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SAR EVALUATION REPORT

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

Date of Testing:
06/23/2022 – 08/15/2022
Test Site/Location:
Element Washington DC LLC,
Morgan Hill, CA, USA
Document Serial No.:
1C2205090023-21.BCG

FCC ID:	**BCGA2757**
APPLICANT:	**APPLE, INC.**

DUT Type:	Tablet Device
Application Type:	Certification
FCC Rule Part(s):	CFR §2.1093
Models:	A2757, A2777

Equipment Class	Band & Mode	Tx Frequency	SAR
			1g Body (W/kg)
PCB	UMTS 850	826.4 - 846.6 MHz	0.99
PCB	UMTS 1750	1712.4 - 1752.6 MHz	1.00
PCB	UMTS 1900	1852.4 - 1907.6 MHz	0.99
PCB	LTE Band 71	665.5 - 695.5 MHz	0.93
PCB	LTE Band 12	699.7 - 715.3 MHz	1.00
PCB	LTE Band 17	706.5 - 713.5 MHz	N/A
PCB	LTE Band 13	779.5 - 784.5 MHz	0.99
PCB	LTE Band 14	790.5 - 795.5 MHz	0.98
PCB	LTE Band 26 (Cell)	814.7 - 848.3 MHz	1.00
PCB	LTE Band 5 (Cell)	824.7 - 848.3 MHz	1.00
PCB	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	0.98
PCB	LTE Band 4 (AWS)	1710.7 - 1754.3 MHz	N/A
PCB	LTE Band 25 (PCS)	1850.7 - 1914.3 MHz	0.94
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	2498.5 - 2687.5 MHz	1.00
CBE	LTE Band 48	3552.5 - 3697.5 MHz	0.98
PCB	NR Band n71	665.5 - 695.5 MHz	0.99
PCB	NR Band n12	701.5 - 713.5 MHz	0.95
PCB	NR Band n5 (Cell)	826.5 - 846.5 MHz	1.00
PCB	NR Band n66 (AWS)	1712.5 - 1777.5 MHz	0.90
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	0.99
PCB	NR Band n41	2506.02 - 2679.99 MHz	0.98
PCB	NR Band n77 DoD	3460.02 - 3540 MHz	0.99
PCB	NR Band n77 C	3710.01 - 3969.99 MHz	1.00
DTS	2.4 GHz WLAN	2412 - 2472 MHz	1.16
NII	U-NII-1	5180 - 5240 MHz	1.17
NII	U-NII-2A	5260 - 5320 MHz	1.08
NII	U-NII-2C	5500 - 5720 MHz	1.18
NII	U-NII-3	5745 - 5825 MHz	1.19
DSS/DTS	Bluetooth	2402 - 2480 MHz	1.04
Simultaneous SAR per KDB 690783 D01v01r03:			1.58

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	826.4 - 846.6 MHz
UMTS 1750	Data	1712.4 - 1752.6 MHz
UMTS 1900	Data	1852.4 - 1907.6 MHz
LTE Band 71	Voice/Data	665.5 - 695.5 MHz
LTE Band 12	Voice/Data	699.7 - 715.3 MHz
LTE Band 17	Voice/Data	706.5 - 713.5 MHz
LTE Band 13	Voice/Data	779.5 - 784.5 MHz
LTE Band 14	Voice/Data	790.5 - 795.5 MHz
LTE Band 26 (Cell)	Voice/Data	814.7 - 848.3 MHz
LTE Band 5 (Cell)	Voice/Data	824.7 - 848.3 MHz
LTE Band 66 (AWS)	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4 (AWS)	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25 (PCS)	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2 (PCS)	Voice/Data	1850.7 - 1909.3 MHz
LTE Band 30	Voice/Data	2307.5 - 2312.5 MHz
LTE Band 7	Voice/Data	2502.5 - 2567.5 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
LTE Band 48	Voice/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 n25 (PCS)	Data	1852.5 - 1912.5 MHz
NR Band n2 (PCS)	Data	1852.5 - 1907.5 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

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	15.90	24.50	17.30	25.00			
UMTS 1750	11.30	23.00	13.00	23.50	12.30	24.30	13.80	25.00			
UMTS 1900	10.80	23.00	13.20	23.50	10.80	24.30	13.00	25.00			
LTE Band 71	N/A	N/A	N/A	N/A	17.40	24.50	20.00	25.00			
LTE Band 12	N/A	N/A	N/A	N/A	17.10	24.50	18.90	25.00			
LTE Band 17	N/A	N/A	N/A	N/A	16.60	24.50	18.20	25.00			
LTE Band 13	N/A	N/A	N/A	N/A	16.80	24.50	19.40	25.00			
LTE Band 14	N/A	N/A	N/A	N/A	16.80	24.50	19.40	25.00			
LTE Band 26 (Cell)	N/A	N/A	N/A	N/A	15.90	24.50	17.30	25.00			
LTE Band 5 (Cell)	N/A	N/A	N/A	N/A	15.90	24.50	17.70	25.00			
LTE Band 5 ULCA (Cell)	N/A	N/A	N/A	N/A	15.90	24.50**	17.70	25.00**			
LTE Band 66 (AWS)	11.30	23.00	13.00	23.50	12.30	24.30	13.80	25.00			
LTE Band 66 ULCA (AWS)	11.30	23.30**	13.00	23.80**	12.30	24.60**	13.80	25.00**			
LTE Band 4 (AWS)	11.30	23.00	13.00	23.50	12.30	24.30	13.80	25.00			
LTE Band 25 (PCS)	10.80	23.00	13.20	23.50	10.80	24.30	13.00	25.00			
LTE Band 2 (PCS)	10.80	23.00	13.20	23.50	10.80	24.30	13.00	25.00			
LTE Band 30	14.00	22.50	14.00	23.50	11.70	21.50	10.60	21.10			
LTE Band 7	13.70	22.50	13.30	23.50	11.20	24.00	10.60	25.00			
LTE Band 7 ULCA	13.70	22.80**	13.30	23.30**	11.20	24.00**	10.60	25.00**	+/- 1.0	+0.7 /- 1.0	+/- 1.0
LTE Band 41 PC3	13.3	22.0^	13.3	22.7	11.9	23.0	10.8	23.0			
LTE Band 41 ULCA PC3	13.3	22.3**^	13.3	23.0**	11.9	23.0**	10.8	23.0**			
LTE Band 41 PC2	13.3	20.4^	13.3	21.4	11.9	21.9	10.8	22.9			
LTE Band 41 ULCA PC2	13.3	20.7**^	13.3	21.7**	11.9	22.2**	10.8	23.2**			
LTE Band 48	10.5	18.5	9.5	17.1	12.6	16.7	10.1	16.8			
LTE Band 48 ULCA	10.5	18.8**	9.5	17.1**	12.6	16.7**	10.1	16.8**			
NR Band n71	N/A	N/A	N/A	N/A	17.40	24.50	20.00	25.00			
NR Band n12	N/A	N/A	N/A	N/A	17.10	24.50	18.90	25.00			
NR Band n5 (Cell)	N/A	N/A	N/A	N/A	15.90	24.50	17.70	25.00			
NR Band n66 (AWS)	11.30	23.00	13.00	23.50	12.30	24.30	13.80	25.00			
NR Band n25 (PCS)	10.80	23.00	13.20	23.50	10.80	24.30	13.00	25.00			
NR Band n2 (PCS)	10.80	23.00	13.20	23.50	10.80	24.30	13.00	25.00			
NR Band n30	14.00	18.00	14.00	19.00	11.70	19.50	10.60	20.50			
NR Band n7	13.70	22.50	13.30	23.50	11.20	24.00	10.60	25.00			
NR Band n41 PC3	13.30	25.00	13.30	25.00	11.90	23.50	10.80	24.00			
NR Band n41 PC2	13.30	25.50	13.30	27.00	11.90	23.50	10.80	24.00			
NR Band n77 PC3	9.70	22.00	9.70	22.00	12.70	25.00	10.10	24.00			
NR Band n77 PC2	9.70	22.00	9.70	22.00	12.70	26.10	10.10	24.70			

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).

**Note when the combined ULCA BW is <= 20mhz, the power is 0.3dB lower.

^Note for frequency < 2507 MHz, LTE Band 41 P_{max} target is 1dB lower for Antenna 1b only.

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.

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 3b	Max allowed power	**16.90**	**16.90**	**16.90**	**16.90**
		Nominal	**15.90**	**15.90**	**15.90**	**15.90**
	Ant 4	Max allowed power	**18.30**	**18.30**	**18.30**	**18.30**
		Nominal	**17.30**	**17.30**	**17.30**	**17.30**

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 1b	Max allowed power	**12.30**	**12.30**	**12.30**	**12.30**
		Nominal	**11.30**	**11.30**	**11.30**	**11.30**
	Ant 2b	Max allowed power	**14.00**	**14.00**	**14.00**	**14.00**
		Nominal	**13.00**	**13.00**	**13.00**	**13.00**
	Ant 3a	Max allowed power	**13.30**	**13.30**	**13.30**	**13.30**
		Nominal	**12.30**	**12.30**	**12.30**	**12.30**
	Ant 4	Max allowed power	**14.80**	**14.80**	**14.80**	**14.80**
		Nominal	**13.80**	**13.80**	**13.80**	**13.80**

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 1b	Max allowed power	**11.80**	**11.80**	**11.80**	**11.80**
		Nominal	**10.80**	**10.80**	**10.80**	**10.80**
	Ant 2b	Max allowed power	**14.20**	**14.20**	**14.20**	**14.20**
		Nominal	**13.20**	**13.20**	**13.20**	**13.20**
	Ant 3a	Max allowed power	**11.80**	**11.80**	**11.80**	**11.80**
		Nominal	**10.80**	**10.80**	**10.80**	**10.80**
	Ant 4	Max allowed power	**14.00**	**14.00**	**14.00**	**14.00**
		Nominal	**13.00**	**13.00**	**13.00**	**13.00**

Table 1-4
LTE Bands

Mode / Band		Modulated Average Output Power (in dBm)						
		Ant 1a	Ant 1b	Ant 2a	Ant 2b	Ant 3a	Ant 3b	Ant 4
LTE FDD Band 71	Max allowed power						18.40	21.00
	Nominal						17.40	20.00
LTE FDD Band 12	Max allowed power						18.10	19.90
	Nominal						17.10	18.90
LTE FDD Band 17	Max allowed power						17.60	19.20
	Nominal						16.60	18.20
LTE FDD Band 13	Max allowed power						17.80	20.40
	Nominal						16.80	19.40
LTE FDD Band 14	Max allowed power						17.80	20.40
	Nominal						16.80	19.40
LTE FDD Band 26	Max allowed power						16.90	18.30
	Nominal						15.90	17.30
LTE FDD Band 5	Max allowed power						16.90	18.70
	Nominal						15.90	17.70
LTE FDD Band 5 Intra-band ULCA	Max allowed power						16.90	18.70
	Nominal						15.90	17.70
LTE FDD Band 4	Max allowed power		12.30		14.00	13.30		14.80
	Nominal		11.30		13.00	12.30		13.80
LTE FDD Band 66	Max allowed power		12.30		14.00	13.30		14.80
	Nominal		11.30		13.00	12.30		13.80
LTE FDD Band 66 Intra-band ULCA	Max allowed power		12.30		14.00	13.30		14.80
	Nominal		11.30		13.00	12.30		13.80
LTE FDD Band 2	Max allowed power		11.80		14.20	11.80		14.00
	Nominal		10.80		13.20	10.80		13.00
LTE FDD Band 25	Max allowed power		11.80		14.20	11.80		14.00
	Nominal		10.80		13.20	10.80		13.00
LTE FDD Band 30	Max allowed power		15.00		15.00	12.70		11.60
	Nominal		14.00		14.00	11.70		10.60
LTE FDD Band 7	Max allowed power		14.70		14.30	12.20		11.60
	Nominal		13.70		13.30	11.20		10.60
LTE FDD Band 7 Intra-band ULCA	Max allowed power		14.70		14.30	12.20		11.60
	Nominal		13.70		13.30	11.20		10.60
LTE TDD Band 41 (PC3)	Max allowed power		16.30		16.30	14.90		13.80
	Nominal		15.30		15.30	13.90		12.80
LTE TDD Band 41 (PC3) Intra-band ULCA	Max allowed power		16.30		16.30	14.90		13.80
	Nominal		15.30		15.30	13.90		12.80
LTE TDD Band 41 (PC2)	Max allowed power		17.90		17.90	16.50		15.40
	Nominal		16.90		16.90	15.50		14.40
LTE TDD Band 41 (PC2) Intra-band ULCA	Max allowed power		17.90		17.90	16.50		15.40
	Nominal		16.90		16.90	15.50		14.40
LTE TDD Band 48	Max allowed power	13.50		12.50			15.60	13.10
	Nominal	12.50		11.50			14.60	12.10
LTE TDD Band 48 Intra-band ULCA	Max allowed power	13.50		12.50			15.60	13.10
	Nominal	12.50		11.50			14.60	12.10

Table 1-5
NR Bands

Mode / Band		Modulated Average Output Power (in dBm)						
		Ant 1a	Ant 1b	Ant 2a	Ant 2b	Ant 3a	Ant 3b	Ant 4
NR FDD Band n71	Max allowed power						18.40	21.00
	Nominal						17.40	20.00
NR FDD Band n12	Max allowed power						18.10	19.90
	Nominal						17.10	18.90
NR FDD Band n5	Max allowed power						16.90	18.70
	Nominal						15.90	17.70
NR FDD Band n66	Max allowed power		12.30		14.00	13.30		14.80
	Nominal		11.30		13.00	12.30		13.80
NR FDD Band n2	Max allowed power		11.80		14.20	11.80		14.00
	Nominal		10.80		13.20	10.80		13.00
NR FDD Band n25	Max allowed power		11.80		14.20	11.80		14.00
	Nominal		10.80		13.20	10.80		13.00
NR FDD Band n30	Max allowed power		15.00		15.00	12.70		11.60
	Nominal		14.00		14.00	11.70		10.60
NR FDD Band n7	Max allowed power		14.70		14.30	12.20		11.60
	Nominal		13.70		13.30	11.20		10.60
NR TDD Band n41 (PC3)	Max allowed power		14.30		14.30	12.90		11.80
[Burst Averaged]	Nominal		13.30		13.30	11.90		10.80
NR TDD Band n41 (PC2)	Max allowed power		14.30		14.30	12.90		11.80
[Burst Averaged]	Nominal		13.30		13.30	11.90		10.80
NR TDD Band n77 (PC3)	Max allowed power	10.70		10.70			13.70	11.10
[Burst Averaged]	Nominal	9.70		9.70			12.70	10.10
NR TDD Band n77 (PC2)	Max allowed power	10.70		10.70			13.70	11.10
[Burst Averaged]	Nominal	9.70		9.70			12.70	10.10

1.4.2 Maximum WLAN Time-Averaged Output Power

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

Mode	IEEE 802.11 (Maximum in dBm) - Antenna 1a Tolerance (+0/-3.00 dB)						
	Channel	SISO				MIMO	
		b	g	n	ax SU	g/n	ax SU
2.4 GHz WIFI 20 MHz Bandwidth	1	12.00	12.00	12.00	12.00	12.00	12.00
	2	12.00	12.00	12.00	12.00	12.00	12.00
	3	12.00	12.00	12.00	12.00	12.00	12.00
	4	12.00	12.00	12.00	12.00	12.00	12.00
	5	12.00	12.00	12.00	12.00	12.00	12.00
	6	12.00	12.00	12.00	12.00	12.00	12.00
	7	12.00	12.00	12.00	12.00	12.00	12.00
	8	12.00	12.00	12.00	12.00	12.00	12.00
	9	12.00	12.00	12.00	12.00	12.00	12.00
	10	12.00	12.00	12.00	12.00	12.00	12.00
	11	12.00	12.00	12.00	12.00	12.00	12.00
	12	12.00	11.25	11.25	11.25	11.00	11.00
	13	12.00	8.00	8.00	N/A	7.50	N/A

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

Mode	IEEE 802.11 (Maximum in dBm) - Antenna 3a Tolerance (+0/-3.00 dB)						
	Channel	SISO				MIMO	
		b	g	n	ax SU	g/n	ax SU
2.4 GHz WIFI 20 MHz Bandwidth	1	12.50	12.50	12.50	12.50	12.50	12.50
	2	12.50	12.50	12.50	12.50	12.50	12.50
	3	12.50	12.50	12.50	12.50	12.50	12.50
	4	12.50	12.50	12.50	12.50	12.50	12.50
	5	12.50	12.50	12.50	12.50	12.50	12.50
	6	12.50	12.50	12.50	12.50	12.50	12.50
	7	12.50	12.50	12.50	12.50	12.50	12.50
	8	12.50	12.50	12.50	12.50	12.50	12.50
	9	12.50	12.50	12.50	12.50	12.50	12.50
	10	12.50	12.50	12.50	12.50	12.50	12.50
	11	12.50	12.50	12.50	12.50	12.50	12.50
	12	12.50	11.25	11.25	11.25	11.00	11.00
	13	12.50	8.00	8.00	N/A	7.50	N/A

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

Mode	IEEE 802.11 (Maximum in dBm) - Antenna 1b Tolerance (+0/-3.00 dB)							
	Channel	SISO			MIMO CDD		MIMO SDM	
		a	n/ac	ax SU	a/n/ac	ax SU	n/ac	ax SU
5 GHz WIFI 20 MHz Bandwidth	36	12.50	12.50	12.50	12.50	12.50	12.50	12.50
	40	12.50	12.50	12.50	12.50	12.50	12.50	12.50
	44	12.50	12.50	12.50	12.50	12.50	12.50	12.50
	48	12.50	12.50	12.50	12.50	12.50	12.50	12.50
	52	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	56	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	60	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	64	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	100	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	104	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	108	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	112	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	116	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	120	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	124	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	128	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	132	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	136	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	140	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	144	11.50	11.50	11.50	11.50	11.50	11.50	11.50
	149	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	153	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	157	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	161	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	165	12.00	12.00	12.00	12.00	12.00	12.00	12.00
5 GHz WIFI 40 MHz Bandwidth	38	[redacted]	12.50	12.50	12.50	12.50	12.50	12.50
	46		12.50	12.50	12.50	12.50	12.50	12.50
	54		12.00	12.00	12.00	12.00	12.00	12.00
	62		12.00	12.00	12.00	12.00	12.00	12.00
	102		11.50	11.50	11.50	11.50	11.50	11.50
	110		11.50	11.50	11.50	11.50	11.50	11.50
	118		11.50	11.50	11.50	11.50	11.50	11.50
	126		11.50	11.50	11.50	11.50	11.50	11.50
	134		11.50	11.50	11.50	11.50	11.50	11.50
	142		11.50	11.50	11.50	11.50	11.50	11.50
	151		12.00	12.00	12.00	12.00	12.00	12.00
	159		12.00	12.00	12.00	12.00	12.00	12.00
5 GHz WIFI 80 MHz Bandwidth	42		12.50	12.50	12.50	12.50	12.50	12.50
	58		11.75	11.75	11.00	11.50	11.00	11.50
	106		11.50	11.50	11.50	11.50	11.50	11.50
	122		11.50	11.50	11.50	11.50	11.50	11.50
	138		11.50	11.50	11.50	11.50	11.50	11.50
	155		12.00	12.00	12.00	12.00	12.00	12.00

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above. 802.11a supports up to 20MHz, 802.11n supports up to 40MHz, 802.11ac/ax support up to 160MHz.

Mode	IEEE 802.11 (Maximum in dBm) - Antenna 3a Tolerance (+0/-3.00 dB)							
	Channel	SISO			MIMO CDD		MIMO SDM	
		a	n/ac	ax SU	a/n/ac	ax SU	n/ac	ax SU
5 GHz WIFI 20 MHz Bandwidth	36	10.75	10.75	10.75	10.75	10.75	10.75	10.75
	40	10.75	10.75	10.75	10.75	10.75	10.75	10.75
	44	10.75	10.75	10.75	10.75	10.75	10.75	10.75
	48	10.75	10.75	10.75	10.75	10.75	10.75	10.75
	52	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	56	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	60	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	64	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	100	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	104	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	108	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	112	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	116	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	120	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	124	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	128	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	132	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	136	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	140	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	144	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	149	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	153	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	157	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	161	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	165	10.00	10.00	10.00	10.00	10.00	10.00	10.00
5 GHz WIFI 40 MHz Bandwidth	38	[redacted]	10.75	10.75	10.75	10.75	10.75	10.75
	46		10.75	10.75	10.75	10.75	10.75	10.75
	54		10.50	10.50	10.50	10.50	10.50	10.50
	62		10.50	10.50	10.50	10.50	10.50	10.50
	102		10.00	10.00	10.00	10.00	10.00	10.00
	110		10.00	10.00	10.00	10.00	10.00	10.00
	118		10.00	10.00	10.00	10.00	10.00	10.00
	126		10.00	10.00	10.00	10.00	10.00	10.00
	134		10.00	10.00	10.00	10.00	10.00	10.00
	142		10.00	10.00	10.00	10.00	10.00	10.00
	151		10.00	10.00	10.00	10.00	10.00	10.00
	159		10.00	10.00	10.00	10.00	10.00	10.00
5 GHz WIFI 80 MHz Bandwidth	42		10.75	10.75	10.75	10.75	10.75	10.75
	58		10.50	10.50	10.50	10.50	10.50	10.50
	106		10.00	10.00	10.00	10.00	10.00	10.00
	122		10.00	10.00	10.00	10.00	10.00	10.00
	138		10.00	10.00	10.00	10.00	10.00	10.00
	155		10.00	10.00	10.00	10.00	10.00	10.00

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above. 802.11a supports up to 20MHz, 802.11n supports up to 40MHz, 802.11ac/ax support up to 160MHz.

Mode	IEEE 802.11 (Maximum in dBm) - Antenna 3c Tolerance (+0/-3.00 dB)							
	Channel	SISO			MIMO CDD		MIMO SDM	
		a	n/ac	ax SU	a/n/ac	ax SU	n/ac	ax SU
5 GHz WIFI 20 MHz Bandwidth	36	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	40	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	44	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	48	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	52	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	56	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	60	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	64	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	100	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	104	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	108	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	112	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	116	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	120	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	124	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	128	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	132	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	136	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	140	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	144	15.00	15.00	15.00	15.00	15.00	15.00	15.00
	149	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	153	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	157	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	161	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	165	16.00	16.00	16.00	16.00	16.00	16.00	16.00
5 GHz WIFI 40 MHz Bandwidth	38	[redacted]	16.00	15.75	14.50	13.50	14.50	13.50
	46		16.00	16.00	16.00	16.00	16.00	16.00
	54		16.00	16.00	16.00	16.00	16.00	16.00
	62		14.50	14.00	12.50	12.00	12.50	12.00
	102		14.00	14.00	12.75	13.00	12.75	13.00
	110		15.00	15.00	15.00	15.00	15.00	15.00
	118		15.00	15.00	15.00	15.00	15.00	15.00
	126		15.00	15.00	15.00	15.00	15.00	15.00
	134		15.00	15.00	15.00	15.00	15.00	15.00
	142		15.00	15.00	15.00	15.00	15.00	15.00
	151		16.00	16.00	16.00	16.00	16.00	16.00
	159		16.00	16.00	16.00	16.00	16.00	16.00
5 GHz WIFI 80 MHz Bandwidth	42		14.75	14.50	14.00	13.50	14.00	13.50
	58		11.75	11.75	11.00	11.50	11.00	11.50
	106		14.00	13.25	12.00	11.50	12.00	11.50
	122		15.00	15.00	15.00	15.00	15.00	15.00
	138		15.00	15.00	15.00	15.00	15.00	15.00
	155		16.00	16.00	16.00	16.00	16.00	16.00

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above. 802.11a supports up to 20MHz, 802.11n supports up to 40MHz, 802.11ac/ax support up to 160MHz.

1.4.3 Reduced WLAN Time-Averaged Output Power

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

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

Mode	IEEE 802.11 (Maximum in dBm) - Antenna 1a Tolerance (+0/-3.00 dB)						
	Channel	SISO				MIMO	
		b	g	n	ax SU	g/n	ax SU
2.4 GHz WIFI 20 MHz Bandwidth	1	8.50	8.50	8.50	8.50	8.50	8.50
	2	8.50	8.50	8.50	8.50	8.50	8.50
	3	8.50	8.50	8.50	8.50	8.50	8.50
	4	8.50	8.50	8.50	8.50	8.50	8.50
	5	8.50	8.50	8.50	8.50	8.50	8.50
	6	8.50	8.50	8.50	8.50	8.50	8.50
	7	8.50	8.50	8.50	8.50	8.50	8.50
	8	8.50	8.50	8.50	8.50	8.50	8.50
	9	8.50	8.50	8.50	8.50	8.50	8.50
	10	8.50	8.50	8.50	8.50	8.50	8.50
	11	8.50	8.50	8.50	8.50	8.50	8.50
	12	8.50	8.50	8.50	8.50	8.50	8.50
	13	8.50	8.00	8.00	N/A	7.50	N/A

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

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

Mode	IEEE 802.11 (Maximum in dBm) - Antenna 3a Tolerance (+0/-3.00 dB)						
	Channel	SISO				MIMO	
		b	g	n	ax SU	g/n	ax SU
2.4 GHz WIFI 20 MHz Bandwidth	1	9.00	9.00	9.00	9.00	9.00	9.00
	2	9.00	9.00	9.00	9.00	9.00	9.00
	3	9.00	9.00	9.00	9.00	9.00	9.00
	4	9.00	9.00	9.00	9.00	9.00	9.00
	5	9.00	9.00	9.00	9.00	9.00	9.00
	6	9.00	9.00	9.00	9.00	9.00	9.00
	7	9.00	9.00	9.00	9.00	9.00	9.00
	8	9.00	9.00	9.00	9.00	9.00	9.00
	9	9.00	9.00	9.00	9.00	9.00	9.00
	10	9.00	9.00	9.00	9.00	9.00	9.00
	11	9.00	9.00	9.00	9.00	9.00	9.00
	12	9.00	9.00	9.00	9.00	9.00	9.00
	13	9.00	8.00	8.00	N/A	7.50	N/A

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

Table below is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b/2b active
-Simultaneous conditions with Inter-Band ULCA active

Mode	IEEE 802.11 (Maximum in dBm) - Antenna 1b Tolerance (+0/-3.00 dB)							
	Channel	SISO			MIMO CDD		MIMO SDM	
		a	n/ac	ax SU	a/n/ac	ax SU	n/ac	ax SU
5 GHz WIFI 20 MHz Bandwidth	36	6.25	6.25	6.25	6.25	6.25	6.25	6.25
	40	6.25	6.25	6.25	6.25	6.25	6.25	6.25
	44	6.25	6.25	6.25	6.25	6.25	6.25	6.25
	48	6.25	6.25	6.25	6.25	6.25	6.25	6.25
	52	5.75	5.75	5.75	5.75	5.75	5.75	5.75
	56	5.75	5.75	5.75	5.75	5.75	5.75	5.75
	60	5.75	5.75	5.75	5.75	5.75	5.75	5.75
	64	5.75	5.75	5.75	5.75	5.75	5.75	5.75
	100	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	104	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	108	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	112	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	116	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	120	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	124	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	128	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	132	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	136	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	140	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	144	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	149	5.75	5.75	5.75	5.75	5.75	5.75	5.75
	153	5.75	5.75	5.75	5.75	5.75	5.75	5.75
	157	5.75	5.75	5.75	5.75	5.75	5.75	5.75
	161	5.75	5.75	5.75	5.75	5.75	5.75	5.75
	165	5.75	5.75	5.75	5.75	5.75	5.75	5.75
5 GHz WIFI 40 MHz Bandwidth	38	[redacted]	6.25	6.25	6.25	6.25	6.25	6.25
	46		6.25	6.25	6.25	6.25	6.25	6.25
	54		5.75	5.75	5.75	5.75	5.75	5.75
	62		5.75	5.75	5.75	5.75	5.75	5.75
	102		5.25	5.25	5.25	5.25	5.25	5.25
	110		5.25	5.25	5.25	5.25	5.25	5.25
	118		5.25	5.25	5.25	5.25	5.25	5.25
	126		5.25	5.25	5.25	5.25	5.25	5.25
	134		5.25	5.25	5.25	5.25	5.25	5.25
	142		5.25	5.25	5.25	5.25	5.25	5.25
	151		5.75	5.75	5.75	5.75	5.75	5.75
	159		5.75	5.75	5.75	5.75	5.75	5.75
5 GHz WIFI 80 MHz Bandwidth	42		6.25	6.25	6.25	6.25	6.25	6.25
	58		5.75	5.75	5.75	5.75	5.75	5.75
	106		5.25	5.25	5.25	5.25	5.25	5.25
	122		5.25	5.25	5.25	5.25	5.25	5.25
	138		5.25	5.25	5.25	5.25	5.25	5.25
	155		5.75	5.75	5.75	5.75	5.75	5.75

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above. 802.11a supports up to 20MHz, 802.11n supports up to 40MHz, 802.11ac/ax support up to 160MHz.

Table below is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3a/3b/4 active
-Simultaneous conditions with Inter-Band ULCA active

Mode	IEEE 802.11 (Maximum in dBm) - Antenna 3a Tolerance (+0/-3.00 dB)							
	Channel	SISO			MIMO CDD		MIMO SDM	
		a	n/ac	ax SU	a/n/ac	ax SU	n/ac	ax SU
5 GHz WIFI 20 MHz Bandwidth	36	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	40	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	44	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	48	5.25	5.25	5.25	5.25	5.25	5.25	5.25
	52	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	56	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	60	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	64	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	100	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	104	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	108	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	112	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	116	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	120	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	124	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	128	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	132	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	136	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	140	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	144	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	149	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	153	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	157	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	161	4.50	4.50	4.50	4.50	4.50	4.50	4.50
	165	4.50	4.50	4.50	4.50	4.50	4.50	4.50
5 GHz WIFI 40 MHz Bandwidth	38	[redacted]	5.25	5.25	5.25	5.25	5.25	5.25
	46		5.25	5.25	5.25	5.25	5.25	5.25
	54		5.00	5.00	5.00	5.00	5.00	5.00
	62		5.00	5.00	5.00	5.00	5.00	5.00
	102		4.50	4.50	4.50	4.50	4.50	4.50
	110		4.50	4.50	4.50	4.50	4.50	4.50
	118		4.50	4.50	4.50	4.50	4.50	4.50
	126		4.50	4.50	4.50	4.50	4.50	4.50
	134		4.50	4.50	4.50	4.50	4.50	4.50
	142		4.50	4.50	4.50	4.50	4.50	4.50
	151		4.50	4.50	4.50	4.50	4.50	4.50
	159		4.50	4.50	4.50	4.50	4.50	4.50
5 GHz WIFI 80 MHz Bandwidth	42		5.25	5.25	5.25	5.25	5.25	5.25
	58		5.00	5.00	5.00	5.00	5.00	5.00
	106		4.50	4.50	4.50	4.50	4.50	4.50
	122		4.50	4.50	4.50	4.50	4.50	4.50
	138		4.50	4.50	4.50	4.50	4.50	4.50
	155		4.50	4.50	4.50	4.50	4.50	4.50

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above. 802.11a supports up to 20MHz, 802.11n supports up to 40MHz, 802.11ac/ax support up to 160MHz.

Table below is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3a/3b/4 active
-Simultaneous conditions with Inter-Band ULCA active

Mode	Channel	IEEE 802.11 (Maximum in dBm) - Antenna 3c Tolerance (+0/-3.00 dB)						
		SISO			MIMO CDD		MIMO SDM	
		a	n/ac	ax SU	a/n/ac	ax SU	n/ac	ax SU
5 GHz WIFI 20 MHz Bandwidth	36	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	40	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	44	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	48	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	52	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	56	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	60	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	64	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	100	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	104	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	108	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	112	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	116	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	120	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	124	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	128	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	132	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	136	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	140	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	144	11.00	11.00	11.00	11.00	11.00	11.00	11.00
	149	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	153	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	157	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	161	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	165	12.00	12.00	12.00	12.00	12.00	12.00	12.00
5 GHz WIFI 40 MHz Bandwidth	38	[redacted]	12.00	12.00	12.00	12.00	12.00	12.00
	46		12.00	12.00	12.00	12.00	12.00	12.00
	54		12.00	12.00	12.00	12.00	12.00	12.00
	62		12.00	12.00	12.00	12.00	12.00	12.00
	102		11.00	11.00	11.00	11.00	11.00	11.00
	110		11.00	11.00	11.00	11.00	11.00	11.00
	118		11.00	11.00	11.00	11.00	11.00	11.00
	126		11.00	11.00	11.00	11.00	11.00	11.00
	134		11.00	11.00	11.00	11.00	11.00	11.00
	142		11.00	11.00	11.00	11.00	11.00	11.00
	151		12.00	12.00	12.00	12.00	12.00	12.00
	159		12.00	12.00	12.00	12.00	12.00	12.00
5 GHz WIFI 80 MHz Bandwidth	42		12.00	12.00	12.00	12.00	12.00	12.00
	58		11.75	11.75	11.00	11.50	11.00	11.50
	106		11.00	11.00	11.00	11.00	11.00	11.00
	122		11.00	11.00	11.00	11.00	11.00	11.00
	138		11.00	11.00	11.00	11.00	11.00	11.00
	155		12.00	12.00	12.00	12.00	12.00	12.00

Note: In MIMO operations, each antenna transmits at maximum allowed powers as indicated above. 802.11a supports up to 20MHz, 802.11n supports up to 40MHz, 802.11ac/ax support up to 160MHz.

1.4.4 Bluetooth Maximum and Reduced Output Power

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) Antenna 1a	Modulated Average (iPA) - Single Tx Chain (dBm) Antenna 1a
Bluetooth BDR/LE	Maximum	**12.50**	**12.50**
	Nominal	**11.00**	**11.00**
Bluetooth EDR	Maximum	**12.50**	**8.00**
	Nominal	**11.00**	**6.50**
Bluetooth HDR	Maximum	**10.50**	**6.00**
	Nominal	**9.00**	**4.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) Antenna 1a	Modulated Average (iPA) - TxBF (dBm) Antenna 1a
Bluetooth BDR/LE	Maximum	**12.50**	**12.50**
	Nominal	**11.00**	**11.00**
Bluetooth EDR	Maximum	**12.50**	**8.00**
	Nominal	**11.00**	**6.50**
Bluetooth HDR	Maximum	**10.50**	**6.00**
	Nominal	**9.00**	**4.50**

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) Antenna 3a	Modulated Average (iPA) - Single Tx Chain (dBm) Antenna 3a
Bluetooth BDR/LE	Maximum	**12.50**	**11.00**
	Nominal	**11.00**	**9.50**
Bluetooth EDR	Maximum	**12.50**	**7.00**
	Nominal	**11.00**	**5.50**
Bluetooth HDR	Maximum	**10.50**	**5.00**
	Nominal	**9.00**	**3.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) Antenna 3a	Modulated Average (iPA) - TxBF (dBm) Antenna 3a
Bluetooth BDR/LE	Maximum	**12.50**	**11.00**
	Nominal	**11.00**	**9.50**
Bluetooth EDR	Maximum	**12.50**	**7.00**
	Nominal	**11.00**	**5.50**
Bluetooth HDR	Maximum	**10.50**	**5.00**
	Nominal	**9.00**	**3.50**

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

Table below is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b/2b active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) Antenna 1a	Modulated Average (iPA) - Single Tx Chain (dBm) Antenna 1a
Bluetooth BDR/LE Reduced	Maximum	**9.00**	**9.00**
	Nominal	**7.50**	**7.50**
Bluetooth EDR Reduced	Maximum	**9.00**	**8.00**
	Nominal	**7.50**	**6.50**
Bluetooth HDR Reduced	Maximum	**9.00**	**6.00**
	Nominal	**7.50**	**4.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) Antenna 1a	Modulated Average (iPA) - TxBF (dBm) Antenna 1a
Bluetooth BDR/LE Reduced	Maximum	**9.00**	**9.00**
	Nominal	**7.50**	**7.50**
Bluetooth EDR Reduced	Maximum	**9.00**	**8.00**
	Nominal	**7.50**	**6.50**
Bluetooth HDR Reduced	Maximum	**9.00**	**6.00**
	Nominal	**7.50**	**4.50**

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

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) Antenna 1a	Modulated Average (iPA) - Single Tx Chain (dBm) Antenna 1a
Bluetooth BDR/LE Reduced	Maximum	**7.00**	**7.00**
	Nominal	**5.50**	**5.50**
Bluetooth EDR Reduced	Maximum	**7.00**	**7.00**
	Nominal	**5.50**	**5.50**
Bluetooth HDR Reduced	Maximum	**7.00**	**6.00**
	Nominal	**5.50**	**4.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) Antenna 1a	Modulated Average (iPA) - TxBF (dBm) Antenna 1a
Bluetooth BDR/LE Reduced	Maximum	**7.00**	**7.00**
	Nominal	**5.50**	**5.50**
Bluetooth EDR Reduced	Maximum	**7.00**	**7.00**
	Nominal	**5.50**	**5.50**
Bluetooth HDR Reduced	Maximum	**7.00**	**6.00**
	Nominal	**5.50**	**4.50**

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

Table below is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1a/1b/2a/2b and 5GHz WLAN active
-Simultaneous conditions with Inter-Band ULCA active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) Antenna 1a	Modulated Average (iPA) - Single Tx Chain (dBm) Antenna 1a
Bluetooth BDR/LE Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**
Bluetooth EDR Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**
Bluetooth HDR Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) Antenna 1a	Modulated Average (iPA) - TxBF (dBm) Antenna 1a
Bluetooth BDR/LE Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**
Bluetooth EDR Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**
Bluetooth HDR Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**

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

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

Mode / Band		Modulated Average (ePA)- Single Tx Chain (dBm) Antenna 3a	Modulated Average (iPA) - Single Tx Chain (dBm) Antenna 3a
Bluetooth BDR/LE Reduced	Maximum	**9.00**	**9.00**
	Nominal	**7.50**	**7.50**
Bluetooth EDR Reduced	Maximum	**9.00**	**7.00**
	Nominal	**7.50**	**5.50**
Bluetooth HDR Reduced	Maximum	**9.00**	**5.00**
	Nominal	**7.50**	**3.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) Antenna 3a	Modulated Average (iPA) - TxBF (dBm) Antenna 3a
Bluetooth BDR/LE Reduced	Maximum	**9.00**	**9.00**
	Nominal	**7.50**	**7.50**
Bluetooth EDR Reduced	Maximum	**9.00**	**7.00**
	Nominal	**7.50**	**5.50**
Bluetooth HDR Reduced	Maximum	**9.00**	**5.00**
	Nominal	**7.50**	**3.50**

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

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) Antenna 3a	Modulated Average (iPA) - Single Tx Chain (dBm) Antenna 3a
Bluetooth BDR/LE Reduced	Maximum	**7.00**	**7.00**
	Nominal	**5.50**	**5.50**
Bluetooth EDR Reduced	Maximum	**7.00**	**7.00**
	Nominal	**5.50**	**5.50**
Bluetooth HDR Reduced	Maximum	**7.00**	**5.00**
	Nominal	**5.50**	**3.50**

Mode / Band		Modulated Average (ePA)- TxBF (dBm) Antenna 3a	Modulated Average (iPA) - TxBF (dBm) Antenna 3a
Bluetooth BDR/LE Reduced	Maximum	**7.00**	**7.00**
	Nominal	**5.50**	**5.50**
Bluetooth EDR Reduced	Maximum	**7.00**	**7.00**
	Nominal	**5.50**	**5.50**
Bluetooth HDR Reduced	Maximum	**7.00**	**5.00**
	Nominal	**5.50**	**3.50**

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

Table below is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3a/3b/4 and 5GHz WLAN active
-Simultaneous conditions with Inter-Band ULCA active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) Antenna 3a	Modulated Average (iPA) - Single Tx Chain (dBm) Antenna 3a
Bluetooth BDR/LE Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**
Bluetooth EDR Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**
Bluetooth HDR Reduced	Maximum	**5.50**	**5.00**
	Nominal	**4.00**	**3.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) Antenna 3a	Modulated Average (iPA) - TxBF (dBm) Antenna 3a
Bluetooth BDR/LE Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**
Bluetooth EDR Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**
Bluetooth HDR Reduced	Maximum	**5.50**	**5.00**
	Nominal	**4.00**	**3.50**

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

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

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

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

Mode	Back	Top	Bottom	Right	Left
UMTS 850 Antenna 3b	Yes	Yes	No	Yes	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	Yes	No
LTE Band 13 Antenna 3b	Yes	Yes	No	Yes	No
LTE Ban 14 Antenna 3b	Yes	Yes	No	Yes	No
LTE Band 26 (Cell) Antenna 3b	Yes	Yes	No	Yes	No
LTE Band 5 (Cell) Antenna 3b	Yes	Yes	No	Yes	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	Yes	No
NR Band n71 Antenna 3b	Yes	Yes	No	Yes	No
NR Band n12 Antenna 3b	Yes	Yes	No	Yes	No
NR Band n5 (Cell) Antenna 3b	Yes	Yes	No	Yes	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 DoD Antenna 3b	Yes	Yes	No	Yes	No
NR Band n77 C Antenna 3b	Yes	Yes	No	Yes	No
2.4 GHz WLAN Antenna 3a	Yes	Yes	No	Yes	No
5 GHz WLAN Antenna 3a	Yes	Yes	No	Yes	No
5 GHz WLAN Antenna 3c	Yes	Yes	No	No	No
Bluetooth Antenna 3a	Yes	Yes	No	Yes	No
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 DoD Antenna 4	Yes	Yes	No	No	Yes
NR Band n77 C Antenna 4	Yes	Yes	No	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.

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 WI-FI Antenna 3a + 2.4 GHz Bluetooth Antenna 1a	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	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 WI-FI 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 3b LB + Cellular Ant 1b MB/HB	Yes	LTE Bands transmitting from Ant 3b LB: LTE B5/12/13 LTE Bands transmitting from Ant 1b MB/HB: LTE B2/4/7/66
2	Cellular Ant 3b LB + Cellular Ant 2b MB/HB	Yes	LTE Bands transmitting from Ant 3b LB: LTE B5/12/13 LTE Bands transmitting from Ant 2b MB/HB: LTE B2/4/7/66
3	Cellular Ant 3b LB + Cellular Ant 3a MB/HB	Yes	LTE Bands transmitting from Ant 3b LB: LTE B5/12/13 LTE Bands transmitting from Ant 3a MB/HB: LTE B2/4/7/66
4	Cellular Ant 3b LB + Cellular Ant 4 MB/HB	Yes	LTE Bands transmitting from Ant 3b LB: LTE B5/12/13 LTE Bands transmitting from Ant 4 MB/HB: LTE B2/4/7/66
5	Cellular Ant 4 LB + Cellular Ant 1b MB/HB	Yes	LTE Bands transmitting from Ant 4 LB: LTE B5/12/13 LTE Bands transmitting from Ant 1b MB/HB: LTE B2/4/7/66
6	Cellular Ant 4 LB + Cellular Ant 2b MB/HB	Yes	LTE Bands transmitting from Ant 4 LB: LTE B5/12/13 LTE Bands transmitting from Ant 2b MB/HB: LTE B2/4/7/66
7	Cellular Ant 4 LB + Cellular Ant 3a MB/HB	Yes	LTE Bands transmitting from Ant 4 LB: LTE B5/12/13 LTE Bands transmitting from Ant 3a MB/HB: LTE B2/4/7/66

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

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	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 Antenna1a. In this scenario Wi-Fi max power will not exceed minimum of (13.5dBm, SAR max cap, Reg max cap) power. Additionally, in disconnected mode, BT will be using iPA only.
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.
6. This device supports VoLTE.

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 3a and Antenna 1b, and U-NII-2A was evaluated for Antenna 3c. Additional testing for U-NII-2A Antenna 3a and Antenna 1b and for U-NII-1 Antenna 3c 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.

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.

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 transmission path and signal characteristics, SAR was only assessed for the band with the larger transmission frequency range.

This device supports both Power Class 2 (PC2) and Power Class 3 (PC3) for LTE Band 41. Per May 2017 TCB Workshop Notes, SAR tests were performed with Power Class 3 (given the specific UL/DL limitations for Power Class 2). Additionally, SAR testing for the power class 2 condition was evaluated for the highest configuration in Power Class 3 for each test configuration to confirm the results were scalable linearly (See Section 13).

This device supports LTE Carrier Aggregation (CA) for LTE Band 41, LTE Band 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 2/4/5/7/12/13/66 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	1C2205090023-20.BCG
RF Exposure Part 2 Test Report	1C2205090023-22.BCG
Compliance summary	1C2205090023-23.BCG

2 LTE AND NR 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	2506 (39750)	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. It supports carrier aggregation, downlink MIMO, LAA features as shown in RF Conducted Powers Section and Downlink LTE CA RF Conductive Powers Appendix. 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.				

NR Information						
Form Factor	Tablet					
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 n25 (PCS) (1852.5 - 1912.5 MHz) NR Band n2 (PCS) (1852.5 - 1907.5 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 (3460.02 - 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)						
NR Band n71: 5 MHz	665.5 (133100)		680.5 (136100)		695.5 (139100)	
NR Band n71: 10 MHz	668 (133600)		680.5 (136100)		693 (138600)	
NR Band n71: 15 MHz	670.5 (134100)		680.5 (136100)		690.5 (138100)	
NR Band n71: 20 MHz	673 (134600)		680.5 (136100)		688 (137600)	
NR Band n12: 5 MHz	701.5 (140300)		707.5 (141500)		713.5 (142700)	
NR Band n12: 10 MHz	704 (140800)		707.5 (141500)		711 (142200)	
NR Band n12: 15 MHz	706.5 (141300)		707.5 (141500)		708.5 (141700)	
NR Band 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/n25/n2/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 n25 (PCS)	LTE Band 12/66/48					
LTE Anchor Bands for NR Band n2 (PCS)	LTE Band 12/13/14/5/66/48					
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 26/4/66/25/2					
LTE Anchor Bands for NR Band n77 DoD	LTE Band 7/41					
LTE Anchor Bands for NR Band n77 C	LTE Band 7/41					

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]

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:

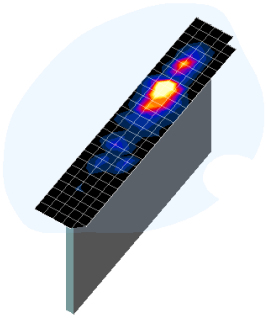


Figure 4-1
Sample SAR Area Scan

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

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.

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.

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.

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.

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.

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.

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 powers 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.

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.

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 P_{limit} Conducted Powers

Table 8-1
Measured P_{Limit} Antenna 1b

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	10.77	10.81	10.72	10.97	11.02	11.12	-
6	HSDPA	Subtest 1	10.58	10.66	10.62	10.89	10.84	10.90	0
6		Subtest 2	10.59	10.64	10.63	10.91	10.85	10.93	0
6		Subtest 3	10.08	10.16	10.14	10.40	10.38	10.38	0.5
6		Subtest 4	10.06	10.13	10.15	10.38	10.35	10.41	0.5
6	HSUPA	Subtest 1	10.60	10.65	10.63	10.89	10.86	10.87	0
6		Subtest 2	8.60	8.68	8.63	8.91	8.86	8.88	2
6		Subtest 3	9.61	9.69	9.63	9.89	9.82	9.84	1
6		Subtest 4	8.62	8.67	8.61	8.92	8.87	8.89	2
6		Subtest 5	10.61	10.68	10.61	10.88	10.86	10.88	0
8	DC-HSDPA	Subtest 1	10.60	10.69	10.62	10.89	10.86	10.84	0
8		Subtest 2	10.61	10.65	10.63	10.90	10.84	10.86	0
8		Subtest 3	10.12	10.18	10.13	10.38	10.33	10.36	0.5
8		Subtest 4	10.10	10.16	10.14	10.37	10.33	10.35	0.5

Table 8-2
Measured P_{Limit} Antenna 2b

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	12.93	12.91	12.95	13.92	14.11	14.03	-
6	HSDPA	Subtest 1	12.84	12.83	12.87	13.78	13.83	13.71	0
6		Subtest 2	12.83	12.83	12.88	13.79	13.84	13.73	0
6		Subtest 3	12.34	12.31	12.39	13.28	13.35	13.23	0.5
6		Subtest 4	12.31	12.32	12.37	13.29	13.35	13.22	0.5
6	HSUPA	Subtest 1	12.84	12.83	12.89	13.79	13.85	13.74	0
6		Subtest 2	10.84	10.82	10.90	11.81	11.87	11.73	2
6		Subtest 3	11.83	11.80	11.89	12.78	12.86	12.71	1
6		Subtest 4	10.85	10.84	10.82	11.80	11.87	11.72	2
6		Subtest 5	12.84	12.83	12.91	13.78	13.84	13.71	0
8	DC-HSDPA	Subtest 1	12.83	12.86	12.90	13.77	13.84	13.70	0
8		Subtest 2	12.85	12.84	12.90	13.75	13.86	13.69	0
8		Subtest 3	12.34	12.32	12.40	13.30	13.34	13.19	0.5
8		Subtest 4	12.35	12.33	12.39	13.27	13.36	13.17	0.5

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	11.80	11.88	11.74	11.54	11.36	11.42	-
6	HSDPA	Subtest 1	11.86	11.78	11.79	11.28	11.19	11.20	0
6		Subtest 2	11.88	11.75	11.76	11.32	11.22	11.22	0
6		Subtest 3	11.37	11.27	11.28	10.81	10.73	10.69	0.5
6		Subtest 4	11.36	11.26	11.27	10.80	10.72	10.68	0.5
6	HSUPA	Subtest 1	11.86	11.77	11.76	11.30	11.23	11.21	0
6		Subtest 2	9.89	9.77	9.77	9.35	9.24	9.21	2
6		Subtest 3	10.88	10.79	10.77	10.31	10.25	10.20	1
6		Subtest 4	9.87	9.79	9.79	9.32	9.27	9.22	2
6		Subtest 5	11.87	11.78	11.78	11.32	11.27	11.21	0
8	DC-HSDPA	Subtest 1	11.85	11.80	11.79	11.31	11.22	11.20	0
8		Subtest 2	11.88	11.76	11.77	11.30	11.24	11.21	0
8		Subtest 3	11.39	11.28	11.35	10.80	10.74	10.75	0.5
8		Subtest 4	11.37	11.27	11.29	10.81	10.73	10.69	0.5

Table 8-4
Measured P_{Limit} 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	15.90	15.80	15.86	-
6	HSDPA	Subtest 1	15.78	15.70	15.64	0
6		Subtest 2	15.82	15.74	15.67	0
6		Subtest 3	15.28	15.21	15.18	0.5
6		Subtest 4	15.31	15.26	15.20	0.5
6	HSUPA	Subtest 1	15.98	15.92	15.88	0
6		Subtest 2	13.99	13.95	13.87	2
6		Subtest 3	14.99	14.92	14.86	1
6		Subtest 4	14.01	13.93	13.87	2
6		Subtest 5	15.98	15.94	15.93	0
8	DC-HSDPA	Subtest 1	16.00	15.92	15.91	0
8		Subtest 2	15.99	15.88	15.85	0
8		Subtest 3	15.53	15.47	15.43	0.5
8		Subtest 4	15.51	14.40	15.38	0.5

Table 8-5
Measured P_{Limit} 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	17.81	17.80	17.60	13.84	13.85	13.88	12.64	12.73	12.59	-
6	HSDPA	Subtest 1	17.53	17.45	17.34	13.31	13.22	13.27	12.52	12.57	12.42	0
6		Subtest 2	17.55	17.48	17.37	13.29	13.21	13.27	12.57	12.55	12.43	0
6		Subtest 3	17.03	16.97	16.88	12.83	12.65	12.77	12.04	12.05	11.91	0.5
6		Subtest 4	17.04	16.95	16.91	12.80	12.68	12.76	12.03	12.04	11.93	0.5
6	HSUPA	Subtest 1	17.54	17.47	17.36	13.29	13.16	13.25	12.56	12.55	12.45	0
6		Subtest 2	15.55	15.48	15.36	11.31	11.22	11.28	10.55	10.58	10.44	2
6		Subtest 3	16.53	16.45	16.35	12.32	12.17	12.26	11.53	11.55	11.42	1
6		Subtest 4	15.54	15.48	15.34	11.34	11.21	11.29	11.56	10.57	10.43	2
6		Subtest 5	17.53	17.48	17.37	13.30	13.20	13.26	12.56	12.56	12.43	0
8	DC-HSDPA	Subtest 1	17.51	17.47	17.36	13.27	13.21	13.25	12.57	12.55	12.40	0
8		Subtest 2	17.53	17.47	17.32	13.33	13.22	13.26	12.53	12.54	12.43	0
8		Subtest 3	17.03	16.96	16.86	12.81	12.70	12.76	12.06	12.05	11.91	0.5
8		Subtest 4	17.06	16.99	16.84	12.78	12.72	12.74	12.02	12.04	11.89	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

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 8-6
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	17.29	0	0
	1	50	**17.38**		0
	1	99	17.23		0
	50	0	17.26	0-1	0
	50	25	**17.37**		0
	50	50	17.34		0
	100	0	17.31		0
16QAM	1	0	17.42	0-1	0
	1	50	17.47		0
	1	99	17.39		0
	50	0	17.07	0-2	0
	50	25	17.09		0
	50	50	17.06		0
	100	0	17.06		0
64QAM	1	0	17.10	0-2	0
	1	50	17.04		0
	1	99	17.06		0
	50	0	17.39	0-3	0
	50	25	17.42		0
	50	50	17.38		0
	100	0	17.40		0
256QAM	1	0	17.46	0-5	0
	1	50	17.64		0
	1	99	17.49		0
	50	0	17.40		0
	50	25	17.38		0
	50	50	17.41		0
	100	0	17.35		0

Table 8-7
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	**20.80**	0	0
	1	50	20.72		0
	1	99	20.68		0
	50	0	20.77	0-1	0
	50	25	**20.82**		0
	50	50	20.77		0
	100	0	20.79		0
16QAM	1	0	20.98	0-1	0
	1	50	20.94		0
	1	99	20.97		0
	50	0	20.58	0-2	0
	50	25	20.63		0
	50	50	20.56		0
	100	0	20.62		0
64QAM	1	0	20.80	0-2	0
	1	50	20.78		0
	1	99	20.74		0
	50	0	20.63	0-3	0
	50	25	20.65		0
	50	50	20.61		0
	100	0	20.59		0
256QAM	1	0	20.24	0-5	0.3
	1	50	20.21		0.3
	1	99	20.29		0.3
	50	0	20.10		0.3
	50	25	20.12		0.3
	50	50	20.07		0.3
	100	0	20.05		0.3

8.2.2 LTE Band 12

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	**17.10**	0	0
	1	25	16.93		0
	1	49	16.94		0
	25	0	**17.20**	0-1	0
	25	12	17.15		0
	25	25	17.19		0
	50	0	17.09		0
16QAM	1	0	17.16	0-1	0
	1	25	17.06		0
	1	49	16.98		0
	25	0	17.09	0-2	0
	25	12	17.15		0
	25	25	17.03		0
	50	0	16.98		0
64QAM	1	0	16.92	0-2	0
	1	25	16.97		0
	1	49	16.96		0
	25	0	17.15	0-3	0
	25	12	17.24		0
	25	25	17.15		0
	50	0	17.04		0
256QAM	1	0	16.89	0-5	0
	1	25	16.89		0
	1	49	16.88		0
	25	0	17.11		0
	25	12	17.15		0
	25	25	17.03		0
	50	0	16.97		0

Table 8-9
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	**18.73**	0	0
	1	25	18.66		0
	1	49	18.59		0
	25	0	18.75	0-1	0
	25	12	**18.77**		0
	25	25	18.72		0
	50	0	18.72		0
16QAM	1	0	18.96	0-1	0
	1	25	18.89		0
	1	49	18.93		0
	25	0	18.59	0-2	0
	25	12	18.57		0
	25	25	18.63		0
	50	0	18.49		0
64QAM	1	0	18.45	0-2	0
	1	25	18.48		0
	1	49	18.51		0
	25	0	18.59	0-3	0
	25	12	18.60		0
	25	25	18.60		0
	50	0	18.56		0
256QAM	1	0	18.81	0-5	0
	1	25	18.92		0
	1	49	18.82		0
	25	0	18.57		0
	25	12	18.55		0
	25	25	18.58		0
	50	0	18.59		0

8.2.3 LTE Band 13

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	16.40	0	0
	1	25	16.50		0
	1	49	**16.61**		0
	25	0	16.63	0-1	0
	25	12	16.70		0
	25	25	**16.71**		0
	50	0	16.60		0
16QAM	1	0	16.80	0-1	0
	1	25	16.75		0
	1	49	16.70		0
	25	0	16.53	0-2	0
	25	12	16.51		0
	25	25	16.41		0
	50	0	16.42		0
64QAM	1	0	16.54	0-2	0
	1	25	16.33		0
	1	49	16.25		0
	25	0	16.78	0-3	0
	25	12	16.74		0
	25	25	16.63		0
	50	0	16.70		0
256QAM	1	0	16.80	0-5	0
	1	25	16.90		0
	1	49	16.95		0
	25	0	16.51		0
	25	12	16.47		0
	25	25	16.41		0
	50	0	16.49		0

Table 8-11
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	**19.31**	0	0
	1	25	18.97		0
	1	49	19.02		0
	25	0	19.25	0-1	0
	25	12	**19.32**		0
	25	25	19.23		0
	50	0	19.30		0
16QAM	1	0	19.49	0-1	0
	1	25	19.33		0
	1	49	19.46		0
	25	0	19.12	0-2	0
	25	12	19.11		0
	25	25	19.11		0
	50	0	19.03		0
64QAM	1	0	19.23	0-2	0
	1	25	19.08		0
	1	49	19.23		0
	25	0	19.10	0-3	0
	25	12	19.06		0
	25	25	19.09		0
	50	0	19.09		0
256QAM	1	0	19.27	0-5	0
	1	25	19.21		0
	1	49	19.35		0
	25	0	18.77		0
	25	12	18.80		0
	25	25	18.85		0
	50	0	18.79		0

8.2.4 LTE Band 14

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	**16.66**	0	0
	1	25	16.55		0
	1	49	16.64		0
	25	0	16.71	0-1	0
	25	12	16.72		0
	25	25	**16.73**		0
	50	0	16.64		0
16QAM	1	0	16.87	0-1	0
	1	25	16.84		0
	1	49	16.81		0
	25	0	16.72	0-2	0
	25	12	16.68		0
	25	25	16.59		0
	50	0	16.50		0
64QAM	1	0	16.74	0-2	0
	1	25	16.64		0
	1	49	16.74		0
	25	0	16.67	0-3	0
	25	12	16.61		0
	25	25	16.64		0
	50	0	16.58		0
256QAM	1	0	16.42	0-5	0
	1	25	16.26		0
	1	49	16.36		0
	25	0	16.70		0
	25	12	16.62		0
	25	25	16.64		0
	50	0	16.62		0

Table 8-13
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	**19.54**	0	0
	1	25	19.39		0
	1	49	19.29		0
	25	0	19.53	0-1	0
	25	12	**19.61**		0
	25	25	19.59		0
	50	0	19.48		0
16QAM	1	0	19.48	0-1	0
	1	25	19.52		0
	1	49	19.46		0
	25	0	19.57	0-2	0
	25	12	19.65		0
	25	25	19.61		0
	50	0	19.51		0
64QAM	1	0	19.41	0-2	0
	1	25	19.49		0
	1	49	19.44		0
	25	0	19.22	0-3	0
	25	12	19.34		0
	25	25	19.25		0
	50	0	19.24		0
256QAM	1	0	19.48	0-5	0
	1	25	19.64		0
	1	49	19.55		0
	25	0	19.10		0
	25	12	19.16		0
	25	25	19.11		0
	50	0	19.06		0

8.2.5 LTE Band 26

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	15.83	15.81	**15.96**	0	0
	1	25	15.78	15.74	15.90		0
	1	49	15.70	15.78	15.85		0
	25	0	15.91	15.93	16.00	0-1	0
	25	12	15.99	16.00	**16.04**		0
	25	25	15.87	15.93	16.01		0
	50	0	15.89	15.88	15.90		0
16QAM	1	0	15.70	15.98	16.24	0-1	0
	1	25	15.64	15.91	16.25		0
	1	49	15.56	15.91	16.20		0
	25	0	15.68	15.75	15.76	0-2	0
	25	12	15.73	15.79	15.82		0
	25	25	15.64	15.75	15.82		0
	50	0	15.66	15.67	15.69		0
64QAM	1	0	15.82	16.10	15.94	0-2	0
	1	25	15.89	16.16	15.94		0
	1	49	15.77	16.05	15.92		0
	25	0	16.00	16.04	16.08	0-3	0
	25	12	16.03	16.09	16.11		0
	25	25	16.03	15.96	16.09		0
	50	0	16.00	15.99	15.98		0
256QAM	1	0	15.77	16.45	15.73	0-5	0
	1	25	15.79	16.46	15.92		0
	1	49	15.76	16.46	15.92		0
	25	0	15.97	15.95	16.12		0
	25	12	16.03	16.04	16.10		0
	25	25	15.93	15.94	16.04		0
	50	0	15.95	16.04	15.98		0

Table 8-15
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	18.08	17.88	17.84	0	0
	1	25	17.86	17.81	17.82		0
	1	49	17.78	17.87	**18.10**		0
	25	0	17.95	17.99	18.02	0-1	0
	25	12	18.07	18.03	**18.08**		0
	25	25	17.95	17.95	17.99		0
	50	0	17.94	17.96	17.97		0
16QAM	1	0	18.25	17.75	18.05	0-1	0
	1	25	18.15	17.71	18.08		0
	1	49	18.10	17.65	17.90		0
	25	0	17.74	17.76	17.87	0-2	0
	25	12	17.84	17.84	17.88		0
	25	25	17.81	17.76	17.89		0
	50	0	17.75	17.75	17.78		0
64QAM	1	0	18.10	17.89	18.07	0-2	0
	1	25	18.15	17.88	17.98		0
	1	49	18.12	17.92	17.96		0
	25	0	18.10	18.06	18.12	0-3	0
	25	12	18.11	18.15	18.14		0
	25	25	18.07	18.14	18.11		0
	50	0	18.08	18.10	18.05		0
256QAM	1	0	17.73	17.40	18.13	0-5	0
	1	25	17.81	17.50	18.24		0
	1	49	17.76	17.53	18.23		0
	25	0	17.79	17.82	17.83		0
	25	12	17.83	17.87	17.86		0
	25	25	17.75	17.91	17.85		0
	50	0	17.75	17.75	17.74		0

8.2.6 LTE Band 5

Table 8-16

LTE Band 5 (Cell) 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	**15.88**	0	0
	1	25	15.81		0
	1	49	15.84		0
	25	0	15.89	0-1	0
	25	12	15.87		0
	25	25	**15.90**		0
	50	0	15.85		0
16QAM	1	0	16.19	0-1	0
	1	25	16.09		0
	1	49	16.13		0
	25	0	15.73	0-2	0
	25	12	15.78		0
	25	25	15.76		0
	50	0	15.70		0
64QAM	1	0	15.77	0-2	0
	1	25	15.77		0
	1	49	15.78		0
	25	0	15.70	0-3	0
	25	12	15.79		0
	25	25	15.76		0
	50	0	15.67		0
256QAM	1	0	16.15	0-5	0
	1	25	16.15		0
	1	49	16.26		0
	25	0	15.69		0
	25	12	15.73		0
	25	25	15.67		0
	50	0	15.73		0

Table 8-17
LTE Band 5 (Cell) 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	**18.00**	0	0
	1	25	17.68		0
	1	49	17.71		0
	25	0	17.72	0-1	0
	25	12	**17.95**		0
	25	25	17.80		0
	50	0	17.93		0
16QAM	1	0	17.71	0-1	0
	1	25	17.67		0
	1	49	17.68		0
	25	0	17.71	0-2	0
	25	12	17.77		0
	25	25	17.77		0
	50	0	17.71		0
64QAM	1	0	17.86	0-2	0
	1	25	17.85		0
	1	49	17.86		0
	25	0	17.74	0-3	0
	25	12	17.78		0
	25	25	17.75		0
	50	0	17.72		0
256QAM	1	0	17.42	0-5	0
	1	25	17.37		0
	1	49	17.48		0
	25	0	17.78		0
	25	12	17.84		0
	25	25	17.73		0
	50	0	17.76		0

8.2.7 LTE Band 66

Table 8-18
LTE Band 66 (AWS) Measured P_{Limit} Antenna 1b - 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	11.10	11.04	11.12	0	0
	1	50	11.12	11.05	**11.26**		0
	1	99	10.99	11.10	11.15		0
	50	0	11.09	11.09	11.24	0-1	0
	50	25	11.14	11.14	**11.34**		0
	50	50	11.08	11.08	11.30		0
	100	0	11.11	11.10	11.22		0
16QAM	1	0	11.27	11.32	11.31	0-1	0
	1	50	11.29	11.28	11.42		0
	1	99	11.20	11.26	11.33		0
	50	0	10.77	10.71	10.82	0-2	0
	50	25	10.83	10.79	10.97		0
	50	50	10.78	10.73	10.92		0
	100	0	10.84	10.81	10.83		0
64QAM	1	0	11.18	11.05	11.17	0-2	0
	1	50	11.11	10.98	11.32		0
	1	99	11.04	10.99	11.22		0
	50	0	10.84	10.76	10.85	0-3	0
	50	25	10.90	10.82	11.00		0
	50	50	10.81	10.77	10.92		0
	100	0	10.83	10.80	10.86		0
256QAM	1	0	11.00	10.95	10.59	0-5	0
	1	50	11.03	10.97	10.72		0
	1	99	10.91	10.94	10.65		0
	50	0	10.81	10.76	10.83		0
	50	25	10.93	10.82	10.96		0
	50	50	10.84	10.74	10.93		0
	100	0	10.86	10.72	10.87		0

Table 8-19
LTE Band 66 (AWS) Measured P_{Limit} Antenna 2b - 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	12.94	12.93	12.61	0	0
	1	50	12.92	12.88	12.63		0
	1	99	12.84	**13.00**	12.55		0
	50	0	12.88	12.96	12.90	0-1	0
	50	25	13.00	**13.06**	12.98		0
	50	50	12.95	12.97	12.93		0
	100	0	12.93	12.97	12.96		0
16QAM	1	0	13.12	12.76	13.16	0-1	0
	1	50	13.22	12.85	13.24		0
	1	99	13.24	12.74	13.11		0
	50	0	12.82	12.79	12.87	0-2	0
	50	25	12.93	12.95	12.85		0
	50	50	12.85	12.90	12.80		0
	100	0	12.89	12.84	12.84		0
64QAM	1	0	12.90	13.12	12.64	0-2	0
	1	50	13.02	13.15	12.64		0
	1	99	13.02	13.12	12.53		0
	50	0	12.83	12.86	12.80	0-3	0
	50	25	12.96	12.97	12.79		0
	50	50	12.90	12.92	12.72		0
	100	0	12.87	12.84	12.82		0
256QAM	1	0	13.12	13.10	13.21	0-5	0
	1	50	13.21	13.23	13.24		0
	1	99	13.12	13.19	13.16		0
	50	0	12.84	12.85	12.84		0
	50	25	12.94	13.00	12.94		0
	50	50	12.92	12.94	12.85		0
	100	0	12.90	12.95	12.89		0

Table 8-20
LTE Band 66 (AWS) 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	12.19	**12.21**	11.96	0	0
	1	50	12.16	12.12	11.85		0
	1	99	12.12	12.06	11.84		0
	50	0	12.22	12.14	12.13	0-1	0
	50	25	12.26	**12.28**	12.22		0
	50	50	12.18	12.11	12.15		0
	100	0	12.20	12.16	12.14		0
16QAM	1	0	12.31	12.44	12.49	0-1	0
	1	50	12.29	12.32	12.46		0
	1	99	12.31	12.28	12.46		0
	50	0	11.88	11.97	11.99	0-2	0
	50	25	11.98	12.03	11.99		0
	50	50	11.96	11.99	12.04		0
	100	0	11.97	12.01	11.96		0
64QAM	1	0	12.55	12.30	12.09	0-2	0
	1	50	12.50	12.27	12.15		0
	1	99	12.52	12.26	12.12		0
	50	0	11.94	11.99	12.01	0-3	0
	50	25	12.02	12.08	12.04		0
	50	50	11.96	12.03	12.09		0
	100	0	11.97	12.02	12.00		0
256QAM	1	0	12.10	12.19	11.97	0-5	0
	1	50	12.06	12.15	11.98		0
	1	99	12.07	12.15	11.97		0
	50	0	11.95	11.96	11.98		0
	50	25	12.01	12.05	12.02		0
	50	50	11.97	11.99	12.06		0
	100	0	12.01	12.00	11.99		0

Table 8-21
LTE Band 66 (AWS) 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	13.65	**13.70**	13.65	0	0
	1	50	13.66	13.45	13.68		0
	1	99	13.60	13.34	13.58		0
	50	0	13.67	13.71	13.67	0-1	0
	50	25	13.77	**13.83**	13.75		0
	50	50	13.67	13.73	13.72		0
	100	0	13.66	13.69	13.65		0
16QAM	1	0	13.85	13.87	13.89	0-1	0
	1	50	13.84	13.88	13.96		0
	1	99	13.79	13.77	13.83		0
	50	0	13.29	13.42	13.37	0-2	0
	50	25	13.40	13.50	13.42		0
	50	50	13.33	13.42	13.42		0
	100	0	13.41	13.45	13.40		0
64QAM	1	0	13.66	13.75	13.78	0-2	0
	1	50	13.66	13.79	13.86		0
	1	99	13.74	13.81	13.77		0
	50	0	13.53	13.63	13.67	0-3	0
	50	25	13.58	13.43	13.77		0
	50	50	13.54	13.68	13.69		0
	100	0	13.54	13.64	13.66		0
256QAM	1	0	13.48	13.76	13.48	0-5	0
	1	50	13.48	13.77	13.55		0
	1	99	13.37	13.78	13.47		0
	50	0	13.48	13.56	13.64		0
	50	25	13.55	13.68	13.75		0
	50	50	13.53	13.60	13.67		0
	100	0	13.55	13.59	13.68		0

8.2.8 LTE Band 25

Table 8-22
LTE Band 25 (PCS) Measured P_{Limit} Antenna 1b - 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	10.79	11.08	11.06	0	0
	1	50	10.87	**11.20**	11.12		0
	1	99	10.89	11.15	11.03		0
	50	0	11.20	11.16	11.15	0-1	0
	50	25	11.22	**11.24**	11.21		0
	50	50	11.20	11.22	11.17		0
	100	0	11.17	11.18	11.16		0
16QAM	1	0	11.18	11.08	10.91	0-1	0
	1	50	11.17	11.07	10.97		0
	1	99	11.23	11.12	10.97		0
	50	0	10.73	10.80	10.75	0-2	0
	50	25	10.76	10.78	10.88		0
	50	50	10.74	10.82	10.85		0
	100	0	10.78	10.80	10.76		0
64QAM	1	0	10.69	10.75	10.82	0-2	0
	1	50	10.62	10.74	10.92		0
	1	99	10.71	10.80	10.95		0
	50	0	10.79	10.81	10.75	0-3	0
	50	25	10.81	10.81	10.83		0
	50	50	10.83	10.87	10.87		0
	100	0	10.78	10.81	10.75		0
256QAM	1	0	10.71	10.87	10.81	0-5	0
	1	50	10.67	10.87	10.87		0
	1	99	10.66	10.92	10.87		0
	50	0	10.76	10.76	10.75		0
	50	25	10.77	10.79	10.85		0
	50	50	10.79	10.77	10.81		0
	100	0	10.79	10.74	10.76		0

Table 8-23
LTE Band 25 (PCS) Measured P_{Limit} Antenna 2b - 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	13.52	13.38	13.62	0	0
	1	50	**13.77**	13.48	13.73		0
	1	99	13.71	13.44	13.72		0
	50	0	13.70	13.80	13.71	0-1	0
	50	25	13.78	13.79	13.73		0
	50	50	**13.83**	13.82	13.80		0
	100	0	13.73	13.75	13.73		0
16QAM	1	0	13.50	13.73	13.68	0-1	0
	1	50	13.59	13.82	13.70		0
	1	99	13.58	13.74	13.63		0
	50	0	13.17	13.33	13.22	0-2	0
	50	25	13.27	13.31	13.23		0
	50	50	13.26	13.30	13.15		0
	100	0	13.24	13.30	13.24		0
64QAM	1	0	13.35	13.39	13.36	0-2	0
	1	50	13.46	13.55	13.39		0
	1	99	13.40	13.41	13.34		0
	50	0	13.22	13.36	13.29	0-3	0
	50	25	13.35	13.34	13.34		0
	50	50	13.31	13.35	13.26		0
	100	0	13.27	13.31	13.33		0
256QAM	1	0	13.60	13.33	13.36	0-5	0
	1	50	13.68	13.40	13.41		0
	1	99	13.62	13.25	13.25		0
	50	0	13.50	13.59	13.52		0
	50	25	13.59	13.56	13.61		0
	50	50	13.51	13.57	13.50		0
	100	0	13.52	13.56	13.61		0

Table 8-24
LTE Band 25 (PCS) 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	**11.17**	11.13	11.05	0	0
	1	50	10.93	11.11	11.10		0
	1	99	10.87	11.14	11.13		0
	50	0	11.24	11.19	11.15	0-1	0
	50	25	**11.30**	11.24	11.17		0
	50	50	11.17	11.20	11.26		0
	100	0	11.15	11.12	11.13		0
16QAM	1	0	11.37	11.37	11.26	0-1	0
	1	50	11.35	11.39	11.28		0
	1	99	11.32	11.42	11.32		0
	50	0	11.03	10.92	10.86	0-2	0
	50	25	11.04	10.92	10.97		0
	50	50	11.04	11.00	11.00		0
	100	0	10.98	10.90	10.96		0
64QAM	1	0	10.96	10.82	10.69	0-2	0
	1	50	10.89	10.80	10.69		0
	1	99	10.94	10.90	10.74		0
	50	0	11.01	10.89	10.87	0-3	0
	50	25	11.01	10.88	11.00		0
	50	50	11.01	10.96	11.01		0
	100	0	10.99	10.85	10.96		0
256QAM	1	0	10.93	10.69	10.86	0-5	0
	1	50	10.90	10.68	10.95		0
	1	99	10.93	10.71	10.99		0
	50	0	11.01	10.90	10.88		0
	50	25	10.99	10.87	10.99		0
	50	50	11.00	10.98	11.01		0
	100	0	10.99	10.86	10.98		0

Table 8-25
LTE Band 25 (PCS) 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	13.16	13.22	12.91	0	0
	1	50	13.27	**13.34**	12.99		0
	1	99	13.19	13.19	12.85		0
	50	0	13.27	13.34	13.28	0-1	0
	50	25	13.33	**13.38**	13.29		0
	50	50	13.30	13.34	13.27		0
	100	0	13.30	13.32	13.26		0
16QAM	1	0	13.43	13.33	13.07	0-1	0
	1	50	13.43	13.36	13.04		0
	1	99	13.48	13.37	13.09		0
	50	0	12.94	13.07	12.99	0-2	0
	50	25	12.98	13.13	12.99		0
	50	50	12.98	13.05	12.99		0
	100	0	12.99	13.05	12.97		0
64QAM	1	0	13.08	13.10	13.53	0-2	0
	1	50	13.09	13.21	13.49		0
	1	99	13.14	13.18	13.47		0
	50	0	12.93	13.10	12.98	0-3	0
	50	25	13.05	13.15	13.02		0
	50	50	13.00	13.10	13.00		0
	100	0	13.01	13.08	12.98		0
256QAM	1	0	12.88	13.20	13.09	0-5	0
	1	50	12.92	13.26	13.07		0
	1	99	12.87	13.13	13.03		0
	50	0	12.89	13.03	12.99		0
	50	25	13.00	13.06	12.99		0
	50	50	12.99	13.06	12.98		0
	100	0	13.01	12.98	12.97		0

8.2.9 LTE Band 30

Table 8-26
LTE Band 30 Measured P_{Limit} Antenna 1b - 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	**13.30**	0	0
	1	25	13.16		0
	1	49	13.14		0
	25	0	13.32	0-1	0
	25	12	13.37		0
	25	25	**13.38**		0
	50	0	13.28		0
16QAM	1	0	13.44	0-1	0
	1	25	13.48		0
	1	49	13.40		0
	25	0	13.31	0-2	0
	25	12	13.28		0
	25	25	13.32		0
	50	0	13.19		0
64QAM	1	0	13.33	0-2	0
	1	25	13.28		0
	1	49	13.30		0
	25	0	13.18	0-3	0
	25	12	13.23		0
	25	25	13.28		0
	50	0	13.17		0
256QAM	1	0	13.64	0-5	0
	1	25	13.68		0
	1	49	13.63		0
	25	0	13.20		0
	25	12	13.23		0
	25	25	13.24		0
	50	0	13.25		0

Table 8-27
LTE Band 30 Measured P_{Limit} Antenna 2b - 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	13.86	0	0
	1	25	13.89		0
	1	49	**14.04**		0
	25	0	13.93	0-1	0
	25	12	14.07		0
	25	25	**14.09**		0
	50	0	14.03		0
16QAM	1	0	14.19	0-1	0
	1	25	14.04		0
	1	49	14.02		0
	25	0	13.66	0-2	0
	25	12	13.72		0
	25	25	13.68		0
	50	0	13.61		0
64QAM	1	0	14.17	0-2	0
	1	25	14.14		0
	1	49	14.09		0
	25	0	14.03	0-3	0
	25	12	14.07		0
	25	25	14.00		0
	50	0	14.00		0
256QAM	1	0	14.18	0-5	0
	1	25	14.17		0
	1	49	14.08		0
	25	0	13.74		0
	25	12	13.80		0
	25	25	13.74		0
	50	0	13.78		0

Table 8-28
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	**11.24**	0	0
	1	25	11.17		0
	1	49	11.09		0
	25	0	11.15	0-1	0
	25	12	**11.26**		0
	25	25	11.20		0
	50	0	11.15		0
16QAM	1	0	11.17	0-1	0
	1	25	11.23		0
	1	49	11.22		0
	25	0	11.01	0-2	0
	25	12	11.11		0
	25	25	11.14		0
	50	0	10.97		0
64QAM	1	0	10.98	0-2	0
	1	25	11.02		0
	1	49	10.95		0
	25	0	11.01	0-3	0
	25	12	11.12		0
	25	25	11.13		0
	50	0	11.00		0
256QAM	1	0	11.12	0-5	0
	1	25	11.10		0
	1	49	11.06		0
	25	0	11.01		0
	25	12	11.16		0
	25	25	11.15		0
	50	0	11.05		0

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	10.93	0	0
	1	25	**11.15**		0
	1	49	11.03		0
	25	0	11.11	0-1	0
	25	12	**11.19**		0
	25	25	11.17		0
	50	0	11.13		0
16QAM	1	0	11.00	0-1	0
	1	25	11.10		0
	1	49	11.00		0
	25	0	10.56	0-2	0
	25	12	10.70		0
	25	25	10.75		0
	50	0	10.61		0
64QAM	1	0	11.05	0-2	0
	1	25	11.06		0
	1	49	11.07		0
	25	0	10.89	0-3	0
	25	12	10.99		0
	25	25	11.01		0
	50	0	10.96		0
256QAM	1	0	11.16	0-5	0
	1	25	11.21		0
	1	49	11.15		0
	25	0	10.56		0
	25	12	10.70		0
	25	25	10.71		0
	50	0	10.67		0

8.2.10 LTE Band 7

Table 8-30
LTE Band 7 Measured P_{Limit} Antenna 1b - 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	13.63	13.66	13.74	0	0
	1	50	13.61	**13.86**	13.54		0
	1	99	13.60	13.56	13.52		0
	50	0	13.60	13.66	13.84	0-1	0
	50	25	13.65	**13.87**	13.68		0
	50	50	13.67	13.70	13.60		0
	100	0	13.75	13.74	13.85		0
16QAM	1	0	13.93	13.84	13.69	0-1	0
	1	50	13.90	13.85	13.70		0
	1	99	13.92	13.87	13.69		0
	50	0	13.41	13.46	13.58	0-2	0
	50	25	13.51	13.56	13.60		0
	50	50	13.49	13.53	13.55		0
	100	0	13.52	13.56	13.56		0
64QAM	1	0	13.40	13.54	13.65	0-2	0
	1	50	13.43	13.58	13.68		0
	1	99	13.52	13.57	13.71		0
	50	0	13.50	13.52	13.48	0-3	0
	50	25	13.57	13.64	13.58		0
	50	50	13.57	13.62	13.56		0
	100	0	13.57	13.61	13.51		0
256QAM	1	0	13.35	13.53	13.53	0-5	0
	1	50	13.45	13.64	13.60		0
	1	99	13.36	13.75	13.62		0
	50	0	13.48	13.48	13.48		0
	50	25	13.56	13.60	13.58		0
	50	50	13.56	13.55	13.53		0
	100	0	13.54	13.54	13.52		0

Table 8-31
LTE Band 7 Measured P_{Limit} Antenna 2b - 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	13.82	13.78	13.82	0	0
	1	50	13.85	13.91	**14.00**		0
	1	99	13.81	13.92	13.94		0
	50	0	13.88	13.86	13.88	0-1	0
	50	25	13.98	13.98	13.95		0
	50	50	13.92	13.94	**14.01**		0
	100	0	13.89	13.90	13.89		0
16QAM	1	0	14.12	13.95	13.77	0-1	0
	1	50	13.89	13.85	13.83		0
	1	99	13.85	13.81	13.75		0
	50	0	13.81	13.69	13.53	0-2	0
	50	25	13.76	13.64	13.54		0
	50	50	13.73	13.59	13.46		0
	100	0	13.71	13.68	13.62		0
64QAM	1	0	14.02	13.87	13.74	0-2	0
	1	50	13.88	13.86	13.78		0
	1	99	13.94	13.70	13.62		0
	50	0	13.78	13.76	13.58	0-3	0
	50	25	13.81	13.75	13.61		0
	50	50	13.82	13.64	13.58		0
	100	0	13.83	13.73	13.59		0
256QAM	1	0	13.74	13.81	13.61	0-5	0
	1	50	13.87	13.78	13.67		0
	1	99	13.72	13.76	13.60		0
	50	0	13.76	13.76	13.54		0
	50	25	13.79	13.70	13.61		0
	50	50	13.76	13.68	13.54		0
	100	0	13.83	13.72	13.60		0

Table 8-32
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	10.76	10.97	10.80	0	0
	1	50	10.82	**11.08**	10.92		0
	1	99	10.95	10.93	10.87		0
	50	0	10.99	11.03	10.90	0-1	0
	50	25	11.07	**11.09**	10.93		0
	50	50	11.01	10.98	10.95		0
	100	0	11.00	11.02	10.86		0
16QAM	1	0	11.26	11.22	11.20	0-1	0
	1	50	11.39	11.15	11.18		0
	1	99	11.41	11.16	11.16		0
	50	0	10.93	10.84	10.80	0-2	0
	50	25	10.93	10.83	10.86		0
	50	50	10.94	10.82	10.81		0
	100	0	10.92	10.87	10.81		0
64QAM	1	0	10.73	10.65	10.78	0-2	0
	1	50	10.88	10.57	10.79		0
	1	99	10.87	10.60	10.74		0
	50	0	10.93	10.87	10.77	0-3	0
	50	25	10.93	10.83	10.87		0
	50	50	10.89	10.85	10.81		0
	100	0	10.88	10.84	10.82		0
256QAM	1	0	10.72	10.65	10.77	0-5	0
	1	50	10.84	10.58	10.75		0
	1	99	10.89	10.60	10.80		0
	50	0	10.93	10.85	10.79		0
	50	25	10.91	10.84	10.84		0
	50	50	10.88	10.82	10.82		0
	100	0	10.86	10.84	10.82		0

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	**10.70**	10.55	10.35	0	0
	1	50	10.54	10.40	10.22		0
	1	99	10.50	10.46	10.27		0
	50	0	**10.70**	10.61	10.60	0-1	0
	50	25	10.63	10.57	10.65		0
	50	50	10.56	10.49	10.56		0
	100	0	10.60	10.55	10.56		0
16QAM	1	0	10.93	10.34	11.06	0-1	0
	1	50	11.05	10.43	11.13		0
	1	99	10.93	10.35	11.11		0
	50	0	10.66	10.68	10.53	0-2	0
	50	25	10.68	10.71	10.66		0
	50	50	10.62	10.70	10.65		0
	100	0	10.64	10.67	10.66		0
64QAM	1	0	10.31	10.83	10.56	0-2	0
	1	50	10.36	10.81	10.69		0
	1	99	10.32	10.76	10.67		0
	50	0	10.65	10.65	10.60	0-3	0
	50	25	10.74	10.71	10.72		0
	50	50	10.69	10.67	10.69		0
	100	0	10.71	10.66	10.71		0
256QAM	1	0	10.69	10.31	10.74	0-5	0
	1	50	10.80	10.41	10.92		0
	1	99	10.77	10.36	10.85		0
	50	0	10.65	10.66	10.60		0
	50	25	10.68	10.66	10.74		0
	50	50	10.63	10.63	10.69		0
	100	0	10.65	10.66	10.66		0

8.2.11 LTE Band 41 PC3

Table 8-34
LTE Band 41 PC3 Measured P_{Limit} Antenna 1b - 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	14.85	14.99	14.90	14.77	14.82	0	0
	1	50	14.95	14.76	14.86	14.88	14.84		0
	1	99	14.86	14.79	14.89	14.90	**15.05**		0
	50	0	15.06	14.96	14.92	14.85	**15.10**	0-1	0
	50	25	15.02	14.95	15.01	14.91	14.94		0
	50	50	14.86	14.92	14.87	14.74	14.95		0
	100	0	14.88	14.94	14.85	14.80	14.92		0
16QAM	1	0	14.73	14.62	15.04	15.03	14.86	0-1	0
	1	50	14.67	14.61	15.02	14.90	14.81		0
	1	99	14.71	14.59	15.03	14.92	14.89		0
	50	0	14.81	14.85	15.01	15.02	15.05	0-2	0
	50	25	14.87	14.92	15.04	15.06	15.34		0
	50	50	14.86	14.88	15.03	15.07	15.10		0
	100	0	14.91	14.94	15.02	15.12	15.15		0
64QAM	1	0	14.68	15.04	15.09	14.92	15.25	0-2	0
	1	50	14.64	15.04	15.02	14.87	15.26		0
	1	99	14.63	15.08	14.99	14.96	15.27		0
	50	0	15.04	15.12	15.25	15.24	15.29	0-3	0
	50	25	15.09	15.14	15.32	15.32	15.33		0
	50	50	15.07	15.10	15.26	15.30	15.32		0
	100	0	15.06	15.17	15.29	15.30	15.30		0
256QAM	1	0	14.90	14.87	15.19	15.09	15.04	0-5	0
	1	50	14.87	14.81	14.97	15.01	15.03		0
	1	99	14.96	14.87	14.96	15.04	15.11		0
	50	0	14.80	14.85	14.99	15.07	15.06		0
	50	25	14.88	14.93	15.06	15.11	15.15		0
	50	50	14.84	14.90	15.02	15.09	15.12		0
	100	0	14.87	14.91	15.04	15.11	15.14		0

Table 8-35
LTE Band 41 PC3 Measured P_{Limit} Antenna 2b - 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	15.91	16.00	16.12	16.14	**16.29**	0	0
	1	50	15.96	16.16	16.11	16.17	16.25		0
	1	99	16.05	16.07	16.10	16.25	16.28		0
	50	0	16.06	16.23	16.20	16.20	16.27	0-1	0
	50	25	16.26	16.27	16.26	16.24	**16.30**		0
	50	50	16.14	16.25	16.24	16.26	16.26		0
	100	0	16.14	16.26	16.24	16.23	16.27		0
16QAM	1	0	15.83	15.81	16.00	15.84	16.17	0-1	0
	1	50	15.71	15.67	15.79	15.66	15.98		0
	1	99	15.75	15.75	15.75	15.71	16.01		0
	50	0	15.76	15.94	15.98	15.96	16.13	0-2	0
	50	25	15.86	15.97	16.00	15.95	16.16		0
	50	50	15.88	15.95	15.91	15.98	16.12		0
	100	0	15.86	15.98	16.04	15.96	16.20		0
64QAM	1	0	15.41	15.52	15.70	15.65	15.80	0-2	0
	1	50	15.39	15.51	15.50	15.55	15.71		0
	1	99	15.44	15.46	15.49	15.59	15.70		0
	50	0	15.82	16.01	16.03	16.02	16.20	0-3	0
	50	25	15.89	16.04	16.03	16.00	16.21		0
	50	50	15.92	16.00	15.99	16.04	16.19		0
	100	0	15.88	15.88	16.01	15.92	16.19		0
256QAM	1	0	15.60	15.78	15.92	15.86	16.06	0-5	0
	1	50	15.61	15.63	15.73	15.77	15.91		0
	1	99	15.76	15.65	15.82	15.81	15.92		0
	50	0	15.82	15.90	16.02	16.04	16.21		0
	50	25	15.91	15.95	16.07	16.02	16.23		0
	50	50	15.93	15.88	16.01	16.07	16.18		0
	100	0	15.86	15.87	16.02	16.00	16.19		0

Table 8-36
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	13.47	13.79	13.54	13.24	13.28	0	0
	1	50	13.92	13.77	13.32	13.12	13.23		0
	1	99	**14.03**	13.58	13.29	13.25	13.27		0
	50	0	13.94	13.90	13.57	13.37	13.36	0-1	0
	50	25	**14.07**	13.92	13.56	13.39	13.40		0
	50	50	14.04	13.77	13.44	13.25	13.32		0
	100	0	13.99	13.84	13.48	13.35	13.34		0
16QAM	1	0	13.75	14.02	13.86	13.87	13.76	0-1	0
	1	50	14.17	13.93	13.84	13.69	13.80		0
	1	99	14.23	13.85	13.80	13.76	13.90		0
	50	0	14.10	14.08	13.70	13.52	13.52	0-2	0
	50	25	14.15	14.06	13.69	13.51	13.57		0
	50	50	14.20	13.94	13.57	13.47	13.48		0
	100	0	14.16	14.03	13.66	13.51	13.56		0
64QAM	1	0	13.54	13.91	13.54	13.23	13.46	0-2	0
	1	50	14.09	13.81	13.44	13.27	13.38		0
	1	99	14.12	13.68	13.41	13.25	13.52		0
	50	0	14.01	14.08	13.66	13.51	13.47	0-3	0
	50	25	14.11	13.98	13.68	13.54	13.52		0
	50	50	14.20	13.95	13.60	13.54	13.53		0
	100	0	14.04	14.03	13.65	13.52	13.51		0
256QAM	1	0	13.85	14.26	13.73	13.54	13.52	0-5	0
	1	50	14.11	14.04	13.61	13.48	13.42		0
	1	99	14.17	14.03	13.61	13.55	13.53		0
	50	0	14.05	14.08	13.68	13.49	13.47		0
	50	25	14.10	13.97	13.68	13.57	13.54		0
	50	50	14.15	13.93	13.58	13.55	13.51		0
	100	0	14.04	13.99	13.65	13.57	13.53		0

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	13.07	12.98	**13.10**	12.79	12.77	0	0
	1	50	12.82	12.70	12.70	12.65	12.51		0
	1	99	12.76	12.65	12.74	12.62	12.63		0
	50	0	13.00	12.98	**13.01**	12.78	12.76	0-1	0
	50	25	12.99	12.97	12.96	12.77	12.75		0
	50	50	12.98	12.90	12.83	12.69	12.69		0
	100	0	12.85	12.84	12.86	12.81	12.71		0
16QAM	1	0	12.66	12.77	13.13	12.71	13.03	0-1	0
	1	50	12.60	12.71	13.03	12.91	12.92		0
	1	99	12.62	12.78	13.15	12.76	13.10		0
	50	0	12.93	12.86	12.82	12.69	12.74	0-2	0
	50	25	12.92	12.87	12.86	12.73	12.78		0
	50	50	12.90	12.85	12.78	12.69	12.72		0
	100	0	12.98	12.85	12.74	12.73	12.76		0
64QAM	1	0	12.75	12.90	12.99	12.92	12.25	0-2	0
	1	50	12.73	12.83	12.91	12.74	12.13		0
	1	99	12.73	12.85	12.95	12.89	12.21		0
	50	0	12.70	12.77	12.79	12.72	12.76	0-3	0
	50	25	12.71	12.78	12.83	12.75	12.80		0
	50	50	12.71	12.83	12.76	12.68	12.73		0
	100	0	12.69	12.78	12.75	12.75	12.79		0
256QAM	1	0	12.83	12.84	12.79	12.77	12.79	0-5	0
	1	50	12.83	12.84	12.78	12.72	12.69		0
	1	99	12.93	12.95	12.81	12.69	12.71		0
	50	0	12.90	12.87	12.88	12.78	12.77		0
	50	25	12.90	12.91	12.86	12.82	12.77		0
	50	50	12.91	12.88	12.87	12.83	12.78		0
	100	0	12.92	12.90	12.88	12.81	12.77		0

8.2.12 LTE Band 41 PC2

Table 8-38
LTE Band 41 PC2 Measured P_{Limit} Antenna 1b - 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	16.79	16.93	17.00	16.97	**17.21**	0	0
	1	50	16.82	16.99	16.95	16.91	17.19		0
	1	99	16.78	16.91	16.97	16.98	17.19		0
	50	0	16.99	16.98	17.07	17.02	17.17	0-1	0
	50	25	17.06	17.07	17.12	17.09	17.20		0
	50	50	17.04	17.03	17.07	17.07	**17.24**		0
	100	0	17.08	17.04	17.12	17.08	17.15		0

Table 8-39
LTE Band 41 PC2 Measured P_{Limit} Antenna 2b - 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	16.87	17.03	16.88	**17.17**	16.96	0	0
	1	50	16.90	16.92	16.75	17.06	16.89		0
	1	99	16.95	16.88	16.82	17.13	16.97		0
	50	0	17.01	17.08	17.02	17.07	17.13	0-1	0
	50	25	17.08	**17.14**	17.05	17.11	17.10		0
	50	50	17.06	17.10	17.00	17.13	17.11		0
	100	0	17.05	17.11	17.04	17.13	17.10		0

Table 8-40
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	14.58	14.93	14.74	14.57	14.54	0	0
	1	50	14.85	14.80	14.58	14.50	14.51		0
	1	99	**14.95**	14.77	14.54	14.58	14.50		0
	50	0	15.04	15.01	14.70	14.59	14.56	0-1	0
	50	25	**15.15**	15.00	14.64	14.55	14.58		0
	50	50	15.11	14.89	14.51	14.53	14.51		0
	100	0	14.94	14.93	14.62	14.55	14.58		0

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	13.98	13.87	**14.15**	13.84	13.79	0	0
	1	50	13.89	13.77	13.91	13.75	13.68		0
	1	99	13.93	13.78	13.93	13.84	13.78		0
	50	0	**14.23**	14.09	14.07	13.92	13.86	0-1	0
	50	25	14.22	14.12	14.06	13.91	13.87		0
	50	50	14.16	14.06	14.00	13.87	13.82		0
	100	0	14.14	14.10	13.99	13.94	13.89		0

8.2.13 LTE Band 48

Table 8-42
LTE Band 48 Measured P_{Limit} Antenna 1a - 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	12.97	12.97	13.01	12.83	0	0
	1	50	12.90	12.91	12.86	12.80		0
	1	99	13.03	**13.04**	12.92	12.81		0
	50	0	13.07	13.12	13.15	13.01	0-1	0
	50	25	13.13	**13.16**	13.12	12.93		0
	50	50	13.14	13.13	13.08	12.92		0
	100	0	13.03	13.02	13.01	12.94		0
16QAM	1	0	13.33	13.02	13.43	13.27	0-1	0
	1	50	13.30	12.99	13.35	13.19		0
	1	99	13.31	13.04	13.31	13.17		0
	50	0	13.08	13.11	13.01	12.86	0-2	0
	50	25	13.08	13.14	13.04	12.87		0
	50	50	13.06	13.11	13.05	12.89		0
	100	0	13.04	13.13	12.99	12.83		0
64QAM	1	0	12.74	12.91	12.82	12.69	0-2	0
	1	50	12.72	12.93	12.79	12.64		0
	1	99	12.80	12.95	12.76	12.63		0
	50	0	13.05	13.11	13.06	12.91	0-3	0
	50	25	13.06	13.12	13.07	12.91		0
	50	50	13.06	13.10	13.06	12.93		0
	100	0	13.05	13.11	13.01	12.90		0
256QAM	1	0	13.19	13.07	13.02	12.92	0-5	0
	1	50	13.22	13.05	12.98	12.90		0
	1	99	13.24	13.15	13.03	12.89		0
	50	0	13.12	13.03	12.99	12.90		0
	50	25	13.24	13.20	13.12	12.89		0
	50	50	13.18	13.12	13.01	12.94		0
	100	0	13.15	13.14	13.02	12.91		0

Table 8-43
LTE Band 48 Measured P_{Limit} Antenna 2a - 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	11.50	11.60	11.63	11.62	0	0
	1	50	11.45	11.55	11.52	11.50		0
	1	99	11.55	**11.65**	11.51	11.53		0
	50	0	11.60	11.63	11.63	11.68	0-1	0
	50	25	11.69	**11.78**	11.67	11.71		0
	50	50	11.67	11.69	11.70	11.66		0
	100	0	11.61	11.64	11.62	11.63		0
16QAM	1	0	11.30	11.44	11.68	11.58	0-1	0
	1	50	11.27	11.50	11.62	11.55		0
	1	99	11.35	11.57	11.64	11.51		0
	50	0	11.30	11.25	11.38	11.26	0-2	0
	50	25	11.42	11.38	11.37	11.29		0
	50	50	11.40	11.37	11.31	11.26		0
	100	0	11.42	11.38	11.34	11.24		0
64QAM	1	0	11.09	11.43	11.23	11.42	0-2	0
	1	50	11.06	11.37	11.16	11.35		0
	1	99	11.18	11.52	11.18	11.43		0
	50	0	11.09	11.41	11.20	11.37	0-3	0
	50	25	11.16	11.48	11.15	11.39		0
	50	50	11.17	11.52	11.22	11.41		0
	100	0	11.13	11.47	11.15	11.35		0
256QAM	1	0	11.35	11.42	11.49	11.39	0-5	0
	1	50	11.29	11.37	11.37	11.29		0
	1	99	11.44	11.46	11.44	11.36		0
	50	0	11.31	11.40	11.46	11.36		0
	50	25	11.45	11.48	11.43	11.35		0
	50	50	11.41	11.49	11.45	11.40		0
	100	0	11.40	11.49	11.42	11.30		0

Table 8-44
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	14.43	14.35	14.33	14.38	0	0
	1	50	14.31	14.30	14.27	14.30		0
	1	99	**14.44**	14.37	14.31	14.33		0
	50	0	**14.55**	14.44	14.40	14.44	0-1	0
	50	25	14.53	14.46	14.37	14.41		0
	50	50	14.54	14.45	14.42	14.45		0
	100	0	14.43	14.40	14.37	14.42		0
16QAM	1	0	14.44	14.24	13.97	14.24	0-1	0
	1	50	14.24	14.10	13.90	14.13		0
	1	99	14.31	14.06	13.90	14.22		0
	50	0	14.35	14.21	13.97	14.27	0-2	0
	50	25	14.35	14.13	13.93	14.36		0
	50	50	14.29	14.08	14.01	14.32		0
	100	0	14.32	14.13	13.96	14.35		0
64QAM	1	0	14.45	14.34	14.27	14.42	0-2	0
	1	50	14.27	14.13	14.18	14.31		0
	1	99	14.31	14.20	14.24	14.42		0
	50	0	14.79	14.68	14.63	14.79	0-3	0
	50	25	14.78	14.69	14.63	14.83		0
	50	50	14.77	14.64	14.67	14.84		0
	100	0	14.77	14.65	14.61	14.83		0
256QAM	1	0	13.77	13.61	13.60	13.69	0-5	1.2
	1	50	13.68	13.46	13.70	13.63		1.2
	1	99	13.79	13.57	13.66	13.71		1.2
	50	0	13.68	13.53	13.58	13.62		1.2
	50	25	13.70	13.60	13.58	13.72		1.2
	50	50	13.70	13.52	13.59	13.65		1.2
	100	0	13.70	13.53	13.54	13.68		1.2

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	**12.54**	12.27	12.38	12.32	0	0
	1	50	12.39	12.24	12.32	12.19		0
	1	99	12.38	12.23	12.31	12.10		0
	50	0	**12.53**	12.41	12.46	12.28	0-1	0
	50	25	12.51	12.47	12.44	12.29		0
	50	50	12.49	12.33	12.48	12.27		0
	100	0	12.52	12.37	12.39	12.22		0
16QAM	1	0	12.43	12.41	12.38	12.36	0-1	0
	1	50	12.41	12.36	12.30	12.29		0
	1	99	12.42	12.34	12.28	12.30		0
	50	0	12.52	12.50	12.35	12.37	0-2	0
	50	25	12.53	12.51	12.48	12.43		0
	50	50	12.52	12.45	12.38	12.39		0
	100	0	12.53	12.48	12.43	12.43		0
64QAM	1	0	12.19	12.14	12.18	12.12	0-2	0
	1	50	12.21	12.14	12.10	12.10		0
	1	99	12.21	12.20	12.09	12.09		0
	50	0	12.59	12.53	12.45	12.43	0-3	0
	50	25	12.57	12.53	12.48	12.46		0
	50	50	12.52	12.49	12.43	12.46		0
	100	0	12.56	12.52	12.43	12.44		0
256QAM	1	0	12.36	12.31	12.38	12.41	0-5	0
	1	50	12.38	12.34	12.34	12.42		0
	1	99	12.39	12.40	12.32	12.42		0
	50	0	12.32	12.34	12.27	12.33		0
	50	25	12.42	12.37	12.35	12.43		0
	50	50	12.36	12.32	12.29	12.36		0
	100	0	12.33	12.26	12.27	12.32		0

8.2.14 LTE Uplink Carrier Aggregation Conducted Powers

Table 8-46
LTE Uplink Carrier Aggregation Measured P_{Limit} Antenna 1a

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	56640	3690.0	QPSK	50	0	LTE B48	20	56442	3670.2	QPSK	50	50	12.90	13.01

Table 8-47
LTE Uplink Carrier Aggregation Measured P_{Limit} Antenna 1b

	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	11.16	11.24
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	11.20	10.97

	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	21350	2560.0	3350	2680.0	QPSK	1	0	LTE B7	20	21152	2540.2	3152	2660.2	QPSK	1	99	13.61	13.74

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	40620	2593.0	QPSK	1	0	LTE B41	20	40422	2573.2	QPSK	1	99	14.88	14.90

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	40620	2593.0	QPSK	1	0	LTE B41 PC2	20	40422	2573.2	QPSK	1	99	16.90	17.00

Table 8-48
LTE Uplink Carrier Aggregation Measured P_{Limit} Antenna 2a

	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	**11.58**	11.65

Table 8-49
LTE Uplink Carrier Aggregation Measured P_{Limit} Antenna 2b

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132572	1770.0	67036	2170.0	QPSK	1	0	LTE B66	20	132374	1750.2	66838	2150.2	QPSK	1	99	12.35	12.61
CA_66B	LTE B66	10	132622	1775.0	67086	2175.0	QPSK	1	0	LTE B66	10	132523	1765.1	66987	2165.1	QPSK	1	49	13.01	12.97

	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	13.96	13.92

	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	16.19	16.14

	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	50	50	LTE B41 PC2	20	39948	2525.8	QPSK	50	0	17.17	17.06

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	132322	1745.0	66786	2145.0	QPSK	1	0	LTE B66	20	132124	1725.2	66588	2125.2	QPSK	1	99	12.27	12.21
CA_66B	LTE B66	10	132322	1745.0	66786	2145.0	QPSK	1	0	LTE B66	10	132223	1735.1	66687	2135.1	QPSK	1	49	12.36	12.20

	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	10.95	10.95

	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	13.94	14.04

	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	50	50	LTE B41 PC2	20	39948	2525.8	QPSK	50	0	15.04	15.11

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	15.86	15.85

	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	100	0	LTE B48	20	55538	3579.8	QPSK	100	0	14.80	14.43

Table 8-52
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	1	0	LTE B5	5	20453	829.3	2453	874.3	QPSK	1	24	17.50	18.00

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132072	1720.0	66536	2120.0	QPSK	50	50	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	50	0	13.80	13.67
CA_66B	LTE B66	10	132022	1715.0	66486	2115.0	QPSK	25	25	LTE B66	10	132121	1724.9	66734	2124.9	QPSK	25	0	13.52	13.90

	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	21350	2560.0	3350	2680.0	QPSK	1	0	LTE B7	20	21152	2540.2	3152	2660.2	QPSK	1	99	10.44	10.35

	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	40185	2549.5	QPSK	1	0	LTE B41	20	39987	2529.7	QPSK	1	99	12.80	12.98

	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	40185	2549.5	QPSK	1	0	LTE B41 PC2	20	39987	2529.7	QPSK	1	99	13.92	13.87

	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	50	50	LTE B48	20	55538	3579.8	QPSK	50	0	12.70	12.49

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

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 8-53
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	17.52	0	0.0
	1	53	17.53		0.0
	1	104	17.42		0.0
	50	0	17.57	0-0.5	0.0
	50	28	17.50	0	0.0
	50	56	17.42	0-0.5	0.0
	100	0	17.55		0.0
DFT-s-OFDM QPSK	1	1	17.51	0	0.0
	1	53	**17.59**		0.0
	1	104	17.38		0.0
	50	0	**17.55**	0-1	0.0
	50	28	17.53	0	0.0
	50	56	17.44	0-1	0.0
	100	0	17.54		0.0
DFT-s-OFDM 16QAM	1	1	17.37	0-1	0.0
CP-OFDM QPSK	1	1	17.48	0-1.5	0.0

Table 8-54
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	20.10	0	0.0
	1	53	19.95		0.0
	1	104	20.00		0.0
	50	0	20.08	0-0.5	0.0
	50	28	20.02	0	0.0
	50	56	20.01	0-0.5	0.0
	100	0	20.05		0.0
DFT-s-OFDM QPSK	1	1	**20.12**	0	0.0
	1	53	19.97		0.0
	1	104	20.05		0.0
	50	0	**20.07**	0-1	0.0
	50	28	20.01	0	0.0
	50	56	19.99	0-1	0.0
	100	0	20.01		0.0
DFT-s-OFDM 16QAM	1	1	20.00	0-1	0.0
CP-OFDM QPSK	1	1	20.24	0-1.5	0.0

8.3.2 NR Band n12

Table 8-55
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	17.05	0	0.0
	1	40	16.95		0.0
	1	77	16.85		0.0
	36	0	17.01	0-0.5	0.0
	36	22	16.90	0	0.0
	36	43	16.85	0-0.5	0.0
	75	0	16.78		0.0
DFT-s-OFDM QPSK	1	1	**17.09**	0	0.0
	1	40	16.94		0.0
	1	77	16.86		0.0
	36	0	**17.05**	0-1	0.0
	36	22	16.94	0	0.0
	36	43	16.86	0-1	0.0
	75	0	16.78		0.0
DFT-s-OFDM 16QAM	1	1	17.05	0-1	0.0
CP-OFDM QPSK	1	1	17.05	0-1.5	0.0

Table 8-56
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 π/2 BPSK	1	1	18.44	0	0.0
	1	40	18.34		0.0
	1	77	18.25		0.0
	36	0	18.15	0-0.5	0.0
	36	22	18.20	0	0.0
	36	43	18.13	0-0.5	0.0
	75	0	18.23		0.0
DFT-s-OFDM QPSK	1	1	**19.00**	0	0.0
	1	40	18.88		0.0
	1	77	18.81		0.0
	36	0	**18.89**	0-1	0.0
	36	22	18.87	0	0.0
	36	43	18.77	0-1	0.0
	75	0	18.88		0.0
DFT-s-OFDM 16QAM	1	1	18.85	0-1	0.0
CP-OFDM QPSK	1	1	18.97	0-1.5	0.0

8.3.3 NR Band n5

Table 8-57
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	15.87	0	0.0
	1	53	15.75		0.0
	1	104	15.64		0.0
	50	0	15.83	0-0.5	0.0
	50	28	15.78	0	0.0
	50	56	15.66	0-0.5	0.0
	100	0	15.78		0.0
DFT-s-OFDM QPSK	1	1	**15.86**	0	0.0
	1	53	15.73		0.0
	1	104	15.68		0.0
	50	0	**15.78**	0-1	0.0
	50	28	15.72	0	0.0
	50	56	15.66	0-1	0.0
	100	0	15.75		0.0
DFT-s-OFDM 16QAM	1	1	15.74	0-1	0.0
CP-OFDM QPSK	1	1	15.89	0-1.5	0.0

Table 8-58
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	17.81	0	0.0
	1	53	17.76		0.0
	1	104	17.61		0.0
	50	0	17.80	0-0.5	0.0
	50	28	17.71	0	0.0
	50	56	17.64	0-0.5	0.0
	100	0	17.76		0.0
DFT-s-OFDM QPSK	1	1	**17.89**	0	0.0
	1	53	17.86		0.0
	1	104	17.67		0.0
	50	0	**17.78**	0-1	0.0
	50	28	17.73	0	0.0
	50	56	17.70	0-1	0.0
	100	0	17.75		0.0
DFT-s-OFDM 16QAM	1	1	17.82	0-1	0.0
CP-OFDM QPSK	1	1	17.76	0-1.5	0.0

8.3.4 NR Band n66

Table 8-59
NR Band n66 Measured P_{Limit} Antenna 1b - 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	11.33	0	0.0
	1	108	11.38		0.0
	1	214	11.40		0.0
	108	0	11.34	0-0.5	0.0
	108	54	11.32	0	0.0
	108	108	11.30	0-0.5	0.0
	216	0	11.37		0.0
DFT-s-OFDM QPSK	1	1	11.36	0	0.0
	1	108	11.37		0.0
	1	214	**11.42**		0.0
	108	0	11.33	0-1	0.0
	108	54	11.34	0	0.0
	108	108	**11.35**	0-1	0.0
	216	0	11.34		0.0
DFT-s-OFDM 16QAM	1	1	11.05	0-1	0.0
CP-OFDM QPSK	1	1	11.44	0-1.5	0.0

Table 8-60
NR Band n66 Measured P_{Limit} Antenna 2b - 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	12.83	0	0.0
	1	108	12.72		0.0
	1	214	12.81		0.0
	108	0	12.87	0-0.5	0.0
	108	54	12.91	0	0.0
	108	108	12.83	0-0.5	0.0
	216	0	12.85		0.0
DFT-s-OFDM QPSK	1	1	12.82	0	0.0
	1	108	**12.89**		0.0
	1	214	12.80		0.0
	108	0	**12.90**	0-1	0.0
	108	54	12.79	0	0.0
	108	108	12.88	0-1	0.0
	216	0	12.80		0.0
DFT-s-OFDM 16QAM	1	1	12.90	0-1	0.0
CP-OFDM QPSK	1	1	12.90	0-1.5	0.0

Table 8-61
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	12.35	0	0.0
	1	108	12.30		0.0
	1	214	12.28		0.0
	108	0	12.33	0-0.5	0.0
	108	54	12.29	0	0.0
	108	108	12.30	0-0.5	0.0
	216	0	12.31		0.0
DFT-s-OFDM QPSK	1	1	12.36	0	0.0
	1	108	**12.38**		0.0
	1	214	12.33		0.0
	108	0	12.33	0-1	0.0
	108	54	12.34	0	0.0
	108	108	**12.36**	0-1	0.0
	216	0	12.30		0.0
DFT-s-OFDM 16QAM	1	1	12.08	0-1	0.0
CP-OFDM QPSK	1	1	12.34	0-1.5	0.0

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 π/2 BPSK	1	1	13.80	0	0.0
	1	108	13.79		0.0
	1	214	13.68		0.0
	108	0	13.90	0-0.5	0.0
	108	54	13.82	0	0.0
	108	108	13.84	0-0.5	0.0
	216	0	13.82		0.0
DFT-s-OFDM QPSK	1	1	13.77	0	0.0
	1	108	**13.90**		0.0
	1	214	13.75		0.0
	108	0	13.85	0-1	0.0
	108	54	**13.88**	0	0.0
	108	108	13.87	0-1	0.0
	216	0	13.86		0.0
DFT-s-OFDM 16QAM	1	1	13.86	0-1	0.0
CP-OFDM QPSK	1	1	13.67	0-1.5	0.0

8.3.5 NR Band n25

Table 8-63
NR Band n25 Measured P_{Limit} Antenna 1b - 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	10.97	0	0.0
	1	108	10.89		0.0
	1	214	11.04		0.0
	108	0	10.94	0-0.5	0.0
	108	54	10.87	0	0.0
	108	108	10.94	0-0.5	0.0
	216	0	10.91		0.0
DFT-s-OFDM QPSK	1	1	11.10	0	0.0
	1	108	10.92		0.0
	1	214	**11.12**		0.0
	108	0	10.91	0-1	0.0
	108	54	**10.92**	0	0.0
	108	108	10.90	0-1	0.0
	216	0	10.91		0.0
DFT-s-OFDM 16QAM	1	1	10.72	0-1	0.0
CP-OFDM QPSK	1	1	11.00	0-1.5	0.0

Table 8-64
NR Band n25 Measured P_{Limit} Antenna 2b - 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	14.11	0	0.0
	1	108	13.93		0.0
	1	214	14.19		0.0
	108	0	13.93	0-0.5	0.0
	108	54	13.84	0	0.0
	108	108	13.98	0-0.5	0.0
	216	0	13.91		0.0
DFT-s-OFDM QPSK	1	1	14.03	0	0.0
	1	108	13.87		0.0
	1	214	**14.06**		0.0
	108	0	**13.92**	0-1	0.0
	108	54	13.88	0	0.0
	108	108	13.90	0-1	0.0
	216	0	13.89		0.0
DFT-s-OFDM 16QAM	1	1	13.99	0-1	0.0
CP-OFDM QPSK	1	1	14.05	0-1.5	0.0

Table 8-65
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	11.01	0	0.0
	1	108	10.96		0.0
	1	214	11.31		0.0
	108	0	11.07	0-0.5	0.0
	108	54	10.97	0	0.0
	108	108	11.10	0-0.5	0.0
	216	0	11.07		0.0
DFT-s-OFDM QPSK	1	1	11.12	0	0.0
	1	108	11.08		0.0
	1	214	**11.42**		0.0
	108	0	11.09	0-1	0.0
	108	54	11.05	0	0.0
	108	108	**11.14**	0-1	0.0
	216	0	11.07		0.0
DFT-s-OFDM 16QAM	1	1	10.98	0-1	0.0
CP-OFDM QPSK	1	1	11.04	0-1.5	0.0

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	13.08	0	0.0
	1	108	12.96		0.0
	1	214	13.08		0.0
	108	0	13.06	0-0.5	0.0
	108	54	12.98	0	0.0
	108	108	13.03	0-0.5	0.0
	216	0	13.06		0.0
DFT-s-OFDM QPSK	1	1	13.04	0	0.0
	1	108	12.95		0.0
	1	214	**13.05**		0.0
	108	0	**13.06**	0-1	0.0
	108	54	13.03	0	0.0
	108	108	13.05	0-1	0.0
	216	0	12.99		0.0
DFT-s-OFDM 16QAM	1	1	13.25	0-1	0.0
CP-OFDM QPSK	1	1	13.07	0-1.5	0.0

8.3.6 NR Band n30

Table 8-67
NR Band n30 Measured P_{Limit} Antenna 1b - 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	13.26	0	0.0
	1	26	13.32		0.0
	1	50	13.23		0.0
	25	0	13.20	0-0.5	0.0
	25	14	13.24	0	0.0
	25	27	13.23	0-0.5	0.0
	50	0	13.25		0.0
DFT-s-OFDM QPSK	1	1	13.23	0	0.0
	1	26	**13.28**		0.0
	1	50	13.22		0.0
	25	0	13.16	0-1	0.0
	25	14	13.26	0	0.0
	25	27	**13.30**	0-1	0.0
	50	0	13.20		0.0
DFT-s-OFDM 16QAM	1	1	13.37	0-1	0.0
CP-OFDM QPSK	1	1	13.21	0-1.5	0.0

Table 8-68
NR Band n30 Measured P_{Limit} Antenna 2b - 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	14.16	0	0.0
	1	26	14.07		0.0
	1	50	14.11		0.0
	25	0	14.13	0-0.5	0.0
	25	14	14.12	0	0.0
	25	27	14.09	0-0.5	0.0
	50	0	14.10		0.0
DFT-s-OFDM QPSK	1	1	14.18	0	0.0
	1	26	**14.25**		0.0
	1	50	14.22		0.0
	25	0	**14.12**	0-1	0.0
	25	14	14.11	0	0.0
	25	27	14.10	0-1	0.0
	50	0	14.11		0.0
DFT-s-OFDM 16QAM	1	1	14.22	0-1	0.0
CP-OFDM QPSK	1	1	14.20	0-1.5	0.0

Table 8-69
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	11.70	0	0.0
	1	26	11.62		0.0
	1	50	11.55		0.0
	25	0	11.62	0-0.5	0.0
	25	14	11.58	0	0.0
	25	27	11.63	0-0.5	0.0
	50	0	11.60		0.0
DFT-s-OFDM QPSK	1	1	**11.73**	0	0.0
	1	26	11.64		0.0
	1	50	11.68		0.0
	25	0	11.62	0-1	0.0
	25	14	**11.66**	0	0.0
	25	27	11.58	0-1	0.0
	50	0	11.62		0.0
DFT-s-OFDM 16QAM	1	1	11.75	0-1	0.0
CP-OFDM QPSK	1	1	11.49	0-1.5	0.0

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	11.08	0	0.0
	1	26	11.25		0.0
	1	50	11.22		0.0
	25	0	11.10	0-0.5	0.0
	25	14	11.12	0	0.0
	25	27	11.17	0-0.5	0.0
	50	0	11.14		0.0
DFT-s-OFDM QPSK	1	1	11.23	0	0.0
	1	26	**11.28**		0.0
	1	50	11.25		0.0
	25	0	11.04	0-1	0.0
	25	14	11.13	0	0.0
	25	27	**11.21**	0-1	0.0
	50	0	11.15		0.0
DFT-s-OFDM 16QAM	1	1	11.18	0-1	0.0
CP-OFDM QPSK	1	1	11.12	0-1.5	0.0

8.3.1 NR Band n7

Table 8-71
NR Band n7 Measured P_{Limit} Antenna 1b - 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	13.64	0	0.0
	1	108	13.72		0.0
	1	214	13.65		0.0
	108	0	13.66	0-0.5	0.0
	108	54	13.67	0	0.0
	108	108	13.69	0-0.5	0.0
	216	0	13.67		0.0
DFT-s-OFDM QPSK	1	1	13.65	0	0.0
	1	108	**13.70**		0.0
	1	214	13.68		0.0
	108	0	13.67	0-1	0.0
	108	54	13.64	0	0.0
	108	108	**13.68**	0-1	0.0
	216	0	13.66		0.0
DFT-s-OFDM 16QAM	1	1	13.72	0-1	0.0
CP-OFDM QPSK	1	1	13.71	0-1.5	0.0

Table 8-72
NR Band n7 Measured P_{Limit} Antenna 2b - 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	13.85	0	0.0
	1	108	13.83		0.0
	1	214	13.87		0.0
	108	0	13.81	0-0.5	0.0
	108	54	13.80	0	0.0
	108	108	13.87	0-0.5	0.0
	216	0	13.90		0.0
DFT-s-OFDM QPSK	1	1	13.84	0	0.0
	1	108	**13.89**		0.0
	1	214	13.74		0.0
	108	0	**13.89**	0-1	0.0
	108	54	13.85	0	0.0
	108	108	13.83	0-1	0.0
	216	0	13.84		0.0
DFT-s-OFDM 16QAM	1	1	13.62	0-1	0.0
CP-OFDM QPSK	1	1	13.90	0-1.5	0.0

Table 8-73
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	11.26	0	0.0
	1	108	11.17		0.0
	1	214	11.15		0.0
	108	0	11.26	0-0.5	0.0
	108	54	11.20	0	0.0
	108	108	11.21	0-0.5	0.0
	216	0	11.25		0.0
DFT-s-OFDM QPSK	1	1	**11.30**	0	0.0
	1	108	11.26		0.0
	1	214	11.21		0.0
	108	0	**11.32**	0-1	0.0
	108	54	11.18	0	0.0
	108	108	11.26	0-1	0.0
	216	0	11.20		0.0
DFT-s-OFDM 16QAM	1	1	11.26	0-1	0.0
CP-OFDM QPSK	1	1	11.22	0-1.5	0.0

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	10.56	0	0.0
	1	108	10.48		0.0
	1	214	10.44		0.0
	108	0	10.54	0-0.5	0.0
	108	54	10.51	0	0.0
	108	108	10.55	0-0.5	0.0
	216	0	10.57		0.0
DFT-s-OFDM QPSK	1	1	10.63	0	0.0
	1	108	**10.65**		0.0
	1	214	10.56		0.0
	108	0	**10.59**	0-1	0.0
	108	54	10.50	0	0.0
	108	108	10.56	0-1	0.0
	216	0	10.57		0.0
DFT-s-OFDM 16QAM	1	1	10.53	0-1	0.0
CP-OFDM QPSK	1	1	10.55	0-1.5	0.0

8.3.2 NR Band n41 PC2

Table 8-75
NR Band n41 PC2 Measured P_{Limit} Antenna 1b - 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	13.31	0	0.0
	1	137	13.34		0.0
	1	271	13.38		0.0
	135	0	13.30	0-0.5	0.0
	135	69	13.31	0	0.0
	135	138	13.25	0-0.5	0.0
	270	0	13.28		0.0
DFT-s-OFDM QPSK	1	1	13.34	0	0.0
	1	137	**13.39**		0.0
	1	271	13.36		0.0
	135	0	13.26	0-1	0.0
	135	69	13.31	0	0.0
	135	138	**13.33**	0-1	0.0
	270	0	13.26		0.0
DFT-s-OFDM 16QAM	1	1	13.00	0-1	0.0
CP-OFDM QPSK	1	1	13.17	0-1.5	0.0

Table 8-76
NR Band n41 PC2 Measured P_{Limit} Antenna 2b - 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	13.67	0	0.0
	1	137	13.61		0.0
	1	271	13.55		0.0
	135	0	13.58	0-0.5	0.0
	135	69	13.62	0	0.0
	135	138	13.61	0-0.5	0.0
	270	0	13.64		0.0
DFT-s-OFDM QPSK	1	1	**13.72**	0	0.0
	1	137	13.55		0.0
	1	271	13.56		0.0
	135	0	13.61	0-1	0.0
	135	69	13.59	0	0.0
	135	138	**13.70**	0-1	0.0
	270	0	13.55		0.0
DFT-s-OFDM 16QAM	1	1	13.63	0-1	0.0
CP-OFDM QPSK	1	1	13.69	0-1.5	0.0

Table 8-77
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	11.90	0	0.0
	1	137	11.59		0.0
	1	271	11.51		0.0
	135	0	11.72	0-0.5	0.0
	135	69	11.57	0	0.0
	135	138	11.53	0-0.5	0.0
	270	0	11.66		0.0
DFT-s-OFDM QPSK	1	1	**11.99**	0	0.0
	1	137	11.60		0.0
	1	271	11.52		0.0
	135	0	**11.71**	0-1	0.0
	135	69	11.59	0	0.0
	135	138	11.56	0-1	0.0
	270	0	11.58		0.0
DFT-s-OFDM 16QAM	1	1	12.01	0-1	0.0
CP-OFDM QPSK	1	1	11.78	0-1.5	0.0

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	10.84	0	0.0
	1	137	10.79		0.0
	1	271	10.68		0.0
	135	0	10.75	0-0.5	0.0
	135	69	10.72	0	0.0
	135	138	10.76	0-0.5	0.0
	270	0	10.73		0.0
DFT-s-OFDM QPSK	1	1	**10.86**	0	0.0
	1	137	10.75		0.0
	1	271	10.72		0.0
	135	0	**10.80**	0-1	0.0
	135	69	10.75	0	0.0
	135	138	10.68	0-1	0.0
	270	0	10.79		0.0
DFT-s-OFDM 16QAM	1	1	10.92	0-1	0.0
CP-OFDM QPSK	1	1	10.77	0-1.5	0.0

8.3.3 NR Band n77 DoD PC2

Table 8-79
NR Band n77 DoD PC2 Measured P_{Limit} Antenna 1a - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	633334 (3500.01 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	9.71	0	0.0
	1	137	9.75		0.0
	1	271	9.56		0.0
	135	0	9.69	0-0.5	0.0
	135	69	9.70	0	0.0
	135	138	9.66	0-0.5	0.0
	270	0	9.70		0.0
DFT-s-OFDM QPSK	1	1	**9.72**	0	0.0
	1	137	9.70		0.0
	1	271	9.55		0.0
	135	0	9.73	0-1	0.0
	135	69	**9.76**	0	0.0
	135	138	9.67	0-1	0.0
	270	0	9.71		0.0
DFT-s-OFDM 16QAM	1	1	9.75	0-1	0.0
CP-OFDM QPSK	1	1	9.64	0-1.5	0.0

Table 8-80
NR Band n77 DoD PC2 Measured P_{Limit} Antenna 2a - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	633334 (3500.01 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	9.66	0	0.0
	1	137	9.86		0.0
	1	271	9.74		0.0
	135	0	9.73	0-0.5	0.0
	135	69	9.82	0	0.0
	135	138	9.75	0-0.5	0.0
	270	0	9.78		0.0
DFT-s-OFDM QPSK	1	1	9.70	0	0.0
	1	137	**9.84**		0.0
	1	271	9.80		0.0
	135	0	9.76	0-1	0.0
	135	69	**9.81**	0	0.0
	135	138	9.77	0-1	0.0
	270	0	9.80		0.0
DFT-s-OFDM 16QAM	1	1	9.85	0-1	0.0
CP-OFDM QPSK	1	1	9.66	0-1.5	0.0

Table 8-81
NR Band n77 DoD PC2 Measured P_{Limit} Antenna 3b - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	633334 (3500.01 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	12.92	0	0.0
	1	137	13.24		0.0
	1	271	13.16		0.0
	135	0	13.00	0-0.5	0.0
	135	69	13.20	0	0.0
	135	138	13.07	0-0.5	0.0
	270	0	13.16		0.0
DFT-s-OFDM QPSK	1	1	12.78	0	0.0
	1	137	**13.16**		0.0
	1	271	13.04		0.0
	135	0	12.98	0-1	0.0
	135	69	13.11	0	0.0
	135	138	**13.18**	0-1	0.0
	270	0	13.13		0.0
DFT-s-OFDM 16QAM	1	1	12.66	0-1	0.0
CP-OFDM QPSK	1	1	13.10	0-1.5	0.0

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

NR Band n77 DoD 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	633334 (3500.01 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	10.01	0	0.0
	1	137	10.24		0.0
	1	271	10.30		0.0
	135	0	10.19	0-0.5	0.0
	135	69	10.21	0	0.0
	135	138	10.18	0-0.5	0.0
	270	0	10.17		0.0
DFT-s-OFDM QPSK	1	1	10.12	0	0.0
	1	137	10.23		0.0
	1	271	**10.32**		0.0
	135	0	10.20	0-1	0.0
	135	69	**10.23**	0	0.0
	135	138	10.21	0-1	0.0
	270	0	10.19		0.0
DFT-s-OFDM 16QAM	1	1	10.02	0-1	0.0
CP-OFDM QPSK	1	1	10.24	0-1.5	0.0

8.3.4 NR Band n77 C PC2

Table 8-83
NR Band n77 C PC2 Measured P_{Limit} Antenna 1a - 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	9.42	9.75	0	0.0
	1	137	9.66	9.82		0.0
	1	271	9.60	9.52		0.0
	135	0	9.52	9.78	0-0.5	0.0
	135	69	9.61	9.79	0	0.0
	135	138	9.61	9.69	0-0.5	0.0
	270	0	9.63	9.76		0.0
DFT-s-OFDM QPSK	1	1	9.42	9.72	0	0.0
	1	137	9.63	**9.77**		0.0
	1	271	9.55	9.54		0.0
	135	0	9.61	**9.79**	0-1	0.0
	135	69	9.65	9.77	0	0.0
	135	138	9.64	9.67	0-1	0.0
	270	0	9.60	9.70		0.0
DFT-s-OFDM 16QAM	1	1	9.38	9.75	0-1	0.0
CP-OFDM QPSK	1	1	9.32	9.64	0-1.5	0.0

Table 8-84
NR Band n77 C PC2 Measured P_{Limit} Antenna 2a - 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	9.49	9.67	0	0.0
	1	137	9.30	9.74		0.0
	1	271	9.12	9.44		0.0
	135	0	9.31	9.60	0-0.5	0.0
	135	69	9.16	9.63	0	0.0
	135	138	9.15	9.48	0-0.5	0.0
	270	0	9.27	9.59		0.0
DFT-s-OFDM QPSK	1	1	**9.80**	9.71	0	0.0
	1	137	9.24	9.65		0.0
	1	271	9.12	9.57		0.0
	135	0	9.74	**9.79**	0-1	0.0
	135	69	9.22	9.63	0	0.0
	135	138	9.19	9.46	0-1	0.0
	270	0	9.24	9.63		0.0
DFT-s-OFDM 16QAM	1	1	9.27	9.56	0-1	0.0
CP-OFDM QPSK	1	1	9.44	9.60	0-1.5	0.0

Table 8-85
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	12.45	12.61	0	0.0
	1	137	12.25	12.63		0.0
	1	271	12.28	12.38		0.0
	135	0	12.32	12.57	0-0.5	0.0
	135	69	12.29	12.51	0	0.0
	135	138	12.30	12.43	0-0.5	0.0
	270	0	12.31	12.46		0.0
DFT-s-OFDM QPSK	1	1	12.41	**12.63**	0	0.0
	1	137	12.30	12.61		0.0
	1	271	12.21	12.39		0.0
	135	0	12.22	**12.52**	0-1	0.0
	135	69	12.20	12.50	0	0.0
	135	138	12.15	12.36	0-1	0.0
	270	0	12.34	12.44		0.0
DFT-s-OFDM 16QAM	1	1	12.30	12.41	0-1	0.0
CP-OFDM QPSK	1	1	12.34	12.53	0-1.5	0.0

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	10.20	10.32	0	0.0
	1	137	10.19	10.26		0.0
	1	271	10.03	10.12		0.0
	135	0	10.12	10.21	0-0.5	0.0
	135	69	10.09	10.17	0	0.0
	135	138	10.12	10.11	0-0.5	0.0
	270	0	10.06	10.16		0.0
DFT-s-OFDM QPSK	1	1	10.14	**10.30**	0	0.0
	1	137	10.12	10.23		0.0
	1	271	10.00	10.10		0.0
	135	0	10.15	**10.29**	0-1	0.0
	135	69	10.09	10.20	0	0.0
	135	138	10.06	10.12	0-1	0.0
	270	0	10.08	10.17		0.0
DFT-s-OFDM 16QAM	1	1	10.14	10.22	0-1	0.0
CP-OFDM QPSK	1	1	10.20	10.27	0-1.5	0.0

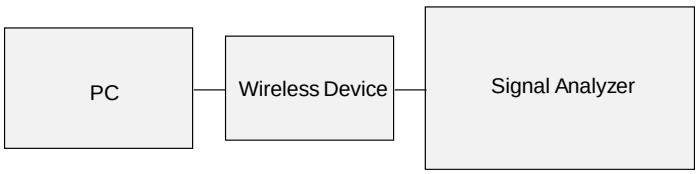


Figure 8-3
Power Measurement Setup

8.4 WLAN Maximum Time-Averaged Conducted Powers

Table 8-87
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	11.08	10.82	11.24	11.07
2437	6	11.05	11.06	11.35	11.29
2462	11	11.03	10.81	11.42	11.01

Table 8-88
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	11.09	11.32	11.59	11.48
2437	6	11.02	11.56	11.63	11.55
2462	11	11.13	11.40	11.57	11.47

Table 8-89
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	11.98	11.34	11.34	11.21
2437	6	11.84	11.45	11.44	11.41
2462	11	12.01	11.37	11.38	11.14

Table 8-90
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	11.96	11.51	11.50	11.38
2437	6	11.92	11.74	11.94	11.75
2462	11	12.12	11.54	11.42	11.36

Table 8-91
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	11.07	10.88
5290	58	11.11	10.80
5530	106	10.60	10.37
5610	122	10.59	10.11
5690	138	10.57	10.49
5775	155	11.72	11.44

Table 8-92
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	11.08	11.56
5290	58	11.01	11.65
5530	106	10.49	10.61
5610	122	10.61	10.39
5690	138	10.54	10.40
5775	155	11.75	10.81

Table 8-93
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	9.93	9.66
5290	58	9.56	9.17
5530	106	8.70	8.70
5610	122	8.69	8.68
5690	138	8.78	8.32
5775	155	8.63	8.19

Table 8-94
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	9.84	9.77
5290	58	9.60	9.52
5530	106	8.80	8.90
5610	122	8.85	8.97
5690	138	8.82	8.79
5775	155	8.65	8.98

Table 8-95
5 GHz WLAN Maximum Average RF Power – Antenna 3c, Variant 1

5GHz (40MHz) Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11n	802.11ac	802.11ax
		Average	Average	Average
5190	38	15.05	15.08	15.07
5230	46	15.63	15.05	15.72
5270	54	14.99	14.84	15.03
5310	62	13.58	13.41	13.61

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5530	106	13.97	12.84
5610	122	14.03	13.99
5690	138	14.06	14.19
5775	155	15.13	14.85

Table 8-96
5 GHz WLAN Maximum Average RF Power – Antenna 3c, Variant 2

5GHz (40MHz) Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11n	802.11ac	802.11ax SU
		Average	Average	Average
5190	38	15.08	14.99	14.69
5230	46	15.36	14.89	15.38
5270	54	15.03	14.96	15.08
5310	62	13.54	13.51	13.12

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5530	106	13.99	12.28
5610	122	14.07	13.88
5690	138	13.95	13.84
5775	155	15.24	14.95

8.5 WLAN Reduced Time-Averaged Conducted Powers

Table 8-97
2.4 GHz WLAN 3.5 dB 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	7.47	7.38	7.37	7.48
2437	6	7.53	7.50	7.53	7.59
2462	11	7.56	7.58	7.60	7.38

Table 8-98
2.4 GHz WLAN 3.5 dB 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	7.36	7.43	7.44	7.50
2437	6	7.39	7.57	7.54	7.39
2462	11	7.51	7.47	7.45	7.44

Table 8-99
2.4 GHz WLAN 3.5 dB 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	7.96	7.90	7.89	8.04
2437	6	8.04	8.02	8.01	8.05
2462	11	8.08	7.86	7.92	7.96

Table 8-100
2.4 GHz WLAN 3.5 dB 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	7.80	7.87	7.78	7.88
2437	6	7.84	7.90	7.91	8.09
2462	11	8.07	7.97	7.99	7.98

Table 8-101
5 GHz WLAN 6.25 dB 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	5.23	5.27
5290	58	4.42	4.86
5530	106	4.29	4.24
5610	122	4.26	4.34
5690	138	4.32	4.19
5775	155	4.80	4.70

Table 8-102
5 GHz WLAN 6.25 dB 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	5.26	5.11
5290	58	4.48	4.82
5530	106	4.26	4.30
5610	122	4.24	4.35
5690	138	4.31	4.16
5775	155	4.72	5.31

Table 8-103
5 GHz WLAN 5.5 dB 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	4.01	4.20
5290	58	3.96	4.02
5530	106	3.38	3.43
5610	122	3.27	3.56
5690	138	3.28	3.61
5775	155	3.46	3.57

Table 8-104
5 GHz WLAN 5.5 dB 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	3.93	4.20
5290	58	3.98	4.00
5530	106	3.37	3.43
5610	122	3.34	3.58
5690	138	3.31	3.55
5775	155	3.50	3.40

Table 8-105
5 GHz WLAN 4 dB Reduced Average RF Power – Antenna 3c, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	10.91	11.05
5290	58	10.73	10.91
5530	106	9.98	9.86
5610	122	10.02	9.99
5690	138	10.05	9.82
5775	155	11.06	10.94

Table 8-106
5 GHz WLAN 4 dB Reduced Average RF Power – Antenna 3c, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	11.09	10.97
5290	58	10.71	10.79
5530	106	9.98	10.06
5610	122	9.97	9.94
5690	138	9.92	9.98
5775	155	11.07	10.93

8.6 WLAN Power Reduction Verification Summary

Table 8-107
WLAN Power Reduction Verification

Antenna	Mode/Band	Channel	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 WLAN	6	Main Band 3B ON	12.50	9.00	11.00 (+1.5/-1.5)	7.50 (+1.5/-1.5)	11.85	8.11	Pass
	2.4 GHz WLAN	6	Main Band 3A ON	12.50	9.00	11.00 (+1.5/-1.5)	7.50 (+1.5/-1.5)	11.85	8.64	Pass
	2.4 GHz WLAN	6	ULCA ON	12.50	9.00	11.00 (+1.5/-1.5)	7.50 (+1.5/-1.5)	11.85	8.47	Pass
Ant 1A	2.4 GHz WLAN	6	Main Band 1A ON	12.00	8.50	10.50 (+1.5/-1.5)	7.00 (+1.5/-1.5)	11.55	7.89	Pass
	2.4 GHz WLAN	6	Main Band 1B ON	12.00	8.50	10.50 (+1.5/-1.5)	7.00 (+1.5/-1.5)	11.55	7.96	Pass
	2.4 GHz WLAN	6	ULCA ON	12.00	8.50	10.50 (+1.5/-1.5)	7.00 (+1.5/-1.5)	11.55	7.87	Pass
Ant 3C	5 GHz WLAN, 802.11a, 20 MHz BW	132	Main Band Ant 4 ON	15.00	11.00	13.50 (+1.5/-1.5)	9.50 (+1.5/-1.5)	14.78	10.83	Pass
	5 GHz WLAN, 802.11a, 20 MHz BW	132	Main Band Ant 3B ON	15.00	11.00	13.50 (+1.5/-1.5)	9.50 (+1.5/-1.5)	14.78	10.79	Pass
	5 GHz WLAN, 802.11a, 20 MHz BW	132	Main Band Ant 3A ON	15.00	11.00	13.50 (+1.5/-1.5)	9.50 (+1.5/-1.5)	14.78	10.31	Pass
	5 GHz WLAN, 802.11a, 20 MHz BW	132	ULCA ON	15.00	11.00	13.50 (+1.5/-1.5)	9.50 (+1.5/-1.5)	14.78	10.01	Pass
Ant 1B	5 GHz WLAN, 802.11ac, 80 MHz BW	42	Main Band Ant 2b ON	12.50	6.25	11.00 (+1.5/-1.5)	4.75 (+1.5/-1.5)	11.51	5.08	Pass
	5 GHz WLAN, 802.11ac, 80 MHz BW	42	Main Band Ant 1a ON	12.50	6.25	11.00 (+1.5/-1.5)	4.75 (+1.5/-1.5)	11.51	5.16	Pass
	5 GHz WLAN, 802.11ac, 80 MHz BW	42	Main Band Ant 1B ON	12.50	6.25	11.00 (+1.5/-1.5)	4.75 (+1.5/-1.5)	11.51	5.12	Pass
	5 GHz WLAN, 802.11ac, 80 MHz BW	42	ULCA ON	12.50	6.25	11.00 (+1.5/-1.5)	4.75 (+1.5/-1.5)	11.51	5.13	Pass
Ant 3A	5 GHz WLAN, 802.11a, 20 MHz BW	132	Main Band Ant 4 ON	10.00	4.50	8.50 (+1.5/-1.5)	3.00 (+1.5/-1.5)	9.81	3.43	Pass
	5 GHz WLAN, 802.11a, 20 MHz BW	132	Main Band Ant 3B ON	10.00	4.50	8.50 (+1.5/-1.5)	3.00 (+1.5/-1.5)	9.81	3.64	Pass
	5 GHz WLAN, 802.11a, 20 MHz BW	132	Main Band Ant 3A ON	10.00	4.50	8.50 (+1.5/-1.5)	3.00 (+1.5/-1.5)	9.81	4.44	Pass
	5 GHz WLAN, 802.11a, 20 MHz BW	132	ULCA ON	10.00	4.50	8.50 (+1.5/-1.5)	3.00 (+1.5/-1.5)	9.81	3.87	Pass

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

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.

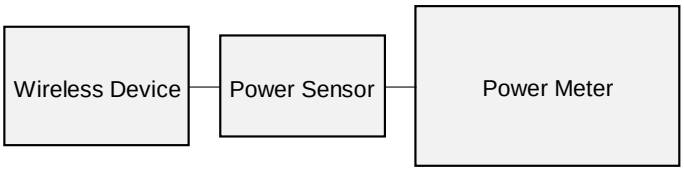


Figure 8-4
Power Measurement Setup

8.8 Bluetooth Maximum Conducted Powers

Table 8-108
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	11.59	14.421
2441	GFSK	1.0	39	11.89	15.453
2480	GFSK	1.0	78	11.25	13.335

Table 8-109
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	11.27	13.397
2441	GFSK	1.0	39	11.31	13.521
2480	GFSK	1.0	78	11.20	13.183

Table 8-110
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	11.15	13.032
2441	GFSK	1.0	39	11.30	13.490
2480	GFSK	1.0	78	11.26	13.366

Table 8-111
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	11.26	13.366
2441	GFSK	1.0	39	11.42	13.868
2480	GFSK	1.0	78	11.13	12.972

8.9 Bluetooth Reduced Conducted Powers

Table 8-112
Bluetooth 3.5 dB 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	8.91	7.780
2441	GFSK	1.0	39	8.54	7.145
2480	GFSK	1.0	78	8.83	7.638

Table 8-113
Bluetooth 3.5 dB 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	8.17	6.561
2441	GFSK	1.0	39	8.09	6.442
2480	GFSK	1.0	78	8.37	6.871

Table 8-114
Bluetooth 5.5 dB 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	6.54	4.508
2441	GFSK	1.0	39	6.44	4.406
2480	GFSK	1.0	78	6.84	4.831

Table 8-115
Bluetooth 5.5 dB 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	6.24	4.207
2441	GFSK	1.0	39	6.05	4.027
2480	GFSK	1.0	78	6.49	4.457

Table 8-116
Bluetooth 7 dB 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	4.45	2.786
2441	GFSK	1.0	39	4.30	2.692
2480	GFSK	1.0	78	4.88	3.076

Table 8-117
Bluetooth 7 dB 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	4.69	2.944
2441	GFSK	1.0	39	4.70	2.951
2480	GFSK	1.0	78	4.83	3.041

Table 8-118
Bluetooth 3.5 dB 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	8.91	7.780
2441	GFSK	1.0	39	8.46	7.015
2480	GFSK	1.0	78	8.96	7.870

Table 8-119
Bluetooth 3.5 dB 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	8.39	6.902
2441	GFSK	1.0	39	8.31	6.776
2480	GFSK	1.0	78	8.14	6.516

Table 8-120
Bluetooth 5.5 dB 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	6.48	4.446
2441	GFSK	1.0	39	6.73	4.710
2480	GFSK	1.0	78	6.61	4.581

Table 8-121
Bluetooth 5.5 dB 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	6.30	4.266
2441	GFSK	1.0	39	6.14	4.111
2480	GFSK	1.0	78	6.03	4.009

Table 8-122
Bluetooth 7 dB 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	4.43	2.773
2441	GFSK	1.0	39	4.52	2.831
2480	GFSK	1.0	78	4.50	2.818

Table 8-123
Bluetooth 7 dB 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	4.32	2.704
2441	GFSK	1.0	39	4.38	2.742
2480	GFSK	1.0	78	4.14	2.594

8.10 Bluetooth Duty Cycle Plots

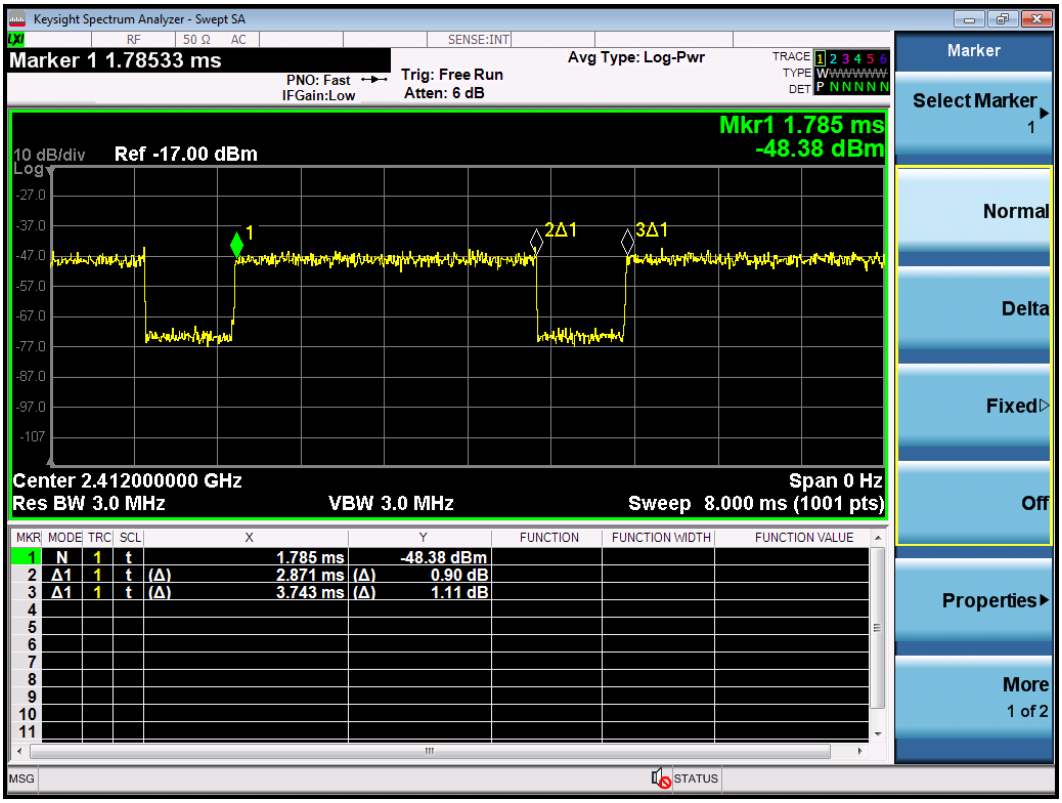


Figure 8-5
Bluetooth Transmission Plot – Antenna 1a, Variant 1

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

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.871\ ms}{3.743\ ms} * 100\% = 76.7\%$$

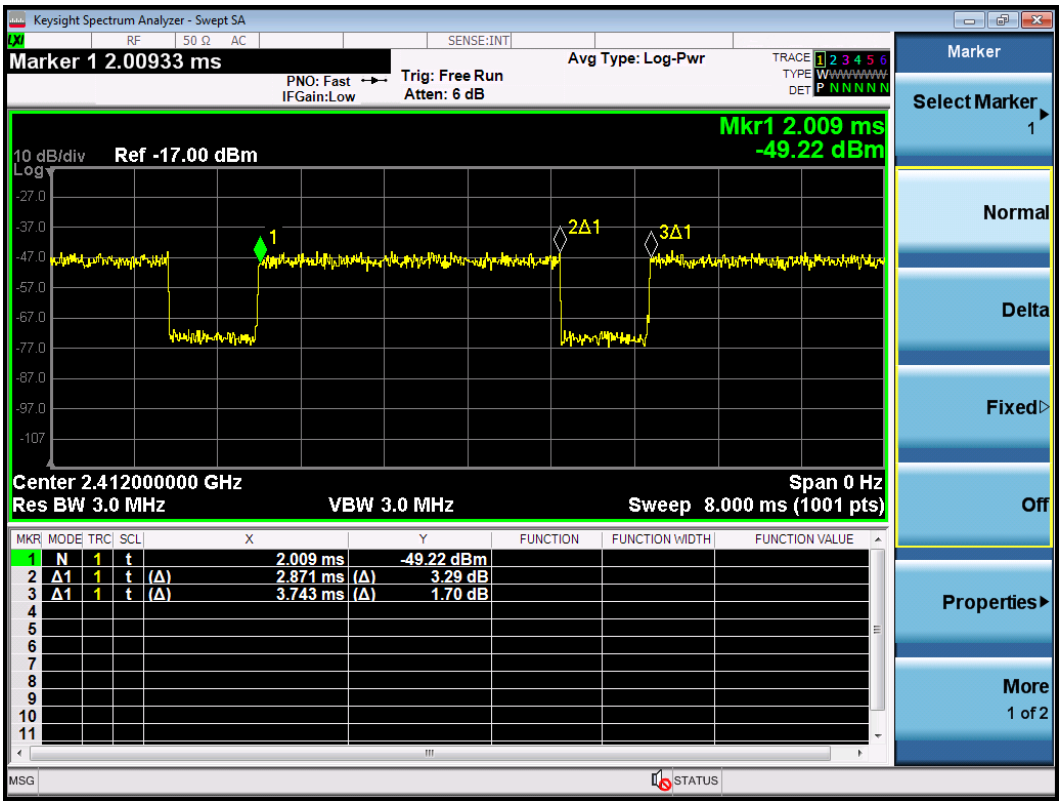


Figure 8-6
Bluetooth Transmission Plot – Antenna 1a, Variant 2

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

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.871\ ms}{3.743\ ms} * 100\% = 76.7\%$$

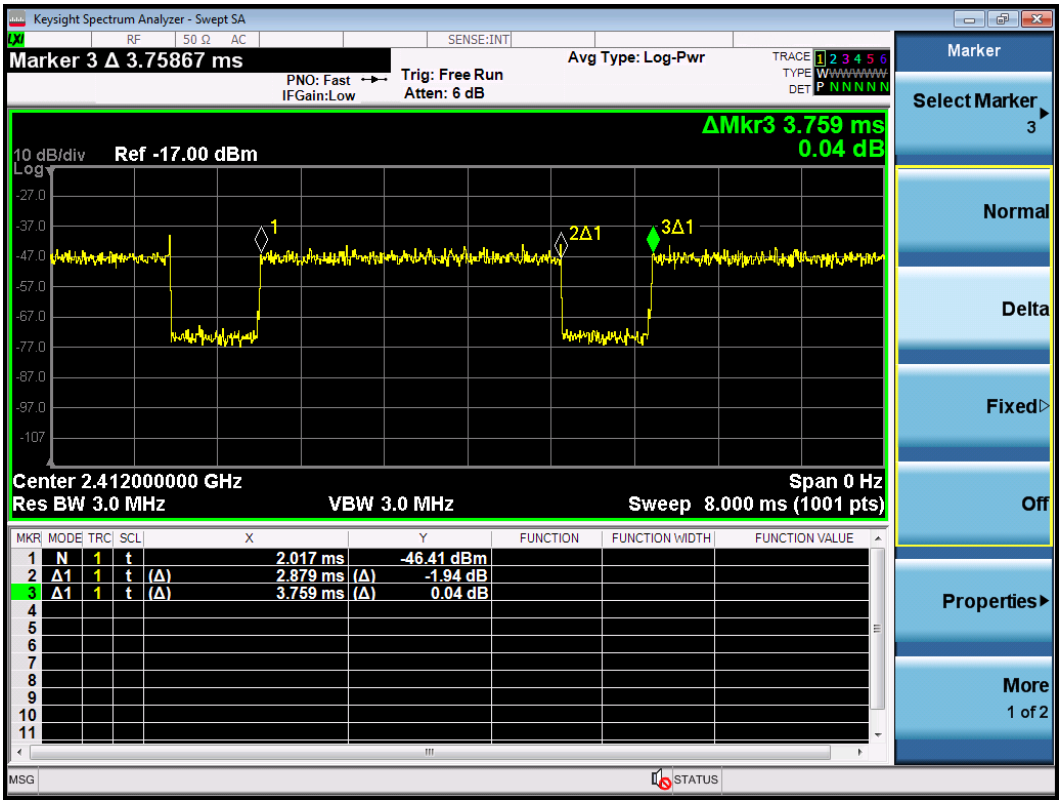


Figure 8-7
Bluetooth Transmission Plot – Antenna 3a, Variant 1

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

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.879\ ms}{3.759\ ms} * 100\% = 76.6\%$$

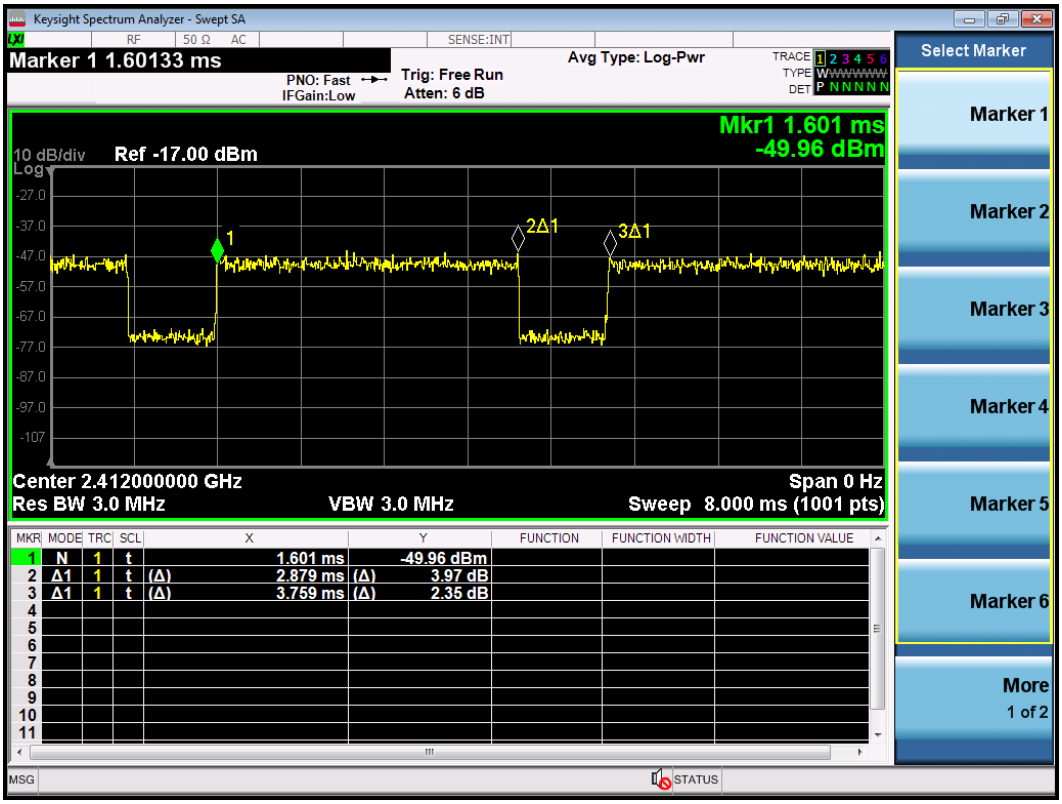


Figure 8-8
Bluetooth Transmission Plot – Antenna 3a, Variant 2

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

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.879\ ms}{3.759\ ms} * 100\% = 76.6\%$$

8.11 Bluetooth Power Reduction Verification Summary

Table 8-124
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	12.50	9.00	11.00 (+1.5/-2)	7.50 (+1.5/-2)	11.00	7.41	Pass
	2.4 GHz Bluetooth	Main Band 3A ON	12.50	9.00	11.00 (+1.5/-2)	7.50 (+1.5/-2)	11.00	7.35	Pass
	2.4 GHz Bluetooth	ULCA ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	11.00	5.02	Pass
	2.4 GHz Bluetooth	ULCA ON and 5 GHZ WLAN 3A/1B/3C ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	11.00	3.31	Pass
	2.4 GHz Bluetooth	Main band Ant 4 ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	11.00	3.10	Pass
	2.4 GHz Bluetooth	Main band Ant 3B ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	11.00	3.76	Pass
	2.4 GHz Bluetooth	Main band Ant 3A ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	11.00	3.85	Pass
	2.4 GHz Bluetooth	Main Band Ant 2A ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	7.00	11.00 (+1.5/-2)	5.50 (+1.5/-2)	11.00	4.55	Pass
	2.4 GHz Bluetooth	Main Band Ant 2B ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	7.00	11.00 (+1.5/-2)	5.50 (+1.5/-2)	11.00	4.43	Pass
	2.4 GHz Bluetooth	Main Band Ant 1A ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	7.00	11.00 (+1.5/-2)	5.50 (+1.5/-2)	11.00	4.62	Pass
	2.4 GHz Bluetooth	Main Band Ant 1B ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	7.00	11.00 (+1.5/-2)	5.50 (+1.5/-2)	11.00	4.49	Pass
	2.4 GHz Bluetooth	5 GHz WLAN Ant 3A/1B/3C ON	12.50	7.00	11.00 (+1.5/-2)	5.50 (+1.5/-2)	11.00	4.74	Pass
Ant 1A	2.4 GHz Bluetooth	Main Band 2B ON	12.50	9.00	11.00 (+1.5/-2)	7.50 (+1.5/-2)	10.25	6.96	Pass
	2.4 GHz Bluetooth	Main Band 1A ON	12.50	9.00	11.00 (+1.5/-2)	7.50 (+1.5/-2)	10.25	6.81	Pass
	2.4 GHz Bluetooth	Main Band 1B ON	12.50	9.00	11.00 (+1.5/-2)	7.50 (+1.5/-2)	10.25	6.94	Pass
	2.4 GHz Bluetooth	ULCA ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	10.25	5.08	Pass
	2.4 GHz Bluetooth	ULCA ON and 5 GHZ WLAN 3A/1B/3C ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	10.25	3.33	Pass
	2.4 GHz Bluetooth	Main band Ant 4 ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	7.00	11.00 (+1.5/-2)	5.50 (+1.5/-2)	10.25	4.85	Pass
	2.4 GHz Bluetooth	Main band Ant 3B ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	7.00	11.00 (+1.5/-2)	5.50 (+1.5/-2)	10.25	4.91	Pass
	2.4 GHz Bluetooth	Main band Ant 3A ON and 5 GHz WLAN Ant3A/1B/3C ON	12.50	7.00	11.00 (+1.5/-2)	5.50 (+1.5/-2)	10.25	4.83	Pass
	2.4 GHz Bluetooth	Main Band Ant 2A ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	10.25	3.15	Pass
	2.4 GHz Bluetooth	Main Band Ant 2B ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	10.25	3.01	Pass
	2.4 GHz Bluetooth	Main Band Ant 1A ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	10.25	2.98	Pass
	2.4 GHz Bluetooth	Main Band Ant 1B ON and 5 GHz WLAN Ant 3A/1B/3C ON	12.50	5.50	11.00 (+1.5/-2)	4.00 (+1.5/-2)	10.25	3.34	Pass
	2.4 GHz Bluetooth	5 GHz WLAN Ant 3A/1B/3C ON	12.50	7.00	11.00 (+1.5/-2)	5.50 (+1.5/-2)	10.25	4.77	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.
- Full power measurements were performed for Variant 1 and Variant 2 per FCC KDB Procedures 248227.

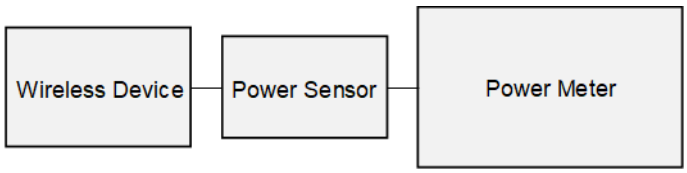


Figure 8-9
Power Measurement Setup

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
07/25/2022	750 Head	21.0	680	0.876	40.682	0.888	42.305	-1.35%	-3.84%
			695	0.880	40.623	0.889	42.227	-1.01%	-3.80%
			700	0.882	40.608	0.889	42.201	-0.79%	-3.77%
			710	0.886	40.579	0.890	42.149	-0.45%	-3.72%
			725	0.892	40.556	0.891	42.071	0.11%	-3.60%
			750	0.901	40.511	0.894	41.942	0.78%	-3.41%
			770	0.906	40.444	0.895	41.838	1.23%	-3.33%
			785	0.911	40.401	0.896	41.760	1.67%	-3.25%
			800	0.916	40.361	0.897	41.682	2.12%	-3.17%
07/05/2022	750 Head	19.0	700	0.846	43.055	0.889	42.201	-4.84%	2.02%
			710	0.856	42.910	0.890	42.149	-3.82%	1.81%
			725	0.870	42.685	0.891	42.071	-2.36%	1.46%
			750	0.893	42.319	0.894	41.942	-0.11%	0.90%
			770	0.912	42.059	0.895	41.838	1.90%	0.53%
			785	0.927	41.868	0.896	41.760	3.46%	0.26%
			800	0.941	41.666	0.897	41.682	4.91%	-0.04%
07/12/2022	750 Head	20.7	700	0.845	43.223	0.889	42.201	-4.95%	2.42%
			710	0.854	43.094	0.890	42.149	-4.04%	2.24%
			725	0.868	42.896	0.891	42.071	-2.58%	1.96%
			750	0.892	42.564	0.894	41.942	-0.22%	1.48%
			770	0.911	42.297	0.895	41.838	1.79%	1.10%
			785	0.925	42.094	0.896	41.760	3.24%	0.80%
			800	0.938	41.899	0.897	41.682	4.57%	0.52%
07/14/2022	750 Head	21.4	695	0.846	41.407	0.889	42.227	-4.84%	-1.94%
			700	0.850	41.333	0.889	42.201	-4.39%	-2.06%
			710	0.859	41.185	0.890	42.149	-3.48%	-2.29%
			725	0.872	40.968	0.891	42.071	-2.13%	-2.62%
			750	0.895	40.613	0.894	41.942	0.11%	-3.17%
			770	0.914	40.347	0.895	41.838	2.12%	-3.56%
			785	0.928	40.142	0.896	41.760	3.57%	-3.87%
			800	0.941	39.931	0.897	41.682	4.91%	-4.20%
07/03/2022	835 Head	20.1	815	0.856	40.713	0.898	41.594	-4.68%	-2.12%
			820	0.861	40.651	0.899	41.578	-4.23%	-2.23%
			835	0.875	40.476	0.900	41.500	-2.78%	-2.47%
			850	0.888	40.312	0.916	41.500	-3.06%	-2.86%
07/05/2022	835 Head	22.0	815	0.873	41.634	0.898	41.594	-2.78%	0.10%
			820	0.878	41.575	0.899	41.578	-2.34%	-0.01%
			835	0.892	41.398	0.900	41.500	-0.89%	-0.25%
			850	0.906	41.222	0.916	41.500	-1.09%	-0.67%
07/07/2022	835 Head	21.7	815	0.872	40.283	0.898	41.594	-2.90%	-3.15%
			820	0.876	40.219	0.899	41.578	-2.56%	-3.27%
			835	0.890	40.031	0.900	41.500	-1.11%	-3.54%
			850	0.904	39.856	0.916	41.500	-1.31%	-3.96%
07/24/2022	1750 Head	19.8	1710	1.298	38.365	1.348	40.142	-3.71%	-4.43%
			1720	1.304	38.358	1.354	40.126	-3.69%	-4.41%
			1745	1.319	38.332	1.368	40.087	-3.58%	-4.38%
			1750	1.322	38.325	1.371	40.079	-3.57%	-4.38%
			1770	1.333	38.293	1.383	40.047	-3.62%	-4.38%
			1790	1.345	38.261	1.394	40.016	-3.52%	-4.39%
07/26/2022	1750 Head	21.3	1710	1.310	38.449	1.348	40.142	-2.82%	-4.22%
			1720	1.316	38.435	1.354	40.126	-2.81%	-4.21%
			1745	1.328	38.393	1.368	40.087	-2.92%	-4.23%
			1750	1.331	38.384	1.371	40.079	-2.92%	-4.23%
			1770	1.340	38.346	1.383	40.047	-3.11%	-4.25%
			1790	1.351	38.301	1.394	40.016	-3.08%	-4.29%
08/07/2022	1750 Head	22.1	1710	1.329	38.635	1.348	40.142	-1.41%	-3.75%
			1720	1.335	38.616	1.354	40.126	-1.40%	-3.76%
			1745	1.351	38.573	1.368	40.087	-1.24%	-3.78%
			1750	1.355	38.565	1.371	40.079	-1.17%	-3.78%
			1770	1.366	38.532	1.383	40.047	-1.23%	-3.78%
			1790	1.377	38.491	1.394	40.016	-1.22%	-3.81%
07/03/2022	1900 Head	20.4	1850	1.403	38.703	1.400	40.000	0.21%	-3.24%
			1860	1.410	38.683	1.400	40.000	0.71%	-3.29%
			1880	1.424	38.640	1.400	40.000	1.71%	-3.40%
			1900	1.437	38.598	1.400	40.000	2.64%	-3.51%
			1905	1.440	38.587	1.400	40.000	2.86%	-3.53%
			1910	1.443	38.575	1.400	40.000	3.07%	-3.56%
07/05/2022	1900 Head	23.5	1850	1.433	38.925	1.400	40.000	2.36%	-2.69%
			1860	1.438	38.913	1.400	40.000	2.71%	-2.72%
			1880	1.451	38.889	1.400	40.000	3.64%	-2.78%
			1900	1.463	38.869	1.400	40.000	4.50%	-2.83%
			1905	1.466	38.862	1.400	40.000	4.71%	-2.85%
			1910	1.468	38.856	1.400	40.000	4.86%	-2.86%
07/10/2022	1900 Head	20.9	1850	1.416	38.343	1.400	40.000	1.14%	-4.14%
			1860	1.421	38.326	1.400	40.000	1.50%	-4.19%
			1880	1.433	38.293	1.400	40.000	2.36%	-4.27%
			1900	1.445	38.271	1.400	40.000	3.21%	-4.32%
			1905	1.448	38.267	1.400	40.000	3.43%	-4.33%
			1910	1.450	38.263	1.400	40.000	3.57%	-4.34%

Table 9-2
Measured Tissue Properties Cont'd

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
06/23/2022	2450 Head	22.5	2300	1.648	39.587	1.670	39.500	-1.32%	0.22%
			2310	1.659	39.544	1.679	39.480	-1.19%	0.16%
			2320	1.671	39.504	1.687	39.460	-0.95%	0.11%
			2400	1.761	39.217	1.756	39.289	0.28%	-0.18%
			2450	1.822	39.028	1.800	39.200	1.22%	-0.44%
			2480	1.855	38.904	1.833	39.162	1.20%	-0.66%
			2500	1.878	38.820	1.855	39.136	1.24%	-0.81%
			2510	1.890	38.782	1.866	39.123	1.29%	-0.87%
			2535	1.920	38.688	1.893	39.092	1.43%	-1.03%
			2550	1.937	38.629	1.909	39.073	1.47%	-1.14%
			2560	1.948	38.585	1.920	39.060	1.46%	-1.22%
			2600	1.996	38.418	1.964	39.009	1.63%	-1.52%
			2650	2.055	38.220	2.018	38.945	1.83%	-1.86%
			2680	2.088	38.094	2.051	38.907	1.80%	-2.09%
			2700	2.112	38.008	2.073	38.882	1.88%	-2.25%
07/17/2022	2450 Head	24.7	2300	1.637	39.138	1.670	39.500	-1.98%	-0.92%
			2310	1.648	39.100	1.679	39.480	-1.85%	-0.96%
			2320	1.659	39.061	1.687	39.460	-1.66%	-1.01%
			2400	1.754	38.781	1.756	39.289	-0.11%	-1.29%
			2450	1.815	38.605	1.800	39.200	0.83%	-1.52%
			2480	1.849	38.495	1.833	39.162	0.87%	-1.70%
			2500	1.874	38.416	1.855	39.136	1.02%	-1.84%
			2510	1.886	38.381	1.866	39.123	1.07%	-1.90%
			2535	1.917	38.298	1.893	39.092	1.27%	-2.03%
			2550	1.935	38.245	1.909	39.073	1.36%	-2.12%
			2560	1.946	38.206	1.920	39.060	1.35%	-2.19%
			2600	1.995	38.050	1.964	39.009	1.58%	-2.46%
			2650	2.056	37.865	2.018	38.945	1.88%	-2.77%
			2680	2.092	37.749	2.051	38.907	2.00%	-2.98%
			2700	2.116	37.660	2.073	38.882	2.07%	-3.14%
07/10/2022	2450 Head	21.2	2300	1.660	39.549	1.670	39.500	-0.60%	0.12%
			2310	1.667	39.529	1.679	39.480	-0.71%	0.12%
			2320	1.675	39.506	1.687	39.460	-0.71%	0.12%
			2400	1.734	39.380	1.756	39.289	-1.25%	0.23%
			2450	1.772	39.302	1.800	39.200	-1.56%	0.26%
			2480	1.794	39.273	1.833	39.162	-2.13%	0.28%
			2500	1.807	39.244	1.855	39.136	-2.59%	0.28%
			2510	1.814	39.228	1.866	39.123	-2.79%	0.27%
			2535	1.835	39.205	1.893	39.092	-3.06%	0.29%
			2550	1.848	39.192	1.909	39.073	-3.20%	0.30%
			2560	1.857	39.182	1.920	39.060	-3.28%	0.31%
			2600	1.888	39.140	1.964	39.009	-3.87%	0.34%
			2650	1.934	39.056	2.018	38.945	-4.16%	0.29%
			2680	1.957	39.012	2.051	38.907	-4.58%	0.27%
			2700	1.972	38.975	2.073	38.882	-4.87%	0.24%
07/07/2022	2450 Head	20.2	2300	1.700	38.518	1.670	39.500	1.80%	-2.49%
			2310	1.708	38.502	1.679	39.480	1.73%	-2.48%
			2320	1.716	38.486	1.687	39.460	1.72%	-2.47%
			2400	1.777	38.391	1.756	39.289	1.20%	-2.29%
			2450	1.818	38.316	1.800	39.200	1.00%	-2.26%
			2480	1.839	38.259	1.833	39.162	0.33%	-2.31%
			2500	1.855	38.213	1.855	39.136	0.00%	-2.36%
			2510	1.863	38.195	1.866	39.123	-0.16%	-2.37%
			2535	1.883	38.171	1.893	39.092	-0.53%	-2.36%
			2550	1.895	38.155	1.909	39.073	-0.73%	-2.35%
			2560	1.902	38.140	1.920	39.060	-0.94%	-2.36%
			2600	1.935	38.060	1.964	39.009	-1.48%	-2.43%
			2650	1.976	37.984	2.018	38.945	-2.08%	-2.47%
			2680	1.999	37.925	2.051	38.907	-2.54%	-2.52%
			2700	2.016	37.887	2.073	38.882	-2.75%	-2.56%
08/15/2022	2450 Head	19.4	2300	1.748	39.094	1.670	39.500	4.67%	-1.03%
			2310	1.756	39.075	1.679	39.480	4.59%	-1.03%
			2320	1.763	39.053	1.687	39.460	4.51%	-1.03%
			2400	1.827	38.938	1.756	39.289	4.04%	-0.89%
			2450	1.872	38.846	1.800	39.200	4.00%	-0.90%
			2480	1.894	38.799	1.833	39.162	3.33%	-0.93%
			2500	1.908	38.753	1.855	39.136	2.86%	-0.98%
			2510	1.917	38.730	1.866	39.123	2.73%	-1.00%
			2535	1.940	38.686	1.893	39.092	2.48%	-1.04%
			2550	1.953	38.669	1.909	39.073	2.30%	-1.03%
			2560	1.961	38.654	1.920	39.060	2.14%	-1.04%
			2600	1.993	38.574	1.964	39.009	1.48%	-1.12%
			2650	2.038	38.478	2.018	38.945	0.99%	-1.20%
			2680	2.063	38.420	2.051	38.907	0.59%	-1.25%
			2700	2.078	38.382	2.073	38.882	0.24%	-1.29%
08/09/2022	2450 Head	24.5	2300	1.643	40.215	1.670	39.500	-1.62%	1.81%
			2310	1.655	40.184	1.679	39.480	-1.43%	1.78%
			2320	1.666	40.147	1.687	39.460	-1.24%	1.74%
			2400	1.763	39.833	1.756	39.289	0.40%	1.38%
			2450	1.824	39.593	1.800	39.200	1.33%	1.00%
			2480	1.862	39.460	1.833	39.162	1.58%	0.76%
			2500	1.887	39.383	1.855	39.136	1.73%	0.63%
			2510	1.900	39.345	1.866	39.123	1.82%	0.57%
			2535	1.929	39.227	1.893	39.092	1.90%	0.35%
			2550	1.948	39.143	1.909	39.073	2.04%	0.18%
			2560	1.960	39.086	1.920	39.060	2.08%	0.07%
			2600	2.013	38.901	1.964	39.009	2.49%	-0.28%
			2650	2.072	38.639	2.018	38.945	2.68%	-0.79%
			2680	2.112	38.468	2.051	38.907	2.97%	-1.13%
			2700	2.137	38.391	2.073	38.882	3.09%	-1.26%

Table 9-3
Measured Tissue Properties Cont'd

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
08/09/2022	3600 Head	18.8	3300	2.597	37.870	2.708	38.157	-4.10%	-0.75%
			3350	2.646	37.790	2.759	38.100	-4.10%	-0.81%
			3450	2.736	37.598	2.861	37.986	-4.37%	-1.02%
			3500	2.786	37.507	2.913	37.929	-4.36%	-1.11%
			3550	2.829	37.426	2.964	37.871	-4.55%	-1.18%
			3560	2.838	37.407	2.974	37.860	-4.57%	-1.20%
			3600	2.875	37.340	3.015	37.814	-4.64%	-1.25%
			3650	2.924	37.259	3.066	37.757	-4.63%	-1.32%
			3690	2.960	37.186	3.107	37.711	-4.73%	-1.39%
			3700	2.970	37.165	3.117	37.700	-4.72%	-1.42%
			3750	3.021	37.095	3.169	37.643	-4.67%	-1.46%
			3900	3.177	36.844	3.323	37.471	-4.39%	-1.67%
			3930	3.206	36.789	3.353	37.437	-4.38%	-1.73%
			4100	3.384	36.507	3.528	37.243	-4.08%	-1.98%
			4150	3.441	36.446	3.579	37.186	-3.86%	-1.99%
07/15/2022	3600 Head	21.5	3300	2.604	38.631	2.708	38.157	-3.84%	1.24%
			3350	2.648	38.547	2.759	38.100	-4.02%	1.17%
			3450	2.740	38.389	2.861	37.986	-4.23%	1.06%
			3500	2.789	38.299	2.913	37.929	-4.26%	0.98%
			3550	2.831	38.216	2.964	37.871	-4.49%	0.91%
			3560	2.841	38.191	2.974	37.860	-4.47%	0.87%
			3600	2.881	38.151	3.015	37.814	-4.44%	0.89%
			3650	2.929	38.046	3.066	37.757	-4.47%	0.77%
			3690	2.967	37.990	3.107	37.711	-4.51%	0.74%
			3700	2.976	37.968	3.117	37.700	-4.52%	0.71%
			3750	3.028	37.887	3.169	37.643	-4.45%	0.65%
			3900	3.180	37.640	3.323	37.471	-4.30%	0.45%
			3930	3.217	37.581	3.353	37.437	-4.06%	0.38%
			4100	3.393	37.308	3.528	37.243	-3.83%	0.17%
			4150	3.447	37.222	3.579	37.186	-3.69%	0.10%
07/13/2022	3600 Head	20.0	3300	2.814	36.755	2.708	38.157	3.91%	-3.67%
			3350	2.862	36.691	2.759	38.100	3.73%	-3.70%
			3450	2.943	36.540	2.861	37.986	2.87%	-3.81%
			3500	2.983	36.446	2.913	37.929	2.40%	-3.91%
			3550	3.025	36.402	2.964	37.871	2.06%	-3.88%
			3560	3.032	36.384	2.974	37.860	1.95%	-3.90%
			3600	3.071	36.331	3.015	37.814	1.86%	-3.92%
			3650	3.115	36.265	3.066	37.757	1.60%	-3.95%
			3690	3.151	36.224	3.107	37.711	1.42%	-3.94%
			3700	3.159	36.203	3.117	37.700	1.35%	-3.97%
			3750	3.202	36.151	3.169	37.643	1.04%	-3.96%
			3900	3.339	35.932	3.323	37.471	0.48%	-4.11%
			3930	3.366	35.886	3.353	37.437	0.39%	-4.14%
			4100	3.532	35.655	3.528	37.243	0.11%	-4.26%
			4150	3.581	35.578	3.579	37.186	0.06%	-4.32%
06/25/2022	5200-5800 Head	21.3	5180	4.522	36.217	4.635	36.009	-2.44%	0.58%
			5190	4.533	36.201	4.645	35.998	-2.41%	0.56%
			5200	4.545	36.188	4.655	35.986	-2.36%	0.56%
			5210	4.558	36.170	4.666	35.975	-2.31%	0.54%
			5220	4.570	36.152	4.676	35.963	-2.27%	0.53%
			5240	4.588	36.111	4.696	35.940	-2.30%	0.48%
			5250	4.599	36.092	4.706	35.929	-2.27%	0.45%
			5260	4.612	36.067	4.717	35.917	-2.23%	0.42%
			5270	4.624	36.048	4.727	35.906	-2.18%	0.40%
			5280	4.635	36.033	4.737	35.894	-2.15%	0.39%
			5290	4.646	36.021	4.748	35.883	-2.15%	0.38%
			5300	4.657	36.003	4.758	35.871	-2.12%	0.37%
			5310	4.668	35.976	4.768	35.860	-2.10%	0.32%
			5320	4.678	35.951	4.778	35.849	-2.09%	0.28%
			5500	4.883	35.652	4.963	35.643	-1.61%	0.03%
			5510	4.895	35.629	4.973	35.632	-1.57%	-0.01%
			5520	4.909	35.611	4.983	35.620	-1.49%	-0.03%
			5530	4.923	35.592	4.994	35.609	-1.42%	-0.05%
			5540	4.934	35.578	5.004	35.597	-1.40%	-0.05%
			5550	4.945	35.563	5.014	35.586	-1.38%	-0.06%
			5560	4.956	35.545	5.024	35.574	-1.35%	-0.08%
			5580	4.980	35.505	5.045	35.551	-1.29%	-0.13%
			5600	5.004	35.478	5.065	35.529	-1.20%	-0.14%
			5610	5.016	35.468	5.076	35.518	-1.18%	-0.14%
			5620	5.027	35.452	5.086	35.506	-1.16%	-0.15%
			5640	5.048	35.409	5.106	35.483	-1.14%	-0.21%
			5660	5.073	35.376	5.127	35.460	-1.05%	-0.24%
			5670	5.083	35.362	5.137	35.449	-1.05%	-0.25%
			5680	5.090	35.347	5.147	35.437	-1.11%	-0.25%
			5690	5.101	35.326	5.158	35.426	-1.11%	-0.28%
			5700	5.114	35.304	5.168	35.414	-1.04%	-0.31%
			5710	5.126	35.285	5.178	35.403	-1.00%	-0.33%
			5720	5.138	35.273	5.188	35.391	-0.96%	-0.33%
			5745	5.169	35.224	5.214	35.363	-0.86%	-0.39%
			5750	5.174	35.214	5.219	35.357	-0.86%	-0.40%
			5755	5.179	35.206	5.224	35.351	-0.86%	-0.41%
			5765	5.190	35.189	5.234	35.340	-0.84%	-0.43%
			5775	5.202	35.168	5.245	35.329	-0.82%	-0.46%
			5785	5.215	35.146	5.255	35.317	-0.76%	-0.48%
			5795	5.226	35.130	5.265	35.305	-0.74%	-0.50%
			5800	5.231	35.120	5.270	35.300	-0.74%	-0.51%
			5800	5.231	35.120	5.270	35.300	-0.74%	-0.51%
			5805	5.236	35.112	5.275	35.294	-0.74%	-0.52%
			5825	5.263	35.073	5.296	35.271	-0.62%	-0.56%
			5835	5.276	35.056	5.305	35.230	-0.55%	-0.49%
			5845	5.287	35.036	5.315	35.210	-0.53%	-0.49%
			5855	5.297	35.024	5.325	35.197	-0.53%	-0.49%
			5865	5.310	35.008	5.336	35.190	-0.49%	-0.52%
			5865	5.310	35.008	5.336	35.190	-0.49%	-0.52%
			5865	5.310	35.008	5.336	35.190	-0.49%	-0.52%
			5865	5.310	35.008	5.336	35.190	-0.49%	-0.52%
			5875	5.321	34.986	5.347	35.183	-0.49%	-0.56%
			5885	5.332	34.969	5.357	35.177	-0.47%	-0.59%
			5905	5.358	34.937	5.379	35.163	-0.39%	-0.64%

The above measured tissue parameters were used in the cDASY6 software. The cDASY6 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.

Per April 2019 TCB Workshop Notes, single head-tissue simulating liquid specified in IEC 62209-1 is permitted to use for all SAR tests.

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 SAR1g (W/kg)	1W Target SAR1g (W/kg)	1W Normalized SAR 1g (W/kg)	Deviation1g (%)
AM12	750	HEAD	07/05/2022	24.5	21.0	0.20	1094	7499	1.640	8.47	8.200	-3.19%
AM12	750	HEAD	07/12/2022	24.0	20.7	0.20	1097	7499	1.620	8.21	8.100	-1.34%
AM12	750	HEAD	07/14/2022	24.1	21.7	0.20	1097	7499	1.670	8.21	8.350	1.71%
AM12	750	HEAD	07/25/2022	21.8	20.5	0.20	1057	7499	1.770	8.51	8.850	4.00%
AM14	835	HEAD	07/03/2022	21.0	21.5	0.20	4d040	7674	1.900	9.79	9.500	-2.96%
AM14	835	HEAD	07/05/2022	24.5	22.3	0.20	4d040	7674	1.920	9.79	9.600	-1.94%
AM14	835	HEAD	07/07/2022	20.9	22.0	0.20	4d040	7674	1.920	9.79	9.600	-1.94%
AM8	1750	HEAD	07/24/2022	19.5	19.0	0.10	1083	7546	3.490	36.50	34.900	-4.38%
AM8	1750	HEAD	07/26/2022	20.6	20.5	0.10	1083	7546	3.510	36.50	35.100	-3.84%
AM13	1750	HEAD	08/07/2022	23.4	22.1	0.10	1104	7360	3.380	35.70	33.800	-5.32%
AM6	1900	HEAD	07/03/2022	20.8	20.3	0.10	5d181	7532	4.210	40.10	42.100	4.99%
AM6	1900	HEAD	07/05/2022	21.6	21.7	0.10	5d181	7532	4.280	40.10	42.800	6.73%
AM6	1900	HEAD	07/10/2022	20.3	20.2	0.10	5d181	7532	4.180	40.10	41.800	4.24%
AM8	2300	HEAD	07/07/2022	19.7	19.6	0.10	1064	7546	4.700	48.90	47.000	-3.89%
AM11	2450	HEAD	06/23/2022	22.8	22.7	0.10	855	7420	5.120	52.30	51.200	-2.10%
AM4	2450	HEAD	07/10/2022	22.1	20.8	0.10	921	3837	5.380	54.20	53.800	-0.74%
AM11	2450	HEAD	07/17/2022	21.3	22.8	0.10	855	7420	5.060	52.30	50.600	-3.25%
AM11	2450	HEAD	08/09/2022	20.8	22.8	0.10	750	7420	4.980	52.60	49.800	-5.32%
AM7	2450	HEAD	08/15/2022	19.5	21.1	0.10	921	7416	5.580	54.20	55.800	2.95%
AM4	2600	HEAD	07/10/2022	22.1	20.8	0.10	1069	3837	5.700	55.60	57.000	2.52%
AM11	2600	HEAD	07/17/2022	21.3	22.8	0.10	1042	7420	5.350	55.80	53.500	-4.12%
AM11	2600	HEAD	08/09/2022	20.8	22.8	0.10	1042	7420	5.380	55.80	53.800	-3.58%
AM7	3500	HEAD	07/13/2022	19.3	20.5	0.10	1055	7416	6.360	67.80	63.600	-6.19%
AM3	3500	HEAD	08/09/2022	24.8	20.1	0.10	1055	7427	6.380	67.80	63.800	-5.90%
AM4	3700	HEAD	07/15/2022	23.5	21.7	0.10	1002	3837	6.420	68.80	64.200	-6.69%
AM3	3700	HEAD	08/09/2022	24.8	20.1	0.10	1002	7427	6.630	68.80	66.300	-3.63%
AM4	3900	HEAD	07/15/2022	23.5	21.7	0.10	1062	3837	7.110	68.60	71.100	3.64%
AM9	5250	HEAD	06/25/2022	21.9	21.3	0.05	1123	7638	3.930	80.50	78.600	-2.36%
AM9	5600	HEAD	06/25/2022	21.9	21.3	0.05	1123	7638	3.890	83.70	77.800	-7.05%
AM9	5750	HEAD	06/25/2022	21.9	21.3	0.05	1123	7638	4.100	80.50	82.000	1.86%

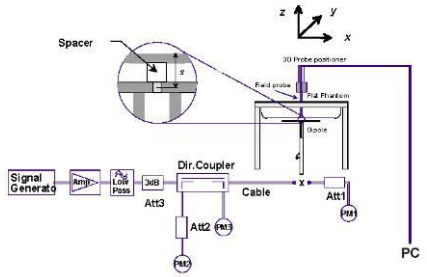


Figure 9-1
System Verification Setup Diagram

Figure 9-2
System Verification Setup Photo

10 SAR DATA SUMMARY

10.1 Standalone SAR Data

Table 10-1
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	16.90	15.90	-0.01	Body	0 mm	Ant 3b	DR2FPM6LJX	1:1	back	0.583	1.259	0.734	0.294	0.370	
826.40	4132	UMTS 850	RMC	16.90	15.90	0.00	Body	0 mm	Ant 3b	DR2FPM6LJX	1:1	top	0.637	1.259	0.802	0.286	0.360	
836.60	4183	UMTS 850	RMC	16.90	15.80	0.01	Body	0 mm	Ant 3b	DR2FPM6LJX	1:1	top	0.702	1.288	0.904	0.303	0.390	
846.60	4233	UMTS 850	RMC	16.90	15.86	0.01	Body	0 mm	Ant 3b	DR2FPM6LJX	1:1	top	0.630	1.271	0.801	0.274	0.348	
826.40	4132	UMTS 850	RMC	16.90	15.90	0.01	Body	0 mm	Ant 3b	DR2FPM6LJX	1:1	bottom	0.015	1.259	0.019	0.006	0.008	
826.40	4132	UMTS 850	RMC	16.90	15.90	-0.03	Body	0 mm	Ant 3b	DR2FPM6LJX	1:1	right	0.076	1.259	0.096	0.037	0.047	
826.40	4132	UMTS 850	RMC	16.90	15.90	0.08	Body	0 mm	Ant 3b	DR2FPM6LJX	1:1	left	0.020	1.259	0.025	0.008	0.010	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-2
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	18.30	17.81	0.02	Body	0 mm	Ant 4	KD40G061JX	1:1	back	0.845	1.119	0.946	0.401	0.449	
836.60	4183	UMTS 850	RMC	18.30	17.80	0.02	Body	0 mm	Ant 4	KD40G061JX	1:1	back	0.883	1.122	0.991	0.374	0.420	A1
846.60	4233	UMTS 850	RMC	18.30	17.60	-0.01	Body	0 mm	Ant 4	KD40G061JX	1:1	back	0.737	1.175	0.866	0.352	0.414	
826.40	4132	UMTS 850	RMC	18.30	17.81	0.00	Body	0 mm	Ant 4	KD40G061JX	1:1	top	0.563	1.119	0.630	0.240	0.269	
826.40	4132	UMTS 850	RMC	18.30	17.81	-0.01	Body	0 mm	Ant 4	KD40G061JX	1:1	bottom	0.024	1.119	0.027	0.011	0.012	
826.40	4132	UMTS 850	RMC	18.30	17.81	-0.10	Body	0 mm	Ant 4	KD40G061JX	1:1	right	0.022	1.119	0.025	0.010	0.011	
826.40	4132	UMTS 850	RMC	18.30	17.81	0.00	Body	0 mm	Ant 4	KD40G061JX	1:1	left	0.384	1.119	0.430	0.163	0.182	
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 1b 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	12.30	10.77	0.00	Body	0 mm	Ant 1b	W4KQW6V71Y	1:1	back	0.669	1.422	0.951	0.268	0.381	
1732.40	1412	UMTS 1750	RMC	12.30	10.81	0.01	Body	0 mm	Ant 1b	W4KQW6V71Y	1:1	back	0.686	1.409	0.967	0.273	0.385	
1752.60	1513	UMTS 1750	RMC	12.30	10.72	-0.01	Body	0 mm	Ant 1b	W4KQW6V71Y	1:1	back	0.680	1.439	0.979	0.271	0.390	
1732.40	1412	UMTS 1750	RMC	12.30	10.81	0.08	Body	0 mm	Ant 1b	W4KQW6V71Y	1:1	top	0.003	1.409	0.004	0.000	0.000	
1732.40	1412	UMTS 1750	RMC	12.30	10.81	-0.03	Body	0 mm	Ant 1b	W4KQW6V71Y	1:1	bottom	0.364	1.409	0.513	0.144	0.203	
1732.40	1412	UMTS 1750	RMC	12.30	10.81	0.04	Body	0 mm	Ant 1b	W4KQW6V71Y	1:1	right	0.005	1.409	0.007	0.002	0.003	
1732.40	1412	UMTS 1750	RMC	12.30	10.81	-0.01	Body	0 mm	Ant 1b	W4KQW6V71Y	1:1	left	0.053	1.409	0.075	0.024	0.034	
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 10-4
UMTS 1750 MHz Antenna 2b 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	14.00	12.93	0.00	Body	0 mm	Ant 2b	G3Q2X6LP70	1:1	back	0.779	1.279	0.996	0.312	0.399	
1732.40	1412	UMTS 1750	RMC	14.00	12.91	0.02	Body	0 mm	Ant 2b	G3Q2X6LP70	1:1	back	0.777	1.285	0.998	0.311	0.400	
1752.60	1513	UMTS 1750	RMC	14.00	12.95	0.01	Body	0 mm	Ant 2b	G3Q2X6LP70	1:1	back	0.782	1.274	0.996	0.312	0.397	
1752.60	1513	UMTS 1750	RMC	14.00	12.95	-0.11	Body	0 mm	Ant 2b	G3Q2X6LP70	1:1	top	0.014	1.274	0.018	0.006	0.008	
1712.40	1312	UMTS 1750	RMC	14.00	12.93	-0.01	Body	0 mm	Ant 2b	G3Q2X6LP70	1:1	bottom	0.776	1.279	0.993	0.303	0.388	
1732.40	1412	UMTS 1750	RMC	14.00	12.91	0.01	Body	0 mm	Ant 2b	G3Q2X6LP70	1:1	bottom	0.746	1.285	0.959	0.294	0.378	
1752.60	1513	UMTS 1750	RMC	14.00	12.95	0.02	Body	0 mm	Ant 2b	G3Q2X6LP70	1:1	bottom	0.742	1.274	0.945	0.290	0.369	
1752.60	1513	UMTS 1750	RMC	14.00	12.95	-0.01	Body	0 mm	Ant 2b	G3Q2X6LP70	1:1	right	0.144	1.274	0.183	0.059	0.075	
1752.60	1513	UMTS 1750	RMC	14.00	12.95	-0.17	Body	0 mm	Ant 2b	G3Q2X6LP70	1:1	left	0.009	1.274	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 10-5
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)	
1732.40	1412	UMTS 1750	RMC	13.30	11.88	-0.01	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	back	0.292	1.387	0.405	0.139	0.193	
1732.40	1412	UMTS 1750	RMC	13.30	11.88	0.05	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	top	0.212	1.387	0.294	0.069	0.096	
1732.40	1412	UMTS 1750	RMC	13.30	11.88	-0.16	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	bottom	0.009	1.387	0.012	0.004	0.006	
1712.40	1312	UMTS 1750	RMC	13.30	11.80	-0.07	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	right	0.643	1.413	0.909	0.265	0.374	
1732.40	1412	UMTS 1750	RMC	13.30	11.88	0.01	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	right	0.652	1.387	0.904	0.269	0.373	
1752.60	1513	UMTS 1750	RMC	13.30	11.74	-0.01	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	right	0.666	1.432	0.954	0.274	0.392	
1732.40	1412	UMTS 1750	RMC	13.30	11.88	-0.12	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	left	0.011	1.387	0.015	0.004	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								

Table 10-6
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	14.80	13.84	0.01	Body	0 mm	Ant 4	KD40G061JX	1:1	back	0.788	1.247	0.983	0.336	0.419	A2
1732.40	1412	UMTS 1750	RMC	14.80	13.85	0.03	Body	0 mm	Ant 4	KD40G061JX	1:1	back	0.764	1.245	0.951	0.323	0.402	
1752.60	1513	UMTS 1750	RMC	14.80	13.88	0.06	Body	0 mm	Ant 4	KD40G061JX	1:1	back	0.726	1.236	0.897	0.309	0.382	
1752.60	1513	UMTS 1750	RMC	14.80	13.88	0.05	Body	0 mm	Ant 4	KD40G061JX	1:1	top	0.353	1.236	0.436	0.146	0.180	
1752.60	1513	UMTS 1750	RMC	14.80	13.88	0.04	Body	0 mm	Ant 4	KD40G061JX	1:1	bottom	0.000	1.236	0.000	0.000	0.000	
1752.60	1513	UMTS 1750	RMC	14.80	13.88	0.06	Body	0 mm	Ant 4	KD40G061JX	1:1	right	0.025	1.236	0.031	0.008	0.010	
1752.60	1513	UMTS 1750	RMC	14.80	13.88	-0.02	Body	0 mm	Ant 4	KD40G061JX	1:1	left	0.544	1.236	0.672	0.189	0.234	
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 10-7
UMTS 1900 MHz Antenna 1b 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	11.80	10.97	-0.02	Body	0 mm	Ant 1b	G3Q2X6LP70	1:1	back	0.745	1.211	0.902	0.286	0.346	
1880.00	9400	UMTS 1900	RMC	11.80	11.02	0.00	Body	0 mm	Ant 1b	G3Q2X6LP70	1:1	back	0.728	1.197	0.871	0.279	0.334	
1907.60	9538	UMTS 1900	RMC	11.80	11.12	-0.01	Body	0 mm	Ant 1b	G3Q2X6LP70	1:1	back	0.751	1.169	0.878	0.286	0.334	
1907.60	9538	UMTS 1900	RMC	11.80	11.12	0.06	Body	0 mm	Ant 1b	G3Q2X6LP70	1:1	top	0.004	1.169	0.005	0.000	0.000	
1907.60	9538	UMTS 1900	RMC	11.80	11.12	0.01	Body	0 mm	Ant 1b	G3Q2X6LP70	1:1	bottom	0.456	1.169	0.533	0.159	0.186	
1907.60	9538	UMTS 1900	RMC	11.80	11.12	0.05	Body	0 mm	Ant 1b	G3Q2X6LP70	1:1	right	0.010	1.169	0.012	0.004	0.005	
1907.60	9538	UMTS 1900	RMC	11.80	11.12	0.00	Body	0 mm	Ant 1b	G3Q2X6LP70	1:1	left	0.056	1.169	0.065	0.025	0.029	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 10-8
UMTS 1900 MHz Antenna 2b 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	14.20	13.92	-0.02	Body	0 mm	Ant 2b	Q7R32XX33P	1:1	back	0.837	1.067	0.893	0.332	0.354	
1880.00	9400	UMTS 1900	RMC	14.20	14.11	-0.06	Body	0 mm	Ant 2b	Q7R32XX33P	1:1	back	0.810	1.021	0.827	0.317	0.324	
1907.60	9538	UMTS 1900	RMC	14.20	14.03	0.01	Body	0 mm	Ant 2b	Q7R32XX33P	1:1	back	0.802	1.040	0.834	0.317	0.330	
1880.00	9400	UMTS 1900	RMC	14.20	14.11	0.02	Body	0 mm	Ant 2b	Q7R32XX33P	1:1	top	0.000	1.021	0.000	0.000	0.000	
1852.40	9262	UMTS 1900	RMC	14.20	13.92	-0.03	Body	0 mm	Ant 2b	Q7R32XX33P	1:1	bottom	0.832	1.067	0.888	0.297	0.317	
1880.00	9400	UMTS 1900	RMC	14.20	14.11	-0.05	Body	0 mm	Ant 2b	Q7R32XX33P	1:1	bottom	0.862	1.021	0.880	0.316	0.323	
1907.60	9538	UMTS 1900	RMC	14.20	14.03	-0.13	Body	0 mm	Ant 2b	Q7R32XX33P	1:1	bottom	0.948	1.040	0.986	0.344	0.358	A3
1880.00	9400	UMTS 1900	RMC	14.20	14.11	0.12	Body	0 mm	Ant 2b	Q7R32XX33P	1:1	right	0.071	1.021	0.072	0.031	0.032	
1880.00	9400	UMTS 1900	RMC	14.20	14.11	0.03	Body	0 mm	Ant 2b	Q7R32XX33P	1:1	left	0.018	1.021	0.018	0.007	0.007	
1907.60	9538	UMTS 1900	RMC	14.20	14.03	0.18	Body	0 mm	Ant 2b	Q7R32XX33P	1:1	bottom	0.860	1.040	0.894	0.309	0.321	
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 10-9
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)	
1852.40	9262	UMTS 1900	RMC	11.80	11.54	-0.02	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	back	0.349	1.062	0.371	0.163	0.173	
1852.40	9262	UMTS 1900	RMC	11.80	11.54	-0.06	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	top	0.245	1.062	0.260	0.080	0.085	
1852.40	9262	UMTS 1900	RMC	11.80	11.54	0.07	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	bottom	0.004	1.062	0.004	0.001	0.001	
1852.40	9262	UMTS 1900	RMC	11.80	11.54	-0.04	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	right	0.793	1.062	0.842	0.309	0.328	
1880.00	9400	UMTS 1900	RMC	11.80	11.36	-0.01	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	right	0.800	1.107	0.886	0.311	0.344	
1907.60	9538	UMTS 1900	RMC	11.80	11.42	0.01	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	right	0.825	1.091	0.900	0.320	0.349	
1852.40	9262	UMTS 1900	RMC	11.80	11.54	0.06	Body	0 mm	Ant 3a	P34PWY9MXP	1:1	left	0.011	1.062	0.012	0.005	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 10-10
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)	
1880.00	9400	UMTS 1900	RMC	14.00	12.73	0.03	Body	0 mm	Ant 4	NMX9PNX42D	1:1	back	0.556	1.340	0.745	0.235	0.315	
1880.00	9400	UMTS 1900	RMC	14.00	12.73	-0.04	Body	0 mm	Ant 4	NMX9PNX42D	1:1	top	0.436	1.340	0.584	0.178	0.239	
1880.00	9400	UMTS 1900	RMC	14.00	12.73	0.05	Body	0 mm	Ant 4	NMX9PNX42D	1:1	bottom	0.004	1.340	0.005	0.002	0.003	
1880.00	9400	UMTS 1900	RMC	14.00	12.73	0.03	Body	0 mm	Ant 4	NMX9PNX42D	1:1	right	0.010	1.340	0.013	0.004	0.005	
1852.40	9262	UMTS 1900	RMC	14.00	12.64	0.02	Body	0 mm	Ant 4	NMX9PNX42D	1:1	left	0.517	1.368	0.707	0.190	0.260	
1880.00	9400	UMTS 1900	RMC	14.00	12.73	0.02	Body	0 mm	Ant 4	NMX9PNX42D	1:1	left	0.578	1.340	0.775	0.207	0.277	
1907.60	9538	UMTS 1900	RMC	14.00	12.59	0.13	Body	0 mm	Ant 4	NMX9PNX42D	1:1	left	0.487	1.384	0.674	0.176	0.244	
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 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	18.40	17.38	0.00	0	Ant 3b	K033JL79Y6	QPSK	1	50	0 mm	back	1:1	0.677	1.265	0.856	0.343	0.434	
680.50	133297	Mid	LTE Band 71	20	18.40	17.37	0.01	0	Ant 3b	K033JL79Y6	QPSK	50	25	0 mm	back	1:1	0.693	1.268	0.879	0.351	0.445	
680.50	133297	Mid	LTE Band 71	20	18.40	17.31	-0.01	0	Ant 3b	K033JL79Y6	QPSK	100	0	0 mm	back	1:1	0.689	1.285	0.885	0.349	0.448	
680.50	133297	Mid	LTE Band 71	20	18.40	17.38	-0.03	0	Ant 3b	K033JL79Y6	QPSK	1	50	0 mm	top	1:1	0.669	1.265	0.846	0.305	0.386	
680.50	133297	Mid	LTE Band 71	20	18.40	17.37	0.00	0	Ant 3b	K033JL79Y6	QPSK	50	25	0 mm	top	1:1	0.681	1.268	0.864	0.314	0.398	
680.50	133297	Mid	LTE Band 71	20	18.40	17.31	0.01	0	Ant 3b	K033JL79Y6	QPSK	100	0	0 mm	top	1:1	0.678	1.285	0.871	0.311	0.400	
680.50	133297	Mid	LTE Band 71	20	18.40	17.38	0.03	0	Ant 3b	K033JL79Y6	QPSK	1	50	0 mm	bottom	1:1	0.009	1.265	0.011	0.003	0.004	
680.50	133297	Mid	LTE Band 71	20	18.40	17.37	0.06	0	Ant 3b	K033JL79Y6	QPSK	50	25	0 mm	bottom	1:1	0.010	1.268	0.013	0.003	0.004	
680.50	133297	Mid	LTE Band 71	20	18.40	17.38	0.00	0	Ant 3b	K033JL79Y6	QPSK	1	50	0 mm	right	1:1	0.105	1.265	0.133	0.048	0.061	
680.50	133297	Mid	LTE Band 71	20	18.40	17.37	-0.07	0	Ant 3b	K033JL79Y6	QPSK	50	25	0 mm	right	1:1	0.111	1.268	0.141	0.051	0.065	
680.50	133297	Mid	LTE Band 71	20	18.40	17.38	0.17	0	Ant 3b	K033JL79Y6	QPSK	1	50	0 mm	left	1:1	0.030	1.265	0.038	0.013	0.016	
680.50	133297	Mid	LTE Band 71	20	18.40	17.37	0.03	0	Ant 3b	K033JL79Y6	QPSK	50	25	0 mm	left	1:1	0.030	1.268	0.038	0.013	0.016	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 10-12
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	21.00	20.80	0.02	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	back	1:1	0.839	1.047	0.878	0.427	0.447	
680.50	133297	Mid	LTE Band 71	20	21.00	20.82	-0.03	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	back	1:1	0.766	1.042	0.798	0.392	0.408	
680.50	133297	Mid	LTE Band 71	20	21.00	20.79	-0.07	0	Ant 4	KD40G061JX	QPSK	100	0	0 mm	back	1:1	0.788	1.050	0.827	0.400	0.420	
680.50	133297	Mid	LTE Band 71	20	21.00	20.80	-0.02	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	top	1:1	0.791	1.047	0.828	0.345	0.361	
680.50	133297	Mid	LTE Band 71	20	21.00	20.82	-0.08	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	top	1:1	0.796	1.042	0.829	0.346	0.361	
680.50	133297	Mid	LTE Band 71	20	21.00	20.79	0.00	0	Ant 4	KD40G061JX	QPSK	100	0	0 mm	top	1:1	0.810	1.050	0.851	0.351	0.369	
680.50	133297	Mid	LTE Band 71	20	21.00	20.80	-0.04	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	bottom	1:1	0.016	1.047	0.017	0.006	0.006	
680.50	133297	Mid	LTE Band 71	20	21.00	20.82	0.03	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	bottom	1:1	0.018	1.042	0.019	0.007	0.007	
680.50	133297	Mid	LTE Band 71	20	21.00	20.80	0.15	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	right	1:1	0.055	1.047	0.058	0.025	0.026	
680.50	133297	Mid	LTE Band 71	20	21.00	20.82	-0.20	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	right	1:1	0.065	1.042	0.068	0.029	0.030	
680.50	133297	Mid	LTE Band 71	20	21.00	20.80	0.04	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	left	1:1	0.887	1.047	0.929	0.314	0.329	A4
680.50	133297	Mid	LTE Band 71	20	21.00	20.82	0.01	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	left	1:1	0.829	1.042	0.864	0.309	0.322	
680.50	133297	Mid	LTE Band 71	20	21.00	20.79	-0.08	0	Ant 4	KD40G061JX	QPSK	100	0	0 mm	left	1:1	0.807	1.050	0.847	0.296	0.311	
680.50	133297	Mid	LTE Band 71	20	21.00	20.80	-0.16	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	left	1:1	0.884	1.047	0.926	0.325	0.340	
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 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	18.10	17.10	0.04	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	back	1:1	0.610	1.259	0.768	0.296	0.373	
707.50	23095	Mid	LTE Band 12	10	18.10	17.20	0.01	0	Ant 3b	K033JL79T6	QPSK	25	0	0 mm	back	1:1	0.630	1.230	0.775	0.305	0.375	
707.50	23095	Mid	LTE Band 12	10	18.10	17.10	-0.03	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	top	1:1	0.705	1.259	0.888	0.321	0.404	
707.50	23095	Mid	LTE Band 12	10	18.10	17.20	0.00	0	Ant 3b	K033JL79T6	QPSK	25	0	0 mm	top	1:1	0.696	1.230	0.856	0.321	0.395	
707.50	23095	Mid	LTE Band 12	10	18.10	17.09	0.01	0	Ant 3b	K033JL79T6	QPSK	50	0	0 mm	top	1:1	0.731	1.262	0.923	0.333	0.420	
707.50	23095	Mid	LTE Band 12	10	18.10	17.10	0.15	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	bottom	1:1	0.012	1.259	0.015	0.005	0.006	
707.50	23095	Mid	LTE Band 12	10	18.10	17.20	0.20	0	Ant 3b	K033JL79T6	QPSK	25	0	0 mm	bottom	1:1	0.014	1.230	0.017	0.006	0.007	
707.50	23095	Mid	LTE Band 12	10	18.10	17.10	-0.01	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	right	1:1	0.099	1.259	0.125	0.047	0.059	
707.50	23095	Mid	LTE Band 12	10	18.10	17.20	-0.03	0	Ant 3b	K033JL79T6	QPSK	25	0	0 mm	right	1:1	0.089	1.230	0.109	0.043	0.053	
707.50	23095	Mid	LTE Band 12	10	18.10	17.10	-0.09	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	left	1:1	0.027	1.259	0.034	0.010	0.013	
707.50	23095	Mid	LTE Band 12	10	18.10	17.20	-0.09	0	Ant 3b	K033JL79T6	QPSK	25	0	0 mm	left	1:1	0.030	1.230	0.037	0.012	0.015	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram														

Table 10-14
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	19.90	18.73	0.02	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	back	1:1	0.750	1.309	0.982	0.382	0.500	
707.50	23095	Mid	LTE Band 12	10	19.90	18.77	0.04	0	Ant 4	KD40G061JX	QPSK	25	12	0 mm	back	1:1	0.763	1.297	0.990	0.386	0.501	A5
707.50	23095	Mid	LTE Band 12	10	19.90	18.72	0.01	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	back	1:1	0.761	1.312	0.998	0.386	0.506	
707.50	23095	Mid	LTE Band 12	10	19.90	18.73	-0.03	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	top	1:1	0.651	1.309	0.852	0.255	0.334	
707.50	23095	Mid	LTE Band 12	10	19.90	18.77	-0.02	0	Ant 4	KD40G061JX	QPSK	25	12	0 mm	top	1:1	0.649	1.297	0.842	0.258	0.335	
707.50	23095	Mid	LTE Band 12	10	19.90	18.72	0.02	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	top	1:1	0.605	1.312	0.794	0.241	0.316	
707.50	23095	Mid	LTE Band 12	10	19.90	18.73	-0.04	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	bottom	1:1	0.020	1.309	0.026	0.008	0.010	
707.50	23095	Mid	LTE Band 12	10	19.90	18.77	-0.16	0	Ant 4	KD40G061JX	QPSK	25	12	0 mm	bottom	1:1	0.017	1.297	0.022	0.007	0.009	
707.50	23095	Mid	LTE Band 12	10	19.90	18.73	-0.16	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	right	1:1	0.029	1.309	0.038	0.013	0.017	
707.50	23095	Mid	LTE Band 12	10	19.90	18.77	-0.07	0	Ant 4	KD40G061JX	QPSK	25	12	0 mm	right	1:1	0.030	1.297	0.039	0.014	0.018	
707.50	23095	Mid	LTE Band 12	10	19.90	18.73	-0.05	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	left	1:1	0.511	1.309	0.669	0.186	0.243	
707.50	23095	Mid	LTE Band 12	10	19.90	18.77	-0.04	0	Ant 4	KD40G061JX	QPSK	25	12	0 mm	left	1:1	0.526	1.297	0.682	0.194	0.252	
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 10-15
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) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																						
782.00	23230	Mid	LTE Band 13	10	17.80	16.61	0.01	0	Ant 3b	K033JL79T6	QPSK	1	49	0 mm	back	1:1	0.648	1.315	0.852	0.327	0.430	
782.00	23230	Mid	LTE Band 13	10	17.80	16.71	0.00	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	back	1:1	0.710	1.285	0.912	0.354	0.455	
782.00	23230	Mid	LTE Band 13	10	17.80	16.60	-0.01	0	Ant 3b	K033JL79T6	QPSK	50	0	0 mm	back	1:1	0.716	1.318	0.944	0.357	0.471	
782.00	23230	Mid	LTE Band 13	10	17.80	16.61	0.01	0	Ant 3b	K033JL79T6	QPSK	1	49	0 mm	top	1:1	0.688	1.315	0.905	0.313	0.412	
782.00	23230	Mid	LTE Band 13	10	17.80	16.71	0.03	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	top	1:1	0.727	1.285	0.934	0.331	0.425	
782.00	23230	Mid	LTE Band 13	10	17.80	16.60	-0.01	0	Ant 3b	K033JL79T6	QPSK	50	0	0 mm	top	1:1	0.752	1.318	0.991	0.342	0.451	
782.00	23230	Mid	LTE Band 13	10	17.80	16.61	0.03	0	Ant 3b	K033JL79T6	QPSK	1	49	0 mm	bottom	1:1	0.012	1.315	0.016	0.005	0.007	
782.00	23230	Mid	LTE Band 13	10	17.80	16.71	0.09	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	bottom	1:1	0.014	1.285	0.018	0.005	0.006	
782.00	23230	Mid	LTE Band 13	10	17.80	16.61	0.05	0	Ant 3b	K033JL79T6	QPSK	1	49	0 mm	right	1:1	0.083	1.315	0.109	0.041	0.054	
782.00	23230	Mid	LTE Band 13	10	17.80	16.71	-0.03	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	right	1:1	0.086	1.285	0.111	0.043	0.055	
782.00	23230	Mid	LTE Band 13	10	17.80	16.61	-0.06	0	Ant 3b	K033JL79T6	QPSK	1	49	0 mm	left	1:1	0.031	1.315	0.041	0.010	0.013	
782.00	23230	Mid	LTE Band 13	10	17.80	16.71	0.07	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	left	1:1	0.032	1.285	0.041	0.011	0.014	
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 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) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																						
782.00	23230	Mid	LTE Band 13	10	20.40	19.31	0.02	0	Ant 4	H79KJRF9ND	QPSK	1	0	0 mm	back	1:1	0.581	1.285	0.747	0.322	0.414	
782.00	23230	Mid	LTE Band 13	10	20.40	19.32	0.00	0	Ant 4	H79KJRF9ND	QPSK	25	12	0 mm	back	1:1	0.578	1.282	0.741	0.319	0.409	
782.00	23230	Mid	LTE Band 13	10	20.40	19.31	0.03	0	Ant 4	H79KJRF9ND	QPSK	1	0	0 mm	top	1:1	0.735	1.285	0.944	0.304	0.391	
782.00	23230	Mid	LTE Band 13	10	20.40	19.32	-0.01	0	Ant 4	H79KJRF9ND	QPSK	25	12	0 mm	top	1:1	0.764	1.282	0.979	0.312	0.400	
782.00	23230	Mid	LTE Band 13	10	20.40	19.30	-0.01	0	Ant 4	H79KJRF9ND	QPSK	50	0	0 mm	top	1:1	0.770	1.288	0.992	0.314	0.404	A6
782.00	23230	Mid	LTE Band 13	10	20.40	19.31	-0.16	0	Ant 4	H79KJRF9ND	QPSK	1	0	0 mm	bottom	1:1	0.025	1.285	0.032	0.011	0.014	
782.00	23230	Mid	LTE Band 13	10	20.40	19.32	0.04	0	Ant 4	H79KJRF9ND	QPSK	25	12	0 mm	bottom	1:1	0.027	1.282	0.035	0.012	0.015	
782.00	23230	Mid	LTE Band 13	10	20.40	19.31	-0.19	0	Ant 4	H79KJRF9ND	QPSK	1	0	0 mm	right	1:1	0.049	1.285	0.063	0.022	0.028	
782.00	23230	Mid	LTE Band 13	10	20.40	19.32	-0.08	0	Ant 4	H79KJRF9ND	QPSK	25	12	0 mm	right	1:1	0.050	1.282	0.064	0.023	0.029	
782.00	23230	Mid	LTE Band 13	10	20.40	19.31	0.02	0	Ant 4	H79KJRF9ND	QPSK	1	0	0 mm	left	1:1	0.698	1.285	0.897	0.266	0.342	
782.00	23230	Mid	LTE Band 13	10	20.40	19.32	-0.03	0	Ant 4	H79KJRF9ND	QPSK	25	12	0 mm	left	1:1	0.698	1.282	0.895	0.269	0.345	
782.00	23230	Mid	LTE Band 13	10	20.40	19.30	0.00	0	Ant 4	H79KJRF9ND	QPSK	50	0	0 mm	left	1:1	0.707	1.288	0.911	0.270	0.348	
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 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) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																						
793.00	23330	Mid	LTE Band 14	10	17.80	16.66	-0.06	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	back	1:1	0.730	1.300	0.949	0.361	0.469	
793.00	23330	Mid	LTE Band 14	10	17.80	16.73	-0.02	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	back	1:1	0.724	1.279	0.926	0.359	0.459	
793.00	23330	Mid	LTE Band 14	10	17.80	16.64	-0.02	0	Ant 3b	K033JL79T6	QPSK	50	0	0 mm	back	1:1	0.724	1.306	0.946	0.359	0.469	
793.00	23330	Mid	LTE Band 14	10	17.80	16.66	-0.02	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	top	1:1	0.727	1.300	0.945	0.331	0.430	
793.00	23330	Mid	LTE Band 14	10	17.80	16.73	-0.01	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	top	1:1	0.752	1.279	0.962	0.343	0.439	
793.00	23330	Mid	LTE Band 14	10	17.80	16.64	-0.03	0	Ant 3b	K033JL79T6	QPSK	50	0	0 mm	top	1:1	0.743	1.306	0.970	0.339	0.443	
793.00	23330	Mid	LTE Band 14	10	17.80	16.66	0.02	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	bottom	1:1	0.013	1.300	0.017	0.005	0.007	
793.00	23330	Mid	LTE Band 14	10	17.80	16.73	0.01	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	bottom	1:1	0.014	1.279	0.018	0.005	0.006	
793.00	23330	Mid	LTE Band 14	10	17.80	16.66	-0.07	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	right	1:1	0.119	1.300	0.155	0.055	0.072	
793.00	23330	Mid	LTE Band 14	10	17.80	16.73	0.02	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	right	1:1	0.125	1.279	0.160	0.058	0.074	
793.00	23330	Mid	LTE Band 14	10	17.80	16.66	0.05	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	left	1:1	0.028	1.300	0.036	0.011	0.014	
793.00	23330	Mid	LTE Band 14	10	17.80	16.73	-0.05	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	left	1:1	0.032	1.279	0.041	0.011	0.014	
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 10-18
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	20.40	19.54	0.08	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	back	1:1	0.685	1.219	0.835	0.365	0.445	
793.00	23330	Mid	LTE Band 14	10	20.40	19.61	0.00	0	Ant 4	KD40G061JX	QPSK	25	12	0 mm	back	1:1	0.675	1.199	0.809	0.360	0.432	
793.00	23330	Mid	LTE Band 14	10	20.40	19.48	0.01	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	back	1:1	0.622	1.236	0.769	0.337	0.417	
793.00	23330	Mid	LTE Band 14	10	20.40	19.54	0.08	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	top	1:1	0.803	1.219	0.979	0.324	0.395	A7
793.00	23330	Mid	LTE Band 14	10	20.40	19.61	0.02	0	Ant 4	KD40G061JX	QPSK	25	12	0 mm	top	1:1	0.793	1.199	0.951	0.318	0.381	
793.00	23330	Mid	LTE Band 14	10	20.40	19.48	-0.02	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	top	1:1	0.788	1.236	0.974	0.316	0.391	
793.00	23330	Mid	LTE Band 14	10	20.40	19.54	-0.07	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	bottom	1:1	0.018	1.219	0.022	0.009	0.011	
793.00	23330	Mid	LTE Band 14	10	20.40	19.61	-0.14	0	Ant 4	KD40G061JX	QPSK	25	12	0 mm	bottom	1:1	0.020	1.199	0.024	0.010	0.012	
793.00	23330	Mid	LTE Band 14	10	20.40	19.54	-0.08	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	right	1:1	0.039	1.219	0.048	0.019	0.023	
793.00	23330	Mid	LTE Band 14	10	20.40	19.61	0.07	0	Ant 4	KD40G061JX	QPSK	25	12	0 mm	right	1:1	0.038	1.199	0.046	0.018	0.022	
793.00	23330	Mid	LTE Band 14	10	20.40	19.54	0.00	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	left	1:1	0.686	1.219	0.836	0.279	0.340	
793.00	23330	Mid	LTE Band 14	10	20.40	19.61	0.03	0	Ant 4	KD40G061JX	QPSK	25	12	0 mm	left	1:1	0.684	1.199	0.820	0.282	0.338	
793.00	23330	Mid	LTE Band 14	10	20.40	19.48	-0.01	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	left	1:1	0.671	1.236	0.829	0.275	0.340	
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 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)	
819.00	26740	Low	LTE Band 26 (Cell)	10	16.90	15.83	-0.01	0	Ant 3b	K033JL79Y6	QPSK	1	0	0 mm	back	1:1	0.510	1.279	0.652	0.258	0.330	
831.50	26865	Mid	LTE Band 26 (Cell)	10	16.90	15.81	0.03	0	Ant 3b	K033JL79Y6	QPSK	1	0	0 mm	back	1:1	0.580	1.285	0.745	0.292	0.375	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	15.96	0.00	0	Ant 3b	K033JL79Y6	QPSK	1	0	0 mm	back	1:1	0.653	1.242	0.811	0.328	0.407	
819.00	26740	Low	LTE Band 26 (Cell)	10	16.90	15.99	-0.02	0	Ant 3b	K033JL79Y6	QPSK	25	12	0 mm	back	1:1	0.547	1.233	0.674	0.276	0.340	
831.50	26865	Mid	LTE Band 26 (Cell)	10	16.90	16.00	0.02	0	Ant 3b	K033JL79Y6	QPSK	25	12	0 mm	back	1:1	0.621	1.230	0.764	0.312	0.384	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	16.04	-0.01	0	Ant 3b	K033JL79Y6	QPSK	25	12	0 mm	back	1:1	0.666	1.219	0.812	0.334	0.407	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	15.90	0.00	0	Ant 3b	K033JL79Y6	QPSK	50	0	0 mm	back	1:1	0.666	1.259	0.838	0.334	0.421	
819.00	26740	Low	LTE Band 26 (Cell)	10	16.90	15.83	-0.01	0	Ant 3b	K033JL79Y6	QPSK	1	0	0 mm	top	1:1	0.655	1.279	0.838	0.278	0.356	
831.50	26865	Mid	LTE Band 26 (Cell)	10	16.90	15.81	0.02	0	Ant 3b	K033JL79Y6	QPSK	1	0	0 mm	top	1:1	0.696	1.285	0.894	0.291	0.374	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	15.96	0.00	0	Ant 3b	K033JL79Y6	QPSK	1	0	0 mm	top	1:1	0.707	1.242	0.878	0.290	0.360	
819.00	26740	Low	LTE Band 26 (Cell)	10	16.90	15.99	0.00	0	Ant 3b	K033JL79Y6	QPSK	25	12	0 mm	top	1:1	0.685	1.233	0.845	0.289	0.356	
831.50	26865	Mid	LTE Band 26 (Cell)	10	16.90	16.00	-0.01	0	Ant 3b	K033JL79Y6	QPSK	25	12	0 mm	top	1:1	0.712	1.230	0.876	0.295	0.363	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	16.04	-0.04	0	Ant 3b	K033JL79Y6	QPSK	25	12	0 mm	top	1:1	0.727	1.219	0.886	0.295	0.360	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	15.90	-0.01	0	Ant 3b	K033JL79Y6	QPSK	50	0	0 mm	top	1:1	0.719	1.259	0.905	0.294	0.370	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	15.96	0.05	0	Ant 3b	K033JL79Y6	QPSK	1	0	0 mm	bottom	1:1	0.000	1.242	0.000	0.000	0.000	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	16.04	0.04	0	Ant 3b	K033JL79Y6	QPSK	25	12	0 mm	bottom	1:1	0.010	1.219	0.012	0.004	0.005	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	15.96	-0.01	0	Ant 3b	K033JL79Y6	QPSK	1	0	0 mm	right	1:1	0.083	1.242	0.103	0.041	0.051	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	16.04	-0.06	0	Ant 3b	K033JL79Y6	QPSK	25	12	0 mm	right	1:1	0.090	1.219	0.110	0.044	0.054	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	15.96	0.14	0	Ant 3b	K033JL79Y6	QPSK	1	0	0 mm	left	1:1	0.020	1.242	0.025	0.008	0.010	
844.00	26990	High	LTE Band 26 (Cell)	10	16.90	16.04	0.03	0	Ant 3b	K033JL79Y6	QPSK	25	12	0 mm	left	1:1	0.019	1.219	0.023	0.008	0.010	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 10-20
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	18.30	18.08	0.02	0	Ant 4	NMX9PNX42D	QPSK	1	0	0 mm	back	1:1	0.943	1.052	0.992	0.445	0.468	
831.50	26865	Mid	LTE Band 26 (Cell)	10	18.30	17.88	-0.02	0	Ant 4	NMX9PNX42D	QPSK	1	0	0 mm	back	1:1	0.869	1.102	0.958	0.413	0.455	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	18.10	-0.01	0	Ant 4	NMX9PNX42D	QPSK	1	49	0 mm	back	1:1	0.779	1.047	0.816	0.373	0.391	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.30	18.07	0.01	0	Ant 4	NMX9PNX42D	QPSK	25	12	0 mm	back	1:1	0.945	1.054	0.996	0.446	0.470	A8
831.50	26865	Mid	LTE Band 26 (Cell)	10	18.30	18.03	-0.02	0	Ant 4	NMX9PNX42D	QPSK	25	12	0 mm	back	1:1	0.865	1.064	0.920	0.412	0.438	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	18.08	-0.01	0	Ant 4	NMX9PNX42D	QPSK	25	12	0 mm	back	1:1	0.829	1.052	0.872	0.392	0.412	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	17.97	0.00	0	Ant 4	NMX9PNX42D	QPSK	50	0	0 mm	back	1:1	0.817	1.079	0.882	0.392	0.423	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	18.10	-0.02	0	Ant 4	NMX9PNX42D	QPSK	1	49	0 mm	top	1:1	0.601	1.047	0.629	0.252	0.264	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	18.08	-0.02	0	Ant 4	NMX9PNX42D	QPSK	25	12	0 mm	top	1:1	0.610	1.052	0.642	0.259	0.272	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	18.10	-0.03	0	Ant 4	NMX9PNX42D	QPSK	1	49	0 mm	bottom	1:1	0.017	1.047	0.018	0.009	0.009	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	18.08	0.06	0	Ant 4	NMX9PNX42D	QPSK	25	12	0 mm	bottom	1:1	0.021	1.052	0.022	0.011	0.012	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	18.10	-0.02	0	Ant 4	NMX9PNX42D	QPSK	1	49	0 mm	right	1:1	0.012	1.047	0.013	0.006	0.006	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	18.08	-0.10	0	Ant 4	NMX9PNX42D	QPSK	25	12	0 mm	right	1:1	0.019	1.052	0.020	0.009	0.009	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	18.10	-0.03	0	Ant 4	NMX9PNX42D	QPSK	1	49	0 mm	left	1:1	0.397	1.047	0.416	0.180	0.188	
844.00	26990	High	LTE Band 26 (Cell)	10	18.30	18.08	0.00	0	Ant 4	NMX9PNX42D	QPSK	25	12	0 mm	left	1:1	0.410	1.052	0.431	0.187	0.197	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.30	18.07	0.01	0	Ant 4	NMX9PNX42D	QPSK	25	12	0 mm	back	1:1	0.922	1.054	0.972	0.456	0.481	
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 10-21
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	16.90	15.88	0.00	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	back	1:1	0.630	1.265	0.797	0.320	0.405	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.90	15.90	0.01	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	back	1:1	0.609	1.259	0.767	0.307	0.387	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.90	15.88	0.01	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	top	1:1	0.691	1.265	0.874	0.289	0.366	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.90	15.90	-0.02	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	top	1:1	0.717	1.259	0.903	0.296	0.373	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.90	15.85	-0.05	0	Ant 3b	K033JL79T6	QPSK	50	0	0 mm	top	1:1	0.717	1.274	0.913	0.297	0.378	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.90	15.86	0.00	0	Ant 3b	K033JL79T6	QPSK	50	0	0 mm	top	1:1	0.714	1.271	0.907	0.314	0.399	
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	16.90	15.88	0.06	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	bottom	1:1	0.007	1.265	0.009	0.003	0.004	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.90	15.90	0.07	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	bottom	1:1	0.012	1.259	0.015	0.005	0.006	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.90	15.88	-0.05	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	right	1:1	0.073	1.265	0.092	0.037	0.047	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.90	15.90	0.03	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	right	1:1	0.104	1.259	0.131	0.049	0.062	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.90	15.88	-0.13	0	Ant 3b	K033JL79T6	QPSK	1	0	0 mm	left	1:1	0.017	1.265	0.022	0.007	0.009	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	16.90	15.90	-0.19	0	Ant 3b	K033JL79T6	QPSK	25	25	0 mm	left	1:1	0.016	1.259	0.020	0.007	0.009	
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 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	18.70	18.00	0.03	0	Ant 4	NW9PNX42D	QPSK	1	0	0 mm	back	1:1	0.848	1.175	0.996	0.407	0.478	A9
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.95	0.00	0	Ant 4	NW9PNX42D	QPSK	25	12	0 mm	back	1:1	0.830	1.189	0.987	0.400	0.476	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.93	-0.01	0	Ant 4	NW9PNX42D	QPSK	50	0	0 mm	back	1:1	0.833	1.194	0.995	0.400	0.478	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.50	-0.01	0	Ant 4	NW9PNX42D	QPSK	1	0	0 mm	back	1:1	0.725	1.318	0.956	0.348	0.459	
2 CC Uplink	SCC	829.30	20453	Mid	LTE Band 5 (Cell)	5								1	24									
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	18.00	0.13	0	Ant 4	NW9PNX42D	QPSK	1	0	0 mm	top	1:1	0.553	1.175	0.650	0.235	0.276	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.95	0.01	0	Ant 4	NW9PNX42D	QPSK	25	12	0 mm	top	1:1	0.564	1.189	0.671	0.239	0.284	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	18.00	0.06	0	Ant 4	NW9PNX42D	QPSK	1	0	0 mm	bottom	1:1	0.016	1.175	0.019	0.008	0.009	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.95	0.08	0	Ant 4	NW9PNX42D	QPSK	25	12	0 mm	bottom	1:1	0.017	1.189	0.020	0.009	0.011	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	18.00	-0.03	0	Ant 4	NW9PNX42D	QPSK	1	0	0 mm	right	1:1	0.015	1.175	0.018	0.007	0.008	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.95	-0.08	0	Ant 4	NW9PNX42D	QPSK	25	12	0 mm	right	1:1	0.019	1.189	0.023	0.009	0.011	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	18.00	0.03	0	Ant 4	NW9PNX42D	QPSK	1	0	0 mm	left	1:1	0.370	1.175	0.435	0.168	0.197	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.95	-0.02	0	Ant 4	NW9PNX42D	QPSK	25	12	0 mm	left	1:1	0.383	1.189	0.455	0.171	0.203	
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 10-23
LTE Band 66 (AWS) 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)	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	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.26	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	back	1:1	0.612	1.271	0.778	0.248	0.315	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	12.30	11.14	-0.03	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	back	1:1	0.600	1.306	0.784	0.244	0.319	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	12.30	11.14	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	back	1:1	0.603	1.306	0.788	0.247	0.323	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.24	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	back	1:1	0.637	1.276	0.813	0.257	0.328	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.34	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	back	1:1	0.643	1.247	0.802	0.261	0.325	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.22	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	100	0	0 mm	back	1:1	0.581	1.282	0.745	0.239	0.306	
1 CC Uplink	N/A	1775.00	132622	High	LTE Band 66 (AWS)	10	12.30	10.97	0.02	0	Ant 1b	W4KQW6V71Y	QPSK	25	0	0 mm	back	1:1	0.641	1.358	0.870	0.256	0.348	
2 CC Uplink	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.16	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	back	1:1	0.637	1.300	0.828	0.256	0.333	
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	12.30	11.20	0.03	0	Ant 1b	W4KQW6V71Y	QPSK	25	0	0 mm	back	1:1	0.700	1.288	0.902	0.279	0.359	
2 CC Uplink	SCC	1765.10	132523	High	LTE Band 66 (AWS)	10								25	25									
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.26	0.05	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	top	1:1	0.002	1.271	0.003	0.000	0.000	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.34	0.06	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	top	1:1	0.002	1.247	0.002	0.000	0.000	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.26	-0.05	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	bottom	1:1	0.332	1.271	0.422	0.126	0.160	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.34	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	bottom	1:1	0.341	1.247	0.425	0.130	0.162	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.26	0.05	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	right	1:1	0.001	1.271	0.001	0.000	0.000	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.34	0.03	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	right	1:1	0.002	1.247	0.002	0.000	0.000	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.26	0.07	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	left	1:1	0.049	1.271	0.062	0.021	0.027	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	12.30	11.34	0.02	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	left	1:1	0.052	1.247	0.065	0.023	0.029	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																			Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 10-24
LTE Band 66 (AWS) 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	1720.00	132072	Low	LTE Band 66 (AWS)	20	14.00	12.94	-0.01	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	back	1:1	0.587	1.276	0.749	0.231	0.295	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	13.00	0.01	0	Ant 2b	CP7K00J0XC	QPSK	1	99	0 mm	back	1:1	0.639	1.259	0.805	0.251	0.316	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	14.00	12.61	0.00	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	back	1:1	0.621	1.377	0.855	0.249	0.343	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	14.00	12.63	-0.01	0	Ant 2b	CP7K00J0XC	QPSK	1	50	0 mm	back	1:1	0.618	1.371	0.847	0.247	0.339	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	14.00	13.00	-0.03	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:1	0.629	1.259	0.792	0.252	0.317	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	13.06	-0.03	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:1	0.650	1.242	0.807	0.259	0.322	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	14.00	12.98	0.00	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:1	0.629	1.265	0.796	0.252	0.319	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	12.97	0.02	0	Ant 2b	CP7K00J0XC	QPSK	100	0	0 mm	back	1:1	0.633	1.268	0.803	0.255	0.323	
1 CC Uplink	N/A	1775.00	132622	High	LTE Band 66 (AWS)	10	14.00	12.97	-0.02	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	back	1:1	0.599	1.268	0.760	0.244	0.309	
2 CC Uplink	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	14.00	12.35	0.00	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	back	1:1	0.559	1.462	0.817	0.215	0.314	
2 CC Uplink	SCC	1750.20	132374	High	LTE Band 66 (AWS)	20								1	99									
2 CC Uplink	PCC	1775.00	132622	High	LTE Band 66 (AWS)	10	14.00	13.01	0.02	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	back	1:1	0.616	1.256	0.774	0.240	0.301	
2 CC Uplink	SCC	1765.10	132523	High	LTE Band 66 (AWS)	10								1	49									
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	13.00	0.05	0	Ant 2b	CP7K00J0XC	QPSK	1	99	0 mm	top	1:1	0.005	1.259	0.006	0.001	0.001	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	13.06	0.06	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	top	1:1	0.006	1.242	0.007	0.002	0.002	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	13.00	-0.08	0	Ant 2b	CP7K00J0XC	QPSK	1	99	0 mm	bottom	1:1	0.577	1.259	0.726	0.229	0.288	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	13.06	-0.07	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	bottom	1:1	0.599	1.242	0.744	0.239	0.297	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	13.00	-0.01	0	Ant 2b	CP7K00J0XC	QPSK	1	99	0 mm	right	1:1	0.109	1.259	0.137	0.051	0.064	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	13.06	-0.11	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	right	1:1	0.110	1.242	0.137	0.052	0.065	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	13.00	-0.19	0	Ant 2b	CP7K00J0XC	QPSK	1	99	0 mm	left	1:1	0.000	1.259	0.000	0.000	0.000	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.00	13.06	0.09	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	left	1:1	0.002	1.242	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								

Table 10-25
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) (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	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.21	-0.01	0	Ant 3a	NWGPNX42D	QPSK	1	0	0 mm	back	1:1	0.256	1.285	0.329	0.121	0.155	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.28	-0.03	0	Ant 3a	NWGPNX42D	QPSK	50	25	0 mm	back	1:1	0.265	1.265	0.335	0.125	0.158	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.21	-0.14	0	Ant 3a	NWGPNX42D	QPSK	1	0	0 mm	top	1:1	0.206	1.285	0.265	0.066	0.085	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.28	0.06	0	Ant 3a	NWGPNX42D	QPSK	50	25	0 mm	top	1:1	0.216	1.265	0.273	0.070	0.089	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.21	0.08	0	Ant 3a	NWGPNX42D	QPSK	1	0	0 mm	bottom	1:1	0.009	1.285	0.012	0.003	0.004	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.28	0.06	0	Ant 3a	NWGPNX42D	QPSK	50	25	0 mm	bottom	1:1	0.004	1.265	0.005	0.000	0.000	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	13.30	12.19	-0.01	0	Ant 3a	NWGPNX42D	QPSK	1	0	0 mm	right	1:1	0.579	1.291	0.747	0.247	0.319	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.21	-0.06	0	Ant 3a	NWGPNX42D	QPSK	1	0	0 mm	right	1:1	0.647	1.285	0.831	0.266	0.342	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	13.30	11.96	0.00	0	Ant 3a	NWGPNX42D	QPSK	1	0	0 mm	right	1:1	0.603	1.361	0.821	0.255	0.347	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.28	-0.04	0	Ant 3a	NWGPNX42D	QPSK	50	25	0 mm	right	1:1	0.616	1.265	0.779	0.260	0.329	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	13.30	12.20	0.01	0	Ant 3a	NWGPNX42D	QPSK	100	0	0 mm	right	1:1	0.572	1.288	0.737	0.246	0.317	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	10	13.30	12.20	-0.04	0	Ant 3a	NWGPNX42D	QPSK	1	0	0 mm	right	1:1	0.573	1.288	0.738	0.248	0.319	
2 CC Uplink	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.27	-0.03	0	Ant 3a	NWGPNX42D	QPSK	1	0	0 mm	right	1:1	0.677	1.268	0.858	0.285	0.361	
2 CC Uplink	SCC	1725.20	132124	Mid	LTE Band 66 (AWS)	20								1	99									
2 CC Uplink	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	10	13.30	12.36	-0.03	0	Ant 3a	NWGPNX42D	QPSK	1	0	0 mm	right	1:1	0.569	1.242	0.707	0.250	0.311	
2 CC Uplink	SCC	1735.10	132223	Mid	LTE Band 66 (AWS)	10								1	49									
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.21	0.05	0	Ant 3a	NWGPNX42D	QPSK	1	0	0 mm	left	1:1	0.009	1.285	0.012	0.003	0.004	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.30	12.28	0.08	0	Ant 3a	NWGPNX42D	QPSK	50	25	0 mm	left	1:1	0.008	1.265	0.010	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 10-26
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) (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	14.80	13.66	-0.01	0	Ant 4	KD40G061JX	QPSK	1	50	0 mm	back	1:1	0.702	1.300	0.913	0.292	0.380	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.70	0.09	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	back	1:1	0.695	1.288	0.895	0.287	0.370	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	14.80	13.68	0.02	0	Ant 4	KD40G061JX	QPSK	1	50	0 mm	back	1:1	0.672	1.294	0.870	0.277	0.358	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	14.80	13.77	0.00	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	back	1:1	0.742	1.268	0.941	0.305	0.387	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	14.80	13.67	-0.01	0	Ant 4	KD40G061JX	QPSK	50	50	0 mm	back	1:1	0.724	1.297	0.939	0.297	0.385	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.83	0.06	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	back	1:1	0.683	1.250	0.854	0.283	0.354	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	14.80	13.75	0.00	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	back	1:1	0.689	1.274	0.878	0.283	0.361	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.69	-0.01	0	Ant 4	KD40G061JX	QPSK	100	0	0 mm	back	1:1	0.698	1.291	0.901	0.290	0.374	
1 CC Uplink	N/A	1715.00	132022	Low	LTE Band 66 (AWS)	10	14.80	13.90	0.06	0	Ant 4	KD40G061JX	QPSK	25	25	0 mm	back	1:1	0.608	1.230	0.748	0.249	0.306	
2 CC Uplink	PCC	1720.00	132072	Low	LTE Band 66 (AWS)	20	14.80	13.80	0.00	0	Ant 4	KD40G061JX	QPSK	50	50	0 mm	back	1:1	0.775	1.259	0.976	0.324	0.408	A10
2 CC Uplink	SCC	1739.80	132270	Low	LTE Band 66 (AWS)	20								50	0									
2 CC Uplink	PCC	1715.00	132022	Low	LTE Band 66 (AWS)	10	14.80	13.52	0.02	0	Ant 4	KD40G061JX	QPSK	25	25	0 mm	back	1:1	0.580	1.343	0.779	0.240	0.322	
2 CC Uplink	SCC	1724.90	132121	Low	LTE Band 66 (AWS)	10								25	0									
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.70	0.01	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	top	1:1	0.320	1.288	0.412	0.139	0.179	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.83	-0.01	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	top	1:1	0.327	1.250	0.409	0.143	0.179	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.70	0.04	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	bottom	1:1	0.000	1.288	0.000	0.000	0.000	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.83	0.03	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	bottom	1:1	0.000	1.250	0.000	0.000	0.000	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.70	0.05	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	right	1:1	0.012	1.288	0.015	0.005	0.006	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.83	0.04	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	right	1:1	0.012	1.250	0.015	0.005	0.006	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.70	-0.04	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	left	1:1	0.515	1.288	0.663	0.183	0.236	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.80	13.83	-0.01	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	left	1:1	0.506	1.250	0.633	0.180	0.225	
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 10-27
LTE Band 25 (PCS) Antenna 1b 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	11.80	10.89	0.02	0	Ant 1b	W4KQW6V71Y	QPSK	1	99	0 mm	back	1:1	0.686	1.233	0.846	0.262	0.323	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.20	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	back	1:1	0.647	1.148	0.743	0.251	0.288	
1905.00	26590	High	LTE Band 25 (PCS)	20	11.80	11.12	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	back	1:1	0.658	1.169	0.769	0.249	0.291	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.22	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	back	1:1	0.694	1.143	0.793	0.263	0.301	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.24	0.04	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	back	1:1	0.706	1.138	0.803	0.269	0.306	
1905.00	26590	High	LTE Band 25 (PCS)	20	11.80	11.21	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	back	1:1	0.684	1.146	0.784	0.258	0.296	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.18	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	100	0	0 mm	back	1:1	0.696	1.153	0.802	0.263	0.303	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.20	0.08	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	top	1:1	0.000	1.148	0.000	0.000	0.000	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.24	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	top	1:1	0.000	1.138	0.000	0.000	0.000	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.20	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	bottom	1:1	0.397	1.148	0.456	0.139	0.160	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.24	-0.02	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	bottom	1:1	0.413	1.138	0.470	0.145	0.165	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.20	0.03	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	right	1:1	0.008	1.148	0.009	0.003	0.003	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.24	0.07	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	right	1:1	0.010	1.138	0.011	0.004	0.005	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.20	-0.03	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	left	1:1	0.048	1.148	0.055	0.019	0.022	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.24	-0.04	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	left	1:1	0.049	1.138	0.056	0.021	0.024	
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 2b 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	14.20	13.77	-0.08	0	Ant 2b	NMX9PNX42D	QPSK	1	50	0 mm	back	1:1	0.722	1.104	0.797	0.281	0.310	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.20	13.48	0.00	0	Ant 2b	NMX9PNX42D	QPSK	1	50	0 mm	back	1:1	0.699	1.180	0.825	0.273	0.322	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.20	13.73	-0.04	0	Ant 2b	NMX9PNX42D	QPSK	1	50	0 mm	back	1:1	0.681	1.114	0.759	0.266	0.296	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.20	13.83	0.01	0	Ant 2b	NMX9PNX42D	QPSK	50	50	0 mm	back	1:1	0.739	1.089	0.805	0.288	0.314	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.20	13.82	0.04	0	Ant 2b	NMX9PNX42D	QPSK	50	50	0 mm	back	1:1	0.702	1.091	0.766	0.274	0.299	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.20	13.80	0.00	0	Ant 2b	NMX9PNX42D	QPSK	50	50	0 mm	back	1:1	0.736	1.096	0.807	0.283	0.310	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.20	13.75	-0.08	0	Ant 2b	NMX9PNX42D	QPSK	100	0	0 mm	back	1:1	0.712	1.109	0.790	0.278	0.308	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.20	13.77	0.09	0	Ant 2b	NMX9PNX42D	QPSK	1	50	0 mm	top	1:1	0.002	1.104	0.002	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.20	13.83	0.06	0	Ant 2b	NMX9PNX42D	QPSK	50	50	0 mm	top	1:1	0.001	1.089	0.001	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.20	13.77	-0.05	0	Ant 2b	NMX9PNX42D	QPSK	1	50	0 mm	bottom	1:1	0.762	1.104	0.841	0.274	0.302	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.20	13.48	0.04	0	Ant 2b	NMX9PNX42D	QPSK	1	50	0 mm	bottom	1:1	0.752	1.180	0.887	0.264	0.312	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.20	13.73	0.08	0	Ant 2b	NMX9PNX42D	QPSK	1	50	0 mm	bottom	1:1	0.775	1.114	0.863	0.284	0.316	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.20	13.83	-0.06	0	Ant 2b	NMX9PNX42D	QPSK	50	50	0 mm	bottom	1:1	0.773	1.089	0.842	0.278	0.303	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.20	13.82	-0.07	0	Ant 2b	NMX9PNX42D	QPSK	50	50	0 mm	bottom	1:1	0.769	1.091	0.839	0.271	0.296	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.20	13.80	-0.02	0	Ant 2b	NMX9PNX42D	QPSK	50	50	0 mm	bottom	1:1	0.853	1.096	0.935	0.298	0.327	A11
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.20	13.75	0.01	0	Ant 2b	NMX9PNX42D	QPSK	100	0	0 mm	bottom	1:1	0.832	1.109	0.923	0.292	0.324	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.20	13.77	0.03	0	Ant 2b	NMX9PNX42D	QPSK	1	50	0 mm	right	1:1	0.061	1.104	0.067	0.024	0.026	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.20	13.83	0.01	0	Ant 2b	NMX9PNX42D	QPSK	50	50	0 mm	right	1:1	0.059	1.089	0.064	0.024	0.026	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.20	13.77	0.04	0	Ant 2b	NMX9PNX42D	QPSK	1	50	0 mm	left	1:1	0.006	1.104	0.007	0.002	0.002	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.20	13.83	0.09	0	Ant 2b	NMX9PNX42D	QPSK	50	50	0 mm	left	1:1	0.006	1.089	0.007	0.002	0.002	
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 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	11.80	11.17	-0.05	0	Ant 3a	NMX9PNX42D	QPSK	1	0	0 mm	back	1:1	0.312	1.156	0.361	0.146	0.169	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.30	-0.03	0	Ant 3a	NMX9PNX42D	QPSK	50	25	0 mm	back	1:1	0.316	1.122	0.355	0.148	0.166	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.17	-0.05	0	Ant 3a	NMX9PNX42D	QPSK	1	0	0 mm	top	1:1	0.222	1.156	0.257	0.072	0.083	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.30	0.04	0	Ant 3a	NMX9PNX42D	QPSK	50	25	0 mm	top	1:1	0.218	1.122	0.245	0.071	0.080	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.17	0.03	0	Ant 3a	NMX9PNX42D	QPSK	1	0	0 mm	bottom	1:1	0.003	1.156	0.003	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.30	0.04	0	Ant 3a	NMX9PNX42D	QPSK	50	25	0 mm	bottom	1:1	0.003	1.122	0.003	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.17	0.04	0	Ant 3a	NMX9PNX42D	QPSK	1	0	0 mm	right	1:1	0.690	1.156	0.798	0.271	0.313	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.14	0.00	0	Ant 3a	NMX9PNX42D	QPSK	1	99	0 mm	right	1:1	0.682	1.164	0.794	0.265	0.308	
1905.00	26590	High	LTE Band 25 (PCS)	20	11.80	11.13	0.00	0	Ant 3a	NMX9PNX42D	QPSK	1	99	0 mm	right	1:1	0.735	1.167	0.858	0.278	0.324	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.30	0.01	0	Ant 3a	NMX9PNX42D	QPSK	50	25	0 mm	right	1:1	0.699	1.122	0.784	0.273	0.306	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	11.80	11.24	-0.01	0	Ant 3a	NMX9PNX42D	QPSK	50	25	0 mm	right	1:1	0.706	1.138	0.803	0.274	0.312	
1905.00	26590	High	LTE Band 25 (PCS)	20	11.80	11.26	-0.06	0	Ant 3a	NMX9PNX42D	QPSK	50	50	0 mm	right	1:1	0.768	1.132	0.869	0.293	0.332	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.15	-0.01	0	Ant 3a	NMX9PNX42D	QPSK	100	0	0 mm	right	1:1	0.698	1.161	0.810	0.273	0.317	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.17	0.08	0	Ant 3a	NMX9PNX42D	QPSK	1	0	0 mm	left	1:1	0.002	1.156	0.002	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	11.80	11.30	0.04	0	Ant 3a	NMX9PNX42D	QPSK	50	25	0 mm	left	1:1	0.000	1.122	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 10-30
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)	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.34	-0.01	0	Ant 4	KD40G061JX	QPSK	1	50	0 mm	back	1:1	0.543	1.164	0.632	0.216	0.251	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.38	0.00	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	back	1:1	0.564	1.153	0.650	0.224	0.258	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.34	-0.01	0	Ant 4	KD40G061JX	QPSK	1	50	0 mm	top	1:1	0.457	1.164	0.532	0.188	0.219	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.38	-0.02	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	top	1:1	0.472	1.153	0.544	0.195	0.225	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.34	0.06	0	Ant 4	KD40G061JX	QPSK	1	50	0 mm	bottom	1:1	0.002	1.164	0.002	0.000	0.000	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.38	0.03	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	bottom	1:1	0.002	1.153	0.002	0.000	0.000	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.34	0.05	0	Ant 4	KD40G061JX	QPSK	1	50	0 mm	right	1:1	0.004	1.164	0.005	0.001	0.001	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.38	0.02	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	right	1:1	0.005	1.153	0.006	0.002	0.002	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.00	13.27	-0.01	0	Ant 4	KD40G061JX	QPSK	1	50	0 mm	left	1:1	0.650	1.183	0.769	0.229	0.271	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.34	0.00	0	Ant 4	KD40G061JX	QPSK	1	50	0 mm	left	1:1	0.632	1.164	0.736	0.223	0.260	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.00	12.99	-0.02	0	Ant 4	KD40G061JX	QPSK	1	50	0 mm	left	1:1	0.632	1.262	0.798	0.222	0.280	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.00	13.33	-0.08	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	left	1:1	0.696	1.167	0.812	0.245	0.286	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.38	-0.02	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	left	1:1	0.657	1.153	0.758	0.231	0.266	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.00	13.29	0.07	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	left	1:1	0.652	1.178	0.768	0.227	0.267	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.00	13.32	0.03	0	Ant 4	KD40G061JX	QPSK	100	0	0 mm	left	1:1	0.621	1.169	0.726	0.224	0.262	
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 1b 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	15.00	13.30	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	back	1:1	0.625	1.479	0.924	0.224	0.331	
2310.00	27710	Mid	LTE Band 30	10	15.00	13.38	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	25	25	0 mm	back	1:1	0.615	1.452	0.893	0.220	0.319	
2310.00	27710	Mid	LTE Band 30	10	15.00	13.28	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	back	1:1	0.605	1.486	0.899	0.218	0.324	
2310.00	27710	Mid	LTE Band 30	10	15.00	13.30	0.05	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	top	1:1	0.001	1.479	0.001	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	15.00	13.38	0.06	0	Ant 1b	W4KQW6V71Y	QPSK	25	25	0 mm	top	1:1	0.001	1.452	0.001	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	15.00	13.30	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	bottom	1:1	0.499	1.479	0.738	0.169	0.250	
2310.00	27710	Mid	LTE Band 30	10	15.00	13.38	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	25	25	0 mm	bottom	1:1	0.516	1.452	0.749	0.175	0.254	
2310.00	27710	Mid	LTE Band 30	10	15.00	13.30	0.02	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	right	1:1	0.000	1.479	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	15.00	13.38	0.04	0	Ant 1b	W4KQW6V71Y	QPSK	25	25	0 mm	right	1:1	0.000	1.452	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	15.00	13.30	-0.13	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	left	1:1	0.024	1.479	0.035	0.010	0.015	
2310.00	27710	Mid	LTE Band 30	10	15.00	13.38	0.06	0	Ant 1b	W4KQW6V71Y	QPSK	25	25	0 mm	left	1:1	0.023	1.452	0.033	0.010	0.015	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-32
LTE Band 30 Antenna 2b 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	15.00	14.04	-0.01	0	Ant 2b	CP7K00J9XC	QPSK	1	49	0 mm	back	1:1	0.726	1.247	0.905	0.304	0.379	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.09	0.00	0	Ant 2b	CP7K00J9XC	QPSK	25	25	0 mm	back	1:1	0.754	1.233	0.930	0.317	0.391	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.03	0.00	0	Ant 2b	CP7K00J9XC	QPSK	50	0	0 mm	back	1:1	0.744	1.250	0.930	0.313	0.391	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.04	0.02	0	Ant 2b	CP7K00J9XC	QPSK	1	49	0 mm	top	1:1	0.009	1.247	0.011	0.003	0.004	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.09	0.04	0	Ant 2b	CP7K00J9XC	QPSK	25	25	0 mm	top	1:1	0.007	1.233	0.009	0.002	0.002	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.04	-0.01	0	Ant 2b	CP7K00J9XC	QPSK	1	49	0 mm	bottom	1:1	0.730	1.247	0.910	0.252	0.314	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.09	-0.02	0	Ant 2b	CP7K00J9XC	QPSK	25	25	0 mm	bottom	1:1	0.758	1.233	0.935	0.262	0.323	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.03	0.01	0	Ant 2b	CP7K00J9XC	QPSK	50	0	0 mm	bottom	1:1	0.799	1.250	0.999	0.273	0.341	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.04	0.09	0	Ant 2b	CP7K00J9XC	QPSK	1	49	0 mm	right	1:1	0.041	1.247	0.051	0.018	0.022	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.09	0.05	0	Ant 2b	CP7K00J9XC	QPSK	25	25	0 mm	right	1:1	0.042	1.233	0.052	0.018	0.022	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.04	0.03	0	Ant 2b	CP7K00J9XC	QPSK	1	49	0 mm	left	1:1	0.008	1.247	0.010	0.003	0.004	
2310.00	27710	Mid	LTE Band 30	10	15.00	14.09	0.07	0	Ant 2b	CP7K00J9XC	QPSK	25	25	0 mm	left	1:1	0.009	1.233	0.011	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 10-33
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) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																						
2310.00	27710	Mid	LTE Band 30	10	12.70	11.24	0.03	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	back	1:1	0.450	1.400	0.630	0.199	0.279	
2310.00	27710	Mid	LTE Band 30	10	12.70	11.26	0.01	0	Ant 3a	P34PWY9M0P	QPSK	25	12	0 mm	back	1:1	0.461	1.393	0.642	0.205	0.286	
2310.00	27710	Mid	LTE Band 30	10	12.70	11.24	0.03	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	top	1:1	0.337	1.400	0.472	0.112	0.157	
2310.00	27710	Mid	LTE Band 30	10	12.70	11.26	-0.01	0	Ant 3a	P34PWY9M0P	QPSK	25	12	0 mm	top	1:1	0.345	1.393	0.481	0.115	0.160	
2310.00	27710	Mid	LTE Band 30	10	12.70	11.24	-0.03	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	bottom	1:1	0.017	1.400	0.024	0.008	0.011	
2310.00	27710	Mid	LTE Band 30	10	12.70	11.26	0.06	0	Ant 3a	P34PWY9M0P	QPSK	25	12	0 mm	bottom	1:1	0.016	1.393	0.022	0.007	0.010	
2310.00	27710	Mid	LTE Band 30	10	12.70	11.24	0.01	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	right	1:1	0.635	1.400	0.889	0.240	0.336	
2310.00	27710	Mid	LTE Band 30	10	12.70	11.26	0.01	0	Ant 3a	P34PWY9M0P	QPSK	25	12	0 mm	right	1:1	0.652	1.393	0.908	0.246	0.343	
2310.00	27710	Mid	LTE Band 30	10	12.70	11.15	-0.04	0	Ant 3a	P34PWY9M0P	QPSK	50	0	0 mm	right	1:1	0.667	1.429	0.953	0.249	0.356	
2310.00	27710	Mid	LTE Band 30	10	12.70	11.24	0.03	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	left	1:1	0.001	1.400	0.001	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	12.70	11.26	0.05	0	Ant 3a	P34PWY9M0P	QPSK	25	12	0 mm	left	1:1	0.002	1.393	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													

Table 10-34
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) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																						
2310.00	27710	Mid	LTE Band 30	10	11.60	11.15	0.03	0	Ant 4	H79KJRF9N0	QPSK	1	25	0 mm	back	1:1	0.801	1.109	0.888	0.315	0.349	
2310.00	27710	Mid	LTE Band 30	10	11.60	11.19	0.00	0	Ant 4	H79KJRF9N0	QPSK	25	12	0 mm	back	1:1	0.829	1.099	0.911	0.325	0.357	
2310.00	27710	Mid	LTE Band 30	10	11.60	11.13	0.00	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	back	1:1	0.878	1.114	0.978	0.341	0.380	A12
2310.00	27710	Mid	LTE Band 30	10	11.60	11.15	-0.02	0	Ant 4	H79KJRF9N0	QPSK	1	25	0 mm	top	1:1	0.268	1.109	0.297	0.086	0.095	
2310.00	27710	Mid	LTE Band 30	10	11.60	11.19	0.02	0	Ant 4	H79KJRF9N0	QPSK	25	12	0 mm	top	1:1	0.277	1.099	0.304	0.089	0.098	
2310.00	27710	Mid	LTE Band 30	10	11.60	11.15	0.06	0	Ant 4	H79KJRF9N0	QPSK	1	25	0 mm	bottom	1:1	0.009	1.109	0.010	0.003	0.003	
2310.00	27710	Mid	LTE Band 30	10	11.60	11.19	-0.07	0	Ant 4	H79KJRF9N0	QPSK	25	12	0 mm	bottom	1:1	0.009	1.099	0.010	0.003	0.003	
2310.00	27710	Mid	LTE Band 30	10	11.60	11.15	0.19	0	Ant 4	H79KJRF9N0	QPSK	1	25	0 mm	right	1:1	0.000	1.109	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	11.60	11.19	0.09	0	Ant 4	H79KJRF9N0	QPSK	25	12	0 mm	right	1:1	0.000	1.099	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	11.60	11.15	0.02	0	Ant 4	H79KJRF9N0	QPSK	1	25	0 mm	left	1:1	0.578	1.109	0.641	0.204	0.226	
2310.00	27710	Mid	LTE Band 30	10	11.60	11.19	-0.02	0	Ant 4	H79KJRF9N0	QPSK	25	12	0 mm	left	1:1	0.596	1.099	0.655	0.210	0.231	
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 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	2510.00	20850	Low	LTE Band 7	20	14.70	13.63	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	back	1:1	0.706	1.279	0.903	0.244	0.312	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.70	13.86	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	back	1:1	0.715	1.213	0.867	0.246	0.298	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.70	13.74	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	back	1:1	0.752	1.247	0.938	0.258	0.322	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.70	13.67	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	50	0 mm	back	1:1	0.743	1.268	0.942	0.256	0.325	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.70	13.87	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	back	1:1	0.748	1.211	0.906	0.257	0.311	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.70	13.84	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	back	1:1	0.773	1.219	0.942	0.265	0.323	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.70	13.85	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	100	0	0 mm	back	1:1	0.797	1.216	0.969	0.271	0.330	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.70	13.86	0.04	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	top	1:1	0.003	1.213	0.004	0.000	0.000	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.70	13.87	0.02	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	top	1:1	0.004	1.211	0.005	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.70	13.63	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	bottom	1:1	0.739	1.279	0.945	0.239	0.306	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.70	13.86	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	bottom	1:1	0.769	1.213	0.933	0.249	0.302	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.70	13.74	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	bottom	1:1	0.800	1.247	0.998	0.260	0.324	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.70	13.67	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	50	50	0 mm	bottom	1:1	0.785	1.268	0.995	0.254	0.322	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.70	13.87	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	bottom	1:1	0.813	1.211	0.985	0.263	0.318	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.70	13.84	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	bottom	1:1	0.818	1.219	0.997	0.264	0.322	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.70	13.85	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	100	0	0 mm	bottom	1:1	0.819	1.216	0.996	0.266	0.323	
2 CC Uplink	PCC	2560.00	21350	High	LTE Band 7	20	14.70	13.61	0.04	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	bottom	1:1	0.749	1.285	0.962	0.242	0.311	
2 CC Uplink	SCC	2540.20	21152	High	LTE Band 7	20								1	99									
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.70	13.86	0.06	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	right	1:1	0.004	1.213	0.005	0.001	0.001	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.70	13.87	0.08	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	right	1:1	0.003	1.211	0.004	0.000	0.000	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.70	13.86	0.20	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	left	1:1	0.016	1.213	0.019	0.006	0.007	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.70	13.87	0.04	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	left	1:1	0.016	1.211	0.019	0.006	0.007	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram														

Table 10-36
LTE Band 7 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)	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	14.30	13.85	-0.06	0	Ant 2b	CP7K00J0XC	QPSK	1	50	0 mm	back	1:1	0.880	1.109	0.976	0.353	0.391	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.30	13.92	0.00	0	Ant 2b	CP7K00J0XC	QPSK	1	99	0 mm	back	1:1	0.822	1.091	0.897	0.335	0.365	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	14.00	-0.04	0	Ant 2b	CP7K00J0XC	QPSK	1	50	0 mm	back	1:1	0.800	1.072	0.858	0.323	0.346	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.30	13.98	-0.06	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:1	0.907	1.076	0.976	0.368	0.396	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.30	13.92	0.00	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	back	1:1	0.891	1.091	0.972	0.360	0.393	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.30	13.98	-0.01	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:1	0.873	1.076	0.939	0.349	0.376	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	14.01	-0.04	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	back	1:1	0.817	1.069	0.873	0.328	0.351	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.30	13.90	-0.01	0	Ant 2b	CP7K00J0XC	QPSK	100	0	0 mm	back	1:1	0.846	1.096	0.927	0.337	0.369	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	14.30	13.96	-0.01	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	back	1:1	0.912	1.081	0.986	0.366	0.396	A13
2 CC Uplink	SCC	2529.80	21048	Low	LTE Band 7	20								50	0									
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	14.00	0.04	0	Ant 2b	CP7K00J0XC	QPSK	1	50	0 mm	top	1:1	0.008	1.072	0.009	0.001	0.001	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	14.01	0.07	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	top	1:1	0.009	1.069	0.010	0.002	0.002	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	14.00	0.02	0	Ant 2b	CP7K00J0XC	QPSK	1	50	0 mm	bottom	1:1	0.617	1.072	0.661	0.205	0.220	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	14.01	-0.03	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	bottom	1:1	0.627	1.069	0.670	0.208	0.222	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	14.00	0.02	0	Ant 2b	CP7K00J0XC	QPSK	1	50	0 mm	right	1:1	0.024	1.072	0.026	0.010	0.011	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	14.01	0.04	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	right	1:1	0.022	1.069	0.024	0.008	0.009	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	14.00	0.09	0	Ant 2b	CP7K00J0XC	QPSK	1	50	0 mm	left	1:1	0.020	1.072	0.021	0.008	0.009	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	14.01	0.02	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	left	1:1	0.022	1.069	0.024	0.008	0.009	
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 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	12.20	11.08	0.03	0	Ant 3a	H79KJRF9N0	QPSK	1	50	0 mm	back	1:1	0.458	1.294	0.593	0.188	0.243	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.20	11.09	0.00	0	Ant 3a	H79KJRF9N0	QPSK	50	25	0 mm	back	1:1	0.470	1.291	0.607	0.193	0.249	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.20	11.08	-0.08	0	Ant 3a	H79KJRF9N0	QPSK	1	50	0 mm	top	1:1	0.278	1.294	0.360	0.092	0.119	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.20	11.09	-0.03	0	Ant 3a	H79KJRF9N0	QPSK	50	25	0 mm	top	1:1	0.285	1.291	0.368	0.093	0.120	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.20	11.08	0.07	0	Ant 3a	H79KJRF9N0	QPSK	1	50	0 mm	bottom	1:1	0.015	1.294	0.019	0.005	0.006	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.20	11.09	-0.14	0	Ant 3a	H79KJRF9N0	QPSK	50	25	0 mm	bottom	1:1	0.015	1.291	0.019	0.005	0.006	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.20	10.95	0.00	0	Ant 3a	H79KJRF9N0	QPSK	1	99	0 mm	right	1:1	0.748	1.334	0.998	0.258	0.344	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.20	11.08	-0.02	0	Ant 3a	H79KJRF9N0	QPSK	1	50	0 mm	right	1:1	0.632	1.294	0.818	0.223	0.289	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	12.20	10.92	-0.03	0	Ant 3a	H79KJRF9N0	QPSK	1	50	0 mm	right	1:1	0.598	1.343	0.803	0.210	0.282	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.20	11.07	-0.01	0	Ant 3a	H79KJRF9N0	QPSK	50	25	0 mm	right	1:1	0.669	1.297	0.868	0.236	0.306	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.20	11.09	0.00	0	Ant 3a	H79KJRF9N0	QPSK	50	25	0 mm	right	1:1	0.661	1.291	0.853	0.233	0.301	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	12.20	10.95	-0.02	0	Ant 3a	H79KJRF9N0	QPSK	50	50	0 mm	right	1:1	0.607	1.334	0.810	0.214	0.285	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.20	11.02	0.00	0	Ant 3a	H79KJRF9N0	QPSK	100	0	0 mm	right	1:1	0.663	1.312	0.870	0.233	0.306	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	12.20	10.95	0.02	0	Ant 3a	H79KJRF9N0	QPSK	1	99	0 mm	right	1:1	0.741	1.334	0.988	0.257	0.343	
2 CC Uplink	SCC	2529.80	21048	Low	LTE Band 7	20								1	0									
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.20	11.08	0.02	0	Ant 3a	H79KJRF9N0	QPSK	1	50	0 mm	left	1:1	0.003	1.294	0.004	0.000	0.000	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.20	11.09	0.04	0	Ant 3a	H79KJRF9N0	QPSK	50	25	0 mm	left	1:1	0.002	1.291	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							

Table 10-38
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	11.60	10.70	0.08	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	back	1:1	0.650	1.230	0.800	0.232	0.285	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.60	10.55	-0.04	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	back	1:1	0.630	1.274	0.803	0.224	0.285	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	11.60	10.35	0.01	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	back	1:1	0.634	1.334	0.846	0.225	0.300	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.60	10.70	0.00	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	back	1:1	0.671	1.230	0.825	0.239	0.294	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.60	10.61	0.00	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	back	1:1	0.642	1.256	0.806	0.227	0.285	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	11.60	10.65	0.03	0	Ant 4	KD40G061JX	QPSK	50	25	0 mm	back	1:1	0.649	1.245	0.808	0.230	0.286	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.60	10.60	0.02	0	Ant 4	KD40G061JX	QPSK	100	0	0 mm	back	1:1	0.669	1.259	0.842	0.238	0.300	
2 CC Uplink	PCC	2560.00	21350	High	LTE Band 7	20	11.60	10.44	0.03	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	back	1:1	0.674	1.306	0.880	0.240	0.313	
2 CC Uplink	SCC	2540.20	21152	High	LTE Band 7	20								1	99									
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.60	10.70	0.00	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	top	1:1	0.300	1.230	0.369	0.094	0.116	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.60	10.70	0.00	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	top	1:1	0.305	1.230	0.375	0.095	0.117	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.60	10.70	0.04	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	bottom	1:1	0.002	1.230	0.002	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.60	10.70	-0.06	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	bottom	1:1	0.004	1.230	0.005	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.60	10.70	0.07	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	right	1:1	0.002	1.230	0.002	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.60	10.70	0.19	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	right	1:1	0.000	1.230	0.000	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.60	10.70	0.02	0	Ant 4	KD40G061JX	QPSK	1	0	0 mm	left	1:1	0.375	1.230	0.461	0.127	0.156	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.60	10.70	-0.03	0	Ant 4	KD40G061JX	QPSK	50	0	0 mm	left	1:1	0.380	1.230	0.467	0.128	0.157	
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 10-39
LTE Band 41 Antenna 1b 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)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.30	14.95	0.10	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	back	1:1.58	0.576	1.365	0.786	0.190	0.259	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.30	14.99	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	back	1:1.58	0.590	1.352	0.798	0.193	0.261	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.30	14.90	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	back	1:1.58	0.664	1.380	0.916	0.214	0.295	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.30	14.90	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	99	0 mm	back	1:1.58	0.589	1.380	0.813	0.184	0.254	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	15.05	0.14	0	Ant 1b	W4KQW6V71Y	QPSK	1	99	0 mm	back	1:1.58	0.604	1.334	0.806	0.188	0.251	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.30	15.06	0.03	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	back	1:1.58	0.618	1.330	0.822	0.201	0.267	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.30	14.96	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	back	1:1.58	0.612	1.361	0.833	0.200	0.272	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.30	15.01	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	back	1:1.58	0.665	1.346	0.895	0.211	0.284	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.30	14.91	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	back	1:1.58	0.619	1.377	0.852	0.196	0.270	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	15.10	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	back	1:1.58	0.622	1.318	0.820	0.194	0.256	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.30	14.94	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	100	0	0 mm	back	1:1.58	0.615	1.368	0.841	0.199	0.272	
1 CC Uplink - Power Class 2	N/A	2593.00	40620	Mid	LTE Band 41	20	17.90	17.00	0.06	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	back	1:2.31	0.685	1.230	0.843	0.222	0.273	
2 CC Uplink - Power Class 3	PCC	2593.00	40620	Mid	LTE Band 41	20	16.30	14.88	0.00	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	back	1:1.58	0.634	1.387	0.879	0.205	0.284	
2 CC Uplink - Power Class 3	SCC	2573.20	40422	Mid	LTE Band 41	20								1	99									
2 CC Uplink - Power Class 2	PCC	2593.00	40620	Mid	LTE Band 41	20	17.90	16.90	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	back	1:2.31	0.699	1.259	0.880	0.221	0.278	
2 CC Uplink - Power Class 2	SCC	2573.20	40422	Mid	LTE Band 41	20								1	99									
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	15.05	-0.05	0	Ant 1b	W4KQW6V71Y	QPSK	1	99	0 mm	top	1:1.58	0.000	1.334	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	15.10	0.06	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	top	1:1.58	0.002	1.318	0.003	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.30	14.95	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	50	0 mm	bottom	1:1.58	0.560	1.365	0.764	0.181	0.247	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.30	14.99	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	bottom	1:1.58	0.594	1.352	0.803	0.191	0.258	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.30	14.90	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	0	0 mm	bottom	1:1.58	0.619	1.380	0.854	0.199	0.275	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.30	14.90	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	99	0 mm	bottom	1:1.58	0.573	1.380	0.791	0.181	0.250	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	15.05	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	99	0 mm	bottom	1:1.58	0.552	1.334	0.736	0.174	0.232	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.30	15.06	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	bottom	1:1.58	0.583	1.330	0.775	0.189	0.251	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.30	14.96	-0.02	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	bottom	1:1.58	0.603	1.361	0.821	0.196	0.267	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.30	15.01	-0.02	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	bottom	1:1.58	0.634	1.346	0.853	0.202	0.272	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.30	14.91	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	25	0 mm	bottom	1:1.58	0.604	1.377	0.832	0.191	0.263	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	15.10	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	bottom	1:1.58	0.570	1.318	0.751	0.179	0.236	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.30	14.94	-0.01	0	Ant 1b	W4KQW6V71Y	QPSK	100	0	0 mm	bottom	1:1.58	0.582	1.368	0.796	0.187	0.256	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	15.05	0.01	0	Ant 1b	W4KQW6V71Y	QPSK	1	99	0 mm	right	1:1.58	0.003	1.334	0.004	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	15.10	0.04	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	right	1:1.58	0.002	1.318	0.003	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	15.05	-0.11	0	Ant 1b	W4KQW6V71Y	QPSK	1	99	0 mm	left	1:1.58	0.011	1.334	0.015	0.003	0.004	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	15.10	-0.17	0	Ant 1b	W4KQW6V71Y	QPSK	50	0	0 mm	left	1:1.58	0.015	1.318	0.020	0.005	0.007	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-40
LTE Band 41 Antenna 2b 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)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.30	16.05	0.02	0	Ant 2b	CP7K00J0XC	QPSK	1	99	0 mm	back	1:1.58	0.907	1.059	0.961	0.355	0.376	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.30	16.16	-0.03	0	Ant 2b	CP7K00J0XC	QPSK	1	50	0 mm	back	1:1.58	0.934	1.033	0.965	0.365	0.377	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.30	16.12	-0.02	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	back	1:1.58	0.906	1.042	0.944	0.343	0.357	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.30	16.25	0.00	0	Ant 2b	CP7K00J0XC	QPSK	1	99	0 mm	back	1:1.58	0.776	1.012	0.785	0.300	0.304	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	16.29	0.01	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	back	1:1.58	0.780	1.002	0.782	0.289	0.290	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.30	16.26	0.01	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:1.58	0.960	1.009	0.969	0.372	0.375	A14
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.30	16.14	-0.01	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	back	1:1.58	0.899	1.038	0.933	0.365	0.379	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.30	16.27	-0.01	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:1.58	0.953	1.007	0.960	0.373	0.376	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.30	16.26	0.00	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:1.58	0.887	1.009	0.895	0.339	0.342	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.30	16.26	-0.01	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	back	1:1.58	0.790	1.009	0.797	0.306	0.309	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	16.30	0.00	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:1.58	0.789	1.000	0.789	0.297	0.297	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	16.27	0.01	0	Ant 2b	CP7K00J0XC	QPSK	100	0	0 mm	back	1:1.58	0.800	1.007	0.806	0.299	0.301	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	17.90	17.08	0.00	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:2.31	0.749	1.208	0.905	0.306	0.370	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	17.90	17.06	0.00	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	back	1:2.31	0.782	1.213	0.949	0.330	0.400	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	LTE Band 41	20	16.30	16.19	0.00	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	back	1:1.58	0.869	1.026	0.892	0.354	0.363	
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	17.90	17.17	-0.02	0	Ant 2b	CP7K00J0XC	QPSK	50	50	0 mm	back	1:2.31	0.799	1.183	0.945	0.332	0.393	
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	16.30	16.29	0.01	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	top	1:1.58	0.006	1.002	0.006	0.001	0.001	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	16.30	0.05	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	top	1:1.58	0.006	1.000	0.006	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	16.29	0.02	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	bottom	1:1.58	0.552	1.002	0.553	0.178	0.178	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	16.30	0.03	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	bottom	1:1.58	0.543	1.000	0.543	0.176	0.176	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	16.29	0.09	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	right	1:1.58	0.035	1.002	0.035	0.012	0.012	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	16.30	0.05	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	right	1:1.58	0.035	1.000	0.035	0.013	0.013	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	16.29	-0.07	0	Ant 2b	CP7K00J0XC	QPSK	1	0	0 mm	left	1:1.58	0.030	1.002	0.030	0.011	0.011	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.30	16.30	0.05	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	left	1:1.58	0.030	1.000	0.030	0.011	0.011	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.30	16.27	0.01	0	Ant 2b	CP7K00J0XC	QPSK	50	25	0 mm	back	1:1.58	0.892	1.007	0.898	0.363	0.366	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram										

Note: Blue entry represents variability measurement.

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

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC 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	14.90	14.03	-0.07	0	Ant 3a	P34PWY9M0P	QPSK	1	99	0 mm	back	1:1.58	0.528	1.222	0.645	0.225	0.275	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.90	13.79	0.05	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	back	1:1.58	0.512	1.291	0.661	0.213	0.275	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.90	13.54	0.01	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	back	1:1.58	0.434	1.368	0.594	0.178	0.244	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.90	13.25	0.04	0	Ant 3a	P34PWY9M0P	QPSK	1	99	0 mm	back	1:1.58	0.402	1.462	0.588	0.162	0.237	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.90	13.28	0.05	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	back	1:1.58	0.414	1.452	0.601	0.167	0.242	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	14.07	0.02	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	back	1:1.58	0.553	1.211	0.670	0.231	0.280	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.90	13.92	0.02	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	back	1:1.58	0.507	1.253	0.635	0.210	0.263	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.90	13.57	0.01	0	Ant 3a	P34PWY9M0P	QPSK	50	0	0 mm	back	1:1.58	0.432	1.358	0.587	0.177	0.240	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.90	13.39	0.03	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	back	1:1.58	0.413	1.416	0.585	0.167	0.236	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.90	13.40	0.05	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	back	1:1.58	0.411	1.413	0.581	0.165	0.233	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	13.99	-0.04	0	Ant 3a	P34PWY9M0P	QPSK	100	0	0 mm	back	1:1.58	0.544	1.233	0.671	0.229	0.282	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	14.03	-0.03	0	Ant 3a	P34PWY9M0P	QPSK	1	99	0 mm	top	1:1.58	0.367	1.222	0.448	0.121	0.148	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	14.07	-0.01	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	top	1:1.58	0.359	1.211	0.435	0.117	0.142	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	14.03	-0.13	0	Ant 3a	P34PWY9M0P	QPSK	1	99	0 mm	bottom	1:1.58	0.020	1.222	0.024	0.008	0.010	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	14.07	0.08	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	bottom	1:1.58	0.023	1.211	0.028	0.009	0.011	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	14.03	0.00	0	Ant 3a	P34PWY9M0P	QPSK	1	99	0 mm	right	1:1.58	0.800	1.222	0.978	0.284	0.347	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.90	13.79	0.07	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	right	1:1.58	0.683	1.291	0.882	0.242	0.312	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.90	13.54	-0.06	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	right	1:1.58	0.623	1.368	0.852	0.217	0.297	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.90	13.25	0.12	0	Ant 3a	P34PWY9M0P	QPSK	1	99	0 mm	right	1:1.58	0.617	1.462	0.902	0.214	0.313	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.90	13.28	0.17	0	Ant 3a	P34PWY9M0P	QPSK	1	0	0 mm	right	1:1.58	0.607	1.452	0.881	0.211	0.306	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	14.07	-0.01	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	right	1:1.58	0.823	1.211	0.997	0.294	0.356	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	14.04	-0.01	0	Ant 3a	P34PWY9M0P	QPSK	50	50	0 mm	right	1:1.58	0.777	1.219	0.947	0.281	0.343	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.90	13.92	0.02	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	right	1:1.58	0.684	1.253	0.857	0.246	0.308	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.90	13.57	-0.01	0	Ant 3a	P34PWY9M0P	QPSK	50	0	0 mm	right	1:1.58	0.626	1.358	0.850	0.223	0.303	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.90	13.39	-0.01	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	right	1:1.58	0.628	1.416	0.889	0.223	0.316	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.90	13.40	0.00	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	right	1:1.58	0.635	1.413	0.897	0.223	0.315	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	13.99	-0.01	0	Ant 3a	P34PWY9M0P	QPSK	100	0	0 mm	right	1:1.58	0.803	1.233	0.990	0.291	0.359	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	16.50	15.15	0.01	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	right	1:2.31	0.659	1.365	0.900	0.239	0.326	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	16.50	15.11	0.02	0	Ant 3a	P34PWY9M0P	QPSK	50	50	0 mm	right	1:2.31	0.659	1.377	0.907	0.238	0.328	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	LTE Band 41	20	14.90	13.94	-0.02	0	Ant 3a	P34PWY9M0P	QPSK	50	50	0 mm	right	1:1.58	0.728	1.247	0.908	0.262	0.327	
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	16.50	15.04	0.00	0	Ant 3a	P34PWY9M0P	QPSK	50	50	0 mm	right	1:2.31	0.640	1.400	0.896	0.228	0.319	
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	2506.00	39750	Low	LTE Band 41	20	14.90	14.03	0.09	0	Ant 3a	P34PWY9M0P	QPSK	1	99	0 mm	left	1:1.58	0.000	1.222	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.90	14.07	0.02	0	Ant 3a	P34PWY9M0P	QPSK	50	25	0 mm	left	1:1.58	0.000	1.211	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 4 Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC 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	13.80	13.07	0.05	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	back	1:1.58	0.830	1.183	0.982	0.285	0.337	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.80	12.98	0.05	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	back	1:1.58	0.819	1.208	0.989	0.277	0.335	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	13.10	-0.04	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	back	1:1.58	0.722	1.175	0.848	0.252	0.296	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	13.80	12.79	0.02	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	back	1:1.58	0.744	1.262	0.939	0.252	0.318	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.80	12.77	-0.05	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	back	1:1.58	0.732	1.268	0.928	0.248	0.314	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	13.80	13.00	-0.01	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	back	1:1.58	0.815	1.202	0.980	0.277	0.333	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.80	12.98	0.03	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	back	1:1.58	0.799	1.208	0.965	0.272	0.329	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	13.01	0.01	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	back	1:1.58	0.744	1.199	0.892	0.259	0.311	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	13.80	12.78	0.04	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	back	1:1.58	0.760	1.265	0.961	0.259	0.328	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.80	12.76	0.04	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	back	1:1.58	0.730	1.271	0.928	0.247	0.314	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	12.86	0.00	0	Ant 4	H79KJRF9N0	QPSK	100	0	0 mm	back	1:1.58	0.721	1.242	0.895	0.252	0.313	
1 CC Uplink - Power Class 2	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	13.87	0.01	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	back	1:2.31	0.639	1.422	0.909	0.217	0.309	
2 CC Uplink - Power Class 3	PCC	2549.50	40185	Low-Mid	LTE Band 41	20	13.80	12.80	0.05	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	back	1:1.58	0.747	1.259	0.940	0.254	0.320	
2 CC Uplink - Power Class 3	SCC	2529.70	39987	Low-Mid	LTE Band 41	20								1	99									
2 CC Uplink - Power Class 2	PCC	2549.50	40185	Low-Mid	LTE Band 41	20	15.40	13.92	-0.02	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	back	1:2.31	0.674	1.406	0.948	0.229	0.322	
2 CC Uplink - Power Class 2	SCC	2529.70	39987	Low-Mid	LTE Band 41	20								1	99									
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	13.10	0.01	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	top	1:1.58	0.406	1.175	0.477	0.125	0.147	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	13.01	-0.01	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	top	1:1.58	0.421	1.199	0.505	0.129	0.155	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	13.10	0.01	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	bottom	1:1.58	0.010	1.175	0.012	0.004	0.005	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	13.01	0.06	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	bottom	1:1.58	0.012	1.199	0.014	0.004	0.005	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	13.10	0.03	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	right	1:1.58	0.003	1.175	0.004	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	13.01	0.06	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	right	1:1.58	0.005	1.199	0.006	0.001	0.001	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	13.80	13.07	0.00	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	left	1:1.58	0.451	1.183	0.534	0.144	0.170	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.80	12.98	0.00	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	left	1:1.58	0.488	1.208	0.590	0.156	0.188	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	13.10	0.02	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	left	1:1.58	0.523	1.175	0.615	0.165	0.194	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	13.80	12.79	-0.06	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	left	1:1.58	0.540	1.262	0.681	0.168	0.212	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.80	12.77	-0.01	0	Ant 4	H79KJRF9N0	QPSK	1	0	0 mm	left	1:1.58	0.553	1.268	0.701	0.171	0.217	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	13.80	13.00	-0.01	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	left	1:1.58	0.476	1.202	0.572	0.153	0.184	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.80	12.98	0.03	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	left	1:1.58	0.504	1.208	0.609	0.161	0.194	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	13.01	-0.06	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	left	1:1.58	0.537	1.199	0.644	0.168	0.201	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	13.80	12.78	0.04	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	left	1:1.58	0.554	1.265	0.701	0.173	0.219	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.80	12.76	-0.04	0	Ant 4	H79KJRF9N0	QPSK	50	0	0 mm	left	1:1.58	0.563	1.271	0.716	0.174	0.221	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.80	12.86	0.01	0	Ant 4	H79KJRF9N0	QPSK	100	0	0 mm	left	1:1.58	0.519	1.242	0.645	0.165	0.205	
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 10-43
LTE Band 48 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	3560.00	55340	Low	LTE Band 48	20	13.50	13.03	-0.13	0	Ant 1a	G3Q2X6LP70	QPSK	1	99	0 mm	back	1:1	0.487	1.114	0.543	0.150	0.167	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.50	13.04	-0.01	0	Ant 1a	G3Q2X6LP70	QPSK	1	99	0 mm	back	1:1	0.561	1.112	0.624	0.166	0.185	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.50	13.01	-0.12	0	Ant 1a	G3Q2X6LP70	QPSK	1	0	0 mm	back	1:1	0.599	1.119	0.670	0.181	0.203	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.50	12.83	-0.13	0	Ant 1a	G3Q2X6LP70	QPSK	1	0	0 mm	back	1:1	0.688	1.167	0.803	0.206	0.240	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.50	13.14	-0.14	0	Ant 1a	G3Q2X6LP70	QPSK	50	50	0 mm	back	1:1	0.497	1.086	0.540	0.152	0.165	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.50	13.16	-0.03	0	Ant 1a	G3Q2X6LP70	QPSK	50	25	0 mm	back	1:1	0.567	1.081	0.613	0.167	0.181	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.50	13.15	-0.11	0	Ant 1a	G3Q2X6LP70	QPSK	50	0	0 mm	back	1:1	0.616	1.084	0.668	0.187	0.203	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.50	13.01	-0.11	0	Ant 1a	G3Q2X6LP70	QPSK	50	0	0 mm	back	1:1	0.685	1.119	0.767	0.207	0.232	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.50	13.03	-0.09	0	Ant 1a	G3Q2X6LP70	QPSK	100	0	0 mm	back	1:1	0.499	1.114	0.556	0.152	0.169	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.50	13.04	0.09	0	Ant 1a	G3Q2X6LP70	QPSK	1	99	0 mm	top	1:1	0.005	1.112	0.006	0.000	0.000	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.50	13.16	0.06	0	Ant 1a	G3Q2X6LP70	QPSK	50	25	0 mm	top	1:1	0.005	1.081	0.005	0.000	0.000	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.50	13.04	-0.07	0	Ant 1a	G3Q2X6LP70	QPSK	1	99	0 mm	bottom	1:1	0.192	1.112	0.214	0.054	0.060	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.50	13.16	-0.13	0	Ant 1a	G3Q2X6LP70	QPSK	50	25	0 mm	bottom	1:1	0.195	1.081	0.211	0.055	0.059	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.50	13.04	0.09	0	Ant 1a	G3Q2X6LP70	QPSK	1	99	0 mm	right	1:1	0.000	1.112	0.000	0.000	0.000	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.50	13.16	0.05	0	Ant 1a	G3Q2X6LP70	QPSK	50	25	0 mm	right	1:1	0.000	1.081	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.50	13.03	-0.07	0	Ant 1a	G3Q2X6LP70	QPSK	1	99	0 mm	left	1:1	0.579	1.114	0.645	0.156	0.174	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.50	13.04	-0.06	0	Ant 1a	G3Q2X6LP70	QPSK	1	99	0 mm	left	1:1	0.619	1.112	0.688	0.167	0.186	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.50	13.01	-0.16	0	Ant 1a	G3Q2X6LP70	QPSK	1	0	0 mm	left	1:1	0.742	1.119	0.830	0.201	0.225	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.50	12.83	0.02	0	Ant 1a	G3Q2X6LP70	QPSK	1	0	0 mm	left	1:1	0.776	1.167	0.906	0.208	0.243	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.50	13.14	-0.07	0	Ant 1a	G3Q2X6LP70	QPSK	50	50	0 mm	left	1:1	0.595	1.086	0.646	0.160	0.174	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.50	13.16	-0.09	0	Ant 1a	G3Q2X6LP70	QPSK	50	25	0 mm	left	1:1	0.656	1.081	0.709	0.176	0.190	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.50	13.15	-0.16	0	Ant 1a	G3Q2X6LP70	QPSK	50	0	0 mm	left	1:1	0.804	1.084	0.872	0.216	0.234	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.50	13.01	0.08	0	Ant 1a	G3Q2X6LP70	QPSK	50	0	0 mm	left	1:1	0.818	1.119	0.915	0.216	0.242	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.50	13.03	-0.06	0	Ant 1a	G3Q2X6LP70	QPSK	100	0	0 mm	left	1:1	0.604	1.114	0.673	0.162	0.180	
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	13.50	12.90	-0.18	0	Ant 1a	G3Q2X6LP70	QPSK	50	0	0 mm	left	1:1	0.818	1.148	0.939	0.218	0.250	
2 CC Uplink	SCC	3670.20	56442	High	LTE Band 48	20								50	50									
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	13.50	12.90	-0.01	0	Ant 1a	G3Q2X6LP70	QPSK	50	0	0 mm	left	1:1	0.761	1.148	0.874	0.217	0.249	
2 CC Uplink	SCC	3670.20	56442	High	LTE Band 48	20								50	50									
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 10-44
LTE Band 48 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	3560.00	55340	Low	LTE Band 48	20	12.50	11.55	-0.02	0	Ant 2a	G3Q2X6LP70	QPSK	1	99	0 mm	back	1:1	0.669	1.245	0.833	0.195	0.243	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.65	-0.06	0	Ant 2a	G3Q2X6LP70	QPSK	1	99	0 mm	back	1:1	0.751	1.216	0.913	0.217	0.264	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	12.50	11.63	-0.04	0	Ant 2a	G3Q2X6LP70	QPSK	1	0	0 mm	back	1:1	0.705	1.222	0.862	0.204	0.249	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	12.50	11.62	-0.11	0	Ant 2a	G3Q2X6LP70	QPSK	1	0	0 mm	back	1:1	0.664	1.225	0.813	0.192	0.235	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	12.50	11.69	-0.04	0	Ant 2a	G3Q2X6LP70	QPSK	50	25	0 mm	back	1:1	0.685	1.205	0.825	0.200	0.241	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.78	0.00	0	Ant 2a	G3Q2X6LP70	QPSK	50	25	0 mm	back	1:1	0.730	1.180	0.861	0.208	0.245	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	12.50	11.70	-0.06	0	Ant 2a	G3Q2X6LP70	QPSK	50	50	0 mm	back	1:1	0.698	1.202	0.839	0.202	0.243	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	12.50	11.71	-0.10	0	Ant 2a	G3Q2X6LP70	QPSK	50	25	0 mm	back	1:1	0.659	1.199	0.790	0.190	0.228	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.64	-0.02	0	Ant 2a	G3Q2X6LP70	QPSK	100	0	0 mm	back	1:1	0.660	1.219	0.805	0.197	0.240	
2 CC Uplink	PCC	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.58	-0.02	0	Ant 2a	G3Q2X6LP70	QPSK	1	99	0 mm	back	1:1	0.711	1.236	0.879	0.204	0.252	
2 CC Uplink	SCC	3623.10	55971	Low-Mid	LTE Band 48	20								1	0									
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.65	0.03	0	Ant 2a	G3Q2X6LP70	QPSK	1	99	0 mm	top	1:1	0.005	1.216	0.006	0.001	0.001	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.78	0.08	0	Ant 2a	G3Q2X6LP70	QPSK	50	25	0 mm	top	1:1	0.004	1.180	0.005	0.000	0.000	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.65	-0.07	0	Ant 2a	G3Q2X6LP70	QPSK	1	99	0 mm	bottom	1:1	0.261	1.216	0.317	0.072	0.088	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.78	-0.01	0	Ant 2a	G3Q2X6LP70	QPSK	50	25	0 mm	bottom	1:1	0.266	1.180	0.314	0.073	0.086	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	12.50	11.55	-0.17	0	Ant 2a	G3Q2X6LP70	QPSK	1	99	0 mm	right	1:1	0.687	1.245	0.855	0.187	0.233	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.65	0.05	0	Ant 2a	G3Q2X6LP70	QPSK	1	99	0 mm	right	1:1	0.711	1.216	0.865	0.192	0.233	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	12.50	11.63	-0.10	0	Ant 2a	G3Q2X6LP70	QPSK	1	0	0 mm	right	1:1	0.704	1.222	0.860	0.189	0.231	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	12.50	11.62	0.04	0	Ant 2a	G3Q2X6LP70	QPSK	1	0	0 mm	right	1:1	0.664	1.225	0.813	0.177	0.217	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	12.50	11.69	-0.07	0	Ant 2a	G3Q2X6LP70	QPSK	50	25	0 mm	right	1:1	0.707	1.205	0.852	0.191	0.230	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.78	-0.11	0	Ant 2a	G3Q2X6LP70	QPSK	50	25	0 mm	right	1:1	0.720	1.180	0.850	0.193	0.228	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	12.50	11.70	-0.12	0	Ant 2a	G3Q2X6LP70	QPSK	50	50	0 mm	right	1:1	0.685	1.202	0.823	0.184	0.221	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	12.50	11.71	0.05	0	Ant 2a	G3Q2X6LP70	QPSK	50	25	0 mm	right	1:1	0.670	1.199	0.803	0.176	0.211	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.64	0.03	0	Ant 2a	G3Q2X6LP70	QPSK	100	0	0 mm	right	1:1	0.728	1.219	0.887	0.197	0.240	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.65	0.03	0	Ant 2a	G3Q2X6LP70	QPSK	1	99	0 mm	left	1:1	0.000	1.216	0.000	0.000	0.000	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.50	11.78	0.05	0	Ant 2a	G3Q2X6LP70	QPSK	50	25	0 mm	left	1:1	0.000	1.180	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 10-45
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)	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	3560.00	55340	Low	LTE Band 48	20	15.60	14.44	-0.08	0	Ant 3b	GVMGXQDNHQ	QPSK	1	99	0 mm	back	1:1	0.657	1.306	0.858	0.239	0.312	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.60	14.37	-0.01	0	Ant 3b	GVMGXQDNHQ	QPSK	1	99	0 mm	back	1:1	0.573	1.327	0.760	0.216	0.287	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.60	14.33	-0.02	0	Ant 3b	GVMGXQDNHQ	QPSK	1	0	0 mm	back	1:1	0.564	1.340	0.756	0.218	0.292	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.60	14.38	0.04	0	Ant 3b	GVMGXQDNHQ	QPSK	1	0	0 mm	back	1:1	0.533	1.324	0.706	0.209	0.277	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.55	-0.01	0	Ant 3b	GVMGXQDNHQ	QPSK	50	0	0 mm	back	1:1	0.681	1.274	0.868	0.248	0.316	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.60	14.46	0.01	0	Ant 3b	GVMGXQDNHQ	QPSK	50	25	0 mm	back	1:1	0.599	1.300	0.779	0.222	0.289	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.60	14.42	-0.01	0	Ant 3b	GVMGXQDNHQ	QPSK	50	50	0 mm	back	1:1	0.578	1.312	0.758	0.222	0.291	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.60	14.45	-0.06	0	Ant 3b	GVMGXQDNHQ	QPSK	50	50	0 mm	back	1:1	0.552	1.303	0.719	0.220	0.287	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.43	0.02	0	Ant 3b	GVMGXQDNHQ	QPSK	100	0	0 mm	back	1:1	0.708	1.309	0.927	0.256	0.335	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	15.60	14.80	-0.02	0	Ant 3b	GVMGXQDNHQ	QPSK	100	0	0 mm	back	1:1	0.765	1.202	0.920	0.277	0.333	
2 CC Uplink	SCC	3540.20	55142	Low	LTE Band 48	20								100	0									
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.44	0.04	0	Ant 3b	GVMGXQDNHQ	QPSK	1	99	0 mm	top	1:1	0.510	1.306	0.666	0.160	0.209	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.60	14.37	0.01	0	Ant 3b	GVMGXQDNHQ	QPSK	1	99	0 mm	top	1:1	0.457	1.327	0.606	0.141	0.187	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.60	14.33	-0.01	0	Ant 3b	GVMGXQDNHQ	QPSK	1	0	0 mm	top	1:1	0.456	1.340	0.611	0.140	0.188	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.60	14.38	0.00	0	Ant 3b	GVMGXQDNHQ	QPSK	1	0	0 mm	top	1:1	0.452	1.324	0.598	0.138	0.183	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.55	-0.02	0	Ant 3b	GVMGXQDNHQ	QPSK	50	0	0 mm	top	1:1	0.529	1.274	0.674	0.164	0.209	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	15.60	14.46	-0.03	0	Ant 3b	GVMGXQDNHQ	QPSK	50	25	0 mm	top	1:1	0.471	1.300	0.612	0.146	0.190	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	15.60	14.42	-0.01	0	Ant 3b	GVMGXQDNHQ	QPSK	50	50	0 mm	top	1:1	0.457	1.312	0.600	0.141	0.185	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	15.60	14.45	-0.01	0	Ant 3b	GVMGXQDNHQ	QPSK	50	50	0 mm	top	1:1	0.444	1.303	0.579	0.135	0.176	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.43	-0.01	0	Ant 3b	GVMGXQDNHQ	QPSK	100	0	0 mm	top	1:1	0.520	1.309	0.681	0.163	0.213	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.44	0.05	0	Ant 3b	GVMGXQDNHQ	QPSK	1	99	0 mm	bottom	1:1	0.000	1.306	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.55	0.03	0	Ant 3b	GVMGXQDNHQ	QPSK	50	0	0 mm	bottom	1:1	0.000	1.274	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.44	0.08	0	Ant 3b	GVMGXQDNHQ	QPSK	1	99	0 mm	right	1:1	0.095	1.306	0.124	0.025	0.033	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.55	0.02	0	Ant 3b	GVMGXQDNHQ	QPSK	50	0	0 mm	right	1:1	0.103	1.274	0.131	0.027	0.034	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.44	0.01	0	Ant 3b	GVMGXQDNHQ	QPSK	1	99	0 mm	left	1:1	0.031	1.306	0.040	0.010	0.013	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	15.60	14.55	0.04	0	Ant 3b	GVMGXQDNHQ	QPSK	50	0	0 mm	left	1:1	0.029	1.274	0.037	0.009	0.011	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 10-46
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)	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	3560.00	55340	Low	LTE Band 48	20	13.10	12.54	-0.04	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	back	1:1	0.690	1.138	0.785	0.232	0.264	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.10	12.27	0.00	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	back	1:1	0.724	1.211	0.877	0.233	0.282	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.10	12.38	-0.03	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	back	1:1	0.553	1.180	0.653	0.183	0.216	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.10	12.32	0.01	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	back	1:1	0.697	1.197	0.834	0.229	0.274	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.53	0.04	0	Ant 4	GVMGXQDNHQ	QPSK	50	0	0 mm	back	1:1	0.862	1.140	0.983	0.276	0.315	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.49	0.03	0	Ant 4	GVMGXQDNHQ	QPSK	50	50	0 mm	back	1:1	0.827	1.151	0.952	0.265	0.305	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.10	12.47	0.00	0	Ant 4	GVMGXQDNHQ	QPSK	50	25	0 mm	back	1:1	0.722	1.156	0.835	0.232	0.268	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.10	12.48	-0.01	0	Ant 4	GVMGXQDNHQ	QPSK	50	50	0 mm	back	1:1	0.676	1.153	0.779	0.218	0.251	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.10	12.29	-0.01	0	Ant 4	GVMGXQDNHQ	QPSK	50	25	0 mm	back	1:1	0.722	1.205	0.870	0.237	0.286	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.52	0.03	0	Ant 4	GVMGXQDNHQ	QPSK	100	0	0 mm	back	1:1	0.858	1.143	0.981	0.276	0.315	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	13.10	12.70	0.01	0	Ant 4	GVMGXQDNHQ	QPSK	50	50	0 mm	back	1:1	0.889	1.096	0.974	0.285	0.312	A15
2 CC Uplink	SCC	3579.80	55538	Low	LTE Band 48	20								50	0									
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.54	-0.02	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	top	1:1	0.293	1.138	0.333	0.095	0.108	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.53	-0.02	0	Ant 4	GVMGXQDNHQ	QPSK	50	0	0 mm	top	1:1	0.292	1.140	0.333	0.093	0.106	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.54	0.06	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	bottom	1:1	0.014	1.138	0.016	0.003	0.003	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.53	0.17	0	Ant 4	GVMGXQDNHQ	QPSK	50	0	0 mm	bottom	1:1	0.016	1.140	0.018	0.004	0.005	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.54	0.04	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	right	1:1	0.001	1.138	0.001	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.53	0.01	0	Ant 4	GVMGXQDNHQ	QPSK	50	0	0 mm	right	1:1	0.002	1.140	0.002	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.54	-0.01	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	left	1:1	0.571	1.138	0.650	0.171	0.195	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.10	12.27	0.02	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	left	1:1	0.548	1.211	0.664	0.163	0.197	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.10	12.38	0.00	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	left	1:1	0.606	1.180	0.715	0.180	0.212	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.10	12.32	-0.03	0	Ant 4	GVMGXQDNHQ	QPSK	1	0	0 mm	left	1:1	0.722	1.197	0.864	0.206	0.247	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.53	-0.02	0	Ant 4	GVMGXQDNHQ	QPSK	50	0	0 mm	left	1:1	0.578	1.140	0.659	0.174	0.198	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.10	12.47	-0.03	0	Ant 4	GVMGXQDNHQ	QPSK	50	25	0 mm	left	1:1	0.552	1.156	0.638	0.163	0.188	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.10	12.48	-0.01	0	Ant 4	GVMGXQDNHQ	QPSK	50	50	0 mm	left	1:1	0.628	1.153	0.724	0.184	0.212	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.10	12.29	-0.01	0	Ant 4	GVMGXQDNHQ	QPSK	50	25	0 mm	left	1:1	0.754	1.205	0.909	0.217	0.261	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.10	12.52	-0.03	0	Ant 4	GVMGXQDNHQ	QPSK	100	0	0 mm	left	1:1	0.585	1.143	0.669	0.173	0.198	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	13.10	12.70	0.03	0	Ant 4	GVMGXQDNHQ	QPSK	50	50	0 mm	back	1:1	0.836	1.096	0.916	0.277	0.304	
2 CC Uplink	SCC	3579.80	55538	Low	LTE Band 48	20								50	0									
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

Note: Blue entry represents variability measurement.

Table 10-47
NR Band n71 Antenna 3b Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
680.50	136100	Mid	back	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	1	53	18.40	17.59	0.00	0.00	1:1	0.722	1.205	0.870	0.369	0.445	
680.50	136100	Mid	back	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	50	0	18.40	17.55	0.00	-0.01	1:1	0.716	1.216	0.871	0.367	0.446	
680.50	136100	Mid	back	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	100	0	18.40	17.54	0.00	0.06	1:1	0.708	1.219	0.863	0.362	0.441	
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	1	53	18.40	17.59	0.00	0.03	1:1	0.787	1.205	0.948	0.341	0.411	
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	50	0	18.40	17.55	0.00	-0.02	1:1	0.780	1.216	0.948	0.341	0.415	
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	100	0	18.40	17.54	0.00	-0.01	1:1	0.765	1.219	0.933	0.337	0.411	
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	CP-OFDM	QPSK	1	1	18.40	17.48	0.00	-0.05	1:1	0.794	1.236	0.981	0.347	0.429	
680.50	136100	Mid	bottom	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	1	53	18.40	17.59	0.00	0.02	1:1	0.007	1.205	0.008	0.003	0.004	
680.50	136100	Mid	bottom	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	50	0	18.40	17.55	0.00	-0.07	1:1	0.010	1.216	0.012	0.004	0.005	
680.50	136100	Mid	right	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	1	53	18.40	17.59	0.00	-0.04	1:1	0.122	1.205	0.147	0.054	0.065	
680.50	136100	Mid	right	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	50	0	18.40	17.55	0.00	-0.03	1:1	0.119	1.216	0.145	0.054	0.066	
680.50	136100	Mid	left	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	1	53	18.40	17.59	0.00	0.00	1:1	0.029	1.205	0.035	0.013	0.016	
680.50	136100	Mid	left	0 mm	NR Band n71	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	50	0	18.40	17.55	0.00	-0.05	1:1	0.026	1.216	0.032	0.011	0.013	
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 Band n71 Antenna 4 Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
680.50	136100	Mid	back	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	1	1	21.00	20.12	0.00	-0.11	1:1	0.805	1.225	0.986	0.412	0.505	A16
680.50	136100	Mid	back	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	50	0	21.00	20.07	0.00	-0.12	1:1	0.717	1.239	0.888	0.371	0.460	
680.50	136100	Mid	back	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	100	0	21.00	20.01	0.00	-0.05	1:1	0.706	1.256	0.887	0.360	0.452	
680.50	136100	Mid	back	0 mm	NR Band n71	Ant 4	KD40G061JX	20	CP-OFDM	QPSK	1	1	21.00	20.24	0.00	-0.04	1:1	0.622	1.191	0.741	0.330	0.393	
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	1	1	21.00	20.12	0.00	-0.18	1:1	0.763	1.225	0.935	0.334	0.409	
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	50	0	21.00	20.07	0.00	-0.08	1:1	0.631	1.239	0.782	0.289	0.358	
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	100	0	21.00	20.01	0.00	-0.06	1:1	0.696	1.256	0.874	0.304	0.382	
680.50	136100	Mid	bottom	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	1	1	21.00	20.12	0.00	0.09	1:1	0.017	1.225	0.021	0.007	0.009	
680.50	136100	Mid	bottom	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	50	0	21.00	20.07	0.00	0.07	1:1	0.020	1.239	0.025	0.008	0.010	
680.50	136100	Mid	right	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	1	1	21.00	20.12	0.00	0.04	1:1	0.054	1.225	0.066	0.023	0.028	
680.50	136100	Mid	right	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	50	0	21.00	20.07	0.00	0.05	1:1	0.053	1.239	0.066	0.023	0.028	
680.50	136100	Mid	left	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	1	1	21.00	20.12	0.00	0.12	1:1	0.703	1.225	0.861	0.263	0.322	
680.50	136100	Mid	left	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	50	0	21.00	20.07	0.00	0.21	1:1	0.766	1.239	0.949	0.275	0.341	
680.50	136100	Mid	left	0 mm	NR Band n71	Ant 4	KD40G061JX	20	DFT-S-OFDM	QPSK	100	0	21.00	20.01	0.00	-0.07	1:1	0.747	1.256	0.938	0.273	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 10-49
NR Band n12 Antenna 3b Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
707.50	141500	Mid	back	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	1	1	18.10	17.09	0.00	0.06	1:1	0.620	1.262	0.782	0.315	0.398	
707.50	141500	Mid	back	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	36	0	18.10	17.05	0.00	-0.02	1:1	0.614	1.274	0.782	0.312	0.397	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	1	1	18.10	17.09	0.00	0.03	1:1	0.755	1.262	0.953	0.338	0.427	A17
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	36	0	18.10	17.05	0.00	0.00	1:1	0.702	1.274	0.894	0.314	0.400	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	75	0	18.10	16.78	0.00	0.01	1:1	0.690	1.355	0.935	0.309	0.419	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	CP-OFDM	QPSK	1	1	18.10	17.05	0.00	0.01	1:1	0.729	1.274	0.929	0.324	0.413	
707.50	141500	Mid	bottom	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	1	1	18.10	17.09	0.00	0.02	1:1	0.007	1.262	0.009	0.003	0.004	
707.50	141500	Mid	bottom	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	36	0	18.10	17.05	0.00	0.05	1:1	0.008	1.274	0.010	0.004	0.005	
707.50	141500	Mid	right	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	1	1	18.10	17.09	0.00	-0.21	1:1	0.093	1.262	0.117	0.044	0.056	
707.50	141500	Mid	right	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	36	0	18.10	17.05	0.00	-0.03	1:1	0.095	1.274	0.121	0.045	0.057	
707.50	141500	Mid	left	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	1	1	18.10	17.09	0.00	-0.12	1:1	0.022	1.262	0.028	0.009	0.011	
707.50	141500	Mid	left	0 mm	NR Band n12	Ant 3b	GVMGJXQDNHQ	15	DFT-S-OFDM	QPSK	36	0	18.10	17.05	0.00	-0.16	1:1	0.019	1.274	0.024	0.007	0.009	
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 Band n12 Antenna 4 Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
707.50	141500	Mid	back	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	1	1	19.90	19.00	0.00	0.05	1:1	0.551	1.230	0.678	0.301	0.370	
707.50	141500	Mid	back	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	36	0	19.90	18.89	0.00	0.02	1:1	0.584	1.262	0.737	0.313	0.395	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	1	1	19.90	19.00	0.00	0.02	1:1	0.639	1.230	0.786	0.248	0.305	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	36	0	19.90	18.89	0.00	0.03	1:1	0.634	1.262	0.800	0.246	0.310	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	75	0	19.90	18.88	0.00	-0.02	1:1	0.589	1.265	0.745	0.235	0.297	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	CP-OFDM	QPSK	1	1	19.90	18.97	0.00	-0.10	1:1	0.648	1.239	0.803	0.251	0.311	
707.50	141500	Mid	bottom	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	1	1	19.90	19.00	0.00	0.02	1:1	0.020	1.230	0.025	0.008	0.010	
707.50	141500	Mid	bottom	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	36	0	19.90	18.89	0.00	-0.09	1:1	0.026	1.262	0.033	0.010	0.013	
707.50	141500	Mid	right	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	1	1	19.90	19.00	0.00	0.09	1:1	0.028	1.230	0.034	0.012	0.015	
707.50	141500	Mid	right	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	36	0	19.90	18.89	0.00	-0.06	1:1	0.036	1.262	0.045	0.016	0.020	
707.50	141500	Mid	left	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	1	1	19.90	19.00	0.00	-0.01	1:1	0.575	1.230	0.707	0.205	0.252	
707.50	141500	Mid	left	0 mm	NR Band n12	Ant 4	NMXGPNX42D	15	DFT-S-OFDM	QPSK	36	0	19.90	18.89	0.00	0.02	1:1	0.571	1.262	0.721	0.203	0.256	
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 Band n5 (Cell) Antenna 3b Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (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	back	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	1	1	16.90	15.86	0.00	0.01	1:1	0.595	1.271	0.756	0.298	0.379	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	50	0	16.90	15.78	0.00	0.00	1:1	0.606	1.294	0.784	0.304	0.393	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	1	1	16.90	15.86	0.00	0.03	1:1	0.707	1.271	0.899	0.298	0.379	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	50	0	16.90	15.78	0.00	-0.03	1:1	0.692	1.294	0.895	0.292	0.378	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	100	0	16.90	15.75	0.00	0.02	1:1	0.687	1.303	0.895	0.289	0.377	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	CP-OFDM	QPSK	1	1	16.90	15.89	0.00	-0.02	1:1	0.732	1.262	0.924	0.307	0.387	
836.50	167300	Mid	bottom	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	1	1	16.90	15.86	0.00	0.10	1:1	0.010	1.271	0.013	0.004	0.005	
836.50	167300	Mid	bottom	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	50	0	16.90	15.78	0.00	0.02	1:1	0.011	1.294	0.014	0.004	0.005	
836.50	167300	Mid	right	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	1	1	16.90	15.86	0.00	-0.02	1:1	0.084	1.271	0.107	0.039	0.050	
836.50	167300	Mid	right	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	50	0	16.90	15.78	0.00	0.00	1:1	0.084	1.294	0.109	0.040	0.052	
836.50	167300	Mid	left	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	1	1	16.90	15.86	0.00	-0.10	1:1	0.017	1.271	0.022	0.007	0.009	
836.50	167300	Mid	left	0 mm	NR Band n5 (Cell)	Ant 3b	K033JL79T6	20	DFT-S-OFDM	QPSK	50	0	16.90	15.78	0.00	-0.12	1:1	0.016	1.294	0.021	0.007	0.009	
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 10-52
NR Band n5 (Cell) Antenna 4 Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (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	back	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	1	1	18.70	17.89	0.00	0.00	1:1	0.745	1.205	0.898	0.353	0.425	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	50	0	18.70	17.78	0.00	0.02	1:1	0.722	1.236	0.892	0.339	0.419	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	100	0	18.70	17.75	0.00	-0.02	1:1	0.671	1.245	0.835	0.316	0.393	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	CP-OFDM	QPSK	1	1	18.70	17.76	0.00	0.02	1:1	0.801	1.242	0.995	0.384	0.477	A18
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	1	1	18.70	17.89	0.00	-0.02	1:1	0.527	1.205	0.635	0.219	0.264	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	50	0	18.70	17.78	0.00	-0.02	1:1	0.509	1.236	0.629	0.211	0.261	
836.50	167300	Mid	bottom	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	1	1	18.70	17.89	0.00	-0.05	1:1	0.015	1.205	0.018	0.008	0.010	
836.50	167300	Mid	bottom	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	50	0	18.70	17.78	0.00	-0.08	1:1	0.018	1.236	0.022	0.009	0.011	
836.50	167300	Mid	right	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	1	1	18.70	17.89	0.00	0.07	1:1	0.017	1.205	0.020	0.008	0.010	
836.50	167300	Mid	right	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	50	0	18.70	17.78	0.00	0.02	1:1	0.020	1.236	0.025	0.010	0.012	
836.50	167300	Mid	left	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	1	1	18.70	17.89	0.00	0.00	1:1	0.566	1.205	0.682	0.211	0.254	
836.50	167300	Mid	left	0 mm	NR Band n5 (Cell)	Ant 4	NMWPNX42D	20	DFT-S-OFDM	QPSK	50	0	18.70	17.78	0.00	-0.03	1:1	0.511	1.236	0.632	0.196	0.242	
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 Band n66 (AWS) Antenna 1b Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (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	back	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	1	214	12.30	11.42	0	-0.01	1:1	0.688	1.225	0.843	0.273	0.334	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	108	108	12.30	11.35	0	0.05	1:1	0.697	1.245	0.868	0.279	0.347	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	216	0	12.30	11.34	0	-0.06	1:1	0.720	1.247	0.898	0.286	0.357	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	CP-OFDM	QPSK	1	1	12.30	11.44	0	-0.07	1:1	0.740	1.219	0.902	0.296	0.361	A19
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	1	214	12.30	11.42	0	-0.10	1:1	0.004	1.225	0.005	0.002	0.002	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	108	108	12.30	11.35	0	0.05	1:1	0.004	1.245	0.005	0.001	0.001	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	1	214	12.30	11.42	0	-0.02	1:1	0.374	1.225	0.458	0.150	0.184	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	108	108	12.30	11.35	0	0.00	1:1	0.377	1.245	0.469	0.150	0.187	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	1	214	12.30	11.42	0	0.03	1:1	0.004	1.225	0.005	0.001	0.001	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	108	108	12.30	11.35	0	0.09	1:1	0.009	1.245	0.011	0.004	0.005	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	1	214	12.30	11.42	0	-0.09	1:1	0.058	1.225	0.071	0.028	0.034	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	108	108	12.30	11.35	0	-0.05	1:1	0.058	1.245	0.072	0.027	0.034	
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 Band n66 (AWS) Antenna 2b Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (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	back	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	1	108	14.00	12.89	0	-0.03	1:1	0.632	1.291	0.816	0.256	0.330	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	108	0	14.00	12.90	0	0.05	1:1	0.679	1.288	0.875	0.271	0.349	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	216	0	14.00	12.80	0	0.08	1:1	0.652	1.318	0.859	0.263	0.347	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	CP-OFDM	QPSK	1	1	14.00	12.90	0	-0.02	1:1	0.659	1.288	0.849	0.266	0.343	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	1	108	14.00	12.89	0	0.09	1:1	0.016	1.291	0.021	0.007	0.009	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	108	0	14.00	12.90	0	-0.11	1:1	0.016	1.288	0.021	0.006	0.008	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	1	108	14.00	12.89	0	-0.02	1:1	0.600	1.291	0.775	0.238	0.307	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	108	0	14.00	12.90	0	0.01	1:1	0.625	1.288	0.805	0.249	0.321	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	216	0	14.00	12.80	0	0.02	1:1	0.612	1.318	0.807	0.245	0.323	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	1	108	14.00	12.89	0	0.07	1:1	0.112	1.291	0.145	0.049	0.063	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	108	0	14.00	12.90	0	-0.06	1:1	0.115	1.288	0.148	0.050	0.064	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	1	108	14.00	12.89	0	-0.10	1:1	0.010	1.291	0.013	0.004	0.005	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 2b	CP7K00J39XC	40	DFT-S-OFDM	QPSK	108	0	14.00	12.90	0	-0.04	1:1	0.011	1.288	0.014	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														

Table 10-55
NR Band n66 (AWS) Antenna 3a Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	1	108	13.30	12.38	0.00	0.01	1:1	0.332	1.236	0.410	0.155	0.192	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	108	108	13.30	12.36	0.00	0.01	1:1	0.326	1.242	0.405	0.153	0.190	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	1	108	13.30	12.38	0.00	0.06	1:1	0.232	1.236	0.287	0.077	0.095	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	108	108	13.30	12.36	0.00	0.01	1:1	0.251	1.242	0.312	0.084	0.104	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	1	108	13.30	12.38	0.00	-0.04	1:1	0.011	1.236	0.014	0.004	0.005	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	108	108	13.30	12.36	0.00	0.01	1:1	0.011	1.242	0.014	0.005	0.006	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	1	108	13.30	12.38	0.00	0.02	1:1	0.636	1.236	0.786	0.264	0.326	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	108	108	13.30	12.36	0.00	0.02	1:1	0.635	1.242	0.789	0.262	0.325	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	216	0	13.30	12.30	0.00	-0.04	1:1	0.655	1.259	0.825	0.269	0.339	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	CP-OFDM	QPSK	1	1	13.30	12.34	0.00	-0.02	1:1	0.621	1.247	0.774	0.257	0.320	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	1	108	13.30	12.38	0.00	0.03	1:1	0.009	1.236	0.011	0.003	0.004	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	108	108	13.30	12.36	0.00	0.03	1:1	0.008	1.242	0.010	0.002	0.002	
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 10-56
NR Band n66 (AWS) Antenna 4 Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	108	14.80	13.90	0.00	0.07	1:1	0.599	1.230	0.737	0.247	0.304	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	54	14.80	13.88	0.00	0.02	1:1	0.585	1.236	0.723	0.242	0.299	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	216	0	14.80	13.86	0.00	0.02	1:1	0.587	1.242	0.729	0.244	0.303	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	CP-OFDM	QPSK	1	1	14.80	13.67	0.00	0.02	1:1	0.622	1.297	0.807	0.259	0.336	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	108	14.80	13.90	0.00	-0.05	1:1	0.416	1.230	0.512	0.173	0.213	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	54	14.80	13.88	0.00	-0.03	1:1	0.372	1.236	0.460	0.156	0.193	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	108	14.80	13.90	0.00	0.04	1:1	0.000	1.230	0.000	0.000	0.000	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	54	14.80	13.88	0.00	0.09	1:1	0.000	1.236	0.000	0.000	0.000	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	108	14.80	13.90	0.00	-0.06	1:1	0.015	1.230	0.018	0.005	0.006	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	54	14.80	13.88	0.00	0.00	1:1	0.014	1.236	0.017	0.004	0.005	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	108	14.80	13.90	0.00	0.08	1:1	0.562	1.230	0.691	0.195	0.240	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	54	14.80	13.88	0.00	0.02	1:1	0.545	1.236	0.674	0.189	0.234	
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 10-57
NR Band n25 (PCS) Antenna 1b Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	1	214	11.80	11.12	0	0.06	1:1	0.788	1.169	0.921	0.303	0.354	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	108	54	11.80	10.92	0	0.01	1:1	0.756	1.225	0.926	0.292	0.358	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	216	0	11.80	10.91	0	0.01	1:1	0.753	1.227	0.924	0.291	0.357	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	CP-OFDM	QPSK	1	1	11.80	11.00	0	-0.05	1:1	0.810	1.202	0.974	0.309	0.371	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	1	214	11.80	11.12	0	0.09	1:1	0.003	1.169	0.004	0.000	0.000	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	108	54	11.80	10.92	0	0.03	1:1	0.004	1.225	0.005	0.000	0.000	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	1	214	11.80	11.12	0	-0.03	1:1	0.451	1.169	0.527	0.160	0.187	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	108	54	11.80	10.92	0	0.00	1:1	0.446	1.225	0.546	0.158	0.194	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	1	214	11.80	11.12	0	-0.12	1:1	0.009	1.169	0.011	0.004	0.005	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	108	54	11.80	10.92	0	0.08	1:1	0.010	1.225	0.012	0.004	0.005	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	1	214	11.80	11.12	0	-0.05	1:1	0.066	1.169	0.077	0.027	0.032	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 1b	Q7R320X33P	40	DFT-S-OFDM	QPSK	108	54	11.80	10.92	0	-0.02	1:1	0.058	1.225	0.071	0.024	0.029	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-58
NR Band n25 (PCS) Antenna 2b Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	1	214	14.20	14.06	0	-0.09	1:1	0.755	1.033	0.780	0.297	0.307	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	108	0	14.20	13.92	0	-0.04	1:1	0.779	1.067	0.831	0.306	0.327	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	216	0	14.20	13.89	0	0.01	1:1	0.747	1.074	0.802	0.299	0.321	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	1	214	14.20	14.06	0	0.05	1:1	0.000	1.033	0.000	0.000	0.000	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	108	0	14.20	13.92	0	0.06	1:1	0.000	1.067	0.000	0.000	0.000	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	1	214	14.20	14.06	0	0.07	1:1	0.903	1.033	0.933	0.316	0.326	A20
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	108	0	14.20	13.92	0	-0.01	1:1	0.874	1.067	0.933	0.307	0.328	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	216	0	14.20	13.89	0	0.00	1:1	0.865	1.074	0.929	0.307	0.330	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	CP-OFDM	QPSK	1	1	14.20	14.05	0	0.02	1:1	0.888	1.035	0.919	0.306	0.317	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	1	214	14.20	14.06	0	-0.09	1:1	0.066	1.033	0.068	0.028	0.029	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	108	0	14.20	13.92	0	-0.03	1:1	0.066	1.067	0.070	0.028	0.030	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	1	214	14.20	14.06	0	-0.20	1:1	0.010	1.033	0.010	0.004	0.004	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 2b	K033JL79T6	40	DFT-S-OFDM	QPSK	108	0	14.20	13.92	0	0.07	1:1	0.008	1.067	0.009	0.003	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 10-59
NR Band n25 (PCS) Antenna 3a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	1	214	11.80	11.42	0.00	-0.03	1:1	0.383	1.091	0.418	0.178	0.194	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	108	108	11.80	11.14	0.00	-0.02	1:1	0.361	1.164	0.420	0.168	0.196	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	1	214	11.80	11.42	0.00	0.01	1:1	0.247	1.091	0.269	0.081	0.088	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	108	108	11.80	11.14	0.00	-0.02	1:1	0.229	1.164	0.267	0.077	0.090	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	1	214	11.80	11.42	0.00	0.04	1:1	0.005	1.091	0.005	0.002	0.002	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	108	108	11.80	11.14	0.00	0.01	1:1	0.003	1.164	0.003	0.001	0.001	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	1	214	11.80	11.42	0.00	0.02	1:1	0.825	1.091	0.900	0.321	0.350	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	108	108	11.80	11.14	0.00	-0.01	1:1	0.811	1.164	0.944	0.316	0.368	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 3a	P34PWY9MKP	40	DFT-S-OFDM	QPSK	216	0	11.80	11.07	0.00	0.07	1:1	0.725	1.183	0.858	0.292	0.345	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 3a	P34PWY9MKP	40	CP-OFDM	QPSK	1	1	11.80	11.04	0.00	0.01	1:1	0.829	1.191	0.987	0.325	0.387	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	1	214	11.80	11.42	0.00	0.06	1:1	0.005	1.091	0.005	0.002	0.002	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	108	108	11.80	11.14	0.00	0.02	1:1	0.005	1.164	0.006	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 10-60
NR Band n25 (PCS) Antenna 4 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	214	14.00	13.05	0.00	0.01	1:1	0.512	1.245	0.637	0.201	0.250	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	0	14.00	13.06	0.00	0.03	1:1	0.520	1.242	0.646	0.203	0.252	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	214	14.00	13.05	0.00	-0.02	1:1	0.428	1.245	0.533	0.173	0.215	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	0	14.00	13.06	0.00	-0.02	1:1	0.446	1.242	0.554	0.181	0.225	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 4	H79KJRF9N0	40	DFT-S-OFDM	QPSK	1	214	14.00	13.05	0.00	0.03	1:1	0.004	1.245	0.005	0.002	0.002	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 4	H79KJRF9N0	40	DFT-S-OFDM	QPSK	108	0	14.00	13.06	0.00	0.02	1:1	0.003	1.242	0.004	0.000	0.000	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 4	H79KJRF9N0	40	DFT-S-OFDM	QPSK	1	214	14.00	13.05	0.00	0.02	1:1	0.012	1.245	0.015	0.005	0.006	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 4	H79KJRF9N0	40	DFT-S-OFDM	QPSK	108	0	14.00	13.06	0.00	0.06	1:1	0.007	1.242	0.009	0.003	0.004	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	214	14.00	13.05	0.00	-0.09	1:1	0.565	1.245	0.703	0.203	0.253	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	0	14.00	13.06	0.00	0.00	1:1	0.599	1.242	0.744	0.214	0.266	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	216	0	14.00	12.99	0.00	0.05	1:1	0.585	1.262	0.738	0.209	0.264	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 4	KD40G061JX	40	CP-OFDM	QPSK	1	1	14.00	13.07	0.00	0.02	1:1	0.631	1.239	0.782	0.225	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 10-61
NR Band n30 Antenna 1b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	1	26	15.00	13.28	0	0.00	1:1	0.604	1.486	0.898	0.216	0.321	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	25	27	15.00	13.30	0	0.02	1:1	0.608	1.479	0.899	0.217	0.321	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	50	0	15.00	13.20	0	0.02	1:1	0.595	1.514	0.901	0.212	0.321	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	CP-OFDM	QPSK	1	1	15.00	13.21	0	0.03	1:1	0.622	1.510	0.939	0.223	0.337	
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	1	26	15.00	13.28	0	0.05	1:1	0.000	1.486	0.000	0.000	0.000	
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	25	27	15.00	13.30	0	-0.07	1:1	0.002	1.479	0.003	0.000	0.000	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	1	26	15.00	13.28	0	0.02	1:1	0.500	1.486	0.743	0.169	0.251	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	25	27	15.00	13.30	0	-0.01	1:1	0.476	1.479	0.704	0.164	0.243	
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	1	26	15.00	13.28	0	-0.20	1:1	0.007	1.486	0.010	0.002	0.003	
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	25	27	15.00	13.30	0	0.06	1:1	0.005	1.479	0.007	0.001	0.001	
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	1	26	15.00	13.28	0	0.00	1:1	0.024	1.486	0.036	0.010	0.015	
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 1b	W4KQW6V71Y	10	DFT-S-OFDM	QPSK	25	27	15.00	13.30	0	-0.02	1:1	0.024	1.479	0.035	0.010	0.015	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram														

Table 10-62
NR Band n30 Antenna 2b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	1	26	15.00	14.25	0	0.00	1:1	0.705	1.189	0.838	0.298	0.354	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	25	0	15.00	14.12	0	0.01	1:1	0.704	1.225	0.862	0.296	0.363	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	50	0	15.00	14.11	0	0.03	1:1	0.714	1.227	0.876	0.298	0.366	
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	1	26	15.00	14.25	0	0.03	1:1	0.022	1.189	0.026	0.008	0.010	
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	25	0	15.00	14.12	0	-0.02	1:1	0.019	1.225	0.023	0.006	0.007	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	1	26	15.00	14.25	0	0.04	1:1	0.793	1.189	0.943	0.272	0.323	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	25	0	15.00	14.12	0	-0.07	1:1	0.751	1.225	0.920	0.258	0.316	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	50	0	15.00	14.11	0	-0.06	1:1	0.744	1.227	0.913	0.256	0.314	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	CP-OFDM	QPSK	1	1	15.00	14.20	0	-0.14	1:1	0.826	1.202	0.993	0.282	0.339	
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	1	26	15.00	14.25	0	0.07	1:1	0.035	1.189	0.042	0.015	0.018	
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	25	0	15.00	14.12	0	-0.01	1:1	0.034	1.225	0.042	0.014	0.017	
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	1	26	15.00	14.25	0	0.03	1:1	0.011	1.189	0.013	0.005	0.006	
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 2b	Q7R32XX33P	10	DFT-S-OFDM	QPSK	25	0	15.00	14.12	0	-0.11	1:1	0.011	1.225	0.013	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														

Table 10-63
NR Band n30 Antenna 3a Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	1	1	12.70	11.73	0.00	0.01	1:1	0.484	1.250	0.605	0.214	0.268	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	25	14	12.70	11.66	0.00	-0.02	1:1	0.483	1.271	0.614	0.213	0.271	
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	1	1	12.70	11.73	0.00	0.10	1:1	0.364	1.250	0.455	0.121	0.151	
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	25	14	12.70	11.66	0.00	0.00	1:1	0.349	1.271	0.444	0.115	0.146	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	1	1	12.70	11.73	0.00	-0.09	1:1	0.019	1.250	0.024	0.008	0.010	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	25	14	12.70	11.66	0.00	-0.11	1:1	0.018	1.271	0.023	0.008	0.010	
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	1	1	12.70	11.73	0.00	-0.02	1:1	0.683	1.250	0.854	0.257	0.321	
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	25	14	12.70	11.66	0.00	0.01	1:1	0.688	1.271	0.874	0.259	0.329	
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	50	0	12.70	11.62	0.00	0.04	1:1	0.682	1.282	0.874	0.259	0.332	
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	CP-OFDM	QPSK	1	1	12.70	11.49	0.00	-0.01	1:1	0.686	1.321	0.906	0.259	0.342	
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	1	1	12.70	11.73	0.00	0.09	1:1	0.000	1.250	0.000	0.000	0.000	
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 3a	P34PWY9MKP	10	DFT-S-OFDM	QPSK	25	14	12.70	11.66	0.00	0.07	1:1	0.001	1.271	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 Band n30 Antenna 4 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	1	26	11.60	11.28	0.00	0.04	1:1	0.892	1.076	0.960	0.343	0.369	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	25	27	11.60	11.21	0.00	-0.13	1:1	0.897	1.094	0.981	0.346	0.379	A21
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	50	0	11.60	11.15	0.00	-0.07	1:1	0.874	1.109	0.969	0.337	0.374	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 4	KD40G061JX	10	CP-OFDM	QPSK	1	1	11.60	11.12	0.00	-0.01	1:1	0.861	1.117	0.962	0.335	0.374	
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	1	26	11.60	11.28	0.00	-0.03	1:1	0.309	1.076	0.332	0.099	0.107	
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	25	27	11.60	11.21	0.00	-0.12	1:1	0.315	1.094	0.345	0.101	0.110	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	1	26	11.60	11.28	0.00	-0.20	1:1	0.012	1.076	0.013	0.005	0.005	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	25	27	11.60	11.21	0.00	-0.08	1:1	0.014	1.094	0.015	0.006	0.007	
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	1	26	11.60	11.28	0.00	0.01	1:1	0.000	1.076	0.000	0.000	0.000	
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	25	27	11.60	11.21	0.00	0.09	1:1	0.002	1.094	0.002	0.000	0.000	
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	1	26	11.60	11.28	0.00	-0.05	1:1	0.633	1.076	0.681	0.225	0.242	
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	25	27	11.60	11.21	0.00	0.04	1:1	0.629	1.094	0.688	0.222	0.243	
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 4	KD40G061JX	10	DFT-S-OFDM	QPSK	25	27	11.60	11.21	0.00	-0.02	1:1	0.870	1.094	0.952	0.330	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														

Note: Blue entry represents variability measurement.

Table 10-65
NR Band n7 Antenna 1b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	1	108	14.70	13.70	0	-0.03	1:1	0.738	1.259	0.929	0.251	0.316	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	108	108	14.70	13.68	0	0.03	1:1	0.765	1.265	0.968	0.257	0.325	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	216	0	14.70	13.66	0	0.00	1:1	0.737	1.271	0.937	0.250	0.318	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	CP-OFDM	QPSK	1	1	14.70	13.71	0	-0.06	1:1	0.713	1.256	0.896	0.245	0.308	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	1	108	14.70	13.70	0	0.06	1:1	0.008	1.259	0.010	0.001	0.001	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	108	108	14.70	13.68	0	0.05	1:1	0.011	1.265	0.014	0.003	0.004	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	1	108	14.70	13.70	0	-0.01	1:1	0.756	1.259	0.952	0.245	0.308	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	108	108	14.70	13.68	0	0.00	1:1	0.752	1.265	0.951	0.244	0.309	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	216	0	14.70	13.66	0	0.06	1:1	0.727	1.271	0.924	0.238	0.302	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	1	108	14.70	13.70	0	-0.02	1:1	0.011	1.259	0.014	0.002	0.003	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	108	108	14.70	13.68	0	0.09	1:1	0.022	1.265	0.028	0.005	0.006	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	1	108	14.70	13.70	0	0.04	1:1	0.018	1.259	0.023	0.007	0.009	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 1b	W4KQW6V71Y	40	DFT-S-OFDM	QPSK	108	108	14.70	13.68	0	0.08	1:1	0.019	1.265	0.024	0.006	0.008	
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 Band n7 Antenna 2b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	1	108	14.30	13.89	0	0.02	1:1	0.860	1.099	0.945	0.361	0.397	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	108	0	14.30	13.89	0	0.00	1:1	0.875	1.099	0.962	0.361	0.397	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	216	0	14.30	13.84	0	-0.06	1:1	0.867	1.112	0.964	0.358	0.398	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	CP-OFDM	QPSK	1	1	14.30	13.90	0	0.01	1:1	0.904	1.096	0.991	0.371	0.407	A22
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	1	108	14.30	13.89	0	0.09	1:1	0.007	1.099	0.008	0.000	0.000	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	108	0	14.30	13.89	0	0.08	1:1	0.004	1.099	0.004	0.000	0.000	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	1	108	14.30	13.89	0	0.04	1:1	0.666	1.099	0.732	0.228	0.251	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	108	0	14.30	13.89	0	0.02	1:1	0.669	1.099	0.735	0.228	0.251	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	1	108	14.30	13.89	0	0.07	1:1	0.022	1.099	0.024	0.009	0.010	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	108	0	14.30	13.89	0	-0.01	1:1	0.022	1.099	0.024	0.008	0.009	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	1	108	14.30	13.89	0	-0.19	1:1	0.022	1.099	0.024	0.008	0.009	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 2b	CP7K00J9XC	40	DFT-S-OFDM	QPSK	108	0	14.30	13.89	0	0.05	1:1	0.026	1.099	0.029	0.011	0.012	
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 Band n7 Antenna 3a Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																					
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	1	1	12.20	11.30	0.00	0.00	1:1	0.502	1.230	0.617	0.208	0.256	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	108	0	12.20	11.32	0.00	0.02	1:1	0.490	1.225	0.600	0.201	0.246	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	1	1	12.20	11.30	0.00	-0.04	1:1	0.327	1.230	0.402	0.108	0.133	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	108	0	12.20	11.32	0.00	0.02	1:1	0.323	1.225	0.396	0.106	0.130	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	1	1	12.20	11.30	0.00	0.16	1:1	0.022	1.230	0.027	0.009	0.011	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	108	0	12.20	11.32	0.00	-0.21	1:1	0.023	1.225	0.028	0.009	0.011	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	1	1	12.20	11.30	0.00	-0.01	1:1	0.711	1.230	0.875	0.248	0.305	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	108	0	12.20	11.32	0.00	-0.01	1:1	0.713	1.225	0.873	0.249	0.305	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	216	0	12.20	11.20	0.00	-0.02	1:1	0.690	1.259	0.869	0.244	0.307	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	CP-OFDM	QPSK	1	1	12.20	11.22	0.00	-0.01	1:1	0.720	1.253	0.902	0.254	0.318	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	1	1	12.20	11.30	0.00	0.02	1:1	0.004	1.230	0.005	0.000	0.000	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 3a	H79KJRF9N0	40	DFT-S-OFDM	QPSK	108	0	12.20	11.32	0.00	0.03	1:1	0.003	1.225	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 10-68
NR Band n7 Antenna 4 Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																					
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	108	11.60	10.65	0.00	0.01	1:1	0.731	1.245	0.910	0.259	0.322	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	0	11.60	10.59	0.00	-0.01	1:1	0.642	1.262	0.810	0.229	0.289	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	216	0	11.60	10.57	0.00	-0.05	1:1	0.738	1.268	0.936	0.264	0.335	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 4	KD40G061JX	40	CP-OFDM	QPSK	1	1	11.60	10.55	0.00	0.01	1:1	0.741	1.274	0.944	0.263	0.335	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	108	11.60	10.65	0.00	0.01	1:1	0.383	1.245	0.477	0.119	0.148	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	0	11.60	10.59	0.00	-0.05	1:1	0.350	1.262	0.442	0.109	0.138	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	108	11.60	10.65	0.00	0.04	1:1	0.007	1.245	0.009	0.002	0.002	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	0	11.60	10.59	0.00	0.02	1:1	0.007	1.262	0.009	0.002	0.003	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	108	11.60	10.65	0.00	0.06	1:1	0.015	1.245	0.019	0.004	0.005	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	0	11.60	10.59	0.00	0.07	1:1	0.010	1.262	0.013	0.003	0.004	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	1	108	11.60	10.65	0.00	0.01	1:1	0.455	1.245	0.566	0.155	0.193	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 4	KD40G061JX	40	DFT-S-OFDM	QPSK	108	0	11.60	10.59	0.00	0.02	1:1	0.427	1.262	0.539	0.144	0.182	
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 Band n41 PC2 Antenna 1b Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																					
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	1	137	14.30	13.39	0.00	0.01	1:1	0.760	1.233	0.937	0.256	0.316	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	135	138	14.30	13.33	0.00	0.00	1:1	0.736	1.250	0.920	0.245	0.306	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	270	0	14.30	13.26	0.00	0.02	1:1	0.762	1.271	0.969	0.258	0.328	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	CP-OFDM	QPSK	1	1	14.30	13.17	0.00	0.01	1:1	0.736	1.297	0.955	0.254	0.329	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	1	137	14.30	13.39	0.00	0.05	1:1	0.000	1.233	0.000	0.000	0.000	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	135	138	14.30	13.33	0.00	0.02	1:1	0.000	1.250	0.000	0.000	0.000	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	1	137	14.30	13.39	0.00	-0.01	1:1	0.737	1.233	0.909	0.242	0.298	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	135	138	14.30	13.33	0.00	-0.01	1:1	0.714	1.250	0.893	0.233	0.291	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	270	0	14.30	13.26	0.00	0.01	1:1	0.727	1.271	0.924	0.238	0.302	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	1	137	14.30	13.39	0.00	0.03	1:1	0.005	1.233	0.006	0.000	0.000	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	135	138	14.30	13.33	0.00	0.13	1:1	0.004	1.250	0.005	0.001	0.001	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	1	137	14.30	13.39	0.00	0.04	1:1	0.019	1.233	0.023	0.007	0.009	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 1b	W4KQW6V71Y	100	DFT-S-OFDM	QPSK	135	138	14.30	13.33	0.00	0.00	1:1	0.021	1.250	0.026	0.008	0.010	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram														

Table 10-70
NR Band n41 PC2 Antenna 2b Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																					
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	1	1	14.30	13.72	0.00	-0.01	1:1	0.824	1.143	0.942	0.323	0.369	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	135	138	14.30	13.70	0.00	0.00	1:1	0.655	1.148	0.752	0.250	0.287	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	270	0	14.30	13.55	0.00	0.01	1:1	0.705	1.189	0.838	0.272	0.323	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	CP-OFDM	QPSK	1	1	14.30	13.69	0.00	-0.01	1:1	0.827	1.151	0.952	0.321	0.369	A23
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	1	1	14.30	13.72	0.00	0.07	1:1	0.000	1.143	0.000	0.000	0.000	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	135	138	14.30	13.70	0.00	0.09	1:1	0.000	1.148	0.000	0.000	0.000	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	1	1	14.30	13.72	0.00	-0.03	1:1	0.616	1.143	0.704	0.200	0.229	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	135	138	14.30	13.70	0.00	0.01	1:1	0.534	1.148	0.613	0.171	0.196	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	270	0	14.30	13.55	0.00	-0.01	1:1	0.562	1.189	0.668	0.180	0.214	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	1	1	14.30	13.72	0.00	0.00	1:1	0.023	1.143	0.026	0.008	0.009	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	135	138	14.30	13.70	0.00	-0.06	1:1	0.021	1.148	0.024	0.007	0.008	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	1	1	14.30	13.72	0.00	-0.07	1:1	0.014	1.143	0.016	0.005	0.006	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 2b	CP7K00J9XC	100	DFT-S-OFDM	QPSK	135	138	14.30	13.70	0.00	0.07	1:1	0.016	1.148	0.018	0.007	0.008	
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 10-71
NR Band n41 PC2 Antenna 3a Body SAR

MEASUREMENT RESULTS																												
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	1	1	12.90	11.99	0.00	-0.01	1:1	0.562	1.233	0.693	0.227	0.280	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	135	0	12.90	11.71	0.00	0.01	1:1	0.514	1.315	0.676	0.205	0.270	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	270	0	12.90	11.58	0.00	0.02	1:1	0.496	1.355	0.672	0.199	0.270	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	1	1	12.90	11.99	0.00	-0.02	1:1	0.396	1.233	0.488	0.132	0.163	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	135	0	12.90	11.71	0.00	0.01	1:1	0.366	1.315	0.481	0.123	0.162	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	1	1	12.90	11.99	0.00	-0.09	1:1	0.019	1.233	0.023	0.008	0.010	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	135	0	12.90	11.71	0.00	0.16	1:1	0.014	1.315	0.018	0.005	0.007	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	1	1	12.90	11.99	0.00	-0.10	1:1	0.797	1.233	0.983	0.277	0.342	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	135	0	12.90	11.71	0.00	0.00	1:1	0.723	1.315	0.951	0.252	0.331	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	270	0	12.90	11.58	0.00	-0.04	1:1	0.677	1.355	0.917	0.235	0.318	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	CP-OFDM	QPSK	1	1	12.90	11.78	0.00	0.04	1:1	0.728	1.294	0.942	0.250	0.324	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	1	1	12.90	11.99	0.00	0.05	1:1	0.003	1.233	0.004	0.000	0.000	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 3a	NMWGPNX42D	100	DFT-S-OFDM	QPSK	135	0	12.90	11.71	0.00	0.08	1:1	0.004	1.315	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 10-72
NR Band n41 PC2 Antenna 4 Body SAR

MEASUREMENT RESULTS																												
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	1	1	11.80	10.86	0.00	0.00	1:1	0.772	1.242	0.959	0.275	0.342	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	135	0	11.80	10.80	0.00	0.01	1:1	0.731	1.259	0.920	0.259	0.326	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	270	0	11.80	10.79	0.00	0.04	1:1	0.713	1.262	0.900	0.253	0.319	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	CP-OFDM	QPSK	1	1	11.80	10.77	0.00	0.03	1:1	0.747	1.268	0.947	0.266	0.337	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	1	1	11.80	10.86	0.00	0.00	1:1	0.399	1.242	0.496	0.123	0.153	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	135	0	11.80	10.80	0.00	-0.02	1:1	0.399	1.259	0.502	0.123	0.155	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	1	1	11.80	10.86	0.00	0.03	1:1	0.009	1.242	0.011	0.002	0.002	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	135	0	11.80	10.80	0.00	0.08	1:1	0.013	1.259	0.016	0.006	0.008	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	1	1	11.80	10.86	0.00	0.01	1:1	0.002	1.242	0.002	0.000	0.000	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	135	0	11.80	10.80	0.00	0.05	1:1	0.001	1.259	0.001	0.000	0.000	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	1	1	11.80	10.86	0.00	0.11	1:1	0.520	1.242	0.646	0.172	0.214	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	135	0	11.80	10.80	0.00	0.02	1:1	0.508	1.259	0.640	0.169	0.213	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 4	NMWGPNX42D	100	DFT-S-OFDM	QPSK	270	0	11.80	10.79	0.00	-0.08	1:1	0.535	1.262	0.675	0.179	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 10-73
NR Band n77 DoD PC2 Antenna 1a Body SAR

MEASUREMENT RESULTS																												
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	1	1	10.70	9.72	0.00	-0.05	1:1	0.562	1.253	0.704	0.171	0.214	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.76	0.00	-0.03	1:1	0.469	1.242	0.582	0.142	0.176	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	CP-OFDM	QPSK	1	1	10.70	9.64	0.00	0.01	1:1	0.540	1.276	0.689	0.178	0.227	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	1	1	10.70	9.72	0.00	0.02	1:1	0.005	1.253	0.006	0.001	0.001	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.76	0.00	0.05	1:1	0.006	1.242	0.007	0.001	0.001	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	1	1	10.70	9.72	0.00	0.11	1:1	0.226	1.253	0.283	0.065	0.081	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.76	0.00	-0.04	1:1	0.175	1.242	0.217	0.050	0.062	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	1	1	10.70	9.72	0.00	0.09	1:1	0.001	1.253	0.001	0.000	0.000	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.76	0.00	0.08	1:1	0.001	1.242	0.001	0.000	0.000	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	1	1	10.70	9.72	0.00	0.01	1:1	0.528	1.253	0.662	0.150	0.188	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 1a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.76	0.00	-0.01	1:1	0.461	1.242	0.573	0.130	0.161	
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 10-74
NR Band n77 DoD PC2 Antenna 2a Body SAR

MEASUREMENT RESULTS																												
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.84	0.00	-0.01	1:1	0.713	1.219	0.869	0.221	0.269	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.81	0.00	0.00	1:1	0.705	1.227	0.865	0.220	0.270	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	270	0	10.70	9.80	0.00	-0.01	1:1	0.676	1.230	0.831	0.213	0.262	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.84	0.00	0.08	1:1	0.004	1.219	0.005	0.001	0.001	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.81	0.00	0.04	1:1	0.003	1.227	0.004	0.001	0.001	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.84	0.00	-0.07	1:1	0.315	1.219	0.384	0.089	0.108	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.81	0.00	0.06	1:1	0.303	1.227	0.372	0.084	0.103	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.84	0.00	-0.09	1:1	0.710	1.219	0.865	0.199	0.243	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.81	0.00	-0.01	1:1	0.691	1.227	0.848	0.194	0.238	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	270	0	10.70	9.80	0.00	-0.08	1:1	0.803	1.230	0.988	0.221	0.272	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	CP-OFDM	QPSK	1	1	10.70	9.66	0.00	-0.01	1:1	0.759	1.271	0.965	0.212	0.269	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.84	0.00	0.06	1:1	0.000	1.219	0.000	0.000	0.000	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 2a	G3Q2X6LP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.81	0.00	0.05	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														

Table 10-75
NR Band n77 DoD PC2 Antenna 3b Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	1	137	13.70	13.16	0.00	-0.01	1:1	0.747	1.132	0.846	0.257	0.291	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	135	138	13.70	13.18	0.00	0.02	1:1	0.715	1.127	0.806	0.252	0.284	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	270	0	13.70	13.13	0.00	0.01	1:1	0.794	1.140	0.905	0.275	0.314	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	CP-OFDM	QPSK	1	1	13.70	13.10	0.00	0.01	1:1	0.856	1.148	0.983	0.286	0.328	A24
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	1	137	13.70	13.16	0.00	0.08	1:1	0.638	1.132	0.722	0.194	0.220	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	135	138	13.70	13.18	0.00	0.01	1:1	0.681	1.127	0.767	0.202	0.228	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	270	0	13.70	13.13	0.00	-0.04	1:1	0.639	1.140	0.728	0.196	0.223	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	1	137	13.70	13.16	0.00	0.00	1:1	0.002	1.132	0.002	0.000	0.000	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	135	138	13.70	13.18	0.00	0.12	1:1	0.005	1.127	0.006	0.002	0.002	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	1	137	13.70	13.16	0.00	0.00	1:1	0.119	1.132	0.135	0.035	0.040	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	135	138	13.70	13.18	0.00	0.00	1:1	0.103	1.127	0.116	0.031	0.035	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	1	137	13.70	13.16	0.00	-0.15	1:1	0.033	1.132	0.037	0.012	0.014	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 3b	K033JL79T6	100	DFT-S-OFDM	QPSK	135	138	13.70	13.18	0.00	-0.19	1:1	0.028	1.127	0.032	0.009	0.010	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram																

Table 10-76
NR Band n77 DoD PC2 Antenna 4 Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	1	271	11.10	10.32	0.00	-0.06	1:1	0.644	1.197	0.771	0.218	0.261	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	135	69	11.10	10.23	0.00	-0.02	1:1	0.705	1.222	0.862	0.237	0.290	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	270	0	11.10	10.19	0.00	-0.01	1:1	0.657	1.233	0.810	0.224	0.276	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	CP-OFDM	QPSK	1	1	11.10	10.24	0.00	0.00	1:1	0.813	1.219	0.991	0.263	0.321	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	1	271	11.10	10.32	0.00	-0.01	1:1	0.206	1.197	0.247	0.061	0.073	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	135	69	11.10	10.23	0.00	-0.01	1:1	0.247	1.222	0.302	0.077	0.094	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	1	271	11.10	10.32	0.00	0.07	1:1	0.013	1.197	0.016	0.003	0.004	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	135	69	11.10	10.23	0.00	0.06	1:1	0.011	1.222	0.013	0.003	0.004	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	1	271	11.10	10.32	0.00	0.04	1:1	0.004	1.197	0.005	0.001	0.001	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	135	69	11.10	10.23	0.00	0.04	1:1	0.003	1.222	0.004	0.001	0.001	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	1	271	11.10	10.32	0.00	-0.06	1:1	0.676	1.197	0.809	0.188	0.225	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	135	69	11.10	10.23	0.00	-0.02	1:1	0.675	1.222	0.825	0.190	0.232	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 4	KD4DG061JX	100	DFT-S-OFDM	QPSK	270	0	11.10	10.19	0.00	-0.01	1:1	0.679	1.233	0.837	0.190	0.234	
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 10-77
NR Band n77 C PC2 Antenna 1a Body SAR

MEASUREMENT RESULTS																									
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	back	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.63	0.00	-0.04	1:1	0.619	1.279	0.792	0.179	0.229	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.77	0.00	-0.03	1:1	0.602	1.239	0.746	0.177	0.219	
3750.00	650000	Low	back	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.65	0.00	-0.05	1:1	0.617	1.274	0.786	0.178	0.227	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	-0.02	1:1	0.625	1.233	0.771	0.176	0.217	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	270	0	10.70	9.70	0.00	-0.02	1:1	0.647	1.259	0.815	0.186	0.234	
3930.00	662000	High	top	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.77	0.00	0.02	1:1	0.008	1.239	0.010	0.003	0.004	
3930.00	662000	High	top	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	0.01	1:1	0.003	1.233	0.004	0.000	0.000	
3930.00	662000	High	bottom	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.77	0.00	0.02	1:1	0.198	1.239	0.245	0.056	0.069	
3930.00	662000	High	bottom	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	-0.06	1:1	0.176	1.233	0.217	0.050	0.062	
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.77	0.00	0.20	1:1	0.002	1.239	0.002	0.000	0.000	
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	0.20	1:1	0.001	1.233	0.001	0.000	0.000	
3750.00	650000	Low	left	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.63	0.00	-0.01	1:1	0.652	1.279	0.834	0.175	0.224	
3930.00	662000	High	left	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	1	137	10.70	9.77	0.00	0.03	1:1	0.753	1.239	0.933	0.201	0.249	
3750.00	650000	Low	left	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	135	69	10.70	9.65	0.00	0.00	1:1	0.647	1.274	0.824	0.173	0.220	
3930.00	662000	High	left	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	0.06	1:1	0.734	1.233	0.905	0.192	0.237	
3930.00	662000	High	left	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	DFT-S-OFDM	QPSK	270	0	10.70	9.70	0.00	0.00	1:1	0.721	1.259	0.908	0.191	0.240	
3930.00	662000	High	left	0 mm	NR Band n77 PC2	Ant 1a	G3Q2XBLP70	100	CP-OFDM	QPSK	1	1	10.70	9.64	0.00	-0.03	1:1	0.667	1.276	0.851	0.174	0.222	
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 10-78
NR Band n77 C PC2 Antenna 2a Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	back	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	1	1	10.70	9.80	0.00	0.00	1:1	0.757	1.230	0.931	0.223	0.274	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	1	1	10.70	9.71	0.00	0.03	1:1	0.665	1.256	0.835	0.189	0.237	
3750.00	650000	Low	back	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	135	0	10.70	9.74	0.00	0.04	1:1	0.696	1.247	0.868	0.204	0.254	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	0.00	1:1	0.683	1.233	0.842	0.193	0.238	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	270	0	10.70	9.63	0.00	0.03	1:1	0.721	1.279	0.922	0.202	0.258	
3750.00	650000	Low	top	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	1	1	10.70	9.80	0.00	-0.21	1:1	0.004	1.230	0.005	0.000	0.000	
3930.00	662000	High	top	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	0.07	1:1	0.002	1.233	0.002	0.000	0.000	
3750.00	650000	Low	bottom	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	1	1	10.70	9.80	0.00	-0.04	1:1	0.260	1.230	0.320	0.072	0.089	
3930.00	662000	High	bottom	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	-0.01	1:1	0.188	1.233	0.232	0.051	0.063	
3750.00	650000	Low	right	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	1	1	10.70	9.80	0.00	-0.03	1:1	0.783	1.230	0.963	0.218	0.268	
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	1	1	10.70	9.71	0.00	0.08	1:1	0.770	1.256	0.967	0.205	0.257	
3750.00	650000	Low	right	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	135	0	10.70	9.74	0.00	0.08	1:1	0.743	1.247	0.927	0.203	0.253	
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	0.00	1:1	0.809	1.233	0.997	0.213	0.263	A25
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	270	0	10.70	9.63	0.00	0.06	1:1	0.780	1.279	0.998	0.210	0.269	
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	CP-OFDM	QPSK	1	1	10.70	9.60	0.00	0.00	1:1	0.761	1.288	0.980	0.202	0.260	
3750.00	650000	Low	left	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	1	1	10.70	9.80	0.00	0.02	1:1	0.000	1.230	0.000	0.000	0.000	
3930.00	662000	High	left	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	0.01	1:1	0.000	1.233	0.000	0.000	0.000	
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 2a	P34PWY9M0P	100	DFT-S-OFDM	QPSK	135	0	10.70	9.79	0.00	-0.01	1:1	0.758	1.233	0.932	0.207	0.255	
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 10-79
NR Band n77 C PC2 Antenna 3b Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	back	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	1	1	13.70	12.41	0.00	0.10	1:1	0.576	1.346	0.775	0.230	0.310	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	1	1	13.70	12.63	0.00	-0.01	1:1	0.509	1.279	0.651	0.209	0.267	
3750.00	650000	Low	back	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	135	0	13.70	12.22	0.00	0.02	1:1	0.584	1.406	0.821	0.235	0.330	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	135	0	13.70	12.52	0.00	0.02	1:1	0.503	1.312	0.660	0.204	0.268	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	270	0	13.70	12.44	0.00	0.00	1:1	0.495	1.337	0.662	0.200	0.267	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	CP-OFDM	QPSK	1	1	13.70	12.53	0.00	-0.02	1:1	0.513	1.309	0.672	0.211	0.276	
3750.00	650000	Low	top	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	1	1	13.70	12.41	0.00	-0.08	1:1	0.523	1.346	0.704	0.156	0.210	
3930.00	662000	High	top	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	1	1	13.70	12.63	0.00	-0.02	1:1	0.372	1.279	0.476	0.113	0.145	
3750.00	650000	Low	top	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	135	0	13.70	12.22	0.00	0.10	1:1	0.500	1.406	0.703	0.151	0.212	
3930.00	662000	High	top	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	135	0	13.70	12.52	0.00	0.03	1:1	0.372	1.312	0.488	0.113	0.148	
3930.00	662000	High	top	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	270	0	13.70	12.44	0.00	0.02	1:1	0.348	1.337	0.465	0.107	0.143	
3930.00	662000	High	bottom	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	1	1	13.70	12.63	0.00	0.04	1:1	0.000	1.279	0.000	0.000	0.000	
3930.00	662000	High	bottom	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	135	0	13.70	12.52	0.00	0.20	1:1	0.000	1.312	0.000	0.000	0.000	
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	1	1	13.70	12.63	0.00	0.08	1:1	0.011	1.279	0.014	0.003	0.004	
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	135	0	13.70	12.52	0.00	0.01	1:1	0.013	1.312	0.017	0.005	0.007	
3930.00	662000	High	left	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	1	1	13.70	12.63	0.00	0.20	1:1	0.009	1.279	0.012	0.003	0.004	
3930.00	662000	High	left	0 mm	NR Band n77 PC2	Ant 3b	DR2FPM6LJX	100	DFT-S-OFDM	QPSK	135	0	13.70	12.52	0.00	-0.16	1:1	0.009	1.312	0.012	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 10-80
NR Band n77 C PC2 Antenna 4 Body SAR

MEASUREMENT RESULTS																										
FREQUENCY		Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	back	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	1	1	11.10	10.14	0.00	0.00	1:1	0.418	1.247	0.521	0.137	0.171	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	1	1	11.10	10.30	0.00	-0.03	1:1	0.491	1.202	0.590	0.155	0.186	
3750.00	650000	Low	back	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	135	0	11.10	10.15	0.00	-0.01	1:1	0.454	1.245	0.565	0.149	0.186	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	135	0	11.10	10.29	0.00	0.00	1:1	0.483	1.205	0.582	0.156	0.188	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	270	0	11.10	10.17	0.00	-0.02	1:1	0.465	1.239	0.576	0.146	0.181	
3930.00	662000	High	back	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	CP-OFDM	QPSK	1	1	11.10	10.27	0.00	0.00	1:1	0.534	1.211	0.647	0.170	0.206	
3930.00	662000	High	top	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	1	1	11.10	10.30	0.00	0.01	1:1	0.176	1.202	0.212	0.047	0.056	
3930.00	662000	High	top	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	135	0	11.10	10.29	0.00	0.03	1:1	0.157	1.205	0.189	0.042	0.051	
3930.00	662000	High	bottom	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	1	1	11.10	10.30	0.00	0.09	1:1	0.000	1.202	0.000	0.000	0.000	
3930.00	662000	High	bottom	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	135	0	11.10	10.29	0.00	0.09	1:1	0.000	1.205	0.000	0.000	0.000	
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	1	1	11.10	10.30	0.00	0.04	1:1	0.003	1.202	0.004	0.000	0.000	
3930.00	662000	High	right	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	135	0	11.10	10.29	0.00	0.05	1:1	0.005	1.205	0.006	0.002	0.002	
3930.00	662000	High	left	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	1	1	11.10	10.30	0.00	0.08	1:1	0.235	1.202	0.282	0.065	0.078	
3930.00	662000	High	left	0 mm	NR Band n77 PC2	Ant 4	YKHQ1SGV4G	100	DFT-S-OFDM	QPSK	135	0	11.10	10.29	0.00	-0.11	1:1	0.189	1.205	0.228	0.052	0.063	
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 10-81
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	12.00	11.08	0.02	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	back	99.7	0.862	1.236	1.003	1.069	0.323	0.400	
2437	6	802.11b	DSSS	22	12.00	11.05	0.03	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	back	99.7	0.880	1.245	1.003	1.099	0.329	0.411	
2462	11	802.11b	DSSS	22	12.00	11.03	0.03	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	back	99.7	0.910	1.250	1.003	1.141	0.341	0.428	
2462	11	802.11b	DSSS	22	12.00	11.13	0.00	0 mm	Ant 1a	V2	Q93JKF6L7J	1	back	99.7	0.799	1.222	1.003	0.979	0.313	0.384	
2412	1	802.11b	DSSS	22	12.00	11.08	0.05	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	top	99.7	0.008	1.236	1.003	0.010	0.003	0.004	
2412	1	802.11b	DSSS	22	12.00	11.08	-0.04	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	bottom	99.7	0.295	1.236	1.003	0.366	0.091	0.113	
2412	1	802.11b	DSSS	22	12.00	11.08	0.08	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	right	99.7	0.000	1.236	1.003	0.000	0.000	0.000	
2412	1	802.11b	DSSS	22	12.00	11.08	-0.08	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	left	99.7	0.851	1.236	1.003	1.055	0.287	0.356	
2437	6	802.11b	DSSS	22	12.00	11.05	0.01	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	left	99.7	0.754	1.245	1.003	0.942	0.255	0.318	
2462	11	802.11b	DSSS	22	12.00	11.03	0.02	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	left	99.7	0.895	1.250	1.003	1.122	0.298	0.374	
2462	11	802.11b	DSSS	22	8.50	7.56	0.02	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	back	99.7	0.458	1.242	1.003	0.571	0.162	0.202	
2462	11	802.11b	DSSS	22	8.50	7.56	-0.20	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	bottom	99.7	0.158	1.242	1.003	0.197	0.047	0.059	
2462	11	802.11b	DSSS	22	8.50	7.56	0.04	0 mm	Ant 1a	V1	Y6L2P59NKJ	1	left	99.7	0.433	1.242	1.003	0.539	0.142	0.177	
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)	
2462	11	802.11b	DSSS	22	12.50	12.12	0.01	0 mm	Ant 3a	V2	Q93JKF6L7J	1	back	99.7	0.652	1.091	1.003	0.713	0.279	0.305	
2462	11	802.11b	DSSS	22	12.50	12.12	0.02	0 mm	Ant 3a	V2	Q93JKF6L7J	1	top	99.7	0.496	1.091	1.003	0.543	0.158	0.173	
2462	11	802.11b	DSSS	22	12.50	12.12	-0.05	0 mm	Ant 3a	V2	Q93JKF6L7J	1	bottom	99.7	0.020	1.091	1.003	0.022	0.008	0.009	
2412	1	802.11b	DSSS	22	12.50	11.96	0.04	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	99.7	0.923	1.132	1.003	1.048	0.329	0.374	
2437	6	802.11b	DSSS	22	12.50	11.92	0.02	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	99.7	0.827	1.143	1.003	0.948	0.293	0.336	
2462	11	802.11b	DSSS	22	12.50	12.12	-0.10	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	99.7	1.060	1.091	1.003	1.160	0.367	0.402	A26
2462	11	802.11b	DSSS	22	12.50	12.01	0.03	0 mm	Ant 3a	V1	G5VX0WJQDP	1	right	99.7	0.976	1.119	1.003	1.095	0.340	0.382	
2462	11	802.11b	DSSS	22	12.50	12.12	0.03	0 mm	Ant 3a	V2	Q93JKF6L7J	1	left	99.7	0.000	1.091	1.003	0.000	0.000	0.000	
2462	11	802.11b	DSSS	22	9.00	8.07	-0.01	0 mm	Ant 3a	V2	Q93JKF6L7J	1	back	99.7	0.278	1.239	1.003	0.345	0.117	0.145	
2462	11	802.11b	DSSS	22	9.00	8.07	-0.03	0 mm	Ant 3a	V2	Q93JKF6L7J	1	top	99.7	0.193	1.239	1.003	0.240	0.062	0.077	
2462	11	802.11b	DSSS	22	9.00	8.07	0.02	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	99.7	0.388	1.239	1.003	0.482	0.132	0.164	
2462	11	802.11b	DSSS	22	12.50	12.12	0.00	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	99.7	0.935	1.091	1.003	1.023	0.332	0.363	
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 10-83
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)	
5210	42	802.11ac	OFDM	80	12.50	11.07	0.00	0 mm	Ant 1b	V1	CQNHQG526T	29.3	back	95.0	0.768	1.390	1.053	1.124	0.239	0.350	
5210	42	802.11ac	OFDM	80	12.50	11.08	-0.02	0 mm	Ant 1b	V2	QWL4PHG93F	29.3	back	95.0	0.759	1.387	1.053	1.109	0.226	0.330	
5210	42	802.11ac	OFDM	80	12.50	11.07	0.09	0 mm	Ant 1b	V1	CQNHQG526T	29.3	top	95.0	0.000	1.390	1.053	0.000	0.000	0.000	
5210	42	802.11ac	OFDM	80	12.50	11.07	0.04	0 mm	Ant 1b	V1	CQNHQG526T	29.3	bottom	95.0	0.546	1.390	1.053	0.799	0.137	0.201	
5210	42	802.11ac	OFDM	80	12.50	11.07	0.09	0 mm	Ant 1b	V1	CQNHQG526T	29.3	right	95.0	0.005	1.390	1.053	0.007	0.000	0.000	
5210	42	802.11ac	OFDM	80	12.50	11.07	0.06	0 mm	Ant 1b	V1	CQNHQG526T	29.3	left	95.0	0.050	1.390	1.053	0.073	0.008	0.012	
5210	42	802.11ac	OFDM	80	6.25	5.23	-0.04	0 mm	Ant 1b	V1	CQNHQG526T	29.3	back	95.0	0.195	1.265	1.053	0.260	0.057	0.076	
5210	42	802.11ac	OFDM	80	6.25	5.23	-0.06	0 mm	Ant 1b	V1	CQNHQG526T	29.3	bottom	95.0	0.147	1.265	1.053	0.196	0.033	0.044	
5530	106	802.11ac	OFDM	80	11.50	10.60	0.07	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	back	95.0	0.909	1.230	1.053	1.177	0.263	0.341	
5610	122	802.11ac	OFDM	80	11.50	10.59	0.01	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	back	95.0	0.907	1.233	1.053	1.178	0.257	0.334	
5690	138	802.11ac	OFDM	80	11.50	10.57	-0.06	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	back	95.0	0.719	1.239	1.053	0.938	0.211	0.275	
5610	122	802.11ac	OFDM	80	11.50	10.61	0.06	0 mm	Ant 1b	V2	P7VM4MQ097	29.3	back	95.0	0.878	1.227	1.053	1.134	0.236	0.305	
5530	106	802.11ac	OFDM	80	11.50	10.60	0.02	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	top	95.0	0.000	1.230	1.053	0.000	0.000	0.000	
5530	106	802.11ac	OFDM	80	11.50	10.60	0.01	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	bottom	95.0	0.528	1.230	1.053	0.684	0.129	0.167	
5530	106	802.11ac	OFDM	80	11.50	10.60	0.08	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	right	95.0	0.003	1.230	1.053	0.004	0.000	0.000	
5530	106	802.11ac	OFDM	80	11.50	10.60	-0.09	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	left	95.0	0.050	1.230	1.053	0.065	0.010	0.013	
5690	138	802.11ac	OFDM	80	5.25	4.32	-0.03	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	back	95.0	0.174	1.239	1.053	0.227	0.044	0.057	
5690	138	802.11ac	OFDM	80	5.25	4.32	0.00	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	bottom	95.0	0.106	1.239	1.053	0.138	0.021	0.027	
5775	155	802.11ac	OFDM	80	12.00	11.75	0.00	0 mm	Ant 1b	V2	NY41T9MX1W	29.3	back	95.0	1.060	1.059	1.053	1.182	0.304	0.339	A27
5775	155	802.11ac	OFDM	80	12.00	11.72	-0.06	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	back	95.0	1.050	1.067	1.053	1.180	0.291	0.327	
5775	155	802.11ac	OFDM	80	12.00	11.75	0.04	0 mm	Ant 1b	V2	NY41T9MX1W	29.3	top	95.0	0.000	1.059	1.053	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	12.00	11.75	0.20	0 mm	Ant 1b	V2	NY41T9MX1W	29.3	bottom	95.0	0.531	1.059	1.053	0.592	0.124	0.138	
5775	155	802.11ac	OFDM	80	12.00	11.75	0.02	0 mm	Ant 1b	V2	NY41T9MX1W	29.3	right	95.0	0.012	1.059	1.053	0.013	0.000	0.000	
5775	155	802.11ac	OFDM	80	12.00	11.75	0.03	0 mm	Ant 1b	V2	NY41T9MX1W	29.3	left	95.0	0.039	1.059	1.053	0.043	0.006	0.007	
5775	155	802.11ac	OFDM	80	5.75	4.72	0.02	0 mm	Ant 1b	V2	P7VM4MQ097	29.3	back	95.0	0.194	1.268	1.053	0.259	0.052	0.069	
5775	155	802.11ac	OFDM	80	5.75	4.72	-0.08	0 mm	Ant 1b	V2	P7VM4MQ097	29.3	bottom	95.0	0.120	1.268	1.053	0.160	0.025	0.033	
5530	106	802.11ac	OFDM	80	11.50	10.60	0.08	0 mm	Ant 1b	V1	JYD4XWJC60	29.3	back	95.0	0.892	1.230	1.053	1.155	0.257	0.333	
5775	155	802.11ac	OFDM	80	12.00	11.75	0.07	0 mm	Ant 1b	V2	NY41T9MX1W	29.3	back	95.0	0.915	1.059	1.053	1.020	0.273	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						

Note: Blue entry represents variability measurement.

Table 10-84
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)	
5210	42	802.11ac	OFDM	80	10.75	9.84	0.04	0 mm	Ant 3a	V2	P7VM4MQ097	29.3	back	95.0	0.685	1.233	1.053	0.889	0.160	0.208	
5210	42	802.11ac	OFDM	80	10.75	9.84	0.08	0 mm	Ant 3a	V2	P7VM4MQ097	29.3	top	95.0	0.176	1.233	1.053	0.229	0.038	0.049	
5210	42	802.11ac	OFDM	80	10.75	9.84	0.06	0 mm	Ant 3a	V2	P7VM4MQ097	29.3	bottom	95.0	0.002	1.233	1.053	0.003	0.000	0.000	
5210	42	802.11ac	OFDM	80	10.75	9.84	0.02	0 mm	Ant 3a	V2	P7VM4MQ097	29.3	right	95.0	0.899	1.233	1.053	1.167	0.221	0.287	
5210	42	802.11ac	OFDM	80	10.75	9.93	0.07	0 mm	Ant 3a	V1	JYD4XWJC60	29.3	right	95.0	0.839	1.208	1.053	1.067	0.205	0.261	
5210	42	802.11ac	OFDM	80	10.75	9.84	0.04	0 mm	Ant 3a	V2	P7VM4MQ097	29.3	left	95.0	0.000	1.233	1.053	0.000	0.000	0.000	
5210	42	802.11ac	OFDM	80	5.25	3.93	0.02	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	back	95.0	0.180	1.355	1.053	0.257	0.039	0.056	
5210	42	802.11ac	OFDM	80	5.25	3.93	-0.10	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	top	95.0	0.039	1.355	1.053	0.056	0.007	0.010	
5210	42	802.11ac	OFDM	80	5.25	3.93	0.01	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	right	95.0	0.214	1.355	1.053	0.305	0.048	0.068	
5530	106	802.11ac	OFDM	80	10.00	8.80	0.04	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	back	95.0	0.836	1.318	1.053	1.160	0.190	0.264	
5610	122	802.11ac	OFDM	80	10.00	8.85	-0.01	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	back	95.0	0.769	1.303	1.053	1.055	0.176	0.241	
5690	138	802.11ac	OFDM	80	10.00	8.82	0.06	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	back	95.0	0.848	1.312	1.053	1.172	0.191	0.264	
5690	138	802.11ac	OFDM	80	10.00	8.78	0.02	0 mm	Ant 3a	V1	CQNHQG526T	29.3	back	95.0	0.809	1.324	1.053	1.128	0.182	0.254	
5610	122	802.11ac	OFDM	80	10.00	8.85	0.06	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	top	95.0	0.127	1.303	1.053	0.174	0.029	0.040	
5610	122	802.11ac	OFDM	80	10.00	8.85	0.09	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	bottom	95.0	0.002	1.303	1.053	0.003	0.000	0.000	
5610	122	802.11ac	OFDM	80	10.00	8.85	0.05	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	right	95.0	0.517	1.303	1.053	0.709	0.118	0.162	
5610	122	802.11ac	OFDM	80	10.00	8.85	0.09	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	left	95.0	0.000	1.303	1.053	0.000	0.000	0.000	
5530	106	802.11ac	OFDM	80	4.50	3.37	-0.09	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	back	95.0	0.239	1.297	1.053	0.326	0.053	0.072	
5530	106	802.11ac	OFDM	80	4.50	3.37	0.19	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	top	95.0	0.048	1.297	1.053	0.066	0.010	0.014	
5530	106	802.11ac	OFDM	80	4.50	3.37	-0.01	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	right	95.0	0.172	1.297	1.053	0.235	0.034	0.046	
5775	155	802.11ac	OFDM	80	10.00	8.63	-0.01	0 mm	Ant 3a	V1	CQNHQG526T	29.3	back	95.0	0.819	1.371	1.053	1.182	0.182	0.263	
5775	155	802.11ac	OFDM	80	10.00	8.65	0.02	0 mm	Ant 3a	V2	QWL4PHG93F	29.3	back	95.0	0.792	1.365	1.053	1.138	0.178	0.256	
5775	155	802.11ac	OFDM	80	10.00	8.63	-0.05	0 mm	Ant 3a	V1	CQNHQG526T	29.3	top	95.0	0.173	1.371	1.053	0.250	0.038	0.055	
5775	155	802.11ac	OFDM	80	10.00	8.63	0.06	0 mm	Ant 3a	V1	CQNHQG526T	29.3	bottom	95.0	0.000	1.371	1.053	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	10.00	8.63	0.00	0 mm	Ant 3a	V1	CQNHQG526T	29.3	right	95.0	0.465	1.371	1.053	0.671	0.104	0.150	
5775	155	802.11ac	OFDM	80	10.00	8.63	0.02	0 mm	Ant 3a	V1	CQNHQG526T	29.3	left	95.0	0.000	1.371	1.053	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	4.50	3.46	0.02	0 mm	Ant 3a	V1	CQNHQG526T	29.3	back	95.0	0.278	1.271	1.053	0.372	0.057	0.076	
5775	155	802.11ac	OFDM	80	4.50	3.46	-0.05	0 mm	Ant 3a	V1	CQNHQG526T	29.3	top	95.0	0.041	1.271	1.053	0.055	0.004	0.005	
5775	155	802.11ac	OFDM	80	4.50	3.46	-0.02	0 mm	Ant 3a	V1	CQNHQG526T	29.3	right	95.0	0.140	1.271	1.053	0.187	0.028	0.037	
5210	42	802.11ac	OFDM	80	10.75	9.84	-0.20	0 mm	Ant 3a	V2	P7VM4MQ097	29.3	right	95.0	0.865	1.233	1.053	1.123	0.211	0.274	
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 10-85
5 GHz WLAN Antenna 3c 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)	
5270	54	802.11n	OFDM	40	16.00	15.03	0.02	0 mm	Ant 3c	V2	NY41T9MX1W	13.5	back	96.8	0.281	1.250	1.033	0.363	0.083	0.107	
5270	54	802.11n	OFDM	40	16.00	15.03	-0.14	0 mm	Ant 3c	V2	NY41T9MX1W	13.5	top	96.8	0.833	1.250	1.033	1.076	0.289	0.373	
5310	62	802.11n	OFDM	40	16.00	13.54	-0.11	0 mm	Ant 3c	V2	NY41T9MX1W	13.5	top	96.8	0.576	1.762	1.033	1.048	0.188	0.342	
5270	54	802.11n	OFDM	40	16.00	14.99	0.06	0 mm	Ant 3c	V1	JYD4XWJC60	13.5	top	96.8	0.744	1.262	1.033	0.970	0.254	0.331	
5270	54	802.11n	OFDM	40	16.00	15.03	0.07	0 mm	Ant 3c	V2	NY41T9MX1W	13.5	bottom	96.8	0.004	1.250	1.033	0.005	0.000	0.000	
5270	54	802.11n	OFDM	40	16.00	15.03	0.03	0 mm	Ant 3c	V2	NY41T9MX1W	13.5	right	96.8	0.029	1.250	1.033	0.037	0.004	0.005	
5270	54	802.11n	OFDM	40	16.00	15.03	0.12	0 mm	Ant 3c	V2	NY41T9MX1W	13.5	left	96.8	0.065	1.250	1.033	0.084	0.010	0.013	
5210	42	802.11ac	OFDM	80	12.00	11.09	0.16	0 mm	Ant 3c	V2	NY41T9MX1W	29.3	back	95.0	0.158	1.233	1.053	0.205	0.044	0.057	
5210	42	802.11ac	OFDM	80	12.00	11.09	0.02	0 mm	Ant 3c	V2	NY41T9MX1W	29.3	top	95.0	0.340	1.233	1.053	0.441	0.112	0.145	
5690	138	802.11ac	OFDM	80	15.00	14.06	-0.06	0 mm	Ant 3c	V1	CQNHQG526T	29.3	back	95.0	0.169	1.242	1.053	0.221	0.049	0.064	
5530	106	802.11ac	OFDM	80	15.00	13.99	-0.07	0 mm	Ant 3c	V2	QWL4PHG93F	29.3	top	95.0	0.714	1.262	1.053	0.949	0.227	0.302	
5610	122	802.11ac	OFDM	80	15.00	14.07	-0.04	0 mm	Ant 3c	V2	QWL4PHG93F	29.3	top	95.0	0.651	1.239	1.053	0.849	0.203	0.265	
5690	138	802.11ac	OFDM	80	15.00	13.95	-0.01	0 mm	Ant 3c	V2	QWL4PHG93F	29.3	top	95.0	0.830	1.274	1.053	1.113	0.259	0.347	
5690	138	802.11ac	OFDM	80	15.00	14.06	-0.13	0 mm	Ant 3c	V1	CQNHQG526T	29.3	top	95.0	0.889	1.242	1.053	1.163	0.277	0.362	
5690	138	802.11ac	OFDM	80	15.00	14.06	0.20	0 mm	Ant 3c	V1	CQNHQG526T	29.3	bottom	95.0	0.004	1.242	1.053	0.005	0.000	0.000	
5690	138	802.11ac	OFDM	80	15.00	14.06	0.05	0 mm	Ant 3c	V1	CQNHQG526T	29.3	right	95.0	0.002	1.242	1.053	0.003	0.000	0.000	
5690	138	802.11ac	OFDM	80	15.00	14.06	0.09	0 mm	Ant 3c	V1	CQNHQG526T	29.3	left	95.0	0.018	1.242	1.053	0.024	0.000	0.000	
5690	138	802.11ac	OFDM	80	11.00	10.05	0.03	0 mm	Ant 3c	V1	CQNHQG526T	29.3	back	95.0	0.046	1.245	1.053	0.060	0.010	0.013	
5690	138	802.11ac	OFDM	80	11.00	10.05	0.08	0 mm	Ant 3c	V1	CQNHQG526T	29.3	top	95.0	0.359	1.245	1.053	0.471	0.108	0.142	
5775	155	802.11ac	OFDM	80	16.00	15.13	0.03	0 mm	Ant 3c	V1	CQNHQG526T	29.3	back	95.0	0.135	1.222	1.053	0.174	0.040	0.051	
5775	155	802.11ac	OFDM	80	16.00	15.13	0.06	0 mm	Ant 3c	V1	CQNHQG526T	29.3	top	95.0	0.923	1.222	1.053	1.188	0.286	0.368	
5775	155	802.11ac	OFDM	80	16.00	15.24	0.02	0 mm	Ant 3c	V2	NY41T9MX1W	29.3	top	95.0	0.939	1.191	1.053	1.178	0.286	0.359	
5775	155	802.11ac	OFDM	80	16.00	15.13	0.08	0 mm	Ant 3c	V1	CQNHQG526T	29.3	bottom	95.0	0.008	1.222	1.053	0.010	0.000	0.000	
5775	155	802.11ac	OFDM	80	16.00	15.13	0.02	0 mm	Ant 3c	V1	CQNHQG526T	29.3	right	95.0	0.003	1.222	1.053	0.004	0.000	0.000	
5775	155	802.11ac	OFDM	80	16.00	15.13	-0.11	0 mm	Ant 3c	V1	CQNHQG526T	29.3	left	95.0	0.004	1.222	1.053	0.005	0.000	0.000	
5775	155	802.11ac	OFDM	80	12.00	11.06	0.09	0 mm	Ant 3c	V1	CQNHQG526T	29.3	back	95.0	0.055	1.242	1.053	0.072	0.013	0.017	
5775	155	802.11ac	OFDM	80	12.00	11.06	-0.02	0 mm	Ant 3c	V1	CQNHQG526T	29.3	top	95.0	0.424	1.242	1.053	0.555	0.126	0.165	

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 10-86
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	12.50	11.27	0.00	0 mm	Ant 1a	V2	X4PV2JXM69	1	back	76.7	0.727	1.327	1.010	0.974	0.265	0.355	
2441	39	Bluetooth	FHSS	12.50	11.31	-0.02	0 mm	Ant 1a	V2	X4PV2JXM69	1	back	76.7	0.779	1.315	1.010	1.035	0.282	0.375	
2480	78	Bluetooth	FHSS	12.50	11.20	-0.01	0 mm	Ant 1a	V2	X4PV2JXM69	1	back	76.7	0.720	1.349	1.010	0.981	0.261	0.356	
2441	39	Bluetooth	FHSS	12.50	11.89	0.00	0 mm	Ant 1a	V1	MWL66H3WFM	1	back	76.7	0.860	1.151	1.010	1.000	0.327	0.380	A28
2441	39	Bluetooth	FHSS	12.50	11.31	0.06	0 mm	Ant 1a	V2	X4PV2JXM69	1	top	76.7	0.013	1.315	1.010	0.017	0.005	0.007	
2441	39	Bluetooth	FHSS	12.50	11.31	0.06	0 mm	Ant 1a	V2	X4PV2JXM69	1	bottom	76.7	0.324	1.315	1.010	0.430	0.101	0.134	
2441	39	Bluetooth	FHSS	12.50	11.31	0.09	0 mm	Ant 1a	V2	X4PV2JXM69	1	right	76.7	0.001	1.315	1.010	0.001	0.000	0.000	
2402	0	Bluetooth	FHSS	12.50	11.27	0.01	0 mm	Ant 1a	V2	X4PV2JXM69	1	left	76.7	0.727	1.327	1.010	0.974	0.255	0.342	
2441	39	Bluetooth	FHSS	12.50	11.31	0.00	0 mm	Ant 1a	V2	X4PV2JXM69	1	left	76.7	0.731	1.315	1.010	0.971	0.247	0.328	
2480	78	Bluetooth	FHSS	12.50	11.20	0.00	0 mm	Ant 1a	V2	X4PV2JXM69	1	left	76.7	0.709	1.349	1.010	0.966	0.239	0.326	
2480	78	Bluetooth	FHSS	9.00	8.37	-0.02	0 mm	Ant 1a	V2	Q93JKF6L7J	1	back	76.7	0.308	1.156	1.010	0.360	0.111	0.130	
2480	78	Bluetooth	FHSS	9.00	8.37	-0.11	0 mm	Ant 1a	V2	Q93JKF6L7J	1	bottom	76.7	0.073	1.156	1.010	0.085	0.021	0.025	
2480	78	Bluetooth	FHSS	9.00	8.37	0.00	0 mm	Ant 1a	V2	Q93JKF6L7J	1	left	76.7	0.272	1.156	1.010	0.318	0.091	0.106	
2480	78	Bluetooth	FHSS	7.00	6.49	-0.02	0 mm	Ant 1a	V2	Q93JKF6L7J	1	back	76.7	0.199	1.125	1.010	0.226	0.070	0.080	
2480	78	Bluetooth	FHSS	7.00	6.49	-0.07	0 mm	Ant 1a	V2	Q93JKF6L7J	1	bottom	76.7	0.051	1.125	1.010	0.058	0.015	0.017	
2480	78	Bluetooth	FHSS	7.00	6.49	0.01	0 mm	Ant 1a	V2	Q93JKF6L7J	1	left	76.7	0.193	1.125	1.010	0.219	0.064	0.073	
2480	78	Bluetooth	FHSS	5.50	4.83	-0.08	0 mm	Ant 1a	V2	Q93JKF6L7J	1	back	76.7	0.121	1.167	1.010	0.143	0.041	0.048	
2480	78	Bluetooth	FHSS	5.50	4.83	0.06	0 mm	Ant 1a	V2	Q93JKF6L7J	1	bottom	76.7	0.028	1.167	1.010	0.033	0.007	0.008	
2480	78	Bluetooth	FHSS	5.50	4.83	-0.07	0 mm	Ant 1a	V2	Q93JKF6L7J	1	left	76.7	0.112	1.167	1.010	0.132	0.037	0.044	

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.

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	11.30	-0.01	0 mm	Ant 3a	V1	MWL66H3WFM	1	back	76.6	0.305	1.318	1.012	0.407	0.127	0.169	
2441	39	Bluetooth	FHSS	12.50	11.30	-0.03	0 mm	Ant 3a	V1	MWL66H3WFM	1	top	76.6	0.242	1.318	1.012	0.323	0.076	0.101	
2441	39	Bluetooth	FHSS	12.50	11.30	0.20	0 mm	Ant 3a	V1	MWL66H3WFM	1	bottom	76.6	0.005	1.318	1.012	0.007	0.002	0.003	
2402	0	Bluetooth	FHSS	12.50	11.26	-0.03	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	76.6	0.395	1.330	1.012	0.532	0.141	0.190	
2441	39	Bluetooth	FHSS	12.50	11.42	-0.05	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	76.6	0.520	1.282	1.012	0.675	0.183	0.237	
2480	78	Bluetooth	FHSS	12.50	11.13	-0.03	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	76.6	0.679	1.371	1.012	0.942	0.238	0.330	
2480	78	Bluetooth	FHSS	12.50	11.26	-0.01	0 mm	Ant 3a	V1	MWL66H3WFM	1	right	76.6	0.696	1.330	1.012	0.937	0.234	0.315	
2441	39	Bluetooth	FHSS	12.50	11.30	0.09	0 mm	Ant 3a	V1	MWL66H3WFM	1	left	76.6	0.001	1.318	1.012	0.001	0.000	0.000	
2402	0	Bluetooth	FHSS	9.00	8.39	0.02	0 mm	Ant 3a	V2	Q93JKF6L7J	1	back	76.6	0.176	1.151	1.012	0.205	0.074	0.086	
2402	0	Bluetooth	FHSS	9.00	8.39	0.00	0 mm	Ant 3a	V2	Q93JKF6L7J	1	top	76.6	0.137	1.151	1.012	0.160	0.043	0.050	
2402	0	Bluetooth	FHSS	9.00	8.39	-0.10	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	76.6	0.230	1.151	1.012	0.268	0.079	0.092	
2402	0	Bluetooth	FHSS	7.00	6.30	-0.02	0 mm	Ant 3a	V2	Q93JKF6L7J	1	back	76.6	0.092	1.175	1.012	0.109	0.038	0.045	
2402	0	Bluetooth	FHSS	7.00	6.30	-0.12	0 mm	Ant 3a	V2	Q93JKF6L7J	1	top	76.6	0.072	1.175	1.012	0.086	0.023	0.027	
2402	0	Bluetooth	FHSS	7.00	6.30	-0.08	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	76.6	0.117	1.175	1.012	0.139	0.041	0.049	
2441	39	Bluetooth	FHSS	5.50	4.38	-0.14	0 mm	Ant 3a	V2	Q93JKF6L7J	1	back	76.6	0.060	1.294	1.012	0.079	0.023	0.030	
2441	39	Bluetooth	FHSS	5.50	4.38	0.02	0 mm	Ant 3a	V2	Q93JKF6L7J	1	top	76.6	0.045	1.294	1.012	0.059	0.014	0.018	
2441	39	Bluetooth	FHSS	5.50	4.38	0.02	0 mm	Ant 3a	V2	Q93JKF6L7J	1	right	76.6	0.114	1.294	1.012	0.149	0.039	0.051	
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.

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.
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 and Power Class 3 operations is 100.0 %. Per FCC Guidance, all SAR tests were performed using Power Class 2.

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.

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.

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 3a SAR (W/kg)	2.4 GHz WLAN Ant 1a Reduced at 8.5dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.815	0.713	0.571	1.386*
	Top	0.010	0.543	0.010	0.563
	Bottom	0.283	0.022	0.197	0.502
	Right	0.002	1.160	0.000	1.162
	Left	0.939	0.000	0.539	**1.478**

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 3a SAR (W/kg)	2.4 GHz WLAN Ant 1a Reduced at 8.5dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.979	0.713	0.571	**1.550***
	Top	0.014	0.543	0.010	0.567
	Bottom	0.998	0.022	0.197	1.217
	Right	0.028	1.160	0.000	1.188
	Left	0.077	0.000	0.539	0.616

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 3a SAR (W/kg)	2.4 GHz WLAN Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.931	0.713	1.141	1.141*
	Top	0.006	0.543	0.010	0.559
	Bottom	0.384	0.022	0.366	0.772
	Right	0.998	1.160	0.000	**1.160***
	Left	0.000	0.000	1.122	1.122

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 3a SAR (W/kg)	2.4 GHz WLAN Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.998	0.713	1.141	1.141*
	Top	0.026	0.543	0.010	0.579
	Bottom	0.999	0.022	0.366	1.387
	Right	0.183	1.160	0.000	**1.343**
	Left	0.030	0.000	1.122	1.152

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 3a Reduced at 9dBm SAR (W/kg)	2.4 GHz WLAN Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.693	0.345	1.141	1.141*
	Top	0.488	0.240	0.010	0.738
	Bottom	0.028	0.022	0.366	0.416
	Right	0.998	0.482	0.000	**1.480**
	Left	0.015	0.000	1.122	1.137

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 3a Reduced at 9dBm SAR (W/kg)	2.4 GHz WLAN Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.983	0.345	1.141	**1.328***
	Top	0.991	0.240	0.010	1.241
	Bottom	0.019	0.022	0.366	0.407
	Right	0.160	0.482	0.000	0.642
	Left	0.041	0.000	1.122	1.163

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 3a SAR (W/kg)	2.4 GHz WLAN Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.998	0.713	1.141	1.141*
	Top	0.992	0.543	0.010	1.545
	Bottom	0.035	0.022	0.366	0.423
	Right	0.068	1.160	0.000	**1.228**
	Left	0.949	0.000	1.122	1.122*

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 3a SAR (W/kg)	5 GHz WLAN Ant 3c SAR (W/kg)	5 GHz WLAN Ant 1b Reduced at 6.25dBm SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.815	1.182	0.363	0.260	1.182*	1.182*	1.438
	Top	0.010	0.250	1.188	0.000	**1.448**	0.260	1.198
	Bottom	0.283	0.003	0.010	0.196	0.296	0.482	0.489
	Right	0.002	1.167	0.037	0.013	1.206	1.182	0.052
	Left	0.939	0.000	0.084	0.073	1.023	1.012	1.096

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 3a SAR (W/kg)	5 GHz WLAN Ant 3c SAR (W/kg)	5 GHz WLAN Ant 1b Reduced at 6.25dBm SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.979	1.182	0.363	0.260	1.182*	1.239*	1.239*
	Top	0.014	0.250	1.188	0.000	**1.452**	0.264	1.202
	Bottom	0.998	0.003	0.010	0.196	1.011	1.197	1.204
	Right	0.028	1.167	0.037	0.013	1.232	1.208	0.078
	Left	0.077	0.000	0.084	0.073	0.161	0.150	0.234

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 3a SAR (W/kg)	5 GHz WLAN Ant 3c SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.931	1.182	0.363	1.182	1.294*	1.182*	1.294*
	Top	0.006	0.250	1.188	0.000	**1.444**	0.256	1.194
	Bottom	0.384	0.003	0.010	0.799	0.397	1.186	1.193
	Right	0.998	1.167	0.037	0.013	1.204*	1.180*	1.048
	Left	0.000	0.000	0.084	0.073	0.084	0.073	0.157

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 3a SAR (W/kg)	5 GHz WLAN Ant 3c SAR (W/kg)	5 GHz WLAN Ant 1b Reduced at 6.25dBm 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	1.182	0.363	0.260	1.182*	1.258*	1.258*
	Top	0.026	0.250	1.188	0.000	**1.464**	0.276	1.214
	Bottom	0.999	0.003	0.010	0.196	1.012	1.198	1.205
	Right	0.183	1.167	0.037	0.013	1.387	1.363	0.233
	Left	0.030	0.000	0.084	0.073	0.114	0.103	0.187

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 3a Reduced at 5.25dBm SAR (W/kg)	5 GHz WLAN Ant 3c Reduced at 12dBm SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.693	0.372	0.205	1.182	1.270	1.182*	1.182*
	Top	0.488	0.066	0.555	0.000	1.109	0.554	1.043
	Bottom	0.028	0.003	0.010	0.799	0.041	0.830	0.837
	Right	0.998	0.305	0.037	0.013	**1.340**	1.316	1.048
	Left	0.015	0.000	0.084	0.073	0.099	0.088	0.172

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 3a Reduced at 5.25dBm SAR (W/kg)	5 GHz WLAN Ant 3c Reduced at 12dBm SAR (W/kg)	5 GHz WLAN Ant 1b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+3+4
Body SAR	Back	0.983	0.372	0.205	1.182	**1.560**	1.355*	1.188*
	Top	0.991	0.066	0.555	0.000	1.546*	1.057	1.546
	Bottom	0.019	0.003	0.010	0.799	0.032	0.821	0.828
	Right	0.160	0.305	0.037	0.013	0.502	0.478	0.210
	Left	0.041	0.000	0.084	0.073	0.125	0.114	0.198

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 3a Reduced at 5.25dBm SAR (W/kg)	5 GHz WLAN Ant 3c Reduced at 12dBm SAR (W/kg)	5 GHz WLAN Ant 1b 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	0.372	0.205	1.182	**1.575**	1.182*	1.203*
	Top	0.992	0.066	0.555	0.000	1.547*	1.058	1.547
	Bottom	0.035	0.003	0.010	0.799	0.048	0.837	0.844
	Right	0.068	0.305	0.037	0.013	0.410	0.386	0.118
	Left	0.949	0.000	0.084	0.073	1.033	1.022	1.106

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 3a SAR (W/kg)	Bluetooth Ant 1a at 9 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.815	0.407	0.360	**1.582**
	Top	0.010	0.323	0.017	0.350
	Bottom	0.283	0.007	0.085	0.375
	Right	0.002	0.942	0.001	0.945
	Left	0.939	0.001	0.318	1.258

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 3a SAR (W/kg)	Bluetooth Ant 1a at 9 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.979	0.407	0.360	**1.339***
	Top	0.014	0.323	0.017	0.354
	Bottom	0.998	0.007	0.085	1.090
	Right	0.028	0.942	0.001	0.971
	Left	0.077	0.001	0.318	0.396

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 3a SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.931	0.407	1.035	**1.035***
	Top	0.006	0.323	0.017	0.346
	Bottom	0.384	0.007	0.430	0.821
	Right	0.998	0.942	0.001	0.999*
	Left	0.000	0.001	0.974	0.975

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 3a SAR (W/kg)	Bluetooth Ant 1a at 9 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.998	0.407	0.360	0.998*
	Top	0.026	0.323	0.017	0.366
	Bottom	0.999	0.007	0.085	1.091
	Right	0.183	0.942	0.001	**1.126**
	Left	0.030	0.001	0.318	0.349

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 3a at 9 dBm SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.693	0.205	1.035	1.035*
	Top	0.488	0.160	0.017	0.665
	Bottom	0.028	0.007	0.430	0.465
	Right	0.998	0.268	0.001	**1.267**
	Left	0.015	0.001	0.974	0.990

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 3a at 9 dBm SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.983	0.205	1.035	**1.188***
	Top	0.991	0.160	0.017	1.168
	Bottom	0.019	0.007	0.430	0.456
	Right	0.160	0.268	0.001	0.429
	Left	0.041	0.001	0.974	1.016

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 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	0.407	1.035	1.035*
	Top	0.992	0.323	0.017	**1.332**
	Bottom	0.035	0.007	0.430	0.472
	Right	0.068	0.942	0.001	1.011
	Left	0.949	0.001	0.974	0.975*

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

Simult Tx	Configuration	Cellular Band Ant 1a SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Bluetooth Ant 1a at 9 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.815	0.713	0.360	1.175*
	Top	0.010	0.543	0.017	0.570
	Bottom	0.283	0.022	0.085	0.390
	Right	0.002	1.160	0.001	1.163
	Left	0.939	0.000	0.318	**1.257**

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

Simult Tx	Configuration	Cellular Band Ant 1b SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Bluetooth Ant 1a at 9 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.979	0.713	0.360	**1.339***
	Top	0.014	0.543	0.017	0.574
	Bottom	0.998	0.022	0.085	1.105
	Right	0.028	1.160	0.001	1.189
	Left	0.077	0.000	0.318	0.395

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

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	0.931	0.713	1.035	1.035*
	Top	0.006	0.543	0.017	0.566
	Bottom	0.384	0.022	0.430	0.836
	Right	0.998	1.160	0.001	**1.161***
	Left	0.000	0.000	0.974	0.974

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

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	2.4 GHz WLAN Ant 3a SAR (W/kg)	Bluetooth Ant 1a at 9 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.998	0.713	0.360	0.998*
	Top	0.026	0.543	0.017	0.586
	Bottom	0.999	0.022	0.085	1.106
	Right	0.183	1.160	0.001	**1.344**
	Left	0.030	0.000	0.318	0.348

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

Simult Tx	Configuration	Cellular Band Ant 3a SAR (W/kg)	2.4 GHz WLAN Ant 3a Reduced at 9dBm SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.693	0.345	1.035	1.038*
	Top	0.488	0.240	0.017	0.745
	Bottom	0.028	0.022	0.430	0.480
	Right	0.998	0.482	0.001	**1.481**
	Left	0.015	0.000	0.974	0.989

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

Simult Tx	Configuration	Cellular Band Ant 3b SAR (W/kg)	2.4 GHz WLAN Ant 3a Reduced at 9dBm SAR (W/kg)	Bluetooth Ant 1a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.983	0.345	1.035	**1.328***
	Top	0.991	0.240	0.017	1.248
	Bottom	0.019	0.022	0.430	0.471
	Right	0.160	0.482	0.001	0.643
	Left	0.041	0.000	0.974	1.015

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

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	0.713	1.035	1.035*
	Top	0.992	0.543	0.017	**1.552**
	Bottom	0.035	0.022	0.430	0.487
	Right	0.068	1.160	0.001	1.229
	Left	0.949	0.000	0.974	0.974*

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 3a at 7 dBm SAR (W/kg)	Bluetooth Ant 1a at 5.5 dBm SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	5 GHz WLAN Ant 3c SAR (W/kg)	5 GHz WLAN Ant 1b Reduced at 6.25dBm 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	0.815	0.109	0.143	1.182	0.363	0.260	1.291*	1.291*	1.218*
	Top	0.010	0.086	0.017	0.250	1.188	0.000	**1.551**	0.363	1.301
	Bottom	0.283	0.007	0.033	0.003	0.010	0.196	0.336	0.522	0.529
	Right	0.002	0.139	0.001	1.167	0.037	0.013	1.346	1.322	0.192
	Left	0.939	0.001	0.132	0.000	0.084	0.073	1.156	1.145	1.229

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 3a at 7 dBm SAR (W/kg)	Bluetooth Ant 1a at 5.5 dBm SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	5 GHz WLAN Ant 3c SAR (W/kg)	5 GHz WLAN Ant 1b Reduced at 6.25dBm 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	0.979	0.109	0.143	1.182	0.363	0.260	1.291*	1.382*	1.382*
	Top	0.014	0.086	0.017	0.250	1.188	0.000	**1.555**	0.367	1.305
	Bottom	0.998	0.007	0.033	0.003	0.010	0.196	1.051	1.237	1.244
	Right	0.028	0.139	0.001	1.167	0.037	0.013	1.372	1.348	0.218
	Left	0.077	0.001	0.132	0.000	0.084	0.073	0.294	0.283	0.367

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 3a at 7 dBm SAR (W/kg)	Bluetooth Ant 1a at 5.5 dBm SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	5 GHz WLAN Ant 3c SAR (W/kg)	5 GHz WLAN Ant 1b 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	0.931	0.109	0.143	1.182	0.363	1.182	1.294*	1.325*	1.325*
	Top	0.006	0.086	0.017	0.250	1.188	0.000	**1.547**	0.359	1.297
	Bottom	0.384	0.007	0.033	0.003	0.010	0.799	0.437	1.226	1.233
	Right	0.998	0.139	0.001	1.167	0.037	0.013	1.344*	1.320*	1.188
	Left	0.000	0.001	0.132	0.000	0.084	0.073	0.217	0.206	0.290

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 3a at 7 dBm SAR (W/kg)	Bluetooth Ant 1a at 5.5 dBm SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	5 GHz WLAN Ant 3c SAR (W/kg)	5 GHz WLAN Ant 1b Reduced at 6.25dBm 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	0.109	0.143	1.182	0.363	0.260	1.291*	1.291*	1.258*
	Top	0.026	0.086	0.017	0.250	1.188	0.000	**1.567**	0.379	1.317
	Bottom	0.999	0.007	0.033	0.003	0.010	0.196	1.052	1.238	1.245
	Right	0.183	0.139	0.001	1.167	0.037	0.013	1.527	1.503	0.373
	Left	0.030	0.001	0.132	0.000	0.084	0.073	0.247	0.236	0.320

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 3a at 5.5 dBm SAR (W/kg)	Bluetooth Ant 1a at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 3a Reduced at 5.25dBm SAR (W/kg)	5 GHz WLAN Ant 3c Reduced at 12dBm SAR (W/kg)	5 GHz WLAN Ant 1b 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	0.693	0.079	0.226	0.372	0.205	1.182	**1.575**	1.408*	1.408*
	Top	0.488	0.059	0.017	0.066	0.555	0.000	1.185	0.630	1.119
	Bottom	0.028	0.007	0.058	0.003	0.010	0.799	0.106	0.895	0.902
	Right	0.998	0.149	0.001	0.305	0.037	0.013	1.490	1.466	1.198
	Left	0.015	0.001	0.219	0.000	0.084	0.073	0.319	0.308	0.392

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 3a at 5.5 dBm SAR (W/kg)	Bluetooth Ant 1a at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 3a Reduced at 5.25dBm SAR (W/kg)	5 GHz WLAN Ant 3c Reduced at 12dBm SAR (W/kg)	5 GHz WLAN Ant 1b 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	0.983	0.079	0.226	0.372	0.205	1.182	1.434*	1.434*	1.408*
	Top	0.991	0.059	0.017	0.066	0.555	0.000	**1.563***	1.133	**1.563***
	Bottom	0.019	0.007	0.058	0.003	0.010	0.799	0.097	0.886	0.893
	Right	0.160	0.149	0.001	0.305	0.037	0.013	0.652	0.628	0.360
	Left	0.041	0.001	0.219	0.000	0.084	0.073	0.345	0.334	0.418

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 3a at 5.5 dBm SAR (W/kg)	Bluetooth Ant 1a at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 3a Reduced at 5.25dBm SAR (W/kg)	5 GHz WLAN Ant 3c Reduced at 12dBm SAR (W/kg)	5 GHz WLAN Ant 1b 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	0.079	0.226	0.372	0.205	1.182	1.203*	1.408*	1.408*
	Top	0.992	0.059	0.017	0.066	0.555	0.000	**1.564***	1.134	**1.564***
	Bottom	0.035	0.007	0.058	0.003	0.010	0.799	0.113	0.902	0.909
	Right	0.068	0.149	0.001	0.305	0.037	0.013	0.560	0.536	0.268
	Left	0.949	0.001	0.219	0.000	0.084	0.073	1.253	1.242	1.326

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

Simult Tx	Configuration	Bluetooth Ant 3a at 7 dBm SAR (W/kg)	Bluetooth Ant 1a at 7 dBm SAR (W/kg)	5 GHz WLAN Ant 3a SAR (W/kg)	5 GHz WLAN Ant 3c SAR (W/kg)	5 GHz WLAN Ant 1b 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	0.109	0.226	1.182	0.363	1.182	1.291*	1.408*	1.408*
	Top	0.086	0.017	0.250	1.188	0.000	**1.541**	0.353	1.291
	Bottom	0.007	0.058	0.003	0.010	0.799	0.078	0.867	0.874
	Right	0.139	0.001	1.167	0.037	0.013	1.344	1.320	0.190
	Left	0.001	0.219	0.000	0.084	0.073	0.304	0.293	0.377

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 2a

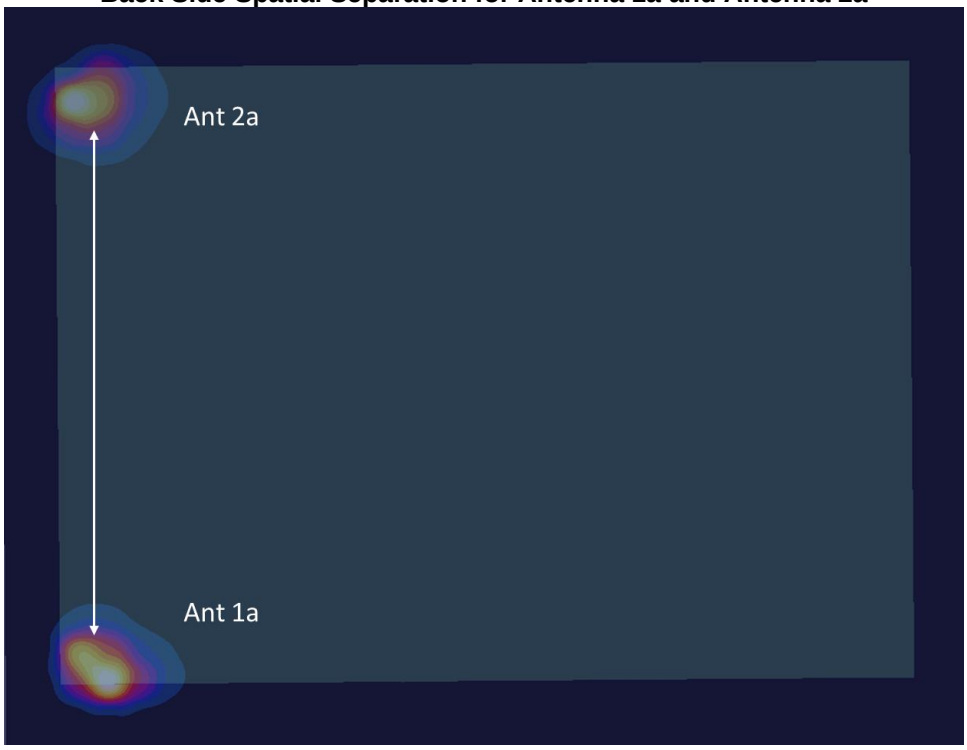


Figure 11-2
Back Side Spatial Separation for Antenna 1a and Antenna 2b

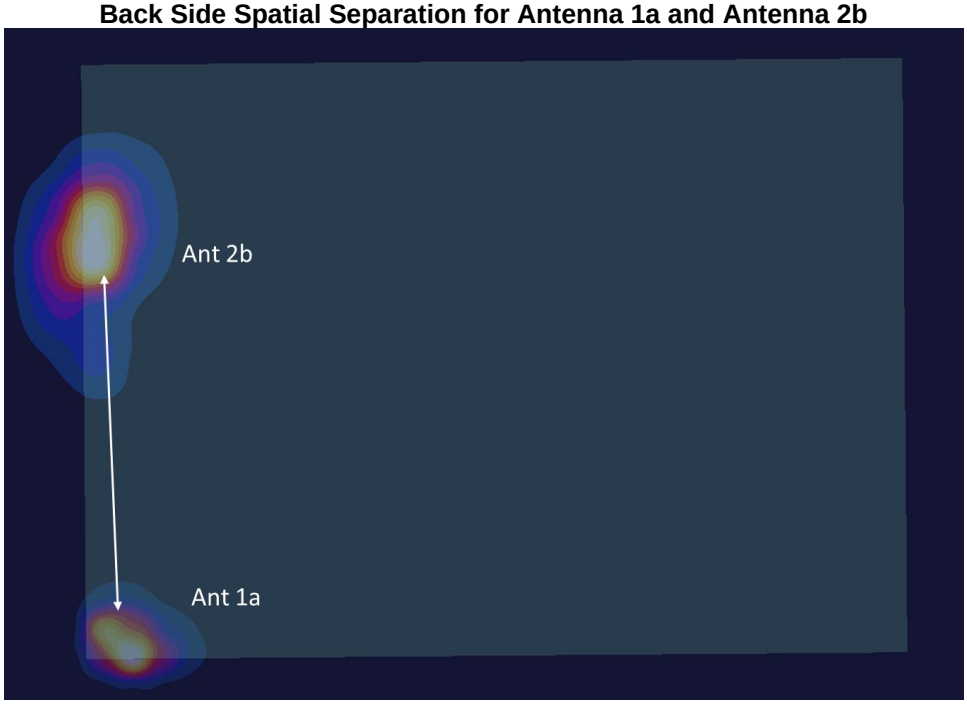


Figure 11-3
Back Side Spatial Separation for Antenna 1a and Antenna 3a

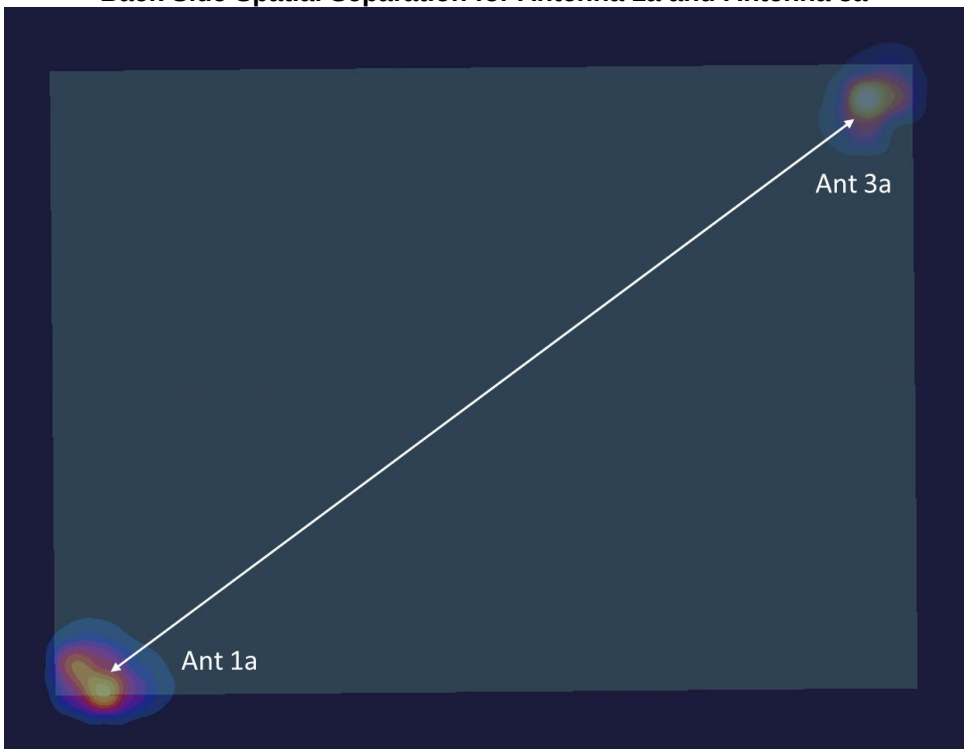


Figure 11-4
Back Side Spatial Separation for Antenna 1a and Antenna 3b

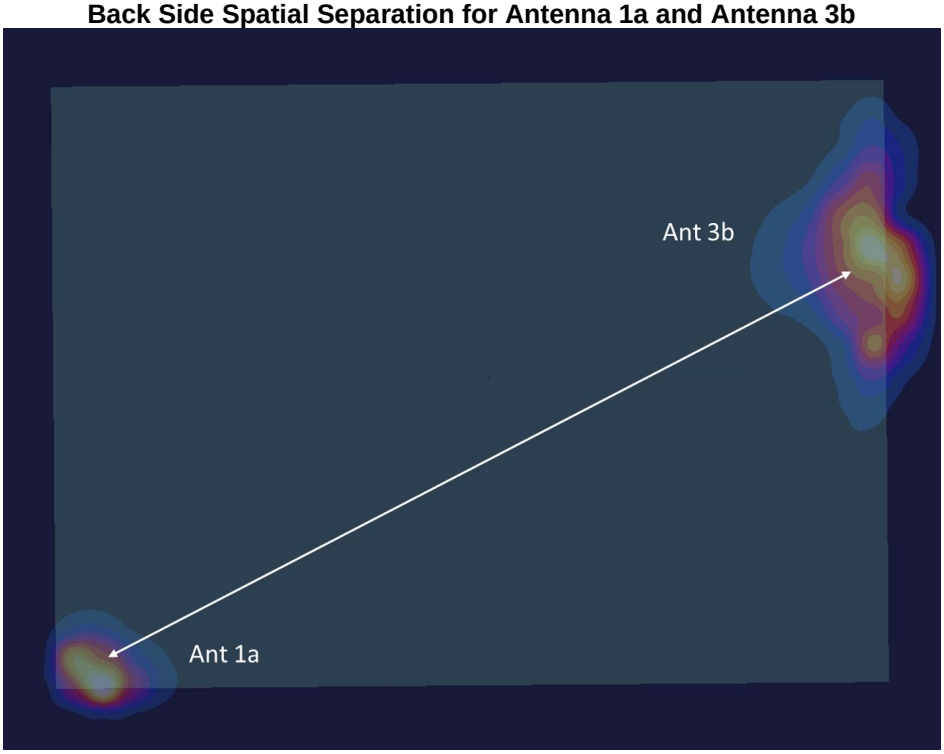


Figure 11-5
Back Side Spatial Separation for Antenna 1a and Antenna 3c

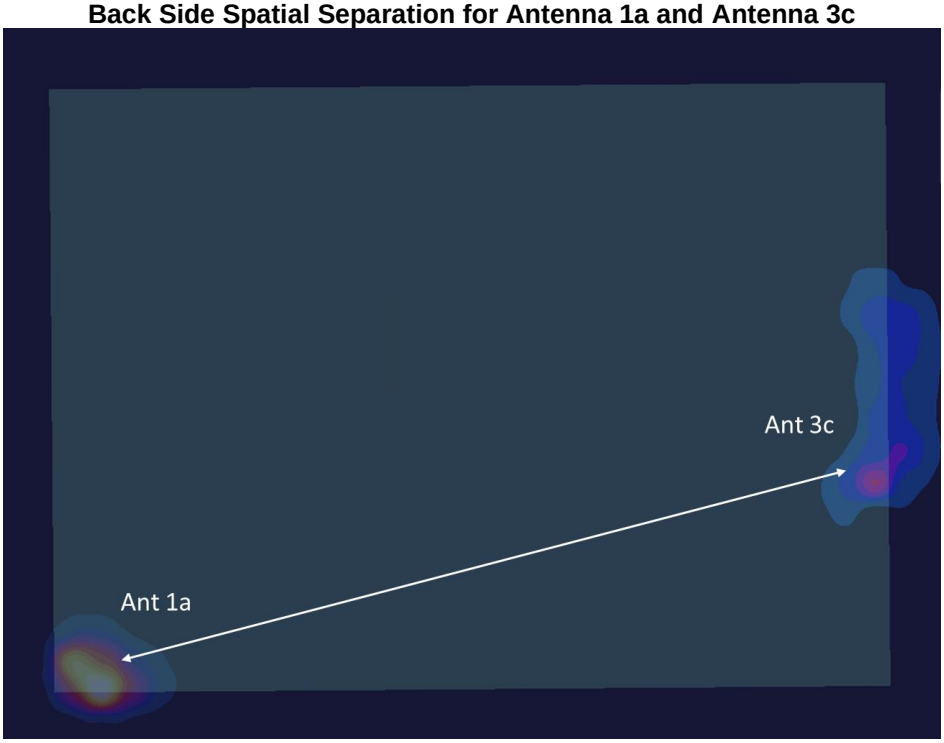


Figure 11-6
Back Side Spatial Separation for Antenna 1a and Antenna 4

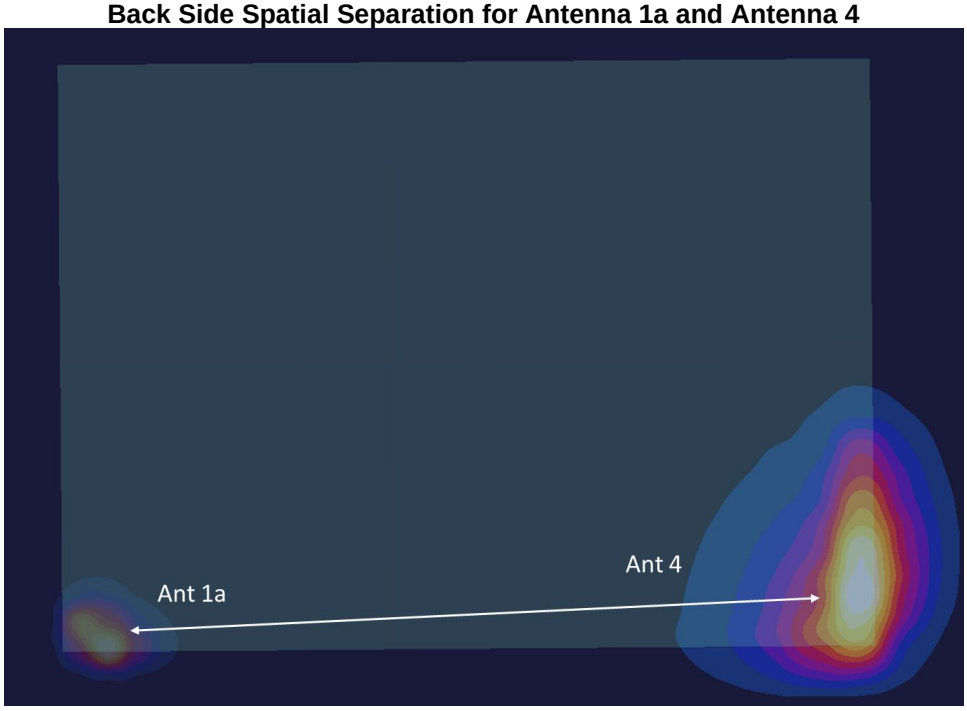


Figure 11-7
Back Side Spatial Separation for Antenna 1b and Antenna 2a

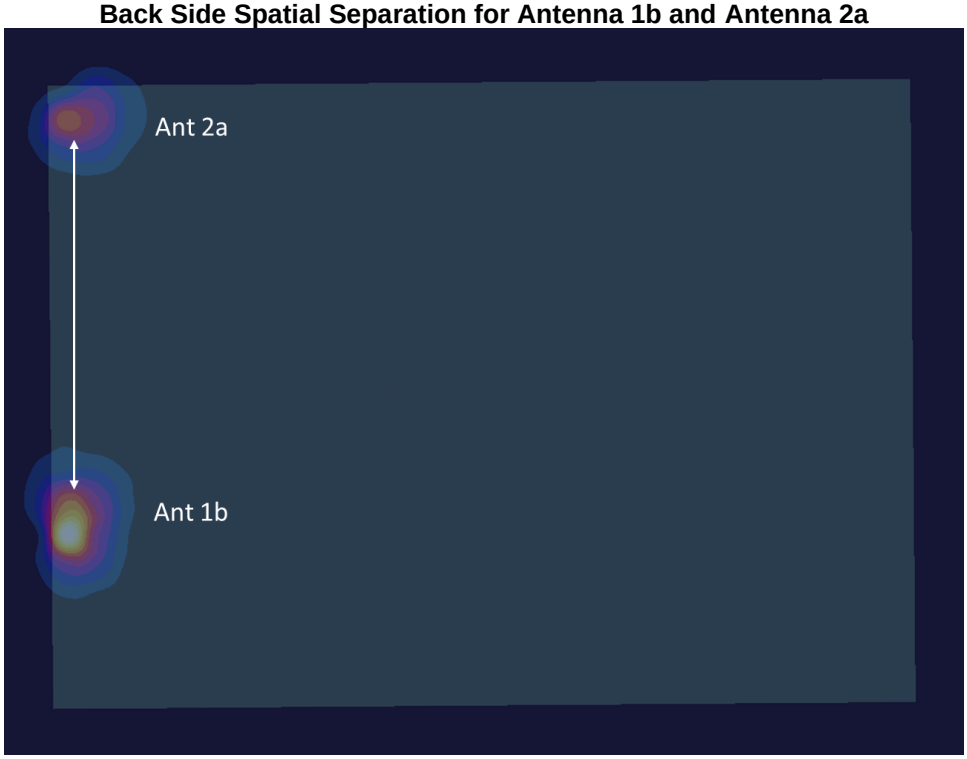


Figure 11-8
Back Side Spatial Separation for Antenna 1b and Antenna 3a

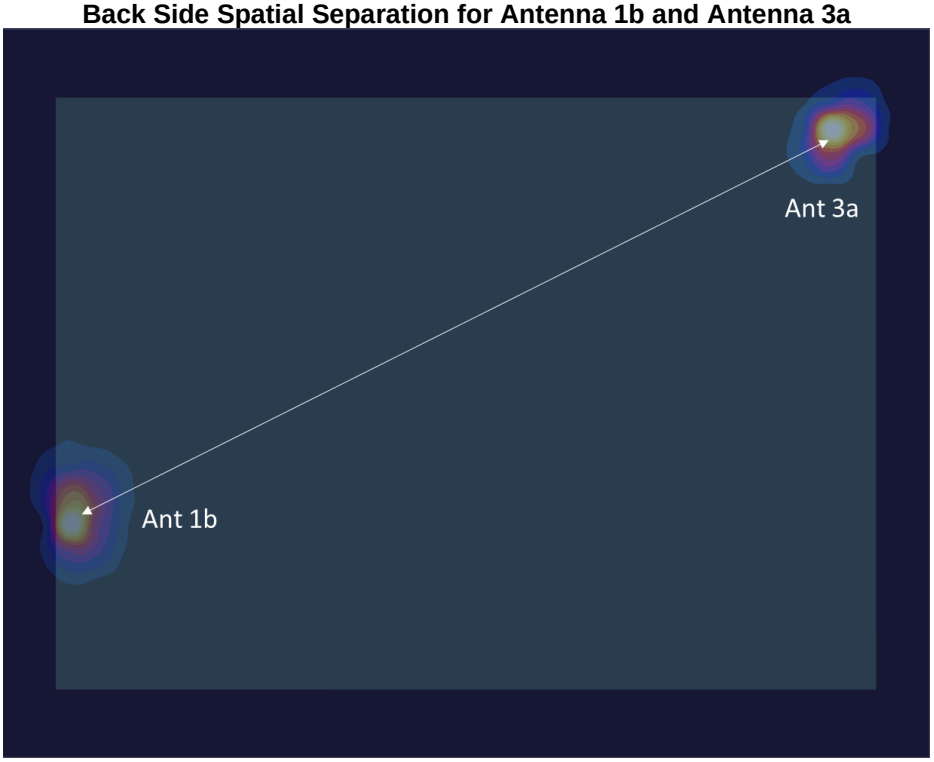


Figure 11-9
Back Side Spatial Separation for Antenna 1b and Antenna 3b

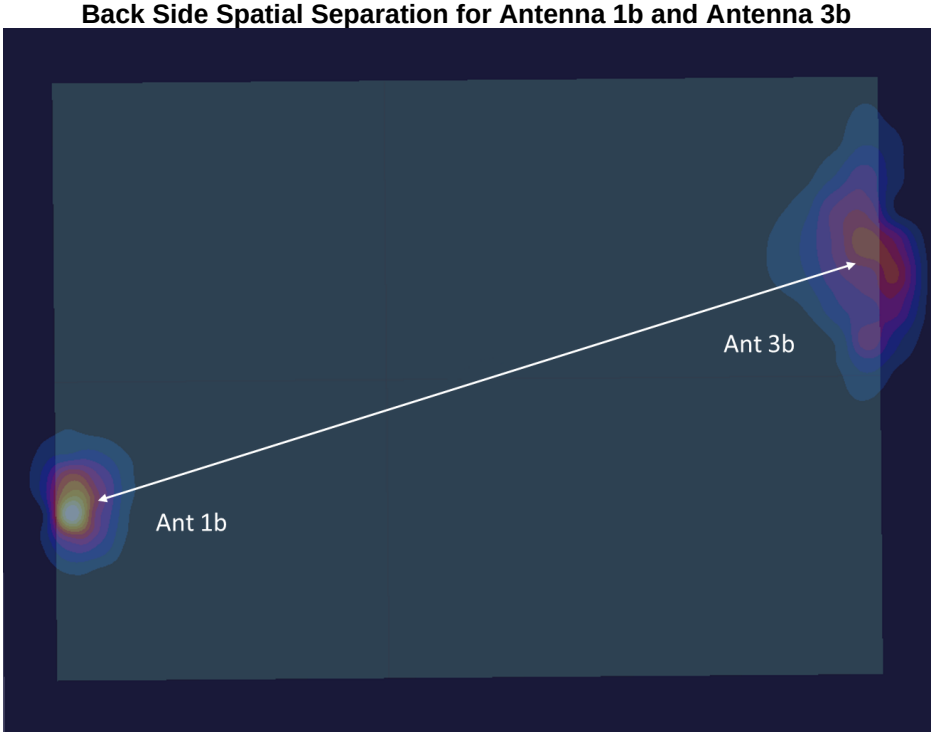


Figure 11-10
Back Side Spatial Separation for Antenna 1b and Antenna 3c

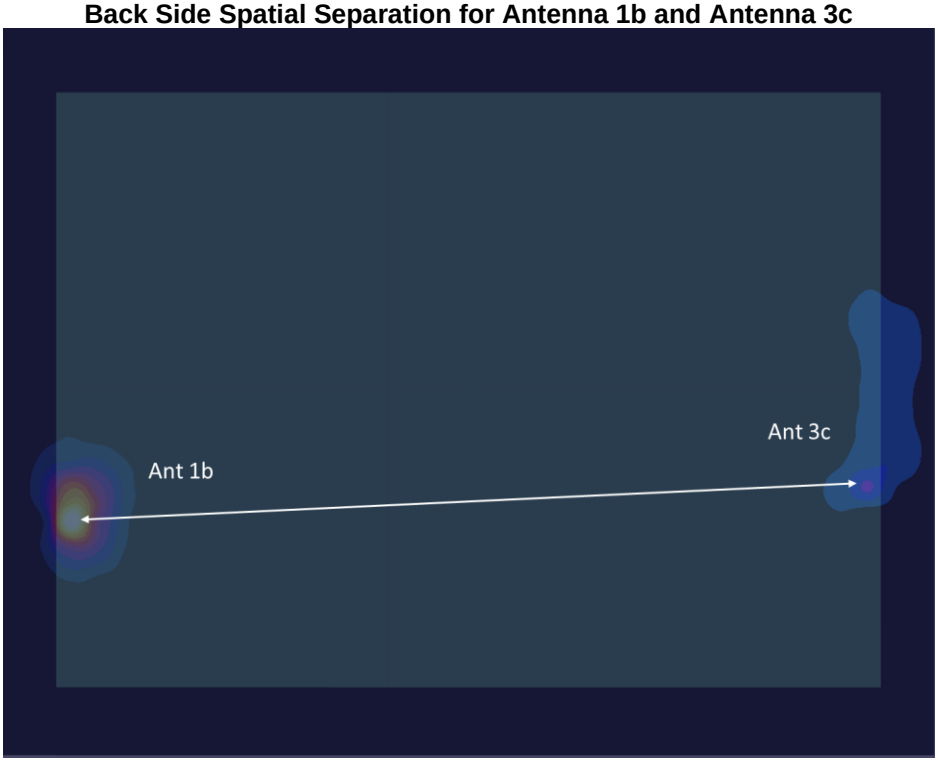


Figure 11-11
Back Side Spatial Separation for Antenna 1b and Antenna 4

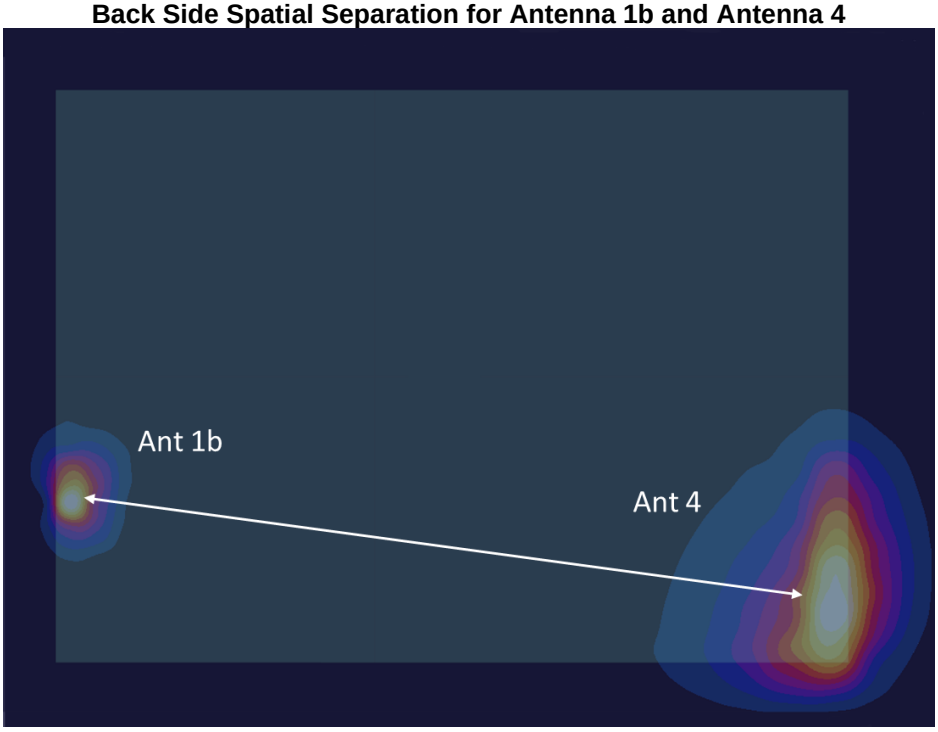


Figure 11-12
Back Side Spatial Separation for Antenna 2a and Antenna 3a

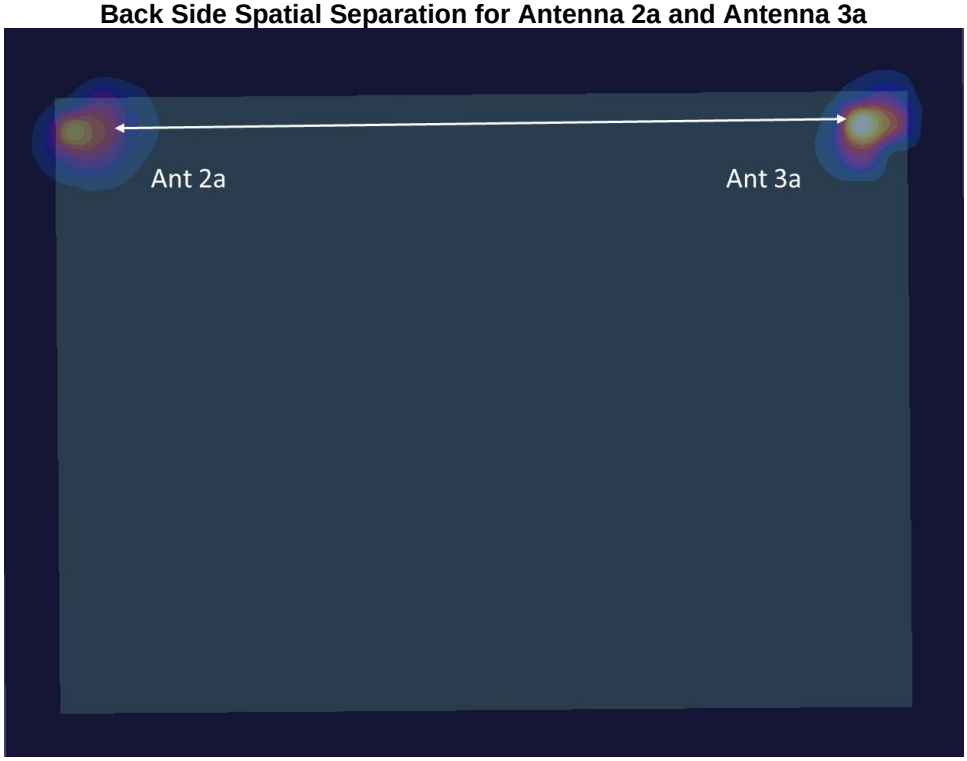


Figure 11-13
Back Side Spatial Separation for Antenna 2b and Antenna 3a

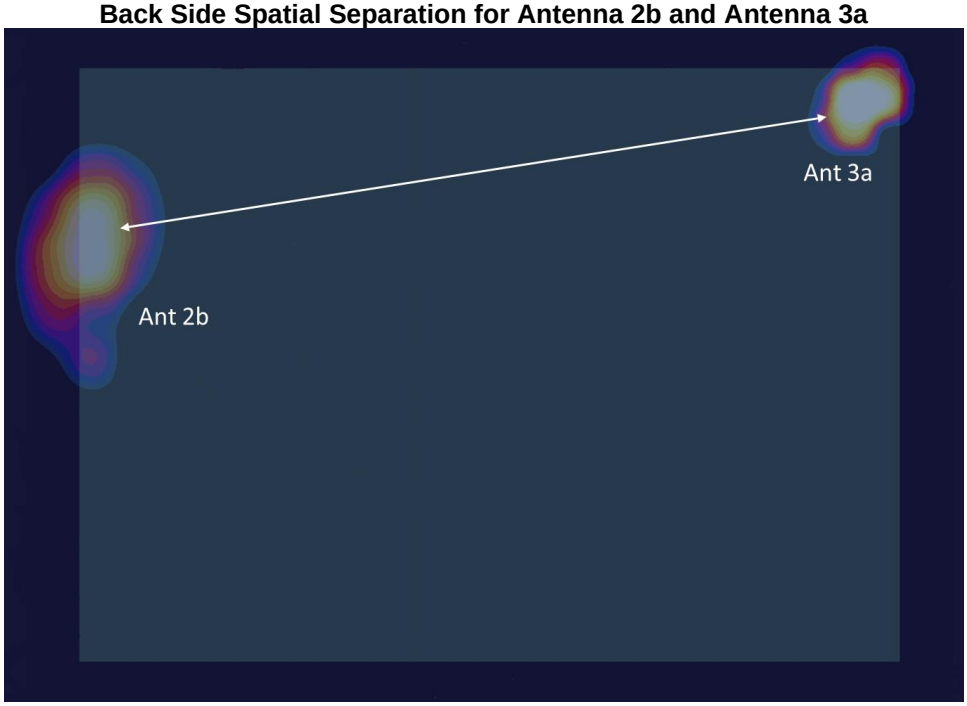


Figure 11-14
Back Side Spatial Separation for Antenna 2b and Antenna 3c

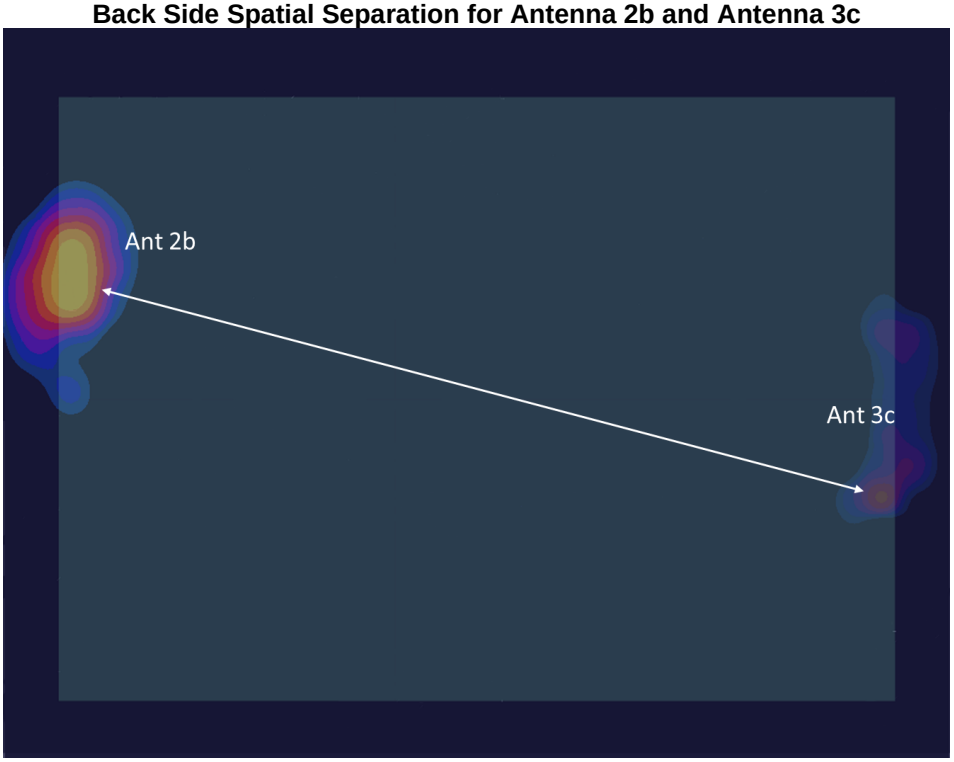


Figure 11-15
Back Side Spatial Separation for Antenna 3a and Antenna 3c

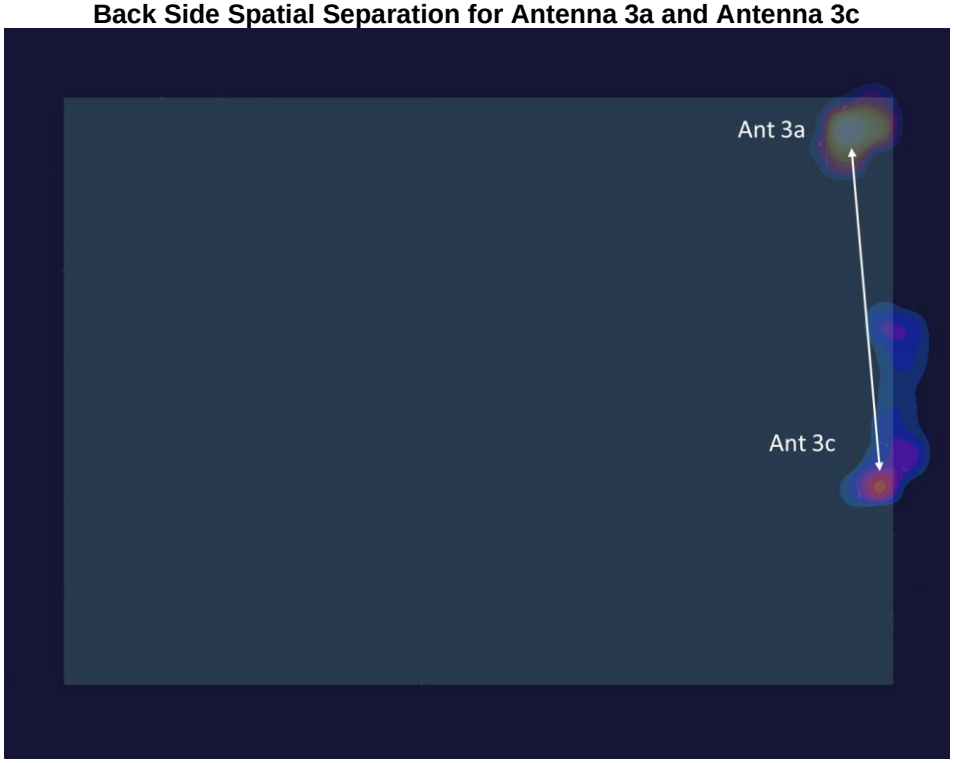
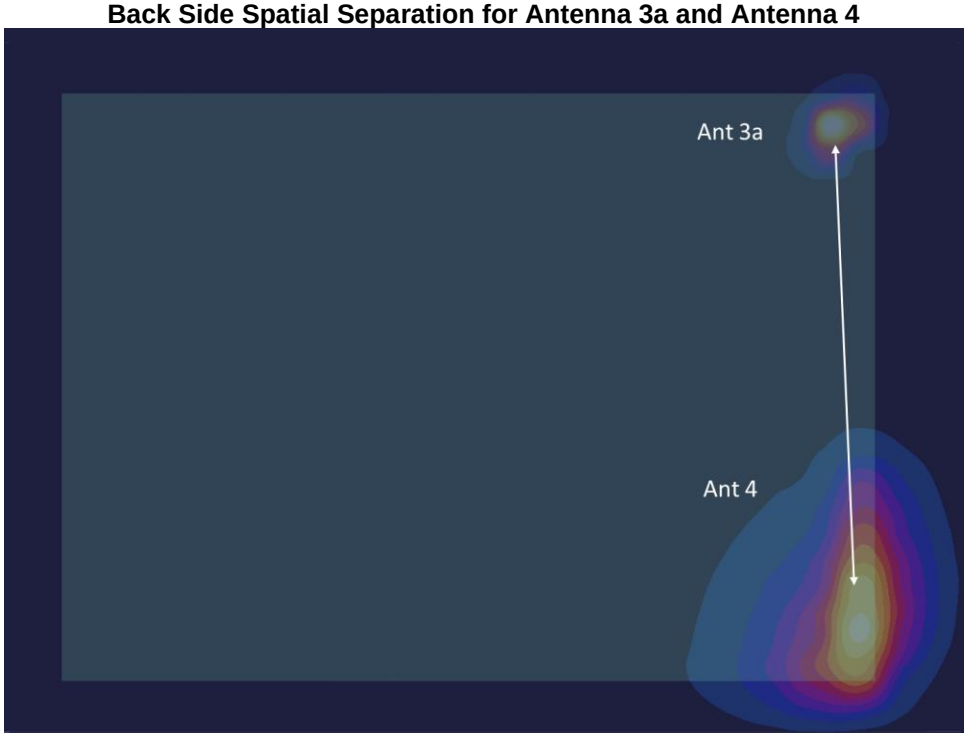
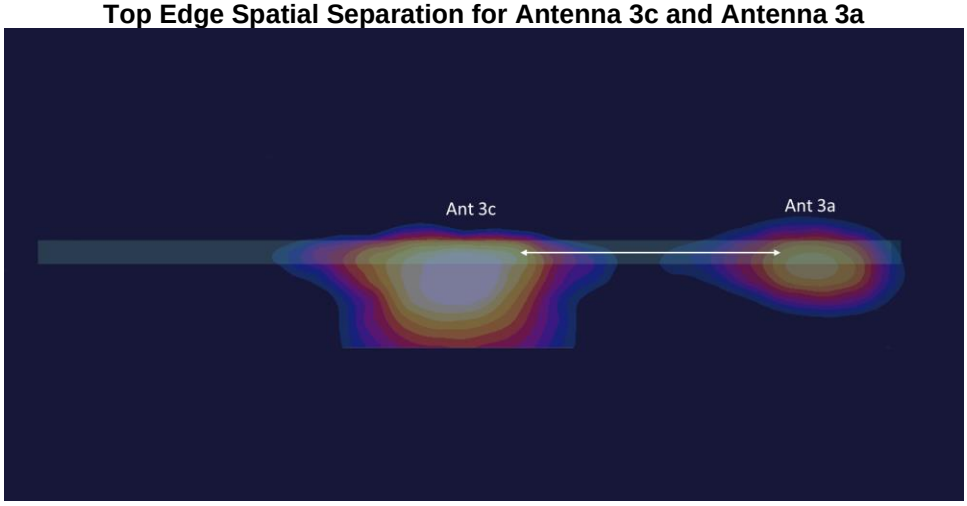


Figure 11-16
Back Side Spatial Separation for Antenna 3a and Antenna 4



11.4.2 Top Edge Spatial Separation Analysis

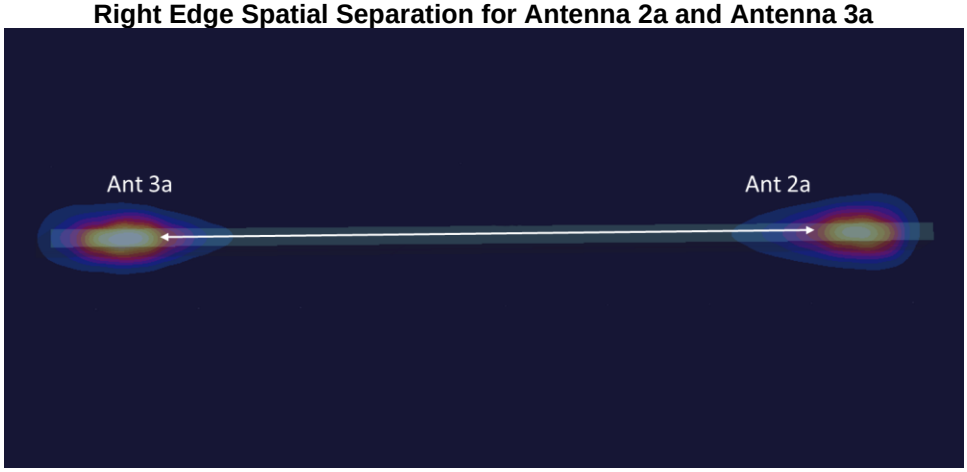
Figure 11-17
Top Edge Spatial Separation for Antenna 3c and Antenna 3a



Antenna Pair		Standalone SAR (W/kg)		Standalone SAR Sum (W/kg)	SPLS Ratio
Ant "a"	Ant "b"	a	b	a+b	$(a+b)^{1.5}/D_{a-b}$
5 GHz WLAN Ant 3c reduced	5 GHz WLAN Ant 3a reduced	0.555	0.066	0.621	0.01
5 GHz WLAN Ant 3c reduced	2.4 GHz Bluetooth Ant 3a at 5.5 dBm	0.555	0.059	0.614	0.01

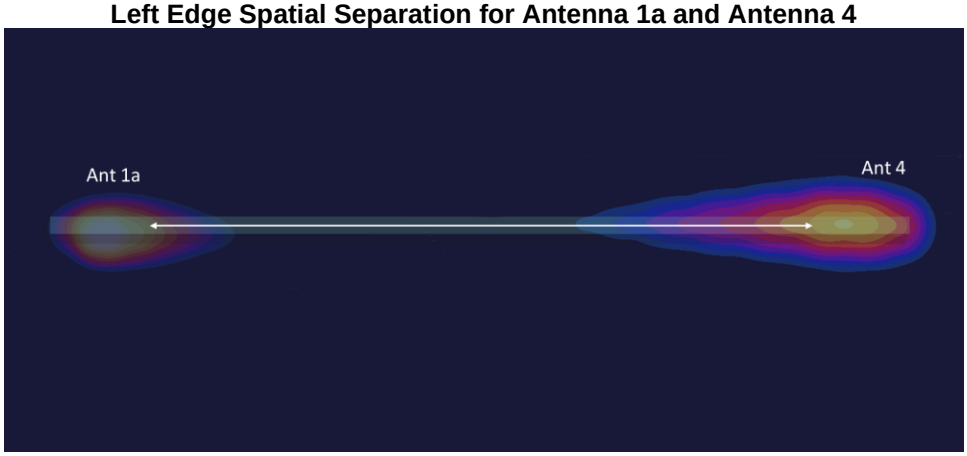
11.4.3 Right Edge Spatial Separation Analysis

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



11.4.4 Left Edge Spatial Separation Analysis

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



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.

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	Service	Antenna	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	QPSK, 1 RB, 0 RB Offset	Ant 4	N/A	left	0 mm	0.887	0.884	1.00	N/A	N/A	N/A	N/A
835	819.00	26740	LTE Band 26 (Cell), 10 MHz Bandwidth	QPSK, 25 RB, 12 RB Offset	Ant 4	N/A	back	0 mm	0.945	0.922	1.02	N/A	N/A	N/A	N/A
1900	1907.60	9538	UMTS 1900	RMC	Ant 2b	N/A	bottom	0 mm	0.948	0.860	1.10	N/A	N/A	N/A	N/A
2300	2310.00	462000	NR Band n30, 10 MHz Bandwidth	DFT-s-OFDM, QPSK, 25 RB, 27 RB Offset	Ant 4	N/A	back	0 mm	0.897	0.870	1.03	N/A	N/A	N/A	N/A
2450	2462.00	11	802.11b, 22 MHz Bandwidth	DSSS	Ant 3a	1	right	0 mm	1.060	0.935	1.13	N/A	N/A	N/A	N/A
2600	2549.50	40185	LTE Band 41, 20 MHz Bandwidth	QPSK, 50 RB, 25 RB Offset	Ant 2b	N/A	back	0 mm	0.953	0.892	1.07	N/A	N/A	N/A	N/A
3500	3560.00	PCC: 55340	LTE Band 48, 20 MHz Bandwidth	QPSK, 50 RB, 50 RB Offset	Ant 4	N/A	back	0mm	0.889	0.836	1.06	N/A	N/A	N/A	N/A
	3579.80	SCC: 55538		QPSK, 50 RB, 0 RB Offset											
3700	3690.00	PCC: 56640	LTE Band 48, 20 MHz Bandwidth	QPSK, 50 RB, 0 RB Offset	Ant 1a	N/A	left	0 mm	0.818	0.761	1.07	N/A	N/A	N/A	N/A
	3670.20	SCC: 56442		QPSK, 50 RB 50 RB Offset											
3900	3930.00	662000	NR Band n77 PC2, 100 MHz Bandwidth	DFT-s-OFDM, QPSK, 135 RB, 0 RB Offset	Ant 2a	N/A	right	0 mm	0.809	0.756	1.07	N/A	N/A	N/A	N/A
5250	5210.00	42	802.11ac, 80 MHz Bandwidth	OFDM	Ant 3a	29.3	right	0 mm	0.899	0.865	1.04	N/A	N/A	N/A	N/A
5600	5530.00	106	802.11ac, 80 MHz Bandwidth	OFDM	Ant 1b	29.3	back	0 mm	0.909	0.892	1.02	N/A	N/A	N/A	N/A
5750	5775.00	155	802.11ac, 80 MHz Bandwidth	OFDM	Ant 1b	29.3	back	0 mm	1.060	0.915	1.16	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.

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 1b

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16.30	17.90
Measured Output Power (dBm)	14.90	17.00
Measured SAR (W/kg)	0.664	0.685
Measured Power (mW)	30.90	50.12
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	19.56	21.70
% deviation from expected linearity		-7.01%

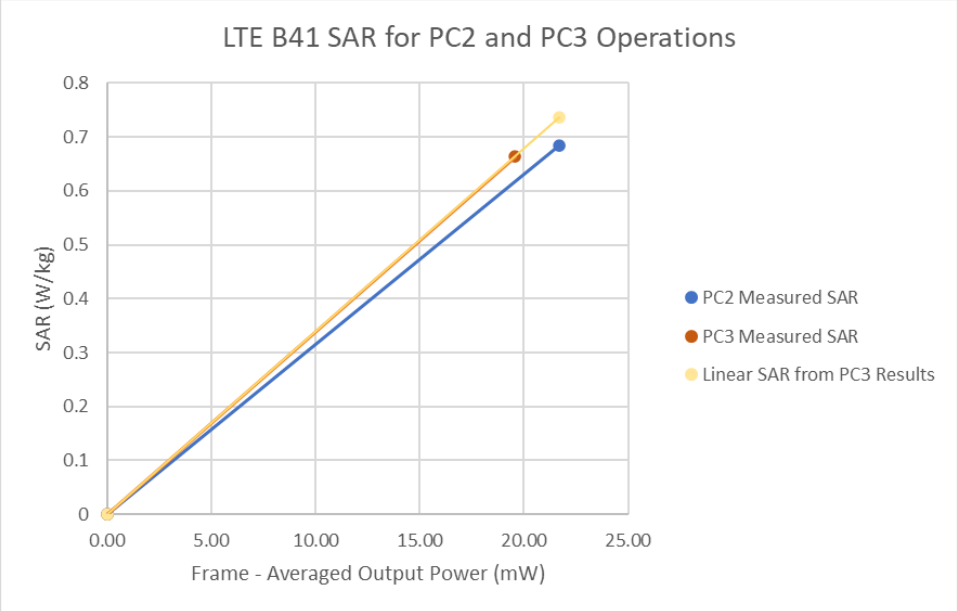


Figure 13-1
LTE Band 41 Body Linearity – Antenna 1b

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16.30	17.90
Measured Output Power (dBm)	14.88	16.90
Measured SAR (W/kg)	0.634	0.699
Measured Power (mW)	30.76	48.98
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	19.47	21.21
% deviation from expected linearity		1.23%

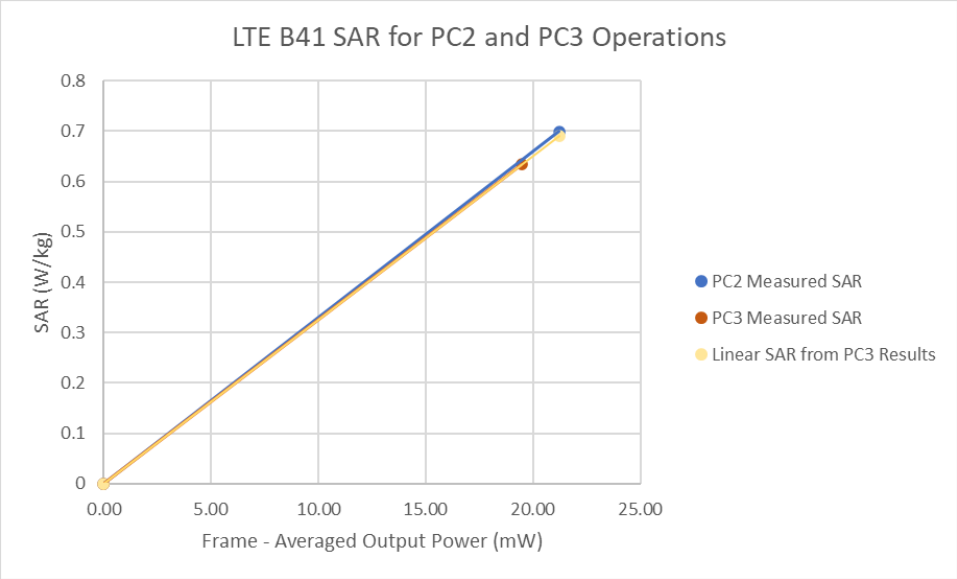


Figure 13-2
LTE Band 41 ULCA Body Linearity – Antenna 1b

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16.30	17.90
Measured Output Power (dBm)	16.26	17.08
Measured SAR (W/kg)	0.960	0.749
Measured Power (mW)	42.27	51.05
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	26.75	22.10
% deviation from expected linearity		-5.57%

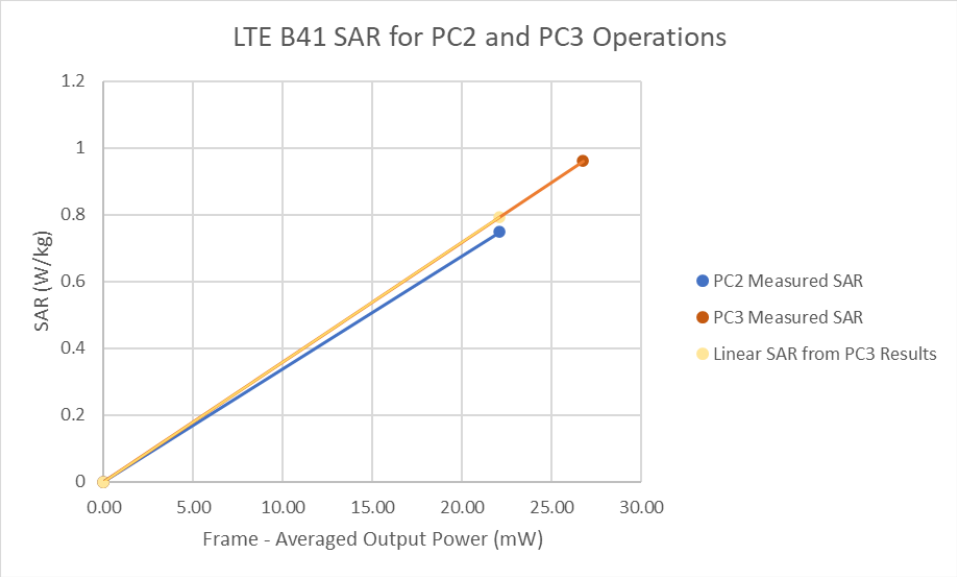


Figure 13-3
LTE Band 41 Body Linearity – Antenna 2b

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16.30	17.90
Measured Output Power (dBm)	16.19	17.17
Measured SAR (W/kg)	0.869	0.799
Measured Power (mW)	41.59	52.12
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	26.33	22.57
% deviation from expected linearity		7.26%

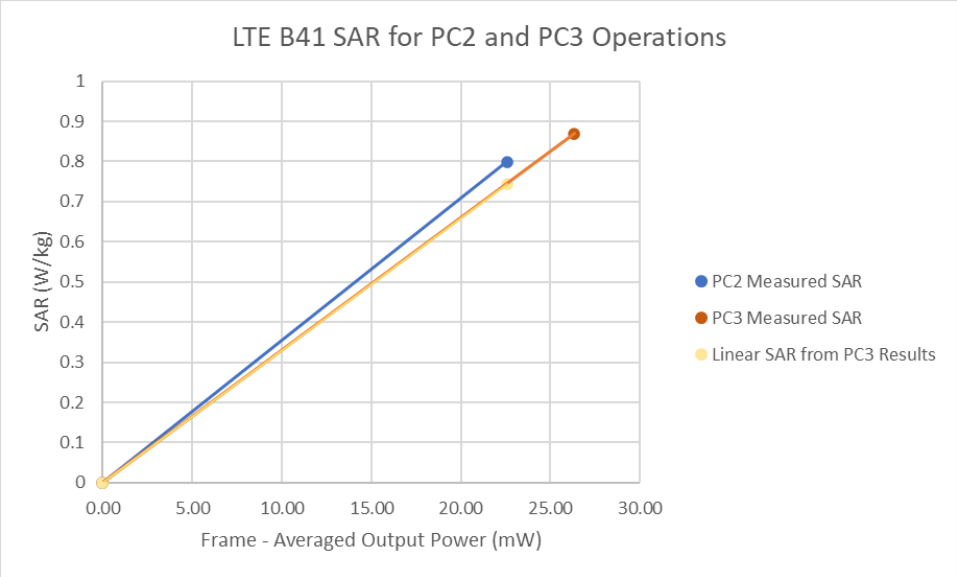


Figure 13-4
LTE Band 41 ULCA Body Linearity – Antenna 2b

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.90	16.50
Measured Output Power (dBm)	14.07	15.15
Measured SAR (W/kg)	0.823	0.659
Measured Power (mW)	25.53	32.73
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	16.16	14.17
% deviation from expected linearity		-8.71%

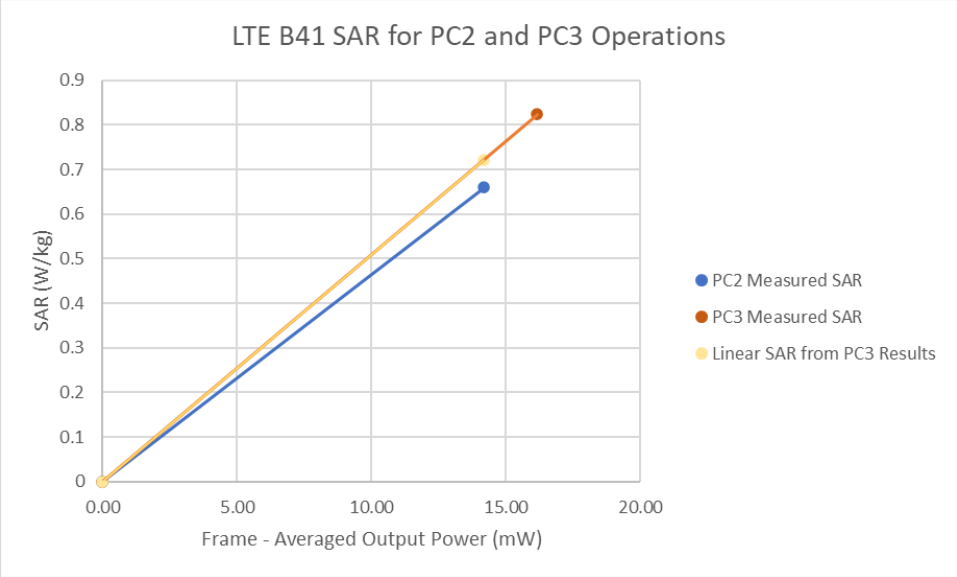


Figure 13-5
LTE Band 41 Body Linearity – Antenna 3a

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)	14.90	16.50
Measured Output Power (dBm)	13.94	15.04
Measured SAR (W/kg)	0.728	0.640
Measured Power (mW)	24.77	31.92
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	15.68	13.82
% deviation from expected linearity		-0.24%

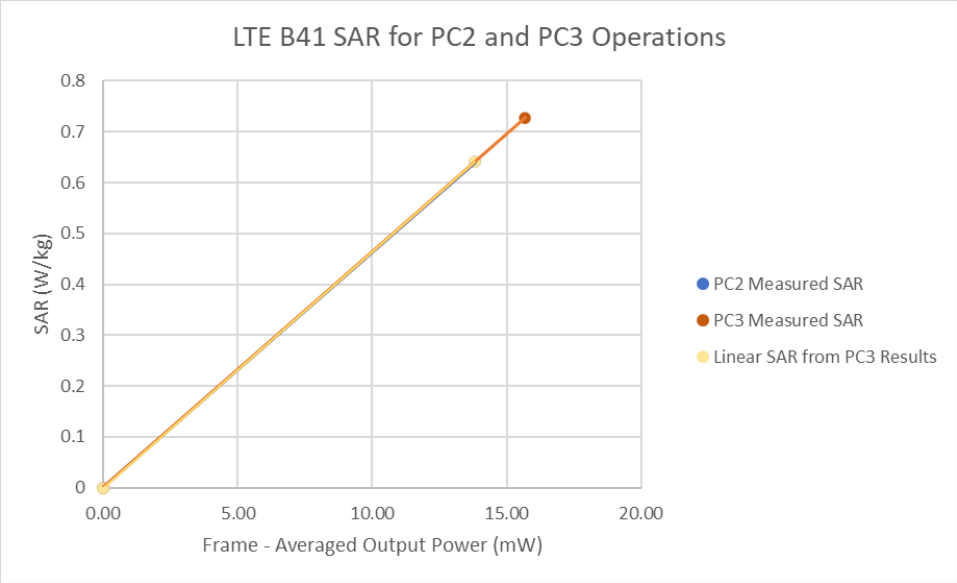


Figure 13-6
LTE Band 41 ULCA Body Linearity – Antenna 3a

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	13.80	15.40
Measured Output Power (dBm)	12.98	13.87
Measured SAR (W/kg)	0.819	0.639
Measured Power (mW)	19.86	24.38
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	12.57	10.56
% deviation from expected linearity		-7.07%

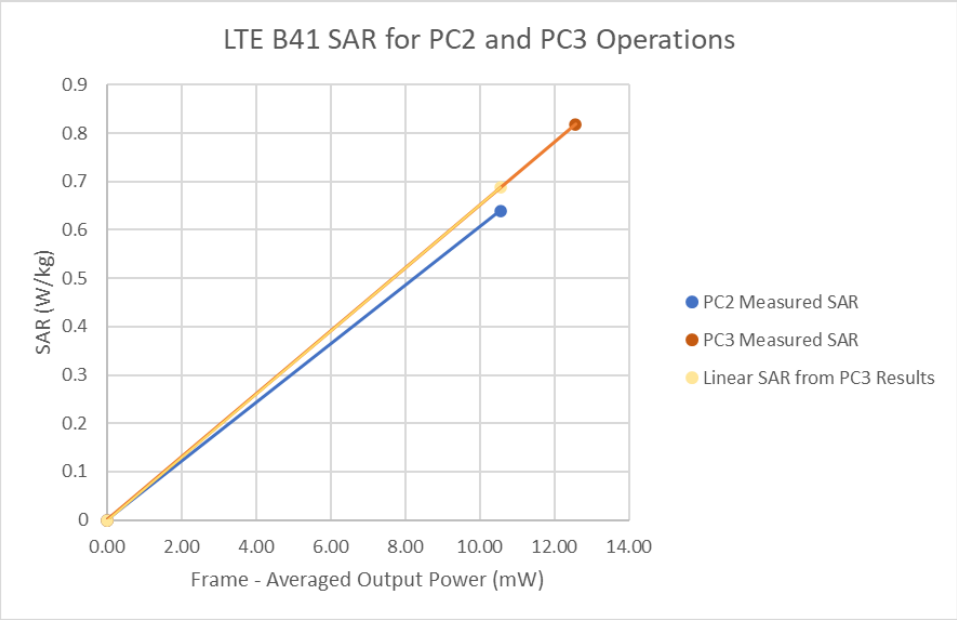


Figure 13-7
LTE Band 41 Body Linearity – Antenna 4

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)	13.80	15.40
Measured Output Power (dBm)	12.80	13.92
Measured SAR (W/kg)	0.747	0.674
Measured Power (mW)	19.05	24.66
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	12.06	10.68
% deviation from expected linearity		1.92%

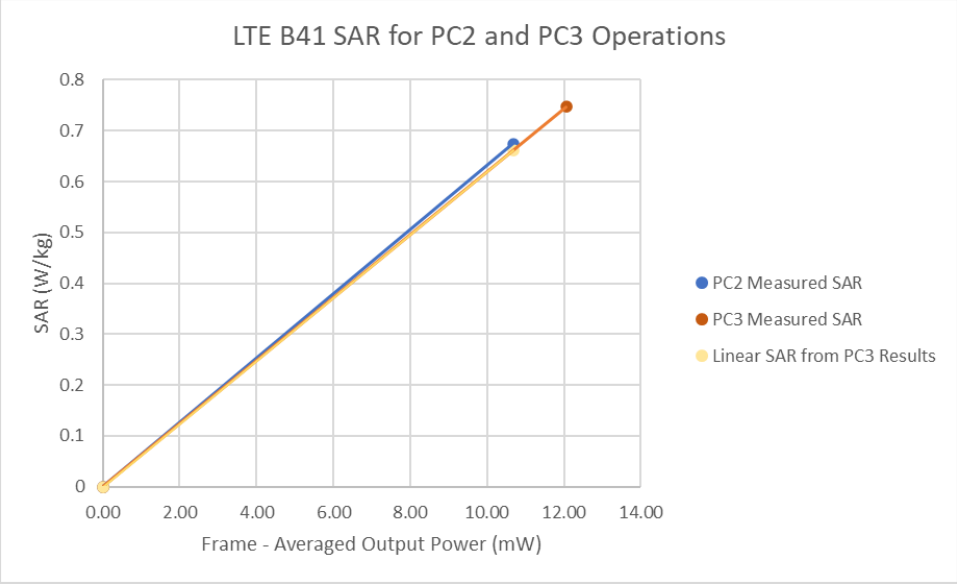


Figure 13-8
LTE Band 41 ULCA Body Linearity – Antenna 4

14 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4404B	Spectrum Analyzer	N/A	N/A	N/A	MY45113242
Agilent	E4438C	ESG Vector Signal Generator	5/10/2022	Annual	5/10/2023	MY42082659
Agilent	E4438C	ESG Vector Signal Generator	2/14/2022	Annual	2/14/2023	MY42082385
Agilent	N5182A	MXG Vector Signal Generator	7/20/2022	Annual	7/20/2023	MY47420800
Agilent	N5182A	MXG Vector Signal Generator	6/21/2022	Annual	6/21/2023	MY47420651
Agilent	8753ES	S-Parameter Vector Network Analyzer	2/11/2022	Annual	2/11/2023	MY40003841
Agilent	8753ES	S-Parameter Vector Network Analyzer	12/17/2021	Annual	12/17/2022	MY40000670
Agilent	E5515C	Wireless Communications Test Set	5/12/2022	Annual	5/12/2023	GB43304278
Agilent	E5515C	Wireless Communications Test Set	1/14/2020	Triennial	1/14/2023	GB43304447
Agilent	N4010A	Wireless Connectivity Test Set	N/A	N/A	N/A	GB46170464
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433972
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433974
Anritsu	ML2495A	Power Meter	3/17/2022	Annual	3/17/2023	941001
Anritsu	ML2496A	Power Meter	3/31/2022	Annual	3/31/2023	1138001
Anritsu	MA2411B	Pulse Power Sensor	4/29/2022	Annual	4/29/2023	1207470
Anritsu	MA2411B	Pulse Power Sensor	9/21/2021	Annual	9/21/2022	1315051
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	6/27/2022	Annual	6/27/2023	6261895213
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	5/24/2022	Annual	5/24/2023	6201144418
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	3/31/2022	Annual	3/31/2023	6201664756
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	9/26/2021	Annual	9/26/2022	6201524637
Anritsu	MT8000A	Radio Communication Test Station	4/15/2022	Annual	4/15/2023	6272337439
Anritsu	MA24106A	USB Power Sensor	3/28/2022	Annual	3/28/2023	1520503
Anritsu	MA24106A	USB Power Sensor	3/2/2022	Annual	3/2/2023	1827532
Control Company	4352	Long Stem Thermometer	9/10/2021	Biennial	9/10/2023	210774678
Control Company	4352	Long Stem Thermometer	9/10/2021	Biennial	9/10/2023	210774685
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670623
Control Company	4040	Therm./ Clock/ Humidity Monitor	1/21/2022	Annual	1/21/2023	160574418
Mitutoyo	500-196-30	CD-6"ASX 6Inch Digital Caliper	2/16/2022	Triennial	2/16/2025	A20238413
Keysight Technologies	N6705B	DC Power Analyzer	5/5/2021	Triennial	5/5/2024	MY53004059
Keysight Technologies	N9020A	MXA Signal Analyzer	4/14/2022	Annual	4/14/2023	MY48010233
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	ZUDC10-83-S+	Directional Coupler	CBT	N/A	CBT	2050
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Pasternack	PE5011-1	Torque Wrench	12/21/2021	Biennial	12/21/2023	82475
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	5/3/2022	Annual	5/3/2023	128635
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/8/2022	Annual	4/8/2023	162125
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/7/2022	Annual	4/7/2023	167283
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	2/21/2022	Annual	2/21/2023	164948
SPEAG	DAK-3.5	Dielectric Assessment Kit	1/6/2022	Annual	1/6/2023	1278
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	8/18/2021	Annual	8/18/2022	1041
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1237
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1243
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1379
SPEAG	D750V3	750 MHz SAR Dipole	9/8/2020	Biennial	9/8/2022	1097
SPEAG	D750V3	750 MHz SAR Dipole	5/16/2022	Annual	5/16/2023	1057
SPEAG	D750V3	750 MHz SAR Dipole	11/11/2019	Triennial	11/11/2022	1094
SPEAG	D835V2	835 MHz SAR Dipole	5/16/2022	Annual	5/16/2023	4d040
SPEAG	D1750V2	1750 MHz SAR Dipole	9/9/2020	Biennial	9/9/2022	1104
SPEAG	D1750V2	1750 MHz SAR Dipole	5/10/2022	Annual	5/10/2023	1083
SPEAG	D1900V2	1900 MHz SAR Dipole	9/10/2020	Biennial	9/10/2022	5d181
SPEAG	D2300V2	2300 MHz SAR Dipole	11/10/2020	Biennial	11/10/2022	1064
SPEAG	D2450V2	2450 MHz SAR Dipole	5/11/2022	Annual	5/11/2023	750
SPEAG	D2450V2	2450 MHz SAR Dipole	11/12/2019	Triennial	11/12/2022	855
SPEAG	D2450V2	2450 MHz SAR Dipole	11/9/2021	Annual	11/9/2022	921
SPEAG	D2600V2	2600 MHz SAR Dipole	9/9/2020	Biennial	9/9/2022	1069
SPEAG	D2600V2	2600 MHz SAR Dipole	5/11/2022	Annual	5/11/2023	1042
SPEAG	D3500V2	3500 MHz SAR Dipole	8/16/2019	Triennial	8/16/2022	1055
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	3/22/2022	Annual	3/22/2023	1123
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/13/2022	Annual	4/13/2023	1582
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/14/2022	Annual	4/14/2023	1402
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/13/2022	Annual	4/13/2023	501
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/13/2022	Annual	1/13/2023	793
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/16/2022	Annual	5/16/2023	701
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/21/2022	Annual	3/21/2023	1408
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/13/2022	Annual	4/13/2023	1465
SPEAG	DAE4	Dasy Data Acquisition Electronics	11/18/2021	Annual	11/18/2022	1237
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/21/2022	Annual	3/21/2023	534
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/22/2022	Annual	2/22/2023	1403
SPEAG	EX3DV4	SAR Probe	9/6/2021	Annual	9/6/2022	7674
SPEAG	EX3DV4	SAR Probe	4/22/2022	Annual	4/22/2023	7546
SPEAG	EX3DV4	SAR Probe	4/22/2022	Annual	4/22/2023	7532
SPEAG	EX3DV4	SAR Probe	1/19/2022	Annual	1/19/2023	3837
SPEAG	EX3DV4	SAR Probe	10/27/2021	Annual	10/27/2022	7420
SPEAG	EX3DV4	SAR Probe	5/18/2022	Annual	5/18/2023	7416
SPEAG	EX3DV4	SAR Probe	3/22/2022	Annual	3/22/2023	7638
SPEAG	EX3DV4	SAR Probe	4/19/2022	Annual	4/19/2023	7499
SPEAG	EX3DV4	SAR Probe	3/21/2022	Annual	3/21/2023	7360
SPEAG	EX3DV4	SAR Probe	2/22/2022	Annual	2/22/2023	7427

*All equipment was used solely within its respective calibration period.

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.

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

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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