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SAR EVALUATION REPORT

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

Date of Testing:
12/28/2020 - 03/03/2021
Test Site/Location:
PCTEST Lab, Morgan Hill, CA, USA
Document Serial No.:
1C2101020005-01.BCG (Rev1)

FCC ID:	**BCGA2379**
APPLICANT:	**APPLE, INC.**

DUT Type:	Tablet Device
Application Type:	Certification
FCC Rule Part(s):	CFR §2.1093
Model:	A2379

Equipment Class	Band & Mode	Tx Frequency	SAR
			1g Body (W/kg)
PCB	GPRS/EDGE 850	824.20 - 848.80 MHz	0.76
PCB	GPRS/EDGE 1900	1850.20 - 1909.80 MHz	0.71
PCB	UMTS 850	826.40 - 846.60 MHz	0.98
PCB	UMTS 1750	1712.4 - 1752.6 MHz	1.00
PCB	UMTS 1900	1852.4 - 1907.6 MHz	0.98
PCB	LTE Band 71	665.5 - 695.5 MHz	0.84
PCB	LTE Band 12	699.7 - 715.3 MHz	0.98
PCB	LTE Band 17	706.5 - 713.5 MHz	N/A
PCB	LTE Band 13	779.5 - 784.5 MHz	0.86
PCB	LTE Band 14	790.5 - 795.5 MHz	0.84
PCB	LTE Band 26 (Cell)	814.7 - 848.3 MHz	0.97
PCB	LTE Band 5 (Cell)	824.7 - 848.3 MHz	0.87
PCB	LTE Band 4 (AWS)	1710.7 - 1754.3 MHz	N/A
PCB	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	0.90
PCB	LTE Band 2 (PCS)	1850.7 - 1909.3 MHz	N/A
PCB	LTE Band 25 (PCS)	1850.7 - 1914.3 MHz	0.76
PCB	LTE Band 30	2307.5 - 2312.5 MHz	0.99
PCB	LTE Band 7	2502.5 - 2567.5 MHz	0.92
PCB	LTE Band 41	2498.5 - 2687.5 MHz	1.00
CBE	LTE Band 48	3552.5 - 3697.5 MHz	0.99
PCB	NR Band n71	665.5 - 695.5 MHz	0.72
PCB	NR Band n12	701.5 - 713.5 MHz	1.00
PCB	NR Band n5 (Cell)	826.5 - 846.5 MHz	0.93
PCB	NR Band n66 (AWS)	1712.5 - 1777.5 MHz	1.00
PCB	NR Band n25 (PCS)	1852.5 - 1912.5 MHz	0.90
PCB	NR Band n2 (PCS)	1852.5 - 1907.5 MHz	N/A
PCB	NR Band n41	2506.02 - 2679.99 MHz	1.00
PCB	NR Band n77	3710.01 - 3969.99 MHz	1.00
DTS	2.4 GHz WLAN	2412 - 2472 MHz	1.19
NII	U-NII-1	5180 - 5240 MHz	N/A
NII	U-NII-2A	5260 - 5320 MHz	1.03
NII	U-NII-2C	5500 - 5720 MHz	1.02
NII	U-NII-3	5745 - 5825 MHz	1.05
DSS/DTS	Bluetooth	2402 - 2480 MHz	1.17
Simultaneous SAR per KDB 690783 D01v01r03:			1.59

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.

Randy Ortanez
President

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

REV 21.4 M
09/11/2019

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1 DEVICE UNDER TEST

1.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
GPRS/EDGE 850	Data	824.20 - 848.80 MHz
GPRS/EDGE 1900	Data	1850.20 - 1909.80 MHz
UMTS 850	Data	826.40 - 846.60 MHz
UMTS 1750	Data	1712.4 - 1752.6 MHz
UMTS 1900	Data	1852.4 - 1907.6 MHz
LTE Band 71	Data	665.5 - 695.5 MHz
LTE Band 12	Data	699.7 - 715.3 MHz
LTE Band 17	Data	706.5 - 713.5 MHz
LTE Band 13	Data	779.5 - 784.5 MHz
LTE Band 14	Data	790.5 - 795.5 MHz
LTE Band 26 (Cell)	Data	814.7 - 848.3 MHz
LTE Band 5 (Cell)	Data	824.7 - 848.3 MHz
LTE Band 4 (AWS)	Data	1710.7 - 1754.3 MHz
LTE Band 66 (AWS)	Data	1710.7 - 1779.3 MHz
LTE Band 2 (PCS)	Data	1850.7 - 1909.3 MHz
LTE Band 25 (PCS)	Data	1850.7 - 1914.3 MHz
LTE Band 30	Data	2307.5 - 2312.5 MHz
LTE Band 7	Data	2502.5 - 2567.5 MHz
LTE Band 41	Data	2498.5 - 2687.5 MHz
LTE Band 48	Data	3552.5 - 3697.5 MHz
NR Band n71	Data	665.5 - 695.5 MHz
NR Band n12	Data	701.5 - 713.5 MHz
NR Band n5 (Cell)	Data	826.5 - 846.5 MHz
NR Band n66 (AWS)	Data	1712.5 - 1777.5 MHz
NR Band n25 (PCS)	Data	1852.5 - 1912.5 MHz
NR Band n2 (PCS)	Data	1852.5 - 1907.5 MHz
NR Band n41	Data	2506.02 - 2679.99 MHz
NR Band n77	Data	3710.01 - 3969.99 MHz
2.4 GHz WLAN	Voice/Data	2412 - 2472 MHz
U-NII-1	Voice/Data	5180 - 5240 MHz
U-NII-2A	Voice/Data	5260 - 5320 MHz
U-NII-2C	Voice/Data	5500 - 5720 MHz
U-NII-3	Voice/Data	5745 - 5825 MHz
Bluetooth	Data	2402 - 2480 MHz
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 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 or PD_design_target, below the predefined time-averaged power limit (i.e., Plimit for sub-6 radio, and input.power.limit for 5G mmW NR), 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 3 Body	Ant 3 Maximum Tune-up Output Power*	Ant 1 Body	Ant 1 Maximum Tune-up Output Power*	Ant 4a/4b Body	Ant 4a/4b Maximum Tune-up Output Power*	Ant 2a/2b Body	Ant 2a/2b Maximum Tune-up Output Power*
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 0.8mW/g**	Pmax	**Plimit corresponding to 0.8mW/g**	Pmax	**Plimit corresponding to 0.8mW/g**	Pmax	**Plimit corresponding to 0.8mW/g**	Pmax
GPRS/EDGE 850 MHz	18.01	24.81	18.61	23.31	N/A	N/A	N/A	N/A
GPRS/EDGE 1900 MHz	15.31	22.81	15.51	20.31	10.81	22.81	12.81	20.31
UMTS B5	18.20	24.70	18.00	22.90	N/A	N/A	N/A	N/A
UMTS B4	15.00	24.70	14.70	21.70	12.70	24.20	12.40	22.20
UMTS B2	14.90	24.70	16.10	21.70	11.00	24.20	12.70	22.20
LTE FDD B71	19.30	24.70	19.60	22.90	N/A	N/A	N/A	N/A
LTE FDD B12	18.60	24.70	19.20	22.90	N/A	N/A	N/A	N/A
LTE FDD B17	18.60	24.70	19.20	22.90	N/A	N/A	N/A	N/A
LTE FDD B13	18.70	24.70	19.80	22.90	N/A	N/A	N/A	N/A
LTE FDD B14	18.70	24.70	19.80	22.90	N/A	N/A	N/A	N/A
LTE FDD B26	18.20	24.70	18.00	22.90	N/A	N/A	N/A	N/A
LTE FDD B5	18.20	24.70	18.00	22.90	N/A	N/A	N/A	N/A
LTE FDD B66/4	15.00	24.70	14.70	21.70	12.70	24.20	12.40	22.20
LTE FDD B25/2	14.90	24.70	16.10	21.70	11.00	24.20	12.70	22.20
LTE FDD B30	14.30	22.70	12.80	19.20	11.50	22.20	13.30	19.70
LTE FDD B7	14.70	24.70	10.70	21.20	11.10	24.20	13.30	21.70
LTE TDD B48	9.71	17.80	10.81	15.52	10.41	16.92	10.81	17.72
LTE TDD B41 PC3	11.31	22.72	10.51	18.92	11.31	22.22	13.01	19.42
LTE TDD B41 ULCA PC3	11.31	22.72	10.51	19.22	11.31	22.22	13.01	19.72
LTE TDD B41 PC2	11.31	23.07	10.51	19.57	11.31	22.57	13.01	20.07
LTE TDD B41 ULCA PC2	11.31	23.37	10.51	19.87	11.31	22.87	13.01	20.37
NR FDD n71	19.30	24.70	20.10	22.90	N/A	N/A	N/A	N/A
NR FDD n12	18.60	24.70	19.20	22.90	N/A	N/A	N/A	N/A
NR FDD n5	18.20	24.70	18.00	22.90	N/A	N/A	N/A	N/A
NR FDD n66	15.00	24.70	14.70	21.70	12.70	24.20	12.40	22.20
NR FDD n25/n2	14.90	24.70	16.10	21.70	11.00	24.20	12.70	22.20
NR TDD n41 PC3	11.30	21.20	10.50	24.70	11.30	21.70	13.00	24.20
NR TDD n41 PC2	11.30	20.00	10.50	23.50	11.30	20.00	13.00	23.00
NR TDD n77 PC3	10.00	24.70	11.50	20.70	10.75	24.70	9.60	21.70
NR TDD n77 PC2	10.00	23.00	11.50	19.00	10.75	23.00	9.60	20.00

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.

*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., GSM & LTE TDD).

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 + 1dB device design uncertainty. The maximum time-averaged output power (dBm) for any 2G/3G/4G/5G Sub6 WWAN technology, band, and DSI = minimum of "Plimit EFS" and "Maximum tune up output power Pmax" + 1dB device uncertainty. SAR values in this report were scaled to this maximum time-averaged output power to determine compliance per KDB Publication 447498 D01v06.

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

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 2G/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 2G/3G/4G/5G Output Power for Portable Use Conditions

Mode/Band	Antenna		Data- Burst Average GMSK (in dBm)		Data - Burst Average 8-PSK (in dBm)	
			1 TX Slots	2 TX Slots	1 TX Slots	2 TX Slots
GPRS/EDGE 850	Ant 1	Max allowed power	**28.80**	**25.80**	**25.00**	**24.00**
		Nominal	**27.80**	**24.80**	**24.00**	**23.00**
	Ant 3	Max allowed power	**28.20**	**25.20**	**26.50**	**25.20**
		Nominal	**27.20**	**24.20**	**25.50**	**24.20**

Mode/Band	Antenna		Data- Burst Average GMSK (in dBm)		Data - Burst Average 8-PSK (in dBm)	
			1 TX Slots	2 TX Slots	1 TX Slots	2 TX Slots
GPRS/EDGE 1900	Ant 1	Max allowed power	**25.70**	**22.70**	**22.50**	**21.50**
		Nominal	**24.70**	**21.70**	**21.50**	**20.50**
	Ant 2b	Max allowed power	**23.00**	**20.00**	**22.20**	**19.20**
		Nominal	**22.00**	**19.00**	**21.20**	**18.20**
	Ant 3	Max allowed power	**25.50**	**22.50**	**24.90**	**21.90**
		Nominal	**24.50**	**21.50**	**23.90**	**20.90**
	Ant 4b	Max allowed power	**21.00**	**18.00**	**21.00**	**18.00**
		Nominal	**20.00**	**17.00**	**20.00**	**17.00**

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	**19.00**	**19.00**	**19.00**	**19.00**
		Nominal	**18.00**	**18.00**	**18.00**	**18.00**
	Ant 3	Max allowed power	**19.20**	**19.20**	**19.20**	**19.20**
		Nominal	**18.20**	**18.20**	**18.20**	**18.20**

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	**15.70**	**15.70**	**15.70**	**15.70**
		Nominal	**14.70**	**14.70**	**14.70**	**14.70**
	Ant 2b	Max allowed power	**13.40**	**13.40**	**13.40**	**13.40**
		Nominal	**12.40**	**12.40**	**12.40**	**12.40**
	Ant 3	Max allowed power	**16.00**	**16.00**	**16.00**	**16.00**
		Nominal	**15.00**	**15.00**	**15.00**	**15.00**
	Ant 4b	Max allowed power	**13.70**	**13.70**	**13.70**	**13.70**
		Nominal	**12.70**	**12.70**	**12.70**	**12.70**

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	**17.10**	**17.10**	**17.10**	**17.10**
		Nominal	**16.10**	**16.10**	**16.10**	**16.10**
	Ant 2b	Max allowed power	**13.70**	**13.70**	**13.70**	**13.70**
		Nominal	**12.70**	**12.70**	**12.70**	**12.70**
	Ant 3	Max allowed power	**15.90**	**15.90**	**15.90**	**15.90**
		Nominal	**14.90**	**14.90**	**14.90**	**14.90**
	Ant 4b	Max allowed power	**12.00**	**12.00**	**12.00**	**12.00**
		Nominal	**11.00**	**11.00**	**11.00**	**11.00**

Mode / Band		Burst Average Output Power (in dBm)					
		Ant 1	Ant 2a	Ant 2b	Ant 3	Ant 4a	Ant 4b
LTE FDD Band 71	Max allowed power	20.60			20.30		
	Nominal	19.60			19.30		
LTE FDD Band 12	Max allowed power	20.20			19.60		
	Nominal	19.20			18.60		
LTE FDD Band 17	Max allowed power	20.20			19.60		
	Nominal	19.20			18.60		
LTE FDD Band 13	Max allowed power	20.80			19.70		
	Nominal	19.80			18.70		
LTE FDD Band 14	Max allowed power	20.80			19.70		
	Nominal	19.80			18.70		
LTE FDD Band 26	Max allowed power	19.00			19.20		
	Nominal	18.00			18.20		
LTE FDD Band 5	Max allowed power	19.00			19.20		
	Nominal	18.00			18.20		
LTE FDD Band 5 Intra-band ULCA	Max allowed power	19.00			19.20		
	Nominal	18.00			18.20		
LTE FDD Band 4	Max allowed power	15.70		13.40	16.00		13.70
	Nominal	14.70		12.40	15.00		12.70
LTE FDD Band 66	Max allowed power	15.70		13.40	16.00		13.70
	Nominal	14.70		12.40	15.00		12.70
LTE FDD Band 2	Max allowed power	17.10		13.70	15.90		12.00
	Nominal	16.10		12.70	14.90		11.00
LTE FDD Band 25	Max allowed power	17.10		13.70	15.90		12.00
	Nominal	16.10		12.70	14.90		11.00
LTE FDD Band 30	Max allowed power	13.80		14.30	15.30		12.50
	Nominal	12.80		13.30	14.30		11.50
LTE FDD Band 7	Max allowed power	11.70		14.30	15.70		12.10
	Nominal	10.70		13.30	14.70		11.10
LTE FDD Band 7 Intra-band ULCA	Max allowed power	11.70		14.30	15.70		12.10
	Nominal	10.70		13.30	14.70		11.10
LTE TDD Band 41 (PC3)	Max allowed power	13.50		16.00	14.30		14.30
	Nominal	12.50		15.00	13.30		13.30
LTE TDD Band 41 (PC3) Intra-band ULCA	Max allowed power	13.50		16.00	14.30		14.30
	Nominal	12.50		15.00	13.30		13.30
LTE TDD Band 41 (PC2)	Max allowed power	15.15		17.65	15.95		15.95
	Nominal	14.15		16.65	14.95		14.95
LTE TDD Band 41 (PC2) Intra-band ULCA	Max allowed power	15.15		17.65	15.95		15.95
	Nominal	14.15		16.65	14.95		14.95
LTE TDD Band 48	Max allowed power	13.80	13.80		12.70	13.40	
	Nominal	12.80	12.80		11.70	12.40	
LTE TDD Band 48 Intra-band ULCA	Max allowed power	13.80	13.80		12.70	13.40	
	Nominal	12.80	12.80		11.70	12.40	

Mode / Band		Burst Average Output Power (in dBm)					
		Ant 1	Ant 2a	Ant 2b	Ant 3	Ant 4a	Ant 4b
NR FDD Band n71	Max allowed power	21.10			20.30		
	Nominal	20.10			19.30		
NR FDD Band n12	Max allowed power	20.20			19.60		
	Nominal	19.20			18.60		
NR FDD Band n5	Max allowed power	19.00			19.20		
	Nominal	18.00			18.20		
NR FDD Band n66	Max allowed power	15.70		13.40	16.00		13.70
	Nominal	14.70		12.40	15.00		12.70
NR FDD Band n2	Max allowed power	17.10		13.70	15.90		12.00
	Nominal	16.10		12.70	14.90		11.00
NR FDD Band n25	Max allowed power	17.10		13.70	15.90		12.00
	Nominal	16.10		12.70	14.90		11.00
NR TDD Band n41 (PC3)	Max allowed power	11.50		14.00	12.30		12.30
	Nominal	10.50		13.00	11.30		11.30
NR TDD Band n41 (PC2)	Max allowed power	14.50		17.00	15.30		15.30
	Nominal	13.50		16.00	14.30		14.30
NR TDD Band n77 (PC3)	Max allowed power	12.50	10.60		11.00	11.75	
	Nominal	11.50	9.60		10.00	10.75	
NR TDD Band n77 (PC2)	Max allowed power	15.50	13.60		14.00	14.75	
	Nominal	14.50	12.60		13.00	13.75	

1.4.2 Maximum Time-Averaged Output Power

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

Mode/ Band			IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Antenna 4a	20 MHz Bandwidth	1	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		2	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		3	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		4	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		5	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		6	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		7	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		8	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		9	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		10	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		11	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		12	11.75	10.25	11.75	10.25	11.75	10.25	11.75	10.25
		13	11.75	10.25	11.00	9.50	11.00	9.50	N/A	N/A

Mode/ Band		Channel	IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
			Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average nonTXBF - 2 Tx Chain (dBm) - Antenna 4a	20 MHz Bandwidth	1	11.75	10.25	11.75	10.25	11.75	10.25
		2	11.75	10.25	11.75	10.25	11.75	10.25
		3	11.75	10.25	11.75	10.25	11.75	10.25
		4	11.75	10.25	11.75	10.25	11.75	10.25
		5	11.75	10.25	11.75	10.25	11.75	10.25
		6	11.75	10.25	11.75	10.25	11.75	10.25
		7	11.75	10.25	11.75	10.25	11.75	10.25
		8	11.75	10.25	11.75	10.25	11.75	10.25
		9	11.75	10.25	11.75	10.25	11.75	10.25
		10	11.75	10.25	11.75	10.25	11.75	10.25
		11	11.75	10.25	11.75	10.25	11.75	10.25
		12	11.75	10.25	11.75	10.25	11.75	10.25
		13	10.50	9.00	10.50	9.00	N/A	N/A

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

Mode/ Band			IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Antenna 2a	20 MHz Bandwidth	1	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		2	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		3	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		4	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		5	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		6	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		7	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		8	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		9	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		10	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		11	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		12	12.75	11.25	12.75	11.25	12.75	11.25	12.75	11.25
		13	12.75	11.25	11.00	9.50	11.00	9.50	N/A	N/A

Mode/ Band			IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average nonTXBF - 2 Tx Chain (dBm) - Antenna 2a	20 MHz Bandwidth	1	12.75	11.25	12.75	11.25	12.75	11.25
		2	12.75	11.25	12.75	11.25	12.75	11.25
		3	12.75	11.25	12.75	11.25	12.75	11.25
		4	12.75	11.25	12.75	11.25	12.75	11.25
		5	12.75	11.25	12.75	11.25	12.75	11.25
		6	12.75	11.25	12.75	11.25	12.75	11.25
		7	12.75	11.25	12.75	11.25	12.75	11.25
		8	12.75	11.25	12.75	11.25	12.75	11.25
		9	12.75	11.25	12.75	11.25	12.75	11.25
		10	12.75	11.25	12.75	11.25	12.75	11.25
		11	12.75	11.25	12.75	11.25	12.75	11.25
		12	12.50	11.00	12.50	11.00	12.50	11.00
		13	10.50	9.00	10.50	9.00	N/A	N/A

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

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Ant 5b	20 MHz Bandwidth	36	16.25	14.75	16.25	14.75	16.25	14.75	16.00	14.50
		40	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		44	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		48	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		52	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		56	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		60	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		64	16.00	14.50	16.00	14.50	16.00	14.50	16.00	14.50
		100	15.50	14.00	15.50	14.00	15.50	14.00	15.50	14.00
		104	15.50	14.00	15.50	14.00	15.50	14.00	15.50	14.00
		108	15.50	14.00	15.50	14.00	15.50	14.00	15.50	14.00
		112	15.50	14.00	15.50	14.00	15.50	14.00	15.50	14.00
		116	15.50	14.00	15.50	14.00	15.50	14.00	15.50	14.00
		120	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		124	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		128	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		132	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		136	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		140	15.00	13.50	15.00	13.50	15.00	13.50	14.50	13.00
		144	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		149	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		153	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		157	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		161	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		165	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
	40 MHz Bandwidth	38			15.00	13.50	15.00	13.50	14.50	13.00
		46			17.25	15.75	17.25	15.75	17.25	15.75
		54			17.25	15.75	17.25	15.75	17.25	15.75
		62			16.00	14.50	16.00	14.50	15.00	13.50
		102			15.00	13.50	15.00	13.50	14.50	13.00
		110			15.50	14.00	15.50	14.00	15.50	14.00
		118			15.50	14.00	15.50	14.00	15.50	14.00
		126			15.00	13.50	15.00	13.50	15.00	13.50
		134			15.00	13.50	15.00	13.50	15.00	13.50
		142			15.00	13.50	15.00	13.50	15.00	13.50
		151			16.25	14.75	16.25	14.75	16.25	14.75
		159			16.25	14.75	16.25	14.75	16.25	14.75
	80 MHz Bandwidth	42					12.50	11.00	12.50	11.00
		58					15.00	13.50	15.00	13.50
		106					15.50	14.00	15.50	14.00
		122					15.00	13.50	15.00	13.50
		138					15.00	13.50	15.00	13.50
		155					16.25	14.75	16.25	14.75

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - Ant 5b	20 MHz Bandwidth	36	16.25	14.75	16.25	14.75	16.25	14.75	15.50	14.00
		40	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		44	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		48	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		52	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		56	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		60	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		64	16.00	14.50	16.00	14.50	16.00	14.50	16.00	14.50
		100	15.50	14.00	15.50	14.00	15.50	14.00	15.50	14.00
		104	15.50	14.00	15.50	14.00	15.50	14.00	15.50	14.00
		108	15.50	14.00	15.50	14.00	15.50	14.00	15.50	14.00
		112	15.50	14.00	15.50	14.00	15.50	14.00	15.50	14.00
		116	15.50	14.00	15.50	14.00	15.50	14.00	15.50	14.00
		120	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		124	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		128	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		132	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		136	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		140	15.00	13.50	15.00	13.50	15.00	13.50	13.50	12.00
		144	15.00	13.50	15.00	13.50	15.00	13.50	15.00	13.50
		149	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		153	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		157	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		161	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
		165	16.25	14.75	16.25	14.75	16.25	14.75	16.25	14.75
	40 MHz Bandwidth	38	[redacted]		14.00	12.50	14.00	12.50	14.00	12.50
		46			17.25	15.75	17.25	15.75	17.25	15.75
		54			17.25	15.75	17.25	15.75	17.25	15.75
		62			15.50	14.00	15.50	14.00	14.50	13.00
		102			14.50	13.00	14.50	13.00	14.00	12.50
		110			15.50	14.00	15.50	14.00	15.50	14.00
		118			15.50	14.00	15.50	14.00	15.50	14.00
		126			15.00	13.50	15.00	13.50	15.00	13.50
		134			15.00	13.50	15.00	13.50	15.00	13.50
		142			15.00	13.50	15.00	13.50	15.00	13.50
		151			16.25	14.75	16.25	14.75	16.25	14.75
		159			16.25	14.75	16.25	14.75	16.25	14.75
	80 MHz Bandwidth	42					12.00	10.50	12.00	10.50
		58					14.50	13.00	14.50	13.00
		106					15.00	13.50	15.00	13.50
		122					15.00	13.50	15.00	13.50
		138					15.00	13.50	15.00	13.50
		155					16.25	14.75	16.25	14.75

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

Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - Ant 5b	20 MHz Bandwidth	36	16.25	14.75	16.25	14.75	15.50	14.00
		40	16.25	14.75	16.25	14.75	16.25	14.75
		44	16.25	14.75	16.25	14.75	16.25	14.75
		48	16.25	14.75	16.25	14.75	16.25	14.75
		52	16.25	14.75	16.25	14.75	16.25	14.75
		56	16.25	14.75	16.25	14.75	16.25	14.75
		60	16.25	14.75	16.25	14.75	16.25	14.75
		64	16.00	14.50	16.00	14.50	16.00	14.50
		100	15.50	14.00	15.50	14.00	15.50	14.00
		104	15.50	14.00	15.50	14.00	15.50	14.00
		108	15.50	14.00	15.50	14.00	15.50	14.00
		112	15.50	14.00	15.50	14.00	15.50	14.00
		116	15.50	14.00	15.50	14.00	15.50	14.00
		120	15.00	13.50	15.00	13.50	15.00	13.50
		124	15.00	13.50	15.00	13.50	15.00	13.50
		128	15.00	13.50	15.00	13.50	15.00	13.50
		132	15.00	13.50	15.00	13.50	15.00	13.50
		136	15.00	13.50	15.00	13.50	15.00	13.50
		140	15.00	13.50	15.00	13.50	13.50	12.00
		144	15.00	13.50	15.00	13.50	15.00	13.50
		149	16.25	14.75	16.25	14.75	16.25	14.75
		153	16.25	14.75	16.25	14.75	16.25	14.75
		157	16.25	14.75	16.25	14.75	16.25	14.75
		161	16.25	14.75	16.25	14.75	16.25	14.75
		165	16.25	14.75	16.25	14.75	16.25	14.75
	40 MHz Bandwidth	38	14.00	12.50	14.00	12.50	14.00	12.50
		46	17.25	15.75	17.25	15.75	17.25	15.75
		54	17.25	15.75	17.25	15.75	17.25	15.75
		62	15.50	14.00	15.50	14.00	14.50	13.00
		102	14.50	13.00	14.50	13.00	14.00	12.50
		110	15.50	14.00	15.50	14.00	15.50	14.00
		118	15.50	14.00	15.50	14.00	15.50	14.00
		126	15.00	13.50	15.00	13.50	15.00	13.50
		134	15.00	13.50	15.00	13.50	15.00	13.50
		142	15.00	13.50	15.00	13.50	15.00	13.50
		151	16.25	14.75	16.25	14.75	16.25	14.75
		159	16.25	14.75	16.25	14.75	16.25	14.75
	80 MHz Bandwidth	42	[redacted]		12.00	10.50	12.00	10.50
		58			14.50	13.00	14.50	13.00
		106			15.00	13.50	15.00	13.50
		122			15.00	13.50	15.00	13.50
		138			15.00	13.50	15.00	13.50
		155			16.25	14.75	16.25	14.75

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

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Ant 4b	20 MHz Bandwidth	36	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		40	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		44	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		48	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		52	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		56	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		60	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		64	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		100	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		104	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		108	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		112	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		116	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		120	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		124	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		128	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		132	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		136	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		140	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		144	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		149	12.50	11.00	12.50	11.00	12.50	11.00	12.50	11.00
		153	12.50	11.00	12.50	11.00	12.50	11.00	12.50	11.00
		157	12.50	11.00	12.50	11.00	12.50	11.00	12.50	11.00
		161	12.50	11.00	12.50	11.00	12.50	11.00	12.50	11.00
		165	12.50	11.00	12.50	11.00	12.50	11.00	12.50	11.00
	40 MHz Bandwidth	38			10.25	8.75	10.25	8.75	10.25	8.75
		46			10.25	8.75	10.25	8.75	10.25	8.75
		54			10.25	8.75	10.25	8.75	10.25	8.75
		62			10.25	8.75	10.25	8.75	10.25	8.75
		102			10.25	8.75	10.25	8.75	10.25	8.75
		110			10.25	8.75	10.25	8.75	10.25	8.75
		118			10.25	8.75	10.25	8.75	10.25	8.75
		126			9.00	7.50	9.00	7.50	9.00	7.50
		134			9.00	7.50	9.00	7.50	9.00	7.50
		142			9.00	7.50	9.00	7.50	9.00	7.50
		151			12.50	11.00	12.50	11.00	12.50	11.00
		159			12.50	11.00	12.50	11.00	12.50	11.00
	80 MHz Bandwidth	42					10.25	8.75	10.25	8.75
		58					11.00	9.50	10.25	8.75
		106					11.00	9.50	10.25	8.75
		122					9.00	7.50	9.00	7.50
		138					9.00	7.50	9.00	7.50
		155					12.50	11.00	12.50	11.00

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - Ant 4b	20 MHz Bandwidth	36	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		40	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		44	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		48	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		52	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		56	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		60	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		64	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		100	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		104	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		108	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		112	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		116	10.25	8.75	10.25	8.75	10.25	8.75	10.25	8.75
		120	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		124	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		128	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		132	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		136	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		140	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		144	9.00	7.50	9.00	7.50	9.00	7.50	9.00	7.50
		149	12.50	11.00	12.50	11.00	12.50	11.00	12.50	11.00
		153	12.50	11.00	12.50	11.00	12.50	11.00	12.50	11.00
		157	12.50	11.00	12.50	11.00	12.50	11.00	12.50	11.00
		161	12.50	11.00	12.50	11.00	12.50	11.00	12.50	11.00
		165	12.50	11.00	12.50	11.00	12.50	11.00	12.50	11.00
	40 MHz Bandwidth	38	[redacted]		10.25	8.75	10.25	8.75	10.25	8.75
		46			10.25	8.75	10.25	8.75	10.25	8.75
		54			10.25	8.75	10.25	8.75	10.25	8.75
		62			10.25	8.75	10.25	8.75	10.25	8.75
		102			10.25	8.75	10.25	8.75	10.25	8.75
		110			10.25	8.75	10.25	8.75	10.25	8.75
		118			10.25	8.75	10.25	8.75	10.25	8.75
		126			9.00	7.50	9.00	7.50	9.00	7.50
		134			9.00	7.50	9.00	7.50	9.00	7.50
		142			9.00	7.50	9.00	7.50	9.00	7.50
		151			12.50	11.00	12.50	11.00	12.50	11.00
		159			12.50	11.00	12.50	11.00	12.50	11.00
	80 MHz Bandwidth	42	[redacted]				10.25	8.75	10.25	8.75
		58					10.25	8.75	10.25	8.75
		106					10.25	8.75	10.25	8.75
		122					9.00	7.50	9.00	7.50
		138					9.00	7.50	9.00	7.50
		155					12.50	11.00	12.50	11.00

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

Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - Ant 4b	20 MHz Bandwidth	36	10.25	8.75	10.25	8.75	10.25	8.75
		40	10.25	8.75	10.25	8.75	10.25	8.75
		44	10.25	8.75	10.25	8.75	10.25	8.75
		48	10.25	8.75	10.25	8.75	10.25	8.75
		52	10.25	8.75	10.25	8.75	10.25	8.75
		56	10.25	8.75	10.25	8.75	10.25	8.75
		60	10.25	8.75	10.25	8.75	10.25	8.75
		64	10.25	8.75	10.25	8.75	10.25	8.75
		100	10.25	8.75	10.25	8.75	10.25	8.75
		104	10.25	8.75	10.25	8.75	10.25	8.75
		108	10.25	8.75	10.25	8.75	10.25	8.75
		112	10.25	8.75	10.25	8.75	10.25	8.75
		116	10.25	8.75	10.25	8.75	10.25	8.75
		120	9.00	7.50	9.00	7.50	9.00	7.50
		124	9.00	7.50	9.00	7.50	9.00	7.50
		128	9.00	7.50	9.00	7.50	9.00	7.50
		132	9.00	7.50	9.00	7.50	9.00	7.50
		136	9.00	7.50	9.00	7.50	9.00	7.50
		140	9.00	7.50	9.00	7.50	9.00	7.50
		144	9.00	7.50	9.00	7.50	9.00	7.50
		149	12.50	11.00	12.50	11.00	12.50	11.00
		153	12.50	11.00	12.50	11.00	12.50	11.00
		157	12.50	11.00	12.50	11.00	12.50	11.00
		161	12.50	11.00	12.50	11.00	12.50	11.00
		165	12.50	11.00	12.50	11.00	12.50	11.00
	40 MHz Bandwidth	38	10.25	8.75	10.25	8.75	10.25	8.75
		46	10.25	8.75	10.25	8.75	10.25	8.75
		54	10.25	8.75	10.25	8.75	10.25	8.75
		62	10.25	8.75	10.25	8.75	10.25	8.75
		102	10.25	8.75	10.25	8.75	10.25	8.75
		110	10.25	8.75	10.25	8.75	10.25	8.75
		118	10.25	8.75	10.25	8.75	10.25	8.75
		126	9.00	7.50	9.00	7.50	9.00	7.50
		134	9.00	7.50	9.00	7.50	9.00	7.50
		142	9.00	7.50	9.00	7.50	9.00	7.50
		151	12.50	11.00	12.50	11.00	12.50	11.00
		159	12.50	11.00	12.50	11.00	12.50	11.00
	80 MHz Bandwidth	42	[redacted]		10.25	8.75	10.25	8.75
		58			10.25	8.75	10.25	8.75
		106			10.25	8.75	10.25	8.75
		122			9.00	7.50	9.00	7.50
		138			9.00	7.50	9.00	7.50
		155			12.50	11.00	12.50	11.00

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

1.4.3 Reduced Time-Averaged Output Power

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

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

Mode/ Band			IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Antenna 4a	20 MHz Bandwidth	1	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		2	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		3	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		4	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		5	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		6	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		7	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		8	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		9	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		10	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		11	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		12	8.75	7.25	8.75	7.25	8.75	7.25	8.75	7.25
		13	8.75	7.25	8.75	7.25	8.75	7.25	N/A	N/A

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

Mode/ Band			IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average nonTXBF - 2 Tx Chain (dBm) - Antenna 4a	20 MHz Bandwidth	1	8.75	7.25	8.75	7.25	8.75	7.25
		2	8.75	7.25	8.75	7.25	8.75	7.25
		3	8.75	7.25	8.75	7.25	8.75	7.25
		4	8.75	7.25	8.75	7.25	8.75	7.25
		5	8.75	7.25	8.75	7.25	8.75	7.25
		6	8.75	7.25	8.75	7.25	8.75	7.25
		7	8.75	7.25	8.75	7.25	8.75	7.25
		8	8.75	7.25	8.75	7.25	8.75	7.25
		9	8.75	7.25	8.75	7.25	8.75	7.25
		10	8.75	7.25	8.75	7.25	8.75	7.25
		11	8.75	7.25	8.75	7.25	8.75	7.25
		12	8.75	7.25	8.75	7.25	8.75	7.25
		13	8.75	7.25	8.75	7.25	N/A	N/A

Note: In MIMO 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 active
-Simultaneous conditions with mmW/Inter -band ULCA active

Mode/ Band			IEEE 802.11b (2.4 GHz)		IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Antenna 2a	20 MHz Bandwidth	1	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		2	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		3	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		4	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		5	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		6	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		7	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		8	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		9	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		10	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		11	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		12	9.75	8.25	9.75	8.25	9.75	8.25	9.75	8.25
		13	9.75	8.25	9.75	8.25	9.75	8.25	N/A	N/A

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

Mode/ Band			IEEE 802.11g (2.4 GHz)		IEEE 802.11n (2.4 GHz)		IEEE 802.11ax SU (2.4 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average nonTXBF - 2 Tx Chain (dBm) - Antenna 2a	20 MHz Bandwidth	1	9.75	8.25	9.75	8.25	9.75	8.25
		2	9.75	8.25	9.75	8.25	9.75	8.25
		3	9.75	8.25	9.75	8.25	9.75	8.25
		4	9.75	8.25	9.75	8.25	9.75	8.25
		5	9.75	8.25	9.75	8.25	9.75	8.25
		6	9.75	8.25	9.75	8.25	9.75	8.25
		7	9.75	8.25	9.75	8.25	9.75	8.25
		8	9.75	8.25	9.75	8.25	9.75	8.25
		9	9.75	8.25	9.75	8.25	9.75	8.25
		10	9.75	8.25	9.75	8.25	9.75	8.25
		11	9.75	8.25	9.75	8.25	9.75	8.25
		12	9.75	8.25	9.75	8.25	9.75	8.25
		13	9.75	8.25	9.75	8.25	N/A	N/A

Note: In MIMO 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 active
-Simultaneous conditions with mmW/Inter -band ULCA active

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Ant 5b	20 MHz Bandwidth	36	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		40	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		44	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		48	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		52	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		56	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		60	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		64	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		100	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		104	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		108	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		112	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		116	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		120	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		124	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		128	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		132	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		136	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		140	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		144	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		149	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		153	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		157	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		161	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		165	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
	40 MHz Bandwidth	38			13.25	11.75	13.25	11.75	13.25	11.75
		46			13.25	11.75	13.25	11.75	13.25	11.75
		54			13.25	11.75	13.25	11.75	13.25	11.75
		62			13.25	11.75	13.25	11.75	13.25	11.75
		102			11.50	10.00	11.50	10.00	11.50	10.00
		110			11.50	10.00	11.50	10.00	11.50	10.00
		118			11.50	10.00	11.50	10.00	11.50	10.00
		126			11.50	10.00	11.50	10.00	11.50	10.00
		134			11.50	10.00	11.50	10.00	11.50	10.00
		142			11.50	10.00	11.50	10.00	11.50	10.00
		151			12.25	10.75	12.25	10.75	12.25	10.75
		159			12.25	10.75	12.25	10.75	12.25	10.75
	80 MHz Bandwidth	42					12.50	11.00	12.50	11.00
		58					13.25	11.75	13.25	11.75
		106					11.50	10.00	11.50	10.00
		122					11.50	10.00	11.50	10.00
		138					11.50	10.00	11.50	10.00
		155					12.25	10.75	12.25	10.75

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

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - Ant 5b	20 MHz Bandwidth	36	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		40	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		44	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		48	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		52	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		56	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		60	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		64	13.25	11.75	13.25	11.75	13.25	11.75	13.25	11.75
		100	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		104	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		108	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		112	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		116	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		120	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		124	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		128	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		132	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		136	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		140	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		144	11.50	10.00	11.50	10.00	11.50	10.00	11.50	10.00
		149	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		153	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		157	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		161	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
		165	12.25	10.75	12.25	10.75	12.25	10.75	12.25	10.75
	40 MHz Bandwidth	38	[redacted]		13.25	11.75	13.25	11.75	13.25	11.75
		46			13.25	11.75	13.25	11.75	13.25	11.75
		54			13.25	11.75	13.25	11.75	13.25	11.75
		62			13.25	11.75	13.25	11.75	13.25	11.75
		102			11.50	10.00	11.50	10.00	11.50	10.00
		110			11.50	10.00	11.50	10.00	11.50	10.00
		118			11.50	10.00	11.50	10.00	11.50	10.00
		126			11.50	10.00	11.50	10.00	11.50	10.00
		134			11.50	10.00	11.50	10.00	11.50	10.00
		142			11.50	10.00	11.50	10.00	11.50	10.00
		151			12.25	10.75	12.25	10.75	12.25	10.75
		159			12.25	10.75	12.25	10.75	12.25	10.75
	80 MHz Bandwidth	42	[redacted]				12.00	10.50	12.00	10.50
		58					13.25	11.75	13.25	11.75
		106					11.50	10.00	11.50	10.00
		122					11.50	10.00	11.50	10.00
		138					11.50	10.00	11.50	10.00
		155					12.25	10.75	12.25	10.75

Note: In MIMO 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 active
-Simultaneous conditions with mmW/Inter -band ULCA active

Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - Ant 5b	20 MHz Bandwidth	36	13.25	11.75	13.25	11.75	13.25	11.75
		40	13.25	11.75	13.25	11.75	13.25	11.75
		44	13.25	11.75	13.25	11.75	13.25	11.75
		48	13.25	11.75	13.25	11.75	13.25	11.75
		52	13.25	11.75	13.25	11.75	13.25	11.75
		56	13.25	11.75	13.25	11.75	13.25	11.75
		60	13.25	11.75	13.25	11.75	13.25	11.75
		64	13.25	11.75	13.25	11.75	13.25	11.75
		100	11.50	10.00	11.50	10.00	11.50	10.00
		104	11.50	10.00	11.50	10.00	11.50	10.00
		108	11.50	10.00	11.50	10.00	11.50	10.00
		112	11.50	10.00	11.50	10.00	11.50	10.00
		116	11.50	10.00	11.50	10.00	11.50	10.00
		120	11.50	10.00	11.50	10.00	11.50	10.00
		124	11.50	10.00	11.50	10.00	11.50	10.00
		128	11.50	10.00	11.50	10.00	11.50	10.00
		132	11.50	10.00	11.50	10.00	11.50	10.00
		136	11.50	10.00	11.50	10.00	11.50	10.00
		140	11.50	10.00	11.50	10.00	11.50	10.00
		144	11.50	10.00	11.50	10.00	11.50	10.00
		149	12.25	10.75	12.25	10.75	12.25	10.75
		153	12.25	10.75	12.25	10.75	12.25	10.75
		157	12.25	10.75	12.25	10.75	12.25	10.75
		161	12.25	10.75	12.25	10.75	12.25	10.75
		165	12.25	10.75	12.25	10.75	12.25	10.75
	40 MHz Bandwidth	38	13.25	11.75	13.25	11.75	13.25	11.75
		46	13.25	11.75	13.25	11.75	13.25	11.75
		54	13.25	11.75	13.25	11.75	13.25	11.75
		62	13.25	11.75	13.25	11.75	13.25	11.75
		102	11.50	10.00	11.50	10.00	11.50	10.00
		110	11.50	10.00	11.50	10.00	11.50	10.00
		118	11.50	10.00	11.50	10.00	11.50	10.00
		126	11.50	10.00	11.50	10.00	11.50	10.00
		134	11.50	10.00	11.50	10.00	11.50	10.00
		142	11.50	10.00	11.50	10.00	11.50	10.00
		151	12.25	10.75	12.25	10.75	12.25	10.75
		159	12.25	10.75	12.25	10.75	12.25	10.75
	80 MHz Bandwidth	42	[redacted]		12.00	10.50	12.00	10.50
		58			13.25	11.75	13.25	11.75
		106			11.50	10.00	11.50	10.00
		122			11.50	10.00	11.50	10.00
		138			11.50	10.00	11.50	10.00
		155			12.25	10.75	12.25	10.75

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

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

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - Single Tx Chain (dBm) - Ant 4b	20 MHz Bandwidth	36	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		40	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		44	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		48	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		52	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		56	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		60	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		64	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		100	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		104	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		108	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		112	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		116	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		120	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		124	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		128	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		132	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		136	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		140	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		144	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		149	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		153	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		157	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		161	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		165	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
	40 MHz Bandwidth	38			4.25	2.75	4.25	2.75	4.25	2.75
		46			4.25	2.75	4.25	2.75	4.25	2.75
		54			5.00	3.50	5.00	3.50	5.00	3.50
		62			5.00	3.50	5.00	3.50	5.00	3.50
		102			5.00	3.50	5.00	3.50	5.00	3.50
		110			5.00	3.50	5.00	3.50	5.00	3.50
		118			5.00	3.50	5.00	3.50	5.00	3.50
		126			5.00	3.50	5.00	3.50	5.00	3.50
		134			5.00	3.50	5.00	3.50	5.00	3.50
		142			5.00	3.50	5.00	3.50	5.00	3.50
		151			6.50	5.00	6.50	5.00	6.50	5.00
		159			6.50	5.00	6.50	5.00	6.50	5.00
	80 MHz Bandwidth	42					4.25	2.75	4.25	2.75
		58					5.00	3.50	5.00	3.50
		106					5.00	3.50	5.00	3.50
		122					5.00	3.50	5.00	3.50
		138					5.00	3.50	5.00	3.50
		155					6.50	5.00	6.50	5.00

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

Mode/ Band			IEEE 802.11a (5 GHz)		IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) CDD - Ant 4b	20 MHz Bandwidth	36	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		40	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		44	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		48	4.25	2.75	4.25	2.75	4.25	2.75	4.25	2.75
		52	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		56	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		60	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		64	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		100	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		104	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		108	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		112	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		116	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		120	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		124	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		128	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		132	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		136	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		140	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		144	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50
		149	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		153	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		157	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		161	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
		165	6.50	5.00	6.50	5.00	6.50	5.00	6.50	5.00
	40 MHz Bandwidth	38			4.25	2.75	4.25	2.75	4.25	2.75
		46			4.25	2.75	4.25	2.75	4.25	2.75
		54			5.00	3.50	5.00	3.50	5.00	3.50
		62			5.00	3.50	5.00	3.50	5.00	3.50
		102			5.00	3.50	5.00	3.50	5.00	3.50
		110			5.00	3.50	5.00	3.50	5.00	3.50
		118			5.00	3.50	5.00	3.50	5.00	3.50
		126			5.00	3.50	5.00	3.50	5.00	3.50
		134			5.00	3.50	5.00	3.50	5.00	3.50
		142			5.00	3.50	5.00	3.50	5.00	3.50
		151			6.50	5.00	6.50	5.00	6.50	5.00
		159			6.50	5.00	6.50	5.00	6.50	5.00
	80 MHz Bandwidth	42					4.25	2.75	4.25	2.75
		58					5.00	3.50	5.00	3.50
		106					5.00	3.50	5.00	3.50
		122					5.00	3.50	5.00	3.50
		138					5.00	3.50	5.00	3.50
		155					6.50	5.00	6.50	5.00

Note: In MIMO 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 4a/4b active
-Simultaneous conditions with mmW/Inter -band ULCA active

Mode/ Band			IEEE 802.11n (5 GHz)		IEEE 802.11ac (5 GHz)		IEEE 802.11ax SU (5 GHz)	
		Channel	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal
Modulated Average - 2 Tx Chain (dBm) SDM - Ant 4b	20 MHz Bandwidth	36	4.25	2.75	4.25	2.75	4.25	2.75
		40	4.25	2.75	4.25	2.75	4.25	2.75
		44	4.25	2.75	4.25	2.75	4.25	2.75
		48	4.25	2.75	4.25	2.75	4.25	2.75
		52	5.00	3.50	5.00	3.50	5.00	3.50
		56	5.00	3.50	5.00	3.50	5.00	3.50
		60	5.00	3.50	5.00	3.50	5.00	3.50
		64	5.00	3.50	5.00	3.50	5.00	3.50
		100	5.00	3.50	5.00	3.50	5.00	3.50
		104	5.00	3.50	5.00	3.50	5.00	3.50
		108	5.00	3.50	5.00	3.50	5.00	3.50
		112	5.00	3.50	5.00	3.50	5.00	3.50
		116	5.00	3.50	5.00	3.50	5.00	3.50
		120	5.00	3.50	5.00	3.50	5.00	3.50
		124	5.00	3.50	5.00	3.50	5.00	3.50
		128	5.00	3.50	5.00	3.50	5.00	3.50
		132	5.00	3.50	5.00	3.50	5.00	3.50
		136	5.00	3.50	5.00	3.50	5.00	3.50
		140	5.00	3.50	5.00	3.50	5.00	3.50
		144	5.00	3.50	5.00	3.50	5.00	3.50
		149	6.50	5.00	6.50	5.00	6.50	5.00
		153	6.50	5.00	6.50	5.00	6.50	5.00
		157	6.50	5.00	6.50	5.00	6.50	5.00
		161	6.50	5.00	6.50	5.00	6.50	5.00
		165	6.50	5.00	6.50	5.00	6.50	5.00
	40 MHz Bandwidth	38	4.25	2.75	4.25	2.75	4.25	2.75
		46	4.25	2.75	4.25	2.75	4.25	2.75
		54	5.00	3.50	5.00	3.50	5.00	3.50
		62	5.00	3.50	5.00	3.50	5.00	3.50
		102	5.00	3.50	5.00	3.50	5.00	3.50
		110	5.00	3.50	5.00	3.50	5.00	3.50
		118	5.00	3.50	5.00	3.50	5.00	3.50
		126	5.00	3.50	5.00	3.50	5.00	3.50
		134	5.00	3.50	5.00	3.50	5.00	3.50
		142	5.00	3.50	5.00	3.50	5.00	3.50
		151	6.50	5.00	6.50	5.00	6.50	5.00
		159	6.50	5.00	6.50	5.00	6.50	5.00
	80 MHz Bandwidth	42			4.25	2.75	4.25	2.75
		58			5.00	3.50	5.00	3.50
		106			5.00	3.50	5.00	3.50
		122			5.00	3.50	5.00	3.50
		138			5.00	3.50	5.00	3.50
		155			6.50	5.00	6.50	5.00

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

1.4.4 Bluetooth Maximum Output Power

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 4a
Bluetooth BDR/LE	Maximum	**12.25**
	Nominal	**10.75**
Bluetooth EDR	Maximum	**12.25**
	Nominal	**10.75**
Bluetooth HDR	Maximum	**10.00**
	Nominal	**8.50**

Mode / Band		Modulated Average - TXBF (dBm) -Ant 4a
Bluetooth BDR	Maximum	**12.25**
	Nominal	**10.75**
Bluetooth EDR	Maximum	**12.00**
	Nominal	**10.50**
Bluetooth HDR	Maximum	**10.00**
	Nominal	**8.50**
Bluetooth LE	Maximum	**5.0**
	Nominal	**3.5**

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

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 2a
Bluetooth BDR/LE	Maximum	**12.75**
	Nominal	**11.25**
Bluetooth EDR	Maximum	**12.75**
	Nominal	**11.25**
Bluetooth HDR	Maximum	**10.00**
	Nominal	**8.50**

Mode / Band		Modulated Average - TXBF (dBm) - Ant 2a
Bluetooth BDR	Maximum	**12.75**
	Nominal	**11.25**
Bluetooth EDR	Maximum	**12.00**
	Nominal	**10.50**
Bluetooth HDR	Maximum	**10.00**
	Nominal	**8.50**
Bluetooth LE	Maximum	**5.0**
	Nominal	**3.5**

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 and 5GHz WLAN Antenna 4b/5b active
-Simultaneous conditions with Licensed Bands Antenna 2a/2b and 5GHz WLAN Antenna 4b/5b active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 4a
Bluetooth BDR/LE Reduced	Maximum	**10.25**
	Nominal	**8.75**
Bluetooth EDR Reduced	Maximum	**10.25**
	Nominal	**8.75**
Bluetooth HDR Reduced	Maximum	**10.00**
	Nominal	**8.50**

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

Mode / Band		Modulated Average - TXBF (dBm) - Ant 4a
Bluetooth BDR Reduced	Maximum	**10.25**
	Nominal	**8.75**
Bluetooth EDR Reduced	Maximum	**10.25**
	Nominal	**8.75**
Bluetooth HDR Reduced	Maximum	**10.00**
	Nominal	**8.50**
Bluetooth LE Reduced	Maximum	**5.0**
	Nominal	**3.5**

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 4a/4b active
-Simultaneous conditions with Licensed Bands Antenna 3 active
-Simultaneous conditions with 5GHz WLAN Antenna 4b/5b active
-Simultaneous conditions with mmW/Inter-band ULCA active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 4a
Bluetooth BDR/LE Reduced	Maximum	**9.25**
	Nominal	**7.75**
Bluetooth EDR Reduced	Maximum	**9.25**
	Nominal	**7.75**
Bluetooth HDR Reduced	Maximum	**9.25**
	Nominal	**7.75**

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

Mode / Band		Modulated Average - TXBF (dBm) - Ant 4a
Bluetooth BDR Reduced	Maximum	**9.25**
	Nominal	**7.75**
Bluetooth EDR Reduced	Maximum	**9.25**
	Nominal	**7.75**
Bluetooth HDR Reduced	Maximum	**9.25**
	Nominal	**7.75**
Bluetooth LE Reduced	Maximum	**5.0**
	Nominal	**3.5**

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 active and 5GHz WLAN Antenna 4b/5b active
-Simultaneous conditions with Licensed Bands Antenna 4A/4B and 5GHz WLAN Antenna 4b/5b active
-Simultaneous conditions with mmW/Inter-band ULCA and 5GHz WLAN Antenna 4b/5b active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 4a
Bluetooth BDR/LE Reduced	Maximum	**5.25**
	Nominal	**3.75**
Bluetooth EDR Reduced	Maximum	**5.25**
	Nominal	**3.75**
Bluetooth HDR Reduced	Maximum	**5.25**
	Nominal	**3.75**

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

Mode / Band		Modulated Average - TXBF (dBm) - Ant 4a
Bluetooth BDR Reduced	Maximum	**5.25**
	Nominal	**3.75**
Bluetooth EDR Reduced	Maximum	**5.25**
	Nominal	**3.75**
Bluetooth HDR Reduced	Maximum	**5.25**
	Nominal	**3.75**
Bluetooth LE Reduced	Maximum	**5.0**
	Nominal	**3.5**

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 5GHz WLAN Antenna 4b/5b active
-Simultaneous conditions with 5GHz WLAN Antenna and Licensed Bands Antenna 4a/4b active
-Simultaneous conditions with 5GHz WLAN Antenna and Licensed Bands Antenna 3 active
-Simultaneous conditions with mmW/Inter-band ULCA active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 2a
Bluetooth BDR/LE Reduced	Maximum	**9.75**
	Nominal	**8.25**
Bluetooth EDR Reduced	Maximum	**9.75**
	Nominal	**8.25**
Bluetooth HDR Reduced	Maximum	**9.75**
	Nominal	**8.25**

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

Mode / Band		Modulated Average - TXBF (dBm) - Ant 2a
Bluetooth BDR Reduced	Maximum	**9.75**
	Nominal	**8.25**
Bluetooth EDR Reduced	Maximum	**9.75**
	Nominal	**8.25**
Bluetooth HDR Reduced	Maximum	**9.75**
	Nominal	**8.25**
Bluetooth LE Reduced	Maximum	**5.0**
	Nominal	**3.5**

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 active
-Simultaneous conditions with Licensed Bands Antenna 2a/2b active
-Simultaneous conditions with mmW/Inter-band ULCA and 5GHz WLAN Antenna 4b/5b active

Mode / Band		Modulated Average - Single Tx Chain (dBm) - Ant 2a
Bluetooth BDR/LE Reduced	Maximum	**8.75**
	Nominal	**7.25**
Bluetooth EDR Reduced	Maximum	**8.75**
	Nominal	**7.25**
Bluetooth HDR Reduced	Maximum	**8.75**
	Nominal	**7.25**

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

Mode / Band		Modulated Average - TXBF (dBm) - Ant 2a
Bluetooth BDR Reduced	Maximum	**8.75**
	Nominal	**7.25**
Bluetooth EDR Reduced	Maximum	**8.75**
	Nominal	**7.25**
Bluetooth HDR Reduced	Maximum	**8.75**
	Nominal	**7.25**
Bluetooth LE Reduced	Maximum	**5.0**
	Nominal	**3.5**

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 1-1
Device Edges/Sides for SAR Testing

Device Sides/Edges for SAR Testing						
Mode	Back	Front	Top	Bottom	Right	Left
GPRS 850 Ant 1	Yes	No	No	Yes	No	Yes
GPRS 1900 Ant 1	Yes	No	No	Yes	No	Yes
UMTS 850 Ant 1	Yes	No	No	Yes	No	Yes
UMTS 1750 Ant 1	Yes	No	No	Yes	No	Yes
UMTS 1900 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 71 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 12 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 13 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 14 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 26 (Cell) Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 5 (Cell) Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 66 (AWS) Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 25 (PCS) Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 30 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 7 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 41 Ant 1	Yes	No	No	Yes	No	Yes
LTE Band 48 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n71 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n12 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n5 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n66 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n25 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n41 Ant 1	Yes	No	No	Yes	No	Yes
NR Band n77 Ant 1	Yes	No	No	Yes	No	Yes
GPRS 850 Ant 3	Yes	No	Yes	No	Yes	No
GPRS 1900 Ant 3	Yes	No	Yes	No	Yes	No
UMTS 850 Ant 3	Yes	No	Yes	No	Yes	No
UMTS 1750 Ant 3	Yes	No	Yes	No	Yes	No
UMTS 1900 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 71 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 12 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 13 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 14 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 26 (Cell) Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 5 (Cell) Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 66 (AWS) Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 25 (PCS) Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 30 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 7 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 41 Ant 3	Yes	No	Yes	No	Yes	No
LTE Band 48 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n71 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n12 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n5 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n66 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n25 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n41 Ant 3	Yes	No	Yes	No	Yes	No
NR Band n77 Ant 3	Yes	No	Yes	No	Yes	No
GPRS 1900 Ant 2b	Yes	No	No	Yes	No	No
UMTS 1750 Ant 2b	Yes	No	No	Yes	No	No
UMTS 1900 Ant 2b	Yes	No	No	Yes	No	No
LTE Band 66 (AWS) Ant 2b	Yes	No	No	Yes	No	No
LTE Band 25 (PCS) Ant 2b	Yes	No	No	Yes	No	No
LTE Band 30 Ant 2b	Yes	No	No	Yes	No	No
LTE Band 7 Ant 2b	Yes	No	No	Yes	No	No
LTE Band 41 Ant 2b	Yes	No	No	Yes	No	No
NR Band n66 Ant 2b	Yes	No	No	Yes	No	No
NR Band n25 Ant 2b	Yes	No	No	Yes	No	No
NR Band n41 Ant 2b	Yes	No	No	Yes	No	No
LTE Band 48 Ant 2a	Yes	No	No	Yes	Yes	No
NR Band n77 Ant 2a	Yes	No	No	Yes	Yes	No
GPRS 1900 Ant 4b	Yes	No	Yes	No	No	No
UMTS 1750 Ant 4b	Yes	No	Yes	No	No	No
UMTS 1900 Ant 4b	Yes	No	Yes	No	No	No
LTE Band 66 (AWS) Ant 4b	Yes	No	Yes	No	No	No
LTE Band 25 (PCS) Ant 4b	Yes	No	Yes	No	No	No
LTE Band 30 Ant 4b	Yes	No	Yes	No	No	No
LTE Band 7 Ant 4b	Yes	No	Yes	No	No	No
LTE Band 41 Ant 4b	Yes	No	Yes	No	No	No
NR Band n66 Ant 4b	Yes	No	Yes	No	No	No
NR Band n25 Ant 4b	Yes	No	Yes	No	No	No
NR Band n41 Ant 4b	Yes	No	Yes	No	No	No
LTE Band 48 Ant 4a	Yes	No	Yes	No	No	Yes
NR Band n77 Ant 4a	Yes	No	Yes	No	No	Yes
2.4 GHz WLAN Ant 2a	Yes	No	No	Yes	Yes	No
2.4 GHz WLAN Ant 4a	Yes	No	Yes	No	No	Yes
5 GHz WLAN Ant 4b	Yes	No	Yes	No	No	No
5 GHz WLAN Ant 5b	Yes	No	No	No	Yes	No
Bluetooth Ant 2a	Yes	No	No	Yes	Yes	No
Bluetooth Ant 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 1-2
Simultaneous Transmission Scenarios

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

Table 1-3
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 B12/13/5 LTE Bands transmitting from Ant 3 MB/HB: LTE B4/66/2/7
2	Cellular Ant 1 LB + Cellular Ant 2b MB/HB	Yes	LTE Bands transmitting from Ant 1 LB: LTE B12/13/5 LTE Bands transmitting from Ant 2b MB/HB: LTE B4/66/2/7
3	Cellular Ant 1 LB + Cellular Ant 4b MB/HB	Yes	LTE Bands transmitting from Ant 1 LB: LTE B12/13/5 LTE Bands transmitting from Ant 4b MB/HB: LTE B4/66/2/7
4	Cellular Ant 3 LB + Cellular Ant 1 MB/HB	Yes	LTE Bands transmitting from Ant 3 LB: LTE B12/13/5 LTE Bands transmitting from Ant 1 MB/HB: LTE B4/66/2/7
5	Cellular Ant 3 LB + Cellular Ant 2b MB/HB	Yes	LTE Bands transmitting from Ant 3 LB: LTE B12/13/5 LTE Bands transmitting from Ant 2b MB/HB: LTE B4/66/2/7
6	Cellular Ant 3 LB + Cellular Ant 4b MB/HB	Yes	LTE Bands transmitting from Ant 3 LB: LTE B12/13/5 LTE Bands transmitting from Ant 4b MB/HB: LTE B4/66/2/7

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

Table 1-4
Simultaneous Transmission Scenarios of Inter-band ULCA

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

Note: LTE Inter-band ULCA can operate in any of the combinations in Table 1-3.

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 share the same antenna path and cannot transmit simultaneously.
3. For licensed bands, Ant 2a and Ant 2b cannot transmit simultaneously, and Ant 4a and Ant 4b cannot transmit simultaneously.
4. This device supports 2x2 MIMO Tx for WLAN 802.11a/g/n/ac/ax. 802.11a/g/n/ac/ax supports CDD and STBC and 802.11n/ac/ax additionally supports SDM. Each WLAN antenna can transmit independently or together when operating with MIMO.
5. While 5 GHz MIMO is active, 5 GHz Ant 4b and Ant 5b can be transmitting together.
6. 5G NR FR2 n260 and n261 cannot transmit simultaneously.
7. LTE + 5G NR FR1 Scenarios are limited to EN-DC combinations with anchor bands shown in the NR FR1 Checklist.
8. LTE + 5G NR FR2 n260 and n261 operations are possible only with LTE Anchors shown in the NR FR2 Checklist.
9. This device support VoWiFi.

1.7 Miscellaneous SAR Test Considerations

(A) WIFI/BT

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

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

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

This device supports IEEE 802.11ax with the following features:

a) Up to 80 MHz Bandwidth only for 5 GHz
b) Up to 20 MHz Bandwidth only for 2.4 GHz
c) No aggregate channel configurations
d) 2 Tx antenna output
e) Up to 1024 QAM is supported
f) TDWR and Band gap channels are supported for 5 GHz
g) MU-MIMO UL Operations are not supported

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

(B) Licensed Transmitter(s)

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

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 H.

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

This device 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 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.

This device supports both Power Class 2 (PC2) and Power Class 3 (PC3) for LTE Band 41, NR Band n41 and NR Band n77. 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 13.1).

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 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 n260, and n261. RF Exposure assessment and simultaneous transmission analysis for these bands can be found in the Near Field PD Report (report SN can be found in Section 1.10 – Bibliography).

1.8 Guidance Applied

- FCC KDB Publication 941225 D01v03r01, D05v02r04, D05Av01r02 (2G/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)
- October 2013 TCB Workshop Notes (GPRS Testing Considerations)
- 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	1C2101020005-34.BCG
Power Density Part 0 Test Report	1C2101020005-18.BCG
Power Density Part 1 Test Report	1C2101020005-19.BCG
RF Exposure Part 2 Test Report	1C2101020005-20.BCG
RF Exposure Compliance Summary Report	1C2101020005-21.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 4 (AWS) (1710.7 - 1754.3 MHz)				
	LTE Band 66 (AWS) (1710.7 - 1779.3 MHz)				
	LTE Band 2 (PCS) (1850.7 - 1909.3 MHz)				
	LTE Band 25 (PCS) (1850.7 - 1914.3 MHz)				
	LTE Band 30 (2307.5 - 2312.5 MHz)				
	LTE Band 7 (2502.5 - 2567.5 MHz)				
	LTE Band 41 (2498.5 - 2687.5 MHz)				
	LTE Band 48 (3552.5 - 3697.5 MHz)				
Channel Bandwidths	LTE Band 71: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 17: 5 MHz, 10 MHz				
	LTE Band 13: 5 MHz, 10 MHz				
	LTE Band 14: 5 MHz, 10 MHz				
	LTE Band 26 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 5 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 4 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 66 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 2 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 25 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 30: 5 MHz, 10 MHz				
	LTE Band 7: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 48: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid	Mid-High	High
LTE Band 71: 5 MHz	665.5 (133147)		680.5 (133297)	695.5 (133447)	
LTE Band 71: 10 MHz	668 (133172)		680.5 (133297)	693 (133422)	
LTE Band 71: 15 MHz	670.5 (133197)		680.5 (133297)	690.5 (133397)	
LTE Band 71: 20 MHz	673 (133222)		680.5 (133297)	688 (133372)	
LTE Band 12: 1.4 MHz	699.7 (23017)		707.5 (23095)	715.3 (23173)	
LTE Band 12: 3 MHz	700.5 (23025)		707.5 (23095)	714.5 (23165)	
LTE Band 12: 5 MHz	701.5 (23035)		707.5 (23095)	713.5 (23155)	
LTE Band 12: 10 MHz	704 (23060)		707.5 (23095)	711 (23130)	
LTE Band 17: 5 MHz	706.5 (23755)		710 (23790)	713.5 (23825)	
LTE Band 17: 10 MHz	709 (23780)		710 (23790)	711 (23800)	
LTE Band 13: 5 MHz	779.5 (23205)		782 (23230)	784.5 (23255)	
LTE Band 13: 10 MHz	N/A		782 (23230)	N/A	
LTE Band 14: 5 MHz	790.5 (23305)		793 (23330)	795.5 (23355)	
LTE Band 14: 10 MHz	N/A		793 (23330)	N/A	
LTE Band 26 (Cell): 1.4 MHz	814.7 (26697)		831.5 (26865)	848.3 (27033)	
LTE Band 26 (Cell): 3 MHz	815.5 (26705)		831.5 (26865)	847.5 (27025)	
LTE Band 26 (Cell): 5 MHz	816.5 (26715)		831.5 (26865)	846.5 (27015)	
LTE Band 26 (Cell): 10 MHz	819 (26740)		831.5 (26865)	844 (26990)	
LTE Band 5 (Cell): 1.4 MHz	824.7 (20407)		836.5 (20525)	848.3 (20643)	
LTE Band 5 (Cell): 3 MHz	825.5 (20415)		836.5 (20525)	847.5 (20635)	
LTE Band 5 (Cell): 5 MHz	826.5 (20425)		836.5 (20525)	846.5 (20625)	
LTE Band 5 (Cell): 10 MHz	829 (20450)		836.5 (20525)	844 (20600)	
LTE Band 4 (AWS): 1.4 MHz	1710.7 (19957)		1732.5 (20175)	1754.3 (20393)	
LTE Band 4 (AWS): 3 MHz	1711.5 (19965)		1732.5 (20175)	1753.5 (20385)	
LTE Band 4 (AWS): 5 MHz	1712.5 (19975)		1732.5 (20175)	1752.5 (20375)	
LTE Band 4 (AWS): 10 MHz	1715 (20000)		1732.5 (20175)	1750 (20350)	
LTE Band 4 (AWS): 15 MHz	1717.5 (20025)		1732.5 (20175)	1747.5 (20325)	
LTE Band 4 (AWS): 20 MHz	1720 (20050)		1732.5 (20175)	1745 (20300)	
LTE Band 66 (AWS): 1.4 MHz	1710.7 (131979)		1745 (132322)	1779.3 (132665)	
LTE Band 66 (AWS): 3 MHz	1711.5 (131987)		1745 (132322)	1778.5 (132657)	
LTE Band 66 (AWS): 5 MHz	1712.5 (131997)		1745 (132322)	1777.5 (132647)	
LTE Band 66 (AWS): 10 MHz	1715 (132022)		1745 (132322)	1775 (132622)	
LTE Band 66 (AWS): 15 MHz	1717.5 (132047)		1745 (132322)	1772.5 (132597)	
LTE Band 66 (AWS): 20 MHz	1720 (132072)		1745 (132322)	1770 (132572)	
LTE Band 2 (PCS): 1.4 MHz	1850.7 (18607)		1880 (18900)	1909.3 (19193)	
LTE Band 2 (PCS): 3 MHz	1851.5 (18615)		1880 (18900)	1908.5 (19185)	
LTE Band 2 (PCS): 5 MHz	1852.5 (18625)		1880 (18900)	1907.5 (19175)	
LTE Band 2 (PCS): 10 MHz	1855 (18650)		1880 (18900)	1905 (19150)	
LTE Band 2 (PCS): 15 MHz	1857.5 (18675)		1880 (18900)	1902.5 (19125)	
LTE Band 2 (PCS): 20 MHz	1860 (18700)		1880 (18900)	1900 (19100)	
LTE Band 25 (PCS): 1.4 MHz	1850.7 (26047)		1882.5 (26365)	1914.3 (26683)	
LTE Band 25 (PCS): 3 MHz	1851.5 (26055)		1882.5 (26365)	1913.5 (26675)	
LTE Band 25 (PCS): 5 MHz	1852.5 (26065)		1882.5 (26365)	1912.5 (26665)	
LTE Band 25 (PCS): 10 MHz	1855 (26090)		1882.5 (26365)	1910 (26640)	
LTE Band 25 (PCS): 15 MHz	1857.5 (26115)		1882.5 (26365)	1907.5 (26615)	
LTE Band 25 (PCS): 20 MHz	1860 (26140)		1882.5 (26365)	1905 (26590)	
LTE Band 30: 5 MHz	2307.5 (27685)		2310 (27710)	2312.5 (27735)	
LTE Band 30: 10 MHz	N/A		2310 (27710)	N/A	
LTE Band 7: 5 MHz	2502.5 (20775)		2535 (21100)	2567.5 (21425)	
LTE Band 7: 10 MHz	2505 (20800)		2535 (21100)	2565 (21400)	
LTE Band 7: 15 MHz	2507.5 (20825)		2535 (21100)	2562.5 (21375)	
LTE Band 7: 20 MHz	2510 (20850)		2535 (21100)	2560 (21350)	
LTE Band 41: 5 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 41: 20 MHz	2506 (39750)	2549.5 (40185)	2593 (40620)	2636.5 (41055)	2680 (41490)
LTE Band 48: 5 MHz	3552.5 (55265)	3600.8 (55748)	N/A	3649.2 (56232)	3697.5 (56715)
LTE Band 48: 10 MHz	3555 (55290)	3601.7 (55757)	N/A	3648.3 (56223)	3695 (56690)
LTE Band 48: 15 MHz	3557.5 (55315)	3602.5 (55765)	N/A	3647.5 (56215)	3692.5 (56665)
LTE Band 48: 20 MHz	3560 (55340)	3603.3 (55773)	N/A	3646.7 (56207)	3690 (56640)
UE Category	DL UE Cat 19, UL UE Cat 16				
Modulations Supported in UL	QPSK, 16QAM, 64QAM, 256QAM				
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3~6.2.5? (manufacturer attestation to be provided)	YES				
A-MPR (Additional MPR) disabled for SAR Testing?	YES				
LTE Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations				
LTE Additional Information	This device does not support full CA features on 3GPP Release 15. It supports carrier aggregation and downlink MIMO features as shown in Section 8 and Appendix H. All other uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC unless otherwise specified. The following LTE Release 15 Features are not supported: Relay, HetNet, Enhanced MIMO, eICIC, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

NR Information						
Form Factor	Tablet Device					
Frequency Range of each NR transmission band	NR Band n71 (665.5 - 695.5 MHz)					
	NR Band n12 (701.5 - 713.5 MHz)					
	NR Band n5 (Cell) (826.5 - 846.5 MHz)					
	NR Band n66 (AWS) (1712.5 - 1777.5 MHz)					
	NR Band n25 (PCS) (1852.5 - 1912.5 MHz)					
	NR Band n2 (PCS) (1852.5 - 1907.5 MHz)					
	NR Band n41 (2506.02 - 2679.99 MHz)					
	NR Band n77 (3710.01 - 3969.99 MHz)					
Channel Bandwidths	NR Band n71: 5 MHz, 10 MHz, 15 MHz, 20 MHz					
	NR Band n12: 5 MHz, 10 MHz, 15 MHz					
	NR Band n5 (Cell): 5 MHz, 10 MHz, 15 MHz, 20 MHz					
	NR Band n66 (AWS): 5 MHz, 10 MHz, 15 MHz, 20 MHz					
	NR Band n25 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz					
	NR Band n2 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz					
	NR Band n41: 20 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz, 100 MHz					
	NR Band n77: 20 MHz, 40 MHz, 50 MHz, 60 MHz, 80 MHz, 90 MHz, 100 MHz					
Channel Numbers and Frequencies (MHz)	Low	Low - Mid	Mid		Mid - High	High
NR Band n71: 5 MHz	665.5 (133147)		680.5 (136100)		695.5 (133447)	
NR Band n71: 10 MHz	668 (133600)		680.5 (136100)		693 (138600)	
NR Band n71: 15 MHz	670.5 (134100)		680.5 (136100)		690.5 (138100)	
NR Band n71: 20 MHz	673 (134600)		680.5 (136100)		688 (137600)	
NR Band n12: 5 MHz	701.5 (140300)		707.5 (141500)		713.5 (142700)	
NR Band n12: 10 MHz	704 (140800)		707.5 (141500)		711 (142200)	
NR Band n12: 15 MHz	706.5 (141300)		707.5 (141500)		708.5 (141700)	
NR Band n5 (Cell): 5 MHz	826.5 (165300)		836.5 (167300)		846.5 (169300)	
NR Band n5 (Cell): 10 MHz	829 (165800)		836.5 (167300)		844 (168800)	
NR Band n5 (Cell): 15 MHz	831.5 (166300)		836.5 (167300)		841.5 (168300)	
NR Band n5 (Cell): 20 MHz	834 (166800)		836.5 (167300)		839 (167800)	
NR Band n66 (AWS): 5 MHz	1712.5 (342500)		1745 (349000)		1777.5 (355500)	
NR Band n66 (AWS): 10 MHz	1715 (343000)		1745 (349000)		1775 (355000)	
NR Band n66 (AWS): 15 MHz	1717.5 (343500)		1745 (349000)		1772.5 (354500)	
NR Band n66 (AWS): 20 MHz	1720 (344000)		1745 (349000)		1770 (354000)	
NR Band 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 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 n41: 20 MHz	2506.02 (501204)	2549.49 (509898)	2592.99 (518598)		2636.49 (527298)	2679.99 (535998)
NR Band n41: 40 MHz	2516.01 (503202)	2567.34 (513468)	N/A		2618.67 (523734)	2670 (534000)
NR Band n41: 50 MHz	2521.02 (504204)		2592.99 (518598)		2664.99 (532998)	
NR Band n41: 60 MHz	2526 (505200)		2592.99 (518598)		2659.98 (531996)	
NR Band n41: 80 MHz	2536.02 (507204)		N/A		2649.99 (529998)	
NR Band n41: 90 MHz	2541 (508200)		N/A		2644.98 (528996)	
NR Band n41: 100 MHz	2546.01 (509202)		2592.99 (518598)		2640 (528000)	
NR Band n77: 20 MHz	3710.01 (647334)	3762 (650800)	3813.99 (654266)	3866.01 (657734)	3918 (661200)	3969.99 (664666)
NR Band n77: 40 MHz	3720 (648000)	3768 (651200)	3816 (654400)	3864 (657600)	3912 (660800)	3960 (664000)
NR Band n77: 50 MHz	3725.01 (648334)	3782.49 (652166)	3840 (656000)		3897.51 (659834)	3954.99 (663666)
NR Band n77: 60 MHz	3730.02 (648668)	3803.34 (653556)	N/A	N/A	3876.66 (658444)	3949.98 (663332)
NR Band n77: 80 MHz	3740.01 (649334)	N/A	3840 (656000)		N/A	3939.99 (662666)
NR Band n77: 90 MHz	3745.02 (649668)	N/A	3840 (656000)		N/A	3934.98 (662332)
NR Band n77: 100 MHz	3750 (650000)	N/A	N/A	N/A	N/A	3930 (662000)
SCS for NR Band n71/n12/n5/n66/n25/n2	15 kHz					
SCS for NR Band n41/n77	30 kHz					
Modulations Supported in UL	DFT-s-OFDM: π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM					
A-MPR (Additional MPR) disabled for SAR Testing?	YES					
EN-DC Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations					
LTE Anchor Bands for NR Band n71	LTE Band 66/2/7					
LTE Anchor Bands for NR Band n12	LTE Band 66/2					
LTE Anchor Bands for NR Band n5 (Cell)	LTE Band 66/2/30/7/48					
LTE Anchor Bands for NR Band n66 (AWS)	LTE Band 71/12/13/14/5/48					
LTE Anchor Bands for NR Band n25 (PCS)	LTE Band 12					
LTE Anchor Bands for NR Band n2 (PCS)	LTE Band 12/13/14/5					
LTE Anchor Bands for NR Band n41	LTE Band 66/2/25/26					
LTE Anchor Bands for NR Band n77	LTE Band 12/13/14/66/2/30/7/41					

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:

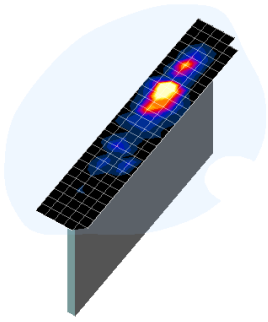

Figure 4-1
Sample SAR Area Scan

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

*Also compliant to IEEE 1528-2013 Table 6

5 TEST CONFIGURATION POSITIONS

5.1 Device Holder

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

5.2 SAR Testing for Tablet per KDB Publication 616217 D04v01r02

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

6 RF EXPOSURE LIMITS

6.1 Uncontrolled Environment

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

6.2 Controlled Environment

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

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

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

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

7 FCC MEASUREMENT PROCEDURES

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

7.1 Measured and Reported SAR

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

7.2 3G SAR Test Reduction Procedure

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

7.3 Procedures Used to Establish RF Signal for SAR

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

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

7.4 SAR Measurement Conditions for UMTS

7.4.1 Output Power Verification

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

7.4.2 Body SAR Measurements

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

7.4.3 SAR Measurements with Rel 5 HSDPA

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

7.4.4 SAR Measurements with Rel 6 HSUPA

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

7.4.5 SAR Measurement Conditions for DC-HSDPA

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

7.5 SAR Measurement Conditions for LTE

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

7.5.1 Spectrum Plots for RB Configurations

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

7.5.2 MPR

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

7.5.3 A-MPR

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

7.5.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r04:

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

According to FCC KDB 447498 D01v06, when the reported (scaled) SAR for LTE Band 41 is ≤ 0.6 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 the highest output power for that channel.

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.

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.

8 RF CONDUCTED POWERS

All conducted power measurements for 2G/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 GSM Conducted Powers

Table 8-1
Measured P_{limit} Ant 1

Maximum Burst-Averaged Output Power					
		GPRS/EDGE Data (GMSK)		*EDGE Data (8-PSK)*	
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**
GSM 850	128	27.34	**24.70**	24.91	23.85
	190	27.41	**24.75**	25.00	23.69
	251	27.23	**24.48**	24.75	23.66
GSM 1900	512	25.30	**21.80**	22.41	21.39
	661	25.38	**21.93**	22.44	21.00
	810	24.61	**21.63**	22.43	21.39

Calculated Maximum Frame-Averaged Output Power					
		GPRS/EDGE Data (GMSK)		*EDGE Data (8-PSK)*	
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**
GSM 850	128	18.14	**18.51**	15.71	17.66
	190	18.21	**18.56**	15.80	17.50
	251	18.03	**18.29**	15.55	17.47
GSM 1900	512	16.10	**15.61**	13.21	15.20
	661	16.18	**15.74**	13.24	14.81
	810	15.41	**15.44**	13.23	15.20

GSM 850	**Frame Avg.Targets:**	18.60	**18.61**	14.80	16.81
GSM 1900		15.50	**15.51**	12.30	14.31

Table 8-2
Measured P_{limit} Ant 3

Maximum Burst-Averaged Output Power					
		GPRS/EDGE Data (GMSK)		*EDGE Data (8-PSK)*	
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**
GSM 850	128	26.91	**24.13**	25.49	**24.00**
	190	27.11	**24.29**	25.73	**24.05**
	251	26.90	**24.15**	25.58	**24.04**
GSM 1900	512	23.82	**20.66**	24.07	20.85
	661	23.84	**20.80**	23.99	20.93
	810	23.56	**20.50**	23.86	20.61

Calculated Maximum Frame-Averaged Output Power					
		GPRS/EDGE Data (GMSK)		*EDGE Data (8-PSK)*	
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**
GSM 850	128	17.71	**17.94**	16.29	**17.81**
	190	17.91	**18.10**	16.53	**17.86**
	251	17.70	**17.96**	16.38	**17.85**
GSM 1900	512	14.62	**14.47**	14.87	14.66
	661	14.64	**14.61**	14.79	14.74
	810	14.36	**14.31**	14.66	14.42

GSM 850	**Frame Avg.Targets:**	18.00	**18.01**	16.30	**18.01**
GSM 1900		15.30	**15.31**	15.30	14.71

Table 8-3
Measured P_{limit} Ant 2b

Maximum Burst-Averaged Output Power					
		GPRS/EDGE Data (GMSK)		*EDGE Data (8-PSK)*	
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**
GSM 1900	512	21.12	**18.25**	21.12	18.12
	661	21.14	**18.21**	21.18	18.32
	810	21.09	**18.04**	20.94	17.99

Calculated Maximum Frame-Averaged Output Power					
		GPRS/EDGE Data (GMSK)		*EDGE Data (8-PSK)*	
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**
GSM 1900	512	11.92	**12.06**	11.92	11.93
	661	11.94	**12.02**	11.98	12.13
	810	11.89	**11.85**	11.74	11.80

GSM 1900	**Frame Avg.Targets:**	12.80	**12.81**	12.00	12.01

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

Maximum Burst-Averaged Output Power					
		GPRS/EDGE Data (GMSK)		*EDGE Data (8-PSK)*	
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**
GSM 1900	512	19.80	**16.90**	19.70	**16.81**
	661	19.86	**16.87**	19.82	**16.74**
	810	19.82	**17.17**	19.89	**16.89**

Calculated Maximum Frame-Averaged Output Power					
		GPRS/EDGE Data (GMSK)		*EDGE Data (8-PSK)*	
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**
GSM 1900	512	10.60	**10.71**	10.50	**10.62**
	661	10.66	**10.68**	10.62	**10.55**
	810	10.62	**10.98**	10.69	**10.70**
GSM 1900	**Frame Avg.Targets:**	10.80	**10.81**	10.80	**10.81**

Note:

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

GSM Class: C
GPRS Multislot class: 10 (Max 2 Tx uplink slots)
EDGE Multislot class: 10 (Max 2 Tx uplink slots)
DTM Multislot Class: N/A

Figure 8-1
Power Measurement Setup

8.2 UMTS Conducted Powers

Table 8-5
Measured P_{limit} Ant 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	18.58	18.60	18.63	14.70	14.61	14.65	15.85	15.58	15.70	-
6	HSDPA	Subtest 1	18.80	18.76	18.79	14.85	14.78	14.74	15.90	15.77	15.69	0
6		Subtest 2	18.74	18.74	18.76	14.82	14.76	14.75	15.89	15.74	15.67	0
6		Subtest 3	18.25	18.23	18.26	14.33	14.27	14.22	15.38	15.25	15.15	0.5
6		Subtest 4	18.22	18.23	18.21	14.30	14.29	14.21	15.39	15.24	15.16	0.5
6	HSUPA	Subtest 1	18.75	18.74	18.77	14.80	14.73	14.70	15.88	15.77	15.69	0
6		Subtest 2	16.81	16.76	16.78	12.74	12.68	12.68	13.85	13.74	13.69	2
6		Subtest 3	17.74	17.72	17.80	13.77	13.65	13.63	14.89	14.73	14.67	1
6		Subtest 4	16.78	16.77	16.79	12.76	12.75	12.74	13.90	13.75	13.68	2
6		Subtest 5	18.76	18.75	18.78	14.82	14.76	14.72	15.92	15.76	15.68	0
8	DC-HSDPA	Subtest 1	18.81	18.78	18.84	14.81	14.71	14.67	15.90	15.77	15.65	0
8		Subtest 2	18.76	18.77	18.80	14.77	14.69	14.64	15.88	15.76	15.67	0
8		Subtest 3	18.29	18.28	18.30	14.28	14.21	14.16	15.40	15.25	15.18	0.5
8		Subtest 4	18.27	18.26	18.30	14.29	14.18	14.15	15.39	15.26	15.19	0.5

Table 8-6
Measured P_{limit} Ant 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	18.10	18.13	18.15	14.52	14.55	14.50	14.91	14.71	14.75	-
6	HSDPA	Subtest 1	18.03	18.12	18.14	14.67	14.66	14.63	14.87	14.70	14.67	0
6		Subtest 2	18.03	18.07	18.12	14.44	14.67	14.61	15.04	14.89	14.82	0
6		Subtest 3	17.49	17.57	17.62	14.36	14.33	14.34	14.56	14.40	14.32	0.5
6		Subtest 4	17.49	17.58	17.59	14.37	14.38	14.36	14.53	14.40	14.36	0.5
6	HSUPA	Subtest 1	18.01	18.12	18.09	14.40	14.42	14.38	14.89	14.73	14.69	0
6		Subtest 2	16.03	16.11	16.11	12.40	12.39	12.37	12.86	12.69	12.68	2
6		Subtest 3	17.03	17.10	17.12	13.40	13.39	13.35	13.88	13.73	13.67	1
6		Subtest 4	16.03	16.10	16.12	12.43	12.43	12.41	12.93	12.74	12.71	2
6		Subtest 5	18.03	18.11	18.09	14.45	14.41	14.39	14.89	14.71	14.70	0
8	DC-HSDPA	Subtest 1	18.09	18.23	18.18	14.61	14.62	14.57	14.95	14.79	14.74	0
8		Subtest 2	18.08	18.15	18.14	14.61	14.58	14.57	14.95	14.81	14.82	0
8		Subtest 3	17.54	17.63	17.64	14.13	14.11	14.06	14.49	14.30	14.28	0.5
8		Subtest 4	17.53	17.67	17.62	14.13	14.12	14.12	14.52	14.31	14.25	0.5

Table 8-7
Measured P_{limit} Ant 2b

3GPP Release Version	Mode	3GPP 34.121 Subtest	AWS Band [dBm]			PCS Band [dBm]			3GPP MPR [dB]
			1312	1412	1513	9262	9400	9538	
99	WCDMA	12.2 kbps RMC	12.37	12.52	12.31	11.99	11.82	11.77	-
6	HSDPA	Subtest 1	12.19	12.22	12.14	12.29	12.20	12.26	0
6		Subtest 2	12.25	12.20	12.08	12.34	12.15	12.21	0
6		Subtest 3	11.76	11.73	11.59	11.79	11.66	11.69	0.5
6		Subtest 4	11.68	11.75	11.55	11.76	11.65	11.73	0.5
6	HSUPA	Subtest 1	12.22	12.21	12.12	12.26	12.17	12.18	0
6		Subtest 2	10.20	10.21	10.12	10.31	10.18	10.23	2
6		Subtest 3	11.18	11.15	11.13	11.30	11.14	11.19	1
6		Subtest 4	10.23	10.13	10.11	10.27	10.13	10.18	2
6		Subtest 5	12.16	12.17	12.08	12.17	12.03	12.12	0
8	DC-HSDPA	Subtest 1	12.17	12.20	12.13	12.35	12.16	12.10	0
8		Subtest 2	12.19	12.21	12.11	12.24	12.15	12.07	0
8		Subtest 3	11.68	11.68	11.57	11.73	11.61	11.60	0.5
8		Subtest 4	11.61	11.67	11.60	11.75	11.62	11.66	0.5

Table 8-8
Measured P_{limit} Ant 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	12.99	12.93	12.83	10.93	10.76	10.81	-
6	HSDPA	Subtest 1	12.51	12.55	12.45	10.85	10.84	11.00	0
6		Subtest 2	12.48	12.52	12.42	10.84	10.75	10.91	0
6		Subtest 3	12.00	12.02	11.98	10.34	10.23	10.45	0.5
6		Subtest 4	12.02	12.01	11.95	10.27	10.23	10.43	0.5
6	HSUPA	Subtest 1	12.49	12.52	12.44	10.81	10.76	10.94	0
6		Subtest 2	10.47	10.54	10.44	8.82	8.76	8.95	2
6		Subtest 3	11.44	11.47	11.42	9.83	9.78	9.91	1
6		Subtest 4	10.48	10.49	10.45	8.84	8.73	8.81	2
6		Subtest 5	12.59	12.51	12.43	10.83	10.77	11.03	0
8	DC-HSDPA	Subtest 1	12.57	12.48	12.49	10.90	10.86	11.00	0
8		Subtest 2	12.58	12.54	12.46	10.85	10.76	10.94	0
8		Subtest 3	12.11	11.88	11.97	10.24	10.17	10.41	0.5
8		Subtest 4	12.10	11.98	11.94	10.25	10.16	10.27	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 8-2
Power Measurement Setup

8.3 LTE Conducted Powers

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

8.3.1 LTE Band 71

Table 8-9
LTE Band 71 Measured P_{limit} Ant 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	**19.07**	0	0
	1	50	18.94		0
	1	99	18.83		0
	50	0	19.10	0-1	0
	50	25	**19.11**		0
	50	50	18.98		0
	100	0	19.06		0
16QAM	1	0	19.15	0-1	0
	1	50	18.97		0
	1	99	18.84		0
	50	0	19.15	0-2	0
	50	25	19.18		0
	50	50	19.04		0
	100	0	19.09		0
64QAM	1	0	19.19	0-2	0
	1	50	19.21		0
	1	99	19.02		0
	50	0	18.97	0-3	0
	50	25	18.95		0
	50	50	18.85		0
	100	0	18.93		0
256QAM	1	0	17.48	0-5	2
	1	50	17.41		2
	1	99	17.38		2
	50	0	17.45		2
	50	25	17.35		2
	50	50	17.55		2
	100	0	17.60		2

Note: LTE Band 71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-10
LTE Band 71 Measured P_{limit} Ant 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	**19.16**	0	0
	1	50	19.08		0
	1	99	19.04		0
	50	0	19.14	0-1	0
	50	25	**19.25**		0
	50	50	19.15		0
	100	0	19.15		0
16QAM	1	0	19.09	0-1	0
	1	50	19.08		0
	1	99	18.94		0
	50	0	18.68	0-2	0
	50	25	18.78		0
	50	50	18.69		0
	100	0	18.69		0
64QAM	1	0	19.20	0-2	0
	1	50	19.23		0
	1	99	19.17		0
	50	0	19.24	0-3	0
	50	25	19.34		0
	50	50	19.20		0
	100	0	19.22		0
256QAM	1	0	19.25	0-5	0
	1	50	19.37		0
	1	99	19.32		0
	50	0	19.22		0
	50	25	19.30		0
	50	50	19.18		0
	100	0	19.15		0

Note: LTE Band 71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

8.3.2 LTE Band 12

Table 8-11
LTE Band 12 Measured P_{limit} Ant 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	**19.77**	0	0
	1	25	19.66		0
	1	49	19.58		0
	25	0	**19.93**	0-1	0
	25	12	19.86		0
	25	25	19.77		0
	50	0	19.76		0
16QAM	1	0	20.07	0-1	0
	1	25	20.02		0
	1	49	19.94		0
	25	0	19.73	0-2	0
	25	12	19.80		0
	25	25	19.69		0
	50	0	19.73		0
64QAM	1	0	19.54	0-2	0
	1	25	19.51		0
	1	49	19.40		0
	25	0	19.75	0-3	0
	25	12	19.78		0
	25	25	19.71		0
	50	0	19.76		0
256QAM	1	0	17.76	0-5	2
	1	25	17.71		2
	1	49	17.68		2
	25	0	17.98		2
	25	12	18.01		2
	25	25	17.88		2
	50	0	17.87		2

Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-12
LTE Band 12 Measured P_{limit} Ant 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	18.57	0	0
	1	25	**18.64**		0
	1	49	18.48		0
	25	0	**18.76**	0-1	0
	25	12	18.69		0
	25	25	18.67		0
	50	0	18.63		0
16QAM	1	0	18.57	0-1	0
	1	25	18.78		0
	1	49	18.64		0
	25	0	18.33	0-2	0
	25	12	18.34		0
	25	25	18.32		0
	50	0	18.23		0
64QAM	1	0	18.70	0-2	0
	1	25	18.64		0
	1	49	18.72		0
	25	0	18.76	0-3	0
	25	12	18.79		0
	25	25	18.83		0
	50	0	18.73		0
256QAM	1	0	18.62	0-5	0
	1	25	18.89		0
	1	49	18.81		0
	25	0	18.28		0
	25	12	18.26		0
	25	25	18.25		0
	50	0	18.27		0

Note: LTE Band 12 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

8.3.3 LTE Band 13

Table 8-13
LTE Band 13 Measured P_{limit} Ant 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	**19.92**	0	0
	1	25	19.70		0
	1	49	19.69		0
	25	0	**19.95**	0-1	0
	25	12	19.92		0
	25	25	19.83		0
	50	0	19.90		0
16QAM	1	0	19.94	0-1	0
	1	25	19.83		0
	1	49	19.72		0
	25	0	19.48	0-2	0
	25	12	19.44		0
	25	25	19.40		0
	50	0	19.44		0
64QAM	1	0	19.65	0-2	0
	1	25	19.58		0
	1	49	19.35		0
	25	0	19.39	0-3	0
	25	12	19.40		0
	25	25	19.32		0
	50	0	19.44		0
256QAM	1	0	17.23	0-5	2
	1	25	17.28		2
	1	49	17.28		2
	25	0	17.19		2
	25	12	17.20		2
	25	25	17.28		2
	50	0	17.31		2

Table 8-14
LTE Band 13 Measured P_{limit} Ant 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	**18.73**	0	0
	1	25	18.42		0
	1	49	18.46		0
	25	0	**18.79**	0-1	0
	25	12	18.78		0
	25	25	18.77		0
	50	0	18.72		0
16QAM	1	0	18.61	0-1	0
	1	25	18.53		0
	1	49	18.52		0
	25	0	18.40	0-2	0
	25	12	18.36		0
	25	25	18.35		0
	50	0	18.30		0
64QAM	1	0	18.72	0-2	0
	1	25	18.69		0
	1	49	18.62		0
	25	0	18.57	0-3	0
	25	12	18.55		0
	25	25	18.58		0
	50	0	18.52		0
256QAM	1	0	18.81	0-5	0
	1	25	18.72		0
	1	49	18.83		0
	25	0	18.91		0
	25	12	18.93		0
	25	25	18.87		0
	50	0	18.89		0

8.3.4 LTE Band 14

Table 8-15
LTE Band 14 Measured P_{limit} Ant 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	**19.77**	0	0
	1	25	19.58		0
	1	49	19.63		0
	25	0	**19.82**	0-1	0
	25	12	19.80		0
	25	25	19.77		0
	50	0	19.76		0
16QAM	1	0	19.55	0-1	0
	1	25	19.40		0
	1	49	19.43		0
	25	0	19.85	0-2	0
	25	12	19.87		0
	25	25	19.80		0
	50	0	19.81		0
64QAM	1	0	19.75	0-2	0
	1	25	19.65		0
	1	49	19.68		0
	25	0	19.34	0-3	0
	25	12	19.29		0
	25	25	19.28		0
	50	0	19.32		0
256QAM	1	0	17.70	0-5	2
	1	25	17.64		2
	1	49	17.63		2
	25	0	17.91		2
	25	12	17.88		2
	25	25	17.83		2
	50	0	17.79		2

Table 8-16
LTE Band 14 Measured P_{limit} Ant 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	18.74	0	0
	1	25	18.77		0
	1	49	**18.78**		0
	25	0	18.85	0-1	0
	25	12	**18.90**		0
	25	25	18.89		0
	50	0	18.77		0
16QAM	1	0	18.73	0-1	0
	1	25	18.78		0
	1	49	18.84		0
	25	0	18.69	0-2	0
	25	12	18.78		0
	25	25	18.73		0
	50	0	18.74		0
64QAM	1	0	18.77	0-2	0
	1	25	18.80		0
	1	49	18.92		0
	25	0	18.97	0-3	0
	25	12	19.00		0
	25	25	19.03		0
	50	0	19.02		0
256QAM	1	0	18.62	0-5	0
	1	25	18.85		0
	1	49	18.98		0
	25	0	18.93		0
	25	12	19.00		0
	25	25	18.98		0
	50	0	18.92		0

8.3.5 LTE Band 26 (Cell)

Table 8-17
LTE Band 26 Measured P_{limit} Ant 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	**18.30**	18.28	18.24	0	0
	1	25	18.13	18.20	18.18		0
	1	49	18.15	18.17	18.17		0
	25	0	**18.38**	18.27	18.27	0-1	0
	25	12	18.34	18.31	18.28		0
	25	25	18.24	18.25	18.24		0
	50	0	18.29	18.27	18.23		0
16QAM	1	0	18.45	18.61	18.33	0-1	0
	1	25	18.31	18.54	18.34		0
	1	49	18.25	18.53	18.27		0
	25	0	18.22	18.11	18.18	0-2	0
	25	12	18.22	18.19	18.13		0
	25	25	18.12	18.11	18.15		0
	50	0	18.22	18.16	18.12		0
64QAM	1	0	18.31	18.25	18.42	0-2	0
	1	25	18.22	18.26	18.49		0
	1	49	18.16	18.23	18.45		0
	25	0	18.27	18.03	18.11	0-3	0
	25	12	18.26	18.13	18.11		0
	25	25	18.17	18.08	18.08		0
	50	0	18.14	18.10	18.02		0
256QAM	1	0	16.53	16.71	16.71	0-5	2
	1	25	16.55	16.51	16.58		2
	1	49	16.74	16.64	16.51		2
	25	0	16.59	16.58	16.58		2
	25	12	16.55	16.71	16.57		2
	25	25	16.58	16.55	16.61		2
	50	0	16.58	16.59	16.59		2

Table 8-18
LTE Band 26 Measured P_{limit} Ant 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	18.15	18.06	**18.21**	0	0
	1	25	18.05	18.07	18.10		0
	1	49	18.08	18.02	18.08		0
	25	0	**18.30**	18.17	18.15	0-1	0
	25	12	18.23	18.21	18.13		0
	25	25	18.14	18.15	18.12		0
	50	0	18.19	18.20	18.13		0
16QAM	1	0	17.81	18.03	18.32	0-1	0
	1	25	17.69	17.99	18.23		0
	1	49	17.67	18.00	18.10		0
	25	0	17.82	17.83	17.77	0-2	0
	25	12	17.80	17.87	17.78		0
	25	25	17.71	17.81	17.74		0
	50	0	17.77	17.73	17.66		0
64QAM	1	0	18.20	17.87	17.78	0-2	0
	1	25	18.12	17.90	17.80		0
	1	49	18.10	17.85	17.76		0
	25	0	18.09	17.97	17.98	0-3	0
	25	12	18.08	18.06	17.93		0
	25	25	18.00	17.96	17.97		0
	50	0	17.98	17.95	17.92		0
256QAM	1	0	18.02	17.67	18.43	0-5	0
	1	25	17.95	17.68	18.45		0
	1	49	17.90	17.67	18.40		0
	25	0	18.02	18.02	18.00		0
	25	12	18.02	18.09	17.96		0
	25	25	17.92	18.00	17.97		0
	50	0	17.96	17.99	17.93		0

8.3.6 LTE Band 5 (Cell)

Table 8-19
LTE Band 5 Measured P_{limit} Ant 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	**18.55**	0	0
	1	25	18.42		0
	1	49	18.41		0
	25	0	18.53	0-1	0
	25	12	**18.64**		0
	25	25	18.60		0
	50	0	18.54		0
16QAM	1	0	18.56	0-1	0
	1	25	18.49		0
	1	49	18.47		0
	25	0	18.32	0-2	0
	25	12	18.41		0
	25	25	18.36		0
	50	0	18.43		0
64QAM	1	0	18.37	0-2	0
	1	25	18.41		0
	1	49	18.36		0
	25	0	18.37	0-3	0
	25	12	18.46		0
	25	25	18.40		0
	50	0	18.34		0
256QAM	1	0	17.73	0-5	1
	1	25	17.69		1
	1	49	17.71		1
	25	0	17.93		1
	25	12	17.93		1
	25	25	17.88		1
	50	0	17.83		1

Note: LTE Band 5 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-20
LTE Band 5 Measured P_{limit} Ant 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	17.95	0	0
	1	25	**18.07**		0
	1	49	18.01		0
	25	0	18.13	0-1	0
	25	12	**18.21**		0
	25	25	18.17		0
	50	0	18.06		0
16QAM	1	0	18.39	0-1	0
	1	25	18.48		0
	1	49	18.39		0
	25	0	17.67	0-2	0
	25	12	17.73		0
	25	25	17.68		0
	50	0	17.58		0
64QAM	1	0	18.07	0-2	0
	1	25	18.08		0
	1	49	18.10		0
	25	0	18.16	0-3	0
	25	12	18.24		0
	25	25	18.08		0
	50	0	18.10		0
256QAM	1	0	18.52	0-5	0
	1	25	18.50		0
	1	49	18.56		0
	25	0	18.07		0
	25	12	18.13		0
	25	25	18.00		0
	50	0	18.19		0

Note: LTE Band 5 at 10 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

8.3.7 LTE Band 66 (AWS)

Table 8-21
LTE Band 66 Measured P_{limit} Ant 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	14.58	**14.76**	14.67	0	0
	1	50	14.46	14.67	14.57		0
	1	99	14.48	14.61	14.48		0
	50	0	**14.81**	14.80	14.64	0-1	0
	50	25	14.80	14.79	14.62		0
	50	50	14.75	14.73	14.61		0
	100	0	14.75	14.74	14.63		0
16QAM	1	0	14.93	15.00	14.73	0-1	0
	1	50	14.85	14.91	14.57		0
	1	99	14.83	14.98	14.51		0
	50	0	14.58	14.55	14.46	0-2	0
	50	25	14.57	14.53	14.44		0
	50	50	14.52	14.51	14.45		0
	100	0	14.58	14.52	14.40		0
64QAM	1	0	14.60	14.57	14.64	0-2	0
	1	50	14.55	14.51	14.61		0
	1	99	14.56	14.55	14.56		0
	50	0	14.64	14.61	14.45	0-3	0
	50	25	14.60	14.63	14.43		0
	50	50	14.62	14.58	14.50		0
	100	0	14.62	14.58	14.40		0
256QAM	1	0	14.67	14.64	14.48	0-5	0
	1	50	14.65	14.65	14.41		0
	1	99	14.68	14.63	14.40		0
	50	0	14.61	14.60	14.46		0
	50	25	14.62	14.61	14.45		0
	50	50	14.55	14.55	14.48		0
	100	0	14.55	14.53	14.42		0

Table 8-22
LTE Band 66 Measured P_{limit} Ant 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	14.20	**14.34**	14.16	0	0
	1	50	14.16	14.23	14.10		0
	1	99	14.13	14.21	14.06		0
	50	0	14.34	14.41	14.31	0-1	0
	50	25	14.41	**14.46**	14.38		0
	50	50	14.40	14.44	14.32		0
	100	0	14.29	14.33	14.22		0
16QAM	1	0	14.49	14.55	14.69	0-1	0
	1	50	14.43	14.49	14.57		0
	1	99	14.42	14.44	14.52		0
	50	0	14.00	14.00	14.10	0-2	0
	50	25	14.11	14.04	14.07		0
	50	50	14.01	14.02	14.01		0
	100	0	14.03	14.00	14.03		0
64QAM	1	0	14.44	14.58	14.38	0-2	0
	1	50	14.33	14.50	14.30		0
	1	99	14.25	14.44	14.22		0
	50	0	14.43	14.34	14.29	0-3	0
	50	25	14.46	14.40	14.28		0
	50	50	14.37	14.34	14.26		0
	100	0	14.44	14.35	14.22		0
256QAM	1	0	14.44	14.65	14.56	0-5	0
	1	50	14.45	14.56	14.39		0
	1	99	14.38	14.53	14.35		0
	50	0	14.41	14.42	14.24		0
	50	25	14.47	14.43	14.23		0
	50	50	14.46	14.40	14.25		0
	100	0	14.47	14.42	14.21		0

Table 8-23
LTE Band 66 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	12.37	**12.58**	12.55	0	0
	1	50	12.27	12.47	12.40		0
	1	99	12.15	12.37	12.24		0
	50	0	**12.59**	12.58	12.41	0-1	0
	50	25	12.52	12.53	12.55		0
	50	50	12.44	12.46	12.36		0
	100	0	12.46	12.49	12.37		0
16QAM	1	0	12.87	12.78	12.70	0-1	0
	1	50	12.75	12.66	12.71		0
	1	99	12.68	12.65	12.55		0
	50	0	12.25	12.29	12.16	0-2	0
	50	25	12.25	12.29	12.24		0
	50	50	12.16	12.19	12.15		0
	100	0	12.28	12.26	12.09		0
64QAM	1	0	12.44	12.78	11.97	0-2	0
	1	50	12.36	12.72	11.95		0
	1	99	12.24	12.61	11.84		0
	50	0	12.38	12.31	12.20	0-3	0
	50	25	12.32	12.30	12.29		0
	50	50	12.25	12.22	12.21		0
	100	0	12.33	12.29	12.22		0
256QAM	1	0	12.24	12.62	12.51	0-5	0
	1	50	12.20	12.55	12.53		0
	1	99	12.15	12.55	12.44		0
	50	0	12.40	12.39	12.33		0
	50	25	12.41	12.41	12.42		0
	50	50	12.38	12.33	12.32		0
	100	0	12.46	12.36	12.31		0

Table 8-24
LTE Band 66 Measured P_{limit} Ant 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	**12.84**	12.60	12.68	0	0
	1	50	12.76	12.55	12.62		0
	1	99	12.75	12.44	12.49		0
	50	0	12.83	**12.90**	12.65	0-1	0
	50	25	12.88	12.89	12.69		0
	50	50	12.81	12.82	12.59		0
	100	0	12.78	12.83	12.67		0
16QAM	1	0	12.73	12.76	12.09	0-1	0
	1	50	12.79	12.77	12.12		0
	1	99	12.74	12.63	12.10		0
	50	0	12.35	12.40	12.16	0-2	0
	50	25	12.39	12.43	12.20		0
	50	50	12.35	12.35	12.13		0
	100	0	12.36	12.39	12.17		0
64QAM	1	0	12.68	12.40	12.23	0-2	0
	1	50	12.80	12.39	12.22		0
	1	99	12.77	12.32	12.10		0
	50	0	12.36	12.45	12.19	0-3	0
	50	25	12.41	12.44	12.24		0
	50	50	12.37	12.37	12.19		0
	100	0	12.36	12.42	12.23		0
256QAM	1	0	12.72	12.86	12.30	0-5	0
	1	50	12.82	12.88	12.28		0
	1	99	12.81	12.79	12.16		0
	50	0	12.66	12.69	12.46		0
	50	25	12.75	12.75	12.49		0
	50	50	12.68	12.73	12.46		0
	100	0	12.68	12.69	12.47		0

8.3.8 LTE Band 25 (PCS)

Table 8-25
LTE Band 25 Measured P_{limit} Ant 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	**16.00**	15.90	15.87	0	0
	1	50	15.99	15.65	15.77		0
	1	99	15.93	15.60	15.75		0
	50	0	**16.18**	15.89	15.82	0-1	0
	50	25	16.15	15.85	15.83		0
	50	50	16.05	15.92	15.89		0
	100	0	15.98	15.91	15.82		0
16QAM	1	0	16.28	16.05	15.86	0-1	0
	1	50	16.25	16.12	15.82		0
	1	99	16.13	16.08	15.84		0
	50	0	15.96	15.68	15.67	0-2	0
	50	25	15.91	15.62	15.64		0
	50	50	15.86	15.67	15.73		0
	100	0	15.83	15.73	15.62		0
64QAM	1	0	16.02	15.63	15.80	0-2	0
	1	50	15.92	15.65	15.84		0
	1	99	15.80	15.62	15.79		0
	50	0	16.04	15.79	15.69	0-3	0
	50	25	16.00	15.72	15.67		0
	50	50	15.90	15.80	15.72		0
	100	0	15.91	15.78	15.65		0
256QAM	1	0	16.14	15.72	15.77	0-5	0
	1	50	16.09	15.70	15.80		0
	1	99	15.91	15.63	15.76		0
	50	0	16.00	15.73	15.71		0
	50	25	15.97	15.69	15.72		0
	50	50	15.85	15.73	15.74		0
	100	0	15.83	15.80	15.67		0

Table 8-26
LTE Band 25 Measured P_{limit} Ant 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	**15.06**	14.74	14.70	0	0
	1	50	14.94	14.67	14.61		0
	1	99	14.90	14.65	14.54		0
	50	0	**15.05**	14.89	14.82	0-1	0
	50	25	15.03	14.80	14.81		0
	50	50	14.98	14.87	14.86		0
	100	0	14.96	14.89	14.80		0
16QAM	1	0	15.17	14.91	14.59	0-1	0
	1	50	15.09	14.83	14.57		0
	1	99	15.03	14.79	14.58		0
	50	0	14.33	14.16	14.07	0-2	0
	50	25	14.31	14.11	14.06		0
	50	50	14.25	14.09	14.10		0
	100	0	14.18	14.12	14.03		0
64QAM	1	0	14.95	14.96	14.92	0-2	0
	1	50	14.94	14.95	14.91		0
	1	99	14.99	14.95	14.91		0
	50	0	14.99	14.94	14.90	0-3	0
	50	25	15.00	14.96	14.92		0
	50	50	14.99	14.96	14.91		0
	100	0	15.01	14.97	14.93		0
256QAM	1	0	15.11	14.98	14.87	0-5	0
	1	50	15.13	14.97	14.85		0
	1	99	15.05	14.96	14.84		0
	50	0	15.10	14.90	14.93		0
	50	25	15.04	14.89	14.96		0
	50	50	15.01	14.91	14.99		0
	100	0	15.00	14.92	14.93		0

Table 8-27
LTE Band 25 Measured P_{limit} Ant 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	**12.27**	11.80	12.08	0	0
	1	50	12.24	11.81	12.17		0
	1	99	12.09	11.82	12.13		0
	50	0	**12.35**	12.12	12.13	0-1	0
	50	25	12.33	12.09	12.26		0
	50	50	12.22	12.15	12.23		0
	100	0	12.26	12.14	12.17		0
16QAM	1	0	12.06	12.30	12.42	0-1	0
	1	50	12.01	12.36	12.49		0
	1	99	11.90	12.31	12.44		0
	50	0	12.15	11.92	11.94	0-2	0
	50	25	12.15	11.90	12.03		0
	50	50	12.10	11.95	12.04		0
	100	0	12.09	11.96	11.96		0
64QAM	1	0	12.03	12.55	12.11	0-2	0
	1	50	12.04	12.59	12.22		0
	1	99	11.92	12.51	12.22		0
	50	0	12.42	12.15	12.18	0-3	0
	50	25	12.41	12.14	12.26		0
	50	50	12.36	12.17	12.21		0
	100	0	12.35	12.16	12.19		0
256QAM	1	0	12.34	12.04	11.75	0-5	0
	1	50	12.29	12.10	11.88		0
	1	99	12.13	12.04	11.77		0
	50	0	12.22	11.96	11.97		0
	50	25	12.23	11.94	12.09		0
	50	50	12.10	11.97	12.05		0
	100	0	12.14	11.98	12.06		0

Table 8-28
LTE Band 25 Measured P_{limit} Ant 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	11.26	11.07	11.26	0	0
	1	50	11.25	11.06	11.29		0
	1	99	11.19	11.09	**11.41**		0
	50	0	11.29	11.26	11.23	0-1	0
	50	25	11.28	11.29	11.22		0
	50	50	11.28	11.29	**11.30**		0
	100	0	11.28	11.29	11.21		0
16QAM	1	0	11.41	11.23	11.22	0-1	0
	1	50	11.29	11.21	11.28		0
	1	99	11.19	11.24	11.33		0
	50	0	11.13	10.94	11.09	0-2	0
	50	25	11.14	11.00	11.21		0
	50	50	11.10	10.99	11.22		0
	100	0	11.09	11.02	11.16		0
64QAM	1	0	11.08	11.16	11.52	0-2	0
	1	50	10.98	11.19	11.65		0
	1	99	10.92	11.28	11.69		0
	50	0	11.09	11.07	11.14	0-3	0
	50	25	11.08	11.13	11.23		0
	50	50	11.06	11.11	11.25		0
	100	0	11.11	11.06	11.18		0
256QAM	1	0	11.30	11.25	11.35	0-5	0
	1	50	11.21	11.29	11.43		0
	1	99	11.10	11.28	11.40		0
	50	0	11.05	10.95	11.05		0
	50	25	11.13	11.04	11.20		0
	50	50	11.03	11.00	11.18		0
	100	0	11.11	11.03	11.11		0

8.3.9 LTE Band 30

Table 8-29
LTE Band 30 Measured P_{limit} Ant 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	**12.64**	0	0
	1	25	12.60		0
	1	49	12.62		0
	25	0	12.70	0-1	0
	25	12	12.68		0
	25	25	**12.71**		0
	50	0	12.63		0
16QAM	1	0	12.90	0-1	0
	1	25	12.91		0
	1	49	12.86		0
	25	0	12.53	0-2	0
	25	12	12.61		0
	25	25	12.63		0
	50	0	12.54		0
64QAM	1	0	12.52	0-2	0
	1	25	12.54		0
	1	49	12.55		0
	25	0	12.56	0-3	0
	25	12	12.61		0
	25	25	12.60		0
	50	0	12.58		0
256QAM	1	0	12.77	0-5	0
	1	25	12.87		0
	1	49	12.85		0
	25	0	12.22		0
	25	12	12.32		0
	25	25	12.34		0
	50	0	12.23		0

Table 8-30
LTE Band 30 Measured P_{limit} Ant 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	**14.32**	0	0
	1	25	14.24		0
	1	49	14.29		0
	25	0	14.30	0-1	0
	25	12	14.29		0
	25	25	**14.43**		0
	50	0	14.31		0
16QAM	1	0	14.37	0-1	0
	1	25	14.47		0
	1	49	14.33		0
	25	0	14.14	0-2	0
	25	12	14.32		0
	25	25	14.36		0
	50	0	14.28		0
64QAM	1	0	14.54	0-2	0
	1	25	14.55		0
	1	49	14.60		0
	25	0	14.28	0-3	0
	25	12	14.31		0
	25	25	14.30		0
	50	0	14.29		0
256QAM	1	0	14.08	0-5	0
	1	25	14.11		0
	1	49	14.02		0
	25	0	14.13		0
	25	12	14.25		0
	25	25	14.24		0
	50	0	14.27		0

Table 8-31
LTE Band 30 Measured P_{limit} Ant 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	**13.56**	0	0
	1	25	13.55		0
	1	49	13.52		0
	25	0	13.45	0-1	0
	25	12	**13.60**		0
	25	25	13.38		0
	50	0	13.55		0
16QAM	1	0	13.50	0-1	0
	1	25	13.45		0
	1	49	13.48		0
	25	0	13.05	0-2	0
	25	12	13.15		0
	25	25	13.13		0
	50	0	13.01		0
64QAM	1	0	13.14	0-2	0
	1	25	13.19		0
	1	49	13.26		0
	25	0	13.35	0-3	0
	25	12	13.42		0
	25	25	13.40		0
	50	0	13.33		0
256QAM	1	0	13.32	0-5	0
	1	25	13.32		0
	1	49	13.39		0
	25	0	12.80		0
	25	12	12.91		0
	25	25	12.93		0
	50	0	12.88		0

Table 8-32
LTE Band 30 Measured P_{limit} Ant 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	11.72	0	0
	1	25	11.69		0
	1	49	**11.74**		0
	25	0	11.64	0-1	0
	25	12	11.77		0
	25	25	**11.81**		0
	50	0	11.73		0
16QAM	1	0	11.64	0-1	0
	1	25	11.55		0
	1	49	11.50		0
	25	0	11.11	0-2	0
	25	12	11.17		0
	25	25	11.20		0
	50	0	11.13		0
64QAM	1	0	11.29	0-2	0
	1	25	11.44		0
	1	49	11.25		0
	25	0	11.34	0-3	0
	25	12	11.39		0
	25	25	11.36		0
	50	0	11.32		0
256QAM	1	0	11.58	0-5	0
	1	25	11.61		0
	1	49	11.58		0
	25	0	11.10		0
	25	12	11.19		0
	25	25	11.15		0
	50	0	11.20		0

8.3.10 LTE Band 7

Table 8-33
LTE Band 7 Measured P_{limit} Ant 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	10.55	**10.83**	10.72	0	0
	1	50	10.52	10.77	10.66		0
	1	99	10.53	10.76	10.61		0
	50	0	10.77	10.83	10.72	0-1	0
	50	25	10.83	**10.88**	10.74		0
	50	50	10.82	10.87	10.69		0
	100	0	10.81	10.82	10.64		0
16QAM	1	0	10.96	11.00	10.70	0-1	0
	1	50	10.95	11.03	10.64		0
	1	99	10.94	10.99	10.55		0
	50	0	10.52	10.63	10.54	0-2	0
	50	25	10.62	10.75	10.59		0
	50	50	10.63	10.71	10.53		0
	100	0	10.65	10.74	10.49		0
64QAM	1	0	10.56	10.72	10.72	0-2	0
	1	50	10.59	10.74	10.68		0
	1	99	10.58	10.72	10.63		0
	50	0	10.64	10.71	10.53	0-3	0
	50	25	10.71	10.81	10.61		0
	50	50	10.72	10.78	10.57		0
	100	0	10.68	10.79	10.50		0
256QAM	1	0	10.50	10.79	10.62	0-5	0
	1	50	10.57	10.80	10.66		0
	1	99	10.60	10.85	10.59		0
	50	0	10.61	10.70	10.56		0
	50	25	10.70	10.77	10.61		0
	50	50	10.69	10.72	10.55		0
	100	0	10.68	10.71	10.50		0

Table 8-34
LTE Band 7 Measured P_{limit} Ant 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	**14.81**	14.48	14.51	0	0
	1	50	14.68	14.52	14.53		0
	1	99	14.51	14.42	14.51		0
	50	0	14.61	14.69	14.52	0-1	0
	50	25	**14.84**	14.76	14.59		0
	50	50	14.72	14.68	14.58		0
	100	0	14.80	14.72	14.52		0
16QAM	1	0	14.82	14.54	14.31	0-1	0
	1	50	14.67	14.53	14.20		0
	1	99	14.65	14.50	14.17		0
	50	0	14.15	14.14	14.03	0-2	0
	50	25	14.21	14.20	14.06		0
	50	50	14.22	14.16	14.09		0
	100	0	14.23	14.21	14.02		0
64QAM	1	0	14.71	14.80	14.49	0-2	0
	1	50	14.77	14.84	14.56		0
	1	99	14.71	14.81	14.50		0
	50	0	14.72	14.68	14.61	0-3	0
	50	25	14.82	14.75	14.59		0
	50	50	14.77	14.72	14.62		0
	100	0	14.79	14.71	14.55		0
256QAM	1	0	14.46	14.55	14.47	0-5	0
	1	50	14.53	14.62	14.53		0
	1	99	14.55	14.65	14.48		0
	50	0	14.58	14.50	14.39		0
	50	25	14.65	14.60	14.41		0
	50	50	14.60	14.54	14.44		0
	100	0	14.60	14.53	14.36		0

Table 8-35
LTE Band 7 Measured P_{limit} Ant 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	13.32	**13.43**	13.28	0	0
	1	50	13.34	13.32	13.18		0
	1	99	13.31	13.33	13.12		0
	50	0	**13.49**	13.41	13.39	0-1	0
	50	25	13.43	13.34	13.35		0
	50	50	13.40	13.37	13.24		0
	100	0	13.40	13.40	13.29		0
16QAM	1	0	13.35	13.59	13.46	0-1	0
	1	50	13.26	13.48	13.42		0
	1	99	13.30	13.35	13.32		0
	50	0	13.22	13.11	13.02	0-2	0
	50	25	13.18	13.11	13.12		0
	50	50	13.17	13.06	13.00		0
	100	0	13.18	13.15	13.10		0
64QAM	1	0	13.02	13.29	13.22	0-2	0
	1	50	13.06	13.22	13.19		0
	1	99	13.04	13.07	13.08		0
	50	0	13.18	13.20	13.01	0-3	0
	50	25	13.15	13.32	12.94		0
	50	50	13.12	13.19	13.01		0
	100	0	13.19	13.29	12.93		0
256QAM	1	0	13.37	13.38	13.12	0-5	0
	1	50	13.47	13.25	13.11		0
	1	99	13.43	13.20	13.16		0
	50	0	13.40	13.31	13.18		0
	50	25	13.41	13.35	13.07		0
	50	50	13.45	13.32	13.10		0
	100	0	13.46	13.34	13.09		0

Table 8-36
LTE Band 7 Measured P_{limit} Ant 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	11.21	11.23	**11.30**	0	0
	1	50	11.17	11.12	11.16		0
	1	99	11.09	11.08	11.16		0
	50	0	**11.43**	11.42	11.24	0-1	0
	50	25	11.40	11.31	11.23		0
	50	50	11.39	11.29	11.25		0
	100	0	11.29	11.20	11.22		0
16QAM	1	0	11.24	11.47	11.32	0-1	0
	1	50	11.19	11.38	11.23		0
	1	99	11.17	11.32	11.24		0
	50	0	10.92	10.86	10.72	0-2	0
	50	25	10.89	10.84	10.71		0
	50	50	10.83	10.81	10.76		0
	100	0	10.86	10.82	10.73		0
64QAM	1	0	10.87	11.05	11.25	0-2	0
	1	50	10.88	11.02	11.20		0
	1	99	10.79	11.00	11.18		0
	50	0	10.95	10.95	10.76	0-3	0
	50	25	10.93	10.94	10.75		0
	50	50	10.88	10.90	10.76		0
	100	0	10.95	10.87	10.74		0
256QAM	1	0	11.07	11.12	11.13	0-5	0
	1	50	11.12	11.11	11.14		0
	1	99	11.06	11.05	11.02		0
	50	0	10.97	10.91	10.80		0
	50	25	10.98	10.89	10.79		0
	50	50	10.92	10.81	10.81		0
	100	0	10.95	10.85	10.77		0

8.3.11 LTE Band 41

Table 8-37
LTE Band 41 Measured P_{limit} Ant 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	12.90	12.80	12.79	12.75	**12.94**	0	0
	1	50	12.90	12.73	12.56	12.62	12.75		0
	1	99	12.93	12.72	12.72	12.71	12.85		0
	50	0	12.97	**13.01**	12.79	12.88	12.70	0-1	0
	50	25	12.98	12.88	12.86	12.86	12.89		0
	50	50	12.97	12.89	12.87	12.90	12.73		0
	100	0	12.90	12.93	12.78	12.81	12.86		0
16QAM	1	0	12.84	12.79	12.44	12.44	12.62	0-1	0
	1	50	12.75	12.54	12.33	12.33	12.46		0
	1	99	12.76	12.43	12.38	12.38	12.51		0
	50	0	12.71	12.66	12.54	12.54	12.57	0-2	0
	50	25	12.81	12.65	12.59	12.59	12.62		0
	50	50	12.77	12.64	12.57	12.57	12.60		0
	100	0	12.74	12.67	12.60	12.60	12.64		0
64QAM	1	0	12.60	12.75	12.92	12.92	12.70	0-2	0
	1	50	12.62	12.70	12.76	12.76	12.56		0
	1	99	12.59	12.62	12.90	12.90	12.68		0
	50	0	12.75	12.77	12.52	12.52	12.60	0-3	0
	50	25	12.78	12.79	12.61	12.61	12.65		0
	50	50	12.76	12.71	12.65	12.65	12.64		0
	100	0	12.82	12.75	12.64	12.64	12.69		0
256QAM	1	0	12.70	12.57	12.75	12.75	12.44	0-5	0
	1	50	12.59	12.45	12.64	12.64	12.42		0
	1	99	12.67	12.43	12.79	12.79	12.55		0
	50	0	12.60	12.59	12.44	12.44	12.51		0
	50	25	12.64	12.65	12.52	12.52	12.57		0
	50	50	12.63	12.57	12.54	12.54	12.59		0
	100	0	12.65	12.60	12.55	12.55	12.59		0

Table 8-38
LTE Band 41 Measured P_{limit} Ant 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	13.07	13.41	13.11	13.19	**13.43**	0	0
	1	50	13.05	13.20	12.90	13.08	13.21		0
	1	99	13.14	13.16	13.26	13.14	13.30		0
	50	0	13.28	13.40	13.31	13.26	**13.41**	0-1	0
	50	25	13.33	13.38	13.25	13.24	13.22		0
	50	50	13.37	13.24	13.25	13.25	13.18		0
	100	0	13.35	13.36	13.26	13.18	13.38		0
16QAM	1	0	13.71	13.43	13.44	13.07	13.29	0-1	0
	1	50	13.73	13.35	13.20	12.91	12.95		0
	1	99	13.61	13.34	13.30	12.94	13.11		0
	50	0	13.41	13.25	13.07	13.03	12.68	0-2	0
	50	25	13.52	13.16	13.21	13.10	12.90		0
	50	50	13.56	13.04	13.24	12.83	12.86		0
	100	0	13.37	13.31	13.16	13.00	12.75		0
64QAM	1	0	13.42	13.16	13.30	13.19	12.58	0-2	0
	1	50	13.35	13.15	13.26	13.20	12.45		0
	1	99	13.41	13.12	13.28	13.16	12.43		0
	50	0	13.34	13.37	13.24	13.23	12.94	0-3	0
	50	25	13.40	13.42	13.23	13.30	12.79		0
	50	50	13.28	13.54	13.15	13.17	12.90		0
	100	0	13.38	13.54	13.32	13.13	12.88		0
256QAM	1	0	13.46	13.35	13.34	13.15	13.02	0-5	0
	1	50	13.28	13.22	13.25	13.23	12.92		0
	1	99	13.41	13.17	13.13	13.20	12.91		0
	50	0	13.30	13.22	13.09	13.14	12.86		0
	50	25	13.36	13.31	13.16	13.09	12.86		0
	50	50	13.30	13.30	13.08	13.03	12.88		0
	100	0	13.35	13.25	13.24	13.05	12.95		0

Table 8-39
LTE Band 41 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	14.77	14.78	14.93	**15.01**	14.87	0	0
	1	50	14.78	14.67	14.77	14.78	14.80		0
	1	99	14.68	14.66	14.91	14.86	14.91		0
	50	0	14.94	15.00	14.91	**15.06**	14.63	0-1	0
	50	25	15.01	14.94	14.96	14.99	14.85		0
	50	50	14.96	14.89	14.94	15.03	14.97		0
	100	0	14.99	14.93	14.95	14.96	14.96		0
16QAM	1	0	14.91	15.17	15.22	15.40	15.20	0-1	0
	1	50	14.88	15.00	15.21	15.27	15.05		0
	1	99	14.87	15.01	15.34	15.30	15.13		0
	50	0	14.92	14.82	14.85	14.96	14.85	0-2	0
	50	25	14.99	14.85	14.93	14.95	14.95		0
	50	50	14.97	14.80	14.92	14.97	14.96		0
	100	0	14.95	14.89	14.90	14.94	14.94		0
64QAM	1	0	14.81	15.00	14.35	14.99	15.06	0-2	0
	1	50	14.78	14.94	14.37	14.89	15.01		0
	1	99	14.80	14.81	14.50	14.96	15.12		0
	50	0	14.97	14.86	14.83	15.07	14.88	0-3	0
	50	25	14.99	14.88	14.95	15.02	14.96		0
	50	50	14.97	14.84	14.96	15.07	14.98		0
	100	0	14.98	14.85	14.95	14.99	14.94		0
256QAM	1	0	14.91	15.05	14.95	15.01	15.03	0-5	0
	1	50	14.83	14.89	14.85	14.94	15.01		0
	1	99	14.91	14.90	14.94	14.95	15.11		0
	50	0	14.90	14.86	14.88	14.96	14.92		0
	50	25	14.97	14.93	14.97	14.98	14.99		0
	50	50	14.94	14.85	14.91	14.99	15.00		0
	100	0	14.96	14.89	14.93	14.97	15.03		0

Table 8-40
LTE Band 41 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	13.24	13.30	**13.45**	13.38	13.37	0	0
	1	50	13.20	13.21	13.31	13.23	13.24		0
	1	99	13.16	13.12	13.35	13.28	13.26		0
	50	0	13.37	13.35	13.45	13.45	13.39	0-1	0
	50	25	13.44	13.35	**13.49**	13.46	13.37		0
	50	50	13.41	13.32	13.46	13.45	13.40		0
	100	0	13.40	13.36	13.35	13.44	13.32		0
16QAM	1	0	13.11	13.31	13.43	13.26	13.48	0-1	0
	1	50	13.07	13.22	13.29	13.07	13.34		0
	1	99	13.04	13.17	13.34	13.14	13.42		0
	50	0	13.15	13.04	13.07	13.17	13.07	0-2	0
	50	25	13.20	13.09	13.09	13.22	13.07		0
	50	50	13.18	13.03	13.10	13.15	13.10		0
	100	0	13.16	13.07	13.11	13.18	13.04		0
64QAM	1	0	13.43	12.72	13.24	12.91	13.52	0-2	0
	1	50	13.37	12.70	13.26	12.80	13.47		0
	1	99	13.35	12.63	13.29	12.83	13.54		0
	50	0	13.27	13.26	13.39	13.36	13.33	0-3	0
	50	25	13.32	13.28	13.46	13.29	13.31		0
	50	50	13.31	13.20	13.42	13.34	13.37		0
	100	0	13.32	13.29	13.45	13.31	13.30		0
256QAM	1	0	13.34	13.42	13.30	13.42	13.48	0-5	0
	1	50	13.22	13.32	13.28	13.32	13.42		0
	1	99	13.31	13.35	13.38	13.40	13.50		0
	50	0	13.28	13.29	13.36	13.37	13.37		0
	50	25	13.34	13.31	13.34	13.35	13.37		0
	50	50	13.30	13.24	13.39	13.37	13.40		0
	100	0	13.33	13.28	13.41	13.31	13.21		0

8.3.12 LTE Band 41 PC2

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

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	14.46	14.38	14.35	14.53	**14.59**	0	0
	1	50	14.45	14.34	14.30	14.45	14.51		0
	1	99	14.37	14.24	14.27	14.47	14.50		0
	50	0	14.57	14.55	14.50	14.55	14.25	0-1	0
	50	25	14.63	14.62	14.59	14.56	**14.70**		0
	50	50	14.57	14.59	14.52	14.59	14.53		0
	100	0	14.58	14.58	14.50	14.52	14.46		0

Table 8-42
LTE Band 41 PC2 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	15.50	15.17	15.37	15.24	15.39	0	0
	1	50	**15.55**	15.19	15.32	15.18	15.36		0
	1	99	15.46	15.12	15.30	15.21	15.34		0
	50	0	15.49	15.47	15.39	15.34	15.35	0-1	0
	50	25	**15.60**	15.50	15.46	15.35	15.39		0
	50	50	15.57	15.45	15.41	15.32	15.37		0
	100	0	15.54	15.47	15.40	15.30	15.36		0

Table 8-43
LTE Band 41 PC2 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	**17.21**	17.06	16.92	16.99	17.16	0	0
	1	50	17.13	17.11	16.91	17.01	17.10		0
	1	99	16.98	17.05	16.93	17.11	17.12		0
	50	0	17.23	17.07	17.12	17.26	17.30	0-1	0
	50	25	**17.31**	17.17	17.21	17.30	17.28		0
	50	50	17.22	17.11	17.17	17.29	17.24		0
	100	0	17.20	17.13	17.11	17.20	17.18		0

Table 8-44
LTE Band 41 PC2 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	15.33	15.26	15.41	15.18	15.49	0	0
	1	50	15.31	15.25	15.34	15.25	15.44		0
	1	99	15.23	15.23	15.33	15.37	**15.54**		0
	50	0	15.53	15.50	15.32	15.51	15.46	0-1	0
	50	25	15.58	15.56	15.41	**15.63**	15.44		0
	50	50	15.52	15.53	15.38	15.58	15.52		0
	100	0	15.52	15.51	15.39	15.53	15.41		0

8.3.13 LTE Band 48

Table 8-45
LTE Band 48 Measured P_{limit} Ant 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	12.64	12.73	12.95	13.13	0	0
	1	50	12.62	12.69	12.91	13.14		0
	1	99	12.94	12.82	12.92	**13.15**		0
	50	0	12.72	12.74	12.97	13.27	0-1	0
	50	25	12.82	12.82	13.07	13.28		0
	50	50	12.81	12.89	13.09	**13.31**		0
	100	0	12.80	12.84	13.10	13.14		0
16QAM	1	0	12.30	12.91	13.19	12.80	0-1	0
	1	50	12.18	12.84	13.14	12.77		0
	1	99	12.26	12.95	13.15	12.86		0
	50	0	12.61	12.92	13.04	13.13	0-2	0
	50	25	12.78	13.01	13.03	13.16		0
	50	50	12.70	12.99	13.10	13.26		0
	100	0	12.75	13.06	12.98	13.18		0
64QAM	1	0	12.80	12.16	12.68	13.11	0-2	0
	1	50	12.77	12.15	12.73	13.17		0
	1	99	12.85	12.23	12.80	13.27		0
	50	0	12.63	12.64	12.84	13.02	0-3	0
	50	25	12.73	12.73	12.86	13.05		0
	50	50	12.71	12.77	12.88	13.10		0
	100	0	12.69	12.77	12.84	13.05		0
256QAM	1	0	11.68	11.64	11.68	11.67	0-5	1
	1	50	11.65	11.68	11.62	11.63		1
	1	99	11.57	11.61	11.74	11.87		1
	50	0	11.55	11.57	11.75	11.65		1
	50	25	11.67	11.57	11.85	11.55		1
	50	50	11.53	11.71	11.73	11.71		1
	100	0	11.51	11.57	11.69	11.54		1

Table 8-46
LTE Band 48 Measured P_{limit} Ant 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	11.48	11.48	**11.75**	11.60	0	0
	1	50	11.38	11.44	11.55	11.45		0
	1	99	11.56	11.58	11.66	11.49		0
	50	0	11.70	11.53	11.63	11.63	0-1	0
	50	25	11.69	11.50	11.70	11.46		0
	50	50	**11.71**	11.60	11.44	11.37		0
	100	0	11.61	11.55	11.61	11.70		0
16QAM	1	0	11.45	11.89	11.84	11.86	0-1	0
	1	50	11.31	11.62	11.87	11.80		0
	1	99	11.39	11.75	11.95	11.93		0
	50	0	11.51	11.56	11.43	11.63	0-2	0
	50	25	11.43	11.52	11.57	11.79		0
	50	50	11.53	11.37	11.56	11.78		0
	100	0	11.58	11.43	11.45	11.78		0
64QAM	1	0	11.75	11.04	11.43	11.85	0-2	0
	1	50	11.61	10.90	11.42	11.64		0
	1	99	11.62	10.95	11.44	11.83		0
	50	0	11.46	11.36	11.55	11.70	0-3	0
	50	25	11.35	11.49	11.57	11.63		0
	50	50	11.38	11.23	11.67	11.66		0
	100	0	11.56	11.46	11.72	11.66		0
256QAM	1	0	11.63	11.82	11.69	11.96	0-5	0
	1	50	11.57	11.78	11.68	11.99		0
	1	99	11.66	11.86	11.72	12.03		0
	50	0	11.55	11.83	11.72	11.90		0
	50	25	11.65	11.80	11.75	11.99		0
	50	50	11.66	11.74	11.78	11.85		0
	100	0	11.62	11.77	11.91	11.92		0

Table 8-47
LTE Band 48 Measured P_{limit} Ant 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	**13.58**	13.46	13.40	13.35	0	0
	1	50	13.50	13.38	13.23	13.20		0
	1	99	13.50	13.43	13.31	13.30		0
	50	0	**13.59**	13.56	13.53	13.40	0-1	0
	50	25	13.58	13.55	13.52	13.39		0
	50	50	13.47	13.47	13.50	13.37		0
	100	0	13.57	13.51	13.50	13.40		0
16QAM	1	0	13.79	13.76	13.47	13.53	0-1	0
	1	50	13.62	13.62	13.31	13.36		0
	1	99	13.69	13.68	13.40	13.41		0
	50	0	13.51	13.41	13.45	13.25	0-2	0
	50	25	13.50	13.42	13.42	13.21		0
	50	50	13.39	13.31	13.43	13.20		0
	100	0	13.51	13.43	13.42	13.25		0
64QAM	1	0	13.77	13.39	12.93	13.42	0-2	0
	1	50	13.63	13.25	12.88	13.36		0
	1	99	13.70	13.35	12.93	13.42		0
	50	0	13.57	13.50	13.38	13.26	0-3	0
	50	25	13.55	13.49	13.36	13.20		0
	50	50	13.51	13.48	13.37	13.26		0
	100	0	13.53	13.51	13.36	13.17		0
256QAM	1	0	13.75	13.67	13.71	13.43	0-5	0
	1	50	13.65	13.55	13.65	13.34		0
	1	99	13.69	13.61	13.71	13.41		0
	50	0	13.71	13.65	13.57	13.37		0
	50	25	13.70	13.67	13.56	13.36		0
	50	50	13.67	13.69	13.58	13.40		0
	100	0	13.70	13.65	13.56	13.36		0

Table 8-48
LTE Band 48 Measured P_{limit} Ant 4a - 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	13.05	13.02	13.03	13.03	0	0
	1	50	13.01	12.93	12.97	12.86		0
	1	99	13.02	12.91	12.94	**13.09**		0
	50	0	13.10	13.09	**13.14**	12.84	0-1	0
	50	25	13.09	13.06	13.12	12.81		0
	50	50	13.04	13.01	13.06	12.78		0
	100	0	13.05	13.03	13.08	13.04		0
16QAM	1	0	12.69	12.10	12.71	12.20	0-1	0
	1	50	12.67	12.15	12.82	12.18		0
	1	99	12.58	12.15	12.76	12.15		0
	50	0	12.77	12.60	12.76	12.52	0-2	0
	50	25	12.72	12.65	12.79	12.55		0
	50	50	12.64	12.53	12.78	12.51		0
	100	0	12.70	12.55	12.76	12.54		0
64QAM	1	0	12.38	12.27	12.43	12.35	0-2	0
	1	50	12.40	12.32	12.43	12.10		0
	1	99	12.39	12.34	12.46	12.10		0
	50	0	12.36	12.32	12.44	12.20	0-3	0
	50	25	12.40	12.33	12.44	12.18		0
	50	50	12.41	12.33	12.45	12.16		0
	100	0	12.39	12.34	12.44	12.20		0
256QAM	1	0	12.55	12.42	12.57	12.30	0-5	0
	1	50	12.45	12.34	12.56	12.28		0
	1	99	12.45	12.39	12.53	12.17		0
	50	0	12.48	12.46	12.42	12.29		0
	50	25	12.54	12.49	12.56	12.24		0
	50	50	12.41	12.47	12.47	12.27		0
	100	0	12.48	12.44	12.47	12.25		0

8.3.14 LTE Uplink Carrier Aggregation Conducted Powers

Table 8-49
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 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	0	LTE B5	5	20453	829.3	2453	874.3	QPSK	1	24	18.50	18.55

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7C	LTE B7	20	21350	2560.0	3350	2680.0	QPSK	50	0	LTE B7	20	21152	2540.2	3152	2660.2	QPSK	50	50	11.34	10.72

	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	50	0	LTE B41	20	41292	2660.2	QPSK	50	50	12.66	12.70

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	41490	2680.0	QPSK	50	0	LTE B41 PC2	20	41292	2660.2	QPSK	50	50	14.60	14.25

	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	1	0	LTE B48	20	56442	3670.2	QPSK	1	99	13.55	13.13

Table 8-50
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 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)
CA_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	50	0	LTE B5	5	20453	829.3	2453	874.3	QPSK	25	0	18.55	18.06

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7C	LTE B7	20	21350	2560.0	3350	2680.0	QPSK	50	0	LTE B7	20	21152	2540.2	3152	2660.2	QPSK	50	50	14.84	14.52

	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	50	0	LTE B41	20	41292	2660.2	QPSK	50	50	12.90	13.41

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	41490	2680.0	QPSK	50	0	LTE B41 PC2	20	41292	2660.2	QPSK	50	50	15.20	15.35

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	55340	3560.0	QPSK	50	50	LTE B48	20	55538	3579.8	QPSK	50	0	11.60	11.71

Table 8-51
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 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	21350	2560.0	3350	2680.0	QPSK	50	0	LTE B7	20	21152	2540.2	3152	2660.2	QPSK	50	50	14.20	13.39

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	41490	2680.0	QPSK	50	0	LTE B41	20	41292	2660.2	QPSK	50	50	15.43	14.63

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	41490	2680.0	QPSK	50	0	LTE B41 PC2	20	41292	2660.2	QPSK	50	50	16.79	17.30

Table 8-52
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 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	56207	3646.7	QPSK	1	0	LTE B48	20	56009	3626.9	QPSK	1	99	13.75	13.40

Table 8-53
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 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)
CA_7C	LTE B7	20	20850	2510	2850	2630	QPSK	100	0	LTE B7	20	21048	2529.8	3048	2649.8	QPSK	100	0	11.60	11.29

	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	13.19	13.38

	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	15.90	15.18

Table 8-54
LTE Uplink Carrier Aggregation Measured P_{limit} – Ant 4a

	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	12.98	12.84

Notes:

1. This device supports uplink carrier aggregation for LTE CA_7C, LTE CA_5B, LTE CA_41C and LTE CA_48C 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 8-3
Power Measurement Setup

8.4 NR Conducted Powers

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

8.4.1 NR Band n71

Table 8-55
NR Band n71 Measured P_{limit} Ant 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	19.30	0	0.0
	1	53	19.43		0.0
	1	104	19.21		0.0
	50	0	19.38	0-0.5	0.0
	50	28	19.36	0	0.0
	50	56	19.11	0-0.5	0.0
	100	0	19.40		0.0
DFT-s-OFDM QPSK	1	1	**19.50**	0	0.0
	1	53	19.47		0.0
	1	104	19.35		0.0
	50	0	**19.38**	0-1	0.0
	50	28	19.37	0	0.0
	50	56	19.36	0-1	0.0
	100	0	19.37		0.0
DFT-s-OFDM 16QAM	1	1	19.35	0-1	0.0
CP-OFDM QPSK	1	1	19.50	0-1.5	0.0

Note: NR Band n71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-56
NR Band n71 Measured P_{limit} Ant 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	19.33	0	0.0
	1	53	19.35		0.0
	1	104	19.23		0.0
	50	0	19.29	0-0.5	0.0
	50	28	19.31	0	0.0
	50	56	19.29	0-0.5	0.0
	100	0	19.32		0.0
DFT-s-OFDM QPSK	1	1	19.37	0	0.0
	1	53	**19.45**		0.0
	1	104	19.26		0.0
	50	0	19.26	0-1	0.0
	50	28	**19.32**	0	0.0
	50	56	19.27	0-1	0.0
	100	0	19.28		0.0
DFT-s-OFDM 16QAM	1	1	19.42	0-1	0.0
CP-OFDM QPSK	1	1	19.37	0-1.5	0.0

Note: NR Band n71 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

8.4.2 NR Band n12

Table 8-57
NR Band n12 Measured P_{limit} Ant 1 - 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	19.25	0	0.0
	1	40	19.22		0.0
	1	77	19.05		0.0
	36	0	19.25	0-0.5	0.0
	36	22	19.28	0	0.0
	36	43	19.18	0-0.5	0.0
	75	0	19.14		0.0
DFT-s-OFDM QPSK	1	1	19.22	0	0.0
	1	40	**19.27**		0.0
	1	77	19.02		0.0
	36	0	19.18	0-1	0.0
	36	22	**19.22**	0	0.0
	36	43	19.11	0-1	0.0
	75	0	19.20		0.0
DFT-s-OFDM 16QAM	1	1	19.55	0-1	0.0
CP-OFDM QPSK	1	1	19.51	0-1.5	0.0

Note: NR Band n12 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-58
NR Band n12 Measured P_{limit} Ant 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	18.64	0	0.0
	1	40	18.75		0.0
	1	77	18.46		0.0
	36	0	18.65	0-0.5	0.0
	36	22	18.57	0	0.0
	36	43	18.53	0-0.5	0.0
	75	0	18.64		0.0
DFT-s-OFDM QPSK	1	1	18.65	0	0.0
	1	40	**18.75**		0.0
	1	77	18.45		0.0
	36	0	18.61	0-1	0.0
	36	22	**18.65**	0	0.0
	36	43	18.58	0-1	0.0
	75	0	18.64		0.0
DFT-s-OFDM 16QAM	1	1	18.39	0-1	0.0
CP-OFDM QPSK	1	1	18.89	0-1.5	0.0

Note: NR Band n12 at 15 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

8.4.3 NR Band n5

Table 8-59
NR Band n5 Measured P_{limit} Ant 1 - 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	18.17	0	0.0
	1	53	18.02		0.0
	1	104	17.96		0.0
	50	0	18.12	0-0.5	0.0
	50	28	17.99	0	0.0
	50	56	17.92	0-0.5	0.0
	100	0	18.03		0.0
DFT-s-OFDM QPSK	1	1	**18.06**	0	0.0
	1	53	17.99		0.0
	1	104	18.02		0.0
	50	0	**18.06**	0-1	0.0
	50	28	18.00	0	0.0
	50	56	17.94	0-1	0.0
	100	0	18.00		0.0
DFT-s-OFDM 16QAM	1	1	18.03	0-1	0.0
CP-OFDM QPSK	1	1	18.09	0-1.5	0.0

Note: NR Band n5 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-60
NR Band n5 Measured P_{limit} Ant 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	18.42		0.0
	1	104	18.31		0.0
	50	0	18.43	0-0.5	0.0
	50	28	18.40	0	0.0
	50	56	18.33	0-0.5	0.0
	100	0	18.46		0.0
DFT-s-OFDM QPSK	1	1	**18.56**	0	0.0
	1	53	18.47		0.0
	1	104	18.32		0.0
	50	0	**18.50**	0-1	0.0
	50	28	18.41	0	0.0
	50	56	18.31	0-1	0.0
	100	0	18.45		0.0
DFT-s-OFDM 16QAM	1	1	18.47	0-1	0.0
CP-OFDM QPSK	1	1	18.55	0-1.5	0.0

Note: NR Band n5 at 20 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

8.4.4 NR Band n66

Table 8-61
NR Band n66 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	14.86	14.68	14.73	0	0.0
	1	53	14.57	14.62	14.67		0.0
	1	104	14.83	14.73	14.77		0.0
	50	0	14.61	14.60	14.60	0-0.5	0.0
	50	28	14.58	14.64	14.57	0	0.0
	50	56	14.71	14.65	14.60	0-0.5	0.0
	100	0	14.74	14.67	14.55		0.0
DFT-s-OFDM QPSK	1	1	14.75	**14.76**	14.70	0	0.0
	1	53	14.58	14.64	14.56		0.0
	1	104	14.74	14.74	14.66		0.0
	50	0	14.75	**14.81**	14.70	0-1	0.0
	50	28	14.71	14.77	14.65	0	0.0
	50	56	14.74	14.73	14.63	0-1	0.0
	100	0	14.63	14.68	14.58		0.0
DFT-s-OFDM 16QAM	1	1	14.71	14.68	14.70	0-1	0.0
CP-OFDM QPSK	1	1	14.76	14.82	14.77	0-1.5	0.0

Table 8-62
NR Band n66 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	15.09	14.92	14.82	0	0.0
	1	53	14.95	14.80	14.88		0.0
	1	104	14.88	14.98	14.97		0.0
	50	0	14.99	14.92	14.80	0-0.5	0.0
	50	28	14.91	14.90	14.83	0	0.0
	50	56	14.89	14.91	14.93	0-0.5	0.0
	100	0	14.95	14.92	14.80		0.0
DFT-s-OFDM QPSK	1	1	15.01	**15.12**	14.91	0	0.0
	1	53	14.92	15.04	14.72		0.0
	1	104	14.88	15.03	14.93		0.0
	50	0	15.02	14.98	14.82	0-1	0.0
	50	28	15.01	14.97	14.86	0	0.0
	50	56	14.96	**15.05**	14.84	0-1	0.0
	100	0	14.99	15.01	14.81		0.0
DFT-s-OFDM 16QAM	1	1	15.04	15.03	15.02	0-1	0.0
CP-OFDM QPSK	1	1	14.67	15.00	14.74	0-1.5	0.0

Table 8-63
NR Band n66 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	12.53	12.51	12.50	0	0.0
	1	53	12.37	12.39	12.36		0.0
	1	104	12.45	12.50	12.40		0.0
	50	0	12.50	12.43	12.37	0-0.5	0.0
	50	28	12.44	12.42	12.35	0	0.0
	50	56	12.46	12.36	12.30	0-0.5	0.0
	100	0	12.45	12.41	12.32		0.0
DFT-s-OFDM QPSK	1	1	12.43	**12.48**	12.40	0	0.0
	1	53	12.39	12.32	12.28		0.0
	1	104	12.44	12.33	12.27		0.0
	50	0	12.39	12.38	12.31	0-1	0.0
	50	28	12.44	12.41	12.36	0	0.0
	50	56	12.43	**12.49**	12.34	0-1	0.0
	100	0	12.40	12.38	12.34		0.0
DFT-s-OFDM 16QAM	1	1	12.40	12.48	12.47	0-1	0.0
CP-OFDM QPSK	1	1	12.48	12.50	12.48	0-1.5	0.0

Table 8-64
NR Band n66 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	12.95	12.87	12.40	0	0.0
	1	53	12.84	12.74	12.69		0.0
	1	104	12.86	12.77	12.73		0.0
	50	0	12.76	12.76	12.66	0-0.5	0.0
	50	28	12.79	12.78	12.67	0	0.0
	50	56	12.78	12.77	12.73	0-0.5	0.0
	100	0	12.77	12.76	12.71		0.0
DFT-s-OFDM QPSK	1	1	12.89	12.89	12.91	0	0.0
	1	53	12.77	12.81	12.82		0.0
	1	104	12.78	**12.96**	12.83		0.0
	50	0	12.75	**12.81**	12.66	0-1	0.0
	50	28	12.76	12.77	12.70	0	0.0
	50	56	12.73	12.74	12.65	0-1	0.0
	100	0	12.75	12.76	12.66		0.0
DFT-s-OFDM 16QAM	1	1	12.63	12.57	12.55	0-1	0.0
CP-OFDM QPSK	1	1	12.89	12.91	12.86	0-1.5	0.0

8.4.5 NR Band n25

Table 8-65
NR Band n25 Measured P_{limit} Ant 1 - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	15.81	15.65	15.49	0	0.0
	1	53	15.59	15.53	15.40		0.0
	1	104	15.57	15.31	15.41		0.0
	50	0	15.67	15.58	15.44	0-0.5	0.0
	50	28	15.67	15.51	15.43	0	0.0
	50	56	15.60	15.44	15.38	0-0.5	0.0
	100	0	15.61	15.49	15.46		0.0
DFT-s-OFDM QPSK	1	1	**15.78**	15.67	15.40	0	0.0
	1	53	15.72	15.62	15.50		0.0
	1	104	15.57	15.39	15.32		0.0
	50	0	**15.67**	15.59	15.41	0-1	0.0
	50	28	15.63	15.51	15.40	0	0.0
	50	56	15.56	15.44	15.38	0-1	0.0
	100	0	15.64	15.52	15.46		0.0
DFT-s-OFDM 16QAM	1	1	15.61	15.55	15.27	0-1	0.0
CP-OFDM QPSK	1	1	15.48	15.44	15.50	0-1.5	0.0

Table 8-66
NR Band n25 Measured P_{limit} Ant 3 - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	15.04	14.88	14.84	0	0.0
	1	53	15.00	14.92	14.88		0.0
	1	104	14.80	14.78	14.68		0.0
	50	0	14.97	14.91	14.84	0-0.5	0.0
	50	28	14.85	14.86	14.78	0	0.0
	50	56	14.81	14.82	14.69	0-0.5	0.0
	100	0	14.87	14.88	14.76		0.0
DFT-s-OFDM QPSK	1	1	14.90	14.89	14.85	0	0.0
	1	53	**14.92**	14.86	14.78		0.0
	1	104	14.81	14.83	14.71		0.0
	50	0	14.99	14.95	14.84	0-1	0.0
	50	28	15.02	14.94	14.72	0	0.0
	50	56	**15.05**	14.87	14.73	0-1	0.0
	100	0	14.91	14.89	14.78		0.0
DFT-s-OFDM 16QAM	1	1	15.10	15.01	14.90	0-1	0.0
CP-OFDM QPSK	1	1	14.85	14.97	15.03	0-1.5	0.0

Table 8-67
NR Band n25 Measured P_{limit} Ant 2b - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	11.95	11.93	11.91	0	0.0
	1	53	11.93	11.91	11.87		0.0
	1	104	11.87	11.96	11.72		0.0
	50	0	11.90	11.93	11.85	0-0.5	0.0
	50	28	11.85	11.91	11.84	0	0.0
	50	56	11.82	11.82	11.83	0-0.5	0.0
	100	0	11.83	11.84	11.76		0.0
DFT-s-OFDM QPSK	1	1	**11.91**	11.85	11.86	0	0.0
	1	53	11.90	11.84	11.80		0.0
	1	104	11.79	11.77	11.75		0.0
	50	0	**11.92**	11.77	11.78	0-1	0.0
	50	28	11.87	11.85	11.72	0	0.0
	50	56	11.82	11.81	11.75	0-1	0.0
	100	0	11.86	11.76	11.76		0.0
DFT-s-OFDM 16QAM	1	1	12.30	12.32	12.26	0-1	0.0
CP-OFDM QPSK	1	1	12.02	12.05	11.98	0-1.5	0.0

Table 8-68
NR Band n25 Measured P_{limit} Ant 4b - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	11.32	11.20	11.14	0	0.0
	1	53	11.15	11.16	11.06		0.0
	1	104	11.02	11.16	11.07		0.0
	50	0	11.22	11.15	11.10	0-0.5	0.0
	50	28	11.15	11.12	11.09	0	0.0
	50	56	11.07	11.06	11.06	0-0.5	0.0
	100	0	11.16	11.14	11.15		0.0
DFT-s-OFDM QPSK	1	1	**11.20**	11.06	11.19	0	0.0
	1	53	11.12	11.04	11.16		0.0
	1	104	11.02	10.94	11.06		0.0
	50	0	**11.18**	11.11	11.11	0-1	0.0
	50	28	11.13	11.10	11.13	0	0.0
	50	56	11.08	11.03	11.09	0-1	0.0
	100	0	11.12	11.05	11.11		0.0
DFT-s-OFDM 16QAM	1	1	11.18	10.91	10.90	0-1	0.0
CP-OFDM QPSK	1	1	10.98	10.90	11.05	0-1.5	0.0

8.4.6 NR Band n41

Table 8-69
NR Band n41 Measured P_{limit} Ant 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	10.75	0	0.0
	1	137	10.72		0.0
	1	271	10.66		0.0
	135	0	10.76	0-0.5	0.0
	135	69	10.77	0	0.0
	135	138	10.78	0-0.5	0.0
	270	0	10.79		0.0
DFT-s-OFDM QPSK	1	1	**10.64**	0	0.0
	1	137	10.63		0.0
	1	271	10.58		0.0
	135	0	**10.62**	0-1	0.0
	135	69	10.55	0	0.0
	135	138	10.59	0-1	0.0
	270	0	10.61		0.0
DFT-s-OFDM 16QAM	1	1	10.79	0-1	0.0
CP-OFDM QPSK	1	1	10.54	0-1.5	0.0

Note: NR Band n41 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-70
NR Band n41 Measured P_{limit} Ant 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	11.29	0	0.0
	1	137	11.40		0.0
	1	271	11.30		0.0
	135	0	11.29	0-0.5	0.0
	135	69	11.27	0	0.0
	135	138	11.22	0-0.5	0.0
	270	0	11.31		0.0
DFT-s-OFDM QPSK	1	1	**11.34**	0	0.0
	1	137	11.31		0.0
	1	271	11.30		0.0
	135	0	11.23	0-1	0.0
	135	69	**11.29**	0	0.0
	135	138	11.26	0-1	0.0
	270	0	11.28		0.0
DFT-s-OFDM 16QAM	1	1	11.00	0-1	0.0
CP-OFDM QPSK	1	1	11.34	0-1.5	0.0

Note: NR Band n41 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-71
NR Band n41 Measured P_{limit} Ant 2b - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	13.39	0	0.0
	1	137	13.24		0.0
	1	271	13.28		0.0
	135	0	13.22	0-0.5	0.0
	135	69	13.18	0	0.0
	135	138	13.26	0-0.5	0.0
	270	0	13.20		0.0
DFT-s-OFDM QPSK	1	1	**13.07**	0	0.0
	1	137	13.00		0.0
	1	271	12.40		0.0
	135	0	**13.09**	0-1	0.0
	135	69	13.04	0	0.0
	135	138	13.06	0-1	0.0
	270	0	13.03		0.0
DFT-s-OFDM 16QAM	1	1	13.32	0-1	0.0
CP-OFDM QPSK	1	1	13.08	0-1.5	0.0

Note: NR Band n41 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-72
NR Band n41 Measured P_{limit} Ant 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	12.01	0	0.0
	1	137	11.88		0.0
	1	271	11.86		0.0
	135	0	11.91	0-0.5	0.0
	135	69	11.84	0	0.0
	135	138	11.88	0-0.5	0.0
	270	0	11.80		0.0
DFT-s-OFDM QPSK	1	1	**12.01**	0	0.0
	1	137	11.77		0.0
	1	271	11.84		0.0
	135	0	11.84	0-1	0.0
	135	69	11.83	0	0.0
	135	138	**11.87**	0-1	0.0
	270	0	11.86		0.0
DFT-s-OFDM 16QAM	1	1	11.94	0-1	0.0
CP-OFDM QPSK	1	1	12.02	0-1.5	0.0

Note: NR Band n41 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

8.4.7 NR Band n41 PC2

Table 8-73
NR Band n41 PC2 Measured P_{limit} Ant 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	13.95	0	0.0
	1	137	13.46		0.0
	1	271	13.82		0.0
	135	0	13.51	0-0.5	0.0
	135	69	13.59	0	0.0
	135	138	13.62	0-0.5	0.0
	270	0	13.66		0.0
DFT-s-OFDM QPSK	1	1	**13.68**	0	0.0
	1	137	13.44		0.0
	1	271	13.41		0.0
	135	0	13.52	0-1	0.0
	135	69	**13.78**	0	0.0
	135	138	13.54	0-1	0.0
	270	0	13.08		0.0
DFT-s-OFDM 16QAM	1	1	13.59	0-1	0.0
CP-OFDM QPSK	1	1	13.72	0-1.5	0.0

Note: NR Band n41 PC2 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-74
NR Band n41 PC2 Measured P_{limit} Ant 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	14.21	0	0.0
	1	137	14.45		0.0
	1	271	14.10		0.0
	135	0	14.25	0-0.5	0.0
	135	69	14.21	0	0.0
	135	138	14.25	0-0.5	0.0
	270	0	14.22		0.0
DFT-s-OFDM QPSK	1	1	**14.39**	0	0.0
	1	137	14.07		0.0
	1	271	14.06		0.0
	135	0	14.31	0-1	0.0
	135	69	**14.39**	0	0.0
	135	138	14.26	0-1	0.0
	270	0	14.38		0.0
DFT-s-OFDM 16QAM	1	1	14.21	0-1	0.0
CP-OFDM QPSK	1	1	14.69	0-1.5	0.0

Note: NR Band n41 PC2 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-75
NR Band n41 PC2 Measured P_{limit} Ant 2b - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	16.19	0	0.0
	1	137	16.45		0.0
	1	271	16.38		0.0
	135	0	16.30	0-0.5	0.0
	135	69	16.01	0	0.0
	135	138	16.16	0-0.5	0.0
	270	0	16.18		0.0
DFT-s-OFDM QPSK	1	1	16.28	0	0.0
	1	137	16.26		0.0
	1	271	**16.37**		0.0
	135	0	16.16	0-1	0.0
	135	69	16.06	0	0.0
	135	138	**16.25**	0-1	0.0
	270	0	15.99		0.0
DFT-s-OFDM 16QAM	1	1	16.06	0-1	0.0
CP-OFDM QPSK	1	1	16.07	0-1.5	0.0

Note: NR Band n41 PC2 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 8-76
NR Band n41 PC2 Measured P_{limit} Ant 4b - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	14.20	0	0.0
	1	137	14.25		0.0
	1	271	13.94		0.0
	135	0	13.87	0-0.5	0.0
	135	69	13.94	0	0.0
	135	138	13.80	0-0.5	0.0
	270	0	13.83		0.0
DFT-s-OFDM QPSK	1	1	**14.32**	0	0.0
	1	137	13.70		0.0
	1	271	14.20		0.0
	135	0	13.80	0-1	0.0
	135	69	13.90	0	0.0
	135	138	**13.95**	0-1	0.0
	270	0	13.94		0.0
DFT-s-OFDM 16QAM	1	1	13.95	0-1	0.0
CP-OFDM QPSK	1	1	14.34	0-1.5	0.0

Note: NR Band n41 PC2 at 100 MHz bandwidth does not support three non-overlapping channels. Per KDB Publication 941225 D05v02, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

8.4.8 NR Band n77

Table 8-77
NR Band n77 Measured P_{limit} Ant 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	11.65	11.70	0	0.0
	1	137	12.20	11.81		0.0
	1	271	11.94	11.75		0.0
	135	0	12.00	11.70	0-0.5	0.0
	135	69	12.21	11.63	0	0.0
	135	138	12.15	11.74	0-0.5	0.0
	270	0	12.14	11.68		0.0
DFT-s-OFDM QPSK	1	1	11.46	11.60	0	0.0
	1	137	**11.95**	11.31		0.0
	1	271	11.30	11.01		0.0
	135	0	11.51	11.52	0-1	0.0
	135	69	**11.60**	11.20	0	0.0
	135	138	11.46	11.11	0-1	0.0
	270	0	11.47	10.90		0.0
DFT-s-OFDM 16QAM	1	1	11.78	11.45	0-1	0.0
CP-OFDM QPSK	1	1	11.37	11.11	0-1.5	0.0

Table 8-78
NR Band n77 Measured P_{limit} Ant 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	9.83	10.16	0	0.0
	1	137	10.54	10.01		0.0
	1	271	10.66	10.07		0.0
	135	0	10.17	10.15	0-0.5	0.0
	135	69	10.44	10.07	0	0.0
	135	138	10.60	10.02	0-0.5	0.0
	270	0	10.41	10.09		0.0
DFT-s-OFDM QPSK	1	1	10.04	10.17	0	0.0
	1	137	10.53	9.99		0.0
	1	271	**10.55**	10.06		0.0
	135	0	10.17	10.15	0-1	0.0
	135	69	10.44	10.01	0	0.0
	135	138	**10.59**	10.02	0-1	0.0
	270	0	10.08	10.09		0.0
DFT-s-OFDM 16QAM	1	1	10.10	10.36	0-1	0.0
CP-OFDM QPSK	1	1	9.94	10.20	0-1.5	0.0

Table 8-79
NR Band n77 Measured P_{limit} Ant 2a - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	9.52	9.70	0	0.0
	1	137	10.30	9.66		0.0
	1	271	10.45	9.63		0.0
	135	0	9.82	9.67	0-0.5	0.0
	135	69	10.14	9.62	0	0.0
	135	138	10.17	9.68	0-0.5	0.0
	270	0	10.05	9.68		0.0
DFT-s-OFDM QPSK	1	1	9.80	9.56	0	0.0
	1	137	10.10	10.09		0.0
	1	271	**10.12**	10.07		0.0
	135	0	9.54	9.91	0-1	0.0
	135	69	9.80	9.95	0	0.0
	135	138	**10.03**	9.93	0-1	0.0
	270	0	9.77	9.94		0.0
DFT-s-OFDM 16QAM	1	1	9.61	9.72	0-1	0.0
CP-OFDM QPSK	1	1	9.58	9.59	0-1.5	0.0

Table 8-80
NR Band n77 Measured P_{limit} Ant 4a - 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	10.13	10.53	0	0.0
	1	137	10.92	10.34		0.0
	1	271	10.85	10.39		0.0
	135	0	10.19	10.42	0-0.5	0.0
	135	69	10.57	10.30	0	0.0
	135	138	10.81	10.27	0-0.5	0.0
	270	0	10.54	10.34		0.0
DFT-s-OFDM QPSK	1	1	10.25	10.43	0	0.0
	1	137	**11.13**	11.08		0.0
	1	271	10.95	11.07		0.0
	135	0	10.66	10.77	0-1	0.0
	135	69	10.90	10.99	0	0.0
	135	138	10.97	**11.08**	0-1	0.0
	270	0	10.81	10.95		0.0
DFT-s-OFDM 16QAM	1	1	10.13	10.52	0-1	0.0
CP-OFDM QPSK	1	1	10.28	10.60	0-1.5	0.0

8.4.9 NR Band n77 PC2

Table 8-81
NR Band n77 PC2 Measured P_{limit} Ant 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	14.45	14.28	0	0.0
	1	137	14.87	14.30		0.0
	1	271	15.00	14.32		0.0
	135	0	14.47	13.90	0-0.5	0.0
	135	69	15.07	13.94	0	0.0
	135	138	15.20	14.00	0-0.5	0.0
	270	0	14.95	13.91		0.0
DFT-s-OFDM QPSK	1	1	14.27	14.32	0	0.0
	1	137	14.89	14.34		0.0
	1	271	**15.10**	14.36		0.0
	135	0	14.70	14.66	0-1	0.0
	135	69	15.08	13.95	0	0.0
	135	138	**15.15**	14.06	0-1	0.0
	270	0	14.97	13.89		0.0
DFT-s-OFDM 16QAM	1	1	14.35	14.70	0-1	0.0
CP-OFDM QPSK	1	1	14.90	14.65	0-1.5	0.0

Table 8-82
NR Band n77 PC2 Measured P_{limit} Ant 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	12.99	12.80	0	0.0
	1	137	13.11	12.66		0.0
	1	271	13.09	13.13		0.0
	135	0	12.53	12.95	0-0.5	0.0
	135	69	12.92	13.04	0	0.0
	135	138	12.95	12.87	0-0.5	0.0
	270	0	12.89	12.97		0.0
DFT-s-OFDM QPSK	1	1	12.55	12.77	0	0.0
	1	137	12.85	12.77		0.0
	1	271	**13.37**	12.91		0.0
	135	0	12.60	12.99	0-1	0.0
	135	69	12.98	12.95	0	0.0
	135	138	13.04	**13.09**	0-1	0.0
	270	0	12.98	12.99		0.0
DFT-s-OFDM 16QAM	1	1	12.97	12.83	0-1	0.0
CP-OFDM QPSK	1	1	13.01	13.07	0-1.5	0.0

Table 8-83
NR Band n77 PC2 Measured P_{limit} Ant 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	13.12	13.43	0	0.0
	1	137	13.02	13.47		0.0
	1	271	12.64	13.40		0.0
	135	0	12.62	12.86	0-0.5	0.0
	135	69	12.90	12.83	0	0.0
	135	138	13.06	12.93	0-0.5	0.0
	270	0	12.77	12.83		0.0
DFT-s-OFDM QPSK	1	1	12.29	12.64	0	0.0
	1	137	**12.90**	12.50		0.0
	1	271	12.65	12.59		0.0
	135	0	12.67	12.69	0-1	0.0
	135	69	12.75	12.86	0	0.0
	135	138	**12.90**	12.81	0-1	0.0
	270	0	12.74	12.80		0.0
DFT-s-OFDM 16QAM	1	1	12.70	13.18	0-1	0.0
CP-OFDM QPSK	1	1	12.34	13.49	0-1.5	0.0

Table 8-84
NR Band n77 PC2 Measured P_{limit} Ant 4a - 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	14.32	14.43	0	0.0
	1	137	14.52	14.62		0.0
	1	271	14.67	14.58		0.0
	135	0	14.03	13.92	0-0.5	0.0
	135	69	13.99	13.91	0	0.0
	135	138	14.12	14.01	0-0.5	0.0
	270	0	14.02	14.09		0.0
DFT-s-OFDM QPSK	1	1	14.13	14.21	0	0.0
	1	137	14.18	14.43		0.0
	1	271	**14.49**	14.34		0.0
	135	0	13.84	14.01	0-1	0.0
	135	69	14.08	14.12	0	0.0
	135	138	13.99	**14.14**	0-1	0.0
	270	0	13.98	13.97		0.0
DFT-s-OFDM 16QAM	1	1	14.31	14.51	0-1	0.0
CP-OFDM QPSK	1	1	14.42	14.64	0-1.5	0.0

8.5 WLAN Maximum Time-Averaged Conducted Powers

Table 8-85
2.4 GHz WLAN Maximum Time-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	10.64	10.79	10.80	10.89
2437	6	10.55	10.77	10.73	10.92
2462	11	10.59	10.70	10.71	10.86

Table 8-86
2.4 GHz WLAN Maximum Time-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 (SU)
		Average	Average	Average	Average
2412	1	10.74	10.83	10.81	10.75
2437	6	10.55	10.91	10.68	10.87
2462	11	10.65	10.67	10.64	10.84

Table 8-87
2.4 GHz WLAN Maximum Time-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	11.60	11.57	11.50	11.76
2437	6	11.78	11.61	11.63	11.83
2462	11	11.71	11.49	11.60	11.75

Table 8-88
2.4 GHz WLAN Maximum Time-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 (SU)
		Average	Average	Average	Average
2412	1	11.66	10.92	10.91	10.87
2437	6	11.70	11.02	11.04	10.69
2462	11	11.71	10.78	10.80	10.81

Table 8-89
5 GHz WLAN Maximum Time-Average RF Power – Ant 5b Variant 1

5GHz (40MHz) Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11n	802.11ac	802.11ax (SU)
		Average	Average	Average
5190	38	14.03	14.11	13.67
5230	46	16.31	16.27	16.28
5270	54	15.75	15.69	16.11
5310	62	14.92	14.88	14.03

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	11.12	11.23
5290	58	14.01	14.09
5530	106	14.43	14.42
5610	122	13.85	14.15
5690	138	13.84	14.20
5775	155	14.37	14.29

Table 8-90
5 GHz WLAN Maximum Time-Average RF Power – Ant 5b Variant 2

5GHz (40MHz) Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11n	802.11ac	802.11ax (SU)
		Average	Average	Average
5190	38	13.96	14.11	13.11
5230	46	16.30	16.20	16.05
5270	54	16.15	16.31	16.11
5310	62	15.05	15.01	14.31

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	11.49	11.41
5290	58	14.02	14.90
5530	106	14.52	14.49
5610	122	14.39	14.13
5690	138	14.08	14.07
5775	155	14.51	15.28

Table 8-91
5 GHz WLAN Maximum Time-Average RF Power – Ant 4b Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	9.61	9.55
5290	58	9.21	9.16
5530	106	9.30	9.28
5610	122	8.24	8.44
5690	138	8.20	8.13
5775	155	11.90	10.76

Table 8-92
5 GHz WLAN Maximum Time-Average RF Power – Ant 4b Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	9.32	9.22
5290	58	9.41	9.35
5530	106	9.05	9.15
5610	122	8.34	8.29
5690	138	8.25	8.35
5775	155	11.50	11.31

8.6 WLAN Reduced Conducted Powers

Table 8-93
2.4 GHz WLAN Reduced Time-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	7.65	7.53	7.63	7.49
2437	6	7.64	7.55	7.60	7.51
2462	11	7.67	7.51	7.66	7.52

Table 8-94
2.4 GHz WLAN Reduced Time-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 (SU)
		Average	Average	Average	Average
2412	1	7.69	7.49	7.63	7.71
2437	6	7.95	7.53	7.65	7.69
2462	11	7.66	7.50	7.59	7.61

Table 8-95
2.4 GHz WLAN Reduced Time-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	8.73	8.81	8.71	8.66
2437	6	8.68	8.79	8.75	8.63
2462	11	8.76	8.73	8.70	8.69

Table 8-96
2.4 GHz WLAN Reduced Time-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 (SU)
		Average	Average	Average	Average
2412	1	8.70	8.59	8.72	8.66
2437	6	8.76	8.63	8.74	8.63
2462	11	8.70	8.67	8.70	8.69

Table 8-97
5 GHz WLAN Reduced Time-Average RF Power – Ant 5b Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	11.25	11.11
5290	58	12.28	12.39
5530	106	10.48	10.51
5610	122	10.41	10.43
5690	138	10.45	10.45
5775	155	11.30	11.21

Table 8-98
5 GHz WLAN Reduced Time-Average RF Power – Ant 5b Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	11.23	11.34
5290	58	12.33	12.21
5530	106	10.45	10.51
5610	122	10.42	10.33
5690	138	10.40	10.36
5775	155	11.36	11.23

Table 8-99
5 GHz WLAN Reduced Time-Average RF Power – Ant 4b Variant 1

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	3.88	3.90
5290	58	3.98	4.01
5530	106	4.02	4.06
5610	122	3.93	4.01
5690	138	3.95	3.92
5775	155	5.65	5.41

Table 8-100
5 GHz WLAN Reduced Time-Average RF Power – Ant 4b Variant 2

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax (SU)
		Average	Average
5210	42	3.83	3.91
5290	58	4.09	4.12
5530	106	4.14	4.10
5610	122	4.05	4.15
5690	138	4.02	4.10
5775	155	5.70	5.66

8.7 WLAN Power Reduction Verification Summary

Table 8-101
WLAN Power Reduction Verification

Antenna	Mode/Band	Condition (s)	Maximum Scenario Maximum Allowed Tune Up Power [dBm]	Reduced Scenario Maximum Allowed Tune Up Power [dBm]	Maximum Target Power [dBm]	Reduced Target Power [dBm]	Maximum Measured Power	Reduced Measured Power	Verdict
					(Tolerance [dB])	(Tolerance [dB])	[dBm]	[dBm]	
Ant 4a	2.4 GHz WLAN	Main Band 4a/4b ON	11.75	8.75	10.25 (+1.5/-1.5)	7.25 (+1.5/-1.5)	10.52	7.33	PASS
	2.4 GHz WLAN	mmW/ ULCA ON	11.75	8.75	10.25 (+1.5/-1.5)	7.25 (+1.5/-1.5)	10.52	7.36	PASS
Ant 2a	2.4 GHz WLAN	Main Band 2a/2b ON	12.75	9.75	11.25 (+1.5/-1.5)	8.25 (+1.5/-1.5)	11.48	8.28	PASS
	2.4 GHz WLAN	mmW/ ULCA ON	12.75	9.75	11.25 (+1.5/-1.5)	8.25 (+1.5/-1.5)	11.48	8.13	PASS
Ant 5b	5 GHz WLAN	Main Band 2a/2b ON	17.25	13.25	15.75 (+1.5/-1.5)	11.75 (+1.5/-1.5)	16.33	12.37	PASS
	5 GHz WLAN	mmW/ ULCA ON	17.25	13.25	15.75 (+1.5/-1.5)	11.75 (+1.5/-1.5)	16.33	12.33	PASS
Ant 4b	5 GHz WLAN	Main Band 4a/4b ON	12.50	6.50	11.00 (+1.5/-1.5)	5.00 (+1.5/-1.5)	11.89	4.24	PASS
	5 GHz WLAN	mmW/ ULCA ON	12.50	6.50	11.00 (+1.5/-1.5)	5.00 (+1.5/-1.5)	11.89	4.39	PASS

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

8.8 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.
- The worst case configurations were evaluated for both variant 1 and variant 2. The variant with highest report SAR value was selected for remaining test configurations.

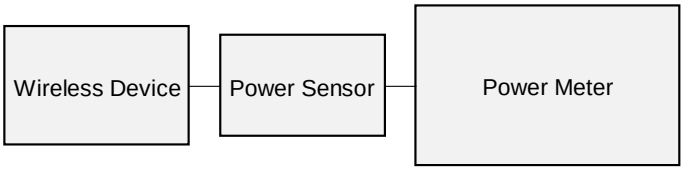

Figure 8-4
Power Measurement Setup

8.9 Bluetooth Conducted Powers

Table 8-102
Bluetooth Maximum Average RF Power – Ant 4a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	11.13	12.972
2441	GFSK	1.0	39	10.91	12.331
2480	GFSK	1.0	78	10.88	12.246

Table 8-103
Bluetooth Maximum Average RF Power – Ant 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	10.75	11.885
2441	GFSK	1.0	39	10.95	12.445
2480	GFSK	1.0	78	10.92	12.359

Table 8-104
Bluetooth Maximum Average RF Power – Ant 2a, Variant 1

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	10.85	12.162
2441	GFSK	1.0	39	11.09	12.853
2480	GFSK	1.0	78	10.75	11.885

Table 8-105
Bluetooth Maximum Average RF Power – Ant 2a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	10.85	12.162
2441	GFSK	1.0	39	10.86	12.190
2480	GFSK	1.0	78	10.78	11.967

8.10 Bluetooth Reduced Conducted Powers

Table 8-106
Bluetooth Reduced Power Level 1 Average RF Power – Ant 2a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	7.25	5.309
2441	GFSK	1.0	39	7.18	5.224
2480	GFSK	1.0	78	7.10	5.129

Table 8-107
Bluetooth Reduced Power Level 2 Average RF Power – Ant 2a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	9.07	8.072
2441	GFSK	1.0	39	8.78	7.551
2480	GFSK	1.0	78	8.95	7.852

Table 8-108
Bluetooth Reduced Power Level 1 Average RF Power – Ant 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	9.68	9.290
2441	GFSK	1.0	39	9.10	8.128
2480	GFSK	1.0	78	9.06	8.054

Table 8-109
Bluetooth Reduced Power Level 2 Average RF Power – Ant 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	8.30	6.761
2441	GFSK	1.0	39	8.20	6.607
2480	GFSK	1.0	78	8.11	6.471

Table 8-110
Bluetooth Reduced Power Level 3 Average RF Power – Ant 4a, Variant 2

Frequency [MHz]	Modulation	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
				[dBm]	[mW]
2402	GFSK	1.0	0	4.27	2.673
2441	GFSK	1.0	39	4.25	2.661
2480	GFSK	1.0	78	4.15	2.600

8.11 Bluetooth Duty Cycle Plots

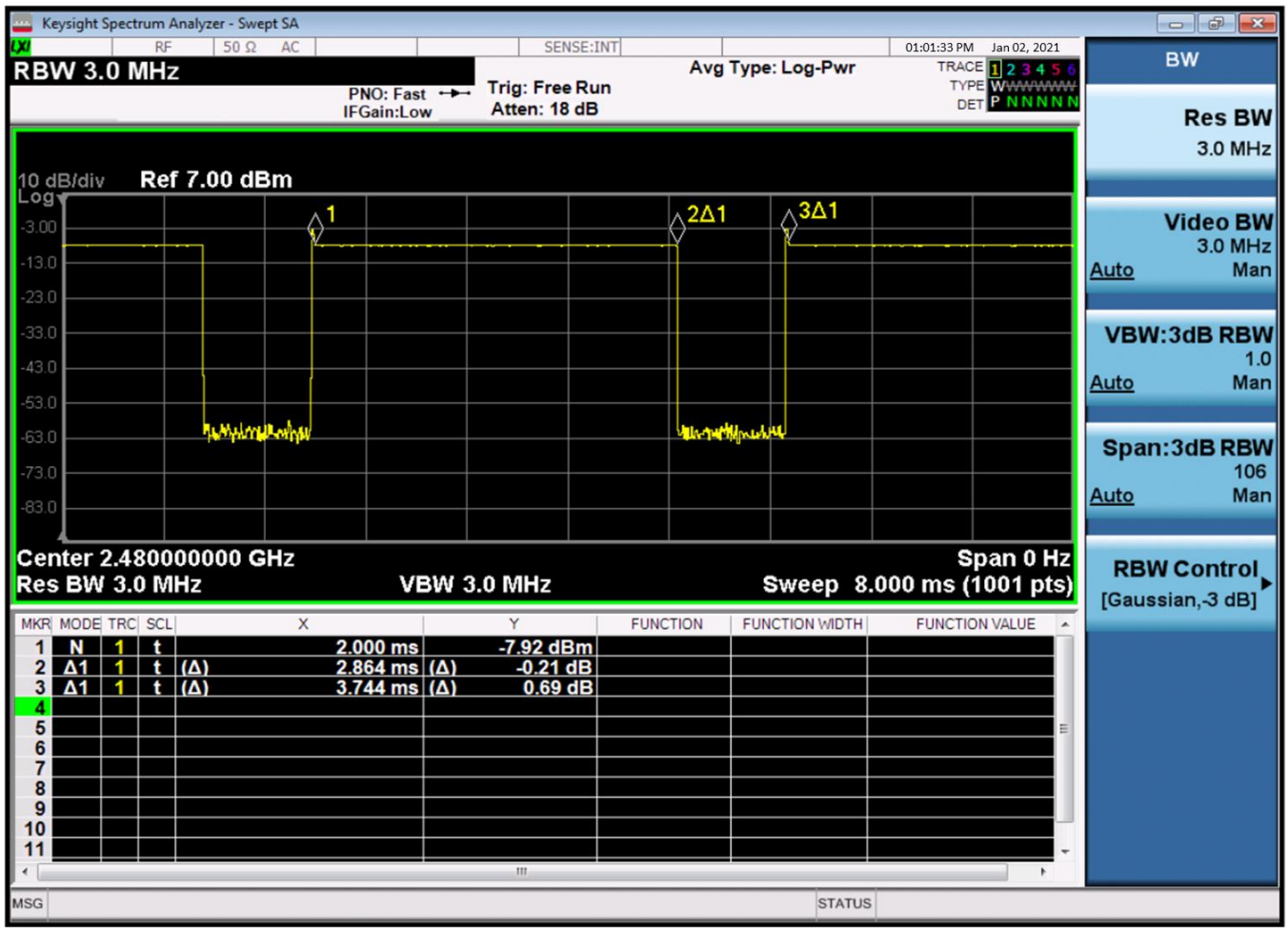

Figure 8-5
Bluetooth Transmission Plot – Ant 2a – Variant 1

Equation 8-1
Bluetooth Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.864ms}{3.744ms} * 100\% = 76.5\%$$

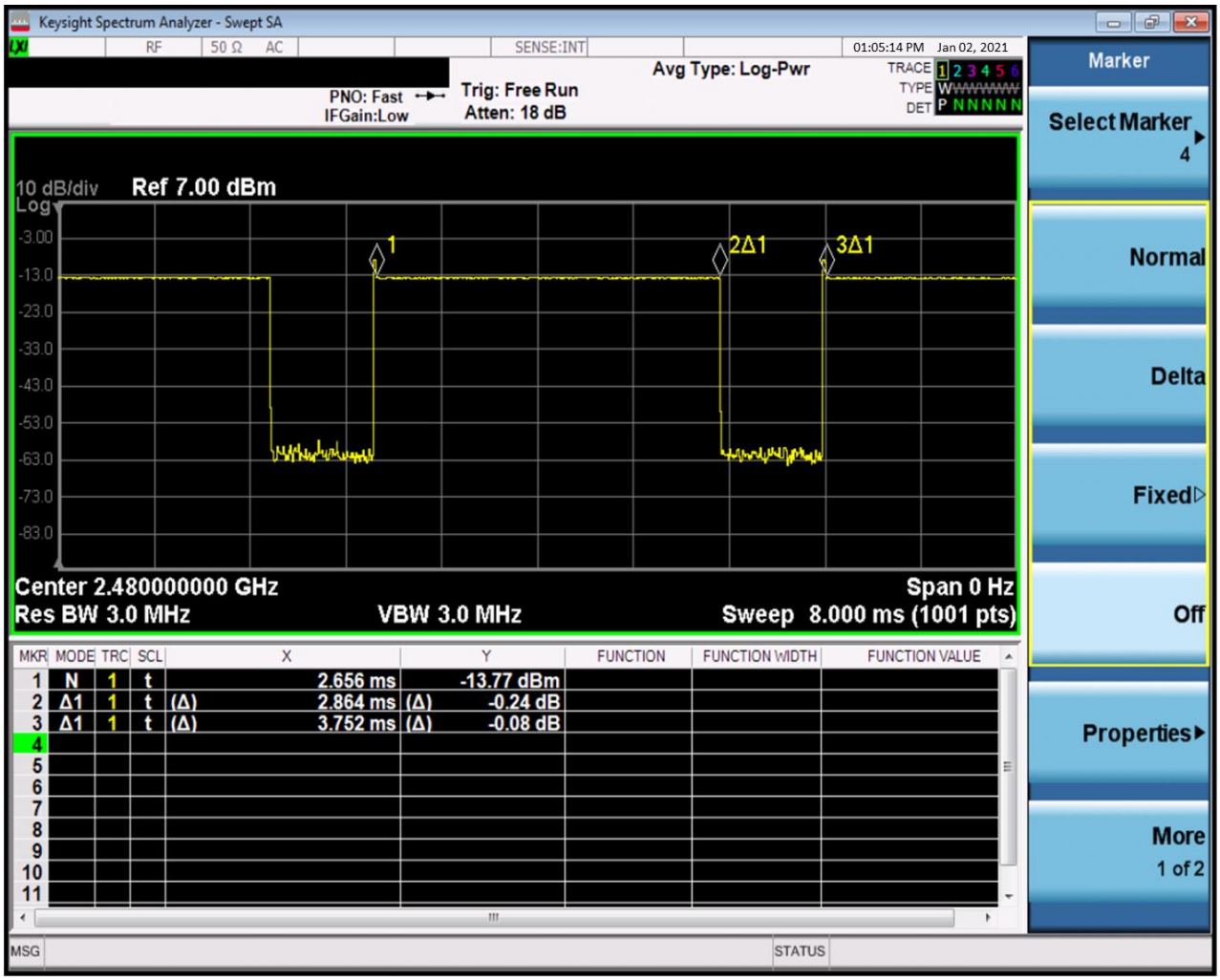

Figure 8-6
Bluetooth Transmission Plot – Ant 2a – Variant 2

Equation 8-2
Bluetooth Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.864ms}{3.752ms} * 100\% = 76.3\%$$

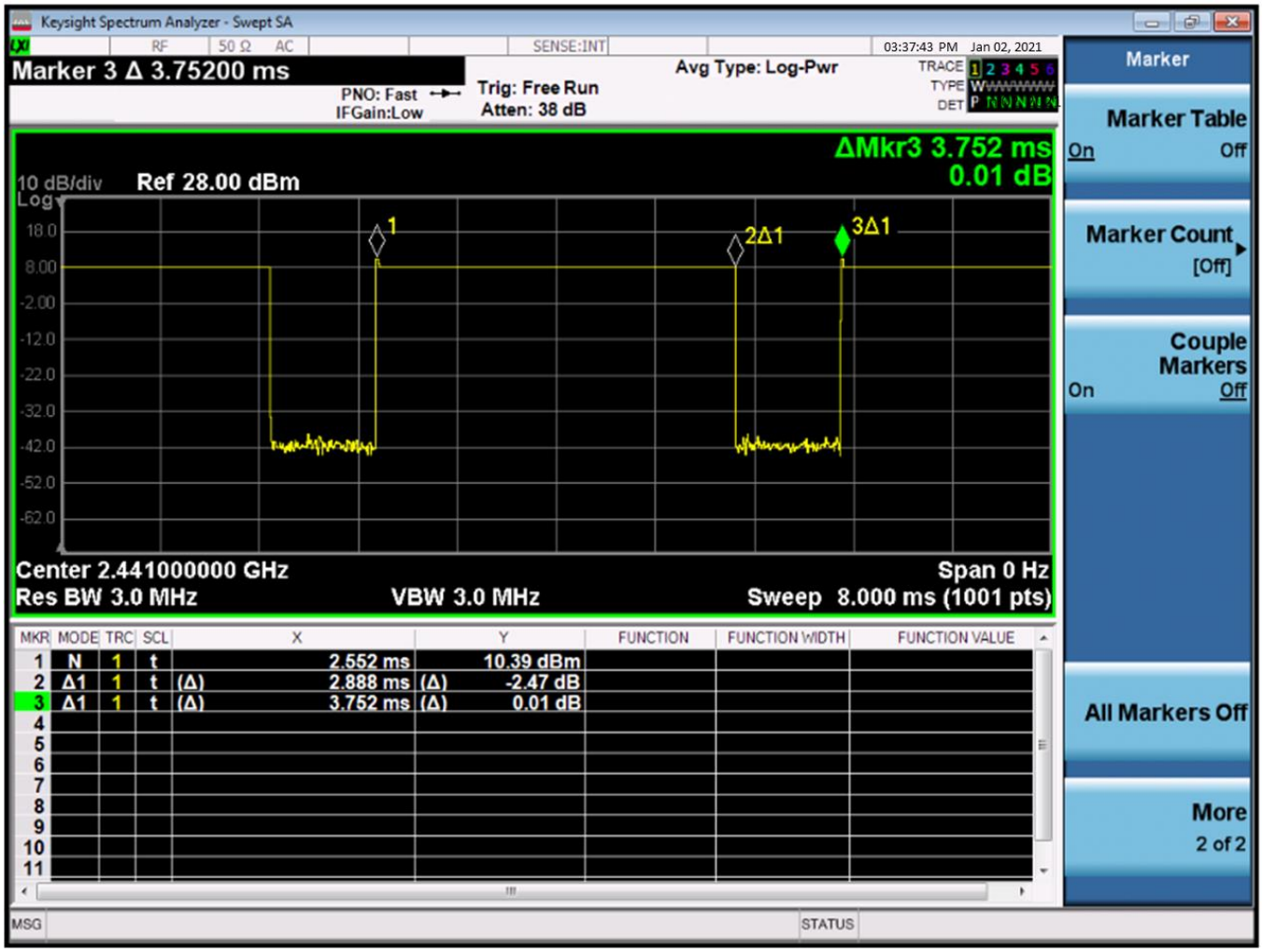

Figure 8-7
Bluetooth Transmission Plot – Ant 4a – Variant 1

Equation 8-3
Bluetooth Duty Cycle Calculation

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

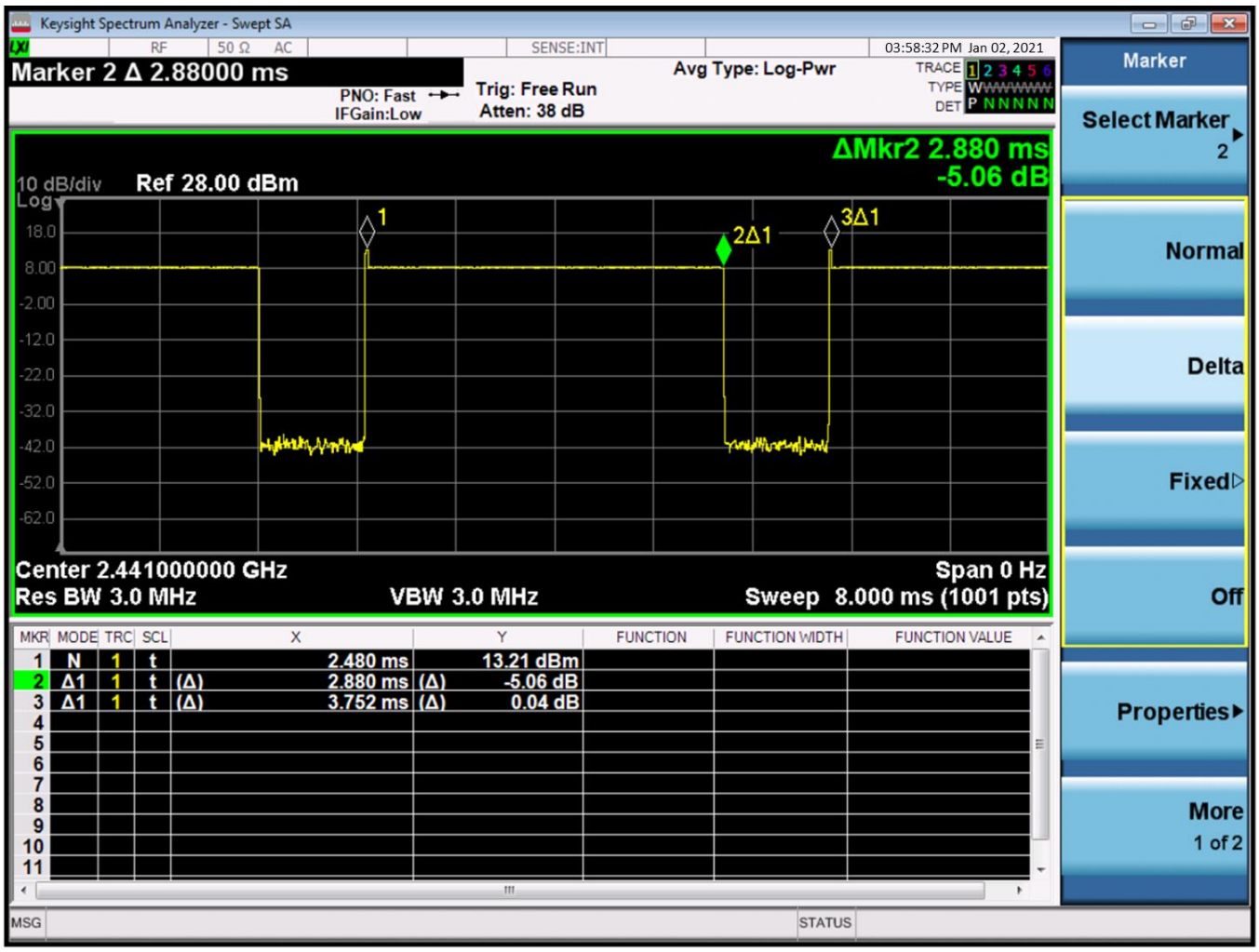

Figure 8-8
Bluetooth Transmission Plot – Ant 4a – Variant 2

Equation 8-4
Bluetooth Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.880ms}{3.752ms} * 100\% = 76.8\%$$

8.12 Bluetooth Power Reduction Verification Summary

Table 8-111
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 4a	2.4 GHz Bluetooth	Main Band 4a/4b ON	12.25	9.25	10.75 (+1.5/-2)	7.75 (+1.5/-2)	11.17	7.54	PASS
	2.4 GHz Bluetooth	Main Band 3 ON	12.25	9.25	10.75 (+1.5/-2)	7.75 (+1.5/-2)	11.17	7.79	PASS
	2.4 GHz Bluetooth	5GHz WLAN Ant 4b/5b ON	12.25	9.25	10.75 (+1.5/-2)	7.75 (+1.5/-2)	11.17	7.35	PASS
	2.4 GHz Bluetooth	mmW/ ULCA ON	12.25	9.25	10.75 (+1.5/-2)	7.75 (+1.5/-2)	11.17	7.55	PASS
	2.4 GHz Bluetooth	Main Band 1 ON and 5GHz WLAN Ant 4b/5b ON	12.25	10.25	10.75 (+1.5/-2)	8.75 (+1.5/-2)	11.17	8.88	PASS
	2.4 GHz Bluetooth	Ant 2a/2b ON and 5GHz WLAN Ant 4b/5b ON	12.25	10.25	10.75 (+1.5/-2)	8.75 (+1.5/-2)	11.17	8.83	PASS
	2.4 GHz Bluetooth	Main Band 3 ON and 5GHz WLAN Ant 4b/5b ON	12.25	5.25	10.75 (+1.5/-2)	3.75 (+1.5/-2)	11.17	3.51	PASS
	2.4 GHz Bluetooth	Main Band 4a/4b ON and 5GHz WLAN Ant 4b/5b ON	12.25	5.25	10.75 (+1.5/-2)	3.75 (+1.5/-2)	11.17	3.63	PASS
	2.4 GHz Bluetooth	mmW/ ULCA ON and 5GHz WLAN Ant 4b/5b ON	12.25	5.25	10.75 (+1.5/-2)	3.75 (+1.5/-2)	11.17	3.61	PASS
Ant 2a	2.4 GHz Bluetooth	Main Band 1 ON	12.75	8.75	11.25 (+1.5/-2)	7.25 (+1.5/-2)	11.66	7.21	PASS
	2.4 GHz Bluetooth	Main Band 2a/2b ON	12.75	8.75	11.25 (+1.5/-2)	7.25 (+1.5/-2)	11.66	7.39	PASS
	2.4 GHz Bluetooth	Main Band 1 on and 5 GHz WLAN 4b/5b on	12.75	8.75	11.25 (+1.5/-2)	7.25 (+1.5/-2)	11.66	7.84	PASS
	2.4 GHz Bluetooth	Ant 2a/2b ON and 5GHz WLAN Ant 4b/5b ON	12.75	8.75	11.25 (+1.5/-2)	7.25 (+1.5/-2)	11.66	7.36	PASS
	2.4 GHz Bluetooth	mmW/ ULCA ON and 5GHz WLAN Ant 4b/5b ON	12.75	8.75	11.25 (+1.5/-2)	7.25 (+1.5/-2)	11.66	7.15	PASS
	2.4 GHz Bluetooth	Main Band 3 on and 5 GHz WLAN Ant 4b/5b on	12.75	9.75	11.25 (+1.5/-2)	8.25 (+1.5/-2)	11.66	8.23	PASS
	2.4 GHz Bluetooth	Main Band 4a/4b on and 5 GHz WLAN ant 4b/5b on	12.75	9.75	11.25 (+1.5/-2)	8.25 (+1.5/-2)	11.66	7.55	PASS
	2.4 GHz Bluetooth	5GHz WLAN Ant 4b/5b ON	12.75	9.75	11.25 (+1.5/-2)	8.25 (+1.5/-2)	11.66	8.26	PASS
	2.4 GHz Bluetooth	mmW/ ULCA ON	12.75	9.75	11.25 (+1.5/-2)	8.25 (+1.5/-2)	11.66	7.33	PASS

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

8.12.1 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 evaluated for both Variant 1 and Variant 2. The variant with highest reported SAR value was selected for the remaining test configurations.
- Full power measurements were performed for Variant 1 and Variant 2 per FCC KDB Procedures 248227.

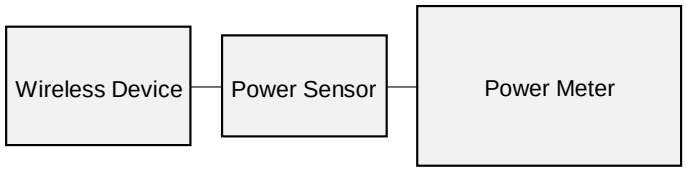

Figure 8-9
Power Measurement Setup

9 SYSTEM VERIFICATION

9.1 Tissue Verification

Table 9-1
Measured Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
12/28/2020	750B	21.0	680	0.955	53.651	0.958	55.804	-0.31%	-3.86%
			695	0.960	53.621	0.959	55.745	0.10%	-3.81%
			700	0.962	53.614	0.959	55.726	0.31%	-3.79%
			710	0.968	53.592	0.960	55.687	0.83%	-3.76%
			720	0.969	53.571	0.961	55.648	0.83%	-3.73%
			725	0.971	53.581	0.961	55.629	1.04%	-3.72%
			740	0.977	53.524	0.963	55.570	1.45%	-3.69%
			755	0.983	53.488	0.964	55.512	1.97%	-3.65%
			770	0.988	53.459	0.965	55.453	2.38%	-3.60%
			785	0.994	53.428	0.966	55.395	2.90%	-3.55%
			800	1.000	53.398	0.967	55.336	3.41%	-3.50%
1/9/2021	750B	20.6	680	0.926	54.235	0.958	55.804	-3.34%	-2.81%
			695	0.931	54.209	0.959	55.745	-2.92%	-2.76%
			700	0.933	54.202	0.959	55.726	-2.71%	-2.73%
			710	0.937	54.186	0.960	55.687	-2.40%	-2.70%
			720	0.941	54.169	0.961	55.648	-2.08%	-2.66%
			725	0.942	54.160	0.961	55.629	-1.98%	-2.64%
			740	0.948	54.125	0.963	55.570	-1.56%	-2.60%
			755	0.953	54.089	0.964	55.512	-1.14%	-2.57%
			770	0.959	54.060	0.965	55.453	-0.73%	-2.51%
			785	0.964	54.034	0.966	55.395	-0.21%	-2.46%
			800	0.970	54.006	0.967	55.336	0.31%	-2.40%
1/22/2021	750B	21.3	680	0.943	54.095	0.958	55.804	-1.57%	-3.06%
			695	0.948	54.061	0.959	55.745	-1.15%	-3.02%
			700	0.950	54.053	0.959	55.726	-0.94%	-3.00%
			710	0.954	54.033	0.960	55.687	-0.63%	-2.97%
			720	0.957	54.011	0.961	55.648	-0.42%	-2.94%
			725	0.959	53.999	0.961	55.629	-0.21%	-2.93%
			740	0.964	53.957	0.963	55.570	0.10%	-2.90%
			755	0.969	53.920	0.964	55.512	0.52%	-2.87%
			770	0.975	53.889	0.965	55.453	1.04%	-2.82%
			785	0.981	53.866	0.966	55.395	1.55%	-2.76%
			800	0.987	53.841	0.967	55.336	2.07%	-2.70%
12/28/2020	835B	20.0	815	0.957	53.602	0.969	55.278	-1.18%	-3.03%
			820	0.962	53.550	0.969	55.258	-0.72%	-3.09%
			835	0.976	53.392	0.970	55.200	0.62%	-3.28%
			850	0.991	53.241	0.988	55.154	0.30%	-3.47%
12/30/2020	835B	19.3	820	0.979	52.931	0.969	55.258	1.03%	-4.21%
			835	0.994	52.755	0.970	55.200	2.47%	-4.43%
			850	1.009	52.581	0.988	55.154	2.13%	-4.67%
3/3/2021	835B	21.6	820	0.991	53.410	0.969	55.258	2.27%	-3.34%
			835	0.997	53.385	0.970	55.200	2.78%	-3.27%
			850	1.002	53.326	0.988	55.154	1.42%	-3.31%
1/20/2021	850B	20.8	820	0.978	54.609	0.969	55.258	0.93%	-0.21%
			835	0.993	54.654	0.970	55.200	2.37%	-0.99%
			850	1.009	54.497	0.988	55.154	2.13%	-1.19%
12/29/2020	1750B	20.7	1710	1.467	52.139	1.463	53.537	0.27%	-2.61%
			1750	1.496	52.083	1.488	53.432	0.54%	-2.52%
			1790	1.522	52.020	1.514	53.326	0.53%	-2.45%
12/31/2020	1750B	20.4	1710	1.469	51.642	1.463	53.537	0.41%	-3.54%
			1750	1.495	51.618	1.488	53.432	0.47%	-3.39%
			1790	1.521	51.570	1.514	53.326	0.46%	-3.29%
2/24/2021	1750B	22.6	1710	1.499	51.729	1.463	53.537	2.46%	-3.38%
			1750	1.537	51.621	1.488	53.432	3.29%	-3.39%
			1790	1.573	51.509	1.514	53.326	3.90%	-3.41%
1/10/2021	1900B	20.4	1850	1.469	52.175	1.520	53.300	-3.35%	-2.11%
			1880	1.488	52.069	1.520	53.300	-2.11%	-2.31%
			1910	1.517	51.972	1.520	53.300	-0.20%	-2.49%
1/4/2021	1900B	20.9	1850	1.458	53.371	1.520	53.300	-4.08%	0.13%
			1880	1.468	53.266	1.520	53.300	-2.11%	-0.05%
			1910	1.519	53.176	1.520	53.300	-0.07%	-0.23%
1/6/2021	1900B	19.8	1850	1.470	50.964	1.520	53.300	-3.29%	-4.38%
			1880	1.501	50.862	1.520	53.300	-1.25%	-4.57%
			1910	1.533	50.762	1.520	53.300	0.86%	-4.76%
1/24/2021	1900B	21.4	1850	1.494	52.094	1.520	53.300	-1.71%	-2.26%
			1880	1.527	51.980	1.520	53.300	0.46%	-2.48%
			1910	1.562	51.874	1.520	53.300	2.76%	-2.68%
2/9/2021	2300B	23.0	2300	1.891	50.506	1.809	52.900	4.53%	-4.36%
			2310	1.899	50.588	1.816	52.887	4.57%	-4.35%
			2320	1.907	50.580	1.826	52.873	4.44%	-4.34%
1/11/2021	2450B	21.7	2400	1.970	50.730	1.902	52.767	3.58%	-3.86%
			2450	2.014	50.672	1.950	52.700	3.28%	-3.85%
			2500	2.057	50.501	2.021	52.636	1.78%	-3.95%
			2550	2.102	50.518	2.062	52.573	0.48%	-3.91%
			2600	2.148	50.427	2.163	52.509	-0.69%	-3.97%
			2650	2.194	50.358	2.234	52.445	-1.79%	-3.98%
			2700	2.238	50.281	2.305	52.382	-2.93%	-4.05%
1/13/2021	2450B	22.9	2400	1.980	50.563	1.902	52.767	4.10%	-4.18%
			2450	2.019	50.501	1.950	52.700	3.54%	-4.17%
			2500	2.064	50.424	2.021	52.636	2.13%	-4.20%
			2550	2.109	50.378	2.062	52.573	0.76%	-4.18%
			2600	2.156	50.289	2.163	52.509	-0.32%	-4.23%
			2650	2.204	50.236	2.234	52.445	-1.34%	-4.21%
			2700	2.250	50.131	2.305	52.382	-2.39%	-4.30%
1/15/2021	2450B	21.7	2400	1.978	51.382	1.902	52.767	4.00%	-2.66%
			2450	2.044	51.165	1.950	52.700	4.82%	-2.91%
			2500	2.118	50.971	2.021	52.636	4.80%	-3.16%
1/21/2021	2450B	22.1	2400	1.954	52.706	1.902	52.767	2.73%	-0.12%
			2450	2.022	52.510	1.950	52.700	3.69%	-0.36%
			2500	2.091	52.291	2.021	52.636	3.46%	-0.66%
2/9/2021	2450B	23.0	2400	1.975	50.456	1.902	52.767	3.84%	-4.36%
			2450	2.017	50.383	1.950	52.700	3.44%	-4.40%
			2500	2.059	50.306	2.021	52.636	1.88%	-4.43%
			2550	2.104	50.259	2.062	52.573	0.57%	-4.40%
			2600	2.151	50.184	2.163	52.509	-0.55%	-4.43%
			2650	2.197	50.112	2.234	52.445	-1.66%	-4.45%
			2700	2.244	50.033	2.305	52.382	-2.65%	-4.52%
1/6/2021	3500B-3700B	22.0	3500	3.359	49.159	3.314	51.321	1.36%	-4.21%
			3550	3.403	49.098	3.372	51.254	0.92%	-4.21%
			3600	3.459	49.025	3.431	51.186	0.82%	-4.22%
			3645	3.500	48.971	3.483	51.125	0.49%	-4.21%
			3685	3.544	48.903	3.530	51.070	0.40%	-4.24%
			3725	3.587	48.869	3.577	51.016	0.28%	-4.21%
2/8/2021	3700B-3900B	19.5	3500	3.227	50.583	3.314	51.321	-2.63%	-1.44%
			3550	3.276	50.433	3.372	51.254	-2.53%	-1.59%
			3600	3.330	50.416	3.431	51.186	-2.36%	-1.50%
			3650	3.407	50.331	3.489	51.118	-2.35%	-1.54%
			3690	3.459	50.253	3.536	51.063	-2.18%	-1.59%
			3700	3.471	50.241	3.548	51.050	-2.17%	-1.58%
			3750	3.535	50.149	3.606	50.982	-2.02%	-1.63%
			3900	3.723	49.893	3.781	50.779	-1.53%	-1.74%
			3930	3.754	49.852	3.816	50.738	-1.36%	-1.72%
01/21/2021	5200B-5800B	22.0	5180	5.433	47.870	5.276	49.041	2.98%	-2.39%
			5200	5.460	47.821	5.299	49.014	3.04%	-2.43%
			5230	5.491	47.786	5.323	48.987	3.16%	-2.45%
			5240	5.518	47.772	5.346	48.960	3.22%	-2.43%
			5260	5.543	47.735	5.369	48.933	3.24%	-2.45%
			5280	5.568	47.679	5.393	48.906	3.26%	-2.51%
			5300	5.595	47.640	5.416	48.879	3.31%	-2.53%
			5320	5.623	47.614	5.439	48.851	3.38%	-2.53%
			5500	5.862	47.318	5.650	48.607	3.75%	-2.66%
			5520	5.890	47.260	5.673	48.580	3.83%	-2.72%
			5540	5.917	47.239	5.696	48.553	3.88%	-2.71%
			5560	5.948	47.189	5.720	48.526	3.99%	-2.76%
			5580	5.981	47.159	5.743	48.499	4.14%	-2.76%
			5600	6.009	47.124	5.766	48.471	4.21%	-2.78%
			5620	6.030	47.096	5.790	48.444	4.15%	-2.78%
			5640	6.059	47.063	5.813	48.417	4.21%	-2.80%
			5660	6.089	47.014	5.837	48.390	4.32%	-2.84%
			5680	6.117	46.971	5.860	48.363	4.39%	-2.88%
			5700	6.146	46.948	5.883	48.336	4.47%	-2.88%
			5745	6.212	46.879	5.936	48.275	4.65%	-2.89%
			5785	6.234	46.829	5.959	48.248	4.61%	-2.94%
			5795	6.247	46.789	5.982	48.220	4.76%	-3.01%
			5800	6.289	46.756	6.000	48.200	4.82%	-3.05%
			5805	6.295	46.756	6.009	48.193	4.81%	-2.98%
			5825	6.336	46.738	6.029	48.166	4.93%	-2.96%

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.

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 9-2
System Verification Results

System Verification TARGET & MEASURED												
SAR System #	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp (°C)	Liquid Temp (°C)	Input Power (W)	Source SN	Probe SN	Measured SAR_{1g} (W/kg)	1 W Target SAR_{1g} (W/kg)	1 W Normalized SAR_{1g} (W/kg)	Deviation$_{1g}$ (%)
AM1	750	BODY	12/29/2020	23.6	20.9	0.200	1034	7427	1.630	8.570	8.150	-4.90%
AM1	750	BODY	01/09/2021	21.9	20.1	0.200	1034	7427	1.700	8.570	8.500	-0.82%
AM8	750	BODY	01/22/2021	22.5	21.2	0.200	1034	7558	1.740	8.570	8.700	1.52%
AM6	835	BODY	12/28/2020	24.0	20.1	0.200	4d040	7546	2.050	9.530	10.250	7.56%
AM6	835	BODY	12/30/2020	21.7	19.5	0.200	4d040	7546	1.950	9.530	9.750	2.31%
AM7	835	BODY	03/03/2021	23.1	21.4	0.200	4d040	7420	2.010	9.530	10.050	5.46%
AM4	850	BODY	01/20/2021	22.2	20.4	0.200	1010	7421	2.150	9.970	10.750	7.82%
AM8	1750	BODY	12/29/2020	21.7	19.7	0.100	1092	7558	3.780	36.400	36.700	3.85%
AM8	1750	BODY	12/31/2020	21.3	20.3	0.100	1092	7558	3.670	36.400	36.700	0.82%
AM4	1750	BODY	02/24/2021	22.7	21.6	0.100	1083	7421	3.930	37.100	39.300	5.93%
AM7	1900	BODY	01/02/2021	22.7	20.2	0.100	5d026	7420	3.940	39.900	39.400	-1.25%
AM7	1900	BODY	01/04/2021	23.5	21.7	0.100	5d181	7420	3.780	39.700	37.800	-4.79%
AM7	1900	BODY	01/06/2021	21.8	18.7	0.100	5d181	7420	3.840	39.700	38.400	-3.27%
AM7	1900	BODY	01/24/2021	21.5	21.0	0.100	5d030	7420	3.850	39.900	38.500	-3.51%
AM8	2300	BODY	02/09/2021	22.1	21.3	0.100	1038	7558	4.600	46.700	46.000	-1.50%
AM6	2450	BODY	01/11/2021	22.3	20.1	0.100	945	7546	5.280	49.400	52.800	6.88%
AM6	2450	BODY	01/13/2021	24.2	21.1	0.100	945	7546	5.240	49.400	52.400	6.07%
AM1	2450	BODY	01/15/2021	23.3	21.5	0.100	921	7427	5.480	50.800	54.800	7.87%
AM1	2450	BODY	01/21/2021	22.8	21.2	0.100	921	7427	5.400	50.800	54.000	6.30%
AM8	2450	BODY	02/09/2021	22.1	21.3	0.100	921	7558	5.260	50.800	52.600	3.54%
AM6	2600	BODY	01/11/2021	22.3	20.1	0.100	1009	7546	5.720	55.500	57.200	3.06%
AM6	2600	BODY	01/13/2021	24.2	21.1	0.100	1009	7546	5.660	55.500	56.600	1.98%
AM8	2600	BODY	02/09/2021	22.1	21.3	0.100	1069	7558	5.640	54.400	56.400	3.68%
AM4	3500	BODY	01/06/2021	24.5	21.8	0.100	1055	7421	6.510	65.000	65.100	0.15%
AM4	3700	BODY	01/06/2021	24.5	21.8	0.100	1002	7421	6.140	64.700	61.400	-5.10%
AM1	3700	BODY	02/08/2021	22.6	21.0	0.100	1002	3837	6.720	64.700	67.200	3.86%
AM1	3900	BODY	02/08/2021	22.6	21.0	0.100	1062	3837	6.650	66.300	66.500	0.30%
AM2	5250	BODY	01/21/2021	23.1	20.2	0.050	1163	7416	3.620	77.700	72.400	-6.82%
AM2	5600	BODY	01/21/2021	23.1	20.2	0.050	1163	7416	3.880	80.100	77.600	-3.12%
AM2	5750	BODY	01/21/2021	23.1	20.2	0.050	1163	7416	3.740	77.800	74.800	-3.86%

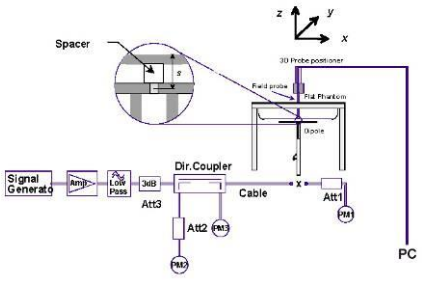

Figure 9-1
System Verification Setup Diagram

Figure 9-2
System Verification Setup Photo

REV 21.4 M
09/11/2019

10 SAR DATA SUMMARY

10.1 Standalone SAR Data

Table 10-1
GPRS 850 MHz Ant 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	# of Time Slots	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)	
824.20	128	GSM 850	GPRS	25.80	24.70	-0.03	Body	0 mm	Ant 1	H77FP2WV19	2	1:4.15	back	0.588	1.288	0.757	0.259	0.334	A1
836.60	190	GSM 850	GPRS	25.80	24.75	-0.01	Body	0 mm	Ant 1	H77FP2WV19	2	1:4.15	back	0.548	1.274	0.698	0.252	0.321	
848.80	251	GSM 850	GPRS	25.80	24.48	-0.03	Body	0 mm	Ant 1	H77FP2WV19	2	1:4.15	back	0.470	1.355	0.637	0.194	0.263	
836.60	190	GSM 850	GPRS	25.80	24.75	0.04	Body	0 mm	Ant 1	H77FP2WV19	2	1:4.15	top	0.017	1.274	0.022	0.008	0.010	
836.60	190	GSM 850	GPRS	25.80	24.75	-0.17	Body	0 mm	Ant 1	H77FP2WV19	2	1:4.15	bottom	0.523	1.274	0.666	0.224	0.285	
836.60	190	GSM 850	GPRS	25.80	24.75	0.12	Body	0 mm	Ant 1	H77FP2WV19	2	1:4.15	right	0.026	1.274	0.033	0.013	0.017	
836.60	190	GSM 850	GPRS	25.80	24.75	-0.05	Body	0 mm	Ant 1	H77FP2WV19	2	1:4.15	left	0.396	1.274	0.505	0.166	0.211	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-2
GPRS 850 MHz Ant 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	# of Time Slots	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)	
824.20	128	GSM 850	GPRS	25.20	24.13	-0.01	Body	0 mm	Ant 3	DH70Y64TLH	2	1:4.15	back	0.543	1.279	0.694	0.296	0.379	
836.60	190	GSM 850	GPRS	25.20	24.29	0.03	Body	0 mm	Ant 3	DH70Y64TLH	2	1:4.15	back	0.569	1.233	0.702	0.309	0.381	
848.80	251	GSM 850	GPRS	25.20	24.15	-0.02	Body	0 mm	Ant 3	DH70Y64TLH	2	1:4.15	back	0.558	1.274	0.711	0.301	0.383	
836.60	190	GSM 850	GPRS	25.20	24.29	-0.01	Body	0 mm	Ant 3	DH70Y64TLH	2	1:4.15	top	0.483	1.233	0.596	0.208	0.256	
836.60	190	GSM 850	GPRS	25.20	24.29	0.11	Body	0 mm	Ant 3	DH70Y64TLH	2	1:4.15	bottom	0.015	1.233	0.018	0.009	0.011	
836.60	190	GSM 850	GPRS	25.20	24.29	0.06	Body	0 mm	Ant 3	DH70Y64TLH	2	1:4.15	right	0.299	1.233	0.369	0.130	0.160	
836.60	190	GSM 850	GPRS	25.20	24.29	0.13	Body	0 mm	Ant 3	DH70Y64TLH	2	1:4.15	left	0.022	1.233	0.027	0.011	0.014	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-3
GPRS 1900 MHz Ant 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	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1880.00	661	GSM 1900	GPRS	22.70	21.93	-0.03	Body	0 mm	Ant 1	GXWM69926V	2	1:4.15	back	0.567	1.194	0.677	0.284	0.339	
1880.00	661	GSM 1900	GPRS	22.70	21.93	0.02	Body	0 mm	Ant 1	GXWM69926V	2	1:4.15	top	0.016	1.194	0.019	0.008	0.010	
1880.00	661	GSM 1900	GPRS	22.70	21.93	-0.01	Body	0 mm	Ant 1	GXWM69926V	2	1:4.15	bottom	0.280	1.194	0.334	0.113	0.135	
1880.00	661	GSM 1900	GPRS	22.70	21.93	-0.12	Body	0 mm	Ant 1	GXWM69926V	2	1:4.15	right	0.000	1.194	0.000	0.000	0.000	
1850.20	512	GSM 1900	GPRS	22.70	21.80	0.04	Body	0 mm	Ant 1	GXWM69926V	2	1:4.15	left	0.496	1.230	0.610	0.204	0.251	
1880.00	661	GSM 1900	GPRS	22.70	21.93	0.14	Body	0 mm	Ant 1	GXWM69926V	2	1:4.15	left	0.594	1.194	0.709	0.241	0.288	A2
1909.80	810	GSM 1900	GPRS	22.70	21.63	0.06	Body	0 mm	Ant 1	GXWM69926V	2	1:4.15	left	0.453	1.279	0.579	0.183	0.234	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-4
GPRS 1900 MHz Ant 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	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1880.00	661	GSM 1900	GPRS	22.50	20.80	0.08	Body	0 mm	Ant 3	GXWM69926V	2	1:4.15	back	0.302	1.479	0.447	0.155	0.229	
1880.00	661	GSM 1900	GPRS	22.50	20.80	-0.02	Body	0 mm	Ant 3	GXWM69926V	2	1:4.15	top	0.210	1.479	0.311	0.084	0.124	
1880.00	661	GSM 1900	GPRS	22.50	20.80	0.06	Body	0 mm	Ant 3	GXWM69926V	2	1:4.15	bottom	0.014	1.479	0.021	0.007	0.010	
1850.20	512	GSM 1900	GPRS	22.50	20.66	0.03	Body	0 mm	Ant 3	GXWM69926V	2	1:4.15	right	0.433	1.528	0.662	0.171	0.261	
1880.00	661	GSM 1900	GPRS	22.50	20.80	0.01	Body	0 mm	Ant 3	GXWM69926V	2	1:4.15	right	0.469	1.479	0.694	0.185	0.274	
1909.80	810	GSM 1900	GPRS	22.50	20.50	-0.01	Body	0 mm	Ant 3	GXWM69926V	2	1:4.15	right	0.441	1.585	0.699	0.184	0.292	
1880.00	661	GSM 1900	GPRS	22.50	20.80	0.07	Body	0 mm	Ant 3	GXWM69926V	2	1:4.15	left	0.003	1.479	0.004	0.002	0.003	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 10-5
GPRS 1900 MHz Ant 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	# of Time Slots	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)	
1850.20	512	GSM 1900	GPRS	20.00	18.25	-0.04	Body	0 mm	Ant 2b	QT394MN7TK	2	1:4.15	back	0.369	1.496	0.552	0.169	0.253	
1880.00	661	GSM 1900	GPRS	20.00	18.21	0.00	Body	0 mm	Ant 2b	QT394MN7TK	2	1:4.15	back	0.439	1.510	0.663	0.191	0.288	
1909.80	810	GSM 1900	GPRS	20.00	18.04	0.00	Body	0 mm	Ant 2b	QT394MN7TK	2	1:4.15	back	0.395	1.570	0.620	0.178	0.279	
1880.00	661	GSM 1900	GPRS	20.00	18.21	0.07	Body	0 mm	Ant 2b	QT394MN7TK	2	1:4.15	top	0.024	1.510	0.036	0.012	0.018	
1880.00	661	GSM 1900	GPRS	20.00	18.21	-0.03	Body	0 mm	Ant 2b	QT394MN7TK	2	1:4.15	bottom	0.257	1.510	0.388	0.102	0.154	
1880.00	661	GSM 1900	GPRS	20.00	18.21	-0.07	Body	0 mm	Ant 2b	QT394MN7TK	2	1:4.15	right	0.218	1.510	0.329	0.107	0.162	
1880.00	661	GSM 1900	GPRS	20.00	18.21	0.03	Body	0 mm	Ant 2b	QT394MN7TK	2	1:4.15	left	0.104	1.510	0.157	0.050	0.076	
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
GPRS 1900 MHz Ant 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	# of Time Slots	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)	
1850.20	512	GSM 1900	GPRS	18.00	16.90	0.00	Body	0 mm	Ant 4b	M9R2DWTV6G	2	1:4.15	back	0.445	1.288	0.573	0.176	0.227	
1880.00	661	GSM 1900	GPRS	18.00	16.87	-0.15	Body	0 mm	Ant 4b	M9R2DWTV6G	2	1:4.15	back	0.536	1.297	0.695	0.214	0.278	
1909.80	810	GSM 1900	GPRS	18.00	17.17	-0.02	Body	0 mm	Ant 4b	M9R2DWTV6G	2	1:4.15	back	0.533	1.211	0.645	0.209	0.253	
1880.00	661	GSM 1900	GPRS	18.00	16.87	-0.20	Body	0 mm	Ant 4b	M9R2DWTV6G	2	1:4.15	top	0.302	1.297	0.392	0.126	0.163	
1880.00	661	GSM 1900	GPRS	18.00	16.87	-0.05	Body	0 mm	Ant 4b	M9R2DWTV6G	2	1:4.15	bottom	0.002	1.297	0.003	0.002	0.003	
1880.00	661	GSM 1900	GPRS	18.00	16.87	-0.04	Body	0 mm	Ant 4b	M9R2DWTV6G	2	1:4.15	right	0.003	1.297	0.004	0.002	0.003	
1880.00	661	GSM 1900	GPRS	18.00	16.87	-0.18	Body	0 mm	Ant 4b	M9R2DWTV6G	2	1:4.15	left	0.009	1.297	0.012	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 10-7
UMTS 850 MHz Ant 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	19.00	18.58	0.04	Body	0 mm	Ant 1	DH70Y64TLH	1:1	back	0.890	1.102	0.981	0.347	0.382	A3
836.60	4183	UMTS 850	RMC	19.00	18.60	-0.03	Body	0 mm	Ant 1	DH70Y64TLH	1:1	back	0.719	1.096	0.788	0.320	0.351	
846.60	4233	UMTS 850	RMC	19.00	18.63	0.00	Body	0 mm	Ant 1	DH70Y64TLH	1:1	back	0.778	1.089	0.847	0.393	0.428	
836.60	4183	UMTS 850	RMC	19.00	18.60	-0.06	Body	0 mm	Ant 1	DH70Y64TLH	1:1	top	0.017	1.096	0.019	0.007	0.008	
836.60	4183	UMTS 850	RMC	19.00	18.60	-0.15	Body	0 mm	Ant 1	DH70Y64TLH	1:1	bottom	0.612	1.096	0.671	0.258	0.283	
836.60	4183	UMTS 850	RMC	19.00	18.60	-0.01	Body	0 mm	Ant 1	DH70Y64TLH	1:1	right	0.033	1.096	0.036	0.015	0.016	
836.60	4183	UMTS 850	RMC	19.00	18.60	-0.03	Body	0 mm	Ant 1	DH70Y64TLH	1:1	left	0.354	1.096	0.388	0.165	0.181	
826.40	4132	UMTS 850	RMC	19.00	18.58	-0.04	Body	0 mm	Ant 1	DH70Y64TLH	1:1	back	0.776	1.102	0.855	0.349	0.385	
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 10-8
UMTS 850 MHz Ant 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)	
826.40	4132	UMTS 850	RMC	19.20	18.10	0.00	Body	0 mm	Ant 3	DH70Y64TLH	1:1	back	0.503	1.288	0.648	0.277	0.357	
836.60	4183	UMTS 850	RMC	19.20	18.13	-0.03	Body	0 mm	Ant 3	DH70Y64TLH	1:1	back	0.589	1.279	0.753	0.325	0.416	
846.60	4233	UMTS 850	RMC	19.20	18.15	0.02	Body	0 mm	Ant 3	DH70Y64TLH	1:1	back	0.559	1.274	0.712	0.304	0.387	
836.60	4183	UMTS 850	RMC	19.20	18.13	-0.01	Body	0 mm	Ant 3	DH70Y64TLH	1:1	top	0.573	1.279	0.733	0.253	0.324	
836.60	4183	UMTS 850	RMC	19.20	18.13	-0.01	Body	0 mm	Ant 3	DH70Y64TLH	1:1	bottom	0.017	1.279	0.022	0.009	0.012	
836.60	4183	UMTS 850	RMC	19.20	18.13	-0.02	Body	0 mm	Ant 3	DH70Y64TLH	1:1	right	0.168	1.279	0.215	0.090	0.115	
836.60	4183	UMTS 850	RMC	19.20	18.13	0.03	Body	0 mm	Ant 3	DH70Y64TLH	1:1	left	0.024	1.279	0.031	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 10-9
UMTS 1750 MHz Ant 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	15.70	14.70	-0.15	Body	0 mm	Ant 1	Y919JM96JK	1:1	back	0.685	1.259	0.862	0.340	0.428	
1732.40	1412	UMTS 1750	RMC	15.70	14.61	-0.19	Body	0 mm	Ant 1	Y919JM96JK	1:1	back	0.660	1.285	0.848	0.331	0.425	
1752.60	1513	UMTS 1750	RMC	15.70	14.65	-0.02	Body	0 mm	Ant 1	Y919JM96JK	1:1	back	0.633	1.274	0.806	0.320	0.408	
1732.40	1412	UMTS 1750	RMC	15.70	14.61	0.10	Body	0 mm	Ant 1	Y919JM96JK	1:1	top	0.033	1.285	0.042	0.016	0.021	
1732.40	1412	UMTS 1750	RMC	15.70	14.61	0.03	Body	0 mm	Ant 1	Y919JM96JK	1:1	bottom	0.259	1.285	0.333	0.113	0.145	
1732.40	1412	UMTS 1750	RMC	15.70	14.61	0.00	Body	0 mm	Ant 1	Y919JM96JK	1:1	right	0.000	1.285	0.000	0.000	0.000	
1712.40	1312	UMTS 1750	RMC	15.70	14.70	-0.05	Body	0 mm	Ant 1	Y919JM96JK	1:1	left	0.685	1.259	0.862	0.279	0.351	
1732.40	1412	UMTS 1750	RMC	15.70	14.61	-0.05	Body	0 mm	Ant 1	Y919JM96JK	1:1	left	0.706	1.285	0.907	0.281	0.361	
1752.60	1513	UMTS 1750	RMC	15.70	14.65	-0.03	Body	0 mm	Ant 1	Y919JM96JK	1:1	left	0.659	1.274	0.840	0.265	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					

Table 10-10
UMTS 1750 MHz Ant 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)	
1732.40	1412	UMTS 1750	RMC	16.00	14.55	-0.16	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	back	0.391	1.396	0.546	0.199	0.278	
1732.40	1412	UMTS 1750	RMC	16.00	14.55	-0.06	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	top	0.245	1.396	0.342	0.106	0.148	
1732.40	1412	UMTS 1750	RMC	16.00	14.55	0.06	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	bottom	0.016	1.396	0.022	0.007	0.010	
1712.40	1312	UMTS 1750	RMC	16.00	14.52	0.02	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	right	0.506	1.406	0.711	0.208	0.292	
1732.40	1412	UMTS 1750	RMC	16.00	14.55	-0.09	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	right	0.488	1.396	0.681	0.205	0.286	
1752.60	1513	UMTS 1750	RMC	16.00	14.50	-0.03	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	right	0.449	1.413	0.634	0.189	0.267	
1732.40	1412	UMTS 1750	RMC	16.00	14.55	0.10	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	left	0.000	1.396	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 10-11
UMTS 1750 MHz Ant 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	13.40	12.37	-0.05	Body	0 mm	Ant 2b	Y919JM96JK	1:1	back	0.751	1.268	0.952	0.324	0.411	
1732.40	1412	UMTS 1750	RMC	13.40	12.52	0.00	Body	0 mm	Ant 2b	Y919JM96JK	1:1	back	0.811	1.225	0.993	0.334	0.409	
1752.60	1513	UMTS 1750	RMC	13.40	12.31	-0.06	Body	0 mm	Ant 2b	Y919JM96JK	1:1	back	0.742	1.285	0.953	0.318	0.409	
1732.40	1412	UMTS 1750	RMC	13.40	12.52	0.12	Body	0 mm	Ant 2b	Y919JM96JK	1:1	top	0.001	1.225	0.001	0.000	0.000	
1732.40	1412	UMTS 1750	RMC	13.40	12.52	-0.01	Body	0 mm	Ant 2b	Y919JM96JK	1:1	bottom	0.427	1.225	0.523	0.164	0.201	
1732.40	1412	UMTS 1750	RMC	13.40	12.52	0.04	Body	0 mm	Ant 2b	Y919JM96JK	1:1	right	0.046	1.225	0.056	0.022	0.027	
1732.40	1412	UMTS 1750	RMC	13.40	12.52	0.05	Body	0 mm	Ant 2b	Y919JM96JK	1:1	left	0.004	1.225	0.005	0.001	0.001	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-12
UMTS 1750 MHz Ant 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)	
1712.40	1312	UMTS 1750	RMC	13.70	12.99	-0.03	Body	0 mm	Ant 4b	M9R2DWTV6G	1:1	back	0.781	1.178	0.920	0.310	0.365	
1732.40	1412	UMTS 1750	RMC	13.70	12.93	-0.02	Body	0 mm	Ant 4b	M9R2DWTV6G	1:1	back	0.811	1.194	0.968	0.320	0.382	
1752.60	1513	UMTS 1750	RMC	13.70	12.83	-0.02	Body	0 mm	Ant 4b	M9R2DWTV6G	1:1	back	0.816	1.222	**0.997**	0.319	0.390	A4
1712.40	1312	UMTS 1750	RMC	13.70	12.99	-0.01	Body	0 mm	Ant 4b	M9R2DWTV6G	1:1	top	0.662	1.178	0.780	0.265	0.312	
1732.40	1412	UMTS 1750	RMC	13.70	12.93	-0.03	Body	0 mm	Ant 4b	M9R2DWTV6G	1:1	top	0.671	1.194	0.801	0.267	0.319	
1752.60	1513	UMTS 1750	RMC	13.70	12.83	0.00	Body	0 mm	Ant 4b	M9R2DWTV6G	1:1	top	0.674	1.222	0.824	0.270	0.330	
1732.40	1412	UMTS 1750	RMC	13.70	12.93	0.12	Body	0 mm	Ant 4b	M9R2DWTV6G	1:1	bottom	0.000	1.194	0.000	0.000	0.000	
1732.40	1412	UMTS 1750	RMC	13.70	12.93	0.00	Body	0 mm	Ant 4b	M9R2DWTV6G	1:1	right	0.000	1.194	0.000	0.000	0.000	
1732.40	1412	UMTS 1750	RMC	13.70	12.93	0.00	Body	0 mm	Ant 4b	M9R2DWTV6G	1:1	left	0.000	1.194	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 10-13
UMTS 1900 MHz Ant 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)	
1880.00	9400	UMTS 1900	RMC	17.10	15.58	-0.07	Body	0 mm	Ant 1	GXWM69926V	1:1	back	0.496	1.419	0.704	0.260	0.369	
1880.00	9400	UMTS 1900	RMC	17.10	15.58	0.07	Body	0 mm	Ant 1	GXWM69926V	1:1	top	0.016	1.419	0.023	0.006	0.009	
1880.00	9400	UMTS 1900	RMC	17.10	15.58	-0.02	Body	0 mm	Ant 1	GXWM69926V	1:1	bottom	0.268	1.419	0.380	0.109	0.155	
1880.00	9400	UMTS 1900	RMC	17.10	15.58	-0.07	Body	0 mm	Ant 1	GXWM69926V	1:1	right	0.000	1.419	0.000	0.000	0.000	
1852.40	9262	UMTS 1900	RMC	17.10	15.85	0.00	Body	0 mm	Ant 1	GXWM69926V	1:1	left	0.544	1.334	0.726	0.223	0.297	
1880.00	9400	UMTS 1900	RMC	17.10	15.58	-0.05	Body	0 mm	Ant 1	GXWM69926V	1:1	left	0.564	1.419	0.800	0.225	0.319	
1907.60	9538	UMTS 1900	RMC	17.10	15.70	-0.01	Body	0 mm	Ant 1	GXWM69926V	1:1	left	0.535	1.380	0.738	0.216	0.298	
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
UMTS 1900 MHz Ant 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)	
1880.00	9400	UMTS 1900	RMC	15.90	14.71	-0.10	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	back	0.371	1.315	0.488	0.195	0.256	
1880.00	9400	UMTS 1900	RMC	15.90	14.71	-0.06	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	top	0.266	1.315	0.350	0.106	0.139	
1880.00	9400	UMTS 1900	RMC	15.90	14.71	-0.07	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	bottom	0.015	1.315	0.020	0.007	0.009	
1852.40	9262	UMTS 1900	RMC	15.90	14.91	0.01	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	right	0.501	1.256	0.629	0.208	0.261	
1880.00	9400	UMTS 1900	RMC	15.90	14.71	-0.01	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	right	0.529	1.315	0.696	0.218	0.287	
1907.60	9538	UMTS 1900	RMC	15.90	14.75	0.05	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	right	0.555	1.303	0.723	0.227	0.296	
1880.00	9400	UMTS 1900	RMC	15.90	14.71	0.15	Body	0 mm	Ant 3	M9R2DWTV6G	1:1	left	0.000	1.315	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 10-15
UMTS 1900 MHz Ant 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	13.70	11.99	-0.02	Body	0 mm	Ant 2b	Y919JM96JK	1:1	back	0.613	1.483	0.909	0.255	0.378	
1880.00	9400	UMTS 1900	RMC	13.70	11.82	0.03	Body	0 mm	Ant 2b	Y919JM96JK	1:1	back	0.618	1.542	0.953	0.256	0.395	
1907.60	9538	UMTS 1900	RMC	13.70	11.77	-0.01	Body	0 mm	Ant 2b	Y919JM96JK	1:1	back	0.629	1.560	0.981	0.265	0.413	
1880.00	9400	UMTS 1900	RMC	13.70	11.82	-0.12	Body	0 mm	Ant 2b	Y919JM96JK	1:1	top	0.001	1.542	0.002	0.000	0.000	
1880.00	9400	UMTS 1900	RMC	13.70	11.82	-0.02	Body	0 mm	Ant 2b	Y919JM96JK	1:1	bottom	0.407	1.542	0.628	0.159	0.245	
1880.00	9400	UMTS 1900	RMC	13.70	11.82	0.10	Body	0 mm	Ant 2b	Y919JM96JK	1:1	right	0.035	1.542	0.054	0.016	0.025	
1880.00	9400	UMTS 1900	RMC	13.70	11.82	-0.04	Body	0 mm	Ant 2b	Y919JM96JK	1:1	left	0.013	1.542	0.020	0.005	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 10-16
UMTS 1900 MHz Ant 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	12.00	10.93	-0.03	Body	0 mm	Ant 4b	Y919JM96JK	1:1	back	0.568	1.279	0.726	0.232	0.297	
1880.00	9400	UMTS 1900	RMC	12.00	10.76	-0.04	Body	0 mm	Ant 4b	Y919JM96JK	1:1	back	0.610	1.330	0.811	0.248	0.330	
1907.60	9538	UMTS 1900	RMC	12.00	10.81	-0.02	Body	0 mm	Ant 4b	Y919JM96JK	1:1	back	0.673	1.315	0.885	0.270	0.355	A5
1880.00	9400	UMTS 1900	RMC	12.00	10.76	-0.05	Body	0 mm	Ant 4b	Y919JM96JK	1:1	top	0.428	1.330	0.569	0.167	0.222	
1880.00	9400	UMTS 1900	RMC	12.00	10.76	0.10	Body	0 mm	Ant 4b	Y919JM96JK	1:1	bottom	0.000	1.330	0.000	0.000	0.000	
1880.00	9400	UMTS 1900	RMC	12.00	10.76	-0.04	Body	0 mm	Ant 4b	Y919JM96JK	1:1	right	0.000	1.330	0.000	0.000	0.000	
1880.00	9400	UMTS 1900	RMC	12.00	10.76	0.01	Body	0 mm	Ant 4b	Y919JM96JK	1:1	left	0.015	1.330	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 10-17
LTE Band 71 Ant 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	20.60	19.07	0.18	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	back	1:1	0.591	1.422	0.840	0.245	0.348	A6
680.50	133297	Mid	LTE Band 71	20	20.60	19.11	-0.07	0	Ant 1	GXWM69926V	QPSK	50	25	0 mm	back	1:1	0.507	1.409	0.714	0.247	0.348	
680.50	133297	Mid	LTE Band 71	20	20.60	19.06	-0.03	0	Ant 1	GXWM69926V	QPSK	100	0	0 mm	back	1:1	0.506	1.426	0.722	0.242	0.345	
680.50	133297	Mid	LTE Band 71	20	20.60	19.07	0.06	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	top	1:1	0.014	1.422	0.020	0.007	0.010	
680.50	133297	Mid	LTE Band 71	20	20.60	19.11	0.01	0	Ant 1	GXWM69926V	QPSK	50	25	0 mm	top	1:1	0.010	1.409	0.014	0.005	0.007	
680.50	133297	Mid	LTE Band 71	20	20.60	19.07	-0.02	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	bottom	1:1	0.460	1.422	0.654	0.190	0.270	
680.50	133297	Mid	LTE Band 71	20	20.60	19.11	0.06	0	Ant 1	GXWM69926V	QPSK	50	25	0 mm	bottom	1:1	0.454	1.409	0.640	0.188	0.265	
680.50	133297	Mid	LTE Band 71	20	20.60	19.07	-0.15	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	right	1:1	0.018	1.422	0.026	0.008	0.011	
680.50	133297	Mid	LTE Band 71	20	20.60	19.11	0.04	0	Ant 1	GXWM69926V	QPSK	50	25	0 mm	right	1:1	0.017	1.409	0.024	0.008	0.011	
680.50	133297	Mid	LTE Band 71	20	20.60	19.07	-0.04	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	left	1:1	0.229	1.422	0.326	0.091	0.129	
680.50	133297	Mid	LTE Band 71	20	20.60	19.11	-0.04	0	Ant 1	GXWM69926V	QPSK	50	25	0 mm	left	1:1	0.227	1.409	0.320	0.092	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 10-18
LTE Band 71 Ant 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	20.30	19.16	0.04	0	Ant 3	GXWM69926V	QPSK	1	0	0 mm	back	1:1	0.568	1.300	0.738	0.292	0.380	
680.50	133297	Mid	LTE Band 71	20	20.30	19.25	0.02	0	Ant 3	GXWM69926V	QPSK	50	25	0 mm	back	1:1	0.525	1.274	0.669	0.278	0.354	
680.50	133297	Mid	LTE Band 71	20	20.30	19.16	-0.04	0	Ant 3	GXWM69926V	QPSK	1	0	0 mm	top	1:1	0.463	1.300	0.602	0.190	0.247	
680.50	133297	Mid	LTE Band 71	20	20.30	19.25	-0.03	0	Ant 3	GXWM69926V	QPSK	50	25	0 mm	top	1:1	0.446	1.274	0.568	0.185	0.236	
680.50	133297	Mid	LTE Band 71	20	20.30	19.16	-0.02	0	Ant 3	GXWM69926V	QPSK	1	0	0 mm	bottom	1:1	0.009	1.300	0.012	0.004	0.005	
680.50	133297	Mid	LTE Band 71	20	20.30	19.25	-0.07	0	Ant 3	GXWM69926V	QPSK	50	25	0 mm	bottom	1:1	0.008	1.274	0.010	0.003	0.004	
680.50	133297	Mid	LTE Band 71	20	20.30	19.16	-0.10	0	Ant 3	GXWM69926V	QPSK	1	0	0 mm	right	1:1	0.192	1.300	0.250	0.090	0.117	
680.50	133297	Mid	LTE Band 71	20	20.30	19.25	0.13	0	Ant 3	GXWM69926V	QPSK	50	25	0 mm	right	1:1	0.175	1.274	0.223	0.084	0.107	
680.50	133297	Mid	LTE Band 71	20	20.30	19.16	-0.02	0	Ant 3	GXWM69926V	QPSK	1	0	0 mm	left	1:1	0.025	1.300	0.033	0.012	0.016	
680.50	133297	Mid	LTE Band 71	20	20.30	19.25	-0.11	0	Ant 3	GXWM69926V	QPSK	50	25	0 mm	left	1:1	0.024	1.274	0.031	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 12 Ant 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	20.20	19.77	-0.03	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	back	1:1	0.863	1.104	0.953	0.346	0.382	
707.50	23095	Mid	LTE Band 12	10	20.20	19.93	-0.04	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	back	1:1	0.885	1.064	0.942	0.350	0.372	A7
707.50	23095	Mid	LTE Band 12	10	20.20	19.76	-0.02	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	back	1:1	0.881	1.107	0.975	0.380	0.421	
707.50	23095	Mid	LTE Band 12	10	20.20	19.77	-0.01	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	top	1:1	0.017	1.104	0.019	0.008	0.009	
707.50	23095	Mid	LTE Band 12	10	20.20	19.93	0.05	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	top	1:1	0.019	1.064	0.020	0.008	0.009	
707.50	23095	Mid	LTE Band 12	10	20.20	19.77	-0.08	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	bottom	1:1	0.588	1.104	0.649	0.255	0.282	
707.50	23095	Mid	LTE Band 12	10	20.20	19.93	-0.06	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	bottom	1:1	0.604	1.064	0.643	0.261	0.278	
707.50	23095	Mid	LTE Band 12	10	20.20	19.77	-0.10	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	right	1:1	0.029	1.104	0.032	0.015	0.017	
707.50	23095	Mid	LTE Band 12	10	20.20	19.93	-0.14	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	right	1:1	0.030	1.064	0.032	0.015	0.016	
707.50	23095	Mid	LTE Band 12	10	20.20	19.77	0.00	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	left	1:1	0.291	1.104	0.321	0.121	0.134	
707.50	23095	Mid	LTE Band 12	10	20.20	19.93	-0.04	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	left	1:1	0.294	1.064	0.313	0.122	0.130	
707.50	23095	Mid	LTE Band 12	10	20.20	19.93	-0.02	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	back	1:1	0.791	1.064	0.842	0.385	0.410	
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 10-20
LTE Band 12 Ant 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	19.60	18.64	0.03	0	Ant 3	GXWM69926V	QPSK	1	25	0 mm	back	1:1	0.596	1.247	0.743	0.324	0.404	
707.50	23095	Mid	LTE Band 12	10	19.60	18.76	0.10	0	Ant 3	GXWM69926V	QPSK	25	0	0 mm	back	1:1	0.629	1.213	0.763	0.341	0.414	
707.50	23095	Mid	LTE Band 12	10	19.60	18.64	0.07	0	Ant 3	GXWM69926V	QPSK	1	25	0 mm	top	1:1	0.440	1.247	0.549	0.195	0.243	
707.50	23095	Mid	LTE Band 12	10	19.60	18.76	0.00	0	Ant 3	GXWM69926V	QPSK	25	0	0 mm	top	1:1	0.465	1.213	0.564	0.204	0.247	
707.50	23095	Mid	LTE Band 12	10	19.60	18.64	0.13	0	Ant 3	GXWM69926V	QPSK	1	25	0 mm	bottom	1:1	0.009	1.247	0.011	0.004	0.005	
707.50	23095	Mid	LTE Band 12	10	19.60	18.76	0.04	0	Ant 3	GXWM69926V	QPSK	25	0	0 mm	bottom	1:1	0.009	1.213	0.011	0.004	0.005	
707.50	23095	Mid	LTE Band 12	10	19.60	18.64	-0.04	0	Ant 3	GXWM69926V	QPSK	1	25	0 mm	right	1:1	0.236	1.247	0.294	0.105	0.131	
707.50	23095	Mid	LTE Band 12	10	19.60	18.76	-0.06	0	Ant 3	GXWM69926V	QPSK	25	0	0 mm	right	1:1	0.245	1.213	0.297	0.109	0.132	
707.50	23095	Mid	LTE Band 12	10	19.60	18.64	-0.08	0	Ant 3	GXWM69926V	QPSK	1	25	0 mm	left	1:1	0.031	1.247	0.039	0.015	0.019	
707.50	23095	Mid	LTE Band 12	10	19.60	18.76	0.00	0	Ant 3	GXWM69926V	QPSK	25	0	0 mm	left	1:1	0.029	1.213	0.035	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 10-21
LTE Band 13 Ant 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	20.80	19.92	0.07	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	back	1:1	0.598	1.225	0.733	0.299	0.366	
782.00	23230	Mid	LTE Band 13	10	20.80	19.95	-0.01	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	back	1:1	0.617	1.216	0.750	0.306	0.372	
782.00	23230	Mid	LTE Band 13	10	20.80	19.92	0.08	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	top	1:1	0.011	1.225	0.013	0.005	0.006	
782.00	23230	Mid	LTE Band 13	10	20.80	19.95	0.01	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	top	1:1	0.009	1.216	0.011	0.004	0.005	
782.00	23230	Mid	LTE Band 13	10	20.80	19.92	-0.01	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	bottom	1:1	0.629	1.225	0.771	0.281	0.344	
782.00	23230	Mid	LTE Band 13	10	20.80	19.95	-0.11	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	bottom	1:1	0.707	1.216	0.860	0.297	0.361	A8
782.00	23230	Mid	LTE Band 13	10	20.80	19.90	-0.03	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	bottom	1:1	0.643	1.230	0.791	0.286	0.352	
782.00	23230	Mid	LTE Band 13	10	20.80	19.92	-0.11	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	right	1:1	0.039	1.225	0.048	0.020	0.025	
782.00	23230	Mid	LTE Band 13	10	20.80	19.95	0.19	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	right	1:1	0.041	1.216	0.050	0.020	0.024	
782.00	23230	Mid	LTE Band 13	10	20.80	19.92	0.05	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	left	1:1	0.348	1.225	0.426	0.155	0.190	
782.00	23230	Mid	LTE Band 13	10	20.80	19.95	0.00	0	Ant 1	GXWM69926V	QPSK	25	0	0 mm	left	1:1	0.350	1.216	0.426	0.157	0.191	
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 13 Ant 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.																						
782.00	23230	Mid	LTE Band 13	10	19.70	18.73	-0.07	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	back	1:1	0.453	1.250	0.566	0.240	0.300	
782.00	23230	Mid	LTE Band 13	10	19.70	18.79	0.02	0	Ant 3	FFQ5HYX09W	QPSK	25	0	0 mm	back	1:1	0.465	1.233	0.573	0.245	0.302	
782.00	23230	Mid	LTE Band 13	10	19.70	18.73	-0.11	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	top	1:1	0.455	1.250	0.569	0.200	0.250	
782.00	23230	Mid	LTE Band 13	10	19.70	18.79	-0.02	0	Ant 3	FFQ5HYX09W	QPSK	25	0	0 mm	top	1:1	0.525	1.233	0.647	0.218	0.269	
782.00	23230	Mid	LTE Band 13	10	19.70	18.73	-0.04	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	bottom	1:1	0.005	1.250	0.006	0.003	0.004	
782.00	23230	Mid	LTE Band 13	10	19.70	18.79	-0.10	0	Ant 3	FFQ5HYX09W	QPSK	25	0	0 mm	bottom	1:1	0.005	1.233	0.006	0.003	0.004	
782.00	23230	Mid	LTE Band 13	10	19.70	18.73	-0.11	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	right	1:1	0.172	1.250	0.215	0.081	0.101	
782.00	23230	Mid	LTE Band 13	10	19.70	18.79	0.07	0	Ant 3	FFQ5HYX09W	QPSK	25	0	0 mm	right	1:1	0.173	1.233	0.213	0.081	0.100	
782.00	23230	Mid	LTE Band 13	10	19.70	18.73	0.17	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	left	1:1	0.021	1.250	0.026	0.010	0.013	
782.00	23230	Mid	LTE Band 13	10	19.70	18.79	0.03	0	Ant 3	FFQ5HYX09W	QPSK	25	0	0 mm	left	1:1	0.022	1.233	0.027	0.011	0.014	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 10-23
LTE Band 14 Ant 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.																						
793.00	23330	Mid	LTE Band 14	10	20.80	19.77	0.07	0	Ant 1	FFQ5HYX09W	QPSK	1	0	0 mm	back	1:1	0.518	1.268	0.657	0.264	0.335	
793.00	23330	Mid	LTE Band 14	10	20.80	19.82	0.08	0	Ant 1	FFQ5HYX09W	QPSK	25	0	0 mm	back	1:1	0.526	1.253	0.659	0.268	0.336	
793.00	23330	Mid	LTE Band 14	10	20.80	19.77	-0.01	0	Ant 1	FFQ5HYX09W	QPSK	1	0	0 mm	top	1:1	0.013	1.268	0.016	0.006	0.008	
793.00	23330	Mid	LTE Band 14	10	20.80	19.82	-0.09	0	Ant 1	FFQ5HYX09W	QPSK	25	0	0 mm	top	1:1	0.015	1.253	0.019	0.007	0.009	
793.00	23330	Mid	LTE Band 14	10	20.80	19.77	0.04	0	Ant 1	FFQ5HYX09W	QPSK	1	0	0 mm	bottom	1:1	0.632	1.268	0.801	0.289	0.366	
793.00	23330	Mid	LTE Band 14	10	20.80	19.82	-0.04	0	Ant 1	FFQ5HYX09W	QPSK	25	0	0 mm	bottom	1:1	0.651	1.253	0.816	0.297	0.372	
793.00	23330	Mid	LTE Band 14	10	20.80	19.76	0.02	0	Ant 1	FFQ5HYX09W	QPSK	50	0	0 mm	bottom	1:1	0.663	1.271	0.843	0.281	0.357	A9
793.00	23330	Mid	LTE Band 14	10	20.80	19.77	-0.11	0	Ant 1	FFQ5HYX09W	QPSK	1	0	0 mm	right	1:1	0.038	1.268	0.048	0.018	0.023	
793.00	23330	Mid	LTE Band 14	10	20.80	19.82	-0.06	0	Ant 1	FFQ5HYX09W	QPSK	25	0	0 mm	right	1:1	0.035	1.253	0.044	0.017	0.021	
793.00	23330	Mid	LTE Band 14	10	20.80	19.77	0.02	0	Ant 1	FFQ5HYX09W	QPSK	1	0	0 mm	left	1:1	0.308	1.268	0.391	0.138	0.175	
793.00	23330	Mid	LTE Band 14	10	20.80	19.82	0.03	0	Ant 1	FFQ5HYX09W	QPSK	25	0	0 mm	left	1:1	0.309	1.253	0.387	0.138	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 10-24
LTE Band 14 Ant 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.																						
793.00	23330	Mid	LTE Band 14	10	19.70	18.78	0.07	0	Ant 3	GXWM69926V	QPSK	1	49	0 mm	back	1:1	0.439	1.236	0.543	0.236	0.292	
793.00	23330	Mid	LTE Band 14	10	19.70	18.90	0.09	0	Ant 3	GXWM69926V	QPSK	25	12	0 mm	back	1:1	0.454	1.202	0.546	0.244	0.293	
793.00	23330	Mid	LTE Band 14	10	19.70	18.78	-0.10	0	Ant 3	GXWM69926V	QPSK	1	49	0 mm	top	1:1	0.547	1.236	0.676	0.226	0.279	
793.00	23330	Mid	LTE Band 14	10	19.70	18.90	-0.02	0	Ant 3	GXWM69926V	QPSK	25	12	0 mm	top	1:1	0.528	1.202	0.635	0.224	0.269	
793.00	23330	Mid	LTE Band 14	10	19.70	18.78	-0.04	0	Ant 3	GXWM69926V	QPSK	1	49	0 mm	bottom	1:1	0.005	1.236	0.006	0.002	0.002	
793.00	23330	Mid	LTE Band 14	10	19.70	18.90	-0.19	0	Ant 3	GXWM69926V	QPSK	25	12	0 mm	bottom	1:1	0.006	1.202	0.007	0.003	0.004	
793.00	23330	Mid	LTE Band 14	10	19.70	18.78	0.06	0	Ant 3	GXWM69926V	QPSK	1	49	0 mm	right	1:1	0.129	1.236	0.159	0.064	0.079	
793.00	23330	Mid	LTE Band 14	10	19.70	18.90	-0.06	0	Ant 3	GXWM69926V	QPSK	25	12	0 mm	right	1:1	0.138	1.202	0.166	0.068	0.082	
793.00	23330	Mid	LTE Band 14	10	19.70	18.78	0.03	0	Ant 3	GXWM69926V	QPSK	1	49	0 mm	left	1:1	0.018	1.236	0.022	0.009	0.011	
793.00	23330	Mid	LTE Band 14	10	19.70	18.90	0.06	0	Ant 3	GXWM69926V	QPSK	25	12	0 mm	left	1:1	0.019	1.202	0.023	0.009	0.011	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 10-25
LTE Band 26 Ant 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	19.00	18.30	-0.02	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	back	1:1	0.823	1.175	0.967	0.341	0.401	A10
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.00	18.28	0.02	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	back	1:1	0.722	1.180	0.852	0.310	0.366	
844.00	26990	High	LTE Band 26 (Cell)	10	19.00	18.24	0.05	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	back	1:1	0.632	1.191	0.753	0.274	0.326	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.38	-0.04	0	Ant 1	QT394MN7TK	QPSK	25	0	0 mm	back	1:1	0.819	1.153	0.944	0.347	0.400	
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.00	18.31	0.00	0	Ant 1	QT394MN7TK	QPSK	25	12	0 mm	back	1:1	0.713	1.172	0.836	0.301	0.353	
844.00	26990	High	LTE Band 26 (Cell)	10	19.00	18.28	-0.04	0	Ant 1	QT394MN7TK	QPSK	25	12	0 mm	back	1:1	0.637	1.180	0.752	0.273	0.322	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.29	0.01	0	Ant 1	QT394MN7TK	QPSK	50	0	0 mm	back	1:1	0.799	1.178	0.941	0.337	0.397	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.30	0.05	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	top	1:1	0.014	1.175	0.016	0.007	0.008	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.38	0.11	0	Ant 1	QT394MN7TK	QPSK	25	0	0 mm	top	1:1	0.016	1.153	0.018	0.007	0.008	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.30	-0.11	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	bottom	1:1	0.544	1.175	0.639	0.237	0.278	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.38	0.06	0	Ant 1	QT394MN7TK	QPSK	25	0	0 mm	bottom	1:1	0.546	1.153	0.630	0.238	0.274	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.30	0.17	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	right	1:1	0.022	1.175	0.026	0.010	0.012	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.38	0.03	0	Ant 1	QT394MN7TK	QPSK	25	0	0 mm	right	1:1	0.021	1.153	0.024	0.010	0.012	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.30	-0.01	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	left	1:1	0.327	1.175	0.384	0.142	0.167	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.00	18.38	0.04	0	Ant 1	QT394MN7TK	QPSK	25	0	0 mm	left	1:1	0.335	1.153	0.386	0.145	0.167	
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 26 Ant 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)	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.20	18.15	-0.04	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	back	1:1	0.583	1.274	0.743	0.320	0.408	
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.20	18.07	-0.04	0	Ant 3	DH70Y64TLH	QPSK	1	25	0 mm	back	1:1	0.611	1.297	0.792	0.334	0.433	
844.00	26990	High	LTE Band 26 (Cell)	10	19.20	18.21	0.01	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	back	1:1	0.654	1.256	0.821	0.352	0.442	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.20	18.30	-0.04	0	Ant 3	DH70Y64TLH	QPSK	25	0	0 mm	back	1:1	0.606	1.230	0.745	0.331	0.407	
831.50	26865	Mid	LTE Band 26 (Cell)	10	19.20	18.20	-0.05	0	Ant 3	DH70Y64TLH	QPSK	50	0	0 mm	back	1:1	0.635	1.259	0.799	0.345	0.434	
844.00	26990	High	LTE Band 26 (Cell)	10	19.20	18.21	0.02	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	top	1:1	0.629	1.256	0.790	0.274	0.344	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.20	18.30	-0.07	0	Ant 3	DH70Y64TLH	QPSK	25	0	0 mm	top	1:1	0.648	1.230	0.797	0.285	0.351	
844.00	26990	High	LTE Band 26 (Cell)	10	19.20	18.21	0.04	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	bottom	1:1	0.022	1.256	0.028	0.012	0.015	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.20	18.30	0.19	0	Ant 3	DH70Y64TLH	QPSK	25	0	0 mm	bottom	1:1	0.012	1.230	0.015	0.006	0.007	
844.00	26990	High	LTE Band 26 (Cell)	10	19.20	18.21	-0.10	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	right	1:1	0.314	1.256	0.394	0.144	0.181	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.20	18.30	-0.08	0	Ant 3	DH70Y64TLH	QPSK	25	0	0 mm	right	1:1	0.264	1.230	0.325	0.121	0.149	
844.00	26990	High	LTE Band 26 (Cell)	10	19.20	18.21	-0.11	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	left	1:1	0.025	1.256	0.031	0.012	0.015	
819.00	26740	Low	LTE Band 26 (Cell)	10	19.20	18.30	0.07	0	Ant 3	DH70Y64TLH	QPSK	25	0	0 mm	left	1:1	0.015	1.230	0.018	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 10-27
LTE Band 5 Ant 1 Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.55	-0.16	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	back	1:1	0.781	1.109	0.866	0.390	0.433	A11
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.64	-0.04	0	Ant 1	QT394MN7TK	QPSK	25	12	0 mm	back	1:1	0.743	1.086	0.807	0.318	0.345	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.54	-0.04	0	Ant 1	QT394MN7TK	QPSK	50	0	0 mm	back	1:1	0.729	1.112	0.811	0.317	0.353	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.50	-0.19	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	back	1:1	0.755	1.122	0.847	0.339	0.380	
2 CC Uplink	SCC	829.30	20453	Mid	LTE Band 5 (Cell)	5								1	24									
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.55	0.08	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	top	1:1	0.025	1.109	0.028	0.011	0.012	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.64	0.07	0	Ant 1	QT394MN7TK	QPSK	25	12	0 mm	top	1:1	0.019	1.086	0.021	0.008	0.009	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.55	-0.21	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	bottom	1:1	0.590	1.109	0.654	0.245	0.272	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.64	-0.05	0	Ant 1	QT394MN7TK	QPSK	25	12	0 mm	bottom	1:1	0.603	1.086	0.655	0.249	0.270	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.55	0.03	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	right	1:1	0.028	1.109	0.031	0.013	0.014	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.64	-0.07	0	Ant 1	QT394MN7TK	QPSK	25	12	0 mm	right	1:1	0.029	1.086	0.031	0.014	0.015	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.55	-0.01	0	Ant 1	QT394MN7TK	QPSK	1	0	0 mm	left	1:1	0.254	1.109	0.282	0.129	0.143	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.00	18.64	0.02	0	Ant 1	QT394MN7TK	QPSK	25	12	0 mm	left	1:1	0.267	1.086	0.290	0.136	0.148	
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 5 Ant 3 Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.07	0.02	0	Ant 3	M9R2DWTV6G	QPSK	1	25	0 mm	back	1:1	0.625	1.297	0.811	0.333	0.432	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.21	0.01	0	Ant 3	M9R2DWTV6G	QPSK	25	12	0 mm	back	1:1	0.648	1.256	0.814	0.343	0.431	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.06	-0.01	0	Ant 3	M9R2DWTV6G	QPSK	50	0	0 mm	back	1:1	0.659	1.300	0.857	0.346	0.450	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.55	-0.02	0	Ant 3	M9R2DWTV6G	QPSK	50	0	0 mm	back	1:1	0.705	1.161	0.819	0.383	0.445	
2 CC Uplink	SCC	829.30	20453	Mid	LTE Band 5 (Cell)	5								25	0									
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.07	0.03	0	Ant 3	M9R2DWTV6G	QPSK	1	25	0 mm	top	1:1	0.588	1.297	0.763	0.245	0.318	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.21	-0.08	0	Ant 3	M9R2DWTV6G	QPSK	25	12	0 mm	top	1:1	0.629	1.256	0.790	0.258	0.324	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.07	0.03	0	Ant 3	M9R2DWTV6G	QPSK	1	25	0 mm	bottom	1:1	0.017	1.297	0.022	0.009	0.012	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.21	0.19	0	Ant 3	M9R2DWTV6G	QPSK	25	12	0 mm	bottom	1:1	0.018	1.256	0.023	0.010	0.013	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.07	-0.05	0	Ant 3	M9R2DWTV6G	QPSK	1	25	0 mm	right	1:1	0.296	1.297	0.384	0.129	0.167	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.21	-0.07	0	Ant 3	M9R2DWTV6G	QPSK	25	12	0 mm	right	1:1	0.299	1.256	0.376	0.132	0.166	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.07	0.17	0	Ant 3	M9R2DWTV6G	QPSK	1	25	0 mm	left	1:1	0.019	1.297	0.025	0.009	0.012	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	19.20	18.21	-0.01	0	Ant 3	M9R2DWTV6G	QPSK	25	12	0 mm	left	1:1	0.022	1.256	0.028	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 10-29
LTE Band 66 Ant 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)	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.70	14.76	0.18	0	Ant 1	Y919JM96JK	QPSK	1	0	0 mm	back	1:1	0.567	1.242	0.704	0.282	0.350	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.70	14.81	0.00	0	Ant 1	Y919JM96JK	QPSK	50	0	0 mm	back	1:1	0.624	1.227	0.766	0.319	0.391	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.70	14.76	0.10	0	Ant 1	Y919JM96JK	QPSK	1	0	0 mm	top	1:1	0.000	1.242	0.000	0.000	0.000	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.70	14.81	0.00	0	Ant 1	Y919JM96JK	QPSK	50	0	0 mm	top	1:1	0.000	1.227	0.000	0.000	0.000	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.70	14.76	-0.04	0	Ant 1	Y919JM96JK	QPSK	1	0	0 mm	bottom	1:1	0.246	1.242	0.306	0.109	0.135	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.70	14.81	0.00	0	Ant 1	Y919JM96JK	QPSK	50	0	0 mm	bottom	1:1	0.254	1.227	0.312	0.115	0.141	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.70	14.76	0.09	0	Ant 1	Y919JM96JK	QPSK	1	0	0 mm	right	1:1	0.000	1.242	0.000	0.000	0.000	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.70	14.81	0.07	0	Ant 1	Y919JM96JK	QPSK	50	0	0 mm	right	1:1	0.000	1.227	0.000	0.000	0.000	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.70	14.76	0.00	0	Ant 1	Y919JM96JK	QPSK	1	0	0 mm	left	1:1	0.620	1.242	0.770	0.242	0.301	
1720.00	132072	Low	LTE Band 66 (AWS)	20	15.70	14.81	0.03	0	Ant 1	Y919JM96JK	QPSK	50	0	0 mm	left	1:1	0.648	1.227	0.795	0.254	0.312	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	15.70	14.80	0.02	0	Ant 1	Y919JM96JK	QPSK	50	0	0 mm	left	1:1	0.625	1.230	0.769	0.244	0.300	
1770.00	132572	High	LTE Band 66 (AWS)	20	15.70	14.64	0.01	0	Ant 1	Y919JM96JK	QPSK	50	0	0 mm	left	1:1	0.594	1.276	0.758	0.231	0.295	
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 66 Ant 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)	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	16.00	14.34	-0.07	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	back	1:1	0.406	1.466	0.595	0.204	0.299	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	16.00	14.46	0.02	0	Ant 3	M9R2DWTV6G	QPSK	50	25	0 mm	back	1:1	0.408	1.426	0.582	0.204	0.291	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	16.00	14.34	0.01	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1	0.225	1.466	0.330	0.095	0.139	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	16.00	14.46	0.01	0	Ant 3	M9R2DWTV6G	QPSK	50	25	0 mm	top	1:1	0.230	1.426	0.328	0.097	0.138	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	16.00	14.34	-0.14	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	bottom	1:1	0.015	1.466	0.022	0.007	0.010	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	16.00	14.46	-0.18	0	Ant 3	M9R2DWTV6G	QPSK	50	25	0 mm	bottom	1:1	0.017	1.426	0.024	0.008	0.011	
1720.00	132072	Low	LTE Band 66 (AWS)	20	16.00	14.20	-0.05	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1	0.436	1.514	0.660	0.180	0.273	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	16.00	14.34	-0.01	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1	0.475	1.466	0.696	0.198	0.290	
1770.00	132572	High	LTE Band 66 (AWS)	20	16.00	14.16	0.02	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1	0.456	1.528	0.697	0.187	0.286	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	16.00	14.46	-0.01	0	Ant 3	M9R2DWTV6G	QPSK	50	25	0 mm	right	1:1	0.481	1.426	0.686	0.199	0.284	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	16.00	14.34	-0.10	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	left	1:1	0.000	1.466	0.000	0.000	0.000	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	16.00	14.46	-0.10	0	Ant 3	M9R2DWTV6G	QPSK	50	25	0 mm	left	1:1	0.000	1.426	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 10-31
LTE Band 66 Ant 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)	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.40	12.37	-0.03	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	back	1:1	0.701	1.268	0.889	0.292	0.370	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.40	12.58	-0.02	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	back	1:1	0.728	1.208	0.879	0.293	0.354	A12
1770.00	132572	High	LTE Band 66 (AWS)	20	13.40	12.55	-0.03	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	back	1:1	0.708	1.216	0.861	0.286	0.348	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.40	12.59	-0.04	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	back	1:1	0.727	1.205	0.876	0.296	0.357	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.40	12.58	-0.02	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	back	1:1	0.721	1.208	0.871	0.292	0.353	
1770.00	132572	High	LTE Band 66 (AWS)	20	13.40	12.55	0.00	0	Ant 2b	Y919JM96JK	QPSK	50	25	0 mm	back	1:1	0.722	1.216	0.878	0.293	0.356	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.40	12.49	-0.02	0	Ant 2b	Y919JM96JK	QPSK	100	0	0 mm	back	1:1	0.716	1.233	0.883	0.290	0.358	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.40	12.58	0.00	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	top	1:1	0.000	1.208	0.000	0.000	0.000	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.40	12.59	0.00	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	top	1:1	0.000	1.205	0.000	0.000	0.000	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.40	12.58	-0.06	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	bottom	1:1	0.363	1.208	0.439	0.142	0.172	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.40	12.59	0.01	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	bottom	1:1	0.379	1.205	0.457	0.148	0.178	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.40	12.58	0.07	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	right	1:1	0.037	1.208	0.045	0.018	0.022	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.40	12.59	0.18	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	right	1:1	0.038	1.205	0.046	0.018	0.022	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.40	12.58	0.17	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	left	1:1	0.009	1.208	0.011	0.002	0.002	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.40	12.59	0.10	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	left	1:1	0.007	1.205	0.008	0.002	0.002	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 10-32
LTE Band 66 Ant 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)	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.70	12.84	-0.06	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	back	1:1	0.624	1.219	0.761	0.248	0.302	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.70	12.88	-0.12	0	Ant 4b	M9R2DWTV6G	QPSK	50	25	0 mm	back	1:1	0.661	1.208	0.798	0.266	0.321	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.90	-0.04	0	Ant 4b	M9R2DWTV6G	QPSK	50	0	0 mm	back	1:1	0.688	1.202	0.827	0.270	0.325	
1770.00	132572	High	LTE Band 66 (AWS)	20	13.70	12.69	-0.07	0	Ant 4b	M9R2DWTV6G	QPSK	50	25	0 mm	back	1:1	0.711	1.262	0.897	0.280	0.353	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.83	-0.01	0	Ant 4b	M9R2DWTV6G	QPSK	100	0	0 mm	back	1:1	0.697	1.222	0.852	0.276	0.337	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.70	12.84	-0.03	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1	0.616	1.219	0.751	0.236	0.288	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.90	-0.07	0	Ant 4b	M9R2DWTV6G	QPSK	50	0	0 mm	top	1:1	0.607	1.202	0.730	0.237	0.285	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.70	12.84	0.10	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	bottom	1:1	0.000	1.219	0.000	0.000	0.000	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.90	0.00	0	Ant 4b	M9R2DWTV6G	QPSK	50	0	0 mm	bottom	1:1	0.000	1.202	0.000	0.000	0.000	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.70	12.84	-0.17	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1	0.001	1.219	0.001	0.000	0.000	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.90	-0.05	0	Ant 4b	M9R2DWTV6G	QPSK	50	0	0 mm	right	1:1	0.000	1.202	0.000	0.000	0.000	
1720.00	132072	Low	LTE Band 66 (AWS)	20	13.70	12.84	0.16	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	left	1:1	0.033	1.219	0.040	0.014	0.017	
1745.00	132322	Mid	LTE Band 66 (AWS)	20	13.70	12.90	0.11	0	Ant 4b	M9R2DWTV6G	QPSK	50	0	0 mm	left	1:1	0.035	1.202	0.042	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 10-33
LTE Band 25 Ant 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	17.10	16.00	-0.07	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	back	1:1	0.485	1.288	0.625	0.261	0.336	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.10	16.18	-0.04	0	Ant 1	GMQY0KQNHY	QPSK	50	0	0 mm	back	1:1	0.494	1.236	0.611	0.264	0.326	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.10	16.00	0.02	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	top	1:1	0.017	1.288	0.022	0.008	0.010	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.10	16.18	0.08	0	Ant 1	GMQY0KQNHY	QPSK	50	0	0 mm	top	1:1	0.019	1.236	0.023	0.009	0.011	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.10	16.00	-0.08	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	bottom	1:1	0.288	1.288	0.371	0.123	0.158	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.10	16.18	-0.09	0	Ant 1	GMQY0KQNHY	QPSK	50	0	0 mm	bottom	1:1	0.289	1.236	0.357	0.124	0.153	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.10	16.00	0.04	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	right	1:1	0.000	1.288	0.000	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.10	16.18	-0.02	0	Ant 1	GMQY0KQNHY	QPSK	50	0	0 mm	right	1:1	0.000	1.236	0.000	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.10	16.00	0.00	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	left	1:1	0.513	1.288	0.661	0.211	0.272	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	17.10	15.90	-0.01	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	left	1:1	0.556	1.318	0.733	0.226	0.298	
1905.00	26590	High	LTE Band 25 (PCS)	20	17.10	15.87	0.03	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	left	1:1	0.531	1.327	0.705	0.214	0.284	
1860.00	26140	Low	LTE Band 25 (PCS)	20	17.10	16.18	0.00	0	Ant 1	GMQY0KQNHY	QPSK	50	0	0 mm	left	1:1	0.531	1.236	0.656	0.218	0.269	
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 25 Ant 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	15.90	15.06	0.05	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	back	1:1	0.401	1.213	0.486	0.207	0.251	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.90	15.05	-0.05	0	Ant 3	M9R2DWTV6G	QPSK	50	0	0 mm	back	1:1	0.406	1.216	0.494	0.208	0.253	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.90	15.06	0.02	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1	0.271	1.213	0.329	0.108	0.131	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.90	15.05	0.04	0	Ant 3	M9R2DWTV6G	QPSK	50	0	0 mm	top	1:1	0.280	1.216	0.340	0.111	0.135	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.90	15.06	-0.03	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	bottom	1:1	0.011	1.213	0.013	0.004	0.005	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.90	15.05	-0.04	0	Ant 3	M9R2DWTV6G	QPSK	50	0	0 mm	bottom	1:1	0.011	1.216	0.013	0.005	0.006	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.90	15.06	0.00	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1	0.480	1.213	0.582	0.207	0.251	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.90	15.05	-0.02	0	Ant 3	M9R2DWTV6G	QPSK	50	0	0 mm	right	1:1	0.494	1.216	0.601	0.212	0.258	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	15.90	14.89	0.01	0	Ant 3	M9R2DWTV6G	QPSK	50	0	0 mm	right	1:1	0.491	1.262	0.620	0.210	0.265	
1905.00	26590	High	LTE Band 25 (PCS)	20	15.90	14.86	0.01	0	Ant 3	M9R2DWTV6G	QPSK	50	50	0 mm	right	1:1	0.591	1.271	0.751	0.244	0.310	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.90	15.06	0.10	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	left	1:1	0.000	1.213	0.000	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	15.90	15.05	0.18	0	Ant 3	M9R2DWTV6G	QPSK	50	0	0 mm	left	1:1	0.001	1.216	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 10-35
LTE Band 25 Ant 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	13.70	12.27	-0.02	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	back	1:1	0.463	1.390	0.644	0.212	0.295	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.35	0.00	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	back	1:1	0.539	1.365	0.736	0.235	0.321	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	13.70	12.15	0.01	0	Ant 2b	Y919JM96JK	QPSK	50	50	0 mm	back	1:1	0.478	1.429	0.683	0.226	0.323	
1905.00	26590	High	LTE Band 25 (PCS)	20	13.70	12.26	-0.01	0	Ant 2b	Y919JM96JK	QPSK	50	25	0 mm	back	1:1	0.500	1.393	0.697	0.234	0.326	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.27	0.10	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	top	1:1	0.000	1.390	0.000	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.35	0.10	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	top	1:1	0.000	1.365	0.000	0.000	0.000	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.27	-0.03	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	bottom	1:1	0.339	1.390	0.471	0.138	0.192	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.35	0.00	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	bottom	1:1	0.344	1.365	0.470	0.139	0.190	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.27	-0.05	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	right	1:1	0.047	1.390	0.065	0.020	0.028	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.35	0.06	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	right	1:1	0.048	1.365	0.066	0.021	0.029	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.27	0.04	0	Ant 2b	Y919JM96JK	QPSK	1	0	0 mm	left	1:1	0.006	1.390	0.008	0.002	0.003	
1860.00	26140	Low	LTE Band 25 (PCS)	20	13.70	12.35	0.08	0	Ant 2b	Y919JM96JK	QPSK	50	0	0 mm	left	1:1	0.007	1.365	0.010	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 10-36
LTE Band 25 Ant 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)	
1905.00	26590	High	LTE Band 25 (PCS)	20	12.00	11.41	0.06	0	Ant 4b	M9R2DWTV6G	QPSK	1	99	0 mm	back	1:1	0.573	1.146	0.657	0.245	0.281	
1860.00	26140	Low	LTE Band 25 (PCS)	20	12.00	11.29	0.00	0	Ant 4b	M9R2DWTV6G	QPSK	50	0	0 mm	back	1:1	0.514	1.178	0.605	0.223	0.263	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	12.00	11.29	-0.01	0	Ant 4b	M9R2DWTV6G	QPSK	50	50	0 mm	back	1:1	0.565	1.178	0.666	0.242	0.285	
1905.00	26590	High	LTE Band 25 (PCS)	20	12.00	11.30	0.17	0	Ant 4b	M9R2DWTV6G	QPSK	50	50	0 mm	back	1:1	0.645	1.175	0.758	0.261	0.307	A13
1905.00	26590	High	LTE Band 25 (PCS)	20	12.00	11.41	-0.03	0	Ant 4b	M9R2DWTV6G	QPSK	1	99	0 mm	top	1:1	0.392	1.146	0.449	0.157	0.180	
1905.00	26590	High	LTE Band 25 (PCS)	20	12.00	11.30	0.09	0	Ant 4b	M9R2DWTV6G	QPSK	50	50	0 mm	top	1:1	0.409	1.175	0.481	0.162	0.190	
1905.00	26590	High	LTE Band 25 (PCS)	20	12.00	11.41	0.00	0	Ant 4b	M9R2DWTV6G	QPSK	1	99	0 mm	bottom	1:1	0.000	1.146	0.000	0.000	0.000	
1905.00	26590	High	LTE Band 25 (PCS)	20	12.00	11.30	0.00	0	Ant 4b	M9R2DWTV6G	QPSK	50	50	0 mm	bottom	1:1	0.000	1.175	0.000	0.000	0.000	
1905.00	26590	High	LTE Band 25 (PCS)	20	12.00	11.41	0.02	0	Ant 4b	M9R2DWTV6G	QPSK	1	99	0 mm	right	1:1	0.001	1.146	0.001	0.000	0.000	
1905.00	26590	High	LTE Band 25 (PCS)	20	12.00	11.30	0.10	0	Ant 4b	M9R2DWTV6G	QPSK	50	50	0 mm	right	1:1	0.002	1.175	0.002	0.001	0.001	
1905.00	26590	High	LTE Band 25 (PCS)	20	12.00	11.41	0.17	0	Ant 4b	M9R2DWTV6G	QPSK	1	99	0 mm	left	1:1	0.019	1.146	0.022	0.008	0.009	
1905.00	26590	High	LTE Band 25 (PCS)	20	12.00	11.30	0.18	0	Ant 4b	M9R2DWTV6G	QPSK	50	50	0 mm	left	1:1	0.018	1.175	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 30 Ant 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	13.80	12.64	-0.04	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	back	1:1	0.403	1.306	0.526	0.179	0.234	
2310.00	27710	Mid	LTE Band 30	10	13.80	12.71	-0.04	0	Ant 1	GXWM69926V	QPSK	25	25	0 mm	back	1:1	0.403	1.285	0.518	0.182	0.234	
2310.00	27710	Mid	LTE Band 30	10	13.80	12.64	0.15	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	top	1:1	0.002	1.306	0.003	0.001	0.001	
2310.00	27710	Mid	LTE Band 30	10	13.80	12.71	0.03	0	Ant 1	GXWM69926V	QPSK	25	25	0 mm	top	1:1	0.007	1.285	0.009	0.003	0.004	
2310.00	27710	Mid	LTE Band 30	10	13.80	12.64	-0.16	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	bottom	1:1	0.342	1.306	0.447	0.120	0.157	
2310.00	27710	Mid	LTE Band 30	10	13.80	12.71	-0.09	0	Ant 1	GXWM69926V	QPSK	25	25	0 mm	bottom	1:1	0.350	1.285	0.450	0.123	0.158	
2310.00	27710	Mid	LTE Band 30	10	13.80	12.64	0.17	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	right	1:1	0.001	1.306	0.001	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	13.80	12.71	0.03	0	Ant 1	GXWM69926V	QPSK	25	25	0 mm	right	1:1	0.001	1.285	0.001	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	13.80	12.64	-0.12	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	left	1:1	0.533	1.306	0.696	0.191	0.249	
2310.00	27710	Mid	LTE Band 30	10	13.80	12.71	-0.14	0	Ant 1	GXWM69926V	QPSK	25	25	0 mm	left	1:1	0.545	1.285	0.700	0.195	0.251	
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 30 Ant 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)	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.32	-0.13	0	Ant 3	H77FP2WV19	QPSK	1	0	0 mm	back	1:1	0.581	1.253	0.728	0.212	0.266	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.43	-0.14	0	Ant 3	H77FP2WV19	QPSK	25	25	0 mm	back	1:1	0.605	1.222	0.739	0.220	0.269	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.32	-0.05	0	Ant 3	H77FP2WV19	QPSK	1	0	0 mm	top	1:1	0.583	1.253	0.730	0.191	0.239	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.43	-0.14	0	Ant 3	H77FP2WV19	QPSK	25	25	0 mm	top	1:1	0.594	1.222	0.726	0.195	0.238	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.32	0.07	0	Ant 3	H77FP2WV19	QPSK	1	0	0 mm	bottom	1:1	0.007	1.253	0.009	0.002	0.003	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.43	0.07	0	Ant 3	H77FP2WV19	QPSK	25	25	0 mm	bottom	1:1	0.006	1.222	0.007	0.002	0.002	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.32	-0.13	0	Ant 3	H77FP2WV19	QPSK	1	0	0 mm	right	1:1	0.673	1.253	0.843	0.249	0.312	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.43	-0.10	0	Ant 3	H77FP2WV19	QPSK	25	25	0 mm	right	1:1	0.690	1.222	0.843	0.255	0.312	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.31	-0.04	0	Ant 3	H77FP2WV19	QPSK	50	0	0 mm	right	1:1	0.671	1.256	0.843	0.240	0.301	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.32	0.06	0	Ant 3	H77FP2WV19	QPSK	1	0	0 mm	left	1:1	0.004	1.253	0.005	0.001	0.001	
2310.00	27710	Mid	LTE Band 30	10	15.30	14.43	0.05	0	Ant 3	H77FP2WV19	QPSK	25	25	0 mm	left	1:1	0.007	1.222	0.009	0.001	0.001	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 10-39
LTE Band 30 Ant 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	14.30	13.56	0.20	0	Ant 2b	H77FP2WV19	QPSK	1	0	0 mm	back	1:1	0.829	1.186	0.983	0.352	0.417	
2310.00	27710	Mid	LTE Band 30	10	14.30	13.60	-0.07	0	Ant 2b	H77FP2WV19	QPSK	25	12	0 mm	back	1:1	0.832	1.175	0.978	0.347	0.408	
2310.00	27710	Mid	LTE Band 30	10	14.30	13.55	-0.02	0	Ant 2b	H77FP2WV19	QPSK	50	0	0 mm	back	1:1	0.833	1.189	0.990	0.346	0.411	A14
2310.00	27710	Mid	LTE Band 30	10	14.30	13.56	0.07	0	Ant 2b	H77FP2WV19	QPSK	1	0	0 mm	top	1:1	0.000	1.186	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	14.30	13.60	-0.12	0	Ant 2b	H77FP2WV19	QPSK	25	12	0 mm	top	1:1	0.000	1.175	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	14.30	13.56	-0.10	0	Ant 2b	H77FP2WV19	QPSK	1	0	0 mm	bottom	1:1	0.568	1.186	0.674	0.211	0.250	
2310.00	27710	Mid	LTE Band 30	10	14.30	13.60	0.03	0	Ant 2b	H77FP2WV19	QPSK	25	12	0 mm	bottom	1:1	0.584	1.175	0.686	0.216	0.254	
2310.00	27710	Mid	LTE Band 30	10	14.30	13.56	0.03	0	Ant 2b	H77FP2WV19	QPSK	1	0	0 mm	right	1:1	0.031	1.186	0.037	0.015	0.018	
2310.00	27710	Mid	LTE Band 30	10	14.30	13.60	0.16	0	Ant 2b	H77FP2WV19	QPSK	25	12	0 mm	right	1:1	0.031	1.175	0.036	0.015	0.018	
2310.00	27710	Mid	LTE Band 30	10	14.30	13.56	0.03	0	Ant 2b	H77FP2WV19	QPSK	1	0	0 mm	left	1:1	0.021	1.186	0.025	0.008	0.009	
2310.00	27710	Mid	LTE Band 30	10	14.30	13.60	0.04	0	Ant 2b	H77FP2WV19	QPSK	25	12	0 mm	left	1:1	0.021	1.175	0.025	0.008	0.009	
2310.00	27710	Mid	LTE Band 30	10	14.30	13.55	-0.03	0	Ant 2b	H77FP2WV19	QPSK	50	0	0 mm	back	1:1	0.771	1.189	0.917	0.322	0.383	
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 10-40
LTE Band 30 Ant 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)	
2310.00	27710	Mid	LTE Band 30	10	12.50	11.74	-0.04	0	Ant 4b	DH70Y64TLH	QPSK	1	49	0 mm	back	1:1	0.652	1.191	0.777	0.242	0.288	
2310.00	27710	Mid	LTE Band 30	10	12.50	11.81	-0.20	0	Ant 4b	DH70Y64TLH	QPSK	25	25	0 mm	back	1:1	0.670	1.172	0.785	0.248	0.291	
2310.00	27710	Mid	LTE Band 30	10	12.50	11.74	-0.07	0	Ant 4b	DH70Y64TLH	QPSK	1	49	0 mm	top	1:1	0.513	1.191	0.611	0.185	0.220	
2310.00	27710	Mid	LTE Band 30	10	12.50	11.81	-0.08	0	Ant 4b	DH70Y64TLH	QPSK	25	25	0 mm	top	1:1	0.529	1.172	0.620	0.191	0.224	
2310.00	27710	Mid	LTE Band 30	10	12.50	11.74	0.21	0	Ant 4b	DH70Y64TLH	QPSK	1	49	0 mm	bottom	1:1	0.000	1.191	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	12.50	11.81	0.19	0	Ant 4b	DH70Y64TLH	QPSK	25	25	0 mm	bottom	1:1	0.000	1.172	0.000	0.000	0.000	
2310.00	27710	Mid	LTE Band 30	10	12.50	11.74	0.06	0	Ant 4b	DH70Y64TLH	QPSK	1	49	0 mm	right	1:1	0.008	1.191	0.010	0.003	0.004	
2310.00	27710	Mid	LTE Band 30	10	12.50	11.81	0.02	0	Ant 4b	DH70Y64TLH	QPSK	25	25	0 mm	right	1:1	0.008	1.172	0.009	0.003	0.004	
2310.00	27710	Mid	LTE Band 30	10	12.50	11.74	0.01	0	Ant 4b	DH70Y64TLH	QPSK	1	49	0 mm	left	1:1	0.033	1.191	0.039	0.013	0.015	
2310.00	27710	Mid	LTE Band 30	10	12.50	11.81	0.08	0	Ant 4b	DH70Y64TLH	QPSK	25	25	0 mm	left	1:1	0.034	1.172	0.040	0.014	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 10-41
LTE Band 7 Ant 1 Body SAR

MEASUREMENT RESULTS																								
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.70	10.83	-0.07	0	Ant 1	FFQ5HYX09W	QPSK	1	0	0 mm	back	1:1	0.483	1.222	0.590	0.158	0.193	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	11.70	10.83	-0.06	0	Ant 1	FFQ5HYX09W	QPSK	50	25	0 mm	back	1:1	0.484	1.222	0.591	0.160	0.196	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.70	10.88	-0.06	0	Ant 1	FFQ5HYX09W	QPSK	50	25	0 mm	back	1:1	0.498	1.208	0.602	0.163	0.197	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	11.70	10.72	-0.03	0	Ant 1	FFQ5HYX09W	QPSK	50	0	0 mm	back	1:1	0.566	1.253	0.709	0.187	0.234	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	11.70	10.74	-0.06	0	Ant 1	FFQ5HYX09W	QPSK	50	25	0 mm	back	1:1	0.528	1.247	0.658	0.171	0.213	
2 CC Uplink	PCC	2560.00	21350	High	LTE Band 7	20	11.70	11.34	-0.04	0	Ant 1	FFQ5HYX09W	QPSK	50	0	0 mm	back	1:1	0.684	1.086	0.743	0.225	0.244	
2 CC Uplink	SCC	2540.20	21152	High	LTE Band 7	20								50	50									
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.70	10.83	0.08	0	Ant 1	FFQ5HYX09W	QPSK	1	0	0 mm	top	1:1	0.003	1.222	0.004	0.000	0.000	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.70	10.88	0.10	0	Ant 1	FFQ5HYX09W	QPSK	50	25	0 mm	top	1:1	0.004	1.208	0.005	0.001	0.001	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.70	10.83	-0.06	0	Ant 1	FFQ5HYX09W	QPSK	1	0	0 mm	bottom	1:1	0.228	1.222	0.279	0.076	0.093	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.70	10.88	-0.05	0	Ant 1	FFQ5HYX09W	QPSK	50	25	0 mm	bottom	1:1	0.256	1.208	0.309	0.088	0.106	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.70	10.83	-0.06	0	Ant 1	FFQ5HYX09W	QPSK	1	0	0 mm	right	1:1	0.001	1.222	0.001	0.000	0.000	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.70	10.88	-0.14	0	Ant 1	FFQ5HYX09W	QPSK	50	25	0 mm	right	1:1	0.000	1.208	0.000	0.000	0.000	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.70	10.83	-0.20	0	Ant 1	FFQ5HYX09W	QPSK	1	0	0 mm	left	1:1	0.179	1.222	0.219	0.060	0.073	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	11.70	10.88	-0.09	0	Ant 1	FFQ5HYX09W	QPSK	50	25	0 mm	left	1:1	0.188	1.208	0.227	0.063	0.076	
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 7 Ant 3 Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.81	-0.06	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	back	1:1	0.425	1.227	0.521	0.143	0.175	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.84	-0.07	0	Ant 3	DH70Y64TLH	QPSK	50	25	0 mm	back	1:1	0.443	1.219	0.540	0.149	0.182	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.81	-0.11	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	top	1:1	0.536	1.227	0.658	0.178	0.218	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.84	-0.02	0	Ant 3	DH70Y64TLH	QPSK	50	25	0 mm	top	1:1	0.571	1.219	0.696	0.190	0.232	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	15.70	14.76	-0.11	0	Ant 3	DH70Y64TLH	QPSK	50	25	0 mm	top	1:1	0.576	1.242	0.715	0.187	0.232	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	15.70	14.52	0.01	0	Ant 3	DH70Y64TLH	QPSK	50	0	0 mm	top	1:1	0.671	1.312	0.880	0.228	0.299	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	15.70	14.59	-0.13	0	Ant 3	DH70Y64TLH	QPSK	50	25	0 mm	top	1:1	0.595	1.291	0.768	0.194	0.250	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.80	0.01	0	Ant 3	DH70Y64TLH	QPSK	100	0	0 mm	top	1:1	0.626	1.230	0.770	0.230	0.283	
2 CC Uplink	PCC	2560.00	21350	High	LTE Band 7	20	15.70	14.84	0.01	0	Ant 3	DH70Y64TLH	QPSK	50	0	0 mm	top	1:1	0.756	1.219	0.922	0.263	0.321	
2 CC Uplink	SCC	2540.20	21152	High	LTE Band 7	20								50	50									
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.81	-0.09	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	bottom	1:1	0.005	1.227	0.006	0.001	0.001	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.84	0.10	0	Ant 3	DH70Y64TLH	QPSK	50	25	0 mm	bottom	1:1	0.003	1.219	0.004	0.001	0.001	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.81	-0.20	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	right	1:1	0.334	1.227	0.410	0.118	0.145	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.84	-0.13	0	Ant 3	DH70Y64TLH	QPSK	50	25	0 mm	right	1:1	0.337	1.219	0.411	0.119	0.145	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.81	-0.04	0	Ant 3	DH70Y64TLH	QPSK	1	0	0 mm	left	1:1	0.010	1.227	0.012	0.003	0.004	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	15.70	14.84	-0.19	0	Ant 3	DH70Y64TLH	QPSK	50	25	0 mm	left	1:1	0.011	1.219	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 10-43
LTE Band 7 Ant 2b Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.30	13.43	-0.02	0	Ant 2b	H77FP2WV19	QPSK	1	0	0 mm	back	1:1	0.587	1.222	0.717	0.240	0.293	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.30	13.49	-0.21	0	Ant 2b	H77FP2WV19	QPSK	50	0	0 mm	back	1:1	0.615	1.205	0.741	0.253	0.305	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.30	13.41	-0.18	0	Ant 2b	H77FP2WV19	QPSK	50	0	0 mm	back	1:1	0.615	1.227	0.755	0.252	0.309	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	14.30	13.39	-0.02	0	Ant 2b	H77FP2WV19	QPSK	50	0	0 mm	back	1:1	0.646	1.233	0.797	0.261	0.322	
2 CC Uplink	PCC	2560.00	21350	High	LTE Band 7	20	14.30	14.20	-0.17	0	Ant 2b	H77FP2WV19	QPSK	50	0	0 mm	back	1:1	0.798	1.023	0.816	0.323	0.330	A15
2 CC Uplink	SCC	2540.20	21152	High	LTE Band 7	20								50	50									
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.30	13.43	0.00	0	Ant 2b	H77FP2WV19	QPSK	1	0	0 mm	top	1:1	0.000	1.222	0.000	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.30	13.49	0.00	0	Ant 2b	H77FP2WV19	QPSK	50	0	0 mm	top	1:1	0.000	1.205	0.000	0.000	0.000	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.30	13.43	-0.05	0	Ant 2b	H77FP2WV19	QPSK	1	0	0 mm	bottom	1:1	0.459	1.222	0.561	0.171	0.209	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.30	13.49	-0.05	0	Ant 2b	H77FP2WV19	QPSK	50	0	0 mm	bottom	1:1	0.504	1.205	0.607	0.187	0.225	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.30	13.43	0.02	0	Ant 2b	H77FP2WV19	QPSK	1	0	0 mm	right	1:1	0.033	1.222	0.040	0.013	0.016	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.30	13.49	0.02	0	Ant 2b	H77FP2WV19	QPSK	50	0	0 mm	right	1:1	0.034	1.205	0.041	0.014	0.017	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	14.30	13.43	0.01	0	Ant 2b	H77FP2WV19	QPSK	1	0	0 mm	left	1:1	0.028	1.222	0.034	0.009	0.011	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	14.30	13.49	0.03	0	Ant 2b	H77FP2WV19	QPSK	50	0	0 mm	left	1:1	0.025	1.205	0.030	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 10-44
LTE Band 7 Ant 4b Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	12.10	11.30	-0.04	0	Ant 4b	Y919JM96JK	QPSK	1	0	0 mm	back	1:1	0.566	1.202	0.680	0.204	0.245	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.10	11.43	-0.01	0	Ant 4b	Y919JM96JK	QPSK	50	0	0 mm	back	1:1	0.570	1.167	0.665	0.207	0.242	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.10	11.21	-0.02	0	Ant 4b	Y919JM96JK	QPSK	1	0	0 mm	top	1:1	0.680	1.227	0.834	0.237	0.291	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.23	-0.06	0	Ant 4b	Y919JM96JK	QPSK	1	0	0 mm	top	1:1	0.660	1.222	0.807	0.228	0.279	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	12.10	11.30	-0.04	0	Ant 4b	Y919JM96JK	QPSK	1	0	0 mm	top	1:1	0.669	1.202	0.804	0.230	0.276	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.10	11.43	-0.08	0	Ant 4b	Y919JM96JK	QPSK	50	0	0 mm	top	1:1	0.697	1.167	0.813	0.242	0.282	
1 CC Uplink	N/A	2535.00	21100	Mid	LTE Band 7	20	12.10	11.42	-0.06	0	Ant 4b	Y919JM96JK	QPSK	50	0	0 mm	top	1:1	0.683	1.169	0.798	0.235	0.275	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	12.10	11.25	-0.04	0	Ant 4b	Y919JM96JK	QPSK	50	50	0 mm	top	1:1	0.678	1.216	0.824	0.233	0.283	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.10	11.29	-0.04	0	Ant 4b	Y919JM96JK	QPSK	100	0	0 mm	top	1:1	0.696	1.205	0.839	0.242	0.292	
2 CC Uplink	PCC	2510.00	20850	Low	LTE Band 7	20	12.10	11.60	-0.15	0	Ant 4b	Y919JM96JK	QPSK	100	0	0 mm	top	1:1	0.724	1.122	0.812	0.247	0.277	
2 CC Uplink	SCC	2529.80	21048	Low	LTE Band 7	20								100	0									
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	12.10	11.30	0.12	0	Ant 4b	Y919JM96JK	QPSK	1	0	0 mm	bottom	1:1	0.000	1.202	0.000	0.000	0.000	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.10	11.43	0.10	0	Ant 4b	Y919JM96JK	QPSK	50	0	0 mm	bottom	1:1	0.000	1.167	0.000	0.000	0.000	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	12.10	11.30	-0.13	0	Ant 4b	Y919JM96JK	QPSK	1	0	0 mm	right	1:1	0.011	1.202	0.013	0.003	0.004	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.10	11.43	-0.02	0	Ant 4b	Y919JM96JK	QPSK	50	0	0 mm	right	1:1	0.010	1.167	0.012	0.003	0.004	
1 CC Uplink	N/A	2560.00	21350	High	LTE Band 7	20	12.10	11.30	0.08	0	Ant 4b	Y919JM96JK	QPSK	1	0	0 mm	left	1:1	0.025	1.202	0.030	0.009	0.011	
1 CC Uplink	N/A	2510.00	20850	Low	LTE Band 7	20	12.10	11.43	0.03	0	Ant 4b	Y919JM96JK	QPSK	50	0	0 mm	left	1:1	0.030	1.167	0.035	0.011	0.013	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 10-45
LTE Band 41 Ant 1 Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	13.50	12.93	-0.08	0	Ant 1	GXWM69926V	QPSK	1	99	0 mm	back	1:1.58	0.458	1.140	0.522	0.151	0.172	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.50	12.80	-0.08	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	back	1:1.58	0.474	1.175	0.557	0.154	0.181	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.50	12.79	-0.09	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	back	1:1.58	0.532	1.178	0.627	0.169	0.199	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	13.50	12.75	-0.09	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	back	1:1.58	0.560	1.189	0.666	0.176	0.209	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.50	12.94	-0.08	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	back	1:1.58	0.586	1.138	0.667	0.178	0.203	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	13.50	12.98	-0.09	0	Ant 1	GXWM69926V	QPSK	50	25	0 mm	back	1:1.58	0.479	1.127	0.540	0.158	0.178	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.50	13.01	-0.07	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	back	1:1.58	0.492	1.119	0.551	0.158	0.177	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	13.50	12.87	-0.09	0	Ant 1	GXWM69926V	QPSK	50	50	0 mm	back	1:1.58	0.540	1.156	0.624	0.171	0.198	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	13.50	12.90	-0.09	0	Ant 1	GXWM69926V	QPSK	50	50	0 mm	back	1:1.58	0.574	1.148	0.659	0.178	0.204	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.50	12.70	0.14	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	back	1:1.58	0.678	1.202	0.815	0.214	0.257	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.50	12.89	-0.05	0	Ant 1	GXWM69926V	QPSK	50	25	0 mm	back	1:1.58	0.628	1.151	0.723	0.196	0.226	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.50	12.93	-0.09	0	Ant 1	GXWM69926V	QPSK	100	0	0 mm	back	1:1.58	0.502	1.140	0.572	0.162	0.185	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	15.15	14.70	-0.01	0	Ant 1	GXWM69926V	QPSK	50	25	0 mm	back	1:2.31	0.607	1.109	0.673	0.194	0.215	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	15.15	14.25	-0.06	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	back	1:2.31	0.603	1.230	0.742	0.187	0.230	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	13.50	12.66	-0.12	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	back	1:1.58	0.660	1.213	0.801	0.214	0.260	
2 CC Uplink - Power Class 3	SCC	2660.20	41292	High	LTE Band 41	20								50	50									
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	15.15	14.60	-0.06	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	back	1:2.31	0.642	1.135	0.729	0.198	0.225	
2 CC Uplink - Power Class 2	SCC	2660.20	41292	High	LTE Band 41	20								50	50									
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.50	12.94	0.18	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	top	1:1.58	0.001	1.138	0.001	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.50	13.01	0.10	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	top	1:1.58	0.003	1.119	0.003	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.50	12.94	-0.08	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	bottom	1:1.58	0.313	1.138	0.356	0.111	0.126	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.50	13.01	-0.04	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	bottom	1:1.58	0.266	1.119	0.298	0.095	0.106	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.50	12.94	0.02	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	right	1:1.58	0.001	1.138	0.001	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.50	13.01	0.08	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	right	1:1.58	0.001	1.119	0.001	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	13.50	12.94	-0.18	0	Ant 1	GXWM69926V	QPSK	1	0	0 mm	left	1:1.58	0.203	1.138	0.231	0.065	0.074	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	13.50	13.01	-0.19	0	Ant 1	GXWM69926V	QPSK	50	0	0 mm	left	1:1.58	0.154	1.119	0.172	0.051	0.057	
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 41 Ant 3 Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.30	13.14	-0.03	0	Ant 3	FFQ5HYX09W	QPSK	1	99	0 mm	back	1:1.58	0.170	1.306	0.222	0.060	0.078	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.30	13.41	-0.04	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	back	1:1.58	0.216	1.227	0.265	0.074	0.091	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.26	-0.04	0	Ant 3	FFQ5HYX09W	QPSK	1	99	0 mm	back	1:1.58	0.301	1.271	0.383	0.102	0.130	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.30	13.19	-0.04	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	back	1:1.58	0.391	1.291	0.505	0.130	0.168	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.43	-0.03	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	back	1:1.58	0.497	1.222	0.607	0.162	0.198	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.30	13.37	-0.04	0	Ant 3	FFQ5HYX09W	QPSK	50	50	0 mm	back	1:1.58	0.192	1.239	0.238	0.068	0.084	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.30	13.40	-0.04	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	back	1:1.58	0.228	1.230	0.280	0.079	0.097	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.31	-0.04	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	back	1:1.58	0.307	1.256	0.386	0.104	0.131	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.30	13.26	-0.04	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	back	1:1.58	0.407	1.271	0.517	0.136	0.173	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.41	-0.03	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	back	1:1.58	0.644	1.227	0.790	0.210	0.258	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.38	-0.04	0	Ant 3	FFQ5HYX09W	QPSK	100	0	0 mm	back	1:1.58	0.532	1.236	0.658	0.173	0.214	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	15.95	15.35	-0.03	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	back	1:2.31	0.735	1.148	0.844	0.233	0.267	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	14.30	12.90	-0.02	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	back	1:1.58	0.598	1.380	0.825	0.200	0.276	
2 CC Uplink - Power Class 3	SCC	2660.20	41292	High	LTE Band 41	20								50	50									
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	15.95	15.20	-0.11	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	back	1:2.31	0.680	1.189	0.809	0.218	0.259	
2 CC Uplink - Power Class 2	SCC	2660.20	41292	High	LTE Band 41	20								50	50									
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.43	-0.20	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	top	1:1.58	0.438	1.222	0.535	0.138	0.169	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.41	-0.17	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	top	1:1.58	0.440	1.227	0.540	0.137	0.168	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.43	0.10	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	bottom	1:1.58	0.000	1.222	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.41	-0.10	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	bottom	1:1.58	0.000	1.227	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.43	-0.21	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	right	1:1.58	0.227	1.222	0.277	0.077	0.094	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.41	-0.16	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	right	1:1.58	0.221	1.227	0.271	0.075	0.092	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.43	0.00	0	Ant 3	FFQ5HYX09W	QPSK	1	0	0 mm	left	1:1.58	0.004	1.222	0.005	0.001	0.001	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.41	0.13	0	Ant 3	FFQ5HYX09W	QPSK	50	0	0 mm	left	1:1.58	0.004	1.227	0.005	0.001	0.001	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 10-47
LTE Band 41 Ant 2b Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	14.78	-0.02	0	Ant 2b	DH70Y64TLH	QPSK	1	50	0 mm	back	1:1.58	0.549	1.324	0.727	0.226	0.299	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	14.78	-0.17	0	Ant 2b	DH70Y64TLH	QPSK	1	0	0 mm	back	1:1.58	0.564	1.324	0.747	0.230	0.305	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	14.93	-0.17	0	Ant 2b	DH70Y64TLH	QPSK	1	0	0 mm	back	1:1.58	0.635	1.279	0.812	0.257	0.329	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.01	-0.20	0	Ant 2b	DH70Y64TLH	QPSK	1	0	0 mm	back	1:1.58	0.688	1.256	0.864	0.275	0.345	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	14.91	-0.20	0	Ant 2b	DH70Y64TLH	QPSK	1	99	0 mm	back	1:1.58	0.660	1.285	0.848	0.259	0.333	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	15.01	-0.03	0	Ant 2b	DH70Y64TLH	QPSK	50	25	0 mm	back	1:1.58	0.578	1.256	0.726	0.238	0.299	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	16.00	15.00	-0.02	0	Ant 2b	DH70Y64TLH	QPSK	50	0	0 mm	back	1:1.58	0.600	1.259	0.755	0.243	0.306	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	16.00	14.96	-0.02	0	Ant 2b	DH70Y64TLH	QPSK	50	25	0 mm	back	1:1.58	0.655	1.271	0.833	0.262	0.333	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.06	-0.21	0	Ant 2b	DH70Y64TLH	QPSK	50	0	0 mm	back	1:1.58	0.684	1.242	0.850	0.272	0.338	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	14.63	-0.08	0	Ant 2b	DH70Y64TLH	QPSK	50	0	0 mm	back	1:1.58	0.701	1.371	0.961	0.302	0.414	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	16.00	14.97	-0.03	0	Ant 2b	DH70Y64TLH	QPSK	50	50	0 mm	back	1:1.58	0.696	1.268	0.883	0.272	0.345	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	16.00	14.99	-0.21	0	Ant 2b	DH70Y64TLH	QPSK	100	0	0 mm	back	1:1.58	0.576	1.262	0.727	0.237	0.299	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	17.65	17.24	-0.03	0	Ant 2b	DH70Y64TLH	QPSK	50	50	0 mm	back	1:2.31	0.744	1.099	0.818	0.314	0.345	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	LTE Band 41	20	17.65	17.30	0.02	0	Ant 2b	DH70Y64TLH	QPSK	50	0	0 mm	back	1:2.31	0.804	1.084	0.872	0.322	0.349	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	LTE Band 41	20	16.00	15.43	0.03	0	Ant 2b	DH70Y64TLH	QPSK	50	0	0 mm	back	1:1.58	0.876	1.140	**0.999**	0.357	0.407	A16
2 CC Uplink - Power Class 3	SCC	2660.20	41292	High	LTE Band 41	20								50	50									
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	LTE Band 41	20	17.65	16.79	-0.03	0	Ant 2b	DH70Y64TLH	QPSK	50	0	0 mm	back	1:2.31	0.749	1.219	0.913	0.305	0.372	
2 CC Uplink - Power Class 2	SCC	2660.20	41292	High	LTE Band 41	20								50	50									
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.01	0.14	0	Ant 2b	DH70Y64TLH	QPSK	1	0	0 mm	top	1:1.58	0.004	1.256	0.005	0.001	0.001	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.06	0.11	0	Ant 2b	DH70Y64TLH	QPSK	50	0	0 mm	top	1:1.58	0.004	1.242	0.005	0.001	0.001	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.01	-0.05	0	Ant 2b	DH70Y64TLH	QPSK	1	0	0 mm	bottom	1:1.58	0.377	1.256	0.474	0.140	0.176	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.06	-0.03	0	Ant 2b	DH70Y64TLH	QPSK	50	0	0 mm	bottom	1:1.58	0.382	1.242	0.474	0.141	0.175	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.01	0.07	0	Ant 2b	DH70Y64TLH	QPSK	1	0	0 mm	right	1:1.58	0.018	1.256	0.023	0.006	0.008	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.06	0.03	0	Ant 2b	DH70Y64TLH	QPSK	50	0	0 mm	right	1:1.58	0.016	1.242	0.020	0.005	0.006	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.01	-0.05	0	Ant 2b	DH70Y64TLH	QPSK	1	0	0 mm	left	1:1.58	0.011	1.256	0.014	0.004	0.005	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	16.00	15.06	0.07	0	Ant 2b	DH70Y64TLH	QPSK	50	0	0 mm	left	1:1.58	0.011	1.242	0.014	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 10-48
LTE Band 41 Ant 4b Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.45	-0.14	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	back	1:1.58	0.340	1.216	0.413	0.121	0.147	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.49	0.03	0	Ant 4b	M9R2DWTV6G	QPSK	50	25	0 mm	back	1:1.58	0.394	1.205	0.475	0.140	0.169	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.30	13.24	-0.07	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1.58	0.556	1.276	0.709	0.194	0.248	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.30	13.30	-0.05	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1.58	0.561	1.259	0.706	0.193	0.243	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.45	-0.03	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1.58	0.611	1.216	0.743	0.206	0.250	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.30	13.38	0.04	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1.58	0.640	1.236	0.791	0.216	0.267	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.37	-0.07	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1.58	0.601	1.239	0.745	0.201	0.249	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	14.30	13.44	0.00	0	Ant 4b	M9R2DWTV6G	QPSK	50	25	0 mm	top	1:1.58	0.608	1.219	0.741	0.209	0.255	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	14.30	13.35	-0.12	0	Ant 4b	M9R2DWTV6G	QPSK	50	25	0 mm	top	1:1.58	0.601	1.245	0.748	0.204	0.254	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.49	-0.08	0	Ant 4b	M9R2DWTV6G	QPSK	50	25	0 mm	top	1:1.58	0.608	1.205	0.733	0.206	0.248	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.30	13.46	0.02	0	Ant 4b	M9R2DWTV6G	QPSK	50	25	0 mm	top	1:1.58	0.598	1.213	0.725	0.200	0.243	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	14.30	13.40	0.08	0	Ant 4b	M9R2DWTV6G	QPSK	50	50	0 mm	top	1:1.58	0.606	1.230	0.745	0.201	0.247	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	14.30	13.44	0.01	0	Ant 4b	M9R2DWTV6G	QPSK	100	0	0 mm	top	1:1.58	0.595	1.219	0.725	0.199	0.243	
1 CC Uplink - Power Class 2	N/A	2636.50	41055	Mid-High	LTE Band 41	20	15.95	15.18	-0.06	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:2.31	0.699	1.194	0.835	0.231	0.276	
2 CC Uplink - Power Class 3	PCC	2636.50	41055	Mid-High	LTE Band 41	20	14.30	13.19	-0.09	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1.58	0.642	1.291	0.829	0.216	0.279	
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	15.95	15.90	-0.07	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:2.31	0.821	1.012	0.831	0.269	0.272	
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	14.30	13.45	0.00	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	bottom	1:1.58	0.000	1.216	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.49	0.00	0	Ant 4b	M9R2DWTV6G	QPSK	50	25	0 mm	bottom	1:1.58	0.000	1.205	0.000	0.000	0.000	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.45	0.08	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1.58	0.011	1.216	0.013	0.003	0.004	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.49	0.06	0	Ant 4b	M9R2DWTV6G	QPSK	50	25	0 mm	right	1:1.58	0.009	1.205	0.011	0.003	0.004	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.45	-0.06	0	Ant 4b	M9R2DWTV6G	QPSK	1	0	0 mm	left	1:1.58	0.017	1.216	0.021	0.006	0.007	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	14.30	13.49	-0.12	0	Ant 4b	M9R2DWTV6G	QPSK	50	25	0 mm	left	1:1.58	0.016	1.205	0.019	0.005	0.006	
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Table 10-49
LTE Band 48 Ant 1 Body SAR

MEASUREMENT RESULTS																										
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	12.94	0.03	0	Ant 1	GMQY0KQNHY	QPSK	1	99	0 mm	back	1:1.58	0.565	1.219	0.689	0.193	0.235	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	12.82	-0.05	0	Ant 1	GMQY0KQNHY	QPSK	1	99	0 mm	back	1:1.58	0.529	1.253	0.663	0.184	0.231	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.95	0.08	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	back	1:1.58	0.549	1.216	0.668	0.189	0.230	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.15	0.01	0	Ant 1	GMQY0KQNHY	QPSK	1	99	0 mm	back	1:1.58	0.572	1.161	0.664	0.197	0.229	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	12.82	-0.01	0	Ant 1	GMQY0KQNHY	QPSK	50	25	0 mm	back	1:1.58	0.568	1.253	0.712	0.197	0.247	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	12.89	-0.04	0	Ant 1	GMQY0KQNHY	QPSK	50	50	0 mm	back	1:1.58	0.547	1.233	0.674	0.188	0.232	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	13.09	0.10	0	Ant 1	GMQY0KQNHY	QPSK	50	50	0 mm	back	1:1.58	0.550	1.178	0.648	0.190	0.224	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.31	-0.04	0	Ant 1	GMQY0KQNHY	QPSK	50	50	0 mm	back	1:1.58	0.576	1.119	0.645	0.199	0.223	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.14	0.03	0	Ant 1	GMQY0KQNHY	QPSK	100	0	0 mm	back	1:1.58	0.555	1.164	0.646	0.191	0.222	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.15	0.00	0	Ant 1	GMQY0KQNHY	QPSK	1	99	0 mm	top	1:1.58	0.000	1.161	0.000	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.31	0.00	0	Ant 1	GMQY0KQNHY	QPSK	50	50	0 mm	top	1:1.58	0.000	1.119	0.000	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.15	0.12	0	Ant 1	GMQY0KQNHY	QPSK	1	99	0 mm	bottom	1:1.58	0.439	1.161	0.510	0.107	0.124	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.31	-0.15	0	Ant 1	GMQY0KQNHY	QPSK	50	50	0 mm	bottom	1:1.58	0.450	1.119	0.504	0.109	0.122	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.15	0.04	0	Ant 1	GMQY0KQNHY	QPSK	1	99	0 mm	right	1:1.58	0.015	1.161	0.017	0.003	0.003	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.31	0.18	0	Ant 1	GMQY0KQNHY	QPSK	50	50	0 mm	right	1:1.58	0.012	1.119	0.013	0.002	0.002	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	12.94	0.11	0	Ant 1	GMQY0KQNHY	QPSK	1	99	0 mm	left	1:1.58	0.352	1.219	0.429	0.086	0.105	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	12.82	-0.01	0	Ant 1	GMQY0KQNHY	QPSK	1	99	0 mm	left	1:1.58	0.404	1.253	0.506	0.102	0.128	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	12.95	-0.02	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	left	1:1.58	0.470	1.216	0.572	0.117	0.142	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.13	0.06	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	left	1:1.58	0.578	1.167	0.675	0.141	0.165	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.15	0.03	0	Ant 1	GMQY0KQNHY	QPSK	1	99	0 mm	left	1:1.58	0.614	1.161	0.713	0.153	0.178	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	12.82	0.04	0	Ant 1	GMQY0KQNHY	QPSK	50	25	0 mm	left	1:1.58	0.359	1.253	0.450	0.089	0.112	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	12.89	-0.01	0	Ant 1	GMQY0KQNHY	QPSK	50	50	0 mm	left	1:1.58	0.413	1.233	0.509	0.104	0.128	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	13.09	0.01	0	Ant 1	GMQY0KQNHY	QPSK	50	50	0 mm	left	1:1.58	0.491	1.178	0.578	0.122	0.144	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.31	0.05	0	Ant 1	GMQY0KQNHY	QPSK	50	50	0 mm	left	1:1.58	0.615	1.119	0.688	0.154	0.172	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.14	-0.02	0	Ant 1	GMQY0KQNHY	QPSK	100	0	0 mm	left	1:1.58	0.579	1.164	0.674	0.143	0.166	
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	13.80	13.55	0.01	0	Ant 1	GMQY0KQNHY	QPSK	1	0	0 mm	left	1:1.58	0.651	1.059	0.689	0.163	0.173	
2 CC Uplink	SCC	3670.20	56442	High	LTE Band 48	20								1	99									
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 10-50
LTE Band 48 Ant 3 Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	12.70	11.56	0.04	0	Ant 3	M9R2DWTV6G	QPSK	1	99	0 mm	back	1:1.58	0.720	1.300	0.936	0.170	0.221	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.70	11.58	0.04	0	Ant 3	M9R2DWTV6G	QPSK	1	99	0 mm	back	1:1.58	0.674	1.294	0.872	0.155	0.201	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	12.70	11.75	0.04	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	back	1:1.58	0.692	1.245	0.862	0.158	0.197	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	12.70	11.60	0.03	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	back	1:1.58	0.709	1.288	0.913	0.159	0.205	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	12.70	11.71	0.04	0	Ant 3	M9R2DWTV6G	QPSK	50	50	0 mm	back	1:1.58	0.786	1.256	0.987	0.181	0.227	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	12.70	11.60	0.04	0	Ant 3	M9R2DWTV6G	QPSK	50	50	0 mm	back	1:1.58	0.680	1.288	0.876	0.157	0.202	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	12.70	11.70	0.04	0	Ant 3	M9R2DWTV6G	QPSK	50	25	0 mm	back	1:1.58	0.694	1.259	0.874	0.155	0.195	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	12.70	11.63	0.02	0	Ant 3	M9R2DWTV6G	QPSK	50	0	0 mm	back	1:1.58	0.722	1.279	0.923	0.163	0.208	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	12.70	11.60	0.03	0	Ant 3	M9R2DWTV6G	QPSK	50	50	0 mm	back	1:1.58	0.729	1.288	0.939	0.168	0.216	
2 CC Uplink	SCC	3579.80	55538	Low	LTE Band 48	20					Ant 3			50	0									
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	12.70	11.70	0.03	0	Ant 3	M9R2DWTV6G	QPSK	100	0	0 mm	back	1:1.58	0.736	1.259	0.927	0.164	0.206	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	12.70	11.75	-0.05	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1.58	0.291	1.245	0.362	0.063	0.078	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	12.70	11.71	-0.08	0	Ant 3	M9R2DWTV6G	QPSK	50	50	0 mm	top	1:1.58	0.289	1.256	0.363	0.062	0.078	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	12.70	11.75	0.00	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	bottom	1:1.58	0.000	1.245	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	12.70	11.71	0.00	0	Ant 3	M9R2DWTV6G	QPSK	50	50	0 mm	bottom	1:1.58	0.000	1.256	0.000	0.000	0.000	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	12.70	11.75	0.08	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1.58	0.363	1.245	0.452	0.091	0.113	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	12.70	11.71	0.02	0	Ant 3	M9R2DWTV6G	QPSK	50	50	0 mm	right	1:1.58	0.361	1.256	0.453	0.090	0.113	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	12.70	11.75	0.12	0	Ant 3	M9R2DWTV6G	QPSK	1	0	0 mm	left	1:1.58	0.008	1.245	0.010	0.001	0.001	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	12.70	11.71	-0.13	0	Ant 3	M9R2DWTV6G	QPSK	50	50	0 mm	left	1:1.58	0.004	1.256	0.005	0.001	0.001	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 10-51
LTE Band 48 Ant 2a Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.58	0.00	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	back	1:1.58	0.642	1.052	0.675	0.190	0.200	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	13.46	-0.03	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	back	1:1.58	0.707	1.081	0.764	0.211	0.228	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	13.40	0.02	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	back	1:1.58	0.811	1.096	0.889	0.236	0.259	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.35	0.02	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	back	1:1.58	0.734	1.109	0.814	0.214	0.237	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.59	0.00	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	back	1:1.58	0.645	1.050	0.677	0.190	0.200	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	13.56	0.03	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	back	1:1.58	0.722	1.057	0.763	0.213	0.225	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	13.53	-0.03	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	back	1:1.58	0.820	1.064	0.872	0.242	0.257	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.40	-0.02	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	back	1:1.58	0.742	1.096	0.813	0.215	0.236	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.57	0.01	0	Ant 2a	M9R2DWTV6G	QPSK	100	0	0 mm	back	1:1.58	0.650	1.054	0.685	0.190	0.200	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.58	0.00	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	top	1:1.58	0.000	1.052	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.59	0.00	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	top	1:1.58	0.000	1.050	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.58	0.04	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	bottom	1:1.58	0.217	1.052	0.228	0.048	0.050	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.59	0.02	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	bottom	1:1.58	0.218	1.050	0.229	0.050	0.053	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.58	0.03	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1.58	0.714	1.052	0.751	0.176	0.185	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	13.46	-0.02	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1.58	0.820	1.081	0.886	0.206	0.223	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	13.40	-0.02	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1.58	0.905	1.096	0.992	0.228	0.250	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.35	-0.04	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1.58	0.804	1.109	0.892	0.192	0.213	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.59	-0.02	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	right	1:1.58	0.747	1.050	0.784	0.185	0.194	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.80	13.56	0.01	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	right	1:1.58	0.854	1.057	0.903	0.214	0.226	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.80	13.53	-0.02	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	right	1:1.58	0.918	1.064	0.977	0.225	0.239	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.80	13.40	-0.09	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	right	1:1.58	0.815	1.096	0.893	0.196	0.215	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.57	-0.02	0	Ant 2a	M9R2DWTV6G	QPSK	100	0	0 mm	right	1:1.58	0.755	1.054	0.796	0.187	0.197	
2 CC Uplink	PCC	3646.70	56207	Mid-High	LTE Band 48	20	13.80	13.75	-0.06	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1.58	0.982	1.012	0.994	0.251	0.254	A17
2 CC Uplink	SCC	3626.90	56009	Mid-High	LTE Band 48	20					Ant 2a			1	99									
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.58	0.00	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	left	1:1.58	0.000	1.052	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.80	13.59	0.00	0	Ant 2a	M9R2DWTV6G	QPSK	50	0	0 mm	left	1:1.58	0.001	1.050	0.001	0.000	0.000	
2 CC Uplink	PCC	3646.7	56207	Mid-High	LTE Band 48	20	13.80	13.75	0.01	0	Ant 2a	M9R2DWTV6G	QPSK	1	0	0 mm	right	1:1.58	0.974	1.012	0.986	0.253	0.256	
2 CC Uplink	SCC	3626.9	56009	Mid-High	LTE Band 48	20								1	99									
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram							

Note: Blue entry represents variability measurement.

Table 10-52
LTE Band 48 Ant 4a Body SAR

MEASUREMENT RESULTS																									
1 CC Uplink | 2CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna Config.	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.40	13.05	0.03	0	Ant 4a	GXWM69926V	QPSK	1	0	0 mm	back	1:1.58	0.791	1.084	0.857	0.235	0.255	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.40	13.02	-0.02	0	Ant 4a	GXWM69926V	QPSK	1	0	0 mm	back	1:1.58	0.756	1.091	0.825	0.223	0.243	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	13.03	-0.03	0	Ant 4a	GXWM69926V	QPSK	1	0	0 mm	back	1:1.58	0.747	1.089	0.813	0.217	0.236	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	13.09	0.00	0	Ant 4a	GXWM69926V	QPSK	1	99	0 mm	back	1:1.58	0.738	1.074	0.793	0.213	0.229	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.40	13.10	-0.01	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	back	1:1.58	0.807	1.072	0.865	0.241	0.258	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.40	13.09	0.02	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	back	1:1.58	0.771	1.074	0.828	0.224	0.241	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	13.14	0.00	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	back	1:1.58	0.748	1.062	0.794	0.215	0.228	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	12.84	-0.01	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	back	1:1.58	0.744	1.138	0.847	0.216	0.246	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	13.08	-0.04	0	Ant 4a	GXWM69926V	QPSK	100	0	0 mm	back	1:1.58	0.758	1.076	0.816	0.219	0.236	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	13.09	-0.02	0	Ant 4a	GXWM69926V	QPSK	1	99	0 mm	top	1:1.58	0.202	1.074	0.217	0.045	0.048	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	13.14	0.14	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	top	1:1.58	0.205	1.062	0.218	0.047	0.050	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	13.09	0.13	0	Ant 4a	GXWM69926V	QPSK	1	99	0 mm	bottom	1:1.58	0.000	1.074	0.000	0.000	0.000	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	13.14	-0.02	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	bottom	1:1.58	0.000	1.062	0.000	0.000	0.000	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	13.09	0.00	0	Ant 4a	GXWM69926V	QPSK	1	99	0 mm	right	1:1.58	0.000	1.074	0.000	0.000	0.000	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	13.14	0.00	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	right	1:1.58	0.000	1.062	0.000	0.000	0.000	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.40	13.05	-0.02	0	Ant 4a	GXWM69926V	QPSK	1	0	0 mm	left	1:1.58	0.889	1.084	0.964	0.225	0.244	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.40	13.02	0.01	0	Ant 4a	GXWM69926V	QPSK	1	0	0 mm	left	1:1.58	0.819	1.091	0.894	0.209	0.228	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	13.03	-0.01	0	Ant 4a	GXWM69926V	QPSK	1	0	0 mm	left	1:1.58	0.829	1.089	0.903	0.206	0.224	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	13.09	-0.04	0	Ant 4a	GXWM69926V	QPSK	1	99	0 mm	left	1:1.58	0.837	1.074	0.899	0.202	0.217	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.40	13.10	-0.03	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	left	1:1.58	0.893	1.072	0.957	0.228	0.244	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	13.40	13.09	-0.03	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	left	1:1.58	0.850	1.074	0.913	0.211	0.227	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	13.14	-0.02	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	left	1:1.58	0.848	1.062	0.901	0.211	0.224	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	13.40	12.84	-0.01	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	left	1:1.58	0.853	1.138	0.971	0.211	0.240	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	13.40	13.08	-0.02	0	Ant 4a	GXWM69926V	QPSK	100	0	0 mm	left	1:1.58	0.846	1.076	0.910	0.211	0.227	
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	13.40	12.98	0.06	0	Ant 4a	GXWM69926V	QPSK	50	0	0 mm	left	1:1.58	0.893	1.102	0.984	0.235	0.259	
2 CC Uplink	SCC	3670.20	56442	High	LTE Band 48	20								50	50									
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	13.40	13.10	-0.05	0	Ant 4a	M9R2DWTV6G	QPSK	50	0	0 mm	left	1:1.58	0.836	1.072	0.896	0.216	0.232	
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 10-53
NR Band n71 Ant 1 Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
680.50	136100	Mid	NR Band n71	20	21.10	19.50	Ant 1	0.02	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.367	1.445	0.530	0.186	0.269	
680.50	136100	Mid	NR Band n71	20	21.10	19.38	Ant 1	-0.02	0.0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.475	1.486	0.706	0.201	0.299	
680.50	136100	Mid	NR Band n71	20	21.10	19.50	Ant 1	-0.10	0.0	GXWM69926V	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.480	1.445	0.694	0.198	0.286	
680.50	136100	Mid	NR Band n71	20	21.10	19.50	Ant 1	0.05	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.003	1.445	0.004	0.001	0.001	
680.50	136100	Mid	NR Band n71	20	21.10	19.38	Ant 1	0.05	0.0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.003	1.486	0.004	0.001	0.001	
680.50	136100	Mid	NR Band n71	20	21.10	19.50	Ant 1	-0.02	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.402	1.445	0.581	0.176	0.254	
680.50	136100	Mid	NR Band n71	20	21.10	19.38	Ant 1	-0.17	0.0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.419	1.486	0.623	0.184	0.273	
680.50	136100	Mid	NR Band n71	20	21.10	19.50	Ant 1	0.03	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.010	1.445	0.014	0.005	0.007	
680.50	136100	Mid	NR Band n71	20	21.10	19.38	Ant 1	-0.15	0.0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.011	1.486	0.016	0.005	0.007	
680.50	136100	Mid	NR Band n71	20	21.10	19.50	Ant 1	-0.02	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.111	1.445	0.160	0.048	0.069	
680.50	136100	Mid	NR Band n71	20	21.10	19.38	Ant 1	-0.03	0.0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.117	1.486	0.174	0.050	0.074	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																				Body 1.6 W/kg (mW/g) averaged over 1 gram			

Table 10-54
NR Band n71 Ant 3 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
680.50	136100	Mid	NR Band n71	20	20.30	19.45	Ant 3	-0.01	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	53	0 mm	back	1:1	0.522	1.216	0.635	0.275	0.334	
680.50	136100	Mid	NR Band n71	20	20.30	19.32	Ant 3	-0.01	0.0	GXWM69926V	DFT-S-OFDM	QPSK	50	28	0 mm	back	1:1	0.550	1.253	0.689	0.282	0.353	
680.50	136100	Mid	NR Band n71	20	20.30	19.37	Ant 3	-0.09	0.0	GXWM69926V	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.583	1.239	0.722	0.300	0.372	A18
680.50	136100	Mid	NR Band n71	20	20.30	19.45	Ant 3	-0.03	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	53	0 mm	top	1:1	0.422	1.216	0.513	0.185	0.225	
680.50	136100	Mid	NR Band n71	20	20.30	19.32	Ant 3	0.00	0.0	GXWM69926V	DFT-S-OFDM	QPSK	50	28	0 mm	top	1:1	0.421	1.253	0.528	0.183	0.229	
680.50	136100	Mid	NR Band n71	20	20.30	19.45	Ant 3	0.05	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	53	0 mm	bottom	1:1	0.004	1.216	0.005	0.001	0.001	
680.50	136100	Mid	NR Band n71	20	20.30	19.32	Ant 3	0.04	0.0	GXWM69926V	DFT-S-OFDM	QPSK	50	28	0 mm	bottom	1:1	0.005	1.253	0.006	0.001	0.001	
680.50	136100	Mid	NR Band n71	20	20.30	19.45	Ant 3	-0.07	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	53	0 mm	right	1:1	0.208	1.216	0.253	0.092	0.112	
680.50	136100	Mid	NR Band n71	20	20.30	19.32	Ant 3	0.03	0.0	GXWM69926V	DFT-S-OFDM	QPSK	50	28	0 mm	right	1:1	0.218	1.253	0.273	0.096	0.120	
680.50	136100	Mid	NR Band n71	20	20.30	19.45	Ant 3	0.07	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	53	0 mm	left	1:1	0.021	1.216	0.026	0.009	0.011	
680.50	136100	Mid	NR Band n71	20	20.30	19.32	Ant 3	-0.12	0.0	GXWM69926V	DFT-S-OFDM	QPSK	50	28	0 mm	left	1:1	0.021	1.253	0.026	0.009	0.011	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 10-55
NR Band n12 Ant 1 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
707.50	141500	Mid	NR Band n12	15	20.20	19.27	Ant 1	0.01	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	40	0 mm	back	1:1	0.694	1.239	0.860	0.364	0.451	
707.50	141500	Mid	NR Band n12	15	20.20	19.22	Ant 1	0.04	0.0	GXWM69926V	DFT-S-OFDM	QPSK	36	22	0 mm	back	1:1	0.682	1.253	0.855	0.353	0.442	
707.50	141500	Mid	NR Band n12	15	20.20	19.20	Ant 1	0.01	0.0	GXWM69926V	DFT-S-OFDM	QPSK	75	0	0 mm	back	1:1	0.662	1.259	0.833	0.340	0.428	
707.50	141500	Mid	NR Band n12	15	20.20	19.51	Ant 1	-0.12	0.0	GXWM69926V	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.852	1.172	**0.999**	0.360	0.422	A19
707.50	141500	Mid	NR Band n12	15	20.20	19.27	Ant 1	-0.05	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	40	0 mm	top	1:1	0.015	1.239	0.019	0.005	0.006	
707.50	141500	Mid	NR Band n12	15	20.20	19.22	Ant 1	0.02	0.0	GXWM69926V	DFT-S-OFDM	QPSK	36	22	0 mm	top	1:1	0.013	1.253	0.016	0.005	0.006	
707.50	141500	Mid	NR Band n12	15	20.20	19.27	Ant 1	-0.02	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	40	0 mm	bottom	1:1	0.535	1.239	0.663	0.240	0.297	
707.50	141500	Mid	NR Band n12	15	20.20	19.22	Ant 1	-0.05	0.0	GXWM69926V	DFT-S-OFDM	QPSK	36	22	0 mm	bottom	1:1	0.550	1.253	0.689	0.243	0.304	
707.50	141500	Mid	NR Band n12	15	20.20	19.27	Ant 1	0.03	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	40	0 mm	right	1:1	0.012	1.239	0.015	0.006	0.007	
707.50	141500	Mid	NR Band n12	15	20.20	19.22	Ant 1	-0.10	0.0	GXWM69926V	DFT-S-OFDM	QPSK	36	22	0 mm	right	1:1	0.012	1.253	0.015	0.005	0.006	
707.50	141500	Mid	NR Band n12	15	20.20	19.27	Ant 1	0.01	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	40	0 mm	left	1:1	0.204	1.239	0.253	0.087	0.108	
707.50	141500	Mid	NR Band n12	15	20.20	19.22	Ant 1	0.08	0.0	GXWM69926V	DFT-S-OFDM	QPSK	36	22	0 mm	left	1:1	0.204	1.253	0.256	0.086	0.108	
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 n12 Ant 3 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
707.50	141500	Mid	NR Band n12	15	19.60	18.75	Ant 3	-0.04	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	40	0 mm	back	1:1	0.597	1.216	0.726	0.320	0.389	
707.50	141500	Mid	NR Band n12	15	19.60	18.65	Ant 3	0.04	0.0	GXWM69926V	DFT-S-OFDM	QPSK	36	22	0 mm	back	1:1	0.624	1.245	0.777	0.319	0.397	
707.50	141500	Mid	NR Band n12	15	19.60	18.89	Ant 3	-0.05	0.0	GXWM69926V	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.552	1.178	0.650	0.298	0.351	
707.50	141500	Mid	NR Band n12	15	19.60	18.75	Ant 3	-0.01	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	40	0 mm	top	1:1	0.448	1.216	0.545	0.199	0.242	
707.50	141500	Mid	NR Band n12	15	19.60	18.65	Ant 3	-0.03	0.0	GXWM69926V	DFT-S-OFDM	QPSK	36	22	0 mm	top	1:1	0.456	1.245	0.568	0.200	0.249	
707.50	141500	Mid	NR Band n12	15	19.60	18.75	Ant 3	0.12	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	40	0 mm	bottom	1:1	0.012	1.216	0.015	0.005	0.006	
707.50	141500	Mid	NR Band n12	15	19.60	18.65	Ant 3	0.06	0.0	GXWM69926V	DFT-S-OFDM	QPSK	36	22	0 mm	bottom	1:1	0.011	1.245	0.014	0.004	0.005	
707.50	141500	Mid	NR Band n12	15	19.60	18.75	Ant 3	-0.01	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	40	0 mm	right	1:1	0.250	1.216	0.304	0.115	0.140	
707.50	141500	Mid	NR Band n12	15	19.60	18.65	Ant 3	-0.04	0.0	GXWM69926V	DFT-S-OFDM	QPSK	36	22	0 mm	right	1:1	0.267	1.245	0.332	0.116	0.144	
707.50	141500	Mid	NR Band n12	15	19.60	18.75	Ant 3	0.05	0.0	GXWM69926V	DFT-S-OFDM	QPSK	1	40	0 mm	left	1:1	0.026	1.216	0.032	0.012	0.015	
707.50	141500	Mid	NR Band n12	15	19.60	18.65	Ant 3	-0.02	0.0	GXWM69926V	DFT-S-OFDM	QPSK	36	22	0 mm	left	1:1	0.012	1.245	0.015	0.003	0.004	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 10-57
NR Band n5 Ant 1 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.06	Ant 1	-0.05	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.748	1.242	0.929	0.399	0.496	A20
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.06	Ant 1	-0.04	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.671	1.242	0.833	0.366	0.455	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.00	Ant 1	-0.03	0	DH70Y64TLH	DFT-S-OFDM	QPSK	100	0	0 mm	back	1:1	0.738	1.259	0.929	0.378	0.476	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.09	Ant 1	-0.03	0	DH70Y64TLH	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.628	1.233	0.774	0.351	0.433	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.06	Ant 1	0.03	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.010	1.242	0.012	0.005	0.006	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.06	Ant 1	0.05	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.009	1.242	0.011	0.005	0.006	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.06	Ant 1	-0.01	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.540	1.242	0.671	0.245	0.304	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.06	Ant 1	0.01	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.513	1.242	0.637	0.238	0.296	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.06	Ant 1	0.03	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.012	1.242	0.015	0.007	0.009	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.06	Ant 1	0.04	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.013	1.242	0.016	0.007	0.009	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.06	Ant 1	0.04	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.229	1.242	0.284	0.099	0.123	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.00	18.06	Ant 1	-0.04	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.239	1.242	0.297	0.102	0.127	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 10-58
NR Band n5 Ant 3 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.56	Ant 3	-0.01	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.688	1.159	0.797	0.369	0.428	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.50	Ant 3	-0.01	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.676	1.175	0.794	0.362	0.425	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.56	Ant 3	0.10	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.720	1.159	0.834	0.305	0.353	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.50	Ant 3	-0.13	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.662	1.175	0.778	0.292	0.343	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.45	Ant 3	-0.10	0	DH70Y64TLH	DFT-S-OFDM	QPSK	100	0	0 mm	top	1:1	0.664	1.189	0.789	0.291	0.346	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.55	Ant 3	-0.09	0	DH70Y64TLH	CP-OFDM	QPSK	1	1	0 mm	top	1:1	0.713	1.161	0.828	0.305	0.354	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.56	Ant 3	0.08	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.015	1.159	0.017	0.008	0.009	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.50	Ant 3	0.08	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.012	1.175	0.014	0.007	0.008	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.56	Ant 3	-0.01	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.255	1.159	0.296	0.123	0.143	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.50	Ant 3	0.00	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.242	1.175	0.284	0.119	0.140	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.56	Ant 3	0.02	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.016	1.159	0.019	0.009	0.010	
836.50	167300	Mid	NR Band n5 (Cell)	20	19.20	18.50	Ant 3	0.04	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.017	1.175	0.020	0.009	0.011	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 10-59
NR Band n66 Ant 1 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1720.00	344000	Low	NR Band n66 (AWS)	20	15.70	14.75	Ant 1	-0.03	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.679	1.245	0.845	0.358	0.446	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.76	Ant 1	-0.02	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.658	1.242	0.817	0.345	0.428	
1770.00	354000	High	NR Band n66 (AWS)	20	15.70	14.70	Ant 1	0.09	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.669	1.259	0.842	0.343	0.432	
1720.00	344000	Low	NR Band n66 (AWS)	20	15.70	14.75	Ant 1	-0.11	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.646	1.245	0.804	0.340	0.423	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.81	Ant 1	-0.06	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.646	1.227	0.793	0.339	0.416	
1770.00	354000	High	NR Band n66 (AWS)	20	15.70	14.70	Ant 1	0.15	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.651	1.259	0.820	0.333	0.419	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.68	Ant 1	0.08	0	DH70Y64TLH	DFT-S-OFDM	QPSK	100	0	0 mm	back	1:1	0.640	1.265	0.810	0.340	0.430	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.76	Ant 1	0.05	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.026	1.242	0.032	0.009	0.011	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.81	Ant 1	0.17	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.025	1.227	0.031	0.011	0.013	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.76	Ant 1	-0.17	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.323	1.242	0.401	0.125	0.155	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.81	Ant 1	-0.08	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.285	1.227	0.350	0.114	0.140	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.76	Ant 1	0.00	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.000	1.242	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.81	Ant 1	0.00	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.000	1.227	0.000	0.000	0.000	
1720.00	344000	Low	NR Band n66 (AWS)	20	15.70	14.75	Ant 1	0.01	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.801	1.245	0.997	0.323	0.402	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.76	Ant 1	0.01	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.783	1.242	0.972	0.320	0.397	
1770.00	354000	High	NR Band n66 (AWS)	20	15.70	14.70	Ant 1	0.06	0	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.791	1.259	0.996	0.322	0.405	
1720.00	344000	Low	NR Band n66 (AWS)	20	15.70	14.75	Ant 1	0.12	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.784	1.245	0.976	0.320	0.398	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.81	Ant 1	0.01	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.811	1.227	0.995	0.321	0.394	
1770.00	354000	High	NR Band n66 (AWS)	20	15.70	14.70	Ant 1	0.00	0	DH70Y64TLH	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.744	1.259	0.937	0.301	0.379	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.68	Ant 1	0.00	0	DH70Y64TLH	DFT-S-OFDM	QPSK	100	0	0 mm	left	1:1	0.785	1.265	0.993	0.318	0.402	
1745.00	349000	Mid	NR Band n66 (AWS)	20	15.70	14.82	Ant 1	-0.03	0	DH70Y64TLH	CP-OFDM	QPSK	1	1	0 mm	left	1:1	0.812	1.225	0.995	0.329	0.403	
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 n66 Ant 3 Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.12	Ant 3	-0.02	0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.481	1.225	0.589	0.255	0.312	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.05	Ant 3	0.03	0	Y919JM96JK	DFT-S-OFDM	QPSK	50	56	0 mm	back	1:1	0.500	1.245	0.623	0.250	0.311	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.12	Ant 3	0.05	0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.254	1.225	0.311	0.113	0.138	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.05	Ant 3	0.00	0	Y919JM96JK	DFT-S-OFDM	QPSK	50	56	0 mm	top	1:1	0.273	1.245	0.340	0.114	0.142	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.12	Ant 3	0.05	0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.022	1.225	0.027	0.012	0.015	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.05	Ant 3	0.02	0	Y919JM96JK	DFT-S-OFDM	QPSK	50	56	0 mm	bottom	1:1	0.023	1.245	0.029	0.012	0.015	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.12	Ant 3	0.04	0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.562	1.225	0.688	0.230	0.282	
1720.00	344000	Low	NR Band n66 (AWS)	20	16.00	15.02	Ant 3	0.04	0	Y919JM96JK	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.605	1.253	0.758	0.252	0.316	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.05	Ant 3	0.09	0	Y919JM96JK	DFT-S-OFDM	QPSK	50	56	0 mm	right	1:1	0.566	1.245	0.705	0.231	0.288	
1770.00	354000	High	NR Band n66 (AWS)	20	16.00	14.86	Ant 3	0.05	0	Y919JM96JK	DFT-S-OFDM	QPSK	50	28	0 mm	right	1:1	0.494	1.300	0.642	0.208	0.270	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.00	Ant 3	0.02	0	Y919JM96JK	CP-OFDM	QPSK	1	1	0 mm	right	1:1	0.581	1.259	0.731	0.239	0.301	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.12	Ant 3	0.10	0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.000	1.225	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	20	16.00	15.05	Ant 3	0.07	0	Y919JM96JK	DFT-S-OFDM	QPSK	50	56	0 mm	left	1:1	0.000	1.245	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 10-61
NR Band n66 Ant 2b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1720.00	344000	Low	NR Band n66 (AWS)	20	13.40	12.44	Ant 2b	-0.01	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	1	104	0 mm	back	1:1	0.619	1.247	0.772	0.254	0.317	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.48	Ant 2b	0.00	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.638	1.236	0.789	0.267	0.330	
1770.00	354000	High	NR Band n66 (AWS)	20	13.40	12.40	Ant 2b	-0.04	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.638	1.259	0.803	0.266	0.335	
1720.00	344000	Low	NR Band n66 (AWS)	20	13.40	12.44	Ant 2b	-0.02	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	50	28	0 mm	back	1:1	0.624	1.247	0.778	0.264	0.329	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.49	Ant 2b	-0.05	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	50	56	0 mm	back	1:1	0.629	1.233	0.776	0.262	0.323	
1770.00	354000	High	NR Band n66 (AWS)	20	13.40	12.36	Ant 2b	0.01	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	50	28	0 mm	back	1:1	0.616	1.271	0.783	0.259	0.329	
1720.00	344000	Low	NR Band n66 (AWS)	20	13.40	12.40	Ant 2b	-0.05	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	100	0	0 mm	back	1:1	0.637	1.259	0.802	0.266	0.335	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.50	Ant 2b	-0.01	0.0	Y919JM96JK	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.623	1.230	0.766	0.261	0.321	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.48	Ant 2b	0.11	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.000	1.236	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.49	Ant 2b	0.03	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	50	56	0 mm	top	1:1	0.000	1.233	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.48	Ant 2b	0.01	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.338	1.236	0.418	0.133	0.164	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.49	Ant 2b	-0.06	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	50	56	0 mm	bottom	1:1	0.336	1.233	0.414	0.131	0.162	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.48	Ant 2b	0.03	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.042	1.236	0.052	0.020	0.025	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.49	Ant 2b	-0.14	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	50	56	0 mm	right	1:1	0.037	1.233	0.046	0.018	0.022	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.48	Ant 2b	-0.02	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.006	1.236	0.007	0.001	0.001	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.40	12.49	Ant 2b	0.06	0.0	Y919JM96JK	DFT-S-OFDM	QPSK	50	56	0 mm	left	1:1	0.005	1.233	0.006	0.001	0.001	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram														

Table 10-62
NR Band n66 Ant 4b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1720.00	344000	Low	NR Band n66 (AWS)	20	13.70	12.89	Ant 4b	0.07	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.767	1.205	0.924	0.310	0.374	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.96	Ant 4b	0.02	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	104	0 mm	back	1:1	0.838	1.186	0.994	0.338	0.401	A21
1770.00	354000	High	NR Band n66 (AWS)	20	13.70	12.91	Ant 4b	0.02	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.822	1.199	0.986	0.331	0.397	
1720.00	344000	Low	NR Band n66 (AWS)	20	13.70	12.76	Ant 4b	0.03	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	28	0 mm	back	1:1	0.741	1.242	0.920	0.306	0.380	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.81	Ant 4b	-0.02	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.772	1.227	0.947	0.316	0.388	
1770.00	354000	High	NR Band n66 (AWS)	20	13.70	12.70	Ant 4b	-0.01	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	28	0 mm	back	1:1	0.781	1.259	0.983	0.320	0.403	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.76	Ant 4b	0.04	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	100	0	0 mm	back	1:1	0.765	1.242	0.950	0.320	0.397	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.91	Ant 4b	0.00	0.0	M9R2DWTV6G	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.830	1.199	0.995	0.341	0.409	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.96	Ant 4b	0.00	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	104	0 mm	top	1:1	0.641	1.186	0.760	0.246	0.292	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.81	Ant 4b	0.07	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.620	1.227	0.761	0.241	0.296	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.96	Ant 4b	0.10	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	104	0 mm	bottom	1:1	0.000	1.186	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.81	Ant 4b	-0.10	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.000	1.227	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.96	Ant 4b	0.10	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	104	0 mm	right	1:1	0.000	1.186	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.81	Ant 4b	-0.03	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.000	1.227	0.000	0.000	0.000	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.96	Ant 4b	0.11	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	104	0 mm	left	1:1	0.023	1.186	0.027	0.008	0.009	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.81	Ant 4b	0.16	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.024	1.227	0.029	0.008	0.010	
1745.00	349000	Mid	NR Band n66 (AWS)	20	13.70	12.96	Ant 4b	-0.06	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	104	0 mm	back	1:1	0.702	1.186	0.833	0.276	0.327	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram														

Note: Blue entry represents variability measurement.

Table 10-63
NR Band n25 Ant 1 Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.78	Ant 1	-0.02	0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.513	1.355	0.695	0.274	0.371	
1882.50	376500	Mid	NR Band n25 (PCS)	20	17.10	15.67	Ant 1	0.01	0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.515	1.390	0.716	0.261	0.363	
1905.00	381000	High	NR Band n25 (PCS)	20	17.10	15.50	Ant 1	0.04	0	GXWM69926V	DFT-S-OFDM	QPSK	1	53	0 mm	back	1:1	0.623	1.445	0.900	0.316	0.457	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.67	Ant 1	0.01	0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.553	1.390	0.769	0.280	0.389	
1882.50	376500	Mid	NR Band n25 (PCS)	20	17.10	15.59	Ant 1	0.01	0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.509	1.416	0.721	0.258	0.365	
1905.00	381000	High	NR Band n25 (PCS)	20	17.10	15.41	Ant 1	-0.05	0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.485	1.476	0.716	0.251	0.370	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.64	Ant 1	-0.01	0	GXWM69926V	DFT-S-OFDM	QPSK	100	0	0 mm	back	1:1	0.515	1.400	0.721	0.242	0.339	
1905.00	381000	High	NR Band n25 (PCS)	20	17.10	15.50	Ant 1	-0.14	0	GXWM69926V	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.490	1.445	0.708	0.216	0.312	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.78	Ant 1	0.11	0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.021	1.355	0.028	0.012	0.016	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.67	Ant 1	0.11	0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.022	1.390	0.031	0.012	0.017	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.78	Ant 1	-0.03	0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.344	1.355	0.466	0.141	0.191	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.67	Ant 1	0.07	0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.313	1.390	0.435	0.127	0.177	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.78	Ant 1	-0.05	0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.003	1.355	0.004	0.002	0.003	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.67	Ant 1	0.03	0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.002	1.390	0.003	0.002	0.003	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.78	Ant 1	-0.01	0	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.537	1.355	0.728	0.220	0.298	
1860.00	372000	Low	NR Band n25 (PCS)	20	17.10	15.67	Ant 1	0.04	0	GXWM69926V	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.507	1.390	0.705	0.220	0.306	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-64
NR Band n25 Ant 3 Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1860.00	372000	Low	NR Band n25 (PCS)	20	15.90	14.92	Ant 3	-0.04	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	53	0 mm	back	1:1	0.442	1.253	0.554	0.211	0.264	
1860.00	372000	Low	NR Band n25 (PCS)	20	15.90	15.05	Ant 3	-0.11	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	56	0 mm	back	1:1	0.357	1.216	0.434	0.187	0.227	
1860.00	372000	Low	NR Band n25 (PCS)	20	15.90	14.92	Ant 3	-0.09	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	53	0 mm	top	1:1	0.269	1.253	0.337	0.106	0.133	
1860.00	372000	Low	NR Band n25 (PCS)	20	15.90	15.05	Ant 3	-0.06	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	56	0 mm	top	1:1	0.260	1.216	0.316	0.105	0.128	
1860.00	372000	Low	NR Band n25 (PCS)	20	15.90	14.92	Ant 3	0.10	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	53	0 mm	bottom	1:1	0.022	1.253	0.028	0.011	0.014	
1860.00	372000	Low	NR Band n25 (PCS)	20	15.90	15.05	Ant 3	-0.03	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	56	0 mm	bottom	1:1	0.014	1.216	0.017	0.007	0.009	
1860.00	372000	Low	NR Band n25 (PCS)	20	15.90	14.92	Ant 3	0.06	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	53	0 mm	right	1:1	0.489	1.253	0.613	0.202	0.253	
1882.50	376500	Mid	NR Band n25 (PCS)	20	15.90	14.89	Ant 3	0.06	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.492	1.262	0.621	0.203	0.256	
1905.00	381000	High	NR Band n25 (PCS)	20	15.90	14.85	Ant 3	-0.01	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.509	1.274	0.648	0.208	0.265	
1860.00	372000	Low	NR Band n25 (PCS)	20	15.90	15.05	Ant 3	0.02	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	56	0 mm	right	1:1	0.481	1.216	0.585	0.199	0.242	
1882.50	376500	Mid	NR Band n25 (PCS)	20	15.90	14.95	Ant 3	0.03	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.499	1.245	0.621	0.204	0.254	
1905.00	381000	High	NR Band n25 (PCS)	20	15.90	14.84	Ant 3	0.01	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.530	1.276	0.676	0.212	0.271	
1905.00	381000	High	NR Band n25 (PCS)	20	15.90	15.03	Ant 3	-0.02	0	M9R2DWTV6G	CP-OFDM	QPSK	1	1	0 mm	right	1:1	0.502	1.222	0.613	0.206	0.252	
1860.00	372000	Low	NR Band n25 (PCS)	20	15.90	14.92	Ant 3	-0.03	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	53	0 mm	left	1:1	0.003	1.253	0.004	0.002	0.003	
1860.00	372000	Low	NR Band n25 (PCS)	20	15.90	15.05	Ant 3	0.03	0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	56	0 mm	left	1:1	0.003	1.216	0.004	0.002	0.002	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-65
NR Band n25 Ant 2b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1860.00	372000	Low	NR Band n25 (PCS)	20	13.70	11.91	Ant 2b	0.01	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.446	1.510	0.673	0.210	0.317	
1882.50	376500	Mid	NR Band n25 (PCS)	20	13.70	11.85	Ant 2b	-0.03	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.453	1.531	0.694	0.212	0.325	
1905.00	381000	High	NR Band n25 (PCS)	20	13.70	11.86	Ant 2b	0.00	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.448	1.528	0.685	0.209	0.319	
1860.00	372000	Low	NR Band n25 (PCS)	20	13.70	11.92	Ant 2b	0.03	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.442	1.507	0.666	0.207	0.312	
1882.50	376500	Mid	NR Band n25 (PCS)	20	13.70	12.05	Ant 2b	-0.04	0.0	H77FP2WV19	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.450	1.462	0.658	0.211	0.308	
1860.00	372000	Low	NR Band n25 (PCS)	20	13.70	11.91	Ant 2b	0.09	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.003	1.510	0.005	0.002	0.003	
1860.00	372000	Low	NR Band n25 (PCS)	20	13.70	11.92	Ant 2b	0.14	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.002	1.507	0.003	0.002	0.003	
1860.00	372000	Low	NR Band n25 (PCS)	20	13.70	11.91	Ant 2b	-0.05	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.361	1.510	0.545	0.143	0.216	
1860.00	372000	Low	NR Band n25 (PCS)	20	13.70	11.92	Ant 2b	-0.02	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.334	1.507	0.503	0.140	0.211	
1860.00	372000	Low	NR Band n25 (PCS)	20	13.70	11.91	Ant 2b	-0.16	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.041	1.510	0.062	0.020	0.030	
1860.00	372000	Low	NR Band n25 (PCS)	20	13.70	11.92	Ant 2b	-0.09	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.037	1.507	0.056	0.019	0.029	
1860.00	372000	Low	NR Band n25 (PCS)	20	13.70	11.91	Ant 2b	0.02	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.012	1.510	0.018	0.007	0.011	
1860.00	372000	Low	NR Band n25 (PCS)	20	13.70	11.92	Ant 2b	0.14	0.0	H77FP2WV19	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.013	1.507	0.020	0.007	0.011	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-66
NR Band n25 Ant 4b Body SAR

MEASUREMENT RESULTS																								
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
1860.00	372000	Low	NR Band n25 (PCS)	20	12.00	11.20	Ant 4b	0.02	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.592	1.202	0.712	0.244	0.293	
1882.50	376500	Mid	NR Band n25 (PCS)	20	12.00	11.06	Ant 4b	-0.03	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.528	1.242	0.656	0.233	0.289	
1905.00	381000	High	NR Band n25 (PCS)	20	12.00	11.19	Ant 4b	0.01	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.636	1.205	0.766	0.258	0.311	A22
1860.00	372000	Low	NR Band n25 (PCS)	20	12.00	11.18	Ant 4b	-0.05	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	back	1:1	0.559	1.208	0.675	0.237	0.286	
1905.00	381000	High	NR Band n25 (PCS)	20	12.00	11.05	Ant 4b	0.03	0.0	M9R2DWTV6G	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.553	1.245	0.688	0.236	0.294	
1860.00	372000	Low	NR Band n25 (PCS)	20	12.00	11.20	Ant 4b	0.03	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.356	1.202	0.428	0.146	0.175	
1860.00	372000	Low	NR Band n25 (PCS)	20	12.00	11.18	Ant 4b	-0.09	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	top	1:1	0.332	1.208	0.401	0.139	0.168	
1860.00	372000	Low	NR Band n25 (PCS)	20	12.00	11.20	Ant 4b	-0.14	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.002	1.202	0.002	0.002	0.002	
1860.00	372000	Low	NR Band n25 (PCS)	20	12.00	11.18	Ant 4b	0.03	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	bottom	1:1	0.002	1.208	0.002	0.001	0.001	
1860.00	372000	Low	NR Band n25 (PCS)	20	12.00	11.20	Ant 4b	-0.14	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.003	1.202	0.004	0.002	0.002	
1860.00	372000	Low	NR Band n25 (PCS)	20	12.00	11.18	Ant 4b	0.17	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	right	1:1	0.003	1.208	0.004	0.002	0.002	
1860.00	372000	Low	NR Band n25 (PCS)	20	12.00	11.20	Ant 4b	-0.04	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.014	1.202	0.017	0.007	0.008	
1860.00	372000	Low	NR Band n25 (PCS)	20	12.00	11.18	Ant 4b	-0.03	0.0	M9R2DWTV6G	DFT-S-OFDM	QPSK	50	0	0 mm	left	1:1	0.015	1.208	0.018	0.007	0.008	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-67
NR Band n41 Ant 1 Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Power class	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2592.99	518598	Mid	NR Band n41	100	11.50	10.64	Ant 1	-0.18	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.759	1.219	0.925	0.242	0.295	
2592.99	518598	Mid	NR Band n41	100	11.50	10.62	Ant 1	-0.08	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:1	0.776	1.225	0.951	0.249	0.305	
2592.99	518598	Mid	NR Band n41	100	11.50	10.61	Ant 1	0.07	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.805	1.227	0.988	0.249	0.306	
2592.99	518598	Mid	NR Band n41	100	11.50	10.54	Ant 1	0.04	0	PC3	Y919JM96JK	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.758	1.247	0.945	0.244	0.304	
2592.99	518598	Mid	NR Band n41	100	14.50	13.08	Ant 1	0.10	0	PC2	Y919JM96JK	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:2	0.646	1.387	0.896	0.206	0.286	
2592.99	518598	Mid	NR Band n41	100	11.50	10.64	Ant 1	0.03	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.002	1.219	0.002	0.001	0.001	
2592.99	518598	Mid	NR Band n41	100	11.50	10.62	Ant 1	-0.03	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	135	0	0 mm	top	1:1	0.001	1.225	0.001	0.000	0.000	
2592.99	518598	Mid	NR Band n41	100	11.50	10.64	Ant 1	0.01	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.350	1.219	0.427	0.122	0.149	
2592.99	518598	Mid	NR Band n41	100	11.50	10.62	Ant 1	0.16	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	135	0	0 mm	bottom	1:1	0.344	1.225	0.421	0.118	0.145	
2592.99	518598	Mid	NR Band n41	100	11.50	10.64	Ant 1	-0.11	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.002	1.219	0.002	0.001	0.001	
2592.99	518598	Mid	NR Band n41	100	11.50	10.62	Ant 1	-0.12	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	135	0	0 mm	right	1:1	0.003	1.225	0.004	0.001	0.001	
2592.99	518598	Mid	NR Band n41	100	11.50	10.64	Ant 1	0.01	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.188	1.219	0.229	0.064	0.078	
2592.99	518598	Mid	NR Band n41	100	11.50	10.62	Ant 1	0.11	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	135	0	0 mm	left	1:1	0.187	1.225	0.229	0.063	0.077	
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 n41 Ant 3 Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Power class	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2592.99	518598	Mid	NR Band n41	100	12.30	11.34	Ant 3	0.06	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.430	1.247	0.536	0.145	0.181	
2592.99	518598	Mid	NR Band n41	100	12.30	11.29	Ant 3	0.03	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.498	1.262	0.628	0.167	0.211	
2592.99	518598	Mid	NR Band n41	100	12.30	11.28	Ant 3	0.03	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.500	1.265	0.633	0.168	0.213	
2592.99	518598	Mid	NR Band n41	100	12.30	11.34	Ant 3	0.04	0	PC3	FFQ5HYX09W	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.377	1.247	0.470	0.129	0.161	
2592.99	518598	Mid	NR Band n41	100	15.30	14.38	Ant 3	0.00	0	PC2	FFQ5HYX09W	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:2	0.521	1.236	0.644	0.174	0.215	
2592.99	518598	Mid	NR Band n41	100	12.30	11.34	Ant 3	0.04	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.367	1.247	0.458	0.125	0.156	
2592.99	518598	Mid	NR Band n41	100	12.30	11.29	Ant 3	0.07	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	69	0 mm	top	1:1	0.372	1.262	0.469	0.127	0.160	
2592.99	518598	Mid	NR Band n41	100	12.30	11.34	Ant 3	-0.17	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.001	1.247	0.001	0.000	0.000	
2592.99	518598	Mid	NR Band n41	100	12.30	11.29	Ant 3	0.06	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	69	0 mm	bottom	1:1	0.000	1.262	0.000	0.000	0.000	
2592.99	518598	Mid	NR Band n41	100	12.30	11.34	Ant 3	-0.07	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.196	1.247	0.244	0.065	0.081	
2592.99	518598	Mid	NR Band n41	100	12.30	11.29	Ant 3	0.03	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.194	1.262	0.245	0.066	0.083	
2592.99	518598	Mid	NR Band n41	100	12.30	11.34	Ant 3	0.06	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.005	1.247	0.006	0.002	0.002	
2592.99	518598	Mid	NR Band n41	100	12.30	11.29	Ant 3	0.04	0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	69	0 mm	left	1:1	0.006	1.262	0.008	0.002	0.003	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-69
NR Band n41 Ant 2b Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Power class	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2592.99	518598	Mid	NR Band n41	100	14.00	13.07	Ant 2b	0.12	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.716	1.239	0.887	0.304	0.377	
2592.99	518598	Mid	NR Band n41	100	14.00	13.09	Ant 2b	0.06	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:1	0.724	1.233	0.893	0.307	0.379	
2592.99	518598	Mid	NR Band n41	100	14.00	13.03	Ant 2b	0.02	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.748	1.250	0.935	0.315	0.394	
2592.99	518598	Mid	NR Band n41	100	14.00	13.08	Ant 2b	0.18	0	PC3	DH70Y64TLH	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.697	1.236	0.861	0.299	0.370	
2592.99	518598	Mid	NR Band n41	100	17.00	15.99	Ant 2b	-0.01	0	PC2	DH70Y64TLH	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:2	0.733	1.262	0.925	0.303	0.382	
2592.99	518598	Mid	NR Band n41	100	14.00	13.07	Ant 2b	0.04	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.000	1.239	0.000	0.000	0.000	
2592.99	518598	Mid	NR Band n41	100	14.00	13.09	Ant 2b	-0.06	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	0	0 mm	top	1:1	0.002	1.233	0.002	0.001	0.001	
2592.99	518598	Mid	NR Band n41	100	14.00	13.07	Ant 2b	0.01	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.532	1.239	0.659	0.199	0.247	
2592.99	518598	Mid	NR Band n41	100	14.00	13.09	Ant 2b	0.03	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	0	0 mm	bottom	1:1	0.518	1.233	0.639	0.190	0.234	
2592.99	518598	Mid	NR Band n41	100	14.00	13.03	Ant 2b	0.06	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	270	0	0 mm	bottom	1:1	0.451	1.250	0.564	0.170	0.213	
2592.99	518598	Mid	NR Band n41	100	14.00	13.07	Ant 2b	-0.04	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.026	1.239	0.032	0.013	0.016	
2592.99	518598	Mid	NR Band n41	100	14.00	13.09	Ant 2b	-0.16	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	0	0 mm	right	1:1	0.026	1.233	0.032	0.011	0.014	
2592.99	518598	Mid	NR Band n41	100	14.00	13.07	Ant 2b	-0.21	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.023	1.239	0.028	0.009	0.011	
2592.99	518598	Mid	NR Band n41	100	14.00	13.09	Ant 2b	-0.08	0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	0	0 mm	left	1:1	0.020	1.233	0.025	0.009	0.011	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 10-70
NR Band n41 Ant 4b Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Power class	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	(W/kg)	(W/kg)	
2592.99	518598	Mid	NR Band n41	100	12.30	12.01	Ant 4b	-0.18	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.932	1.069	**0.996**	0.319	0.341	A23
2592.99	518598	Mid	NR Band n41	100	12.30	11.87	Ant 4b	-0.06	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	135	138	0 mm	back	1:1	0.854	1.104	0.943	0.290	0.320	
2592.99	518598	Mid	NR Band n41	100	12.30	11.86	Ant 4b	-0.03	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.878	1.107	0.972	0.299	0.331	
2592.99	518598	Mid	NR Band n41	100	12.30	12.02	Ant 4b	-0.03	0	PC3	Y919JM96JK	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.876	1.067	0.935	0.303	0.323	
2592.99	518598	Mid	NR Band n41	100	15.30	14.32	Ant 4b	-0.03	0	PC2	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:2	0.795	1.253	0.996	0.275	0.345	
2592.99	518598	Mid	NR Band n41	100	12.30	12.01	Ant 4b	-0.07	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	top	1:1	0.845	1.069	0.903	0.290	0.310	
2592.99	518598	Mid	NR Band n41	100	12.30	11.87	Ant 4b	0.05	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	135	138	0 mm	top	1:1	0.728	1.104	0.804	0.247	0.273	
2592.99	518598	Mid	NR Band n41	100	12.30	11.86	Ant 4b	0.02	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	270	0	0 mm	top	1:1	0.755	1.107	0.836	0.255	0.282	
2592.99	518598	Mid	NR Band n41	100	12.30	12.01	Ant 4b	0.03	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.003	1.069	0.003	0.001	0.001	
2592.99	518598	Mid	NR Band n41	100	12.30	11.87	Ant 4b	0.02	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	135	138	0 mm	bottom	1:1	0.000	1.104	0.000	0.000	0.000	
2592.99	518598	Mid	NR Band n41	100	12.30	12.01	Ant 4b	0.15	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.016	1.069	0.017	0.004	0.004	
2592.99	518598	Mid	NR Band n41	100	12.30	11.87	Ant 4b	0.15	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	135	138	0 mm	right	1:1	0.014	1.104	0.015	0.004	0.004	
2592.99	518598	Mid	NR Band n41	100	12.30	12.01	Ant 4b	0.09	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.036	1.069	0.038	0.015	0.016	
2592.99	518598	Mid	NR Band n41	100	12.30	11.87	Ant 4b	-0.18	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	135	138	0 mm	left	1:1	0.036	1.104	0.040	0.013	0.014	
2592.99	518598	Mid	NR Band n41	100	12.30	12.01	Ant 4b	-0.06	0	PC3	Y919JM96JK	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.903	1.069	0.965	0.307	0.328	
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 10-71
NR Band n77 Ant 1 Body SAR

MEASUREMENT RESULTS																										
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Power class	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	NR Band n77	100	12.50	11.95	Ant 1	-0.04	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.751	1.135	0.852	0.261	0.296	
3930.00	662000	High	NR Band n77	100	12.50	11.60	Ant 1	-0.05	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.772	1.230	0.950	0.270	0.332	
3750.00	650000	Low	NR Band n77	100	12.50	11.60	Ant 1	-0.03	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.743	1.230	0.914	0.259	0.319	
3930.00	662000	High	NR Band n77	100	12.50	11.52	Ant 1	0.02	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:1	0.795	1.253	0.996	0.269	0.337	
3750.00	650000	Low	NR Band n77	100	12.50	11.47	Ant 1	0.04	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.766	1.268	0.971	0.262	0.332	
3750.00	650000	Low	NR Band n77	100	12.50	11.37	Ant 1	-0.19	0.0	PC3	FFQ5HYX09W	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.695	1.297	0.901	0.239	0.310	
3930.00	662000	High	NR Band n77	100	15.50	14.66	Ant 1	0.00	0.0	PC2	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:2	0.820	1.213	0.995	0.268	0.325	
3750.00	650000	Low	NR Band n77	100	12.50	11.95	Ant 1	0.10	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	137	0 mm	top	1:1	0.000	1.135	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	12.50	11.60	Ant 1	0.00	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	69	0 mm	top	1:1	0.000	1.230	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	12.50	11.95	Ant 1	-0.01	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	137	0 mm	bottom	1:1	0.586	1.135	0.665	0.155	0.176	
3930.00	662000	High	NR Band n77	100	12.50	11.60	Ant 1	0.04	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	1	0 mm	bottom	1:1	0.471	1.230	0.579	0.122	0.150	
3750.00	650000	Low	NR Band n77	100	12.50	11.60	Ant 1	-0.05	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	69	0 mm	bottom	1:1	0.573	1.230	0.705	0.153	0.188	
3930.00	662000	High	NR Band n77	100	12.50	11.52	Ant 1	-0.13	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	0	0 mm	bottom	1:1	0.458	1.253	0.574	0.117	0.147	
3750.00	650000	Low	NR Band n77	100	12.50	11.47	Ant 1	0.02	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	270	0	0 mm	bottom	1:1	0.567	1.268	0.719	0.152	0.193	
3750.00	650000	Low	NR Band n77	100	12.50	11.95	Ant 1	0.03	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	137	0 mm	right	1:1	0.026	1.135	0.030	0.006	0.007	
3750.00	650000	Low	NR Band n77	100	12.50	11.60	Ant 1	-0.14	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.025	1.230	0.031	0.006	0.007	
3750.00	650000	Low	NR Band n77	100	12.50	11.95	Ant 1	0.02	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	137	0 mm	left	1:1	0.671	1.135	0.762	0.180	0.204	
3930.00	662000	High	NR Band n77	100	12.50	11.60	Ant 1	0.11	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	1	1	0 mm	left	1:1	0.716	1.230	0.881	0.187	0.230	
3750.00	650000	Low	NR Band n77	100	12.50	11.60	Ant 1	0.00	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	69	0 mm	left	1:1	0.677	1.230	0.833	0.174	0.214	
3930.00	662000	High	NR Band n77	100	12.50	11.52	Ant 1	0.04	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	0	0 mm	left	1:1	0.737	1.253	0.923	0.191	0.239	
3750.00	650000	Low	NR Band n77	100	12.50	11.47	Ant 1	0.03	0.0	PC3	FFQ5HYX09W	DFT-S-OFDM	QPSK	270	0	0 mm	left	1:1	0.668	1.268	0.847	0.179	0.227	
3930.00	662000	High	NR Band n77	100	15.50	14.66	Ant 1	-0.06	0.0	PC2	FFQ5HYX09W	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:2	0.818	1.213	0.992	0.266	0.323	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

Note: Blue entry represents variability measurement.

Table 10-72
NR Band n77 Ant 3 Body SAR

MEASUREMENT RESULTS																										
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Power class	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	NR Band n77	100	11.00	10.55	Ant 3	0.02	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	271	0 mm	back	1:1	0.699	1.109	0.775	0.156	0.173	
3930.00	662000	High	NR Band n77	100	11.00	10.17	Ant 3	0.19	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	back	1:1	0.620	1.211	0.751	0.136	0.165	
3750.00	650000	Low	NR Band n77	100	11.00	10.59	Ant 3	0.14	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	138	0 mm	back	1:1	0.687	1.099	0.755	0.156	0.171	
3930.00	662000	High	NR Band n77	100	11.00	10.15	Ant 3	0.03	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	0	0 mm	back	1:1	0.602	1.216	0.732	0.130	0.158	
3930.00	662000	High	NR Band n77	100	11.00	10.09	Ant 3	0.10	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.743	1.233	0.916	0.172	0.212	
3930.00	662000	High	NR Band n77	100	11.00	10.20	Ant 3	0.03	0.0	PC3	GXWM69926V	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.636	1.202	0.764	0.138	0.166	
3930.00	662000	High	NR Band n77	100	14.00	12.99	Ant 3	-0.04	0.0	PC2	GXWM69926V	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:2	0.751	1.262	0.948	0.172	0.217	
3750.00	650000	Low	NR Band n77	100	11.00	10.55	Ant 3	-0.14	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	271	0 mm	top	1:1	0.274	1.109	0.304	0.070	0.078	
3750.00	650000	Low	NR Band n77	100	11.00	10.59	Ant 3	0.13	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	138	0 mm	top	1:1	0.290	1.099	0.319	0.074	0.081	
3750.00	650000	Low	NR Band n77	100	11.00	10.55	Ant 3	0.13	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	271	0 mm	bottom	1:1	0.000	1.109	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	11.00	10.59	Ant 3	0.04	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	138	0 mm	bottom	1:1	0.000	1.099	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	11.00	10.55	Ant 3	-0.20	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	271	0 mm	right	1:1	0.378	1.109	0.419	0.103	0.114	
3930.00	662000	High	NR Band n77	100	11.00	10.17	Ant 3	-0.04	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	1	0 mm	right	1:1	0.366	1.211	0.443	0.100	0.121	
3750.00	650000	Low	NR Band n77	100	11.00	10.59	Ant 3	-0.10	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	138	0 mm	right	1:1	0.361	1.099	0.397	0.101	0.111	
3930.00	662000	High	NR Band n77	100	11.00	10.15	Ant 3	0.06	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	0	0 mm	right	1:1	0.354	1.216	0.430	0.097	0.118	
3930.00	662000	High	NR Band n77	100	11.00	10.09	Ant 3	-0.04	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	270	0	0 mm	right	1:1	0.349	1.233	0.430	0.095	0.117	
3750.00	650000	Low	NR Band n77	100	11.00	10.55	Ant 3	0.02	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	271	0 mm	left	1:1	0.004	1.109	0.004	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	11.00	10.59	Ant 3	-0.03	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	138	0 mm	left	1:1	0.007	1.099	0.008	0.001	0.001	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 10-73
NR Band n77 Ant 2a Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Power class	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	NR Band n77	100	10.60	10.12	Ant 2a	-0.06	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	271	0 mm	back	1:1	0.320	1.117	0.357	0.100	0.112	
3750.00	650000	Low	NR Band n77	100	10.60	10.03	Ant 2a	-0.10	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	138	0 mm	back	1:1	0.477	1.140	0.544	0.136	0.155	
3930.00	662000	High	NR Band n77	100	10.60	9.95	Ant 2a	-0.09	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	69	0 mm	back	1:1	0.486	1.161	0.564	0.134	0.156	
3930.00	662000	High	NR Band n77	100	10.60	9.94	Ant 2a	-0.12	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.397	1.164	0.462	0.114	0.133	
3750.00	650000	Low	NR Band n77	100	10.60	10.12	Ant 2a	0.18	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	271	0 mm	top	1:1	0.002	1.117	0.002	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	10.60	10.03	Ant 2a	0.12	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	138	0 mm	top	1:1	0.003	1.140	0.003	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	10.60	10.12	Ant 2a	0.13	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	271	0 mm	bottom	1:1	0.134	1.117	0.150	0.032	0.036	
3750.00	650000	Low	NR Band n77	100	10.60	10.03	Ant 2a	0.02	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	138	0 mm	bottom	1:1	0.121	1.140	0.138	0.029	0.033	
3750.00	650000	Low	NR Band n77	100	10.60	10.12	Ant 2a	0.03	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	271	0 mm	right	1:1	0.505	1.117	0.564	0.109	0.122	
3930.00	662000	High	NR Band n77	100	10.60	10.09	Ant 2a	0.06	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	137	0 mm	right	1:1	0.517	1.125	0.582	0.132	0.149	
3750.00	650000	Low	NR Band n77	100	10.60	10.03	Ant 2a	0.07	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	138	0 mm	right	1:1	0.462	1.140	0.527	0.120	0.137	
3930.00	662000	High	NR Band n77	100	10.60	9.95	Ant 2a	-0.05	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:1	0.519	1.161	0.603	0.132	0.153	
3930.00	662000	High	NR Band n77	100	10.60	9.94	Ant 2a	-0.03	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	270	0	0 mm	right	1:1	0.485	1.164	0.565	0.124	0.144	
3930.00	662000	High	NR Band n77	100	10.60	9.59	Ant 2a	-0.06	0.0	PC3	GXWM69926V	CP-OFDM	QPSK	1	1	0 mm	right	1:1	0.461	1.262	0.582	0.120	0.151	
3930.00	662000	High	NR Band n77	100	13.60	12.86	Ant 2a	-0.09	0.0	PC2	GXWM69926V	DFT-S-OFDM	QPSK	135	69	0 mm	right	1:2	0.520	1.186	0.617	0.133	0.158	
3750.00	650000	Low	NR Band n77	100	10.60	10.12	Ant 2a	0.00	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	1	271	0 mm	left	1:1	0.000	1.117	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	10.60	10.03	Ant 2a	0.00	0.0	PC3	GXWM69926V	DFT-S-OFDM	QPSK	135	138	0 mm	left	1:1	0.000	1.140	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 10-74
NR Band n77 Ant 4a Body SAR

MEASUREMENT RESULTS																									
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Antenna Config	Power Drift [dB]	MPR [dB]	Power class	Serial Number	Waveform	Modulation	RB Size	RB Offset	Spacing	side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	(W/kg)	(W/kg)	
3750.00	650000	Low	NR Band n77	100	11.75	11.13	Ant 4a	-0.10	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.865	1.153	0.997	0.259	0.299	
3930.00	662000	High	NR Band n77	100	11.75	11.08	Ant 4a	-0.09	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:1	0.533	1.167	0.622	0.152	0.177	
3750.00	650000	Low	NR Band n77	100	11.75	10.97	Ant 4a	-0.10	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	138	0 mm	back	1:1	0.818	1.197	0.979	0.244	0.292	
3930.00	662000	High	NR Band n77	100	11.75	11.08	Ant 4a	-0.04	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	138	0 mm	back	1:1	0.511	1.167	0.596	0.145	0.169	
3930.00	662000	High	NR Band n77	100	11.75	10.95	Ant 4a	-0.03	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	270	0	0 mm	back	1:1	0.536	1.202	0.644	0.153	0.184	
3930.00	662000	High	NR Band n77	100	11.75	10.60	Ant 4a	-0.11	0.0	PC3	DH70Y64TLH	CP-OFDM	QPSK	1	1	0 mm	back	1:1	0.589	1.303	0.767	0.171	0.223	
3750.00	650000	Low	NR Band n77	100	14.75	14.18	Ant 4a	-0.15	0.0	PC2	DH70Y64TLH	DFT-S-OFDM	QPSK	1	137	0 mm	back	1:2	0.875	1.140	0.998	0.262	0.299	A24
3750.00	650000	Low	NR Band n77	100	11.75	11.13	Ant 4a	-0.08	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	137	0 mm	top	1:1	0.256	1.153	0.295	0.069	0.080	
3930.00	662000	High	NR Band n77	100	11.75	11.08	Ant 4a	0.05	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	138	0 mm	top	1:1	0.133	1.167	0.155	0.034	0.040	
3750.00	650000	Low	NR Band n77	100	11.75	11.13	Ant 4a	-0.07	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	137	0 mm	bottom	1:1	0.007	1.153	0.008	0.001	0.001	
3930.00	662000	High	NR Band n77	100	11.75	11.08	Ant 4a	0.02	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	138	0 mm	bottom	1:1	0.007	1.167	0.008	0.001	0.001	
3750.00	650000	Low	NR Band n77	100	11.75	11.13	Ant 4a	0.00	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	137	0 mm	right	1:1	0.000	1.153	0.000	0.000	0.000	
3930.00	662000	High	NR Band n77	100	11.75	11.08	Ant 4a	0.00	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	138	0 mm	right	1:1	0.000	1.167	0.000	0.000	0.000	
3750.00	650000	Low	NR Band n77	100	11.75	11.13	Ant 4a	0.16	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	137	0 mm	left	1:1	0.754	1.153	0.869	0.199	0.229	
3930.00	662000	High	NR Band n77	100	11.75	11.08	Ant 4a	0.03	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	1	137	0 mm	left	1:1	0.573	1.167	0.669	0.144	0.168	
3750.00	650000	Low	NR Band n77	100	11.75	10.97	Ant 4a	0.04	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	138	0 mm	left	1:1	0.726	1.197	0.869	0.190	0.227	
3930.00	662000	High	NR Band n77	100	11.75	11.08	Ant 4a	0.02	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	135	138	0 mm	left	1:1	0.568	1.167	0.663	0.142	0.166	
3930.00	662000	High	NR Band n77	100	11.75	10.95	Ant 4a	0.06	0.0	PC3	DH70Y64TLH	DFT-S-OFDM	QPSK	270	0	0 mm	left	1:1	0.541	1.202	0.650	0.140	0.168	
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
2.4 GHz WLAN Ant 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	12.75	11.66	-0.14	0 mm	Ant 2a	V2	H40TVDCFN7	1	back	100.0	0.907	1.285	1.000	1.165	0.347	0.446	
2437	6	802.11b	DSSS	22	12.75	11.70	-0.05	0 mm	Ant 2a	V2	H40TVDCFN7	1	back	100.0	0.933	1.274	1.000	**1.189**	0.358	0.456	A25
2437	6	802.11b	DSSS	22	12.75	11.78	-0.17	0 mm	Ant 2a	V1	M4YK1QCNPW	1	back	100.0	0.931	1.250	1.000	1.164	0.357	0.446	
2462	11	802.11b	DSSS	22	12.75	11.71	-0.15	0 mm	Ant 2a	V2	H40TVDCFN7	1	back	100.0	0.925	1.271	1.000	1.176	0.353	0.449	
2462	11	802.11b	DSSS	22	12.75	11.71	0.00	0 mm	Ant 2a	V2	H40TVDCFN7	1	top	100.0	0.000	1.271	1.000	0.000	0.000	0.000	
2462	11	802.11b	DSSS	22	12.75	11.71	-0.12	0 mm	Ant 2a	V2	H40TVDCFN7	1	bottom	100.0	0.309	1.271	1.000	0.393	0.097	0.123	
2412	1	802.11b	DSSS	22	12.75	11.66	0.01	0 mm	Ant 2a	V2	H40TVDCFN7	1	right	100.0	0.743	1.285	1.000	0.955	0.261	0.335	
2437	6	802.11b	DSSS	22	12.75	11.70	0.00	0 mm	Ant 2a	V2	H40TVDCFN7	1	right	100.0	0.781	1.274	1.000	0.995	0.273	0.348	
2462	11	802.11b	DSSS	22	12.75	11.71	0.00	0 mm	Ant 2a	V2	H40TVDCFN7	1	right	100.0	0.864	1.271	1.000	1.098	0.297	0.377	
2462	11	802.11b	DSSS	22	12.75	11.71	-0.10	0 mm	Ant 2a	V2	H40TVDCFN7	1	left	100.0	0.000	1.271	1.000	0.000	0.000	0.000	
2437	6	802.11b	DSSS	22	9.75	8.76	-0.13	0 mm	Ant 2a	V2	H40TVDCFN7	1	back	100.0	0.424	1.256	1.000	0.533	0.161	0.202	
2437	6	802.11b	DSSS	22	9.75	8.76	-0.11	0 mm	Ant 2a	V2	H40TVDCFN7	1	bottom	100.0	0.141	1.256	1.000	0.177	0.044	0.055	
2437	6	802.11b	DSSS	22	9.75	8.76	-0.12	0 mm	Ant 2a	V2	H40TVDCFN7	1	right	100.0	0.363	1.256	1.000	0.456	0.126	0.158	
2437	6	802.11b	DSSS	22	12.75	11.70	0.01	0 mm	Ant 2a	V2	H40TVDCFN7	1	back	100.0	0.912	1.274	1.000	1.162	0.358	0.456	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram													

Note: Blue entry represents variability measurement.

Table 10-76
2.4 GHz WLAN Ant 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	11.75	10.74	-0.11	0 mm	Ant 4a	V2	H40TVDCFN7	1	back	100.0	0.810	1.262	1.000	1.022	0.309	0.390	
2437	6	802.11b	DSSS	22	11.75	10.55	-0.02	0 mm	Ant 4a	V2	H40TVDCFN7	1	back	100.0	0.860	1.318	1.000	1.133	0.326	0.430	
2437	6	802.11b	DSSS	22	11.75	10.55	-0.03	0 mm	Ant 4a	V1	M4YK1QCNPW	1	back	100.0	0.844	1.318	1.000	1.112	0.317	0.418	
2462	11	802.11b	DSSS	22	11.75	10.65	0.14	0 mm	Ant 4a	V2	H40TVDCFN7	1	back	100.0	0.791	1.288	1.000	1.019	0.299	0.385	
2412	1	802.11b	DSSS	22	11.75	10.74	-0.05	0 mm	Ant 4a	V2	H40TVDCFN7	1	top	100.0	0.234	1.262	1.000	0.295	0.072	0.091	
2412	1	802.11b	DSSS	22	11.75	10.74	-0.03	0 mm	Ant 4a	V2	H40TVDCFN7	1	bottom	100.0	0.007	1.262	1.000	0.009	0.004	0.005	
2412	1	802.11b	DSSS	22	11.75	10.74	-0.14	0 mm	Ant 4a	V2	H40TVDCFN7	1	right	100.0	0.002	1.262	1.000	0.003	0.001	0.001	
2412	1	802.11b	DSSS	22	11.75	10.74	-0.06	0 mm	Ant 4a	V2	H40TVDCFN7	1	left	100.0	0.720	1.262	1.000	0.909	0.249	0.314	
2437	6	802.11b	DSSS	22	11.75	10.55	-0.03	0 mm	Ant 4a	V2	H40TVDCFN7	1	left	100.0	0.727	1.318	1.000	0.958	0.248	0.327	
2462	11	802.11b	DSSS	22	11.75	10.65	-0.02	0 mm	Ant 4a	V2	H40TVDCFN7	1	left	100.0	0.741	1.288	1.000	0.954	0.252	0.325	
2437	6	802.11b	DSSS	22	8.75	7.95	0.04	0 mm	Ant 4a	V2	H40TVDCFN7	1	back	100.0	0.338	1.202	1.000	0.406	0.132	0.159	
2437	6	802.11b	DSSS	22	8.75	7.95	-0.03	0 mm	Ant 4a	V2	H40TVDCFN7	1	top	100.0	0.120	1.202	1.000	0.144	0.038	0.046	
2437	6	802.11b	DSSS	22	8.75	7.95	0.00	0 mm	Ant 4a	V2	H40TVDCFN7	1	left	100.0	0.318	1.202	1.000	0.382	0.110	0.132	
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
5 GHz WLAN Ant 4b 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	11.00	9.41	-0.02	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	back	96.1	0.601	1.442	1.041	0.902	0.171	0.257	
5290	58	802.11ac	OFDM	80	11.00	9.21	-0.03	0 mm	Ant 4b	V1	DWC520V2RM	29.3	back	95.8	0.570	1.510	1.044	0.899	0.162	0.255	
5290	58	802.11ac	OFDM	80	11.00	9.41	-0.02	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	top	96.1	0.512	1.442	1.041	0.769	0.128	0.192	
5290	58	802.11ac	OFDM	80	11.00	9.41	0.03	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	bottom	96.1	0.000	1.442	1.041	0.000	0.000	0.000	
5290	58	802.11ac	OFDM	80	11.00	9.41	-0.04	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	right	96.1	0.000	1.442	1.041	0.000	0.000	0.000	
5290	58	802.11ac	OFDM	80	11.00	9.41	0.20	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	left	96.1	0.019	1.442	1.041	0.029	0.003	0.005	
5290	58	802.11ac	OFDM	80	5.00	4.09	0.17	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	back	96.1	0.150	1.233	1.041	0.193	0.041	0.053	
5290	58	802.11ac	OFDM	80	5.00	4.09	-0.13	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	top	96.1	0.129	1.233	1.041	0.166	0.031	0.040	
5530	106	802.11ac	OFDM	80	11.00	9.05	-0.03	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	back	96.1	0.604	1.567	1.041	0.985	0.173	0.282	
5610	122	802.11ac	OFDM	80	9.00	8.34	-0.03	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	back	96.1	0.546	1.164	1.041	0.662	0.156	0.189	
5690	138	802.11ac	OFDM	80	9.00	8.25	-0.08	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	back	96.1	0.522	1.189	1.041	0.646	0.151	0.187	
5530	106	802.11ac	OFDM	80	11.00	9.05	-0.03	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	top	96.1	0.623	1.567	1.041	1.016	0.150	0.245	
5530	106	802.11ac	OFDM	80	11.00	9.30	-0.03	0 mm	Ant 4b	V1	M4YK1QCNPW	29.3	top	95.8	0.550	1.479	1.044	0.849	0.135	0.208	
5610	122	802.11ac	OFDM	80	9.00	8.34	-0.03	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	top	96.1	0.521	1.164	1.041	0.631	0.124	0.150	
5690	138	802.11ac	OFDM	80	9.00	8.25	-0.03	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	top	96.1	0.469	1.189	1.041	0.581	0.109	0.135	
5530	106	802.11ac	OFDM	80	11.00	9.05	-0.10	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	bottom	96.1	0.000	1.567	1.041	0.000	0.000	0.000	
5530	106	802.11ac	OFDM	80	11.00	9.05	-0.04	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	right	96.1	0.005	1.567	1.041	0.008	0.000	0.000	
5530	106	802.11ac	OFDM	80	11.00	9.05	-0.02	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	left	96.1	0.016	1.567	1.041	0.026	0.002	0.003	
5530	106	802.11ac	OFDM	80	5.00	4.14	-0.12	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	back	96.1	0.216	1.219	1.041	0.274	0.058	0.074	
5530	106	802.11ac	OFDM	80	5.00	4.14	-0.13	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	top	96.1	0.176	1.219	1.041	0.223	0.040	0.051	
5775	155	802.11ac	OFDM	80	12.50	11.50	-0.03	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	back	96.1	0.799	1.259	1.041	**1.047**	0.219	0.287	A26
5775	155	802.11ac	OFDM	80	12.50	11.90	-0.03	0 mm	Ant 4b	V1	DWC520V2RM	29.3	back	95.8	0.782	1.148	1.044	0.937	0.217	0.260	
5775	155	802.11ac	OFDM	80	12.50	11.50	-0.13	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	top	96.1	0.645	1.259	1.041	0.845	0.156	0.204	
5775	155	802.11ac	OFDM	80	12.50	11.50	-0.04	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	bottom	96.1	0.000	1.259	1.041	0.000	0.000	0.000	
5775	155	802.11ac	OFDM	80	12.50	11.50	-0.04	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	right	96.1	0.001	1.259	1.041	0.001	0.000	0.000	
5775	155	802.11ac	OFDM	80	12.50	11.50	-0.02	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	left	96.1	0.019	1.259	1.041	0.025	0.002	0.003	
5775	155	802.11ac	OFDM	80	6.50	5.70	-0.03	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	back	96.1	0.165	1.202	1.041	0.206	0.045	0.056	
5775	155	802.11ac	OFDM	80	6.50	5.70	0.04	0 mm	Ant 4b	V2	H40TVDCFN7	29.3	top	96.1	0.142	1.202	1.041	0.178	0.034	0.043	
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
5 GHz WLAN Ant 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)	
5270	54	802.11n	OFDM	40	17.25	16.15	0.04	0 mm	Ant 5b	V2	H40TVDCFN7	13.5	back	98.0	0.106	1.288	1.020	0.139	0.040	0.053	
5270	54	802.11n	OFDM	40	17.25	16.15	0.00	0 mm	Ant 5b	V2	H40TVDCFN7	13.5	top	98.0	0.000	1.288	1.020	0.000	0.000	0.000	
5270	54	802.11n	OFDM	40	17.25	16.15	-0.04	0 mm	Ant 5b	V2	H40TVDCFN7	13.5	bottom	98.0	0.004	1.288	1.020	0.005	0.001	0.001	
5270	54	802.11n	OFDM	40	17.25	15.75	0.00	0 mm	Ant 5b	V1	DWC520V2RM	13.5	right	97.8	0.588	1.413	1.022	0.849	0.181	0.261	
5270	54	802.11n	OFDM	40	17.25	16.15	-0.03	0 mm	Ant 5b	V2	H40TVDCFN7	13.5	right	98.0	0.784	1.288	1.020	1.030	0.240	0.315	
5310	62	802.11n	OFDM	40	16.00	15.05	0.05	0 mm	Ant 5b	V2	H40TVDCFN7	13.5	right	98.0	0.612	1.245	1.020	0.777	0.185	0.235	
5270	54	802.11n	OFDM	40	17.25	16.15	-0.09	0 mm	Ant 5b	V2	H40TVDCFN7	13.5	left	98.0	0.008	1.288	1.020	0.011	0.003	0.004	
5290	58	802.11ac	OFDM	80	13.25	12.33	-0.04	0 mm	Ant 5b	V2	H40TVDCFN7	29.3	right	96.1	0.308	1.236	1.041	0.396	0.088	0.113	
5530	106	802.11ac	OFDM	80	15.50	14.43	-0.03	0 mm	Ant 5b	V1	M4YK1QCNPW	29.3	back	95.8	0.110	1.279	1.044	0.147	0.043	0.057	
5530	106	802.11ac	OFDM	80	15.50	14.43	-0.06	0 mm	Ant 5b	V1	M4YK1QCNPW	29.3	top	95.8	0.000	1.279	1.044	0.000	0.000	0.000	
5530	106	802.11ac	OFDM	80	15.50	14.43	0.06	0 mm	Ant 5b	V1	M4YK1QCNPW	29.3	bottom	95.8	0.011	1.279	1.044	0.015	0.002	0.003	
5530	106	802.11ac	OFDM	80	15.50	14.43	0.21	0 mm	Ant 5b	V1	M4YK1QCNPW	29.3	right	95.8	0.686	1.279	1.044	0.916	0.231	0.308	
5530	106	802.11ac	OFDM	80	15.50	14.52	-0.14	0 mm	Ant 5b	V2	J65QXWCP9N	29.3	right	96.1	0.672	1.253	1.041	0.877	0.222	0.290	
5610	122	802.11ac	OFDM	80	15.00	13.85	-0.03	0 mm	Ant 5b	V1	M4YK1QCNPW	29.3	right	95.8	0.538	1.303	1.044	0.732	0.174	0.237	
5690	138	802.11ac	OFDM	80	15.00	13.84	-0.03	0 mm	Ant 5b	V1	M4YK1QCNPW	29.3	right	95.8	0.494	1.306	1.044	0.674	0.162	0.221	
5530	106	802.11ac	OFDM	80	15.50	14.43	-0.08	0 mm	Ant 5b	V1	M4YK1QCNPW	29.3	left	95.8	0.000	1.279	1.044	0.000	0.000	0.000	
5530	106	802.11ac	OFDM	80	11.50	10.48	-0.01	0 mm	Ant 5b	V1	M4YK1QCNPW	29.3	right	95.8	0.246	1.265	1.044	0.325	0.080	0.106	
5775	155	802.11ac	OFDM	80	16.25	14.51	0.20	0 mm	Ant 5b	V2	H40TVDCFN7	29.3	back	96.1	0.071	1.493	1.041	0.110	0.027	0.042	
5775	155	802.11ac	OFDM	80	16.25	14.51	0.06	0 mm	Ant 5b	V2	H40TVDCFN7	29.3	top	96.1	0.001	1.493	1.041	0.002	0.000	0.000	
5775	155	802.11ac	OFDM	80	16.25	14.51	-0.03	0 mm	Ant 5b	V2	H40TVDCFN7	29.3	bottom	96.1	0.007	1.493	1.041	0.011	0.003	0.005	
5775	155	802.11ac	OFDM	80	16.25	14.51	-0.16	0 mm	Ant 5b	V2	H40TVDCFN7	29.3	right	96.1	0.646	1.493	1.041	1.004	0.210	0.326	
5775	155	802.11ac	OFDM	80	16.25	14.37	-0.10	0 mm	Ant 5b	V1	DWC520V2RM	29.3	right	95.8	0.620	1.542	1.044	0.998	0.208	0.335	
5775	155	802.11ac	OFDM	80	16.25	14.51	-0.07	0 mm	Ant 5b	V2	H40TVDCFN7	29.3	left	96.1	0.002	1.493	1.041	0.003	0.000	0.000	
5775	155	802.11ac	OFDM	80	12.25	11.36	-0.02	0 mm	Ant 5b	V2	H40TVDCFN7	29.3	right	96.1	0.310	1.227	1.041	0.396	0.102	0.130	

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

Table 10-79
Bluetooth Ant 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	12.75	10.85	-0.17	0 mm	Ant 2a	V2	H40TVDCFN7	1	back	76.3	0.424	1.549	1.016	0.667	0.157	0.247	
2441	39	Bluetooth	FHSS	12.75	10.86	-0.16	0 mm	Ant 2a	V2	H40TVDCFN7	1	back	76.3	0.447	1.545	1.016	0.702	0.173	0.272	
2441	39	Bluetooth	FHSS	12.75	11.09	0.04	0 mm	Ant 2a	V1	M4YK1QCNPW	1	back	76.5	0.460	1.466	1.013	0.683	0.176	0.261	
2480	78	Bluetooth	FHSS	12.75	10.78	-0.10	0 mm	Ant 2a	V2	H40TVDCFN7	1	back	76.3	0.397	1.574	1.016	0.635	0.151	0.241	
2441	39	Bluetooth	FHSS	12.75	10.86	0.13	0 mm	Ant 2a	V2	H40TVDCFN7	1	top	76.3	0.006	1.545	1.016	0.009	0.002	0.003	
2441	39	Bluetooth	FHSS	12.75	10.86	-0.04	0 mm	Ant 2a	V2	H40TVDCFN7	1	bottom	76.3	0.151	1.545	1.016	0.237	0.047	0.074	
2441	39	Bluetooth	FHSS	12.75	10.86	-0.04	0 mm	Ant 2a	V2	H40TVDCFN7	1	right	76.3	0.403	1.545	1.016	0.633	0.139	0.218	
2441	39	Bluetooth	FHSS	12.75	10.86	-0.03	0 mm	Ant 2a	V2	H40TVDCFN7	1	left	76.3	0.000	1.545	1.016	0.000	0.000	0.000	
2402	0	Bluetooth	FHSS	9.75	9.07	-0.08	0 mm	Ant 2a	V2	H40TVDCFN7	1	back	76.3	0.326	1.169	1.016	0.387	0.126	0.150	
2402	0	Bluetooth	FHSS	9.75	9.07	-0.02	0 mm	Ant 2a	V2	H40TVDCFN7	1	bottom	76.3	0.093	1.169	1.016	0.110	0.003	0.004	
2402	0	Bluetooth	FHSS	9.75	9.07	-0.05	0 mm	Ant 2a	V2	H40TVDCFN7	1	right	76.3	0.292	1.169	1.016	0.347	0.101	0.120	
2402	0	Bluetooth	FHSS	8.75	7.25	-0.10	0 mm	Ant 2a	V2	H40TVDCFN7	1	back	76.3	0.180	1.413	1.016	0.258	0.070	0.100	
2402	0	Bluetooth	FHSS	8.75	7.25	0.00	0 mm	Ant 2a	V2	H40TVDCFN7	1	bottom	76.3	0.061	1.413	1.016	0.088	0.019	0.027	
2402	0	Bluetooth	FHSS	8.75	7.25	0.05	0 mm	Ant 2a	V2	H40TVDCFN7	1	right	76.3	0.142	1.413	1.016	0.204	0.050	0.072	

ANSI / IEEE C95.1 1992 - SAFETY LIMIT	Body
Spatial Peak	1.6 W/kg (mW/g)
Uncontrolled Exposure/General Population	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 10-80
Bluetooth Ant 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	12.25	10.75	-0.17	0 mm	Ant 4a	V2	H40TVDCFN7	1	back	76.8	0.822	1.413	1.009	**1.172**	0.333	0.475	A27
2402	0	Bluetooth	FHSS	12.25	11.13	-0.07	0 mm	Ant 4a	V1	M4YK1QCNPW	1	back	77	0.779	1.294	1.006	1.014	0.317	0.413	
2441	39	Bluetooth	FHSS	12.25	10.95	-0.10	0 mm	Ant 4a	V2	H40TVDCFN7	1	back	76.8	0.728	1.349	1.009	0.991	0.283	0.385	
2480	78	Bluetooth	FHSS	12.25	10.92	-0.15	0 mm	Ant 4a	V2	H40TVDCFN7	1	back	76.8	0.644	1.358	1.009	0.882	0.245	0.336	
2441	39	Bluetooth	FHSS	12.25	10.95	-0.16	0 mm	Ant 4a	V2	H40TVDCFN7	1	top	76.8	0.271	1.349	1.009	0.369	0.085	0.116	
2441	39	Bluetooth	FHSS	12.25	10.95	-0.03	0 mm	Ant 4a	V2	H40TVDCFN7	1	bottom	76.8	0.006	1.349	1.009	0.008	0.003	0.004	
2441	39	Bluetooth	FHSS	12.25	10.95	-0.04	0 mm	Ant 4a	V2	H40TVDCFN7	1	right	76.8	0.000	1.349	1.009	0.000	0.000	0.000	
2441	39	Bluetooth	FHSS	12.25	10.95	-0.03	0 mm	Ant 4a	V2	H40TVDCFN7	1	left	76.8	0.560	1.349	1.009	0.762	0.205	0.279	
2402	0	Bluetooth	FHSS	10.25	9.68	-0.05	0 mm	Ant 4a	V2	H40TVDCFN7	1	back	76.8	0.472	1.140	1.009	0.543	0.185	0.213	
2402	0	Bluetooth	FHSS	10.25	9.68	-0.16	0 mm	Ant 4a	V2	H40TVDCFN7	1	top	76.8	0.135	1.140	1.009	0.155	0.042	0.048	
2402	0	Bluetooth	FHSS	10.25	9.68	-0.11	0 mm	Ant 4a	V2	H40TVDCFN7	1	left	76.8	0.315	1.140	1.009	0.362	0.119	0.137	
2402	0	Bluetooth	FHSS	9.25	8.30	-0.01	0 mm	Ant 4a	V2	H40TVDCFN7	1	back	76.8	0.367	1.245	1.009	0.461	0.143	0.180	
2402	0	Bluetooth	FHSS	9.25	8.30	-0.17	0 mm	Ant 4a	V2	H40TVDCFN7	1	top	76.8	0.101	1.245	1.009	0.127	0.031	0.039	
2402	0	Bluetooth	FHSS	9.25	8.30	-0.07	0 mm	Ant 4a	V2	H40TVDCFN7	1	left	76.8	0.245	1.245	1.009	0.308	0.091	0.114	
2402	0	Bluetooth	FHSS	5.25	4.27	-0.03	0 mm	Ant 4a	V2	H40TVDCFN7	1	back	76.8	0.112	1.253	1.009	0.142	0.043	0.054	
2402	0	Bluetooth	FHSS	5.25	4.27	-0.02	0 mm	Ant 4a	V2	H40TVDCFN7	1	top	76.8	0.038	1.253	1.009	0.048	0.012	0.015	
2402	0	Bluetooth	FHSS	5.25	4.27	0.20	0 mm	Ant 4a	V2	H40TVDCFN7	1	left	76.8	0.076	1.253	1.009	0.096	0.028	0.035	
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. The orange highlights throughout the report represents the highest scaled SAR per Equipment Class.
9. This device uses Smart Transmit for 2G/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).

GSM Test Notes:

1. Justification for reduced test configurations per KDB Publication 941225 D01v03r01 and October 2013 TCB Workshop Notes: The source-based frame-averaged output power was evaluated for all GPRS/EDGE slot configurations. The configuration with the highest target frame averaged output power

was evaluated for SAR. When the maximum frame-averaged powers are equivalent across two or more slots (within 0.25 dB), the configuration with the most number of time slots was tested.
2. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the middle channel or 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). When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel was used.

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 middle channel or 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). When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel was used.

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 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 mode. In EN-DC mode, NR operates with the LTE Bands shown in the NR FR1 checklist acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors
2. Due to test setup limitations, SAR testing for NR was performed using test mode software to establish the connection.
3. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
4. 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.
5. This device supports Power Class 2 and Power Class 3 operations for NR Band n41 and NR Band n77. The highest available duty cycle for Power Class 2 operations is 50.0 % 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.
6. Simultaneous transmission analysis for EN-DC operations is addressed in the Part 2 Test Report (Serial Number can be found in the bibliography).
7. 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 1g evaluations and was > 0.6 W/kg for NR n41 1g evaluations, testing at the other channels was required for such test configurations

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 8.11 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 was 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.

11.3 Body SAR Simultaneous Transmission Analysis

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

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	1+3	1+2+3
Body SAR	Back	0.999	1.189	1.133	1.189*	1.133*	1.189*
	Top	0.042	0.000	0.295	0.042	0.337	0.337
	Bottom	0.860	0.393	0.009	1.253	0.869	1.262
	Right	0.050	1.098	0.003	1.148	0.053	1.151
	Left	0.997	0.000	0.958	0.997	0.997*	0.997*

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

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	1+3	1+2+3
Body SAR	Back	0.987	1.189	1.133	1.189*	1.133*	1.189*
	Top	0.922	0.000	0.295	0.922	1.217	1.217
	Bottom	0.029	0.393	0.009	0.422	0.038	0.431
	Right	0.843	1.098	0.003	1.098*	0.846	1.101*
	Left	0.039	0.000	0.958	0.039	0.997	0.997

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

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	2.4 GHz WLAN Ant 2a Reduced at 9.75 dBm SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	0.533	1.133	1.532	1.133*	1.532*
	Top	0.036	0.000	0.295	0.036	0.331	0.331
	Bottom	0.686	0.177	0.009	0.863	0.695	0.872
	Right	0.329	0.456	0.003	0.785	0.332	0.788
	Left	0.157	0.000	0.958	0.157	1.115	1.115

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

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 2a Reduced at 9.75 dBm SAR (W/kg)	2.4 GHz WLAN Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.889	0.533	1.133	1.422	1.133*	1.422*
	Top	0.003	0.000	0.295	0.003	0.298	0.298
	Bottom	0.229	0.177	0.009	0.406	0.238	0.415
	Right	0.994	0.456	0.003	1.450	0.997	1.453
	Left	0.001	0.000	0.958	0.001	0.959	0.959

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

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 8.75 dBm SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.997	1.189	0.406	1.189*	1.403	1.403*
	Top	0.873	0.000	0.144	0.873	1.017	1.017
	Bottom	0.003	0.393	0.009	0.396	0.012	0.405
	Right	0.017	1.098	0.003	1.115	0.020	1.118
	Left	0.042	0.000	0.382	0.042	0.424	0.424

Table 11-6
Cellular Band Ant 4a Simultaneous Transmission Scenario with 2.4 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 4a SAR (W/kg)	2.4 GHz WLAN Ant 2a SAR (W/kg)	2.4 GHz WLAN Ant 4a Reduced at 8.75 dBm SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.998	1.189	0.406	1.189*	1.404	1.404*
	Top	0.295	0.000	0.144	0.295	0.439	0.439
	Bottom	0.008	0.393	0.009	0.401	0.017	0.410
	Right	0.000	1.098	0.003	1.098	0.003	1.101
	Left	0.984	0.000	0.382	0.984	1.366	1.366

Table 11-7
Cellular Band Ant 1 Simultaneous Transmission Scenario with 5 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	1.047	0.147	1.047*	1.146	1.146*
	Top	0.042	1.016	0.002	1.058	0.044	1.060
	Bottom	0.860	0.000	0.015	0.860	0.875	0.875
	Right	0.050	0.008	1.030	0.058	1.080	1.088
	Left	0.997	0.029	0.011	1.026	1.008	1.037

Table 11-8
Cellular Band Ant 3 Simultaneous Transmission Scenario with 5 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.987	1.047	0.147	1.047*	1.134	1.134*
	Top	0.922	1.016	0.002	1.016*	0.924	1.018*
	Bottom	0.029	0.000	0.015	0.029	0.044	0.044
	Right	0.843	0.008	1.030	0.851	1.030*	1.030*
	Left	0.039	0.029	0.011	0.068	0.050	0.079

Table 11-9
Cellular Band Ant 2b Simultaneous Transmission Scenario with 5 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b Reduced SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	1.047	0.147	1.047*	1.146	1.146*
	Top	0.036	1.016	0.002	1.052	0.038	1.054
	Bottom	0.686	0.000	0.015	0.686	0.701	0.701
	Right	0.329	0.008	0.396	0.337	0.725	0.733
	Left	0.157	0.029	0.011	0.186	0.168	0.197

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

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b Reduced SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.889	1.047	0.147	1.047*	1.036	1.047*
	Top	0.003	1.016	0.002	1.019	0.005	1.021
	Bottom	0.229	0.000	0.015	0.229	0.244	0.244
	Right	0.994	0.008	0.396	1.002	1.390	1.398
	Left	0.001	0.029	0.011	0.030	0.012	0.041

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

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	5 GHz WLAN Ant 4b Reduced SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.997	0.274	0.147	1.271	1.144	1.418
	Top	0.873	0.223	0.002	1.096	0.875	1.098
	Bottom	0.003	0.000	0.015	0.003	0.018	0.018
	Right	0.017	0.008	1.030	0.025	1.047	1.055
	Left	0.042	0.029	0.011	0.071	0.053	0.082

Table 11-12
Cellular Band Ant 4a Simultaneous Transmission Scenario with 5 GHz WLAN

Simult Tx	Configuration	Cellular Band Ant 4a SAR (W/kg)	5 GHz WLAN Ant 4b Reduced SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.998	0.274	0.147	1.272	1.145	1.419
	Top	0.295	0.223	0.002	0.518	0.297	0.520
	Bottom	0.008	0.000	0.015	0.008	0.023	0.023
	Right	0.000	0.008	1.030	0.008	1.030	1.038
	Left	0.984	0.029	0.011	1.013	0.995	1.024

Table 11-13
Cellular Band Ant 1 Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	Bluetooth Ant 2a Reduced at 8.75 dBm SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	0.258	1.172	1.257	1.172*	1.172*
	Top	0.042	0.009	0.369	0.051	0.411	0.420
	Bottom	0.860	0.088	0.008	0.948	0.868	0.956
	Right	0.050	0.204	0.000	0.254	0.050	0.254
	Left	0.997	0.000	0.762	0.997	0.997*	0.997*

Table 11-14
Cellular Band Ant 3 Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a Reduced at 9.25 dBm SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.987	0.702	0.461	0.987*	1.448	0.987*
	Top	0.922	0.009	0.127	0.931	1.049	1.058
	Bottom	0.029	0.237	0.008	0.266	0.037	0.274
	Right	0.843	0.633	0.000	1.476	0.843	1.476
	Left	0.039	0.000	0.308	0.039	0.347	0.347

Table 11-15
Cellular Band Ant 2b Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	Bluetooth Ant 2a Reduced at 8.75 dBm SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.999	0.258	1.172	1.257	1.172*	1.257*
	Top	0.036	0.009	0.369	0.045	0.405	0.414
	Bottom	0.686	0.088	0.008	0.774	0.694	0.782
	Right	0.329	0.204	0.000	0.533	0.329	0.533
	Left	0.157	0.000	0.762	0.157	0.919	0.919

Table 11-16
Cellular Band Ant 2a Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	Bluetooth Ant 2a Reduced at 8.75 dBm SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.889	0.258	1.172	1.147	1.172*	1.172*
	Top	0.003	0.009	0.369	0.012	0.372	0.381
	Bottom	0.229	0.088	0.008	0.317	0.237	0.325
	Right	0.994	0.204	0.000	1.198	0.994	1.198
	Left	0.001	0.000	0.762	0.001	0.763	0.763

Table 11-17
Cellular Band Ant 4b Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a Reduced at 9.25 dBm SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.997	0.702	0.461	0.997*	1.458	1.458*
	Top	0.873	0.009	0.127	0.882	1.000	1.009
	Bottom	0.003	0.237	0.008	0.240	0.011	0.248
	Right	0.017	0.633	0.000	0.650	0.017	0.650
	Left	0.042	0.000	0.308	0.042	0.350	0.350

Table 11-18
Cellular Band Ant 4a Simultaneous Transmission Scenario with 2.4 GHz BT

Simult Tx	Configuration	Cellular Band Ant 4a SAR (W/kg)	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a Reduced at 9.25 dBm SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body SAR	Back	0.998	0.702	0.461	0.998*	1.459	1.459*
	Top	0.295	0.009	0.127	0.304	0.422	0.431
	Bottom	0.008	0.237	0.008	0.245	0.016	0.253
	Right	0.000	0.633	0.000	0.633	0.000	0.633
	Left	0.984	0.000	0.308	0.984	1.292	1.292

Table 11-19
Cellular Band Ant 1 Simultaneous Transmission Scenario with 2.4 GHz BT and 5GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 1 SAR (W/kg)	Bluetooth Ant 2a Reduced at 8.75 dBm SAR (W/kg)	Bluetooth Ant 4a Reduced at 10.25 dBm SAR (W/kg)	5 GHz WLAN Ant 4b 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	0.258	0.543	1.047	0.147	1.590*
	Top	0.042	0.009	0.155	1.016	0.002	1.224
	Bottom	0.860	0.088	0.008	0.000	0.015	0.971
	Right	0.050	0.204	0.000	0.008	1.030	1.292
	Left	0.997	0.000	0.362	0.029	0.011	1.399

Table 11-20
Cellular Band Ant 3 Simultaneous Transmission Scenario with 2.4 GHz BT and 5GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 3 SAR (W/kg)	Bluetooth Ant 2a Reduced at 9.75 dBm SAR (W/kg)	Bluetooth Ant 4a Reduced at 5.25 dBm SAR (W/kg)	5 GHz WLAN Ant 4b 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	0.987	0.387	0.142	1.047	0.147	1.189*
	Top	0.922	0.009	0.048	1.016	0.002	1.075*
	Bottom	0.029	0.110	0.008	0.000	0.015	0.162
	Right	0.843	0.347	0.000	0.008	1.030	1.377*
	Left	0.039	0.000	0.096	0.029	0.011	0.175

Table 11-21
Cellular Band Ant 2b Simultaneous Transmission Scenario with 2.4 GHz BT and 5GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 2b SAR (W/kg)	Bluetooth Ant 2a Reduced at 8.75 dBm SAR (W/kg)	Bluetooth Ant 4a Reduced at 10.25 dBm SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b Reduced SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.999	0.258	0.543	1.047	0.147	1.590*
	Top	0.036	0.009	0.155	1.016	0.002	1.218
	Bottom	0.686	0.088	0.008	0.000	0.015	0.797
	Right	0.329	0.204	0.000	0.008	0.396	0.937
	Left	0.157	0.000	0.362	0.029	0.011	0.559

Table 11-22
Cellular Band Ant 2a Simultaneous Transmission Scenario with 2.4 GHz BT and 5GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 2a SAR (W/kg)	Bluetooth Ant 2a Reduced at 8.75 dBm SAR (W/kg)	Bluetooth Ant 4a Reduced at 10.25 dBm SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b Reduced SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	5	1+2+3+4+5
Body SAR	Back	0.889	0.258	0.543	1.047	0.147	1.590*
	Top	0.003	0.009	0.155	1.016	0.002	1.185
	Bottom	0.229	0.088	0.008	0.000	0.015	0.340
	Right	0.994	0.204	0.000	0.008	0.396	1.594*
	Left	0.001	0.000	0.362	0.029	0.011	0.403

Table 11-23
Cellular Band Ant 4b Simultaneous Transmission Scenario with 2.4 GHz BT and 5GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 4b SAR (W/kg)	Bluetooth Ant 2a Reduced at 9.75 dBm SAR (W/kg)	Bluetooth Ant 4a Reduced at 5.25 dBm SAR (W/kg)	5 GHz WLAN Ant 4b Reduced 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	0.997	0.387	0.142	0.274	0.147	1.413*
	Top	0.873	0.009	0.048	0.223	0.002	1.155
	Bottom	0.003	0.110	0.008	0.000	0.015	0.136
	Right	0.017	0.347	0.000	0.008	1.030	1.402
	Left	0.042	0.000	0.096	0.029	0.011	0.178

Table 11-24
Cellular Band Ant 4a Simultaneous Transmission Scenario with 2.4 GHz BT and 5GHz WLAN MIMO

Simult Tx	Configuration	Cellular Band Ant 4a SAR (W/kg)	Bluetooth Ant 2a Reduced at 9.75 dBm SAR (W/kg)	Bluetooth Ant 4a Reduced at 5.25 dBm SAR (W/kg)	5 GHz WLAN Ant 4b Reduced 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	0.998	0.387	0.142	0.274	0.147	1.414*
	Top	0.295	0.009	0.048	0.223	0.002	0.577
	Bottom	0.008	0.110	0.008	0.000	0.015	0.141
	Right	0.000	0.347	0.000	0.008	1.030	1.385
	Left	0.984	0.000	0.096	0.029	0.011	1.120

Table 11-25
2.4 GHz BT Ant 2a Simultaneous Transmission Scenario with 5GHz WLAN MIMO

Simult Tx	Configuration	Bluetooth Ant 2a Reduced at 9.75 dBm SAR (W/kg)	Bluetooth Ant 4a Reduced at 9.25 dBm SAR (W/kg)	5 GHz WLAN Ant 4b SAR (W/kg)	5 GHz WLAN Ant 5b SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body SAR	Back	0.387	0.461	1.047	0.147	1.508*
	Top	0.009	0.127	1.016	0.002	1.154
	Bottom	0.110	0.008	0.000	0.015	0.133
	Right	0.347	0.000	0.008	1.030	1.385
	Left	0.000	0.308	0.029	0.011	0.348

Table 11-26
Simultaneous Transmission Scenario with 2.4 GHz Bluetooth

Simult Tx	Configuration	Bluetooth Ant 2a SAR (W/kg)	Bluetooth Ant 4a SAR (W/kg)	Σ SAR (W/kg)
		2	3	1+2
Body SAR	Back	0.702	1.172	1.172*
	Top	0.009	0.369	0.378
	Bottom	0.237	0.008	0.245
	Right	0.633	0.000	0.633
	Left	0.000	0.762	0.762

11.4 Spatial Separation Analysis

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

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

11.4.1 Back Side Spatial Separation Analysis

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

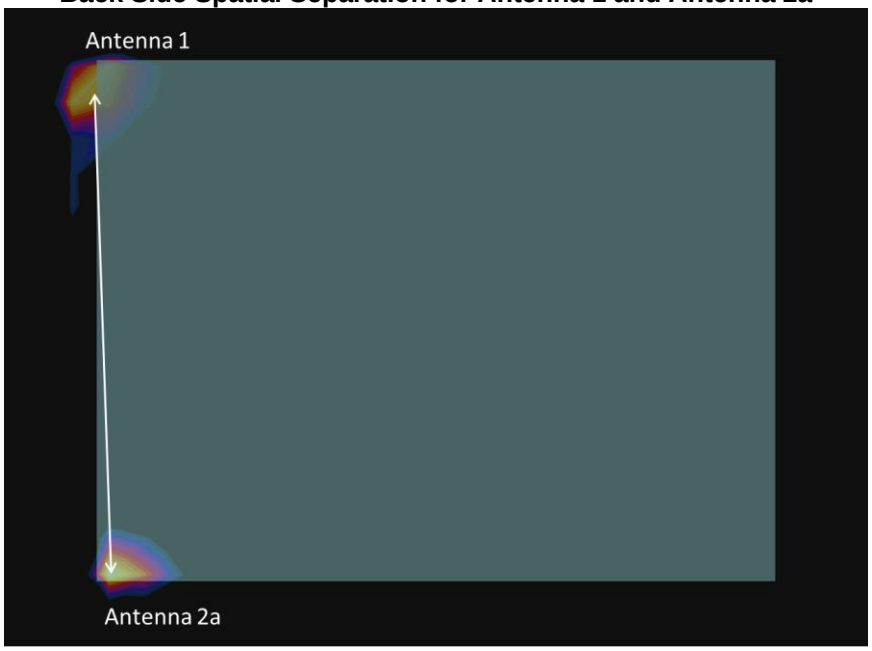


Figure 11-2
Back Side Spatial Separation for Antenna 1 and Antenna 4a

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

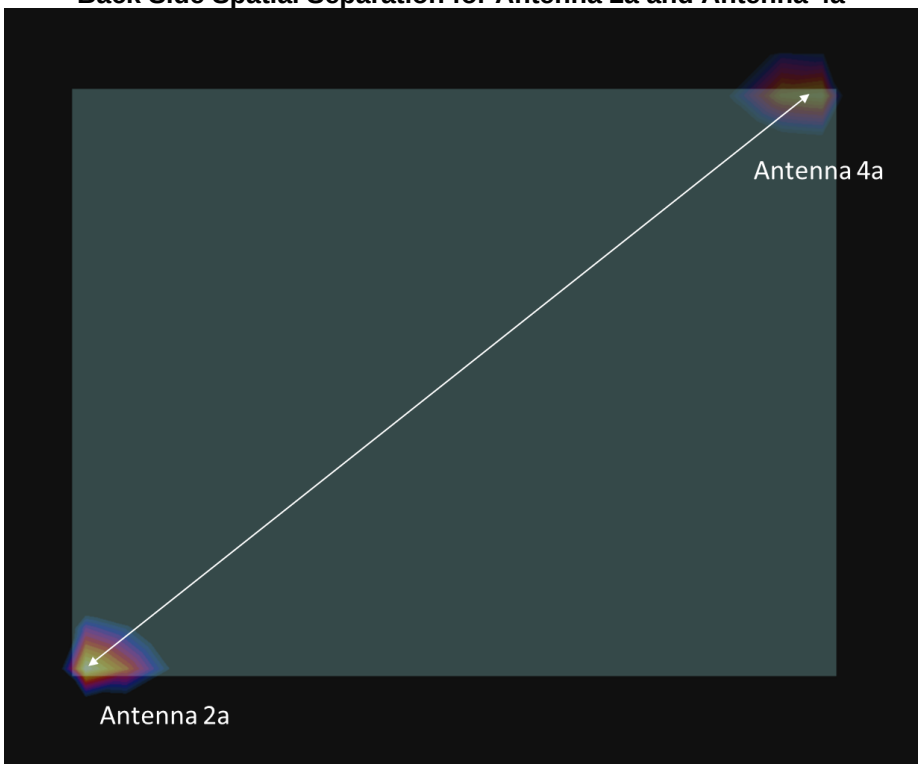


Figure 11-4
Back Side Spatial Separation for Antenna 3 and Antenna 2a

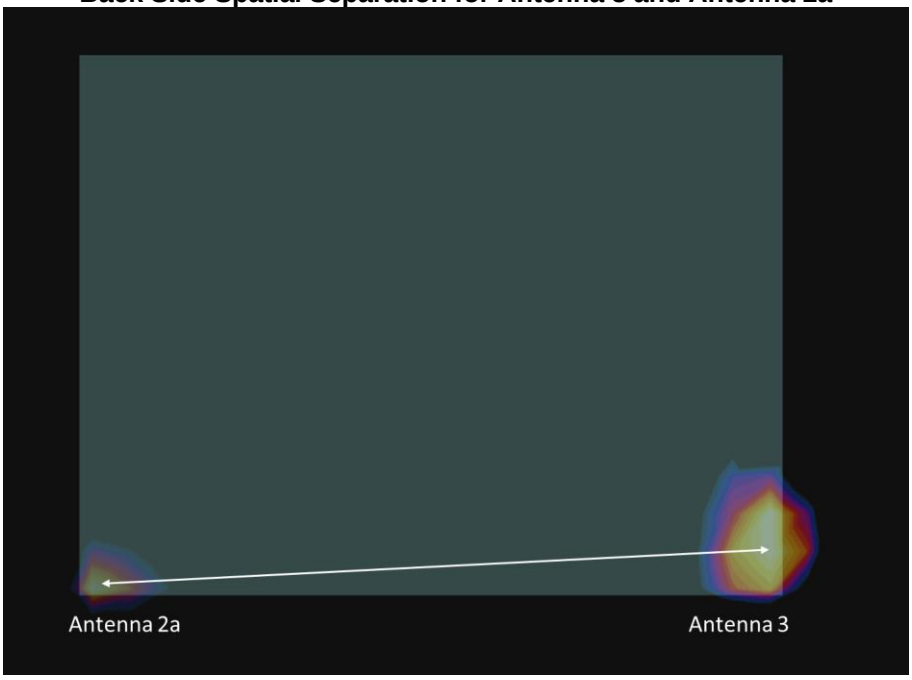


Figure 11-5
Back Side Spatial Separation for Antenna 3 and Antenna 4a

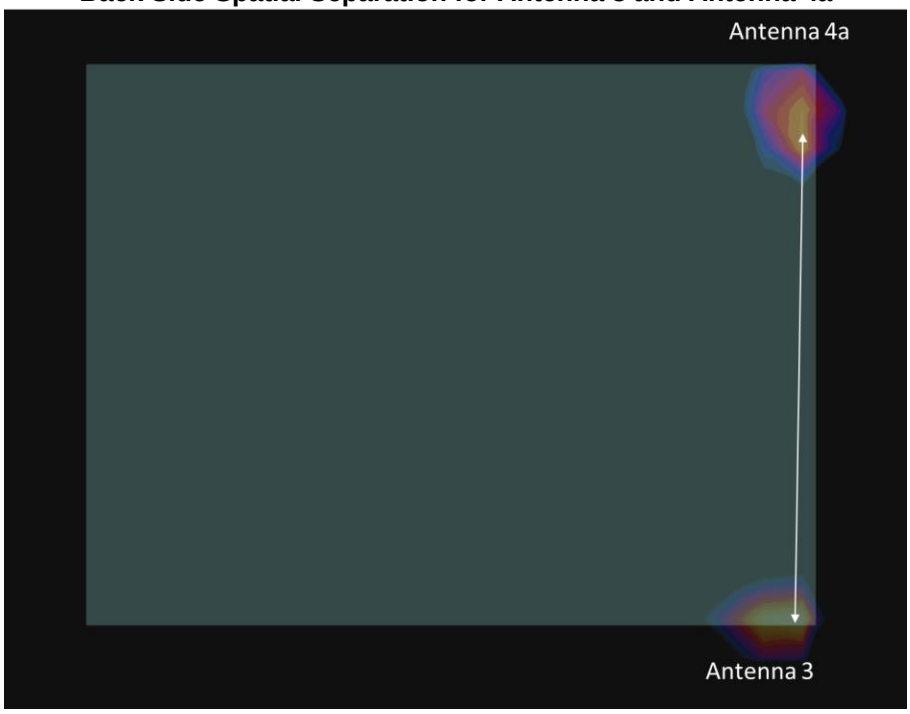


Figure 11-6
Back Side Spatial Separation for Antenna 2b and Antenna 4a

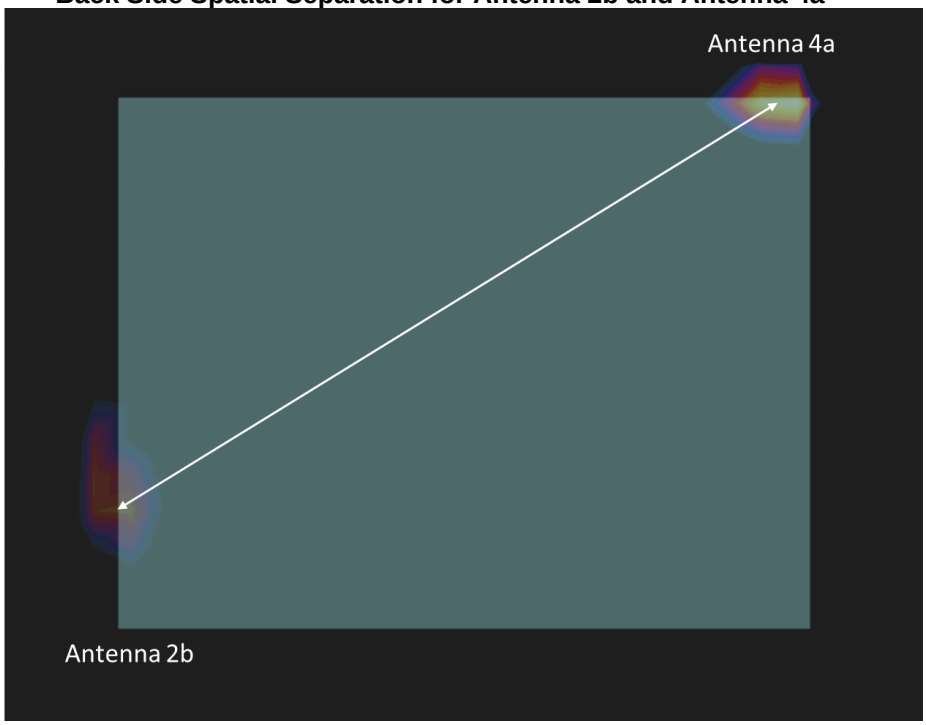


Figure 11-7
Back Side Spatial Separation for Antenna 2a and Antenna 4b

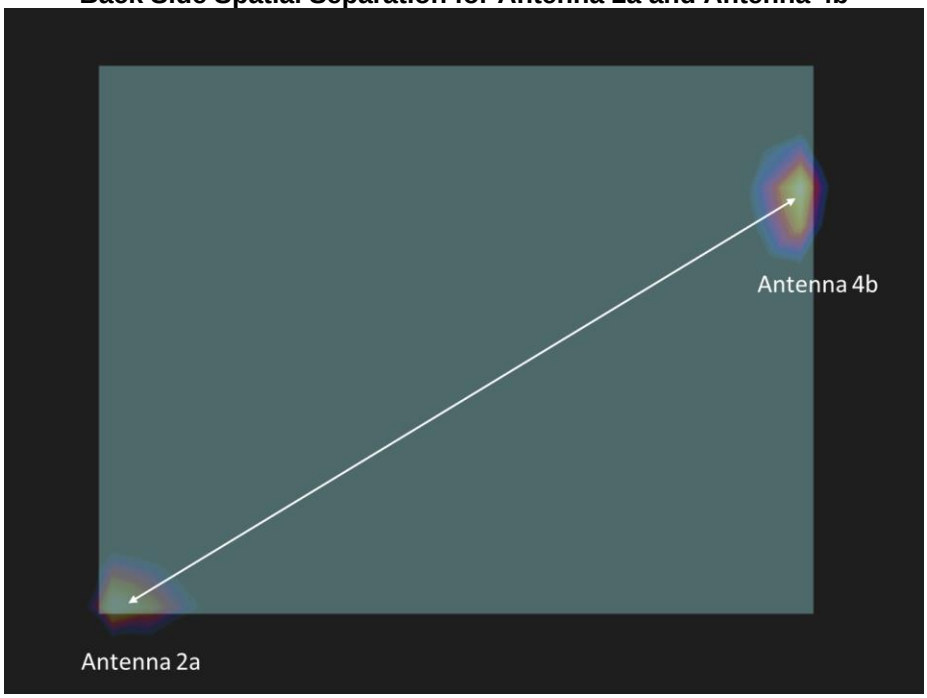


Figure 11-8
Back Side Spatial Separation for Antenna 1 and Antenna 4b

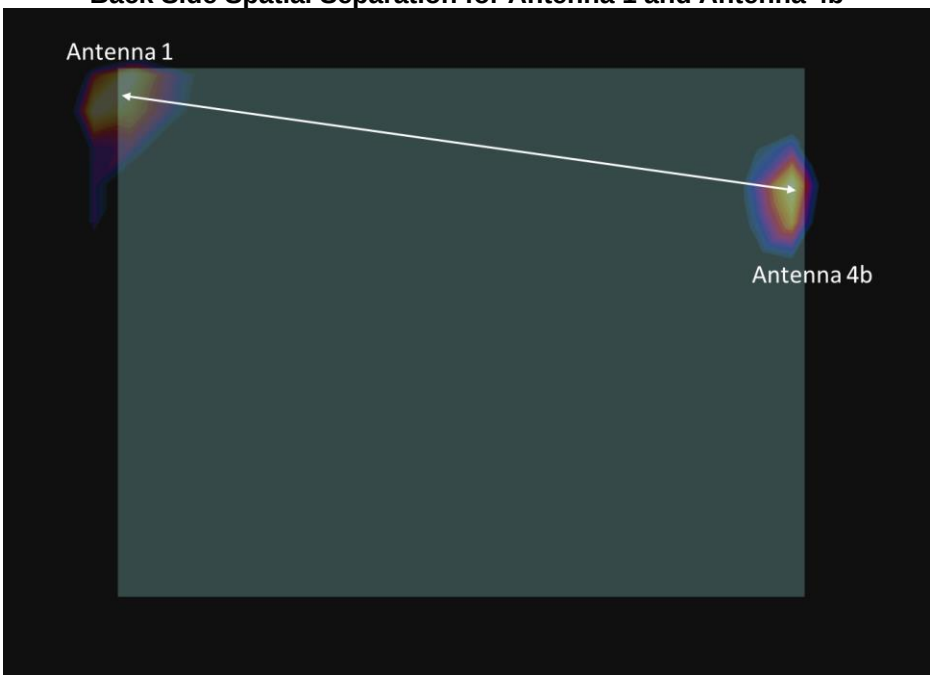


Figure 11-9
Back Side Spatial Separation for Antenna 3 and Antenna 4b

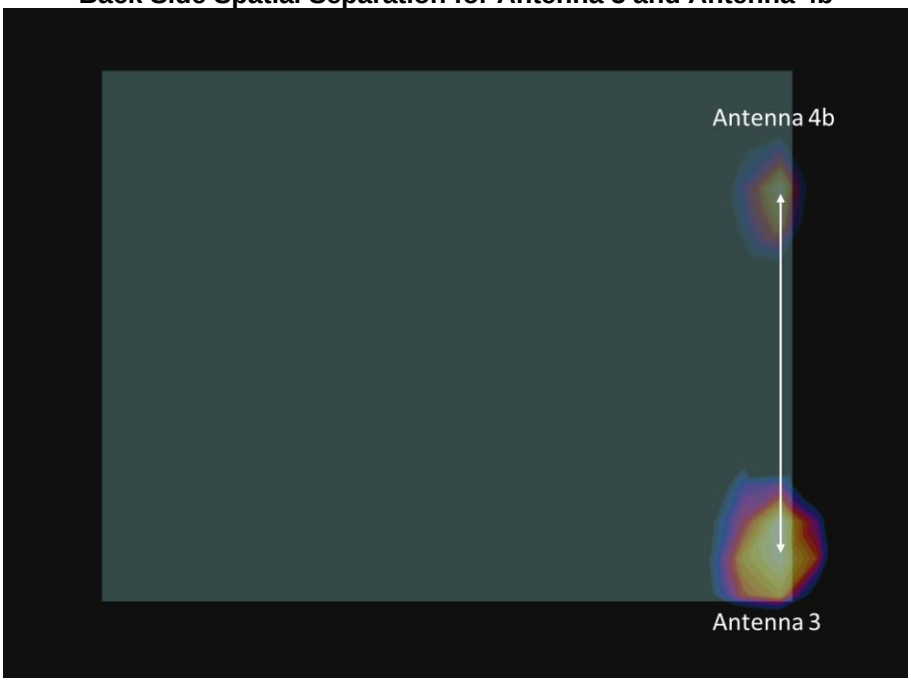


Figure 11-10
Back Side Spatial Separation for Antenna 2b and Antenna 4b

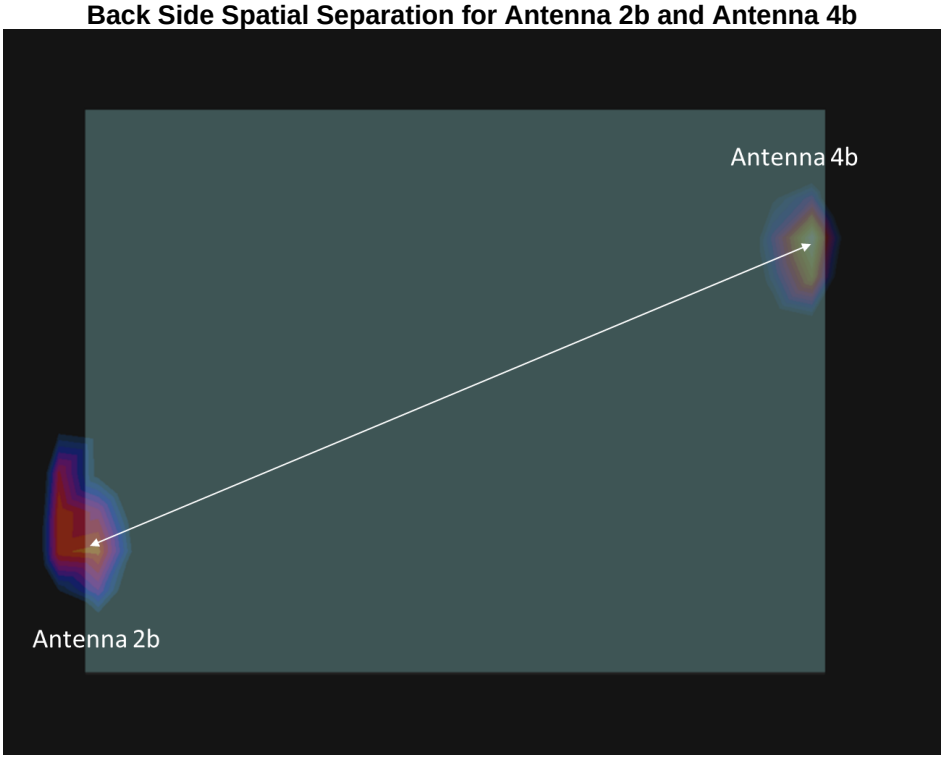


Figure 11-11
Back Side Spatial Separation for Antenna 4a and Antenna 5b

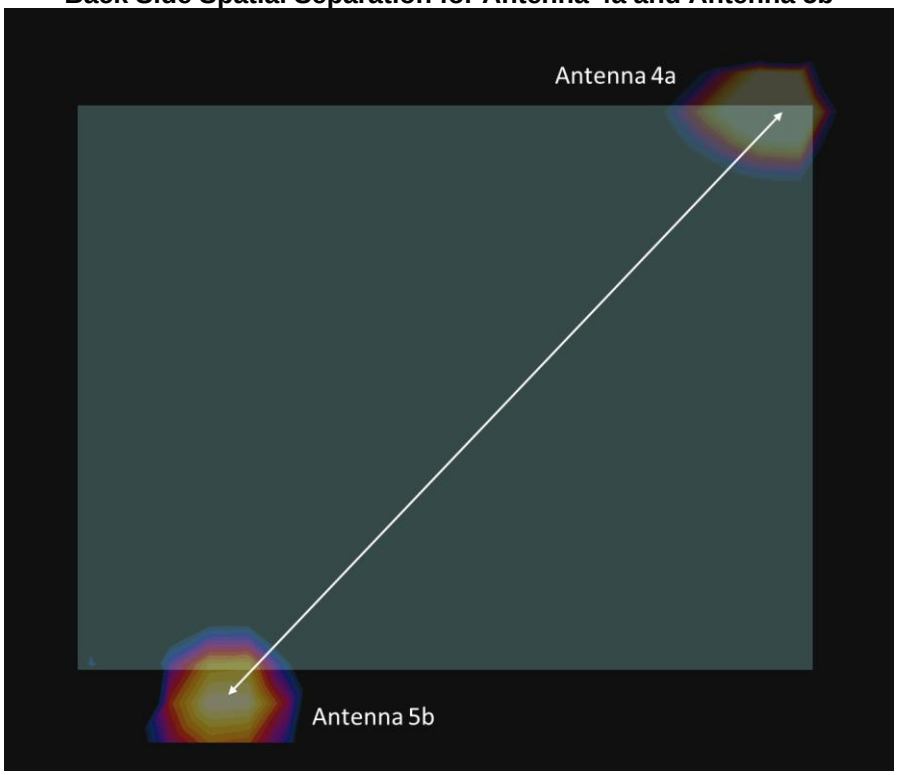
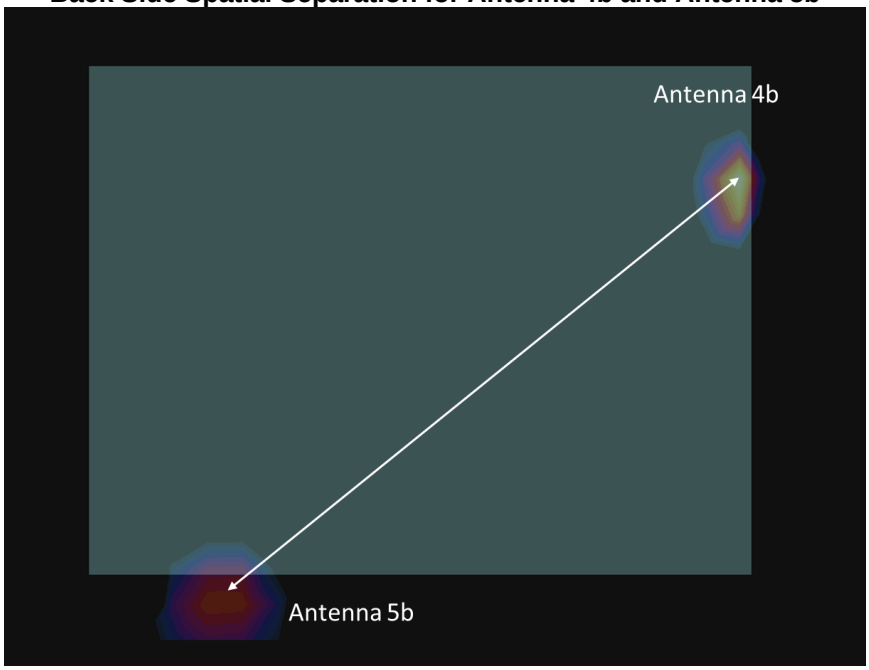
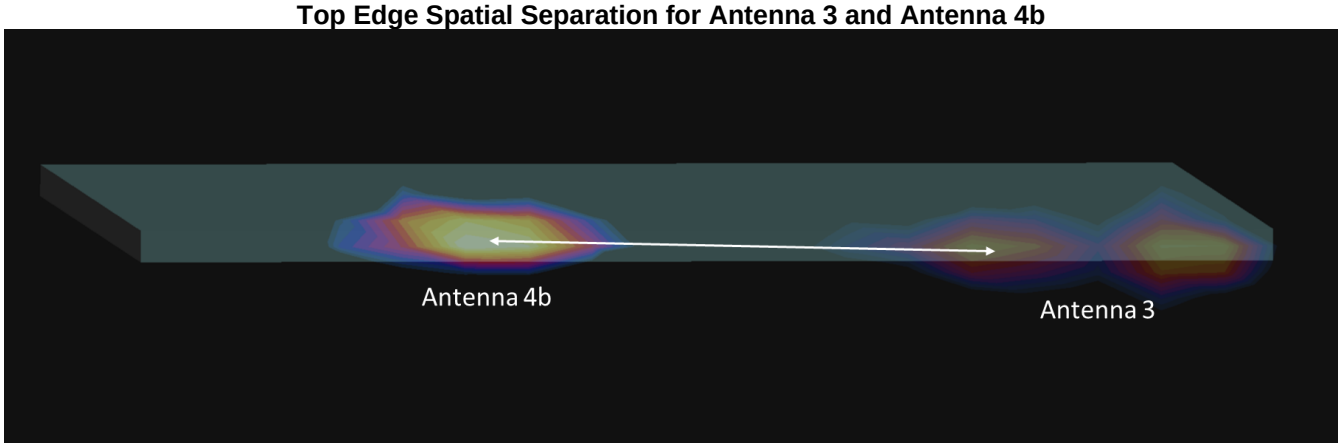


Figure 11-12
Back Side Spatial Separation for Antenna 4b and Antenna 5b



11.4.2 Top Edge Spatial Separation Analysis

Figure 11-13
Top Edge Spatial Separation for Antenna 3 and Antenna 4b



11.4.3 Right Edge Spatial Separation Analysis

Figure 11-14
Right Edge Spatial Separation for Antenna 3 and Antenna 2a

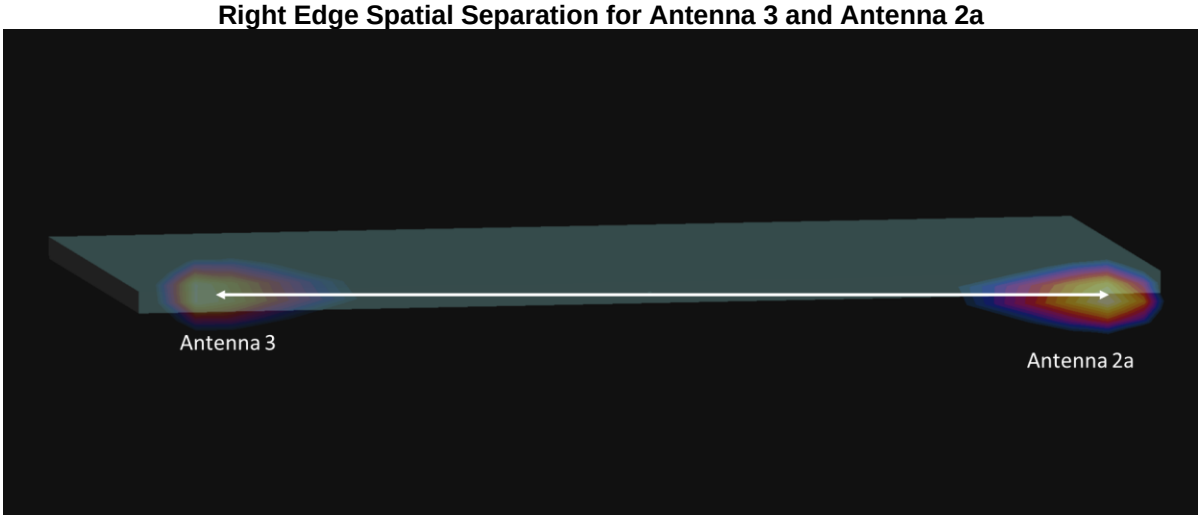


Figure 11-15
Right Edge Spatial Separation for Antenna 3 and Antenna 5b

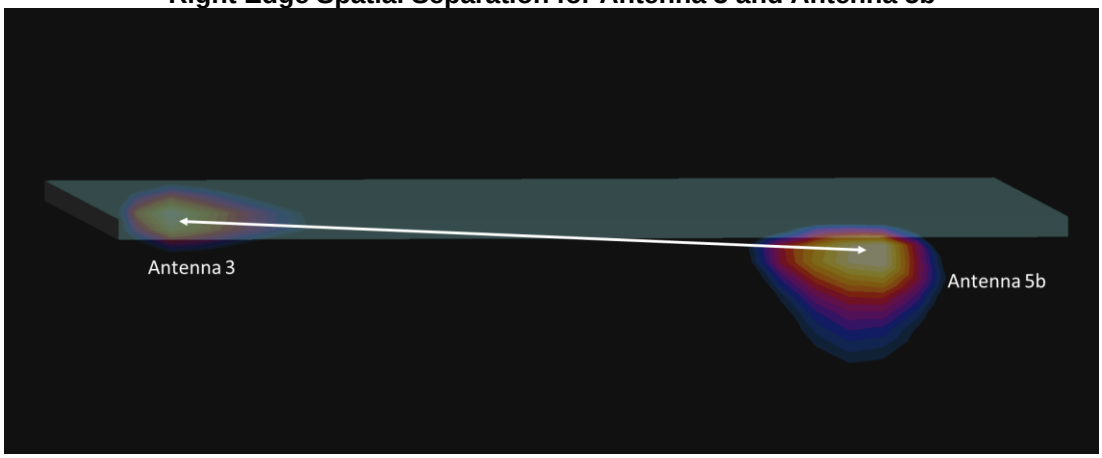


Figure 11-16
Right Edge Spatial Separation for Antenna 4b and Antenna 5b

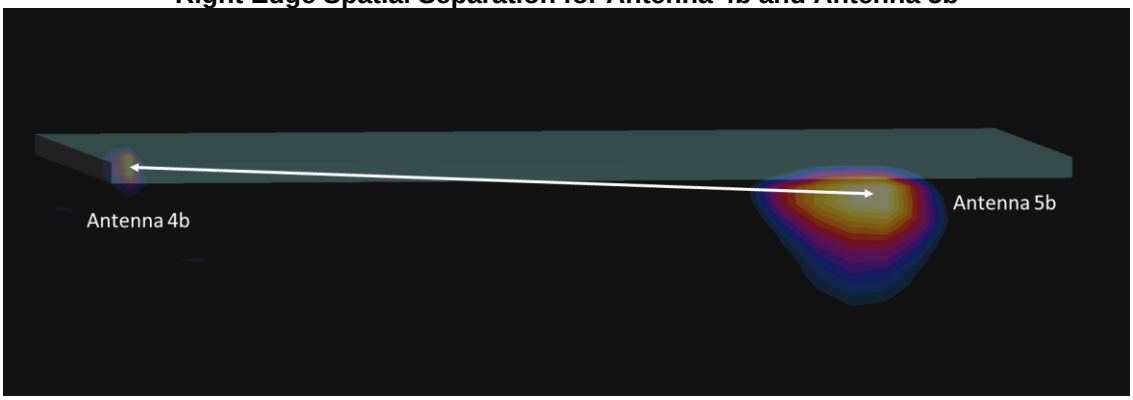
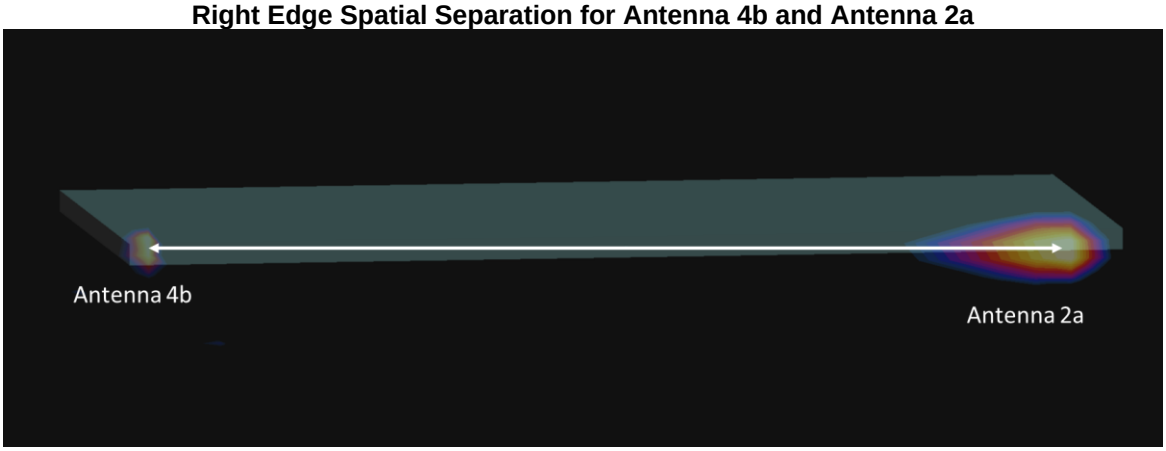
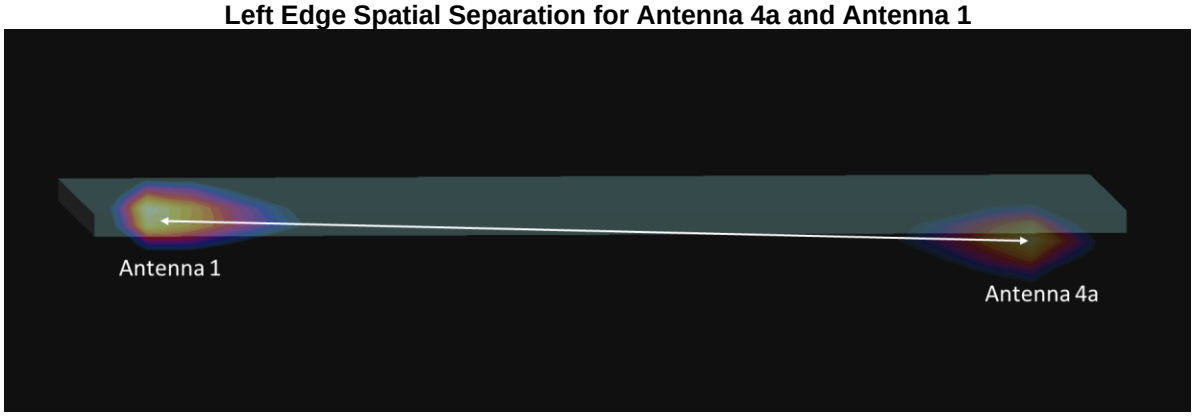


Figure 11-17
Right Edge Spatial Separation for Antenna 4b and Antenna 2a



11.4.4 Left Edge Spatial Separation Analysis

Figure 11-18
Left Edge Spatial Separation for Antenna 4a and Antenna 1



11.5 Simultaneous Transmission Conclusion

The above numerical summed SAR results and spatial separation analysis 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

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

Table 12-1
Body SAR Measurement Variability Results

BODY VARIABILITY RESULTS																
Band	FREQUENCY		Mode	Service	Ant	Data Rate (Mbps)	Side	Spacing	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.							(W/kg)	(W/kg)		(W/kg)		(W/kg)	
750	707.50	23095	LTE Band 12, 10 MHz Bandwidth	QPSK, 25 RB, 0 RB Offset	Ant 1	N/A	back	0 mm	0.885	0.791	1.12	N/A	N/A	N/A	N/A
835	826.40	4132	UMTS 850	RMC	Ant 1	N/A	back	0 mm	0.890	0.776	1.15	N/A	N/A	N/A	N/A
1750	1745.00	349000	NR Band n66 (AWS), 20 MHz Bandwidth	DFT-S-OFDM, QPSK, 1 RB, 104 RB Offset	Ant 4b	N/A	back	0 mm	0.838	0.702	1.19	N/A	N/A	N/A	N/A
2300	2310.00	27710	LTE Band 30, 10 MHz Bandwidth	QPSK, 50 RB, 0 RB Offset	Ant 2b	N/A	back	0 mm	0.833	0.771	1.08	N/A	N/A	N/A	N/A
2450	2437.00	6	802.11b, 22 MHz Bandwidth	DSSS	Ant 2a	1	back	0 mm	0.933	0.912	1.02	N/A	N/A	N/A	N/A
2600	2592.99	518598	NR Band n41 PC3, 100 MHz Bandwidth	DFT-S-OFDM, QPSK, 1 RB, 1 RB Offset	Ant 4b	N/A	back	0 mm	0.932	0.903	1.03	N/A	N/A	N/A	N/A
3500	3560.00	55340	LTE Band 48, 20 MHz Bandwidth	QPSK, 50 RB, 0 RB Offset	Ant 4a	N/A	left	0 mm	0.893	0.836	1.07	N/A	N/A	N/A	N/A
3700	3646.70	56207	LTE Band 48 ULCA, 20 MHz Bandwidth	QPSK, PCC Ch.56207, 3646.7 MHz 1 RB, 0 RB offset, SCC Ch.56009, 3626.9 MHz 1 RB, 99 RB offset	Ant 2a	N/A	right	0 mm	0.982	0.974	1.01	N/A	N/A	N/A	N/A
3900	3930.00	662000	NR Band n77 PC2, 100 MHz Bandwidth	DFT-S-OFDM, QPSK, 135 RB, 0 RB Offset	Ant 1	N/A	back	0 mm	0.820	0.818	1.00	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram						

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 – Ant 1

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	13.5	15.15
Measured Output Power (dBm)	12.7	14.25
Measured SAR (W/kg)	0.678	0.603
Measured Power (mW)	18.62	26.61
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	11.79	11.52
% deviation from expected linearity		-9.01%

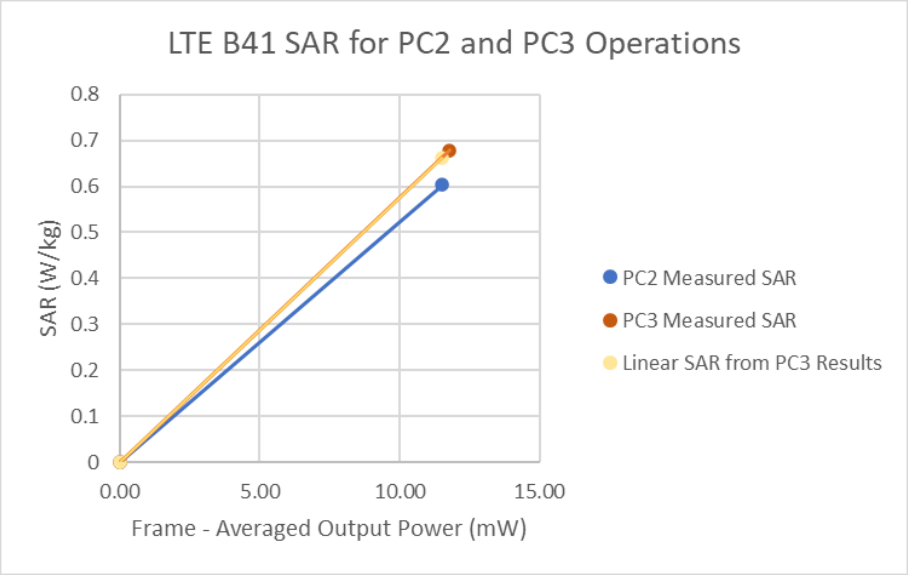


Figure 13-1
LTE Band 41 Body Linearity – Ant 1

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	13.5	15.15
Measured Output Power (dBm)	12.66	14.6
Measured SAR (W/kg)	0.660	0.642
Measured Power (mW)	18.45	28.84
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	11.68	12.49
% deviation from expected linearity		-9.03%

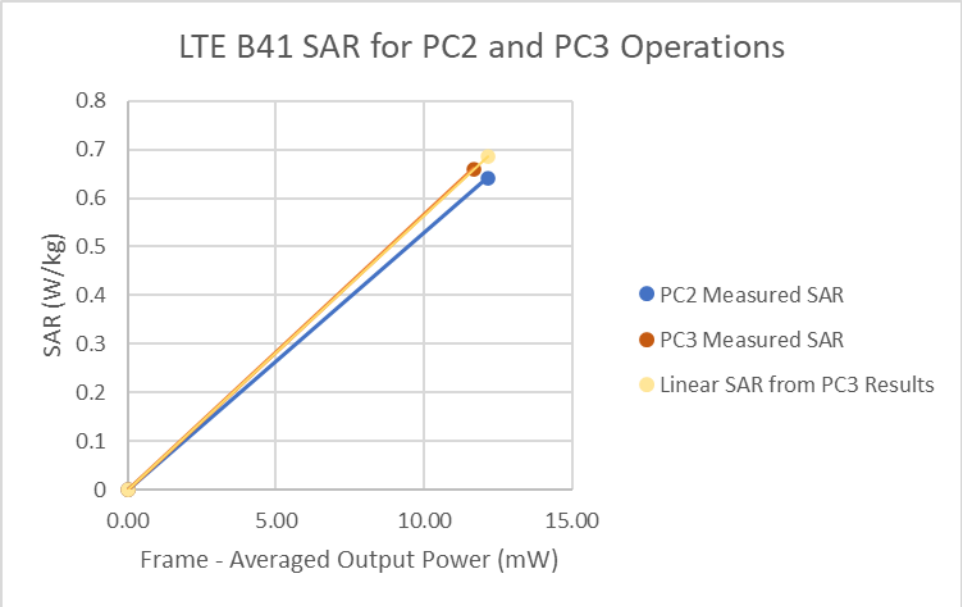


Figure 13-2
LTE Band 41 ULCA Body Linearity – Ant 1

Table 13-3
LTE Band 41 Body Linearity Data – Ant 3

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.3	15.95
Measured Output Power (dBm)	13.41	15.35
Measured SAR (W/kg)	0.644	0.735
Measured Power (mW)	21.93	34.28
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	13.88	14.84
% deviation from expected linearity		6.74%

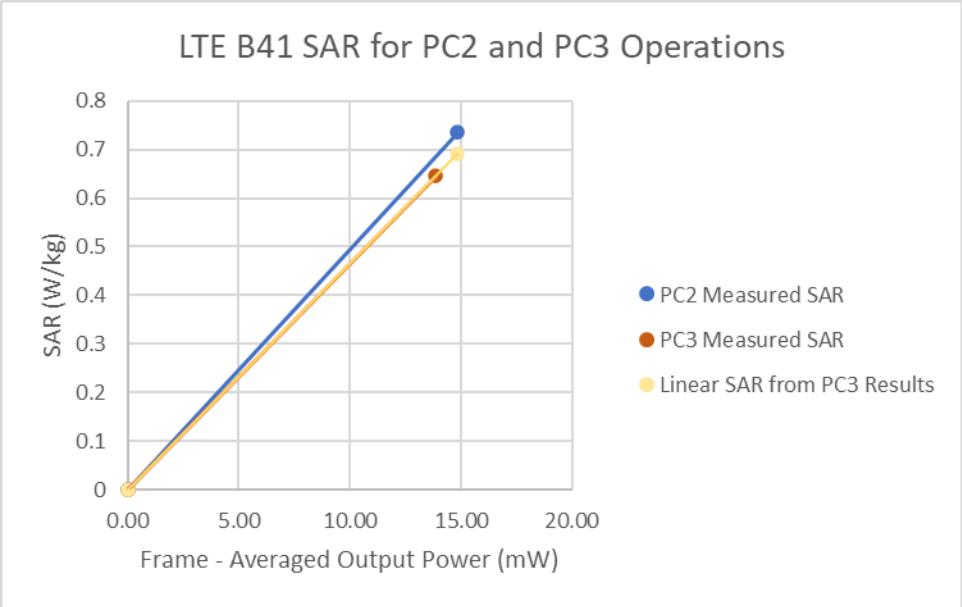


Figure 13-3
LTE Band 41 Body Linearity – Ant 3

Table 13-4
LTE Band 41 ULCA Body Linearity Data – Ant 3

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.3	15.95
Measured Output Power (dBm)	12.9	15.2
Measured SAR (W/kg)	0.598	0.680
Measured Power (mW)	19.50	33.11
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	12.34	14.34
% deviation from expected linearity		-2.11%

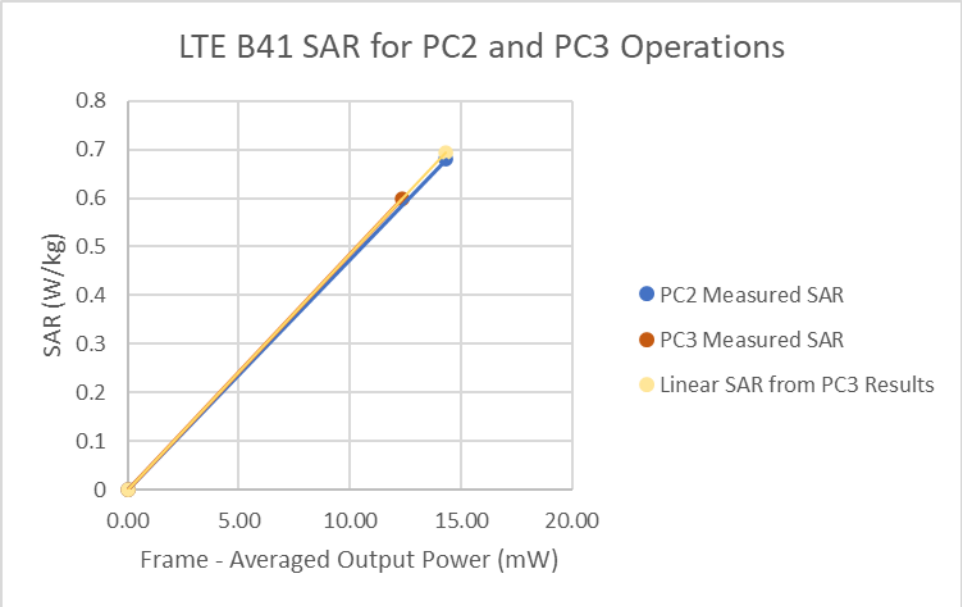


Figure 13-4
LTE Band 41 ULCA Body Linearity – Ant 3

Table 13-5
LTE Band 41 Body Linearity Data – Ant 2b

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16	17.65
Measured Output Power (dBm)	14.63	17.3
Measured SAR (W/kg)	0.701	0.804
Measured Power (mW)	29.04	53.70
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	18.38	23.25
% deviation from expected linearity		-9.33%

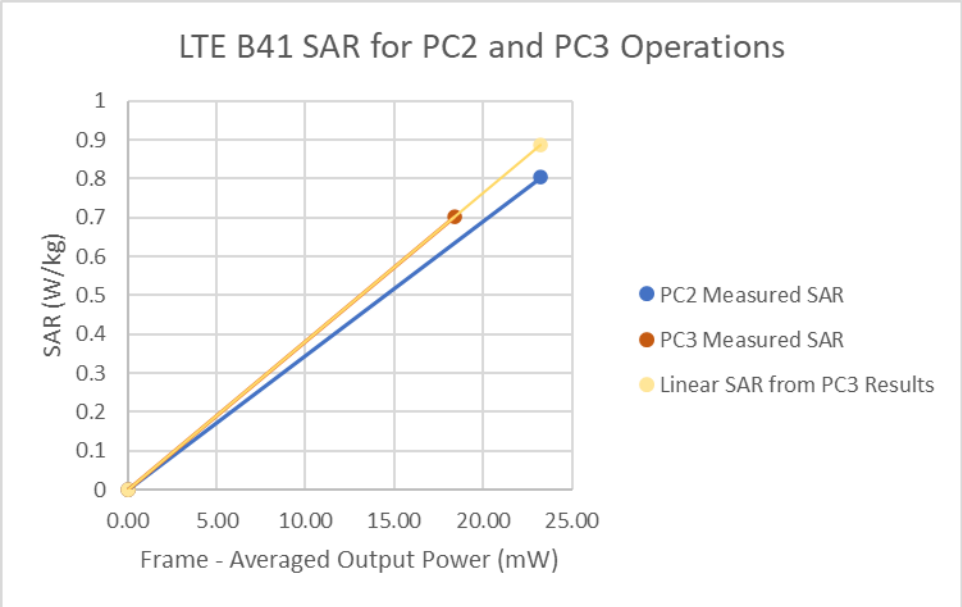


Figure 13-5
LTE Band 41 Body Linearity – Ant 2b

Table 13-6
LTE Band 41 ULCA Body Linearity Data – Ant 2b

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	16	17.65
Measured Output Power (dBm)	15.43	16.79
Measured SAR (W/kg)	0.876	0.749
Measured Power (mW)	34.91	47.75
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	22.10	20.68
% deviation from expected linearity		-8.61%

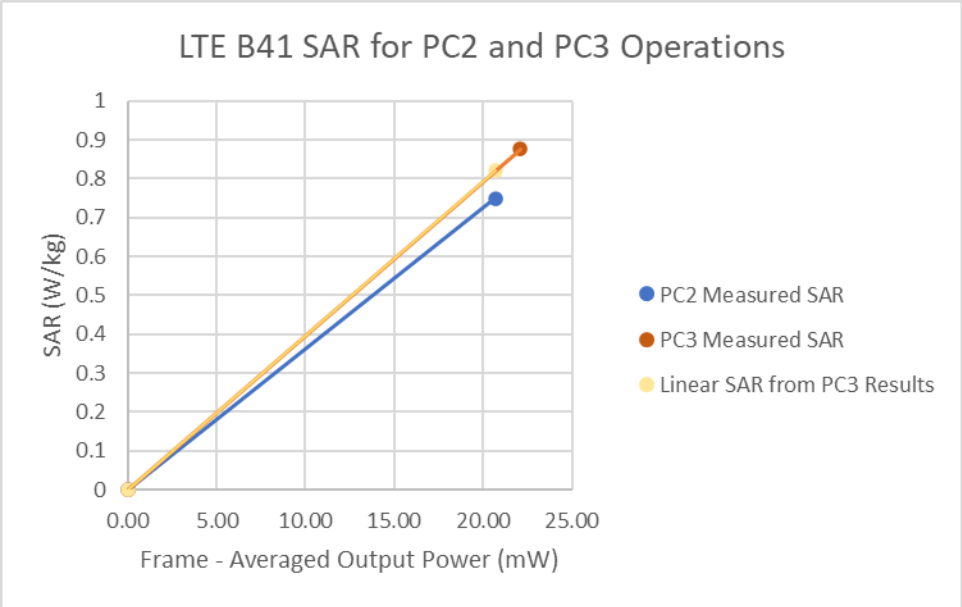


Figure 13-6
LTE Band 41 ULCA Body Linearity – Ant 2b

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.3	15.95
Measured Output Power (dBm)	13.38	15.18
Measured SAR (W/kg)	0.640	0.699
Measured Power (mW)	21.78	32.96
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	13.78	14.27
% deviation from expected linearity		5.49%

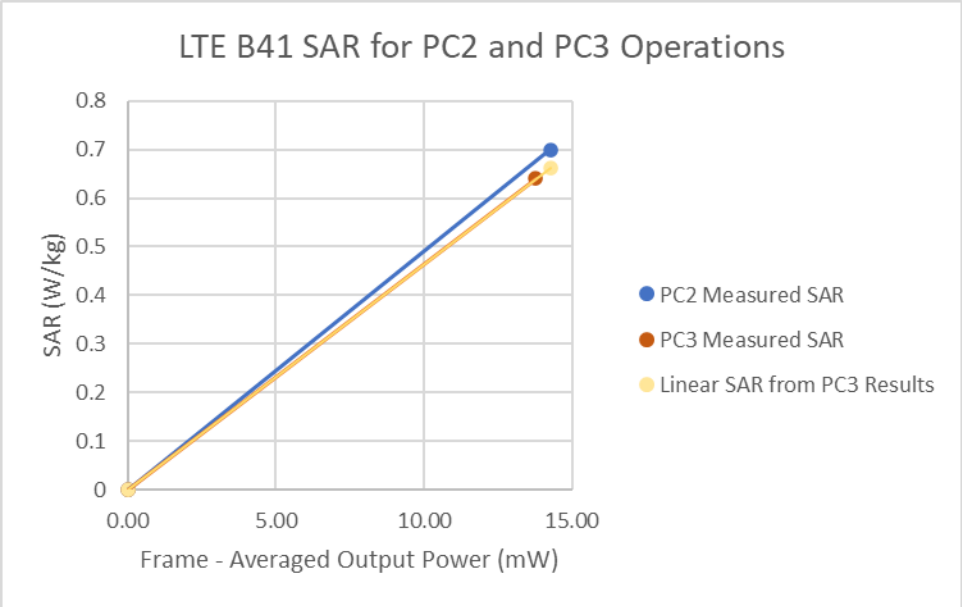


Figure 13-7
LTE Band 41 Body Linearity – Ant 4b

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	14.3	15.95
Measured Output Power (dBm)	13.19	15.90
Measured SAR (W/kg)	0.642	0.821
Measured Power (mW)	20.84	38.90
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	13.19	16.85
% deviation from expected linearity		0.17%

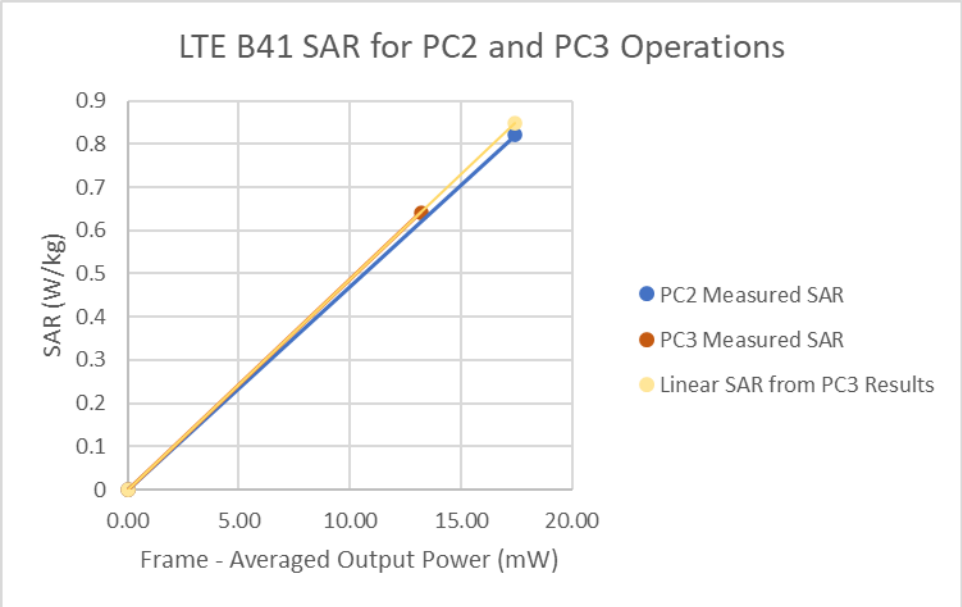


Figure 13-8
LTE Band 41 ULCA Body Linearity – Ant 4b

13.2 NR Band n41 Power Class 2 and Power Class 3 Linearity

This device supports Power Class 2 and Power Class 3 operations for NR Band n41. The highest available duty cycle for Power Class 2 operations is 50%. Per October 2020 TCB Workshop Guidance, NR FR1 SAR evaluations are being generally based on adapting the existing LTE SAR procedures. Therefore, 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. 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 13-9
NR Band n41 Body Linearity Data – Ant 1

	NR Band 41 PC3	NR Band 41 PC2
Maximum Allowed Output Power (dBm)	11.5	14.5
Measured Output Power (dBm)	10.61	13.08
Measured SAR (W/kg)	0.805	0.646
Measured Power (mW)	11.51	20.32
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	11.51	10.16
% deviation from expected linearity		-9.12%

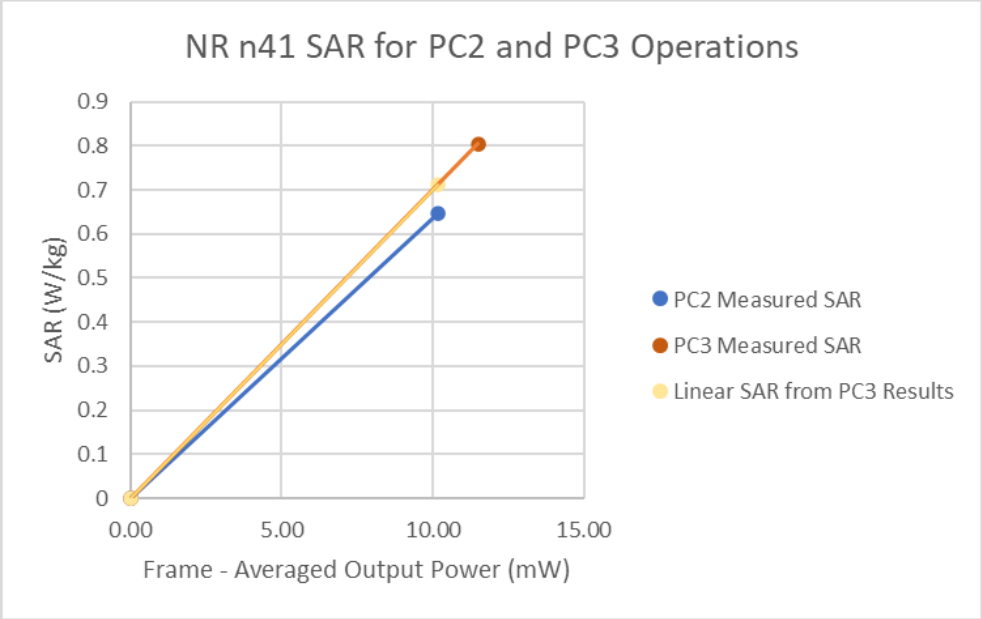


Figure 13-9
NR Band n41 Body Linearity – Ant 1

Table 13-10
NR Band n41 Body Linearity Data – Ant 3

	NR Band 41 PC3	NR Band 41 PC2
Maximum Allowed Output Power (dBm)	12.3	15.3
Measured Output Power (dBm)	11.28	14.38
Measured SAR (W/kg)	0.500	0.521
Measured Power (mW)	13.43	27.42
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	13.43	13.71
% deviation from expected linearity		2.07%

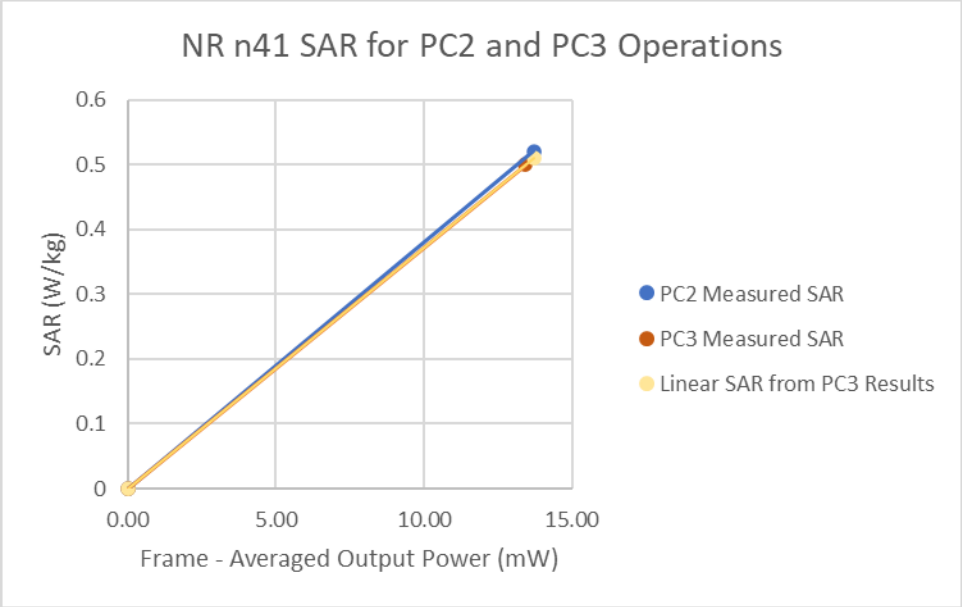


Figure 13-10
NR Band n41 Body Linearity – Ant 3

Table 13-11
NR Band n41 Body Linearity Data – Ant 2b

	NR Band 41 PC3	NR Band 41 PC2
Maximum Allowed Output Power (dBm)	14	17
Measured Output Power (dBm)	13.03	15.99
Measured SAR (W/kg)	0.748	0.733
Measured Power (mW)	20.09	39.72
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	20.09	19.86
% deviation from expected linearity		-0.86%

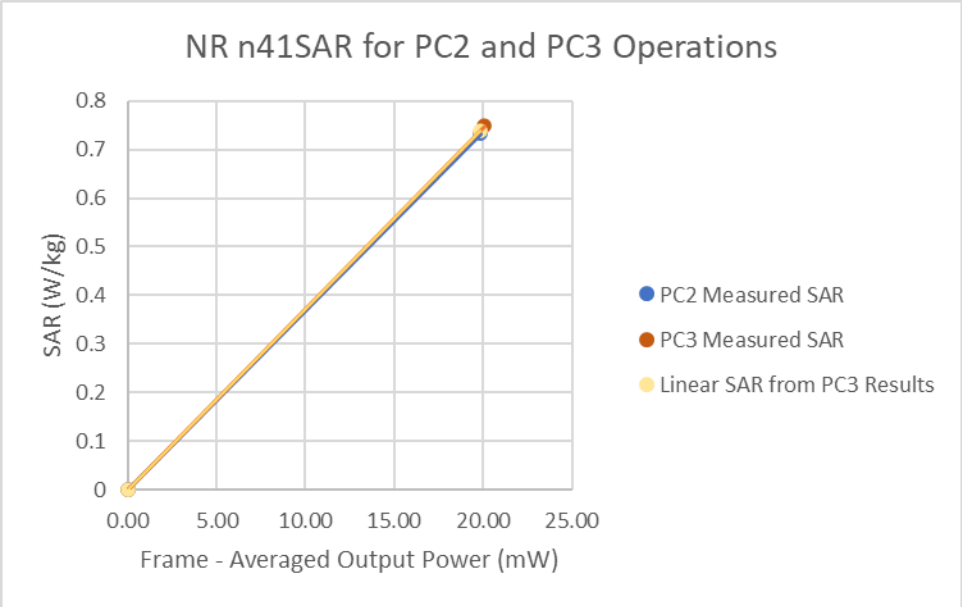


Figure 13-11
NR Band n41 Body Linearity – Ant 2b

Table 13-12
NR Band n41 Body Linearity Data – Ant 4b

	NR Band 41 PC3	NR Band 41 PC2
Maximum Allowed Output Power (dBm)	12.3	15.3
Measured Output Power (dBm)	12.01	14.32
Measured SAR (W/kg)	0.932	0.795
Measured Power (mW)	15.89	27.04
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	15.89	13.52
% deviation from expected linearity		0.23%

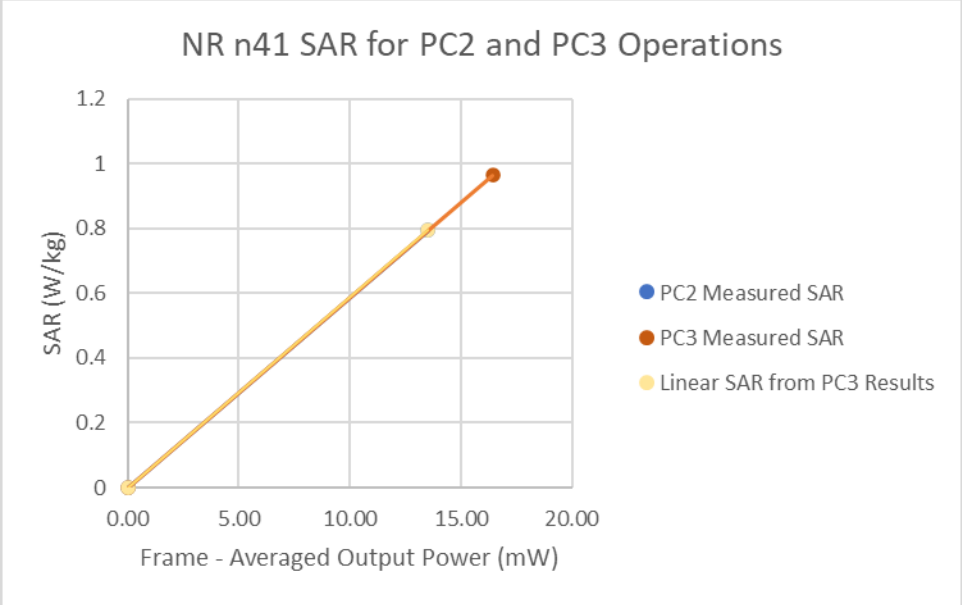


Figure 13-12
NR Band n41 Body Linearity – Ant 4b

13.3 NR Band n77 Power Class 2 and Power Class 3 Linearity

This device supports Power Class 2 and Power Class 3 operations for NR Band n77. The highest available duty cycle for Power Class 2 operations is 50%. Per October 2020 TCB Workshop Guidance, NR FR1 SAR evaluations are being generally based on adapting the existing LTE SAR procedures. Therefore, 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. 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 13-13
NR Band n77 Body Linearity Data – Ant 1

	NR n77 PC3	NR n77 PC2
Maximum Allowed Output Power (dBm)	12.5	15.5
Measured Output Power (dBm)	11.52	14.66
Measured SAR (W/kg)	0.795	0.820
Measured Power (mW)	14.19	29.24
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	14.19	14.62
% deviation from expected linearity		0.11%

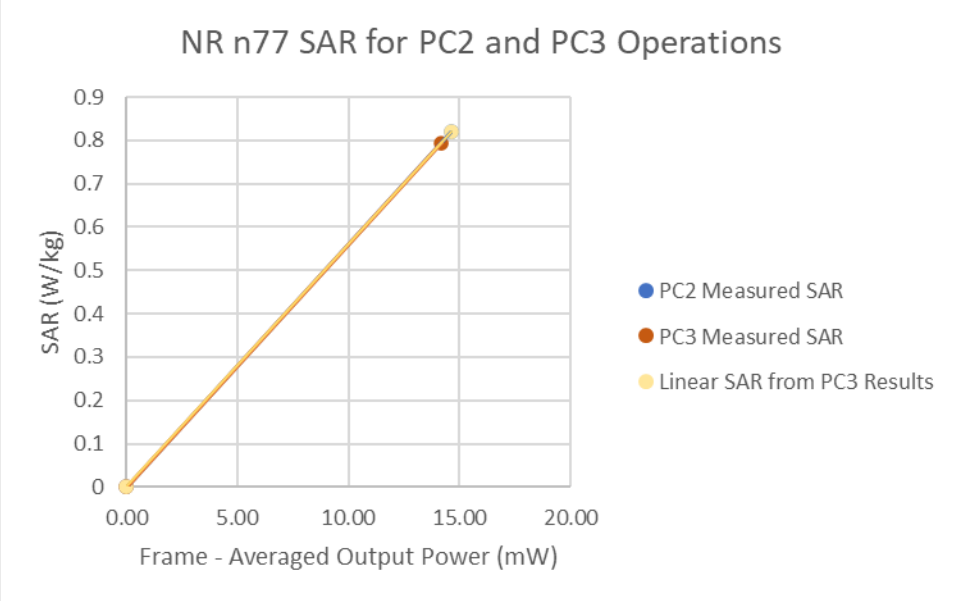


Figure 13-13
NR Band n77 Body Linearity – Ant 1

Table 13-14
NR Band n77 Body Linearity Data – Ant 3

	NR n77 PC3	NR n77 PC2
Maximum Allowed Output Power (dBm)	11	14
Measured Output Power (dBm)	10.09	12.99
Measured SAR (W/kg)	0.743	0.751
Measured Power (mW)	10.21	19.91
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	10.21	9.95
% deviation from expected linearity		3.68%

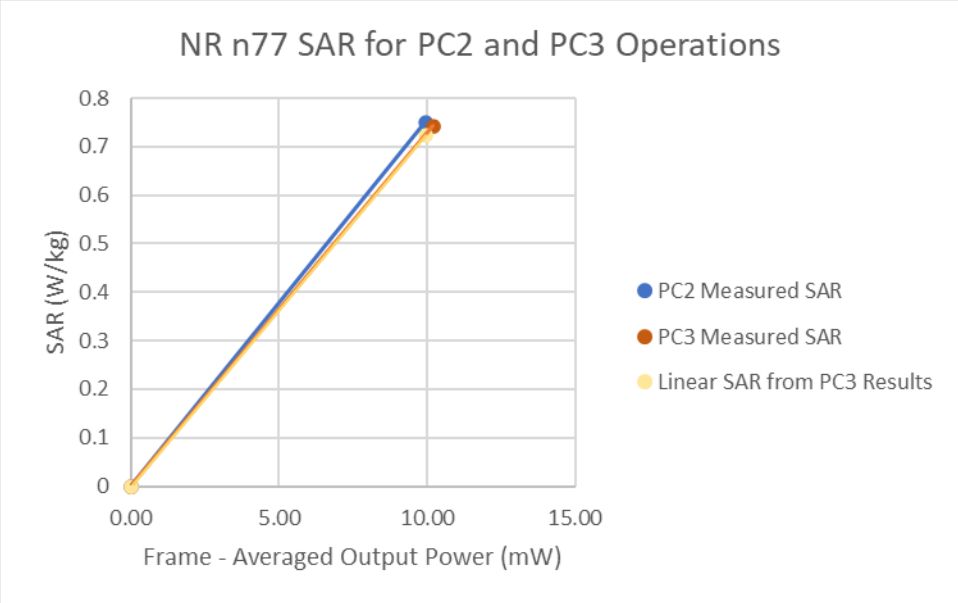


Figure 13-14
NR Band n77 Body Linearity – Ant 3

Table 13-15
NR Band n77 Body Linearity Data – Ant 2a

	NR n77 PC3	NR n77 PC2
Maximum Allowed Output Power (dBm)	10.6	13.6
Measured Output Power (dBm)	9.95	12.86
Measured SAR (W/kg)	0.519	0.520
Measured Power (mW)	9.89	19.32
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	9.89	9.66
% deviation from expected linearity		2.53%

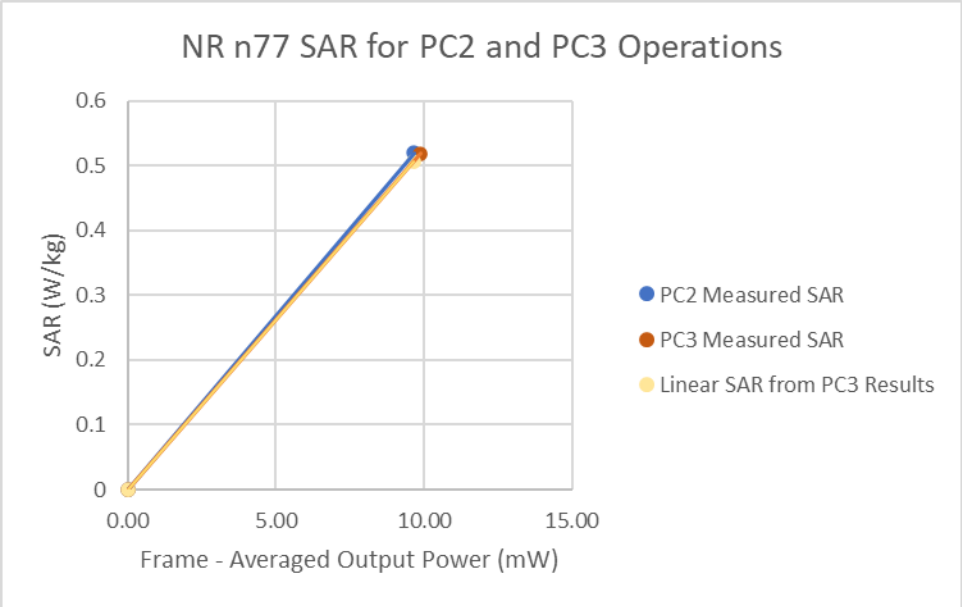


Figure 13-15
NR Band n77 Body Linearity – Ant 2a

Table 13-16
NR Band n77 Body Linearity Data – Ant 4a

	NR n77 PC3	NR n77 PC2
Maximum Allowed Output Power (dBm)	11.75	14.75
Measured Output Power (dBm)	11.13	14.18
Measured SAR (W/kg)	0.865	0.875
Measured Power (mW)	12.97	26.18
Duty Cycle	100.0%	50.0%
Frame Averaged Output Power (mW)	12.97	13.09
% deviation from expected linearity		0.24%

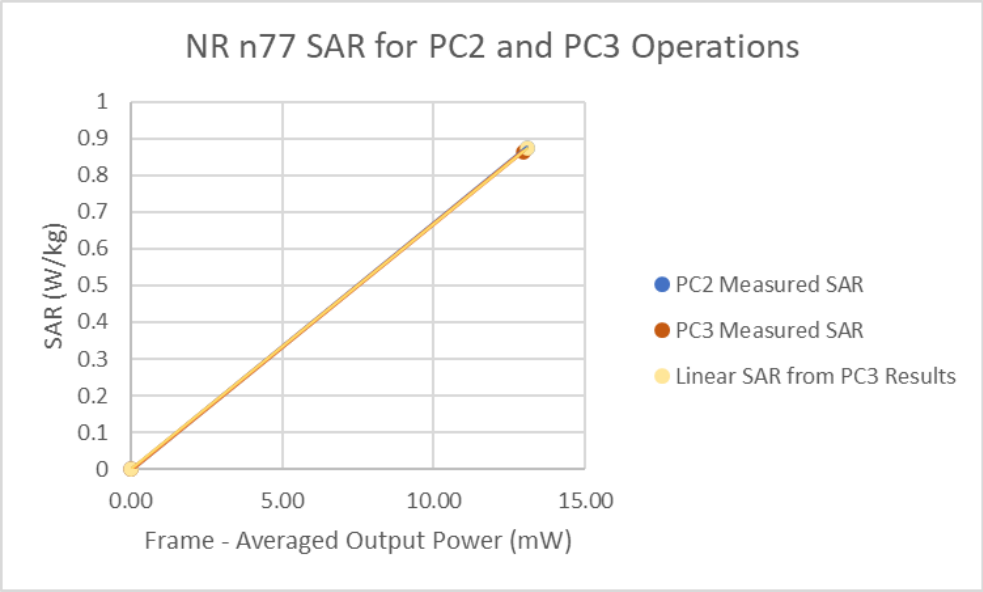


Figure 13-16
NR Band n77 Body Linearity – Ant 4a

14 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	8753ES	S-Parameter Network Analyzer	9/16/2020	Annual	9/16/2021	MY40000670
Agilent	E4438C	ESG Vector Signal Generator	12/2/2020	Annual	12/2/2021	MY42081752
Agilent	E5515C	Wireless Communications Test Set	12/15/2020	Annual	12/15/2021	GB42361078
Agilent	N5182A	MXG Vector Signal Generator	9/25/2020	Annual	9/25/2021	US46240505
Agilent	N5182A	MXG Vector Signal Generator	12/1/2020	Annual	12/1/2021	MY47420837
Agilent	N9020A	MXA Signal Analyzer	12/21/2020	Annual	12/21/2021	MY50200571
Amplifier Research	150A100C	Amplifier	CBT	N/A	CBT	350132
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343972
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	343971
Anritsu	MA24106A	USB Power Sensor	9/15/2020	Annual	9/15/2021	1244515
Anritsu	MA24106A	USB Power Sensor	9/15/2020	Annual	9/15/2021	1248508
Anritsu	MA24106A	USB Power Sensor	6/8/2020	Annual	6/8/2021	2018534
Anritsu	MA24106A	USB Power Sensor	6/3/2020	Annual	6/3/2021	2018527
Anritsu	MA2411B	Pulse Power Sensor	12/18/2020	Annual	12/18/2021	1126066
Anritsu	ML2495A	Power Meter	11/3/2020	Annual	11/3/2021	1039008
Anritsu	MT8820C	Radio Communication Analyzer	9/30/2020	Annual	9/30/2021	6201240328
Anritsu	MT8821C	Radio Communication Analyzer	5/21/2020	Annual	5/21/2021	6201144419
Control Company	4040	Therm./Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291470
Control Company	4040	Therm./Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291455
Control Company	4040	Therm./Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291460
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670646
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670653
Insize	1108-150	Digital Caliper	1/17/2020	Biennial	1/17/2022	409193536
KEYSIGHT	E4438C	VECTOR SIGNAL GENERATOR	6/22/2020	Annual	6/22/2021	MY45092078
MCL	BW-N10W5+	10dB Attenuator	CBT	N/A	CBT	1611
MCL	BW-N3W5+	3dB Attenuator	CBT	N/A	CBT	1812
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1311
Mini-Circuits	NLP-1000+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	VLF-6000+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	ZHDC-16-63-S+	50-6000MHz Bidirectional Coupler	CBT	N/A	CBT	N/A
Pasternack	PE2208-6	Bidirectional Coupler	CBT	N/A	CBT	N/A
Rohde & Schwarz	CMW500	Radio Communication Tester	5/13/2020	Annual	5/13/2021	167284
Rohde & Schwarz	CMW500	Radio Communication Tester	4/28/2020	Annual	4/28/2021	167285
Rohde & Schwarz	FSP-7	Spectrum Analyzer	1/9/2020	Biennial	1/9/2022	100990
Rohde& Schwarz	CMW500	Wideband Radio Communication Tester	9/17/2020	Annual	9/17/2021	145663
Rohde & Schwarz	CMW500	Radio Communication Tester	11/4/2020	Annual	11/4/2021	100976
Rosenberger	32W1006-016	Torque Wrench	12/1/2020	Annual	12/1/2021	N/A
SPEAG	D1750V2	1750 MHz SAR Dipole	5/15/2018	Triennial	5/15/2021	1092
SPEAG	D1750V2	1750 MHz SAR Dipole	6/19/2019	Biennial	6/19/2021	1083
SPEAG	D1900V2	1900 MHz SAR Dipole	9/10/2020	Annual	9/10/2021	5d181
SPEAG	D1900V2	1900 MHz SAR Dipole	5/14/2018	Triennial	5/14/2021	5d026
SPEAG	D1900V2	1900 MHz SAR Dipole	6/19/2019	Biennial	6/19/2021	5d030
SPEAG	D2300V2	2300 MHz SAR Dipole	3/7/2018	Triennial	3/7/2021	1038
SPEAG	D2450V2	2450 MHz SAR Dipole	11/12/2018	Triennial	11/12/2021	921
SPEAG	D2450V2	2450 MHz SAR Dipole	5/16/2018	Triennial	5/16/2021	945
SPEAG	D2600V2	2600 MHz SAR Dipole	9/9/2020	Annual	9/9/2021	1069
SPEAG	D2600V2	2600 MHz SAR Dipole	6/19/2018	Triennial	6/19/2021	1009
SPEAG	D3500V2	3500 MHz SAR Dipole	8/16/2019	Biennial	8/16/2021	1055
SPEAG	D3700V2	3700 MHz SAR Dipole	10/17/2019	Biennial	10/17/2021	1002
SPEAG	D3900V2	SAR DIPOLE	11/13/2020	Annual	11/13/2021	1062
SPEAG	D5GHzV2	5 GHz SAR Dipole	9/13/2018	Triennial	9/13/2021	1163
SPEAG	D750V3	750 MHz SAR Dipole	5/18/2018	Triennial	5/18/2021	1034
SPEAG	D750V3	750 MHz SAR Dipole	6/20/2019	Biennial	6/20/2021	1057
SPEAG	D835V2	835 MHz SAR Dipole	6/20/2019	Biennial	6/20/2021	4d040
SPEAG	D850V2	850 MHz SAR Dipole	9/8/2020	Annual	9/8/2021	1010
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/12/2020	Annual	10/12/2021	1364
SPEAG	DAE4	Dasy Data Acquisition Electronics	10/12/2020	Annual	10/12/2021	1213
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/19/2020	Annual	3/19/2021	604
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/13/2021	Annual	1/13/2022	793
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/13/2020	Annual	2/13/2021	1403
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/11/2020	Annual	6/11/2021	701
SPEAG	DAE4	Data Acquisition Electronics	4/14/2020	Annual	4/14/2021	1532
SPEAG	EX3DV4	SAR Probe	6/22/2020	Annual	6/22/2021	7416
SPEAG	EX3DV4	SAR Probe	10/21/2020	Annual	10/21/2021	7420
SPEAG	EX3DV4	SAR Probe	1/18/2021	Annual	1/18/2022	3837
SPEAG	EX3DV4	SAR Probe	2/19/2020	Annual	2/19/2021	7427
SPEAG	EX3DV4	SAR Probe	3/20/2020	Annual	3/20/2021	7421
SPEAG	EX3DV4	SAR Probe	7/16/2020	Annual	7/16/2021	7546
SPEAG	EX3DV4	SAR Probe	10/21/2020	Annual	10/21/2021	7558
SPEAG	DAKS-3.5	Portable DAK	9/9/2020	Annual	9/9/2021	1045

Note: All equipment was used strictly during calibration date.

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

15 MEASUREMENT UNCERTAINTIES

a	b	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
Uncertainty Component	IEEE 1528 Sec.	Tol. (± %)	Prob. Dist.	Div.	c_i 1gm	c_i 10 gms	1gm u_i (± %)	10gms u_i (± %)	v_i
Measurement System									
Probe Calibration	E.2.1	6.55	N	1	1	1	6.6	6.6	∞
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	∞
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				11.6	11.4	191
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				23.2	22.8	

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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