66QY6	1	left	99.7	0.915	1.183	1.003	**1.086**	0.323	0.383	
2437	6	802.11b	DSSS	22	13.50	12.88	-0.07	0 mm	Ant 1a	V2	Y0X4T66QY6	1	left	99.7	0.940	1.153	1.003	**1.087**	0.330	0.382	A26
2437	6	802.11b	DSSS	22	13.50	12.51	0.00	0 mm	Ant 1a	V1	RP04M6VR9H	1	left	99.7	0.852	1.256	1.003	1.073	0.299	0.377	
2462	11	802.11b	DSSS	22	13.50	12.79	0.10	0 mm	Ant 1a	V2	Y0X4T66QY6	1	left	99.7	0.740	1.178	1.003	0.874	0.259	0.306	
2462	11	802.11b	DSSS	22	10.50	9.60	0.00	0 mm	Ant 1a	V2	Y0X4T66QY6	1	back	99.7	0.411	1.230	1.003	0.507	0.180	0.222	
2462	11	802.11b	DSSS	22	10.50	9.60	-0.02	0 mm	Ant 1a	V2	Y0X4T66QY6	1	bottom	99.7	0.146	1.230	1.003	0.180	0.043	0.053	
2462	11	802.11b	DSSS	22	10.50	9.60	-0.02	0 mm	Ant 1a	V2	Y0X4T66QY6	1	left	99.7	0.465	1.230	1.003	0.574	0.163	0.201	
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 10-82
2.4 GHz WLAN Antenna 3a Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	(W/kg)	(W/kg)	
2412	1	802.11b	DSSS	22	12.25	11.15	0.01	0 mm	Ant 3a	V2	H9TXRFVC3X	1	back	99.7	0.361	1.288	1.003	0.466	0.157	0.203	
2412	1	802.11b	DSSS	22	12.25	11.15	0.06	0 mm	Ant 3a	V2	H9TXRFVC3X	1	top	99.7	0.260	1.288	1.003	0.336	0.081	0.105	
2412	1	802.11b	DSSS	22	12.25	11.15	0.09	0 mm	Ant 3a	V2	H9TXRFVC3X	1	bottom	99.7	0.003	1.288	1.003	0.004	0.000	0.000	
2412	1	802.11b	DSSS	22	12.25	11.15	0.01	0 mm	Ant 3a	V2	H9TXRFVC3X	1	right	99.7	0.778	1.288	1.003	1.005	0.277	0.358	
2437	6	802.11b	DSSS	22	12.25	11.06	0.01	0 mm	Ant 3a	V2	H9TXRFVC3X	1	right	99.7	0.805	1.315	1.003	1.062	0.284	0.375	
2437	6	802.11b	DSSS	22	12.25	11.06	-0.04	0 mm	Ant 3a	V1	RP04M6VR9H	1	right	99.7	0.784	1.315	1.003	1.034	0.279	0.368	
2462	11	802.11b	DSSS	22	12.25	11.13	0.02	0 mm	Ant 3a	V2	H9TXRFVC3X	1	right	99.7	0.793	1.294	1.003	1.029	0.276	0.358	
2412	1	802.11b	DSSS	22	12.25	11.15	-0.09	0 mm	Ant 3a	V2	H9TXRFVC3X	1	left	99.7	0.000	1.288	1.003	0.000	0.000	0.000	
2437	6	802.11b	DSSS	22	9.25	8.34	-0.09	0 mm	Ant 3a	V2	H9TXRFVC3X	1	back	99.7	0.214	1.233	1.003	0.265	0.093	0.115	
2437	6	802.11b	DSSS	22	9.25	8.34	-0.05	0 mm	Ant 3a	V2	H9TXRFVC3X	1	top	99.7	0.173	1.233	1.003	0.214	0.053	0.066	
2437	6	802.11b	DSSS	22	9.25	8.34	-0.01	0 mm	Ant 3a	V2	H9TXRFVC3X	1	right	99.7	0.452	1.233	1.003	0.559	0.156	0.193	
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 10-83
5 GHz WLAN Antenna 1b Body SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	(W/kg)	(W/kg)	
5290	58	802.11ac	OFDM	80	10.50	9.75	-0.14	0 mm	Ant 1b	V1	RP04M6VR9H	29.3	back	95.4	0.871	1.189	1.048	**1.085**	0.257	0.320	
5290	58	802.11ac	OFDM	80	10.50	9.57	0.00	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	back	95.4	0.834	1.239	1.048	1.083	0.252	0.327	
5290	58	802.11ac	OFDM	80	10.50	9.75	0.01	0 mm	Ant 1b	V1	RP04M6VR9H	29.3	top	95.4	0.000	1.189	1.048	0.000	0.000	0.000	
5290	58	802.11ac	OFDM	80	10.50	9.75	0.04	0 mm	Ant 1b	V1	RP04M6VR9H	29.3	bottom	95.4	0.680	1.189	1.048	0.847	0.147	0.183	
5290	58	802.11ac	OFDM	80	10.50	9.75	0.03	0 mm	Ant 1b	V1	RP04M6VR9H	29.3	right	95.4	0.006	1.189	1.048	0.007	0.000	0.000	
5290	58	802.11ac	OFDM	80	10.50	9.75	0.01	0 mm	Ant 1b	V1	RP04M6VR9H	29.3	left	95.4	0.043	1.189	1.048	0.054	0.005	0.006	
5290	58	802.11ac	OFDM	80	4.50	3.67	-0.09	0 mm	Ant 1b	V1	RP04M6VR9H	29.3	back	95.4	0.191	1.211	1.048	0.242	0.053	0.067	
5290	58	802.11ac	OFDM	80	4.50	3.67	-0.02	0 mm	Ant 1b	V1	RP04M6VR9H	29.3	bottom	95.4	0.145	1.211	1.048	0.184	0.024	0.030	
5530	106	802.11ac	OFDM	80	10.25	9.92	-0.01	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	back	95.4	0.908	1.079	1.048	1.027	0.278	0.314	
5610	122	802.11ac	OFDM	80	10.25	10.06	-0.02	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	back	95.4	0.994	1.045	1.048	**1.089**	0.305	0.334	
5610	122	802.11ac	OFDM	80	10.25	10.14	0.07	0 mm	Ant 1b	V1	RRFNYFJ9CV	29.3	back	95.4	0.907	1.026	1.048	0.975	0.282	0.303	
5690	138	802.11ac	OFDM	80	10.25	10.20	0.01	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	back	95.4	1.010	1.012	1.048	1.071	0.298	0.316	A27
5690	138	802.11ac	OFDM	80	10.25	10.20	-0.14	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	top	95.4	0.000	1.012	1.048	0.000	0.000	0.000	
5530	106	802.11ac	OFDM	80	10.25	9.92	-0.01	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	bottom	95.4	0.739	1.079	1.048	0.836	0.166	0.188	
5610	122	802.11ac	OFDM	80	10.25	10.06	0.02	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	bottom	95.4	0.758	1.045	1.048	0.830	0.171	0.187	
5690	138	802.11ac	OFDM	80	10.25	10.20	0.03	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	bottom	95.4	0.774	1.012	1.048	0.821	0.173	0.183	
5690	138	802.11ac	OFDM	80	10.25	10.20	-0.02	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	right	95.4	0.009	1.012	1.048	0.010	0.000	0.000	
5690	138	802.11ac	OFDM	80	10.25	10.20	-0.11	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	left	95.4	0.061	1.012	1.048	0.065	0.010	0.011	
5690	138	802.11ac	OFDM	80	4.25	3.72	0.09	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	back	95.4	0.213	1.130	1.048	0.252	0.059	0.070	
5690	138	802.11ac	OFDM	80	4.25	3.72	0.15	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	bottom	95.4	0.153	1.130	1.048	0.181	0.028	0.033	
5775	155	802.11ac	OFDM	80	10.00	8.55	0.09	0 mm	Ant 1b	V2	H4P42VGK7F	29.3	back	95.4	0.734	1.396	1.048	1.074	0.218	0.319	
5775	155	802.11ac	OFDM	80	10.00	8.63	0.01	0 mm	Ant 1b	V1	LVX4YX3VT0	29.3	back	95.4	0.692	1.371	1.048	0.994	0.199	0.286	
5775	155	802.11ac	OFDM	80	10.00	8.55	0.00	0 mm	Ant 1b	V2	H4P42VGK7F	29.3	top	95.4	0.000	1.396	1.048	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	10.00	8.55	0.03	0 mm	Ant 1b	V2	H4P42VGK7F	29.3	bottom	95.4	0.549	1.396	1.048	0.803	0.117	0.171	
5775	155	802.11ac	OFDM	80	10.00	8.55	0.00	0 mm	Ant 1b	V2	H4P42VGK7F	29.3	right	95.4	0.007	1.396	1.048	0.010	0.000	0.000	
5775	155	802.11ac	OFDM	80	10.00	8.55	-0.04	0 mm	Ant 1b	V2	H4P42VGK7F	29.3	left	95.4	0.022	1.396	1.048	0.032	0.000	0.000	
5775	155	802.11ac	OFDM	80	4.00	3.04	-0.02	0 mm	Ant 1b	V2	H4P42VGK7F	29.3	back	95.4	0.175	1.247	1.048	0.229	0.047	0.061	
5775	155	802.11ac	OFDM	80	4.00	3.04	-0.17	0 mm	Ant 1b	V2	H4P42VGK7F	29.3	bottom	95.4	0.112	1.247	1.048	0.146	0.018	0.024	
5290	58	802.11ac	OFDM	80	10.50	9.75	0.03	0 mm	Ant 1b	V1	RP04M6VR9H	29.3	back	95.4	0.843	1.189	1.048	1.050	0.259	0.323	
5610	122	802.11ac	OFDM	80	10.25	10.06	-0.02	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	back	95.4	0.958	1.045	1.048	1.049	0.291	0.319	
5690	138	802.11ac	OFDM	80	10.25	10.20	-0.03	0 mm	Ant 1b	V2	JFPF0XQ24V	29.3	back	95.4	0.999	1.012	1.048	1.060	0.300	0.318	
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 10-84
5 GHz WLAN Antenna 2b Body SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	(W/kg)	(W/kg)	
5210	42	802.11ac	OFDM	80	10.25	9.30	0.01	0 mm	Ant 2b	V1	WX69TQ05VJ	29.3	back	95.4	0.806	1.245	1.048	1.052	0.242	0.316	
5210	42	802.11ac	OFDM	80	10.25	8.94	0.03	0 mm	Ant 2b	V2	H4P42VGK7F	29.3	back	95.4	0.704	1.352	1.048	0.997	0.214	0.303	
5210	42	802.11ac	OFDM	80	10.25	9.30	0.00	0 mm	Ant 2b	V1	WX69TQ05VJ	29.3	top	95.4	0.000	1.245	1.048	0.000	0.000	0.000	
5210	42	802.11ac	OFDM	80	10.25	9.30	0.03	0 mm	Ant 2b	V1	WX69TQ05VJ	29.3	bottom	95.4	0.632	1.245	1.048	0.825	0.146	0.190	
5210	42	802.11ac	OFDM	80	10.25	9.30	0.07	0 mm	Ant 2b	V1	WX69TQ05VJ	29.3	right	95.4	0.029	1.245	1.048	0.038	0.003	0.004	
5210	42	802.11ac	OFDM	80	10.25	9.30	-0.09	0 mm	Ant 2b	V1	WX69TQ05VJ	29.3	left	95.4	0.011	1.245	1.048	0.014	0.000	0.000	
5210	42	802.11ac	OFDM	80	7.25	6.15	-0.08	0 mm	Ant 2b	V1	WX69TQ05VJ	29.3	back	95.4	0.335	1.288	1.048	0.452	0.098	0.132	
5210	42	802.11ac	OFDM	80	7.25	6.15	-0.02	0 mm	Ant 2b	V1	WX69TQ05VJ	29.3	bottom	95.4	0.260	1.288	1.048	0.351	0.060	0.081	
5530	106	802.11ac	OFDM	80	10.0	8.69	-0.12	0 mm	Ant 2b	V2	H4P42VGK7F	29.3	back	95.4	0.743	1.352	1.048	1.053	0.222	0.315	
5610	122	802.11ac	OFDM	80	10.0	8.47	-0.02	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	back	95.4	0.654	1.422	1.048	0.975	0.184	0.274	
5610	122	802.11ac	OFDM	80	10.0	8.21	0.00	0 mm	Ant 2b	V2	H4P42VGK7F	29.3	back	95.4	0.671	1.510	1.048	1.062	0.193	0.305	
5690	138	802.11ac	OFDM	80	10.00	8.50	-0.06	0 mm	Ant 2b	V2	H4P42VGK7F	29.3	back	95.4	0.664	1.413	1.048	0.983	0.194	0.287	
5690	138	802.11ac	OFDM	80	10.00	8.56	0.01	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	top	95.4	0.000	1.393	1.048	0.000	0.000	0.000	
5690	138	802.11ac	OFDM	80	10.00	8.56	0.02	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	bottom	95.4	0.440	1.393	1.048	0.642	0.101	0.147	
5690	138	802.11ac	OFDM	80	10.00	8.56	0.03	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	right	95.4	0.041	1.393	1.048	0.060	0.003	0.004	
5690	138	802.11ac	OFDM	80	10.00	8.56	0.02	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	left	95.4	0.012	1.393	1.048	0.018	0.002	0.003	
5690	138	802.11ac	OFDM	80	7.00	6.11	-0.09	0 mm	Ant 2b	V2	H4P42VGK7F	29.3	back	95.4	0.339	1.227	1.048	0.436	0.095	0.122	
5690	138	802.11ac	OFDM	80	7.00	6.11	0.07	0 mm	Ant 2b	V2	H4P42VGK7F	29.3	bottom	95.4	0.241	1.227	1.048	0.310	0.050	0.064	
5775	155	802.11ac	OFDM	80	10.00	8.90	0.00	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	back	95.4	0.773	1.288	1.048	1.043	0.220	0.297	
5775	155	802.11ac	OFDM	80	10.00	9.02	0.03	0 mm	Ant 2b	V2	Y0X4T66QY6	29.3	back	95.4	0.712	1.253	1.048	0.935	0.207	0.272	
5775	155	802.11ac	OFDM	80	10.00	8.90	0.03	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	top	95.4	0.000	1.288	1.048	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	10.00	8.90	-0.04	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	bottom	95.4	0.457	1.288	1.048	0.617	0.102	0.138	
5775	155	802.11ac	OFDM	80	10.00	8.90	-0.05	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	right	95.4	0.043	1.288	1.048	0.058	0.004	0.005	
5775	155	802.11ac	OFDM	80	10.00	8.90	-0.04	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	left	95.4	0.002	1.288	1.048	0.003	0.000	0.000	
5775	155	802.11ac	OFDM	80	7.00	6.20	0.08	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	back	95.4	0.406	1.202	1.048	0.511	0.112	0.141	
5775	155	802.11ac	OFDM	80	7.00	6.20	0.06	0 mm	Ant 2b	V1	K0V2HLHF2L	29.3	bottom	95.4	0.265	1.202	1.048	0.334	0.059	0.074	
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 10-85
5 GHz WLAN Antenna 3a Body SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	(W/kg)	(W/kg)	
5290	58	802.11ac	OFDM	80	10.50	9.47	0.02	0 mm	Ant 3a	V2	JFPF0XQ24V	29.3	back	95.4	0.820	1.268	1.048	**1.090**	0.169	0.225	
5290	58	802.11ac	OFDM	80	10.50	9.49	0.04	0 mm	Ant 3a	V1	WX69TQ05VJ	29.3	back	95.4	0.745	1.262	1.048	0.985	0.153	0.202	
5290	58	802.11ac	OFDM	80	10.50	9.49	0.03	0 mm	Ant 3a	V1	WX69TQ05VJ	29.3	top	95.4	0.113	1.262	1.048	0.149	0.028	0.037	
5290	58	802.11ac	OFDM	80	10.50	9.49	0.03	0 mm	Ant 3a	V1	WX69TQ05VJ	29.3	bottom	95.4	0.008	1.262	1.048	0.011	0.000	0.000	
5290	58	802.11ac	OFDM	80	10.50	9.49	-0.05	0 mm	Ant 3a	V1	WX69TQ05VJ	29.3	right	95.4	0.286	1.262	1.048	0.378	0.061	0.081	
5290	58	802.11ac	OFDM	80	10.50	9.49	0.06	0 mm	Ant 3a	V1	WX69TQ05VJ	29.3	left	95.4	0.000	1.262	1.048	0.000	0.000	0.000	
5290	58	802.11ac	OFDM	80	4.50	3.55	0.03	0 mm	Ant 3a	V2	JFPF0XQ24V	29.3	back	95.4	0.207	1.245	1.048	0.270	0.037	0.048	
5290	58	802.11ac	OFDM	80	4.50	3.55	-0.20	0 mm	Ant 3a	V2	JFPF0XQ24V	29.3	top	95.4	0.023	1.245	1.048	0.030	0.000	0.000	
5290	58	802.11ac	OFDM	80	4.50	3.55	-0.03	0 mm	Ant 3a	V2	JFPF0XQ24V	29.3	right	95.4	0.074	1.245	1.048	0.097	0.012	0.016	
5530	106	802.11ac	OFDM	80	11.00	10.15	-0.02	0 mm	Ant 3a	V2	Y0X4T66QY6	29.3	back	95.4	0.852	1.216	1.048	**1.086**	0.179	0.228	
5610	122	802.11ac	OFDM	80	11.00	10.18	0.02	0 mm	Ant 3a	V2	Y0X4T66QY6	29.3	back	95.4	0.860	1.208	1.048	**1.089**	0.177	0.224	
5610	122	802.11ac	OFDM	80	11.00	9.98	-0.02	0 mm	Ant 3a	V1	K0V2HLHF2L	29.3	back	95.4	0.758	1.265	1.048	1.005	0.152	0.202	
5690	138	802.11ac	OFDM	80	11.00	10.20	0.01	0 mm	Ant 3a	V2	Y0X4T66QY6	29.3	back	95.4	0.856	1.202	1.048	1.078	0.180	0.227	
5690	138	802.11ac	OFDM	80	11.00	10.20	-0.16	0 mm	Ant 3a	V2	Y0X4T66QY6	29.3	top	95.4	0.144	1.202	1.048	0.181	0.031	0.039	
5690	138	802.11ac	OFDM	80	11.00	10.20	0.08	0 mm	Ant 3a	V2	Y0X4T66QY6	29.3	bottom	95.4	0.000	1.202	1.048	0.000	0.000	0.000	
5690	138	802.11ac	OFDM	80	11.00	10.20	0.20	0 mm	Ant 3a	V2	Y0X4T66QY6	29.3	right	95.4	0.518	1.202	1.048	0.653	0.113	0.142	
5690	138	802.11ac	OFDM	80	11.00	10.20	0.05	0 mm	Ant 3a	V2	Y0X4T66QY6	29.3	left	95.4	0.000	1.202	1.048	0.000	0.000	0.000	
5530	106	802.11ac	OFDM	80	5.00	4.07	-0.06	0 mm	Ant 3a	V2	Y0X4T66QY6	29.3	back	95.4	0.185	1.239	1.048	0.240	0.031	0.040	
5530	106	802.11ac	OFDM	80	5.00	4.07	-0.06	0 mm	Ant 3a	V2	Y0X4T66QY6	29.3	top	95.4	0.005	1.239	1.048	0.006	0.000	0.000	
5530	106	802.11ac	OFDM	80	5.00	4.07	-0.07	0 mm	Ant 3a	V2	Y0X4T66QY6	29.3	right	95.4	0.105	1.239	1.048	0.136	0.016	0.021	
5775	155	802.11ac	OFDM	80	10.25	9.05	0.00	0 mm	Ant 3a	V2	H4P42VGK7F	29.3	back	95.4	0.754	1.318	1.048	1.041	0.154	0.213	
5775	155	802.11ac	OFDM	80	10.25	9.09	0.00	0 mm	Ant 3a	V1	RP04M6VR9H	29.3	back	95.4	0.633	1.306	1.048	0.866	0.127	0.174	
5775	155	802.11ac	OFDM	80	10.25	9.05	-0.07	0 mm	Ant 3a	V2	H4P42VGK7F	29.3	top	95.4	0.088	1.318	1.048	0.122	0.012	0.017	
5775	155	802.11ac	OFDM	80	10.25	9.05	0.00	0 mm	Ant 3a	V2	H4P42VGK7F	29.3	bottom	95.4	0.000	1.318	1.048	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	10.25	9.05	-0.08	0 mm	Ant 3a	V2	H4P42VGK7F	29.3	right	95.4	0.398	1.318	1.048	0.550	0.084	0.116	
5775	155	802.11ac	OFDM	80	10.25	9.05	0.17	0 mm	Ant 3a	V2	H4P42VGK7F	29.3	left	95.4	0.000	1.318	1.048	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	4.25	3.20	-0.01	0 mm	Ant 3a	V2	H4P42VGK7F	29.3	back	95.4	0.138	1.274	1.048	0.184	0.016	0.021	
5775	155	802.11ac	OFDM	80	4.25	3.20	0.06	0 mm	Ant 3a	V2	H4P42VGK7F	29.3	top	95.4	0.006	1.274	1.048	0.008	0.000	0.000	
5775	155	802.11ac	OFDM	80	4.25	3.20	0.12	0 mm	Ant 3a	V2	H4P42VGK7F	29.3	right	95.4	0.070	1.274	1.048	0.093	0.004	0.005	
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 10-86
Bluetooth Antenna 1a Body SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	(W/kg)	(W/kg)	
2402	0	Bluetooth	FHSS	14.00	12.51	0.00	0 mm	Ant 1a	V1	K0V2HLHF2L	1	back	76.7	0.587	1.409	1.010	0.835	0.252	0.359	
2441	39	Bluetooth	FHSS	14.00	13.66	-0.02	0 mm	Ant 1a	V1	K0V2HLHF2L	1	back	76.7	0.993	1.081	1.010	**1.084**	0.423	0.462	A28
2441	39	Bluetooth	FHSS	14.00	13.69	-0.01	0 mm	Ant 1a	V2	JFPF0XQ24V	1	back	76.7	0.847	1.074	1.010	0.919	0.360	0.391	
2480	78	Bluetooth	FHSS	14.00	13.10	-0.01	0 mm	Ant 1a	V1	K0V2HLHF2L	1	back	76.7	0.794	1.230	1.010	0.986	0.335	0.416	
2441	39	Bluetooth	FHSS	14.00	13.66	0.08	0 mm	Ant 1a	V1	K0V2HLHF2L	1	top	76.7	0.014	1.081	1.010	0.015	0.004	0.004	
2441	39	Bluetooth	FHSS	14.00	13.66	-0.04	0 mm	Ant 1a	V1	K0V2HLHF2L	1	bottom	76.7	0.293	1.081	1.010	0.320	0.088	0.096	
2441	39	Bluetooth	FHSS	14.00	13.66	0.02	0 mm	Ant 1a	V1	K0V2HLHF2L	1	right	76.7	0.000	1.081	1.010	0.000	0.000	0.000	
2441	39	Bluetooth	FHSS	14.00	13.66	-0.02	0 mm	Ant 1a	V1	K0V2HLHF2L	1	left	76.7	0.629	1.081	1.010	0.687	0.218	0.238	
2402	0	Bluetooth	FHSS	10.50	10.06	0.00	0 mm	Ant 1a	V1	K0V2HLHF2L	1	back	76.7	0.299	1.107	1.010	0.334	0.134	0.150	
2402	0	Bluetooth	FHSS	10.50	10.06	-0.11	0 mm	Ant 1a	V1	K0V2HLHF2L	1	bottom	76.7	0.110	1.107	1.010	0.123	0.033	0.037	
2402	0	Bluetooth	FHSS	10.50	10.06	-0.05	0 mm	Ant 1a	V1	K0V2HLHF2L	1	left	76.7	0.293	1.107	1.010	0.328	0.104	0.116	
2480	78	Bluetooth	FHSS	9.50	9.07	-0.13	0 mm	Ant 1a	V1	K0V2HLHF2L	1	back	76.7	0.248	1.104	1.010	0.277	0.111	0.124	
2480	78	Bluetooth	FHSS	9.50	9.07	-0.04	0 mm	Ant 1a	V1	K0V2HLHF2L	1	bottom	76.7	0.090	1.104	1.010	0.100	0.020	0.022	
2480	78	Bluetooth	FHSS	9.50	9.07	-0.05	0 mm	Ant 1a	V1	K0V2HLHF2L	1	left	76.7	0.202	1.104	1.010	0.225	0.069	0.077	
2441	39	Bluetooth	FHSS	7.00	6.58	0.00	0 mm	Ant 1a	V1	K0V2HLHF2L	1	back	76.7	0.208	1.102	1.010	0.232	0.089	0.099	
2441	39	Bluetooth	FHSS	7.00	6.58	-0.06	0 mm	Ant 1a	V1	K0V2HLHF2L	1	bottom	76.7	0.052	1.102	1.010	0.058	0.015	0.017	
2441	39	Bluetooth	FHSS	7.00	6.58	-0.01	0 mm	Ant 1a	V1	K0V2HLHF2L	1	left	76.7	0.150	1.102	1.010	0.167	0.056	0.062	
2441	39	Bluetooth	FHSS	14.00	13.66	-0.01	0 mm	Ant 1a	V1	K0V2HLHF2L	1	back	76.7	0.901	1.081	1.010	0.984	0.384	0.419	
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: The reported SAR was scaled to the 77.5% transmission duty factor to determine compliance since the duty factor of the device is permanently limited to 77.5% per the manufacturer.
Blue entry represents variability measurement.

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Table 10-87
Bluetooth Antenna 3a Body SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	(W/kg)	(W/kg)	
2441	39	Bluetooth	FHSS	12.50	12.50	0.01	0 mm	Ant 3a	V2	H4P42VGK7F	1	back	76.7	0.527	1.000	1.010	0.532	0.238	0.240	
2441	39	Bluetooth	FHSS	12.50	12.50	0.00	0 mm	Ant 3a	V2	H4P42VGK7F	1	top	76.7	0.431	1.000	1.010	0.435	0.132	0.133	
2441	39	Bluetooth	FHSS	12.50	12.50	-0.04	0 mm	Ant 3a	V2	H4P42VGK7F	1	bottom	76.7	0.007	1.000	1.010	0.007	0.002	0.002	
2402	0	Bluetooth	FHSS	12.50	12.37	-0.03	0 mm	Ant 3a	V2	H4P42VGK7F	1	right	76.7	0.799	1.030	1.010	0.831	0.281	0.292	
2441	39	Bluetooth	FHSS	12.50	12.50	-0.01	0 mm	Ant 3a	V2	H4P42VGK7F	1	right	76.7	0.978	1.000	1.010	0.988	0.340	0.343	
2441	39	Bluetooth	FHSS	12.50	12.48	0.01	0 mm	Ant 3a	V1	WX69TQ05VJ	1	right	76.7	0.940	1.005	1.010	0.954	0.323	0.328	
2480	78	Bluetooth	FHSS	12.50	11.65	0.01	0 mm	Ant 3a	V2	H4P42VGK7F	1	right	76.7	0.792	1.216	1.010	0.973	0.272	0.334	
2441	39	Bluetooth	FHSS	12.50	12.50	-0.02	0 mm	Ant 3a	V2	H4P42VGK7F	1	left	76.7	0.000	1.000	1.010	0.000	0.000	0.000	
2402	0	Bluetooth	FHSS	9.00	8.68	0.02	0 mm	Ant 3a	V2	H4P42VGK7F	1	back	76.7	0.150	1.076	1.010	0.163	0.067	0.073	
2402	0	Bluetooth	FHSS	9.00	8.68	0.02	0 mm	Ant 3a	V2	H4P42VGK7F	1	top	76.7	0.116	1.076	1.010	0.126	0.035	0.038	
2402	0	Bluetooth	FHSS	9.00	8.68	0.03	0 mm	Ant 3a	V2	H4P42VGK7F	1	right	76.7	0.262	1.076	1.010	0.285	0.092	0.100	
2480	78	Bluetooth	FHSS	8.00	7.60	-0.01	0 mm	Ant 3a	V2	H4P42VGK7F	1	back	76.7	0.125	1.096	1.010	0.138	0.055	0.061	
2480	78	Bluetooth	FHSS	8.00	7.60	-0.12	0 mm	Ant 3a	V2	H4P42VGK7F	1	top	76.7	0.100	1.096	1.010	0.111	0.031	0.034	
2480	78	Bluetooth	FHSS	8.00	7.60	-0.01	0 mm	Ant 3a	V2	H4P42VGK7F	1	right	76.7	0.216	1.096	1.010	0.239	0.076	0.084	
2402	0	Bluetooth	FHSS	5.50	4.85	-0.04	0 mm	Ant 3a	V2	H4P42VGK7F	1	back	76.7	0.075	1.161	1.010	0.088	0.033	0.039	
2402	0	Bluetooth	FHSS	5.50	4.85	0.05	0 mm	Ant 3a	V2	H4P42VGK7F	1	top	76.7	0.059	1.161	1.010	0.069	0.017	0.020	
2402	0	Bluetooth	FHSS	5.50	4.85	0.05	0 mm	Ant 3a	V2	H4P42VGK7F	1	right	76.7	0.116	1.161	1.010	0.136	0.041	0.048	
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: The reported SAR was scaled to the 77.5% transmission duty factor to determine compliance since the duty factor of the device is permanently limited to 77.5% per the manufacturer.

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10.2 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in FCC KDB Publication 616217 D04v01r02, 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. 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.
7. FCC KDB Publication 616217 D04v01r02 Section 4.3, SAR tests are required for the back surface and edges of the tablet with the tablet touching the phantom. The SAR Exclusion Threshold in FCC KDB 447498 D01v06 was applied to determine SAR test exclusion for adjacent edge configurations.
8. This device uses Smart Transmit for 3G/4G/5G 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).
9. The orange highlights throughout the report represents the highest scaled SAR per Equipment Class.

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 7.5.4.
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 LTE Band 41 and LTE Band 48 SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for 1g evaluations, 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.

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6. Per KDB Publication 941225 D05Av01r02, SAR for downlink only LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive.
7. 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 5, LTE Band 66, LTE Band 7, LTE Band 41, and LTE Band 48, per FCC guidance, SAR was first measured with only a single carrier active in the uplink (carrier aggregation not active). For each exposure condition, the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when carrier aggregation was not active. The SCC was configured with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power.
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.
10. 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 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.

NR Notes:

1. NR implementation supports SA and NSA modes. NR implementation in EN-DC mode 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. Per FCC KDB Publication 447498 D01v06, when the reported SAR measured at the highest output power channel in a given a test configuration was > 0.4 W/kg for NR n77 C 1g evaluations, > 0.6 W/kg for NR n41 1g evaluations, and > 0.8 W/kg for NR n77 DoD, testing at the other channels was required for such test configurations.
3. Due to test setup limitations, SAR testing for NR was performed using test mode software to establish the connection.
4. Simultaneous transmission analysis for EN-DC operations is addressed in the Part 2 Test Report (Serial Number can be found in the bibliography).
5. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
6. 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.
7. This device supports Power Class 2 and Power Class 3 operations for NR Band n41, NR Band n77 DoD, and NR Band n77 C. The highest available duty cycle for Power Class 2 operations is 100.0 %. Per FCC Guidance, all SAR tests were performed using Power Class 2.

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WLAN Notes:

1. 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 7.6.4 for more information.
2. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed powers. Other transmission modes were not investigated since the highest reported SAR for initial test configuration adjusted by the ratio of maximum output powers is less than 1.2 W/kg for 1g evaluations. See Section 7.6.5 for more information.
3. 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 Section 11 for complete analysis.
4. 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.
5. 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.
6. The time-averaged mechanism for WLAN operations was disabled for the above SAR measurements. The SAR was scaled to the maximum time-averaged output power

Bluetooth Notes

1. Bluetooth SAR was evaluated with a test mode with hopping disabled with DH5 operation. The reported SAR was scaled to the 77.5% transmission duty factor to determine compliance since the duty factor of the device is limited to 77.5% per the manufacturer. See Section 8.10 for the time domain plot and calculation for the duty factor of the device.

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11 FCC MULTI-TX AND ANTENNA SAR CONSIDERATIONS

11.1 Introduction

The following procedures adopted from FCC KDB Publication 447498 D01v06 are applicable to devices with built-in unlicensed transmitters such as 802.11 and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

11.2 Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore, simultaneous transmission analysis is required. Per FCC KDB Publication 447498 D01v06 4.3.2 and IEEE 1528-2013 Section 6.3.4.1.2, simultaneous transmission SAR test exclusion may be applied when the sum of the 1g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤1.6 W/kg. The different test positions in an exposure condition may be considered collectively to determine SAR test exclusion according to the sum of 1g or 10g SAR.

Note:
SAR Summations for some scenarios when the output power levels are reduced, SAR values at the maximum output power level were used as the most conservative evaluation for simultaneous transmission analysis.

For each position, the highest SAR value across all modes for the applicable cellular band antenna was considered for summation to determine simultaneous SAR test exclusion.

*The SAR distributions for at least one of the antennas are spatially separated from the other antennas per FCC KDB Publication 248227 Section 6.1 procedures. Therefore, the simultaneous transmission were treated independently for this configuration. See section 11.4 for more information about the Spatial Separation Analysis.

Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G (including scenarios with inter-band ULCA active) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR and during inter-band ULCA active conditions to not exceed FCC limit. Therefore, simultaneous transmission compliance between 4G+5G operations (including scenarios with inter-band ULCA active) is demonstrated in the Part 2 Report during algorithm validation.

All 3G/4G/5G transmitting antennas are within one Smart Transmit Gen2 antenna group, therefore no additional simultaneous analysis is required.

In some cases where simultaneous transmission scenarios overlap with the same power level (for example, cellular band + 2.4 GHz WIFI SISO and cellular band + 2.4 GHz WIFI MIMO), the most conservative SAR summation scenario was evaluated.

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11.3 Body SAR Simultaneous Transmission Analysis

Table 11-1
Cellular Band Ant 1a Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 1a SAR (W/kg)	2.4 GHz WLAN Ant 1a Reduced at 10.5dBm SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.999	0.507	0.466	1.506*
	Top	0.043	0.024	0.336	0.403
	Bottom	0.488	0.180	0.004	0.672
	Right	0.015	0.000	1.062	1.077
	Left	0.998	0.574	0.000	**1.572**

Table 11-2
Cellular Band Ant 1b Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 1b SAR (W/kg)	2.4 GHz WLAN Ant 1a Reduced at 10.5dBm SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.990	0.507	0.466	**1.497***
	Top	0.000	0.024	0.336	0.360
	Bottom	0.994	0.180	0.004	1.178
	Right	0.010	0.000	1.062	1.072
	Left	0.017	0.574	0.000	0.591

Table 11-3
Cellular Band Ant 2a Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 1a SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.993	0.955	0.466	0.993*
	Top	0.026	0.024	0.336	0.386
	Bottom	0.661	0.426	0.004	1.091
	Right	0.764	0.000	1.062	1.062*
	Left	0.005	1.087	0.000	**1.092**

Table 11-4
Cellular Band Ant 2b Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	2.4 GHz WLAN Ant 1a SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.962	0.955	0.466	0.962*
	Top	0.000	0.024	0.336	0.360
	Bottom	0.994	0.426	0.004	**1.424**
	Right	0.022	0.000	1.062	1.084
	Left	0.008	1.087	0.000	1.095

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Table 11-5
Cellular Band Ant 3a Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 3a SAR (W/kg)	2.4 GHz WLAN Ant 1a SAR (W/kg)	2.4 GHz WLAN Ant 3a Reduced at 9.25dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.584	0.955	0.265	0.955*
	Top	0.478	0.024	0.214	0.716
	Bottom	0.011	0.426	0.004	0.441
	Right	0.995	0.000	0.559	**1.554**
	Left	0.019	1.087	0.000	1.106

Table 11-6
Cellular Band Ant 3b Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 3b SAR (W/kg)	2.4 GHz WLAN Ant 1a SAR (W/kg)	2.4 GHz WLAN Ant 3a Reduced at 9.25dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.995	0.955	0.265	**1.260***
	Top	0.992	0.024	0.214	1.230
	Bottom	0.010	0.426	0.004	0.440
	Right	0.107	0.000	0.559	0.666
	Left	0.023	1.087	0.000	1.110

Table 11-7
Cellular Band Ant 4 Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 4 SAR (W/kg)	2.4 GHz WLAN Ant 1a SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.998	0.955	0.466	0.998*
	Top	0.893	0.024	0.336	**1.253**
	Bottom	0.032	0.426	0.004	0.462
	Right	0.046	0.000	1.062	1.108
	Left	0.996	1.087	0.000	1.087*

Table 11-8
Cellular Band Ant 1a Simultaneous Transmission Scenario with 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 1a SAR (W/kg)	5 GHz WLAN Ant 1b Reduced SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.999	0.252	1.062	1.090	1.251*	1.251*	1.090*
	Top	0.043	0.000	0.000	0.181	0.043	0.224	0.224
	Bottom	0.488	0.184	0.825	0.011	**1.497**	0.683	1.324
	Right	0.015	0.010	0.060	0.653	0.085	0.678	0.728
	Left	0.998	0.065	0.018	0.000	1.081	1.063	1.016

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Table 11-9
Cellular Band Ant 1b Simultaneous Transmission Scenario with 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 1b SAR (W/kg)	5 GHz WLAN Ant 1b Reduced SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.990	0.252	1.062	1.090	**1.242***	**1.242***	1.090*
	Top	0.000	0.000	0.000	0.181	0.000	0.181	0.181
	Bottom	0.994	0.184	0.825	0.011	1.178*	1.189	1.005*
	Right	0.010	0.010	0.060	0.653	0.080	0.673	0.723
	Left	0.017	0.065	0.018	0.000	0.100	0.082	0.035

Table 11-10
Cellular Band Ant 2a Simultaneous Transmission Scenario with 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b Reduced SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.993	1.089	0.511	1.090	**1.504***	1.090*	**1.504***
	Top	0.026	0.000	0.000	0.181	0.026	0.207	0.207
	Bottom	0.661	0.847	0.351	0.011	1.012*	1.519	1.023
	Right	0.764	0.010	0.060	0.653	0.834	1.427	1.477
	Left	0.005	0.065	0.018	0.000	0.088	0.070	0.023

Table 11-11
Cellular Band Ant 2b Simultaneous Transmission Scenario with 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b Reduced SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.962	1.089	0.511	1.090	**1.473***	1.090*	**1.473***
	Top	0.000	0.000	0.000	0.181	0.000	0.181	0.181
	Bottom	0.994	0.847	0.351	0.011	1.345*	1.005*	1.356
	Right	0.022	0.010	0.060	0.653	0.092	0.685	0.735
	Left	0.008	0.065	0.018	0.000	0.091	0.073	0.026

Table 11-12
Cellular Band Ant 3a Simultaneous Transmission Scenario with 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 3a SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a Reduced SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.584	1.089	1.062	0.270	1.089*	1.089*	1.062*
	Top	0.478	0.000	0.000	0.030	0.478	0.508	0.508
	Bottom	0.011	0.847	0.825	0.011	0.858*	0.869	0.847
	Right	0.995	0.010	0.060	0.136	1.065	1.141	**1.191**
	Left	0.019	0.065	0.018	0.000	0.102	0.084	0.037

Table 11-13
Cellular Band Ant 3b Simultaneous Transmission Scenario with 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 3b SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a Reduced SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.995	1.089	1.062	0.270	1.089*	**1.265***	**1.265***
	Top	0.992	0.000	0.000	0.030	0.992	1.022	1.022
	Bottom	0.010	0.847	0.825	0.011	0.857*	0.868	0.846
	Right	0.107	0.010	0.060	0.136	0.177	0.253	0.303
	Left	0.023	0.065	0.018	0.000	0.106	0.088	0.041

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Table 11-14
Cellular Band Ant 4 Simultaneous Transmission Scenario with 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 4 SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.998	1.089	1.062	1.090	1.089*	**1.090***	**1.090***
	Top	0.893	0.000	0.000	0.181	0.893	1.074	1.074
	Bottom	0.032	0.847	0.825	0.011	0.879*	0.890	0.868
	Right	0.046	0.010	0.060	0.653	0.116	0.709	0.759
	Left	0.996	0.065	0.018	0.000	1.079	1.061	1.014

Table 11-15
Cellular Band Ant 1a Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 1a SAR (W/kg)	Bluetooth Ant 1a at 10.5 dBm SAR (W/kg)	Bluetooth Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.999	0.334	0.532	**1.333***
	Top	0.043	0.015	0.435	0.493
	Bottom	0.488	0.123	0.007	0.618
	Right	0.015	0.000	0.988	1.003
	Left	0.998	0.328	0.000	1.326

Table 11-16
Cellular Band Ant 1b Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 1b SAR (W/kg)	Bluetooth Ant 1a at 10.5 dBm SAR (W/kg)	Bluetooth Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.990	0.334	0.532	**1.324***
	Top	0.000	0.015	0.435	0.450
	Bottom	0.994	0.123	0.007	1.124
	Right	0.010	0.000	0.988	0.998
	Left	0.017	0.328	0.000	0.345

Table 11-17
Cellular Band Ant 2a Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Bluetooth Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.993	1.084	0.532	**1.084***
	Top	0.026	0.015	0.435	0.476
	Bottom	0.661	0.320	0.007	0.988
	Right	0.764	0.000	0.988	0.988*
	Left	0.005	0.687	0.000	0.692

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Table 11-18
Cellular Band Ant 2b Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Bluetooth Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.962	1.084	0.532	1.084*
	Top	0.000	0.015	0.435	0.450
	Bottom	0.994	0.320	0.007	**1.321**
	Right	0.022	0.000	0.988	1.010
	Left	0.008	0.687	0.000	0.695

Table 11-19
Cellular Band Ant 3a Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 3a SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Bluetooth Ant 3a at 9 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.584	1.084	0.163	1.084*
	Top	0.478	0.015	0.126	0.619
	Bottom	0.011	0.320	0.007	0.338
	Right	0.995	0.000	0.285	**1.280**
	Left	0.019	0.687	0.000	0.706

Table 11-20
Cellular Band Ant 3b Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 3b SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Bluetooth Ant 3a at 9 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.995	1.084	0.163	**1.158***
	Top	0.992	0.015	0.126	1.133
	Bottom	0.010	0.320	0.007	0.337
	Right	0.107	0.000	0.285	0.392
	Left	0.023	0.687	0.000	0.710

Table 11-21
Cellular Band Ant 4 Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 4 SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Bluetooth Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.998	1.084	0.532	1.084*
	Top	0.893	0.015	0.435	**1.343**
	Bottom	0.032	0.320	0.007	0.359
	Right	0.046	0.000	0.988	1.034
	Left	0.996	0.687	0.000	0.996*

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Table 11-22
Cellular Band Ant 1a Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 1a SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Bluetooth Ant 1a at 10.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.999	0.466	0.334	**1.333***
	Top	0.043	0.336	0.015	0.394
	Bottom	0.488	0.004	0.123	0.615
	Right	0.015	1.062	0.000	1.077
	Left	0.998	0.000	0.328	1.326

Table 11-23
Cellular Band Ant 1b Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 1b SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Bluetooth Ant 1a at 10.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.990	0.466	0.334	**1.324***
	Top	0.000	0.336	0.015	0.351
	Bottom	0.994	0.004	0.123	1.121
	Right	0.010	1.062	0.000	1.072
	Left	0.017	0.000	0.328	0.345

Table 11-24
Cellular Band Ant 2a Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.993	0.466	1.084	**1.084***
	Top	0.026	0.336	0.015	0.377
	Bottom	0.661	0.004	0.320	0.985
	Right	0.764	1.062	0.000	1.062*
	Left	0.005	0.000	0.687	0.692

Table 11-25
Cellular Band Ant 2b Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.962	0.466	1.084	1.084*
	Top	0.000	0.336	0.015	0.351
	Bottom	0.994	0.004	0.320	**1.318**
	Right	0.022	1.062	0.000	1.084
	Left	0.008	0.000	0.687	0.695

Table 11-26
Cellular Band Ant 3a Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 3a SAR (W/kg)	2.4 GHz WLAN Ant 3a Reduced at 9.25dBm SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.584	0.265	1.084	1.084*
	Top	0.478	0.214	0.015	0.707
	Bottom	0.011	0.004	0.320	0.335
	Right	0.995	0.559	0.000	**1.554**
	Left	0.019	0.000	0.687	0.706

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Table 11-27
Cellular Band Ant 3b Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 3b SAR (W/kg)	2.4 GHz WLAN Ant 3a Reduced at 9.25dBm SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.995	0.265	1.084	**1.260***
	Top	0.992	0.214	0.015	1.221
	Bottom	0.010	0.004	0.320	0.334
	Right	0.107	0.559	0.000	0.666
	Left	0.023	0.000	0.687	0.710

Table 11-28
Cellular Band Ant 4 Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 4 SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.998	0.466	1.084	1.084*
	Top	0.893	0.336	0.015	**1.244**
	Bottom	0.032	0.004	0.320	0.356
	Right	0.046	1.062	0.000	1.108
	Left	0.996	0.000	0.687	0.996*

Table 11-29
Cellular Band Ant 1a Simultaneous Transmission Scenario with Bluetooth TxBF and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 1a SAR (W/kg)	Bluetooth Ant 1a at 7 dBm SAR (W/kg)	Bluetooth Ant 3a at 8 dBm SAR (W/kg)	5 GHz WLAN Ant 1b Reduced SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	5	6	1+2+3+4+5	1+2+3+4+6	1+2+3+5+6
Body SAR	Back	0.999	0.232	0.138	0.252	1.062	1.090	1.483*	1.483*	1.231*
	Top	0.043	0.015	0.111	0.000	0.000	0.181	0.169	0.350	0.350
	Bottom	0.488	0.058	0.007	0.184	0.825	0.011	**1.562**	0.748	1.389
	Right	0.015	0.000	0.239	0.010	0.060	0.653	0.324	0.917	0.967
	Left	0.998	0.167	0.000	0.065	0.018	0.000	1.248	1.230	1.183

Table 11-30
Cellular Band Ant 1b Simultaneous Transmission Scenario with Bluetooth TxBF and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 1b SAR (W/kg)	Bluetooth Ant 1a at 7 dBm SAR (W/kg)	Bluetooth Ant 3a at 8 dBm SAR (W/kg)	5 GHz WLAN Ant 1b Reduced SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	5	6	1+2+3+4+5	1+2+3+4+6	1+2+3+5+6
Body SAR	Back	0.990	0.232	0.138	0.252	1.062	1.090	**1.474***	**1.474***	1.228*
	Top	0.000	0.015	0.111	0.000	0.000	0.181	0.126	0.307	0.307
	Bottom	0.994	0.058	0.007	0.184	0.825	0.011	1.243*	1.254	1.070*
	Right	0.010	0.000	0.239	0.010	0.060	0.653	0.319	0.912	0.962
	Left	0.017	0.167	0.000	0.065	0.018	0.000	0.267	0.249	0.202

Table 11-31
Cellular Band Ant 2a Simultaneous Transmission Scenario with Bluetooth TxBF and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	Bluetooth Ant 1a at 9.5 dBm SAR (W/kg)	Bluetooth Ant 3a at 8 dBm SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b Reduced SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	5	6	1+2+3+4+5	1+2+3+4+6	1+2+3+5+6
Body SAR	Back	0.993	0.277	0.138	1.089	0.511	1.090	**1.504***	1.366*	**1.504***
	Top	0.026	0.015	0.111	0.000	0.000	0.181	0.152	0.333	0.333
	Bottom	0.661	0.100	0.007	0.847	0.351	0.011	1.119*	0.965*	1.130
	Right	0.764	0.000	0.239	0.010	0.060	0.653	1.073	0.902*	0.952*
	Left	0.005	0.225	0.000	0.065	0.018	0.000	0.313	0.295	0.248

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Table 11-32
Cellular Band Ant 2b Simultaneous Transmission Scenario with Bluetooth TxBF and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	Bluetooth Ant 1a at 9.5 dBm SAR (W/kg)	Bluetooth Ant 3a at 8 dBm SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b Reduced SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	5	6	1+2+3+4+5	1+2+3+4+6	1+2+3+5+6
Body SAR	Back	0.962	0.277	0.138	1.089	0.511	1.090	**1.473***	1.112*	**1.473***
	Top	0.000	0.015	0.111	0.000	0.000	0.181	0.126	0.307	0.307
	Bottom	0.994	0.100	0.007	0.847	0.351	0.011	1.452*	1.012*	1.463
	Right	0.022	0.000	0.239	0.010	0.060	0.653	0.331	0.924	0.974
	Left	0.008	0.225	0.000	0.065	0.018	0.000	0.316	0.298	0.251

Table 11-33
Cellular Band Ant 3a Simultaneous Transmission Scenario with Bluetooth TxBF and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 3a SAR (W/kg)	Bluetooth Ant 1a at 9.5 dBm SAR (W/kg)	Bluetooth Ant 3a at 5.5 dBm SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a Reduced SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	5	6	1+2+3+4+5	1+2+3+4+6	1+2+3+5+6
Body SAR	Back	0.584	0.277	0.088	1.089	1.062	0.270	**1.366***	**1.366***	1.062*
	Top	0.478	0.015	0.069	0.000	0.000	0.030	0.562	0.592	0.592
	Bottom	0.011	0.100	0.007	0.847	0.825	0.011	0.965*	0.976	0.954
	Right	0.995	0.000	0.136	0.010	0.060	0.136	1.201	1.277	1.327
	Left	0.019	0.225	0.000	0.065	0.018	0.000	0.327	0.309	0.262

Table 11-34
Cellular Band Ant 3b Simultaneous Transmission Scenario with Bluetooth TxBF and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 3b SAR (W/kg)	Bluetooth Ant 1a at 9.5 dBm SAR (W/kg)	Bluetooth Ant 3a at 5.5 dBm SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a Reduced SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	5	6	1+2+3+4+5	1+2+3+4+6	1+2+3+5+6
Body SAR	Back	0.995	0.277	0.088	1.089	1.062	0.270	**1.366***	**1.366***	1.353*
	Top	0.992	0.015	0.069	0.000	0.000	0.030	1.076	1.106	1.106
	Bottom	0.010	0.100	0.007	0.847	0.825	0.011	0.964*	0.975	0.953
	Right	0.107	0.000	0.136	0.010	0.060	0.136	0.313	0.389	0.439
	Left	0.023	0.225	0.000	0.065	0.018	0.000	0.331	0.313	0.266

Table 11-35
Cellular Band Ant 4 Simultaneous Transmission Scenario with Bluetooth TxBF and 5 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 4 SAR (W/kg)	Bluetooth Ant 1a at 9.5 dBm SAR (W/kg)	Bluetooth Ant 3a at 8 dBm SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	5	6	1+2+3+4+5	1+2+3+4+6	1+2+3+5+6
Body SAR	Back	0.998	0.277	0.138	1.089	1.062	1.090	**1.366***	**1.366***	1.228*
	Top	0.893	0.015	0.111	0.000	0.000	0.181	1.019	1.200	1.200
	Bottom	0.032	0.100	0.007	0.847	0.825	0.011	0.986*	0.997	0.975
	Right	0.046	0.000	0.239	0.010	0.060	0.653	0.355	0.948	0.998
	Left	0.996	0.225	0.000	0.065	0.018	0.000	1.304	1.286	1.239

Table 11-36
Bluetooth TxBF Simultaneous Transmission Scenario with 5 GHz WLAN MIMO

Simult Tx	Configuration	Bluetooth Ant 1a at 9.5 dBm SAR (W/kg)	Bluetooth Ant 3a at 8 dBm SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	5 GHz WLAN Ant 2b SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	5	1+2+3+4	1+2+3+5	1+2+4+5
Body SAR	Back	0.277	0.138	1.089	1.062	1.090	**1.366***	**1.366***	1.228*
	Top	0.015	0.111	0.000	0.000	0.181	0.126	0.307	0.307
	Bottom	0.100	0.007	0.847	0.825	0.011	0.954*	0.965	0.943
	Right	0.000	0.239	0.010	0.060	0.653	0.309	0.902	0.952
	Left	0.225	0.000	0.065	0.018	0.000	0.308	0.290	0.243

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Table 11-37
Bluetooth TxBF Simultaneous Transmission Scenario

Simult Tx	Configuration	Bluetooth Ant 1a SAR (W/kg)	Bluetooth Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body SAR	Back	1.084	0.532	**1.084***
	Top	0.015	0.435	0.450
	Bottom	0.320	0.007	0.327
	Right	0.000	0.988	0.988
	Left	0.687	0.000	0.687

Table 11-38
Bluetooth Simultaneous Transmission Scenario with 2.4 GHz WLAN

Simult Tx	Configuration	Bluetooth Ant 1a SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body SAR	Back	1.084	0.466	**1.550**
	Top	0.015	0.336	0.351
	Bottom	0.320	0.004	0.324
	Right	0.000	1.062	1.062
	Left	0.687	0.000	0.687

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11.4 Spatial Separation Analysis

Per FCC KDB Publication 248227, antennas may be considered spatially separated when the aggregate SAR from multiple antennas at any location in the combined SAR distribution is either ≤ 1.2 W/kg where at least 90% of the SAR is attributed to a single SAR distribution or ≤ 0.4 W/kg where no more than one SAR distribution is contributing > 0.1 W/kg.

Spatial separation was determined by inspection of the area scan SAR distributions to confirm that at all locations, SAR was < 1.2 W/kg, where at least 90% of the SAR is attributed to a single SAR distribution. See below for illustrations of the spatial separated antennas considered.

11.4.1 Back Side Spatial Separation Analysis

Figure 11-1
Back Side Spatial Separation for Antenna 1a and Antenna 3a

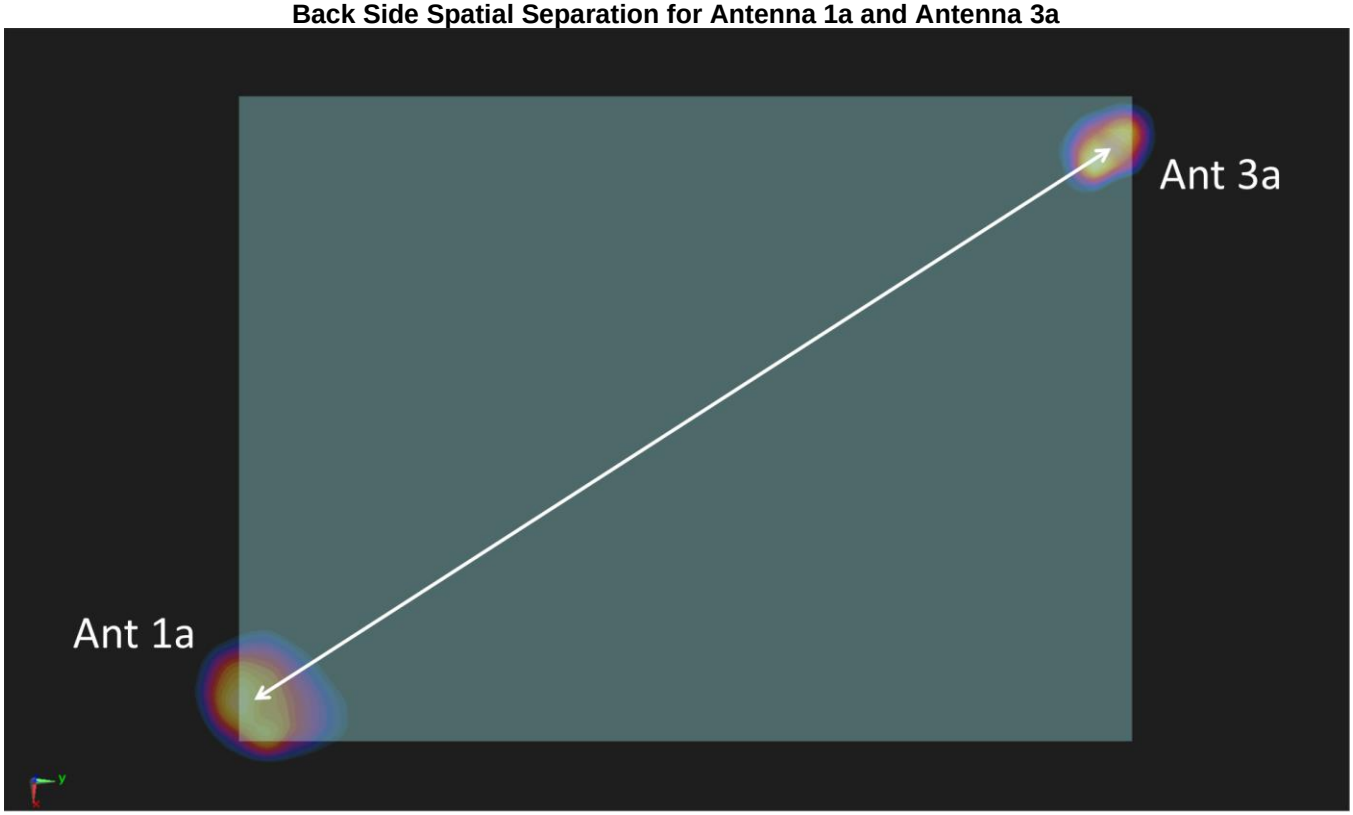

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Figure 11-2
Back Side Spatial Separation for Antenna 1a and Antenna 2a

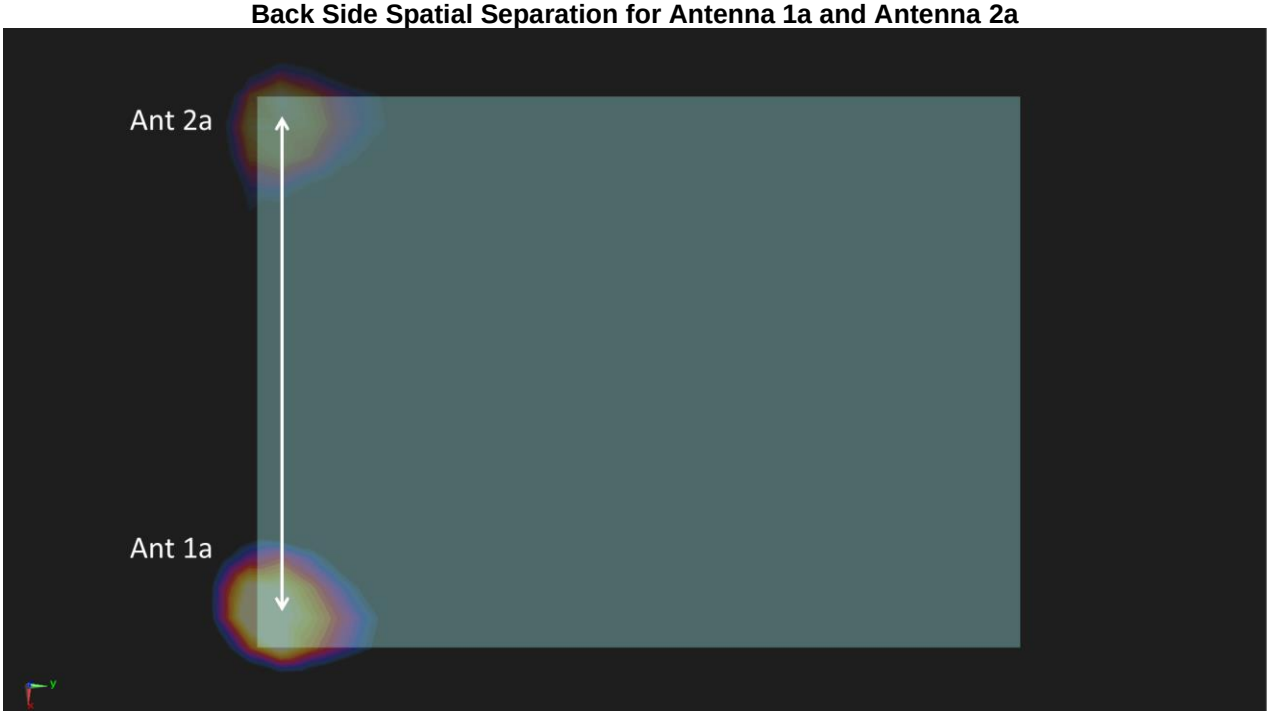

Figure 11-3
Back Side Spatial Separation for Antenna 1a and Antenna 2b

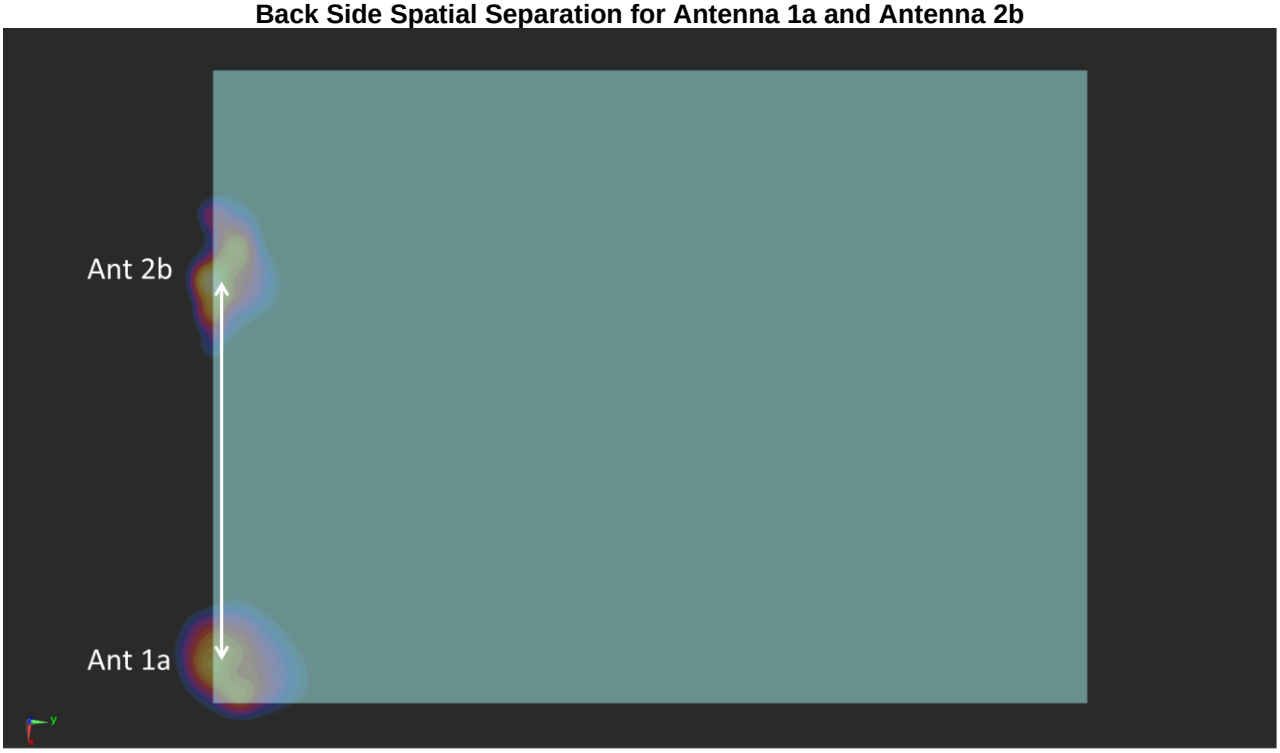

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Figure 11-4
Back Side Spatial Separation for Antenna 1b and Antenna 2b

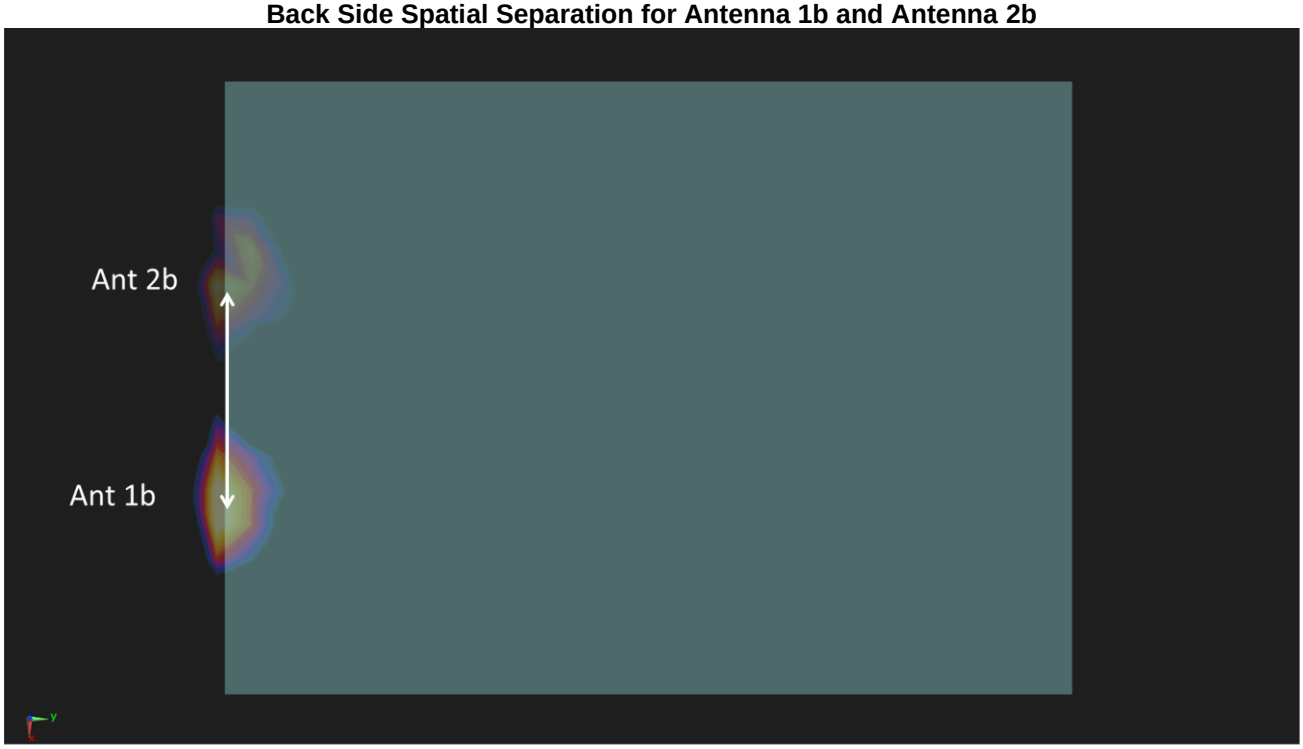

Figure 11-5
Back Side Spatial Separation for Antenna 1b and Antenna 3a

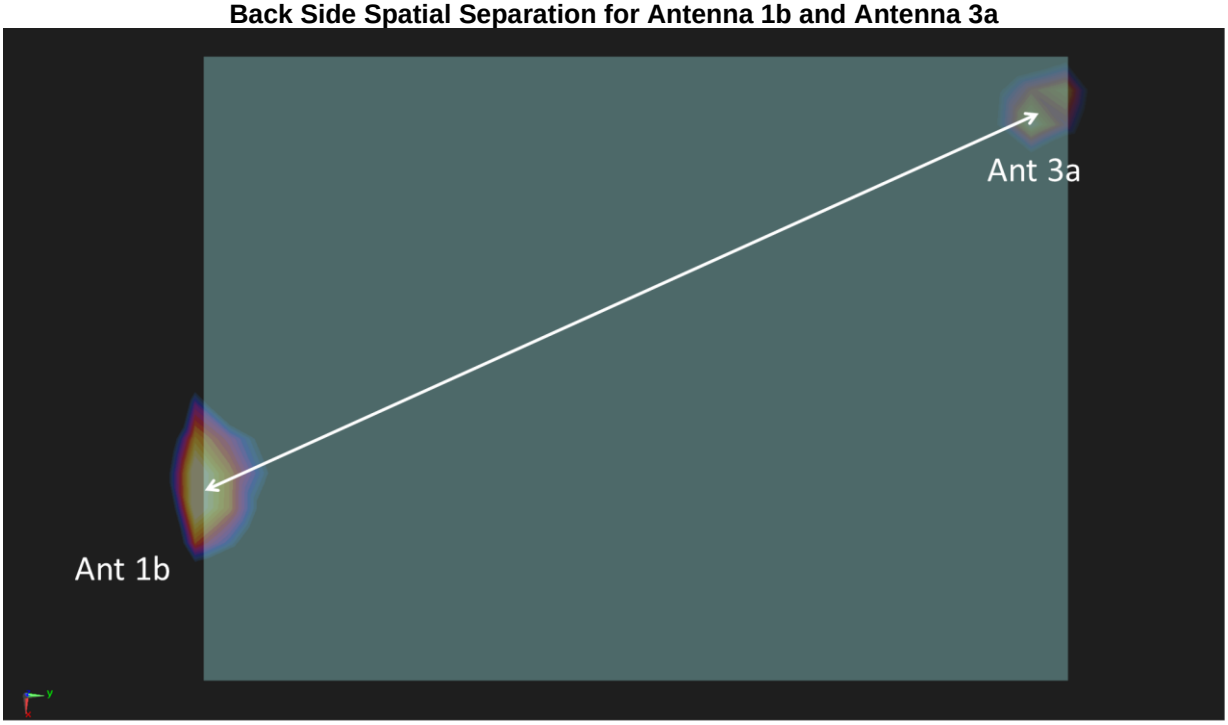

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Figure 11-6
Back Side Spatial Separation for Antenna 1b and Antenna 2a

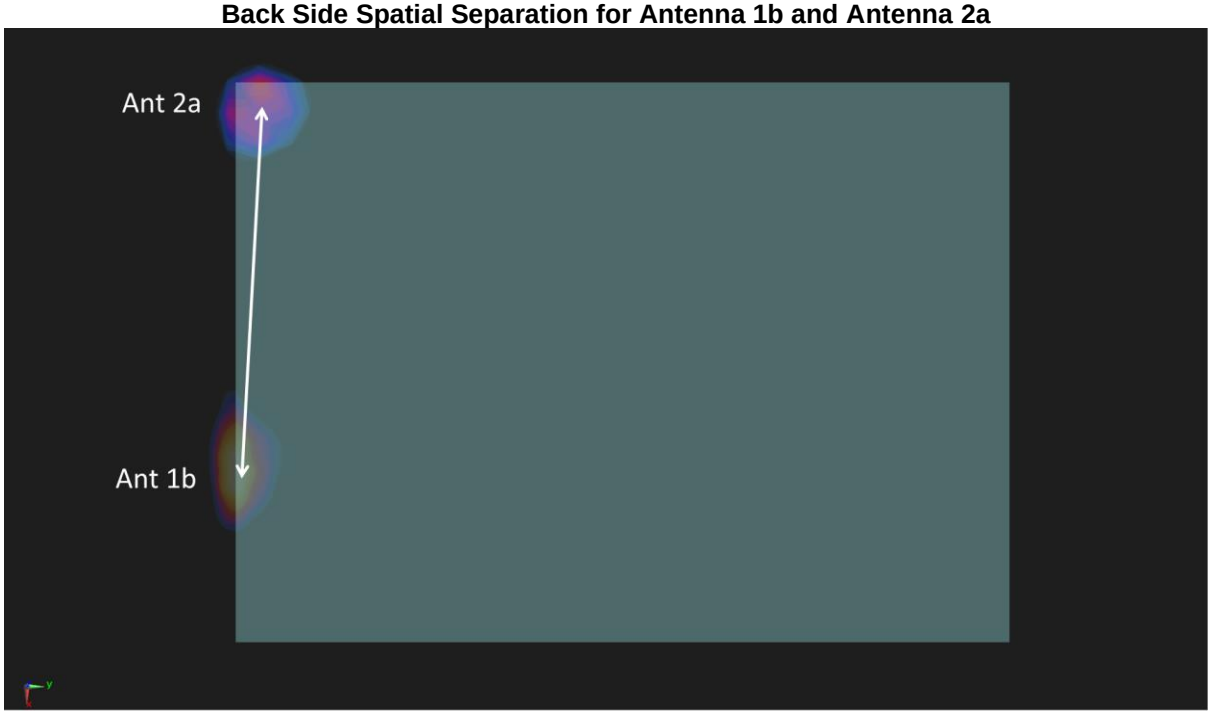

Figure 11-7
Back Side Spatial Separation for Antenna 2b and Antenna 3a

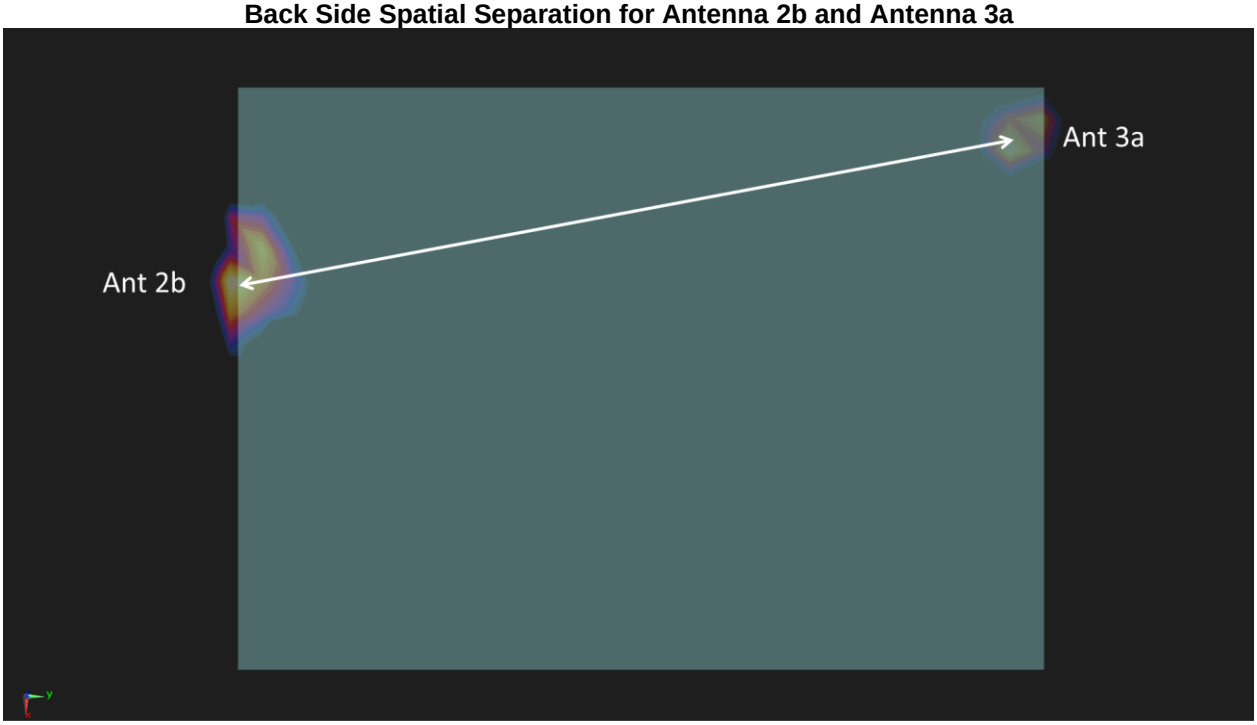

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Figure 11-8
Back Side Spatial Separation for Antenna 2a and Antenna 3a

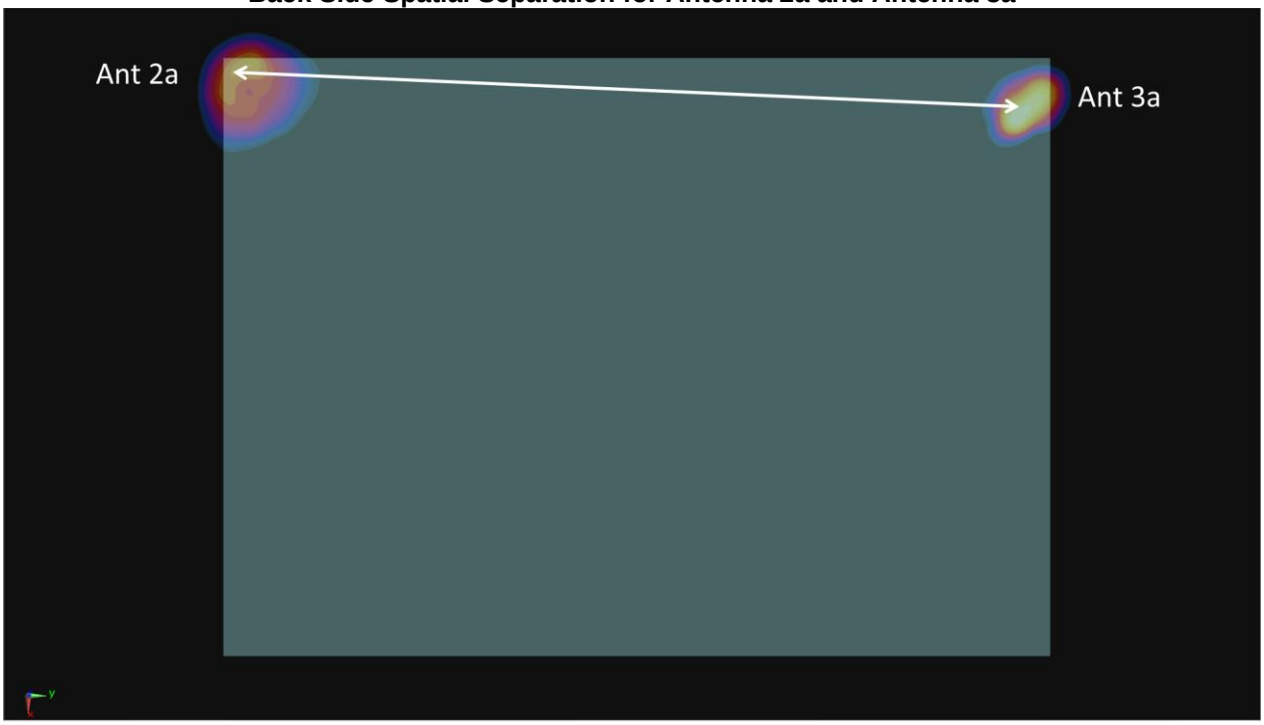

Figure 11-9
Back Side Spatial Separation for Antenna 1b and Antenna 4

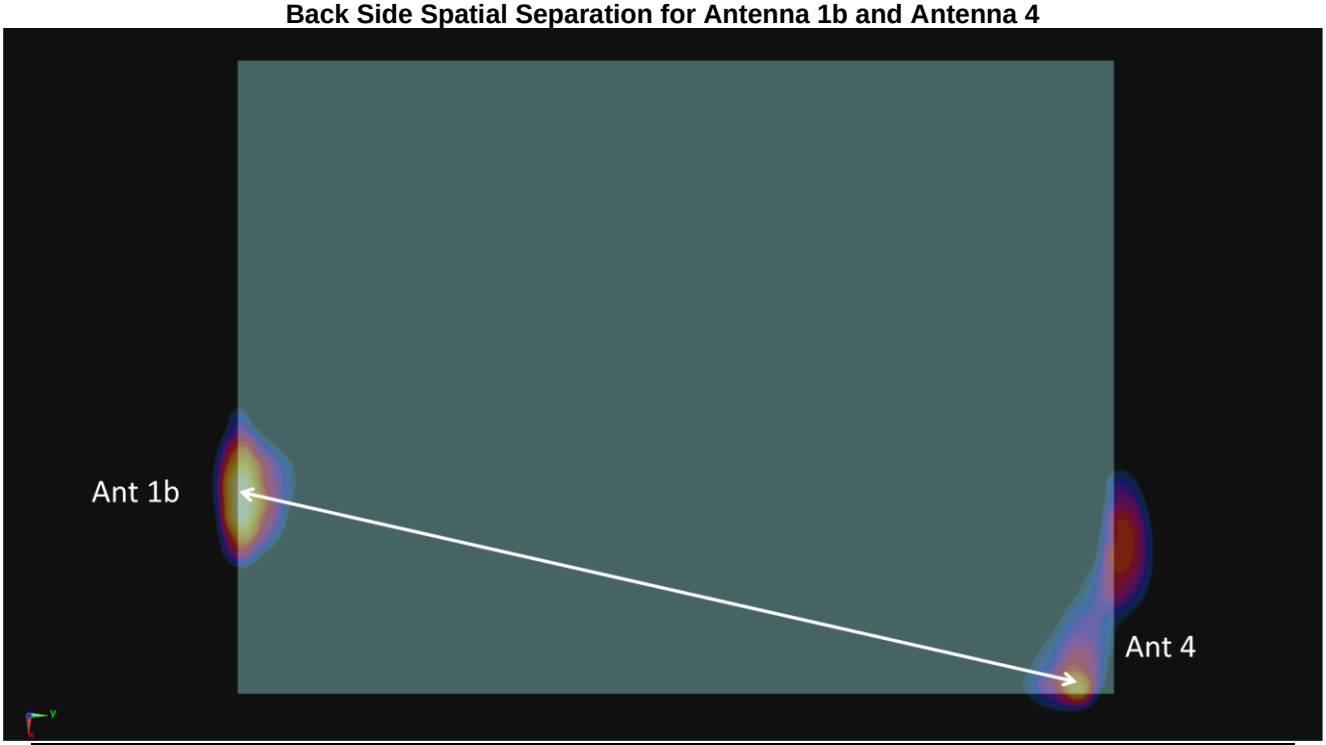

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Figure 11-10
Back Side Spatial Separation for Antenna 1a and Antenna 4

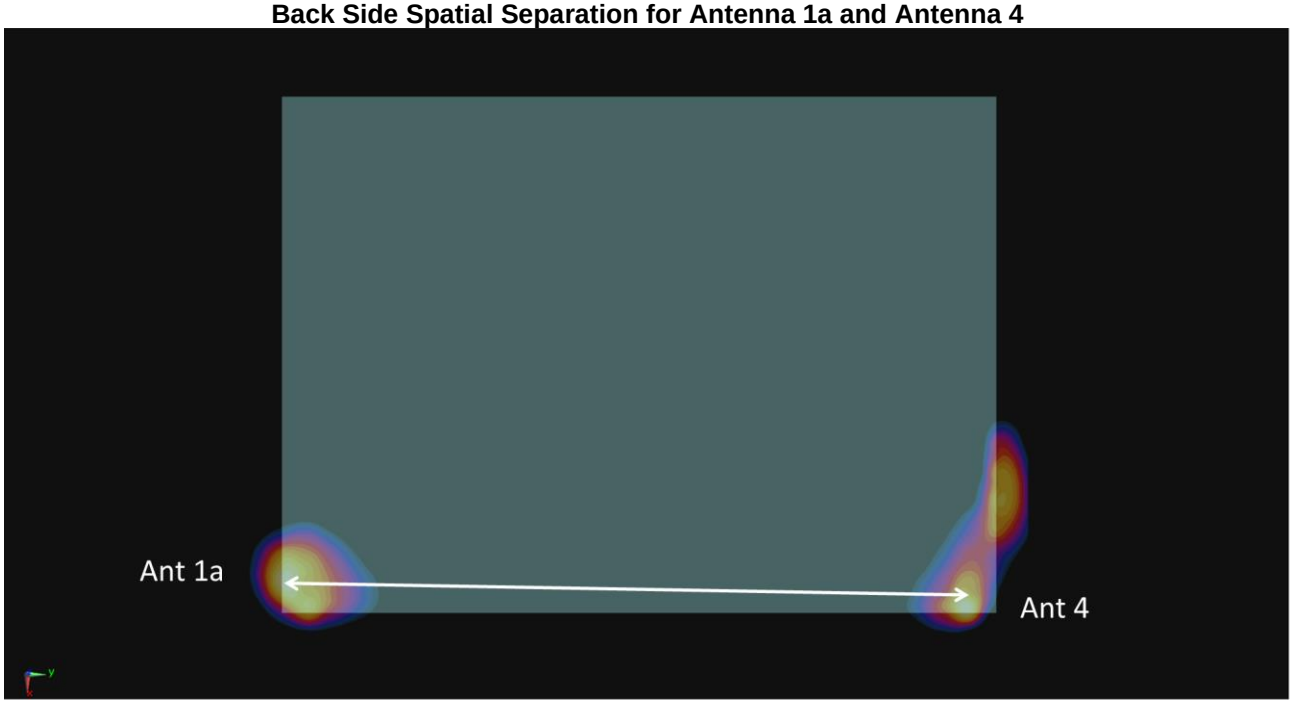

Figure 11-11
Back Side Spatial Separation for Antenna 2b and Antenna 4

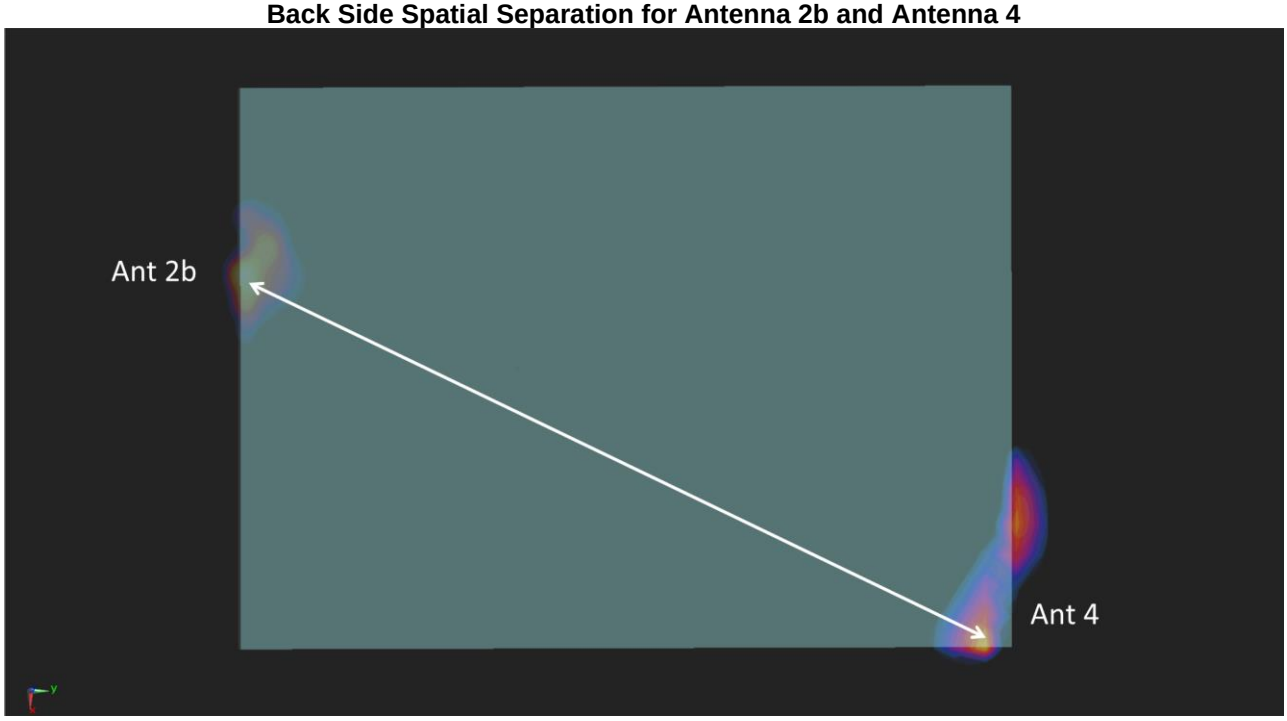

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Figure 11-12
Back Side Spatial Separation for Antenna 3a and Antenna 4

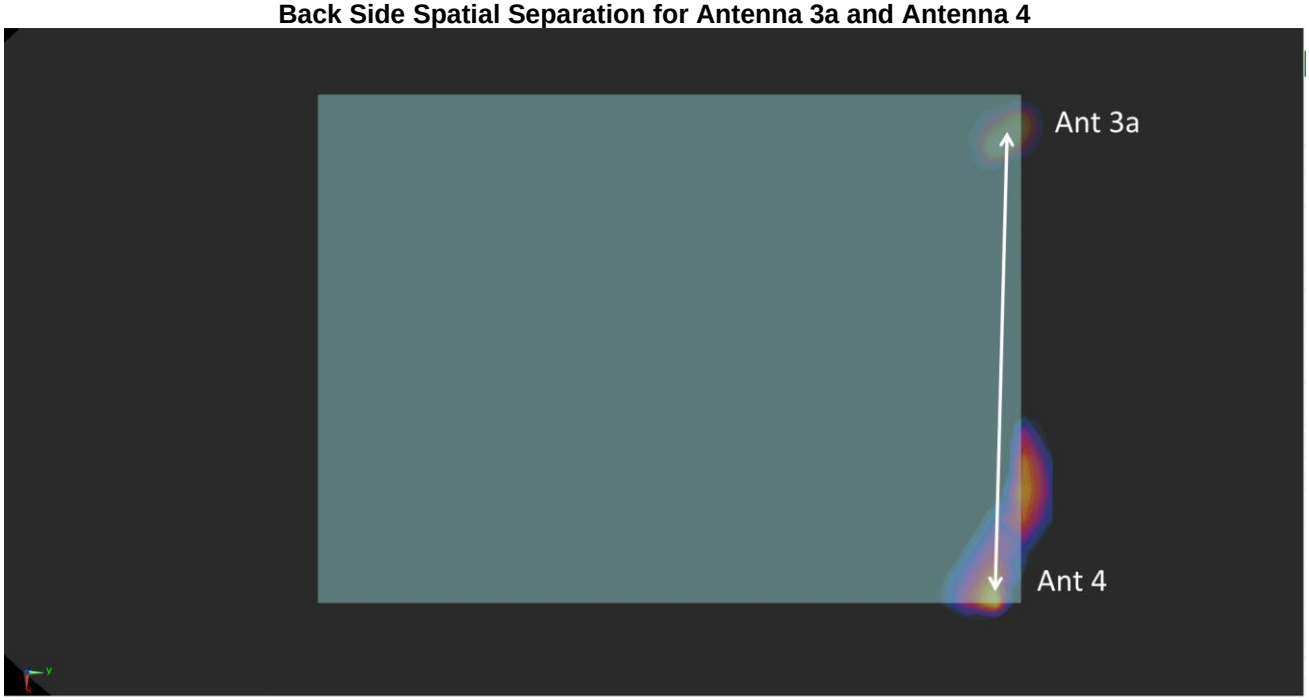

Figure 11-13
Back Side Spatial Separation for Antenna 1a and Antenna 3b

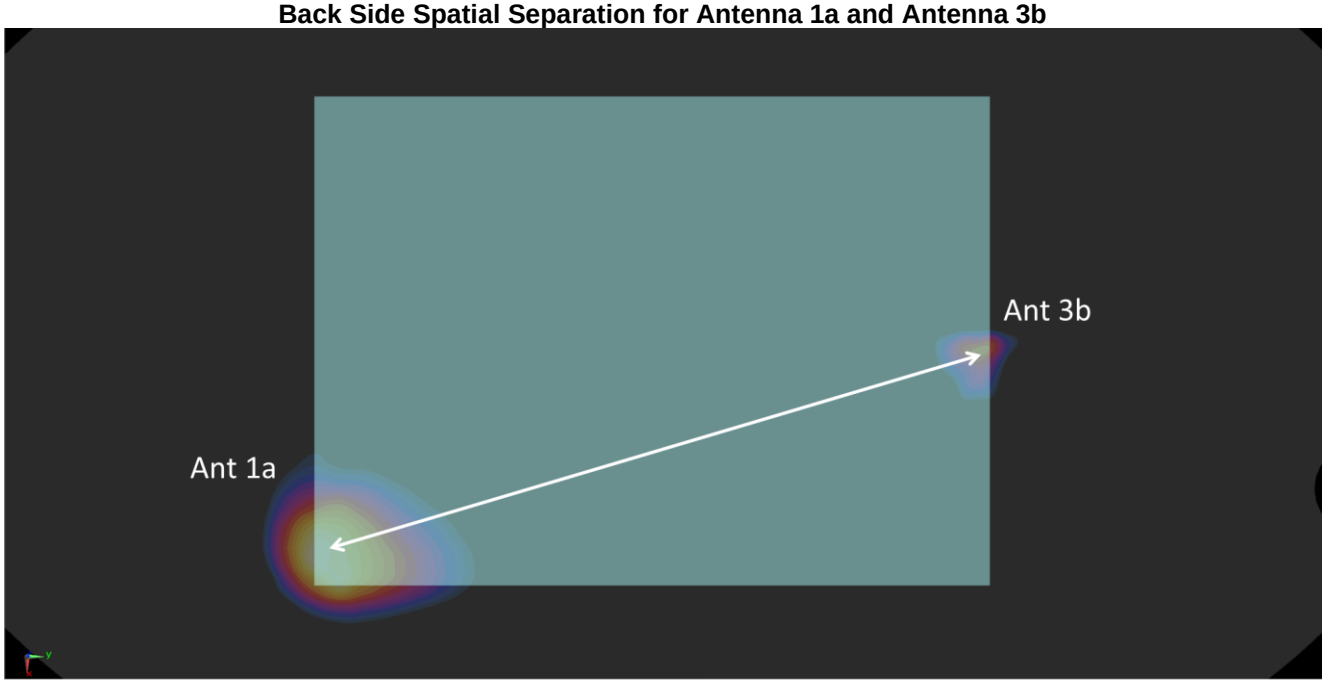

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Figure 11-14
Back Side Spatial Separation for Antenna 2b and Antenna 3b

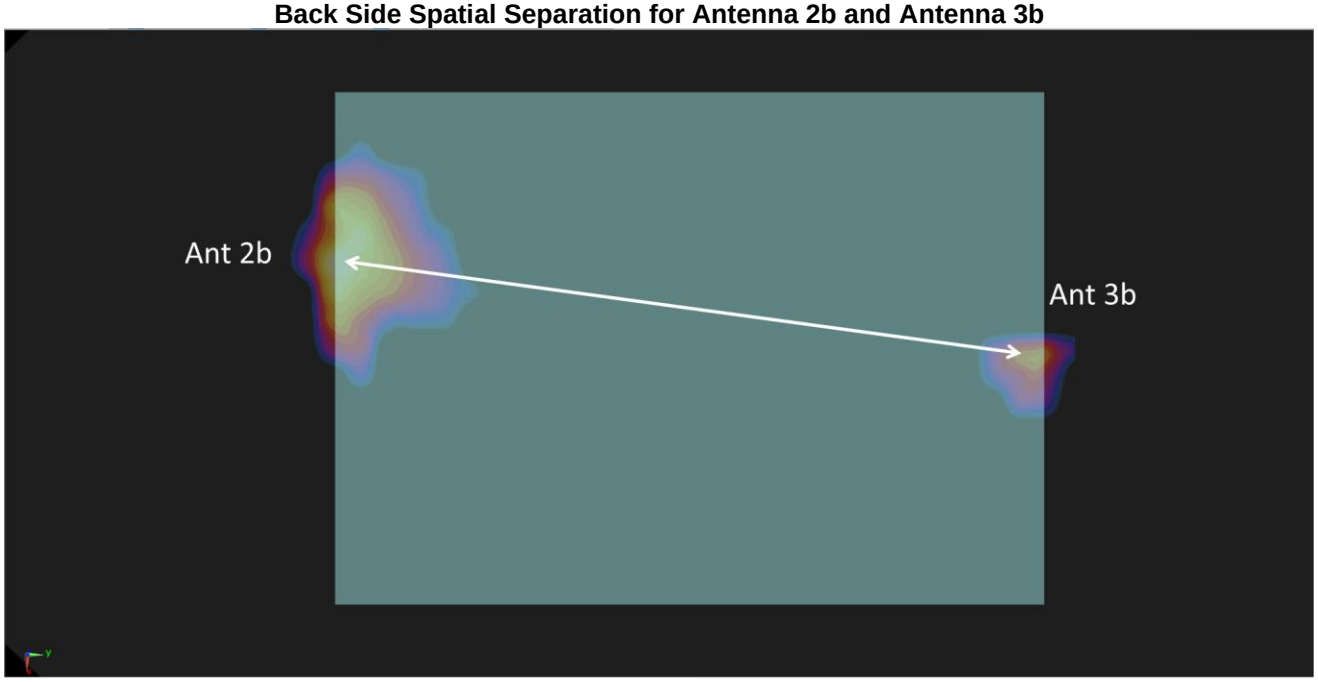
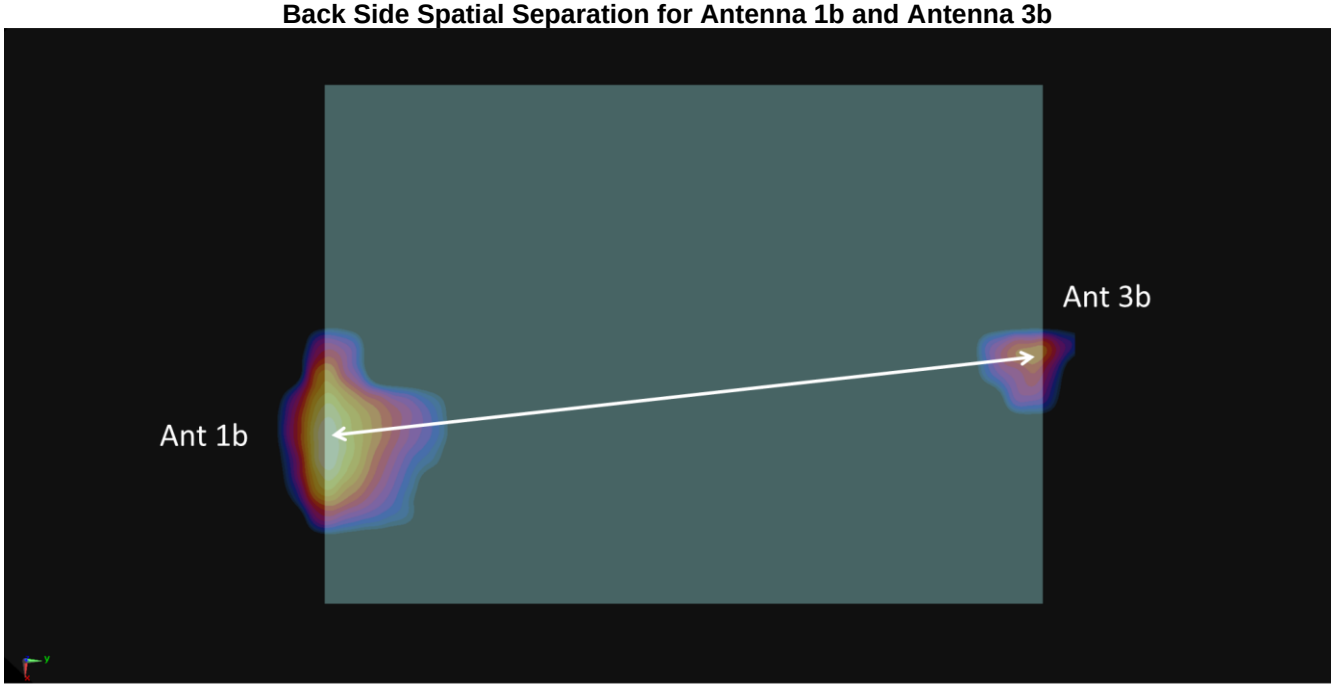


Figure 11-15
Back Side Spatial Separation for Antenna 1b and Antenna 3b



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11.4.2 Bottom Edge Spatial Separation Analysis

Figure 11-16
Bottom Edge Spatial Separation for Antenna 1b and Antenna 2b

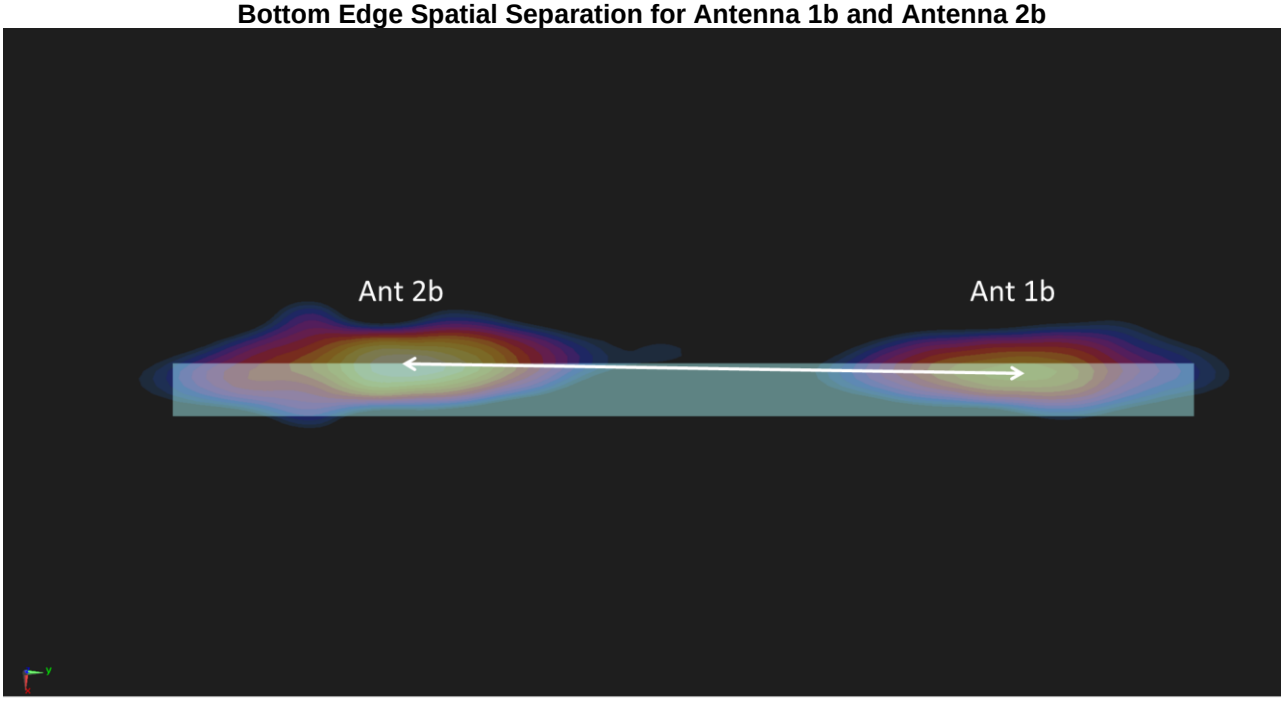
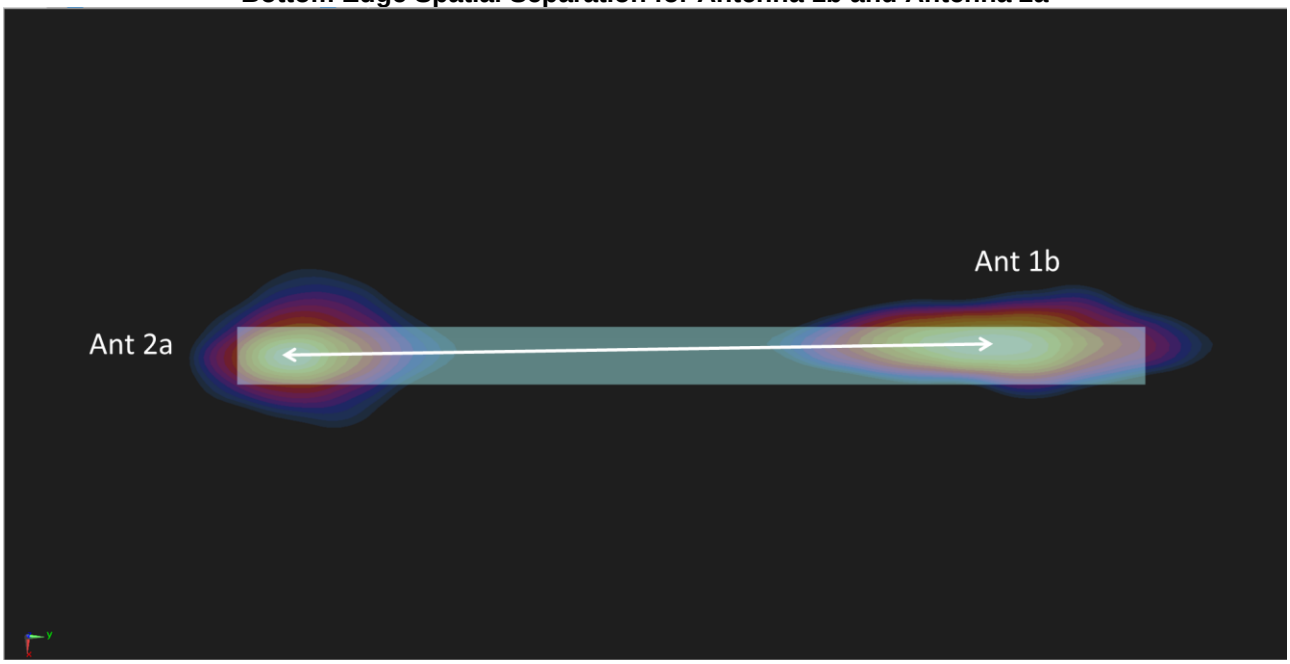


Figure 11-17
Bottom Edge Spatial Separation for Antenna 1b and Antenna 2a



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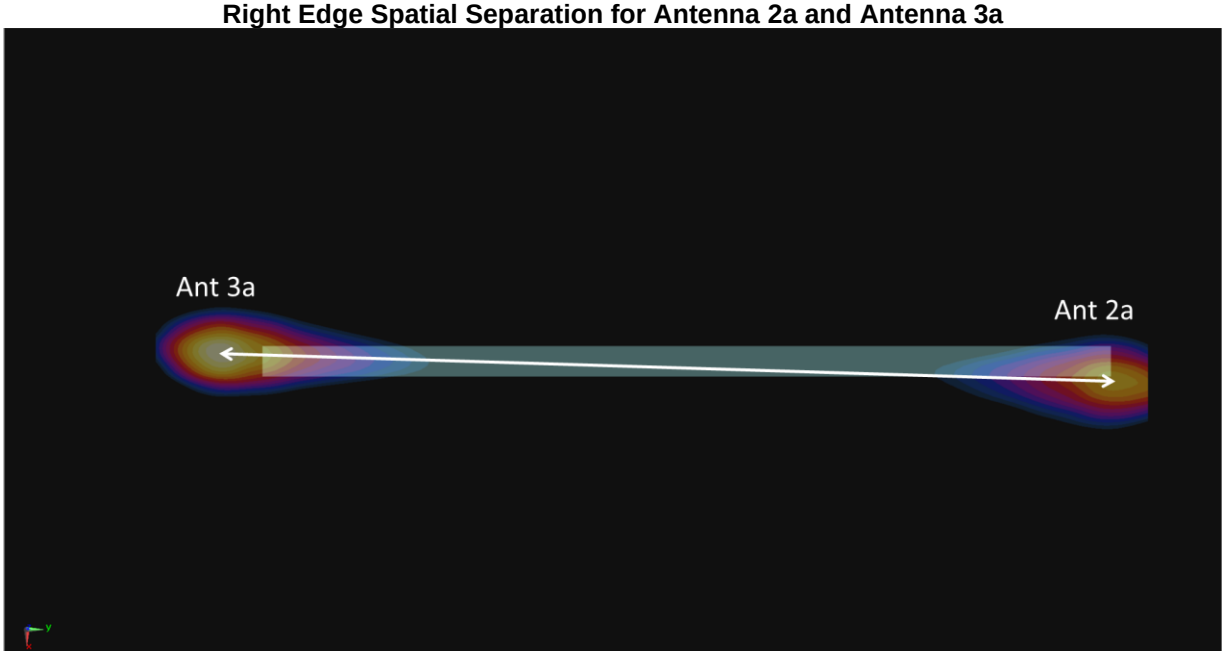
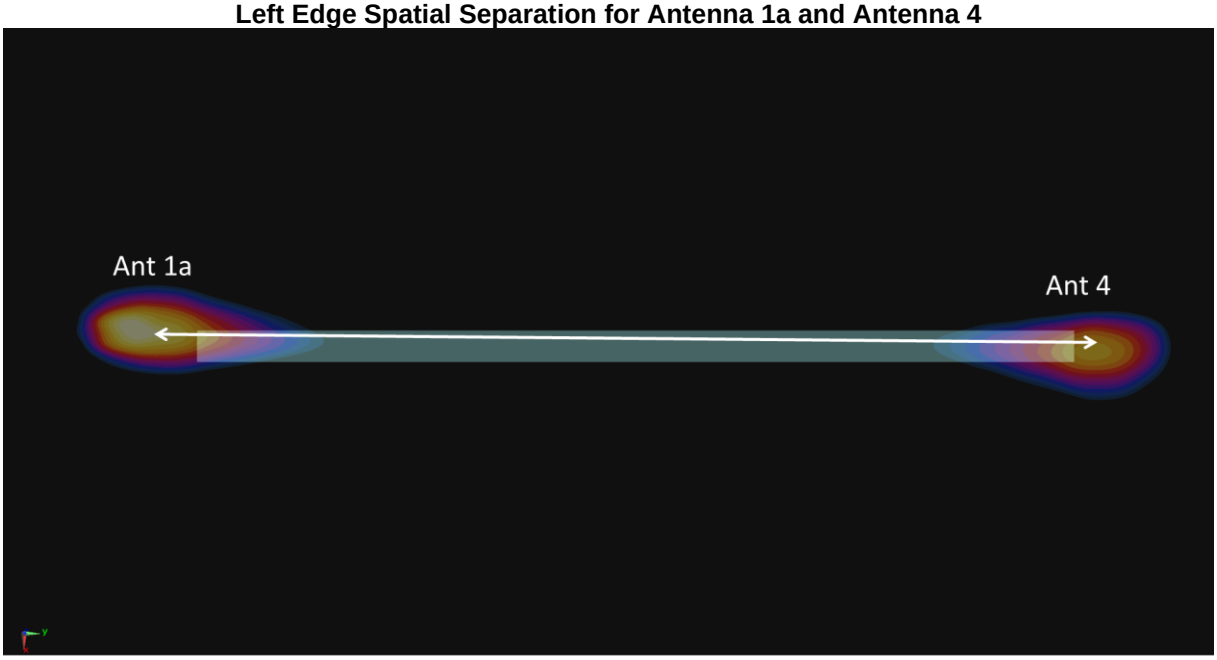
11.4.3 Right Edge Spatial Separation Analysis

Figure 11-18
Right Edge Spatial Separation for Antenna 2a and Antenna 3a



11.4.1 Left Edge Spatial Separation Analysis

Figure 11-19
Left Edge Spatial Separation for Antenna 1a and Antenna 4



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11.5 Simultaneous Transmission Conclusion

The above numerical summed SAR results for all the worst-case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE 1528-2013 Section 6.3.4.1.2.

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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
Body SAR Measurement Variability Results

BODY VARIABILITY RESULTS																
Band	FREQUENCY		Mode	Waveform	Service	Ant	Data Rate (Mbps)	Side	Spacing	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.								(W/kg)	(W/kg)		(W/kg)		(W/kg)	
750	680.50	133297	LTE Band 71, 20 MHz Bandwidth	N/A	QPSK, 1 RB, 0 RB Offset	Ant 3b	N/A	back	0 mm	0.805	0.797	1.01	N/A	N/A	N/A	N/A
850	831.50	26865	LTE Band 26 (Cell), 10 MHz Bandwidth	N/A	QPSK, 25 RB, 12 RB Offset	Ant 4	N/A	left	0 mm	0.951	0.817	1.16	N/A	N/A	N/A	N/A
1750	1745.00	349000	NR Band n66 (AWS), 40 MHz Bandwidth	DFT-S-OFDM	QPSK, 1 RB, 1 RB Offset	Ant 2a	N/A	back	0 mm	0.974	0.847	1.15	N/A	N/A	N/A	N/A
1900	1860.00	26140	LTE Band 25 (PCS), 20 MHz Bandwidth	N/A	QPSK, 50 RB, 0 RB Offset	Ant 2a	N/A	back	0 mm	0.819	0.780	1.05	N/A	N/A	N/A	N/A
2450	2441.00	39	Bluetooth	N/A	FHSS	Ant 1a	1	back	0 mm	0.993	0.901	1.10	N/A	N/A	N/A	N/A
2600	2680.00	PCC: 41490	LTE Band 41 PC2, 20 MHz Bandwidth	N/A	QPSK, 1 RB, 0 RB Offset	Ant 1a	N/A	back	0 mm	0.933	0.886	1.05	N/A	N/A	N/A	N/A
	2660.20	SCC: 41292	LTE Band 41 PC2, 20 MHz Bandwidth		QPSK, 1 RB, 99 RB Offset											
3500	3500.01	633334	NR Band n77 DoD, 100 MHz Bandwidth	DFT-S-OFDM	QPSK, 1 RB, 137 RB Offset	Ant 2B	N/A	back	0 mm	0.861	0.832	1.03	N/A	N/A	N/A	N/A
3900	3930.00	662000	NR Band n77 C, 100 MHz Bandwidth	DFT-S-OFDM	QPSK, 1 RB, 271 RB Offset	Ant 4	N/A	back	0 mm	0.853	0.816	1.05	N/A	N/A	N/A	N/A
5250	5290.00	58	802.11ac, 80 MHz Bandwidth	N/A	OFDM	Ant 1b	29.3	back	0 mm	0.871	0.843	1.03	N/A	N/A	N/A	N/A
5600	5610.00	122	802.11ac, 80 MHz Bandwidth	N/A	OFDM	Ant 1b	29.3	back	0 mm	0.994	0.958	1.04	N/A	N/A	N/A	N/A
5750	5690.00	138	802.11ac, 80 MHz Bandwidth	N/A	OFDM	Ant 1b	29.3	back	0 mm	1.010	0.999	1.01	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						

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 Body Linearity Data – Antenna 1a

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	15.4	17
Measured Output Power (dBm)	14.84	16.8
Measured SAR (W/kg)	0.872	0.922
Measured Power (mW)	30.48	47.86
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	19.29	20.72
% deviation from expected linearity		-1.57%

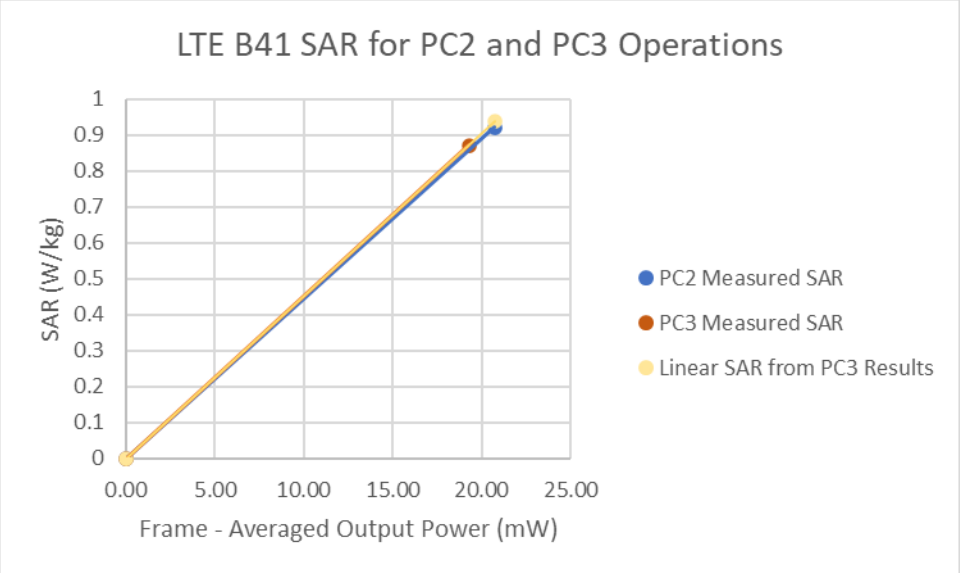

Figure 13-1
LTE Band 41 Body Linearity – Antenna 1a

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Table 13-2
LTE Band 41 ULCA Body Linearity Data – Antenna 1a

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	15.4	17
Measured Output Power (dBm)	14.97	16.78
Measured SAR (W/kg)	0.900	0.933
Measured Power (mW)	31.41	47.64
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	19.88	20.63
% deviation from expected linearity		-0.10%

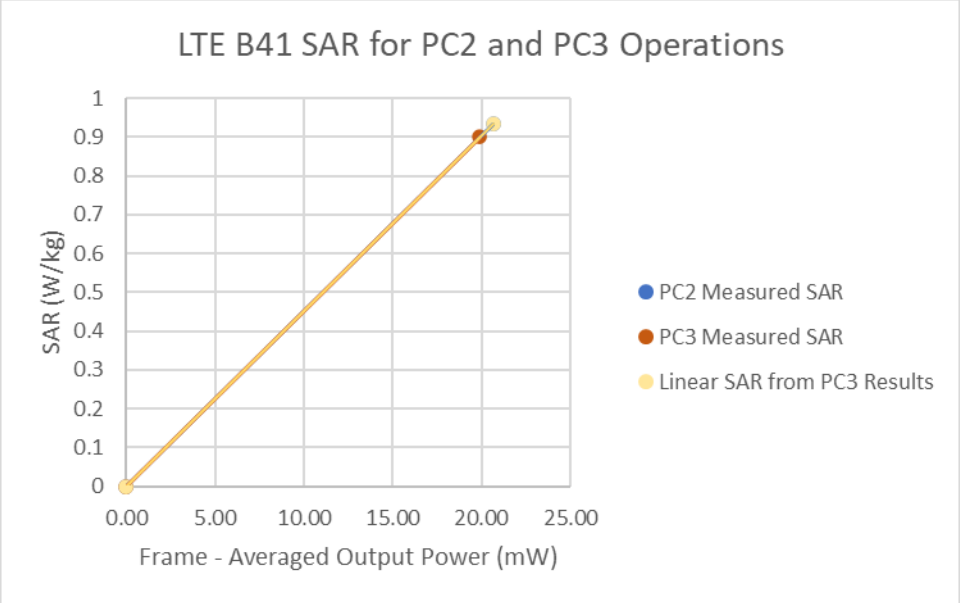

Figure 13-2
LTE Band 41 ULCA Body Linearity – Antenna 1a

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Table 13-3
LTE Band 41 Body Linearity Data – Antenna 2a

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16	17.6
Measured Output Power (dBm)	15.08	16.62
Measured SAR (W/kg)	0.760	0.712
Measured Power (mW)	32.21	45.92
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	20.39	19.88
% deviation from expected linearity		-3.93%

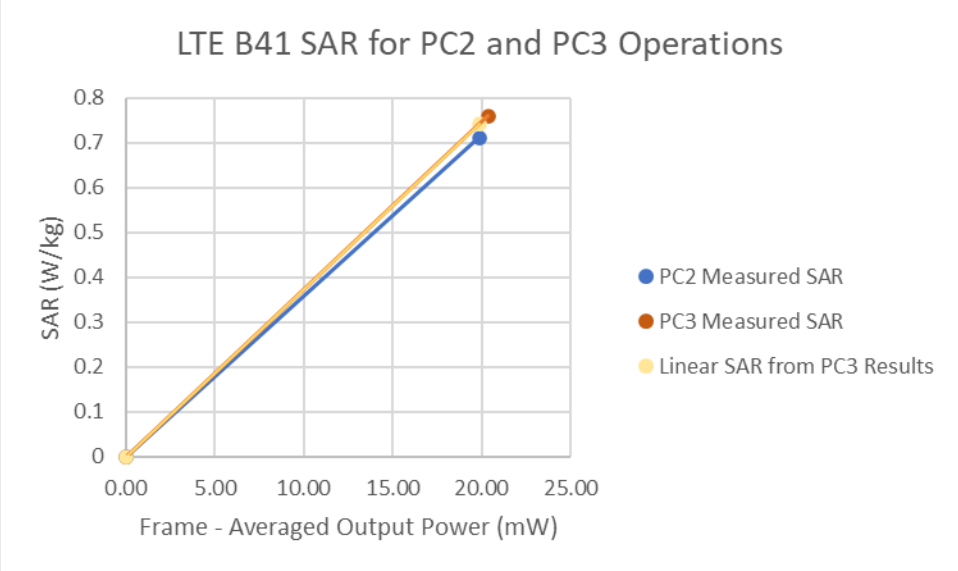

Figure 13-3
LTE Band 41 Body Linearity – Antenna 2a

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Table 13-4
LTE Band 41 ULCA Body Linearity Data – Antenna 2a

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16	17.6
Measured Output Power (dBm)	15	16.3
Measured SAR (W/kg)	0.709	0.662
Measured Power (mW)	31.62	42.66
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	20.02	18.47
% deviation from expected linearity		1.19%

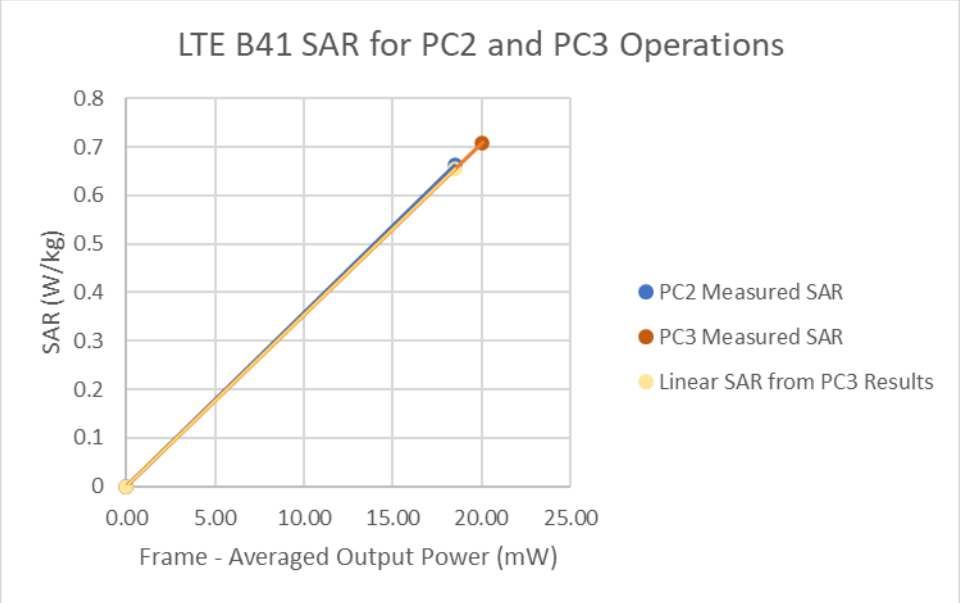

Figure 13-4
LTE Band 41 ULCA Body Linearity – Antenna 2a

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Table 13-5
LTE Band 41 Body Linearity Data – Antenna 3a

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.7	16.3
Measured Output Power (dBm)	13.6	15.51
Measured SAR (W/kg)	0.709	0.679
Measured Power (mW)	22.91	35.56
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	14.50	15.40
% deviation from expected linearity		-9.81%

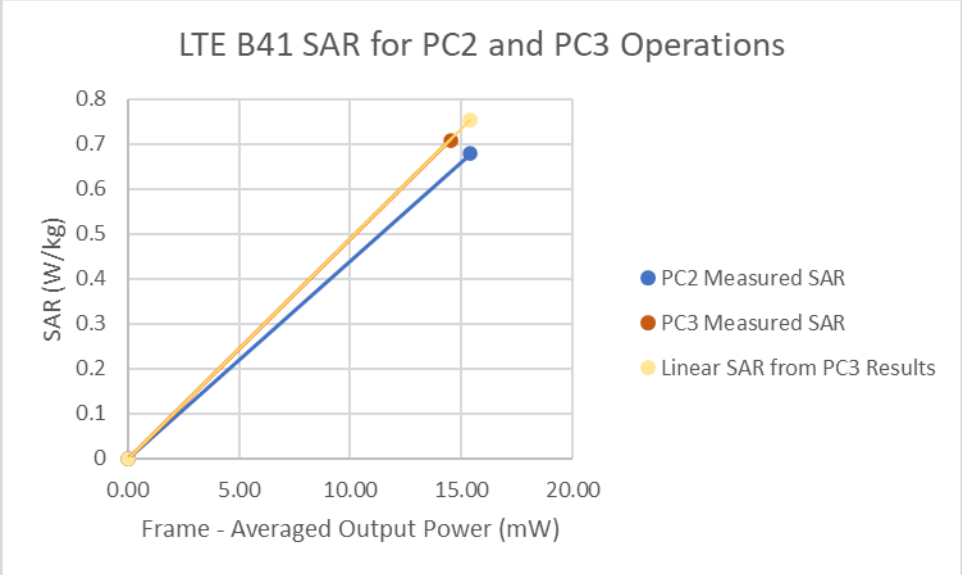

Figure 13-5
LTE Band 41 Body Linearity – Antenna 3a

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Table 13-6
LTE Band 41 ULCA Body Linearity Data – Antenna 3a

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.7	16.3
Measured Output Power (dBm)	14.42	15.43
Measured SAR (W/kg)	0.891	0.696
Measured Power (mW)	27.67	34.91
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	17.51	15.12
% deviation from expected linearity		-9.50%

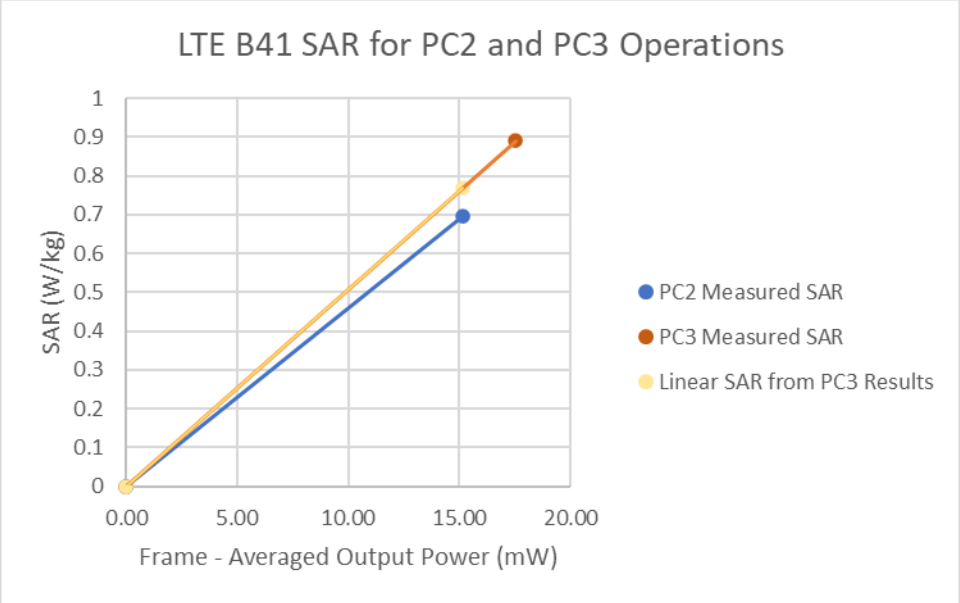

Figure 13-6
LTE Band 41 ULCA Body Linearity – Antenna 3a

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Table 13-7
LTE Band 41 Body Linearity Data – Antenna 4

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16	17.6
Measured Output Power (dBm)	15.13	16.59
Measured SAR (W/kg)	0.753	0.673
Measured Power (mW)	32.58	45.60
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	20.63	19.75
% deviation from expected linearity		-6.65%

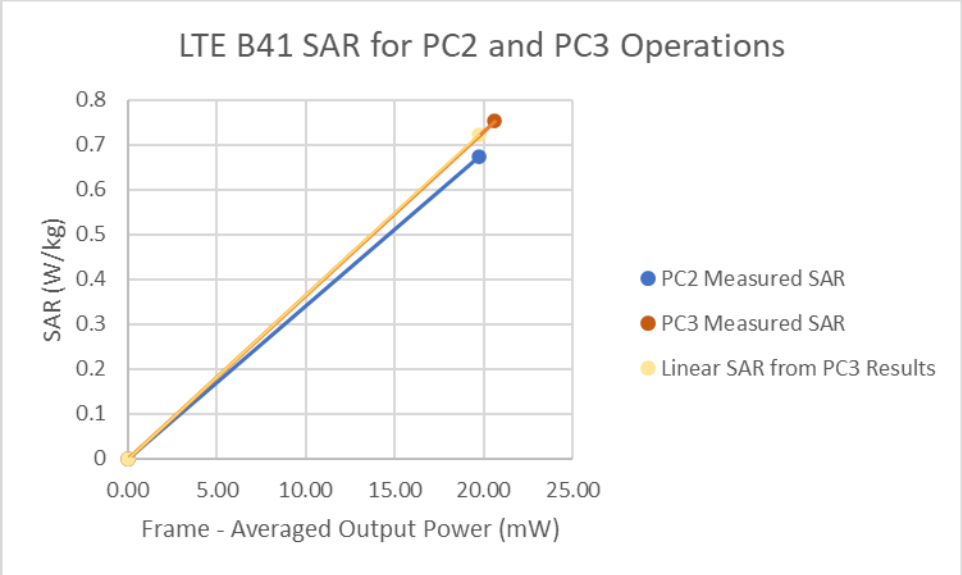

Figure 13-7
LTE Band 41 Body Linearity – Antenna 4

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Table 13-8
LTE Band 41 ULCA Body Linearity Data – Antenna 4

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16	17.6
Measured Output Power (dBm)	15.21	16.65
Measured SAR (W/kg)	0.776	0.716
Measured Power (mW)	33.19	46.24
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	21.01	20.02
% deviation from expected linearity		-3.18%

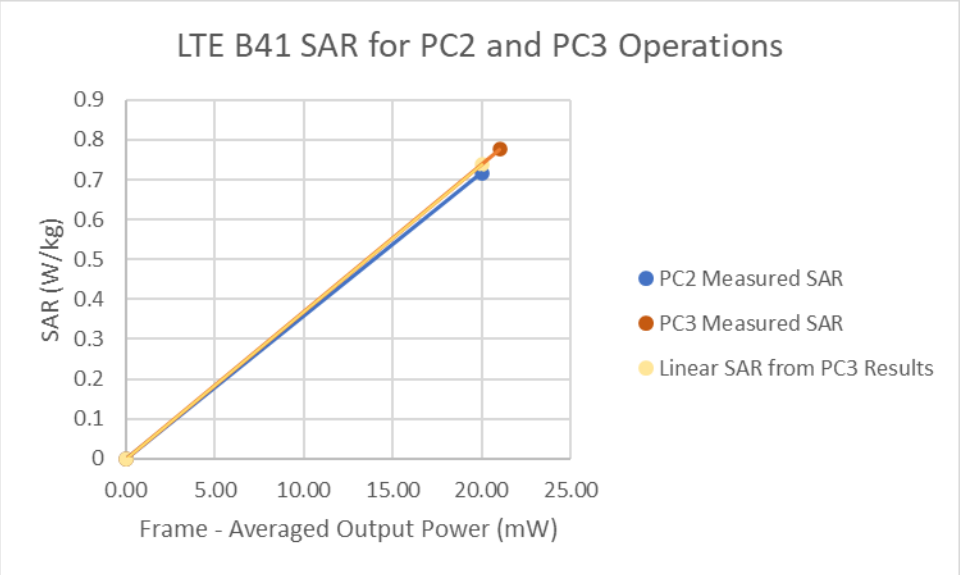

Figure 13-8
LTE Band 41 ULCA Body Linearity – Antenna 4

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14 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	8753ES	S-Parameter Vector Network Analyzer	12/17/2021	Annual	12/17/2022	MY40000670
Agilent	N9020A	MXA Signal Analyzer	02/24/2021	Annual	02/24/2022	MY48010233
Agilent	8753ES	S-Parameter Vector Network Analyzer	04/14/2021	Annual	04/14/2022	US39170118
Agilent	8753ES	S-Parameter Vector Network Analyzer	04/14/2021	Annual	04/14/2022	US39170118
Agilent	E4440A	PSA Series Spectrum Analyzer	01/29/2021	Annual	01/29/2022	MY46186272
Agilent	E5515C	Wireless Communications Test Set	05/04/2021	Biennial	05/04/2023	GB41450275
Agilent	E5515C	Wireless Communications Test Set	02/04/2021	Annual	02/04/2022	GB43193563
Amplifier Research	150A100C	Amplifier	CBT	N/A	CBT	350132
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343972
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343971
Anritsu	MA24106A	USB Power Sensor	02/25/2021	Annual	02/25/2022	1520503
Anritsu	MA24106A	USB Power Sensor	02/25/2021	Annual	02/25/2022	1520501
Anritsu	MA2411B	Pulse Power Sensor	03/08/2021	Annual	03/08/2022	1339007
Anritsu	ML2496A	Power Meter	02/19/2021	Annual	02/19/2022	1138001
Anritsu	MT8821C	Radio Communication Analyzer	05/21/2021	Annual	05/21/2022	6201144419
Control Company	4040	Therm./ Clock/ Humidity Monitor	02/23/2021	Annual	02/23/2022	160574418
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670623
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670633
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670635
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670646
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670653
Insize	1108-150	Digital Caliper	01/17/2020	Biennial	01/17/2022	409193536
Keysight Technologies	E4438C	VECTOR SIGNAL GENERATOR	10/15/2021	Annual	10/15/2022	MY45092078
MCL	BW-N10W5+	Attenuator	09/15/2021	Annual	09/15/2022	2106
MCL	BW-N3W5+	Attenuator	07/06/2021	Annual	07/06/2022	1608
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
Mini Circuits	PWR-4GHS	USB Power Sensor	05/24/2021	Annual	05/24/2022	12010120004
Mini-Circuits	NLP-1200+	Low Pass Filter	07/06/2021	Annual	07/06/2022	UU13301538
Mini-Circuits	NLP-2950+	Low Pass Filter	07/06/2021	Annual	07/06/2022	UU19201507
Mini-Circuits	VHF-8400+	High Pass Filter	07/06/2021	Annual	07/06/2022	31048
Mini-Circuits	VLF-6000+	Low Pass Filter	07/06/2021	Annual	07/06/2022	31634
Mini-Circuits	ZHDC-16-63-S+	Bidirectional Coupler	CBT	N/A	CBT	N/A
Pasternack	PE2209-10	Bidirectional Coupler	CBT	N/A	CBT	N/A
Rohde & Schwarz	CMW500	Radio Communication Tester	12/30/2021	Annual	12/30/2022	106578
Rohde & Schwarz	CMW500	Radio Communication Tester	07/19/2021	Annual	07/19/2022	128635
Rohde & Schwarz	CMW500	Radio Communication Tester	01/20/2021	Annual	01/20/2022	122206
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	09/29/2021	Annual	09/29/2022	151849
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	09/29/2021	Annual	09/29/2022	145663
Rohde & Schwarz	FSP-7	Spectrum Analyzer	01/09/2020	Biennial	01/09/2022	100990
Rohde & Schwarz	CMW500	Radio Communication Tester	04/13/2021	Annual	04/13/2022	167284
Rohde & Schwarz	CMW500	Radio Communication Tester	04/27/2021	Annual	04/27/2022	167285
Rosenberger	32W006-016	Torque Wrench	08/27/2020	Biennial	08/27/2022	N/A
SPEAG	DAKS-3.5	Portable DAK	10/07/2021	Annual	10/07/2022	1045
SPEAG	D750V3	750 MHz SAR Dipole	09/08/2021	Annual	09/08/2022	1097
SPEAG	D835V2	835 MHz SAR Dipole	06/20/2019	Triennial	06/20/2022	4d040
SPEAG	D1750V2	1750 MHz SAR Dipole	06/19/2019	Triennial	06/19/2022	1083
SPEAG	D1750V2	1750 MHz SAR Dipole	09/09/2020	Biennial	09/09/2022	1104
SPEAG	D1900V2	1900 MHz SAR Dipole	06/19/2019	Triennial	06/19/2022	5d030
SPEAG	D1900V2	1900 MHz SAR Dipole	08/10/2020	Biennial	08/10/2022	5d180
SPEAG	D2300V2	2300 MHz SAR Dipole	11/10/2020	Biennial	11/10/2022	1064
SPEAG	D2450V2	2450 MHz SAR Dipole	06/14/2019	Triennial	06/14/2022	750
SPEAG	D2600V2	2600 MHz SAR Dipole	06/14/2019	Triennial	06/14/2022	1042
SPEAG	D3500V2	3500 MHz SAR Dipole	08/16/2019	Triennial	08/16/2022	1055
SPEAG	D3700V2	3700 MHz SAR Dipole	06/09/2021	Annual	06/09/2022	1097
SPEAG	D3700V2	3700 MHz SAR Dipole	10/17/2019	Triennial	10/17/2022	1002
SPEAG	D3900V2	3900 MHz SAR Dipole	11/13/2020	Biennial	11/13/2022	1062
SPEAG	D5GHzV2	5 GHz SAR Dipole	03/10/2021	Annual	03/10/2022	1123
SPEAG	DAE4	Dasy Data Acquisition Electronics	01/13/2021	Annual	01/13/2022	793
SPEAG	DAE4	Dasy Data Acquisition Electronics	05/11/2021	Annual	05/11/2022	701
SPEAG	DAE4	Dasy Data Acquisition Electronics	04/13/2021	Annual	04/13/2022	501
SPEAG	DAE4	Dasy Data Acquisition Electronics	03/10/2021	Annual	03/10/2022	604
SPEAG	DAE4	Dasy Data Acquisition Electronics	07/14/2021	Annual	07/14/2022	1402
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/20/2021	Annual	10/20/2022	1333
SPEAG	DAE4	Dasy Data Acquisition Electronics	08/06/2021	Annual	08/06/2022	1683
SPEAG	DAK-3.5	Dielectric Assessment Kit	05/12/2021	Annual	05/12/2022	1070
SPEAG	EX3DV4	SAR Probe	05/18/2021	Annual	05/18/2022	7416
SPEAG	EX3DV4	SAR Probe	01/18/2021	Annual	01/18/2022	3837
SPEAG	EX3DV4	SAR Probe	02/17/2021	Annual	02/17/2022	7427
SPEAG	EX3DV4	SAR Probe	03/17/2021	Annual	03/17/2022	7421
SPEAG	EX3DV4	SAR Probe	10/27/2021	Annual	10/27/2022	7420
SPEAG	EX3DV4	SAR Probe	07/21/2021	Annual	07/21/2022	7546
SPEAG	EX3DV4	SAR Probe	04/19/2021	Annual	04/19/2022	7532
SPEAG	EX3DV4	SAR Probe	09/06/2021	Annual	09/06/2022	7674
SPEAG	MAIA	Modulation and Audio Interference Analyzer	CBT	N/A	CBT	1237
SPEAG	MAIA	Modulation and Audio Interference Analyzer	CBT	N/A	CBT	1324
SPEAG	MAIA	Modulation and Audio Interference Analyzer	CBT	N/A	CBT	1260

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.

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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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