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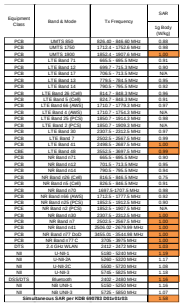
SAR EVALUATION REPORT

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

Date of Testing:
06/17/2022 – 09/13/2022
Test Site/Location:
Element Washington DC LLC,
Morgan Hill, CA, USA
Document Serial No.:
1C2205090028-26.BCG (Rev 2)

FCC ID:	**BCGA2764**
APPLICANT:	**APPLE, INC.**

DUT Type:	Tablet Device
Application Type:	Certification
FCC Rule Part(s):	CFR §2.1093
Models:	A2764



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

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE C95.1-1992 and has been tested in accordance with the measurement procedures specified in Section 1.8 of this report; for North American frequency bands only.

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

RJ Ortanez
Executive Vice President

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1 DEVICE UNDER TEST

1.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
UMTS 850	Data	826.40 - 846.60 MHz
UMTS 1750	Data	1712.4 - 1752.6 MHz
UMTS 1900	Data	1852.4 - 1907.6 MHz
LTE Band 71	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 n14	Data	790.5 - 795.5 MHz
NR Band n26 (Cell)	Data	816.5 - 846.5 MHz
NR Band n5 (Cell)	Data	826.5 - 846.5 MHz
NR Band n70	Data	1697.5 - 1707.5 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	3455.01 - 3544.98 MHz
NR Band n77 C	Data	3705.00 - 3975.00 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
U-NII-5	Voice/Data	5955 - 6415 MHz
U-NII-6	Voice/Data	6435 - 6515 MHz
U-NII-7	Voice/Data	6535 - 6875 MHz
U-NII-8	Voice/Data	6895 - 7115 MHz
Bluetooth	Data	2402 - 2480 MHz
NB UNII-1	Data	5162 - 5245 MHz
NB UNII-3	Data	5733 - 5844 MHz
NR Band n258	Data	24250 - 24450 MHz 24750 - 25250 MHz
NR Band n260	Data	37000 - 40000 MHz
NR Band n261	Data	27500 - 28350 MHz

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 1 Body	Ant 1 Maximum Tune-up Output Power*	Ant 2a/2b Body	Ant 2a/2b Maximum Tune-up Output Power*	Ant 3 Body	Ant 3 Maximum Tune-up Output Power*	Ant 4b Body	Ant 4b Maximum Tune-up Output Power*	Manufacturer's Smart Transmit Uncertainty (dB)	Low, Mid, High Band Pmax target Tolerance (dB)	Plimit target and UHB Pmax 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	17.70	23.20	N/A	N/A	18.40	25.00	N/A	N/A			
UMTS 1750	16.10	22.00	14.30	22.00	16.00	24.50	13.30	25.00			
UMTS 1900	16.40	22.00	13.70	22.00	15.90	24.50	12.20	25.00			
LTE Band 71	20.30	23.20	N/A	N/A	20.50	25.00	N/A	N/A			
LTE Band 12	20.10	23.20	N/A	N/A	19.50	25.00	N/A	N/A			
LTE Band 17	20.10	23.20	N/A	N/A	19.50	25.00	N/A	N/A			
LTE Band 13	19.60	23.20	N/A	N/A	19.90	25.00	N/A	N/A			
LTE Band 14	19.60	23.20	N/A	N/A	19.90	25.00	N/A	N/A			
LTE Band 26 (Cell)	17.70	23.20	N/A	N/A	18.40	25.00	N/A	N/A			
LTE Band 5 (Cell)	17.70	23.20	N/A	N/A	18.40	25.00	N/A	N/A			
LTE Band 5 ULCA (Cell)	17.70	23.20	N/A	N/A	18.40	25.00	N/A	N/A			
LTE Band 66 (AWS)	16.10	25.00	14.30	24.50	16.00	23.50	13.30	24.00			
LTE Band 4 (AWS)	16.10	25.00	14.30	24.50	16.00	24.50	13.30	25.00			
LTE Band 25 (PCS)	16.40	22.00	13.70	22.00	15.90	24.50	12.20	25.00			
LTE Band 2 (PCS)	16.40	22.00	13.70	22.00	15.90	24.50	12.20	25.00			
LTE Band 30	13.60	21.50	13.60	21.50	14.90	24.50	12.10	21.80			
LTE Band 7	13.50	21.50	13.90	21.50	15.50	24.50	12.20	25.00			
LTE Band 7 ULCA	13.50	21.50	13.90	21.50	15.50	24.50	12.20	25.00			
LTE Band 41 PC3	12.7	23.0	14.0	23.0	13.1	23.0	11.8	23.0			
LTE Band 41 ULCA PC3	12.7	23.0	14.0	23.0	13.1	23.0	11.8	23.0	+/- 1.0	+0.7 /- 1.0	+/- 1.0
LTE Band 41 PC2	12.7	24.4	14.0	23.9	13.1	22.9	11.8	23.4			
LTE Band 41 ULCA PC2	12.7	24.4	14.0	23.9	13.1	22.9	11.8	23.4			
LTE Band 48	11.2	17.6	11.4	18.0	11.8	16.7	10.9	19.0			
LTE Band 48 ULCA	11.2	17.6	11.4	18.0	11.8	16.7	10.9	19.0			
NR Band n71	20.30	23.20	N/A	N/A	20.50	25.00	N/A	N/A			
NR Band n12	20.10	23.20	N/A	N/A	19.50	25.00	N/A	N/A			
NR Band n14	19.60	23.20	N/A	N/A	19.90	25.00	N/A	N/A			
NR Band n26 (Cell)	17.70	23.20	N/A	N/A	18.40	25.00	N/A	N/A			
NR Band n5 (Cell)	17.70	23.20	N/A	N/A	18.40	25.00	N/A	N/A			
NR Band n70	16.10	25.00	14.30	24.50	16.00	24.50	13.30	25.00			
NR Band n66 (AWS)	16.10	25.00	14.30	24.50	16.00	23.50	13.30	24.00			
NR Band n25 (PCS)	16.40	22.00	13.70	22.00	15.90	24.50	12.20	25.00			
NR Band n2 (PCS)	16.40	22.00	13.70	22.00	15.90	24.50	12.20	25.00			
NR Band n30	13.60	21.50	13.60	21.50	14.90	24.50	12.10	21.80			
NR Band n7	13.50	21.50	13.90	21.50	15.50	24.50	12.20	25.00			
NR Band n41 PC3	12.70	25.00	14.00	25.00	13.10	25.00	11.80	25.00			
NR Band n41 PC2	12.70	28.00	14.00	27.50	13.10	26.50	11.80	27.00			
NR Band n77 PC3	11.20	22.50	11.00	22.50	11.20	24.70	10.80	24.70			
NR Band n77 PC2	11.20	22.50	11.00	22.50	11.20	26.50	10.80	26.50			

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

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

*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).

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 1	Max allowed power	**18.70**	**18.70**	**18.70**	**18.70**
		Nominal	**17.70**	**17.70**	**17.70**	**17.70**
	Ant 3	Max allowed power	**19.40**	**19.40**	**19.40**	**19.40**
		Nominal	**18.40**	**18.40**	**18.40**	**18.40**

Table 1-2
UMTS B4 (1750 MHz)

Mode/Band	Antenna		Modulated Average Output Power (in dBm)			
			3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
UMTS Band 4 (1750 MHz)	Ant 1	Max allowed power	**17.10**	**17.10**	**17.10**	**17.10**
		Nominal	**16.10**	**16.10**	**16.10**	**16.10**
	Ant 2b	Max allowed power	**15.30**	**15.30**	**15.30**	**15.30**
		Nominal	**14.30**	**14.30**	**14.30**	**14.30**
	Ant 3	Max allowed power	**17.00**	**17.00**	**17.00**	**17.00**
		Nominal	**16.00**	**16.00**	**16.00**	**16.00**
	Ant 4b	Max allowed power	**14.30**	**14.30**	**14.30**	**14.30**
		Nominal	**13.30**	**13.30**	**13.30**	**13.30**

Table 1-3
UMTS B2 (1900 MHz)

Mode/Band	Antenna		Modulated Average Output Power (in dBm)			
			3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
UMTS Band 2 (1900 MHz)	Ant 1	Max allowed power	**17.40**	**17.40**	**17.40**	**17.40**
		Nominal	**16.40**	**16.40**	**16.40**	**16.40**
	Ant 2b	Max allowed power	**14.70**	**14.70**	**14.70**	**14.70**
		Nominal	**13.70**	**13.70**	**13.70**	**13.70**
	Ant 3	Max allowed power	**16.90**	**16.90**	**16.90**	**16.90**
		Nominal	**15.90**	**15.90**	**15.90**	**15.90**
	Ant 4b	Max allowed power	**13.20**	**13.20**	**13.20**	**13.20**
		Nominal	**12.20**	**12.20**	**12.20**	**12.20**

Table 1-4
LTE Bands

Mode / Band		Modulated Average Output Power (in dBm)				
		Ant 1	Ant 2a	Ant 2b	Ant 3	Ant 4b
LTE FDD Band 71	Max allowed power	21.30			21.50	
	Nominal	20.30			20.50	
LTE FDD Band 12	Max allowed power	21.10			20.50	
	Nominal	20.10			19.50	
LTE FDD Band 17	Max allowed power	21.10			20.50	
	Nominal	20.10			19.50	
LTE FDD Band 13	Max allowed power	20.60			20.90	
	Nominal	19.60			19.90	
LTE FDD Band 14	Max allowed power	20.60			20.90	
	Nominal	19.60			19.90	
LTE FDD Band 26	Max allowed power	18.70			19.40	
	Nominal	17.70			18.40	
LTE FDD Band 5	Max allowed power	18.70			19.40	
	Nominal	17.70			18.40	
LTE FDD Band 5 Intra-Band ULCA	Max allowed power	18.70			19.40	
	Nominal	17.70			18.40	
LTE FDD Band 4	Max allowed power	17.10		15.30	17.00	14.30
	Nominal	16.10		14.30	16.00	13.30
LTE FDD Band 66	Max allowed power	17.10		15.30	17.00	14.30
	Nominal	16.10		14.30	16.00	13.30
LTE FDD Band 2	Max allowed power	17.40		14.70	16.90	13.20
	Nominal	16.40		13.70	15.90	12.20
LTE FDD Band 25	Max allowed power	17.40		14.70	16.90	13.20
	Nominal	16.40		13.70	15.90	12.20
LTE FDD Band 30	Max allowed power	14.60		14.60	15.90	13.10
	Nominal	13.60		13.60	14.90	12.10
LTE FDD Band 7	Max allowed power	14.50		14.90	16.50	13.20
	Nominal	13.50		13.90	15.50	12.20
LTE FDD Band 7 Intra-Band ULCA	Max allowed power	14.50		14.90	16.50	13.20
	Nominal	13.50		13.90	15.50	12.20
LTE TDD Band 41 (PC3)	Max allowed power	15.70		17.00	16.10	14.80
	Nominal	14.70		16.00	15.10	13.80
LTE TDD Band 41 (PC3) Intra-band ULCA	Max allowed power	15.70		17.00	16.10	14.80
	Nominal	14.70		16.00	15.10	13.80
LTE TDD Band 41 (PC2)	Max allowed power	17.30		18.60	17.70	16.40
	Nominal	16.30		17.60	16.70	15.40
LTE TDD Band 41 (PC2) Intra-band ULCA	Max allowed power	17.30		18.60	17.70	16.40
	Nominal	16.30		17.60	16.70	15.40
LTE TDD Band 48	Max allowed power	14.20	14.40		14.80	13.90
	Nominal	13.20	13.40		13.80	12.90
LTE TDD Band 48 Intra-band ULCA	Max allowed power	14.20	14.40		14.80	13.90
	Nominal	13.20	13.40		13.80	12.90

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

Table 1-5
NR Bands

Mode / Band		Modulated Average Output Power (in dBm)				
		Ant 1	Ant 2a	Ant 2b	Ant 3	Ant 4b
NR FDD Band n71	Max allowed power	21.30			21.50	
	Nominal	20.30			20.50	
NR FDD Band n12	Max allowed power	21.10			20.50	
	Nominal	20.10			19.50	
NR FDD Band n14	Max allowed power	20.60			20.90	
	Nominal	19.60			19.90	
NR FDD Band n26	Max allowed power	18.70			19.40	
	Nominal	17.70			18.40	
NR FDD Band n5	Max allowed power	18.70			19.40	
	Nominal	17.70			18.40	
NR FDD Band n70	Max allowed power	17.10		15.30	17.00	14.30
	Nominal	16.10		14.30	16.00	13.30
NR FDD Band n66	Max allowed power	17.10		15.30	17.00	14.30
	Nominal	16.10		14.30	16.00	13.30
NR FDD Band n25	Max allowed power	17.40		14.70	16.90	13.20
	Nominal	16.40		13.70	15.90	12.20
NR FDD Band n2	Max allowed power	17.40		14.70	16.90	13.20
	Nominal	16.40		13.70	15.90	12.20
NR FDD Band n30	Max allowed power	14.60		14.60	15.90	13.10
	Nominal	13.60		13.60	14.90	12.10
NR FDD Band n7	Max allowed power	14.50		14.90	16.50	13.20
	Nominal	13.50		13.90	15.50	12.20
NR TDD Band n41 (PC3)	Max allowed power	13.70		15.00	14.10	12.80
	Nominal	12.70		14.00	13.10	11.80
NR TDD Band n41 (PC2)	Max allowed power	13.70		15.00	14.10	12.80
	Nominal	12.70		14.00	13.10	11.80
NR TDD Band n77 (PC3)	Max allowed power	12.20	12.00		12.20	11.80
	Nominal	11.20	11.00		11.20	10.80
NR TDD Band n77 (PC2)	Max allowed power	12.20	12.00		12.20	11.80
	Nominal	11.20	11.00		11.20	10.80

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

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) - Ant 2a 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	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	2	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	3	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	4	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	5	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	6	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	7	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	8	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	9	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	10	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	11	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	12	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	13	13.50	10.50	11.00	NS	10.50	10.50	NS

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

Mode	IEEE 802.11 (Maximum in dBm) - Ant 4a 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	14.00	14.00	14.00	14.00	13.50	13.50	13.50
	2	14.00	14.00	14.00	14.00	14.00	14.00	14.00
	3	14.00	14.00	14.00	14.00	14.00	14.00	14.00
	4	14.00	14.00	14.00	14.00	14.00	14.00	14.00
	5	14.00	14.00	14.00	14.00	14.00	14.00	14.00
	6	14.00	14.00	14.00	14.00	14.00	14.00	14.00
	7	14.00	14.00	14.00	14.00	14.00	14.00	14.00
	8	14.00	14.00	14.00	14.00	14.00	14.00	14.00
	9	14.00	14.00	14.00	14.00	14.00	14.00	14.00
	10	14.00	14.00	14.00	14.00	14.00	14.00	14.00
	11	14.00	14.00	14.00	14.00	14.00	14.00	14.00
	12	14.00	14.00	14.00	14.00	14.00	14.00	13.50
	13	14.00	10.50	11.00	NS	10.50	10.50	NS

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

Mode	IEEE 802.11 (Maximum in dBm) - Ant 4a 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	10.25	10.25	10.25	10.25	10.25	10.25	10.25
	40	10.25	10.25	10.25	10.25	10.25	10.25	10.25
	44	10.25	10.25	10.25	10.25	10.25	10.25	10.25
	48	10.25	10.25	10.25	10.25	10.25	10.25	10.25
	52	10.25	10.25	10.25	10.25	10.25	10.25	10.25
	56	10.25	10.25	10.25	10.25	10.25	10.25	10.25
	60	10.25	10.25	10.25	10.25	10.25	10.25	10.25
	64	10.25	10.25	10.25	10.25	10.25	10.25	10.25
	100	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	104	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	108	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	112	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	116	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	120	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	124	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	128	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	132	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	136	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	140	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	144	9.00	9.00	9.00	9.00	9.00	9.00	9.00
	149	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	153	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	157	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	161	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	165	10.50	10.50	10.50	10.50	10.50	10.50	10.50
5 GHz WIFI 40 MHz Bandwidth	38	[redacted]	10.25	10.25	10.25	10.25	10.25	10.25
	46		10.25	10.25	10.25	10.25	10.25	10.25
	54		10.25	10.25	10.25	10.25	10.25	10.25
	62		10.25	10.25	10.25	10.25	10.25	10.25
	102		9.00	9.00	9.00	9.00	9.00	9.00
	110		9.00	9.00	9.00	9.00	9.00	9.00
	118		9.00	9.00	9.00	9.00	9.00	9.00
	126		9.00	9.00	9.00	9.00	9.00	9.00
	134		9.00	9.00	9.00	9.00	9.00	9.00
	142		9.00	9.00	9.00	9.00	9.00	9.00
	151		10.50	10.50	10.50	10.50	10.50	10.50
	159		10.50	10.50	10.50	10.50	10.50	10.50
5 GHz WIFI 80 MHz Bandwidth	42		10.25	10.25	10.25	10.25	10.25	10.25
	58		10.25	10.25	10.25	10.25	10.25	10.25
	106		9.00	9.00	9.00	9.00	9.00	9.00
	122		9.00	9.00	9.00	9.00	9.00	9.00
	138		9.00	9.00	9.00	9.00	9.00	9.00
	155		10.50	10.50	10.50	10.50	10.50	10.50
5GHz WIFI 160 Mhz Bandwidth	50		9.00	9.00	8.50	8.50	8.50	8.50
	114		9.00	9.00	9.00	9.00	9.00	9.00

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

Mode	IEEE 802.11 (Maximum in dBm) - Ant 5b 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	17.50	17.50	16.50	17.00	16.25	17.00	16.25
	40	17.50	17.50	17.50	17.00	17.00	17.00	17.00
	44	17.50	17.50	17.50	17.00	17.00	17.00	17.00
	48	17.50	17.50	17.50	17.00	17.00	17.00	17.00
	52	16.50	16.50	16.50	16.50	16.50	16.50	16.50
	56	16.50	16.50	16.50	16.50	16.50	16.50	16.50
	60	16.50	16.50	16.50	16.50	16.50	16.50	16.50
	64	16.50	16.50	16.50	16.50	16.50	16.50	16.50
	100	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	104	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	108	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	112	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	116	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	120	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	124	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	128	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	132	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	136	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	140	16.00	16.00	14.50	16.00	14.50	16.00	14.50
	144	16.00	16.00	16.00	16.00	16.00	16.00	16.00
	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]	14.50	14.00	14.50	13.75	14.50	13.75
	46		17.50	17.50	17.50	17.50	17.50	17.50
	54		16.50	16.50	16.50	16.50	16.50	16.50
	62		16.50	16.00	16.50	15.50	16.50	15.50
	102		15.00	15.50	14.50	14.50	14.50	14.50
	110		16.00	16.00	16.00	16.00	16.00	16.00
	118		16.00	16.00	16.00	16.00	16.00	16.00
	126		16.00	16.00	16.00	16.00	16.00	16.00
	134		16.00	16.00	16.00	16.00	16.00	16.00
	142		16.00	16.00	16.00	16.00	16.00	16.00
	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		12.50	12.00	12.50	11.75	12.50	11.75
	58		15.25	14.50	15.00	14.50	15.00	14.50
	106		14.00	14.00	14.00	14.00	14.00	14.00
	122		16.00	16.00	16.00	16.00	16.00	16.00
	138		16.00	16.00	16.00	16.00	16.00	16.00
	155		16.00	16.00	16.00	16.00	16.00	16.00
5GHz WIFI 160 Mhz Bandwidth	50		9.00	9.00	8.50	8.50	8.50	8.50
	114		11.00	10.00	10.50	10.00	10.50	10.00

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

The table below is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2a/2b active
-Simultaneous conditions with mmW/Inter-band ULCA active

Mode	IEEE 802.11 (Maximum in dBm) - Ant 2a 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	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	2	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	3	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	4	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	5	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	6	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	7	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	8	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	9	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	10	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	11	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	12	10.00	10.00	10.00	10.00	10.00	10.00	10.00
	13	10.00	10.00	10.00	NS	10.00	10.00	NS

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

The table below is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 4b active
-Simultaneous conditions with mmW/Inter-band ULCA active

Mode	IEEE 802.11 (Maximum in dBm) - Ant 4a 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	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	2	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	3	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	4	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	5	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	6	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	7	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	8	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	9	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	10	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	11	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	12	10.50	10.50	10.50	10.50	10.50	10.50	10.50
	13	10.50	10.50	10.50	NS	10.50	10.50	NS

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

The table below is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 4b active
-Simultaneous conditions with mmW/Inter-band ULCA active

Mode	Channel	IEEE 802.11 (Maximum in dBm) - Ant 4a 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	4.75	4.75	4.75	4.75	4.75	4.75	4.75
	40	4.75	4.75	4.75	4.75	4.75	4.75	4.75
	44	4.75	4.75	4.75	4.75	4.75	4.75	4.75
	48	4.75	4.75	4.75	4.75	4.75	4.75	4.75
	52	4.75	4.75	4.75	4.75	4.75	4.75	4.75
	56	4.75	4.75	4.75	4.75	4.75	4.75	4.75
	60	4.75	4.75	4.75	4.75	4.75	4.75	4.75
	64	4.75	4.75	4.75	4.75	4.75	4.75	4.75
	100	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	104	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	108	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	112	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	116	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	120	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	124	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	128	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	132	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	136	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	140	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	144	3.50	3.50	3.50	3.50	3.50	3.50	3.50
	149	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	153	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	157	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	161	5.00	5.00	5.00	5.00	5.00	5.00	5.00
	165	5.00	5.00	5.00	5.00	5.00	5.00	5.00
5 GHz WIFI 40 MHz Bandwidth	38	[redacted]	4.75	4.75	4.75	4.75	4.75	4.75
	46		4.75	4.75	4.75	4.75	4.75	4.75
	54		4.75	4.75	4.75	4.75	4.75	4.75
	62		4.75	4.75	4.75	4.75	4.75	4.75
	102		3.50	3.50	3.50	3.50	3.50	3.50
	110		3.50	3.50	3.50	3.50	3.50	3.50
	118		3.50	3.50	3.50	3.50	3.50	3.50
	126		3.50	3.50	3.50	3.50	3.50	3.50
	134		3.50	3.50	3.50	3.50	3.50	3.50
	142		3.50	3.50	3.50	3.50	3.50	3.50
	151		5.00	5.00	5.00	5.00	5.00	5.00
	159		5.00	5.00	5.00	5.00	5.00	5.00
5 GHz WIFI 80 MHz Bandwidth	42		4.75	4.75	4.75	4.75	4.75	4.75
	58		4.75	4.75	4.75	4.75	4.75	4.75
	106		3.50	3.50	3.50	3.50	3.50	3.50
	122		3.50	3.50	3.50	3.50	3.50	3.50
	138		3.50	3.50	3.50	3.50	3.50	3.50
	155		5.00	5.00	5.00	5.00	5.00	5.00
5GHz WIFI 160 Mhz Bandwidth	50		4.75	4.75	4.75	4.75	4.75	4.75
	114		3.50	3.50	3.50	3.50	3.50	3.50

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

The table below is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2a/2b active
-Simultaneous conditions with mmW/Inter-band ULCA active

Mode	IEEE 802.11 (Maximum in dBm) - Ant 5b 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	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	40	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	44	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	48	13.50	13.50	13.50	13.50	13.50	13.50	13.50
	52	12.50	12.50	12.50	12.50	12.50	12.50	12.50
	56	12.50	12.50	12.50	12.50	12.50	12.50	12.50
	60	12.50	12.50	12.50	12.50	12.50	12.50	12.50
	64	12.50	12.50	12.50	12.50	12.50	12.50	12.50
	100	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	104	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	108	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	112	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	116	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	120	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	124	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	128	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	132	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	136	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	140	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	144	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	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]	13.50	13.50	13.50	13.50	13.50	13.50
	46		13.50	13.50	13.50	13.50	13.50	13.50
	54		12.50	12.50	12.50	12.50	12.50	12.50
	62		12.50	12.50	12.50	12.50	12.50	12.50
	102		12.00	12.00	12.00	12.00	12.00	12.00
	110		12.00	12.00	12.00	12.00	12.00	12.00
	118		12.00	12.00	12.00	12.00	12.00	12.00
	126		12.00	12.00	12.00	12.00	12.00	12.00
	134		12.00	12.00	12.00	12.00	12.00	12.00
	142		12.00	12.00	12.00	12.00	12.00	12.00
	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		12.50	12.00	12.50	11.75	12.50	11.75
	58		12.50	12.50	12.50	12.50	12.50	12.50
	106		12.00	12.00	12.00	12.00	12.00	12.00
	122		12.00	12.00	12.00	12.00	12.00	12.00
	138		12.00	12.00	12.00	12.00	12.00	12.00
	155		12.00	12.00	12.00	12.00	12.00	12.00
5GHz WIFI 160 Mhz Bandwidth	50		9.00	9.00	8.50	8.50	8.50	8.50
	114		11.00	10.00	10.50	10.00	10.50	10.00

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

1.4.4 Bluetooth Maximum and Reduced Output Power

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 2a	Modulated Average (iPA) - Single Tx Chain (dBm) - Antenna 2a
Bluetooth BDR/LE	Maximum	**14.00**	**10.00**
	Nominal	**12.50**	**8.50**
Bluetooth EDR	Maximum	**13.00**	**5.50**
	Nominal	**11.50**	**4.00**
Bluetooth HDR	Maximum	**10.00**	**3.00**
	Nominal	**8.50**	**1.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) - Antenna 2a	Modulated Average (iPA) - TxBF (dBm) - Antenna 2a
Bluetooth BDR/LE	Maximum	**10.50**	**10.00**
	Nominal	**9.00**	**8.50**
Bluetooth EDR	Maximum	**10.50**	**5.50**
	Nominal	**9.00**	**4.00**
Bluetooth HDR	Maximum	**10.00**	**3.00**
	Nominal	**8.50**	**1.50**

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (iPA) - Single Tx Chain (dBm) - Antenna 4a
Bluetooth BDR/LE	Maximum	**14.50**	**10.50**
	Nominal	**13.00**	**9.00**
Bluetooth EDR	Maximum	**13.50**	**7.50**
	Nominal	**12.00**	**6.00**
Bluetooth HDR	Maximum	**10.00**	**5.00**
	Nominal	**8.50**	**3.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) - Antenna 4a	Modulated Average (iPA) - TxBF (dBm) - Antenna 4a
Bluetooth BDR/LE	Maximum	**11.00**	**10.50**
	Nominal	**9.50**	**9.00**
Bluetooth EDR	Maximum	**11.00**	**7.50**
	Nominal	**9.50**	**6.00**
Bluetooth HDR	Maximum	**10.00**	**5.00**
	Nominal	**8.50**	**3.50**

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

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1/2a/2b active
-Simultaneous conditions with Licensed Bands Antenna 3/4b and 5/6 GHz WLAN active
-Simultaneous conditions with 5/6 GHz WLAN active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 2a	Modulated Average (iPA) - Single Tx Chain (dBm) - Antenna 2a
Bluetooth BDR/LE Reduced	Maximum	**10.00**	**10.00**
	Nominal	**8.50**	**8.50**
Bluetooth EDR Reduced	Maximum	**10.00**	**5.50**
	Nominal	**8.50**	**4.00**
Bluetooth HDR Reduced	Maximum	**10.00**	**3.00**
	Nominal	**8.50**	**1.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) - Antenna 2a	Modulated Average (iPA) - TxBF (dBm) - Antenna 2a
Bluetooth BDR/LE Reduced	Maximum	**6.50**	**6.50**
	Nominal	**5.00**	**5.00**
Bluetooth EDR Reduced	Maximum	**6.50**	**5.50**
	Nominal	**5.00**	**4.00**
Bluetooth HDR Reduced	Maximum	**6.50**	**3.00**
	Nominal	**5.00**	**1.50**

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

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2a/2b and 5/6 GHz WLAN active
-Simultaneous conditions with mmW/Inter-band ULCA active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 2a	Modulated Average (iPA) - Single Tx Chain (dBm) - Antenna 2a
Bluetooth BDR/LE Reduced	Maximum	**7.00**	**7.00**
	Nominal	**5.50**	**5.50**
Bluetooth EDR Reduced	Maximum	**7.00**	**5.50**
	Nominal	**5.50**	**4.00**
Bluetooth HDR Reduced	Maximum	**7.00**	**3.00**
	Nominal	**5.50**	**1.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) - Antenna 2a	Modulated Average (iPA) - TxBF (dBm) - Antenna 2a
Bluetooth BDR/LE Reduced	Maximum	**3.50**	**3.50**
	Nominal	**2.00**	**2.00**
Bluetooth EDR Reduced	Maximum	**3.50**	**3.50**
	Nominal	**2.00**	**2.00**
Bluetooth HDR Reduced	Maximum	**3.50**	**3.00**
	Nominal	**2.00**	**1.50**

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

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3/4b active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (iPA) - Single Tx Chain (dBm) - Antenna 4a
Bluetooth BDR/LE Reduced	Maximum	**11.50**	**10.50**
	Nominal	**10.00**	**9.00**
Bluetooth EDR Reduced	Maximum	**11.50**	**7.50**
	Nominal	**10.00**	**6.00**
Bluetooth HDR Reduced	Maximum	**10.00**	**5.00**
	Nominal	**8.50**	**3.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) - Antenna 4a	Modulated Average (iPA) - TxBF (dBm) - Antenna 4a
Bluetooth BDR/LE Reduced	Maximum	**8.00**	**8.00**
	Nominal	**6.50**	**6.50**
Bluetooth EDR Reduced	Maximum	**8.00**	**7.50**
	Nominal	**6.50**	**6.00**
Bluetooth HDR Reduced	Maximum	**8.00**	**5.00**
	Nominal	**6.50**	**3.50**

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

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1/2a/2b and 5/6 GHz WLAN active
-Simultaneous conditions with 5/6 GHz WLAN active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (iPA) - Single Tx Chain (dBm) - Antenna 4a
Bluetooth BDR/LE Reduced	Maximum	**9.50**	**9.50**
	Nominal	**8.00**	**8.00**
Bluetooth EDR Reduced	Maximum	**9.50**	**7.50**
	Nominal	**8.00**	**6.00**
Bluetooth HDR Reduced	Maximum	**9.50**	**5.00**
	Nominal	**8.00**	**3.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) - Antenna 4a	Modulated Average (iPA) - TxBF (dBm) - Antenna 4a
Bluetooth BDR/LE Reduced	Maximum	**6.00**	**6.00**
	Nominal	**4.50**	**4.50**
Bluetooth EDR Reduced	Maximum	**6.00**	**6.00**
	Nominal	**4.50**	**4.50**
Bluetooth HDR Reduced	Maximum	**6.00**	**5.00**
	Nominal	**4.50**	**3.50**

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

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3/4b and 5/6 GHz WLAN active
-Simultaneous conditions with mmW/Inter-band ULCA active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (iPA) - Single Tx Chain (dBm) - Antenna 4a
Bluetooth BDR/LE Reduced	Maximum	**7.50**	**7.50**
	Nominal	**6.00**	**6.00**
Bluetooth EDR Reduced	Maximum	**7.50**	**7.50**
	Nominal	**6.00**	**6.00**
Bluetooth HDR Reduced	Maximum	**7.50**	**5.00**
	Nominal	**6.00**	**3.50**

Mode / Band		Modulated Average (ePA) - TxBF (dBm) - Antenna 4a	Modulated Average (iPA) - TxBF (dBm) - Antenna 4a
Bluetooth BDR/LE Reduced	Maximum	**4.00**	**4.00**
	Nominal	**2.50**	**2.50**
Bluetooth EDR Reduced	Maximum	**4.00**	**4.00**
	Nominal	**2.50**	**2.50**
Bluetooth HDR Reduced	Maximum	**4.00**	**4.00**
	Nominal	**2.50**	**2.50**

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

1.4.5 NB UNII Maximum and Reduced Output Power

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (ePA) - TxBF (dBm) - Antenna 4a
NB UNII-1 BDR	Maximum	**10.00**	**7.00**
	Nominal	**8.50**	**5.50**
NB UNII-1 HDR	Maximum	**10.50**	**9.00**
	Nominal	**9.00**	**7.50**

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 5b	Modulated Average (ePA) - TxBF (dBm) - Antenna 5b
NB UNII-1 BDR	Maximum	**10.00**	**7.00**
	Nominal	**8.50**	**5.50**
NB UNII-1 HDR	Maximum	**11.50**	**9.00**
	Nominal	**10.00**	**7.50**

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (ePA) - TxBF (dBm) - Antenna 4a
NB UNII-3 BDR	Maximum	**11.00**	**11.00**
	Nominal	**9.50**	**9.50**
NB UNII-3 HDR	Maximum	**11.00**	**11.00**
	Nominal	**9.50**	**9.50**

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 5b	Modulated Average (ePA) - TxBF (dBm) - Antenna 5b
NB UNII-3 BDR	Maximum	**18.00**	**18.00**
	Nominal	**16.50**	**16.50**
NB UNII-3 HDR	Maximum	**14.00**	**14.00**
	Nominal	**12.50**	**12.50**

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

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3/4b active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (ePA) - TxBF (dBm) - Antenna 4a
NB UNII-1 BDR Reduced	Maximum	**7.50**	**7.00**
	Nominal	**6.00**	**5.50**
NB UNII-1 HDR Reduced	Maximum	**7.50**	**7.50**
	Nominal	**6.00**	**6.00**

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (ePA) - TxBF (dBm) - Antenna 4a
NB UNII-3 BDR Reduced	Maximum	**8.00**	**8.00**
	Nominal	**6.50**	**6.50**
NB UNII-3 HDR Reduced	Maximum	**8.00**	**8.00**
	Nominal	**6.50**	**6.50**

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

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1/2a/2b and 2.4 GHz WLAN active
-Simultaneous conditions with 2.4 GHz WLAN active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (ePA) - TxBF (dBm) - Antenna 4a
NB UNII-1 BDR Reduced	Maximum	**5.50**	**5.50**
	Nominal	**4.00**	**4.00**
NB UNII-1 EDR 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.

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (ePA) - TxBF (dBm) - Antenna 4a
NB UNII-3 BDR Reduced	Maximum	**6.00**	**6.00**
	Nominal	**4.50**	**4.50**
NB UNII-3 EDR Reduced	Maximum	**6.00**	**6.00**
	Nominal	**4.50**	**4.50**

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

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 3/4b and 2.4 GHz WLAN active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (ePA) - TxBF (dBm) - Antenna 4a
NB UNII-1 BDR Reduced	Maximum	**3.50**	**3.50**
	Nominal	**2.00**	**2.00**
NB UNII-1 HDR Reduced	Maximum	**3.50**	**3.50**
	Nominal	**2.00**	**2.00**

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 4a	Modulated Average (ePA) - TxBF (dBm) - Antenna 4a
NB UNII-3 BDR Reduced	Maximum	**4.00**	**4.00**
	Nominal	**2.50**	**2.50**
NB UNII-3 HDR Reduced	Maximum	**4.00**	**4.00**
	Nominal	**2.50**	**2.50**

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

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 1/2a/2b active or 2.4 GHz WLAN active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 5b	Modulated Average (ePA) - TxBF (dBm) - Antenna 5b
NB UNII-1 BDR Reduced	Maximum	**7.50**	**7.00**
	Nominal	**6.00**	**5.50**
NB UNII-1 HDR Reduced	Maximum	**7.50**	**7.50**
	Nominal	**6.00**	**6.00**

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 5b	Modulated Average (ePA) - TxBF (dBm) - Antenna 5b
NB UNII-3 BDR Reduced	Maximum	**14.00**	**14.00**
	Nominal	**12.50**	**12.50**
NB UNII-3 HDR Reduced	Maximum	**14.00**	**14.00**
	Nominal	**12.50**	**12.50**

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

Below table is applicable in the following conditions:
-Simultaneous conditions with Licensed Bands Antenna 2a/2b and 2.4 GHz WLAN active

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 5b	Modulated Average (ePA) - TxBF (dBm) - Antenna 5b
NB UNII-1 BDR Reduced	Maximum	**4.50**	**4.50**
	Nominal	**3.00**	**3.00**
NB UNII-1 HDR Reduced	Maximum	**4.50**	**4.50**
	Nominal	**3.00**	**3.00**

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

Mode / Band		Modulated Average (ePA) - Single Tx Chain (dBm) - Antenna 5b	Modulated Average (ePA) - TxBF (dBm) - Antenna 5b
NB UNII-3 Bluetooth BDR Reduced	Maximum	**11.00**	**11.00**
	Nominal	**9.50**	**9.50**
NB UNII-3 Bluetooth HDR Reduced	Maximum	**11.00**	**11.00**
	Nominal	**9.50**	**9.50**

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	Front	Top	Bottom	Right	Left
UMTS 850 Antenna 1	Yes	No	No	Yes	No	Yes
UMTS 1750 Antenna 1	Yes	No	No	Yes	No	Yes
UMTS 1900 Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 71 Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 12 Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 13 Antenna 1	Yes	No	No	Yes	No	Yes
LTE Ban 14 Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 26 (Cell) Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 5 (Cell) Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 66 (AWS) Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 25 (PCS) Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 30 Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 7 Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 41 Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 48 Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n71 Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n12 Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n14 Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n5 (Cell) Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n26 (Cell) Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n70 Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n66 (AWS) Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n25 (PCS) Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n30 Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n7 Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n41 Antenna 1	Yes	No	No	Yes	No	Yes
NR Band n77 Antenna 1	Yes	No	No	Yes	No	Yes
LTE Band 48 Antenna 2a	Yes	No	No	Yes	Yes	No
NR Band n77 Antenna 2a	Yes	No	No	Yes	Yes	No
UMTS 1750 Antenna 2b	Yes	No	No	Yes	No	No
UMTS 1900 Antenna 2b	Yes	No	No	Yes	No	No
LTE Band 66 (AWS) Antenna 2b	Yes	No	No	Yes	No	No
LTE Band 25 (PCS) Antenna 2b	Yes	No	No	Yes	No	No
LTE Band 30 Antenna 2b	Yes	No	No	Yes	No	No
LTE Band 7 Antenna 2b	Yes	No	No	Yes	No	No
LTE Band 41 Antenna 2b	Yes	No	No	Yes	No	No
NR Band n70 Antenna 2b	Yes	No	No	Yes	No	No
NR Band n66 (AWS) Antenna 2b	Yes	No	No	Yes	No	No
NR Band n25 (PCS) Antenna 2b	Yes	No	No	Yes	No	No
NR Band n30 Antenna 2b	Yes	No	No	Yes	No	No
NR Band n7 Antenna 2b	Yes	No	No	Yes	No	No
NR Band n41 Antenna 2b	Yes	No	No	Yes	No	No

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

Mode	Back	Front	Top	Bottom	Right	Left
UMTS 850 Antenna 3	Yes	No	Yes	No	Yes	No
UMTS 1750 Antenna 3	Yes	No	Yes	No	Yes	No
UMTS 1900 Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 71 Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 12 Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 13 Antenna 3	Yes	No	Yes	No	Yes	No
LTE Ban 14 Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 26 (Cell) Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 5 (Cell) Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 66 (AWS) Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 25 (PCS) Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 30 Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 7 Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 41 Antenna 3	Yes	No	Yes	No	Yes	No
LTE Band 48 Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n71 Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n12 Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n14 Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n5 (Cell) Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n26 (Cell) Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n70 Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n66 (AWS) Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n25 (PCS) Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n30 Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n7 Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n41 Antenna 3	Yes	No	Yes	No	Yes	No
NR Band n77 Antenna 3	Yes	No	Yes	No	Yes	No
UMTS 1750 Antenna 4b	Yes	No	Yes	No	No	No
UMTS 1900 Antenna 4b	Yes	No	Yes	No	No	No
LTE Band 66 (AWS) Antenna 4b	Yes	No	Yes	No	No	No
LTE Band 25 (PCS) Antenna 4b	Yes	No	Yes	No	No	No
LTE Band 30 Antenna 4b	Yes	No	Yes	No	No	No
LTE Band 7 Antenna 4b	Yes	No	Yes	No	No	No
LTE Band 41 Antenna 4b	Yes	No	Yes	No	No	No
LTE Band 48 Antenna 4b	Yes	No	Yes	No	No	No
NR Band n70 Antenna 4b	Yes	No	Yes	No	No	No
NR Band n66 (AWS) Antenna 4b	Yes	No	Yes	No	No	No
NR Band n25 (PCS) Antenna 4b	Yes	No	Yes	No	No	No
NR Band n30 Antenna 4b	Yes	No	Yes	No	No	No
NR Band n7 Antenna 4b	Yes	No	Yes	No	No	No
NR Band n41 Antenna 4b	Yes	No	Yes	No	No	No
NR Band n77 Antenna 4b	Yes	No	Yes	No	No	No
2.4GHz WLAN Antenna 2a	Yes	No	No	Yes	Yes	No
2.4GHz WLAN Antenna 4a	Yes	No	Yes	No	No	Yes
5 GHz WLAN Antenna 5b	Yes	No	No	No	Yes	No
5 GHz WLAN Antenna 4a	Yes	No	Yes	No	No	Yes
Bluetooth Antenna 2a	Yes	No	No	Yes	Yes	No
Bluetooth Antenna 4a	Yes	No	Yes	No	No	Yes
NB UNII-1 Antenna 5b	Yes	No	No	No	Yes	No
NB UNII-1 Antenna 4a	Yes	No	Yes	No	No	Yes
NB UNII-3 Antenna 5b	Yes	No	No	No	Yes	No
NB UNII-3 Antenna 4a	Yes	No	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 WIFI	Yes
2	Cellular Band + 5/6 GHz WIFI	Yes
3	Cellular Band + 2.4 GHz Bluetooth	Yes
4	Cellular Band+ 2.4 GHz WIFI MIMO	Yes
5	Cellular Band+ 5/6 GHz WIFI MIMO	Yes
6	Cellular Band + 2.4 GHz Bluetooth + 5/6 GHz WIFI	Yes
7	Cellular Band + 2.4 GHz Bluetooth + 5/6 GHz WIFI MIMO	Yes
8	2.4 GHz Bluetooth + 5 GHz WIFI	Yes
9	2.4 GHz Bluetooth + 5/6 GHz WIFI MIMO	Yes
10	Cellular Band + 2.4 GHz Bluetooth(TXBF) + 5/6 GHz WIFI	Yes
11	Cellular Band + 2.4 GHz Bluetooth(TXBF) + 5/6 GHz WIFI MIMO	Yes
12	2.4 GHz Bluetooth(TXBF) + 5/6 GHz WIFI	Yes
13	2.4 GHz Bluetooth (TXBF) + 5/6 GHZ WIFI MIMO	Yes
14	Cellular Band + NB UNII	Yes
15	Cellular Band + NB UNII + 2.4 GHz WIFI	Yes
16	Cellular Band + NB UNII + 2.4 GHz WIFI MIMO	Yes
17	NB UNII + 2.4 GHz WIFI	Yes
18	NB UNII + 2.4 GHz WIFI MIMO	Yes
19	Cellular Band + NB UNII(TXBF) + 2.4 GHz WIFI	Yes
20	Cellular Band + NB UNII(TXBF) + 2.4 GHz WIFI MIMO	Yes
21	Cellular Band + NB UNII(TXBF)	Yes
22	Cellular Band + 2.4 GHz Bluetooth(TXBF)	Yes
23	Cellular Band + 2.4 GHz WLAN + 2.4 GHz Bluetooth	Yes
24	2.4 GHz WLAN + 2.4 GHz Bluetooth	Yes
25	NB UNII(TXBF) + 2.4 GHz WIFI	Yes
26	NB UNII(TXBF) + 2.4 GHz WIFI MIMO	Yes

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

No.	Capable Transmit Configuration	Body	Notes
1	Cellular Ant 1 LB + Cellular Ant 3 MB/HB	Yes	LTE Bands transmitting from Ant 1 LB: LTE B5/12/13/14 LTE Bands transmitting from Ant 3 MB/HB: LTE B2/4/7/30/66
2	Cellular Ant 1 LB + Cellular Ant 2b MB/HB	Yes	LTE Bands transmitting from Ant 1 LB: LTE B5/12/13/14 LTE Bands transmitting from Ant 2b MB/HB: LTE B2/4/7/30/66
3	Cellular Ant 1 LB + Cellular Ant 4b MB/HB	Yes	LTE Bands transmitting from Ant 1 LB: LTE B5/12/13/14 LTE Bands transmitting from Ant 4b MB/HB: LTE B2/4/7/30/66
4	Cellular Ant 3 LB + Cellular Ant 1 MB/HB	Yes	LTE Bands transmitting from Ant 3 LB: LTE B5/12/13/14 LTE Bands transmitting from Ant 1 MB/HB: LTE B2/4/7/30/66
5	Cellular Ant 3 LB + Cellular Ant 2b MB/HB	Yes	LTE Bands transmitting from Ant 3 LB: LTE B5/12/13/14 LTE Bands transmitting from Ant 2b MB/HB: LTE B2/4/7/30/66
6	Cellular Ant 3 LB + Cellular Ant 4b MB/HB	Yes	LTE Bands transmitting from Ant 3 LB: LTE B5/12/13/14 LTE Bands transmitting from Ant 4b MB/HB: LTE B2/4/7/30/66

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 + 5/6 GHz WI-FI	Yes
3	LTE Inter-Band ULCA + 2.4 GHz Bluetooth	Yes
4	LTE Inter-Band ULCA + 2.4 GHz WI-FI MIMO	Yes
5	LTE Inter-Band ULCA + 5/6 GHz WI-FI MIMO	Yes
6	LTE Inter-Band ULCA + 2.4 GHz Bluetooth + 5/6 GHz WI-FI	Yes
7	LTE Inter-Band ULCA + 2.4 GHz Bluetooth + 5/6 GHz WI-FI MIMO	Yes
8	LTE Inter-Band ULCA + 2.4 GHz Bluetooth(TXBF) + 5/6 GHz WI-FI	Yes
9	LTE Inter-Band ULCA + 2.4 GHz Bluetooth(TXBF) + 5/6 GHz WI-FI MIMO	Yes
10	LTE Inter-Band ULCA + NB UNII	Yes
11	LTE Inter-Band ULCA + UNII NB + 2.4 GHz WI-FI	Yes
12	LTE Inter-Band ULCA + UNII NB + 2.4 GHz WI-FI MIMO	Yes
13	LTE Inter-Band ULCA + UNII NB(TXBF) + 2.4 GHz WI-FI	Yes
14	LTE Inter-Band ULCA + UNII NB(TXBF) + 2.4 GHz WI-FI MIMO	Yes
15	LTE Inter-Band ULCA + UNII NB(TXBF)	Yes
16	LTE Inter-Band ULCA + 2.4 GHz Bluetooth(TXBF)	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. 2.4 GHz WLAN, and 2.4 GHz Bluetooth can transmit simultaneously on separate antennas. 2.4 GHz WLAN Antenna 4a can only transmit simultaneously with 2.4 GHz Bluetooth Ant 2a. In this scenario, Wi-Fi max power will not exceed minimum of (13.5 dBm, 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/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.
7. 5G NR FR2 n258, n260, and n261 cannot transmit simultaneously
8. LTE + 5G NR FR2 Scenarios are limited to EN-DC combinations with anchor bands as shown in the NR FR2 checklist

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 5b and U-NII-2A was evaluated for Antenna 4a. Additional testing for U-NII-2A Antenna 5b and for U-NII-1 Antenna 4a 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 spot checked on Variant 1 and Variant 2. The Variant with the highest reported SAR value was evaluated for the remaining WLAN/Bluetooth configurations.

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

This device supports IEEE 802.11ac with the following features:

a) Up to 160 MHz Bandwidth only for 5/6GHz
b) 3 Tx antenna output
c) 256 QAM is supported
d) TDWR and Band gap channels are supported

This device supports IEEE 802.11ax with the following features:

a) Up to 160 MHz Bandwidth only for 5/6 GHz
b) Up to 20 MHz Bandwidth only for 2.4 GHz
c) 3 Tx antenna output
d) Up to 1024 QAM is supported
e) TDWR and Band gap channels are supported for 5 GHz
f) MU-MIMO UL Operations are not supported

Per 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 and NR Band n41/77. Per May 2017 TCB Workshop Notes, SAR tests were performed with Power Class 3 (given the specific UL/DL limitations for Power Class 2). Additionally, SAR testing for the Power class 2 condition was evaluated for the highest configuration in Power Class 3 for each test configuration to confirm the results were scalable linearly (See Section 13).

This device supports LTE Carrier Aggregation (CA) for LTE Band 41, LTE Band 48, LTE Band 5, and LTE Band 7 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per 2017 Fall TCB Workshop Notes.

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

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

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	1C2205090028-25.BCG
RF Exposure Part 2 Test Report	1C2205090028-27.BCG
Compliance summary	1C2205090028-30.BCG
Near Field PD Report (Part 1)	1C2205090028-29.BCG
Near Field PD Part 0 Report	1C2205090028-28.BCG
Wi-Fi 6 GHz RF Exposure Report	1C2205090028-33.BCG

2 LTE INFORMATION

LTE Information					
Form Factor	Tablet Device				
Frequency Range of each LTE transmission band	LTE Band 71 (665.5 - 695.5 MHz)				
	LTE Band 12 (699.7 - 715.3 MHz)				
	LTE Band 17 (706.5 - 713.5 MHz)				
	LTE Band 13 (779.5 - 784.5 MHz)				
	LTE Band 14 (790.5 - 795.5 MHz)				
	LTE Band 26 (Cell) (814.7 - 848.3 MHz)				
	LTE Band 5 (Cell) (824.7 - 848.3 MHz)				
	LTE Band 66 (AWS) (1710.7 - 1779.3 MHz)				
	LTE Band 4 (AWS) (1710.7 - 1754.3 MHz)				
	LTE Band 25 (PCS) (1850.7 - 1914.3 MHz)				
	LTE Band 2 (PCS) (1850.7 - 1909.3 MHz)				
	LTE Band 30 (2307.5 - 2312.5 MHz)				
	LTE Band 7 (2502.5 - 2567.5 MHz)				
	LTE Band 41 (2498.5 - 2687.5 MHz)				
	LTE Band 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 66 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 4 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 25 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 2 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 30: 5 MHz, 10 MHz				
	LTE Band 7: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 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 66 (AWS): 1.4 MHz	1710.7 (131979)		1745 (132322)	1779.3 (132665)	
LTE Band 66 (AWS): 3 MHz	1711.5 (131987)		1745 (132322)	1778.5 (132657)	
LTE Band 66 (AWS): 5 MHz	1712.5 (131997)		1745 (132322)	1777.5 (132647)	
LTE Band 66 (AWS): 10 MHz	1715 (132022)		1745 (132322)	1775 (132622)	
LTE Band 66 (AWS): 15 MHz	1717.5 (132047)		1745 (132322)	1772.5 (132597)	
LTE Band 66 (AWS): 20 MHz	1720 (132072)		1745 (132322)	1770 (132572)	
LTE Band 4 (AWS): 1.4 MHz	1710.7 (19957)		1732.5 (20175)	1754.3 (20393)	
LTE Band 4 (AWS): 3 MHz	1711.5 (19965)		1732.5 (20175)	1753.5 (20385)	
LTE Band 4 (AWS): 5 MHz	1712.5 (19975)		1732.5 (20175)	1752.5 (20375)	
LTE Band 4 (AWS): 10 MHz	1715 (20000)		1732.5 (20175)	1750 (20350)	
LTE Band 4 (AWS): 15 MHz	1717.5 (20025)		1732.5 (20175)	1747.5 (20325)	
LTE Band 4 (AWS): 20 MHz	1720 (20050)		1732.5 (20175)	1745 (20300)	
LTE Band 25 (PCS): 1.4 MHz	1850.7 (26047)		1882.5 (26365)	1914.3 (26683)	
LTE Band 25 (PCS): 3 MHz	1851.5 (26055)		1882.5 (26365)	1913.5 (26675)	
LTE Band 25 (PCS): 5 MHz	1852.5 (26065)		1882.5 (26365)	1912.5 (26665)	
LTE Band 25 (PCS): 10 MHz	1855 (26090)		1882.5 (26365)	1910 (26640)	
LTE Band 25 (PCS): 15 MHz	1857.5 (26115)		1882.5 (26365)	1907.5 (26615)	
LTE Band 25 (PCS): 20 MHz	1860 (26140)		1882.5 (26365)	1905 (26590)	
LTE Band 2 (PCS): 1.4 MHz	1850.7 (18607)		1880 (18900)	1909.3 (19193)	
LTE Band 2 (PCS): 3 MHz	1851.5 (18615)		1880 (18900)	1908.5 (19185)	
LTE Band 2 (PCS): 5 MHz	1852.5 (18625)		1880 (18900)	1907.5 (19175)	
LTE Band 2 (PCS): 10 MHz	1855 (18650)		1880 (18900)	1905 (19150)	
LTE Band 2 (PCS): 15 MHz	1857.5 (18675)		1880 (18900)	1902.5 (19125)	
LTE Band 2 (PCS): 20 MHz	1860 (18700)		1880 (18900)	1900 (19100)	
LTE Band 30: 5 MHz	2307.5 (27685)		2310 (27710)	2312.5 (27735)	
LTE Band 30: 10 MHz	N/A		2310 (27710)	N/A	
LTE Band 7: 5 MHz	2502.5 (20775)		2535 (21100)	2567.5 (21425)	
LTE Band 7: 10 MHz	2505 (20800)		2535 (21100)	2565 (21400)	
LTE Band 7: 15 MHz	2507.5 (20825)		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)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 20 MHz	2506 (39750)	2549.5 (40185)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 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, 256 QAM) , UL UE Cat 18 (QPSK, 16QAM, 64QAM, 256QAM)				
Modulations Supported in UL	QPSK, 16QAM, 64QAM, 256QAM				
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3~6.2.5? (manufacturer attestation to be provided)	YES				
A-MPR (Additional MPR) disabled for SAR Testing?	YES				
LTE Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations				
LTE Additional Information	This device does not support full CA features on 3GPP Release 15. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 15 Features are not supported: Relay, HetNet, Enhanced MIMO, eICIC, WIFI Offloading, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

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 n14 (790.5 - 795.5 MHz) NR Band n26 (Cell) (816.5 - 846.5 MHz) NR Band n5 (Cell) (826.5 - 846.5 MHz) NR Band n70 (1697.5-1707.5 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 (3455.01 - 3544.98 MHz) NR Band n77 C (3705 - 3975 MHz)									
Channel Bandwidths	NR Band n71: 5 MHz, 10 MHz, 15 MHz, 20 MHz NR Band n12: 5 MHz, 10 MHz, 15 MHz NR Band n14: 5 MHz, 10 MHz NR Band n26 (Cell): 5 MHz, 10 MHz NR Band n5 (Cell): 5 MHz, 10 MHz, 15 MHz, 20 MHz NR Band n70: 5 MHz, 10 MHz, 15 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, 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, 70 MHz, 80 MHz, 90 MHz, 100 MHz NR Band n77 DoD: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz NR Band n77 C: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz									
Channel Numbers and Frequencies (MHz)	Low		Low-Mid		Mid		Mid-High		High	
NR Band n71: 5 MHz	665.5 (133100)				680.5 (136100)				695.5 (139100)	
NR Band n71: 10 MHz	668 (133800)				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 n14: 5 MHz	790.5 (158100)				793 (158600)				795.5 (159100)	
NR Band n14: 10 MHz	N/A				793 (158600)				N/A	
NR Band n26 (Cell): 5 MHz	816.5 (163300)				831.5 (166300)				846.5 (169300)	
NR Band n26 (Cell): 10 MHz	819 (163800)				831.5 (166300)				844 (168800)	
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 n70: 5 MHz	1697.5 (339500)				1702.5 (340500)				1707.5 (341500)	
NR Band n70: 10 MHz	1700 (340000)				1702.5 (340500)				1705 (341000)	
NR Band n70: 15 MHz	N/A				1702.5 (340500)				N/A	
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: 70 MHz	2531.01 (506202)				N/A		2655 (531000)			
NR Band n41: 80 MHz	2536.02 (507204)				N/A		2649.99 (529998)			
NR Band n41: 90 MHz	2541 (508200)				N/A		2644.98 (528996)			
NR Band n41: 100 MHz	2546.01 (509202)				2592.99 (518598)		2640 (528000)			
NR Band n77 DoD: 10 MHz	3455.01 (630334)				3500.01 (633334)		3544.98 (636332)			
NR Band n77 DoD: 15 MHz	3457.5 (630500)				3500.01 (633334)		3542.49 (636166)			
NR Band n77 DoD: 20 MHz	3460.02 (630668)				3500.01 (633334)		3540 (636000)			
NR Band n77 DoD: 30 MHz	3465 (631000)				3500.01 (633334)		3534.99 (635666)			
NR Band n77 DoD: 40 MHz	3470.01 (631334)				N/A		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: 10 MHz	3705 (647000)		3759 (650600)		3813 (654200)	3867 (657800)		3921 (661400)		3975 (665000)
NR Band n77 C: 15 MHz	3707.52 (647168)		3760.5 (650700)		3813.51 (654234)	3866.49 (657766)		3919.5 (661300)		3972.48 (664832)
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/n14/n26/n5/n70/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 66/2/7/48									
LTE Anchor Bands for NR Band n12	LTE Band 66/2/30/48									
LTE Anchor Bands for NR Band n14	LTE Band 66/2/30									
LTE Anchor Bands for NR Band n26 (Cell)	N/A									
LTE Anchor Bands for NR Band n5 (Cell)	LTE Band 66/2/30/7/48									
LTE Anchor Bands for NR Band n70	N/A									
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									
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 26/4/66/2/25									
LTE Anchor Bands for NR Band n77 DoD	LTE Band 71/12/13/14/5/66/2/30/7/41									
LTE Anchor Bands for NR Band n77 C	LTE Band 71/12/13/14/5/66/2/30/7/41									

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:

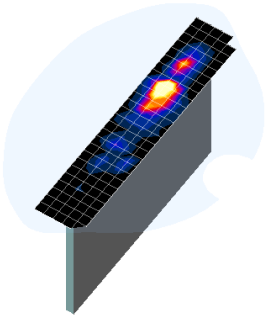

Figure 4-1
Sample SAR Area Scan

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*Δz_{zoom}(n-1)	≥ 30
2-3 GHz	≤ 12	≤ 5	≤ 5	≤ 4	≤ 1.5*Δz_{zoom}(n-1)	≥ 30
3-4 GHz	≤ 12	≤ 5	≤ 4	≤ 3	≤ 1.5*Δz_{zoom}(n-1)	≥ 28
4-5 GHz	≤ 10	≤ 4	≤ 3	≤ 2.5	≤ 1.5*Δz_{zoom}(n-1)	≥ 25
5-6 GHz	≤ 10	≤ 4	≤ 2	≤ 2	≤ 1.5*Δz_{zoom}(n-1)	≥ 22

*Also compliant to IEEE 1528-2013 Table 6

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 power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

7.6.6 Initial Test Configuration Procedure

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

When the reported SAR is ≤ 0.8 W/kg, no additional measurements on other test channels are required. Otherwise, SAR is evaluated using the subsequent highest average RF output channel until the reported SAR result is ≤ 1.2 W/kg or all channels are measured. When there are multiple untested channels having the same subsequent highest average RF output power, the channel with higher frequency from the lowest 802.11 mode is considered for SAR measurements (See Section 7.6.5). When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

7.6.7 Subsequent Test Configuration Procedures

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

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 1

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	17.91	17.85	17.79	16.27	16.20	15.93	16.78	16.73	16.54	-
6	HSDPA	Subtest 1	17.32	16.96	16.83	15.75	15.85	15.75	16.17	16.31	16.22	0
6		Subtest 2	17.31	16.98	16.87	15.77	15.82	15.73	16.23	16.28	16.19	0
6		Subtest 3	17.31	17.01	16.85	15.75	15.84	15.74	16.24	16.27	16.21	0.5
6		Subtest 4	17.29	17.01	16.83	15.74	15.88	15.73	16.21	16.28	16.22	0.5
6	HSUPA	Subtest 1	17.24	16.95	16.85	15.76	15.81	15.74	16.25	16.27	16.24	0
6		Subtest 2	15.32	14.99	14.86	13.70	13.85	13.70	14.21	14.26	14.11	2
6		Subtest 3	16.30	15.97	15.83	14.70	14.82	14.70	15.20	15.26	15.14	1
6		Subtest 4	15.29	15.00	14.82	13.71	13.85	13.72	14.24	14.27	14.16	2
6		Subtest 5	17.30	17.01	16.82	15.74	15.91	15.74	16.21	16.28	16.18	0
8	DC-HSDPA	Subtest 1	17.29	17.03	16.84	15.75	15.57	15.77	16.22	16.29	16.20	0
8		Subtest 2	17.33	17.05	16.85	15.78	15.84	15.74	16.23	16.28	16.13	0
8		Subtest 3	16.82	16.53	16.35	15.27	15.37	15.28	15.72	15.80	15.71	0.5
8		Subtest 4	16.79	16.50	16.37	15.26	15.36	15.21	15.70	15.78	15.68	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	14.60	14.50	14.40	14.31	14.36	14.35	-
6	HSDPA	Subtest 1	13.70	13.69	13.67	13.35	13.28	13.15	0
6		Subtest 2	13.71	13.72	13.69	13.37	13.31	13.13	0
6		Subtest 3	13.23	13.22	13.18	12.77	12.74	12.61	0.5
6		Subtest 4	13.22	13.21	13.17	12.74	12.73	12.66	0.5
6	HSUPA	Subtest 1	13.66	13.69	13.67	13.32	13.28	13.16	0
6		Subtest 2	11.64	11.68	11.66	11.34	11.29	11.15	2
6		Subtest 3	12.67	12.69	12.64	12.31	12.30	12.16	1
6		Subtest 4	11.66	11.69	11.66	11.33	11.28	11.17	2
6		Subtest 5	13.70	13.71	13.67	13.34	13.32	13.18	0
8	DC-HSDPA	Subtest 1	13.66	13.67	13.63	13.31	13.30	13.18	0
8		Subtest 2	13.62	13.68	13.62	13.32	13.25	13.11	0
8		Subtest 3	13.16	13.17	13.12	12.65	12.78	12.62	0.5
8		Subtest 4	13.15	13.17	13.11	12.62	12.72	12.63	0.5

Table 8-3
Measured P_{limit} Antenna 3

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	18.34	18.50	18.48	15.72	15.70	15.49	16.41	16.44	16.51	-
6	HSDPA	Subtest 1	18.02	18.15	18.06	15.49	15.45	15.48	16.19	16.14	16.08	0
6		Subtest 2	18.00	18.11	18.04	15.51	15.46	15.46	16.17	16.14	16.09	0
6		Subtest 3	17.51	17.62	17.55	15.02	14.92	14.95	15.67	15.66	15.57	0.5
6		Subtest 4	17.52	17.64	17.54	14.96	14.96	14.97	15.68	15.63	15.59	0.5
6	HSUPA	Subtest 1	18.01	18.14	18.05	15.51	15.44	15.46	15.92	15.89	15.89	0
6		Subtest 2	15.92	16.03	15.94	13.46	13.67	13.40	13.94	13.92	13.85	2
6		Subtest 3	16.88	17.05	16.94	14.50	14.39	14.43	14.92	14.87	15.88	1
6		Subtest 4	15.90	16.02	15.91	13.48	13.68	13.42	13.94	13.91	13.83	2
6		Subtest 5	17.90	18.05	17.97	15.52	15.47	15.50	15.95	15.93	15.92	0
8	DC-HSDPA	Subtest 1	17.92	18.06	17.98	15.55	15.46	15.49	15.93	15.91	15.49	0
8		Subtest 2	17.93	18.05	17.98	15.56	15.46	15.48	15.95	15.93	15.92	0
8		Subtest 3	17.41	17.59	17.42	15.02	15.01	15.05	15.43	15.42	15.41	0.5
8		Subtest 4	17.39	17.56	17.38	14.97	14.96	14.99	15.56	15.43	15.38	0.5

Table 8-4
Measured P_{limit} Antenna 4b

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	13.11	12.99	12.28	12.47	12.40	-
6	HSDPA	Subtest 1	13.05	13.12	12.96	12.11	12.15	12.07	0
6		Subtest 2	12.83	13.12	12.98	12.09	12.15	12.03	0
6		Subtest 3	12.31	12.62	12.47	11.59	11.66	11.51	0.5
6		Subtest 4	12.32	12.59	12.46	11.57	11.65	11.50	0.5
6	HSUPA	Subtest 1	12.70	13.00	12.83	12.02	12.09	11.97	0
6		Subtest 2	10.71	10.98	10.82	10.03	10.13	9.96	2
6		Subtest 3	11.64	11.95	11.80	11.05	11.08	10.98	1
6		Subtest 4	10.66	10.95	10.82	10.02	10.10	10.00	2
6		Subtest 5	12.70	12.97	12.79	12.01	12.09	12.00	0
8	DC-HSDPA	Subtest 1	12.66	12.97	12.80	12.02	12.12	11.47	0
8		Subtest 2	12.67	12.96	12.79	12.00	12.11	11.46	0
8		Subtest 3	12.15	12.50	12.60	11.50	11.58	12.04	0.5
8		Subtest 4	12.17	12.47	12.29	11.52	11.59	12.01	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 8-5
LTE Band 71 Measured P_{limit} Antenna 1 - 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	**20.00**	0	0
	1	50	19.91		0
	1	99	19.98		0
	50	0	19.79	0-1	0
	50	25	**19.84**		0
	50	50	19.81		0
	100	0	19.80		0
16QAM	1	0	19.90	0-1	0
	1	50	20.04		0
	1	99	19.91		0
	50	0	19.61	0-2	0
	50	25	19.63		0
	50	50	19.64		0
	100	0	19.65		0
64QAM	1	0	20.20	0-2	0
	1	50	20.25		0
	1	99	20.22		0
	50	0	19.94	0-3	0.4
	50	25	20.00		0.4
	50	50	19.95		0.4
	100	0	20.02		0.4
256QAM	1	0	17.73	0-5	2.4
	1	50	17.84		2.4
	1	99	17.85		2.4
	50	0	17.70		2.4
	50	25	17.77		2.4
	50	50	17.75		2.4
	100	0	17.76		2.4

Table 8-6
LTE Band 71 Measured P_{limit} Antenna 3 - 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	**20.60**	0	0
	1	50	20.49		0
	1	99	20.60		0
	50	0	20.46	0-1	0
	50	25	20.48		0
	50	50	**20.50**		0
	100	0	20.49		0
16QAM	1	0	20.72	0-1	0
	1	50	20.83		0
	1	99	20.70		0
	50	0	20.47	0-2	0
	50	25	20.49		0
	50	50	20.49		0
	100	0	20.52		0
64QAM	1	0	20.59	0-2	0
	1	50	20.75		0
	1	99	20.57		0
	50	0	20.44	0-3	0
	50	25	20.48		0
	50	50	20.47		0
	100	0	20.49		0
256QAM	1	0	20.29	0-5	0.8
	1	50	20.38		0.8
	1	99	20.44		0.8
	50	0	20.28		0.8
	50	25	20.29		0.8
	50	50	20.32		0.8
	100	0	20.28		0.8

8.2.2 LTE Band 12

Table 8-7
LTE Band 12 Measured P_{limit} Antenna 1 - 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	20.10	0	0
	1	25	**20.13**		0
	1	49	20.05		0
	25	0	19.95	0-1	0
	25	12	**20.02**		0
	25	25	20.01		0
	50	0	20.01		0
16QAM	1	0	20.07	0-1	0
	1	25	20.01		0
	1	49	20.14		0
	25	0	19.81	0-2	0
	25	12	19.86		0
	25	25	19.83		0
	50	0	19.82		0
64QAM	1	0	20.00	0-2	0
	1	25	19.90		0
	1	49	19.91		0
	25	0	19.69	0-3	0.2
	25	12	19.75		0.2
	25	25	19.70		0.2
	50	0	19.73		0.2
256QAM	1	0	17.94	0-5	2.2
	1	25	17.95		2.2
	1	49	17.93		2.2
	25	0	17.72		2.2
	25	12	17.80		2.2
	25	25	17.77		2.2
	50	0	17.78		2.2

Table 8-8
LTE Band 12 Measured P_{limit} Antenna 3 - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	19.10	0	0
	1	25	**19.11**		0
	1	49	18.95		0
	25	0	19.14	0-1	0
	25	12	**19.15**		0
	25	25	19.08		0
	50	0	19.10		0
16QAM	1	0	19.10	0-1	0
	1	25	19.07		0
	1	49	18.96		0
	25	0	18.84	0-2	0
	25	12	18.83		0
	25	25	18.77		0
	50	0	18.84		0
64QAM	1	0	19.42	0-2	0
	1	25	19.42		0
	1	49	19.33		0
	25	0	19.20	0-3	0
	25	12	19.22		0
	25	25	19.22		0
	50	0	19.17		0
256QAM	1	0	19.24	0-5	0
	1	25	19.33		0
	1	49	19.24		0
	25	0	19.19		0
	25	12	19.21		0
	25	25	19.21		0
	50	0	19.15		0

8.2.3 LTE Band 13

Table 8-9
LTE Band 13 Measured P_{limit} Antenna 1 - 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	**19.83**	0	0
	1	25	19.72		0
	1	49	19.70		0
	25	0	19.60	0-1	0
	25	12	**19.66**		0
	25	25	19.61		0
	50	0	19.62		0
16QAM	1	0	19.69	0-1	0
	1	25	19.61		0
	1	49	19.59		0
	25	0	19.41	0-2	0
	25	12	19.38		0
	25	25	19.34		0
	50	0	19.41		0
64QAM	1	0	19.57	0-2	0
	1	25	19.69		0
	1	49	19.61		0
	25	0	19.37	0-3	0
	25	12	19.35		0
	25	25	19.31		0
	50	0	19.36		0
256QAM	1	0	17.82	0-5	1.7
	1	25	17.96		1.7
	1	49	17.77		1.7
	25	0	17.72		1.7
	25	12	17.69		1.7
	25	25	17.66		1.7
	50	0	17.71		1.7

Table 8-10
LTE Band 13 Measured P_{limit} Antenna 3 - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**20.08**	0	0
	1	25	19.99		0
	1	49	19.91		0
	25	0	**19.95**	0-1	0
	25	12	19.91		0
	25	25	19.89		0
	50	0	19.92		0
16QAM	1	0	20.05	0-1	0
	1	25	19.85		0
	1	49	19.87		0
	25	0	19.70	0-2	0
	25	12	19.66		0
	25	25	19.61		0
	50	0	19.68		0
64QAM	1	0	19.91	0-2	0
	1	25	19.88		0
	1	49	19.80		0
	25	0	19.69	0-3	0
	25	12	19.70		0
	25	25	19.64		0
	50	0	19.71		0
256QAM	1	0	19.87	0-5	0.2
	1	25	19.79		0.2
	1	49	19.75		0.2
	25	0	19.71		0.2
	25	12	19.70		0.2
	25	25	19.67		0.2
	50	0	19.74		0.2

8.2.4 LTE Band 14

Table 8-11
LTE Band 14 Measured P_{limit} Antenna 1 - 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	**19.75**	0	0
	1	25	19.71		0
	1	49	19.57		0
	25	0	**19.74**	0-1	0
	25	12	19.72		0
	25	25	19.67		0
	50	0	19.71		0
16QAM	1	0	20.05	0-1	0
	1	25	19.99		0
	1	49	19.98		0
	25	0	19.80	0-2	0
	25	12	19.79		0
	25	25	19.74		0
	50	0	19.77		0
64QAM	1	0	19.95	0-2	0
	1	25	19.84		0
	1	49	19.88		0
	25	0	19.79	0-3	0
	25	12	19.79		0
	25	25	19.74		0
	50	0	19.76		0
256QAM	1	0	17.83	0-5	1.7
	1	25	17.87		1.7
	1	49	17.81		1.7
	25	0	17.79		1.7
	25	12	17.79		1.7
	25	25	17.71		1.7
	50	0	17.77		1.7

Table 8-12
LTE Band 14 Measured P_{limit} Antenna 3 - 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	**20.12**	0	0
	1	25	19.95		0
	1	49	19.91		0
	25	0	19.89	0-1	0
	25	12	**19.90**		0
	25	25	19.83		0
	50	0	19.86		0
16QAM	1	0	20.06	0-1	0
	1	25	19.93		0
	1	49	19.89		0
	25	0	19.61	0-2	0
	25	12	19.62		0
	25	25	19.55		0
	50	0	19.58		0
64QAM	1	0	20.18	0-2	0
	1	25	20.17		0
	1	49	20.04		0
	25	0	19.95	0-3	0
	25	12	19.94		0
	25	25	19.86		0
	50	0	19.90		0
256QAM	1	0	19.96	0-5	0.2
	1	25	20.12		0.2
	1	49	19.95		0.2
	25	0	19.95		0.2
	25	12	19.94		0.2
	25	25	19.87		0.2
	50	0	19.92		0.2

8.2.5 LTE Band 26

Table 8-13
LTE Band 26 (Cell) Measured P_{limit} Antenna 1 - 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	**17.86**	17.76	17.72	0	0
	1	25	17.78	17.82	17.70		0
	1	49	17.81	17.84	17.67		0
	25	0	17.82	17.77	17.80	0-1	0
	25	12	**17.84**	17.81	17.82		0
	25	25	17.78	17.83	17.81		0
	50	0	17.81	17.83	17.79		0
16QAM	1	0	17.52	17.46	17.61	0-1	0
	1	25	17.49	17.44	17.58		0
	1	49	17.56	17.51	17.54		0
	25	0	17.39	17.32	17.30	0-2	0
	25	12	17.35	17.36	17.29		0
	25	25	17.27	17.34	17.35		0
	50	0	17.31	17.33	17.34		0
64QAM	1	0	17.69	17.62	17.82	0-2	0
	1	25	17.56	17.70	17.85		0
	1	49	17.66	17.73	17.77		0
	25	0	17.47	17.55	17.60	0-3	0
	25	12	17.43	17.56	17.58		0
	25	25	17.41	17.61	17.62		0
	50	0	17.42	17.54	17.57		0
256QAM	1	0	17.62	17.51	17.54	0-5	0
	1	25	17.60	17.65	17.59		0
	1	49	17.52	17.60	17.66		0
	25	0	17.48	17.53	17.60		0
	25	12	17.49	17.54	17.61		0
	25	25	17.45	17.60	17.62		0
	50	0	17.46	17.54	17.58		0

Table 8-14
LTE Band 26 (Cell) Measured P_{limit} Antenna 3 - 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	18.33	18.33	18.44	0	0
	1	25	18.25	18.30	18.41		0
	1	49	18.27	**18.45**	18.35		0
	25	0	18.34	18.37	18.37	0-1	0
	25	12	18.32	**18.43**	18.36		0
	25	25	18.30	18.42	18.40		0
	50	0	18.32	18.42	18.36		0
16QAM	1	0	18.35	18.34	18.41	0-1	0
	1	25	18.21	18.32	18.39		0
	1	49	18.28	18.37	18.31		0
	25	0	18.07	18.07	18.10	0-2	0
	25	12	18.05	18.15	18.09		0
	25	25	18.04	18.12	18.17		0
	50	0	18.05	18.14	18.08		0
64QAM	1	0	18.53	18.46	18.50	0-2	0
	1	25	18.48	18.53	18.52		0
	1	49	18.42	18.49	18.41		0
	25	0	18.43	18.28	18.24	0-3	0
	25	12	18.40	18.37	18.23		0
	25	25	18.37	18.39	18.27		0
	50	0	18.39	18.34	18.21		0
256QAM	1	0	18.68	18.48	18.35	0-5	0
	1	25	18.65	18.55	18.41		0
	1	49	18.57	18.45	18.30		0
	25	0	18.43	18.32	18.27		0
	25	12	18.40	18.36	18.24		0
	25	25	18.38	18.34	18.30		0
	50	0	18.39	18.32	18.21		0

8.2.6 LTE Band 5

Table 8-15
LTE Band 5 (Cell) Measured P_{limit} Antenna 1 - 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	17.73	0	0
	1	25	17.70		0
	1	49	**17.74**		0
	25	0	17.79	0-1	0
	25	12	17.80		0
	25	25	**17.81**		0
	50	0	17.73		0
16QAM	1	0	17.51	0-1	0
	1	25	17.47		0
	1	49	17.57		0
	25	0	17.38	0-2	0
	25	12	17.34		0
	25	25	17.41		0
	50	0	17.32		0
64QAM	1	0	17.55	0-2	0
	1	25	17.48		0
	1	49	17.64		0
	25	0	17.37	0-3	0
	25	12	17.40		0
	25	25	17.39		0
	50	0	17.35		0
256QAM	1	0	17.40	0-5	0
	1	25	17.42		0
	1	49	17.47		0
	25	0	17.39		0
	25	12	17.42		0
	25	25	17.33		0
	50	0	17.36		0

Table 8-16
LTE Band 5 (Cell) Uplink Carrier Aggregation Measured P_{limit} – Antenna 1

	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	49	LTE B5	5	20597	843.7	2597	888.7	QPSK	1	0	17.80	17.74

Table 8-17
LTE Band 5 (Cell) Measured P_{limit} Antenna 3 - 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	18.22	0	0
	1	25	18.24		0
	1	49	**18.30**		0
	25	0	18.33	0-1	0
	25	12	18.41		0
	25	25	**18.42**		0
	50	0	18.29		0
16QAM	1	0	18.28	0-1	0
	1	25	18.26		0
	1	49	18.39		0
	25	0	18.09	0-2	0
	25	12	18.14		0
	25	25	18.19		0
	50	0	18.11		0
64QAM	1	0	18.37	0-2	0
	1	25	18.39		0
	1	49	18.35		0
	25	0	18.20	0-3	0
	25	12	18.25		0
	25	25	18.29		0
	50	0	18.23		0
256QAM	1	0	18.21	0-5	0
	1	25	18.23		0
	1	49	18.23		0
	25	0	18.19		0
	25	12	18.30		0
	25	25	18.23		0
	50	0	18.23		0

Table 8-18
LTE Band 5 (Cell) Uplink Carrier Aggregation Measured P_{limit} – Antenna 3

		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)
SCC Higher	CA_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	1	49	LTE B5	5	20597	843.7	2597	888.7	QPSK	1	0	18.24	18.30

8.2.7 LTE Band 66

Table 8-19
LTE Band 66 (AWS) Measured P_{limit} Antenna 1 - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	15.99	16.20	16.05	0	0
	1	50	**16.25**	16.23	16.11		0
	1	99	16.01	16.22	15.99		0
	50	0	16.17	16.22	15.98	0-1	0
	50	25	**16.26**	16.25	16.10		0
	50	50	16.25	16.23	16.00		0
	100	0	16.21	16.24	16.03		0
16QAM	1	0	16.44	16.32	16.32	0-1	0
	1	50	16.47	16.37	16.43		0
	1	99	16.38	16.28	16.30		0
	50	0	16.07	15.99	16.04	0-2	0
	50	25	16.01	15.98	16.04		0
	50	50	15.99	15.97	16.09		0
	100	0	15.97	16.00	16.01		0
64QAM	1	0	16.52	16.44	16.56	0-2	0
	1	50	16.58	16.46	16.59		0
	1	99	16.46	16.45	16.45		0
	50	0	16.36	16.27	16.31	0-3	0
	50	25	16.29	16.26	16.32		0
	50	50	16.25	16.25	16.36		0
	100	0	16.28	16.26	16.29		0
256QAM	1	0	16.47	16.41	16.46	0-5	0
	1	50	16.43	16.40	16.57		0
	1	99	16.33	16.35	16.53		0
	50	0	16.36	16.29	16.32		0
	50	25	16.29	16.29	16.32		0
	50	50	16.27	16.24	16.37		0
	100	0	16.26	16.27	16.29		0

Table 8-20
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	14.63	14.62	14.52	0	0
	1	50	**14.71**	14.70	14.58		0
	1	99	14.57	14.55	14.42		0
	50	0	14.65	14.65	14.46	0-1	0
	50	25	**14.69**	14.64	14.55		0
	50	50	14.66	14.63	14.60		0
	100	0	14.55	14.56	14.50		0
16QAM	1	0	14.62	14.67	14.56	0-1	0
	1	50	14.61	14.58	14.70		0
	1	99	14.51	14.50	14.58		0
	50	0	14.46	14.33	14.37	0-2	0
	50	25	14.39	14.36	14.43		0
	50	50	14.38	14.29	14.42		0
	100	0	14.41	14.35	14.34		0
64QAM	1	0	14.47	14.33	14.35	0-2	0
	1	50	14.46	14.36	14.51		0
	1	99	14.26	14.31	14.30		0
	50	0	14.30	14.21	14.28	0-3	0
	50	25	14.33	14.23	14.35		0
	50	50	14.20	14.18	14.32		0
	100	0	14.30	14.20	14.22		0
256QAM	1	0	14.36	14.32	14.31	0-5	0
	1	50	14.35	14.31	14.41		0
	1	99	14.22	14.32	14.34		0
	50	0	14.23	14.20	14.21		0
	50	25	14.32	14.21	14.29		0
	50	50	14.18	14.15	14.30		0
	100	0	14.29	14.22	14.23		0

Table 8-21
LTE Band 66 (AWS) Measured P_{limit} Antenna 3 - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	15.53	15.71	15.67	0	0
	1	50	15.57	**15.76**	15.71		0
	1	99	15.54	15.70	15.65		0
	50	0	15.60	15.66	15.69	0-1	0
	50	25	15.68	**15.76**	15.76		0
	50	50	15.70	15.74	15.72		0
	100	0	15.67	15.74	15.70		0
16QAM	1	0	16.06	16.05	16.12	0-1	0
	1	50	16.20	16.15	16.25		0
	1	99	16.18	16.04	16.06		0
	50	0	16.08	16.03	15.94	0-2	0
	50	25	16.09	16.05	16.04		0
	50	50	16.05	15.98	16.04		0
	100	0	16.08	16.01	15.94		0
64QAM	1	0	16.20	16.08	16.16	0-2	0
	1	50	16.18	16.19	16.22		0
	1	99	16.09	16.13	16.14		0
	50	0	16.04	16.01	15.92	0-3	0
	50	25	16.05	15.98	16.01		0
	50	50	16.01	15.94	16.00		0
	100	0	16.02	15.99	15.94		0
256QAM	1	0	16.21	16.07	16.05	0-5	0
	1	50	16.20	16.23	16.15		0
	1	99	16.11	16.08	16.13		0
	50	0	16.05	15.98	15.94		0
	50	25	16.05	16.00	16.01		0
	50	50	16.01	15.95	16.00		0
	100	0	16.00	15.98	15.92		0

Table 8-22
LTE Band 66 (AWS) Measured P_{limit} Antenna 4b - 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	13.04	13.23	13.00	0	0
	1	50	13.19	**13.30**	13.01		0
	1	99	13.12	13.22	12.94		0
	50	0	13.11	13.14	13.16	0-1	0
	50	25	13.16	**13.23**	13.17		0
	50	50	13.08	13.14	13.16		0
	100	0	13.10	13.14	13.15		0
16QAM	1	0	13.24	13.31	13.64	0-1	0
	1	50	13.34	13.33	13.73		0
	1	99	13.28	13.27	13.67		0
	50	0	13.22	13.22	13.25	0-2	0
	50	25	13.29	13.25	13.32		0
	50	50	13.18	13.27	13.29		0
	100	0	13.25	13.23	13.27		0
64QAM	1	0	13.28	13.23	13.50	0-2	0
	1	50	13.41	13.45	13.63		0
	1	99	13.26	13.31	13.38		0
	50	0	13.24	13.22	13.25	0-3	0
	50	25	13.29	13.27	13.33		0
	50	50	13.20	13.22	13.26		0
	100	0	13.24	13.22	13.27		0
256QAM	1	0	13.20	13.26	13.17	0-5	0
	1	50	13.35	13.33	13.32		0
	1	99	13.17	13.24	13.29		0
	50	0	13.10	13.06	13.09		0
	50	25	13.04	13.11	13.13		0
	50	50	13.03	13.10	13.14		0
	100	0	13.00	13.05	13.08		0

8.2.8 LTE Band 25

Table 8-23
LTE Band 25 (PCS) Measured P_{limit} Antenna 1 - 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	16.50	16.23	16.33	0	0
	1	50	**16.59**	16.33	16.43		0
	1	99	16.54	16.22	16.27		0
	50	0	16.53	16.55	16.48	0-1	0
	50	25	**16.57**	16.50	16.50		0
	50	50	16.51	16.46	16.39		0
	100	0	16.48	16.49	16.45		0
16QAM	1	0	16.33	16.49	16.72	0-1	0
	1	50	16.48	16.66	16.82		0
	1	99	16.41	16.47	16.61		0
	50	0	16.40	16.36	16.29	0-2	0
	50	25	16.33	16.36	16.28		0
	50	50	16.34	16.31	16.23		0
	100	0	16.27	16.34	16.27		0
64QAM	1	0	16.40	16.43	16.31	0-2	0
	1	50	16.57	16.68	16.53		0
	1	99	16.48	16.41	16.29		0
	50	0	16.36	16.35	16.28	0-3	0
	50	25	16.33	16.37	16.26		0
	50	50	16.34	16.31	16.21		0
	100	0	16.31	16.35	16.27		0
256QAM	1	0	16.55	16.47	16.47	0-5	0.1
	1	50	16.47	16.38	16.38		0.1
	1	99	16.52	16.36	16.41		0.1
	50	0	16.36	16.34	16.23		0.1
	50	25	16.32	16.36	16.25		0.1
	50	50	16.31	16.27	16.15		0.1
	100	0	16.30	16.35	16.25		0.1

Table 8-24
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	14.22	14.38	14.30	0	0
	1	50	14.31	**14.49**	14.41		0
	1	99	14.36	14.40	14.29		0
	50	0	14.37	14.46	14.52	0-1	0
	50	25	14.40	**14.55**	14.51		0
	50	50	14.43	14.47	14.44		0
	100	0	14.39	14.44	14.43		0
16QAM	1	0	14.24	14.41	14.42	0-1	0
	1	50	14.35	14.69	14.45		0
	1	99	14.33	14.40	14.45		0
	50	0	14.28	14.43	14.39	0-2	0
	50	25	14.39	14.48	14.38		0
	50	50	14.37	14.35	14.38		0
	100	0	14.32	14.42	14.38		0
64QAM	1	0	14.21	14.39	14.25	0-2	0
	1	50	14.39	14.55	14.45		0
	1	99	14.29	14.36	14.26		0
	50	0	14.20	14.34	14.33	0-3	0
	50	25	14.29	14.36	14.34		0
	50	50	14.25	14.32	14.27		0
	100	0	14.20	14.29	14.28		0
256QAM	1	0	14.04	14.53	14.45	0-5	0
	1	50	14.20	14.64	14.45		0
	1	99	14.22	14.52	14.36		0
	50	0	14.16	14.32	14.32		0
	50	25	14.28	14.40	14.33		0
	50	50	14.24	14.34	14.21		0
	100	0	14.18	14.34	14.33		0

Table 8-25
LTE Band 25 (PCS) Measured P_{limit} Antenna 3 - 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	16.41	16.37	16.20	0	0
	1	50	16.47	16.39	16.21		0
	1	99	**16.51**	16.42	16.22		0
	50	0	16.47	16.46	16.44	0-1	0
	50	25	16.48	16.52	16.41		0
	50	50	**16.54**	16.53	16.45		0
	100	0	16.44	16.43	16.43		0
16QAM	1	0	16.32	16.21	16.32	0-1	0
	1	50	16.54	16.39	16.46		0
	1	99	16.40	16.24	16.26		0
	50	0	16.15	16.15	16.13	0-2	0
	50	25	16.14	16.22	16.12		0
	50	50	16.17	16.24	16.13		0
	100	0	16.12	16.19	16.14		0
64QAM	1	0	15.85	15.93	15.93	0-2	0
	1	50	16.08	16.04	16.10		0
	1	99	15.94	15.90	15.91		0
	50	0	15.89	15.89	15.82	0-3	0
	50	25	15.86	15.91	15.83		0
	50	50	15.86	15.87	15.87		0
	100	0	15.82	15.85	15.79		0
256QAM	1	0	15.99	16.00	16.00	0-5	0
	1	50	16.05	15.99	16.07		0
	1	99	15.94	16.01	16.05		0
	50	0	15.90	15.87	15.80		0
	50	25	15.86	15.90	15.80		0
	50	50	15.82	15.88	15.85		0
	100	0	15.81	15.87	15.80		0

Table 8-26
LTE Band 25 (PCS) Measured P_{limit} Antenna 4b - 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	11.98	12.13	12.15	0	0
	1	50	12.04	**12.23**	12.12		0
	1	99	12.02	12.11	12.03		0
	50	0	12.22	12.26	12.21	0-1	0
	50	25	12.24	**12.29**	12.16		0
	50	50	12.21	12.20	12.10		0
	100	0	12.11	12.12	12.08		0
16QAM	1	0	12.12	12.09	12.20	0-1	0
	1	50	12.14	12.05	12.22		0
	1	99	12.16	11.97	12.00		0
	50	0	12.02	12.07	11.99	0-2	0
	50	25	12.06	12.11	12.01		0
	50	50	12.02	12.01	11.89		0
	100	0	12.00	12.05	11.96		0
64QAM	1	0	12.08	12.18	11.99	0-2	0
	1	50	12.13	12.21	12.07		0
	1	99	12.11	12.12	11.98		0
	50	0	12.00	12.09	12.02	0-3	0
	50	25	12.06	12.14	12.03		0
	50	50	12.01	12.02	11.88		0
	100	0	12.03	12.05	11.93		0
256QAM	1	0	12.10	12.15	12.02	0-5	0
	1	50	12.24	12.23	12.10		0
	1	99	12.07	12.14	12.01		0
	50	0	12.00	12.06	11.97		0
	50	25	12.08	12.11	12.00		0
	50	50	12.01	11.99	11.86		0
	100	0	12.05	12.07	11.92		0

8.2.9 LTE Band 30

Table 8-27
LTE Band 30 Measured P_{limit} Antenna 1 - 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	13.14	0	0
	1	25	**13.26**		0
	1	49	13.18		0
	25	0	13.13	0-1	0
	25	12	**13.16**		0
	25	25	13.11		0
	50	0	13.12		0
16QAM	1	0	13.68	0-1	0
	1	25	13.67		0
	1	49	13.63		0
	25	0	13.37	0-2	0
	25	12	13.40		0
	25	25	13.35		0
	50	0	13.34		0
64QAM	1	0	13.45	0-2	0
	1	25	13.48		0
	1	49	13.49		0
	25	0	13.35	0-3	0
	25	12	13.37		0
	25	25	13.32		0
	50	0	13.32		0
256QAM	1	0	13.31	0-5	0
	1	25	13.45		0
	1	49	13.22		0
	25	0	13.35		0
	25	12	13.38		0
	25	25	13.33		0
	50	0	13.32		0

Table 8-28
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	13.63	0	0
	1	25	**13.67**		0
	1	49	13.62		0
	25	0	13.66	0-1	0
	25	12	**13.69**		0
	25	25	13.65		0
	50	0	13.66		0
16QAM	1	0	14.06	0-1	0
	1	25	14.10		0
	1	49	14.10		0
	25	0	13.74	0-2	0
	25	12	13.78		0
	25	25	13.75		0
	50	0	13.69		0
64QAM	1	0	13.93	0-2	0
	1	25	13.91		0
	1	49	13.84		0
	25	0	13.79	0-3	0
	25	12	13.83		0
	25	25	13.80		0
	50	0	13.78		0
256QAM	1	0	13.88	0-5	0
	1	25	13.99		0
	1	49	13.73		0
	25	0	13.75		0
	25	12	13.79		0
	25	25	13.77		0
	50	0	13.74		0

Table 8-29
LTE Band 30 Measured P_{limit} Antenna 3 - 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	14.91	0	0
	1	25	**14.97**		0
	1	49	14.89		0
	25	0	14.99	0-1	0
	25	12	**15.04**		0
	25	25	14.96		0
	50	0	14.90		0
16QAM	1	0	15.39	0-1	0
	1	25	15.38		0
	1	49	15.44		0
	25	0	15.02	0-2	0
	25	12	15.05		0
	25	25	15.00		0
	50	0	15.00		0
64QAM	1	0	15.44	0-2	0
	1	25	15.30		0
	1	49	15.28		0
	25	0	15.01	0-3	0
	25	12	15.04		0
	25	25	15.01		0
	50	0	15.01		0
256QAM	1	0	15.34	0-5	0
	1	25	15.26		0
	1	49	15.37		0
	25	0	15.01		0
	25	12	15.04		0
	25	25	15.02		0
	50	0	15.00		0

Table 8-30
LTE Band 30 Measured P_{limit} Antenna 4b - 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	11.74	0	0
	1	25	**11.80**		0
	1	49	11.72		0
	25	0	11.77	0-1	0
	25	12	**11.78**		0
	25	25	11.76		0
	50	0	11.75		0
16QAM	1	0	11.92	0-1	0
	1	25	11.87		0
	1	49	11.79		0
	25	0	11.55	0-2	0
	25	12	11.62		0
	25	25	11.56		0
	50	0	11.56		0
64QAM	1	0	11.71	0-2	0
	1	25	11.78		0
	1	49	11.69		0
	25	0	11.50	0-3	0
	25	12	11.57		0
	25	25	11.55		0
	50	0	11.52		0
256QAM	1	0	11.83	0-5	0
	1	25	11.92		0
	1	49	11.71		0
	25	0	11.63		0
	25	12	11.71		0
	25	25	11.68		0
	50	0	11.66		0

8.2.10 LTE Band 7

Table 8-31
LTE Band 7 Measured P_{limit} Antenna 1 - 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	13.66	13.96	14.05	0	0
	1	50	13.90	14.11	**14.13**		0
	1	99	13.67	14.10	14.04		0
	50	0	13.52	13.69	14.15	0-1	0
	50	25	13.61	13.92	**14.16**		0
	50	50	13.60	13.90	13.97		0
	100	0	13.60	13.67	13.77		0
16QAM	1	0	13.32	13.33	13.55	0-1	0
	1	50	13.51	13.54	13.76		0
	1	99	13.41	13.52	13.61		0
	50	0	13.48	13.54	13.66	0-2	0
	50	25	13.50	13.60	13.71		0
	50	50	13.47	13.58	13.69		0
	100	0	13.45	13.56	13.66		0
64QAM	1	0	13.62	13.49	13.63	0-2	0
	1	50	13.81	13.78	13.84		0
	1	99	13.62	13.70	13.72		0
	50	0	13.53	13.59	13.65	0-3	0
	50	25	13.56	13.65	13.69		0
	50	50	13.56	13.64	13.68		0
	100	0	13.55	13.60	13.65		0
256QAM	1	0	13.51	13.52	13.55	0-5	0
	1	50	13.60	13.71	13.83		0
	1	99	13.69	13.82	13.81		0
	50	0	13.45	13.47	13.52		0
	50	25	13.51	13.60	13.62		0
	50	50	13.52	13.61	13.72		0
	100	0	13.49	13.56	13.57		0

Table 8-32
LTE Band 7 Uplink Carrier Aggregation Measured P_{limit} – Antenna 1

		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)
SCC Lower	CA_7C	LTE B7	20	21350	2560.0	3350	2680.0	QPSK	50	0	LTE B7	20	21152	2540.2	3152	2660.2	QPSK	50	50	14.40	14.15

Table 8-33
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	13.95	14.09	14.09	0	0
	1	50	14.01	14.10	**14.22**		0
	1	99	13.99	14.05	14.09		0
	50	0	14.21	14.19	14.14	0-1	0
	50	25	**14.24**	14.23	14.21		0
	50	50	14.22	14.19	14.15		0
	100	0	14.21	14.19	14.16		0
16QAM	1	0	14.39	14.20	14.36	0-1	0
	1	50	14.44	14.26	14.45		0
	1	99	14.39	14.14	14.47		0
	50	0	14.23	14.24	14.14	0-2	0
	50	25	14.25	14.20	14.20		0
	50	50	14.24	14.19	14.19		0
	100	0	14.22	14.20	14.20		0
64QAM	1	0	14.23	14.21	14.22	0-2	0
	1	50	14.33	14.42	14.33		0
	1	99	14.25	14.14	14.35		0
	50	0	14.22	14.19	14.17	0-3	0
	50	25	14.22	14.21	14.26		0
	50	50	14.19	14.18	14.25		0
	100	0	14.21	14.20	14.14		0
256QAM	1	0	14.21	14.28	14.28	0-5	0
	1	50	14.34	14.34	14.33		0
	1	99	14.29	14.38	14.41		0
	50	0	14.23	14.19	14.15		0
	50	25	14.24	14.23	14.27		0
	50	50	14.25	14.21	14.26		0
	100	0	14.24	14.20	14.18		0

Table 8-34
LTE Band 7 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_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	14.40	14.22

Table 8-35
LTE Band 7 Measured P_{limit} Antenna 3 - 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	15.51	15.74	15.86	0	0
	1	50	15.52	15.82	**15.95**		0
	1	99	15.51	15.75	15.87		0
	50	0	15.90	15.89	15.90	0-1	0
	50	25	15.81	15.90	**15.91**		0
	50	50	15.80	15.87	15.85		0
	100	0	15.82	15.85	15.87		0
16QAM	1	0	15.59	15.75	15.57	0-1	0
	1	50	15.74	15.87	15.71		0
	1	99	15.58	15.79	15.62		0
	50	0	15.63	15.63	15.66	0-2	0
	50	25	15.52	15.60	15.65		0
	50	50	15.54	15.60	15.61		0
	100	0	15.52	15.59	15.63		0
64QAM	1	0	15.49	15.77	15.74	0-2	0
	1	50	15.67	15.94	15.98		0
	1	99	15.52	15.84	15.81		0
	50	0	15.54	15.56	15.64	0-3	0
	50	25	15.46	15.56	15.63		0
	50	50	15.47	15.58	15.59		0
	100	0	15.46	15.55	15.61		0
256QAM	1	0	15.44	15.76	15.77	0-5	0
	1	50	15.68	16.11	16.14		0
	1	99	15.56	15.81	15.80		0
	50	0	15.55	15.58	15.64		0
	50	25	15.46	15.55	15.61		0
	50	50	15.48	15.57	15.60		0
	100	0	15.46	15.55	15.60		0

Table 8-36
LTE Band 7 Uplink Carrier Aggregation Measured P_{limit} – Antenna 3

		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)
SCC Higher	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	15.55	15.51

Table 8-37
LTE Band 7 Measured P_{limit} Antenna 4b - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	12.08	12.27	12.27	0	0
	1	50	12.17	12.30	**12.34**		0
	1	99	12.07	12.24	12.22		0
	50	0	12.30	12.33	12.22	0-1	0
	50	25	**12.35**	12.26	12.21		0
	50	50	12.23	12.27	12.21		0
	100	0	12.21	12.23	12.22		0
16QAM	1	0	12.38	12.52	12.44	0-1	0
	1	50	12.41	12.51	12.43		0
	1	99	12.33	12.66	12.43		0
	50	0	12.30	12.41	12.25	0-2	0
	50	25	12.34	12.23	12.21		0
	50	50	12.26	12.26	12.21		0
	100	0	12.32	12.25	12.18		0
64QAM	1	0	12.34	12.48	12.45	0-2	0
	1	50	12.37	12.47	12.46		0
	1	99	12.30	12.40	12.42		0
	50	0	12.32	12.33	12.27	0-3	0
	50	25	12.36	12.24	12.24		0
	50	50	12.24	12.27	12.22		0
	100	0	12.33	12.24	12.20		0
256QAM	1	0	12.30	12.45	12.43	0-5	0
	1	50	12.39	12.55	12.39		0
	1	99	12.35	12.49	12.40		0
	50	0	12.33	12.33	12.26		0
	50	25	12.36	12.24	12.21		0
	50	50	12.25	12.24	12.21		0
	100	0	12.31	12.24	12.22		0

Table 8-38
LTE Band 7 Uplink Carrier Aggregation Measured P_{limit} – Antenna 4b

		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)
SCC Higher	CA_7C	LTE B7	20	20850	2510.0	2850	2630.0	QPSK	1	99	LTE B7	20	21048	2529.8	3048	2649.8	QPSK	1	0	12.32	12.07

8.2.11 LTE Band 41 PC3

Table 8-39
LTE Band 41 PC3 Measured P_{limit} Antenna 1 - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	14.35	14.46	**14.68**	14.50	14.28	0	0
	1	50	14.38	14.51	14.56	14.37	14.34		0
	1	99	14.40	14.58	14.60	14.25	14.67		0
	50	0	14.48	14.57	14.60	14.49	14.35	0-1	0
	50	25	14.47	14.61	**14.75**	14.62	14.73		0
	50	50	14.45	14.64	14.54	14.45	14.44		0
	100	0	14.44	14.59	14.58	14.38	14.46		0
16QAM	1	0	14.50	14.49	14.68	14.22	14.52	0-1	0
	1	50	14.62	14.71	14.70	14.30	14.57		0
	1	99	14.57	14.52	14.51	14.22	14.63		0
	50	0	14.49	14.54	14.66	14.21	14.32	0-2	0
	50	25	14.48	14.58	14.60	14.22	14.39		0
	50	50	14.48	14.63	14.52	14.17	14.41		0
	100	0	14.46	14.59	14.56	14.22	14.37		0
64QAM	1	0	14.60	14.53	14.74	14.41	14.61	0-2	0
	1	50	14.58	14.60	14.63	14.38	14.63		0
	1	99	14.63	14.55	14.62	14.48	14.72		0
	50	0	14.68	14.74	14.76	14.54	14.75	0-3	0
	50	25	14.62	14.76	14.74	14.56	14.78		0
	50	50	14.59	14.76	14.61	14.46	14.74		0
	100	0	14.58	14.76	14.64	14.53	14.78		0
256QAM	1	0	14.59	14.54	14.74	14.46	14.59	0-5	0
	1	50	14.59	14.61	14.63	14.43	14.60		0
	1	99	14.53	14.57	14.63	14.47	14.68		0
	50	0	14.66	14.77	14.76	14.52	14.76		0
	50	25	14.61	14.75	14.76	14.54	14.80		0
	50	50	14.60	14.73	14.62	14.46	14.72		0
	100	0	14.61	14.73	14.64	14.52	14.78		0

Table 8-40
LTE Band 41 PC3 Uplink Carrier Aggregation Measured P_{limit} – Antenna 1

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	41055	2636.5	QPSK	1	0	LTE B41	20	40857	2616.7	QPSK	1	99	14.51	14.50

Table 8-41
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 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	15.98	16.01	16.11	15.97	16.27	0	0
	1	50	16.02	15.96	16.10	16.04	16.21		0
	1	99	15.98	15.89	16.00	16.00	**16.33**		0
	50	0	16.16	16.16	16.23	16.12	16.31	0-1	0
	50	25	16.12	16.11	16.22	16.18	**16.34**		0
	50	50	16.09	16.06	16.12	16.06	16.29		0
	100	0	16.14	16.08	16.13	16.13	16.32		0
16QAM	1	0	16.19	15.96	16.27	16.25	16.20	0-1	0
	1	50	16.16	16.07	16.20	16.28	16.37		0
	1	99	16.09	15.87	16.07	16.25	16.33		0
	50	0	16.17	16.10	16.21	16.17	16.33	0-2	0
	50	25	16.16	16.12	16.21	16.17	16.35		0
	50	50	16.14	16.06	16.08	16.10	16.39		0
	100	0	16.13	16.08	16.09	16.17	16.49		0
64QAM	1	0	16.07	15.94	16.14	16.09	16.26	0-2	0
	1	50	16.07	15.95	16.16	16.05	16.31		0
	1	99	16.01	15.86	16.11	16.08	16.36		0
	50	0	16.13	16.15	16.22	16.12	16.34	0-3	0
	50	25	16.12	16.13	16.23	16.13	16.38		0
	50	50	16.14	16.09	16.12	16.09	16.31		0
	100	0	16.14	16.11	16.13	16.16	16.38		0
256QAM	1	0	16.14	16.03	16.08	16.12	16.30	0-5	0
	1	50	16.08	15.96	16.12	16.14	16.26		0
	1	99	16.08	15.98	16.06	16.11	16.39		0
	50	0	16.15	16.15	16.20	16.15	16.32		0
	50	25	16.16	16.11	16.21	16.16	16.34		0
	50	50	16.10	16.07	16.06	16.07	16.25		0
	100	0	16.16	16.11	16.10	16.15	16.30		0

Table 8-42
LTE Band 41 PC3 Uplink Carrier Aggregation Measured P_{limit} – Antenna 2b

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	39750	2506.0	QPSK	50	50	LTE B41	20	39948	2525.8	QPSK	50	0	16.03	16.09

Table 8-43
LTE Band 41 PC3 Measured P_{limit} Antenna 3 - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	14.96	15.06	15.23	15.21	15.27	0	0
	1	50	15.07	15.14	15.17	15.18	15.24		0
	1	99	14.98	15.05	15.12	15.24	**15.28**		0
	50	0	15.14	15.22	15.24	15.28	15.34	0-1	0
	50	25	15.17	15.25	15.26	15.30	**15.36**		0
	50	50	15.14	15.21	15.22	15.28	15.33		0
	100	0	15.06	15.13	15.18	15.23	15.25		0
16QAM	1	0	15.29	15.26	15.28	14.96	14.86	0-1	0
	1	50	15.41	15.42	15.36	15.04	15.20		0
	1	99	15.29	15.30	15.13	14.79	14.87		0
	50	0	15.46	15.32	15.21	15.02	14.84	0-2	0
	50	25	15.36	15.30	15.20	14.99	14.86		0
	50	50	15.37	15.24	15.19	14.99	14.83		0
	100	0	15.35	15.31	15.17	15.00	14.85		0
64QAM	1	0	15.48	15.37	15.24	15.07	14.95	0-2	0
	1	50	15.56	15.43	15.12	14.99	14.81		0
	1	99	15.40	15.21	15.10	14.97	14.90		0
	50	0	15.46	15.34	15.21	15.07	14.88	0-3	0
	50	25	15.37	15.32	15.22	15.04	14.88		0
	50	50	15.40	15.25	15.19	14.98	14.85		0
	100	0	15.33	15.33	15.22	15.02	14.86		0
256QAM	1	0	15.38	15.32	15.24	15.00	14.82	0-5	0
	1	50	15.29	15.24	15.00	14.84	14.81		0
	1	99	15.29	15.19	14.96	14.85	14.80		0
	50	0	15.45	15.32	15.18	15.01	14.86		0
	50	25	15.35	15.30	15.17	15.01	14.86		0
	50	50	15.33	15.18	15.15	14.95	14.83		0
	100	0	15.34	15.29	15.16	14.98	14.85		0

Table 8-44
LTE Band 41 PC3 Uplink Carrier Aggregation Measured P_{limit} – Antenna 3

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	41490	2680.0	QPSK	1	0	LTE B41	20	41292	2660.2	QPSK	1	99	15.98	15.27

Table 8-45
LTE Band 41 PC3 Measured P_{limit} Antenna 4b - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	13.43	13.41	13.32	13.22	13.15	0	0
	1	50	13.62	**13.67**	13.28	13.17	13.13		0
	1	99	13.40	13.35	13.18	13.08	13.08		0
	50	0	13.61	13.55	13.38	13.21	13.21	0-1	0
	50	25	13.65	**13.69**	13.37	13.22	13.23		0
	50	50	13.59	13.46	13.30	13.19	13.20		0
	100	0	13.55	13.51	13.32	13.20	13.20		0
16QAM	1	0	13.54	13.45	13.27	13.25	13.15	0-1	0
	1	50	13.64	13.66	13.25	13.24	13.31		0
	1	99	13.67	13.39	13.20	13.17	13.14		0
	50	0	13.62	13.54	13.35	13.17	13.21	0-2	0
	50	25	13.61	13.54	13.35	13.19	13.21		0
	50	50	13.56	13.48	13.31	13.16	13.17		0
	100	0	13.60	13.53	13.33	13.18	13.18		0
64QAM	1	0	13.30	13.39	13.49	13.19	13.06	0-2	0
	1	50	13.31	13.41	13.44	13.11	13.01		0
	1	99	13.33	13.26	13.29	12.95	13.05		0
	50	0	13.37	13.41	13.42	13.11	13.02	0-3	0
	50	25	13.36	13.33	13.35	13.03	12.95		0
	50	50	13.27	13.30	13.30	12.96	12.91		0
	100	0	13.33	13.34	13.33	13.03	12.95		0
256QAM	1	0	13.33	13.40	13.40	13.12	12.98	0-5	0
	1	50	13.22	13.27	13.34	12.93	12.90		0
	1	99	13.21	13.26	13.22	12.96	12.93		0
	50	0	13.32	13.42	13.42	13.12	13.02		0
	50	25	13.32	13.32	13.36	13.02	12.99		0
	50	50	13.26	13.28	13.29	13.01	12.96		0
	100	0	13.32	13.32	13.28	12.98	13.01		0

Table 8-46
LTE Band 41 PC3 Uplink Carrier Aggregation Measured P_{limit} – Antenna 4b

		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)
SCC lower	CA_41C	LTE B41	20	41490	2680.0	QPSK	1	0	LTE B41	20	41292	2660.2	QPSK	1	99	12.95	13.15

8.2.12 LTE Band 41 PC2

Table 8-47
LTE Band 41 PC2 Measured P_{limit} Antenna 1 - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	15.99	16.10	16.12	15.93	16.00	0	0
	1	50	16.06	16.19	16.08	15.92	15.98		0
	1	99	16.08	16.18	16.02	15.95	16.12		0
	50	0	16.13	16.20	16.25	15.98	16.08	0-1	0
	50	25	16.14	16.22	16.18	15.99	16.12		0
	50	50	16.17	16.22	16.18	15.95	16.09		0
	100	0	16.12	16.18	16.17	15.99	16.12		0

Table 8-48
LTE Band 41 PC2 Uplink Carrier Aggregation Measured P_{limit} – Antenna 1

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	41055	2636.5	QPSK	1	0	LTE B41 PC2	20	40857	2616.7	QPSK	1	99	15.91	15.93

Table 8-49
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 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	17.59	17.65	17.57	17.46	17.73	0	0
	1	50	17.65	17.71	17.52	17.44	17.79		0
	1	99	17.52	17.59	17.43	17.46	17.86		0
	50	0	17.80	17.70	17.66	17.58	17.80	0-1	0
	50	25	17.77	17.71	17.69	17.67	17.89		0
	50	50	17.85	17.65	17.51	17.57	17.84		0
	100	0	17.69	17.69	17.57	17.61	17.83		0

Table 8-50
LTE Uplink Carrier Aggregation Measured P_{limit} – Antenna 2b

		PCC							SCC						Power	
	Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
SCC higher	CA_41C	LTE B41 PC2	20	39750	2506.0	QPSK	50	50	LTE B41 PC2	20	39948	2525.8	QPSK	50	0	17.45	17.85

Table 8-51
LTE Band 41 PC2 Measured P_{limit} Antenna 3 - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	16.59	16.52	16.79	16.73	16.70	0	0
	1	50	16.66	16.63	16.71	16.68	16.74		0
	1	99	16.58	16.67	16.77	16.76	16.83		0
	50	0	16.76	16.76	16.84	16.82	16.82	0-1	0
	50	25	16.78	16.78	16.84	16.83	16.84		0
	50	50	16.77	16.78	16.81	16.83	16.91		0
	100	0	16.77	16.77	16.80	16.79	16.82		0

Table 8-52
LTE Band 41 PC2 Uplink Carrier Aggregation Measured P_{limit} – Antenna 3

		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)
SCC lower	CA_41C	LTE B41 PC2	20	41490	2680.0	QPSK	1	0	LTE B41 PC2	20	41292	2660.2	QPSK	1	99	17.51	16.70

Table 8-53
LTE Band 41 PC2 Measured P_{limit} Antenna 4b - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	15.33	15.30	15.41	15.20	14.96	0	0
	1	50	15.40	15.38	15.35	15.19	14.94		0
	1	99	15.30	15.28	15.31	15.16	14.90		0
	50	0	15.49	15.47	15.35	15.19	15.05	0-1	0
	50	25	15.48	15.50	15.36	15.20	15.06		0
	50	50	15.47	15.38	15.29	15.15	15.02		0
	100	0	15.39	15.37	15.33	15.15	15.04		0

Table 8-54
LTE Band 41 PC2 Uplink Carrier Aggregation Measured P_{limit} – Antenna 4b

		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)
SCC lower	CA_41C	LTE B41 PC2	20	41490	2680.0	QPSK	1	0	LTE B41 PC2	20	41292	2660.2	QPSK	1	99	15.00	14.96

8.2.1 LTE Band 48

Table 8-55
LTE Band 48 Measured P_{limit} Antenna 1 - 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	12.95	12.86	12.95	13.07	0	0
	1	50	13.10	13.00	13.09	**13.18**		0
	1	99	13.02	13.02	13.02	13.05		0
	50	0	13.08	13.09	13.07	13.07	0-1	0
	50	25	13.09	13.06	13.09	13.09		0
	50	50	13.07	13.06	13.06	**13.10**		0
	100	0	13.05	13.08	13.09	13.08		0
16QAM	1	0	13.16	13.02	13.04	12.97	0-1	0
	1	50	13.27	13.08	13.14	13.15		0
	1	99	13.20	13.05	13.09	12.99		0
	50	0	13.03	13.03	12.94	12.96	0-2	0
	50	25	13.08	13.07	13.04	12.95		0
	50	50	13.03	13.09	13.06	13.00		0
	100	0	12.98	13.05	13.05	12.94		0
64QAM	1	0	13.03	12.76	12.88	12.81	0-2	0
	1	50	12.86	12.90	12.90	12.81		0
	1	99	12.93	12.92	12.93	12.87		0
	50	0	13.06	13.06	12.96	12.99	0-3	0
	50	25	13.12	13.12	13.09	13.03		0
	50	50	13.05	13.15	13.08	13.09		0
	100	0	13.04	13.09	13.08	13.00		0
256QAM	1	0	13.02	12.97	12.84	12.88	0-5	0
	1	50	13.06	12.91	12.92	12.88		0
	1	99	13.02	13.04	13.00	12.90		0
	50	0	12.96	12.93	12.87	12.83		0
	50	25	12.91	12.99	12.88	12.93		0
	50	50	12.96	13.03	12.97	12.92		0
	100	0	12.97	12.98	12.87	12.92		0

Table 8-56
LTE Band 48 Uplink Carrier Aggregation Measured P_{limit} – Antenna 1

	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	13.30	13.07

Table 8-57
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	13.18	13.28	13.42	13.46	0	0
	1	50	13.25	13.34	13.46	**13.52**		0
	1	99	13.24	13.38	13.39	13.50		0
	50	0	13.37	13.44	13.46	13.57	0-1	0
	50	25	13.39	13.48	13.49	13.65		0
	50	50	13.43	13.51	13.55	**13.68**		0
	100	0	13.40	13.45	13.44	13.50		0
16QAM	1	0	13.55	13.36	13.53	13.78	0-1	0
	1	50	13.70	13.50	13.81	13.89		0
	1	99	13.60	13.44	13.69	13.80		0
	50	0	13.61	13.59	13.61	13.73	0-2	0
	50	25	13.67	13.64	13.68	13.86		0
	50	50	13.66	13.66	13.76	13.84		0
	100	0	13.65	13.58	13.63	13.74		0
64QAM	1	0	13.50	13.29	13.48	13.50	0-2	0
	1	50	13.65	13.44	13.73	13.62		0
	1	99	13.58	13.33	13.61	13.47		0
	50	0	13.58	13.48	13.49	13.64	0-3	0
	50	25	13.64	13.56	13.66	13.76		0
	50	50	13.56	13.46	13.64	13.74		0
	100	0	13.61	13.52	13.58	13.68		0
256QAM	1	0	13.52	13.54	13.41	13.66	0-5	0
	1	50	13.57	13.40	13.62	13.80		0
	1	99	13.50	13.41	13.62	13.73		0
	50	0	13.58	13.49	13.46	13.61		0
	50	25	13.66	13.56	13.64	13.83		0
	50	50	13.56	13.47	13.65	13.73		0
	100	0	13.61	13.51	13.61	13.64		0

Table 8-58
LTE Band 48 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	55340	3560.0	QPSK	1	99	LTE B48	20	55538	3579.8	QPSK	1	0	13.30	13.24

Table 8-59
LTE Band 48 Measured P_{limit} Antenna 3 - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel 55340 (3560.0 MHz)	Low-Mid Channel 55773 (3603.3 MHz)	Mid-High Channel 56207 (3646.7 MHz)	High Channel 56640 (3690.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	13.79	13.72	13.80	13.81	0	0
	1	50	13.86	13.81	**13.90**	13.82		0
	1	99	13.87	13.82	13.85	13.76		0
	50	0	13.92	13.88	13.89	13.92	0-1	0
	50	25	13.98	13.91	13.91	13.94		0
	50	50	13.97	13.94	**13.99**	13.91		0
	100	0	13.88	13.88	13.89	13.87		0
16QAM	1	0	13.71	13.61	13.68	13.82	0-1	0
	1	50	13.68	13.66	13.72	13.98		0
	1	99	13.70	13.57	13.74	13.84		0
	50	0	13.84	13.75	13.73	13.96	0-2	0
	50	25	13.85	13.71	13.83	14.13		0
	50	50	13.77	13.62	13.85	14.20		0
	100	0	13.84	13.72	13.82	14.14		0
64QAM	1	0	13.75	13.64	13.58	13.90	0-2	0
	1	50	13.74	13.57	13.62	13.95		0
	1	99	13.73	13.43	13.62	13.93		0
	50	0	13.80	13.60	13.57	13.86	0-3	0
	50	25	13.71	13.53	13.60	13.99		0
	50	50	13.74	13.51	13.71	14.00		0
	100	0	13.73	13.52	13.59	13.90		0
256QAM	1	0	13.80	13.62	13.52	13.73	0-5	0.1
	1	50	13.69	13.50	13.61	13.78		0.1
	1	99	13.72	13.52	13.61	13.90		0.1
	50	0	13.79	13.63	13.54	13.85		0.1
	50	25	13.72	13.52	13.57	13.93		0.1
	50	50	13.73	13.51	13.70	13.92		0.1
	100	0	13.71	13.51	13.57	13.84		0.1

Table 8-60
LTE Band 48 Uplink Carrier Aggregation Measured P_{limit} – Antenna 3

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	56207	3646.7	QPSK	50	50	LTE B48	20	56405	3666.5	QPSK	50	0	13.81	13.99

Table 8-61
LTE Band 48 Measured P_{limit} Antenna 4b - 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	12.72	12.72	12.83	12.99	0	0
	1	50	12.81	12.77	12.92	**13.04**		0
	1	99	12.85	12.79	12.95	13.00		0
	50	0	12.82	12.86	12.91	13.05	0-1	0
	50	25	12.87	12.90	12.94	13.04		0
	50	50	12.92	12.92	13.05	**13.06**		0
	100	0	12.89	12.90	12.91	13.00		0
16QAM	1	0	12.58	12.53	12.67	12.94	0-1	0
	1	50	12.77	12.65	12.72	13.01		0
	1	99	12.65	12.58	12.68	12.93		0
	50	0	12.69	12.68	12.64	13.04	0-2	0
	50	25	12.73	12.69	12.77	13.10		0
	50	50	12.77	12.71	12.78	13.12		0
	100	0	12.72	12.69	12.75	13.11		0
64QAM	1	0	12.57	12.57	12.62	13.03	0-2	0
	1	50	12.70	12.63	12.72	13.08		0
	1	99	12.72	12.62	12.67	13.00		0
	50	0	12.71	12.67	12.66	13.04	0-3	0
	50	25	12.75	12.69	12.76	13.12		0
	50	50	12.76	12.70	12.77	13.13		0
	100	0	12.75	12.68	12.76	13.14		0
256QAM	1	0	12.75	12.63	12.60	13.09	0-5	0
	1	50	12.67	12.57	12.67	13.06		0
	1	99	12.64	12.56	12.71	13.07		0
	50	0	12.74	12.58	12.55	12.93		0
	50	25	12.76	12.55	12.57	13.03		0
	50	50	12.72	12.57	12.67	13.04		0
	100	0	12.75	12.55	12.56	13.03		0

Table 8-62
LTE Band 48 Uplink Carrier Aggregation Measured P_{limit} – Antenna 4b

	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	12.85	13.06

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

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 8-63
NR Band n71 Measured P_{Limit} Antenna 1 - 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	20.16	0	0.0
	1	53	19.96		0.0
	1	104	20.02		0.0
	50	0	20.08	0-0.5	0.0
	50	28	19.97	0	0.0
	50	56	19.99	0-0.5	0.0
	100	0	20.00		0.0
DFT-s-OFDM QPSK	1	1	**20.17**	0	0.0
	1	53	19.97		0.0
	1	104	20.08		0.0
	50	0	**20.06**	0-1	0.0
	50	28	19.98	0	0.0
	50	56	20.01	0-1	0.0
	100	0	19.99		0.0
DFT-s-OFDM 16QAM	1	1	20.41	0-1	0.0
CP-OFDM QPSK	1	1	20.05	0-1.5	0.0

Table 8-64
NR Band n71 Measured P_{Limit} Antenna 3 - 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	19.81	0	0.0
	1	53	19.65		0.0
	1	104	19.75		0.0
	50	0	19.74	0-0.5	0.0
	50	28	19.62	0	0.0
	50	56	19.71	0-0.5	0.0
	100	0	19.63		0.0
DFT-s-OFDM QPSK	1	1	19.50	0	0.0
	1	53	19.73		0.0
	1	104	**19.78**		0.0
	50	0	**19.72**	0-1	0.0
	50	28	19.63	0	0.0
	50	56	19.58	0-1	0.0
	100	0	19.55		0.0
DFT-s-OFDM 16QAM	1	1	19.96	0-1	0.0
CP-OFDM QPSK	1	1	19.55	0-1.5	0.0

8.3.2 NR Band n12

Table 8-65
NR Band n12 Measured P_{Limit} Antenna 1 - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	20.19	0	0.0
	1	40	20.14		0.0
	1	77	20.08		0.0
	36	0	20.12	0-0.5	0.0
	36	22	20.06	0	0.0
	36	43	20.02	0-0.5	0.0
	75	0	20.10		0.0
DFT-s-OFDM QPSK	1	1	**20.21**	0	0.0
	1	40	20.15		0.0
	1	77	20.11		0.0
	36	0	**20.19**	0-1	0.0
	36	22	20.13	0	0.0
	36	43	20.10	0-1	0.0
	75	0	20.16		0.0
DFT-s-OFDM 16QAM	1	1	20.52	0-1	0.0
CP-OFDM QPSK	1	1	20.05	0-1.5	0.0

Table 8-66
NR Band n12 Measured P_{Limit} Antenna 3 - 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	19.22	0	0.0
	1	40	19.24		0.0
	1	77	19.04		0.0
	36	0	19.18	0-0.5	0.0
	36	22	19.11	0	0.0
	36	43	19.05	0-0.5	0.0
	75	0	19.17		0.0
DFT-s-OFDM QPSK	1	1	**19.20**	0	0.0
	1	40	19.14		0.0
	1	77	19.05		0.0
	36	0	**19.24**	0-1	0.0
	36	22	19.13	0	0.0
	36	43	19.12	0-1	0.0
	75	0	19.19		0.0
DFT-s-OFDM 16QAM	1	1	19.43	0-1	0.0
CP-OFDM QPSK	1	1	19.12	0-1.5	0.0

8.3.3 NR Band n14

Table 8-67
NR Band n14 Measured P_{Limit} Antenna 1 - 10 MHz Bandwidth

NR Band n14 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	158600 (793 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	19.89	0	0.0
	1	26	19.86		0.0
	1	50	19.87		0.0
	25	0	19.73	0-0.5	0.0
	25	14	19.74	0	0.0
	25	27	19.70	0-0.5	0.0
	50	0	19.71		0.0
DFT-s-OFDM QPSK	1	1	**19.85**	0	0.0
	1	26	19.67		0.0
	1	50	19.78		0.0
	25	0	**19.73**	0-1	0.0
	25	14	19.62	0	0.0
	25	27	19.72	0-1	0.0
	50	0	19.62		0.0
DFT-s-OFDM 16QAM	1	1	19.77	0-1	0.0
CP-OFDM QPSK	1	1	19.76	0-1.5	0.0

Table 8-68
NR Band n14 Measured P_{Limit} Antenna 3 - 10 MHz Bandwidth

NR Band n14 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	158600 (793 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	19.93	0	0.0
	1	26	19.86		0.0
	1	50	19.77		0.0
	25	0	19.79	0-0.5	0.0
	25	14	19.78	0	0.0
	25	27	19.72	0-0.5	0.0
	50	0	19.74		0.0
DFT-s-OFDM QPSK	1	1	**19.96**	0	0.0
	1	26	19.84		0.0
	1	50	19.77		0.0
	25	0	**19.80**	0-1	0.0
	25	14	19.79	0	0.0
	25	27	19.72	0-1	0.0
	50	0	19.77		0.0
DFT-s-OFDM 16QAM	1	1	19.81	0-1	0.0
CP-OFDM QPSK	1	1	20.02	0-1.5	0.0

8.3.4 NR Band n26

Table 8-69
NR Band n26 Measured P_{Limit} Antenna 1 - 10 MHz Bandwidth

NR Band n26 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	163800 (819 MHz)	166300 (831.5 MHz)	168800 (844 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	17.78	17.85	17.76	0	0.0
	1	26	17.76	17.88	17.89		0.0
	1	50	17.79	17.88	17.81		0.0
	25	0	17.72	17.74	17.83	0-0.5	0.0
	25	14	17.65	17.77	17.79	0	0.0
	25	27	17.67	17.77	17.80	0-0.5	0.0
	50	0	17.68	17.82	17.86		0.0
DFT-s-OFDM QPSK	1	1	17.83	17.80	17.87	0	0.0
	1	26	17.81	17.88	**17.95**		0.0
	1	50	17.75	17.87	17.78		0.0
	25	0	17.76	17.77	**17.90**	0-1	0.0
	25	14	17.75	17.80	17.82	0	0.0
	25	27	17.67	17.78	17.81	0-1	0.0
	50	0	17.71	17.82	17.86		0.0
DFT-s-OFDM 16QAM	1	1	17.97	18.01	18.04	0-1	0.0
CP-OFDM QPSK	1	1	17.60	17.61	17.58	0-1.5	0.0

Table 8-70
NR Band n26 Measured P_{Limit} Antenna 3 - 10 MHz Bandwidth

NR Band n26 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	163800 (819 MHz)	166300 (831.5 MHz)	168800 (844 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	18.41	18.31	18.33	0	0.0
	1	26	18.42	18.32	18.32		0.0
	1	50	18.41	18.33	18.30		0.0
	25	0	18.34	18.33	18.25	0-0.5	0.0
	25	14	18.28	18.29	18.25	0	0.0
	25	27	18.29	18.28	18.27	0-0.5	0.0
	50	0	18.31	18.29	18.20		0.0
DFT-s-OFDM QPSK	1	1	**18.44**	18.35	18.32	0	0.0
	1	26	18.40	18.33	18.40		0.0
	1	50	18.38	18.30	18.34		0.0
	25	0	18.37	18.37	18.25	0-1	0.0
	25	14	**18.38**	18.35	18.27	0	0.0
	25	27	18.31	18.28	18.29	0-1	0.0
	50	0	18.35	18.33	18.24		0.0
DFT-s-OFDM 16QAM	1	1	18.68	18.57	18.59	0-1	0.0
CP-OFDM QPSK	1	1	18.32	18.15	18.02	0-1.5	0.0

8.3.5 NR Band n5

Table 8-71
NR Band n5 Measured P_{Limit} Antenna 1 - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	17.74	0	0.0
	1	53	17.67		0.0
	1	104	17.65		0.0
	50	0	17.71	0-0.5	0.0
	50	28	17.67	0	0.0
	50	56	17.68	0-0.5	0.0
	100	0	17.61		0.0
DFT-s-OFDM QPSK	1	1	**17.79**	0	0.0
	1	53	17.70		0.0
	1	104	17.67		0.0
	50	0	**17.77**	0-1	0.0
	50	28	17.65	0	0.0
	50	56	17.72	0-1	0.0
	100	0	17.73		0.0
DFT-s-OFDM 16QAM	1	1	18.03	0-1	0.0
CP-OFDM QPSK	1	1	17.72	0-1.5	0.0

Table 8-72
NR Band n5 Measured P_{Limit} Antenna 3 - 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	18.50	0	0.0
	1	53	18.32		0.0
	1	104	18.17		0.0
	50	0	18.47	0-0.5	0.0
	50	28	18.35	0	0.0
	50	56	18.26	0-0.5	0.0
	100	0	18.37		0.0
DFT-s-OFDM QPSK	1	1	**18.36**	0	0.0
	1	53	18.33		0.0
	1	104	18.24		0.0
	50	0	**18.41**	0-1	0.0
	50	28	18.33	0	0.0
	50	56	18.23	0-1	0.0
	100	0	18.35		0.0
DFT-s-OFDM 16QAM	1	1	18.68	0-1	0.0
CP-OFDM QPSK	1	1	18.34	0-1.5	0.0

8.3.6 NR Band n70

Table 8-73
NR Band n70 Measured P_{Limit} Antenna 1 - 15 MHz Bandwidth

NR Band n70 15 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	340500 (1702.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	16.25	0	0.0
	1	40	16.28		0.0
	1	77	16.21		0.0
	36	0	16.16	0-0.5	0.0
	36	22	16.17	0	0.0
	36	43	16.15	0-0.5	0.0
	75	0	16.19		0.0
DFT-s-OFDM QPSK	1	1	16.35	0	0.0
	1	40	16.33		0.0
	1	77	**16.36**		0.0
	36	0	16.28	0-1	0.0
	36	22	16.26	0	0.0
	36	43	**16.30**	0-1	0.0
	75	0	16.24		0.0
DFT-s-OFDM 16QAM	1	1	16.50	0-1	0.0
CP-OFDM QPSK	1	1	16.30	0-1.5	0.0

Table 8-74
NR Band n70 Measured P_{Limit} Antenna 2b - 15 MHz Bandwidth

NR Band n70 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	340500 (1702.5 MHz)		
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	14.72	0	0.0
	1	40	14.82		0.0
	1	77	14.81		0.0
	36	0	14.67	0-0.5	0.0
	36	22	14.55	0	0.0
	36	43	14.64	0-0.5	0.0
	75	0	14.60		0.0
DFT-s-OFDM QPSK	1	1	14.74	0	0.0
	1	40	14.80		0.0
	1	77	**14.84**		0.0
	36	0	14.65	0-1	0.0
	36	22	**14.72**	0	0.0
	36	43	14.64	0-1	0.0
	75	0	14.67		0.0
DFT-s-OFDM 16QAM	1	1	14.61	0-1	0.0
CP-OFDM QPSK	1	1	14.32	0-1.5	0.0

Table 8-75
NR Band n70 Measured P_{Limit} Antenna 3 - 15 MHz Bandwidth

NR Band n70 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	340500 (1702.5 MHz)		
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	15.95	0	0.0
	1	40	16.01		0.0
	1	77	15.98		0.0
	36	0	15.78	0-0.5	0.0
	36	22	15.79	0	0.0
	36	43	15.81	0-0.5	0.0
	75	0	15.82		0.0
DFT-s-OFDM QPSK	1	1	**16.00**	0	0.0
	1	40	15.95		0.0
	1	77	15.93		0.0
	36	0	**15.85**	0-1	0.0
	36	22	15.83	0	0.0
	36	43	15.82	0-1	0.0
	75	0	15.82		0.0
DFT-s-OFDM 16QAM	1	1	15.77	0-1	0.0
CP-OFDM QPSK	1	1	15.88	0-1.5	0.0

Table 8-76
NR Band n70 Measured P_{Limit} Antenna 4b - 15 MHz Bandwidth

NR Band n70 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	340500 (1702.5 MHz)		
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	13.34	0	0.0
	1	40	13.35		0.0
	1	77	13.30		0.0
	36	0	13.24	0-0.5	0.0
	36	22	13.25	0	0.0
	36	43	13.28	0-0.5	0.0
	75	0	13.25		0.0
DFT-s-OFDM QPSK	1	1	**13.27**	0	0.0
	1	40	13.25		0.0
	1	77	13.23		0.0
	36	0	13.24	0-1	0.0
	36	22	**13.26**	0	0.0
	36	43	13.25	0-1	0.0
	75	0	13.22		0.0
DFT-s-OFDM 16QAM	1	1	13.53	0-1	0.0
CP-OFDM QPSK	1	1	13.23	0-1.5	0.0

8.3.7 NR Band n66

Table 8-77
NR Band n66 Measured P_{Limit} Antenna 1 - 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	16.24	0	0.0
	1	108	16.23		0.0
	1	214	16.13		0.0
	108	0	16.19	0-0.5	0.0
	108	54	16.15	0	0.0
	108	108	16.17	0-0.5	0.0
	216	0	16.14		0.0
DFT-s-OFDM QPSK	1	1	**16.31**	0	0.0
	1	108	16.23		0.0
	1	214	16.11		0.0
	108	0	16.16	0-1	0.0
	108	54	16.22	0	0.0
	108	108	**16.24**	0-1	0.0
	216	0	16.14		0.0
DFT-s-OFDM 16QAM	1	1	16.14	0-1	0.0
CP-OFDM QPSK	1	1	16.20	0-1.5	0.0

Table 8-78
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	14.69	0	0.0
	1	108	14.67		0.0
	1	214	14.64		0.0
	108	0	14.62	0-0.5	0.0
	108	54	14.61	0	0.0
	108	108	14.69	0-0.5	0.0
	216	0	14.67		0.0
DFT-s-OFDM QPSK	1	1	14.71	0	0.0
	1	108	**14.74**		0.0
	1	214	14.61		0.0
	108	0	14.59	0-1	0.0
	108	54	14.65	0	0.0
	108	108	**14.70**	0-1	0.0
	216	0	14.65		0.0
DFT-s-OFDM 16QAM	1	1	14.68	0-1	0.0
CP-OFDM QPSK	1	1	14.50	0-1.5	0.0

Table 8-79
NR Band n66 Measured P_{Limit} Antenna 3 - 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	349000 (1745 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	15.80	0	0.0
	1	108	15.84		0.0
	1	214	15.88		0.0
	108	0	15.85	0-0.5	0.0
	108	54	15.81	0	0.0
	108	108	15.93	0-0.5	0.0
	216	0	15.87		0.0
DFT-s-OFDM QPSK	1	1	15.85	0	0.0
	1	108	15.90		0.0
	1	214	**15.93**		0.0
	108	0	15.89	0-1	0.0
	108	54	15.87	0	0.0
	108	108	**15.99**	0-1	0.0
	216	0	15.86		0.0
DFT-s-OFDM 16QAM	1	1	16.06	0-1	0.0
CP-OFDM QPSK	1	1	15.40	0-1.5	0.0

Table 8-80
NR Band n66 Measured P_{Limit} Antenna 4b - 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	13.29	0	0.0
	1	108	13.24		0.0
	1	214	13.18		0.0
	108	0	13.20	0-0.5	0.0
	108	54	13.15	0	0.0
	108	108	13.14	0-0.5	0.0
	216	0	13.16		0.0
DFT-s-OFDM QPSK	1	1	**13.33**	0	0.0
	1	108	13.28		0.0
	1	214	13.26		0.0
	108	0	**13.25**	0-1	0.0
	108	54	13.20	0	0.0
	108	108	13.18	0-1	0.0
	216	0	13.18		0.0
DFT-s-OFDM 16QAM	1	1	13.18	0-1	0.0
CP-OFDM QPSK	1	1	13.20	0-1.5	0.0

8.3.8 NR Band n25

Table 8-81
NR Band n25 Measured P_{Limit} Antenna 1 - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	16.81	0	0.0
	1	108	16.88		0.0
	1	214	16.72		0.0
	108	0	16.88	0-0.5	0.0
	108	54	16.82	0	0.0
	108	108	16.74	0-0.5	0.0
	216	0	16.73		0.0
DFT-s-OFDM QPSK	1	1	**16.67**	0	0.0
	1	108	16.62		0.0
	1	214	16.66		0.0
	108	0	**16.87**	0-1	0.0
	108	54	16.80	0	0.0
	108	108	16.72	0-1	0.0
	216	0	16.65		0.0
DFT-s-OFDM 16QAM	1	1	17.04	0-1	0.0
CP-OFDM QPSK	1	1	16.60	0-1.5	0.0

Table 8-82
NR Band n25 Measured P_{Limit} Antenna 2b - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	14.28	0	0.0
	1	108	14.30		0.0
	1	214	14.38		0.0
	108	0	14.31	0-0.5	0.0
	108	54	14.31	0	0.0
	108	108	14.40	0-0.5	0.0
	216	0	14.36		0.0
DFT-s-OFDM QPSK	1	1	14.36	0	0.0
	1	108	14.30		0.0
	1	214	**14.39**		0.0
	108	0	14.30	0-1	0.0
	108	54	14.28	0	0.0
	108	108	**14.32**	0-1	0.0
	216	0	14.30		0.0
DFT-s-OFDM 16QAM	1	1	14.57	0-1	0.0
CP-OFDM QPSK	1	1	14.27	0-1.5	0.0

Table 8-83
NR Band n25 Measured P_{Limit} Antenna 3 - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	16.41	0	0.0
	1	108	16.39		0.0
	1	214	16.34		0.0
	108	0	16.40	0-0.5	0.0
	108	54	16.33	0	0.0
	108	108	16.35	0-0.5	0.0
	216	0	16.38		0.0
DFT-s-OFDM QPSK	1	1	16.48	0	0.0
	1	108	**16.49**		0.0
	1	214	16.41		0.0
	108	0	**16.42**	0-1	0.0
	108	54	16.36	0	0.0
	108	108	16.33	0-1	0.0
	216	0	16.09		0.0
DFT-s-OFDM 16QAM	1	1	16.70	0-1	0.0
CP-OFDM QPSK	1	1	16.36	0-1.5	0.0

Table 8-84
NR Band n25 Measured P_{Limit} Antenna 4b - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	12.24	0	0.0
	1	108	12.21		0.0
	1	214	12.27		0.0
	108	0	12.22	0-0.5	0.0
	108	54	12.15	0	0.0
	108	108	12.31	0-0.5	0.0
	216	0	12.22		0.0
DFT-s-OFDM QPSK	1	1	12.29	0	0.0
	1	108	12.25		0.0
	1	214	**12.31**		0.0
	108	0	**12.25**	0-1	0.0
	108	54	12.20	0	0.0
	108	108	12.20	0-1	0.0
	216	0	12.22		0.0
DFT-s-OFDM 16QAM	1	1	12.10	0-1	0.0
CP-OFDM QPSK	1	1	12.23	0-1.5	0.0

8.3.9 NR Band n30

Table 8-85
NR Band n30 Measured P_{Limit} Antenna 1 - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	13.32	0	0.0
	1	26	13.34		0.0
	1	50	13.33		0.0
	25	0	13.22	0-0.5	0.0
	25	14	13.19	0	0.0
	25	27	13.15	0-0.5	0.0
	50	0	13.22		0.0
DFT-s-OFDM QPSK	1	1	13.31	0	0.0
	1	26	**13.42**		0.0
	1	50	13.34		0.0
	25	0	13.21	0-1	0.0
	25	14	**13.36**	0	0.0
	25	27	13.23	0-1	0.0
	50	0	13.35		0.0
DFT-s-OFDM 16QAM	1	1	13.30	0-1	0.0
CP-OFDM QPSK	1	1	13.37	0-1.5	0.0

Table 8-86
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	13.70	0	0.0
	1	26	13.69		0.0
	1	50	13.77		0.0
	25	0	13.53	0-0.5	0.0
	25	14	13.57	0	0.0
	25	27	13.57	0-0.5	0.0
	50	0	13.56		0.0
DFT-s-OFDM QPSK	1	1	13.72	0	0.0
	1	26	13.73		0.0
	1	50	**13.75**		0.0
	25	0	13.56	0-1	0.0
	25	14	**13.62**	0	0.0
	25	27	13.55	0-1	0.0
	50	0	13.60		0.0
DFT-s-OFDM 16QAM	1	1	13.61	0-1	0.0
CP-OFDM QPSK	1	1	13.66	0-1.5	0.0

Table 8-87
NR Band n30 Measured P_{Limit} Antenna 3 - 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	14.93	0	0.0
	1	26	14.91		0.0
	1	50	14.97		0.0
	25	0	14.81	0-0.5	0.0
	25	14	14.83	0	0.0
	25	27	14.73	0-0.5	0.0
	50	0	14.80		0.0
DFT-s-OFDM QPSK	1	1	15.04	0	0.0
	1	26	15.03		0.0
	1	50	**15.05**		0.0
	25	0	14.93	0-1	0.0
	25	14	**15.01**	0	0.0
	25	27	14.87	0-1	0.0
	50	0	14.92		0.0
DFT-s-OFDM 16QAM	1	1	15.06	0-1	0.0
CP-OFDM QPSK	1	1	15.13	0-1.5	0.0

Table 8-88
NR Band n30 Measured P_{Limit} Antenna 4b - 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	11.90	0	0.0
	1	26	12.02		0.0
	1	50	12.01		0.0
	25	0	11.84	0-0.5	0.0
	25	14	11.96	0	0.0
	25	27	11.94	0-0.5	0.0
	50	0	11.88		0.0
DFT-s-OFDM QPSK	1	1	11.98	0	0.0
	1	26	**12.02**		0.0
	1	50	12.01		0.0
	25	0	11.85	0-1	0.0
	25	14	**11.96**	0	0.0
	25	27	11.94	0-1	0.0
	50	0	11.92		0.0
DFT-s-OFDM 16QAM	1	1	12.10	0-1	0.0
CP-OFDM QPSK	1	1	11.70	0-1.5	0.0

8.3.10 NR Band n7

Table 8-89
NR Band n7 Measured P_{Limit} Antenna 1 - 40 MHz Bandwidth

NR Band n7 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	507000 (2535 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	13.49	0	0.0
	1	108	13.56		0.0
	1	214	13.61		0.0
	108	0	13.55	0-0.5	0.0
	108	54	13.48	0	0.0
	108	108	13.49	0-0.5	0.0
	216	0	13.56		0.0
DFT-s-OFDM QPSK	1	1	13.53	0	0.0
	1	108	13.59		0.0
	1	214	**13.64**		0.0
	108	0	**13.60**	0-1	0.0
	108	54	13.50	0	0.0
	108	108	13.52	0-1	0.0
	216	0	13.59		0.0
DFT-s-OFDM 16QAM	1	1	13.75	0-1	0.0
CP-OFDM QPSK	1	1	13.55	0-1.5	0.0

Table 8-90
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	13.93	0	0.0
	1	108	13.88		0.0
	1	214	13.91		0.0
	108	0	13.85	0-0.5	0.0
	108	54	13.79	0	0.0
	108	108	13.80	0-0.5	0.0
	216	0	13.81		0.0
DFT-s-OFDM QPSK	1	1	13.88	0	0.0
	1	108	13.90		0.0
	1	214	**13.92**		0.0
	108	0	**13.85**	0-1	0.0
	108	54	13.75	0	0.0
	108	108	13.79	0-1	0.0
	216	0	13.83		0.0
DFT-s-OFDM 16QAM	1	1	13.75	0-1	0.0
CP-OFDM QPSK	1	1	13.92	0-1.5	0.0

Table 8-91
NR Band n7 Measured P_{Limit} Antenna 3 - 40 MHz Bandwidth

NR Band n7 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	507000 (2535 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	16.12	0	0.0
	1	108	16.11		0.0
	1	214	15.95		0.0
	108	0	16.00	0-0.5	0.0
	108	54	16.03	0	0.0
	108	108	15.98	0-0.5	0.0
	216	0	16.05		0.0
DFT-s-OFDM QPSK	1	1	**16.31**	0	0.0
	1	108	16.22		0.0
	1	214	16.07		0.0
	108	0	**16.28**	0-1	0.0
	108	54	16.13	0	0.0
	108	108	16.10	0-1	0.0
	216	0	16.27		0.0
DFT-s-OFDM 16QAM	1	1	16.32	0-1	0.0
CP-OFDM QPSK	1	1	16.36	0-1.5	0.0

Table 8-92
NR Band n7 Measured P_{Limit} Antenna 4b - 40 MHz Bandwidth

NR Band n7 40 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	507000 (2535 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	12.65	0	0.0
	1	108	12.52		0.0
	1	214	12.51		0.0
	108	0	12.52	0-0.5	0.0
	108	54	12.45	0	0.0
	108	108	12.51	0-0.5	0.0
	216	0	12.50		0.0
DFT-s-OFDM QPSK	1	1	**12.67**	0	0.0
	1	108	12.60		0.0
	1	214	12.53		0.0
	108	0	12.52	0-1	0.0
	108	54	12.47	0	0.0
	108	108	**12.54**	0-1	0.0
	216	0	12.53		0.0
DFT-s-OFDM 16QAM	1	1	12.88	0-1	0.0
CP-OFDM QPSK	1	1	12.57	0-1.5	0.0

8.3.11 NR Band n41 PC2

Table 8-93
NR Band n41 PC2 Measured P_{Limit} Antenna 1 - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	12.67	0	0.0
	1	137	12.72		0.0
	1	271	12.71		0.0
	135	0	12.73	0-0.5	0.0
	135	69	12.64	0	0.0
	135	138	12.63	0-0.5	0.0
	270	0	12.67		0.0
DFT-s-OFDM QPSK	1	1	12.70	0	0.0
	1	137	**12.75**		0.0
	1	271	12.72		0.0
	135	0	12.66	0-1	0.0
	135	69	**12.68**	0	0.0
	135	138	12.63	0-1	0.0
	270	0	12.65		0.0
DFT-s-OFDM 16QAM	1	1	12.85	0-1	0.0
CP-OFDM QPSK	1	1	12.62	0-1.5	0.0

Table 8-94
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	14.08	0	0.0
	1	137	14.14		0.0
	1	271	14.21		0.0
	135	0	14.04	0-0.5	0.0
	135	69	14.08	0	0.0
	135	138	14.07	0-0.5	0.0
	270	0	14.08		0.0
DFT-s-OFDM QPSK	1	1	14.12	0	0.0
	1	137	14.24		0.0
	1	271	**14.25**		0.0
	135	0	**14.14**	0-1	0.0
	135	69	14.09	0	0.0
	135	138	14.10	0-1	0.0
	270	0	14.13		0.0
DFT-s-OFDM 16QAM	1	1	14.37	0-1	0.0
CP-OFDM QPSK	1	1	13.98	0-1.5	0.0

Table 8-95
NR Band n41 PC2 Measured P_{Limit} Antenna 3 - 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	13.49	0	0.0
	1	137	13.42		0.0
	1	271	13.50		0.0
	135	0	13.43	0-0.5	0.0
	135	69	13.40	0	0.0
	135	138	13.44	0-0.5	0.0
	270	0	13.39		0.0
DFT-s-OFDM QPSK	1	1	13.50	0	0.0
	1	137	13.46		0.0
	1	271	**13.54**		0.0
	135	0	13.41	0-1	0.0
	135	69	13.34	0	0.0
	135	138	**13.46**	0-1	0.0
	270	0	13.41		0.0
DFT-s-OFDM 16QAM	1	1	13.33	0-1	0.0
CP-OFDM QPSK	1	1	13.48	0-1.5	0.0

Table 8-96
NR Band n41 PC2 Measured P_{Limit} Antenna 4b - 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	11.88	0	0.0
	1	137	11.75		0.0
	1	271	11.67		0.0
	135	0	11.82	0-0.5	0.0
	135	69	11.73	0	0.0
	135	138	11.58	0-0.5	0.0
	270	0	11.71		0.0
DFT-s-OFDM QPSK	1	1	**11.88**	0	0.0
	1	137	11.75		0.0
	1	271	11.68		0.0
	135	0	**11.81**	0-1	0.0
	135	69	11.75	0	0.0
	135	138	11.63	0-1	0.0
	270	0	11.71		0.0
DFT-s-OFDM 16QAM	1	1	12.08	0-1	0.0
CP-OFDM QPSK	1	1	11.74	0-1.5	0.0

8.3.12 NR Band n77 DoD

Table 8-97
NR Band n77DoD Measured P_{Limit} Antenna 1 - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	633334 (3500.01 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	11.15	0	0.0
	1	137	11.17		0.0
	1	271	11.22		0.0
	135	0	11.11	0-0.5	0.0
	135	69	11.07	0	0.0
	135	138	11.15	0-0.5	0.0
	270	0	11.09		0.0
DFT-s-OFDM QPSK	1	1	11.17	0	0.0
	1	137	11.18		0.0
	1	271	**11.33**		0.0
	135	0	11.14	0-1	0.0
	135	69	11.12	0	0.0
	135	138	**11.20**	0-1	0.0
	270	0	11.10		0.0
DFT-s-OFDM 16QAM	1	1	11.26	0-1	0.0
CP-OFDM QPSK	1	1	11.09	0-1.5	0.0

Table 8-98
NR Band n77DoD 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	11.18	0	0.0
	1	137	11.04		0.0
	1	271	11.27		0.0
	135	0	11.14	0-0.5	0.0
	135	69	11.03	0	0.0
	135	138	11.04	0-0.5	0.0
	270	0	11.08		0.0
DFT-s-OFDM QPSK	1	1	**11.41**	0	0.0
	1	137	11.02		0.0
	1	271	11.22		0.0
	135	0	**11.35**	0-1	0.0
	135	69	11.26	0	0.0
	135	138	11.15	0-1	0.0
	270	0	11.00		0.0
DFT-s-OFDM 16QAM	1	1	11.62	0-1	0.0
CP-OFDM QPSK	1	1	11.20	0-1.5	0.0

Table 8-99
NR Band n77DoD Measured P_{Limit} Antenna 3 - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	633334 (3500.01 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	11.40	0	0.0
	1	137	11.24		0.0
	1	271	11.18		0.0
	135	0	11.36	0-0.5	0.0
	135	69	11.27	0	0.0
	135	138	11.23	0-0.5	0.0
	270	0	11.26		0.0
DFT-s-OFDM QPSK	1	1	**11.43**	0	0.0
	1	137	11.26		0.0
	1	271	11.21		0.0
	135	0	**11.37**	0-1	0.0
	135	69	11.22	0	0.0
	135	138	11.17	0-1	0.0
	270	0	11.27		0.0
DFT-s-OFDM 16QAM	1	1	11.63	0-1	0.0
CP-OFDM QPSK	1	1	11.26	0-1.5	0.0

Table 8-100
NR Band n77DoD Measured P_{Limit} Antenna 4b - 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	10.92	0	0.0
	1	137	10.87		0.0
	1	271	10.85		0.0
	135	0	10.84	0-0.5	0.0
	135	69	10.84	0	0.0
	135	138	10.73	0-0.5	0.0
	270	0	10.84		0.0
DFT-s-OFDM QPSK	1	1	**10.95**	0	0.0
	1	137	10.90		0.0
	1	271	10.83		0.0
	135	0	**10.87**	0-1	0.0
	135	69	10.82	0	0.0
	135	138	10.72	0-1	0.0
	270	0	10.56		0.0
DFT-s-OFDM 16QAM	1	1	11.15	0-1	0.0
CP-OFDM QPSK	1	1	10.81	0-1.5	0.0

8.3.13 NR Band n77 C

Table 8-101
NR Band n77C Measured P_{Limit} Antenna 1 - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	11.12	11.28	0	0.0
	1	137	11.22	11.01		0.0
	1	271	11.24	10.78		0.0
	135	0	11.15	11.10	0-0.5	0.0
	135	69	11.20	10.94	0	0.0
	135	138	11.19	10.77	0-0.5	0.0
	270	0	11.19	10.95		0.0
DFT-s-OFDM QPSK	1	1	11.15	**11.34**	0	0.0
	1	137	11.26	11.01		0.0
	1	271	11.31	10.74		0.0
	135	0	11.18	**11.33**	0-1	0.0
	135	69	11.19	10.94	0	0.0
	135	138	11.16	10.74	0-1	0.0
	270	0	11.18	10.94		0.0
DFT-s-OFDM 16QAM	1	1	11.36	11.52	0-1	0.0
CP-OFDM QPSK	1	1	11.04	11.29	0-1.5	0.0

Table 8-102
NR Band n77C 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	11.31	11.01	0	0.0
	1	137	11.45	11.01		0.0
	1	271	11.35	10.97		0.0
	135	0	11.36	10.94	0-0.5	0.0
	135	69	11.34	10.92	0	0.0
	135	138	11.28	10.83	0-0.5	0.0
	270	0	11.35	10.92		0.0
DFT-s-OFDM QPSK	1	1	11.33	11.10	0	0.0
	1	137	**11.45**	11.00		0.0
	1	271	11.37	10.94		0.0
	135	0	11.35	11.47	0-1	0.0
	135	69	**11.48**	11.22	0	0.0
	135	138	11.28	11.13	0-1	0.0
	270	0	11.35	11.15		0.0
DFT-s-OFDM 16QAM	1	1	11.55	11.18	0-1	0.0
CP-OFDM QPSK	1	1	11.25	10.88	0-1.5	0.0

Table 8-103
NR Band n77C Measured P_{Limit} Antenna 3 - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	11.50	11.52	0	0.0
	1	137	11.62	11.52		0.0
	1	271	11.68	11.49		0.0
	135	0	11.53	11.55	0-0.5	0.0
	135	69	11.59	11.57	0	0.0
	135	138	11.58	11.45	0-0.5	0.0
	270	0	11.52	11.57		0.0
DFT-s-OFDM QPSK	1	1	11.47	11.65	0	0.0
	1	137	**11.66**	11.63		0.0
	1	271	11.65	11.51		0.0
	135	0	**11.54**	11.53	0-1	0.0
	135	69	11.49	11.52	0	0.0
	135	138	11.52	11.46	0-1	0.0
	270	0	11.53	11.50		0.0
DFT-s-OFDM 16QAM	1	1	11.61	11.81	0-1	0.0
CP-OFDM QPSK	1	1	11.36	11.34	0-1.5	0.0

Table 8-104
NR Band n77C Measured P_{Limit} Antenna 4b - 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	10.48	10.73	0	0.0
	1	137	10.63	10.68		0.0
	1	271	10.75	10.58		0.0
	135	0	10.63	10.62	0-0.5	0.0
	135	69	10.60	10.55	0	0.0
	135	138	10.63	10.55	0-0.5	0.0
	270	0	10.62	10.60		0.0
DFT-s-OFDM QPSK	1	1	10.42	10.72	0	0.0
	1	137	10.94	**11.00**		0.0
	1	271	10.75	10.84		0.0
	135	0	10.68	**10.97**	0-1	0.0
	135	69	10.76	10.94	0	0.0
	135	138	10.69	10.80	0-1	0.0
	270	0	10.67	10.93		0.0
DFT-s-OFDM 16QAM	1	1	10.75	11.00	0-1	0.0
CP-OFDM QPSK	1	1	10.86	10.40	0-1.5	0.0

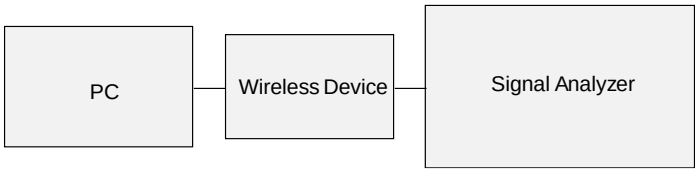

Figure 8-3
Power Measurement Setup

8.3 WLAN Maximum Time-Averaged Conducted Powers

Table 8-105
2.4 GHz WLAN Maximum Average RF Power – Ant 2a, Variant 1

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax SU
		Average	Average	Average	Average
2412	1	12.46	12.56	12.53	12.65
2437	6	12.42	12.59	12.46	12.46
2462	11	12.43	12.37	12.37	12.40

Table 8-106
2.4 GHz WLAN Maximum Average RF Power – Ant 2a, Variant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax
		Average	Average	Average	Average
2412	1	12.60	12.52	12.57	12.47
2437	6	12.50	12.61	12.55	12.59
2462	11	12.49	12.49	12.44	12.43

Table 8-107
2.4 GHz WLAN Maximum Average RF Power – Ant 4a, 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	13.06	13.01	13.04	13.11
2437	6	13.05	12.95	12.93	13.02
2462	11	12.97	12.94	13.01	12.90

Table 8-108
2.4 GHz WLAN Maximum Average RF Power – Ant 4a, Variant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax
		Average	Average	Average	Average
2412	1	13.01	13.15	13.05	13.04
2437	6	13.15	13.09	13.11	13.10
2462	11	12.93	12.98	12.95	13.02

Table 8-109
5 GHz WLAN Maximum Average RF Power – Ant 4a, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax SU
		Average	Average
5210	42	9.48	9.13
5290	58	9.25	9.29
5530	106	8.22	8.17
5610	122	8.16	8.33
5690	138	8.01	8.20
5775	155	9.40	9.31

Table 8-110
5 GHz WLAN Maximum Average RF Power – Ant 4a, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax SU
		Average	Average
5210	42	9.21	9.36
5290	58	9.12	9.43
5530	106	8.17	8.29
5610	122	8.10	8.24
5690	138	8.11	8.13
5775	155	9.42	9.44

Table 8-111
5 GHz WLAN Maximum Average RF Power – Ant 5b, Variant 1

5GHz (40MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11n	802.11ax SU
		Average	Average
5190	38	13.12	13.34
5230	46	16.60	16.55
5270	54	16.41	15.47
5310	62	15.53	14.94

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax SU
		Average	Average
5530	106	12.16	12.97
5610	122	14.92	15.20
5690	138	15.10	15.24
5775	155	15.24	15.28

Table 8-112
5 GHz WLAN Maximum Average RF Power – Ant 5b, Variant 2

5GHz (40MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11n	802.11ax SU
		Average	Average
5190	38	13.18	13.03
5230	46	16.58	16.62
5270	54	16.35	15.49
5310	62	15.53	15.02

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax SU
		Average	Average
5530	106	12.05	13.20
5610	122	14.91	14.93
5690	138	14.96	15.01
5775	155	15.20	15.22

8.4 WLAN Reduced Time-Averaged Conducted Powers

Table 8-113
2.4 GHz WLAN 3.5 dB Reduced Average RF Power – Ant 2a, Variant 1

2.4GHz Conducted Power [dBm]						
Freq [MHz]	Channel	IEEE Transmission Mode				
		802.11b	802.11g	802.11n	802.11ac	802.11ax
		Average	Average	Average	Average	Average
2412	1	9.07	9.07	8.97	8.49	9.06
2437	6	8.93	8.88	9.01	8.46	9.04
2462	11	9.03	8.94	9.13	8.58	9.11

Table 8-114
2.4 GHz WLAN 3.5 dB Reduced Average RF Power – Ant 2a, Variant 2

2.4GHz Conducted Power [dBm]						
Freq [MHz]	Channel	IEEE Transmission Mode				
		802.11b	802.11g	802.11n	802.11ac	802.11ax
		Average	Average	Average	Average	Average
2412	1	9.02	9.07	9.02	8.42	9.08
2437	6	8.99	9.11	8.98	8.63	8.99
2462	11	8.95	9.04	9.05	8.61	9.03

Table 8-115
2.4 GHz WLAN 3.5 dB Reduced Average RF Power – Ant 4a, Variant 1

2.4GHz Conducted Power [dBm]						
Freq [MHz]	Channel	IEEE Transmission Mode				
		802.11b	802.11g	802.11n	802.11ac	802.11ax
		Average	Average	Average	Average	Average
2412	1	10.02	9.68	9.75	9.87	9.80
2437	6	10.13	9.84	9.81	9.91	9.72
2462	11	10.35	9.82	9.66	9.83	9.80

Table 8-116
2.4 GHz WLAN 3.5 dB Reduced Average RF Power – Ant 4a, Variant 2

2.4GHz Conducted Power [dBm]						
Freq [MHz]	Channel	IEEE Transmission Mode				
		802.11b	802.11g	802.11n	802.11ac	802.11ax
		Average	Average	Average	Average	Average
2412	1	9.99	9.65	9.91	9.86	9.76
2437	6	10.18	9.87	9.92	9.90	9.84
2462	11	10.25	9.80	9.79	9.83	9.73

Table 8-117
5 GHz WLAN 5.5 dB Reduced Average RF Power – Ant 4a, Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5210	42	4.40	3.60
5290	58	3.82	3.77
5530	106	2.50	2.99
5610	122	2.61	3.15
5690	138	2.68	3.04
5775	155	4.33	4.16

Table 8-118
5 GHz WLAN 5.5 dB Reduced Average RF Power – Ant 4a, Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
			Average
5210	42	4.37	3.59
5290	58	3.80	3.66
5530	106	3.24	2.81
5610	122	3.35	3.04
5690	138	2.70	2.92
5775	155	4.75	4.10

Table 8-119
5 GHz WLAN 4 dB Reduced Average RF Power – Ant 5b, Variant 1

5GHz (40MHz) Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11n	802.11ac	802.11ax
		Average	Average	Average
5190	38	12.65	12.52	12.56
5230	46	12.84	12.60	12.66
5270	54	11.22	11.42	11.56
5310	62	12.11	12.44	11.62

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5530	106	11.30	11.05
5610	122	11.69	11.12
5690	138	11.32	11.01
5775	155	11.07	10.96

Table 8-120
5 GHz WLAN 4 dB Reduced Average RF Power – Ant 5b, Variant 2

5GHz (40MHz) Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11n	802.11ac	802.11ax
		Average	Average	Average
5190	38	11.75	12.44	12.49
5230	46	12.51	12.49	12.61
5270	54	11.05	12.46	11.75
5310	62	11.92	11.10	11.19

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5530	106	11.11	11.08
5610	122	11.24	11.16
5690	138	10.92	11.05
5775	155	11.10	10.97

8.5 WLAN Power Reduction Verification Summary

Table 8-121
WLAN Power Reduction Verification

Antenna	Mode/Band	Condition (s)	Maximum Scenario Maximum Allowed Tune Up Power [dBm]	Reduced Scenario Maximum Allowed Tune Up Power [dBm]	Maximum Target Power [dBm] (Tolerance [dB])	Reduced Target Power [dBm] (Tolerance [dB])	Maximum Measured Power [dBm]	Reduced Measured Power [dBm]	Verdict
Ant 2A	2.4 GHz WLAN	Main Band 2A ON	13.50	9.00	12.00 (+1.5/-1.5)	7.50 (+1.5/-1.5)	11.90	8.34	Pass
	2.4 GHz WLAN	Main Band 2B ON	13.50	9.00	12.00 (+1.5/-1.5)	7.50 (+1.5/-1.5)	11.90	8.20	Pass
	2.4 GHz WLAN	ULCA ON	13.50	9.00	12.00 (+1.5/-1.5)	7.50 (+1.5/-1.5)	11.90	8.70	Pass
Ant 4A	2.4 GHz WLAN	Main Band 4A ON	14.00	11.50	12.50 (+1.5/-1.5)	10.00 (+1.5/-1.5)	11.80	-	Pass
	2.4 GHz WLAN	Main Band 4B ON	14.00	11.50	12.50 (+1.5/-1.5)	10.00 (+1.5/-1.5)	11.80	9.80	Pass
	2.4 GHz WLAN	ULCA ON	14.00	11.50	12.50 (+1.5/-1.5)	10.00 (+1.5/-1.5)	11.80	9.21	Pass
Ant 4A	5 GHz WLAN	Main Band Ant 4A ON	10.50	5.00	9.00 (+1.5/-1.5)	3.50 (+1.5/-1.5)	9.23	-	Pass
	5 GHz WLAN	Main Band Ant 4B ON	10.50	5.00	9.00 (+1.5/-1.5)	3.50 (+1.5/-1.5)	9.23	4.43	Pass
	5 GHz WLAN	ULCA ON	10.50	5.00	9.00 (+1.5/-1.5)	3.50 (+1.5/-1.5)	9.23	3.93	Pass
Ant 5B	5 GHz WLAN	Main Band Ant 2A ON	17.50	13.50	16.00 (+1.5/-1.5)	12.00 (+1.5/-1.5)	14.82	11.17	Pass
	5 GHz WLAN	Main Band Ant 2B ON	17.50	13.50	16.00 (+1.5/-1.5)	12.00 (+1.5/-1.5)	14.82	11.20	Pass
	5 GHz WLAN	ULCA ON	17.50	13.50	16.00 (+1.5/-1.5)	12.00 (+1.5/-1.5)	14.82	12.20	Pass

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

8.6 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 spot checked on Variant 1 and Variant 2. The Variant with the highest reported SAR value was evaluated for the remaining WLAN configurations.

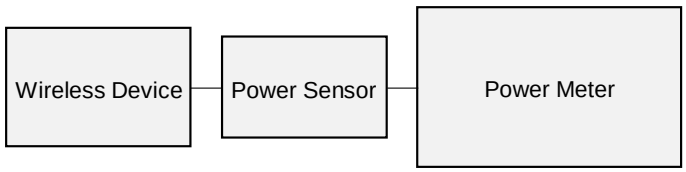

Figure 8-4
Power Measurement Setup

8.7 Bluetooth Maximum Conducted Powers

Table 8-122
Bluetooth Average RF Power – Antenna 2a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	13.16	20.701
2441	GFSK	1.0	39	13.12	20.512
2480	GFSK	1.0	78	13.13	20.559

Table 8-123
Bluetooth Average RF Power – Antenna 2a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	12.86	19.320
2441	GFSK	1.0	39	13.05	20.184
2480	GFSK	1.0	78	12.94	19.679

Table 8-124
Bluetooth Average RF Power – Antenna 4a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	13.14	20.606
2441	GFSK	1.0	39	13.57	22.751
2480	GFSK	1.0	78	13.41	21.928

Table 8-125
Bluetooth Average RF Power – Antenna 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	13.50	22.387
2441	GFSK	1.0	39	13.48	22.284
2480	GFSK	1.0	78	13.68	23.335

Table 8-126
NB UNII Average RF Power – Antenna 4a, Variant 1

Band	Frequency	Average
UNII1	5162	9.73
	5204	9.60
	5245	9.51
UNII3	5733	10.14
	5789	9.95
	5844	9.91

Table 8-127
NB UNII Average RF Power – Antenna 4a, Variant 2

Band	Frequency	Average
UNII1	5162	9.64
	5204	9.70
	5245	9.73
UNII3	5733	10.16
	5789	9.99
	5844	9.96

Table 8-128
NB UNII Average RF Power – Antenna 5b, Variant 1

Band	Frequency	Average
UNII1	5162	10.65
	5204	10.63
	5245	10.54
UNII3	5733	17.14
	5789	17.08
	5844	17.02

Table 8-129
NB UNII Average RF Power – Antenna 5b, Variant 2

Band	Frequency	Average
UNII1	5162	10.47
	5204	10.56
	5245	10.24
UNII3	5733	16.94
	5789	16.84
	5844	16.91

8.8 Bluetooth Reduced Conducted Powers

Table 8-130
Bluetooth 4 dB Reduced Average RF Power – Antenna 2a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	9.20	8.318
2441	GFSK	1.0	39	9.26	8.433
2480	GFSK	1.0	78	9.19	8.299

Table 8-131
Bluetooth 4 dB Reduced Average RF Power – Antenna 2a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	9.01	7.962
2441	GFSK	1.0	39	9.11	8.147
2480	GFSK	1.0	78	8.97	7.889

Table 8-132
Bluetooth 7 dB Reduced Average RF Power – Antenna 2a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	6.17	4.140
2441	GFSK	1.0	39	6.08	4.055
2480	GFSK	1.0	78	5.94	3.926

Table 8-133
Bluetooth 7 dB Reduced Average RF Power – Antenna 2a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	5.98	3.963
2441	GFSK	1.0	39	5.87	3.864
2480	GFSK	1.0	78	5.92	3.908

Table 8-134
Bluetooth 3 dB Reduced Average RF Power – Antenna 4a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	10.28	10.666
2441	GFSK	1.0	39	10.60	11.482
2480	GFSK	1.0	78	10.54	11.324

Table 8-135
Bluetooth 3 dB Reduced Average RF Power – Antenna 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	10.68	11.695
2441	GFSK	1.0	39	10.51	11.246
2480	GFSK	1.0	78	10.61	11.508

Table 8-136
Bluetooth 5 dB Reduced Average RF Power – Antenna 4a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	8.55	7.161
2441	GFSK	1.0	39	8.35	6.839
2480	GFSK	1.0	78	8.60	7.244

Table 8-137
Bluetooth 5 dB Reduced Average RF Power – Antenna 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	8.32	6.792
2441	GFSK	1.0	39	8.53	7.129
2480	GFSK	1.0	78	8.30	6.761

Table 8-138
Bluetooth 7 dB Reduced Average RF Power – Antenna 4a, Variant 1

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	6.56	4.529
2480	GFSK	1.0	78	6.63	4.603

Table 8-139
Bluetooth 7 dB Reduced Average RF Power – Antenna 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	6.52	4.487
2441	GFSK	1.0	39	6.61	4.581
2480	GFSK	1.0	78	6.51	4.477

Table 8-140
NB UNII 3 dB Reduced Average RF Power – Antenna 4a, Variant 1

Band	Frequency	Average
UNII1	5162	6.37
	5204	6.68
	5245	6.34
UNII3	5733	6.57
	5789	7.05
	5844	6.49

Table 8-141
NB UNII 3 dB Reduced Average RF Power – Antenna 4a, Variant 2

Band	Frequency	Average
UNII1	5162	6.97
	5204	7.38
	5245	7.04
UNII3	5733	6.79
	5789	7.01
	5844	6.53

Table 8-142
NB UNII 5 dB Reduced Average RF Power – Antenna 4a, Variant 1

Band	Frequency	Average
UNII1	5162	4.35
	5204	4.69
	5245	4.42
UNII3	5733	5.61
	5789	5.83
	5844	5.49

Table 8-143
NB UNII 5 dB Reduced Average RF Power – Antenna 4a, Variant 2

Band	Frequency	Average
UNII1	5162	4.65
	5204	4.97
	5245	4.53
UNII3	5733	5.77
	5789	5.5
	5844	5.45

Table 8-144
NB UNII 7 dB Reduced Average RF Power – Antenna 4a, Variant 1

Band	Frequency	Average
UNII1	5162	2.49
	5204	2.84
	5245	2.56
UNII3	5733	3.60
	5789	3.93
	5844	3.45

Table 8-145
NB UNII 7 dB Reduced Average RF Power – Antenna 4a, Variant 2

Band	Frequency	Average
UNII1	5162	2.46
	5204	2.76
	5245	2.43
UNII3	5733	3.77
	5789	3.48
	5844	3.34

Table 8-146
NB UNII 4 dB Reduced Average RF Power – Antenna 5b, Variant 1

Band	Frequency	Average
UNII1	5162	6.47
	5204	6.51
	5245	6.36
UNII3	5733	12.80
	5789	12.72
	5844	12.77

Table 8-147
NB UNII 4 dB Reduced Average RF Power – Antenna 5b, Variant 2

Band	Frequency	Average
UNII1	5162	6.48
	5204	6.35
	5245	6.31
UNII3	5733	12.93
	5789	13.12
	5844	12.84

Table 8-148
NB UNII 7 dB Reduced Average RF Power – Antenna 5b, Variant 1

Band	Frequency	Average
UNII1	5162	3.48
	5204	3.53
	5245	3.45
UNII3	5733	10.25
	5789	10.14
	5844	10.05

Table 8-149
NB UNII 7 dB Reduced Average RF Power – Antenna 5b, Variant 2

Band	Frequency	Average
UNII1	5162	3.40
	5204	3.48
	5245	3.29
UNII3	5733	9.80
	5789	10.08
	5844	10.11

8.9 Bluetooth Duty Cycle Plots

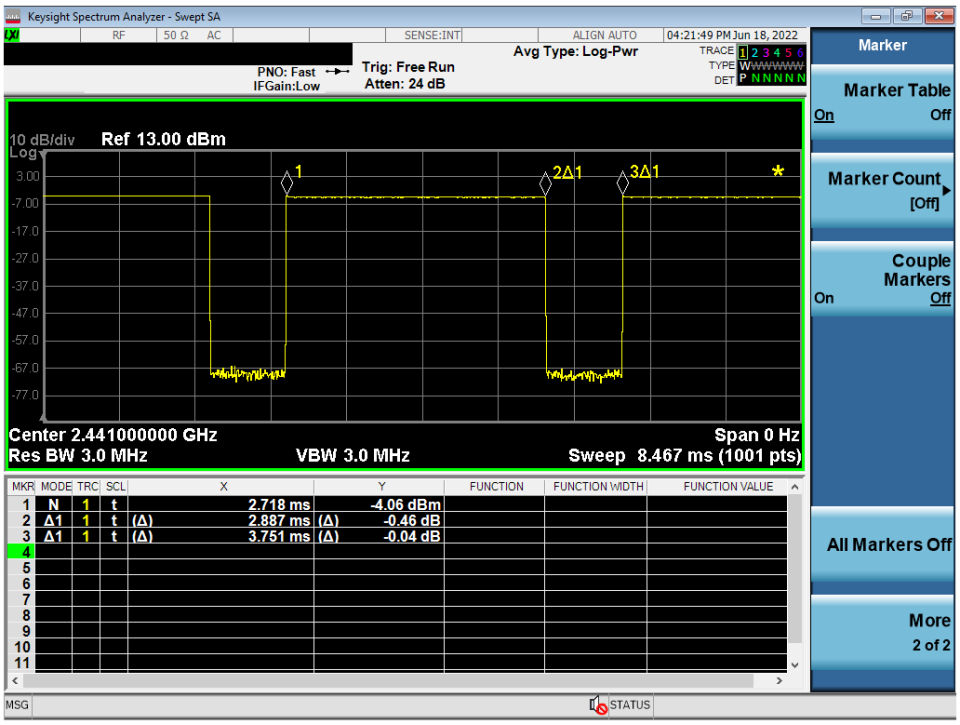

Figure 8-5
Bluetooth Transmission Plot – Antenna 2a, Variant 1

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

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.887\ ms}{3.751\ ms} * 100\% = 76.9\%$$

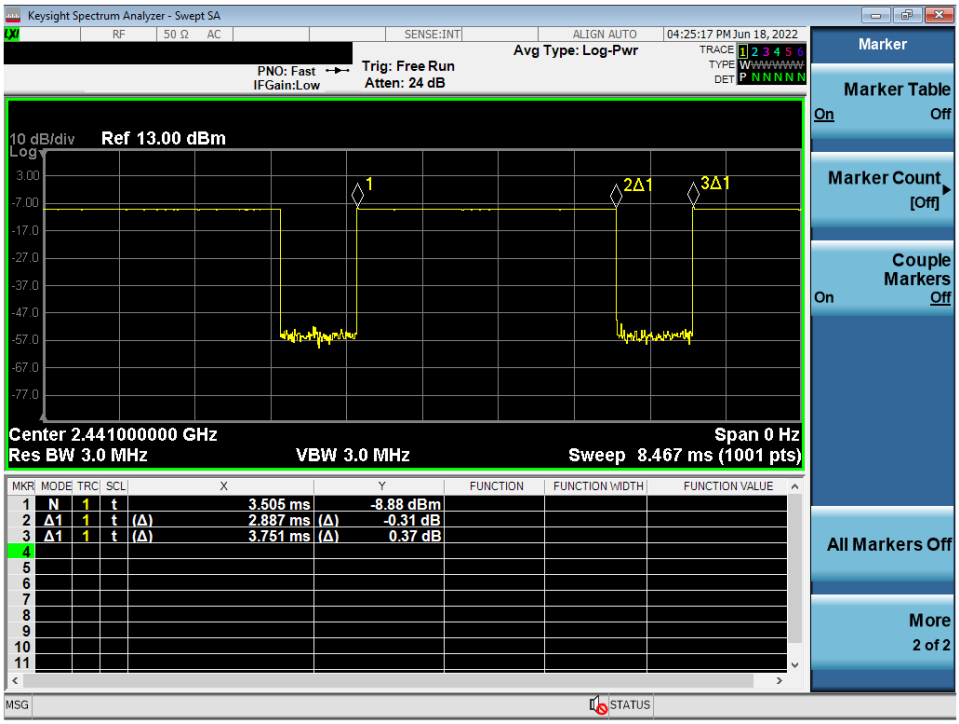

Figure 8-6
Bluetooth Transmission Plot – Antenna 2a, Variant 2

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

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.887\ ms}{3.751\ ms} * 100\% = 76.9\%$$

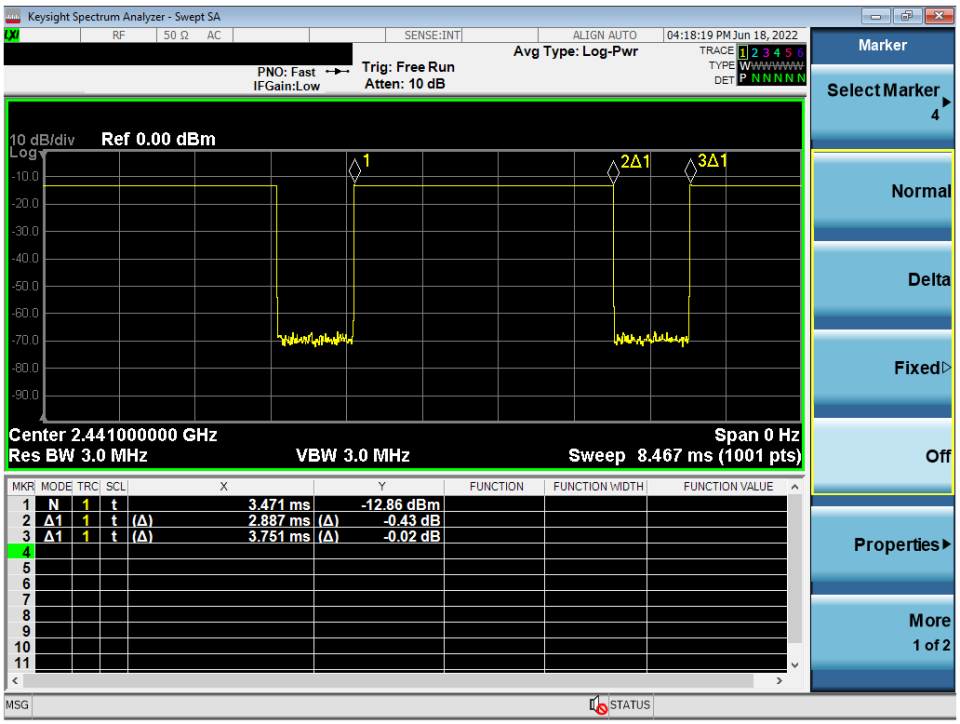

Figure 8-7
Bluetooth Transmission Plot – Antenna 4a, Variant 1

Equation 8-3
Bluetooth Duty Cycle Calculation – Antenna 4a, Variant 1

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.887\ ms}{3.751\ ms} * 100\% = 76.9\%$$

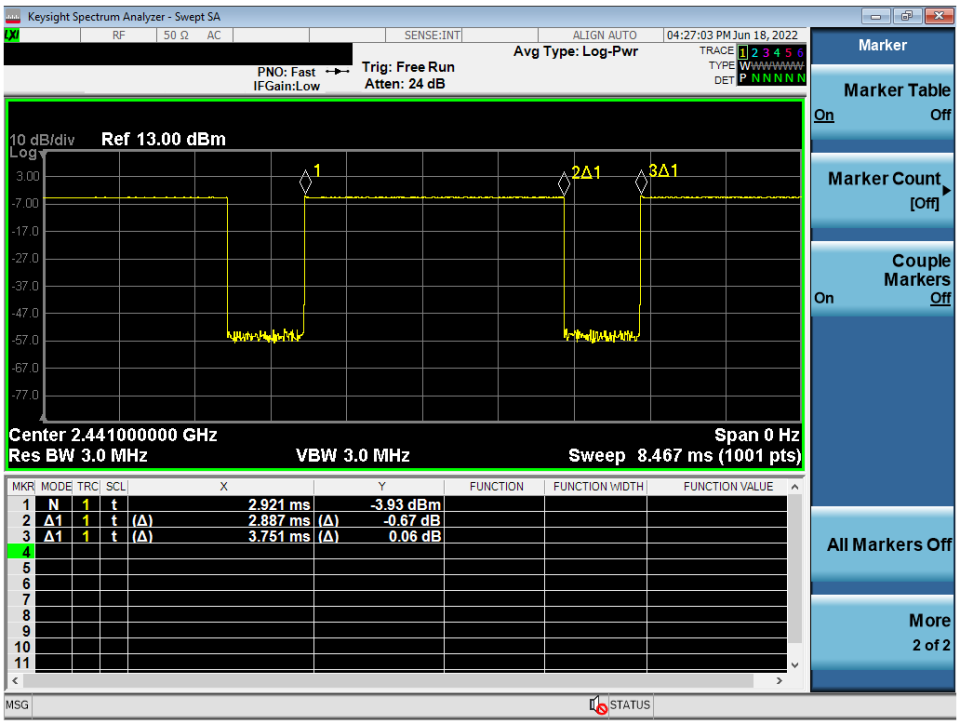

Figure 8-8
Bluetooth Transmission Plot – Antenna 4a, Variant 2

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

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.887\ ms}{3.751\ ms} * 100\% = 76.9\%$$

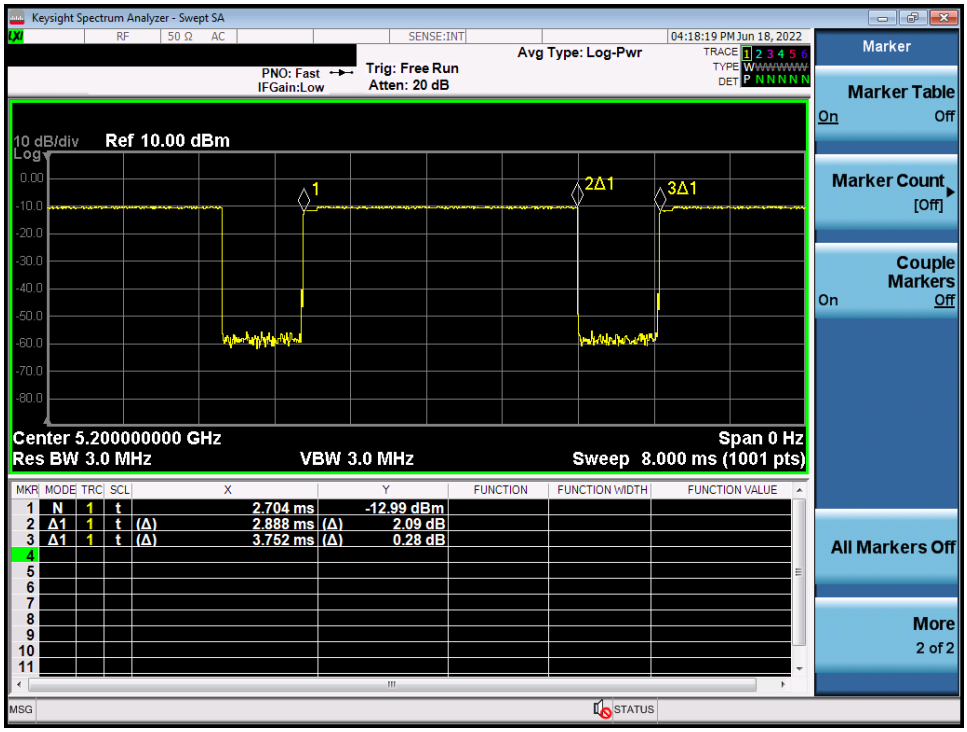

Figure 8-9
NB UNII-1 Transmission Plot – Antenna 5b, Variant 1

Equation 8-5
NB UNII-1 Duty Cycle Calculation – Antenna 5b, Variant 1

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.888\ ms}{3.752\ ms} * 100\% = 77.0\%$$

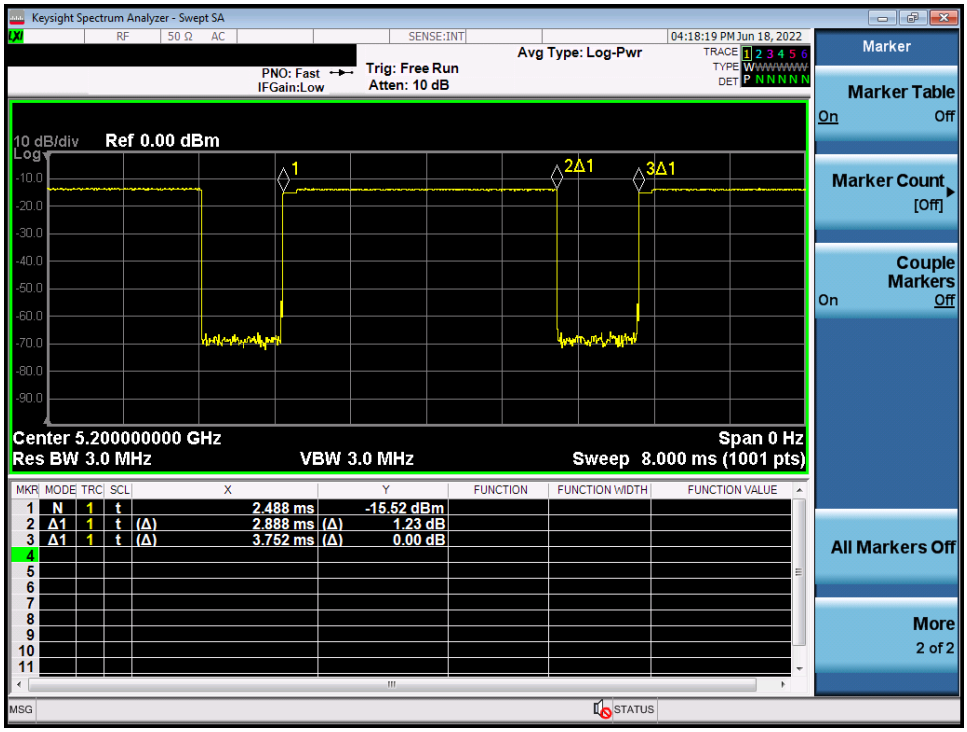

Figure 8-10
NB UNII-1 Transmission Plot – Antenna 5b, Variant 2

Equation 8-6
NB UNII-1 Duty Cycle Calculation – Antenna 5b, Variant 2

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.888\ ms}{3.752\ ms} * 100\% = 77.0\%$$

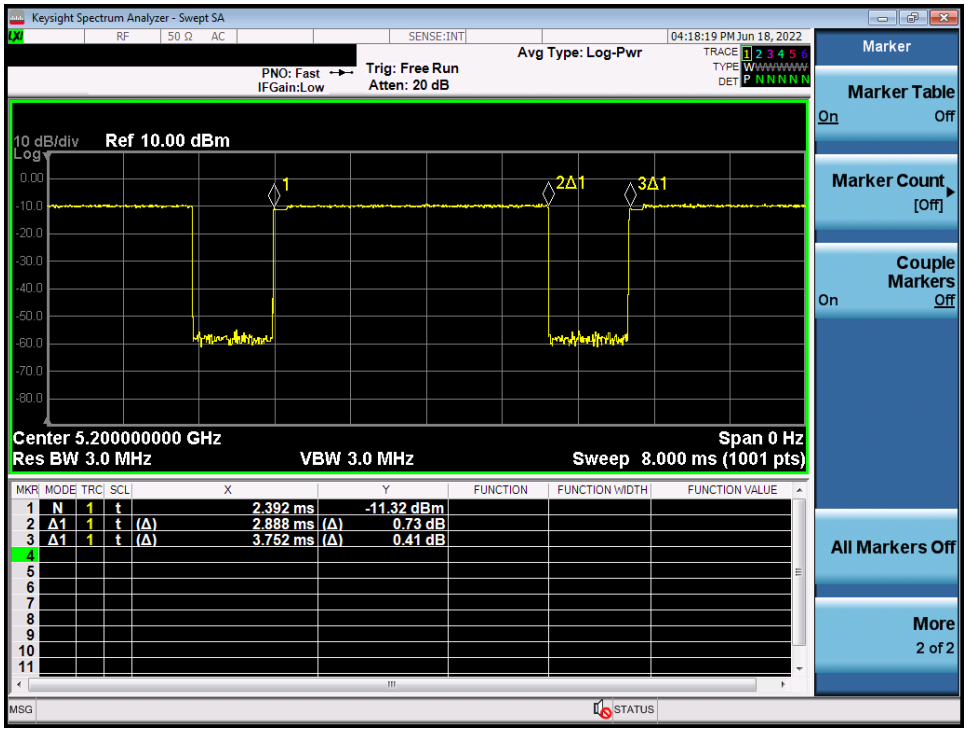

Figure 8-11
NB UNII-1 Transmission Plot – Antenna 4a, Variant 1

Equation 8-7
NB UNII-1 Duty Cycle Calculation – Antenna 4a, Variant 1

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.888\ ms}{3.752\ ms} * 100\% = 77.0\%$$

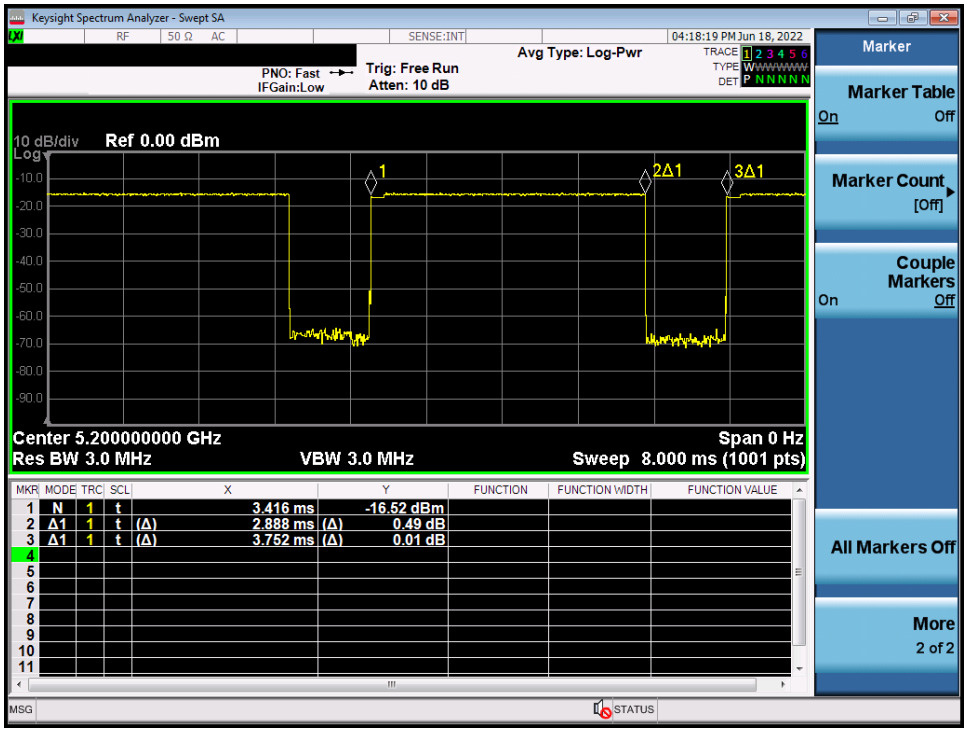

Figure 8-12
NB UNII-1 Transmission Plot – Antenna 4a, Variant 2

Equation 8-8
NB UNII-1 Duty Cycle Calculation – Antenna 4a, Variant 2

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.888\ ms}{3.752\ ms} * 100\% = 77.0\%$$

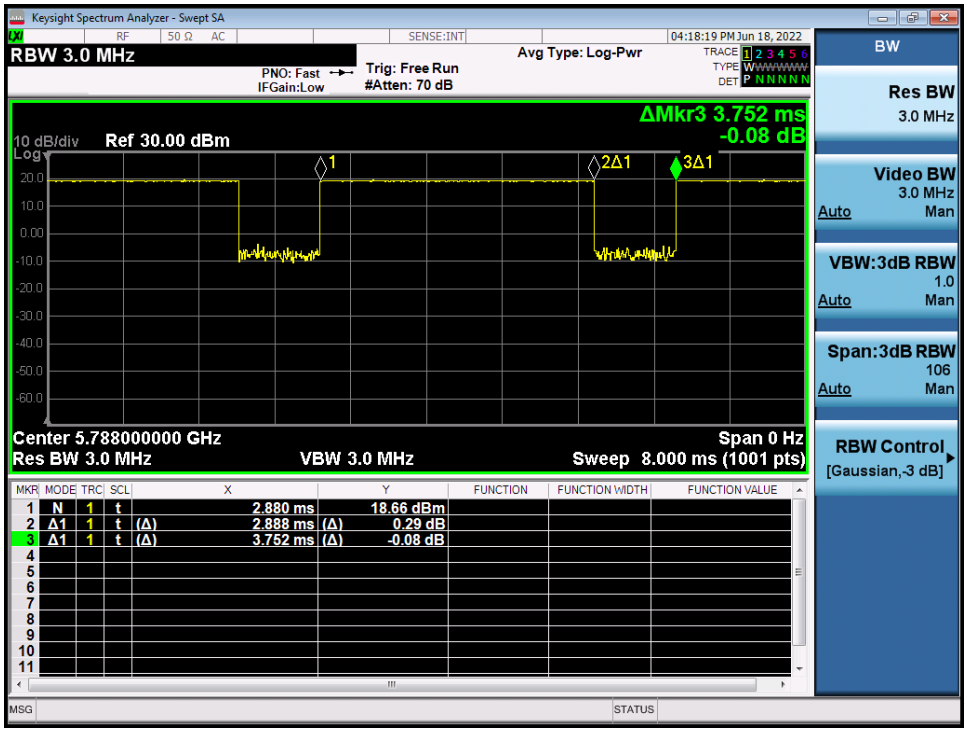

Figure 8-13
NB UNII-3 Transmission Plot – Antenna 5b, Variant 1

Equation 8-9
NB UNII-3 Duty Cycle Calculation – Antenna 5b, Variant 1

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.888\ ms}{3.752\ ms} * 100\% = 77.0\%$$

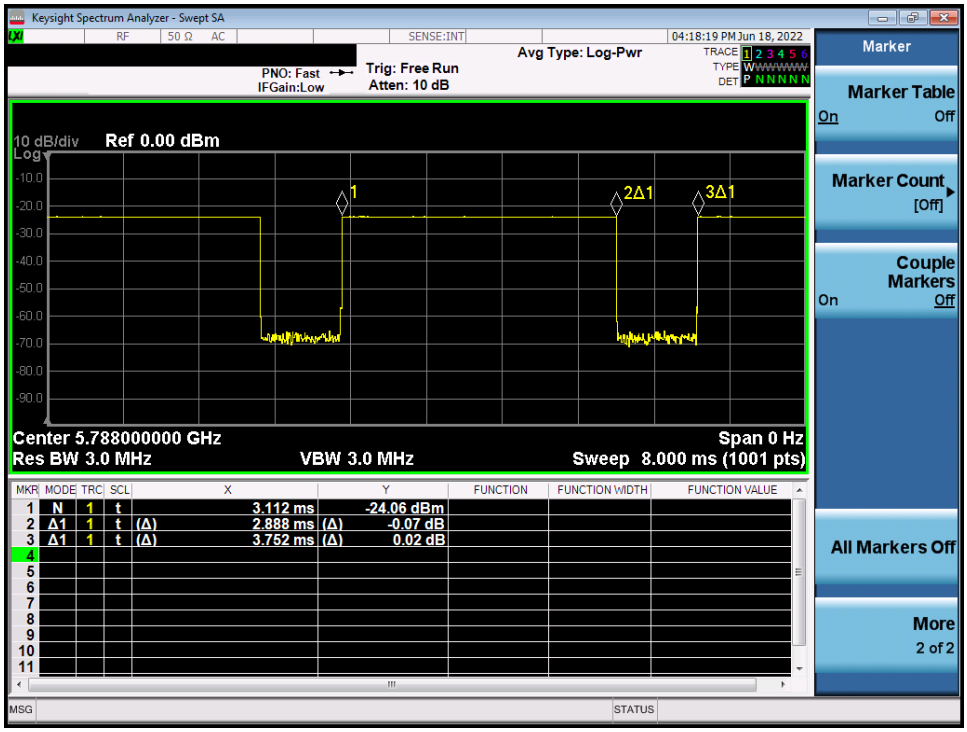

Figure 8-14
NB UNII-3 Transmission Plot – Antenna 5b, Variant 2

Equation 8-10
NB UNII-3 Duty Cycle Calculation – Antenna 5b, Variant 2

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.888\ ms}{3.752\ ms} * 100\% = 77.0\%$$

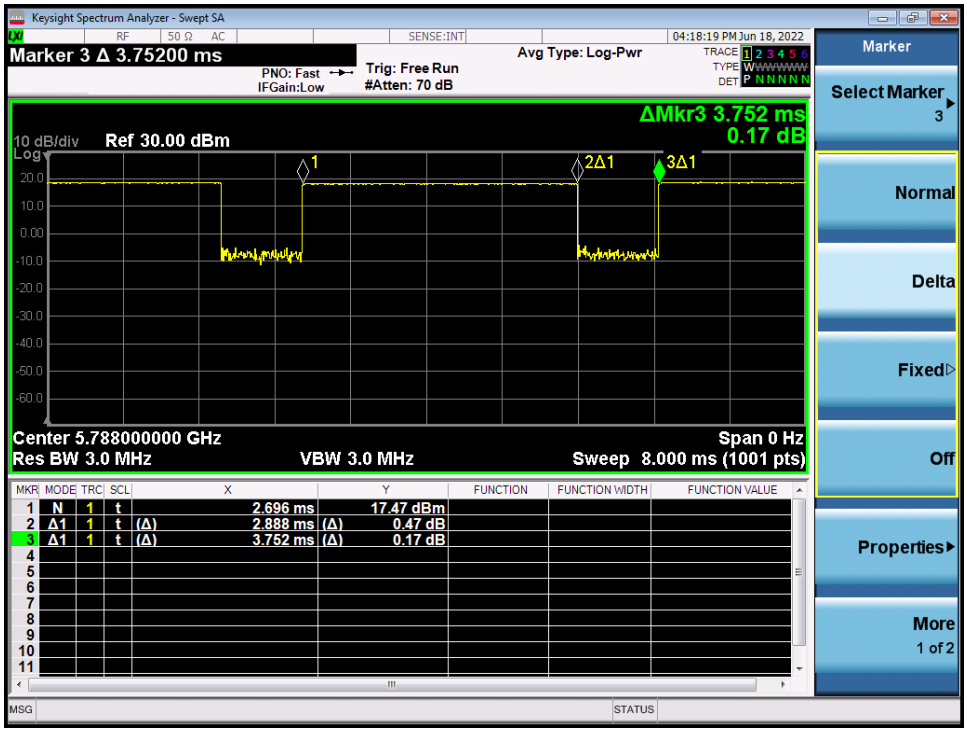

Figure 8-15
NB UNII-3 Transmission Plot – Antenna 4a, Variant 1

Equation 8-11
NB UNII-3 Duty Cycle Calculation – Antenna 4a, Variant 1

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.888\ ms}{3.752\ ms} * 100\% = 77.0\%$$

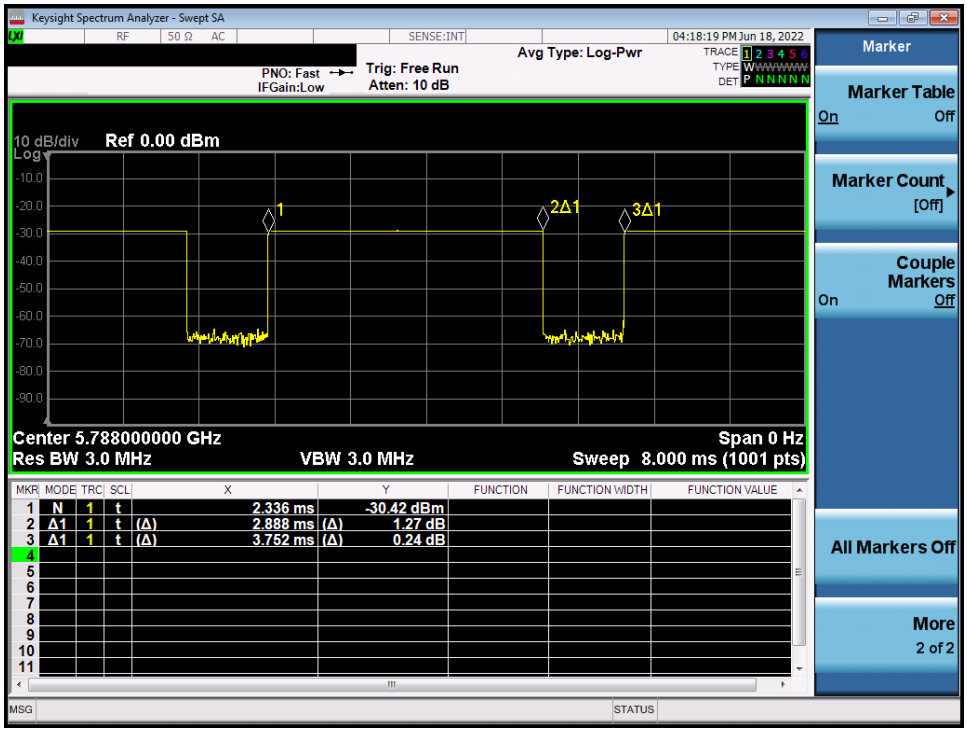

Figure 8-16
NB UNII-3 Transmission Plot – Antenna 4a, Variant 2

Equation 8-12
NB UNII-3 Duty Cycle Calculation – Antenna 4a, Variant 2

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.888\ ms}{3.752\ ms} * 100\% = 77.0\%$$

8.10 Bluetooth Power Reduction Verification Summary

Table 8-150
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 2A	2.4 GHz Bluetooth	Main Band 1 ON	14.00	10.00	12.50 (+1.5/-2)	8.50 (+1.5/-1.5)	13.24	8.50	Pass
	2.4 GHz Bluetooth	Main Band 2A/2B ON	14.00	10.00	12.50 (+1.5/-2)	8.50 (+1.5/-1.5)	13.24	8.54	Pass
	2.4 GHz Bluetooth	ULCA ON	14.00	10.00	12.50 (+1.5/-2)	8.50 (+1.5/-1.5)	13.24	5.53	Pass
	2.4 GHz Bluetooth	5GHz WLAN 5B/4A ON	14.00	10.00	12.50 (+1.5/-2)	8.50 (+1.5/-1.5)	13.24	8.49	Pass
	2.4 GHz Bluetooth	Main Band Ant 1 ON and 5GHz WLAN 5B/4A ON	14.00	10.00	12.50 (+1.5/-2)	8.50 (+1.5/-1.5)	13.24	8.55	Pass
	2.4 GHz Bluetooth	Main band Ant 2B/2A ON and 5GHz WLAN Ant 5B/4A ON	14.00	7.00	12.50 (+1.5/-2)	5.50 (+1.5/-1.5)	13.24	5.58	Pass
	2.4 GHz Bluetooth	Main band Ant 3 ON and 5GHz WLAN Ant 5B/4A ON	14.00	10.00	12.50 (+1.5/-2)	8.50 (+1.5/-1.5)	13.24	8.35	Pass
	2.4 GHz Bluetooth	Main Band Ant 4A/4B ON and 5GHz WLAN Ant 5B/4A ON	14.00	10.00	12.50 (+1.5/-2)	8.50 (+1.5/-1.5)	13.24	8.27	Pass
	2.4 GHz Bluetooth	ULCA ON and 5GHz WLAN Ant 4B/5B ON	14.00	7.00	12.50 (+1.5/-2)	5.50 (+1.5/-1.5)	13.24	5.53	Pass
Ant 4A	2.4 GHz Bluetooth	Main Band 3 ON	14.50	11.50	13.00 (+1.5/-2)	10.00 (+1.5/-1.5)	13.42	10.29	Pass
	2.4 GHz Bluetooth	Main Band 4A/4B ON	14.50	11.50	13.00 (+1.5/-2)	10.00 (+1.5/-1.5)	13.42	10.34	Pass
	2.4 GHz Bluetooth	ULCA ON	14.50	7.50	13.00 (+1.5/-2)	6.00 (+1.5/-1.5)	13.42	6.28	Pass
	2.4 GHz Bluetooth	5GHz WLAN 5B/4A ON	14.50	9.50	13.00 (+1.5/-2)	8.00 (+1.5/-1.5)	13.42	8.14	Pass
	2.4 GHz Bluetooth	Main Band Ant 1 ON and 5GHz WLAN 5B/4A ON	14.50	9.50	13.00 (+1.5/-2)	8.00 (+1.5/-1.5)	13.42	8.09	Pass
	2.4 GHz Bluetooth	Main band Ant 2A/2B ON and 5GHz WLAN Ant 5B/4A ON	14.50	9.50	13.00 (+1.5/-2)	8.00 (+1.5/-1.5)	13.42	8.03	Pass
	2.4 GHz Bluetooth	Main band Ant 3 ON and 5GHz WLAN Ant 5B/4A ON	14.50	7.50	13.00 (+1.5/-2)	6.00 (+1.5/-1.5)	13.42	6.13	Pass
	2.4 GHz Bluetooth	Main Band Ant 4A/4B ON and 5GHz WLAN Ant 5B/4A ON	14.50	7.50	13.00 (+1.5/-2)	6.00 (+1.5/-1.5)	13.42	6.19	Pass
	2.4 GHz Bluetooth	ULCA ON and 5GHz WLAN Ant 4B/5B ON	14.50	7.50	13.00 (+1.5/-2)	6.00 (+1.5/-1.5)	13.42	6.09	Pass
Ant 4A	5 GHz Bluetooth	Main Band 3 ON	11.00	8.00	9.50 (+1.5/-2)	6.50 (+1.5/-2)	9.95	6.93	Pass
	5 GHz Bluetooth	Main Band 4A/4B ON	11.00	8.00	9.50 (+1.5/-2)	6.50 (+1.5/-2)	9.95	6.98	Pass
	5 GHz Bluetooth	ULCA ON	11.00	4.00	9.50 (+1.5/-2)	2.50 (+1.5/-2)	9.95	2.77	Pass
	5 GHz Bluetooth	2.4 GHZ WLAN 2A/4A ON	11.00	6.00	9.50 (+1.5/-2)	4.50 (+1.5/-2)	9.95	4.45	Pass
	5 GHz Bluetooth	Main band Ant 1 ON and 2.4 GHZ WLAN 2A/4A ON	11.00	6.00	9.50 (+1.5/-2)	4.50 (+1.5/-2)	9.95	4.47	Pass
	5 GHz Bluetooth	Main band Ant 2A/2B ON and 2.4 GHZ WLAN 2A/4A ON	11.00	6.00	9.50 (+1.5/-2)	4.50 (+1.5/-2)	9.95	4.49	Pass
	5 GHz Bluetooth	Main band Ant 3 ON and 2.4 GHZ WLAN 2A/4A ON	11.00	4.00	9.50 (+1.5/-2)	2.50 (+1.5/-2)	9.95	2.48	Pass
	5 GHz Bluetooth	Main band Ant 4A/4B ON and 2.4 GHZ WLAN 2A/4A ON	11.00	4.00	9.50 (+1.5/-2)	2.50 (+1.5/-2)	9.95	2.52	Pass
	5 GHz Bluetooth	ULCA ON an 2.4 GHz WLAN 2A/4A ON	11.00	4.00	9.50 (+1.5/-2)	2.50 (+1.5/-2)	9.95	2.45	Pass
Ant 5B	5 GHz Bluetooth	Main Band 1 ON	18.00	14.00	16.50 (+1.5/-2)	12.50 (+1.5/-2)	16.84	13.36	Pass
	5 GHz Bluetooth	Main Band 2A/2B ON	18.00	14.00	16.50 (+1.5/-2)	12.50 (+1.5/-2)	16.84	13.49	Pass
	5 GHz Bluetooth	ULCA ON	18.00	11.00	16.50 (+1.5/-2)	9.50 (+1.5/-2)	16.84	10.14	Pass
	5 GHz Bluetooth	2.4 GHZ WLAN 2A/4A ON	18.00	14.00	16.50 (+1.5/-2)	12.50 (+1.5/-2)	16.84	13.62	Pass
	5 GHz Bluetooth	Main band Ant 1 ON and 2.4 GHZ WLAN 2A/4A ON	18.00	14.00	16.50 (+1.5/-2)	12.50 (+1.5/-2)	16.84	13.27	Pass
	5 GHz Bluetooth	Main band Ant 2A/2B ON and 2.4 GHZ WLAN 2A/4A ON	18.00	11.00	16.50 (+1.5/-2)	9.50 (+1.5/-2)	16.84	10.35	Pass
	5 GHz Bluetooth	Main band Ant 3 ON and 2.4 GHZ WLAN 2A/4A ON	18.00	14.00	16.50 (+1.5/-2)	12.50 (+1.5/-2)	16.84	13.18	Pass
	5 GHz Bluetooth	Main band Ant 4A/4B ON and 2.4 GHZ WLAN 2A/4A ON	18.00	14.00	16.50 (+1.5/-2)	12.50 (+1.5/-2)	16.84	13.16	Pass
	5 GHz Bluetooth	ULCA ON an 2.4 GHz WLAN 2A/4A ON	18.00	11.00	16.50 (+1.5/-2)	9.50 (+1.5/-2)	16.84	10.72	Pass

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

8.11 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 spot-checked on Variant 1 and Variant 2. The Variant with the highest reported SAR value was evaluated for the remaining Bluetooth configurations.
- Full power measurements were performed for Variant 1 and Variant 2 per FCC KDB Procedures 248227.

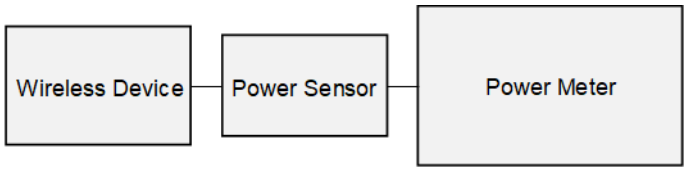

Figure 8-17
Power Measurement Setup

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
06/19/2022	750 Head	24.9	700	0.847	41.943	0.889	42.201	-4.72%	-0.61%
			710	0.855	41.814	0.890	42.149	-3.93%	-0.79%
			725	0.869	41.611	0.891	42.071	-2.47%	-1.09%
			750	0.894	41.262	0.894	41.942	0.00%	-1.62%
			770	0.912	40.990	0.895	41.838	1.90%	-2.03%
			785	0.925	40.791	0.896	41.760	3.24%	-2.32%
			800	0.938	40.593	0.897	41.682	4.57%	-2.61%
06/28/2022	750 Head	21.5	700	0.847	43.320	0.889	42.201	-4.72%	2.65%
			710	0.856	43.178	0.890	42.149	-3.82%	2.44%
			725	0.869	42.967	0.891	42.071	-2.47%	2.13%
			750	0.892	42.622	0.894	41.942	-0.22%	1.62%
			770	0.912	42.369	0.895	41.838	1.90%	1.27%
			785	0.926	42.175	0.896	41.760	3.35%	0.99%
			800	0.940	41.974	0.897	41.682	4.79%	0.70%
07/03/2022	750 Head	18.5	700	0.845	42.752	0.889	42.201	-4.95%	1.31%
			710	0.854	42.600	0.890	42.149	-4.04%	1.07%
			725	0.868	42.385	0.891	42.071	-2.58%	0.75%
			750	0.893	42.056	0.894	41.942	-0.11%	0.27%
			770	0.911	41.797	0.895	41.838	1.79%	-0.10%
			785	0.924	41.590	0.896	41.760	3.13%	-0.41%
			800	0.938	41.377	0.897	41.682	4.57%	-0.73%
07/10/2022	750 Head	21.3	695	0.845	43.051	0.889	42.227	-4.95%	1.95%
			700	0.850	42.984	0.889	42.201	-4.39%	1.86%
			710	0.858	42.850	0.890	42.149	-3.60%	1.66%
			725	0.872	42.640	0.891	42.071	-2.13%	1.35%
			750	0.896	42.282	0.894	41.942	0.22%	0.81%
			770	0.914	42.026	0.895	41.838	2.12%	0.45%
			785	0.928	41.844	0.896	41.760	3.57%	0.20%
			800	0.942	41.661	0.897	41.682	4.98%	-0.05%
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%
07/22/2022	750 Head	21.4	680	0.887	40.536	0.888	42.305	-0.11%	-4.18%
			695	0.892	40.492	0.889	42.227	0.34%	-4.11%
			700	0.893	40.479	0.889	42.201	0.45%	-4.08%
			710	0.896	40.449	0.890	42.149	0.67%	-4.03%
			725	0.901	40.405	0.891	42.071	1.12%	-3.96%
			750	0.910	40.333	0.894	41.942	1.79%	-3.84%
			770	0.917	40.285	0.895	41.838	2.46%	-3.71%
			785	0.922	40.251	0.896	41.760	2.90%	-3.61%
			800	0.928	40.203	0.897	41.682	3.46%	-3.55%
06/22/2022	835 Head	20.0	815	0.855	40.157	0.898	41.594	-4.79%	-3.45%
			820	0.860	40.093	0.899	41.578	-4.34%	-3.57%
			835	0.874	39.899	0.900	41.500	-2.89%	-3.86%
			850	0.888	39.719	0.916	41.500	-3.06%	-4.29%
06/24/2022	835 Head	24.4	815	0.858	39.842	0.898	41.594	-4.45%	-4.21%
			820	0.862	39.786	0.899	41.578	-4.12%	-4.31%
			835	0.874	39.620	0.900	41.500	-2.89%	-4.53%
			850	0.887	39.435	0.916	41.500	-3.17%	-4.98%
06/30/2022	835 Head	21.8	815	0.878	41.667	0.898	41.594	-2.23%	0.18%
			820	0.883	41.605	0.899	41.578	-1.78%	0.06%
			835	0.898	41.422	0.900	41.500	-0.22%	-0.19%
			850	0.912	41.246	0.916	41.500	-0.44%	-0.61%
07/10/2022	835 Head	21.7	815	0.879	41.306	0.898	41.594	-2.12%	-0.69%
			820	0.884	41.240	0.899	41.578	-1.67%	-0.81%
			835	0.899	41.042	0.900	41.500	-0.11%	-1.10%
			850	0.913	40.846	0.916	41.500	-0.33%	-1.58%
09/08/2022	835 Head	21.3	815	0.879	42.303	0.898	41.594	-2.12%	1.70%
			820	0.884	42.239	0.899	41.578	-1.67%	1.59%
			835	0.898	42.054	0.900	41.500	-0.22%	1.33%
			850	0.912	41.865	0.916	41.500	-0.44%	0.88%

Table 9-2
Measured Tissue Properties (Cont.)

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
07/18/2022	1750 Head	20.1	1710	1.316	38.449	1.348	40.142	-2.37%	-4.22%
			1720	1.322	38.435	1.354	40.126	-2.36%	-4.21%
			1745	1.338	38.384	1.368	40.087	-2.19%	-4.25%
			1750	1.341	38.373	1.371	40.079	-2.19%	-4.26%
			1770	1.353	38.334	1.383	40.047	-2.17%	-4.28%
			1790	1.364	38.293	1.394	40.016	-2.15%	-4.31%
07/20/2022	1750 Head	20.5	1710	1.320	38.739	1.348	40.142	-2.08%	-3.50%
			1720	1.326	38.726	1.354	40.126	-2.07%	-3.49%
			1745	1.340	38.690	1.368	40.087	-2.05%	-3.48%
			1750	1.343	38.682	1.371	40.079	-2.04%	-3.49%
			1770	1.355	38.648	1.383	40.047	-2.02%	-3.49%
			1790	1.367	38.608	1.394	40.016	-1.94%	-3.52%
07/07/2022	1900 Head	19.9	1850	1.379	38.548	1.400	40.000	-1.50%	-3.63%
			1860	1.384	38.532	1.400	40.000	-1.14%	-3.67%
			1880	1.396	38.501	1.400	40.000	-0.29%	-3.75%
			1900	1.408	38.480	1.400	40.000	0.57%	-3.80%
			1905	1.411	38.476	1.400	40.000	0.79%	-3.81%
			1910	1.413	38.472	1.400	40.000	0.93%	-3.82%
07/12/2022	1900 Head	20.5	1850	1.417	38.353	1.400	40.000	1.21%	-4.12%
			1860	1.423	38.335	1.400	40.000	1.64%	-4.16%
			1880	1.435	38.309	1.400	40.000	2.50%	-4.23%
			1900	1.446	38.290	1.400	40.000	3.29%	-4.28%
			1905	1.449	38.285	1.400	40.000	3.50%	-4.29%
			1910	1.452	38.278	1.400	40.000	3.71%	-4.31%
07/14/2022	2450 Head	21.3	2300	1.669	39.959	1.670	39.500	-0.06%	1.16%
			2310	1.676	39.937	1.679	39.480	-0.18%	1.16%
			2320	1.684	39.912	1.687	39.460	-0.18%	1.15%
			2400	1.741	39.782	1.756	39.289	-0.85%	1.25%
			2450	1.780	39.700	1.800	39.200	-1.11%	1.28%
			2480	1.801	39.653	1.833	39.162	-1.75%	1.25%
			2500	1.816	39.613	1.855	39.136	-2.10%	1.22%
			2510	1.824	39.597	1.866	39.123	-2.25%	1.21%
			2535	1.843	39.564	1.893	39.092	-2.64%	1.21%
			2550	1.855	39.545	1.909	39.073	-2.83%	1.21%
			2560	1.863	39.529	1.920	39.060	-2.97%	1.20%
			2600	1.897	39.463	1.964	39.009	-3.41%	1.16%
			2650	1.939	39.388	2.018	38.945	-3.91%	1.14%
			2680	1.963	39.329	2.051	38.907	-4.29%	1.08%
			2700	1.979	39.285	2.073	38.882	-4.53%	1.04%
06/17/2022	2450 Head	21.9	2300	1.713	39.157	1.670	39.500	2.57%	-0.87%
			2310	1.720	39.137	1.679	39.480	2.44%	-0.87%
			2320	1.728	39.119	1.687	39.460	2.43%	-0.86%
			2400	1.785	39.008	1.756	39.289	1.65%	-0.72%
			2450	1.824	38.957	1.800	39.200	1.33%	-0.62%
			2480	1.845	38.910	1.833	39.162	0.65%	-0.64%
			2500	1.861	38.877	1.855	39.136	0.32%	-0.66%
			2510	1.869	38.864	1.866	39.123	0.16%	-0.66%
			2535	1.889	38.835	1.893	39.092	-0.21%	-0.66%
			2550	1.901	38.816	1.909	39.073	-0.42%	-0.66%
			2560	1.908	38.799	1.920	39.060	-0.63%	-0.67%
			2600	1.941	38.732	1.964	39.009	-1.17%	-0.71%
			2650	1.982	38.655	2.018	38.945	-1.78%	-0.74%
			2680	2.005	38.599	2.051	38.907	-2.24%	-0.79%
			2700	2.022	38.560	2.073	38.882	-2.46%	-0.83%
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%

Table 9-3
Measured Tissue Properties (Cont.)

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
07/14/2022	2450 Head	20.9	2300	1.714	38.999	1.670	39.500	2.63%	-1.27%
			2310	1.721	38.985	1.679	39.480	2.50%	-1.25%
			2320	1.729	38.972	1.687	39.460	2.49%	-1.24%
			2400	1.788	38.875	1.756	39.289	1.82%	-1.05%
			2450	1.829	38.813	1.800	39.200	1.61%	-0.99%
			2480	1.849	38.766	1.833	39.162	0.87%	-1.01%
			2500	1.865	38.725	1.855	39.136	0.54%	-1.05%
			2510	1.874	38.708	1.866	39.123	0.43%	-1.06%
			2535	1.895	38.679	1.893	39.092	0.11%	-1.06%
			2550	1.907	38.659	1.909	39.073	-0.10%	-1.06%
			2560	1.914	38.643	1.920	39.060	-0.31%	-1.07%
			2600	1.946	38.562	1.964	39.009	-0.92%	-1.15%
			2650	1.986	38.481	2.018	38.945	-1.59%	-1.19%
			2680	2.008	38.414	2.051	38.907	-2.10%	-1.27%
			2700	2.025	38.373	2.073	38.882	-2.32%	-1.31%
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%
07/24/2022	2450 Head	21.6	2300	1.692	39.245	1.670	39.500	1.32%	-0.65%
			2310	1.700	39.227	1.679	39.480	1.25%	-0.64%
			2320	1.708	39.213	1.687	39.460	1.24%	-0.63%
			2400	1.768	39.117	1.756	39.289	0.68%	-0.44%
			2450	1.807	39.066	1.800	39.200	0.39%	-0.34%
			2480	1.830	39.014	1.833	39.162	-0.16%	-0.38%
			2500	1.845	38.974	1.855	39.136	-0.54%	-0.41%
			2510	1.853	38.957	1.866	39.123	-0.70%	-0.42%
			2535	1.873	38.923	1.893	39.092	-1.06%	-0.43%
			2550	1.885	38.905	1.909	39.073	-1.26%	-0.43%
			2560	1.893	38.890	1.920	39.060	-1.41%	-0.44%
			2600	1.924	38.822	1.964	39.009	-2.04%	-0.48%
			2650	1.963	38.747	2.018	38.945	-2.73%	-0.51%
			2680	1.987	38.693	2.051	38.907	-3.12%	-0.55%
			2700	2.003	38.662	2.073	38.882	-3.38%	-0.57%
09/13/2022	2450 Head	21.9	2300	1.722	38.065	1.670	39.500	3.11%	-3.63%
			2310	1.729	38.050	1.679	39.480	2.98%	-3.62%
			2320	1.735	38.038	1.687	39.460	2.85%	-3.60%
			2400	1.796	37.909	1.756	39.289	2.28%	-3.51%
			2450	1.830	37.822	1.800	39.200	1.67%	-3.52%
			2480	1.853	37.767	1.833	39.162	1.09%	-3.56%
			2500	1.868	37.747	1.855	39.136	0.70%	-3.55%
			2510	1.876	37.744	1.866	39.123	0.54%	-3.52%
			2535	1.896	37.715	1.893	39.092	0.16%	-3.52%
			2550	1.908	37.682	1.909	39.073	-0.05%	-3.56%
			2560	1.915	37.657	1.920	39.060	-0.26%	-3.59%
			2600	1.947	37.596	1.964	39.009	-0.87%	-3.62%
			2650	1.988	37.521	2.018	38.945	-1.49%	-3.66%
			2680	2.012	37.458	2.051	38.907	-1.90%	-3.72%
			2700	2.029	37.432	2.073	38.882	-2.12%	-3.73%

Table 9-4
Measured Tissue Properties (Cont.)

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
09/13/2022	2450 Head	21.9	2300	1.722	38.065	1.670	39.500	3.11%	-3.63%
			2310	1.729	38.050	1.679	39.480	2.98%	-3.62%
			2320	1.735	38.038	1.687	39.460	2.85%	-3.60%
			2400	1.796	37.909	1.756	39.289	2.28%	-3.51%
			2450	1.830	37.822	1.800	39.200	1.67%	-3.52%
			2480	1.853	37.767	1.833	39.162	1.09%	-3.56%
			2500	1.868	37.747	1.855	39.136	0.70%	-3.55%
			2510	1.876	37.744	1.866	39.123	0.54%	-3.52%
			2535	1.896	37.715	1.893	39.092	0.16%	-3.52%
			2550	1.908	37.682	1.909	39.073	-0.05%	-3.56%
			2560	1.915	37.657	1.920	39.060	-0.26%	-3.59%
			2600	1.947	37.596	1.964	39.009	-0.87%	-3.62%
			2650	1.988	37.521	2.018	38.945	-1.49%	-3.66%
			2680	2.012	37.458	2.051	38.907	-1.90%	-3.72%
			2700	2.029	37.432	2.073	38.882	-2.12%	-3.73%
06/24/2022	3600 Head	20.7	3300	2.744	37.406	2.708	38.157	1.33%	-1.97%
			3350	2.782	37.330	2.759	38.100	0.83%	-2.02%
			3450	2.859	37.208	2.861	37.986	-0.07%	-2.05%
			3500	2.893	37.146	2.913	37.929	-0.69%	-2.06%
			3550	2.935	37.080	2.964	37.871	-0.98%	-2.09%
			3560	2.942	37.074	2.974	37.860	-1.08%	-2.08%
			3600	2.969	37.008	3.015	37.814	-1.53%	-2.13%
			3650	3.010	36.946	3.066	37.757	-1.83%	-2.15%
			3690	3.039	36.888	3.107	37.711	-2.19%	-2.18%
			3700	3.047	36.879	3.117	37.700	-2.25%	-2.18%
			3750	3.087	36.828	3.169	37.643	-2.59%	-2.17%
			3900	3.212	36.642	3.323	37.471	-3.34%	-2.21%
			3930	3.241	36.620	3.353	37.437	-3.34%	-2.18%
			4100	3.387	36.437	3.528	37.243	-4.00%	-2.16%
			4150	3.435	36.403	3.579	37.186	-4.02%	-2.11%
06/30/2022	3600 Head	19.9	3300	2.765	37.558	2.708	38.157	2.10%	-1.57%
			3350	2.804	37.467	2.759	38.100	1.63%	-1.66%
			3450	2.880	37.323	2.861	37.986	0.66%	-1.75%
			3500	2.923	37.255	2.913	37.929	0.34%	-1.78%
			3550	2.956	37.197	2.964	37.871	-0.27%	-1.78%
			3560	2.966	37.170	2.974	37.860	-0.27%	-1.82%
			3600	3.000	37.126	3.015	37.814	-0.50%	-1.82%
			3650	3.037	37.071	3.066	37.757	-0.95%	-1.82%
			3690	3.073	36.997	3.107	37.711	-1.09%	-1.89%
			3700	3.082	36.981	3.117	37.700	-1.12%	-1.91%
			3750	3.121	36.938	3.169	37.643	-1.51%	-1.87%
			3900	3.254	36.747	3.323	37.471	-2.08%	-1.93%
			3930	3.273	36.735	3.353	37.437	-2.39%	-1.88%
			4100	3.430	36.494	3.528	37.243	-2.78%	-2.01%
			4150	3.474	36.457	3.579	37.186	-2.93%	-1.96%
07/27/2022	3600 Head	20.3	3300	2.773	37.257	2.708	38.157	2.40%	-2.36%
			3350	2.814	37.183	2.759	38.100	1.99%	-2.41%
			3450	2.890	37.048	2.861	37.986	1.01%	-2.47%
			3500	2.927	36.959	2.913	37.929	0.48%	-2.56%
			3550	2.973	36.898	2.964	37.871	0.30%	-2.57%
			3560	2.980	36.889	2.974	37.860	0.20%	-2.56%
			3600	3.011	36.833	3.015	37.814	-0.13%	-2.59%
			3650	3.051	36.764	3.066	37.757	-0.49%	-2.63%
			3690	3.082	36.710	3.107	37.711	-0.80%	-2.65%
			3700	3.091	36.694	3.117	37.700	-0.83%	-2.67%
			3750	3.132	36.649	3.169	37.643	-1.17%	-2.64%
			3900	3.259	36.452	3.323	37.471	-1.93%	-2.72%
			3930	3.289	36.417	3.353	37.437	-1.91%	-2.72%
			4100	3.440	36.219	3.528	37.243	-2.49%	-2.75%
			4150	3.490	36.132	3.579	37.186	-2.49%	-2.83%

Table 9-5
Measured Tissue Properties (Cont.)

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
07/25/2022	5200-5800 Head	20.8	5180	4.546	35.417	4.635	36.009	-1.92%	-1.64%
			5190	4.561	35.405	4.645	35.998	-1.81%	-1.65%
			5200	4.572	35.385	4.655	35.986	-1.78%	-1.67%
			5210	4.582	35.357	4.666	35.975	-1.80%	-1.72%
			5220	4.593	35.332	4.676	35.963	-1.78%	-1.75%
			5240	4.617	35.298	4.696	35.940	-1.68%	-1.79%
			5250	4.630	35.273	4.706	35.929	-1.61%	-1.83%
			5260	4.641	35.252	4.717	35.917	-1.61%	-1.85%
			5270	4.654	35.239	4.727	35.906	-1.54%	-1.86%
			5280	4.664	35.230	4.737	35.894	-1.54%	-1.85%
			5290	4.676	35.218	4.748	35.883	-1.52%	-1.85%
			5300	4.685	35.198	4.758	35.871	-1.53%	-1.88%
			5310	4.694	35.176	4.768	35.860	-1.55%	-1.91%
			5320	4.705	35.154	4.778	35.849	-1.53%	-1.94%
			5500	4.907	34.840	4.963	35.643	-1.13%	-2.25%
			5510	4.920	34.819	4.973	35.632	-1.07%	-2.28%
			5520	4.931	34.791	4.983	35.620	-1.04%	-2.33%
			5530	4.943	34.767	4.994	35.609	-1.02%	-2.36%
			5540	4.953	34.746	5.004	35.597	-1.02%	-2.39%
			5550	4.964	34.737	5.014	35.586	-1.00%	-2.39%
			5560	4.977	34.733	5.024	35.574	-0.94%	-2.36%
			5580	5.003	34.705	5.045	35.551	-0.83%	-2.38%
			5600	5.024	34.653	5.065	35.529	-0.81%	-2.47%
			5610	5.035	34.626	5.076	35.518	-0.81%	-2.51%
			5620	5.047	34.599	5.086	35.506	-0.77%	-2.55%
			5640	5.071	34.572	5.106	35.483	-0.69%	-2.57%
			5660	5.093	34.553	5.127	35.460	-0.66%	-2.56%
			5670	5.106	34.537	5.137	35.449	-0.60%	-2.57%
			5680	5.121	34.520	5.147	35.437	-0.51%	-2.59%
			5690	5.133	34.501	5.158	35.426	-0.48%	-2.61%
			5700	5.141	34.480	5.168	35.414	-0.52%	-2.64%
			5710	5.150	34.464	5.178	35.403	-0.54%	-2.65%
			5720	5.163	34.439	5.188	35.391	-0.48%	-2.69%
			5745	5.192	34.388	5.214	35.363	-0.42%	-2.78%
			5750	5.197	34.377	5.219	35.357	-0.42%	-2.77%
			5755	5.204	34.367	5.224	35.351	-0.38%	-2.78%
			5765	5.217	34.352	5.234	35.340	-0.32%	-2.80%
			5775	5.231	34.342	5.245	35.329	-0.27%	-2.79%
			5785	5.244	34.334	5.255	35.317	-0.21%	-2.78%
			5795	5.255	34.316	5.265	35.305	-0.19%	-2.80%
			5800	5.259	34.307	5.270	35.300	-0.21%	-2.81%
			5800	5.259	34.307	5.270	35.300	-0.21%	-2.81%
			5805	5.264	34.298	5.275	35.294	-0.21%	-2.82%
			5825	5.286	34.258	5.296	35.271	-0.19%	-2.87%
			5835	5.296	34.234	5.305	35.230	-0.17%	-2.83%
			5845	5.306	34.208	5.315	35.210	-0.17%	-2.85%
			5855	5.316	34.194	5.325	35.197	-0.17%	-2.85%
			5865	5.329	34.179	5.336	35.190	-0.13%	-2.87%
			5865	5.329	34.179	5.336	35.190	-0.13%	-2.87%
			5865	5.329	34.179	5.336	35.190	-0.13%	-2.87%
			5865	5.329	34.179	5.336	35.190	-0.13%	-2.87%
			5875	5.343	34.169	5.347	35.183	-0.07%	-2.88%
			5885	5.356	34.156	5.357	35.177	-0.02%	-2.90%
			5905	5.379	34.125	5.379	35.163	0.00%	-2.95%
08/11/2022	5200-5800 Head	21.6	5180	4.507	36.082	4.635	36.009	-2.76%	0.20%
			5190	4.519	36.054	4.645	35.998	-2.71%	0.16%
			5200	4.529	36.029	4.655	35.986	-2.71%	0.12%
			5210	4.542	36.012	4.666	35.975	-2.66%	0.10%
			5220	4.554	35.997	4.676	35.963	-2.61%	0.09%
			5240	4.580	35.972	4.696	35.940	-2.47%	0.09%
			5250	4.589	35.953	4.706	35.929	-2.49%	0.07%
			5260	4.597	35.936	4.717	35.917	-2.54%	0.05%
			5270	4.607	35.916	4.727	35.906	-2.54%	0.03%
			5280	4.615	35.895	4.737	35.894	-2.58%	0.00%
			5290	4.628	35.873	4.748	35.883	-2.53%	-0.03%
			5300	4.639	35.850	4.758	35.871	-2.50%	-0.06%
			5310	4.651	35.825	4.768	35.860	-2.45%	-0.10%
			5320	4.665	35.803	4.778	35.849	-2.37%	-0.13%
			5500	4.873	35.499	4.963	35.643	-1.81%	-0.40%
			5510	4.886	35.487	4.973	35.632	-1.75%	-0.41%
			5520	4.899	35.477	4.983	35.620	-1.69%	-0.40%
			5530	4.913	35.466	4.994	35.609	-1.62%	-0.40%
			5540	4.925	35.451	5.004	35.597	-1.58%	-0.41%
			5550	4.937	35.431	5.014	35.586	-1.54%	-0.44%
			5560	4.950	35.413	5.024	35.574	-1.47%	-0.45%
			5580	4.971	35.389	5.045	35.551	-1.47%	-0.46%
			5600	4.993	35.345	5.065	35.529	-1.42%	-0.52%
			5610	5.006	35.326	5.076	35.518	-1.38%	-0.54%
			5620	5.018	35.312	5.086	35.506	-1.34%	-0.55%
			5640	5.043	35.292	5.106	35.483	-1.23%	-0.54%
			5660	5.061	35.266	5.127	35.460	-1.29%	-0.55%
			5670	5.067	35.240	5.137	35.449	-1.36%	-0.59%
			5680	5.078	35.218	5.147	35.437	-1.34%	-0.62%
			5690	5.092	35.196	5.158	35.426	-1.28%	-0.65%
			5700	5.105	35.172	5.168	35.414	-1.22%	-0.68%
			5710	5.115	35.155	5.178	35.403	-1.22%	-0.70%
			5720	5.124	35.146	5.188	35.391	-1.23%	-0.69%
			5745	5.151	35.096	5.214	35.363	-1.21%	-0.76%
			5750	5.157	35.085	5.219	35.357	-1.19%	-0.77%
			5755	5.161	35.072	5.224	35.351	-1.21%	-0.79%
			5765	5.172	35.055	5.234	35.340	-1.18%	-0.81%
			5775	5.183	35.032	5.245	35.329	-1.18%	-0.84%
			5785	5.196	35.006	5.255	35.317	-1.12%	-0.88%
			5795	5.207	34.991	5.265	35.305	-1.10%	-0.89%
			5800	5.213	34.987	5.270	35.300	-1.08%	-0.89%
			5800	5.213	34.987	5.270	35.300	-1.08%	-0.89%
			5805	5.218	34.981	5.275	35.294	-1.08%	-0.89%
			5825	5.239	34.950	5.296	35.271	-1.08%	-0.91%
			5835	5.250	34.936	5.305	35.230	-1.04%	-0.83%
			5845	5.261	34.921	5.315	35.210	-1.02%	-0.82%
			5855	5.271	34.900	5.325	35.197	-1.01%	-0.84%
			5865	5.284	34.877	5.336	35.190	-0.97%	-0.89%
			5865	5.284	34.877	5.336	35.190	-0.97%	-0.89%
			5865	5.284	34.877	5.336	35.190	-0.97%	-0.89%
			5865	5.284	34.877	5.336	35.190	-0.97%	-0.89%
			5875	5.296	34.855	5.347	35.183	-0.95%	-0.93%
			5885	5.308	34.830	5.357	35.177	-0.91%	-0.99%
			5905	5.331	34.789	5.379	35.163	-0.89%	-1.06%

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

Note: 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 9-6
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	06/19/2022	20.8	23.2	0.20	1094	7499	1.770	8.47	8.850	4.49%
AM12	750	HEAD	06/28/2022	24.7	21.4	0.20	1094	7499	1.760	8.47	8.800	3.90%
AM12	750	HEAD	07/03/2022	20.0	18.5	0.20	1094	7499	1.810	8.47	9.050	6.85%
AM12	750	HEAD	07/10/2022	20.1	19.8	0.20	1094	7499	1.760	8.47	8.800	3.90%
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	07/22/2022	23.3	21.1	0.20	1057	7499	1.620	8.51	8.100	-4.82%
AM14	835	HEAD	06/22/2022	20.3	21.0	0.20	4d040	7674	2.060	9.79	10.300	5.21%
AM14	835	HEAD	06/24/2022	22.6	22.5	0.20	4d108	7674	1.980	9.70	9.900	2.06%
AM14	835	HEAD	06/30/2022	22.3	21.5	0.20	4d108	7674	2.050	9.70	10.250	5.67%
AM14	835	HEAD	07/10/2022	21.2	21.0	0.20	4d040	7674	1.960	9.79	9.800	0.10%
AM12	835	HEAD	09/08/2022	22.5	19.4	0.20	4d040	7499	2.010	9.79	10.050	2.66%
AM8	1750	HEAD	07/18/2022	19.7	19.2	0.10	1104	7546	3.530	35.70	35.300	-1.12%
AM8	1750	HEAD	07/20/2022	21.1	20.7	0.10	1104	7546	3.420	35.70	34.200	-4.20%
AM6	1900	HEAD	07/07/2022	22.1	19.4	0.10	5d181	7532	4.270	40.10	42.700	6.48%
AM6	1900	HEAD	07/12/2022	22.3	19.1	0.10	5d030	7532	3.810	39.80	38.100	-4.27%
AM4	2300	HEAD	07/14/2022	23.1	21.3	0.10	1064	3837	5.260	48.90	52.600	7.57%
AM10	2450	HEAD	06/17/2022	24.5	21.9	0.10	750	7308	5.380	52.60	53.800	2.28%
AM11	2450	HEAD	06/23/2022	22.8	22.7	0.10	855	7420	5.120	52.30	51.200	-2.10%
AM11	2450	HEAD	07/17/2022	21.3	22.8	0.10	855	7420	5.060	52.30	50.600	-3.25%
AM4	2450	HEAD	09/13/2022	23.8	21.4	0.10	750	3837	5.510	52.60	55.100	4.75%
AM10	2600	HEAD	07/14/2022	22.7	20.5	0.10	1069	7308	5.240	55.60	52.400	-5.76%
AM11	2600	HEAD	07/17/2022	21.3	22.8	0.10	1042	7420	5.350	55.80	53.500	-4.12%
AM4	2600	HEAD	07/24/2022	22.4	21.2	0.10	1042	3837	5.510	55.80	55.100	-1.25%
AM4	2600	HEAD	09/13/2022	23.8	21.4	0.10	1042	3837	5.880	55.80	58.800	5.38%
AM7	3500	HEAD	06/30/2022	21.5	19.9	0.10	1055	7416	6.430	67.80	64.300	-5.16%
AM7	3500	HEAD	07/27/2022	20.3	19.2	0.10	1055	7416	7.060	67.80	70.600	4.13%
AM7	3700	HEAD	06/24/2022	20.3	19.7	0.10	1002	7416	6.590	68.80	65.900	-4.22%
AM7	3700	HEAD	07/27/2022	20.3	19.2	0.10	1002	7416	7.100	68.80	71.000	3.20%
AM7	3900	HEAD	06/24/2022	20.3	19.7	0.10	1062	7416	6.580	68.60	65.800	-4.08%
AM9	5250	HEAD	07/25/2022	22.4	20.8	0.05	1123	7638	3.750	80.50	75.000	-6.83%
AM9	5250	HEAD	08/11/2022	22.4	21.4	0.05	1123	7638	3.810	80.50	76.200	-5.34%
AM9	5600	HEAD	07/25/2022	22.4	20.8	0.05	1123	7638	3.880	83.70	77.600	-7.29%
AM9	5600	HEAD	08/11/2022	22.4	21.4	0.05	1123	7638	3.890	83.70	77.800	-7.05%
AM9	5750	HEAD	07/25/2022	22.4	20.8	0.05	1123	7638	3.770	80.50	75.400	-6.34%
AM9	5750	HEAD	08/11/2022	22.4	21.4	0.05	1123	7638	3.830	80.50	76.600	-4.84%

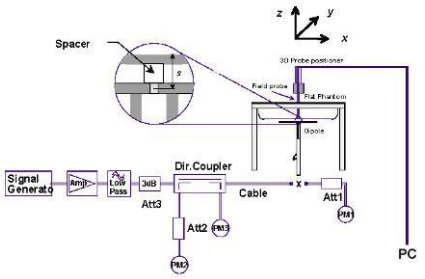

Figure 9-1
System Verification Setup Diagram

Figure 9-2
System Verification Setup Photo

10 SAR DATA SUMMARY

10.1 Standalone SAR Data

Table 10-1
UMTS 850 MHz Antenna 1 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	18.70	17.91	-0.01	Body	0 mm	Ant 1	QPFQ1YH0QD	1:1	back	0.664	1.199	0.796	0.310	0.372	
836.60	4183	UMTS 850	RMC	18.70	17.85	0.03	Body	0 mm	Ant 1	QPFQ1YH0QD	1:1	back	0.586	1.216	0.713	0.275	0.334	
846.60	4233	UMTS 850	RMC	18.70	17.79	0.00	Body	0 mm	Ant 1	QPFQ1YH0QD	1:1	back	0.537	1.233	0.662	0.251	0.309	
826.40	4132	UMTS 850	RMC	18.70	17.91	-0.18	Body	0 mm	Ant 1	QPFQ1YH0QD	1:1	top	0.006	1.199	0.007	0.003	0.004	
826.40	4132	UMTS 850	RMC	18.70	17.91	0.00	Body	0 mm	Ant 1	QPFQ1YH0QD	1:1	bottom	0.467	1.199	0.560	0.195	0.234	
826.40	4132	UMTS 850	RMC	18.70	17.91	-0.06	Body	0 mm	Ant 1	QPFQ1YH0QD	1:1	right	0.029	1.199	0.035	0.014	0.017	
826.40	4132	UMTS 850	RMC	18.70	17.91	-0.05	Body	0 mm	Ant 1	QPFQ1YH0QD	1:1	left	0.238	1.199	0.285	0.105	0.126	
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 3 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)	
836.60	4183	UMTS 850	RMC	19.40	18.50	-0.03	Body	0 mm	Ant 3	C0D414XD6N	1:1	back	0.539	1.230	0.663	0.296	0.364	
826.40	4132	UMTS 850	RMC	19.40	18.34	-0.04	Body	0 mm	Ant 3	C0D414XD6N	1:1	top	0.688	1.276	0.878	0.266	0.339	
836.60	4183	UMTS 850	RMC	19.40	18.50	-0.03	Body	0 mm	Ant 3	C0D414XD6N	1:1	top	0.680	1.230	0.836	0.262	0.322	
846.60	4233	UMTS 850	RMC	19.40	18.48	-0.04	Body	0 mm	Ant 3	C0D414XD6N	1:1	top	0.710	1.236	0.878	0.277	0.342	A1
836.60	4183	UMTS 850	RMC	19.40	18.50	0.05	Body	0 mm	Ant 3	C0D414XD6N	1:1	bottom	0.015	1.230	0.018	0.008	0.010	
836.60	4183	UMTS 850	RMC	19.40	18.50	-0.02	Body	0 mm	Ant 3	C0D414XD6N	1:1	right	0.325	1.230	0.400	0.144	0.177	
836.60	4183	UMTS 850	RMC	19.40	18.50	0.02	Body	0 mm	Ant 3	C0D414XD6N	1:1	left	0.018	1.230	0.022	0.010	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 10-3
UMTS 1750 MHz Antenna 1 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	17.10	16.27	-0.01	Body	0 mm	Ant 1	RXMW0Y2WCW	1:1	back	0.788	1.211	0.954	0.346	0.419	
1732.40	1412	UMTS 1750	RMC	17.10	16.20	0.00	Body	0 mm	Ant 1	RXMW0Y2WCW	1:1	back	0.783	1.230	0.963	0.343	0.422	
1752.60	1513	UMTS 1750	RMC	17.10	15.93	0.01	Body	0 mm	Ant 1	RXMW0Y2WCW	1:1	back	0.742	1.309	0.971	0.324	0.424	
1712.40	1312	UMTS 1750	RMC	17.10	16.27	-0.01	Body	0 mm	Ant 1	RXMW0Y2WCW	1:1	top	0.039	1.211	0.047	0.017	0.021	
1712.40	1312	UMTS 1750	RMC	17.10	16.27	0.01	Body	0 mm	Ant 1	RXMW0Y2WCW	1:1	bottom	0.302	1.211	0.366	0.121	0.147	
1712.40	1312	UMTS 1750	RMC	17.10	16.27	0.09	Body	0 mm	Ant 1	RXMW0Y2WCW	1:1	right	0.007	1.211	0.008	0.002	0.002	
1712.40	1312	UMTS 1750	RMC	17.10	16.27	0.07	Body	0 mm	Ant 1	RXMW0Y2WCW	1:1	left	0.780	1.211	0.945	0.300	0.363	
1732.40	1412	UMTS 1750	RMC	17.10	16.20	-0.01	Body	0 mm	Ant 1	RXMW0Y2WCW	1:1	left	0.795	1.230	0.978	0.305	0.375	A2
1752.60	1513	UMTS 1750	RMC	17.10	15.93	-0.05	Body	0 mm	Ant 1	RXMW0Y2WCW	1:1	left	0.724	1.309	0.948	0.281	0.368	
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	15.30	14.60	0.06	Body	0 mm	Ant 2b	C0D414XD6N	1:1	back	0.740	1.175	0.870	0.313	0.368	
1732.40	1412	UMTS 1750	RMC	15.30	14.50	-0.19	Body	0 mm	Ant 2b	C0D414XD6N	1:1	back	0.765	1.202	0.920	0.325	0.391	
1752.60	1513	UMTS 1750	RMC	15.30	14.40	-0.06	Body	0 mm	Ant 2b	C0D414XD6N	1:1	back	0.744	1.230	0.915	0.323	0.397	
1712.40	1312	UMTS 1750	RMC	15.30	14.60	0.09	Body	0 mm	Ant 2b	C0D414XD6N	1:1	top	0.003	1.175	0.004	0.000	0.000	
1712.40	1312	UMTS 1750	RMC	15.30	14.60	0.01	Body	0 mm	Ant 2b	C0D414XD6N	1:1	bottom	0.650	1.175	0.764	0.236	0.277	
1712.40	1312	UMTS 1750	RMC	15.30	14.60	0.02	Body	0 mm	Ant 2b	C0D414XD6N	1:1	right	0.063	1.175	0.074	0.028	0.033	
1712.40	1312	UMTS 1750	RMC	15.30	14.60	0.01	Body	0 mm	Ant 2b	C0D414XD6N	1:1	left	0.020	1.175	0.024	0.012	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 10-5
UMTS 1750 MHz Antenna 3 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	17.00	15.72	-0.01	Body	0 mm	Ant 3	C0D414XD6N	1:1	back	0.518	1.343	0.696	0.261	0.351	
1712.40	1312	UMTS 1750	RMC	17.00	15.72	0.04	Body	0 mm	Ant 3	C0D414XD6N	1:1	top	0.296	1.343	0.398	0.116	0.156	
1712.40	1312	UMTS 1750	RMC	17.00	15.72	0.09	Body	0 mm	Ant 3	C0D414XD6N	1:1	bottom	0.013	1.343	0.017	0.005	0.007	
1712.40	1312	UMTS 1750	RMC	17.00	15.72	0.05	Body	0 mm	Ant 3	C0D414XD6N	1:1	right	0.661	1.343	0.888	0.268	0.360	
1732.40	1412	UMTS 1750	RMC	17.00	15.70	-0.10	Body	0 mm	Ant 3	C0D414XD6N	1:1	right	0.623	1.349	0.840	0.255	0.344	
1752.60	1513	UMTS 1750	RMC	17.00	15.49	-0.11	Body	0 mm	Ant 3	C0D414XD6N	1:1	right	0.612	1.416	0.867	0.232	0.329	
1712.40	1312	UMTS 1750	RMC	17.00	15.72	0.07	Body	0 mm	Ant 3	C0D414XD6N	1:1	left	0.000	1.343	0.000	0.000	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-6
UMTS 1750 MHz Antenna 4b 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	14.30	13.11	0.00	Body	0 mm	Ant 4b	FYQLHC9HFM	1:1	back	0.370	1.315	0.487	0.150	0.197	
1712.40	1312	UMTS 1750	RMC	14.30	12.93	0.01	Body	0 mm	Ant 4b	FYQLHC9HFM	1:1	top	0.671	1.371	0.920	0.244	0.335	
1732.40	1412	UMTS 1750	RMC	14.30	13.11	0.01	Body	0 mm	Ant 4b	FYQLHC9HFM	1:1	top	0.702	1.315	0.923	0.254	0.334	
1752.60	1513	UMTS 1750	RMC	14.30	12.99	0.01	Body	0 mm	Ant 4b	FYQLHC9HFM	1:1	top	0.692	1.352	0.936	0.250	0.338	
1732.40	1412	UMTS 1750	RMC	14.30	13.11	0.01	Body	0 mm	Ant 4b	FYQLHC9HFM	1:1	bottom	0.000	1.315	0.000	0.000	0.000	
1732.40	1412	UMTS 1750	RMC	14.30	13.11	0.09	Body	0 mm	Ant 4b	FYQLHC9HFM	1:1	right	0.002	1.315	0.003	0.000	0.000	
1732.40	1412	UMTS 1750	RMC	14.30	13.11	0.01	Body	0 mm	Ant 4b	FYQLHC9HFM	1:1	left	0.039	1.315	0.051	0.016	0.021	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-7
UMTS 1900 MHz Antenna 1 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	17.40	16.78	0.00	Body	0 mm	Ant 1	C0D414XD6N	1:1	back	0.748	1.153	0.862	0.355	0.409	
1880.00	9400	UMTS 1900	RMC	17.40	16.73	-0.03	Body	0 mm	Ant 1	C0D414XD6N	1:1	back	0.815	1.167	0.951	0.337	0.393	
1907.60	9538	UMTS 1900	RMC	17.40	16.54	-0.01	Body	0 mm	Ant 1	C0D414XD6N	1:1	back	0.805	1.219	0.981	0.328	0.400	
1852.40	9262	UMTS 1900	RMC	17.40	16.78	0.09	Body	0 mm	Ant 1	C0D414XD6N	1:1	top	0.014	1.153	0.016	0.007	0.008	
1852.40	9262	UMTS 1900	RMC	17.40	16.78	-0.04	Body	0 mm	Ant 1	C0D414XD6N	1:1	bottom	0.408	1.153	0.470	0.152	0.175	
1852.40	9262	UMTS 1900	RMC	17.40	16.78	0.08	Body	0 mm	Ant 1	C0D414XD6N	1:1	right	0.000	1.153	0.000	0.000	0.000	
1852.40	9262	UMTS 1900	RMC	17.40	16.78	0.04	Body	0 mm	Ant 1	C0D414XD6N	1:1	left	0.759	1.153	0.875	0.274	0.316	
1880.00	9400	UMTS 1900	RMC	17.40	16.73	-0.04	Body	0 mm	Ant 1	C0D414XD6N	1:1	left	0.753	1.167	0.879	0.273	0.319	
1907.60	9538	UMTS 1900	RMC	17.40	16.54	0.02	Body	0 mm	Ant 1	C0D414XD6N	1:1	left	0.764	1.219	0.931	0.276	0.336	
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	14.70	14.31	0.03	Body	0 mm	Ant 2b	C0D414XD6N	1:1	back	0.869	1.094	0.951	0.351	0.384	
1880.00	9400	UMTS 1900	RMC	14.70	14.36	-0.02	Body	0 mm	Ant 2b	C0D414XD6N	1:1	back	0.870	1.081	0.940	0.350	0.378	
1907.60	9538	UMTS 1900	RMC	14.70	14.35	0.02	Body	0 mm	Ant 2b	C0D414XD6N	1:1	back	0.879	1.084	0.953	0.355	0.385	
1880.00	9400	UMTS 1900	RMC	14.70	14.36	0.04	Body	0 mm	Ant 2b	C0D414XD6N	1:1	top	0.017	1.081	0.018	0.006	0.006	
1852.40	9262	UMTS 1900	RMC	14.70	14.31	0.00	Body	0 mm	Ant 2b	C0D414XD6N	1:1	bottom	0.725	1.094	0.793	0.262	0.287	
1880.00	9400	UMTS 1900	RMC	14.70	14.36	-0.03	Body	0 mm	Ant 2b	C0D414XD6N	1:1	bottom	0.755	1.081	0.816	0.272	0.294	
1907.60	9538	UMTS 1900	RMC	14.70	14.35	-0.02	Body	0 mm	Ant 2b	C0D414XD6N	1:1	bottom	0.799	1.084	0.866	0.288	0.312	
1880.00	9400	UMTS 1900	RMC	14.70	14.36	0.04	Body	0 mm	Ant 2b	C0D414XD6N	1:1	right	0.045	1.081	0.049	0.018	0.019	
1880.00	9400	UMTS 1900	RMC	14.70	14.36	0.04	Body	0 mm	Ant 2b	C0D414XD6N	1:1	left	0.015	1.081	0.016	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 10-9
UMTS 1900 MHz Antenna 3 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)	
1907.60	9538	UMTS 1900	RMC	16.90	16.51	-0.02	Body	0 mm	Ant 3	C0D414XD6N	1:1	back	0.525	1.094	0.574	0.279	0.305	
1907.60	9538	UMTS 1900	RMC	16.90	16.51	0.03	Body	0 mm	Ant 3	C0D414XD6N	1:1	top	0.456	1.094	0.499	0.176	0.193	
1907.60	9538	UMTS 1900	RMC	16.90	16.51	-0.08	Body	0 mm	Ant 3	C0D414XD6N	1:1	bottom	0.010	1.094	0.011	0.005	0.005	
1852.40	9262	UMTS 1900	RMC	16.90	16.41	-0.10	Body	0 mm	Ant 3	C0D414XD6N	1:1	right	0.867	1.119	0.970	0.333	0.373	
1880.00	9400	UMTS 1900	RMC	16.90	16.44	-0.04	Body	0 mm	Ant 3	C0D414XD6N	1:1	right	0.880	1.112	0.979	0.339	0.377	
1907.60	9538	UMTS 1900	RMC	16.90	16.51	0.04	Body	0 mm	Ant 3	C0D414XD6N	1:1	right	0.912	1.094	0.998	0.349	0.382	A3
1907.60	9538	UMTS 1900	RMC	16.90	16.51	0.01	Body	0 mm	Ant 3	C0D414XD6N	1:1	left	0.000	1.094	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 10-10
UMTS 1900 MHz Antenna 4b Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Position	Spacing	Antenna Config.	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1852.40	9262	UMTS 1900	RMC	13.20	12.28	0.00	Body	0 mm	Ant 4b	C0D414XD6N	1:1	back	0.718	1.236	0.887	0.275	0.340	
1880.00	9400	UMTS 1900	RMC	13.20	12.47	-0.02	Body	0 mm	Ant 4b	C0D414XD6N	1:1	back	0.777	1.183	0.919	0.297	0.351	
1907.60	9538	UMTS 1900	RMC	13.20	12.40	-0.01	Body	0 mm	Ant 4b	C0D414XD6N	1:1	back	0.801	1.202	0.963	0.307	0.369	
1852.40	9262	UMTS 1900	RMC	13.20	12.28	0.02	Body	0 mm	Ant 4b	C0D414XD6N	1:1	top	0.679	1.236	0.839	0.245	0.303	
1880.00	9400	UMTS 1900	RMC	13.20	12.47	-0.07	Body	0 mm	Ant 4b	C0D414XD6N	1:1	top	0.702	1.183	0.830	0.251	0.297	
1907.60	9538	UMTS 1900	RMC	13.20	12.40	0.00	Body	0 mm	Ant 4b	C0D414XD6N	1:1	top	0.695	1.202	0.835	0.249	0.299	
1880.00	9400	UMTS 1900	RMC	13.20	12.47	-0.15	Body	0 mm	Ant 4b	C0D414XD6N	1:1	bottom	0.000	1.183	0.000	0.000	0.000	
1880.00	9400	UMTS 1900	RMC	13.20	12.47	0.03	Body	0 mm	Ant 4b	C0D414XD6N	1:1	right	0.001	1.183	0.001	0.000	0.000	
1880.00	9400	UMTS 1900	RMC	13.20	12.47	-0.06	Body	0 mm	Ant 4b	C0D414XD6N	1:1	left	0.021	1.183	0.025	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 10-11
LTE Band 71 Antenna 1 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	21.30	20.00	0.06	0	Ant 1	HM2FPP9TMW	QPSK	1	0	0 mm	back	1:1	0.673	1.349	0.908	0.277	0.374	
680.50	133297	Mid	LTE Band 71	20	21.30	19.84	-0.04	0	Ant 1	HM2FPP9TMW	QPSK	50	25	0 mm	back	1:1	0.617	1.400	0.864	0.258	0.361	
680.50	133297	Mid	LTE Band 71	20	21.30	19.80	-0.01	0	Ant 1	HM2FPP9TMW	QPSK	100	0	0 mm	back	1:1	0.595	1.413	0.841	0.285	0.403	
680.50	133297	Mid	LTE Band 71	20	21.30	20.00	0.05	0	Ant 1	HM2FPP9TMW	QPSK	1	0	0 mm	top	1:1	0.008	1.349	0.011	0.003	0.004	
680.50	133297	Mid	LTE Band 71	20	21.30	19.84	-0.18	0	Ant 1	HM2FPP9TMW	QPSK	50	25	0 mm	top	1:1	0.012	1.400	0.017	0.004	0.006	
680.50	133297	Mid	LTE Band 71	20	21.30	20.00	0.01	0	Ant 1	HM2FPP9TMW	QPSK	1	0	0 mm	bottom	1:1	0.580	1.349	0.782	0.232	0.313	
680.50	133297	Mid	LTE Band 71	20	21.30	19.84	-0.03	0	Ant 1	HM2FPP9TMW	QPSK	50	25	0 mm	bottom	1:1	0.570	1.400	0.798	0.227	0.318	
680.50	133297	Mid	LTE Band 71	20	21.30	20.00	-0.08	0	Ant 1	HM2FPP9TMW	QPSK	1	0	0 mm	right	1:1	0.036	1.349	0.049	0.014	0.019	
680.50	133297	Mid	LTE Band 71	20	21.30	19.84	0.01	0	Ant 1	HM2FPP9TMW	QPSK	50	25	0 mm	right	1:1	0.035	1.400	0.049	0.014	0.020	
680.50	133297	Mid	LTE Band 71	20	21.30	20.00	-0.12	0	Ant 1	HM2FPP9TMW	QPSK	1	0	0 mm	left	1:1	0.280	1.349	0.378	0.107	0.144	
680.50	133297	Mid	LTE Band 71	20	21.30	19.84	-0.04	0	Ant 1	HM2FPP9TMW	QPSK	50	25	0 mm	left	1:1	0.264	1.400	0.370	0.100	0.140	
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 3 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	21.50	20.60	0.00	0	Ant 3	HDJWVMWQYM	QPSK	1	0	0 mm	back	1:1	0.648	1.230	0.797	0.322	0.396	
680.50	133297	Mid	LTE Band 71	20	21.50	20.50	-0.12	0	Ant 3	HDJWVMWQYM	QPSK	50	50	0 mm	back	1:1	0.634	1.259	0.798	0.317	0.399	
680.50	133297	Mid	LTE Band 71	20	21.50	20.60	0.04	0	Ant 3	HDJWVMWQYM	QPSK	1	0	0 mm	top	1:1	0.722	1.230	0.888	0.294	0.362	A4
680.50	133297	Mid	LTE Band 71	20	21.50	20.50	0.05	0	Ant 3	HDJWVMWQYM	QPSK	50	50	0 mm	top	1:1	0.684	1.259	0.861	0.283	0.356	
680.50	133297	Mid	LTE Band 71	20	21.50	20.49	0.03	0	Ant 3	HDJWVMWQYM	QPSK	100	0	0 mm	top	1:1	0.696	1.262	0.878	0.289	0.365	
680.50	133297	Mid	LTE Band 71	20	21.50	20.60	0.07	0	Ant 3	HDJWVMWQYM	QPSK	1	0	0 mm	bottom	1:1	0.014	1.230	0.017	0.006	0.007	
680.50	133297	Mid	LTE Band 71	20	21.50	20.50	-0.12	0	Ant 3	HDJWVMWQYM	QPSK	50	50	0 mm	bottom	1:1	0.015	1.259	0.019	0.006	0.008	
680.50	133297	Mid	LTE Band 71	20	21.50	20.60	-0.01	0	Ant 3	HDJWVMWQYM	QPSK	1	0	0 mm	right	1:1	0.159	1.230	0.196	0.086	0.106	
680.50	133297	Mid	LTE Band 71	20	21.50	20.50	0.01	0	Ant 3	HDJWVMWQYM	QPSK	50	50	0 mm	right	1:1	0.138	1.259	0.174	0.075	0.094	
680.50	133297	Mid	LTE Band 71	20	21.50	20.60	-0.01	0	Ant 3	HDJWVMWQYM	QPSK	1	0	0 mm	left	1:1	0.055	1.230	0.068	0.020	0.025	
680.50	133297	Mid	LTE Band 71	20	21.50	20.50	-0.14	0	Ant 3	HDJWVMWQYM	QPSK	50	50	0 mm	left	1:1	0.044	1.259	0.055	0.017	0.021	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 10-13
LTE Band 12 Antenna 1 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	(W/kg)	(W/kg)	
707.50	23095	Mid	LTE Band 12	10	21.10	20.13	0.02	0	Ant 1	Q7XW2M7YLH	QPSK	1	25	0 mm	back	1:1	0.720	1.250	0.900	0.343	0.429	A5
707.50	23095	Mid	LTE Band 12	10	21.10	20.02	0.00	0	Ant 1	Q7XW2M7YLH	QPSK	25	12	0 mm	back	1:1	0.696	1.282	0.892	0.332	0.426	
707.50	23095	Mid	LTE Band 12	10	21.10	20.01	-0.03	0	Ant 1	Q7XW2M7YLH	QPSK	50	0	0 mm	back	1:1	0.570	1.285	0.732	0.296	0.380	
707.50	23095	Mid	LTE Band 12	10	21.10	20.13	0.09	0	Ant 1	Q7XW2M7YLH	QPSK	1	25	0 mm	top	1:1	0.015	1.250	0.019	0.006	0.008	
707.50	23095	Mid	LTE Band 12	10	21.10	20.02	0.18	0	Ant 1	Q7XW2M7YLH	QPSK	25	12	0 mm	top	1:1	0.015	1.282	0.019	0.006	0.008	
707.50	23095	Mid	LTE Band 12	10	21.10	20.13	0.05	0	Ant 1	Q7XW2M7YLH	QPSK	1	25	0 mm	bottom	1:1	0.646	1.250	0.808	0.262	0.328	
707.50	23095	Mid	LTE Band 12	10	21.10	20.02	0.02	0	Ant 1	Q7XW2M7YLH	QPSK	25	12	0 mm	bottom	1:1	0.652	1.282	0.836	0.264	0.338	
707.50	23095	Mid	LTE Band 12	10	21.10	20.01	-0.12	0	Ant 1	Q7XW2M7YLH	QPSK	50	0	0 mm	bottom	1:1	0.595	1.285	0.765	0.247	0.317	
707.50	23095	Mid	LTE Band 12	10	21.10	20.13	0.05	0	Ant 1	Q7XW2M7YLH	QPSK	1	25	0 mm	right	1:1	0.035	1.250	0.044	0.015	0.019	
707.50	23095	Mid	LTE Band 12	10	21.10	20.02	0.08	0	Ant 1	Q7XW2M7YLH	QPSK	25	12	0 mm	right	1:1	0.035	1.282	0.045	0.015	0.019	
707.50	23095	Mid	LTE Band 12	10	21.10	20.13	-0.11	0	Ant 1	Q7XW2M7YLH	QPSK	1	25	0 mm	left	1:1	0.273	1.250	0.341	0.114	0.143	
707.50	23095	Mid	LTE Band 12	10	21.10	20.02	0.01	0	Ant 1	Q7XW2M7YLH	QPSK	25	12	0 mm	left	1:1	0.284	1.282	0.364	0.119	0.153	
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 3 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	20.50	19.11	0.06	0	Ant 3	MGXQY2CWF2	QPSK	1	25	0 mm	back	1:1	0.615	1.377	0.847	0.327	0.450	
707.50	23095	Mid	LTE Band 12	10	20.50	19.15	0.03	0	Ant 3	MGXQY2CWF2	QPSK	25	12	0 mm	back	1:1	0.597	1.365	0.815	0.319	0.435	
707.50	23095	Mid	LTE Band 12	10	20.50	19.10	0.01	0	Ant 3	MGXQY2CWF2	QPSK	50	0	0 mm	back	1:1	0.532	1.380	0.734	0.283	0.391	
707.50	23095	Mid	LTE Band 12	10	20.50	19.11	-0.08	0	Ant 3	MGXQY2CWF2	QPSK	1	25	0 mm	top	1:1	0.645	1.377	0.888	0.269	0.370	
707.50	23095	Mid	LTE Band 12	10	20.50	19.15	0.00	0	Ant 3	MGXQY2CWF2	QPSK	25	12	0 mm	top	1:1	0.637	1.365	0.870	0.263	0.359	
707.50	23095	Mid	LTE Band 12	10	20.50	19.10	0.04	0	Ant 3	MGXQY2CWF2	QPSK	50	0	0 mm	top	1:1	0.635	1.380	0.876	0.263	0.363	
707.50	23095	Mid	LTE Band 12	10	20.50	19.11	0.04	0	Ant 3	MGXQY2CWF2	QPSK	1	25	0 mm	bottom	1:1	0.013	1.377	0.018	0.005	0.007	
707.50	23095	Mid	LTE Band 12	10	20.50	19.15	0.04	0	Ant 3	MGXQY2CWF2	QPSK	25	12	0 mm	bottom	1:1	0.014	1.365	0.019	0.005	0.007	
707.50	23095	Mid	LTE Band 12	10	20.50	19.11	0.05	0	Ant 3	MGXQY2CWF2	QPSK	1	25	0 mm	right	1:1	0.160	1.377	0.220	0.078	0.107	
707.50	23095	Mid	LTE Band 12	10	20.50	19.15	-0.04	0	Ant 3	MGXQY2CWF2	QPSK	25	12	0 mm	right	1:1	0.162	1.365	0.221	0.080	0.109	
707.50	23095	Mid	LTE Band 12	10	20.50	19.11	0.06	0	Ant 3	MGXQY2CWF2	QPSK	1	25	0 mm	left	1:1	0.031	1.377	0.043	0.013	0.018	
707.50	23095	Mid	LTE Band 12	10	20.50	19.15	-0.20	0	Ant 3	MGXQY2CWF2	QPSK	25	12	0 mm	left	1:1	0.031	1.365	0.042	0.013	0.018	
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 1 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	(W/kg)	(W/kg)	
782.00	23230	Mid	LTE Band 13	10	20.60	19.83	-0.08	0	Ant 1	MGXQY2CWF2	QPSK	1	0	0 mm	back	1:1	0.527	1.194	0.629	0.249	0.297	
782.00	23230	Mid	LTE Band 13	10	20.60	19.66	0.01	0	Ant 1	MGXQY2CWF2	QPSK	25	12	0 mm	back	1:1	0.483	1.242	0.600	0.231	0.287	
782.00	23230	Mid	LTE Band 13	10	20.60	19.83	0.16	0	Ant 1	MGXQY2CWF2	QPSK	1	0	0 mm	top	1:1	0.013	1.194	0.016	0.004	0.005	
782.00	23230	Mid	LTE Band 13	10	20.60	19.66	0.08	0	Ant 1	MGXQY2CWF2	QPSK	25	12	0 mm	top	1:1	0.011	1.242	0.014	0.004	0.005	
782.00	23230	Mid	LTE Band 13	10	20.60	19.83	-0.01	0	Ant 1	MGXQY2CWF2	QPSK	1	0	0 mm	bottom	1:1	0.669	1.194	0.799	0.272	0.325	
782.00	23230	Mid	LTE Band 13	10	20.60	19.66	0.02	0	Ant 1	MGXQY2CWF2	QPSK	25	12	0 mm	bottom	1:1	0.645	1.242	0.801	0.263	0.327	
782.00	23230	Mid	LTE Band 13	10	20.60	19.62	0.07	0	Ant 1	MGXQY2CWF2	QPSK	50	0	0 mm	bottom	1:1	0.634	1.253	0.794	0.259	0.325	
782.00	23230	Mid	LTE Band 13	10	20.60	19.83	-0.02	0	Ant 1	MGXQY2CWF2	QPSK	1	0	0 mm	right	1:1	0.038	1.194	0.045	0.017	0.020	
782.00	23230	Mid	LTE Band 13	10	20.60	19.66	0.07	0	Ant 1	MGXQY2CWF2	QPSK	25	12	0 mm	right	1:1	0.036	1.242	0.045	0.016	0.020	
782.00	23230	Mid	LTE Band 13	10	20.60	19.83	0.10	0	Ant 1	MGXQY2CWF2	QPSK	1	0	0 mm	left	1:1	0.383	1.194	0.457	0.152	0.181	
782.00	23230	Mid	LTE Band 13	10	20.60	19.66	-0.02	0	Ant 1	MGXQY2CWF2	QPSK	25	12	0 mm	left	1:1	0.361	1.242	0.448	0.142	0.176	
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 3 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY		Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	(W/kg)	(W/kg)	
782.00	23230	Mid	LTE Band 13	10	20.90	20.08	-0.01	0	Ant 3	HDJWVMWQYM	QPSK	1	0	0 mm	back	1:1	0.694	1.208	0.838	0.364	0.440	
782.00	23230	Mid	LTE Band 13	10	20.90	19.95	-0.06	0	Ant 3	HDJWVMWQYM	QPSK	25	0	0 mm	back	1:1	0.628	1.245	0.782	0.319	0.397	
782.00	23230	Mid	LTE Band 13	10	20.90	19.92	0.02	0	Ant 3	HDJWVMWQYM	QPSK	50	0	0 mm	back	1:1	0.609	1.253	0.763	0.316	0.396	
782.00	23230	Mid	LTE Band 13	10	20.90	20.08	-0.02	0	Ant 3	HDJWVMWQYM	QPSK	1	0	0 mm	top	1:1	0.704	1.208	0.850	0.299	0.361	
782.00	23230	Mid	LTE Band 13	10	20.90	19.95	-0.02	0	Ant 3	HDJWVMWQYM	QPSK	25	0	0 mm	top	1:1	0.735	1.245	0.915	0.307	0.382	
782.00	23230	Mid	LTE Band 13	10	20.90	19.92	0.01	0	Ant 3	HDJWVMWQYM	QPSK	50	0	0 mm	top	1:1	0.756	1.253	0.947	0.309	0.387	A6
782.00	23230	Mid	LTE Band 13	10	20.90	20.08	-0.16	0	Ant 3	HDJWVMWQYM	QPSK	1	0	0 mm	bottom	1:1	0.012	1.208	0.014	0.005	0.006	
782.00	23230	Mid	LTE Band 13	10	20.90	19.95	-0.11	0	Ant 3	HDJWVMWQYM	QPSK	25	0	0 mm	bottom	1:1	0.012	1.245	0.015	0.005	0.006	
782.00	23230	Mid	LTE Band 13	10	20.90	20.08	-0.02	0	Ant 3	HDJWVMWQYM	QPSK	1	0	0 mm	right	1:1	0.175	1.208	0.211	0.087	0.105	
782.00	23230	Mid	LTE Band 13	10	20.90	19.95	0.00	0	Ant 3	HDJWVMWQYM	QPSK	25	0	0 mm	right	1:1	0.163	1.245	0.203	0.082	0.102	
782.00	23230	Mid	LTE Band 13	10	20.90	20.08	-0.10	0	Ant 3	HDJWVMWQYM	QPSK	1	0	0 mm	left	1:1	0.036	1.208	0.043	0.015	0.018	
782.00	23230	Mid	LTE Band 13	10	20.90	19.95	-0.14	0	Ant 3	HDJWVMWQYM	QPSK	25	0	0 mm	left	1:1	0.033	1.245	0.041	0.014	0.017	
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 1 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	20.60	19.75	0.13	0	Ant 1	MGXQY2CWF2	QPSK	1	0	0 mm	back	1:1	0.634	1.216	0.771	0.272	0.331	
793.00	23330	Mid	LTE Band 14	10	20.60	19.74	-0.01	0	Ant 1	MGXQY2CWF2	QPSK	25	0	0 mm	back	1:1	0.602	1.219	0.734	0.260	0.317	
793.00	23330	Mid	LTE Band 14	10	20.60	19.75	0.03	0	Ant 1	MGXQY2CWF2	QPSK	1	0	0 mm	top	1:1	0.016	1.216	0.019	0.006	0.007	
793.00	23330	Mid	LTE Band 14	10	20.60	19.74	-0.08	0	Ant 1	MGXQY2CWF2	QPSK	25	0	0 mm	top	1:1	0.015	1.219	0.018	0.006	0.007	
793.00	23330	Mid	LTE Band 14	10	20.60	19.75	0.00	0	Ant 1	MGXQY2CWF2	QPSK	1	0	0 mm	bottom	1:1	0.708	1.216	0.861	0.291	0.354	
793.00	23330	Mid	LTE Band 14	10	20.60	19.74	0.03	0	Ant 1	MGXQY2CWF2	QPSK	25	0	0 mm	bottom	1:1	0.717	1.219	0.874	0.294	0.358	
793.00	23330	Mid	LTE Band 14	10	20.60	19.71	0.04	0	Ant 1	MGXQY2CWF2	QPSK	50	0	0 mm	bottom	1:1	0.753	1.227	0.924	0.300	0.368	A7
793.00	23330	Mid	LTE Band 14	10	20.60	19.75	-0.12	0	Ant 1	MGXQY2CWF2	QPSK	1	0	0 mm	right	1:1	0.035	1.216	0.043	0.015	0.018	
793.00	23330	Mid	LTE Band 14	10	20.60	19.74	0.03	0	Ant 1	MGXQY2CWF2	QPSK	25	0	0 mm	right	1:1	0.029	1.219	0.035	0.013	0.016	
793.00	23330	Mid	LTE Band 14	10	20.60	19.75	0.03	0	Ant 1	MGXQY2CWF2	QPSK	1	0	0 mm	left	1:1	0.396	1.216	0.482	0.155	0.188	
793.00	23330	Mid	LTE Band 14	10	20.60	19.74	0.05	0	Ant 1	MGXQY2CWF2	QPSK	25	0	0 mm	left	1:1	0.360	1.219	0.439	0.142	0.173	
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 3 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	20.90	20.12	-0.01	0	Ant 3	Q7XW2M7YLH	QPSK	1	0	0 mm	back	1:1	0.613	1.197	0.734	0.316	0.378	
793.00	23330	Mid	LTE Band 14	10	20.90	19.90	-0.01	0	Ant 3	Q7XW2M7YLH	QPSK	25	12	0 mm	back	1:1	0.581	1.259	0.731	0.299	0.376	
793.00	23330	Mid	LTE Band 14	10	20.90	20.12	-0.15	0	Ant 3	Q7XW2M7YLH	QPSK	1	0	0 mm	top	1:1	0.743	1.197	0.889	0.309	0.370	
793.00	23330	Mid	LTE Band 14	10	20.90	19.90	-0.04	0	Ant 3	Q7XW2M7YLH	QPSK	25	12	0 mm	top	1:1	0.721	1.259	0.908	0.301	0.379	
793.00	23330	Mid	LTE Band 14	10	20.90	19.86	-0.02	0	Ant 3	Q7XW2M7YLH	QPSK	50	0	0 mm	top	1:1	0.707	1.271	0.899	0.296	0.376	
793.00	23330	Mid	LTE Band 14	10	20.90	20.12	0.17	0	Ant 3	Q7XW2M7YLH	QPSK	1	0	0 mm	bottom	1:1	0.011	1.197	0.013	0.004	0.005	
793.00	23330	Mid	LTE Band 14	10	20.90	19.90	0.14	0	Ant 3	Q7XW2M7YLH	QPSK	25	12	0 mm	bottom	1:1	0.010	1.259	0.013	0.004	0.005	
793.00	23330	Mid	LTE Band 14	10	20.90	20.12	0.18	0	Ant 3	Q7XW2M7YLH	QPSK	1	0	0 mm	right	1:1	0.227	1.197	0.272	0.106	0.127	
793.00	23330	Mid	LTE Band 14	10	20.90	19.90	0.17	0	Ant 3	Q7XW2M7YLH	QPSK	25	12	0 mm	right	1:1	0.229	1.259	0.288	0.106	0.133	
793.00	23330	Mid	LTE Band 14	10	20.90	20.12	-0.19	0	Ant 3	Q7XW2M7YLH	QPSK	1	0	0 mm	left	1:1	0.030	1.197	0.036	0.013	0.016	
793.00	23330	Mid	LTE Band 14	10	20.90	19.90	-0.17	0	Ant 3	Q7XW2M7YLH	QPSK	25	12	0 mm	left	1:1	0.028	1.259	0.035	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 10-19
LTE Band 26 (Cell) Antenna 1 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	18.70	17.86	0.02	0	Ant 1	HDJWVMWQYM	QPSK	1	0	0 mm	back	1:1	0.606	1.213	0.735	0.282	0.342	
831.50	26865	Mid	LTE Band 26 (Cell)	10	18.70	17.84	0.06	0	Ant 1	HDJWVMWQYM	QPSK	1	49	0 mm	back	1:1	0.523	1.219	0.638	0.242	0.295	
844.00	26990	High	LTE Band 26 (Cell)	10	18.70	17.72	-0.11	0	Ant 1	HDJWVMWQYM	QPSK	1	0	0 mm	back	1:1	0.536	1.253	0.672	0.245	0.307	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.70	17.84	0.00	0	Ant 1	HDJWVMWQYM	QPSK	25	12	0 mm	back	1:1	0.555	1.219	0.677	0.269	0.328	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.70	17.86	0.02	0	Ant 1	HDJWVMWQYM	QPSK	1	0	0 mm	top	1:1	0.008	1.213	0.010	0.004	0.005	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.70	17.84	0.05	0	Ant 1	HDJWVMWQYM	QPSK	25	12	0 mm	top	1:1	0.010	1.219	0.012	0.005	0.006	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.70	17.86	0.18	0	Ant 1	HDJWVMWQYM	QPSK	1	0	0 mm	bottom	1:1	0.476	1.213	0.577	0.190	0.230	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.70	17.84	0.01	0	Ant 1	HDJWVMWQYM	QPSK	25	12	0 mm	bottom	1:1	0.475	1.219	0.579	0.188	0.229	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.70	17.86	0.05	0	Ant 1	HDJWVMWQYM	QPSK	1	0	0 mm	right	1:1	0.015	1.213	0.018	0.008	0.010	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.70	17.84	0.03	0	Ant 1	HDJWVMWQYM	QPSK	25	12	0 mm	right	1:1	0.016	1.219	0.020	0.008	0.010	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.70	17.86	-0.01	0	Ant 1	HDJWVMWQYM	QPSK	1	0	0 mm	left	1:1	0.271	1.213	0.329	0.106	0.129	
819.00	26740	Low	LTE Band 26 (Cell)	10	18.70	17.84	-0.06	0	Ant 1	HDJWVMWQYM	QPSK	25	12	0 mm	left	1:1	0.240	1.219	0.293	0.099	0.121	
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 3 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.																							
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.45	0.08	0	Ant 3	FYQLHC9HFM	QPSK	1	49	0 mm	back	1:1	0.501	1.245	0.624	0.279	0.347			
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.43	-0.01	0	Ant 3	FYQLHC9HFM	QPSK	25	12	0 mm	back	1:1	0.509	1.250	0.636	0.283	0.354			
819.00	26740	Low	LTE Band 26 (Cell)	10	19.40	18.33	0.07	0	Ant 3	FYQLHC9HFM	QPSK	1	0	0 mm	top	1:1	0.734	1.279	0.939	0.278	0.356			
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.45	0.09	0	Ant 3	FYQLHC9HFM	QPSK	1	49	0 mm	top	1:1	0.744	1.245	0.926	0.279	0.347			
844.00	26990	High	LTE Band 26 (Cell)	10	19.40	18.44	0.04	0	Ant 3	FYQLHC9HFM	QPSK	1	0	0 mm	top	1:1	0.769	1.247	0.959	0.290	0.362	A8		
819.00	26740	Low	LTE Band 26 (Cell)	10	19.40	18.34	0.03	0	Ant 3	FYQLHC9HFM	QPSK	25	0	0 mm	top	1:1	0.738	1.276	0.942	0.278	0.355			
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.43	0.04	0	Ant 3	FYQLHC9HFM	QPSK	25	12	0 mm	top	1:1	0.758	1.250	0.948	0.285	0.356			
844.00	26990	High	LTE Band 26 (Cell)	10	19.40	18.40	0.03	0	Ant 3	FYQLHC9HFM	QPSK	25	25	0 mm	top	1:1	0.751	1.259	0.946	0.284	0.358			
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.42	-0.03	0	Ant 3	FYQLHC9HFM	QPSK	50	0	0 mm	top	1:1	0.747	1.253	0.936	0.284	0.356			
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.45	0.05	0	Ant 3	FYQLHC9HFM	QPSK	1	49	0 mm	bottom	1:1	0.015	1.245	0.019	0.008	0.010			
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.43	0.03	0	Ant 3	FYQLHC9HFM	QPSK	25	12	0 mm	bottom	1:1	0.014	1.250	0.018	0.007	0.009			
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.45	0.01	0	Ant 3	FYQLHC9HFM	QPSK	1	49	0 mm	right	1:1	0.295	1.245	0.367	0.126	0.157			
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.43	0.08	0	Ant 3	FYQLHC9HFM	QPSK	25	12	0 mm	right	1:1	0.277	1.250	0.346	0.120	0.150			
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.45	0.10	0	Ant 3	FYQLHC9HFM	QPSK	1	49	0 mm	left	1:1	0.020	1.245	0.025	0.010	0.012			
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.40	18.43	0.01	0	Ant 3	FYQLHC9HFM	QPSK	25	12	0 mm	left	1:1	0.019	1.250	0.024	0.010	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 10-21
LTE Band 5 (Cell) Antenna 1 Body SAR

MEASUREMENT RESULTS																								
1 CC 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	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.74	0.16	0	Ant 1	QPFQ1YH0QD	QPSK	1	49	0 mm	back	1:1	0.567	1.247	0.707	0.268	0.334	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.81	0.01	0	Ant 1	QPFQ1YH0QD	QPSK	25	25	0 mm	back	1:1	0.564	1.227	0.692	0.266	0.326	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.80	0.08	0	Ant 1	QPFQ1YH0QD	QPSK	1	49	0 mm	back	1:1	0.601	1.230	0.739	0.276	0.339	
2 CC Uplink	SCC	843.70	20597	Mid	LTE Band 5 (Cell)	5								1	0									
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.74	0.01	0	Ant 1	QPFQ1YH0QD	QPSK	1	49	0 mm	top	1:1	0.011	1.247	0.014	0.005	0.006	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.81	0.07	0	Ant 1	QPFQ1YH0QD	QPSK	25	25	0 mm	top	1:1	0.012	1.227	0.015	0.006	0.007	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.74	0.04	0	Ant 1	QPFQ1YH0QD	QPSK	1	49	0 mm	bottom	1:1	0.479	1.247	0.597	0.190	0.237	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.81	-0.02	0	Ant 1	QPFQ1YH0QD	QPSK	25	25	0 mm	bottom	1:1	0.476	1.227	0.584	0.191	0.234	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.74	-0.20	0	Ant 1	QPFQ1YH0QD	QPSK	1	49	0 mm	right	1:1	0.021	1.247	0.026	0.011	0.014	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.81	-0.08	0	Ant 1	QPFQ1YH0QD	QPSK	25	25	0 mm	right	1:1	0.021	1.227	0.026	0.011	0.013	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.74	0.00	0	Ant 1	QPFQ1YH0QD	QPSK	1	49	0 mm	left	1:1	0.329	1.247	0.410	0.136	0.170	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	18.70	17.81	0.02	0	Ant 1	QPFQ1YH0QD	QPSK	25	25	0 mm	left	1:1	0.319	1.227	0.391	0.133	0.163	
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 3 Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink / 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																					
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.30	0.03	0	Ant 3	MGXQY2CWF2	QPSK	1	49	0 mm	back	1:1	0.529	1.288	0.681	0.290	0.374	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.42	0.03	0	Ant 3	MGXQY2CWF2	QPSK	25	25	0 mm	back	1:1	0.548	1.253	0.687	0.297	0.372	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.30	0.00	0	Ant 3	MGXQY2CWF2	QPSK	1	49	0 mm	top	1:1	0.704	1.288	0.907	0.276	0.355	A9
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.42	-0.04	0	Ant 3	MGXQY2CWF2	QPSK	25	25	0 mm	top	1:1	0.689	1.253	0.863	0.270	0.338	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.29	-0.02	0	Ant 3	MGXQY2CWF2	QPSK	50	0	0 mm	top	1:1	0.679	1.291	0.877	0.267	0.345	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.24	0.05	0	Ant 3	MGXQY2CWF2	QPSK	1	49	0 mm	top	1:1	0.677	1.306	0.884	0.288	0.376	
2 CC Uplink	SCC	843.70	20597	Mid	LTE Band 5 (Cell)	5								1	0									
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.30	0.00	0	Ant 3	MGXQY2CWF2	QPSK	1	49	0 mm	bottom	1:1	0.015	1.288	0.019	0.008	0.010	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.42	0.02	0	Ant 3	MGXQY2CWF2	QPSK	25	25	0 mm	bottom	1:1	0.017	1.253	0.021	0.009	0.011	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.30	0.00	0	Ant 3	MGXQY2CWF2	QPSK	1	49	0 mm	right	1:1	0.266	1.288	0.343	0.120	0.155	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.42	0.00	0	Ant 3	MGXQY2CWF2	QPSK	25	25	0 mm	right	1:1	0.304	1.253	0.381	0.131	0.164	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.30	0.02	0	Ant 3	MGXQY2CWF2	QPSK	1	49	0 mm	left	1:1	0.030	1.288	0.039	0.012	0.015	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.40	18.42	0.03	0	Ant 3	MGXQY2CWF2	QPSK	25	25	0 mm	left	1:1	0.035	1.253	0.044	0.017	0.021	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-23
LTE Band 66 (AWS) Antenna 1 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.																						
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.10	16.25	0.00	0	Ant 1	MGXQY2CWF2	QPSK	1	50	0 mm	back	1:1	0.705	1.216	0.857	0.364	0.443	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.10	16.23	-0.01	0	Ant 1	MGXQY2CWF2	QPSK	1	50	0 mm	back	1:1	0.754	1.222	0.921	0.341	0.417	
1770.00	132572	High	LTE Band 66 (AWS)	20	17.10	16.11	0.00	0	Ant 1	MGXQY2CWF2	QPSK	1	50	0 mm	back	1:1	0.742	1.256	0.932	0.335	0.421	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.10	16.26	-0.01	0	Ant 1	MGXQY2CWF2	QPSK	50	25	0 mm	back	1:1	0.704	1.213	0.854	0.365	0.443	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.10	16.25	-0.02	0	Ant 1	MGXQY2CWF2	QPSK	50	25	0 mm	back	1:1	0.759	1.216	0.923	0.343	0.417	
1770.00	132572	High	LTE Band 66 (AWS)	20	17.10	16.10	-0.01	0	Ant 1	MGXQY2CWF2	QPSK	50	25	0 mm	back	1:1	0.756	1.259	0.952	0.338	0.426	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.10	16.24	-0.01	0	Ant 1	MGXQY2CWF2	QPSK	100	0	0 mm	back	1:1	0.777	1.219	0.947	0.347	0.423	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.10	16.25	0.03	0	Ant 1	MGXQY2CWF2	QPSK	1	50	0 mm	top	1:1	0.025	1.216	0.030	0.012	0.015	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.10	16.26	-0.14	0	Ant 1	MGXQY2CWF2	QPSK	50	25	0 mm	top	1:1	0.025	1.213	0.030	0.011	0.013	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.10	16.25	-0.03	0	Ant 1	MGXQY2CWF2	QPSK	1	50	0 mm	bottom	1:1	0.276	1.216	0.336	0.109	0.133	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.10	16.26	0.00	0	Ant 1	MGXQY2CWF2	QPSK	50	25	0 mm	bottom	1:1	0.288	1.213	0.349	0.116	0.141	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.10	16.25	-0.04	0	Ant 1	N4C42R071C	QPSK	1	50	0 mm	right	1:1	0.000	1.216	0.000	0.000	0.000	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.10	16.26	0.15	0	Ant 1	N4C42R071C	QPSK	50	25	0 mm	right	1:1	0.000	1.213	0.000	0.000	0.000	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.10	16.25	0.00	0	Ant 1	MGXQY2CWF2	QPSK	1	50	0 mm	left	1:1	0.779	1.216	0.947	0.285	0.347	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.10	16.23	-0.02	0	Ant 1	MGXQY2CWF2	QPSK	1	50	0 mm	left	1:1	0.763	1.222	0.932	0.276	0.337	
1770.00	132572	High	LTE Band 66 (AWS)	20	17.10	16.11	0.01	0	Ant 1	MGXQY2CWF2	QPSK	1	50	0 mm	left	1:1	0.733	1.256	0.921	0.265	0.333	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.10	16.26	0.06	0	Ant 1	MGXQY2CWF2	QPSK	50	25	0 mm	left	1:1	0.796	1.213	0.966	0.287	0.348	A10
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.10	16.25	0.00	0	Ant 1	MGXQY2CWF2	QPSK	50	25	0 mm	left	1:1	0.759	1.216	0.923	0.274	0.333	
1770.00	132572	High	LTE Band 66 (AWS)	20	17.10	16.10	-0.01	0	Ant 1	MGXQY2CWF2	QPSK	50	25	0 mm	left	1:1	0.742	1.259	0.934	0.266	0.335	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.10	16.24	0.01	0	Ant 1	MGXQY2CWF2	QPSK	100	0	0 mm	left	1:1	0.752	1.219	0.917	0.272	0.332	
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																							
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.																						
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.71	0.03	0	Ant 2b	H0JWvMWQYM	QPSK	1	50	0 mm	back	1:1	0.746	1.146	0.855	0.317	0.363	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	14.70	-0.01	0	Ant 2b	H0JWvMWQYM	QPSK	1	50	0 mm	back	1:1	0.773	1.148	0.887	0.329	0.378	
1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.58	-0.01	0	Ant 2b	H0JWvMWQYM	QPSK	1	50	0 mm	back	1:1	0.793	1.180	0.936	0.337	0.398	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.69	-0.01	0	Ant 2b	H0JWvMWQYM	QPSK	50	25	0 mm	back	1:1	0.731	1.151	0.841	0.317	0.365	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	14.65	-0.03	0	Ant 2b	H0JWvMWQYM	QPSK	50	0	0 mm	back	1:1	0.751	1.161	0.872	0.323	0.375	
1770.00	132572	High	LTE Band 66 (AWS)	20	15.30	14.60	-0.10	0	Ant 2b	H0JWvMWQYM	QPSK	50	50	0 mm	back	1:1	0.795	1.175	0.934	0.337	0.396	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.30	14.56	-0.01	0	Ant 2b	H0JWvMWQYM	QPSK	100	0	0 mm	back	1:1	0.641	1.186	0.760	0.278	0.330	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.71	0.02	0	Ant 2b	H0JWvMWQYM	QPSK	1	50	0 mm	top	1:1	0.000	1.146	0.000	0.000	0.000	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.69	0.05	0	Ant 2b	H0JWvMWQYM	QPSK	50	25	0 mm	top	1:1	0.000	1.151	0.000	0.000	0.000	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.71	-0.03	0	Ant 2b	H0JWvMWQYM	QPSK	1	50	0 mm	bottom	1:1	0.686	1.146	0.786	0.249	0.285	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.69	0.00	0	Ant 2b	H0JWvMWQYM	QPSK	50	25	0 mm	bottom	1:1	0.688	1.151	0.792	0.249	0.287	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.71	0.12	0	Ant 2b	H0JWvMWQYM	QPSK	1	50	0 mm	right	1:1	0.072	1.146	0.083	0.032	0.037	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.69	0.03	0	Ant 2b	H0JWvMWQYM	QPSK	50	25	0 mm	right	1:1	0.069	1.151	0.079	0.031	0.036	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.71	0.01	0	Ant 2b	H0JWvMWQYM	QPSK	1	50	0 mm	left	1:1	0.015	1.146	0.017	0.007	0.008	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.30	14.69	0.16	0	Ant 2b	H0JWvMWQYM	QPSK	50	25	0 mm	left	1:1	0.014	1.151	0.016	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 10-25
LTE Band 66 (AWS) Antenna 3 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.																						
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.76	0.00	0	Ant 3	Q7XW2M7YLH	QPSK	1	50	0 mm	back	1:1	0.524	1.330	0.697	0.272	0.362	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.76	-0.01	0	Ant 3	Q7XW2M7YLH	QPSK	50	25	0 mm	back	1:1	0.526	1.330	0.700	0.272	0.362	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.76	0.07	0	Ant 3	Q7XW2M7YLH	QPSK	1	50	0 mm	top	1:1	0.326	1.330	0.434	0.126	0.168	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.76	0.02	0	Ant 3	Q7XW2M7YLH	QPSK	50	25	0 mm	top	1:1	0.322	1.330	0.428	0.124	0.165	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.76	0.07	0	Ant 3	Q7XW2M7YLH	QPSK	1	50	0 mm	bottom	1:1	0.022	1.330	0.029	0.011	0.015	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.76	0.04	0	Ant 3	Q7XW2M7YLH	QPSK	50	25	0 mm	bottom	1:1	0.022	1.330	0.029	0.011	0.015	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.00	15.57	0.01	0	Ant 3	Q7XW2M7YLH	QPSK	1	50	0 mm	right	1:1	0.627	1.390	0.872	0.247	0.343	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.76	0.08	0	Ant 3	Q7XW2M7YLH	QPSK	1	50	0 mm	right	1:1	0.632	1.330	0.841	0.250	0.333	
1770.00	132572	High	LTE Band 66 (AWS)	20	17.00	15.71	0.20	0	Ant 3	Q7XW2M7YLH	QPSK	1	50	0 mm	right	1:1	0.611	1.346	0.822	0.235	0.316	
1720.00	132072	Low	LTE Band 66 (AWS)	20	17.00	15.70	0.00	0	Ant 3	Q7XW2M7YLH	QPSK	50	50	0 mm	right	1:1	0.620	1.349	0.836	0.244	0.329	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.76	-0.01	0	Ant 3	Q7XW2M7YLH	QPSK	50	25	0 mm	right	1:1	0.621	1.330	0.826	0.246	0.327	
1770.00	132572	High	LTE Band 66 (AWS)	20	17.00	15.76	0.01	0	Ant 3	Q7XW2M7YLH	QPSK	50	25	0 mm	right	1:1	0.612	1.332	0.815	0.246	0.328	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.74	0.01	0	Ant 3	Q7XW2M7YLH	QPSK	100	0	0 mm	right	1:1	0.640	1.337	0.856	0.259	0.346	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.76	-0.12	0	Ant 3	Q7XW2M7YLH	QPSK	1	50	0 mm	left	1:1	0.078	1.330	0.104	0.031	0.041	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	17.00	15.76	0.01	0	Ant 3	Q7XW2M7YLH	QPSK	50	25	0 mm	left	1:1	0.078	1.330	0.104	0.031	0.041	
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 4b 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)	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.30	13.30	0.02	0	Ant 4b	RXMW0Y2WCW	QPSK	1	50	0 mm	back	1:1	0.540	1.259	0.680	0.216	0.272	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.30	13.23	0.00	0	Ant 4b	RXMW0Y2WCW	QPSK	50	25	0 mm	back	1:1	0.550	1.279	0.703	0.218	0.279	
1720.00	132072	Low	LTE Band 66 (AWS)	20	14.30	13.19	0.03	0	Ant 4b	RXMW0Y2WCW	QPSK	1	50	0 mm	top	1:1	0.660	1.291	0.852	0.243	0.314	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.30	13.30	0.05	0	Ant 4b	RXMW0Y2WCW	QPSK	1	50	0 mm	top	1:1	0.661	1.259	0.832	0.243	0.306	
1770.00	132572	High	LTE Band 66 (AWS)	20	14.30	13.01	0.02	0	Ant 4b	RXMW0Y2WCW	QPSK	1	50	0 mm	top	1:1	0.683	1.346	0.919	0.250	0.337	
1720.00	132072	Low	LTE Band 66 (AWS)	20	14.30	13.16	0.00	0	Ant 4b	RXMW0Y2WCW	QPSK	50	25	0 mm	top	1:1	0.654	1.300	0.850	0.241	0.313	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.30	13.23	-0.02	0	Ant 4b	RXMW0Y2WCW	QPSK	50	25	0 mm	top	1:1	0.656	1.279	0.839	0.241	0.308	
1770.00	132572	High	LTE Band 66 (AWS)	20	14.30	13.17	0.00	0	Ant 4b	RXMW0Y2WCW	QPSK	50	25	0 mm	top	1:1	0.686	1.297	0.890	0.252	0.327	
1770.00	132572	High	LTE Band 66 (AWS)	20	14.30	13.15	0.01	0	Ant 4b	RXMW0Y2WCW	QPSK	100	0	0 mm	top	1:1	0.665	1.303	0.866	0.244	0.318	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.30	13.30	0.07	0	Ant 4b	RXMW0Y2WCW	QPSK	1	50	0 mm	bottom	1:1	0.000	1.259	0.000	0.000	0.000	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.30	13.23	0.01	0	Ant 4b	RXMW0Y2WCW	QPSK	50	25	0 mm	bottom	1:1	0.000	1.279	0.000	0.000	0.000	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.30	13.30	0.09	0	Ant 4b	RXMW0Y2WCW	QPSK	1	50	0 mm	right	1:1	0.001	1.259	0.001	0.000	0.000	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.30	13.23	0.01	0	Ant 4b	RXMW0Y2WCW	QPSK	50	25	0 mm	right	1:1	0.001	1.279	0.001	0.000	0.000	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.30	13.30	0.01	0	Ant 4b	RXMW0Y2WCW	QPSK	1	50	0 mm	left	1:1	0.037	1.259	0.047	0.014	0.018	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	14.30	13.23	0.00	0	Ant 4b	RXMW0Y2WCW	QPSK	50	25	0 mm	left	1:1	0.040	1.279	0.051	0.015	0.019	
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 1 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	17.40	16.59	0.00	0	Ant 1	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.702	1.205	0.846	0.291	0.351	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	17.40	16.33	-0.04	0	Ant 1	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.692	1.279	0.885	0.283	0.362	
1905.00	26590	High	LTE Band 25 (PCS)	20	17.40	16.43	0.00	0	Ant 1	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.607	1.250	0.759	0.277	0.346	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.40	16.57	0.05	0	Ant 1	C0D414XD6N	QPSK	50	25	0 mm	back	1:1	0.729	1.211	0.883	0.296	0.358	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	17.40	16.55	0.04	0	Ant 1	C0D414XD6N	QPSK	50	0	0 mm	back	1:1	0.736	1.216	0.895	0.295	0.359	
1905.00	26590	High	LTE Band 25 (PCS)	20	17.40	16.50	-0.03	0	Ant 1	C0D414XD6N	QPSK	50	25	0 mm	back	1:1	0.704	1.230	0.866	0.288	0.354	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	17.40	16.49	0.00	0	Ant 1	C0D414XD6N	QPSK	100	0	0 mm	back	1:1	0.691	1.233	0.852	0.285	0.351	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.40	16.59	-0.12	0	Ant 1	C0D414XD6N	QPSK	1	50	0 mm	top	1:1	0.021	1.205	0.025	0.010	0.012	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.40	16.57	-0.08	0	Ant 1	C0D414XD6N	QPSK	50	25	0 mm	top	1:1	0.020	1.211	0.024	0.009	0.011	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.40	16.59	0.06	0	Ant 1	C0D414XD6N	QPSK	1	50	0 mm	bottom	1:1	0.334	1.205	0.402	0.123	0.148	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.40	16.57	-0.02	0	Ant 1	C0D414XD6N	QPSK	50	25	0 mm	bottom	1:1	0.334	1.211	0.404	0.125	0.151	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.40	16.59	0.03	0	Ant 1	C0D414XD6N	QPSK	1	50	0 mm	right	1:1	0.000	1.205	0.000	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.40	16.57	0.08	0	Ant 1	C0D414XD6N	QPSK	50	25	0 mm	right	1:1	0.000	1.211	0.000	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.40	16.59	0.16	0	Ant 1	C0D414XD6N	QPSK	1	50	0 mm	left	1:1	0.657	1.205	0.792	0.243	0.293	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.40	16.57	0.03	0	Ant 1	C0D414XD6N	QPSK	50	25	0 mm	left	1:1	0.649	1.211	0.786	0.238	0.288	
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	14.70	14.36	0.00	0	Ant 2b	C0D414XD6N	QPSK	1	99	0 mm	back	1:1	0.863	1.081	0.933	0.343	0.371	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.49	-0.04	0	Ant 2b	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.881	1.050	0.925	0.351	0.369	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.70	14.41	-0.05	0	Ant 2b	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.890	1.069	0.951	0.355	0.379	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.70	14.43	-0.03	0	Ant 2b	C0D414XD6N	QPSK	50	50	0 mm	back	1:1	0.878	1.064	0.934	0.350	0.372	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.55	0.01	0	Ant 2b	C0D414XD6N	QPSK	50	25	0 mm	back	1:1	0.899	1.035	0.930	0.358	0.371	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.70	14.52	0.00	0	Ant 2b	C0D414XD6N	QPSK	50	0	0 mm	back	1:1	0.913	1.042	0.951	0.363	0.378	A11
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.44	0.03	0	Ant 2b	C0D414XD6N	QPSK	100	0	0 mm	back	1:1	0.888	1.062	0.943	0.352	0.374	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.49	0.01	0	Ant 2b	C0D414XD6N	QPSK	1	50	0 mm	top	1:1	0.005	1.050	0.005	0.002	0.002	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.55	0.08	0	Ant 2b	C0D414XD6N	QPSK	50	25	0 mm	top	1:1	0.005	1.035	0.005	0.002	0.002	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.70	14.36	0.01	0	Ant 2b	C0D414XD6N	QPSK	1	99	0 mm	bottom	1:1	0.723	1.081	0.782	0.260	0.281	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.49	-0.03	0	Ant 2b	C0D414XD6N	QPSK	1	50	0 mm	bottom	1:1	0.769	1.050	0.807	0.280	0.294	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.70	14.41	0.00	0	Ant 2b	C0D414XD6N	QPSK	1	50	0 mm	bottom	1:1	0.791	1.069	0.846	0.285	0.305	
1860.00	26140	Low	LTE Band 25 (PCS)	20	14.70	14.43	0.03	0	Ant 2b	C0D414XD6N	QPSK	50	50	0 mm	bottom	1:1	0.735	1.064	0.782	0.269	0.286	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.55	0.01	0	Ant 2b	C0D414XD6N	QPSK	50	25	0 mm	bottom	1:1	0.781	1.035	0.808	0.283	0.293	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.70	14.52	-0.06	0	Ant 2b	C0D414XD6N	QPSK	50	0	0 mm	bottom	1:1	0.802	1.042	0.836	0.290	0.302	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.44	0.01	0	Ant 2b	C0D414XD6N	QPSK	100	0	0 mm	bottom	1:1	0.788	1.062	0.837	0.281	0.298	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.49	-0.01	0	Ant 2b	C0D414XD6N	QPSK	1	50	0 mm	right	1:1	0.034	1.050	0.036	0.016	0.017	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.55	-0.01	0	Ant 2b	C0D414XD6N	QPSK	50	25	0 mm	right	1:1	0.036	1.035	0.037	0.018	0.019	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.49	-0.06	0	Ant 2b	C0D414XD6N	QPSK	1	50	0 mm	left	1:1	0.014	1.050	0.015	0.007	0.007	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	14.70	14.55	0.05	0	Ant 2b	C0D414XD6N	QPSK	50	25	0 mm	left	1:1	0.013	1.035	0.013	0.006	0.006	
1905.00	26590	High	LTE Band 25 (PCS)	20	14.70	14.52	-0.01	0	Ant 2b	C0D414XD6N	QPSK	50	0	0 mm	back	1:1	0.775	1.042	0.808	0.324	0.338	
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 10-29
LTE Band 25 (PCS) Antenna 3 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	16.90	16.51	-0.03	0	Ant 3	C0D414XD6N	QPSK	1	99	0 mm	back	1:1	0.564	1.094	0.617	0.284	0.311	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.90	16.54	-0.01	0	Ant 3	C0D414XD6N	QPSK	50	50	0 mm	back	1:1	0.561	1.086	0.609	0.282	0.306	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.90	16.51	-0.02	0	Ant 3	C0D414XD6N	QPSK	1	99	0 mm	top	1:1	0.439	1.094	0.480	0.159	0.174	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.90	16.54	0.02	0	Ant 3	C0D414XD6N	QPSK	50	50	0 mm	top	1:1	0.440	1.086	0.478	0.160	0.174	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.90	16.51	0.01	0	Ant 3	C0D414XD6N	QPSK	1	99	0 mm	bottom	1:1	0.019	1.094	0.021	0.010	0.011	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.90	16.54	0.01	0	Ant 3	C0D414XD6N	QPSK	50	50	0 mm	bottom	1:1	0.017	1.086	0.018	0.008	0.009	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.90	16.51	-0.05	0	Ant 3	C0D414XD6N	QPSK	1	99	0 mm	right	1:1	0.793	1.094	0.868	0.312	0.341	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	16.90	16.42	-0.06	0	Ant 3	C0D414XD6N	QPSK	1	99	0 mm	right	1:1	0.803	1.117	0.897	0.318	0.355	
1905.00	26590	High	LTE Band 25 (PCS)	20	16.90	16.22	0.03	0	Ant 3	C0D414XD6N	QPSK	1	99	0 mm	right	1:1	0.834	1.169	0.975	0.330	0.386	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.90	16.54	0.00	0	Ant 3	C0D414XD6N	QPSK	50	50	0 mm	right	1:1	0.771	1.086	0.837	0.303	0.329	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	16.90	16.53	-0.02	0	Ant 3	C0D414XD6N	QPSK	50	50	0 mm	right	1:1	0.785	1.089	0.855	0.308	0.335	
1905.00	26590	High	LTE Band 25 (PCS)	20	16.90	16.45	0.00	0	Ant 3	C0D414XD6N	QPSK	50	50	0 mm	right	1:1	0.815	1.109	0.904	0.321	0.356	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.90	16.44	0.03	0	Ant 3	C0D414XD6N	QPSK	100	0	0 mm	right	1:1	0.789	1.112	0.877	0.312	0.347	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.90	16.51	0.01	0	Ant 3	C0D414XD6N	QPSK	1	99	0 mm	left	1:1	0.001	1.094	0.001	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	16.90	16.54	0.07	0	Ant 3	C0D414XD6N	QPSK	50	50	0 mm	left	1:1	0.000	1.086	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 4b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.20	12.04	-0.07	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.660	1.306	0.862	0.255	0.333	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.23	0.04	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.698	1.250	0.873	0.269	0.336	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.20	12.15	-0.01	0	Ant 4b	C0D414XD6N	QPSK	1	0	0 mm	back	1:1	0.698	1.274	0.889	0.268	0.341	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.20	12.24	-0.02	0	Ant 4b	C0D414XD6N	QPSK	50	25	0 mm	back	1:1	0.666	1.247	0.831	0.256	0.319	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.29	-0.02	0	Ant 4b	C0D414XD6N	QPSK	50	25	0 mm	back	1:1	0.712	1.233	0.878	0.274	0.338	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.20	12.21	-0.19	0	Ant 4b	C0D414XD6N	QPSK	50	0	0 mm	back	1:1	0.757	1.256	0.951	0.291	0.365	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.12	-0.02	0	Ant 4b	C0D414XD6N	QPSK	100	0	0 mm	back	1:1	0.705	1.282	0.904	0.271	0.347	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.20	12.04	-0.04	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	top	1:1	0.657	1.306	0.858	0.238	0.311	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.23	0.05	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	top	1:1	0.651	1.250	0.814	0.236	0.295	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.20	12.15	-0.03	0	Ant 4b	C0D414XD6N	QPSK	1	0	0 mm	top	1:1	0.658	1.274	0.838	0.237	0.302	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.20	12.24	-0.02	0	Ant 4b	C0D414XD6N	QPSK	50	25	0 mm	top	1:1	0.675	1.247	0.842	0.244	0.304	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.29	-0.04	0	Ant 4b	C0D414XD6N	QPSK	50	25	0 mm	top	1:1	0.675	1.233	0.832	0.243	0.300	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.20	12.21	-0.01	0	Ant 4b	C0D414XD6N	QPSK	50	0	0 mm	top	1:1	0.678	1.256	0.852	0.244	0.306	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.12	-0.06	0	Ant 4b	C0D414XD6N	QPSK	100	0	0 mm	top	1:1	0.679	1.282	0.870	0.245	0.314	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.23	0.02	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	bottom	1:1	0.150	1.250	0.188	0.054	0.068	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.29	-0.06	0	Ant 4b	C0D414XD6N	QPSK	50	25	0 mm	bottom	1:1	0.148	1.233	0.182	0.053	0.065	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.23	0.05	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	right	1:1	0.007	1.250	0.009	0.003	0.004	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.29	0.09	0	Ant 4b	C0D414XD6N	QPSK	50	25	0 mm	right	1:1	0.006	1.233	0.007	0.002	0.002	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.23	-0.10	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	left	1:1	0.021	1.250	0.026	0.008	0.010	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.20	12.29	-0.08	0	Ant 4b	C0D414XD6N	QPSK	50	25	0 mm	left	1:1	0.021	1.233	0.026	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 10-31
LTE Band 30 Antenna 1 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.26	0.05	0	Ant 1	FYQLHC9HFM	QPSK	1	25	0 mm	back	1:1	0.696	1.361	0.947	0.273	0.372	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.16	-0.01	0	Ant 1	FYQLHC9HFM	QPSK	25	12	0 mm	back	1:1	0.684	1.393	0.953	0.269	0.375	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.12	-0.02	0	Ant 1	FYQLHC9HFM	QPSK	50	0	0 mm	back	1:1	0.660	1.406	0.928	0.261	0.367	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.26	0.07	0	Ant 1	FYQLHC9HFM	QPSK	1	25	0 mm	top	1:1	0.004	1.361	0.005	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.16	0.01	0	Ant 1	FYQLHC9HFM	QPSK	25	12	0 mm	top	1:1	0.004	1.393	0.006	0.001	0.001	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.26	-0.03	0	Ant 1	FYQLHC9HFM	QPSK	1	25	0 mm	bottom	1:1	0.391	1.361	0.532	0.137	0.186	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.16	0.04	0	Ant 1	FYQLHC9HFM	QPSK	25	12	0 mm	bottom	1:1	0.392	1.393	0.546	0.137	0.191	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.26	0.09	0	Ant 1	FYQLHC9HFM	QPSK	1	25	0 mm	right	1:1	0.000	1.361	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.16	0.06	0	Ant 1	FYQLHC9HFM	QPSK	25	12	0 mm	right	1:1	0.000	1.393	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.26	0.08	0	Ant 1	FYQLHC9HFM	QPSK	1	25	0 mm	left	1:1	0.666	1.361	0.906	0.245	0.333	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.16	-0.03	0	Ant 1	FYQLHC9HFM	QPSK	25	12	0 mm	left	1:1	0.653	1.393	0.910	0.240	0.334	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.12	0.01	0	Ant 1	FYQLHC9HFM	QPSK	50	0	0 mm	left	1:1	0.686	1.406	0.965	0.246	0.346	
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	14.60	13.67	-0.02	0	Ant 2b	FYQLHC9HFM	QPSK	1	25	0 mm	back	1:1	0.702	1.239	0.870	0.256	0.317	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.69	0.01	0	Ant 2b	FYQLHC9HFM	QPSK	25	12	0 mm	back	1:1	0.708	1.233	0.873	0.258	0.318	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.66	0.00	0	Ant 2b	FYQLHC9HFM	QPSK	50	0	0 mm	back	1:1	0.643	1.242	0.799	0.232	0.288	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.67	0.01	0	Ant 2b	FYQLHC9HFM	QPSK	1	25	0 mm	top	1:1	0.000	1.239	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.69	0.20	0	Ant 2b	FYQLHC9HFM	QPSK	25	12	0 mm	top	1:1	0.000	1.233	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.67	0.09	0	Ant 2b	FYQLHC9HFM	QPSK	1	25	0 mm	bottom	1:1	0.748	1.239	0.927	0.276	0.342	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.69	0.02	0	Ant 2b	FYQLHC9HFM	QPSK	25	12	0 mm	bottom	1:1	0.754	1.233	0.930	0.275	0.339	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.66	-0.01	0	Ant 2b	FYQLHC9HFM	QPSK	50	0	0 mm	bottom	1:1	0.730	1.242	0.907	0.268	0.333	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.67	0.01	0	Ant 2b	FYQLHC9HFM	QPSK	1	25	0 mm	right	1:1	0.042	1.239	0.052	0.017	0.021	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.69	-0.03	0	Ant 2b	FYQLHC9HFM	QPSK	25	12	0 mm	right	1:1	0.040	1.233	0.049	0.017	0.021	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.67	0.03	0	Ant 2b	FYQLHC9HFM	QPSK	1	25	0 mm	left	1:1	0.021	1.239	0.026	0.008	0.010	
2310.00	27710	Mid	LTE Band 30	10	14.60	13.69	-0.20	0	Ant 2b	FYQLHC9HFM	QPSK	25	12	0 mm	left	1:1	0.016	1.233	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 10-33
LTE Band 30 Antenna 3 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	15.90	14.97	0.02	0	Ant 3	Q7XW2M7YLH	QPSK	1	25	0 mm	back	1:1	0.534	1.239	0.662	0.204	0.253	
2310.00	27710	Mid	LTE Band 30	10	15.90	15.04	-0.02	0	Ant 3	Q7XW2M7YLH	QPSK	25	12	0 mm	back	1:1	0.536	1.219	0.653	0.205	0.250	
2310.00	27710	Mid	LTE Band 30	10	15.90	14.97	0.06	0	Ant 3	Q7XW2M7YLH	QPSK	1	25	0 mm	top	1:1	0.580	1.239	0.719	0.193	0.239	
2310.00	27710	Mid	LTE Band 30	10	15.90	15.04	-0.02	0	Ant 3	Q7XW2M7YLH	QPSK	25	12	0 mm	top	1:1	0.580	1.219	0.707	0.194	0.236	
2310.00	27710	Mid	LTE Band 30	10	15.90	14.97	0.02	0	Ant 3	Q7XW2M7YLH	QPSK	1	25	0 mm	bottom	1:1	0.000	1.239	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	15.90	15.04	0.02	0	Ant 3	Q7XW2M7YLH	QPSK	25	12	0 mm	bottom	1:1	0.008	1.219	0.010	0.003	0.004	
2310.00	27710	Mid	LTE Band 30	10	15.90	14.97	0.03	0	Ant 3	Q7XW2M7YLH	QPSK	1	25	0 mm	right	1:1	0.780	1.239	0.966	0.294	0.364	A12
2310.00	27710	Mid	LTE Band 30	10	15.90	15.04	0.01	0	Ant 3	Q7XW2M7YLH	QPSK	25	12	0 mm	right	1:1	0.780	1.219	0.951	0.294	0.358	
2310.00	27710	Mid	LTE Band 30	10	15.90	14.90	-0.01	0	Ant 3	Q7XW2M7YLH	QPSK	50	0	0 mm	right	1:1	0.753	1.259	0.948	0.285	0.359	
2310.00	27710	Mid	LTE Band 30	10	15.90	14.97	-0.01	0	Ant 3	Q7XW2M7YLH	QPSK	1	25	0 mm	left	1:1	0.081	1.239	0.100	0.032	0.040	
2310.00	27710	Mid	LTE Band 30	10	15.90	15.04	0.00	0	Ant 3	Q7XW2M7YLH	QPSK	25	12	0 mm	left	1:1	0.079	1.219	0.096	0.031	0.038	
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 4b 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	13.10	11.80	0.00	0	Ant 4b	MGXQY2CWF2	QPSK	1	25	0 mm	back	1:1	0.709	1.349	0.956	0.268	0.362	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.78	0.04	0	Ant 4b	MGXQY2CWF2	QPSK	25	12	0 mm	back	1:1	0.717	1.355	0.972	0.271	0.367	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.75	-0.03	0	Ant 4b	MGXQY2CWF2	QPSK	50	0	0 mm	back	1:1	0.701	1.365	0.957	0.265	0.362	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.80	0.04	0	Ant 4b	MGXQY2CWF2	QPSK	1	25	0 mm	top	1:1	0.699	1.349	0.943	0.248	0.335	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.78	0.00	0	Ant 4b	MGXQY2CWF2	QPSK	25	12	0 mm	top	1:1	0.701	1.355	0.950	0.247	0.335	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.75	-0.01	0	Ant 4b	MGXQY2CWF2	QPSK	50	0	0 mm	top	1:1	0.687	1.365	0.938	0.243	0.332	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.80	0.20	0	Ant 4b	MGXQY2CWF2	QPSK	1	25	0 mm	bottom	1:1	0.000	1.349	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.78	0.20	0	Ant 4b	MGXQY2CWF2	QPSK	25	12	0 mm	bottom	1:1	0.001	1.355	0.001	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.80	0.20	0	Ant 4b	MGXQY2CWF2	QPSK	1	25	0 mm	right	1:1	0.008	1.349	0.011	0.004	0.005	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.78	0.09	0	Ant 4b	MGXQY2CWF2	QPSK	25	12	0 mm	right	1:1	0.006	1.355	0.008	0.002	0.003	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.80	0.05	0	Ant 4b	MGXQY2CWF2	QPSK	1	25	0 mm	left	1:1	0.032	1.349	0.043	0.013	0.018	
2310.00	27710	Mid	LTE Band 30	10	13.10	11.78	-0.03	0	Ant 4b	MGXQY2CWF2	QPSK	25	12	0 mm	left	1:1	0.032	1.355	0.043	0.012	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 10-35
LTE Band 7 Antenna 1 Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink / 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																					
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.50	13.90	0.05	0	Ant 1	N4C42R071C	QPSK	1	50	0 mm	back	1:1	0.762	1.148	0.875	0.254	0.292	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.50	14.11	0.06	0	Ant 1	N4C42R071C	QPSK	1	50	0 mm	back	1:1	0.807	1.094	0.883	0.267	0.292	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.13	-0.01	0	Ant 1	N4C42R071C	QPSK	1	50	0 mm	back	1:1	0.886	1.089	0.965	0.291	0.317	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.50	13.61	0.03	0	Ant 1	N4C42R071C	QPSK	50	25	0 mm	back	1:1	0.771	1.227	0.946	0.258	0.317	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.50	13.92	-0.01	0	Ant 1	N4C42R071C	QPSK	50	25	0 mm	back	1:1	0.821	1.143	0.938	0.324	0.370	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.15	0.10	0	Ant 1	N4C42R071C	QPSK	50	0	0 mm	back	1:1	0.904	1.084	0.980	0.311	0.337	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.16	0.05	0	Ant 1	N4C42R071C	QPSK	50	25	0 mm	back	1:1	0.893	1.081	0.965	0.292	0.316	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	13.77	0.12	0	Ant 1	N4C42R071C	QPSK	100	0	0 mm	back	1:1	0.705	1.183	0.834	0.235	0.278	
2 CC Uplink	PCC	2560.00	21350	High	LTE Band 7	20	14.50	14.40	0.00	0	Ant 1	N4C42R071C	QPSK	50	0	0 mm	back	1:1	0.967	1.023	0.989	0.332	0.340	A13
2 CC Uplink	SCC	2540.20	21152	High	LTE Band 7	20								50	50									
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.13	-0.08	0	Ant 1	N4C42R071C	QPSK	1	50	0 mm	top	1:1	0.007	1.089	0.008	0.000	0.000	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.16	0.05	0	Ant 1	N4C42R071C	QPSK	50	25	0 mm	top	1:1	0.010	1.081	0.011	0.000	0.000	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.13	-0.03	0	Ant 1	N4C42R071C	QPSK	1	50	0 mm	bottom	1:1	0.530	1.089	0.577	0.180	0.196	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.16	0.03	0	Ant 1	N4C42R071C	QPSK	50	25	0 mm	bottom	1:1	0.537	1.081	0.580	0.182	0.197	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.13	0.01	0	Ant 1	N4C42R071C	QPSK	1	50	0 mm	right	1:1	0.006	1.089	0.007	0.000	0.000	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.16	0.04	0	Ant 1	N4C42R071C	QPSK	50	25	0 mm	right	1:1	0.008	1.081	0.009	0.002	0.002	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.13	0.09	0	Ant 1	N4C42R071C	QPSK	1	50	0 mm	left	1:1	0.300	1.089	0.327	0.100	0.109	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.50	14.16	-0.01	0	Ant 1	N4C42R071C	QPSK	50	25	0 mm	left	1:1	0.305	1.081	0.330	0.102	0.110	
2 CC Uplink	PCC	2560.00	21350	High	LTE Band 7	20	14.50	14.40	0.07	0	Ant 1	N4C42R071C	QPSK	50	0	0 mm	back	1:1	0.949	1.023	0.971	0.324	0.331	
2 CC Uplink	SCC	2540.20	21152	High	LTE Band 7	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 10-36
LTE Band 7 Antenna 2b Body SAR

MEASUREMENT RESULTS																												
1 CC Uplink | 2 CC 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	N/A	2510.00	20850	Low	LTE Band 7	20	14.90	14.01	0.06	0	Ant 2b	JYHWFYYC62	QPSK	1	50	0 mm	back	1:1	0.717	1.228	0.880	0.318	0.391	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.90	14.10	0.04	0	Ant 2b	JYHWFYYC62	QPSK	1	50	0 mm	back	1:1	0.685	1.203	0.824	0.305	0.367	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.90	14.22	0.01	0	Ant 2b	JYHWFYYC62	QPSK	1	50	0 mm	back	1:1	0.687	1.169	0.803	0.273	0.319	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.90	14.24	0.01	0	Ant 2b	JYHWFYYC62	QPSK	50	25	0 mm	back	1:1	0.783	1.164	0.911	0.271	0.315	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.90	14.22	0.04	0	Ant 2b	JYHWFYYC62	QPSK	50	50	0 mm	back	1:1	0.705	1.169	0.824	0.307	0.359	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.90	14.23	-0.03	0	Ant 2b	JYHWFYYC62	QPSK	50	25	0 mm	back	1:1	0.711	1.168	0.830	0.309	0.361	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.90	14.21	0.00	0	Ant 2b	JYHWFYYC62	QPSK	50	25	0 mm	back	1:1	0.705	1.171	0.826	0.313	0.367	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.90	14.21	-0.03	0	Ant 2b	JYHWFYYC62	QPSK	100	0	0 mm	back	1:1	0.735	1.173	0.862	0.324	0.380	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	14.90	14.40	0.00	0	Ant 2b	JYHWFYYC62	QPSK	50	50	0 mm	back	1:1	0.769	1.122	0.863	0.288	0.323	
2 CC Uplink	SCC	2529.80	21048	High	LTE Band 7	20								50	0									
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.90	14.22	-0.03	0	Ant 2b	JYHWFYYC62	QPSK	1	50	0 mm	top	1:1	0.014	1.169	0.016	0.004	0.005	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.90	14.24	0.08	0	Ant 2b	JYHWFYYC62	QPSK	50	25	0 mm	top	1:1	0.005	1.164	0.006	0.000	0.000	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.90	14.22	-0.09	0	Ant 2b	JYHWFYYC62	QPSK	1	50	0 mm	bottom	1:1	0.599	1.169	0.700	0.214	0.250	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.90	14.24	-0.01	0	Ant 2b	JYHWFYYC62	QPSK	50	25	0 mm	bottom	1:1	0.661	1.164	0.769	0.236	0.275	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.90	14.22	-0.09	0	Ant 2b	JYHWFYYC62	QPSK	1	50	0 mm	right	1:1	0.030	1.169	0.035	0.012	0.014	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.90	14.24	-0.03	0	Ant 2b	JYHWFYYC62	QPSK	50	25	0 mm	right	1:1	0.033	1.164	0.038	0.014	0.016	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.90	14.22	0.03	0	Ant 2b	JYHWFYYC62	QPSK	1	50	0 mm	left	1:1	0.015	1.169	0.018	0.006	0.007	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.90	14.24	0.03	0	Ant 2b	JYHWFYYC62	QPSK	50	25	0 mm	left	1:1	0.018	1.164	0.021	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 10-37
LTE Band 7 Antenna 3 Body SAR

MEASUREMENT RESULTS																												
1 CC Uplink | 2 CC 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	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.95	0.03	0	Ant 3	HMDFPP9TMW	QPSK	1	50	0 mm	back	1:1	0.640	1.135	0.726	0.229	0.260	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.91	0.04	0	Ant 3	HMDFPP9TMW	QPSK	50	25	0 mm	back	1:1	0.652	1.146	0.747	0.233	0.267	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	16.50	15.52	-0.01	0	Ant 3	HMDFPP9TMW	QPSK	1	50	0 mm	top	1:1	0.737	1.253	0.923	0.257	0.322	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	16.50	15.51	0.02	0	Ant 3	HMDFPP9TMW	QPSK	1	99	0 mm	top	1:1	0.744	1.256	0.934	0.259	0.325	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	16.50	15.82	-0.01	0	Ant 3	HMDFPP9TMW	QPSK	1	50	0 mm	top	1:1	0.698	1.169	0.816	0.253	0.296	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.95	0.01	0	Ant 3	HMDFPP9TMW	QPSK	1	50	0 mm	top	1:1	0.717	1.135	0.814	0.258	0.293	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	16.50	15.90	0.02	0	Ant 3	HMDFPP9TMW	QPSK	50	0	0 mm	top	1:1	0.690	1.148	0.792	0.254	0.292	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	16.50	15.90	0.01	0	Ant 3	HMDFPP9TMW	QPSK	50	25	0 mm	top	1:1	0.708	1.148	0.813	0.257	0.295	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.91	0.02	0	Ant 3	HMDFPP9TMW	QPSK	50	25	0 mm	top	1:1	0.736	1.146	0.843	0.264	0.303	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.87	-0.01	0	Ant 3	HMDFPP9TMW	QPSK	100	0	0 mm	top	1:1	0.725	1.156	0.838	0.261	0.302	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	16.50	15.55	0.00	0	Ant 3	HMDFPP9TMW	QPSK	1	99	0 mm	top	1:1	0.745	1.245	0.928	0.258	0.321	
2 CC Uplink	SCC	2529.80	21048	Low	LTE Band 7	20								1	0									
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.95	0.09	0	Ant 3	HMDFPP9TMW	QPSK	1	50	0 mm	bottom	1:1	0.003	1.135	0.003	0.000	0.000	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.91	0.05	0	Ant 3	HMDFPP9TMW	QPSK	50	25	0 mm	bottom	1:1	0.003	1.146	0.003	0.001	0.001	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.95	0.01	0	Ant 3	HMDFPP9TMW	QPSK	1	50	0 mm	right	1:1	0.433	1.135	0.491	0.150	0.170	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.91	-0.01	0	Ant 3	HMDFPP9TMW	QPSK	50	25	0 mm	right	1:1	0.434	1.146	0.497	0.152	0.174	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.95	0.01	0	Ant 3	HMDFPP9TMW	QPSK	1	50	0 mm	left	1:1	0.014	1.135	0.016	0.005	0.006	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	16.50	15.91	0.05	0	Ant 3	HMDFPP9TMW	QPSK	50	25	0 mm	left	1:1	0.014	1.146	0.016	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 10-38
LTE Band 7 Antenna 4b Body SAR

MEASUREMENT RESULTS																												
1 CC Uplink | 2 CC 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	N/A	2560.00	21350	High	LTE Band 7	20	13.20	12.34	0.03	0	Ant 4b	N4C42R071C	QPSK	1	50	0 mm	back	1:1	0.549	1.219	0.669	0.201	0.245	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	13.20	12.35	0.01	0	Ant 4b	N4C42R071C	QPSK	50	25	0 mm	back	1:1	0.581	1.216	0.706	0.214	0.260	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	13.20	12.17	-0.10	0	Ant 4b	N4C42R071C	QPSK	1	50	0 mm	top	1:1	0.783	1.268	0.993	0.267	0.339	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	13.20	12.07	-0.01	0	Ant 4b	N4C42R071C	QPSK	1	99	0 mm	top	1:1	0.729	1.297	0.946	0.250	0.324	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	13.20	12.30	-0.03	0	Ant 4b	N4C42R071C	QPSK	1	50	0 mm	top	1:1	0.760	1.230	0.935	0.259	0.319	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.20	12.34	0.00	0	Ant 4b	N4C42R071C	QPSK	1	50	0 mm	top	1:1	0.650	1.219	0.792	0.218	0.266	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	13.20	12.35	0.00	0	Ant 4b	N4C42R071C	QPSK	50	25	0 mm	top	1:1	0.668	1.216	0.812	0.224	0.272	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	13.20	12.33	0.00	0	Ant 4b	N4C42R071C	QPSK	50	0	0 mm	top	1:1	0.664	1.222	0.811	0.222	0.271	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.20	12.22	-0.01	0	Ant 4b	N4C42R071C	QPSK	50	0	0 mm	top	1:1	0.671	1.253	0.841	0.222	0.278	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	13.20	12.23	0.00	0	Ant 4b	N4C42R071C	QPSK	100	0	0 mm	top	1:1	0.768	1.250	0.960	0.262	0.328	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	13.20	12.32	-0.02	0	Ant 4b	N4C42R071C	QPSK	1	99	0 mm	top	1:1	0.756	1.225	0.926	0.258	0.316	
2 CC Uplink	SCC	2529.80	21048	High	LTE Band 7	20								1	0									
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.20	12.34	0.02	0	Ant 4b	N4C42R071C	QPSK	1	50	0 mm	bottom	1:1	0.000	1.219	0.000	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	13.20	12.35	0.06	0	Ant 4b	N4C42R071C	QPSK	50	25	0 mm	bottom	1:1	0.000	1.216	0.000	0.000	0.000	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.20	12.34	0.09	0	Ant 4b	N4C42R071C	QPSK	1	50	0 mm	right	1:1	0.018	1.219	0.022	0.006	0.007	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	13.20	12.35	0.04	0	Ant 4b	N4C42R071C	QPSK	50	25	0 mm	right	1:1	0.017	1.216	0.021	0.005	0.006	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	13.20	12.34	0.11	0	Ant 4b	N4C42R071C	QPSK	1	50	0 mm	left	1:1	0.018	1.219	0.022	0.005	0.006	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	13.20	12.35	0.08	0	Ant 4b	N4C42R071C	QPSK	50	25	0 mm	left	1:1	0.017	1.216	0.021	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 10-39
LTE Band 41 Antenna 1 Body SAR

MEASUREMENT RESULTS																											
1 CC Uplink / 2 CC 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	15.70	14.40	-0.05	0	Ant 1	QPFQ1YH0QD	QPSK	1	99	0 mm	back	1:1.58	0.662	1.349	0.893	0.232	0.313	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.70	14.58	-0.01	0	Ant 1	QPFQ1YH0QD	QPSK	1	99	0 mm	back	1:1.58	0.710	1.294	0.919	0.244	0.316	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.70	14.68	-0.07	0	Ant 1	QPFQ1YH0QD	QPSK	1	0	0 mm	back	1:1.58	0.760	1.265	0.961	0.257	0.325	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	15.70	14.50	-0.03	0	Ant 1	QPFQ1YH0QD	QPSK	1	0	0 mm	back	1:1.58	0.758	1.318	0.999	0.255	0.336	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	15.70	14.67	0.04	0	Ant 1	QPFQ1YH0QD	QPSK	1	99	0 mm	back	1:1.58	0.786	1.268	0.997	0.259	0.328	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	15.70	14.48	0.01	0	Ant 1	QPFQ1YH0QD	QPSK	50	0	0 mm	back	1:1.58	0.659	1.324	0.873	0.234	0.310	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.70	14.64	0.03	0	Ant 1	QPFQ1YH0QD	QPSK	50	50	0 mm	back	1:1.58	0.728	1.276	0.929	0.250	0.319	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.70	14.75	-0.02	0	Ant 1	QPFQ1YH0QD	QPSK	50	25	0 mm	back	1:1.58	0.773	1.245	0.962	0.261	0.325	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	15.70	14.62	0.01	0	Ant 1	QPFQ1YH0QD	QPSK	50	25	0 mm	back	1:1.58	0.773	1.282	0.991	0.258	0.331	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	15.70	14.73	0.00	0	Ant 1	QPFQ1YH0QD	QPSK	50	25	0 mm	back	1:1.58	0.796	1.250	0.995	0.262	0.328	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	15.70	14.59	0.00	0	Ant 1	QPFQ1YH0QD	QPSK	100	0	0 mm	back	1:1.58	0.715	1.291	0.923	0.235	0.303	
1 CC Uplink - Power Class 2	N/A	2636.50	41055	Mid-High	LTE Band 41	20	17.30	15.93	-0.02	0	Ant 1	QPFQ1YH0QD	QPSK	1	0	0 mm	back	1:2.31	0.723	1.371	0.991	0.242	0.332	
2 CC Uplink - Power Class 3	PCC	2636.50	41055	Mid-High	LTE Band 41	20	15.70	14.51	-0.01	0	Ant 1	QPFQ1YH0QD	QPSK	1	0	0 mm	back	1:1.58	0.759	1.315	0.998	0.253	0.333	
2 CC Uplink - Power Class 3	SCC	2616.70	40857	Mid-High	LTE Band 41	20								1	99									
2 CC Uplink - Power Class 2	PCC	2636.50	41055	Mid-High	LTE Band 41	20	17.30	15.91	-0.01	0	Ant 1	QPFQ1YH0QD	QPSK	1	0	0 mm	back	1:2.31	0.694	1.377	0.956	0.230	0.317	
2 CC Uplink - Power Class 2	SCC	2616.70	40857	Mid-High	LTE Band 41	20								1	99									
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.70	14.68	0.01	0	Ant 1	QPFQ1YH0QD	QPSK	1	0	0 mm	top	1:1.58	0.001	1.265	0.001	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.70	14.75	0.03	0	Ant 1	QPFQ1YH0QD	QPSK	50	25	0 mm	top	1:1.58	0.005	1.245	0.006	0.002	0.002	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.70	14.68	0.00	0	Ant 1	QPFQ1YH0QD	QPSK	1	0	0 mm	bottom	1:1.58	0.457	1.265	0.578	0.161	0.204	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.70	14.75	-0.04	0	Ant 1	QPFQ1YH0QD	QPSK	50	25	0 mm	bottom	1:1.58	0.457	1.245	0.569	0.161	0.200	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.70	14.68	0.05	0	Ant 1	QPFQ1YH0QD	QPSK	1	0	0 mm	right	1:1.58	0.002	1.265	0.003	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.70	14.75	0.01	0	Ant 1	QPFQ1YH0QD	QPSK	50	25	0 mm	right	1:1.58	0.002	1.245	0.002	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.70	14.68	0.04	0	Ant 1	QPFQ1YH0QD	QPSK	1	0	0 mm	left	1:1.58	0.287	1.265	0.363	0.096	0.121	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	15.70	14.75	0.01	0	Ant 1	QPFQ1YH0QD	QPSK	50	25	0 mm	left	1:1.58	0.290	1.245	0.361	0.097	0.121	
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 / 2 CC 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	17.00	16.02	0.00	0	Ant 2b	FYQLHC9HFM	QPSK	1	50	0 mm	back	1:1.58	0.698	1.253	0.875	0.299	0.375	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.00	16.01	0.06	0	Ant 2b	FYQLHC9HFM	QPSK	1	0	0 mm	back	1:1.58	0.668	1.256	0.839	0.285	0.358	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	17.00	16.11	0.02	0	Ant 2b	FYQLHC9HFM	QPSK	1	0	0 mm	back	1:1.58	0.685	1.226	0.840	0.290	0.356	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	17.00	16.04	0.00	0	Ant 2b	FYQLHC9HFM	QPSK	1	50	0 mm	back	1:1.58	0.633	1.248	0.790	0.266	0.332	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.33	0.01	0	Ant 2b	FYQLHC9HFM	QPSK	1	99	0 mm	back	1:1.58	0.666	1.165	0.776	0.285	0.332	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	17.00	16.16	0.05	0	Ant 2b	FYQLHC9HFM	QPSK	50	0	0 mm	back	1:1.58	0.726	1.212	0.880	0.309	0.375	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	17.00	16.09	-0.09	0	Ant 2b	FYQLHC9HFM	QPSK	50	50	0 mm	back	1:1.58	0.734	1.232	0.904	0.256	0.315	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	17.00	16.16	0.03	0	Ant 2b	FYQLHC9HFM	QPSK	50	0	0 mm	back	1:1.58	0.675	1.214	0.819	0.288	0.350	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	17.00	16.23	-0.01	0	Ant 2b	FYQLHC9HFM	QPSK	50	0	0 mm	back	1:1.58	0.613	1.194	0.732	0.233	0.278	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	17.00	16.18	0.02	0	Ant 2b	FYQLHC9HFM	QPSK	50	25	0 mm	back	1:1.58	0.659	1.207	0.795	0.277	0.334	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.34	-0.01	0	Ant 2b	FYQLHC9HFM	QPSK	50	25	0 mm	back	1:1.58	0.680	1.165	0.792	0.289	0.337	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.32	0.02	0	Ant 2b	FYQLHC9HFM	QPSK	100	0	0 mm	back	1:1.58	0.669	1.171	0.783	0.281	0.329	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	18.60	17.80	-0.01	0	Ant 2b	FYQLHC9HFM	QPSK	50	0	0 mm	back	1:2.31	0.770	1.202	0.926	0.281	0.338	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	18.60	17.85	0.00	0	Ant 2b	FYQLHC9HFM	QPSK	50	50	0 mm	back	1:2.31	0.782	1.189	0.930	0.314	0.373	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	LTE Band 41	20	17.00	16.03	-0.02	0	Ant 2b	FYQLHC9HFM	QPSK	50	50	0 mm	back	1:1.58	0.735	1.250	0.919	0.248	0.310	
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	18.60	17.45	0.03	0	Ant 2b	FYQLHC9HFM	QPSK	50	50	0 mm	back	1:2.31	0.714	1.303	0.930	0.257	0.335	
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	17.00	16.33	0.02	0	Ant 2b	FYQLHC9HFM	QPSK	1	99	0 mm	top	1:1.58	0.001	1.165	0.001	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.34	0.09	0	Ant 2b	FYQLHC9HFM	QPSK	50	25	0 mm	top	1:1.58	0.000	1.165	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.33	-0.02	0	Ant 2b	FYQLHC9HFM	QPSK	1	99	0 mm	bottom	1:1.58	0.451	1.165	0.525	0.165	0.192	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.34	0.02	0	Ant 2b	FYQLHC9HFM	QPSK	50	25	0 mm	bottom	1:1.58	0.461	1.165	0.537	0.167	0.195	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.33	0.03	0	Ant 2b	FYQLHC9HFM	QPSK	1	99	0 mm	right	1:1.58	0.021	1.165	0.024	0.008	0.009	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.34	-0.07	0	Ant 2b	FYQLHC9HFM	QPSK	50	25	0 mm	right	1:1.58	0.022	1.165	0.026	0.008	0.009	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.33	0.08	0	Ant 2b	FYQLHC9HFM	QPSK	1	99	0 mm	left	1:1.58	0.000	1.165	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	17.00	16.34	0.01	0	Ant 2b	FYQLHC9HFM	QPSK	50	25	0 mm	left	1:1.58	0.000	1.165	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 10-41
LTE Band 41 Antenna 3 Body SAR

MEASUREMENT RESULTS																												
1 CC Uplink / 2 CC 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	16.10	15.07	-0.05	0	Ant 3	HM2FPP9TMW	QPSK	1	50	0 mm	back	1:1.58	0.296	1.268	0.375	0.109	0.138	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.10	15.14	0.01	0	Ant 3	HM2FPP9TMW	QPSK	1	50	0 mm	back	1:1.58	0.382	1.247	0.476	0.138	0.172	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.10	15.23	0.00	0	Ant 3	HM2FPP9TMW	QPSK	1	0	0 mm	back	1:1.58	0.489	1.222	0.598	0.175	0.214	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.10	15.24	0.07	0	Ant 3	HM2FPP9TMW	QPSK	1	99	0 mm	back	1:1.58	0.778	1.219	0.948	0.253	0.308	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.27	0.05	0	Ant 3	HM2FPP9TMW	QPSK	1	0	0 mm	back	1:1.58	0.774	1.211	0.937	0.255	0.309	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.28	-0.05	0	Ant 3	HM2FPP9TMW	QPSK	1	99	0 mm	back	1:1.58	0.789	1.208	0.953	0.258	0.312	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.10	15.17	-0.02	0	Ant 3	HM2FPP9TMW	QPSK	50	25	0 mm	back	1:1.58	0.294	1.239	0.364	0.108	0.134	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.10	15.25	0.03	0	Ant 3	HM2FPP9TMW	QPSK	50	25	0 mm	back	1:1.58	0.390	1.216	0.474	0.141	0.171	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.10	15.26	-0.01	0	Ant 3	HM2FPP9TMW	QPSK	50	25	0 mm	back	1:1.58	0.517	1.213	0.627	0.184	0.223	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.10	15.30	-0.02	0	Ant 3	HM2FPP9TMW	QPSK	50	25	0 mm	back	1:1.58	0.568	1.202	0.683	0.191	0.230	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.36	0.00	0	Ant 3	HM2FPP9TMW	QPSK	50	25	0 mm	back	1:1.58	0.704	1.186	0.835	0.232	0.275	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.25	-0.13	0	Ant 3	HM2FPP9TMW	QPSK	100	0	0 mm	back	1:1.58	0.750	1.216	0.912	0.250	0.304	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	17.70	16.83	0.02	0	Ant 3	FYQLHC9HFM	QPSK	1	99	0 mm	back	1:2.31	0.741	1.222	0.906	0.241	0.295	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	17.70	16.70	-0.04	0	Ant 3	FYQLHC9HFM	QPSK	1	0	0 mm	back	1:2.31	0.682	1.259	0.859	0.227	0.286	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	16.10	15.98	0.01	0	Ant 3	HM2FPP9TMW	QPSK	1	0	0 mm	back	1:1.58	0.909	1.028	0.934	0.301	0.309	A14
2 CC Uplink - Power Class 3	SCC	2660.20	41292	High	LTE Band 41	20								1	99									
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	17.70	17.51	0.05	0	Ant 3	FYQLHC9HFM	QPSK	1	0	0 mm	back	1:2.31	0.816	1.045	0.853	0.269	0.281	
2 CC Uplink - Power Class 2	SCC	2660.20	41292	High	LTE Band 41	20								1	99									
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.10	15.07	-0.03	0	Ant 3	HM2FPP9TMW	QPSK	1	50	0 mm	top	1:1.58	0.371	1.268	0.470	0.129	0.164	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.10	15.14	-0.05	0	Ant 3	HM2FPP9TMW	QPSK	1	50	0 mm	top	1:1.58	0.399	1.247	0.498	0.130	0.162	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.10	15.23	0.02	0	Ant 3	HM2FPP9TMW	QPSK	1	0	0 mm	top	1:1.58	0.458	1.222	0.560	0.152	0.186	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.10	15.24	0.00	0	Ant 3	HM2FPP9TMW	QPSK	1	99	0 mm	top	1:1.58	0.471	1.219	0.574	0.155	0.189	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.28	0.03	0	Ant 3	HM2FPP9TMW	QPSK	1	99	0 mm	top	1:1.58	0.499	1.208	0.603	0.157	0.190	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.36	-0.02	0	Ant 3	HM2FPP9TMW	QPSK	50	25	0 mm	top	1:1.58	0.488	1.186	0.579	0.159	0.189	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.25	0.00	0	Ant 3	HM2FPP9TMW	QPSK	100	0	0 mm	top	1:1.58	0.489	1.216	0.595	0.160	0.195	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.28	0.02	0	Ant 3	HM2FPP9TMW	QPSK	1	99	0 mm	bottom	1:1.58	0.000	1.208	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.36	0.09	0	Ant 3	HM2FPP9TMW	QPSK	50	25	0 mm	bottom	1:1.58	0.000	1.186	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.28	-0.02	0	Ant 3	HM2FPP9TMW	QPSK	1	99	0 mm	right	1:1.58	0.388	1.208	0.469	0.113	0.137	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.36	0.01	0	Ant 3	HM2FPP9TMW	QPSK	50	25	0 mm	right	1:1.58	0.402	1.186	0.477	0.116	0.138	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.28	-0.12	0	Ant 3	HM2FPP9TMW	QPSK	1	99	0 mm	left	1:1.58	0.009	1.208	0.011	0.003	0.004	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.10	15.36	0.01	0	Ant 3	HM2FPP9TMW	QPSK	50	25	0 mm	left	1:1.58	0.014	1.186	0.017	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 10-42
LTE Band 41 Antenna 4b Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2 CC 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	14.80	13.62	-0.02	0	Ant 4b	HM2FPP9TMW	QPSK	1	50	0 mm	back	1:1.58	0.513	1.312	0.673	0.177	0.232	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.80	13.67	0.03	0	Ant 4b	HM2FPP9TMW	QPSK	1	50	0 mm	back	1:1.58	0.497	1.297	0.645	0.178	0.231	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.80	13.32	0.01	0	Ant 4b	HM2FPP9TMW	QPSK	1	0	0 mm	back	1:1.58	0.487	1.406	0.685	0.169	0.238	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.80	13.22	0.00	0	Ant 4b	HM2FPP9TMW	QPSK	1	0	0 mm	back	1:1.58	0.519	1.439	0.747	0.180	0.259	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.80	13.15	0.05	0	Ant 4b	HM2FPP9TMW	QPSK	1	0	0 mm	back	1:1.58	0.552	1.462	0.807	0.188	0.275	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.80	13.65	0.00	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	back	1:1.58	0.524	1.303	0.683	0.181	0.236	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.80	13.69	0.01	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	back	1:1.58	0.505	1.291	0.652	0.180	0.232	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.80	13.38	-0.01	0	Ant 4b	HM2FPP9TMW	QPSK	50	0	0 mm	back	1:1.58	0.502	1.387	0.696	0.175	0.243	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.80	13.22	0.00	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	back	1:1.58	0.525	1.439	0.755	0.182	0.262	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.80	13.23	0.00	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	back	1:1.58	0.566	1.435	0.812	0.193	0.277	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.80	13.55	0.01	0	Ant 4b	HM2FPP9TMW	QPSK	100	0	0 mm	back	1:1.58	0.533	1.334	0.711	0.189	0.252	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.80	13.62	0.01	0	Ant 4b	HM2FPP9TMW	QPSK	1	50	0 mm	top	1:1.58	0.563	1.312	0.739	0.184	0.241	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.80	13.67	0.01	0	Ant 4b	HM2FPP9TMW	QPSK	1	50	0 mm	top	1:1.58	0.558	1.297	0.724	0.179	0.232	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.80	13.32	-0.07	0	Ant 4b	HM2FPP9TMW	QPSK	1	0	0 mm	top	1:1.58	0.572	1.406	0.804	0.183	0.257	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.80	13.22	0.07	0	Ant 4b	HM2FPP9TMW	QPSK	1	0	0 mm	top	1:1.58	0.613	1.439	0.882	0.192	0.276	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.80	13.15	0.06	0	Ant 4b	HM2FPP9TMW	QPSK	1	0	0 mm	top	1:1.58	0.650	1.462	0.950	0.205	0.300	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.80	13.65	-0.01	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	top	1:1.58	0.572	1.303	0.745	0.188	0.245	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.80	13.69	0.01	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	top	1:1.58	0.582	1.291	0.751	0.188	0.243	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.80	13.38	-0.06	0	Ant 4b	HM2FPP9TMW	QPSK	50	0	0 mm	top	1:1.58	0.594	1.387	0.824	0.190	0.264	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.80	13.22	-0.05	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	top	1:1.58	0.631	1.439	0.908	0.200	0.288	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.80	13.23	-0.01	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	top	1:1.58	0.596	1.435	0.855	0.193	0.277	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.80	13.55	-0.01	0	Ant 4b	HM2FPP9TMW	QPSK	100	0	0 mm	top	1:1.58	0.587	1.334	0.783	0.192	0.256	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	16.40	14.96	0.02	0	Ant 4b	HM2FPP9TMW	QPSK	1	0	0 mm	top	1:2.31	0.706	1.393	0.983	0.222	0.309	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	14.80	12.95	-0.08	0	Ant 4b	HM2FPP9TMW	QPSK	1	0	0 mm	top	1:1.58	0.605	1.531	0.926	0.194	0.297	
2 CC Uplink - Power Class 3	SCC	2660.20	41292	High	LTE Band 41	20								1	99									
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	16.40	15.00	0.00	0	Ant 4b	HM2FPP9TMW	QPSK	1	0	0 mm	top	1:2.31	0.680	1.380	0.938	0.214	0.295	
2 CC Uplink - Power Class 2	SCC	2660.20	41292	High	LTE Band 41	20								1	99									
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.80	13.67	0.07	0	Ant 4b	HM2FPP9TMW	QPSK	1	50	0 mm	bottom	1:1.58	0.000	1.297	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.80	13.69	0.02	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	bottom	1:1.58	0.000	1.291	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.80	13.67	0.14	0	Ant 4b	HM2FPP9TMW	QPSK	1	50	0 mm	right	1:1.58	0.005	1.297	0.006	0.001	0.001	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.80	13.69	-0.18	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	right	1:1.58	0.004	1.291	0.005	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.80	13.67	0.03	0	Ant 4b	HM2FPP9TMW	QPSK	1	50	0 mm	left	1:1.58	0.020	1.297	0.026	0.007	0.009	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.80	13.69	0.17	0	Ant 4b	HM2FPP9TMW	QPSK	50	25	0 mm	left	1:1.58	0.020	1.291	0.026	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 10-43
LTE Band 48 Antenna 1 Body SAR

MEASUREMENT RESULTS																											
1 CC Uplink | 2 CC 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	N/A	3560.00	55340	Low	LTE Band 48	20	14.20	13.10	0.03	0	Ant 1	JYHWFYYC62	QPSK	1	50	0 mm	back	1:1	0.585	1.288	0.753	0.184	0.237	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.20	13.02	0.04	0	Ant 1	JYHWFYYC62	QPSK	1	99	0 mm	back	1:1	0.615	1.312	0.807	0.195	0.256	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.20	13.09	-0.03	0	Ant 1	JYHWFYYC62	QPSK	1	50	0 mm	back	1:1	0.640	1.291	0.826	0.205	0.265	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.18	0.01	0	Ant 1	JYHWFYYC62	QPSK	1	50	0 mm	back	1:1	0.734	1.265	0.929	0.235	0.297	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.20	13.09	0.04	0	Ant 1	JYHWFYYC62	QPSK	50	25	0 mm	back	1:1	0.589	1.291	0.760	0.185	0.239	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.20	13.09	0.00	0	Ant 1	JYHWFYYC62	QPSK	50	0	0 mm	back	1:1	0.608	1.291	0.785	0.194	0.250	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.20	13.09	0.02	0	Ant 1	JYHWFYYC62	QPSK	50	25	0 mm	back	1:1	0.662	1.291	0.855	0.211	0.272	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.07	-0.15	0	Ant 1	JYHWFYYC62	QPSK	50	0	0 mm	back	1:1	0.676	1.297	0.877	0.220	0.285	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.10	0.00	0	Ant 1	JYHWFYYC62	QPSK	50	50	0 mm	back	1:1	0.767	1.288	0.988	0.241	0.310	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.20	13.09	0.01	0	Ant 1	JYHWFYYC62	QPSK	100	0	0 mm	back	1:1	0.658	1.291	0.849	0.210	0.271	
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	14.20	13.30	0.02	0	Ant 1	JYHWFYYC62	QPSK	50	0	0 mm	back	1:1	0.714	1.230	0.878	0.229	0.282	
2 CC Uplink	SCC	3670.20	56442	High	LTE Band 48	20								50	50									
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.18	0.02	0	Ant 1	JYHWFYYC62	QPSK	1	50	0 mm	top	1:1	0.000	1.265	0.000	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.10	0.08	0	Ant 1	JYHWFYYC62	QPSK	50	50	0 mm	top	1:1	0.000	1.288	0.000	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.18	-0.02	0	Ant 1	JYHWFYYC62	QPSK	1	50	0 mm	bottom	1:1	0.298	1.265	0.377	0.080	0.101	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.10	-0.01	0	Ant 1	JYHWFYYC62	QPSK	50	50	0 mm	bottom	1:1	0.303	1.288	0.390	0.081	0.104	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.18	0.04	0	Ant 1	JYHWFYYC62	QPSK	1	50	0 mm	right	1:1	0.014	1.265	0.018	0.002	0.003	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.10	0.06	0	Ant 1	JYHWFYYC62	QPSK	50	50	0 mm	right	1:1	0.015	1.288	0.019	0.003	0.004	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.18	0.05	0	Ant 1	JYHWFYYC62	QPSK	1	50	0 mm	left	1:1	0.419	1.265	0.530	0.111	0.140	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.20	13.10	-0.02	0	Ant 1	JYHWFYYC62	QPSK	50	50	0 mm	left	1:1	0.423	1.288	0.545	0.112	0.144	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-44
LTE Band 48 Antenna 2a Body SAR

MEASUREMENT RESULTS																											
1 CC Uplink | 2 CC Uplink	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	N/A	3560.00	55340	Low	LTE Band 48	20	14.40	13.25	-0.07	0	Ant 2a	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.688	1.303	0.896	0.207	0.270	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.40	13.38	-0.01	0	Ant 2a	C0D414XD6N	QPSK	1	99	0 mm	back	1:1	0.674	1.265	0.853	0.200	0.253	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.40	13.46	0.03	0	Ant 2a	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.666	1.242	0.827	0.200	0.248	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.52	0.05	0	Ant 2a	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.683	1.225	0.837	0.203	0.249	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.40	13.43	-0.02	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	back	1:1	0.739	1.250	0.904	0.225	0.281	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.40	13.51	0.00	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	back	1:1	0.692	1.227	0.849	0.210	0.258	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.40	13.55	-0.03	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	back	1:1	0.682	1.216	0.829	0.206	0.250	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.68	0.00	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	back	1:1	0.706	1.180	0.833	0.208	0.245	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.50	0.01	0	Ant 2a	C0D414XD6N	QPSK	100	0	0 mm	back	1:1	0.756	1.230	0.930	0.225	0.277	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.52	0.08	0	Ant 2a	C0D414XD6N	QPSK	1	50	0 mm	top	1:1	0.004	1.225	0.005	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.68	0.20	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	top	1:1	0.005	1.180	0.006	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.52	-0.02	0	Ant 2a	C0D414XD6N	QPSK	1	50	0 mm	bottom	1:1	0.207	1.225	0.254	0.058	0.071	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.68	0.03	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	bottom	1:1	0.247	1.180	0.291	0.067	0.079	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.40	13.25	-0.06	0	Ant 2a	C0D414XD6N	QPSK	1	50	0 mm	right	1:1	0.722	1.303	0.941	0.193	0.251	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.40	13.24	-0.13	0	Ant 2a	C0D414XD6N	QPSK	1	99	0 mm	right	1:1	0.689	1.306	0.900	0.185	0.242	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.40	13.38	-0.01	0	Ant 2a	C0D414XD6N	QPSK	1	99	0 mm	right	1:1	0.692	1.265	0.875	0.183	0.231	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.40	13.46	0.01	0	Ant 2a	C0D414XD6N	QPSK	1	50	0 mm	right	1:1	0.716	1.242	0.889	0.189	0.235	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.52	-0.01	0	Ant 2a	C0D414XD6N	QPSK	1	50	0 mm	right	1:1	0.723	1.225	0.886	0.189	0.232	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.40	13.43	-0.04	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	right	1:1	0.741	1.250	0.926	0.198	0.248	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.40	13.51	-0.02	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	right	1:1	0.719	1.227	0.882	0.190	0.233	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.40	13.55	-0.02	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	right	1:1	0.734	1.216	0.893	0.193	0.235	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.68	-0.02	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	right	1:1	0.747	1.180	0.881	0.193	0.228	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.50	-0.03	0	Ant 2a	C0D414XD6N	QPSK	100	0	0 mm	right	1:1	0.759	1.230	0.934	0.199	0.245	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	14.40	13.30	-0.13	0	Ant 2a	C0D414XD6N	QPSK	1	99	0 mm	right	1:1	0.698	1.288	0.899	0.186	0.240	
2 CC Uplink	SCC	3579.80	55538	Low	LTE Band 48	20								1	0									
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.52	0.05	0	Ant 2a	C0D414XD6N	QPSK	1	50	0 mm	left	1:1	0.023	1.225	0.028	0.006	0.007	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.40	13.68	0.15	0	Ant 2a	C0D414XD6N	QPSK	50	50	0 mm	left	1:1	0.021	1.180	0.025	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 10-45
LTE Band 48 Antenna 3 Body SAR

MEASUREMENT RESULTS																											
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																						
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.80	13.87	-0.02	0	Ant 3	QQQ632279T	QPSK	1	99	0 mm	back	1:1	0.724	1.239	0.897	0.196	0.243	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.80	13.82	0.02	0	Ant 3	QQQ632279T	QPSK	1	99	0 mm	back	1:1	0.744	1.253	0.932	0.199	0.249	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.90	0.00	0	Ant 3	QQQ632279T	QPSK	1	50	0 mm	back	1:1	0.757	1.230	0.931	0.194	0.239	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.80	13.82	-0.10	0	Ant 3	QQQ632279T	QPSK	1	50	0 mm	back	1:1	0.709	1.253	0.888	0.180	0.226	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.80	13.98	0.02	0	Ant 3	QQQ632279T	QPSK	50	25	0 mm	back	1:1	0.688	1.208	0.831	0.184	0.222	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.80	13.94	0.04	0	Ant 3	QQQ632279T	QPSK	50	50	0 mm	back	1:1	0.735	1.219	0.896	0.191	0.233	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.99	-0.02	0	Ant 3	QQQ632279T	QPSK	50	50	0 mm	back	1:1	0.780	1.205	0.940	0.200	0.241	A15
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.80	13.94	-0.03	0	Ant 3	QQQ632279T	QPSK	50	25	0 mm	back	1:1	0.747	1.219	0.911	0.199	0.243	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.89	0.01	0	Ant 3	QQQ632279T	QPSK	100	0	0 mm	back	1:1	0.755	1.233	0.931	0.197	0.243	
2 CC Uplink	PCC	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.81	-0.03	0	Ant 3	QQQ632279T	QPSK	50	50	0 mm	back	1:1	0.740	1.256	0.929	0.190	0.239	
2 CC Uplink	SCC	3666.50	56405	Mid-High	LTE Band 48	20								50	0									
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.90	-0.02	0	Ant 3	QQQ632279T	QPSK	1	50	0 mm	top	1:1	0.302	1.230	0.371	0.081	0.100	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.99	-0.01	0	Ant 3	QQQ632279T	QPSK	50	50	0 mm	top	1:1	0.309	1.205	0.372	0.082	0.099	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.90	0.05	0	Ant 3	QQQ632279T	QPSK	1	50	0 mm	bottom	1:1	0.004	1.230	0.005	0.001	0.001	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.99	0.02	0	Ant 3	QQQ632279T	QPSK	50	50	0 mm	bottom	1:1	0.000	1.205	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.80	13.87	0.03	0	Ant 3	QQQ632279T	QPSK	1	99	0 mm	right	1:1	0.471	1.239	0.584	0.138	0.171	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.80	13.82	0.03	0	Ant 3	QQQ632279T	QPSK	1	99	0 mm	right	1:1	0.530	1.253	0.664	0.155	0.194	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.90	0.02	0	Ant 3	QQQ632279T	QPSK	1	50	0 mm	right	1:1	0.541	1.230	0.665	0.156	0.192	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.80	13.82	0.00	0	Ant 3	QQQ632279T	QPSK	1	50	0 mm	right	1:1	0.541	1.253	0.678	0.157	0.197	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	14.80	13.98	0.02	0	Ant 3	QQQ632279T	QPSK	50	25	0 mm	right	1:1	0.467	1.208	0.564	0.136	0.164	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	14.80	13.94	0.04	0	Ant 3	QQQ632279T	QPSK	50	50	0 mm	right	1:1	0.544	1.219	0.663	0.157	0.191	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.99	-0.01	0	Ant 3	QQQ632279T	QPSK	50	50	0 mm	right	1:1	0.565	1.205	0.681	0.164	0.198	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	14.80	13.94	0.05	0	Ant 3	QQQ632279T	QPSK	50	25	0 mm	right	1:1	0.550	1.219	0.670	0.160	0.195	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.89	0.03	0	Ant 3	QQQ632279T	QPSK	100	0	0 mm	right	1:1	0.545	1.233	0.672	0.160	0.197	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.90	0.08	0	Ant 3	QQQ632279T	QPSK	1	50	0 mm	left	1:1	0.016	1.230	0.020	0.005	0.006	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	14.80	13.99	0.04	0	Ant 3	QQQ632279T	QPSK	50	50	0 mm	left	1:1	0.015	1.205	0.018	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 10-46
LTE Band 48 Antenna 4b Body SAR

MEASUREMENT RESULTS																											
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																						
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.04	-0.03	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	back	1:1	0.459	1.219	0.560	0.129	0.157	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.06	-0.05	0	Ant 4b	C0D414XD6N	QPSK	50	50	0 mm	back	1:1	0.471	1.213	0.571	0.133	0.161	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.90	12.85	0.09	0	Ant 4b	C0D414XD6N	QPSK	1	99	0 mm	top	1:1	0.563	1.274	0.717	0.160	0.204	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.90	12.79	0.01	0	Ant 4b	C0D414XD6N	QPSK	1	99	0 mm	top	1:1	0.548	1.291	0.707	0.153	0.198	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.90	12.95	-0.01	0	Ant 4b	C0D414XD6N	QPSK	1	99	0 mm	top	1:1	0.564	1.245	0.702	0.157	0.195	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.04	-0.09	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	top	1:1	0.608	1.219	0.741	0.168	0.205	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.90	12.92	0.00	0	Ant 4b	C0D414XD6N	QPSK	50	50	0 mm	top	1:1	0.580	1.253	0.727	0.163	0.204	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.90	12.92	-0.04	0	Ant 4b	C0D414XD6N	QPSK	50	50	0 mm	top	1:1	0.558	1.253	0.699	0.156	0.195	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.90	13.05	-0.01	0	Ant 4b	C0D414XD6N	QPSK	50	50	0 mm	top	1:1	0.580	1.216	0.705	0.162	0.197	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.05	-0.09	0	Ant 4b	C0D414XD6N	QPSK	50	0	0 mm	top	1:1	0.650	1.216	0.790	0.179	0.218	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.06	0.02	0	Ant 4b	C0D414XD6N	QPSK	50	50	0 mm	top	1:1	0.616	1.213	0.747	0.173	0.210	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.00	-0.09	0	Ant 4b	C0D414XD6N	QPSK	100	0	0 mm	top	1:1	0.633	1.230	0.779	0.175	0.215	
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	13.90	12.85	-0.04	0	Ant 4b	C0D414XD6N	QPSK	50	0	0 mm	top	1:1	0.594	1.274	0.757	0.163	0.208	
2 CC Uplink	SCC	3670.20	56442	High	LTE Band 48	20								50	50									
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.04	0.09	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	bottom	1:1	0.001	1.219	0.001	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.06	0.02	0	Ant 4b	C0D414XD6N	QPSK	50	50	0 mm	bottom	1:1	0.001	1.213	0.001	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.04	0.01	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	right	1:1	0.003	1.219	0.004	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.06	0.03	0	Ant 4b	C0D414XD6N	QPSK	50	50	0 mm	right	1:1	0.002	1.213	0.002	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.04	0.01	0	Ant 4b	C0D414XD6N	QPSK	1	50	0 mm	left	1:1	0.027	1.219	0.033	0.007	0.009	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.90	13.06	0.09	0	Ant 4b	C0D414XD6N	QPSK	50	50	0 mm	left	1:1	0.027	1.213	0.033	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 10-47
NR Band n71 Antenna 1 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 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	1	1	21.30	20.17	0	0.04	1:1	0.530	1.297	0.687	0.279	0.362	
680.50	136100	Mid	back	0 mm	NR Band n71	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	50	0	21.30	20.06	0	0.00	1:1	0.429	1.330	0.571	0.228	0.303	
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	1	1	21.30	20.17	0	0.08	1:1	0.011	1.297	0.014	0.004	0.005	
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	50	0	21.30	20.06	0	0.07	1:1	0.013	1.330	0.017	0.005	0.007	
680.50	136100	Mid	bottom	0 mm	NR Band n71	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	1	1	21.30	20.17	0	-0.08	1:1	0.551	1.297	0.715	0.221	0.287	
680.50	136100	Mid	bottom	0 mm	NR Band n71	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	50	0	21.30	20.06	0	-0.04	1:1	0.516	1.330	0.686	0.211	0.281	
680.50	136100	Mid	bottom	0 mm	NR Band n71	Ant 1	Q7XW2M7YLH	20	CP-OFDM	QPSK	1	1	21.30	20.05	0	-0.02	1:1	0.535	1.334	0.714	0.216	0.288	
680.50	136100	Mid	right	0 mm	NR Band n71	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	1	1	21.30	20.17	0	0.02	1:1	0.040	1.297	0.052	0.016	0.021	
680.50	136100	Mid	right	0 mm	NR Band n71	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	50	0	21.30	20.06	0	-0.10	1:1	0.038	1.330	0.051	0.015	0.020	
680.50	136100	Mid	left	0 mm	NR Band n71	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	1	1	21.30	20.17	0	0.04	1:1	0.256	1.297	0.332	0.102	0.132	
680.50	136100	Mid	left	0 mm	NR Band n71	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	50	0	21.30	20.06	0	-0.01	1:1	0.244	1.330	0.325	0.098	0.130	
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 3 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 3	MGXQY2CWF2	20	DFT-S-OFDM	QPSK	1	104	21.50	19.78	0	-0.01	1:1	0.520	1.486	0.773	0.262	0.389	
680.50	136100	Mid	back	0 mm	NR Band n71	Ant 3	MGXQY2CWF2	20	DFT-S-OFDM	QPSK	50	0	21.50	19.72	0	0.01	1:1	0.528	1.507	0.796	0.283	0.426	
680.50	136100	Mid	back	0 mm	NR Band n71	Ant 3	MGXQY2CWF2	20	CP-OFDM	QPSK	1	1	21.50	19.55	0	-0.02	1:1	0.577	1.567	0.904	0.306	0.480	A16
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 3	MGXQY2CWF2	20	DFT-S-OFDM	QPSK	1	104	21.50	19.78	0	-0.06	1:1	0.535	1.486	0.795	0.218	0.324	
680.50	136100	Mid	top	0 mm	NR Band n71	Ant 3	MGXQY2CWF2	20	DFT-S-OFDM	QPSK	50	0	21.50	19.72	0	-0.01	1:1	0.495	1.507	0.746	0.208	0.313	
680.50	136100	Mid	bottom	0 mm	NR Band n71	Ant 3	MGXQY2CWF2	20	DFT-S-OFDM	QPSK	1	104	21.50	19.78	0	0.04	1:1	0.005	1.486	0.007	0.001	0.001	
680.50	136100	Mid	bottom	0 mm	NR Band n71	Ant 3	MGXQY2CWF2	20	DFT-S-OFDM	QPSK	50	0	21.50	19.72	0	0.08	1:1	0.011	1.507	0.017	0.004	0.006	
680.50	136100	Mid	right	0 mm	NR Band n71	Ant 3	MGXQY2CWF2	20	DFT-S-OFDM	QPSK	1	104	21.50	19.78	0	0.01	1:1	0.276	1.486	0.410	0.114	0.169	
680.50	136100	Mid	right	0 mm	NR Band n71	Ant 3	MGXQY2CWF2	20	DFT-S-OFDM	QPSK	50	0	21.50	19.72	0	0.09	1:1	0.258	1.507	0.389	0.108	0.163	
680.50	136100	Mid	left	0 mm	NR Band n71	Ant 3	MGXQY2CWF2	20	DFT-S-OFDM	QPSK	1	104	21.50	19.78	0	0.06	1:1	0.042	1.486	0.062	0.017	0.025	
680.50	136100	Mid	left	0 mm	NR Band n71	Ant 3	MGXQY2CWF2	20	DFT-S-OFDM	QPSK	50	0	21.50	19.72	0	-0.09	1:1	0.039	1.507	0.059	0.015	0.023	
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 1 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 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	1	1	21.10	20.21	0	0.00	1:1	0.733	1.227	0.899	0.349	0.428	
707.50	141500	Mid	back	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	36	0	21.10	20.19	0	0.02	1:1	0.767	1.233	0.946	0.362	0.446	A17
707.50	141500	Mid	back	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	75	0	21.10	20.16	0	0.00	1:1	0.695	1.242	0.863	0.340	0.422	
707.50	141500	Mid	back	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	CP-OFDM	QPSK	1	1	21.10	20.05	0	0.00	1:1	0.707	1.274	0.901	0.352	0.448	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	1	1	21.10	20.21	0	0.06	1:1	0.012	1.227	0.015	0.005	0.006	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	36	0	21.10	20.19	0	0.08	1:1	0.021	1.233	0.026	0.008	0.010	
707.50	141500	Mid	bottom	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	1	1	21.10	20.21	0	-0.01	1:1	0.634	1.227	0.778	0.263	0.323	
707.50	141500	Mid	bottom	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	36	0	21.10	20.19	0	-0.05	1:1	0.679	1.233	0.837	0.279	0.344	
707.50	141500	Mid	bottom	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	75	0	21.10	20.16	0	0.00	1:1	0.624	1.242	0.775	0.250	0.311	
707.50	141500	Mid	right	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	1	1	21.10	20.21	0	0.09	1:1	0.032	1.227	0.039	0.014	0.017	
707.50	141500	Mid	right	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	36	0	21.10	20.19	0	-0.04	1:1	0.034	1.233	0.042	0.015	0.018	
707.50	141500	Mid	left	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	1	1	21.10	20.21	0	0.04	1:1	0.211	1.227	0.259	0.101	0.124	
707.50	141500	Mid	left	0 mm	NR Band n12	Ant 1	MGXQY2CWF2	15	DFT-S-OFDM	QPSK	36	0	21.10	20.19	0	-0.04	1:1	0.205	1.233	0.253	0.097	0.120	
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 3 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 3	Q7XW2M7YLH	15	DFT-S-OFDM	QPSK	1	1	20.50	19.20	0	0.07	1:1	0.507	1.349	0.684	0.257	0.347	
707.50	141500	Mid	back	0 mm	NR Band n12	Ant 3	Q7XW2M7YLH	15	DFT-S-OFDM	QPSK	36	0	20.50	19.24	0	0.01	1:1	0.530	1.337	0.709	0.276	0.369	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 3	Q7XW2M7YLH	15	DFT-S-OFDM	QPSK	1	1	20.50	19.20	0	0.01	1:1	0.572	1.349	0.772	0.240	0.324	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 3	Q7XW2M7YLH	15	DFT-S-OFDM	QPSK	36	0	20.50	19.24	0	0.00	1:1	0.556	1.337	0.743	0.234	0.313	
707.50	141500	Mid	top	0 mm	NR Band n12	Ant 3	Q7XW2M7YLH	15	CP-OFDM	QPSK	1	1	20.50	19.12	0	0.08	1:1	0.593	1.374	0.815	0.246	0.338	
707.50	141500	Mid	bottom	0 mm	NR Band n12	Ant 3	Q7XW2M7YLH	15	DFT-S-OFDM	QPSK	1	1	20.50	19.20	0	-0.11	1:1	0.011	1.349	0.015	0.004	0.005	
707.50	141500	Mid	bottom	0 mm	NR Band n12	Ant 3	Q7XW2M7YLH	15	DFT-S-OFDM	QPSK	36	0	20.50	19.24	0	0.10	1:1	0.010	1.337	0.013	0.005	0.007	
707.50	141500	Mid	right	0 mm	NR Band n12	Ant 3	Q7XW2M7YLH	15	DFT-S-OFDM	QPSK	1	1	20.50	19.20	0	0.08	1:1	0.211	1.349	0.285	0.094	0.127	
707.50	141500	Mid	right	0 mm	NR Band n12	Ant 3	Q7XW2M7YLH	15	DFT-S-OFDM	QPSK	36	0	20.50	19.24	0	0.10	1:1	0.240	1.337	0.321	0.104	0.139	
707.50	141500	Mid	left	0 mm	NR Band n12	Ant 3	Q7XW2M7YLH	15	DFT-S-OFDM	QPSK	1	1	20.50	19.20	0	0.06	1:1	0.027	1.349	0.036	0.011	0.015	
707.50	141500	Mid	left	0 mm	NR Band n12	Ant 3	Q7XW2M7YLH	15	DFT-S-OFDM	QPSK	36	0	20.50	19.24	0	0.03	1:1	0.030	1.337	0.040	0.012	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 10-51
NR Band n14 Antenna 1 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.																					
793.00	158600	Mid	back	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	1	1	20.60	19.85	0	0.05	1:1	0.508	1.189	0.604	0.265	0.315	
793.00	158600	Mid	back	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	25	0	20.60	19.73	0	0.04	1:1	0.552	1.222	0.675	0.281	0.343	
793.00	158600	Mid	top	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	1	1	20.60	19.85	0	-0.13	1:1	0.017	1.189	0.020	0.007	0.008	
793.00	158600	Mid	top	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	25	0	20.60	19.73	0	-0.13	1:1	0.015	1.222	0.018	0.006	0.007	
793.00	158600	Mid	bottom	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	1	1	20.60	19.85	0	-0.01	1:1	0.707	1.189	0.841	0.290	0.345	
793.00	158600	Mid	bottom	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	25	0	20.60	19.73	0	0.05	1:1	0.695	1.222	0.849	0.285	0.348	
793.00	158600	Mid	bottom	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	50	0	20.60	19.62	0	-0.01	1:1	0.743	1.253	0.931	0.302	0.378	
793.00	158600	Mid	bottom	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	CP-OFDM	QPSK	1	1	20.60	19.76	0	-0.01	1:1	0.709	1.213	0.860	0.289	0.351	
793.00	158600	Mid	right	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	1	1	20.60	19.85	0	0.01	1:1	0.035	1.189	0.042	0.016	0.019	
793.00	158600	Mid	right	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	25	0	20.60	19.73	0	0.11	1:1	0.033	1.222	0.040	0.015	0.018	
793.00	158600	Mid	left	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	1	1	20.60	19.85	0	0.01	1:1	0.330	1.189	0.392	0.137	0.163	
793.00	158600	Mid	left	0 mm	NR Band n14	Ant 1	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	25	0	20.60	19.73	0	0.01	1:1	0.291	1.222	0.356	0.124	0.152	
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 n14 Antenna 3 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.																					
793.00	158600	Mid	back	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	1	1	20.90	19.96	0	-0.03	1:1	0.617	1.242	0.766	0.318	0.395	
793.00	158600	Mid	back	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	25	0	20.90	19.80	0	0.00	1:1	0.583	1.288	0.751	0.302	0.389	
793.00	158600	Mid	top	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	1	1	20.90	19.96	0	-0.10	1:1	0.742	1.242	0.922	0.310	0.385	
793.00	158600	Mid	top	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	25	0	20.90	19.80	0	0.03	1:1	0.730	1.288	0.940	0.305	0.393	
793.00	158600	Mid	top	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	50	0	20.90	19.77	0	0.02	1:1	0.710	1.297	0.921	0.297	0.385	
793.00	158600	Mid	top	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	CP-OFDM	QPSK	1	1	20.90	20.02	0	0.08	1:1	0.769	1.225	0.942	0.318	0.390	A18
793.00	158600	Mid	bottom	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	1	1	20.90	19.96	0	0.05	1:1	0.013	1.242	0.016	0.005	0.006	
793.00	158600	Mid	bottom	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	25	0	20.90	19.80	0	0.09	1:1	0.011	1.288	0.014	0.004	0.005	
793.00	158600	Mid	right	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	1	1	20.90	19.96	0	0.04	1:1	0.251	1.242	0.312	0.114	0.142	
793.00	158600	Mid	right	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	25	0	20.90	19.80	0	0.02	1:1	0.235	1.288	0.303	0.106	0.137	
793.00	158600	Mid	left	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	1	1	20.90	19.96	0	-0.03	1:1	0.034	1.242	0.042	0.015	0.019	
793.00	158600	Mid	left	0 mm	NR Band n14	Ant 3	M3XQY2CWF2	10	DFT-S-OFDM	QPSK	25	0	20.90	19.80	0	-0.12	1:1	0.028	1.288	0.036	0.013	0.017	
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 n26 (Cell) Antenna 1 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.																					
844.00	168800	High	back	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	26	18.70	17.95	0	-0.01	1:1	0.507	1.189	0.603	0.238	0.283	
844.00	168800	High	back	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	0	18.70	17.90	0	0.00	1:1	0.502	1.202	0.603	0.243	0.292	
844.00	168800	High	top	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	26	18.70	17.95	0	0.06	1:1	0.013	1.189	0.015	0.005	0.006	
844.00	168800	High	top	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	0	18.70	17.90	0	0.05	1:1	0.014	1.202	0.017	0.006	0.007	
844.00	168800	High	bottom	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	26	18.70	17.95	0	0.01	1:1	0.508	1.189	0.604	0.212	0.252	
819.00	163800	Low	bottom	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	0	18.70	17.76	0	0.03	1:1	0.453	1.242	0.563	0.186	0.231	
831.50	166300	Mid	bottom	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	14	18.70	17.80	0	0.01	1:1	0.445	1.230	0.547	0.184	0.226	
844.00	168800	High	bottom	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	0	18.70	17.90	0	0.01	1:1	0.524	1.202	0.630	0.216	0.260	
831.50	166300	Mid	bottom	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	CP-OFDM	QPSK	1	1	18.70	17.60	0	0.01	1:1	0.417	1.288	0.537	0.174	0.224	
844.00	168800	High	right	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	26	18.70	17.95	0	-0.21	1:1	0.035	1.189	0.042	0.016	0.019	
844.00	168800	High	right	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	0	18.70	17.90	0	-0.03	1:1	0.029	1.202	0.035	0.013	0.016	
844.00	168800	High	left	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	26	18.70	17.95	0	0.02	1:1	0.423	1.189	0.503	0.153	0.182	
844.00	168800	High	left	0 mm	NR Band n26 (Cell)	Ant 1	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	0	18.70	17.90	0	0.03	1:1	0.422	1.202	0.507	0.152	0.183	
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 n26 (Cell) Antenna 3 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.																					
819.00	163800	Low	back	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	1	19.40	18.44	0	-0.06	1:1	0.482	1.247	0.601	0.268	0.334	
819.00	163800	Low	back	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	14	19.40	18.38	0	0.01	1:1	0.488	1.265	0.617	0.269	0.340	
819.00	163800	Low	top	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	1	19.40	18.44	0	-0.01	1:1	0.550	1.247	0.686	0.239	0.298	
831.50	166300	Mid	top	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	1	19.40	18.35	0	-0.01	1:1	0.548	1.274	0.698	0.239	0.304	
844.00	168800	High	top	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	26	19.40	18.40	0	-0.02	1:1	0.593	1.259	0.747	0.257	0.324	A19
819.00	163800	Low	top	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	14	19.40	18.38	0	0.01	1:1	0.509	1.265	0.644	0.227	0.287	
819.00	163800	Low	top	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	CP-OFDM	QPSK	1	1	19.40	18.44	0	0.03	1:1	0.593	1.247	0.739	0.252	0.314	
819.00	163800	Low	bottom	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	1	19.40	18.44	0	0.07	1:1	0.007	1.247	0.009	0.003	0.004	
819.00	163800	Low	bottom	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	14	19.40	18.38	0	0.04	1:1	0.009	1.265	0.011	0.004	0.005	
819.00	163800	Low	right	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	1	19.40	18.44	0	-0.02	1:1	0.187	1.247	0.233	0.084	0.105	
819.00	163800	Low	right	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	14	19.40	18.38	0	-0.02	1:1	0.197	1.265	0.249	0.088	0.111	
819.00	163800	Low	left	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	1	1	19.40	18.44	0	-0.15	1:1	0.015	1.247	0.019	0.007	0.009	
819.00	163800	Low	left	0 mm	NR Band n26 (Cell)	Ant 3	L9WRV/F323	10	DFT-S-OFDM	QPSK	25	14	19.40	18.38	0	0.09	1:1	0.018	1.265	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 10-55
NR Band n5 (Cell) Antenna 1 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)	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	1	1	18.70	17.79	0	-0.01	1:1	0.681	1.233	0.840	0.317	0.391	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	50	0	18.70	17.77	0	0.00	1:1	0.628	1.239	0.778	0.293	0.363	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	100	0	18.70	17.73	0	0.00	1:1	0.613	1.250	0.766	0.284	0.355	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	CP-OFDM	QPSK	1	1	18.70	17.72	0	-0.02	1:1	0.629	1.253	0.788	0.300	0.376	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	1	1	18.70	17.79	0	-0.21	1:1	0.009	1.233	0.011	0.004	0.005	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	50	0	18.70	17.77	0	0.02	1:1	0.010	1.239	0.012	0.005	0.006	
836.50	167300	Mid	bottom	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	1	1	18.70	17.79	0	-0.04	1:1	0.551	1.233	0.679	0.218	0.269	
836.50	167300	Mid	bottom	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	50	0	18.70	17.77	0	0.00	1:1	0.536	1.239	0.664	0.212	0.263	
836.50	167300	Mid	right	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	1	1	18.70	17.79	0	-0.10	1:1	0.032	1.233	0.039	0.015	0.018	
836.50	167300	Mid	right	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	50	0	18.70	17.77	0	0.02	1:1	0.029	1.239	0.036	0.014	0.017	
836.50	167300	Mid	left	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	1	1	18.70	17.79	0	0.03	1:1	0.386	1.233	0.476	0.151	0.186	
836.50	167300	Mid	left	0 mm	NR Band n5 (Cell)	Ant 1	Q7XW2M7YLH	20	DFT-S-OFDM	QPSK	50	0	18.70	17.77	0	0.03	1:1	0.383	1.239	0.475	0.150	0.186	
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 n5 (Cell) Antenna 3 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)	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	1	1	19.40	18.36	0	-0.01	1:1	0.533	1.271	0.677	0.290	0.369	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	50	0	19.40	18.41	0	0.05	1:1	0.540	1.256	0.678	0.294	0.369	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	1	1	19.40	18.36	0	-0.08	1:1	0.710	1.271	0.902	0.274	0.348	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	50	0	19.40	18.41	0	-0.01	1:1	0.688	1.256	0.864	0.263	0.330	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	100	0	19.40	18.35	0	-0.01	1:1	0.647	1.274	0.824	0.253	0.322	
836.50	167300	Mid	top	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	CP-OFDM	QPSK	1	1	19.40	18.34	0	-0.03	1:1	0.714	1.276	0.911	0.273	0.348	A20
836.50	167300	Mid	bottom	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	1	1	19.40	18.36	0	-0.21	1:1	0.013	1.271	0.017	0.007	0.009	
836.50	167300	Mid	bottom	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	50	0	19.40	18.41	0	0.02	1:1	0.016	1.256	0.020	0.008	0.010	
836.50	167300	Mid	right	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	1	1	19.40	18.36	0	0.01	1:1	0.280	1.271	0.356	0.119	0.151	
836.50	167300	Mid	right	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	50	0	19.40	18.41	0	0.01	1:1	0.282	1.256	0.354	0.122	0.153	
836.50	167300	Mid	left	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	1	1	19.40	18.36	0	0.09	1:1	0.021	1.271	0.027	0.010	0.013	
836.50	167300	Mid	left	0 mm	NR Band n5 (Cell)	Ant 3	C0D414XD6N	20	DFT-S-OFDM	QPSK	50	0	19.40	18.41	0	0.03	1:1	0.027	1.256	0.034	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 10-57
NR Band n70 Antenna 1 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)	
1702.50	340500	Mid	back	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	1	77	17.10	16.36	0	-0.11	1:1	0.782	1.186	0.927	0.347	0.412	
1702.50	340500	Mid	back	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	36	43	17.10	16.30	0	0.00	1:1	0.790	1.202	0.950	0.351	0.422	
1702.50	340500	Mid	back	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	75	0	17.10	16.24	0	-0.01	1:1	0.769	1.219	0.937	0.345	0.421	
1702.50	340500	Mid	top	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	1	77	17.10	16.36	0	0.05	1:1	0.027	1.186	0.032	0.012	0.014	
1702.50	340500	Mid	top	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	36	43	17.10	16.30	0	-0.06	1:1	0.027	1.202	0.032	0.012	0.014	
1702.50	340500	Mid	bottom	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	1	77	17.10	16.36	0	-0.01	1:1	0.298	1.186	0.353	0.120	0.142	
1702.50	340500	Mid	bottom	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	36	43	17.10	16.30	0	-0.05	1:1	0.293	1.202	0.352	0.118	0.142	
1702.50	340500	Mid	right	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	1	77	17.10	16.36	0	0.11	1:1	0.000	1.186	0.000	0.000	0.000	
1702.50	340500	Mid	right	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	36	43	17.10	16.30	0	0.02	1:1	0.000	1.202	0.000	0.000	0.000	
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	1	77	17.10	16.36	0	0.05	1:1	0.803	1.186	0.952	0.305	0.362	
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	36	43	17.10	16.30	0	0.02	1:1	0.802	1.202	0.964	0.300	0.361	
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	DFT-S-OFDM	QPSK	75	0	17.10	16.24	0	0.00	1:1	0.795	1.219	0.969	0.297	0.362	
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	CP-OFDM	QPSK	1	1	17.10	16.30	0	0.02	1:1	0.816	1.202	0.981	0.305	0.367	A21
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 1	J3NQM2SXM7	15	CP-OFDM	QPSK	1	1	17.10	16.30	0	0.01	1:1	0.769	1.202	0.924	0.310	0.373	
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 10-58
NR Band n70 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)	
1702.50	340500	Mid	back	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	DFT-S-OFDM	QPSK	1	77	15.30	14.84	0	-0.03	1:1	0.703	1.112	0.782	0.296	0.329	
1702.50	340500	Mid	back	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	DFT-S-OFDM	QPSK	36	22	15.30	14.72	0	0.03	1:1	0.665	1.143	0.760	0.284	0.325	
1702.50	340500	Mid	top	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	DFT-S-OFDM	QPSK	1	77	15.30	14.84	0	0.07	1:1	0.000	1.112	0.000	0.000	0.000	
1702.50	340500	Mid	top	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	DFT-S-OFDM	QPSK	36	22	15.30	14.72	0	0.20	1:1	0.000	1.143	0.000	0.000	0.000	
1702.50	340500	Mid	bottom	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	DFT-S-OFDM	QPSK	1	77	15.30	14.84	0	-0.03	1:1	0.701	1.112	0.780	0.269	0.299	
1702.50	340500	Mid	bottom	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	DFT-S-OFDM	QPSK	36	22	15.30	14.72	0	-0.02	1:1	0.686	1.143	0.784	0.263	0.301	
1702.50	340500	Mid	bottom	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	CP-OFDM	QPSK	1	1	15.30	14.32	0	-0.01	1:1	0.705	1.253	0.883	0.268	0.336	
1702.50	340500	Mid	right	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	DFT-S-OFDM	QPSK	1	77	15.30	14.84	0	-0.03	1:1	0.068	1.112	0.076	0.027	0.030	
1702.50	340500	Mid	right	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	DFT-S-OFDM	QPSK	36	22	15.30	14.72	0	-0.05	1:1	0.069	1.143	0.079	0.028	0.032	
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	DFT-S-OFDM	QPSK	1	77	15.30	14.84	0	0.06	1:1	0.007	1.112	0.008	0.003	0.003	
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 2b	N4C42R071C	15	DFT-S-OFDM	QPSK	36	22	15.30	14.72	0	0.07	1:1	0.008	1.143	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 n70 Antenna 3 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)	
1702.50	340500	Mid	back	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	1	1	17.00	16.00	0	-0.04	1:1	0.547	1.259	0.689	0.283	0.356	
1702.50	340500	Mid	back	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	36	0	17.00	15.85	0	-0.05	1:1	0.532	1.303	0.693	0.276	0.360	
1702.50	340500	Mid	top	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	1	1	17.00	16.00	0	0.01	1:1	0.313	1.259	0.394	0.128	0.161	
1702.50	340500	Mid	top	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	36	0	17.00	15.85	0	0.06	1:1	0.310	1.303	0.404	0.125	0.163	
1702.50	340500	Mid	bottom	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	1	1	17.00	16.00	0	-0.06	1:1	0.023	1.259	0.029	0.010	0.013	
1702.50	340500	Mid	bottom	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	36	0	17.00	15.85	0	-0.04	1:1	0.020	1.303	0.026	0.009	0.012	
1702.50	340500	Mid	right	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	1	1	17.00	16.00	0	-0.01	1:1	0.665	1.259	0.837	0.270	0.340	
1702.50	340500	Mid	right	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	36	0	17.00	15.85	0	-0.03	1:1	0.645	1.303	0.840	0.258	0.336	
1702.50	340500	Mid	right	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	75	0	17.00	15.82	0	-0.06	1:1	0.693	1.312	0.909	0.271	0.356	
1702.50	340500	Mid	right	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	CP-OFDM	QPSK	1	1	17.00	15.88	0	0.06	1:1	0.658	1.294	0.851	0.265	0.343	
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	1	1	17.00	16.00	0	0.05	1:1	0.000	1.259	0.000	0.000	0.000	
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 3	P7HQJ6DWW0	15	DFT-S-OFDM	QPSK	36	0	17.00	15.85	0	0.20	1:1	0.000	1.303	0.000	0.000	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram														

Table 10-60
NR Band n70 Antenna 4b 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)	
1702.50	340500	Mid	back	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	1	1	14.30	13.27	0	0.03	1:1	0.559	1.268	0.709	0.223	0.283	
1702.50	340500	Mid	back	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	36	22	14.30	13.26	0	-0.01	1:1	0.547	1.271	0.695	0.219	0.278	
1702.50	340500	Mid	top	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	1	1	14.30	13.27	0	0.02	1:1	0.712	1.268	0.903	0.262	0.332	
1702.50	340500	Mid	top	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	36	22	14.30	13.26	0	-0.02	1:1	0.685	1.271	0.871	0.253	0.322	
1702.50	340500	Mid	top	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	75	0	14.30	13.22	0	0.00	1:1	0.657	1.282	0.842	0.243	0.312	
1702.50	340500	Mid	top	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	CP-OFDM	QPSK	1	1	14.30	13.27	0	0.02	1:1	0.707	1.268	0.896	0.259	0.328	
1702.50	340500	Mid	bottom	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	1	1	14.30	13.27	0	0.05	1:1	0.000	1.268	0.000	0.000	0.000	
1702.50	340500	Mid	bottom	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	36	22	14.30	13.26	0	0.04	1:1	0.000	1.271	0.000	0.000	0.000	
1702.50	340500	Mid	right	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	1	1	14.30	13.27	0	0.02	1:1	0.002	1.268	0.003	0.000	0.000	
1702.50	340500	Mid	right	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	36	22	14.30	13.26	0	0.04	1:1	0.001	1.271	0.001	0.000	0.000	
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	1	1	14.30	13.27	0	-0.02	1:1	0.033	1.268	0.042	0.013	0.016	
1702.50	340500	Mid	left	0 mm	NR Band n70	Ant 4b	F2NN0KJTG0	15	DFT-S-OFDM	QPSK	36	22	14.30	13.26	0	0.05	1:1	0.036	1.271	0.046	0.015	0.019	
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 n66 (AWS) Antenna 1 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 1	N4C42R071C	40	DFT-S-OFDM	QPSK	1	1	17.10	16.31	0	-0.02	1:1	0.690	1.199	0.827	0.353	0.423	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	108	108	17.10	16.24	0	0.01	1:1	0.664	1.219	0.809	0.335	0.408	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	216	0	17.10	16.14	0	-0.06	1:1	0.722	1.247	0.900	0.327	0.408	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	1	1	17.10	16.31	0	-0.03	1:1	0.030	1.199	0.036	0.012	0.014	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	108	108	17.10	16.24	0	-0.06	1:1	0.027	1.219	0.033	0.011	0.013	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	1	1	17.10	16.31	0	-0.02	1:1	0.300	1.199	0.360	0.120	0.144	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	108	108	17.10	16.24	0	-0.01	1:1	0.305	1.219	0.372	0.116	0.141	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	1	1	17.10	16.31	0	0.05	1:1	0.000	1.199	0.000	0.000	0.000	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	108	108	17.10	16.24	0	0.20	1:1	0.000	1.219	0.000	0.000	0.000	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	1	1	17.10	16.31	0	0.00	1:1	0.749	1.199	0.898	0.283	0.339	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	108	108	17.10	16.24	0	0.04	1:1	0.726	1.219	0.885	0.269	0.328	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	DFT-S-OFDM	QPSK	216	0	17.10	16.14	0	0.01	1:1	0.728	1.247	0.908	0.271	0.338	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 1	N4C42R071C	40	CP-OFDM	QPSK	1	1	17.10	16.20	0	0.00	1:1	0.767	1.230	0.943	0.284	0.349	
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 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)	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 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	1	108	15.30	14.74	0	0.01	1:1	0.788	1.138	0.897	0.330	0.376	A22
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	108	108	15.30	14.70	0	-0.01	1:1	0.771	1.148	0.885	0.324	0.372	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	216	0	15.30	14.65	0	-0.07	1:1	0.770	1.161	0.894	0.324	0.376	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	CP-OFDM	QPSK	1	1	15.30	14.50	0	-0.01	1:1	0.751	1.202	0.903	0.316	0.380	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	1	108	15.30	14.74	0	0.05	1:1	0.000	1.138	0.000	0.000	0.000	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	108	108	15.30	14.70	0	0.04	1:1	0.000	1.148	0.000	0.000	0.000	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	1	108	15.30	14.74	0	-0.02	1:1	0.670	1.138	0.762	0.251	0.286	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	108	108	15.30	14.70	0	-0.06	1:1	0.646	1.148	0.742	0.241	0.277	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	1	108	15.30	14.74	0	-0.01	1:1	0.066	1.138	0.075	0.029	0.033	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	108	108	15.30	14.70	0	-0.03	1:1	0.068	1.148	0.078	0.028	0.032	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	1	108	15.30	14.74	0	-0.01	1:1	0.011	1.138	0.013	0.005	0.006	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 2b	FYQLHC3HFM	40	DFT-S-OFDM	QPSK	108	108	15.30	14.70	0	-0.20	1:1	0.011	1.148	0.013	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 10-63
NR Band n66 (AWS) Antenna 3 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 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	1	214	17.00	15.93	0	0.00	1:1	0.512	1.279	0.655	0.259	0.331	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	108	108	17.00	15.99	0	-0.01	1:1	0.551	1.262	0.695	0.284	0.358	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	1	214	17.00	15.93	0	-0.01	1:1	0.348	1.279	0.445	0.136	0.174	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	108	108	17.00	15.99	0	0.02	1:1	0.351	1.262	0.443	0.133	0.168	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	1	214	17.00	15.93	0	0.05	1:1	0.020	1.279	0.026	0.009	0.012	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	108	108	17.00	15.99	0	0.03	1:1	0.023	1.262	0.029	0.011	0.014	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	1	214	17.00	15.93	0	-0.01	1:1	0.594	1.279	0.760	0.249	0.318	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	108	108	17.00	15.99	0	-0.03	1:1	0.640	1.262	0.808	0.240	0.303	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	216	0	17.00	15.86	0	-0.02	1:1	0.674	1.300	0.876	0.261	0.339	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	CP-OFDM	QPSK	1	1	17.00	15.40	0	-0.07	1:1	0.639	1.445	0.923	0.246	0.355	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	1	214	17.00	15.93	0	0.02	1:1	0.002	1.279	0.003	0.000	0.000	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	108	108	17.00	15.99	0	0.01	1:1	0.002	1.262	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 10-64
NR Band n66 (AWS) Antenna 4b 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 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	1	1	14.30	13.33	0	0.00	1:1	0.568	1.250	0.710	0.226	0.283	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	108	0	14.30	13.25	0	-0.04	1:1	0.566	1.274	0.721	0.225	0.287	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	1	1	14.30	13.33	0	0.00	1:1	0.694	1.250	0.868	0.256	0.320	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	108	0	14.30	13.25	0	-0.03	1:1	0.689	1.274	0.878	0.253	0.322	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	216	0	14.30	13.18	0	0.01	1:1	0.673	1.294	0.871	0.248	0.321	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	CP-OFDM	QPSK	1	1	14.30	13.20	0	-0.03	1:1	0.703	1.288	0.905	0.257	0.331	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	1	1	14.30	13.33	0	0.08	1:1	0.000	1.250	0.000	0.000	0.000	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	108	0	14.30	13.25	0	-0.10	1:1	0.000	1.274	0.000	0.000	0.000	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	1	1	14.30	13.33	0	0.07	1:1	0.001	1.250	0.001	0.000	0.000	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	108	0	14.30	13.25	0	0.04	1:1	0.001	1.274	0.001	0.000	0.000	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	1	1	14.30	13.33	0	-0.05	1:1	0.040	1.250	0.050	0.016	0.020	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	108	0	14.30	13.25	0	0.00	1:1	0.039	1.274	0.050	0.015	0.019	
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 10-65
NR Band n25 (PCS) Antenna 1 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.																					
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	1	1	17.40	16.67	0	-0.03	1:1	0.746	1.183	0.883	0.310	0.367	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	108	0	17.40	16.87	0	-0.04	1:1	0.735	1.130	0.831	0.305	0.345	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	216	0	17.40	16.65	0	0.08	1:1	0.725	1.189	0.862	0.301	0.358	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	CP-OFDM	QPSK	1	1	17.40	16.60	0	0.00	1:1	0.671	1.202	0.807	0.330	0.397	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	1	1	17.40	16.67	0	-0.15	1:1	0.019	1.183	0.022	0.008	0.009	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	108	0	17.40	16.87	0	-0.15	1:1	0.017	1.130	0.019	0.008	0.009	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	1	1	17.40	16.67	0	0.07	1:1	0.378	1.183	0.447	0.136	0.161	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	108	0	17.40	16.87	0	0.00	1:1	0.362	1.130	0.409	0.131	0.148	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	1	1	17.40	16.67	0	0.20	1:1	0.000	1.183	0.000	0.000	0.000	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	108	0	17.40	16.87	0	0.03	1:1	0.001	1.130	0.001	0.000	0.000	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	1	1	17.40	16.67	0	0.03	1:1	0.735	1.183	0.870	0.261	0.309	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	108	0	17.40	16.87	0	-0.01	1:1	0.749	1.130	0.846	0.259	0.293	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 1	V1419WRN7D	40	DFT-S-OFDM	QPSK	216	0	17.40	16.65	0	0.13	1:1	0.719	1.189	0.855	0.258	0.307	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram														

Table 10-66
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) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																					
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	214	14.70	14.39	0	-0.09	1:1	0.816	1.074	0.876	0.328	0.352	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	108	14.70	14.32	0	-0.05	1:1	0.829	1.091	0.904	0.331	0.361	A23
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	216	0	14.70	14.30	0	-0.03	1:1	0.825	1.096	0.904	0.329	0.361	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	CP-OFDM	QPSK	1	1	14.70	14.27	0	-0.04	1:1	0.808	1.104	0.892	0.321	0.354	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	214	14.70	14.39	0	0.04	1:1	0.013	1.074	0.014	0.006	0.006	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	108	14.70	14.32	0	0.04	1:1	0.013	1.091	0.014	0.004	0.004	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	214	14.70	14.39	0	-0.06	1:1	0.726	1.074	0.780	0.262	0.281	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	108	14.70	14.32	0	0.05	1:1	0.716	1.091	0.781	0.257	0.280	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	214	14.70	14.39	0	-0.19	1:1	0.041	1.074	0.044	0.017	0.018	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	108	14.70	14.32	0	0.09	1:1	0.046	1.091	0.050	0.019	0.021	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	214	14.70	14.39	0	0.06	1:1	0.011	1.074	0.012	0.005	0.005	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 2b	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	108	14.70	14.32	0	0.02	1:1	0.010	1.091	0.011	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 10-67
NR Band n25 (PCS) Antenna 3 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.																					
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	108	16.90	16.49	0	0.02	1:1	0.454	1.099	0.499	0.227	0.249				
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	0	16.90	16.42	0	0.01	1:1	0.495	1.117	0.553	0.245	0.274				
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	108	16.90	16.49	0	-0.04	1:1	0.409	1.099	0.449	0.148	0.163				
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	0	16.90	16.42	0	-0.07	1:1	0.412	1.117	0.460	0.153	0.171				
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	108	16.90	16.49	0	0.09	1:1	0.022	1.099	0.024	0.011	0.012				
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	0	16.90	16.42	0	0.04	1:1	0.018	1.117	0.020	0.008	0.009				
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	108	16.90	16.49	0	0.04	1:1	0.617	1.099	0.678	0.265	0.291				
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	0	16.90	16.42	0	0.08	1:1	0.729	1.117	0.814	0.292	0.326				
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	216	0	16.90	16.09	0	0.03	1:1	0.748	1.205	0.901	0.297	0.358				
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	CP-OFDM	QPSK	1	1	16.90	16.38	0	0.00	1:1	0.730	1.132	0.826	0.292	0.331				
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	108	16.90	16.49	0	0.04	1:1	0.002	1.099	0.002	0.000	0.000				
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 3	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	0	16.90	16.42	0	0.03	1:1	0.001	1.117	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 10-68
NR Band n25 (PCS) Antenna 4b 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.																					
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	214	13.20	12.31	0	0.00	1:1	0.658	1.227	0.807	0.252	0.309				
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	0	13.20	12.25	0	0.00	1:1	0.629	1.245	0.783	0.242	0.301				
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	216	0	13.20	12.22	0	-0.06	1:1	0.647	1.253	0.811	0.249	0.312				
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	CP-OFDM	QPSK	1	1	13.20	12.23	0	0.00	1:1	0.632	1.250	0.790	0.242	0.303				
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	214	13.20	12.31	0	-0.10	1:1	0.606	1.227	0.744	0.217	0.266				
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	0	13.20	12.25	0	-0.05	1:1	0.609	1.245	0.758	0.219	0.273				
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	214	13.20	12.31	0	0.08	1:1	0.000	1.227	0.000	0.000	0.000				
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	0	13.20	12.25	0	0.06	1:1	0.000	1.245	0.000	0.000	0.000				
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	214	13.20	12.31	0	0.02	1:1	0.002	1.227	0.002	0.000	0.000				
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	0	13.20	12.25	0	0.06	1:1	0.002	1.245	0.002	0.000	0.000				
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	1	214	13.20	12.31	0	-0.12	1:1	0.016	1.227	0.020	0.004	0.005				
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	Ant 4b	C0D414XD6N	40	DFT-S-OFDM	QPSK	108	0	13.20	12.25	0	-0.04	1:1	0.018	1.245	0.022	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 10-69
NR Band n30 Antenna 1 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.																					
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	1	26	14.60	13.42	0	0.01	1:1	0.661	1.312	0.867	0.268	0.352				
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	25	14	14.60	13.36	0	-0.04	1:1	0.631	1.330	0.839	0.254	0.338				
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	50	0	14.60	13.35	0	-0.01	1:1	0.644	1.334	0.859	0.258	0.344				
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	1	26	14.60	13.42	0	0.06	1:1	0.003	1.312	0.004	0.000	0.000				
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	25	14	14.60	13.36	0	0.05	1:1	0.003	1.330	0.004	0.000	0.000				
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	1	26	14.60	13.42	0	0.06	1:1	0.416	1.312	0.546	0.148	0.194				
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	25	14	14.60	13.36	0	-0.08	1:1	0.438	1.330	0.583	0.150	0.200				
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	1	26	14.60	13.42	0	0.03	1:1	0.000	1.312	0.000	0.000	0.000				
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	25	14	14.60	13.36	0	0.04	1:1	0.000	1.330	0.000	0.000	0.000				
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	1	26	14.60	13.42	0	0.02	1:1	0.728	1.312	0.955	0.263	0.345				
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	25	14	14.60	13.36	0	0.02	1:1	0.722	1.330	0.960	0.255	0.339				
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	DFT-S-OFDM	QPSK	50	0	14.60	13.35	0	0.00	1:1	0.747	1.334	0.996	0.262	0.350				
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 1	RXMW0Y2WCW	10	CP-OFDM	QPSK	1	1	14.60	13.37	0	-0.02	1:1	0.746	1.327	0.990	0.266	0.353				
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 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) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	SAR (10g) (W/kg)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																					
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	1	50	14.60	13.75	0	0.02	1:1	0.691	1.216	0.840	0.251	0.305				
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	25	14	14.60	13.62	0	-0.05	1:1	0.674	1.253	0.845	0.249	0.312				
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	50	0	14.60	13.60	0	0.02	1:1	0.686	1.259	0.864	0.251	0.316				
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	1	50	14.60	13.75	0	0.06	1:1	0.014	1.216	0.017	0.002	0.002				
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	25	14	14.60	13.62	0	0.20	1:1	0.015	1.253	0.019	0.004	0.005				
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	1	50	14.60	13.75	0	0.00	1:1	0.720	1.216	0.876	0.262	0.319				
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	25	14	14.60	13.62	0	-0.01	1:1	0.706	1.253	0.885	0.255	0.320				
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	50	0	14.60	13.60	0	0.02	1:1	0.706	1.259	0.889	0.257	0.324				
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	CP-OFDM	QPSK	1	1	14.60	13.66	0	-0.01	1:1	0.713	1.242	0.886	0.258	0.320				
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	1	50	14.60	13.75	0	-0.18	1:1	0.034	1.216	0.041	0.014	0.017				
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	25	14	14.60	13.62	0	0.17	1:1	0.031	1.253	0.039	0.012	0.015				
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	1	50	14.60	13.75	0	0.05	1:1	0.016	1.216	0.019	0.006	0.007				
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 2b	CYYGWM4L6P	10	DFT-S-OFDM	QPSK	25	14	14.60	13.62	0	0.17	1:1	0.015	1.253	0.019	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 10-71
NR Band n30 Antenna 3 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.																									
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	1	50	15.90	15.05	0	-0.05	1:1	0.546	1.216	0.664	0.207	0.252				
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	25	14	15.90	15.01	0	0.03	1:1	0.530	1.227	0.650	0.201	0.247				
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	1	50	15.90	15.05	0	0.01	1:1	0.610	1.216	0.742	0.206	0.250				
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	25	14	15.90	15.01	0	0.00	1:1	0.565	1.227	0.693	0.193	0.237				
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	1	50	15.90	15.05	0	0.04	1:1	0.005	1.216	0.006	0.002	0.002				
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	25	14	15.90	15.01	0	0.07	1:1	0.007	1.227	0.009	0.002	0.002				
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	1	50	15.90	15.05	0	-0.01	1:1	0.753	1.216	0.916	0.284	0.345				
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	25	14	15.90	15.01	0	0.05	1:1	0.776	1.227	0.952	0.287	0.352	A24			
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	50	0	15.90	14.92	0	-0.11	1:1	0.669	1.253	0.838	0.258	0.323				
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	CP-OFDM	QPSK	1	1	15.90	15.13	0	0.07	1:1	0.639	1.194	0.763	0.249	0.297				
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	1	50	15.90	15.05	0	0.20	1:1	0.000	1.216	0.000	0.000	0.000				
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 3	Q7XW2MFYLH	10	DFT-S-OFDM	QPSK	25	14	15.90	15.01	0	0.07	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 10-72
NR Band n30 Antenna 4b 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.																									
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	1	26	13.10	12.02	0	-0.03	1:1	0.626	1.282	0.803	0.233	0.299				
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	25	14	13.10	11.96	0	0.01	1:1	0.643	1.300	0.836	0.237	0.308				
2310.00	462000	Mid	back	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	50	0	13.10	11.92	0	-0.01	1:1	0.502	1.312	0.659	0.183	0.240				
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	1	26	13.10	12.02	0	-0.01	1:1	0.656	1.282	0.841	0.226	0.290				
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	25	14	13.10	11.96	0	0.01	1:1	0.621	1.300	0.807	0.216	0.281				
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	50	0	13.10	11.92	0	0.07	1:1	0.699	1.312	0.917	0.278	0.365				
2310.00	462000	Mid	top	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	CP-OFDM	QPSK	1	1	13.10	11.70	0	0.00	1:1	0.653	1.380	0.901	0.223	0.308				
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	1	26	13.10	12.02	0	0.06	1:1	0.000	1.282	0.000	0.000	0.000				
2310.00	462000	Mid	bottom	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	25	14	13.10	11.96	0	0.02	1:1	0.000	1.300	0.000	0.000	0.000				
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	1	26	13.10	12.02	0	0.02	1:1	0.008	1.282	0.010	0.003	0.004				
2310.00	462000	Mid	right	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	25	14	13.10	11.96	0	0.20	1:1	0.006	1.300	0.008	0.002	0.003				
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	1	26	13.10	12.02	0	0.05	1:1	0.029	1.282	0.037	0.011	0.014				
2310.00	462000	Mid	left	0 mm	NR Band n30	Ant 4b	M2XQY2CWF2	10	DFT-S-OFDM	QPSK	25	14	13.10	11.96	0	-0.09	1:1	0.027	1.300	0.035	0.010	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 10-73
NR Band n7 Antenna 1 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 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	1	214	14.50	13.64	0	0.00	1:1	0.770	1.219	0.939	0.267	0.325				
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	108	0	14.50	13.60	0	0.00	1:1	0.793	1.230	0.975	0.277	0.341				
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	216	0	14.50	13.59	0	-0.09	1:1	0.806	1.233	0.994	0.279	0.344				
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	CP-OFDM	QPSK	1	1	14.50	13.55	0	0.07	1:1	0.800	1.245	0.996	0.278	0.346				
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	1	214	14.50	13.64	0	0.00	1:1	0.020	1.219	0.024	0.006	0.007				
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	108	0	14.50	13.60	0	0.02	1:1	0.017	1.230	0.021	0.005	0.006				
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	1	214	14.50	13.64	0	0.20	1:1	0.527	1.219	0.642	0.177	0.216				
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	108	0	14.50	13.60	0	-0.06	1:1	0.516	1.230	0.635	0.178	0.219				
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	1	214	14.50	13.64	0	0.03	1:1	0.007	1.219	0.009	0.002	0.002				
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	108	0	14.50	13.60	0	0.09	1:1	0.006	1.230	0.007	0.002	0.002				
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	1	214	14.50	13.64	0	-0.01	1:1	0.319	1.219	0.389	0.107	0.130				
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 1	V1419WRNTD	40	DFT-S-OFDM	QPSK	108	0	14.50	13.60	0	-0.03	1:1	0.295	1.230	0.363	0.102	0.125				
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 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) (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 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	1	214	14.90	13.92	0	-0.01	1:1	0.645	1.253	0.808	0.273	0.342				
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	108	0	14.90	13.85	0	0.06	1:1	0.625	1.274	0.796	0.246	0.313				
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	216	0	14.90	13.83	0	0.01	1:1	0.643	1.279	0.822	0.250	0.320				
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	CP-OFDM	QPSK	1	1	14.90	13.92	0	0.01	1:1	0.673	1.253	0.843	0.282	0.353				
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	1	214	14.90	13.92	0	0.04	1:1	0.013	1.253	0.016	0.002	0.003				
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	108	0	14.90	13.85	0	0.03	1:1	0.010	1.274	0.013	0.001	0.001				
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	1	214	14.90	13.92	0	-0.03	1:1	0.547	1.253	0.685	0.194	0.243				
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	108	0	14.90	13.85	0	0.05	1:1	0.545	1.274	0.694	0.193	0.246				
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	1	214	14.90	13.92	0	-0.20	1:1	0.025	1.253	0.031	0.009	0.011				
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	108	0	14.90	13.85	0	0.04	1:1	0.023	1.274	0.029	0.009	0.011				
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	1	214	14.90	13.92	0	0.01	1:1	0.015	1.253	0.019	0.005	0.006				
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 2b	QQQ632279T	40	DFT-S-OFDM	QPSK	108	0	14.90	13.85	0	0.04	1:1	0.018	1.274	0.023	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 10-75
NR Band n7 Antenna 3 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 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	1	1	16.50	16.31	0	-0.11	1:1	0.652	1.045	0.681	0.236	0.247	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	108	0	16.50	16.28	0	0.08	1:1	0.673	1.052	0.708	0.243	0.256	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	1	1	16.50	16.31	0	-0.01	1:1	0.947	1.045	0.990	0.337	0.352	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	108	0	16.50	16.28	0	0.06	1:1	0.911	1.052	0.958	0.332	0.349	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	216	0	16.50	16.27	0	0.00	1:1	0.927	1.054	0.977	0.331	0.349	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	CP-OFDM	QPSK	1	1	16.50	16.36	0	-0.10	1:1	0.966	1.033	**0.998**	0.347	0.358	A25
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	1	1	16.50	16.31	0	0.09	1:1	0.006	1.045	0.006	0.002	0.002	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	108	0	16.50	16.28	0	0.07	1:1	0.005	1.052	0.005	0.002	0.002	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	1	1	16.50	16.31	0	-0.03	1:1	0.586	1.045	0.612	0.205	0.214	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	108	0	16.50	16.28	0	0.00	1:1	0.600	1.052	0.631	0.209	0.220	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	1	1	16.50	16.31	0	0.03	1:1	0.024	1.045	0.025	0.010	0.010	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 3	QQQ63227ST	40	DFT-S-OFDM	QPSK	108	0	16.50	16.28	0	-0.13	1:1	0.019	1.052	0.020	0.007	0.007	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**													**Body** **1.6 W/kg (mW/g)** averaged over 1 gram										

Table 10-76
NR Band n7 Antenna 4b 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 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	1	1	13.20	12.67	0	-0.06	1:1	0.666	1.130	0.753	0.241	0.272	
2535.00	507000	Mid	back	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	108	108	13.20	12.54	0	-0.01	1:1	0.643	1.164	0.748	0.231	0.269	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	1	1	13.20	12.67	0	-0.07	1:1	0.781	1.130	0.883	0.268	0.303	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	108	108	13.20	12.54	0	-0.04	1:1	0.775	1.164	0.902	0.263	0.306	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	216	0	13.20	12.53	0	0.00	1:1	0.785	1.167	0.916	0.267	0.312	
2535.00	507000	Mid	top	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	CP-OFDM	QPSK	1	1	13.20	12.57	0	0.00	1:1	0.792	1.158	0.916	0.271	0.313	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	1	1	13.20	12.67	0	0.01	1:1	0.000	1.130	0.000	0.000	0.000	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	108	108	13.20	12.54	0	0.07	1:1	0.002	1.164	0.002	0.000	0.000	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	1	1	13.20	12.67	0	0.12	1:1	0.019	1.130	0.021	0.006	0.007	
2535.00	507000	Mid	right	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	108	108	13.20	12.54	0	0.20	1:1	0.017	1.164	0.020	0.006	0.007	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	1	1	13.20	12.67	0	0.17	1:1	0.023	1.130	0.026	0.009	0.010	
2535.00	507000	Mid	left	0 mm	NR Band n7	Ant 4b	P7HQJ6DWW0	40	DFT-S-OFDM	QPSK	108	108	13.20	12.54	0	-0.02	1:1	0.023	1.164	0.027	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 10-77
NR Band n41 PC2 Antenna 1 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 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	13.70	12.75	0	0.01	1:1	0.802	1.245	**0.998**	0.272	0.339	A26
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	69	13.70	12.68	0	-0.01	1:1	0.785	1.265	0.993	0.265	0.335	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	270	0	13.70	12.65	0	-0.04	1:1	0.777	1.274	0.990	0.264	0.336	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	CP-OFDM	QPSK	1	1	13.70	12.62	0	0.00	1:1	0.743	1.282	0.953	0.255	0.327	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	13.70	12.75	0	0.03	1:1	0.000	1.245	0.000	0.000	0.000	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	69	13.70	12.68	0	0.05	1:1	0.000	1.265	0.000	0.000	0.000	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	13.70	12.75	0	0.00	1:1	0.475	1.245	0.591	0.164	0.204	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	69	13.70	12.68	0	0.00	1:1	0.468	1.265	0.592	0.161	0.204	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	13.70	12.75	0	0.07	1:1	0.005	1.245	0.006	0.000	0.000	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	69	13.70	12.68	0	-0.07	1:1	0.007	1.265	0.009	0.002	0.003	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	13.70	12.75	0	0.07	1:1	0.306	1.245	0.381	0.097	0.121	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 1	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	69	13.70	12.68	0	0.02	1:1	0.309	1.265	0.391	0.098	0.124	
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 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)	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 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	1	271	15.00	14.25	0	-0.03	1:1	0.717	1.189	0.853	0.298	0.354	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	135	0	15.00	14.14	0	-0.05	1:1	0.785	1.219	0.957	0.325	0.386	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	270	0	15.00	14.13	0	0.02	1:1	0.772	1.222	0.943	0.316	0.389	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	CP-OFDM	QPSK	1	1	15.00	13.98	0	0.00	1:1	0.779	1.265	0.985	0.319	0.404	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	1	271	15.00	14.25	0	0.08	1:1	0.001	1.189	0.001	0.000	0.000	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	135	0	15.00	14.14	0	0.09	1:1	0.002	1.219	0.002	0.000	0.000	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	1	271	15.00	14.25	0	-0.05	1:1	0.545	1.189	0.648	0.193	0.229	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	135	0	15.00	14.14	0	-0.01	1:1	0.676	1.219	0.824	0.238	0.290	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	270	0	15.00	14.13	0	-0.14	1:1	0.601	1.222	0.734	0.212	0.259	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	1	271	15.00	14.25	0	-0.11	1:1	0.027	1.189	0.032	0.011	0.013	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	135	0	15.00	14.14	0	0.04	1:1	0.030	1.219	0.037	0.012	0.015	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	1	271	15.00	14.25	0	-0.15	1:1	0.022	1.189	0.026	0.008	0.010	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 2b	Q7XW2M7YLH	100	DFT-S-OFDM	QPSK	135	0	15.00	14.14	0	0.00	1:1	0.019	1.219	0.023	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 10-79
NR Band n41 PC2 Antenna 3 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 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	271	14.10	13.54	0	-0.02	1:1	0.734	1.138	0.835	0.246	0.280	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	138	14.10	13.46	0	0.08	1:1	0.640	1.159	0.742	0.219	0.254	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	270	0	14.10	13.41	0	0.00	1:1	0.607	1.172	0.711	0.214	0.251	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	CP-OFDM	QPSK	1	1	14.10	13.48	0	-0.02	1:1	0.451	1.153	0.520	0.161	0.186	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	271	14.10	13.54	0	0.02	1:1	0.568	1.138	0.646	0.220	0.250	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	138	14.10	13.46	0	0.00	1:1	0.527	1.159	0.611	0.174	0.202	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	270	0	14.10	13.41	0	-0.01	1:1	0.537	1.172	0.629	0.180	0.211	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	271	14.10	13.54	0	0.06	1:1	0.003	1.138	0.003	0.000	0.000	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	138	14.10	13.46	0	0.02	1:1	0.002	1.159	0.002	0.000	0.000	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	271	14.10	13.54	0	-0.10	1:1	0.328	1.138	0.373	0.104	0.118	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	138	14.10	13.46	0	-0.02	1:1	0.395	1.159	0.458	0.119	0.138	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	271	14.10	13.54	0	-0.20	1:1	0.017	1.138	0.019	0.005	0.006	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 3	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	138	14.10	13.46	0	-0.21	1:1	0.014	1.159	0.016	0.004	0.005	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram													

Table 10-80
NR Band n41 PC2 Antenna 4b 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 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	1	1	12.80	11.88	0	-0.07	1:1	0.583	1.236	0.721	0.201	0.248	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	135	0	12.80	11.81	0	-0.10	1:1	0.556	1.256	0.698	0.191	0.240	
2592.99	518598	Mid	back	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	270	0	12.80	11.71	0	-0.02	1:1	0.564	1.285	0.725	0.191	0.245	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	1	1	12.80	11.88	0	0.02	1:1	0.712	1.236	0.880	0.233	0.288	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	135	0	12.80	11.81	0	-0.06	1:1	0.699	1.256	0.878	0.227	0.285	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	270	0	12.80	11.71	0	0.01	1:1	0.667	1.285	0.857	0.214	0.275	
2592.99	518598	Mid	top	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	CP-OFDM	QPSK	1	1	12.80	11.74	0	-0.01	1:1	0.713	1.276	0.910	0.233	0.297	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	1	1	12.80	11.88	0	0.04	1:1	0.000	1.236	0.000	0.000	0.000	
2592.99	518598	Mid	bottom	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	135	0	12.80	11.81	0	0.06	1:1	0.000	1.256	0.000	0.000	0.000	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	1	1	12.80	11.88	0	0.07	1:1	0.009	1.236	0.011	0.003	0.004	
2592.99	518598	Mid	right	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	135	0	12.80	11.81	0	0.06	1:1	0.005	1.256	0.006	0.000	0.000	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	1	1	12.80	11.88	0	-0.01	1:1	0.023	1.236	0.028	0.008	0.010	
2592.99	518598	Mid	left	0 mm	NR Band n41 PC2	Ant 4b	N4C42R071C	100	DFT-S-OFDM	QPSK	135	0	12.80	11.81	0	0.05	1:1	0.020	1.256	0.025	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 10-81
NR Band n77 DoD PC2 Antenna 1 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 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	271	12.20	11.33	0	0.05	1:1	0.816	1.222	0.997	0.214	0.262	A27
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	138	12.20	11.20	0	0.02	1:1	0.760	1.259	0.957	0.200	0.252	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	270	0	12.20	11.10	0	0.01	1:1	0.773	1.288	0.996	0.203	0.261	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	CP-OFDM	QPSK	1	1	12.20	11.09	0	0.02	1:1	0.768	1.291	0.991	0.211	0.272	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	271	12.20	11.33	0	0.20	1:1	0.002	1.222	0.002	0.000	0.000	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	138	12.20	11.20	0	0.20	1:1	0.003	1.259	0.004	0.000	0.000	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	271	12.20	11.33	0	-0.02	1:1	0.478	1.222	0.584	0.141	0.172	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	138	12.20	11.20	0	0.04	1:1	0.458	1.259	0.577	0.135	0.170	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	271	12.20	11.33	0	-0.10	1:1	0.015	1.222	0.018	0.005	0.006	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	138	12.20	11.20	0	0.11	1:1	0.015	1.259	0.019	0.005	0.006	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	271	12.20	11.33	0	-0.03	1:1	0.344	1.222	0.420	0.099	0.121	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	138	12.20	11.20	0	0.10	1:1	0.278	1.259	0.350	0.079	0.099	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 1	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	271	12.20	11.33	0	-0.04	1:1	0.728	1.222	0.890	0.196	0.240	
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 10-82
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	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.00	11.41	0	0.03	1:1	0.732	1.146	0.839	0.236	0.270	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.00	11.10	0	0.08	1:1	0.720	1.230	0.886	0.223	0.274	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	270	0	12.00	11.00	0	-0.01	1:1	0.709	1.259	0.893	0.219	0.276	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	CP-OFDM	QPSK	1	1	12.00	11.20	0	0.04	1:1	0.734	1.202	0.882	0.231	0.278	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.00	11.41	0	0.04	1:1	0.013	1.146	0.015	0.004	0.005	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.00	11.10	0	0.04	1:1	0.011	1.230	0.014	0.003	0.004	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.00	11.41	0	-0.08	1:1	0.265	1.146	0.304	0.076	0.087	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.00	11.10	0	0.00	1:1	0.255	1.230	0.314	0.072	0.089	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.00	11.41	0	-0.04	1:1	0.697	1.146	0.799	0.199	0.228	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.00	11.10	0	-0.04	1:1	0.683	1.230	0.840	0.193	0.237	
3500.01	633334	High	right	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	270	0	12.00	11.00	0	-0.01	1:1	0.709	1.259	0.893	0.195	0.246	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.00	11.41	0	0.20	1:1	0.003	1.146	0.003	0.001	0.001	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 2a	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.00	11.10	0	0.20	1:1	0.001	1.230	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 10-83
NR Band n77 DoD PC2 Antenna 3 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 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.20	11.43	0	0.05	1:1	0.490	1.194	0.585	0.142	0.170	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.37	0	0.01	1:1	0.504	1.211	0.610	0.144	0.174	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 3	QPFQ1YH0QD	100	CP-OFDM	QPSK	1	1	12.20	11.43	0	-0.07	1:1	0.415	1.194	0.496	0.120	0.143	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.20	11.43	0	-0.05	1:1	0.299	1.194	0.357	0.082	0.098	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.37	0	0.05	1:1	0.312	1.211	0.378	0.085	0.103	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.20	11.43	0	0.05	1:1	0.000	1.194	0.000	0.000	0.000	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.37	0	0.03	1:1	0.000	1.211	0.000	0.000	0.000	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.20	11.43	0	-0.04	1:1	0.198	1.194	0.236	0.059	0.070	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.37	0	-0.01	1:1	0.228	1.211	0.276	0.070	0.085	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.20	11.43	0	0.21	1:1	0.013	1.194	0.016	0.003	0.004	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.37	0	-0.04	1:1	0.011	1.211	0.013	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 10-84
NR Band n77 DoD PC2 Antenna 4b 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 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	11.80	10.95	0	-0.06	1:1	0.486	1.216	0.591	0.140	0.170	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	11.80	10.87	0	-0.14	1:1	0.360	1.239	0.446	0.106	0.131	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	11.80	10.95	0	0.01	1:1	0.691	1.216	0.840	0.200	0.243	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	11.80	10.87	0	-0.05	1:1	0.671	1.239	0.831	0.195	0.242	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	270	0	11.80	10.56	0	0.03	1:1	0.695	1.330	0.924	0.201	0.267	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	CP-OFDM	QPSK	1	1	11.80	10.81	0	0.00	1:1	0.666	1.256	0.836	0.192	0.241	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	11.80	10.95	0	0.04	1:1	0.000	1.216	0.000	0.000	0.000	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	11.80	10.87	0	0.06	1:1	0.000	1.239	0.000	0.000	0.000	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	11.80	10.95	0	0.07	1:1	0.006	1.216	0.007	0.000	0.000	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	11.80	10.87	0	0.07	1:1	0.010	1.239	0.012	0.002	0.002	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	11.80	10.95	0	-0.02	1:1	0.019	1.216	0.023	0.005	0.006	
3500.01	633334	Mid	left	0 mm	NR Band n77 DoD PC2	Ant 4b	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	11.80	10.87	0	-0.13	1:1	0.022	1.239	0.027	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 10-85
NR Band n77 C PC2 Antenna 1 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 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	1	271	12.20	11.31	0	0.02	1:1	0.780	1.227	0.957	0.280	0.344	
3930.00	662000	High	back	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	1	1	12.20	11.34	0	0.04	1:1	0.801	1.219	0.976	0.272	0.332	
3750.00	650000	Low	back	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	135	69	12.20	11.19	0	-0.01	1:1	0.773	1.262	0.976	0.264	0.333	
3930.00	662000	High	back	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	135	0	12.20	11.33	0	0.02	1:1	0.774	1.222	0.946	0.257	0.314	
3750.00	650000	Low	back	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	270	0	12.20	11.18	0	-0.04	1:1	0.769	1.265	0.973	0.263	0.333	
3930.00	662000	High	back	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	CP-OFDM	QPSK	1	1	12.20	11.29	0	0.03	1:1	0.798	1.233	0.984	0.265	0.327	
3930.00	662000	High	top	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	1	1	12.20	11.34	0	0.03	1:1	0.000	1.219	0.000	0.000	0.000	
3930.00	662000	High	top	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	135	0	12.20	11.33	0	0.20	1:1	0.000	1.222	0.000	0.000	0.000	
3750.00	650000	Low	bottom	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	1	271	12.20	11.31	0	0.01	1:1	0.444	1.227	0.545	0.124	0.152	
3930.00	662000	High	bottom	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	1	1	12.20	11.34	0	0.05	1:1	0.410	1.219	0.500	0.113	0.138	
3750.00	650000	Low	bottom	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	135	69	12.20	11.19	0	-0.02	1:1	0.456	1.262	0.575	0.128	0.162	
3930.00	662000	High	bottom	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	135	0	12.20	11.33	0	-0.05	1:1	0.372	1.222	0.455	0.102	0.125	
3750.00	650000	Low	bottom	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	270	0	12.20	11.18	0	0.06	1:1	0.457	1.265	0.578	0.127	0.161	
3930.00	662000	High	right	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	1	1	12.20	11.34	0	0.07	1:1	0.012	1.219	0.015	0.004	0.005	
3930.00	662000	High	right	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	135	0	12.20	11.33	0	0.01	1:1	0.009	1.222	0.011	0.003	0.004	
3750.00	650000	Low	left	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	1	271	12.20	11.31	0	0.05	1:1	0.575	1.227	0.706	0.156	0.191	
3930.00	662000	High	left	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	1	1	12.20	11.34	0	0.00	1:1	0.645	1.219	0.786	0.170	0.207	
3750.00	650000	Low	left	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	135	69	12.20	11.19	0	0.02	1:1	0.551	1.262	0.695	0.151	0.191	
3930.00	662000	High	left	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	135	0	12.20	11.33	0	0.07	1:1	0.648	1.222	0.792	0.171	0.209	
3750.00	650000	Low	left	0 mm	NR Band n77 C PC2	Ant 1	2HWFYYC62	100	DFT-S-OFDM	QPSK	270	0	12.20	11.18	0	0.00	1:1	0.532	1.265	0.673	0.147	0.186	
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
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 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	137	12.00	11.45	0	0.07	1:1	0.503	1.135	0.571	0.166	0.188	
3930.00	662000	High	back	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	1	12.00	11.10	0	0.15	1:1	0.462	1.230	0.593	0.153	0.188	
3750.00	650000	Low	back	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	69	12.00	11.48	0	0.04	1:1	0.584	1.127	0.658	0.187	0.211	
3930.00	662000	High	back	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	0	12.00	11.47	0	0.00	1:1	0.496	1.130	0.560	0.156	0.176	
3750.00	650000	Low	back	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	270	0	12.00	11.35	0	-0.01	1:1	0.680	1.161	0.789	0.201	0.233	
3750.00	650000	Low	top	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	137	12.00	11.45	0	-0.15	1:1	0.010	1.135	0.011	0.001	0.001	
3750.00	650000	Low	top	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	69	12.00	11.48	0	0.00	1:1	0.007	1.127	0.008	0.000	0.000	
3750.00	650000	Low	bottom	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	137	12.00	11.45	0	0.02	1:1	0.226	1.135	0.257	0.063	0.072	
3750.00	650000	Low	bottom	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	69	12.00	11.48	0	-0.06	1:1	0.214	1.127	0.241	0.060	0.068	
3750.00	650000	Low	right	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	137	12.00	11.45	0	0.02	1:1	0.703	1.135	0.798	0.199	0.226	
3930.00	662000	High	right	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	1	12.00	11.10	0	-0.01	1:1	0.768	1.230	0.945	0.205	0.252	
3750.00	650000	Low	right	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	69	12.00	11.48	0	-0.05	1:1	0.749	1.127	0.844	0.205	0.231	
3930.00	662000	High	right	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	0	12.00	11.47	0	-0.10	1:1	0.842	1.130	0.951	0.221	0.250	A28
3750.00	650000	Low	right	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	270	0	12.00	11.35	0	-0.11	1:1	0.747	1.161	0.867	0.204	0.237	
3750.00	650000	Low	right	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	CP-OFDM	QPSK	1	1	12.00	11.25	0	0.01	1:1	0.790	1.189	0.939	0.216	0.257	
3750.00	650000	Low	left	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	1	137	12.00	11.45	0	0.05	1:1	0.000	1.135	0.000	0.000	0.000	
3750.00	650000	Low	left	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	69	12.00	11.48	0	0.07	1:1	0.007	1.127	0.008	0.003	0.003	
3930.00	662000	High	right	0 mm	NR Band n77 C PC2	Ant 2a	MGXQY2CWF2	100	DFT-S-OFDM	QPSK	135	0	12.00	11.47	0	-0.01	1:1	0.840	1.130	0.949	0.217	0.245	
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 10-87
NR Band n77 C PC2 Antenna 3 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 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	137	12.20	11.66	0	0.06	1:1	0.765	1.132	0.866	0.192	0.217	
3930.00	662000	High	back	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.20	11.65	0	-0.03	1:1	0.551	1.135	0.625	0.135	0.153	
3750.00	650000	Low	back	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.54	0	-0.01	1:1	0.780	1.164	0.908	0.196	0.228	
3930.00	662000	High	back	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.53	0	-0.02	1:1	0.528	1.167	0.616	0.128	0.149	
3750.00	650000	Low	back	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	270	0	12.20	11.53	0	-0.01	1:1	0.727	1.167	0.848	0.182	0.212	
3750.00	650000	Low	back	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	CP-OFDM	QPSK	1	1	12.20	11.36	0	-0.04	1:1	0.791	1.213	0.959	0.203	0.246	
3750.00	650000	Low	top	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	137	12.20	11.66	0	0.02	1:1	0.396	1.132	0.448	0.115	0.130	
3930.00	662000	High	top	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.20	11.05	0	0.11	1:1	0.295	1.135	0.335	0.081	0.092	
3750.00	650000	Low	top	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.54	0	0.02	1:1	0.398	1.164	0.463	0.117	0.136	
3930.00	662000	High	top	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.53	0	-0.04	1:1	0.287	1.167	0.335	0.078	0.091	
3750.00	650000	Low	top	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	270	0	12.20	11.53	0	0.06	1:1	0.389	1.167	0.454	0.112	0.131	
3750.00	650000	Low	bottom	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	137	12.20	11.66	0	0.20	1:1	0.001	1.132	0.001	0.000	0.000	
3750.00	650000	Low	bottom	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.54	0	0.02	1:1	0.002	1.164	0.002	0.000	0.000	
3750.00	650000	Low	right	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	137	12.20	11.66	0	0.02	1:1	0.559	1.132	0.633	0.162	0.183	
3930.00	662000	High	right	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	1	12.20	11.65	0	0.04	1:1	0.481	1.135	0.546	0.137	0.155	
3750.00	650000	Low	right	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.54	0	-0.01	1:1	0.566	1.164	0.659	0.163	0.190	
3930.00	662000	High	right	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.53	0	0.01	1:1	0.479	1.167	0.559	0.136	0.159	
3750.00	650000	Low	right	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	270	0	12.20	11.53	0	-0.01	1:1	0.553	1.167	0.645	0.160	0.187	
3750.00	650000	Low	left	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	1	137	12.20	11.66	0	0.13	1:1	0.019	1.132	0.022	0.005	0.006	
3750.00	650000	Low	left	0 mm	NR Band n77 C PC2	Ant 3	QPFQ1YH0QD	100	DFT-S-OFDM	QPSK	135	0	12.20	11.54	0	0.03	1:1	0.022	1.164	0.026	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 10-88
NR Band n77 C PC2 Antenna 4b 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 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	11.80	10.94	0	0.00	1:1	0.612	1.219	0.746	0.170	0.207	
3930.00	662000	High	back	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	11.80	11.00	0	0.01	1:1	0.473	1.202	0.569	0.131	0.157	
3750.00	650000	Low	back	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	69	11.80	10.76	0	0.03	1:1	0.609	1.271	0.774	0.169	0.215	
3930.00	662000	High	back	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	0	11.80	10.97	0	0.06	1:1	0.504	1.211	0.610	0.141	0.171	
3930.00	662000	High	back	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	270	0	11.80	10.93	0	-0.02	1:1	0.489	1.222	0.598	0.135	0.165	
3750.00	650000	Low	top	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	11.80	10.94	0	-0.04	1:1	0.813	1.219	0.991	0.227	0.277	
3930.00	662000	High	top	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	11.80	11.00	0	-0.04	1:1	0.747	1.202	0.898	0.209	0.251	
3750.00	650000	Low	top	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	69	11.80	10.76	0	-0.04	1:1	0.785	1.271	**0.998**	0.219	0.278	
3930.00	662000	High	top	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	0	11.80	10.97	0	-0.01	1:1	0.752	1.211	0.911	0.209	0.253	
3930.00	662000	High	top	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	270	0	11.80	10.93	0	0.03	1:1	0.739	1.222	0.903	0.205	0.251	
3750.00	650000	Low	top	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	CP-OFDM	QPSK	1	1	11.80	10.86	0	-0.01	1:1	0.801	1.242	**0.995**	0.227	0.282	
3930.00	662000	High	bottom	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	11.80	11.00	0	0.02	1:1	0.000	1.202	0.000	0.000	0.000	
3930.00	662000	High	bottom	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	0	11.80	10.97	0	0.02	1:1	0.000	1.211	0.000	0.000	0.000	
3930.00	662000	High	right	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	11.80	11.00	0	0.05	1:1	0.005	1.202	0.006	0.002	0.002	
3930.00	662000	High	right	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	0	11.80	10.97	0	0.01	1:1	0.007	1.211	0.008	0.002	0.002	
3930.00	662000	High	left	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	11.80	11.00	0	0.20	1:1	0.008	1.202	0.010	0.000	0.000	
3930.00	662000	High	left	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	135	0	11.80	10.97	0	0.09	1:1	0.012	1.211	0.015	0.002	0.002	
3750.00	650000	Low	top	0 mm	NR Band n77 C PC2	Ant 4b	V1419WRN7D	100	DFT-S-OFDM	QPSK	1	137	11.80	10.94	0	0.00	1:1	0.776	1.219	0.946	0.225	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 10-89
2.4 GHz WLAN Antenna 2a Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	(W/kg)	(W/kg)	
2412	1	802.11b	DSSS	22	13.50	12.46	-0.01	0 mm	Ant 2a	V1	RXMW0Y2WCW	1	back	99.1	0.801	1.271	1.009	1.027	0.298	0.382	A29
2412	1	802.11b	DSSS	22	13.50	12.60	0.10	0 mm	Ant 2a	V2	N4C42R071C	1	back	99.7	0.783	1.230	1.003	0.966	0.293	0.361	
2437	6	802.11b	DSSS	22	13.50	12.42	-0.03	0 mm	Ant 2a	V1	RXMW0Y2WCW	1	back	99.1	0.659	1.282	1.009	0.852	0.245	0.317	
2462	11	802.11b	DSSS	22	13.50	12.43	0.01	0 mm	Ant 2a	V1	RXMW0Y2WCW	1	back	99.1	0.769	1.279	1.009	0.992	0.287	0.370	
2412	1	802.11b	DSSS	22	13.50	12.60	-0.15	0 mm	Ant 2a	V2	N4C42R071C	1	top	99.7	0.010	1.230	1.003	0.012	0.005	0.006	
2412	1	802.11b	DSSS	22	13.50	12.60	0.03	0 mm	Ant 2a	V2	N4C42R071C	1	bottom	99.7	0.281	1.230	1.003	0.347	0.086	0.106	
2412	1	802.11b	DSSS	22	13.50	12.60	-0.01	0 mm	Ant 2a	V2	N4C42R071C	1	right	99.7	0.618	1.230	1.003	0.762	0.218	0.269	
2412	1	802.11b	DSSS	22	13.50	12.60	-0.19	0 mm	Ant 2a	V2	N4C42R071C	1	left	99.7	0.000	1.230	1.003	0.000	0.000	0.000	
2412	1	802.11b	DSSS	22	10.00	9.07	0.03	0 mm	Ant 2a	V1	RXMW0Y2WCW	1	back	99.1	0.376	1.239	1.009	0.470	0.147	0.184	
2412	1	802.11b	DSSS	22	10.00	9.07	0.04	0 mm	Ant 2a	V1	RXMW0Y2WCW	1	bottom	99.1	0.151	1.239	1.009	0.189	0.046	0.058	
2412	1	802.11b	DSSS	22	10.00	9.07	0.00	0 mm	Ant 2a	V1	RXMW0Y2WCW	1	right	99.1	0.373	1.239	1.009	0.466	0.123	0.154	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 10-90
2.4 GHz WLAN Antenna 4a 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	14.00	13.06	-0.01	0 mm	Ant 4a	V1	H0JWVMWQYM	1	back	99.6	0.718	1.242	1.004	0.895	0.281	0.350	
2437	6	802.11b	DSSS	22	14.00	13.05	0.02	0 mm	Ant 4a	V1	H0JWVMWQYM	1	back	99.6	0.526	1.245	1.004	0.657	0.226	0.282	
2462	11	802.11b	DSSS	22	14.00	12.97	0.05	0 mm	Ant 4a	V1	H0JWVMWQYM	1	back	99.6	0.620	1.268	1.004	0.789	0.237	0.302	
2412	1	802.11b	DSSS	22	14.00	13.06	0.01	0 mm	Ant 4a	V1	H0JWVMWQYM	1	top	99.6	0.257	1.242	1.004	0.320	0.079	0.099	
2412	1	802.11b	DSSS	22	14.00	13.06	-0.07	0 mm	Ant 4a	V1	H0JWVMWQYM	1	bottom	99.6	0.007	1.242	1.004	0.009	0.003	0.004	
2412	1	802.11b	DSSS	22	14.00	13.06	-0.08	0 mm	Ant 4a	V1	H0JWVMWQYM	1	right	99.6	0.000	1.242	1.004	0.000	0.000	0.000	
2412	1	802.11b	DSSS	22	14.00	13.06	-0.02	0 mm	Ant 4a	V1	H0JWVMWQYM	1	left	99.6	0.771	1.242	1.004	0.961	0.250	0.312	
2437	6	802.11b	DSSS	22	14.00	13.05	-0.10	0 mm	Ant 4a	V1	H0JWVMWQYM	1	left	99.6	0.623	1.245	1.004	0.779	0.201	0.251	
2462	11	802.11b	DSSS	22	14.00	12.97	0.02	0 mm	Ant 4a	V1	H0JWVMWQYM	1	left	99.6	0.576	1.268	1.004	0.733	0.184	0.234	
2412	1	802.11b	DSSS	22	14.00	13.01	-0.02	0 mm	Ant 4a	V2	H0JWVMWQYM	1	left	99.7	0.650	1.256	1.003	0.819	0.224	0.282	
2462	11	802.11b	DSSS	22	10.50	10.35	0.08	0 mm	Ant 4a	V1	H0JWVMWQYM	1	back	99.6	0.456	1.035	1.004	0.474	0.166	0.172	
2462	11	802.11b	DSSS	22	10.50	10.35	0.01	0 mm	Ant 4a	V1	H0JWVMWQYM	1	top	99.6	0.216	1.035	1.004	0.224	0.066	0.069	
2462	11	802.11b	DSSS	22	10.50	10.35	0.06	0 mm	Ant 4a	V1	H0JWVMWQYM	1	left	99.6	0.406	1.035	1.004	0.422	0.136	0.141	
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 10-91
5 GHz WLAN Antenna 4a Body SAR

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.														(W/kg)			(W/kg)	(W/kg)	(W/kg)	
5290	58	802.11ac	OFDM	80	10.25	9.25	-0.02	0 mm	Ant 4a	V1	V1419WRN7D	29.3	back	95.2	0.794	1.259	1.050	1.050	0.182	0.241	
5290	58	802.11ac	OFDM	80	10.25	9.25	0.00	0 mm	Ant 4a	V1	V1419WRN7D	29.3	top	95.2	0.091	1.259	1.050	0.120	0.021	0.028	
5290	58	802.11ac	OFDM	80	10.25	9.25	0.02	0 mm	Ant 4a	V1	V1419WRN7D	29.3	bottom	95.2	0.000	1.259	1.050	0.000	0.000	0.000	
5290	58	802.11ac	OFDM	80	10.25	9.25	-0.09	0 mm	Ant 4a	V1	V1419WRN7D	29.3	right	95.2	0.000	1.259	1.050	0.000	0.000	0.000	
5290	58	802.11ac	OFDM	80	10.25	9.25	0.05	0 mm	Ant 4a	V1	V1419WRN7D	29.3	left	95.2	0.883	1.259	1.050	1.167	0.193	0.255	
5290	58	802.11ac	OFDM	80	10.25	9.12	-0.12	0 mm	Ant 4a	V2	Q7XW2M7YLH	29.3	left	95.2	0.782	1.297	1.050	1.065	0.172	0.234	
5290	58	802.11ac	OFDM	80	4.75	3.82	-0.05	0 mm	Ant 4a	V1	V1419WRN7D	29.3	back	95.2	0.202	1.239	1.050	0.263	0.041	0.053	
5290	58	802.11ac	OFDM	80	4.75	3.82	-0.09	0 mm	Ant 4a	V1	V1419WRN7D	29.3	top	95.2	0.020	1.239	1.050	0.026	0.000	0.000	
5290	58	802.11ac	OFDM	80	4.75	3.82	0.01	0 mm	Ant 4a	V1	V1419WRN7D	29.3	left	95.2	0.202	1.239	1.050	0.263	0.041	0.053	
5530	106	802.11ac	OFDM	80	9.00	8.22	0.08	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	back	95.2	0.670	1.197	1.050	0.842	0.145	0.182	
5610	122	802.11ac	OFDM	80	9.00	8.16	0.03	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	back	95.2	0.721	1.213	1.050	0.918	0.154	0.196	
5690	138	802.11ac	OFDM	80	9.00	8.01	-0.04	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	back	95.2	0.753	1.256	1.050	0.993	0.157	0.207	
5530	106	802.11ac	OFDM	80	9.00	8.22	-0.13	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	top	95.2	0.066	1.197	1.050	0.083	0.014	0.018	
5530	106	802.11ac	OFDM	80	9.00	8.22	-0.05	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	bottom	95.2	0.000	1.197	1.050	0.000	0.000	0.000	
5530	106	802.11ac	OFDM	80	9.00	8.22	0.03	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	right	95.2	0.000	1.197	1.050	0.000	0.000	0.000	
5530	106	802.11ac	OFDM	80	9.00	8.22	-0.01	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	left	95.2	0.810	1.197	1.050	1.018	0.179	0.225	
5610	122	802.11ac	OFDM	80	9.00	8.16	-0.06	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	left	95.2	0.843	1.213	1.050	1.074	0.185	0.236	
5690	138	802.11ac	OFDM	80	9.00	8.01	-0.01	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	left	95.2	0.818	1.256	1.050	1.079	0.177	0.233	
5690	138	802.11ac	OFDM	80	9.00	8.11	-0.01	0 mm	Ant 4a	V2	HMZFPP9TMW	29.3	left	95.2	0.808	1.227	1.050	1.041	0.174	0.224	
5690	138	802.11ac	OFDM	80	3.50	2.68	-0.04	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	back	95.2	0.183	1.208	1.050	0.232	0.033	0.042	
5690	138	802.11ac	OFDM	80	3.50	2.68	0.11	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	top	95.2	0.014	1.208	1.050	0.018	0.000	0.000	
5690	138	802.11ac	OFDM	80	3.50	2.68	0.17	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	left	95.2	0.206	1.208	1.050	0.261	0.041	0.052	
5775	155	802.11ac	OFDM	80	10.50	9.40	0.00	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	back	95.2	0.817	1.288	1.050	1.105	0.165	0.223	
5775	155	802.11ac	OFDM	80	10.50	9.40	-0.02	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	top	95.2	0.079	1.288	1.050	0.107	0.018	0.024	
5775	155	802.11ac	OFDM	80	10.50	9.40	-0.09	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	bottom	95.2	0.000	1.288	1.050	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	10.50	9.40	0.02	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	right	95.2	0.000	1.288	1.050	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	10.50	9.40	0.00	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	left	95.2	0.872	1.288	1.050	1.179	0.190	0.257	
5775	155	802.11ac	OFDM	80	10.50	9.42	0.00	0 mm	Ant 4a	V2	HMZFPP9TMW	29.3	left	95.2	0.849	1.282	1.050	1.143	0.183	0.246	
5775	155	802.11ac	OFDM	80	5.00	4.33	-0.06	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	back	95.2	0.241	1.167	1.050	0.295	0.043	0.053	
5775	155	802.11ac	OFDM	80	5.00	4.33	-0.02	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	top	95.2	0.019	1.167	1.050	0.023	0.000	0.000	
5775	155	802.11ac	OFDM	80	5.00	4.33	-0.05	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	left	95.2	0.287	1.167	1.050	0.352	0.055	0.067	
5610	122	802.11ac	OFDM	80	9.00	8.16	-0.05	0 mm	Ant 4a	V1	H0JWVMWQYM	29.3	left	95.2	0.811	1.213	1.050	1.033	0.180	0.229	
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 10-92
5 GHz WLAN Antenna 5b 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)	
5230	46	802.11n	OFDM	40	17.50	16.58	-0.04	0 mm	Ant 5b	V2	Q7XW2M7YLH	13.5	back	97.9	0.177	1.236	1.021	0.223	0.068	0.086	
5230	46	802.11n	OFDM	40	17.50	16.58	0.10	0 mm	Ant 5b	V2	Q7XW2M7YLH	13.5	top	97.9	0.000	1.236	1.021	0.000	0.000	0.000	
5230	46	802.11n	OFDM	40	17.50	16.58	-0.09	0 mm	Ant 5b	V2	Q7XW2M7YLH	13.5	bottom	97.9	0.011	1.236	1.021	0.014	0.000	0.000	
5190	38	802.11n	OFDM	40	14.50	13.18	-0.02	0 mm	Ant 5b	V2	Q7XW2M7YLH	13.5	right	97.9	0.339	1.355	1.021	0.469	0.105	0.145	
5230	46	802.11n	OFDM	40	17.50	16.58	0.00	0 mm	Ant 5b	V2	Q7XW2M7YLH	13.5	right	97.9	0.940	1.236	1.021	1.186	0.298	0.376	A30
5230	46	802.11n	OFDM	40	17.50	16.60	-0.14	0 mm	Ant 5b	V1	RXMW0Y2WCW	13.5	right	97.9	0.826	1.230	1.021	1.037	0.252	0.316	
5230	46	802.11n	OFDM	40	17.50	16.58	-0.12	0 mm	Ant 5b	V2	Q7XW2M7YLH	13.5	left	97.9	0.013	1.236	1.021	0.016	0.002	0.003	
5230	46	802.11n	OFDM	40	13.50	12.51	0.05	0 mm	Ant 5b	V2	Q7XW2M7YLH	13.5	back	97.9	0.048	1.256	1.021	0.062	0.017	0.022	
5230	46	802.11n	OFDM	40	13.50	12.51	0.00	0 mm	Ant 5b	V2	Q7XW2M7YLH	13.5	right	97.9	0.280	1.256	1.021	0.359	0.087	0.112	
5690	138	802.11ac	OFDM	80	16.00	14.96	-0.02	0 mm	Ant 5b	V2	HM2FPP9TMW	29.3	back	95.2	0.133	1.271	1.050	0.177	0.047	0.063	
5690	138	802.11ac	OFDM	80	16.00	14.96	0.11	0 mm	Ant 5b	V2	HM2FPP9TMW	29.3	top	95.2	0.000	1.271	1.050	0.000	0.000	0.000	
5690	138	802.11ac	OFDM	80	16.00	14.96	0.16	0 mm	Ant 5b	V2	HM2FPP9TMW	29.3	bottom	95.2	0.008	1.271	1.050	0.011	0.000	0.000	
5530	106	802.11ac	OFDM	80	14.00	12.05	0.04	0 mm	Ant 5b	V2	HM2FPP9TMW	29.3	right	95.2	0.320	1.567	1.050	0.527	0.095	0.156	
5610	122	802.11ac	OFDM	80	16.00	14.91	0.03	0 mm	Ant 5b	V2	HM2FPP9TMW	29.3	right	95.2	0.728	1.285	1.050	0.982	0.225	0.304	
5690	138	802.11ac	OFDM	80	16.00	14.96	0.00	0 mm	Ant 5b	V2	HM2FPP9TMW	29.3	right	95.2	0.678	1.271	1.050	0.905	0.213	0.284	
5610	122	802.11ac	OFDM	80	16.00	14.92	0.04	0 mm	Ant 5b	V1	RXMW0Y2WCW	29.3	right	95.2	0.639	1.282	1.050	0.860	0.201	0.271	
5690	138	802.11ac	OFDM	80	16.00	14.96	0.09	0 mm	Ant 5b	V2	HM2FPP9TMW	29.3	left	95.2	0.009	1.271	1.050	0.012	0.000	0.000	
5610	122	802.11ac	OFDM	80	12.00	11.24	-0.03	0 mm	Ant 5b	V2	HM2FPP9TMW	29.3	back	95.2	0.045	1.191	1.050	0.056	0.014	0.018	
5610	122	802.11ac	OFDM	80	12.00	11.24	0.04	0 mm	Ant 5b	V2	HM2FPP9TMW	29.3	right	95.2	0.302	1.191	1.050	0.378	0.089	0.111	
5775	155	802.11ac	OFDM	80	16.00	15.20	0.08	0 mm	Ant 5b	V2	QQQ632279T	29.3	back	95.2	0.138	1.202	1.050	0.174	0.051	0.064	
5775	155	802.11ac	OFDM	80	16.00	15.20	-0.11	0 mm	Ant 5b	V2	QQQ632279T	29.3	top	95.2	0.000	1.202	1.050	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	16.00	15.20	-0.03	0 mm	Ant 5b	V2	QQQ632279T	29.3	bottom	95.2	0.007	1.202	1.050	0.009	0.000	0.000	
5775	155	802.11ac	OFDM	80	16.00	15.20	0.01	0 mm	Ant 5b	V2	QQQ632279T	29.3	right	95.2	0.936	1.202	1.050	1.181	0.299	0.377	
5775	155	802.11ac	OFDM	80	16.00	15.24	0.00	0 mm	Ant 5b	V1	C0D414XD6N	29.3	right	95.2	0.815	1.191	1.050	1.019	0.260	0.325	
5775	155	802.11ac	OFDM	80	16.00	15.20	0.05	0 mm	Ant 5b	V2	QQQ632279T	29.3	left	95.2	0.020	1.202	1.050	0.025	0.006	0.008	
5775	155	802.11ac	OFDM	80	12.00	11.10	-0.05	0 mm	Ant 5b	V2	QQQ632279T	29.3	back	95.2	0.052	1.230	1.050	0.067	0.016	0.021	
5775	155	802.11ac	OFDM	80	12.00	11.10	0.01	0 mm	Ant 5b	V2	QQQ632279T	29.3	right	95.2	0.299	1.230	1.050	0.386	0.093	0.120	
5775	155	802.11ac	OFDM	80	16.00	15.20	0.06	0 mm	Ant 5b	0	QQQ632279T	29.3	right	95.2	0.842	1.202	1.050	1.063	0.278	0.351	
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 10-93
Bluetooth Antenna 2a Body SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	(W/kg)	(W/kg)	
2402	0	Bluetooth	FHSS	14.00	13.16	-0.07	0 mm	Ant 2a	V1	JYHWFYYC62	1	back	76.9	0.747	1.213	1.008	0.913	0.294	0.359	
2441	39	Bluetooth	FHSS	14.00	13.12	0.01	0 mm	Ant 2a	V1	JYHWFYYC62	1	back	76.9	0.812	1.225	1.008	1.003	0.313	0.386	
2480	78	Bluetooth	FHSS	14.00	13.13	0.01	0 mm	Ant 2a	V1	JYHWFYYC62	1	back	76.9	0.895	1.222	1.008	1.102	0.344	0.424	
2402	0	Bluetooth	FHSS	14.00	13.16	0.04	0 mm	Ant 2a	V1	JYHWFYYC62	1	top	76.9	0.009	1.213	1.008	0.011	0.003	0.004	
2402	0	Bluetooth	FHSS	14.00	13.16	-0.01	0 mm	Ant 2a	V1	JYHWFYYC62	1	bottom	76.9	0.335	1.213	1.008	0.410	0.101	0.123	
2402	0	Bluetooth	FHSS	14.00	13.16	-0.04	0 mm	Ant 2a	V1	JYHWFYYC62	1	right	76.9	0.729	1.213	1.008	0.891	0.237	0.290	
2441	39	Bluetooth	FHSS	14.00	13.12	0.02	0 mm	Ant 2a	V1	JYHWFYYC62	1	right	76.9	0.892	1.225	1.008	1.101	0.290	0.358	
2480	78	Bluetooth	FHSS	14.00	13.13	-0.05	0 mm	Ant 2a	V1	JYHWFYYC62	1	right	76.9	0.921	1.222	1.008	1.134	0.297	0.366	
2480	78	Bluetooth	FHSS	14.00	12.94	-0.03	0 mm	Ant 2a	V2	HM2FPP9TMW	1	right	76.9	0.823	1.276	1.008	1.059	0.268	0.345	
2402	0	Bluetooth	FHSS	14.00	13.16	0.08	0 mm	Ant 2a	V1	JYHWFYYC62	1	left	76.9	0.000	1.213	1.008	0.000	0.000	0.000	
2441	39	Bluetooth	FHSS	10.00	9.26	0.01	0 mm	Ant 2a	V1	JYHWFYYC62	1	back	76.9	0.286	1.186	1.008	0.342	0.114	0.136	
2441	39	Bluetooth	FHSS	10.00	9.26	0.01	0 mm	Ant 2a	V1	JYHWFYYC62	1	bottom	76.9	0.144	1.186	1.008	0.172	0.044	0.053	
2441	39	Bluetooth	FHSS	10.00	9.26	0.06	0 mm	Ant 2a	V1	JYHWFYYC62	1	right	76.9	0.284	1.186	1.008	0.340	0.094	0.112	
2402	0	Bluetooth	FHSS	7.00	6.17	0.01	0 mm	Ant 2a	V1	JYHWFYYC62	1	back	76.9	0.133	1.211	1.008	0.162	0.056	0.068	
2402	0	Bluetooth	FHSS	7.00	6.17	0.08	0 mm	Ant 2a	V1	JYHWFYYC62	1	bottom	76.9	0.076	1.211	1.008	0.093	0.022	0.027	
2402	0	Bluetooth	FHSS	7.00	6.17	0.03	0 mm	Ant 2a	V1	JYHWFYYC62	1	right	76.9	0.131	1.211	1.008	0.160	0.042	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.

Table 10-94
Bluetooth Antenna 4a Body SAR

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Variant	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	(W/kg)	(W/kg)	
2402	0	Bluetooth	FHSS	14.50	13.50	-0.05	0 mm	Ant 4a	V2	MGXQY2CWF2	1	back	76.9	0.856	1.259	1.008	1.086	0.330	0.419	
2441	39	Bluetooth	FHSS	14.50	13.48	-0.01	0 mm	Ant 4a	V2	MGXQY2CWF2	1	back	76.9	0.742	1.265	1.008	0.946	0.281	0.358	
2480	78	Bluetooth	FHSS	14.50	13.68	0.09	0 mm	Ant 4a	V2	MGXQY2CWF2	1	back	76.9	0.950	1.208	1.008	1.157	0.358	0.436	A31
2480	78	Bluetooth	FHSS	14.50	13.41	0.04	0 mm	Ant 4a	V1	C0D414XD6N	1	back	76.9	0.860	1.285	1.008	1.114	0.326	0.422	
2480	78	Bluetooth	FHSS	14.50	13.68	0.01	0 mm	Ant 4a	V2	MGXQY2CWF2	1	top	76.9	0.434	1.208	1.008	0.528	0.131	0.160	
2480	78	Bluetooth	FHSS	14.50	13.68	0.04	0 mm	Ant 4a	V2	MGXQY2CWF2	1	bottom	76.9	0.016	1.208	1.008	0.019	0.007	0.009	
2480	78	Bluetooth	FHSS	14.50	13.68	0.03	0 mm	Ant 4a	V2	MGXQY2CWF2	1	right	76.9	0.000	1.208	1.008	0.000	0.000	0.000	
2402	0	Bluetooth	FHSS	14.50	13.50	-0.02	0 mm	Ant 4a	V2	MGXQY2CWF2	1	left	76.9	0.762	1.259	1.008	0.967	0.258	0.327	
2441	39	Bluetooth	FHSS	14.50	13.48	-0.01	0 mm	Ant 4a	V2	MGXQY2CWF2	1	left	76.9	0.684	1.265	1.008	0.872	0.231	0.295	
2480	78	Bluetooth	FHSS	14.50	13.68	0.00	0 mm	Ant 4a	V2	MGXQY2CWF2	1	left	76.9	0.859	1.208	1.008	1.046	0.274	0.334	
2402	0	Bluetooth	FHSS	11.50	10.68	-0.06	0 mm	Ant 4a	V2	MGXQY2CWF2	1	back	76.9	0.495	1.208	1.008	0.603	0.195	0.237	
2402	0	Bluetooth	FHSS	11.50	10.68	-0.04	0 mm	Ant 4a	V2	MGXQY2CWF2	1	top	76.9	0.220	1.208	1.008	0.268	0.066	0.080	
2402	0	Bluetooth	FHSS	11.50	10.68	-0.01	0 mm	Ant 4a	V2	MGXQY2CWF2	1	left	76.9	0.444	1.208	1.008	0.541	0.150	0.183	
2441	39	Bluetooth	FHSS	9.50	8.53	-0.04	0 mm	Ant 4a	V2	MGXQY2CWF2	1	back	76.9	0.244	1.250	1.008	0.307	0.093	0.117	
2441	39	Bluetooth	FHSS	9.50	8.53	0.01	0 mm	Ant 4a	V2	MGXQY2CWF2	1	top	76.9	0.126	1.250	1.008	0.159	0.037	0.047	
2441	39	Bluetooth	FHSS	9.50	8.53	-0.02	0 mm	Ant 4a	V2	MGXQY2CWF2	1	left	76.9	0.195	1.250	1.008	0.246	0.065	0.082	
2441	39	Bluetooth	FHSS	7.50	6.61	-0.12	0 mm	Ant 4a	V2	MGXQY2CWF2	1	back	76.9	0.157	1.227	1.008	0.194	0.059	0.073	
2441	39	Bluetooth	FHSS	7.50	6.61	-0.02	0 mm	Ant 4a	V2	MGXQY2CWF2	1	top	76.9	0.078	1.227	1.008	0.096	0.023	0.028	
2441	39	Bluetooth	FHSS	7.50	6.61	0.01	0 mm	Ant 4a	V2	MGXQY2CWF2	1	left	76.9	0.107	1.227	1.008	0.132	0.039	0.048	
2480	78	Bluetooth	FHSS	14.50	13.68	0.15	0 mm	Ant 4a	V2	MGXQY2CWF2	1	back	76.9	0.921	1.208	1.008	1.121	0.387	0.471	
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.
Note: Blue entry represents variability measurement.

Table 10-95
NB UNII Antenna 4a 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)	
5162	Low	NB UNII 1	FHSS	10.50	9.73	-0.01	0 mm	Ant 4a	V1	JYHWFYYC62	1	back	77.0	0.925	1.194	1.006	1.111	0.217	0.261	
5204	Mid	NB UNII 1	FHSS	10.50	9.60	-0.18	0 mm	Ant 4a	V1	JYHWFYYC62	1	back	77.0	0.935	1.230	1.006	1.157	0.219	0.271	
5245	High	NB UNII 1	FHSS	10.50	9.51	-0.05	0 mm	Ant 4a	V1	JYHWFYYC62	1	back	77.0	0.877	1.256	1.006	1.108	0.203	0.256	
5162	Low	NB UNII 1	FHSS	10.50	9.73	0.01	0 mm	Ant 4a	V1	JYHWFYYC62	1	top	77.0	0.179	1.194	1.006	0.215	0.043	0.052	
5162	Low	NB UNII 1	FHSS	10.50	9.73	-0.10	0 mm	Ant 4a	V1	JYHWFYYC62	1	bottom	77.0	0.000	1.194	1.006	0.000	0.000	0.000	
5162	Low	NB UNII 1	FHSS	10.50	9.73	0.19	0 mm	Ant 4a	V1	JYHWFYYC62	1	right	77.0	0.000	1.194	1.006	0.000	0.000	0.000	
5162	Low	NB UNII 1	FHSS	10.50	9.64	0.02	0 mm	Ant 4a	V2	HM2FPP9TMW	1	left	77.0	0.928	1.219	1.006	1.138	0.211	0.259	
5204	Mid	NB UNII 1	FHSS	10.50	9.60	-0.05	0 mm	Ant 4a	V1	JYHWFYYC62	1	left	77.0	0.909	1.230	1.006	1.125	0.244	0.302	
5245	High	NB UNII 1	FHSS	10.50	9.51	0.00	0 mm	Ant 4a	V1	JYHWFYYC62	1	left	77.0	0.865	1.256	1.006	1.093	0.236	0.298	
5162	Low	NB UNII 1	FHSS	10.50	9.73	-0.06	0 mm	Ant 4a	V1	JYHWFYYC62	1	left	77.0	0.963	1.194	1.006	1.157	0.219	0.263	A32
5204	Mid	NB UNII 1	FHSS	7.50	6.68	-0.02	0 mm	Ant 4a	V1	JYHWFYYC62	1	back	77.0	0.394	1.208	1.006	0.479	0.092	0.112	
5204	Mid	NB UNII 1	FHSS	7.50	6.68	-0.17	0 mm	Ant 4a	V1	JYHWFYYC62	1	top	77.0	0.081	1.208	1.006	0.098	0.017	0.021	
5204	Mid	NB UNII 1	FHSS	7.50	6.68	0.03	0 mm	Ant 4a	V1	JYHWFYYC62	1	left	77.0	0.409	1.208	1.006	0.497	0.090	0.109	
5204	Mid	NB UNII 1	FHSS	5.50	4.69	0.07	0 mm	Ant 4a	V1	JYHWFYYC62	1	back	77.0	0.237	1.205	1.006	0.287	0.054	0.065	
5204	Mid	NB UNII 1	FHSS	5.50	4.69	0.07	0 mm	Ant 4a	V1	JYHWFYYC62	1	top	77.0	0.051	1.205	1.006	0.062	0.010	0.012	
5204	Mid	NB UNII 1	FHSS	5.50	4.69	0.16	0 mm	Ant 4a	V1	JYHWFYYC62	1	left	77.0	0.258	1.205	1.006	0.313	0.056	0.068	
5204	Mid	NB UNII 1	FHSS	3.50	2.84	-0.16	0 mm	Ant 4a	V1	JYHWFYYC62	1	back	77.0	0.093	1.164	1.006	0.109	0.018	0.021	
5204	Mid	NB UNII 1	FHSS	3.50	2.84	0.02	0 mm	Ant 4a	V1	JYHWFYYC62	1	top	77.0	0.016	1.164	1.006	0.019	0.002	0.002	
5204	Mid	NB UNII 1	FHSS	3.50	2.84	-0.18	0 mm	Ant 4a	V1	JYHWFYYC62	1	left	77.0	0.095	1.164	1.006	0.111	0.018	0.021	
5733	Low	NB UNII 3	FHSS	11.00	10.14	-0.03	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	back	77.0	0.687	1.219	1.006	0.842	0.132	0.162	
5789	Mid	NB UNII 3	FHSS	11.00	9.95	0.09	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	back	77.0	0.669	1.274	1.006	0.857	0.126	0.161	
5844	High	NB UNII 3	FHSS	11.00	9.91	-0.02	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	back	77.0	0.731	1.285	1.006	0.945	0.136	0.176	
5733	Low	NB UNII 3	FHSS	11.00	10.14	-0.20	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	top	77.0	0.077	1.219	1.006	0.094	0.015	0.018	
5733	Low	NB UNII 3	FHSS	11.00	10.14	0.07	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	bottom	77.0	0.000	1.219	1.006	0.000	0.000	0.000	
5733	Low	NB UNII 3	FHSS	11.00	10.14	0.03	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	right	77.0	0.000	1.219	1.006	0.000	0.000	0.000	
5733	Low	NB UNII 3	FHSS	11.00	10.16	0.02	0 mm	Ant 4a	V2	HM2FPP9TMW	1	left	77.0	0.800	1.213	1.006	0.976	0.173	0.211	
5789	Mid	NB UNII 3	FHSS	11.00	9.99	0.03	0 mm	Ant 4a	V2	HM2FPP9TMW	1	left	77.0	0.757	1.262	1.006	0.961	0.167	0.212	
5844	High	NB UNII 3	FHSS	11.00	9.96	0.02	0 mm	Ant 4a	V2	HM2FPP9TMW	1	left	77.0	0.816	1.271	1.006	1.043	0.178	0.228	
5844	High	NB UNII 3	FHSS	11.00	9.91	0.05	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	left	77.0	0.826	1.285	1.006	1.068	0.177	0.229	
5789	Mid	NB UNII 3	FHSS	8.00	7.05	-0.05	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	back	77.0	0.275	1.245	1.006	0.344	0.055	0.069	
5789	Mid	NB UNII 3	FHSS	8.00	7.05	0.06	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	top	77	0.036	1.245	1.006	0.045	0.004	0.005	
5789	Mid	NB UNII 3	FHSS	8.00	7.05	-0.01	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	left	77.0	0.402	1.245	1.006	0.503	0.085	0.106	
5789	Mid	NB UNII 3	FHSS	6.00	5.83	0.02	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	back	77.0	0.218	1.040	1.006	0.228	0.041	0.043	
5789	Mid	NB UNII 3	FHSS	6.00	5.83	0.03	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	top	77	0.014	1.040	1.006	0.015	0.000	0.000	
5789	Mid	NB UNII 3	FHSS	6.00	5.83	-0.10	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	left	77.0	0.302	1.040	1.006	0.316	0.060	0.063	
5789	Mid	NB UNII 3	FHSS	4.00	3.93	-0.13	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	back	77.0	0.128	1.016	1.006	0.131	0.023	0.024	
5789	Mid	NB UNII 3	FHSS	4.00	3.93	0.09	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	top	77	0.005	1.016	1.006	0.005	0.000	0.000	
5789	Mid	NB UNII 3	FHSS	4.00	3.93	0.01	0 mm	Ant 4a	V1	RXMW0Y2WCW	1	left	77.0	0.175	1.016	1.006	0.179	0.033	0.034	
5162	Low	NB UNII 1	FHSS	10.50	9.73	-0.08	0 mm	Ant 4a	V1	JYHWFYYC62	1	left	77.0	0.840	1.194	1.006	1.009	0.202	0.243	
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.
Note: Blue entry represents variability measurement.

Table 10-96
NB UNII Antenna 5b 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)	
5162	Low	NB UNII 1	FHSS	11.50	10.65	0.01	0 mm	Ant 5b	V1	V1419WRN7D	1	back	77.0	0.017	1.216	1.006	0.021	0.004	0.005	
5162	Low	NB UNII 1	FHSS	11.50	10.65	0.02	0 mm	Ant 5b	V1	V1419WRN7D	1	top	77.0	0.000	1.216	1.006	0.000	0.000	0.000	
5162	Low	NB UNII 1	FHSS	11.50	10.65	0.03	0 mm	Ant 5b	V1	V1419WRN7D	1	bottom	77.0	0.000	1.216	1.006	0.000	0.000	0.000	
5162	Low	NB UNII 1	FHSS	11.50	10.65	0.04	0 mm	Ant 5b	V1	V1419WRN7D	1	right	77.0	0.172	1.216	1.006	0.210	0.045	0.055	
5204	Mid	NB UNII 1	FHSS	11.50	10.63	0.03	0 mm	Ant 5b	V1	V1419WRN7D	1	right	77.0	0.188	1.222	1.006	0.231	0.051	0.063	
5245	High	NB UNII 1	FHSS	11.50	10.54	0.03	0 mm	Ant 5b	V1	V1419WRN7D	1	right	77.0	0.190	1.247	1.006	0.238	0.053	0.066	
5245	High	NB UNII 1	FHSS	11.50	10.24	0.04	0 mm	Ant 5b	V2	Q7XW2M7YLH	1	right	77.0	0.147	1.337	1.006	0.198	0.041	0.055	
5162	Low	NB UNII 1	FHSS	11.50	10.65	0.01	0 mm	Ant 5b	V1	V1419WRN7D	1	left	77.0	0.000	1.216	1.006	0.000	0.000	0.000	
5204	Mid	NB UNII 1	FHSS	7.50	6.51	0.02	0 mm	Ant 5b	V1	V1419WRN7D	1	back	77	0.004	1.256	1.006	0.005	0.000	0.000	
5204	Mid	NB UNII 1	FHSS	7.50	6.51	0.04	0 mm	Ant 5b	V1	V1419WRN7D	1	right	77.0	0.044	1.256	1.006	0.056	0.012	0.015	
5204	Mid	NB UNII 1	FHSS	4.50	3.53	-0.15	0 mm	Ant 5b	V1	V1419WRN7D	1	back	77	0.002	1.250	1.006	0.003	0.000	0.000	
5204	Mid	NB UNII 1	FHSS	4.50	3.53	0.20	0 mm	Ant 5b	V1	V1419WRN7D	1	right	77.0	0.022	1.250	1.006	0.028	0.005	0.006	
5733	Low	NB UNII 3	FHSS	18.00	17.14	-0.06	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	back	77.0	0.145	1.219	1.006	0.178	0.051	0.063	
5733	Low	NB UNII 3	FHSS	18.00	17.14	0.03	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	top	77.0	0.000	1.219	1.006	0.000	0.000	0.000	
5733	Low	NB UNII 3	FHSS	18.00	17.14	0.07	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	bottom	77.0	0.006	1.219	1.006	0.007	0.000	0.000	
5733	Low	NB UNII 3	FHSS	18.00	17.14	0.02	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	right	77.0	0.756	1.219	1.006	0.927	0.246	0.302	
5789	Mid	NB UNII 3	FHSS	18.00	17.08	-0.02	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	right	77.0	0.720	1.236	1.006	0.895	0.235	0.292	
5844	High	NB UNII 3	FHSS	18.00	17.02	-0.01	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	right	77.0	0.750	1.253	1.006	0.945	0.244	0.308	
5844	High	NB UNII 3	FHSS	18.00	16.91	-0.11	0 mm	Ant 5b	V2	HM2FPP9TMW	1	right	77.0	0.701	1.285	1.006	0.906	0.231	0.299	
5733	Low	NB UNII 3	FHSS	18.00	17.14	0.07	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	left	77.0	0.007	1.219	1.006	0.009	0.000	0.000	
5733	Low	NB UNII 3	FHSS	14.00	12.80	0.06	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	back	77.0	0.039	1.318	1.006	0.052	0.017	0.023	
5733	Low	NB UNII 3	FHSS	14.00	12.80	0.00	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	right	77.0	0.202	1.318	1.006	0.268	0.068	0.090	
5733	Low	NB UNII 3	FHSS	11.00	10.25	0.01	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	back	77.0	0.017	1.189	1.006	0.020	0.004	0.005	
5733	Low	NB UNII 3	FHSS	11.00	10.25	0.16	0 mm	Ant 5b	V1	RXMW0Y2WCW	1	right	77.0	0.100	1.189	1.006	0.120	0.032	0.038	
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 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 1 Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.999	1.027	0.895	1.027*
	Top	0.047	0.012	0.320	0.379
	Bottom	0.931	0.347	0.009	**1.287**
	Right	0.052	0.762	0.000	0.814
	Left	0.996	0.000	0.961	0.996*

Table 11-2
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 2a Reduced at 10dBm SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.930	0.470	0.895	1.400*
	Top	0.015	0.012	0.320	0.347
	Bottom	0.314	0.189	0.009	0.512
	Right	0.951	0.466	0.000	**1.417**
	Left	0.028	0.000	0.961	0.989

Table 11-3
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 2a Reduced at 10dBm SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.985	0.470	0.895	**1.455***
	Top	0.019	0.012	0.320	0.351
	Bottom	0.930	0.189	0.009	1.128
	Right	0.083	0.466	0.000	0.549
	Left	0.026	0.000	0.961	0.987

Table 11-4
Cellular Band Ant 3 Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.959	1.027	0.895	1.027*
	Top	0.998	0.012	0.320	**1.330**
	Bottom	0.029	0.347	0.009	0.385
	Right	0.998	0.762	0.000	0.998*
	Left	0.104	0.000	0.961	1.065

Table 11-5
Cellular Band Ant 4b Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a Reduced at 10.5dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.972	1.027	0.474	**1.446***
	Top	0.998	0.012	0.224	1.234
	Bottom	0.188	0.347	0.009	0.544
	Right	0.022	0.762	0.000	0.784
	Left	0.051	0.000	0.422	0.473

Table 11-6
Cellular Band Ant 1 Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.999	0.342	1.157	**1.157***
	Top	0.047	0.011	0.528	0.586
	Bottom	0.931	0.172	0.019	1.122
	Right	0.052	0.340	0.000	0.392
	Left	0.996	0.000	1.046	1.046*

Table 11-7
Cellular Band Ant 2a Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.930	0.342	1.157	1.272*
	Top	0.015	0.011	0.528	0.554
	Bottom	0.314	0.172	0.019	0.505
	Right	0.951	0.340	0.000	**1.291**
	Left	0.028	0.000	1.046	1.074

Table 11-8
Cellular Band Ant 2b Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.985	0.342	1.157	**1.327***
	Top	0.019	0.011	0.528	0.558
	Bottom	0.930	0.172	0.019	1.121
	Right	0.083	0.340	0.000	0.423
	Left	0.026	0.000	1.046	1.072

Table 11-9
Cellular Band Ant 3 Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a at 11.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.959	1.102	0.603	1.102*
	Top	0.998	0.011	0.268	**1.277**
	Bottom	0.029	0.410	0.019	0.458
	Right	0.998	1.134	0.000	1.134*
	Left	0.104	0.000	0.541	0.645

Table 11-10
Cellular Band Ant 4b Simultaneous Transmission Scenario with Bluetooth TxBF

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a at 11.5 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.972	1.102	0.603	**1.575***
	Top	0.998	0.011	0.268	1.277
	Bottom	0.188	0.410	0.019	0.617
	Right	0.022	1.134	0.000	1.156
	Left	0.051	0.000	0.541	0.592

Table 11-11
Cellular Band Ant 1 Simultaneous Transmission Scenario with 5 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	5 GHz WLAN Ant 4a SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.999	1.105	0.223	1.105*
	Top	0.047	0.120	0.000	0.167
	Bottom	0.931	0.000	0.014	0.945
	Right	0.052	0.000	1.186	**1.238**
	Left	0.996	1.179	0.025	1.204*

Table 11-12
Cellular Band Ant 2a Simultaneous Transmission Scenario with 5 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	5 GHz WLAN Ant 4a SAR (W/kg)	5 GHz WLAN Ant 5b Reduced at 13 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.930	1.105	0.067	1.105*
	Top	0.015	0.120	0.000	0.135
	Bottom	0.314	0.000	0.014	0.328
	Right	0.951	0.000	0.386	**1.337**
	Left	0.028	1.179	0.025	1.232

Table 11-13
Cellular Band Ant 2b Simultaneous Transmission Scenario with 5 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	5 GHz WLAN Ant 4a SAR (W/kg)	5 GHz WLAN Ant 5b Reduced at 13 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.985	1.105	0.067	1.105*
	Top	0.019	0.120	0.000	0.139
	Bottom	0.930	0.000	0.014	0.944
	Right	0.083	0.000	0.386	0.469
	Left	0.026	1.179	0.025	**1.230**

Table 11-14
Cellular Band Ant 3 Simultaneous Transmission Scenario with 5 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4a SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.959	1.105	0.223	1.105*
	Top	0.998	0.120	0.000	1.118
	Bottom	0.029	0.000	0.014	0.043
	Right	0.998	0.000	1.186	**1.186***
	Left	0.104	1.179	0.025	1.308

Table 11-15
Cellular Band Ant 4b Simultaneous Transmission Scenario with 5 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	5 GHz WLAN Ant 4a Reduced at 4.75 dBm SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.972	0.295	0.223	**1.490**
	Top	0.998	0.026	0.000	1.024
	Bottom	0.188	0.000	0.014	0.202
	Right	0.022	0.000	1.186	1.208
	Left	0.051	0.352	0.025	0.428

Table 11-16
Cellular Band Ant 1 Simultaneous Transmission Scenario with NB UNII TxBF

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	NB UNII Ant 5b Reduced at 14 dBm SAR (W/kg)	NB UNII Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.999	0.052	1.157	1.157*
	Top	0.047	0.000	0.215	0.262
	Bottom	0.931	0.007	0.000	0.938
	Right	0.052	0.268	0.000	0.320
	Left	0.996	0.009	1.157	**1.166***

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

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	NB UNII Ant 5b Reduced at 14 dBm SAR (W/kg)	NB UNII Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.930	0.052	1.157	1.157*
	Top	0.015	0.000	0.215	0.230
	Bottom	0.314	0.007	0.000	0.321
	Right	0.951	0.268	0.000	**1.219**
	Left	0.028	0.009	1.157	1.194

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

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	NB UNII Ant 5b Reduced at 14 dBm SAR (W/kg)	NB UNII Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.985	0.052	1.157	1.157*
	Top	0.019	0.000	0.215	0.234
	Bottom	0.930	0.007	0.000	0.937
	Right	0.083	0.268	0.000	0.351
	Left	0.026	0.009	1.157	**1.192**

Table 11-19
Cellular Band Ant 3 Simultaneous Transmission Scenario with NB UNII TxBF

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	NB UNII Ant 5b SAR (W/kg)	NB UNII Ant 4a Reduced at 8 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.959	0.178	0.479	0.959*
	Top	0.998	0.000	0.098	**1.096**
	Bottom	0.029	0.007	0.000	0.036
	Right	0.998	0.945	0.000	0.998*
	Left	0.104	0.009	0.503	0.616

Table 11-20
Cellular Band Ant 4 Simultaneous Transmission Scenario with NB UNII TxBF

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	NB UNII Ant 5b SAR (W/kg)	NB UNII Ant 4a Reduced at 8 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.972	0.178	0.479	**1.451***
	Top	0.998	0.000	0.098	1.096
	Bottom	0.188	0.007	0.000	0.195
	Right	0.022	0.945	0.000	0.967
	Left	0.051	0.009	0.503	0.563

Table 11-21
Cellular Band Ant 1 Simultaneous Transmission Scenario with 6 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	WIFI 6E Ant 4a SAR (W/kg)	WIFI 6E Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.999	1.189	0.094	**1.189***
	Top	0.047	0.115	0.000	0.162
	Bottom	0.931	0.003	0.007	0.941
	Right	0.052	0.005	0.604	0.661
	Left	0.996	0.135	0.000	1.131

Table 11-22
Cellular Band Ant 2a Simultaneous Transmission Scenario with 6 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	WIFI 6E Ant 4a SAR (W/kg)	WIFI 6E Ant 5b Reduced at 13 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.930	1.189	0.094	1.189*
	Top	0.015	0.115	0.000	0.130
	Bottom	0.314	0.003	0.007	0.324
	Right	0.951	0.005	0.345	**1.301**
	Left	0.028	0.135	0.000	0.163

Table 11-23
Cellular Band Ant 2b Simultaneous Transmission Scenario with 6 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	WIFI 6E Ant 4a SAR (W/kg)	WIFI 6E Ant 5b Reduced at 13 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.985	1.189	0.094	**1.189***
	Top	0.019	0.115	0.000	0.134
	Bottom	0.930	0.003	0.007	0.940
	Right	0.083	0.005	0.345	0.433
	Left	0.026	0.135	0.000	0.161

Table 11-24
Cellular Band Ant 3 Simultaneous Transmission Scenario with 6 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	WIFI 6E Ant 4a SAR (W/kg)	WIFI 6E Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.959	1.189	0.094	**1.189***
	Top	0.998	0.115	0.000	1.113
	Bottom	0.029	0.003	0.007	0.039
	Right	0.998	0.005	0.604	1.003*
	Left	0.104	0.135	0.000	0.239

Table 11-25
Cellular Band Ant 4b Simultaneous Transmission Scenario with 6 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	WIFI 6E Ant 4a Reduced at 4.75 dBm SAR (W/kg)	WIFI 6E Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.972	0.233	0.094	**1.299**
	Top	0.998	0.028	0.000	1.026
	Bottom	0.188	0.003	0.007	0.198
	Right	0.022	0.005	0.604	0.631
	Left	0.051	0.027	0.000	0.078

Table 11-26
Cellular Band Ant 1 Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.999	0.895	0.342	0.999*
	Top	0.047	0.320	0.011	0.378
	Bottom	0.931	0.009	0.172	**1.112**
	Right	0.052	0.000	0.340	0.392
	Left	0.996	0.961	0.000	0.996*

Table 11-27
Cellular Band Ant 2a Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.930	0.895	0.342	1.272*
	Top	0.015	0.320	0.011	0.346
	Bottom	0.314	0.009	0.172	0.495
	Right	0.951	0.000	0.340	**1.291**
	Left	0.028	0.961	0.000	0.989

Table 11-28
Cellular Band Ant 2b Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.985	0.895	0.342	**1.327***
	Top	0.019	0.320	0.011	0.350
	Bottom	0.930	0.009	0.172	1.111
	Right	0.083	0.000	0.340	0.423
	Left	0.026	0.961	0.000	0.987

Table 11-29
Cellular Band Ant 3 Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Bluetooth Ant 2a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.959	0.895	1.102	1.102*
	Top	0.998	0.320	0.011	**1.329**
	Bottom	0.029	0.009	0.410	0.448
	Right	0.998	0.000	1.134	1.134*
	Left	0.104	0.961	0.000	1.065

Table 11-30
Cellular Band Ant 4b Simultaneous Transmission Scenario with Bluetooth and 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	2.4 GHz WLAN Ant 4a Reduced at 10.5dBm SAR (W/kg)	Bluetooth Ant 2a SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Body SAR	Back	0.972	0.474	1.102	**1.446***
	Top	0.998	0.224	0.011	1.233
	Bottom	0.188	0.009	0.410	0.607
	Right	0.022	0.000	1.134	1.156
	Left	0.051	0.422	0.000	0.473

Table 11-31
Cellular Band Ant 1 Simultaneous Transmission Scenario with Bluetooth TxBF and 5 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Bluetooth Ant 4a at 9.5 dBm SAR (W/kg)	5 GHz WLAN Ant 4a SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.999	0.342	0.307	1.105	0.223	1.412*
	Top	0.047	0.011	0.159	0.120	0.000	0.337
	Bottom	0.931	0.172	0.019	0.000	0.014	1.136
	Right	0.052	0.340	0.000	0.000	1.186	**1.578**
	Left	0.996	0.000	0.246	1.179	0.025	1.450*

Table 11-32
Cellular Band Ant 2a Simultaneous Transmission Scenario with Bluetooth TxBF and 5 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	Bluetooth Ant 2a at 7 dBm SAR (W/kg)	Bluetooth Ant 4a at 9.5 dBm SAR (W/kg)	5 GHz WLAN Ant 4a SAR (W/kg)	5 GHz WLAN Ant 5b Reduced at 13 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.930	0.162	0.307	1.105	0.067	1.412*
	Top	0.015	0.011	0.159	0.120	0.000	0.305
	Bottom	0.314	0.093	0.019	0.000	0.014	0.440
	Right	0.951	0.160	0.000	0.000	0.386	**1.497**
	Left	0.028	0.000	0.246	1.179	0.025	1.478

Table 11-33
Cellular Band Ant 2b Simultaneous Transmission Scenario with Bluetooth TXBF and 5 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	Bluetooth Ant 2a at 7 dBm SAR (W/kg)	Bluetooth Ant 4a at 9.5 dBm SAR (W/kg)	5 GHz WLAN Ant 4a SAR (W/kg)	5 GHz WLAN Ant 5b Reduced at 13 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.985	0.162	0.307	1.105	0.067	1.412*
	Top	0.019	0.011	0.159	0.120	0.000	0.309
	Bottom	0.930	0.093	0.019	0.000	0.014	1.056
	Right	0.083	0.160	0.000	0.000	0.386	0.629
	Left	0.026	0.000	0.246	1.179	0.025	**1.476**

Table 11-34
Cellular Band Ant 3 Simultaneous Transmission Scenario with Bluetooth TXBF and 5 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Bluetooth Ant 4a at 7.5 dBm SAR (W/kg)	5 GHz WLAN Ant 4a SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.959	0.342	0.194	1.105	0.223	1.299*
	Top	0.998	0.011	0.096	0.120	0.000	1.225
	Bottom	0.029	0.172	0.019	0.000	0.014	0.234
	Right	0.998	0.340	0.000	0.000	1.186	**1.526***
	Left	0.104	0.000	0.132	1.179	0.025	1.440

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

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Bluetooth Ant 4a at 7.5 dBm SAR (W/kg)	5 GHz WLAN Ant 4a Reduced at 4.75 dBm SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.972	0.342	0.194	0.295	0.223	1.461*
	Top	0.998	0.011	0.096	0.026	0.000	1.131
	Bottom	0.188	0.172	0.019	0.000	0.014	0.393
	Right	0.022	0.340	0.000	0.000	1.186	**1.548**
	Left	0.051	0.000	0.132	0.352	0.025	0.560

Table 11-36
Cellular Band Ant 1 Simultaneous Transmission Scenario with 2.4 GHz WI-FI MIMO and NB UNII TxBF

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	NB UNII Ant 4a Reduced at 6 dBm SAR (W/kg)	NB UNII Ant 5b Reduced at 14 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.999	1.027	0.895	0.287	0.052	1.182*
	Top	0.047	0.012	0.320	0.062	0.000	0.441
	Bottom	0.931	0.347	0.009	0.000	0.007	**1.294**
	Right	0.052	0.762	0.000	0.000	0.268	1.082
	Left	0.996	0.000	0.961	0.316	0.009	1.286*

Table 11-37
Cellular Band Ant 2a Simultaneous Transmission Scenario with 2.4 GHz WI-FI MIMO and NB UNII TxBF

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 2a Reduced at 10dBm SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	NB UNII Ant 4a Reduced at 6 dBm SAR (W/kg)	NB UNII Ant 5b Reduced at 11 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.930	0.470	0.895	0.287	0.020	1.420*
	Top	0.015	0.012	0.320	0.062	0.000	0.409
	Bottom	0.314	0.189	0.009	0.000	0.007	0.519
	Right	0.951	0.466	0.000	0.000	0.120	**1.537**
	Left	0.028	0.000	0.961	0.316	0.009	1.314

Table 11-38
Cellular Band Ant 2b Simultaneous Transmission Scenario with 2.4 GHz WI-FI MIMO and NB UNII TxBF

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	2.4 GHz WLAN Ant 2a Reduced at 10dBm SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	NB UNII Ant 4a Reduced at 6 dBm SAR (W/kg)	NB UNII Ant 5b Reduced at 11 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.985	0.470	0.895	0.287	0.020	**1.455***
	Top	0.019	0.012	0.320	0.062	0.000	0.413
	Bottom	0.930	0.189	0.009	0.000	0.007	1.135
	Right	0.083	0.466	0.000	0.000	0.120	0.669
	Left	0.026	0.000	0.961	0.316	0.009	1.312

Table 11-39
Cellular Band Ant 3 Simultaneous Transmission Scenario with 2.4 GHz WI-FI MIMO and NB UNII TxBF

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	NB UNII Ant 4a Reduced at 4 dBm SAR (W/kg)	NB UNII Ant 5b Reduced at 14 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.959	1.027	0.895	0.131	0.052	1.079*
	Top	0.998	0.012	0.320	0.019	0.000	**1.349**
	Bottom	0.029	0.347	0.009	0.000	0.007	0.392
	Right	0.998	0.762	0.000	0.000	0.268	1.030*
	Left	0.104	0.000	0.961	0.179	0.009	1.253

Table 11-40
Cellular Band Ant 4b Simultaneous Transmission Scenario with 2.4 GHz WI-FI MIMO and NB UNII TxBF

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a Reduced at 10.5dBm SAR (W/kg)	NB UNII Ant 4a Reduced at 4 dBm SAR (W/kg)	NB UNII Ant 5b Reduced at 14 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.972	1.027	0.474	0.131	0.052	**1.577***
	Top	0.998	0.012	0.224	0.019	0.000	1.253
	Bottom	0.188	0.347	0.009	0.000	0.007	0.551
	Right	0.022	0.762	0.000	0.000	0.268	1.052
	Left	0.051	0.000	0.422	0.179	0.009	0.661

Table 11-41
2.4 GHz Bluetooth TxBF Simultaneous Transmission Scenario

Simult Tx	Configuration	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		2	3	2+3
Body SAR	Back	1.102	1.157	**1.157***
	Top	0.011	0.528	0.539
	Bottom	0.410	0.019	0.429
	Right	1.134	0.000	1.134
	Left	0.000	1.046	1.046

Table 11-42
NB UNII TxBF Simultaneous Transmission Scenario

Simult Tx	Configuration	NB UNII Ant 4a SAR (W/kg)	NB UNII Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		2	3	2+3
Body SAR	Back	1.157	0.178	**1.335**
	Top	0.215	0.000	0.215
	Bottom	0.000	0.007	0.007
	Right	0.000	0.945	0.945
	Left	1.157	0.009	1.166

Table 11-43
Cellular Band Ant 1 Simultaneous Transmission Scenario with Bluetooth TxBF and 6 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Bluetooth Ant 4a at 9.5 dBm SAR (W/kg)	WIFI 6E Ant 4a SAR (W/kg)	WIFI 6E Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.999	0.342	0.307	1.189	0.094	**1.496***
	Top	0.047	0.011	0.159	0.115	0.000	0.332
	Bottom	0.931	0.172	0.019	0.003	0.007	1.132
	Right	0.052	0.340	0.000	0.005	0.604	1.001
	Left	0.996	0.000	0.246	0.135	0.000	1.377

Table 11-44
Cellular Band Ant 2a Simultaneous Transmission Scenario with Bluetooth TxBF and 6 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	Bluetooth Ant 2a at 7 dBm SAR (W/kg)	Bluetooth Ant 4a at 9.5 dBm SAR (W/kg)	WIFI 6E Ant 4a SAR (W/kg)	WIFI 6E Ant 5b Reduced at 13 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.930	0.162	0.307	1.189	0.094	**1.496***
	Top	0.015	0.011	0.159	0.115	0.000	0.300
	Bottom	0.314	0.093	0.019	0.003	0.007	0.436
	Right	0.951	0.160	0.000	0.005	0.345	1.461
	Left	0.028	0.000	0.246	0.135	0.000	0.409

Table 11-45
Cellular Band Ant 2b Simultaneous Transmission Scenario with Bluetooth TxBF and 6 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	Bluetooth Ant 2a at 7 dBm SAR (W/kg)	Bluetooth Ant 4a at 9.5 dBm SAR (W/kg)	WIFI 6E Ant 4a SAR (W/kg)	WIFI 6E Ant 5b Reduced at 13 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.985	0.162	0.307	1.189	0.094	**1.496***
	Top	0.019	0.011	0.159	0.115	0.000	0.304
	Bottom	0.930	0.093	0.019	0.003	0.007	1.052
	Right	0.083	0.160	0.000	0.005	0.345	0.593
	Left	0.026	0.000	0.246	0.135	0.000	0.407

Table 11-46
Cellular Band Ant 3 Simultaneous Transmission Scenario with Bluetooth TxBF and 6 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Bluetooth Ant 4a at 7.5 dBm SAR (W/kg)	WIFI 6E Ant 4a SAR (W/kg)	WIFI 6E Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.959	0.342	0.194	1.189	0.094	**1.383***
	Top	0.998	0.011	0.096	0.115	0.000	1.220
	Bottom	0.029	0.172	0.019	0.003	0.007	0.230
	Right	0.998	0.340	0.000	0.005	0.604	0.998*
	Left	0.104	0.000	0.132	0.135	0.000	0.371

Table 11-47
Cellular Band Ant 4b Simultaneous Transmission Scenario with Bluetooth TxBF and 6 GHz WI-FI MIMO

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	Bluetooth Ant 2a at 10 dBm SAR (W/kg)	Bluetooth Ant 4a at 7.5 dBm SAR (W/kg)	WIFI 6E Ant 4a Reduced at 4.75 dBm SAR (W/kg)	WIFI 6E Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.972	0.342	0.194	0.233	0.094	**1.399***
	Top	0.998	0.011	0.096	0.028	0.000	1.133
	Bottom	0.188	0.172	0.019	0.003	0.007	0.389
	Right	0.022	0.340	0.000	0.005	0.604	0.971
	Left	0.051	0.000	0.132	0.027	0.000	0.210

11.1 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.

11.1.1 Back Side Spatial Separation Analysis

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

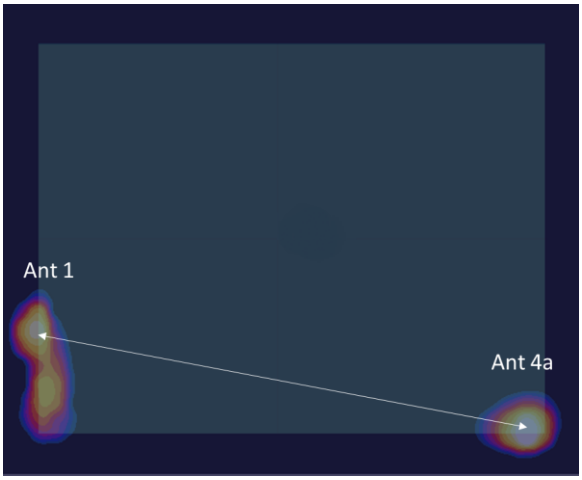

Figure 11-2
Back Side Spatial Separation for Antenna 1 and Antenna 4a

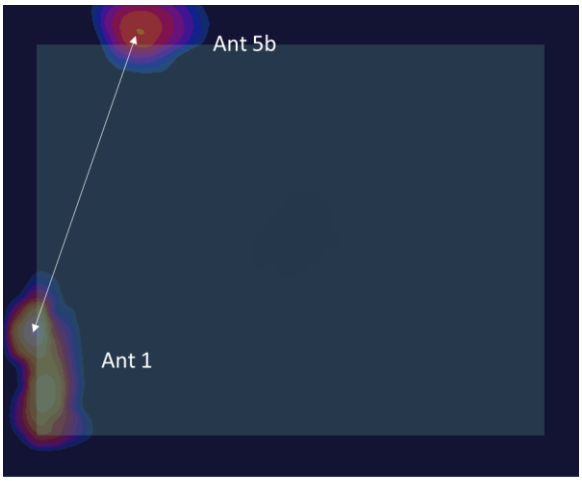

Figure 11-3
Back Side Spatial Separation for Antenna 1 and Antenna 5b

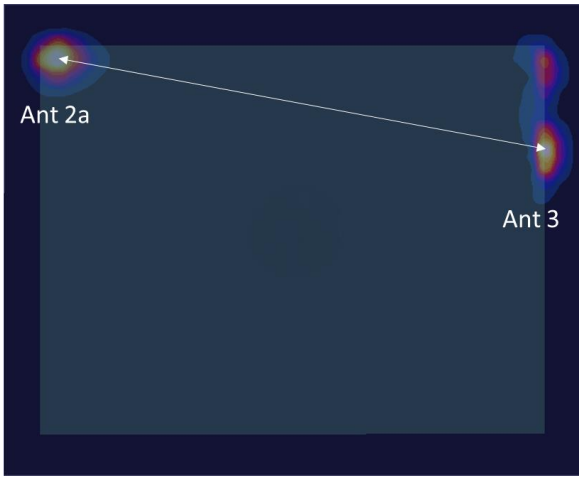

Figure 11-4
Back Side Spatial Separation for Antenna 2a and Antenna 3

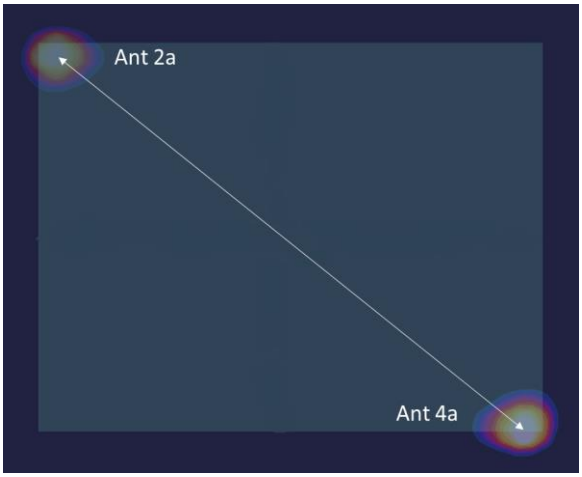

Figure 11-5
Back Side Spatial Separation for Antenna 2a and Antenna 4a

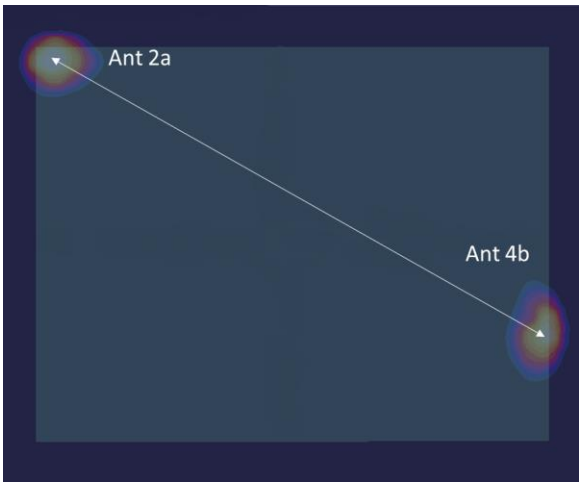

Figure 11-6
Back Side Spatial Separation for Antenna 2a and Antenna 4b

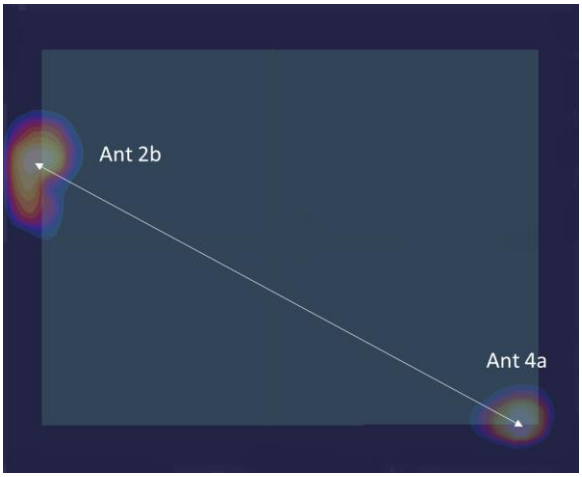

Figure 11-7
Back Side Spatial Separation for Antenna 2b and Antenna 4a

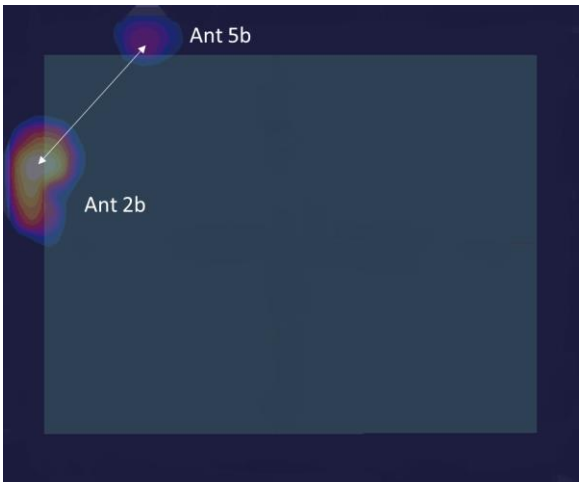

Figure 11-8
Back Side Spatial Separation for Antenna 2b and Antenna 5b

Figure 11-9
Back Side Spatial Separation for Antenna 3 and Antenna 4a

Figure 11-10
Back Side Spatial Separation for Antenna 3 and Antenna 5b

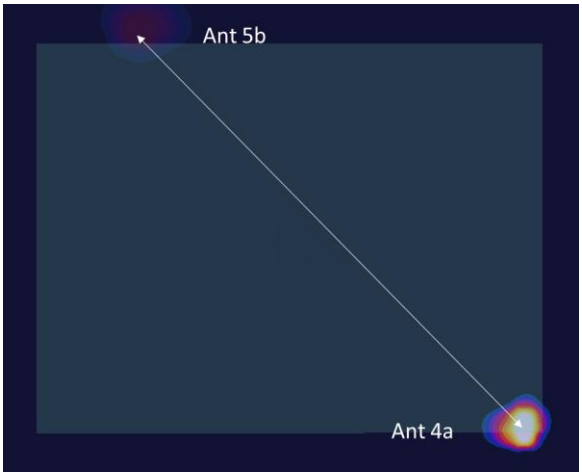

Figure 11-11
Back Side Spatial Separation for Antenna 4a and Antenna 5b

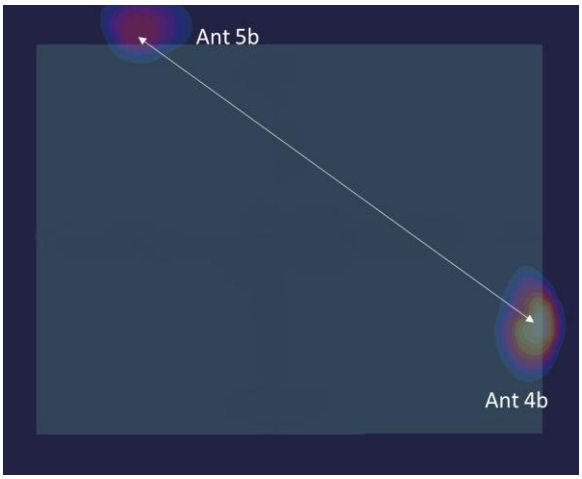

Figure 11-12
Back Side Spatial Separation for Antenna 4b and Antenna 5b

11.1.2 Right Edge Spatial Separation Analysis

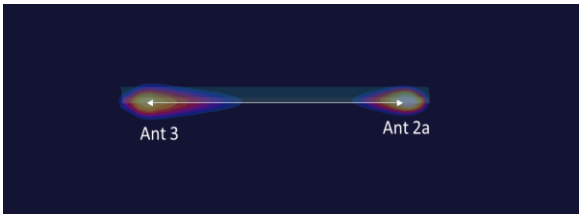

Figure 11-13
Right Edge Spatial Separation for Antenna 2a and Antenna 3

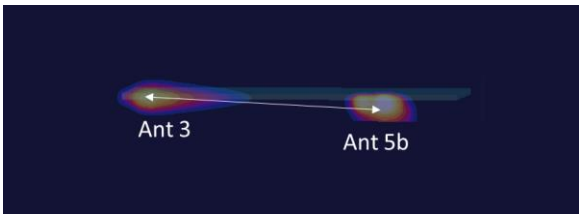

Figure 11-14
Right Edge Spatial Separation for Antenna 3 and Antenna 5b

11.1.3 Left Edge Spatial Separation Analysis

Figure 11-15
Left Edge Spatial Separation for Antenna 1 and Antenna 4a

11.2 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	Waveform	Service	Ant	Data Rate (Mbps)	Side	Spacing	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.								(W/kg)	(W/kg)		(W/kg)		(W/kg)	
1750	1702.50	340500	NR Band n70, 15 MHz Bandwidth	CP-OFDM	QPSK, 1 RB, 1 RB Offset	1	N/A	left	0 mm	0.816	0.769	1.06	N/A	N/A	N/A	N/A
1900	1905.00	26590	LTE Band 25 (PCS), 20 MHz Bandwidth	N/A	QPSK, 50 RB, 0 RB Offset	2b	N/A	back	0 mm	0.913	0.904	1.01	N/A	N/A	N/A	N/A
2450	2480.00	78	Bluetooth	N/A	FHSS	4a	1.00	back	0 mm	0.950	0.921	1.03	N/A	N/A	N/A	N/A
2600	2560.00	20850	LTE Band 7, 20 MHz Bandwidth	N/A	QPSK, 50 RB, 0 RB Offset	1	N/A	back	0 mm	0.967	0.949	1.02	N/A	N/A	N/A	N/A
	2540.20	21048			QPSK, 50 RB, 50 RB Offset											
3500	3500.01	633334	NR Band n77 DoD PC2, 100 MHz Bandwidth	DFT-S-OFDM	QPSK, 1 RB, 271 RB Offset	1	N/A	back	0 mm	0.816	0.728	1.12	N/A	N/A	N/A	N/A
3700	3750.00	650000	NR Band n77 C PC2, 100 MHz Bandwidth	DFT-S-OFDM	QPSK, 1 RB, 137 RB Offset	4b	N/A	top	0 mm	0.813	0.776	1.05	N/A	N/A	N/A	N/A
3900	3930.00	662000	NR Band n77 C PC2, 100 MHz Bandwidth	DFT-S-OFDM	QPSK, 135 RB, 0 RB Offset	2a	N/A	right	0 mm	0.842	0.840	1.00	N/A	N/A	N/A	N/A
5250	5162.00	Low	NB UNII 1	N/A	FHSS	4a	1.00	left	0 mm	0.963	0.840	1.15	N/A	N/A	N/A	N/A
5600	5610.00	122	802.11ac, 80 MHz Bandwidth	N/A	OFDM	4a	29.30	left	0 mm	0.843	0.811	1.04	N/A	N/A	N/A	N/A
5750	5775.00	155	802.11ac, 80 MHz Bandwidth	N/A	OFDM	5b	29.30	right	0 mm	0.936	0.842	1.11	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 1

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	15.70	17.30
Measured Output Power (dBm)	14.5	15.93
Measured SAR (W/kg)	0.758	0.723
Measured Power (mW)	28.18	39.17
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	17.84	16.96
% deviation from expected linearity		0.32%

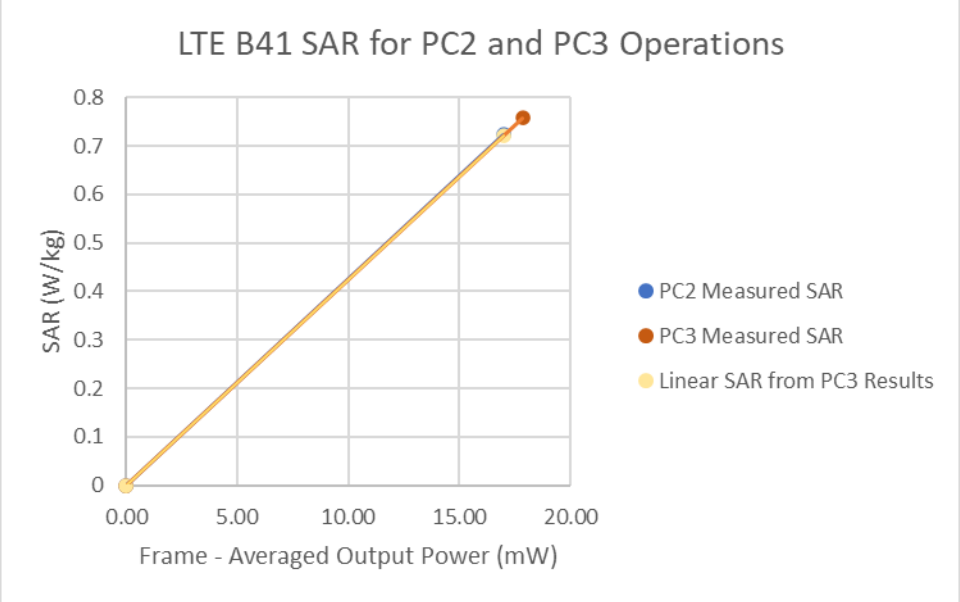

Figure 13-1
LTE Band 41 Body Linearity – Antenna 1

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	15.70	17.30
Measured Output Power (dBm)	14.51	15.91
Measured SAR (W/kg)	0.759	0.694
Measured Power (mW)	28.25	38.99
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	17.88	16.88
% deviation from expected linearity		-3.16%

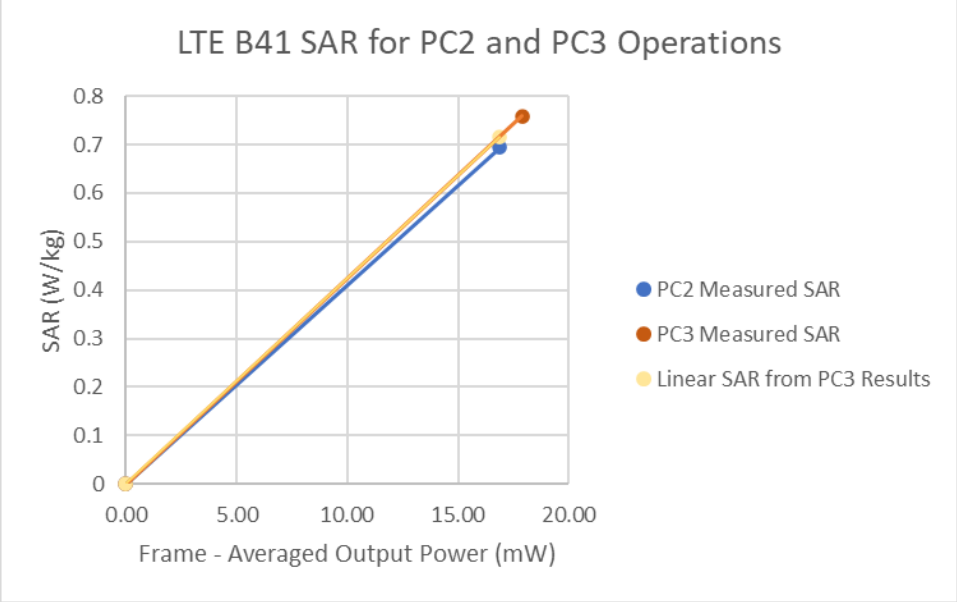

Figure 13-2
LTE Band 41 ULCA Body Linearity – Antenna 1

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	17.00	18.60
Measured Output Power (dBm)	16.16	17.80
Measured SAR (W/kg)	0.726	0.770
Measured Power (mW)	41.30	60.26
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	26.15	26.09
% deviation from expected linearity		6.28%

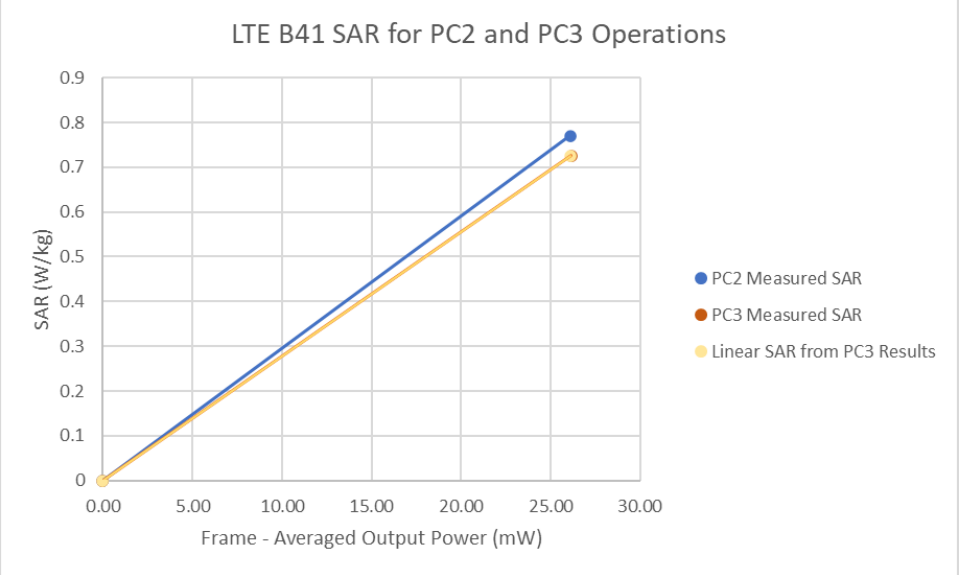

Figure 13-3
LTE Band 41 Body Linearity – Antenna 2b

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)	17.00	18.60
Measured Output Power (dBm)	16.03	17.45
Measured SAR (W/kg)	0.735	0.714
Measured Power (mW)	40.09	55.59
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	25.37	24.07
% deviation from expected linearity		2.41%

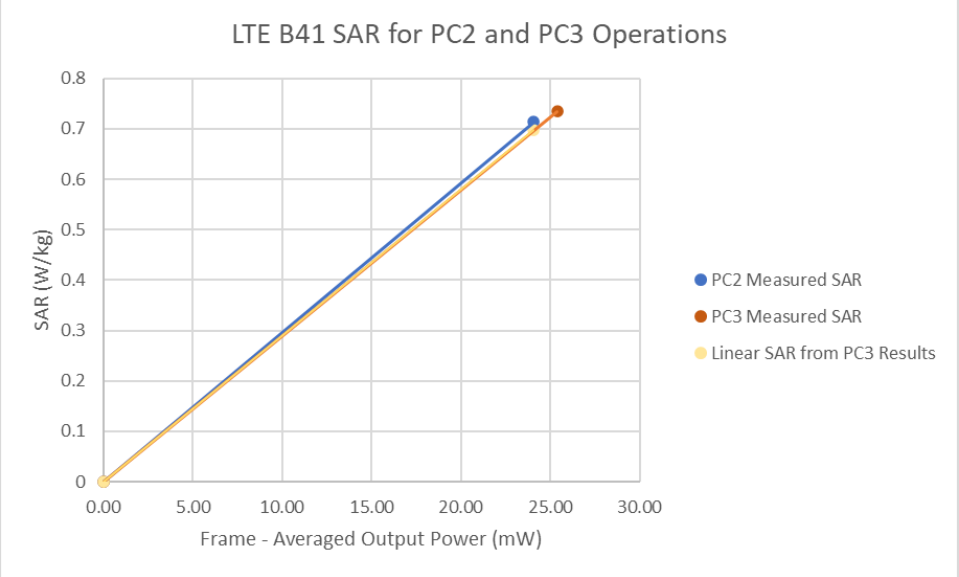

Figure 13-4
LTE Band 41 ULCA Body Linearity – Antenna 2b

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16.10	17.70
Measured Output Power (dBm)	15.27	16.70
Measured SAR (W/kg)	0.774	0.682
Measured Power (mW)	33.65	46.77
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	21.30	20.25
% deviation from expected linearity		-7.33%

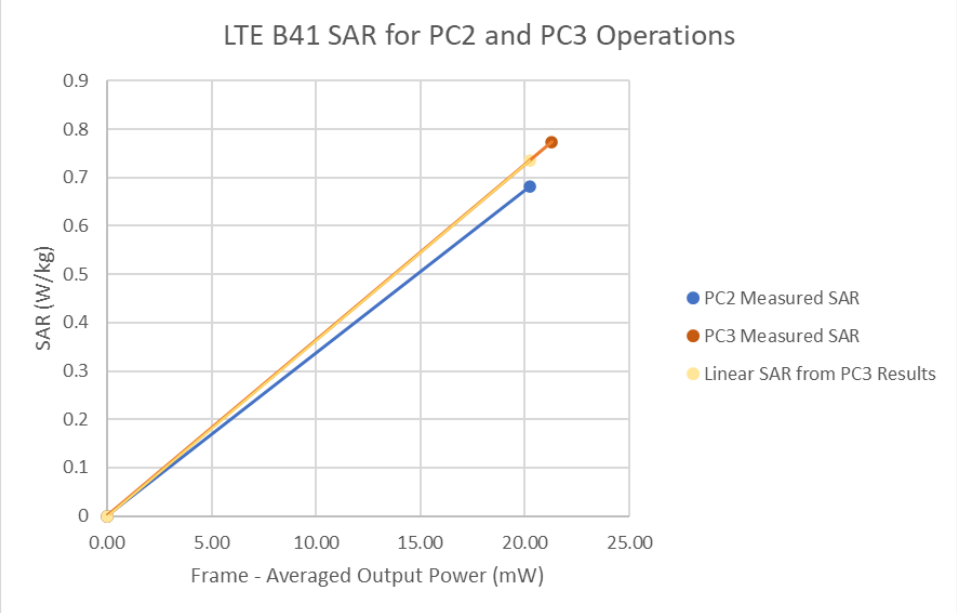

Figure 13-5
LTE Band 41 Body Linearity – Antenna 3

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16.10	17.70
Measured Output Power (dBm)	15.98	17.51
Measured SAR (W/kg)	0.909	0.816
Measured Power (mW)	39.63	56.36
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	25.08	24.41
% deviation from expected linearity		-7.73%

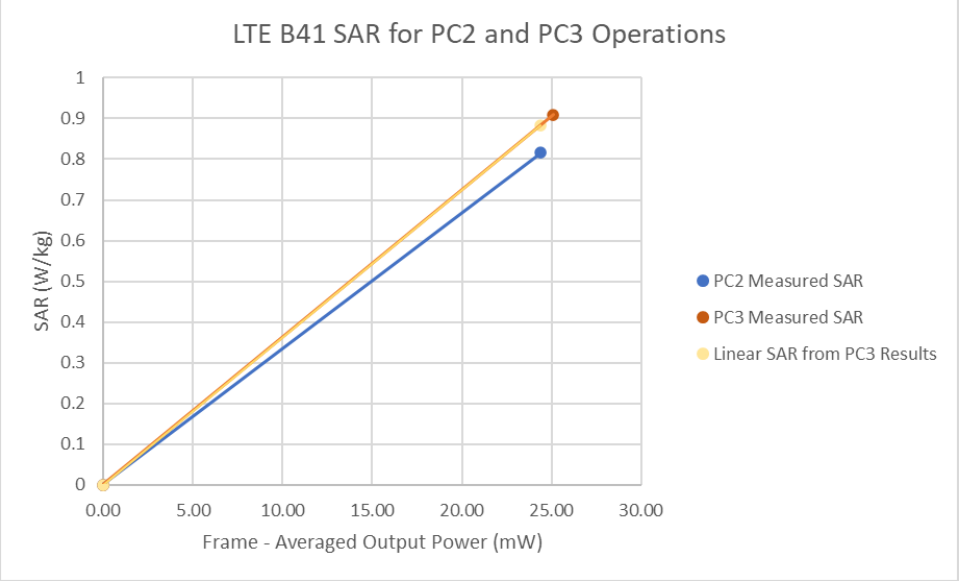

Figure 13-6
LTE Band 41 ULCA Body Linearity – Antenna 3

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.80	16.40
Measured Output Power (dBm)	13.15	14.96
Measured SAR (W/kg)	0.650	0.706
Measured Power (mW)	20.65	31.33
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	13.07	13.57
% deviation from expected linearity		4.67%

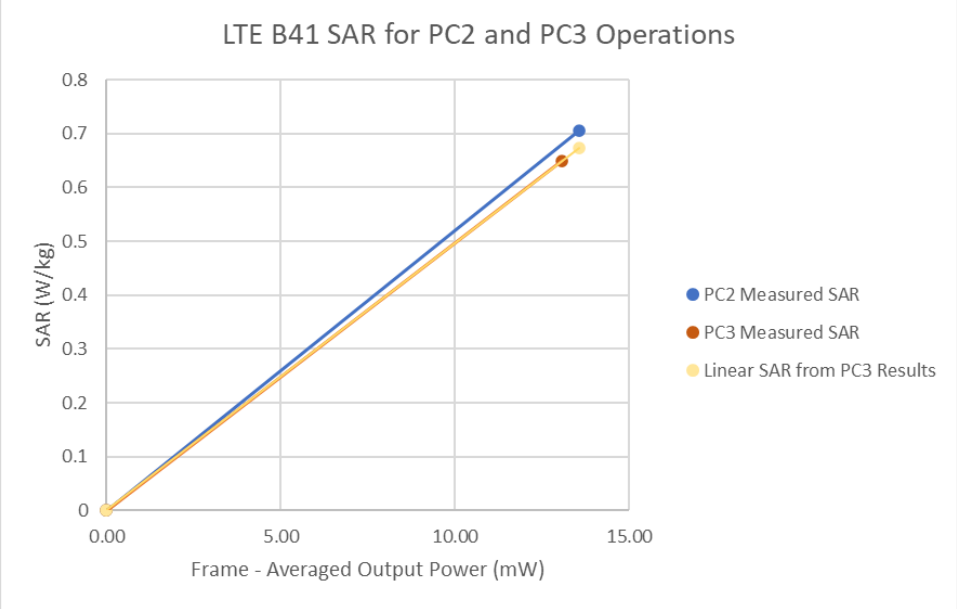

Figure 13-7
LTE Band 41 Body Linearity – Antenna 4b

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.80	16.40
Measured Output Power (dBm)	12.95	15.00
Measured SAR (W/kg)	0.605	0.680
Measured Power (mW)	19.72	31.62
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	12.49	13.69
% deviation from expected linearity		2.49%

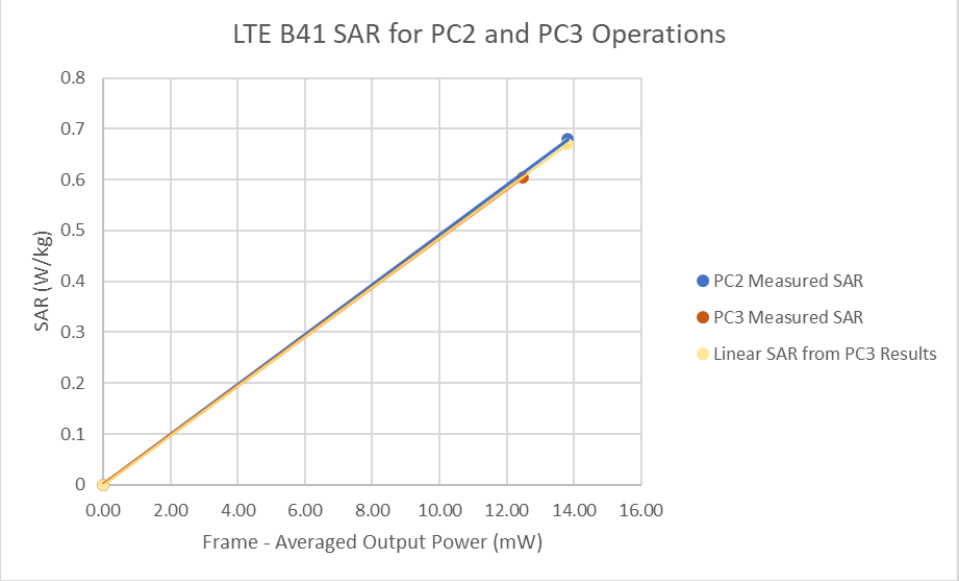

Figure 13-8
LTE Band 41 ULCA Body Linearity – Antenna 4b

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	8/2/2021	Annual	8/2/2022	6272337438
Anritsu	MT8000A	Radio Communication Test Station	8/2/2021	Annual	8/2/2022	6272337436
Anritsu	MT8000A	Radio Communication Test Station	3/30/2022	Annual	3/30/2023	6261914237
Anritsu	MA24106A	USB Power Sensor	8/12/2022	Annual	8/12/2023	1349513
Anritsu	MA24106A	USB Power Sensor	8/5/2022	Annual	8/5/2023	1344555
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	VLF-6000+	Low Pass Filter DC to 6000 MHz	7/6/2021	Annual	7/6/2022	31634
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	ZUDC10-83-S+	Directional Coupler	CBT	N/A	CBT	2050
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Huber + Suhner	74Z-0-0-21	Torque Wrench	4/6/2022	Biennial	6/4/2024	83881
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	1379
SPEAG	DAK-12	Dielectric Assessment Kit (10MHz - 3GHz)	3/21/2022	Annual	3/21/2023	1102
SPEAG	D750V3	750 MHz SAR Dipole	9/8/2021	Annual	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	11/11/2019	Triennial	11/11/2022	4d108
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	D1900V2	1900 MHz SAR Dipole	9/10/2020	Biennial	9/10/2022	5d181
SPEAG	D1900V2	1900 MHz SAR Dipole	5/16/2022	Annual	5/16/2023	5d030
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	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	10/20/2021	Annual	10/20/2022	1333
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	2/24/2022	Annual	2/24/2023	467
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	2/21/2022	Annual	2/21/2023	7308
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

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

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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