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SAR EVALUATION REPORT

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

Date of Testing:
10/21/19 - 01/01/20
Test Site/Location:
PCTEST Lab, Columbia, MD, USA
Document Serial No.:
1M1910220166-01-R1.A3L

FCC ID: **A3LSMG986U**

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

DUT Type: Portable Handset
Application Type: Certification
FCC Rule Part(s): CFR §2.1093
Model: SM-G986U
Additional Model(s): SM-G986U1, SM-G986XU

Equipment Class	Band & Mode	Tx Frequency	SAR			
			1g Head (W/kg)	1g Body-Worn (W/kg)	1g Hotspot (W/kg)	10g Phablet (W/kg)
PCE	CDMA/EVDO BC10 (§90S)	817.90 - 823.10 MHz	0.24	0.26	0.56	N/A
PCE	CDMA/EVDO BC0 (§22H)	824.70 - 848.31 MHz	0.30	0.31	0.77	N/A
PCE	PCS CDMA/EVDO	1851.25 - 1908.75 MHz	0.16	0.93	1.25	2.11
PCE	GSM/GPRS/EDGE 850	824.20 - 848.80 MHz	0.19	0.20	0.56	N/A
PCE	GSM/GPRS/EDGE 1900	1850.20 - 1909.80 MHz	< 0.1	0.34	0.79	2.82
PCE	UMTS 850	826.40 - 846.60 MHz	0.22	0.28	0.68	N/A
PCE	UMTS 1750	1712.4 - 1752.6 MHz	0.16	1.02	0.93	2.76
PCE	UMTS 1900	1852.4 - 1907.6 MHz	0.14	0.92	1.09	2.99
PCE	LTE Band 71	665.5 - 695.5 MHz	0.10	0.17	0.21	N/A
PCE	LTE Band 12	699.7 - 715.3 MHz	0.13	0.20	0.30	N/A
PCE	LTE Band 13	779.5 - 784.5 MHz	0.18	0.28	0.47	N/A
PCE	LTE Band 14	790.5 - 795.5 MHz	0.26	0.34	0.62	N/A
PCE	LTE Band 26 (Cell)	814.7 - 848.3 MHz	0.24	0.33	0.76	N/A
PCE	LTE Band 5 (Cell)	824.7 - 848.3 MHz	0.25	0.28	0.66	N/A
PCE	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	0.18	0.96	1.24	2.96
PCE	LTE Band 4 (AWS)	1710.7 - 1754.3 MHz	N/A	N/A	N/A	N/A
PCE	LTE Band 25 (PCS)	1850.7 - 1914.3 MHz	0.12	0.85	1.14	2.23
PCE	LTE Band 2 (PCS)	1850.7 - 1909.3 MHz	0.14	0.75	1.01	2.22
PCE	LTE Band 30	2307.5 - 2312.5 MHz	0.10	0.67	1.08	2.83
PCE	LTE Band 7	2502.5 - 2567.5 MHz	0.14	0.44	1.01	1.55
CBE	LTE Band 48	3552.5 - 3697.5 MHz	1.08	0.25	0.85	N/A
PCE	LTE Band 41	2498.5 - 2687.5 MHz	< 0.1	0.24	0.85	2.37
PCE	LTE Band 38	2572.5 - 2617.5 MHz	N/A	N/A	N/A	N/A
PCE	NR Band n71	665.5 - 695.5 MHz	0.13	0.23	0.28	N/A
PCE	NR Band n5 (Cell)	826.5 - 846.5 MHz	0.26	0.30	0.68	N/A
PCE	NR Band n66 (AWS)	1712.5 - 1777.5 MHz	0.16	0.80	1.25	3.10
PCE	NR Band n2 (PCS)	1852.5 - 1907.5 MHz	0.16	0.70	0.91	2.48
PCE	NR Band n41	2506.02 - 2679.99 MHz	1.08	< 0.1	0.19	N/A
DTS	2.4 GHz WLAN	2412 - 2462 MHz	0.47	0.10	0.33	N/A
NII	U-NII-1	5180 - 5240 MHz	N/A	N/A	N/A	N/A
NII	U-NII-2A	5260 - 5320 MHz	0.19	0.40	N/A	1.60
NII	U-NII-2C	5500 - 5720 MHz	< 0.1	0.22	N/A	1.17
NII	U-NII-3	5745 - 5825 MHz	0.18	0.32	0.49	N/A
DSS/DTS	Bluetooth	2402 - 2480 MHz	0.29	< 0.1	< 0.1	N/A
Simultaneous SAR per KDB 690783 D01v01r03:			1.59	1.53	1.59	3.97

Note: This revised test report (S/N: 1M1910220166-01-R1.A3L) 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 1.10 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.

TABLE OF CONTENTS

1 DEVICE UNDER TEST

1.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
CDMA/EVDO BC10 (§90S)	Voice/Data	817.90 - 823.10 MHz
CDMA/EVDO BC0 (§22H)	Voice/Data	824.70 - 848.31 MHz
PCS CDMA/EVDO	Voice/Data	1851.25 - 1908.75 MHz
GSM/GPRS/EDGE 850	Voice/Data	824.20 - 848.80 MHz
GSM/GPRS/EDGE 1900	Voice/Data	1850.20 - 1909.80 MHz
UMTS 850	Voice/Data	826.40 - 846.60 MHz
UMTS 1750	Voice/Data	1712.4 - 1752.6 MHz
UMTS 1900	Voice/Data	1852.4 - 1907.6 MHz
LTE Band 71	Voice/Data	665.5 - 695.5 MHz
LTE Band 12	Voice/Data	699.7 - 715.3 MHz
LTE Band 13	Voice/Data	779.5 - 784.5 MHz
LTE Band 14	Voice/Data	790.5 - 795.5 MHz
LTE Band 26 (Cell)	Voice/Data	814.7 - 848.3 MHz
LTE Band 5 (Cell)	Voice/Data	824.7 - 848.3 MHz
LTE Band 66 (AWS)	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4 (AWS)	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25 (PCS)	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2 (PCS)	Voice/Data	1850.7 - 1909.3 MHz
LTE Band 30	Voice/Data	2307.5 - 2312.5 MHz
LTE Band 7	Voice/Data	2502.5 - 2567.5 MHz
LTE Band 48	Voice/Data	3552.5 - 3697.5 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
LTE Band 38	Voice/Data	2572.5 - 2617.5 MHz
NR Band n71	Data	665.5 - 695.5 MHz
NR Band n5	Data	826.5 - 846.5 MHz
NR Band n66	Data	1712.5 - 1777.5 MHz
NR Band n2	Data	1852.5 - 1907.5 MHz
NR Band n41	Data	2506.02 - 2679.99 MHz
2.4 GHz WLAN	Voice/Data	2412 - 2462 MHz
U-NII-1	Voice/Data	5180 - 5240 MHz
U-NII-2A	Voice/Data	5260 - 5320 MHz
U-NII-2C	Voice/Data	5500 - 5720 MHz
U-NII-3	Voice/Data	5745 - 5825 MHz
Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
ANT+	Data	2402 - 2480 MHz
MST	Data	555 Hz - 8.33 kHz
NR Band n260	Data	37000 - 40000 MHz
NR Band n261	Data	27500 - 28350 MHz

1.2 Time-Averaging Algorithm for RF Exposure Compliance

The equipment under test (EUT) contains:

a. Qualcomm® SM8250 modem supporting 2G/3G/4G WWAN technologies

b. Qualcomm® SDX55M modem supporting 5G NR

Both of Qualcomm® SM8250 and SDX55M modems are 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 1.11 – 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., P_{limit} 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 1.11 - Bibliography).

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

Exposure Scenario:		Body-Worn	Phablet	Phablet	Head	Hotspot	Phablet	Maximum Tune-up Output Power*
Averaging Volume:		1g	10g	10g	1g	1g	10g	
Spacing:		15 mm	6, 8, 11 mm	0 mm	0 mm	10 mm	0 mm	
DSI:		0	0	1	2	3	4	
Technology/Band	Antenna	Plimit corresponding to 1mW/g (SAR_design_target)						
GSM/GPRS/EDGE 850 MHz	A	30.9	33.0	26.1	31.1	26.1	26.1	24.8
GSM/GPRS/EDGE 1900 MHz	A	25.5	28.7	18.8	34.0	18.8	18.8	21.3
UMTS B5	A	30.6	32.3	26.0	31.6	26.0	26.0	24
UMTS B4	A	25.0	26.1	19.0	32.6	19.0	19.0	23.5
UMTS B2	A	24.9	26.6	18.5	32.9	18.5	18.5	23.5
CDMA/EVDO BC10	A	31.6	33.1	26.2	32.0	26.2	26.2	24.8
CDMA/EVDO BC0	A	30.8	32.1	26.2	31.1	26.2	26.2	24.8
CDMA/EVDO BC1	A	24.8	27.0	19.0	32.6	18.5	19.0	23.5
LTE FDD B71	A	32.6	36.7	29.8	34.9	29.8	29.8	24.5
LTE FDD B12	A	32.2	36.1	29.6	34.1	29.6	29.6	24.8
LTE FDD B13	A	30.9	33.6	27.2	32.9	27.2	27.2	24.8
LTE FDD B14	A	30.3	32.4	26.7	31.5	26.7	26.7	24.8
LTE FDD B26	A	30.5	31.9	25.8	31.6	25.8	25.8	24.8
LTE FDD B5	A	30.9	32.1	26.1	31.8	26.1	26.1	24.8
LTE FDD B66/4	A	24.8	26.8	19.8	32.7	19.5	19.8	24
LTE FDD B25	A	25.2	27.1	18.5	33.0	18.5	18.5	23.5
LTE FDD B2	A	25.2	26.7	18.5	33.0	18.5	18.5	23.5
LTE FDD B30	A	24.7	31.7	20.5	32.8	18.2	20.5	22
LTE FDD B7	B	27.5	31.2	20.5	32.6	19.5	20.5	23
LTE TDD B48	G	28.2	22.5	22.5	16.5	22.5	22.5	21
LTE TDD B38	B	28.0	31.7	19.0	28.0	19.0	19.0	22
LTE TDD B41 (PC3 & PC2)	B	29.5	31.7	21.5	34.6	19.0	21.5	23.1
NR FDD n71	A	31.9	36.3	29.4	34.3	29.4	29.4	24.5
NR FDD n5	A	31.0	32.1	25.8	31.7	25.8	25.8	24.8
NR FDD n66	A	25.4	27.6	19.8	32.8	19.8	19.8	24
NR FDD n2	A	26.1	26.9	18.5	32.5	18.5	18.5	23.5
NR TDD n41	F	29.3	22.9	22.9	18.2	22.9	22.9	17.5

*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 P_{max} is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum Tune up output power + 1dB device design uncertainty.

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

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

Measurement Condition: All conducted power and SAR measurements in this report (Part 1 test) were performed by setting *Reserve_power_margin* (Smart Transmit EFS entry) to 0dB.

1.3 Power Reduction for SAR

This device uses an independent fixed level power reduction mechanism for WLAN operations when 5G NR is active and also during all voice or VoIP held to ear scenarios. Per FCC Guidance, the held-to-ear exposure conditions were evaluated at reduced power according to the head SAR positions described in IEEE 1528-2013. Detailed descriptions of the power reduction mechanism are included in the operational description.

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

CDMA BC10 (815 MHz)				
Power Level	Mode / Band	Modulated Average Output Power (in dBm)		
		1x-RTT	EVDO Rev 0	EVDO Rev A
Max (DSI = 0 - 4)	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
CDMA BC0 (835 MHz)				
Power Level	Mode / Band	Modulated Average Output Power (in dBm)		
		1x-RTT	EVDO Rev 0	EVDO Rev A
Max (DSI = 0 - 4)	Max allowed power	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8
CDMA BC1 (1900 MHz)				
Power Level	Mode / Band	Modulated Average Output Power (in dBm)		
		1x-RTT	EVDO Rev 0	EVDO Rev A
Max (DSI = 0 or 2)	Max allowed power	24.5	24.5	24.5
	Nominal	23.5	23.5	23.5
Earjack Active (DSI = 4)	Max allowed power	20.0	20.0	20.0
	Nominal	19.0	19.0	19.0
Hotspot Mode Active (DSI = 3)	Max allowed power	19.5	19.5	19.5
	Nominal	18.5	18.5	18.5
Proximity Sensor (DSI = 1)	Max allowed power	20.0	20.0	20.0
	Nominal	19.0	19.0	19.0

GSM/GPRS/EDGE 850										
Power Level	Mode / Band	Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
		1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Max (DSI = 0 - 4)	Max allowed power	33.0	33.0	32.0	30.0	28.0	27.5	25.5	23.5	22.5
	Nominal	32.0	32.0	31.0	29.0	27.0	26.5	24.5	22.5	21.5
GSM/GPRS/EDGE 1900										
Power Level	Mode / Band	Voice (in dBm)	Data - Burst Average GMSK (in dBm)				Data - Burst Average 8-PSK (in dBm)			
		1 TX Slot	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots	1 TX Slots	2 TX Slots	3 TX Slots	4 TX Slots
Max (DSI = 0 or 2)	Max allowed power	30.0	30.0	28.5	26.5	24.5	26.5	24.0	22.0	21.0
	Nominal	29.0	29.0	27.5	25.5	23.5	25.5	23.0	21.0	20.0
Earjack Active (DSI = 4)	Max allowed power	29.0	29.0	26.0	24.2	23.0	26.5	24.0	22.0	21.0
	Nominal	28.0	28.0	25.0	23.2	22.0	25.5	23.0	21.0	20.0
Hotspot Mode Active (DSI = 3)	Max allowed power	N/A	29.0	26.0	24.2	23.0	26.5	24.0	22.0	21.0
	Nominal	N/A	28.0	25.0	23.2	22.0	25.5	23.0	21.0	20.0
Proximity Sensor (DSI = 1)	Max allowed power	29.0	29.0	26.0	24.2	23.0	26.5	24.0	22.0	21.0
	Nominal	28.0	28.0	25.0	23.2	22.0	25.5	23.0	21.0	20.0

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

UMTS Band 5 (850 MHz)					
Power Level	Mode / Band	Modulated Average Output Power (in dBm)			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Max (DSI = 0 - 4)	Max allowed power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
UMTS Band 4 (1750 MHz)					
Power Level	Mode / Band	Modulated Average Output Power (in dBm)			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Max (DSI = 0 or 2)	Max allowed power	24.5	23.5	23.5	23.5
	Nominal	23.5	22.5	22.5	22.5
Earjack Active (DSI = 4)	Max allowed power	19.0	19.0	19.0	19.0
	Nominal	18.0	18.0	18.0	18.0
Hotspot Mode Active (DSI = 3)	Max allowed power	19.0	19.0	1.0	19.0
	Nominal	18.0	18.0	18.0	18.0
Proximity Sensor (DSI = 1)	Max allowed power	19.0	19.0	19.0	19.0
	Nominal	18.0	18.0	18.0	18.0
UMTS Band 2 (1900 MHz)					
Power Level	Mode / Band	Modulated Average Output Power (in dBm)			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Max (DSI = 0 or 2)	Max allowed power	24.5	23.5	23.5	23.5
	Nominal	23.5	22.5	22.5	22.5
Earjack Active (DSI = 4)	Max allowed power	19.5	18.5	18.5	18.5
	Nominal	18.5	17.5	17.5	17.5
Hotspot Mode Active (DSI = 3)	Max allowed power	19.5	18.5	18.5	18.5
	Nominal	18.5	17.5	17.5	17.5
Proximity Sensor (DSI = 1)	Max allowed power	19.5	18.5	18.5	18.5
	Nominal	18.5	17.5	17.5	17.5

Mode / Band		Modulated Average Output Power (in dBm)				
		Max (DSI = 0)	RCV Mode Active (DSI = 2)	Hotspot Mode Active (DSI = 3)	Earjack Active (DSI = 4)	Proximity Sensor Active (DSI = 1)
LTE FDD Band 71	Max allowed power	25.5	25.5	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5	24.5	24.5
LTE FDD Band 12	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 13	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 14	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 26	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 5	Max allowed power	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
LTE FDD Band 66	Max allowed power	25.0	25.0	20.5	20.8	20.8
	Nominal	24.0	24.0	19.5	19.8	19.8
LTE FDD Band 4	Max allowed power	25.0	25.0	20.5	20.8	20.8
	Nominal	24.0	24.0	19.5	19.8	19.8
LTE FDD Band 2	Max allowed power	24.5	24.5	19.5	19.5	19.5
	Nominal	23.5	23.5	18.5	18.5	18.5
LTE FDD Band 25	Max allowed power	24.5	24.5	19.5	19.5	19.5
	Nominal	23.5	23.5	18.5	18.5	18.5
LTE FDD Band 7	Max allowed power	24.0	24.0	20.5	21.5	21.5
	Nominal	23.0	23.0	19.5	20.5	20.5
LTE FDD Band 30	Max allowed power	23.0	23.0	19.2	21.5	21.5
	Nominal	22.0	22.0	18.2	20.5	20.5
LTE TDD Band 38	Max allowed power	25.0	25.0	22.0	22.0	22.0
	Nominal	24.0	24.0	21.0	21.0	21.0
LTE TDD Band 48	Max allowed power	24.0	19.5	24.0	24.0	24.0
	Nominal	23.0	18.5	23.0	23.0	23.0
LTE TDD Band 41 (PC2)	Max allowed power	27.7	27.7	23.6	26.1	26.1
	Nominal	26.7	26.7	22.6	25.1	25.1
LTE TDD Band 41 (PC3)	Max allowed power	25.0	25.0	22.0	24.5	24.5
	Nominal	24.0	24.0	21.0	23.5	23.5

Mode / Band		Modulated Average Output Power (in dBm)			
		Max (DSI = 0 or 2)	Hotspot Mode Active (DSI = 3)	Earjack Active (DSI = 4)	Proximity Sensor Active (DSI = 1)
NR FDD Band n71	Max allowed power	25.5	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5	24.5
NR FDD Band n5	Max allowed power	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8
NR FDD Band n2	Max allowed power	24.5	19.5	19.5	19.5
	Nominal	23.5	18.5	18.5	18.5
NR FDD Band n66	Max allowed power	25.0	20.8	20.8	20.8
	Nominal	24.0	19.8	19.8	19.8
NR TDD Band n41	Max allowed power	24.5	24.5	24.5	24.5
	Nominal	23.5	23.5	23.5	23.5

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

1.4.2 2.4 GHz Maximum Bluetooth and SISO/MIMO WLAN Output Power

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

Mode / Band		Modulated Average - Single Tx Chain - Antenna 1 (dBm)	
	Channel	1 - 10	11
IEEE 802.11b (2.4 GHz)	Maximum	**21.0**	
	Nominal	**20.0**	
IEEE 802.11g (2.4 GHz)	Maximum	**18.0**	**17.0**
	Nominal	**17.0**	**16.0**
IEEE 802.11n (2.4 GHz)	Maximum	**18.0**	**17.0**
	Nominal	**17.0**	**16.0**
IEEE 802.11ax SU (2.4 GHz)	Maximum	**17.0**	**14.5**
	Nominal	**16.0**	**13.5**

Mode / Band		Modulated Average - Single Tx Chain - Antenna 2 (dBm)	
	Channel	1 - 10	11
IEEE 802.11b (2.4 GHz)	Maximum	**21.0**	**19.5**
	Nominal	**20.0**	**18.5**
IEEE 802.11g (2.4 GHz)	Maximum	**18.0**	**17.0**
	Nominal	**17.0**	**16.0**
IEEE 802.11n (2.4 GHz)	Maximum	**18.0**	**17.0**
	Nominal	**17.0**	**16.0**
IEEE 802.11ax SU (2.4 GHz)	Maximum	**17.0**	**14.5**
	Nominal	**16.0**	**13.5**

Mode / Band		Modulated Average - MIMO (dBm) 20 MHz Bandwidth	
	Channel	1 - 10	11
IEEE 802.11g (2.4 GHz)	Maximum	**21.0**	**20.0**
	Nominal	**20.0**	**19.0**
IEEE 802.11n (2.4 GHz)	Maximum	**21.0**	**20.0**
	Nominal	**20.0**	**19.0**
IEEE 802.11ax SU (2.4 GHz)	Maximum	**17.0**	**14.5**
	Nominal	**16.0**	**13.5**

Mode / Band		Modulated Average (dBm)
Bluetooth	Maximum	**15.0**
	Nominal	**14.0**
Bluetooth EDR	Maximum	**12.5**
	Nominal	**11.5**
Bluetooth LE (2 Mbps)	Maximum	**9.0**
	Nominal	**8.0**
Bluetooth LE (1 Mbps, 125/500 Kbps)	Maximum	**7.5**
	Nominal	**6.5**

1.4.3 2.4 GHz Reduced WLAN Output Powers

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

The below table is applicable in the following conditions:

- Head Conditions
- Simultaneous conditions with 2.4 GHz WLAN and 5 GHz WLAN
- Simultaneous conditions with 5G NR and 2.4 GHz WLAN and/or 5 GHz WLAN

Mode / Band		Modulated Average - Single Tx Chain (dBm)	
	Channel	1 - 10	11
IEEE 802.11b (2.4 GHz)	Maximum	**17.0**	
	Nominal	**16.0**	
IEEE 802.11g (2.4 GHz)	Maximum	**17.0**	
	Nominal	**16.0**	
IEEE 802.11n (2.4 GHz)	Maximum	**17.0**	
	Nominal	**16.0**	
IEEE 802.11ax SU (2.4 GHz)	Maximum	**17.0**	**14.5**
	Nominal	**16.0**	**13.5**

Mode / Band		Modulated Average - MIMO (dBm)	
		20 MHz Bandwidth	
	Channel	1 - 10	11
IEEE 802.11g (2.4 GHz)	Maximum	**20.0**	
	Nominal	**19.0**	
IEEE 802.11n (2.4 GHz)	Maximum	**20.0**	
	Nominal	**19.0**	
IEEE 802.11ax SU (2.4 GHz)	Maximum	**17.0**	**14.5**
	Nominal	**16.0**	**13.5**

The below table is applicable in the following conditions:

- Head Conditions during simultaneous conditions with 2.4 GHz WLAN and 5 GHz WLAN
- Head Conditions during simultaneous conditions with 5G NR and 2.4 GHz WLAN and/or 5 GHz WLAN

Mode / Band		Modulated Average - Single Tx Chain (dBm)	
	Channel	1 - 11	
IEEE 802.11b (2.4 GHz)	Maximum	**14.0**	
	Nominal	**13.0**	
IEEE 802.11g (2.4 GHz)	Maximum	**14.0**	
	Nominal	**13.0**	
IEEE 802.11n (2.4 GHz)	Maximum	**14.0**	
	Nominal	**13.0**	
IEEE 802.11ax SU (2.4 GHz)	Maximum	**14.0**	
	Nominal	**13.0**	

Mode / Band		Modulated Average - MIMO (dBm)	
		20 MHz Bandwidth	
	Channel	1 - 10	11
IEEE 802.11g (2.4 GHz)	Maximum	**17.0**	
	Nominal	**16.0**	
IEEE 802.11n (2.4 GHz)	Maximum	**17.0**	
	Nominal	**16.0**	
IEEE 802.11ax SU (2.4 GHz)	Maximum	**17.0**	**14.5**
	Nominal	**16.0**	**13.5**

1.4.1 5 GHz Maximum SISO/MIMO WLAN Output Power

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

Mode / Band		Modulated Average - Single Tx Chain (dBm)												
		20 MHz Bandwidth				40 MHz Bandwidth					80 MHz Bandwidth			
	Channel	36	40 - 60	64 - 100	104 - 165	38	46 - 54	62	102	110 - 159	42	58	106	122 - 155
IEEE 802.11a (5 GHz)	Maximum	16.5	18.0	16.5	18.0									
	Nominal	15.5	17.0	15.5	17.0									
IEEE 802.11n (5 GHz)	Maximum	16.5	18.0	16.5	18.0	13.5	17.0	13.5	15.0	17.0				
	Nominal	15.5	17.0	15.5	17.0	12.5	16.0	12.5	14.0	16.0				
IEEE 802.11ac (5 GHz)	Maximum	16.5	18.0	16.5	18.0	13.5	17.0	13.5	15.0	17.0	13.5	12.0	13.0	16.0
	Nominal	15.5	17.0	15.5	17.0	12.5	16.0	12.5	14.0	16.0	12.5	11.0	12.0	15.0
IEEE 802.11ax SU (5 GHz)	Maximum	16.0				13.5	14.0				13.0			
	Nominal	15.0				12.5	13.0				12.0			

Mode / Band		Modulated Average - MIMO (dBm)												
		20 MHz Bandwidth				40 MHz Bandwidth					80 MHz Bandwidth			
	Channel	36	40 - 60	64 - 100	104 - 165	38	46 - 54	62	102	110 - 159	42	58	106	122 - 155
IEEE 802.11a (5 GHz)	Maximum	19.5	21.0	19.5	21.0									
	Nominal	18.5	20.0	18.5	20.0									
IEEE 802.11n (5 GHz)	Maximum	19.5	21.0	19.5	21.0	16.5	20.0	16.5	18.0	20.0				
	Nominal	18.5	20.0	18.5	20.0	15.5	19.0	15.5	17.0	19.0				
IEEE 802.11ac (5 GHz)	Maximum	19.5	21.0	19.5	21.0	16.5	20.0	16.5	18.0	20.0	16.5	15.0	16.0	19.0
	Nominal	18.5	20.0	18.5	20.0	15.5	19.0	15.5	17.0	19.0	15.5	14.0	15.0	18.0
IEEE 802.11ax SU (5 GHz)	Maximum	16.0				13.5	14.0				13.0			
	Nominal	15.0				12.5	13.0				12.0			

1.4.2 5 GHz Reduced WLAN Output Powers

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

The below table is applicable in the following conditions:

- Head Conditions
- Simultaneous conditions with 2.4 GHz WLAN and 5 GHz WLAN
- Simultaneous conditions with 5G NR and 2.4 GHz WLAN and/or 5 GHz WLAN
- Head Conditions during simultaneous conditions with 2.4 GHz WLAN and 5 GHz WLAN
- Head Conditions during simultaneous conditions with 5G NR and 2.4 GHz WLAN and/or 5 GHz WLAN

Mode / Band		Modulated Average - Single Tx Chain (dBm)											
		20 MHz Bandwidth		40 MHz Bandwidth				80 MHz Bandwidth					
	Channel	36 - 165		38	46 - 54	62	102 - 159	42	58	106	122 - 155		
IEEE 802.11a (5 GHz)	Maximum	14.0											
	Nominal	13.0											
IEEE 802.11n (5 GHz)	Maximum	14.0		13.5	14.0	13.5	14.0						
	Nominal	13.0		12.5	13.0	12.5	13.0						
IEEE 802.11ac (5 GHz)	Maximum	14.0		13.5	14.0	13.5	14.0	13.5	12.0	13.0	14.0		
	Nominal	13.0		12.5	13.0	12.5	13.0	12.5	11.0	12.0	13.0		
IEEE 802.11ax SU (5 GHz)	Maximum	14.0		13.5	14.0			13.0					
	Nominal	13.0		12.5	13.0			12.0					

Mode / Band		Modulated Average - MIMO (dBm)											
		20 MHz Bandwidth		40 MHz Bandwidth				80 MHz Bandwidth					
	Channel	36 - 165		38	46 - 54	62	102 - 159	42	58	106	122 - 155		
IEEE 802.11a (5 GHz)	Maximum	17.0											
	Nominal	16.0											
IEEE 802.11n (5 GHz)	Maximum	17.0		16.5	17.0	16.5	17.0						
	Nominal	16.0		15.5	16.0	15.5	16.0						
IEEE 802.11ac (5 GHz)	Maximum	17.0		16.5	17.0	16.5	17.0	16.5	15.0	16.0	17.0		
	Nominal	16.0		15.5	16.0	15.5	16.0	15.5	14.0	15.0	16.0		
IEEE 802.11ax SU (5 GHz)	Maximum	17.0		13.5	14.0			13.0					
	Nominal	16.0		12.5	13.0			12.0					

1.5 DUT Antenna Locations

The overall dimensions of this device are > 9 x 5 cm. The overall diagonal dimension of the device is ≤160 mm and the diagonal display is ≤150 mm. A diagram showing the location of the device antennas can be found in Appendix E. Since the diagonal dimension of this device is > 160 mm and <200 mm, it is considered a “phablet.”

Table 1-1
Device Edges/Sides for SAR Testing

Mode	Back	Front	Top	Bottom	Right	Left
EVDO BC10 (§90S)	Yes	Yes	No	Yes	Yes	Yes
EVDO BC0 (§22H)	Yes	Yes	No	Yes	Yes	Yes
PCS EVDO	Yes	Yes	No	Yes	Yes	Yes
GPRS 850	Yes	Yes	No	Yes	Yes	Yes
GPRS 1900	Yes	Yes	No	Yes	Yes	Yes
UMTS 850	Yes	Yes	No	Yes	Yes	Yes
UMTS 1750	Yes	Yes	No	Yes	Yes	Yes
UMTS 1900	Yes	Yes	No	Yes	Yes	Yes
LTE Band 71	Yes	Yes	No	Yes	Yes	Yes
LTE Band 12	Yes	Yes	No	Yes	Yes	Yes
LTE Band 13	Yes	Yes	No	Yes	Yes	Yes
LTE Band 14	Yes	Yes	No	Yes	Yes	Yes
LTE Band 26 (Cell)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 5 (Cell)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 66 (AWS)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 25 (PCS)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 2 (PCS)	Yes	Yes	No	Yes	Yes	Yes
LTE Band 30	Yes	Yes	No	Yes	Yes	Yes
LTE Band 7	Yes	Yes	No	Yes	No	Yes
LTE Band 48	Yes	Yes	Yes	No	No	Yes
LTE Band 41	Yes	Yes	No	Yes	No	Yes
NR Band n71	Yes	Yes	No	Yes	Yes	Yes
NR Band n5	Yes	Yes	No	Yes	Yes	Yes
NR Band n66	Yes	Yes	No	Yes	Yes	Yes
NR Band n2	Yes	Yes	No	Yes	Yes	Yes
NR Band n41	Yes	Yes	Yes	No	No	Yes
2.4 GHz WLAN Ant 1	Yes	Yes	Yes	No	No	Yes
2.4 GHz WLAN Ant 2	Yes	Yes	Yes	No	No	Yes
5 GHz WLAN Ant 1	Yes	Yes	Yes	No	No	Yes
5 GHz WLAN Ant 2	Yes	Yes	Yes	No	No	Yes
5 GHz WLAN MIMO	Yes	Yes	Yes	No	No	Yes
Bluetooth	Yes	Yes	Yes	No	No	Yes

Note: Particular DUT edges were not required to be evaluated for wireless router SAR or phablet SAR if the edges were greater than 2.5 cm from the transmitting antenna according to FCC KDB Publication 941225 D06v02r01 Section III and FCC KDB Publication 648474 D04v01r03. The distances between the transmit antennas and the edges of the device are included in the filing. When wireless router mode is enabled, U-NII-1, U-NII-2A, U-NII-2C operations are disabled.

1.6 Near Field Communications (NFC) Antenna

This DUT has NFC operations. The NFC antenna is integrated into the device for this model. Therefore, all SAR tests were performed with the device which already incorporates the NFC antenna. A diagram showing the location of the NFC antenna can be found in Appendix E.

1.7 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	Head	Body-Worn Accessory	Wireless Router	Phablet	Notes
1	1x CDMA voice + 2.4 GHz WI-FI	Yes	Yes	N/A	Yes	
2	1x CDMA voice + 5 GHz WI-FI	Yes	Yes	N/A	Yes	
3	1x CDMA voice + 2.4 GHz Bluetooth	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
4	1x CDMA voice + 2.4 GHz Bluetooth + 5GHz WI-FI	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
5	1x CDMA voice + 2.4 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
6	1x CDMA voice + 5 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
7	1x CDMA voice + 2.4 GHz WI-FI + 5 GHz WI-FI	Yes	Yes	N/A	Yes	
8	1x CDMA voice + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
9	1x CDMA voice + 2.4 GHz Bluetooth + 5GHz WI-FI MIMO	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
10	GSM voice + 2.4 GHz WI-FI	Yes	Yes	N/A	Yes	
11	GSM voice + 5 GHz WI-FI	Yes	Yes	N/A	Yes	
12	GSM voice + 2.4 GHz Bluetooth	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
13	GSM voice + 2.4 GHz Bluetooth + 5GHz WI-FI	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
14	GSM voice + 2.4 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
15	GSM voice + 5 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
16	GSM voice + 2.4 GHz WI-FI + 5 GHz WI-FI	Yes	Yes	N/A	Yes	
17	GSM voice + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	Yes	Yes	N/A	Yes	
18	GSM voice + 2.4 GHz Bluetooth + 5GHz WI-FI MIMO	Yes^	Yes	N/A	Yes	^Bluetooth Tethering is considered
19	UMTS + 2.4 GHz WI-FI	Yes	Yes	Yes	Yes	
20	UMTS + 5 GHz WI-FI	Yes	Yes	Yes	Yes	
21	UMTS + 2.4 GHz Bluetooth	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
22	UMTS + 2.4 GHz Bluetooth + 5 GHz WI-FI	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
23	UMTS + 2.4 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
24	UMTS + 5 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
25	UMTS + 2.4 GHz WI-FI + 5 GHz WI-FI	Yes	Yes	Yes	Yes	
26	UMTS + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
27	UMTS + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
28	LTE + 5G NR	Yes	Yes	N/A	Yes	
29	LTE + 2.4 GHz WI-FI	Yes	Yes	Yes	Yes	
30	LTE + 2.4 GHz WI-FI + 5G NR	Yes	Yes	Yes	Yes	
31	LTE + 5 GHz WI-FI	Yes	Yes	Yes	Yes	
32	LTE + 5 GHz WI-FI + 5G NR	Yes	Yes	Yes	Yes	
33	LTE + 2.4 GHz Bluetooth	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
34	LTE + 2.4 GHz Bluetooth + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
35	LTE + 2.4 GHz Bluetooth + 5 GHz WI-FI	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
36	LTE + 2.4 GHz Bluetooth + 5 GHz WI-FI + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
37	LTE + 2.4 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
38	LTE + 2.4 GHz WI-FI MIMO + 5G NR	Yes	Yes	Yes	Yes	
39	LTE + 5 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
40	LTE + 5 GHz WI-FI MIMO + 5G NR	Yes	Yes	Yes	Yes	
41	LTE + 2.4 GHz WI-FI + 5 GHz WI-FI	Yes	Yes	Yes	Yes	
42	LTE + 2.4 GHz WI-FI + 5 GHz WI-FI + 5G NR	Yes	Yes	Yes	Yes	
43	LTE + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	Yes	Yes	Yes	Yes	
44	LTE + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO + 5G NR	Yes	Yes	Yes	Yes	
45	LTE + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
46	LTE + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO + 5G NR	Yes^	Yes	Yes^	Yes	^Bluetooth Tethering is considered
47	CDMA/EVDO data + 2.4 GHz WI-FI	Yes*	Yes*	Yes	Yes	* Pre-installed VOIP applications are considered
48	CDMA/EVDO data + 5 GHz WI-FI	Yes*	Yes*	Yes	Yes	* Pre-installed VOIP applications are considered
49	CDMA/EVDO data + 2.4 GHz Bluetooth	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
50	CDMA/EVDO data + 2.4 GHz Bluetooth + 5 GHz WI-FI	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
51	CDMA/EVDO data + 2.4 GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes	* Pre-installed VOIP applications are considered
52	CDMA/EVDO data + 5 GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes	* Pre-installed VOIP applications are considered
53	CDMA/EVDO data + 2.4 GHz WI-FI + 5 GHz WI-FI	Yes*	Yes*	Yes	Yes	* Pre-installed VOIP applications are considered
54	CDMA/EVDO data + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	Yes*	Yes*	Yes	Yes	* Pre-installed VOIP applications are considered
55	CDMA/EVDO data + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO	Yes*^	Yes*	Yes^	Yes	* Pre-installed VOIP applications are considered ^Bluetooth Tethering is considered
56	GPRS/EDGE + 2.4 GHz WI-FI	N/A	N/A	Yes	Yes	
57	GPRS/EDGE + 5 GHz WI-FI	N/A	N/A	Yes	Yes	
58	GPRS/EDGE + 2.4 GHz Bluetooth	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered
59	GPRS/EDGE + 2.4 GHz Bluetooth + 5 GHz WI-FI	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered
60	GPRS/EDGE + 2.4 GHz WI-FI MIMO	N/A	N/A	Yes	Yes	
61	GPRS/EDGE + 5 GHz WI-FI MIMO	N/A	N/A	Yes	Yes	
62	GPRS/EDGE + 2.4 GHz WI-FI + 5 GHz WI-FI	N/A	N/A	Yes	Yes	
63	GPRS/EDGE + 2.4 GHz WI-FI MIMO + 5 GHz WI-FI MIMO	N/A	N/A	Yes	Yes	
64	GPRS/EDGE + 2.4 GHz Bluetooth + 5 GHz WI-FI MIMO	N/A	N/A	Yes^	Yes	^Bluetooth Tethering is considered

1. 2.4 GHz WLAN and 2.4 GHz Bluetooth share the same antenna path and cannot transmit simultaneously.
2. All licensed modes share the same antenna path and cannot transmit simultaneously.
3. When the user utilizes multiple services in UMTS 3G mode it uses multi-Radio Access Bearer or multi-RAB. The power control is based on a physical control channel (Dedicated Physical Control Channel [DPCCH]) and power control will be adjusted to meet the needs of both services. Therefore, the UMTS+WLAN scenario also represents the UMTS Voice/DATA + WLAN Hotspot scenario.
4. Per the manufacturer, WIFI Direct is not expected to be used in conjunction with a held-to-ear or body-worn accessory voice call. Therefore, there are no simultaneous transmission scenarios involving WIFI direct beyond that listed in the above table.

5. 5 GHz Wireless Router is only supported for the U-NII-3 by S/W, therefore U-NII-1, U-NII2A, and U-NII2C were not evaluated for wireless router conditions.
6. 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.
7. This device supports VoWIFI.
8. This device supports Bluetooth Tethering.
9. This device supports VoLTE.
10. LTE + 5G NR FR1 Scenarios are limited to LTE Anchor Bands, LTE B2/5/7/12/13/25/30/41/48/66.
11. 5G NR FR2 n260 and n261 cannot transmit simultaneously.
12. LTE + 5G NR FR2 n260 and n261 operations are possible only with LTE B2/4/5/12/13/30/66 under EN-DC mode.

1.8 Miscellaneous SAR Test Considerations

(A) WIFI/BT

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

Since Wireless Router operations are not allowed by the chipset firmware using U-NII-1, U-NII-2A & U-NII-2C WIFI, only 2.4 GHz and U-NII-3 WIFI Hotspot SAR tests and combinations are considered for SAR with respect to Wireless Router configurations according to FCC KDB 941225 D06v02r01.

This device supports IEEE 802.11ax with the following features:

a) Up to 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 FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" since the diagonal dimension is greater than 160mm and less than 200mm. Phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. Because wireless router operations are not supported for U-NII-1, U-NII-2A & U-NII-2C WLAN, phablet SAR tests were performed. Phablet SAR was not evaluated for 2.4 GHz and U-NII-3 WLAN operations since wireless router 1g SAR was < 1.2 W/kg.

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)

GSM/GPRS/EDGE DTM is not supported for US bands. Therefore, the GSM Voice modes in this report do not transmit simultaneously with GPRS/EDGE Data.

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

LTE SAR for the higher modulations and lower bandwidths were not tested since the maximum average output power of all required channels and configurations was not more than 0.5 dB higher than the highest bandwidth; and the reported LTE SAR for the highest bandwidth was less than 1.45 W/kg for all configurations according to FCC KDB 941225 D05v02r04.

CDMA 1X Advanced technology was not required for SAR since the maximum allowed output powers for 1x Advanced was not more than 0.25 dB higher than the maximum powers for 1x and the measured SAR in any 1x mode exposure conditions was not greater than 1.2 W/kg per FCC KDB Publication 941225 D01v03r01.

This device supports LTE Carrier Aggregation (CA) in the downlink. All uplink communications are identical to Release 8 specifications. Per FCC KDB Publication 941225 D05A v01r02, SAR for LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive. The downlink carrier aggregation exclusion analysis can be found in Appendix F.

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" since the diagonal dimension is greater than 160mm and less than 200mm. Therefore, phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg. Phablet SAR was not evaluated for licensed technologies since wireless router 1g SAR was < 1.2 W/kg for these modes.

This device supports downlink 4x4 MIMO operations for some LTE Bands. Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation was not needed since the maximum average output power in 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25 dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

This device supports LTE capabilities with overlapping transmission frequency ranges. When the supported frequency range of an LTE Band falls completely within an LTE band with a larger transmission frequency range, both LTE bands have the same target power (or the band with the larger transmission frequency range has a higher target power), and both LTE bands share the same transmission path and signal characteristics, SAR was only assessed for the band with the larger transmission frequency range.

This device supports both Power Class 2 (PC2) and Power Class 3 (PC3) for LTE Band 41. Per May 2017 TCB Workshop Notes, SAR tests were performed with Power Class 3 (given the specific UL/DL limitations for Power Class 2). Additionally, SAR testing for the power class condition was evaluated for the highest configuration in Power Class 3 for each test configuration to confirm the results were scalable linearly (See Section 14.2).

This device supports LTE Carrier Aggregation (CA) for LTE Band 5, LTE Band 66, LTE Band 48, and LTE Band 41 with two component carriers in the uplink. SAR Measurements and conducted powers were evaluated per 2017 Fall TCB Workshop Notes.

This device supports 64QAM and 256QAM on the uplink and 256QAM on the downlink for LTE Operations. Conducted powers for 64QAM and 256QAM uplink configurations were measured per Section 5.1 of FCC

KDB Publication 941225D05v02r05. SAR was not required for 64QAM or 256QAM since the highest maximum output power for 64QAM and 256QAM is ≤ ½ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45W/kg, per Section 5.2.4 of FCC KDB Publication 941225 D05v02r05.

This device supports 5G NR for Bands n260, and n261. RF Exposure assessment and simultaneous transmission analysis for these bands can be found in test report 1M1910220166-23.A3L.

NR implementation of n71, n5, n66, n2, and n41 is limited to EN-DC operations only, with LTE Band 2/7/66/5/12/13/30/48/25/41 acting as the anchor band. Per FCC Guidance, SAR tests were performed separately for NR Bands and LTE Anchor Bands. Please see Section 11 for more details.

1.9 Guidance Applied

- IEEE 1528-2013
- FCC KDB Publication 941225 D01v03r01, D05v02r04, D05Av01r02, D06v02r01 (2G/3G/4G and Hotspot)
- FCC KDB Publication 248227 D01v02r02 (SAR Considerations for 802.11 Devices)
- FCC KDB Publication 447498 D01v06 (General SAR Guidance)
- FCC KDB Publication 865664 D01v01r04, D02v01r02 (SAR Measurements up to 6 GHz)
- FCC KDB Publication 648474 D04v01r03 (Phablet Procedures)
- FCC KDB Publication 616217 D04v01r02 (Proximity Sensor)
- 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, Dynamic Antenna Tuning)

1.10 Device Serial Numbers

Several samples with identical hardware were used to support SAR testing. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units. The serial numbers used for each test are indicated alongside the results in Section 11.

1.11 Bibliography

Report Type	Report Serial Number
Near Field PD Report (Part 1)	1M1910220166-23.A3L
RF Exposure Part 0 Test Report	1M1910220166-22-R1.A3L
RF Exposure Part 2 Test Report	80-W5681-4 Rev.B
RF Exposure Compliance Summary Report	1M1910220166-24.A3L

2 LTE AND NR INFORMATION

LTE Information					
Form Factor	Portable Handset				
Frequency Range of each LTE transmission band	LTE Band 71 (665.5 - 695.5 MHz)				
	LTE Band 12 (699.7 - 715.3 MHz)				
	LTE Band 13 (779.5 - 784.5 MHz)				
	LTE Band 14 (790.5 - 795.5 MHz)				
	LTE Band 26 (Cell) (814.7 - 848.3 MHz)				
	LTE Band 5 (Cell) (824.7 - 848.3 MHz)				
	LTE Band 66 (AWS) (1710.7 - 1779.3 MHz)				
	LTE Band 4 (AWS) (1710.7 - 1754.3 MHz)				
	LTE Band 25 (PCS) (1850.7 - 1914.3 MHz)				
	LTE Band 2 (PCS) (1850.7 - 1909.3 MHz)				
	LTE Band 30 (2307.5 - 2312.5 MHz)				
	LTE Band 7 (2502.5 - 2567.5 MHz)				
	LTE Band 48 (3552.5 - 3697.5 MHz)				
	LTE Band 41 (2498.5 - 2687.5 MHz)				
	LTE Band 38 (2572.5 - 2617.5 MHz)				
Channel Bandwidths	LTE Band 71: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 13: 5 MHz, 10 MHz				
	LTE Band 14: 5 MHz, 10 MHz				
	LTE Band 26 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz				
	LTE Band 5 (Cell): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 66 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 4 (AWS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 25 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 2 (PCS): 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 30: 5 MHz, 10 MHz				
	LTE Band 7: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 48: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 38: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid	Mid-High	High
LTE Band 71: 5 MHz	665.5 (133147)		680.5 (133297)	695.5 (133447)	
LTE Band 71: 10 MHz	668 (133172)		680.5 (133297)	693 (133422)	
LTE Band 71: 15 MHz	670.5 (133197)		680.5 (133297)	690.5 (133397)	
LTE Band 71: 20 MHz	673 (133222)		680.5 (133297)	688 (133372)	
LTE Band 12: 1.4 MHz	699.7 (23017)		707.5 (23095)	715.3 (23173)	
LTE Band 12: 3 MHz	700.5 (23025)		707.5 (23095)	714.5 (23165)	
LTE Band 12: 5 MHz	701.5 (23035)		707.5 (23095)	713.5 (23155)	
LTE Band 12: 10 MHz	704 (23060)		707.5 (23095)	711 (23130)	
LTE Band 13: 5 MHz	779.5 (23205)		782 (23230)	784.5 (23255)	
LTE Band 13: 10 MHz	N/A		782 (23230)	N/A	
LTE Band 14: 5 MHz	790.5 (23305)		793 (23330)	795.5 (23355)	
LTE Band 14: 10 MHz	N/A		793 (23330)	N/A	
LTE Band 26 (Cell): 1.4 MHz	814.7 (26697)		831.5 (26865)	848.3 (27033)	
LTE Band 26 (Cell): 3 MHz	815.5 (26705)		831.5 (26865)	847.5 (27025)	
LTE Band 26 (Cell): 5 MHz	816.5 (26715)		831.5 (26865)	846.5 (27015)	
LTE Band 26 (Cell): 10 MHz	819 (26740)		831.5 (26865)	844 (26990)	
LTE Band 26 (Cell): 15 MHz	821.5 (26765)		831.5 (26865)	841.5 (26965)	
LTE Band 5 (Cell): 1.4 MHz	824.7 (20407)		836.5 (20525)	848.3 (20643)	
LTE Band 5 (Cell): 3 MHz	825.5 (20415)		836.5 (20525)	847.5 (20635)	
LTE Band 5 (Cell): 5 MHz	826.5 (20425)		836.5 (20525)	846.5 (20625)	
LTE Band 5 (Cell): 10 MHz	829 (20450)		836.5 (20525)	844 (20600)	
LTE Band 66 (AWS): 1.4 MHz	1710.7 (131979)		1745 (132322)	1779.3 (132665)	
LTE Band 66 (AWS): 3 MHz	1711.5 (131987)		1745 (132322)	1778.5 (132657)	
LTE Band 66 (AWS): 5 MHz	1712.5 (131997)		1745 (132322)	1777.5 (132647)	
LTE Band 66 (AWS): 10 MHz	1715 (132022)		1745 (132322)	1775 (132622)	
LTE Band 66 (AWS): 15 MHz	1717.5 (132047)		1745 (132322)	1772.5 (132597)	
LTE Band 66 (AWS): 20 MHz	1720 (132072)		1745 (132322)	1770 (132572)	
LTE Band 4 (AWS): 1.4 MHz	1710.7 (19957)		1732.5 (20175)	1754.3 (20393)	
LTE Band 4 (AWS): 3 MHz	1711.5 (19965)		1732.5 (20175)	1753.5 (20385)	
LTE Band 4 (AWS): 5 MHz	1712.5 (19975)		1732.5 (20175)	1752.5 (20375)	
LTE Band 4 (AWS): 10 MHz	1715 (20000)		1732.5 (20175)	1750 (20350)	
LTE Band 4 (AWS): 15 MHz	1717.5 (20025)		1732.5 (20175)	1747.5 (20325)	
LTE Band 4 (AWS): 20 MHz	1720 (20050)		1732.5 (20175)	1745 (20300)	
LTE Band 25 (PCS): 1.4 MHz	1850.7 (26047)		1882.5 (26365)	1914.3 (26683)	
LTE Band 25 (PCS): 3 MHz	1851.5 (26055)		1882.5 (26365)	1913.5 (26675)	
LTE Band 25 (PCS): 5 MHz	1852.5 (26065)		1882.5 (26365)	1912.5 (26665)	
LTE Band 25 (PCS): 10 MHz	1855 (26090)		1882.5 (26365)	1910 (26640)	
LTE Band 25 (PCS): 15 MHz	1857.5 (26115)		1882.5 (26365)	1907.5 (26615)	
LTE Band 25 (PCS): 20 MHz	1860 (26140)		1882.5 (26365)	1905 (26590)	
LTE Band 2 (PCS): 1.4 MHz	1850.7 (18607)		1880 (18900)	1909.3 (19193)	
LTE Band 2 (PCS): 3 MHz	1851.5 (18615)		1880 (18900)	1908.5 (19185)	
LTE Band 2 (PCS): 5 MHz	1852.5 (18625)		1880 (18900)	1907.5 (19175)	
LTE Band 2 (PCS): 10 MHz	1855 (18650)		1880 (18900)	1905 (19150)	
LTE Band 2 (PCS): 15 MHz	1857.5 (18675)		1880 (18900)	1902.5 (19125)	
LTE Band 2 (PCS): 20 MHz	1860 (18700)		1880 (18900)	1900 (19100)	
LTE Band 30: 5 MHz	2307.5 (27685)		2310 (27710)	2312.5 (27735)	
LTE Band 30: 10 MHz	N/A		2310 (27710)	N/A	
LTE Band 7: 5 MHz	2502.5 (20775)		2535 (21100)	2567.5 (21425)	
LTE Band 7: 10 MHz	2505 (20800)		2535 (21100)	2565 (21400)	
LTE Band 7: 15 MHz	2507.5 (20825)		2535 (21100)	2562.5 (21375)	
LTE Band 7: 20 MHz	2510 (20850)		2535 (21100)	2560 (21350)	
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)
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 38: 5 MHz	2572.5 (37775)		2595 (38000)	2617.5 (38225)	
LTE Band 38: 10 MHz	2575 (37800)		2595 (38000)	2615 (38200)	
LTE Band 38: 15 MHz	2577.5 (37825)		2595 (38000)	2612.5 (38175)	
LTE Band 38: 20 MHz	2580 (37850)		2595 (38000)	2610 (38150)	
UE Category	DL UE Cat 20 (QPSK, 16QAM, 64QAM, 256QAM), UL UE Cat 18 (QPSK, 16QAM, 64QAM, 256QAM)				
Modulations Supported in UL	QPSK, 16QAM, 64QAM, 256QAM				
LTE MPR Permanently implemented per 3GPP TS 36.101 section 6.2.3~6.2.5? (manufacturer attestation to be provided)	YES				
A-MPR (Additional MPR) disabled for SAR Testing?	YES				
LTE Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations				
LTE Additional Information	This device does not support full CA features on 3GPP Release 16. It supports carrier aggregation, downlink MIMO, LAA features as shown in Section 9 and Appendix F. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 16 Features are not supported: Relay, HetNet, Enhanced MIMO, eICIC, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

NR Information					
Form Factor	Portable Handset				
Frequency Range of each LTE transmission band	NR Band n71 (665.5 - 695.5 MHz)				
	NR Band n5 (Cell) (826.5 - 846.5 MHz)				
	NR Band n66 (AWS) (1712.5 - 1777.5 MHz)				
	NR Band n2 (PCS) (1852.5 - 1907.5 MHz)				
	NR Band n41 (2506.02 - 2679.99 MHz)				
Channel Bandwidths	NR Band n71: 5 MHz, 10 MHz, 15 MHz, 20 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 n2 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n41: 20 MHz, 40 MHz, 50MHz, 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 (133100)		680.5 (136100)	695.5 (139100)	
NR Band n71: 10 MHz	668 (133600)		680.5 (136100)	693 (138600)	
NR Band n71: 15 MHz	670.5 (134100)		N/A	690.5 (138100)	
NR Band n71: 20 MHz	673 (134600)		680.5 (136100)	688 (137600)	
NR Band n5 (Cell): 5 MHz	826.5 (165300)		836.5 (167300)	846.5 (169300)	
NR Band n5 (Cell): 10 MHz	829 (165800)		N/A	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)	1734.1 (346820)	N/A	1755.8 (351160)	1777.5 (355500)
NR Band n66 (AWS): 10 MHz	1715 (343000)	1735 (347000)	N/A	1755 (351000)	1775 (355000)
NR Band n66 (AWS): 15 MHz	1717.5 (343500)	1735.8 (347160)	N/A	1754.1 (350820)	1772.5 (354500)
NR Band n66 (AWS): 20 MHz	1720 (344000)		1745 (349000)	1770 (354000)	
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	N/A		2592.99 (518598)	N/A	
NR Band n71/n5/n2/n66 SCS	15 kHZ				
NR Band n41 SCS	30 kHz				
Modulations Supported in UL	DFT-s-OFDM: QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM				
A-MPR (Additional MPR) disabled for SAR Testing?	YES				
EN-DC Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations				
LTE Anchor Bands for NR Band n71	LTE Band 2/7/66				
LTE Anchor Bands for NR Band n5	LTE Band 2/30/66				
LTE Anchor Bands for NR Band n66	LTE Band 5/12/13/48				
LTE Anchor Bands for NR Band n2	LTE Band 5/12/13				
LTE Anchor Bands for NR Band n41	LTE Band 2/25/41/66				

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:

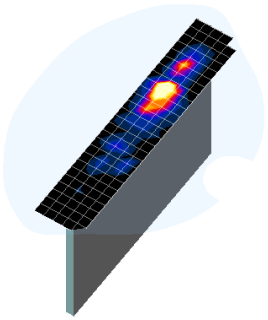


Figure 4-1
Sample SAR Area Scan

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 DEFINITION OF REFERENCE POINTS

5.1 EAR REFERENCE POINT

Figure 5-2 shows the front, back and side views of the SAM Twin Phantom. The point "M" is the reference point for the center of the mouth, "LE" is the left ear reference point (ERP), and "RE" is the right ERP. The ERP is 15mm posterior to the entrance to the ear canal (EEC) along the B-M line (Back-Mouth), as shown in Figure 5-1. The plane passing through the two ear canals and M is defined as the Reference Plane. The line N-F (Neck-Front), also called the Reference Pivoting Line, is not perpendicular to the reference plane (see Figure 5-1). Line B-M is perpendicular to the N-F line. Both N-F and B-M lines are marked on the external phantom shell to facilitate handset positioning [5].

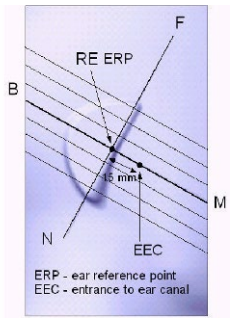


Figure 5-1
Close-Up Side view of ERP

5.2 HANDSET REFERENCE POINTS

Two imaginary lines on the handset were established: the vertical centerline and the horizontal line. The test device was placed in a normal operating position with the acoustic output located along the "vertical centerline" on the front of the device aligned to the "ear reference point" (See Figure 5-3). The acoustic output was than located at the same level as the center of the ear reference point. The test device was positioned so that the "vertical centerline" was bisecting the front surface of the handset at its top and bottom edges, positioning the "ear reference point" on the outer surface of the both the left and right head phantoms on the ear reference point.

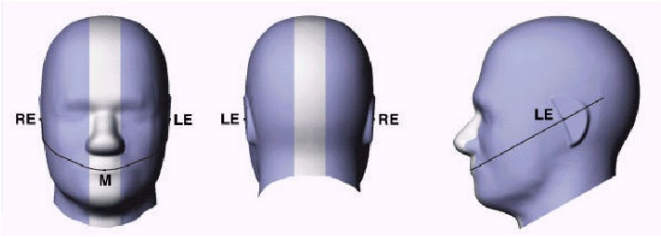


Figure 5-2
Front, back and side view of SAM Twin Phantom

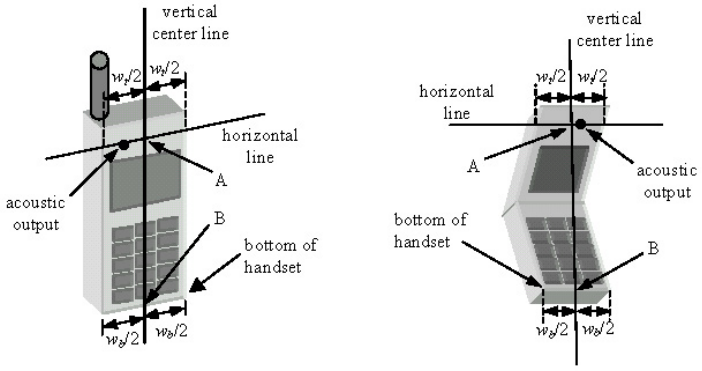


Figure 5-3
Handset Vertical Center & Horizontal Line Reference Points

6 TEST CONFIGURATION POSITIONS

6.1 Device Holder

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

6.2 Positioning for Cheek

1. The test device was positioned with the device close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 6-1), such that the plane defined by the vertical center line and the horizontal line of the phone is approximately parallel to the sagittal plane of the phantom.

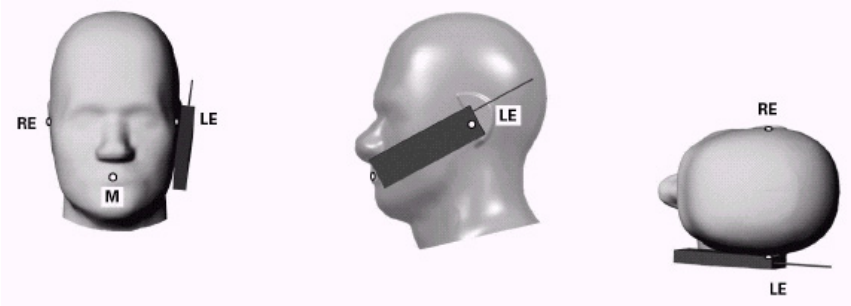


Figure 6-1 Front, Side and Top View of Cheek Position

2. The handset was translated towards the phantom along the line passing through RE & LE until the handset touches the pinna.
3. While maintaining the handset in this plane, the handset was rotated around the LE-RE line until the vertical centerline was in the reference plane.
4. The phone was then rotated around the vertical centerline until the phone (horizontal line) was symmetrical was respect to the line NF.
5. While maintaining the vertical centerline in the reference plane, keeping point A on the line passing through RE and LE, and maintaining the device contact with the ear, the device was rotated about the NF line until any point on the handset made contact with a phantom point below the ear (cheek) (See Figure 6-2).

6.3 Positioning for Ear / 15º Tilt

With the test device aligned in the “Cheek Position”:

1. While maintaining the orientation of the phone, the phone was retracted parallel to the reference plane far enough to enable a rotation of the phone by 15degrees.
2. The phone was then rotated around the horizontal line by 15 degrees.
3. While maintaining the orientation of the phone, the phone was moved parallel to the reference plane until any part of the handset touched the head. (In this position, point A was located on the line RE-LE). The tilted position is obtained when the contact is on the pinna. If the contact was at any location other than the pinna, the angle of the phone would then be reduced. In this situation, the tilted position was obtained when any part of the phone was in contact of the ear as well as a second part of the phone was in contact with the head (see Figure 6-2).

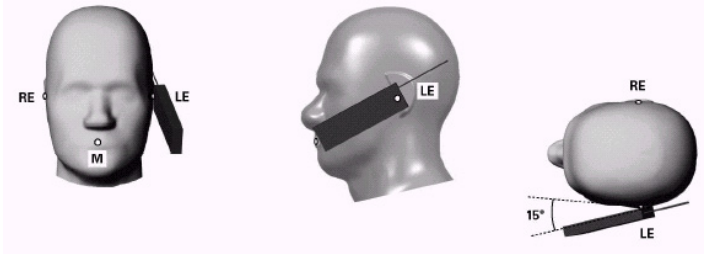


Figure 6-2 Front, Side and Top View of Ear/15º Tilt Position

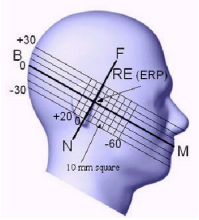


Figure 6-3
Side view w/ relevant markings

6.4 SAR Evaluations near the Mouth/Jaw Regions of the SAM Phantom

Antennas located near the bottom of a phone may require SAR measurements around the mouth and jaw regions of the SAM head phantom. This typically applies to clam-shell style phones that are generally longer in the unfolded normal use positions or to certain older style long rectangular phones. Per IEEE 1528-2013, a rotated SAM phantom is necessary to allow probe access to such regions. Both SAM heads of the TwinSAM-Chin20 are rotated 20 degrees around the NF line. Each head can be removed from the table for emptying and cleaning.

Under these circumstances, the following procedures apply, adopted from the FCC guidance on SAR handsets document FCC KDB Publication 648474 D04v01r03. The SAR required in these regions of SAM should be measured using a flat phantom. The phone should be positioned with a separation distance of 4 mm between the ear reference point (ERP) and the outer surface of the flat phantom shell. While maintaining this distance at the ERP location, the low (bottom) edge of the phone should be lowered from the phantom to establish the same separation distance between the peak SAR location identified by the truncated partial SAR distribution measured with the SAM phantom. The distance from the peak SAR location to the phone is determined by the straight line passing perpendicularly through the phantom surface. When it is not feasible to maintain 4 mm separation at the ERP while also establishing the required separation at the peak SAR location, the top edge of the phone will be allowed to touch the phantom with a separation < 4 mm at the ERP. The phone should not be tilted to the left or right while placed in this inclined position to the flat phantom.

6.5 Body-Worn Accessory Configurations

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 6-4). Per FCC KDB Publication 648474 D04v01r03, Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D01v06 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

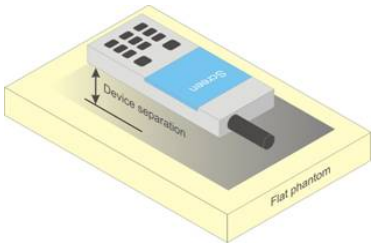


Figure 6-4
Sample Body-Worn Diagram

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not

contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented.
Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

6.6 Extremity Exposure Configurations

Devices that are designed or intended for use on extremities or mainly operated in extremity only exposure conditions; i.e., hands, wrists, feet and ankles, may require extremity SAR evaluation. When the device also operates in close proximity to the user's body, SAR compliance for the body is also required. The 1g body and 10g extremity SAR Exclusion Thresholds found in KDB Publication 447498 D01v06 should be applied to determine SAR test requirements.

Per KDB Publication 447498 D01v06, Cell phones (handsets) are not normally designed to be used on extremities or operated in extremity only exposure conditions. The maximum output power levels of handsets generally do not require extremity SAR testing to show compliance. Therefore, extremity SAR was not evaluated for this device.

6.7 Wireless Router Configurations

Some battery-operated handsets have the capability to transmit and receive user data through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06v02r01 where SAR test considerations for handsets (L x W ≥ 9 cm x 5 cm) are based on a composite test separation distance of 10 mm from the front, back and edges of the device containing transmitting antennas within 2.5 cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D01v06 procedures. The "Portable Hotspot" feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

6.8 Phablet Configurations

For smart phones with a display diagonal dimension > 150 mm or an overall diagonal dimension > 160 mm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that

support voice calls next to the ear, the phablets procedures outlined in KDB Publication 648474 D04v01r03 should be applied to evaluate SAR compliance. A device marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance. In addition to the normally required head and body-worn accessory SAR test procedures required for handsets, the UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna <=25 mm from that surface or edge, in direct contact with the phantom, for 10g SAR. The UMPC mini-tablet 1g SAR at 5 mm is not required. When hotspot mode applies, 10g SAR is required only for the surfaces and edges with hotspot mode 1g SAR > 1.2 W/kg.

6.9 Proximity Sensor Considerations

This device uses a power reduction mechanism to reduce output powers in certain use conditions when the device is used close the user's body.

When the device's antenna is within a certain distance of the user, the sensor activates and reduces the maximum allowed output power. However, the sensor is not active when the device is moved beyond the sensor triggering distance and the maximum output power is no longer limited. Therefore, additional evaluation is needed in the vicinity of the triggering distance to ensure SAR is compliant when the device is allowed to operate at a non-reduced output power level. FCC KDB Publication 616217 D04v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device at these additional test positions. Sensor triggering distance summary data is included in Appendix G.

The sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the sensor entirely covers the antennas.

7 RF EXPOSURE LIMITS

7.1 Uncontrolled Environment

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

7.2 Controlled Environment

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

Table 7-1
SAR Human Exposure Specified in ANSI/IEEE C95.1-1992 and Health Canada Safety Code 6

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

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

8 FCC MEASUREMENT PROCEDURES

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

8.1 Measured and Reported SAR

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

8.2 3G SAR Test Reduction Procedure

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

8.3 Procedures Used to Establish RF Signal for SAR

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

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

8.4 SAR Measurement Conditions for CDMA2000

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

8.4.1 Output Power Verification

See 3GPP2 C.S0011/TIA-98-E as recommended by FCC KDB Publication 941225 D01v03r01 “3G SAR Measurement Procedures.” Maximum output power is verified on the High, Middle and Low channels according to procedures in section 4.4.5.2 of 3GPP2 C.S0011/TIA-98-E. SO55 tests were measured with power control bits in the “All Up” condition.

1. If the mobile station (MS) supports Reverse TCH RC 1 and Forward TCH RC 1, set up a call using Fundamental Channel Test Mode 1 (RC=1/1) with 9600 bps data rate only.
2. Under RC1, C.S0011 Table 4.4.5.2-1, Table 8-1 parameters were applied.
3. If the MS supports the RC 3 Reverse FCH, RC3 Reverse SCH_0 and demodulation of RC 3,4, or 5, set up a call using Supplemental Channel Test Mode 3 (RC 3/3) with 9600 bps Fundamental Channel and 9600 bps SCH0 data rate.
4. Under RC3, C.S0011 Table 4.4.5.2-2, Table 8-2 was applied.

Table 8-1
Parameters for Max. Power for RC1

Parameter	Units	Value
$\hat{I}_{or}$	dBm/1.23 MHz	-104
$\frac{\text{Pilot } E_c}{I_{or}}$	dB	-7
$\frac{\text{Traffic } E_c}{I_{or}}$	dB	-7.4

Table 8-2
Parameters for Max. Power for RC3

Parameter	Units	Value
$\hat{I}_{or}$	dBm/1.23 MHz	-86
$\frac{\text{Pilot } E_c}{I_{or}}$	dB	-7
$\frac{\text{Traffic } E_c}{I_{or}}$	dB	-7.4

5. FCHs were configured at full rate for maximum SAR with “All Up” power control bits.

8.4.2 Head SAR Measurements

SAR for next to the ear head exposure is measured in RC3 with the handset configured to transmit at fullrate in SO55. The 3G SAR test reduction procedure is applied to RC1 with RC3 as the primary mode; otherwise, SAR is required for the channel with maximum measured output in RC1 using the head exposure configuration that results in the highest reported SAR in RC3.

Head SAR is additionally evaluated using EVDO Rev. A to support compliance for VoIP operations. See Section 8.4.5 for EVDO Rev. A configuration parameters.

8.4.3 Body-worn SAR Measurements

SAR for body-worn exposure configurations is measured in RC3 with the DUT configured to transmit at full rate on FCH with all other code channels disabled using TDSO / SO32. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCHn), with FCH only as the primary mode. Otherwise, SAR is required for multiple code channel configuration (FCH + SCHn), with FCH at full rate and SCH0 enabled at 9600 bps, using the highest reported SAR configuration for FCH only. When multiple code channels are enabled, the transmitter output can shift by more than 0.5 dB and may lead to higher SAR drifts and SCH dropouts.

The 3G SAR test reduction procedure is applied to body-worn accessory SAR in RC1 with RC3 as the primary mode. Otherwise, SAR is required for RC1, with SO55 and full rate, using the highest reported SAR configuration for body-worn accessory exposure in RC3.

8.4.4 Body-worn SAR Measurements for EVDO Devices

For handsets with EVDO capabilities, the 3G SAR test reduction procedure is applied to EVDO Rev. 0 with 1x RTT RC3 as the primary mode to determine body-worn accessory test requirements. Otherwise, body-worn accessory SAR is required for Rev. 0, at 153.6 kbps, using the highest reported SAR configuration for body-worn accessory exposure in RC3.

The 3G SAR test reduction procedure is applied to Rev. A, with Rev. 0 as the primary mode to determine body-worn accessory SAR test requirements. When SAR is not required for Rev. 0, the 3G SAR test reduction is applied with 1x RTT RC3 as the primary mode.

When SAR is required for EVDO Rev. A, SAR is measured with a Reverse Data Channel payload size of 4096 bits and a Termination Target of 16 slots defined for Subtype 2 Physical Layer configurations, using the highest reported SAR configuration for body-worn accessory exposure in Rev. 0 or 1x RTT RC3, as appropriate.

8.4.5 Body SAR Measurements for EVDO Hotspot

Hotspot Body SAR is measured using Subtype 0/1 Physical Layer configurations for Rev. 0. The 3G SAR test reduction procedure is applied to Rev. A, Subtype 2 Physical layer configuration, with Rev. 0 as the primary mode; otherwise, SAR is measured for Rev. A using the highest reported SAR configuration for body-worn accessory exposure in Rev. 0. The AT is tested with a Reverse Data Channel rate of 153.6 kbps in Subtype 0/1 Physical Layer configurations; and a Reverse Data Channel payload size of 4096 bits and Termination Target of 16 slots in Subtype 2 Physical Layer configurations.

For EVDO data devices that also support 1x RTT voice and/or data operations, the 3G SAR test reduction procedure is applied to 1x RTT RC3 and RC1 with EVDO Rev. 0 and Rev. A as the respective primary modes. Otherwise, the 'Body-Worn Accessory SAR' procedures in the '3GPP2 CDMA 2000 1x Handsets' section are applied.

8.4.6 CDMA2000 1x Advanced

This device additionally supports 1x Advanced. Conducted powers are measured using SO75 with RC8 on the uplink and RC11 on the downlink per FCC KDB Publication 941225 D01v03r01. Smart blanking is disabled for all measurements. The EUT is configured with forward power control Mode 000 and reverse power control at 400 bps. Conducted powers are measured on an Agilent 8960 Series 10 Wireless Communications Test Set, Model E5515C using the CDMA2000 1x Advanced application, Option E1962B-410.

The 3G SAR test reduction procedure is applied to the 1x-Advanced transmission mode with 1x RTT RC3 as the primary mode. When SAR measurement is required, the 1x-Advanced power measurement configurations are used. The1x Advanced SAR procedures are applied separately to head, body-worn accessory and other exposure conditions.

8.5 SAR Measurement Conditions for UMTS

8.5.1 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.

8.5.2 Head SAR Measurements

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the

primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.

8.5.3 Body SAR Measurements

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

8.5.4 SAR Measurements with Rel 5 HSDPA

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

8.5.5 SAR Measurements with Rel 6 HSUPA

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

When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing.

8.5.6 SAR Measurement Conditions for DC-HSDPA

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

8.6 SAR Measurement Conditions for LTE

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

8.6.1 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.

8.6.2 MPR

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

8.6.3 A-MPR

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

8.6.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r04:

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

8.6.5 TDD

LTE TDD testing is performed using the SAR test guidance provided in FCC KDB 941225 D05v02r04. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05v02r04. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211 Section 4.

8.6.6 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.

8.7 SAR Testing with 802.11 Transmitters

The normal network operating configurations of 802.11 transmitters are not suitable for SAR measurements. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01v02r02 for more details.

8.7.1 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters.

A periodic duty factor is required for current generation SAR systems to measure SAR. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR is scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

8.7.2 U-NII-1 and U-NII-2A

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, SAR measurement using OFDM SAR test procedures is not required for U-NII-1 unless the highest reported SAR for U-NII-2A is > 1.2 W/kg. When different maximum output powers are specified for the bands, SAR measurement for the U-NII band with the lower maximum output power is not required unless the highest reported SAR for the U-NII band with the higher maximum output power, adjusted by the ratio of lower to higher specified maximum output power for the two bands, is > 1.2 W/kg. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.7.3 U-NII-2C and U-NII-3

The frequency range covered by U-NII-2C and U-NII-3 is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification. Unless band gap channels are permanently disabled, SAR must be considered for these channels. Each band is tested independently according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

8.7.4 Initial Test Position Procedure

For exposure conditions with multiple test positions, such as handset operating next to the ear, devices with hotspot mode or UMPC mini-tablet, procedures for initial test position can be applied. Using the transmission mode determined by the DSSS procedure or initial test configuration, area scans are measured for all positions in an exposure condition. The test position with the highest extrapolated (peak) SAR is used as the initial test position. When reported SAR for the initial test position is ≤ 0.4 W/kg, no additional testing for the remaining test positions is required. Otherwise, SAR is evaluated at the subsequent highest peak SAR

positions until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.7.5 2.4 GHz SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either the fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.

2) When the reported SAR is > 0.8 W/kg, SAR is required for that position using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

2.4 GHz 802.11 g/n/ax OFDM are additionally evaluated for SAR if the highest reported SAR for 802.11b, adjusted by the ratio of the OFDM to DSSS specified maximum output power, is > 1.2 W/kg. When SAR is required for OFDM modes in 2.4 GHz band, the Initial Test Configuration Procedures should be followed. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.7.6 OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. Per April 2019 TCB Workshop guidance, 802.11ax was considered the highest order 802.11 mode. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

8.7.7 Initial Test Configuration Procedure

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

When the reported SAR is ≤ 0.8 W/kg, no additional measurements on other test channels are required. Otherwise, SAR is evaluated using the subsequent highest average RF output channel until the reported SAR result is ≤ 1.2 W/kg or all channels are measured. When there are multiple untested channels having the same subsequent highest average RF output power, the channel with higher frequency from the lowest 802.11 mode is considered for SAR measurements (See Section 8.7.6). When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.7.8 Subsequent Test Configuration Procedures

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

8.7.9 MIMO SAR considerations

Per KDB Publication 248227 D01v02r02, the simultaneous SAR provisions in KDB Publication 447498 D01v06 should be applied to determine simultaneous transmission SAR test exclusion for WIFI MIMO. If the sum of 1g single transmission chain SAR measurements is <1.6 W/kg, no additional SAR measurements for MIMO are required. Alternatively, SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

9 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 (P_{limit}, maximum tune up output power P_{max}).

9.1 CDMA Conducted Powers

Table 9-1
Measured P_{max}

Band	Channel	Rule Part	Frequency	SO55 [dBm]	SO55 [dBm]	SO75 [dBm]	TDSO SO32 [dBm]	TDSO SO32 [dBm]	1x EvDO Rev. 0 [dBm]	1x EvDO Rev. A [dBm]
	F-RC		MHz	RC1	RC3	RC11	FCH+SCH	FCH	(RTAP)	(RETAP)
Cellular	564	90S	820.1	24.54	24.53	24.54	24.53	24.54	24.61	24.58
Cellular	1013	22H	824.7	24.54	24.53	24.56	24.52	24.53	24.59	24.59
	384	22H	836.52	24.47	24.47	24.53	24.47	24.46	24.52	24.54
	777	22H	848.31	24.37	24.34	24.38	24.35	24.34	24.40	24.43
PCS	25	24E	1851.25	23.11	23.12	23.15	23.15	23.14	23.23	23.18
	600	24E	1880	23.03	23.02	23.02	23.03	23.06	23.11	23.09
	1175	24E	1908.75	23.00	23.01	23.08	23.01	23.00	23.09	23.07

Table 9-2
Measured P_{limit} for DSI = 3 (Hotspot Mode)

Band	Channel	Rule Part	Frequency	TDSO SO32 [dBm]	TDSO SO32 [dBm]	1x EvDO Rev. 0 [dBm]	1x EvDO Rev. A [dBm]
	F-RC		MHz	FCH+SCH	FCH	(RTAP)	(RETAP)
PCS	25	24E	1851.25	18.17	18.23	18.31	18.30
	600	24E	1880	18.17	18.16	18.34	18.25
	1175	24E	1908.75	18.17	18.16	18.26	18.24

Table 9-3
Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active)

Band	Channel	Rule Part	Frequency	SO55 [dBm]	SO55 [dBm]	SO75 [dBm]	TDSO SO32 [dBm]	TDSO SO32 [dBm]	1x EvDO Rev. 0 [dBm]	1x EvDO Rev. A [dBm]
	F-RC		MHz	RC1	RC3	RC11	FCH+SCH	FCH	(RTAP)	(RETAP)
PCS	25	24E	1851.25	19.56	19.54	19.60	19.56	19.57	19.73	19.41
	600	24E	1880	19.46	19.48	19.55	19.46	19.48	19.65	19.40
	1175	24E	1908.75	19.46	19.44	19.52	19.47	19.45	19.61	19.35

Note: RC1 is only applicable for IS-95 compatibility. For FCC Rule Part 90S, Per FCC KDB Publication 447498 D01v06 4.1.g), only one channel is required since the device operates within the transmission range of 817.90 – 823.10 MHz.

Figure 9-1
Power Measurement Setup

9.2 GSM Conducted Powers

Table 9-4
Measured P_{max}

Maximum Burst-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	31.91	31.79	30.72	**28.47**	26.62	25.93	24.53	22.26	21.14
	190	31.54	31.69	30.74	**28.63**	26.79	26.22	24.50	22.32	21.22
	251	31.77	31.73	30.53	**28.20**	26.53	25.70	24.29	22.09	21.11
GSM 1900	512	28.65	28.79	27.13	**24.91**	23.09	24.41	22.36	20.28	19.36
	661	29.02	29.06	27.42	**25.24**	23.27	24.62	22.73	20.65	19.58
	810	28.71	28.69	27.24	**24.90**	22.94	24.45	22.59	20.41	19.11

Calculated Maximum Frame-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	22.88	22.76	24.70	**24.21**	23.61	16.90	18.51	18.00	18.13
	190	22.51	22.66	24.72	**24.37**	23.78	17.19	18.48	18.06	18.21
	251	22.74	22.70	24.51	**23.94**	23.52	16.67	18.27	17.83	18.10
GSM 1900	512	19.62	19.76	21.11	**20.65**	20.08	15.38	16.34	16.02	16.35
	661	19.99	20.03	21.40	**20.98**	20.26	15.59	16.71	16.39	16.57
	810	19.68	19.66	21.22	**20.64**	19.93	15.42	16.57	16.15	16.10

GSM 850	**Frame Avg.Targets:**	22.80	22.80	24.81	**24.57**	23.82	17.30	18.31	18.07	18.32
GSM 1900		19.80	19.80	21.31	**21.07**	20.32	16.30	16.81	16.57	16.82

Table 9-5
Measured P_{limit} for DSI = 3 (Hotspot mode)

Maximum Burst-Averaged Output Power									
		GPRS/EDGE Data (GMSK)				*EDGE Data (8-PSK)*			
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 1900	512	28.38	25.21	23.49	**22.70**	24.41	22.36	20.28	19.36
	661	29.00	25.51	23.74	**22.50**	24.62	22.73	20.65	19.58
	810	28.45	25.25	23.51	**22.49**	24.45	22.59	20.41	19.11

Calculated Maximum Frame-Averaged Output Power									
		GPRS/EDGE Data (GMSK)				*EDGE Data (8-PSK)*			
Band	**Channel**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 1900	512	19.18	19.02	19.06	**19.52**	15.38	16.34	16.02	16.35
	661	19.80	19.32	19.31	**19.32**	15.59	16.71	16.39	16.57
	810	19.25	19.06	19.08	**19.31**	15.42	16.57	16.15	16.10

GSM 1900	**Frame Avg.Targets:**	18.80	18.81	18.77	**18.82**	16.47	16.98	16.74	16.99

Table 9-6
Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active)

Maximum Burst-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 1900	512	28.88	28.38	25.21	23.49	**22.70**	24.41	22.36	20.28	19.36
	661	28.73	29.00	25.51	23.74	**22.50**	24.62	22.73	20.65	19.58
	810	28.91	28.45	25.25	23.51	**22.49**	24.45	22.59	20.41	19.11

Calculated Maximum Frame-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 1900	512	19.68	19.18	19.02	19.06	**19.52**	15.38	16.34	16.02	16.35
	661	19.53	19.80	19.32	19.31	**19.32**	15.59	16.71	16.39	16.57
	810	19.71	19.25	19.06	19.08	**19.31**	15.42	16.57	16.15	16.10
GSM 1900	**Frame Avg.Targets:**	18.80	18.80	18.81	18.77	**18.82**	16.47	16.98	16.74	16.99

Note:

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

GSM Class: B
GPRS Multislot class: 33 (Max 4 Tx uplink slots)
EDGE Multislot class: 33 (Max 4 Tx uplink slots)
DTM Multislot Class: N/A

Figure 9-2
Power Measurement Setup

9.3 UMTS Conducted Powers

Table 9-7
Measured P_{max}

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	23.77	23.80	23.69	23.29	23.39	23.20	23.22	23.24	23.19	-
99		12.2 kbps AMR	23.75	23.73	23.62	23.30	23.34	23.21	23.24	23.25	23.18	-
6	HSDPA	Subtest 1	22.97	22.85	22.80	22.25	22.45	22.27	22.32	22.32	22.35	0
6		Subtest 2	22.94	22.85	22.79	22.24	22.45	22.27	22.34	22.32	22.34	0
6		Subtest 3	22.41	22.35	22.30	21.75	21.94	21.76	21.65	21.63	21.70	0.5
6		Subtest 4	22.41	22.40	22.27	21.80	21.80	21.70	21.64	21.76	21.70	0.5
6	HSUPA	Subtest 1	22.86	22.82	22.76	22.25	22.38	22.20	22.29	22.29	22.22	0
6		Subtest 2	20.88	20.85	20.75	20.25	20.38	20.20	20.25	20.23	20.22	2
6		Subtest 3	21.90	21.86	21.75	21.24	21.38	21.18	21.24	21.24	21.21	1
6		Subtest 4	20.88	20.85	20.73	20.25	20.38	20.20	20.26	20.25	20.22	2
6		Subtest 5	22.90	22.85	22.74	22.29	22.46	22.25	22.34	22.31	22.26	0
8	DC-HSDPA	Subtest 1	22.90	22.88	22.72	22.37	22.48	22.24	22.38	22.36	22.30	0
8		Subtest 2	22.91	22.85	22.75	22.38	22.46	22.24	22.36	22.36	22.30	0
8		Subtest 3	22.43	22.40	22.24	21.84	21.97	21.80	21.85	21.86	21.78	0.5
8		Subtest 4	22.42	22.41	22.28	21.83	21.90	21.80	21.83	21.90	21.77	0.5

Table 9-8
Measured P_{limit} for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active)

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	19.88	19.82	19.85	18.58	18.60	18.53	-
99		12.2 kbps AMR	19.97	19.90	19.81	18.58	18.58	18.52	-
6	HSDPA	Subtest 1	18.90	18.96	18.95	17.61	17.62	17.58	0
6		Subtest 2	18.86	18.95	18.94	17.62	17.65	17.59	0
6		Subtest 3	18.36	18.45	18.43	17.07	17.10	17.12	0.5
6		Subtest 4	18.38	18.44	18.42	17.13	17.09	17.11	0.5
6	HSUPA	Subtest 1	18.83	18.95	18.93	17.62	17.63	17.67	0
6		Subtest 2	16.85	16.93	16.93	15.60	15.61	15.59	2
6		Subtest 3	17.81	17.94	17.90	16.62	16.58	16.58	1
6		Subtest 4	16.83	16.93	16.92	15.58	15.61	15.55	2
6		Subtest 5	18.83	18.93	18.94	17.63	17.64	17.58	0
8	DC-HSDPA	Subtest 1	18.78	18.72	18.73	17.38	17.38	17.26	0
8		Subtest 2	18.77	18.80	18.72	17.43	17.37	17.29	0
8		Subtest 3	18.21	18.21	18.19	16.88	16.91	16.84	0.5
8		Subtest 4	18.20	18.26	18.18	16.91	16.94	16.83	0.5

DC-HSDPA considerations

- 3GPP Specification 34.121-1 Release 8 Ver 8.10.0 was used for DC-HSDPA guidance
- H-Set 12 (QPSK) was confirmed to be used during DC-HSDPA measurements
- The DUT supports UE category 24 for HSDPA

It is expected by the manufacturer that MPR for some HSPA subtests may be up to 2 dB more than specified by 3GPP, but also as low as 0 dB according to the chipset implementation in this model.

Figure 9-3
Power Measurement Setup

9.4 LTE Conducted Powers

9.4.1 LTE Band 71

Table 9-9
LTE Band 71 Measured P_{max} for all DSI - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.86**	0	0
	1	50	24.73		0
	1	99	24.63		0
	50	0	**23.88**	0-1	1
	50	25	23.86		1
	50	50	23.79		1
	100	0	23.79		1
16QAM	1	0	24.41	0-1	1
	1	50	24.06		1
	1	99	24.00		1
	50	0	22.88	0-2	2
	50	25	22.87		2
	50	50	22.76		2
	100	0	22.80		2
64QAM	1	0	22.72	0-2	2
	1	50	23.03		2
	1	99	22.94		2
	50	0	22.02	0-3	3
	50	25	21.93		3
	50	50	21.77		3
	100	0	21.84		3
256QAM	1	0	19.76	0-5	5
	1	50	20.02		5
	1	99	19.76		5
	50	0	19.78		5
	50	25	19.88		5
	50	50	19.76		5
	100	0	19.83		5

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 9-10
LTE Band 71 Measured P_{max} for all DSI - 15 MHz Bandwidth

LTE Band 71 15 MHz Bandwidth					
Modulation	**RB Size**	**RB Offset**	**Mid Channel** **133297** **(680.5 MHz)** **Conducted Power [dBm]**	**MPR Allowed per 3GPP [dB]**	**MPR [dB]**
QPSK	1	0	24.81	0	0
	1	36	24.74		0
	1	74	24.68		0
	36	0	23.91	0-1	1
	36	18	23.88		1
	36	37	23.87		1
	75	0	23.84		1
16QAM	1	0	24.35	0-1	1
	1	36	24.03		1
	1	74	23.91		1
	36	0	22.92	0-2	2
	36	18	22.91		2
	36	37	22.83		2
	75	0	22.83		2
64QAM	1	0	22.96	0-2	2
	1	36	23.02		2
	1	74	22.95		2
	36	0	21.95	0-3	3
	36	18	21.94		3
	36	37	21.85		3
	75	0	21.87		3
256QAM	1	0	19.78	0-5	5
	1	36	19.98		5
	1	74	19.73		5
	36	0	19.81		5
	36	18	19.94		5
	36	37	19.88		5
	75	0	19.86		5

Note: LTE Band 71 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 9-11
LTE Band 71 Measured P_{max} for all DSI - 10 MHz Bandwidth

LTE Band 71 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 133172 (668.0 MHz)	Mid Channel 133297 (680.5 MHz)	High Channel 133422 (693.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.84	24.59	24.56	0	0
	1	25	24.84	24.61	24.36		0
	1	49	24.68	24.52	24.37		0
	25	0	23.85	23.62	23.49	0-1	1
	25	12	23.91	23.66	23.56		1
	25	25	23.77	23.59	23.47		1
	50	0	23.81	23.59	23.45		1
16QAM	1	0	24.34	24.18	23.95	0-1	1
	1	25	24.19	23.94	23.89		1
	1	49	24.14	23.90	23.97		1
	25	0	22.94	22.67	22.43	0-2	2
	25	12	22.89	22.63	22.59		2
	25	25	22.72	22.61	22.43		2
	50	0	22.68	22.60	22.47		2
64QAM	1	0	22.48	22.88	22.78	0-2	2
	1	25	22.88	22.68	22.59		2
	1	49	22.68	22.74	22.50		2
	25	0	21.71	21.62	21.53	0-3	3
	25	12	21.91	21.65	21.67		3
	25	25	21.70	21.60	21.45		3
	50	0	21.66	21.63	21.53		3
256QAM	1	0	19.87	19.59	19.47	0-5	5
	1	25	19.82	19.68	19.57		5
	1	49	19.67	19.63	19.44		5
	25	0	19.81	19.60	19.45		5
	25	12	19.82	19.67	19.61		5
	25	25	19.77	19.54	19.56		5
	50	0	19.81	19.61	19.57		5

Table 9-12
LTE Band 71 Measured P_{max} for all DSI - 5 MHz Bandwidth

LTE Band 71 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 133147 (665.5 MHz)	Mid Channel 133297 (680.5 MHz)	High Channel 133447 (695.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.86	24.42	24.32	0	0
	1	12	24.91	24.57	24.44		0
	1	24	24.77	24.55	24.37		0
	12	0	23.92	23.59	23.51	0-1	1
	12	6	23.93	23.72	23.53		1
	12	13	23.92	23.63	23.57		1
	25	0	23.92	23.65	23.48		1
16QAM	1	0	24.27	23.83	23.74	0-1	1
	1	12	24.24	23.93	23.88		1
	1	24	24.17	23.88	23.80		1
	12	0	22.95	22.62	22.54	0-2	2
	12	6	22.98	22.69	22.61		2
	12	13	22.93	22.71	22.58		2
	25	0	22.88	22.67	22.51		2
64QAM	1	0	22.38	22.75	22.60	0-2	2
	1	12	22.89	22.74	22.73		2
	1	24	23.01	22.73	22.39		2
	12	0	21.44	21.64	21.53	0-3	3
	12	6	21.75	21.69	21.56		3
	12	13	21.84	21.72	21.61		3
	25	0	21.59	21.64	21.57		3
256QAM	1	0	19.94	19.68	19.57	0-5	5
	1	12	19.96	19.76	19.70		5
	1	24	19.96	19.82	19.67		5
	12	0	19.89	19.64	19.52		5
	12	6	19.90	19.72	19.54		5
	12	13	19.83	19.70	19.56		5
	25	0	19.84	19.70	19.55		5

9.4.2 LTE Band 12

Table 9-13
LTE Band 12 Measured P_{max} for all DSI - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.92**	0	0
	1	25	24.81		0
	1	49	24.82		0
	25	0	23.77	0-1	1
	25	12	**23.82**		1
	25	25	23.79		1
	50	0	23.73		1
16QAM	1	0	24.45	0-1	1
	1	25	24.42		1
	1	49	24.41		1
	25	0	22.79	0-2	2
	25	12	22.85		2
	25	25	22.83		2
	50	0	22.72		2
64QAM	1	0	23.38	0-2	2
	1	25	23.41		2
	1	49	23.37		2
	25	0	21.84	0-3	3
	25	12	21.88		3
	25	25	21.84		3
	50	0	21.79		3
256QAM	1	0	20.32	0-5	5
	1	25	20.31		5
	1	49	20.39		5
	25	0	19.87		5
	25	12	19.93		5
	25	25	19.89		5
	50	0	19.79		5

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 9-14
LTE Band 12 Measured P_{max} for all DSI - 5 MHz Bandwidth

LTE Band 12 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 23035 (701.5 MHz)	Mid Channel 23095 (707.5 MHz)	High Channel 23155 (713.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.91	24.81	24.76	0	0
	1	12	24.91	24.78	24.75		0
	1	24	24.88	24.76	24.77		0
	12	0	24.01	23.88	23.88	0-1	1
	12	6	24.05	23.89	23.83		1
	12	13	24.00	23.86	23.87		1
	25	0	24.01	23.81	23.83		1
16QAM	1	0	24.22	24.10	24.17	0-1	1
	1	12	24.28	24.13	24.21		1
	1	24	24.22	24.10	24.11		1
	12	0	23.12	22.93	22.91	0-2	2
	12	6	23.14	22.94	22.93		2
	12	13	23.01	22.98	22.97		2
	25	0	23.00	22.91	22.91		2
64QAM	1	0	23.14	23.09	23.09	0-2	2
	1	12	23.15	23.08	23.07		2
	1	24	23.18	23.04	23.06		2
	12	0	22.08	21.92	21.92	0-3	3
	12	6	22.06	21.94	21.91		3
	12	13	21.97	21.94	21.89		3
	25	0	22.03	21.89	21.84		3
256QAM	1	0	20.06	19.99	19.94	0-5	5
	1	12	20.11	20.04	20.01		5
	1	24	20.05	19.95	19.91		5
	12	0	20.03	19.89	19.83		5
	12	6	20.04	19.91	19.86		5
	12	13	19.94	19.90	19.84		5
	25	0	19.97	19.88	19.82		5

Table 9-15
LTE Band 12 Measured P_{max} for all DSI - 3 MHz Bandwidth

LTE Band 12 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 23025 (700.5 MHz)	Mid Channel 23095 (707.5 MHz)	High Channel 23165 (714.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.90	24.83	24.79	0	0
	1	7	24.77	24.79	24.83		0
	1	14	24.86	24.82	24.74		0
	8	0	24.02	23.86	23.81	0-1	1
	8	4	23.98	23.84	23.79		1
	8	7	23.93	23.91	23.88		1
	15	0	24.01	23.86	23.81		1
16QAM	1	0	24.27	24.17	24.11	0-1	1
	1	7	24.22	24.17	24.18		1
	1	14	24.26	24.14	24.21		1
	8	0	23.16	22.99	22.91	0-2	2
	8	4	23.08	22.98	22.96		2
	8	7	23.04	22.97	22.94		2
	15	0	23.03	22.90	22.82		2
64QAM	1	0	23.23	23.11	23.07	0-2	2
	1	7	23.19	23.07	23.06		2
	1	14	23.16	23.08	23.05		2
	8	0	22.05	21.94	21.84	0-3	3
	8	4	22.09	21.91	21.89		3
	8	7	22.06	21.92	21.96		3
	15	0	22.04	21.93	21.86		3
256QAM	1	0	20.09	19.94	19.94	0-5	5
	1	7	20.11	20.04	19.97		5
	1	14	20.06	19.97	19.91		5
	8	0	20.04	19.91	19.88		5
	8	4	20.09	19.90	19.87		5
	8	7	20.02	19.91	19.97		5
	15	0	20.08	19.87	19.83		5

Table 9-16
LTE Band 12 Measured P_{max} for all DSI -1.4 MHz Bandwidth

LTE Band 12 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 23017 (699.7 MHz)	Mid Channel 23095 (707.5 MHz)	High Channel 23173 (715.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.79	24.71	24.70	0	0
	1	2	24.90	24.76	24.74		0
	1	5	24.82	24.77	24.71		0
	3	0	24.88	24.72	24.71		0
	3	2	24.91	24.71	24.69		0
	3	3	24.82	24.79	24.65		0
	6	0	23.91	23.78	23.78	0-1	1
16QAM	1	0	24.21	24.07	24.02	0-1	1
	1	2	24.27	24.14	24.17		1
	1	5	24.15	24.12	24.09		1
	3	0	24.06	23.93	23.82		1
	3	2	24.07	23.90	23.94		1
	3	3	24.05	23.92	23.82		1
	6	0	22.98	22.88	22.85	0-2	2
64QAM	1	0	23.08	23.02	22.97	0-2	2
	1	2	23.18	23.04	23.03		2
	1	5	23.11	23.06	22.94		2
	3	0	23.04	22.89	22.85		2
	3	2	23.08	22.93	22.89		2
	3	3	23.01	22.92	22.87		2
	6	0	21.94	21.87	21.81	0-3	3
256QAM	1	0	19.96	19.88	19.84	0-5	5
	1	2	20.11	19.95	19.94		5
	1	5	20.00	19.92	19.86		5
	3	0	20.04	19.87	19.84		5
	3	2	20.07	19.91	19.96		5
	3	3	20.02	19.96	19.84		5
	6	0	19.96	19.76	19.79		5

9.4.3 LTE Band 13

Table 9-17
LTE Band 13 Measured P_{max} for all DSI - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.99**	0	0
	1	25	24.98		0
	1	49	24.93		0
	25	0	**23.97**	0-1	1
	25	12	23.96		1
	25	25	23.94		1
	50	0	23.95		1
16QAM	1	0	24.34	0-1	1
	1	25	24.66		1
	1	49	24.53		1
	25	0	22.96	0-2	2
	25	12	22.98		2
	25	25	22.97		2
	50	0	22.95		2
64QAM	1	0	23.10	0-2	2
	1	25	23.31		2
	1	49	23.27		2
	25	0	22.04	0-3	3
	25	12	22.11		3
	25	25	22.06		3
	50	0	22.01		3
256QAM	1	0	20.31	0-5	5
	1	25	20.53		5
	1	49	20.57		5
	25	0	20.00		5
	25	12	20.17		5
	25	25	20.06		5
	50	0	20.03		5

Table 9-18
LTE Band 13 Measured P_{max} for all DSI - 5 MHz Bandwidth

LTE Band 13 5 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.90	0	0
	1	12	24.84		0
	1	24	24.91		0
	12	0	23.98	0-1	1
	12	6	24.05		1
	12	13	24.04		1
	25	0	24.01		1
16QAM	1	0	24.31	0-1	1
	1	12	24.35		1
	1	24	24.31		1
	12	0	23.01	0-2	2
	12	6	23.09		2
	12	13	23.07		2
	25	0	22.99		2
64QAM	1	0	23.01	0-2	2
	1	12	23.14		2
	1	24	23.22		2
	12	0	21.87	0-3	3
	12	6	21.95		3
	12	13	21.92		3
	25	0	21.98		3
256QAM	1	0	20.04	0-5	5
	1	12	20.25		5
	1	24	20.33		5
	12	0	19.97		5
	12	6	20.04		5
	12	13	20.02		5
	25	0	20.04		5

Note: LTE Band 13 at 5 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.

9.4.4 LTE Band 14

Table 9-19
LTE Band 14 Measured P_{max} for all DSI - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.78**	0	0
	1	25	24.62		0
	1	49	24.50		0
	25	0	**23.64**	0-1	1
	25	12	23.63		1
	25	25	23.49		1
	50	0	23.56		1
16QAM	1	0	24.12	0-1	1
	1	25	24.01		1
	1	49	23.96		1
	25	0	22.65	0-2	2
	25	12	22.61		2
	25	25	22.54		2
	50	0	22.53		2
64QAM	1	0	22.97	0-2	2
	1	25	22.84		2
	1	49	22.73		2
	25	0	21.64	0-3	3
	25	12	21.72		3
	25	25	21.54		3
	50	0	21.60		3
256QAM	1	0	19.51	0-5	5
	1	25	19.86		5
	1	49	19.51		5
	25	0	19.69		5
	25	12	19.66		5
	25	25	19.59		5
	50	0	19.60		5

Table 9-20
LTE Band 14 Measured P_{max} for all DSI - 5 MHz Bandwidth

LTE Band 14 5 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.62	0	0
	1	12	24.63		0
	1	24	24.50		0
	12	0	23.75	0-1	1
	12	6	23.76		1
	12	13	23.65		1
	25	0	23.69		1
16QAM	1	0	23.99	0-1	1
	1	12	24.17		1
	1	24	23.84		1
	12	0	22.84	0-2	2
	12	6	22.82		2
	12	13	22.70		2
	25	0	22.65		2
64QAM	1	0	22.89	0-2	2
	1	12	22.95		2
	1	24	22.74		2
	12	0	21.84	0-3	3
	12	6	21.80		3
	12	13	21.65		3
	25	0	21.71		3
256QAM	1	0	19.84	0-5	5
	1	12	19.83		5
	1	24	19.64		5
	12	0	19.76		5
	12	6	19.72		5
	12	13	19.62		5
	25	0	19.71		5

Note: LTE Band 14 at 5 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.

9.4.5 LTE Band 26 (Cell)

Table 9-21
LTE Band 26 (Cell) Measured P_{max} for all DSI - 15 MHz Bandwidth

LTE Band 26 (Cell) 15 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 26865 (831.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.69	0	0
	1	36	**24.72**		0
	1	74	24.71		0
	36	0	23.79	0-1	1
	36	18	23.86		1
	36	37	**23.89**		1
	75	0	23.82		1
16QAM	1	0	24.53	0-1	1
	1	36	24.57		1
	1	74	24.51		1
	36	0	22.87	0-2	2
	36	18	22.92		2
	36	37	22.92		2
	75	0	22.81		2
64QAM	1	0	23.29	0-2	2
	1	36	23.33		2
	1	74	23.29		2
	36	0	21.89	0-3	3
	36	18	21.99		3
	36	37	21.96		3
	75	0	21.83		3
256QAM	1	0	20.20	0-5	5
	1	36	20.50		5
	1	74	20.34		5
	36	0	19.84		5
	36	18	19.93		5
	36	37	19.94		5
	75	0	19.82		5

Note: LTE Band 26 (Cell) 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 9-22
LTE Band 26 (Cell) Measured P_{max} for all DSI - 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	24.52	24.63	24.62	0	0
	1	25	24.51	24.67	24.61		0
	1	49	24.65	24.66	24.58		0
	25	0	23.51	23.62	23.56	0-1	1
	25	12	23.74	23.77	23.74		1
	25	25	23.59	23.74	23.68		1
	50	0	23.64	23.66	23.57		1
16QAM	1	0	24.00	24.12	24.05	0-1	1
	1	25	24.13	24.13	24.04		1
	1	49	24.05	24.13	23.89		1
	25	0	22.49	22.61	22.59	0-2	2
	25	12	22.65	22.74	22.75		2
	25	25	22.60	22.71	22.68		2
	50	0	22.61	22.58	22.57		2
64QAM	1	0	22.83	22.94	22.91	0-2	2
	1	25	22.96	22.90	22.75		2
	1	49	22.92	22.91	22.75		2
	25	0	21.54	21.71	21.61	0-3	3
	25	12	21.75	21.78	21.78		3
	25	25	21.67	21.74	21.66		3
	50	0	21.64	21.65	21.57		3
256QAM	1	0	19.40	19.42	19.57	0-5	5
	1	25	19.63	19.90	19.73		5
	1	49	19.54	19.57	19.67		5
	25	0	19.53	19.63	19.56		5
	25	12	19.70	19.73	19.68		5
	25	25	19.65	19.69	19.65		5
	50	0	19.66	19.65	19.62		5

Table 9-23
LTE Band 26 (Cell) Measured P_{max} for all DSI - 5 MHz Bandwidth

LTE Band 26 (Cell) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26715 (816.5 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 27015 (846.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.43	24.63	24.58	0	0
	1	12	24.57	24.68	24.62		0
	1	24	24.56	24.67	24.65		0
	12	0	23.57	23.73	23.61	0-1	1
	12	6	23.74	23.75	23.76		1
	12	13	23.68	23.77	23.65		1
	25	0	23.64	23.75	23.61		1
16QAM	1	0	23.84	24.07	23.98	0-1	1
	1	12	23.87	23.97	24.03		1
	1	24	23.89	24.06	24.08		1
	12	0	22.68	22.78	22.67	0-2	2
	12	6	22.76	22.85	22.81		2
	12	13	22.74	22.79	22.71		2
	25	0	22.71	22.73	22.68		2
64QAM	1	0	22.80	22.94	22.87	0-2	2
	1	12	22.84	22.98	22.81		2
	1	24	22.87	23.01	22.75		2
	12	0	21.67	21.80	21.71	0-3	3
	12	6	21.77	21.84	21.74		3
	12	13	21.71	21.85	21.70		3
	25	0	21.70	21.71	21.70		3
256QAM	1	0	19.72	19.73	19.66	0-5	5
	1	12	19.74	19.87	19.78		5
	1	24	19.81	19.85	19.81		5
	12	0	19.58	19.74	19.65		5
	12	6	19.74	19.77	19.74		5
	12	13	19.70	19.74	19.71		5
	25	0	19.64	19.66	19.60		5

Table 9-24
LTE Band 26 (Cell) Measured P_{max} for all DSI - 3 MHz Bandwidth

LTE Band 26 (Cell) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26705 (815.5 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 27025 (847.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.52	24.70	24.61	0	0
	1	7	24.69	24.68	24.67		0
	1	14	24.61	24.66	24.63		0
	8	0	23.61	23.72	23.68	0-1	1
	8	4	23.71	23.84	23.72		1
	8	7	23.62	23.75	23.71		1
	15	0	23.69	23.71	23.67		1
16QAM	1	0	23.94	24.01	23.98	0-1	1
	1	7	23.94	24.02	24.08		1
	1	14	23.97	24.05	24.01		1
	8	0	22.70	22.78	22.72	0-2	2
	8	4	22.77	22.91	22.82		2
	8	7	22.74	22.85	22.79		2
	15	0	22.72	22.73	22.71		2
64QAM	1	0	22.84	22.92	22.82	0-2	2
	1	7	22.83	23.02	22.78		2
	1	14	22.88	23.00	22.67		2
	8	0	21.71	21.75	21.72	0-3	3
	8	4	21.78	21.89	21.81		3
	8	7	21.76	21.78	21.69		3
	15	0	21.70	21.74	21.74		3
256QAM	1	0	19.68	19.81	19.75	0-5	5
	1	7	19.78	19.88	19.64		5
	1	14	19.76	19.83	19.67		5
	8	0	19.64	19.76	19.72		5
	8	4	19.74	19.80	19.76		5
	8	7	19.67	19.81	19.69		5
	15	0	19.76	19.75	19.66		5

Table 9-25
LTE Band 26 (Cell) Measured P_{max} for all DSI -1.4 MHz Bandwidth

LTE Band 26 (Cell) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26697 (814.7 MHz)	Mid Channel 26865 (831.5 MHz)	High Channel 27033 (848.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.43	24.55	24.53	0	0
	1	2	24.58	24.68	24.57		0
	1	5	24.51	24.59	24.49		0
	3	0	24.47	24.51	24.54		0
	3	2	24.54	24.63	24.49		0
	3	3	24.53	24.56	24.46		0
	6	0	23.62	23.64	23.59	0-1	1
16QAM	1	0	23.75	23.89	24.01	0-1	1
	1	2	23.76	23.94	24.07		1
	1	5	23.77	23.87	24.11		1
	3	0	23.74	23.75	23.67		1
	3	2	23.71	23.89	23.76		1
	3	3	23.71	23.85	23.67		1
	6	0	22.64	22.73	22.67	0-2	2
64QAM	1	0	22.78	22.80	22.81	0-2	2
	1	2	22.87	22.98	22.76		2
	1	5	22.83	22.88	22.74		2
	3	0	22.66	22.72	22.68		2
	3	2	22.71	22.79	22.68		2
	3	3	22.71	22.80	22.74		2
	6	0	21.67	21.64	21.64	0-3	3
256QAM	1	0	19.60	19.68	19.77	0-5	5
	1	2	19.75	19.88	19.82		5
	1	5	19.68	19.79	19.75		5
	3	0	19.62	19.72	19.85		5
	3	2	19.72	19.88	19.70		5
	3	3	19.65	19.84	19.66		5
	6	0	19.57	19.66	19.58		5

9.4.6 LTE Band 5 (Cell)

Table 9-26
LTE Band 5 (Cell) Measured P_{max} for all DSI - 10 MHz Bandwidth

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.90**	0	0
	1	25	24.83		0
	1	49	24.84		0
	25	0	23.83	0-1	1
	25	12	23.83		1
	25	25	**23.87**		1
	50	0	23.74		1
16QAM	1	0	24.43	0-1	1
	1	25	24.41		1
	1	49	24.36		1
	25	0	22.82	0-2	2
	25	12	22.85		2
	25	25	22.88		2
	50	0	22.76		2
64QAM	1	0	22.92	0-2	2
	1	25	22.88		2
	1	49	22.87		2
	25	0	21.91	0-3	3
	25	12	21.89		3
	25	25	21.97		3
	50	0	21.80		3
256QAM	1	0	19.80	0-5	5
	1	25	20.14		5
	1	49	19.80		5
	25	0	19.76		5
	25	12	19.86		5
	25	25	19.85		5
	50	0	19.76		5

Note: LTE Band 5 (Cell) 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 9-27
LTE Band 5 (Cell) Measured P_{max} for all DSI - 5 MHz Bandwidth

LTE Band 5 (Cell) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20425 (826.5 MHz)	Mid Channel 20525 (836.5 MHz)	High Channel 20625 (846.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.82	24.78	24.77	0	0
	1	12	24.92	24.87	24.90		0
	1	24	24.86	24.77	24.78		0
	12	0	23.89	23.84	23.86	0-1	1
	12	6	24.03	23.94	23.93		1
	12	13	23.96	23.87	23.91		1
	25	0	23.98	23.82	23.92		1
16QAM	1	0	24.17	24.16	24.12	0-1	1
	1	12	24.38	24.23	24.37		1
	1	24	24.20	24.21	24.13		1
	12	0	22.94	22.96	22.92	0-2	2
	12	6	23.03	22.94	22.98		2
	12	13	23.04	22.95	22.94		2
	25	0	23.01	22.89	22.94		2
64QAM	1	0	23.00	23.05	23.02	0-2	2
	1	12	23.11	23.12	23.08		2
	1	24	23.16	23.08	22.52		2
	12	0	21.98	21.96	21.93	0-3	3
	12	6	22.03	21.97	21.98		3
	12	13	21.95	21.95	21.76		3
	25	0	22.02	21.92	21.78		3
256QAM	1	0	19.97	19.95	19.96	0-5	5
	1	12	20.06	20.06	19.94		5
	1	24	20.05	19.97	19.92		5
	12	0	19.88	19.88	19.84		5
	12	6	19.98	19.93	19.91		5
	12	13	19.94	19.91	19.89		5
	25	0	19.96	19.91	19.95		5

Table 9-28
LTE Band 5 (Cell) Measured P_{max} for all DSI - 3 MHz Bandwidth

LTE Band 5 (Cell) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20415 (825.5 MHz)	Mid Channel 20525 (836.5 MHz)	High Channel 20635 (847.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.86	24.85	24.69	0	0
	1	7	24.89	24.88	24.75		0
	1	14	24.87	24.87	24.77		0
	8	0	23.99	23.86	23.80	0-1	1
	8	4	23.98	23.93	23.95		1
	8	7	23.98	23.88	23.92		1
	15	0	24.01	23.88	23.92		1
16QAM	1	0	24.23	24.13	24.17	0-1	1
	1	7	24.31	24.25	24.16		1
	1	14	24.24	24.16	24.20		1
	8	0	23.12	22.95	22.96	0-2	2
	8	4	23.11	22.98	23.02		2
	8	7	23.07	23.04	22.99		2
	15	0	23.01	22.96	22.93		2
64QAM	1	0	23.08	23.08	22.94	0-2	2
	1	7	23.16	23.10	22.86		2
	1	14	23.15	23.16	22.27		2
	8	0	22.00	21.88	21.67	0-3	3
	8	4	22.08	21.94	21.66		3
	8	7	22.02	21.96	21.47		3
	15	0	22.04	21.92	21.63		3
256QAM	1	0	20.07	19.94	19.94	0-5	5
	1	7	20.09	20.01	19.95		5
	1	14	20.15	19.99	20.04		5
	8	0	20.02	19.92	19.95		5
	8	4	20.05	19.94	19.99		5
	8	7	19.99	20.00	19.95		5
	15	0	20.02	19.88	19.92		5

Table 9-29
LTE Band 5 (Cell) Measured P_{max} for all DSI -1.4 MHz Bandwidth

LTE Band 5 (Cell) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20407 (824.7 MHz)	Mid Channel 20525 (836.5 MHz)	High Channel 20643 (848.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.74	24.74	24.71	0	0
	1	2	24.88	24.77	24.79		0
	1	5	24.77	24.81	24.78		0
	3	0	24.80	24.71	24.73		0
	3	2	24.80	24.77	24.78		0
	3	3	24.82	24.82	24.76		0
	6	0	23.95	23.80	23.80	0-1	1
16QAM	1	0	24.08	24.05	24.11	0-1	1
	1	2	24.30	24.05	24.27		1
	1	5	24.28	24.13	24.18		1
	3	0	23.98	23.91	23.92		1
	3	2	24.03	24.01	24.00		1
	3	3	24.05	23.96	23.95		1
	6	0	23.02	22.90	22.97	0-2	2
64QAM	1	0	23.08	23.00	22.74	0-2	2
	1	2	23.09	23.10	22.73		2
	1	5	23.04	23.04	22.30		2
	3	0	23.02	22.94	22.61		2
	3	2	23.04	23.01	22.47		2
	3	3	23.01	22.99	22.46		2
	6	0	21.97	21.84	21.41	0-3	3
256QAM	1	0	19.98	19.90	19.92	0-5	5
	1	2	20.07	19.98	19.95		5
	1	5	19.97	19.94	19.84		5
	3	0	20.04	19.90	20.04		5
	3	2	20.06	19.94	19.98		5
	3	3	19.98	19.96	20.05		5
	6	0	19.91	19.81	19.92		5

9.4.7 LTE Band 66 (AWS)

Table 9-30
LTE Band 66 (AWS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 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	23.79	23.98	23.77	0	0
	1	50	23.87	**24.16**	23.75		0
	1	99	23.88	24.06	23.73		0
	50	0	23.14	**23.19**	23.03	0-1	1
	50	25	23.16	23.16	22.86		1
	50	50	23.18	23.15	22.82		1
	100	0	23.13	23.14	22.85		1
16QAM	1	0	23.43	23.55	23.23	0-1	1
	1	50	23.55	23.58	23.24		1
	1	99	23.41	23.68	23.23		1
	50	0	22.68	22.24	22.40	0-2	2
	50	25	22.35	22.17	22.04		2
	50	50	22.26	22.16	21.85		2
	100	0	22.20	22.15	21.85		2
64QAM	1	0	21.95	21.87	21.64	0-2	2
	1	50	21.98	21.99	21.93		2
	1	99	21.77	22.03	21.87		2
	50	0	21.15	21.52	21.37	0-3	3
	50	25	21.14	21.32	20.96		3
	50	50	20.87	21.27	20.93		3
	100	0	20.78	21.21	20.87		3
256QAM	1	0	18.98	18.79	18.81	0-5	5
	1	50	19.05	18.93	18.87		5
	1	99	19.07	18.98	18.81		5
	50	0	19.08	19.01	18.74		5
	50	25	19.16	19.15	18.76		5
	50	50	19.20	19.15	18.84		5
	100	0	19.15	19.16	18.79		5

Table 9-31
LTE Band 66 (AWS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 15 MHz Bandwidth

LTE Band 66 (AWS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132047 (1717.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132597 (1772.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.10	24.15	24.13	0	0
	1	36	24.17	24.14	24.20		0
	1	74	23.89	24.10	24.02		0
	36	0	23.26	23.26	23.30	0-1	1
	36	18	23.37	23.25	23.25		1
	36	37	23.23	23.31	23.19		1
	75	0	23.25	23.27	23.20		1
16QAM	1	0	23.28	23.45	23.07	0-1	1
	1	36	23.22	23.60	23.31		1
	1	74	23.30	23.46	23.29		1
	36	0	22.36	22.45	22.33	0-2	2
	36	18	22.30	22.28	22.35		2
	36	37	22.29	22.25	22.29		2
	75	0	22.28	22.31	22.22		2
64QAM	1	0	22.33	21.85	21.59	0-2	2
	1	36	22.31	22.19	22.22		2
	1	74	22.17	22.45	22.30		2
	36	0	21.35	21.28	20.99	0-3	3
	36	18	21.33	21.20	20.96		3
	36	37	21.19	21.25	21.23		3
	75	0	21.17	21.28	21.01		3
256QAM	1	0	19.28	19.21	19.30	0-5	5
	1	36	19.45	19.24	19.24		5
	1	74	19.44	19.19	19.27		5
	36	0	19.26	19.22	19.21		5
	36	18	19.35	19.24	19.22		5
	36	37	19.30	19.30	19.22		5
	75	0	19.28	19.22	19.24		5

Table 9-32
LTE Band 66 (AWS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.70	23.74	23.61	0	0
	1	25	24.12	23.99	23.83		0
	1	49	23.78	23.80	23.71		0
	25	0	23.00	23.10	22.93	0-1	1
	25	12	23.19	23.09	23.08		1
	25	25	23.05	22.98	23.05		1
	50	0	23.04	22.99	22.96		1
16QAM	1	0	23.07	23.21	22.92	0-1	1
	1	25	23.60	23.21	23.36		1
	1	49	23.24	23.57	23.06		1
	25	0	22.23	22.03	22.05	0-2	2
	25	12	22.08	22.12	22.02		2
	25	25	22.03	21.95	22.10		2
	50	0	22.10	21.93	21.98		2
64QAM	1	0	22.00	22.33	21.75	0-2	2
	1	25	22.30	22.42	22.10		2
	1	49	22.10	22.49	22.02		2
	25	0	21.00	21.05	21.04	0-3	3
	25	12	21.31	21.07	21.00		3
	25	25	21.07	21.06	20.98		3
	50	0	21.08	21.02	20.86		3
256QAM	1	0	19.28	19.04	18.68	0-5	5
	1	25	19.33	19.08	18.72		5
	1	49	19.18	18.72	19.11		5
	25	0	19.21	19.05	18.96		5
	25	12	19.24	18.97	18.82		5
	25	25	19.19	19.10	19.11		5
	50	0	19.25	19.03	19.02		5

Table 9-33
LTE Band 66 (AWS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 5 MHz Bandwidth

LTE Band 66 (AWS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131997 (1712.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132647 (1777.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	24.02	24.00	23.79	0	0
	1	12	23.97	24.15	24.10		0
	1	24	23.91	24.06	23.91		0
	12	0	23.09	23.13	23.10	0-1	1
	12	6	23.13	23.05	23.15		1
	12	13	23.07	23.12	23.07		1
	25	0	23.11	23.06	23.06		1
16QAM	1	0	23.27	23.31	23.13	0-1	1
	1	12	23.06	23.11	23.51		1
	1	24	23.05	23.22	23.10		1
	12	0	22.31	22.13	22.18	0-2	2
	12	6	22.07	22.17	22.15		2
	12	13	22.13	22.11	22.09		2
	25	0	22.04	22.08	22.15		2
64QAM	1	0	22.02	22.08	22.14	0-2	2
	1	12	22.14	22.35	22.25		2
	1	24	22.21	22.00	22.34		2
	12	0	21.14	21.22	21.01	0-3	3
	12	6	21.08	21.11	21.23		3
	12	13	21.06	21.07	21.06		3
	25	0	21.14	21.11	21.16		3
256QAM	1	0	19.04	19.26	19.08	0-5	5
	1	12	19.28	19.12	19.07		5
	1	24	19.29	18.92	19.24		5
	12	0	19.12	19.00	19.12		5
	12	6	19.10	19.03	19.11		5
	12	13	19.06	19.04	19.00		5
	25	0	19.05	19.00	19.08		5

Table 9-34
LTE Band 66 (AWS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 3 MHz Bandwidth

LTE Band 66 (AWS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131987 (1711.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132657 (1778.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.76	23.94	23.85	0	0
	1	7	23.90	23.95	23.83		0
	1	14	23.81	23.89	23.59		0
	8	0	23.02	23.11	22.95	0-1	1
	8	4	23.02	23.12	22.93		1
	8	7	22.88	23.07	22.79		1
	15	0	23.01	23.03	22.80		1
16QAM	1	0	22.94	23.06	22.99	0-1	1
	1	7	23.05	23.08	22.87		1
	1	14	22.95	23.23	22.76		1
	8	0	22.18	22.12	22.07	0-2	2
	8	4	22.05	22.19	22.04		2
	8	7	21.98	22.08	21.90		2
	15	0	22.04	22.08	22.06		2
64QAM	1	0	21.98	22.26	22.00	0-2	2
	1	7	22.00	22.25	21.87		2
	1	14	22.01	22.18	21.75		2
	8	0	20.98	21.11	20.90	0-3	3
	8	4	21.00	21.16	20.74		3
	8	7	20.95	21.10	21.00		3
	15	0	20.88	21.06	20.93		3
256QAM	1	0	19.43	19.20	19.18	0-5	5
	1	7	19.38	19.25	19.25		5
	1	14	19.41	19.35	19.19		5
	8	0	19.03	19.11	19.21		5
	8	4	19.04	19.21	19.22		5
	8	7	19.01	19.08	19.17		5
	15	0	18.92	18.91	19.09		5

Table 9-35
LTE Band 66 (AWS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 1.4 MHz Bandwidth

LTE Band 66 (AWS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131979 (1710.7 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132665 (1779.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.77	23.93	23.56	0	0
	1	2	23.92	23.97	23.50		0
	1	5	23.87	23.89	23.45		0
	3	0	23.82	23.94	23.57		0
	3	2	23.84	24.01	23.59		0
	3	3	23.80	23.92	23.50		0
	6	0	22.88	23.03	22.68	0-1	1
16QAM	1	0	23.01	23.05	22.92	0-1	1
	1	2	23.13	23.39	22.95		1
	1	5	23.08	23.45	22.88		1
	3	0	23.10	23.36	22.81		1
	3	2	23.15	23.31	22.85		1
	3	3	23.07	23.32	22.89		1
	6	0	22.04	21.93	21.74	0-2	2
64QAM	1	0	21.93	21.88	21.50	0-2	2
	1	2	22.15	21.89	21.66		2
	1	5	22.05	21.76	21.68		2
	3	0	22.02	22.11	21.54		2
	3	2	22.08	22.16	21.55		2
	3	3	22.02	22.13	21.62		2
	6	0	20.80	21.02	20.50	0-3	3
256QAM	1	0	18.89	19.08	19.11	0-5	5
	1	2	18.98	19.07	19.14		5
	1	5	18.80	19.04	19.04		5
	3	0	19.01	19.08	18.97		5
	3	2	19.00	19.08	19.18		5
	3	3	18.91	19.06	18.96		5
	6	0	18.93	18.93	19.17		5

Table 9-36
LTE Band 66 (AWS) Measured P_{limit} for DSI = 3 (Hotspot mode) - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.49	19.46	19.60	0	0
	1	50	**19.63**	19.62	19.53		0
	1	99	19.38	19.48	19.32		0
	50	0	19.74	19.76	19.62	0-1	0
	50	25	**19.89**	19.84	19.74		0
	50	50	19.78	19.81	19.64		0
	100	0	19.57	19.61	19.59		0
16QAM	1	0	19.68	19.64	19.83	0-1	0
	1	50	19.76	19.89	19.67		0
	1	99	19.54	19.55	19.76		0
	50	0	19.81	19.84	19.67	0-2	0
	50	25	19.89	19.89	19.73		0
	50	50	19.80	19.79	19.68		0
	100	0	19.84	19.82	19.55		0
64QAM	1	0	19.65	19.66	19.89	0-2	0
	1	50	19.96	20.05	19.84		0
	1	99	19.58	19.74	19.74		0
	50	0	19.78	19.85	19.64	0-3	0
	50	25	19.88	19.92	19.68		0
	50	50	19.85	19.81	19.64		0
	100	0	19.86	19.76	19.64		0
256QAM	1	0	19.07	19.10	19.05	0-5	0.5
	1	50	19.16	19.27	19.27		0.5
	1	99	19.17	19.07	18.95		0.5
	50	0	19.22	19.20	19.04		0.5
	50	25	19.16	19.29	19.32		0.5
	50	50	19.31	19.23	19.11		0.5
	100	0	19.32	19.32	19.12		0.5

Table 9-37
LTE Band 66 (AWS) Measured P_{limit} for DSI = 3 (Hotspot mode) - 15 MHz Bandwidth

LTE Band 66 (AWS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132047 (1717.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132597 (1772.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.43	19.50	19.48	0	0
	1	36	19.64	19.67	19.49		0
	1	74	19.33	19.46	19.59		0
	36	0	19.71	19.76	19.80	0-1	0
	36	18	19.82	19.79	19.82		0
	36	37	19.72	19.76	19.75		0
	75	0	19.75	19.71	19.71		0
16QAM	1	0	19.96	19.97	19.96	0-1	0
	1	36	20.08	20.05	20.03		0
	1	74	19.82	19.93	19.99		0
	36	0	19.75	19.84	19.85	0-2	0
	36	18	19.91	19.86	19.83		0
	36	37	19.80	19.85	19.77		0
	75	0	19.78	19.75	19.77		0
64QAM	1	0	19.57	19.71	19.99	0-2	0
	1	36	19.82	19.77	20.01		0
	1	74	19.62	19.67	19.80		0
	36	0	19.82	19.83	19.91	0-3	0
	36	18	19.95	19.92	19.90		0
	36	37	19.84	19.90	19.83		0
	75	0	19.75	19.83	19.73		0
256QAM	1	0	19.11	19.18	19.09	0-5	0.5
	1	36	19.12	19.35	19.33		0.5
	1	74	19.07	19.10	19.03		0.5
	36	0	18.77	18.84	18.85		0.5
	36	18	18.85	18.85	18.80		0.5
	36	37	18.75	18.82	18.78		0.5
	75	0	18.82	18.79	18.80		0.5

Table 9-38
LTE Band 66 (AWS) Measured P_{limit} for DSI = 3 (Hotspot mode) - 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.00	19.30	18.95	0	0
	1	25	19.25	19.45	19.21		0
	1	49	19.14	19.29	19.01		0
	25	0	19.45	19.49	19.37	0-1	0
	25	12	19.60	19.50	19.49		0
	25	25	19.45	19.45	19.36		0
	50	0	19.41	19.44	19.36		0
16QAM	1	0	19.49	19.37	19.45	0-1	0
	1	25	19.56	19.72	19.76		0
	1	49	19.44	19.54	19.66		0
	25	0	19.22	19.44	19.35	0-2	0
	25	12	19.48	19.47	19.48		0
	25	25	19.30	19.34	19.52		0
	50	0	19.38	19.35	19.41		0
64QAM	1	0	19.36	19.34	19.50	0-2	0
	1	25	19.75	19.72	19.80		0
	1	49	19.53	19.72	19.86		0
	25	0	19.27	19.31	19.42	0-3	0
	25	12	19.49	19.55	19.58		0
	25	25	19.42	19.53	19.53		0
	50	0	19.38	19.45	19.49		0
256QAM	1	0	18.67	18.72	18.90	0-5	0.5
	1	25	19.06	19.11	19.10		0.5
	1	49	18.78	18.98	18.99		0.5
	25	0	18.84	18.85	18.83		0.5
	25	12	19.00	19.03	18.98		0.5
	25	25	18.92	19.01	19.03		0.5
	50	0	18.91	18.99	18.95		0.5

Table 9-39
LTE Band 66 (AWS) Measured P_{limit} for DSI = 3 (Hotspot mode) - 5 MHz Bandwidth

LTE Band 66 (AWS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131997 (1712.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132647 (1777.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.21	19.23	19.34	0	0
	1	12	19.33	19.48	19.47		0
	1	24	19.32	19.37	19.35		0
	12	0	19.42	19.46	19.44	0-1	0
	12	6	19.44	19.48	19.50		0
	12	13	19.39	19.45	19.49		0
	25	0	19.42	19.44	19.47		0
16QAM	1	0	19.52	19.54	19.56	0-1	0
	1	12	19.53	19.67	19.65		0
	1	24	19.58	19.62	19.65		0
	12	0	19.49	19.50	19.55	0-2	0
	12	6	19.52	19.50	19.56		0
	12	13	19.37	19.56	19.53		0
	25	0	19.49	19.47	19.49		0
64QAM	1	0	19.61	19.68	19.60	0-2	0
	1	12	19.61	19.74	19.85		0
	1	24	19.62	19.65	19.67		0
	12	0	19.57	19.58	19.60	0-3	0
	12	6	19.57	19.59	19.57		0
	12	13	19.58	19.55	19.61		0
	25	0	19.46	19.47	19.53		0
256QAM	1	0	19.11	19.09	19.15	0-5	0.5
	1	12	19.11	19.14	19.11		0.5
	1	24	19.00	19.11	19.19		0.5
	12	0	19.01	19.05	19.00		0.5
	12	6	19.01	19.08	19.06		0.5
	12	13	18.98	19.01	19.06		0.5
	25	0	18.93	18.99	19.01		0.5

Table 9-40
LTE Band 66 (AWS) Measured P_{limit} for DSI = 3 (Hotspot mode) - 3 MHz Bandwidth

LTE Band 66 (AWS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131987 (1711.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132657 (1778.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.42	19.35	19.55	0	0
	1	7	19.45	19.33	19.54		0
	1	14	19.32	19.30	19.50		0
	8	0	19.56	19.49	19.65	0-1	0
	8	4	19.61	19.50	19.69		0
	8	7	19.50	19.44	19.63		0
	15	0	19.55	19.44	19.65		0
16QAM	1	0	19.63	19.55	19.78	0-1	0
	1	7	19.70	19.75	19.83		0
	1	14	19.69	19.65	19.76		0
	8	0	19.62	19.51	19.70	0-2	0
	8	4	19.61	19.60	19.69		0
	8	7	19.57	19.48	19.62		0
	15	0	19.60	19.41	19.64		0
64QAM	1	0	19.69	19.67	19.92	0-2	0
	1	7	19.71	19.79	19.86		0
	1	14	19.73	19.68	19.75		0
	8	0	19.59	19.48	19.77	0-3	0
	8	4	19.62	19.73	19.73		0
	8	7	19.58	19.54	19.64		0
	15	0	19.60	19.54	19.68		0
256QAM	1	0	19.21	19.22	19.33	0-5	0.5
	1	7	19.13	19.14	19.30		0.5
	1	14	19.20	19.16	19.30		0.5
	8	0	19.16	19.00	19.23		0.5
	8	4	19.21	19.10	19.20		0.5
	8	7	19.06	19.03	19.16		0.5
	15	0	19.15	19.04	19.20		0.5

Table 9-41
LTE Band 66 (AWS) Measured P_{limit} for DSI = 3 (Hotspot mode) - 1.4 MHz Bandwidth

LTE Band 66 (AWS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131979 (1710.7 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132665 (1779.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.23	19.44	19.46	0	0
	1	2	19.54	19.53	19.50		0
	1	5	19.38	19.42	19.43		0
	3	0	19.39	19.51	19.48		0
	3	2	19.46	19.48	19.51		0
	3	3	19.40	19.41	19.47		0
	6	0	19.52	19.60	19.57	0-1	0
16QAM	1	0	19.64	19.78	19.82	0-1	0
	1	2	19.83	19.80	19.89		0
	1	5	19.67	19.72	19.74		0
	3	0	19.61	19.68	19.70		0
	3	2	19.57	19.70	19.74		0
	3	3	19.61	19.65	19.65		0
	6	0	19.53	19.59	19.64	0-2	0
64QAM	1	0	19.63	19.73	19.82	0-2	0
	1	2	19.73	19.84	19.85		0
	1	5	19.62	19.67	19.72		0
	3	0	19.52	19.73	19.70		0
	3	2	19.59	19.71	19.68		0
	3	3	19.58	19.63	19.64		0
	6	0	19.49	19.60	19.22	0-3	0
256QAM	1	0	19.10	19.28	19.24	0-5	0.5
	1	2	19.22	19.36	19.34		0.5
	1	5	19.19	19.25	19.22		0.5
	3	0	19.07	19.15	19.09		0.5
	3	2	19.18	19.21	19.15		0.5
	3	3	19.11	19.15	19.03		0.5
	6	0	19.04	19.20	19.02		0.5

Table 9-42
LTE Band 66 (AWS) Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.56	19.94	20.01	0	0
	1	50	**20.15**	19.94	19.95		0
	1	99	19.66	19.99	19.84		0
	50	0	20.04	20.15	19.93	0-1	0
	50	25	**20.17**	20.10	19.96		0
	50	50	20.10	20.09	20.01		0
	100	0	20.10	19.97	19.98		0
16QAM	1	0	20.01	19.87	20.21	0-1	0
	1	50	20.43	19.96	20.01		0
	1	99	20.31	19.91	19.96		0
	50	0	20.06	20.09	20.02	0-2	0
	50	25	20.18	20.23	19.96		0
	50	50	20.07	20.06	20.04		0
	100	0	20.12	19.96	20.00		0
64QAM	1	0	20.25	20.20	19.98	0-2	0
	1	50	20.05	20.08	20.38		0
	1	99	20.23	20.18	20.40		0
	50	0	20.13	20.13	19.96	0-3	0
	50	25	20.28	20.19	20.16		0
	50	50	20.27	20.17	20.00		0
	100	0	20.13	20.13	20.08		0
256QAM	1	0	19.32	19.16	18.92	0-5	0.8
	1	50	19.22	19.70	19.48		0.8
	1	99	19.27	19.39	19.04		0.8
	50	0	19.25	19.26	19.30		0.8
	50	25	19.32	19.28	19.16		0.8
	50	50	19.23	19.31	19.26		0.8
	100	0	19.31	19.26	19.20		0.8

Table 9-43
LTE Band 66 (AWS) Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 15 MHz Bandwidth

LTE Band 66 (AWS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132047 (1717.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132597 (1772.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.67	20.07	19.82	0	0
	1	36	19.80	20.07	19.70		0
	1	74	19.68	20.06	19.60		0
	36	0	19.93	20.07	19.84	0-1	0
	36	18	20.01	20.05	19.79		0
	36	37	19.95	20.07	19.78		0
	75	0	19.98	20.05	19.78		0
16QAM	1	0	20.16	20.10	20.15	0-1	0
	1	36	20.22	20.26	20.07		0
	1	74	19.95	20.08	20.01		0
	36	0	20.06	20.06	19.84	0-2	0
	36	18	20.04	20.03	19.84		0
	36	37	19.98	20.03	19.83		0
	75	0	19.99	20.07	19.80		0
64QAM	1	0	19.98	20.12	20.07	0-2	0
	1	36	20.13	20.20	19.99		0
	1	74	19.99	19.98	19.91		0
	36	0	20.01	20.13	19.92	0-3	0
	36	18	20.07	20.09	19.87		0
	36	37	20.05	20.06	19.88		0
	75	0	20.02	20.12	19.83		0
256QAM	1	0	19.03	19.14	19.00	0-5	0.8
	1	36	19.23	19.34	19.11		0.8
	1	74	19.16	19.26	19.14		0.8
	36	0	19.05	19.11	19.03		0.8
	36	18	19.15	19.25	19.04		0.8
	36	37	19.16	19.20	19.05		0.8
	75	0	19.10	19.16	19.01		0.8

Table 9-44
LTE Band 66 (AWS) Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 10 MHz Bandwidth

LTE Band 66 (AWS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132022 (1715.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132622 (1775.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.50	19.66	19.60	0	0
	1	25	19.70	19.83	19.67		0
	1	49	19.44	19.54	19.52		0
	25	0	19.80	19.95	19.83	0-1	0
	25	12	19.90	20.01	19.98		0
	25	25	19.81	19.97	19.83		0
	50	0	19.87	19.92	19.88		0
16QAM	1	0	19.77	20.10	19.82	0-1	0
	1	25	20.42	20.13	20.00		0
	1	49	19.90	20.12	19.85		0
	25	0	19.88	20.02	19.73	0-2	0
	25	12	20.03	20.09	19.91		0
	25	25	19.93	20.03	19.75		0
	50	0	19.85	19.98	19.84		0
64QAM	1	0	19.75	19.92	19.82	0-2	0
	1	25	20.19	20.06	20.16		0
	1	49	20.03	20.08	19.89		0
	25	0	19.81	19.80	19.73	0-3	0
	25	12	20.00	20.03	19.87		0
	25	25	19.89	19.98	19.81		0
	50	0	19.82	19.92	19.85		0
256QAM	1	0	18.90	18.95	18.80	0-5	0.8
	1	25	19.18	19.36	19.09		0.8
	1	49	19.02	19.19	18.96		0.8
	25	0	18.90	19.14	18.97		0.8
	25	12	19.16	19.18	19.14		0.8
	25	25	19.05	19.11	18.98		0.8
	50	0	19.09	19.05	19.02		0.8

Table 9-45
LTE Band 66 (AWS) Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 5 MHz Bandwidth

LTE Band 66 (AWS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131997 (1712.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132647 (1777.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.69	19.66	19.60	0	0
	1	12	19.72	19.69	19.51		0
	1	24	19.67	19.61	19.47		0
	12	0	19.75	19.76	19.66	0-1	0
	12	6	19.75	19.74	19.66		0
	12	13	19.76	19.74	19.64		0
	25	0	19.79	19.75	19.66		0
16QAM	1	0	19.88	19.91	19.80	0-1	0
	1	12	19.83	19.95	19.77		0
	1	24	19.72	19.94	19.71		0
	12	0	19.76	19.85	19.74	0-2	0
	12	6	19.73	19.79	19.75		0
	12	13	19.70	19.83	19.63		0
	25	0	19.65	19.76	19.66		0
64QAM	1	0	19.77	19.95	19.91	0-2	0
	1	12	19.87	20.01	19.91		0
	1	24	19.82	20.22	19.71		0
	12	0	19.80	19.88	19.62	0-3	0
	12	6	19.82	19.85	19.81		0
	12	13	19.68	19.86	19.70		0
	25	0	19.72	19.79	19.66		0
256QAM	1	0	18.94	19.10	19.03	0-5	0.8
	1	12	18.96	19.11	19.01		0.8
	1	24	18.97	19.10	18.92		0.8
	12	0	18.95	19.01	18.88		0.8
	12	6	19.00	19.02	18.90		0.8
	12	13	18.87	18.98	18.80		0.8
	25	0	18.89	18.98	18.84		0.8

Table 9-46
LTE Band 66 (AWS) Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 3 MHz Bandwidth

LTE Band 66 (AWS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131987 (1711.5 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132657 (1778.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.70	19.87	19.74	0	0
	1	7	19.78	19.93	19.92		0
	1	14	19.69	19.86	19.68		0
	8	0	19.86	19.91	19.79	0-1	0
	8	4	19.89	20.03	19.83		0
	8	7	19.75	20.00	19.81		0
	15	0	19.78	19.95	19.80		0
16QAM	1	0	19.96	20.17	19.97	0-1	0
	1	7	19.97	20.15	20.05		0
	1	14	19.84	20.13	19.95		0
	8	0	19.91	19.99	19.85	0-2	0
	8	4	19.88	20.08	19.80		0
	8	7	19.80	19.96	19.81		0
	15	0	19.90	19.93	19.79		0
64QAM	1	0	20.03	20.14	20.01	0-2	0
	1	7	20.05	20.26	20.01		0
	1	14	20.08	20.13	19.92		0
	8	0	19.94	20.06	19.91	0-3	0
	8	4	19.92	20.08	19.87		0
	8	7	19.86	20.07	19.81		0
	15	0	19.87	19.94	19.86		0
256QAM	1	0	19.17	19.35	19.10	0-5	0.8
	1	7	19.14	19.31	19.11		0.8
	1	14	19.10	19.28	19.13		0.8
	8	0	19.08	19.27	19.05		0.8
	8	4	19.08	19.25	19.01		0.8
	8	7	19.07	19.19	19.06		0.8
	15	0	19.05	19.25	19.01		0.8

Table 9-47
LTE Band 66 (AWS) Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) – 1.4 MHz Bandwidth

LTE Band 66 (AWS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 131979 (1710.7 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132665 (1779.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.76	19.84	19.76	0	0
	1	2	19.82	19.99	19.89		0
	1	5	19.67	19.82	19.73		0
	3	0	19.76	19.93	19.72		0
	3	2	19.77	19.96	19.82		0
	3	3	19.72	19.91	19.68		0
	6	0	19.82	20.03	19.83	0-1	0
16QAM	1	0	19.94	20.12	20.01	0-1	0
	1	2	20.13	20.20	20.10		0
	1	5	19.96	20.12	19.96		0
	3	0	19.98	20.09	19.89		0
	3	2	19.90	20.11	19.98		0
	3	3	19.87	20.03	19.90		0
	6	0	19.86	20.05	19.88	0-2	0
64QAM	1	0	19.94	20.20	20.04	0-2	0
	1	2	20.09	20.30	20.17		0
	1	5	19.99	20.20	20.02		0
	3	0	19.95	20.13	19.96		0
	3	2	20.02	20.08	20.00		0
	3	3	19.88	20.10	19.94		0
	6	0	19.91	19.98	19.86	0-3	0
256QAM	1	0	19.15	19.43	19.24	0-5	0.8
	1	2	19.28	19.42	19.32		0.8
	1	5	19.15	19.35	19.17		0.8
	3	0	19.12	19.25	19.17		0.8
	3	2	19.17	19.37	19.15		0.8
	3	3	19.10	19.29	19.15		0.8
	6	0	19.06	19.19	19.04		0.8

9.4.8 LTE Band 25 (PCS)

Table 9-48
LTE Band 25 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 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	23.74	23.97	23.95	0	0
	1	50	23.70	23.94	23.96		0
	1	99	23.74	**24.01**	23.79		0
	50	0	23.00	22.95	22.96	0-1	1
	50	25	22.99	22.98	22.98		1
	50	50	23.01	**23.04**	23.01		1
	100	0	22.91	22.92	22.87		1
16QAM	1	0	23.47	23.33	23.45	0-1	1
	1	50	23.47	23.38	23.48		1
	1	99	23.48	23.34	23.07		1
	50	0	22.03	22.14	22.16	0-2	2
	50	25	22.06	22.14	22.24		2
	50	50	22.05	22.21	22.23		2
	100	0	22.04	22.07	22.18		2
64QAM	1	0	21.56	22.28	22.28	0-2	2
	1	50	21.99	22.36	22.33		2
	1	99	21.81	22.37	21.57		2
	50	0	21.07	21.12	20.99	0-3	3
	50	25	21.12	21.17	21.01		3
	50	50	21.07	21.23	20.92		3
	100	0	20.98	21.05	20.93		3
256QAM	1	0	18.67	18.82	18.84	0-5	5
	1	50	18.97	19.28	19.27		5
	1	99	18.77	19.11	19.08		5
	50	0	18.94	19.00	19.01		5
	50	25	19.08	19.16	19.22		5
	50	50	19.07	19.18	19.21		5
	100	0	19.04	19.08	19.16		5

Table 9-49
LTE Band 25 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 15 MHz Bandwidth

LTE Band 25 (PCS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26115 (1857.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26615 (1907.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.80	23.96	23.94	0	0
	1	36	23.91	24.00	23.97		0
	1	74	23.77	23.97	23.84		0
	36	0	23.06	22.96	22.92	0-1	1
	36	18	23.18	23.05	23.04		1
	36	37	23.10	23.08	23.14		1
	75	0	23.12	22.99	23.03		1
16QAM	1	0	23.21	23.32	23.33	0-1	1
	1	36	23.32	23.29	23.35		1
	1	74	23.30	23.33	23.25		1
	36	0	22.10	21.97	21.94	0-2	2
	36	18	22.16	22.08	22.05		2
	36	37	22.15	22.13	22.10		2
	75	0	22.07	21.97	21.96		2
64QAM	1	0	22.00	22.28	22.23	0-2	2
	1	36	22.27	22.32	22.29		2
	1	74	22.15	22.29	21.48		2
	36	0	21.07	21.04	20.98	0-3	3
	36	18	21.16	21.06	21.05		3
	36	37	21.14	21.14	20.92		3
	75	0	21.13	21.04	21.00		3
256QAM	1	0	19.01	18.88	18.88	0-5	5
	1	36	19.14	19.23	19.14		5
	1	74	19.07	19.06	19.05		5
	36	0	19.08	19.01	18.84		5
	36	18	19.17	19.07	19.05		5
	36	37	19.13	19.12	19.07		5
	75	0	19.06	18.96	19.01		5

Table 9-50
LTE Band 25 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 10 MHz Bandwidth

LTE Band 25 (PCS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26090 (1855.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26640 (1910.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.57	23.56	23.66	0	0
	1	25	23.72	23.75	23.57		0
	1	49	23.53	23.62	23.71		0
	25	0	22.87	22.72	22.72	0-1	1
	25	12	22.92	22.81	22.82		1
	25	25	22.81	22.83	22.78		1
	50	0	22.83	22.78	22.75		1
16QAM	1	0	23.04	23.03	23.16	0-1	1
	1	25	23.16	23.10	23.21		1
	1	49	23.01	22.85	23.13		1
	25	0	21.89	21.72	21.67	0-2	2
	25	12	21.96	21.80	21.81		2
	25	25	21.82	21.84	21.78		2
	50	0	21.84	21.72	21.69		2
64QAM	1	0	21.69	21.84	21.96	0-2	2
	1	25	21.96	21.96	21.97		2
	1	49	21.80	21.95	21.46		2
	25	0	20.82	20.65	20.64	0-3	3
	25	12	20.90	20.82	20.88		3
	25	25	20.87	20.86	20.58		3
	50	0	20.82	20.77	20.79		3
256QAM	1	0	18.78	18.71	18.56	0-5	5
	1	25	18.94	18.83	18.83		5
	1	49	18.79	18.69	18.64		5
	25	0	18.87	18.74	18.69		5
	25	12	18.93	18.84	18.82		5
	25	25	18.90	18.83	18.80		5
	50	0	18.84	18.70	18.76		5

Table 9-51
LTE Band 25 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 5 MHz Bandwidth

LTE Band 25 (PCS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26065 (1852.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26665 (1912.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.75	23.67	23.70	0	0
	1	12	23.87	23.85	23.71		0
	1	24	23.85	23.78	23.75		0
	12	0	22.85	22.79	22.81	0-1	1
	12	6	22.92	22.83	22.82		1
	12	13	22.90	22.87	22.84		1
	25	0	22.93	22.80	22.81		1
16QAM	1	0	23.09	23.07	23.05	0-1	1
	1	12	23.12	23.10	23.07		1
	1	24	23.15	23.19	23.09		1
	12	0	21.95	21.85	21.87	0-2	2
	12	6	21.98	21.90	21.89		2
	12	13	21.91	21.96	21.90		2
	25	0	21.87	21.78	21.79		2
64QAM	1	0	21.87	21.96	21.94	0-2	2
	1	12	22.05	22.01	21.88		2
	1	24	22.09	22.07	21.40		2
	12	0	20.88	20.82	20.73	0-3	3
	12	6	20.93	20.84	20.64		3
	12	13	20.93	20.87	20.47		3
	25	0	20.89	20.76	20.56		3
256QAM	1	0	18.92	18.80	18.88	0-5	5
	1	12	18.96	18.94	18.84		5
	1	24	18.99	18.99	18.86		5
	12	0	18.85	18.78	18.75		5
	12	6	18.87	18.81	18.82		5
	12	13	18.92	18.84	18.80		5
	25	0	18.84	18.77	18.78		5

Table 9-52
LTE Band 25 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 3 MHz Bandwidth

LTE Band 25 (PCS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26055 (1851.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26675 (1913.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.84	23.70	23.65	0	0
	1	7	23.75	23.78	23.77		0
	1	14	23.80	23.79	23.74		0
	8	0	22.84	22.81	22.77	0-1	1
	8	4	22.90	22.88	22.76		1
	8	7	22.89	22.89	22.81		1
	15	0	22.86	22.82	22.72		1
16QAM	1	0	23.16	23.04	22.97	0-1	1
	1	7	23.13	22.99	23.01		1
	1	14	23.24	23.15	23.05		1
	8	0	21.96	21.92	21.84	0-2	2
	8	4	22.04	22.01	21.82		2
	8	7	22.01	21.96	21.89		2
	15	0	21.92	21.81	21.76		2
64QAM	1	0	21.98	21.94	21.84	0-2	2
	1	7	22.06	21.99	21.86		2
	1	14	22.09	22.03	21.43		2
	8	0	20.89	20.86	20.58	0-3	3
	8	4	20.95	20.87	20.57		3
	8	7	20.92	20.88	20.50		3
	15	0	20.91	20.84	20.57		3
256QAM	1	0	18.97	18.89	18.79	0-5	5
	1	7	18.94	18.95	18.86		5
	1	14	19.01	18.96	18.92		5
	8	0	18.92	18.85	18.71		5
	8	4	18.96	18.88	18.75		5
	8	7	18.94	18.90	18.80		5
	15	0	18.93	18.84	18.75		5

Table 9-53
LTE Band 25 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) -1.4 MHz Bandwidth

LTE Band 25 (PCS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26047 (1850.7 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26683 (1914.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.71	23.69	23.65	0	0
	1	2	23.80	23.81	23.68		0
	1	5	23.74	23.69	23.70		0
	3	0	23.72	23.76	23.64		0
	3	2	23.83	23.79	23.72		0
	3	3	23.81	23.75	23.69		0
	6	0	22.88	22.87	22.76	0-1	1
16QAM	1	0	23.12	23.08	22.98	0-1	1
	1	2	23.18	23.15	23.04		1
	1	5	23.10	23.15	23.00		1
	3	0	22.91	22.94	22.94		1
	3	2	23.04	22.96	22.89		1
	3	3	22.91	22.87	22.93		1
	6	0	21.87	21.95	21.80	0-2	2
64QAM	1	0	21.93	21.94	21.78	0-2	2
	1	2	22.07	22.04	21.89		2
	1	5	22.04	22.02	21.40		2
	3	0	21.89	21.88	21.37		2
	3	2	21.94	21.93	21.40		2
	3	3	21.97	21.90	21.34		2
	6	0	20.91	20.84	20.62	0-3	3
256QAM	1	0	18.97	18.90	18.80	0-5	5
	1	2	18.97	19.03	18.92		5
	1	5	18.90	18.86	18.83		5
	3	0	18.94	18.92	18.85		5
	3	2	18.99	18.99	18.89		5
	3	3	18.94	18.91	18.81		5
	6	0	18.82	18.86	18.73		5

Table 9-54
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 20 MHz Bandwidth

LTE Band 25 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26140 (1860.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26590 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**18.49**	18.42	18.33	0	0
	1	50	18.35	18.47	18.40		0
	1	99	18.45	18.35	18.40		0
	50	0	18.55	18.49	18.60	0-1	0
	50	25	**18.64**	18.60	18.54		0
	50	50	18.58	18.59	18.60		0
	100	0	18.41	18.37	18.43		0
16QAM	1	0	18.97	18.73	18.71	0-1	0
	1	50	18.75	18.64	18.67		0
	1	99	18.64	18.33	18.61		0
	50	0	18.58	18.61	18.57	0-2	0
	50	25	18.66	18.78	18.67		0
	50	50	18.63	18.65	18.65		0
	100	0	18.54	18.56	18.41		0
64QAM	1	0	18.77	18.78	18.78	0-2	0
	1	50	18.75	18.79	18.35		0
	1	99	18.82	18.88	18.78		0
	50	0	18.54	18.57	18.60	0-3	0
	50	25	18.75	18.71	18.59		0
	50	50	18.58	18.58	18.67		0
	100	0	18.58	18.60	18.50		0
256QAM	1	0	18.24	18.29	18.32	0-5	0
	1	50	18.56	18.51	18.64		0
	1	99	18.55	18.36	18.42		0
	50	0	18.46	18.44	18.46		0
	50	25	18.65	18.67	18.64		0
	50	50	18.53	18.62	18.64		0
	100	0	18.60	18.61	18.51		0

Table 9-55
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 15 MHz Bandwidth

LTE Band 25 (PCS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26115 (1857.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26615 (1907.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.19	18.41	18.41	0	0
	1	36	18.42	18.39	18.44		0
	1	74	18.29	18.40	18.41		0
	36	0	18.41	18.39	18.35	0-1	0
	36	18	18.57	18.47	18.48		0
	36	37	18.54	18.52	18.48		0
	75	0	18.50	18.40	18.30		0
16QAM	1	0	18.42	18.68	18.65	0-1	0
	1	36	18.66	18.68	18.57		0
	1	74	18.49	18.66	18.53		0
	36	0	18.44	18.51	18.34	0-2	0
	36	18	18.45	18.40	18.46		0
	36	37	18.47	18.54	18.50		0
	75	0	18.54	18.44	18.35		0
64QAM	1	0	18.54	18.64	18.65	0-2	0
	1	36	18.68	18.60	18.58		0
	1	74	18.63	18.68	18.63		0
	36	0	18.55	18.45	18.42	0-3	0
	36	18	18.62	18.55	18.54		0
	36	37	18.60	18.55	18.56		0
	75	0	18.56	18.45	18.39		0
256QAM	1	0	18.39	18.55	18.36	0-5	0
	1	36	18.53	18.65	18.68		0
	1	74	18.47	18.56	18.62		0
	36	0	18.47	18.45	18.31		0
	36	18	18.60	18.55	18.45		0
	36	37	18.59	18.55	18.54		0
	75	0	18.56	18.45	18.43		0

Table 9-56
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 10 MHz Bandwidth

LTE Band 25 (PCS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26090 (1855.0 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26640 (1910.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	17.95	17.93	18.15	0	0
	1	25	18.12	18.08	18.06		0
	1	49	17.90	17.86	18.06		0
	25	0	18.20	18.10	18.03	0-1	0
	25	12	18.30	18.18	18.25		0
	25	25	18.24	18.27	18.19		0
	50	0	18.26	18.12	18.13		0
16QAM	1	0	18.36	18.38	18.45	0-1	0
	1	25	18.38	18.50	18.45		0
	1	49	18.33	18.45	18.51		0
	25	0	18.30	18.10	18.15	0-2	0
	25	12	18.35	18.30	18.58		0
	25	25	18.22	18.30	18.40		0
	50	0	18.30	18.11	18.35		0
64QAM	1	0	18.29	18.15	18.32	0-2	0
	1	25	18.61	18.77	18.44		0
	1	49	18.26	18.25	18.49		0
	25	0	18.12	18.16	18.05	0-3	0
	25	12	18.35	18.35	18.39		0
	25	25	18.25	18.30	18.24		0
	50	0	18.25	18.12	18.12		0
256QAM	1	0	18.18	18.06	18.11	0-5	0
	1	25	18.39	18.45	18.17		0
	1	49	18.14	18.28	18.45		0
	25	0	18.25	18.18	18.01		0
	25	12	18.36	18.26	18.25		0
	25	25	18.19	18.34	18.13		0
	50	0	18.28	18.16	18.21		0

Table 9-57
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 5 MHz Bandwidth

LTE Band 25 (PCS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26065 (1852.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26665 (1912.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.22	18.15	18.18	0	0
	1	12	18.31	18.20	18.14		0
	1	24	18.29	18.27	18.21		0
	12	0	18.32	18.25	18.24	0-1	0
	12	6	18.34	18.29	18.32		0
	12	13	18.34	18.36	18.32		0
	25	0	18.37	18.30	18.27		0
16QAM	1	0	18.43	18.40	18.38	0-1	0
	1	12	18.38	18.50	18.37		0
	1	24	18.53	18.49	18.52		0
	12	0	18.31	18.28	18.31	0-2	0
	12	6	18.36	18.35	18.34		0
	12	13	18.43	18.40	18.34		0
	25	0	18.34	18.33	18.36		0
64QAM	1	0	18.44	18.49	18.48	0-2	0
	1	12	18.56	18.63	18.46		0
	1	24	18.53	18.65	18.56		0
	12	0	18.41	18.30	18.35	0-3	0
	12	6	18.43	18.41	18.38		0
	12	13	18.43	18.50	18.40		0
	25	0	18.37	18.34	18.31		0
256QAM	1	0	18.44	18.45	18.44	0-5	0
	1	12	18.44	18.49	18.48		0
	1	24	18.55	18.59	18.49		0
	12	0	18.35	18.25	18.33		0
	12	6	18.42	18.37	18.34		0
	12	13	18.43	18.35	18.34		0
	25	0	18.33	18.33	18.33		0

Table 9-58
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 3 MHz Bandwidth

LTE Band 25 (PCS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26055 (1851.5 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26675 (1913.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.19	18.10	18.13	0	0
	1	7	18.22	18.20	18.18		0
	1	14	18.31	18.25	18.26		0
	8	0	18.31	18.24	18.21	0-1	0
	8	4	18.29	18.31	18.26		0
	8	7	18.33	18.36	18.34		0
	15	0	18.31	18.25	18.25		0
16QAM	1	0	18.46	18.43	18.37	0-1	0
	1	7	18.54	18.40	18.38		0
	1	14	18.55	18.56	18.52		0
	8	0	18.37	18.26	18.22	0-2	0
	8	4	18.33	18.40	18.34		0
	8	7	18.40	18.39	18.33		0
	15	0	18.32	18.23	18.29		0
64QAM	1	0	18.43	18.55	18.37	0-2	0
	1	7	18.52	18.59	18.41		0
	1	14	18.56	18.56	18.50		0
	8	0	18.35	18.30	18.28	0-3	0
	8	4	18.39	18.36	18.30		0
	8	7	18.38	18.41	18.37		0
	15	0	18.36	18.27	18.27		0
256QAM	1	0	18.39	18.37	18.32	0-5	0
	1	7	18.52	18.44	18.25		0
	1	14	18.52	18.53	18.48		0
	8	0	18.34	18.32	18.28		0
	8	4	18.37	18.38	18.33		0
	8	7	18.39	18.40	18.36		0
	15	0	18.37	18.33	18.30		0

Table 9-59
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) – 1.4 MHz Bandwidth

LTE Band 25 (PCS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 26047 (1850.7 MHz)	Mid Channel 26365 (1882.5 MHz)	High Channel 26683 (1914.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.09	18.13	18.09	0	0
	1	2	18.17	18.18	18.17		0
	1	5	18.19	18.21	18.11		0
	3	0	18.09	18.15	18.13		0
	3	2	18.25	18.21	18.19		0
	3	3	18.14	18.15	18.06		0
	6	0	18.25	18.30	18.25	0-1	0
16QAM	1	0	18.38	18.39	18.29	0-1	0
	1	2	18.47	18.64	18.47		0
	1	5	18.35	18.41	18.31		0
	3	0	18.44	18.33	18.28		0
	3	2	18.55	18.38	18.32		0
	3	3	18.35	18.31	18.23		0
	6	0	18.31	18.29	18.30	0-2	0
64QAM	1	0	18.39	18.34	18.35	0-2	0
	1	2	18.50	18.41	18.44		0
	1	5	18.56	18.36	18.44		0
	3	0	18.32	18.38	18.28		0
	3	2	18.41	18.41	18.35		0
	3	3	18.37	18.34	18.38		0
	6	0	18.22	18.26	18.22	0-3	0
256QAM	1	0	18.35	18.35	18.45	0-5	0
	1	2	18.50	18.45	18.40		0
	1	5	18.45	18.49	18.35		0
	3	0	18.53	18.30	18.29		0
	3	2	18.40	18.42	18.35		0
	3	3	18.30	18.33	18.30		0
	6	0	18.26	18.26	18.21		0

9.4.9 LTE Band 2 (PCS)

Table 9-60
LTE Band 2 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 20 MHz Bandwidth

LTE Band 2 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18700 (1860.0 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19100 (1900.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.82	23.67	23.85	0	0
	1	50	23.84	23.72	23.84		0
	1	99	23.87	23.71	**23.89**		0
	50	0	22.83	22.85	22.84	0-1	1
	50	25	22.96	**22.98**	22.97		1
	50	50	22.92	22.97	22.85		1
	100	0	22.87	22.92	22.90		1
16QAM	1	0	23.03	23.11	23.45	0-1	1
	1	50	23.02	23.14	23.46		1
	1	99	23.08	23.18	23.41		1
	50	0	21.82	21.86	21.89	0-2	2
	50	25	21.93	21.98	21.95		2
	50	50	21.98	21.94	21.90		2
	100	0	21.89	21.93	21.95		2
64QAM	1	0	21.65	22.07	22.10	0-2	2
	1	50	21.84	22.19	22.08		2
	1	99	21.85	22.10	22.01		2
	50	0	20.87	20.86	20.92	0-3	3
	50	25	20.99	20.99	21.03		3
	50	50	20.94	20.99	20.91		3
	100	0	20.93	20.89	20.93		3
256QAM	1	0	18.54	18.71	18.80	0-5	5
	1	50	18.84	19.10	19.04		5
	1	99	18.79	18.93	18.90		5
	50	0	18.82	18.84	18.84		5
	50	25	18.94	19.01	18.94		5
	50	50	18.91	18.94	18.89		5
	100	0	18.90	18.92	18.87		5

Table 9-61
LTE Band 2 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 15 MHz Bandwidth

LTE Band 2 (PCS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18675 (1857.5 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19125 (1902.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.70	23.87	23.77	0	0
	1	36	23.77	23.88	23.73		0
	1	74	23.74	23.88	23.69		0
	36	0	22.94	22.92	22.80	0-1	1
	36	18	23.03	23.04	22.89		1
	36	37	23.04	23.01	22.86		1
	75	0	22.98	22.98	22.87		1
16QAM	1	0	23.18	23.37	23.26	0-1	1
	1	36	23.14	23.30	23.09		1
	1	74	23.26	23.26	23.11		1
	36	0	22.02	21.99	21.88	0-2	2
	36	18	22.02	22.03	21.90		2
	36	37	22.07	22.04	21.84		2
	75	0	22.03	22.00	21.92		2
64QAM	1	0	21.68	22.16	22.10	0-2	2
	1	36	22.13	22.15	22.04		2
	1	74	22.06	22.11	21.96		2
	36	0	20.96	20.95	20.85	0-3	3
	36	18	21.00	21.01	20.90		3
	36	37	21.02	20.97	20.92		3
	75	0	21.01	20.94	20.90		3
256QAM	1	0	18.95	18.90	18.85	0-5	5
	1	36	19.07	19.09	18.94		5
	1	74	18.94	19.01	18.79		5
	36	0	18.91	18.88	18.83		5
	36	18	18.97	18.99	18.90		5
	36	37	19.03	19.05	18.81		5
	75	0	18.99	18.94	18.81		5

Table 9-62
LTE Band 2 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 10 MHz Bandwidth

LTE Band 2 (PCS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18650 (1855.0 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19150 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.58	23.52	23.60	0	0
	1	25	23.76	23.84	23.59		0
	1	49	23.62	23.67	23.50		0
	25	0	22.85	22.75	22.55	0-1	1
	25	12	22.88	22.83	22.64		1
	25	25	22.78	22.70	22.58		1
	50	0	22.83	22.76	22.60		1
16QAM	1	0	22.86	22.91	23.04	0-1	1
	1	25	23.04	23.23	23.00		1
	1	49	22.89	22.89	23.05		1
	25	0	21.81	21.80	21.56	0-2	2
	25	12	21.87	21.83	21.68		2
	25	25	21.78	21.70	21.56		2
	50	0	21.77	21.76	21.61		2
64QAM	1	0	21.40	21.72	21.88	0-2	2
	1	25	21.88	21.98	21.82		2
	1	49	21.74	21.83	21.80		2
	25	0	20.79	20.76	20.60	0-3	3
	25	12	20.90	20.92	20.69		3
	25	25	20.74	20.76	20.64		3
	50	0	20.83	20.81	20.61		3
256QAM	1	0	18.59	18.64	18.51	0-5	5
	1	25	18.90	18.84	18.57		5
	1	49	18.69	18.69	18.49		5
	25	0	18.71	18.67	18.56		5
	25	12	18.82	18.76	18.66		5
	25	25	18.74	18.75	18.54		5
	50	0	18.74	18.71	18.52		5

Table 9-63
LTE Band 2 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 5 MHz Bandwidth

LTE Band 2 (PCS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18625 (1852.5 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19175 (1907.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.72	23.62	23.58	0	0
	1	12	23.88	23.88	23.68		0
	1	24	23.70	23.59	23.54		0
	12	0	22.81	22.77	22.69	0-1	1
	12	6	22.84	22.81	22.74		1
	12	13	22.76	22.76	22.61		1
	25	0	22.80	22.75	22.68		1
16QAM	1	0	22.96	23.04	23.02	0-1	1
	1	12	23.18	23.17	23.01		1
	1	24	23.05	23.00	22.93		1
	12	0	21.89	21.83	21.79	0-2	2
	12	6	21.92	21.90	21.80		2
	12	13	21.84	21.84	21.70		2
	25	0	21.81	21.78	21.67		2
64QAM	1	0	21.60	21.98	21.77	0-2	2
	1	12	21.98	22.09	21.84		2
	1	24	21.87	21.85	21.74		2
	12	0	20.63	20.89	20.70	0-3	3
	12	6	20.87	20.91	20.77		3
	12	13	20.82	20.75	20.69		3
	25	0	20.75	20.79	20.63		3
256QAM	1	0	18.84	18.84	18.81	0-5	5
	1	12	18.91	18.91	18.79		5
	1	24	18.75	18.70	18.65		5
	12	0	18.83	18.78	18.66		5
	12	6	18.79	18.82	18.63		5
	12	13	18.67	18.71	18.59		5
	25	0	18.74	18.78	18.65		5

Table 9-64
LTE Band 2 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 3 MHz Bandwidth

LTE Band 2 (PCS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18615 (1851.5 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19185 (1908.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.78	23.77	23.64	0	0
	1	7	23.82	23.84	23.65		0
	1	14	23.67	23.76	23.50		0
	8	0	22.88	22.82	22.68	0-1	1
	8	4	22.86	22.93	22.67		1
	8	7	22.79	22.82	22.64		1
	15	0	22.81	22.79	22.67		1
16QAM	1	0	23.11	23.17	22.95	0-1	1
	1	7	23.11	23.18	23.04		1
	1	14	23.06	23.10	23.04		1
	8	0	21.97	21.94	21.75	0-2	2
	8	4	21.96	22.06	21.76		2
	8	7	21.91	21.93	21.70		2
	15	0	21.87	21.84	21.70		2
64QAM	1	0	21.61	22.00	21.85	0-2	2
	1	7	21.78	22.04	21.82		2
	1	14	21.87	21.96	21.70		2
	8	0	20.59	20.84	20.67	0-3	3
	8	4	20.79	20.96	20.74		3
	8	7	20.81	20.81	20.63		3
	15	0	20.74	20.81	20.72		3
256QAM	1	0	18.90	18.91	18.74	0-5	5
	1	7	18.94	18.94	18.73		5
	1	14	18.79	18.84	18.64		5
	8	0	18.88	18.79	18.66		5
	8	4	18.82	18.86	18.70		5
	8	7	18.78	18.86	18.63		5
	15	0	18.82	18.82	18.62		5

Table 9-65
LTE Band 2 (PCS) Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) -1.4 MHz Bandwidth

LTE Band 2 (PCS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18607 (1850.7 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19193 (1909.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.67	23.68	23.47	0	0
	1	2	23.71	23.74	23.51		0
	1	5	23.61	23.64	23.46		0
	3	0	23.65	23.67	23.50		0
	3	2	23.71	23.73	23.54		0
	3	3	23.63	23.69	23.49		0
	6	0	22.79	22.78	22.58	0-1	1
16QAM	1	0	23.05	23.14	23.04	0-1	1
	1	2	23.04	23.10	23.12		1
	1	5	22.89	23.07	22.95		1
	3	0	22.91	22.94	22.68		1
	3	2	22.92	22.97	22.79		1
	3	3	22.81	22.91	22.64		1
	6	0	21.74	21.87	21.61	0-2	2
64QAM	1	0	21.58	21.97	21.79	0-2	2
	1	2	21.69	21.98	21.84		2
	1	5	21.69	21.94	21.62		2
	3	0	21.52	21.86	21.59		2
	3	2	21.61	21.95	21.72		2
	3	3	21.57	21.82	21.65		2
	6	0	20.52	20.76	20.58	0-3	3
256QAM	1	0	18.77	18.86	18.61	0-5	5
	1	2	18.85	18.90	18.72		5
	1	5	18.77	18.79	18.63		5
	3	0	18.84	18.87	18.67		5
	3	2	18.85	18.87	18.73		5
	3	3	18.83	18.82	18.65		5
	6	0	18.70	18.74	18.48		5

Table 9-66
LTE Band 2 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 20 MHz Bandwidth

LTE Band 2 (PCS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18700 (1860.0 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19100 (1900.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.78	**18.95**	18.86	0	0
	1	50	18.86	18.83	18.73		0
	1	99	18.80	18.85	18.70		0
	50	0	18.83	18.83	18.87	0-1	0
	50	25	18.92	18.93	18.92		0
	50	50	18.90	**18.95**	18.79		0
	100	0	18.89	18.92	18.90		0
16QAM	1	0	19.26	19.36	19.27	0-1	0
	1	50	19.18	19.25	19.11		0
	1	99	19.24	19.27	19.20		0
	50	0	18.92	18.87	18.83	0-2	0
	50	25	19.01	19.02	18.95		0
	50	50	18.96	18.89	18.78		0
	100	0	18.87	18.85	18.88		0
64QAM	1	0	19.16	19.22	19.23	0-2	0
	1	50	19.12	19.29	19.27		0
	1	99	19.14	19.15	19.19		0
	50	0	18.96	18.89	18.96	0-3	0
	50	25	19.01	19.04	19.07		0
	50	50	18.95	19.01	19.05		0
	100	0	18.96	19.07	18.75		0
256QAM	1	0	18.74	19.16	19.13	0-5	0
	1	50	19.12	19.23	18.93		0
	1	99	18.93	19.10	18.86		0
	50	0	18.91	18.96	19.12		0
	50	25	19.00	19.05	18.99		0
	50	50	18.91	19.05	18.92		0
	100	0	18.97	19.00	18.96		0

Table 9-67
LTE Band 2 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 15 MHz Bandwidth

LTE Band 2 (PCS) 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18675 (1857.5 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19125 (1902.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.31	18.55	18.44	0	0
	1	36	18.50	18.60	18.35		0
	1	74	18.44	18.56	18.26		0
	36	0	18.65	18.60	18.57	0-1	0
	36	18	18.69	18.61	18.61		0
	36	37	18.67	18.62	18.62		0
	75	0	18.64	18.62	18.56		0
16QAM	1	0	18.51	18.94	18.86	0-1	0
	1	36	18.55	18.82	18.71		0
	1	74	18.52	18.88	18.71		0
	36	0	18.59	18.57	18.55	0-2	0
	36	18	18.69	18.69	18.63		0
	36	37	18.64	18.67	18.58		0
	75	0	18.68	18.68	18.58		0
64QAM	1	0	18.75	18.89	18.81	0-2	0
	1	36	18.89	18.90	18.69		0
	1	74	18.92	18.80	18.70		0
	36	0	18.68	18.66	18.66	0-3	0
	36	18	18.75	18.73	18.68		0
	36	37	18.79	18.70	18.67		0
	75	0	18.72	18.70	18.62		0
256QAM	1	0	18.65	18.70	18.66	0-5	0
	1	36	19.00	18.95	18.76		0
	1	74	18.76	18.60	18.53		0
	36	0	18.57	18.74	18.59		0
	36	18	18.74	18.74	18.67		0
	36	37	18.67	18.74	18.66		0
	75	0	18.65	18.70	18.60		0

Table 9-68
LTE Band 2 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 10 MHz Bandwidth

LTE Band 2 (PCS) 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18650 (1855.0 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19150 (1905.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.55	18.62	18.80	0	0
	1	25	18.87	18.95	18.80		0
	1	49	18.70	18.74	18.74		0
	25	0	18.83	18.81	18.78	0-1	0
	25	12	19.07	19.04	18.95		0
	25	25	18.90	18.87	18.77		0
	50	0	18.95	18.94	18.85		0
16QAM	1	0	18.96	18.96	19.20	0-1	0
	1	25	19.23	19.35	19.20		0
	1	49	19.04	19.18	19.22		0
	25	0	18.86	18.91	18.81	0-2	0
	25	12	18.98	19.05	18.91		0
	25	25	18.93	19.05	18.81		0
	50	0	18.88	18.85	18.81		0
64QAM	1	0	18.96	19.12	19.05	0-2	0
	1	25	19.33	19.34	19.36		0
	1	49	19.00	18.90	18.87		0
	25	0	18.97	18.93	18.85	0-3	0
	25	12	19.02	19.10	19.03		0
	25	25	19.01	18.97	18.83		0
	50	0	18.87	18.93	18.94		0
256QAM	1	0	18.69	18.96	18.72	0-5	0
	1	25	19.02	19.15	19.10		0
	1	49	18.79	18.81	18.79		0
	25	0	18.99	18.95	18.91		0
	25	12	19.09	19.00	19.00		0
	25	25	18.95	18.81	18.75		0
	50	0	18.93	18.92	18.95		0

Table 9-69
LTE Band 2 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 5 MHz Bandwidth

LTE Band 2 (PCS) 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18625 (1852.5 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19175 (1907.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.41	18.38	18.26	0	0
	1	12	18.46	18.46	18.21		0
	1	24	18.37	18.34	18.14		0
	12	0	18.50	18.53	18.43	0-1	0
	12	6	18.56	18.56	18.40		0
	12	13	18.48	18.56	18.32		0
	25	0	18.52	18.50	18.38		0
16QAM	1	0	18.67	18.62	18.53	0-1	0
	1	12	18.70	18.74	18.54		0
	1	24	18.55	18.62	18.45		0
	12	0	18.59	18.65	18.41	0-2	0
	12	6	18.62	18.61	18.46		0
	12	13	18.50	18.55	18.37		0
	25	0	18.55	18.50	18.39		0
64QAM	1	0	18.63	18.64	18.63	0-2	0
	1	12	18.77	18.70	18.54		0
	1	24	18.70	18.62	18.38		0
	12	0	18.60	18.50	18.51	0-3	0
	12	6	18.70	18.66	18.44		0
	12	13	18.59	18.65	18.45		0
	25	0	18.50	18.53	18.45		0
256QAM	1	0	18.66	18.64	18.36	0-5	0
	1	12	18.68	18.70	18.59		0
	1	24	18.60	18.66	18.33		0
	12	0	18.60	18.60	18.39		0
	12	6	18.66	18.64	18.35		0
	12	13	18.52	18.61	18.32		0
	25	0	18.56	18.49	18.43		0

Table 9-70
LTE Band 2 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 3 MHz Bandwidth

LTE Band 2 (PCS) 3 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18615 (1851.5 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19185 (1908.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.51	18.51	18.36	0	0
	1	7	18.50	18.44	18.24		0
	1	14	18.41	18.41	18.22		0
	8	0	18.59	18.55	18.37	0-1	0
	8	4	18.64	18.56	18.42		0
	8	7	18.53	18.54	18.36		0
	15	0	18.60	18.51	18.43		0
16QAM	1	0	18.81	18.71	18.52	0-1	0
	1	7	18.74	18.75	18.47		0
	1	14	18.65	18.68	18.40		0
	8	0	18.65	18.61	18.43	0-2	0
	8	4	18.67	18.57	18.46		0
	8	7	18.59	18.62	18.37		0
	15	0	18.56	18.57	18.38		0
64QAM	1	0	18.78	18.70	18.61	0-2	0
	1	7	18.80	18.66	18.59		0
	1	14	18.71	18.62	18.48		0
	8	0	18.62	18.55	18.41	0-3	0
	8	4	18.66	18.66	18.42		0
	8	7	18.60	18.63	18.32		0
	15	0	18.60	18.52	18.43		0
256QAM	1	0	18.79	18.79	18.63	0-5	0
	1	7	18.69	18.72	18.52		0
	1	14	18.69	18.68	18.60		0
	8	0	18.66	18.66	18.52		0
	8	4	18.62	18.57	18.49		0
	8	7	18.56	18.65	18.43		0
	15	0	18.56	18.60	18.45		0

Table 9-71
LTE Band 2 (PCS) Measured Plimit for DSI = 3 (Hotspot mode), DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) – 1.4 MHz Bandwidth

LTE Band 2 (PCS) 1.4 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 18607 (1850.7 MHz)	Mid Channel 18900 (1880.0 MHz)	High Channel 19193 (1909.3 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	18.39	18.45	18.27	0	0
	1	2	18.51	18.50	18.30		0
	1	5	18.33	18.36	18.15		0
	3	0	18.37	18.42	18.21		0
	3	2	18.45	18.49	18.28		0
	3	3	18.35	18.46	18.20		0
	6	0	18.50	18.52	18.36	0-1	0
16QAM	1	0	18.62	18.72	18.44	0-1	0
	1	2	18.71	18.80	18.56		0
	1	5	18.65	18.64	18.43		0
	3	0	18.55	18.64	18.47		0
	3	2	18.58	18.66	18.50		0
	3	3	18.49	18.61	18.40		0
	6	0	18.55	18.60	18.34	0-2	0
64QAM	1	0	18.65	18.70	18.47	0-2	0
	1	2	18.68	18.82	18.56		0
	1	5	18.63	18.58	18.47		0
	3	0	18.68	18.68	18.40		0
	3	2	18.61	18.65	18.66		0
	3	3	18.58	18.58	18.38		0
	6	0	18.45	18.50	18.37	0-3	0
256QAM	1	0	18.63	18.72	18.50	0-5	0
	1	2	18.65	18.77	18.62		0
	1	5	18.62	18.71	18.56		0
	3	0	18.55	18.59	18.40		0
	3	2	18.62	18.63	18.44		0
	3	3	18.58	18.59	18.45		0
	6	0	18.54	18.52	18.35		0

9.4.10 LTE Band 30

Table 9-72
LTE Band 30 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 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	**22.44**	0	0
	1	25	22.38		0
	1	49	22.37		0
	25	0	21.45	0-1	1
	25	12	**21.58**		1
	25	25	21.53		1
	50	0	21.51		1
16QAM	1	0	21.85	0-1	1
	1	25	21.87		1
	1	49	21.74		1
	25	0	20.42	0-2	2
	25	12	20.55		2
	25	25	20.48		2
	50	0	20.46		2
64QAM	1	0	20.63	0-2	2
	1	25	20.67		2
	1	49	20.61		2
	25	0	19.41	0-3	3
	25	12	19.60		3
	25	25	19.50		3
	50	0	19.52		3
256QAM	1	0	17.42	0-5	5
	1	25	17.59		5
	1	49	17.31		5
	25	0	17.37		5
	25	12	17.52		5
	25	25	17.46		5
	50	0	17.51		5

Table 9-73
LTE Band 30 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) – 5 MHz Bandwidth

LTE Band 30 5 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	22.35	0	0
	1	12	22.51		0
	1	24	22.42		0
	12	0	21.47	0-1	1
	12	6	21.55		1
	12	13	21.48		1
	25	0	21.50		1
16QAM	1	0	21.66	0-1	1
	1	12	21.79		1
	1	24	21.73		1
	12	0	20.54	0-2	2
	12	6	20.59		2
	12	13	20.54		2
	25	0	20.55		2
64QAM	1	0	20.57	0-2	2
	1	12	20.70		2
	1	24	20.56		2
	12	0	19.46	0-3	3
	12	6	19.55		3
	12	13	19.50		3
	25	0	19.54		3
256QAM	1	0	17.47	0-5	5
	1	12	17.56		5
	1	24	17.53		5
	12	0	17.43		5
	12	6	17.52		5
	12	13	17.46		5
	25	0	17.50		5

Note: LTE Band 30 at 5 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 9-74
LTE Band 30 Measured P_{limit} for DSI = 3 (Hotspot mode) - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	18.90	0	0
	1	25	**18.92**		0
	1	49	18.81		0
	25	0	18.89	0-1	0
	25	12	**18.94**		0
	25	25	18.84		0
	50	0	18.88		0
16QAM	1	0	19.20	0-1	0
	1	25	19.17		0
	1	49	19.19		0
	25	0	18.95	0-2	0
	25	12	18.99		0
	25	25	18.86		0
	50	0	18.92		0
64QAM	1	0	19.19	0-2	0
	1	25	19.16		0
	1	49	19.14		0
	25	0	18.70	0-3	0
	25	12	18.98		0
	25	25	18.89		0
	50	0	18.94		0
256QAM	1	0	17.60	0-5	1.2
	1	25	17.86		1.2
	1	49	17.49		1.2
	25	0	17.65		1.2
	25	12	17.73		1.2
	25	25	17.57		1.2
	50	0	17.63		1.2

Table 9-75
LTE Band 30 Measured P_{limit} for DSI = 3 (Hotspot mode) - 5 MHz Bandwidth

LTE Band 30 5 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	18.82	0	0
	1	12	18.96		0
	1	24	18.75		0
	12	0	18.96	0-1	0
	12	6	19.00		0
	12	13	18.94		0
	25	0	18.91		0
16QAM	1	0	19.19	0-1	0
	1	12	19.20		0
	1	24	19.17		0
	12	0	19.03	0-2	0
	12	6	19.07		0
	12	13	19.04		0
	25	0	18.99		0
64QAM	1	0	19.07	0-2	0
	1	12	19.20		0
	1	24	19.04		0
	12	0	19.01	0-3	0
	12	6	19.05		0
	12	13	19.03		0
	25	0	18.96		0
256QAM	1	0	17.88	0-5	1.2
	1	12	17.84		1.2
	1	24	17.68		1.2
	12	0	17.74		1.2
	12	6	17.71		1.2
	12	13	17.67		1.2
	25	0	17.64		1.2

Note: LTE Band 30 at 5 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 9-76
LTE Band 30 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.58	0	0
	1	25	20.41		0
	1	49	**20.74**		0
	25	0	20.59	0-1	0
	25	12	**20.78**		0
	25	25	20.75		0
	50	0	20.30		0
16QAM	1	0	20.60	0-1	0
	1	25	20.44		0
	1	49	20.53		0
	25	0	20.25	0-2	0.5
	25	12	20.44		0.5
	25	25	20.43		0.5
	50	0	20.41		0.5
64QAM	1	0	19.98	0-2	0.5
	1	25	20.49		0.5
	1	49	20.28		0.5
	25	0	18.95	0-3	1.5
	25	12	18.99		1.5
	25	25	19.29		1.5
	50	0	19.40		1.5
256QAM	1	0	17.60	0-5	3.5
	1	25	17.80		3.5
	1	49	17.58		3.5
	25	0	17.28		3.5
	25	12	17.49		3.5
	25	25	17.45		3.5
	50	0	17.40		3.5

Table 9-77
LTE Band 30 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 5 MHz Bandwidth

LTE Band 30 5 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	20.64	0	0
	1	12	20.80		0
	1	24	20.65		0
	12	0	20.62	0-1	0
	12	6	20.83		0
	12	13	20.82		0
	25	0	20.69		0
16QAM	1	0	20.65	0-1	0
	1	12	20.83		0
	1	24	20.93		0
	12	0	20.00	0-2	0.5
	12	6	20.28		0.5
	12	13	20.44		0.5
	25	0	20.15		0.5
64QAM	1	0	19.74	0-2	0.5
	1	12	20.11		0.5
	1	24	20.10		0.5
	12	0	18.65	0-3	1.5
	12	6	18.72		1.5
	12	13	18.95		1.5
	25	0	18.93		1.5
256QAM	1	0	17.58	0-5	3.5
	1	12	17.43		3.5
	1	24	17.58		3.5
	12	0	17.45		3.5
	12	6	17.57		3.5
	12	13	17.54		3.5
	25	0	17.51		3.5

Note: LTE Band 30 at 5 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.

9.4.11 LTE Band 7

Table 9-78
LTE Band 7 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 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	23.37	23.39	23.30	0	0
	1	50	23.39	23.36	23.25		0
	1	99	**23.45**	23.38	23.21		0
	50	0	22.44	22.46	22.51	0-1	1
	50	25	22.55	22.43	22.59		1
	50	50	**22.60**	22.47	22.55		1
	100	0	22.46	22.37	22.56		1
16QAM	1	0	22.82	22.99	22.74	0-1	1
	1	50	22.88	22.87	22.72		1
	1	99	22.95	22.81	22.67		1
	50	0	21.51	21.54	21.56	0-2	2
	50	25	21.47	21.52	21.66		2
	50	50	21.48	21.54	21.61		2
	100	0	21.46	21.50	21.56		2
64QAM	1	0	21.45	21.43	21.64	0-2	2
	1	50	21.54	21.55	21.56		2
	1	99	21.60	21.56	21.51		2
	50	0	20.47	20.63	20.55	0-3	3
	50	25	20.58	20.55	20.61		3
	50	50	20.56	20.59	20.62		3
	100	0	20.50	20.57	20.57		3
256QAM	1	0	18.32	18.27	18.37	0-5	5
	1	50	18.53	18.53	18.48		5
	1	99	18.35	18.42	18.40		5
	50	0	18.31	18.45	18.45		5
	50	25	18.44	18.48	18.58		5
	50	50	18.44	18.51	18.56		5
	100	0	18.38	18.41	18.49		5

Table 9-79
LTE Band 7 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 15 MHz Bandwidth

LTE Band 7 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20825 (2507.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21375 (2562.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.32	23.56	23.34	0	0
	1	36	23.53	23.45	23.36		0
	1	74	23.46	23.58	23.24		0
	36	0	22.44	22.67	22.50	0-1	1
	36	18	22.68	22.55	22.54		1
	36	37	22.65	22.52	22.52		1
	75	0	22.61	22.59	22.41		1
16QAM	1	0	22.74	22.74	22.69	0-1	1
	1	36	22.67	22.78	22.78		1
	1	74	22.81	22.67	22.63		1
	36	0	21.53	21.71	21.55	0-2	2
	36	18	21.37	21.73	21.56		2
	36	37	21.68	21.77	21.58		2
	75	0	21.66	21.60	21.48		2
64QAM	1	0	21.50	21.72	21.79	0-2	2
	1	36	21.70	21.85	21.75		2
	1	74	21.37	21.64	21.73		2
	36	0	20.31	20.52	20.41	0-3	3
	36	18	20.41	20.68	20.40		3
	36	37	20.57	20.71	20.64		3
	75	0	20.25	20.69	20.42		3
256QAM	1	0	18.75	18.71	18.76	0-5	5
	1	36	18.95	18.98	18.89		5
	1	74	18.79	18.83	18.77		5
	36	0	18.38	18.52	18.52		5
	36	18	18.40	18.55	18.53		5
	36	37	18.50	18.53	18.55		5
	75	0	18.49	18.50	18.50		5

Table 9-80
LTE Band 7 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 10 MHz Bandwidth

LTE Band 7 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20800 (2505.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21400 (2565.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.38	23.23	23.33	0	0
	1	25	23.27	23.19	23.38		0
	1	49	23.36	23.22	23.34		0
	25	0	22.30	22.42	22.39	0-1	1
	25	12	22.44	22.43	22.40		1
	25	25	22.57	22.48	22.48		1
	50	0	22.44	22.54	22.61		1
16QAM	1	0	22.65	22.60	22.76	0-1	1
	1	25	22.74	22.55	22.69		1
	1	49	22.61	22.50	22.60		1
	25	0	21.52	21.45	21.47	0-2	2
	25	12	21.62	21.43	21.46		2
	25	25	21.60	21.48	21.53		2
	50	0	21.52	21.38	21.39		2
64QAM	1	0	21.49	21.38	21.75	0-2	2
	1	25	21.38	21.47	21.71		2
	1	49	21.22	21.32	21.68		2
	25	0	20.70	20.53	20.39	0-3	3
	25	12	20.73	20.62	20.58		3
	25	25	20.55	20.60	20.65		3
	50	0	20.31	20.39	20.47		3
256QAM	1	0	18.43	18.27	18.22	0-5	5
	1	25	18.65	18.65	18.44		5
	1	49	18.51	18.34	18.22		5
	25	0	18.15	18.27	18.32		5
	25	12	18.33	18.35	18.33		5
	25	25	18.25	18.32	18.38		5
	50	0	18.20	18.22	18.29		5

Table 9-81
LTE Band 7 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 5 MHz Bandwidth

LTE Band 7 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20775 (2502.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21425 (2567.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	23.22	23.33	23.22	0	0
	1	12	23.26	23.36	23.24		0
	1	24	23.32	23.37	23.27		0
	12	0	22.29	22.41	22.43	0-1	1
	12	6	22.40	22.44	22.49		1
	12	13	22.45	22.49	22.39		1
	25	0	22.47	22.40	22.57		1
16QAM	1	0	22.51	22.71	22.63	0-1	1
	1	12	22.56	22.64	22.61		1
	1	24	22.66	22.69	22.68		1
	12	0	21.63	21.56	21.43	0-2	2
	12	6	21.44	21.48	21.54		2
	12	13	21.40	21.48	21.46		2
	25	0	21.37	21.39	21.40		2
64QAM	1	0	21.40	21.68	21.48	0-2	2
	1	12	21.44	21.69	21.58		2
	1	24	21.51	21.74	21.54		2
	12	0	20.62	20.46	20.41	0-3	3
	12	6	20.54	20.49	20.48		3
	12	13	20.47	20.50	20.42		3
	25	0	20.25	20.40	20.40		3
256QAM	1	0	18.25	18.20	18.56	0-5	5
	1	12	18.43	18.30	18.64		5
	1	24	18.31	18.21	18.55		5
	12	0	18.23	18.30	18.37		5
	12	6	18.34	18.27	18.46		5
	12	13	18.28	18.34	18.40		5
	25	0	18.27	18.30	18.31		5

Table 9-82
LTE Band 7 Measured P_{limit} for DSI = 3 (Hotspot mode) - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**19.93**	19.68	19.60	0	0
	1	50	19.81	19.60	19.72		0
	1	99	19.79	19.64	19.82		0
	50	0	**20.03**	19.69	19.81	0-1	0
	50	25	19.97	19.71	19.87		0
	50	50	19.94	19.73	19.98		0
	100	0	19.88	19.65	19.79		0
16QAM	1	0	20.22	20.12	20.13	0-1	0
	1	50	20.38	19.99	20.31		0
	1	99	20.38	20.10	20.24		0
	50	0	20.02	19.70	19.81	0-2	0
	50	25	19.97	19.74	19.90		0
	50	50	19.95	19.76	20.00		0
	100	0	19.88	19.68	19.85		0
64QAM	1	0	20.03	19.78	20.00	0-2	0
	1	50	20.07	19.72	20.04		0
	1	99	19.85	19.83	20.10		0
	50	0	19.88	19.72	19.92	0-3	0
	50	25	19.79	19.68	19.86		0
	50	50	19.71	19.65	19.94		0
	100	0	19.68	19.53	19.88		0
256QAM	1	0	18.03	17.87	18.40	0-5	1.5
	1	50	18.33	18.10	18.48		1.5
	1	99	18.11	18.06	18.01		1.5
	50	0	18.28	18.09	18.31		1.5
	50	25	18.15	18.15	18.35		1.5
	50	50	18.11	18.03	18.25		1.5
	100	0	18.26	18.06	18.35		1.5

Table 9-83
LTE Band 7 Measured P_{limit} for DSI = 3 (Hotspot mode) - 15 MHz Bandwidth

LTE Band 7 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20825 (2507.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21375 (2562.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	20.07	19.82	20.17	0	0
	1	36	19.90	19.70	20.12		0
	1	74	19.92	19.72	20.08		0
	36	0	20.13	19.94	20.25	0-1	0
	36	18	20.19	19.92	20.29		0
	36	37	20.06	19.97	20.33		0
	75	0	20.00	19.91	20.20		0
16QAM	1	0	19.81	19.79	20.35	0-1	0
	1	36	20.11	19.71	20.30		0
	1	74	19.86	19.76	20.41		0
	36	0	20.17	19.92	20.30	0-2	0
	36	18	20.19	19.93	20.26		0
	36	37	20.07	19.98	20.23		0
	75	0	20.12	19.95	20.25		0
64QAM	1	0	20.34	19.86	20.37	0-2	0
	1	36	20.26	20.13	20.34		0
	1	74	20.22	20.18	20.35		0
	36	0	20.20	20.04	20.29	0-3	0
	36	18	20.20	19.95	20.28		0
	36	37	20.21	20.00	20.37		0
	75	0	20.07	19.96	20.31		0
256QAM	1	0	18.53	18.24	18.72	0-5	1.5
	1	36	18.60	18.40	18.87		1.5
	1	74	18.52	18.44	18.80		1.5
	36	0	18.68	18.44	18.76		1.5
	36	18	18.80	18.51	18.79		1.5
	36	37	18.58	18.52	18.83		1.5
	75	0	18.44	18.42	18.76		1.5

Table 9-84
LTE Band 7 Measured P_{limit} for DSI = 3 (Hotspot mode) - 10 MHz Bandwidth

LTE Band 7 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20800 (2505.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21400 (2565.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.82	19.70	19.88	0	0
	1	25	19.81	19.63	19.93		0
	1	49	19.76	19.52	19.80		0
	25	0	19.93	19.73	19.92	0-1	0
	25	12	19.85	19.74	19.97		0
	25	25	19.86	19.72	19.95		0
	50	0	19.78	19.72	19.92		0
16QAM	1	0	20.05	19.91	20.32	0-1	0
	1	25	20.15	20.03	20.32		0
	1	49	20.17	19.96	20.31		0
	25	0	20.05	19.82	20.00	0-2	0
	25	12	19.97	19.78	20.00		0
	25	25	19.82	19.78	20.06		0
	50	0	19.70	19.68	19.91		0
64QAM	1	0	20.15	20.12	20.40	0-2	0
	1	25	20.14	20.01	20.24		0
	1	49	20.11	19.96	20.29		0
	25	0	20.04	19.84	20.04	0-3	0
	25	12	19.97	19.82	20.11		0
	25	25	19.89	19.81	20.15		0
	50	0	19.86	19.74	20.00		0
256QAM	1	0	18.16	18.12	18.31	0-5	1.5
	1	25	18.53	18.29	18.58		1.5
	1	49	18.14	18.00	18.48		1.5
	25	0	18.47	18.15	18.44		1.5
	25	12	18.42	18.30	18.46		1.5
	25	25	18.06	18.23	18.55		1.5
	50	0	18.33	18.17	18.44		1.5

Table 9-85
LTE Band 7 Measured P_{limit} for DSI = 3 (Hotspot mode) - 5 MHz Bandwidth

LTE Band 7 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20775 (2502.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21425 (2567.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.81	19.65	19.88	0	0
	1	12	19.69	19.55	19.93		0
	1	24	19.75	19.74	19.94		0
	12	0	19.91	19.96	20.00	0-1	0
	12	6	19.98	19.76	20.13		0
	12	13	19.84	19.81	20.14		0
	25	0	19.82	19.69	19.99		0
16QAM	1	0	19.80	20.00	20.06	0-1	0
	1	12	19.91	19.76	19.74		0
	1	24	19.95	19.82	20.15		0
	12	0	19.87	19.73	20.12	0-2	0
	12	6	19.72	19.60	20.01		0
	12	13	19.80	19.76	20.12		0
	25	0	19.75	19.71	20.06		0
64QAM	1	0	20.27	20.27	20.02	0-2	0
	1	12	20.20	19.78	20.25		0
	1	24	19.70	19.84	20.21		0
	12	0	20.09	19.77	20.08	0-3	0
	12	6	20.12	19.81	20.06		0
	12	13	19.92	19.78	20.13		0
	25	0	20.06	19.78	20.15		0
256QAM	1	0	18.59	18.16	18.47	0-5	1.5
	1	12	18.67	18.31	18.71		1.5
	1	24	18.40	18.15	18.50		1.5
	12	0	18.57	18.19	18.57		1.5
	12	6	18.61	18.30	18.63		1.5
	12	13	18.39	18.23	18.56		1.5
	25	0	18.50	18.27	18.57		1.5

Table 9-86
LTE Band 7 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	**21.00**	20.57	20.71	0	0
	1	50	20.85	20.43	20.79		0
	1	99	20.81	20.64	20.88		0
	50	0	**21.05**	20.94	20.84	0-1	0
	50	25	21.00	20.92	20.94		0
	50	50	20.99	20.77	21.04		0
	100	0	20.93	20.69	20.86		0
16QAM	1	0	21.42	21.07	21.09	0-1	0
	1	50	21.27	20.97	21.26		0
	1	99	21.28	21.16	21.32		0
	50	0	21.08	20.72	20.87	0-2	0
	50	25	21.02	20.77	20.96		0
	50	50	21.01	20.78	21.05		0
	100	0	20.94	20.71	20.90		0
64QAM	1	0	21.12	20.92	21.00	0-2	0
	1	50	20.99	20.88	21.06		0
	1	99	20.96	21.07	20.84		0
	50	0	20.28	20.30	20.70	0-3	0.5
	50	25	20.28	20.27	20.40		0.5
	50	50	20.25	20.25	20.49		0.5
	100	0	20.26	20.21	20.36		0.5
256QAM	1	0	18.08	17.94	18.24	0-5	2.5
	1	50	18.41	18.17	18.27		2.5
	1	99	18.02	18.10	18.04		2.5
	50	0	18.28	18.09	18.33		2.5
	50	25	18.30	18.18	18.33		2.5
	50	50	18.16	18.09	18.35		2.5
	100	0	18.22	18.06	18.28		2.5

Table 9-87
LTE Band 7 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 15 MHz Bandwidth

LTE Band 7 15 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20825 (2507.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21375 (2562.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	20.74	20.76	20.87	0	0
	1	36	20.79	20.83	20.78		0
	1	74	20.76	20.79	20.81		0
	36	0	20.90	20.96	20.97	0-1	0
	36	18	20.98	20.92	20.97		0
	36	37	20.96	20.99	21.04		0
	75	0	20.92	20.90	20.94		0
16QAM	1	0	20.80	21.03	21.08	0-1	0
	1	36	20.97	21.00	21.09		0
	1	74	20.85	21.00	21.00		0
	36	0	20.87	20.95	21.00	0-2	0
	36	18	20.95	20.95	20.97		0
	36	37	20.94	20.98	21.03		0
	75	0	20.95	20.90	20.94		0
64QAM	1	0	20.53	20.93	20.98	0-2	0
	1	36	20.68	21.09	20.92		0
	1	74	20.51	21.11	21.00		0
	36	0	19.97	20.36	20.37	0-3	0.5
	36	18	20.14	20.45	20.37		0.5
	36	37	20.34	20.53	20.36		0.5
	75	0	20.09	20.42	20.35		0.5
256QAM	1	0	18.21	18.31	18.46	0-5	2.5
	1	36	18.36	18.49	18.53		2.5
	1	74	18.29	18.41	18.49		2.5
	36	0	18.24	18.41	18.44		2.5
	36	18	18.42	18.47	18.45		2.5
	36	37	18.38	18.58	18.48		2.5
	75	0	18.36	18.41	18.40		2.5

Table 9-88
LTE Band 7 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 10 MHz Bandwidth

LTE Band 7 10 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20800 (2505.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21400 (2565.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	20.61	20.66	20.67	0	0
	1	25	20.50	20.54	20.68		0
	1	49	20.51	20.65	20.68		0
	25	0	20.67	20.59	20.77	0-1	0
	25	12	20.78	20.68	20.84		0
	25	25	20.73	20.80	20.84		0
	50	0	20.70	20.64	20.78		0
16QAM	1	0	20.93	20.74	20.96	0-1	0
	1	25	20.94	20.89	21.01		0
	1	49	20.92	20.99	21.00		0
	25	0	20.71	20.68	20.80	0-2	0
	25	12	20.79	20.77	20.85		0
	25	25	20.70	20.80	20.81		0
	50	0	20.67	20.64	20.78		0
64QAM	1	0	20.54	20.42	20.96	0-2	0
	1	25	20.65	20.49	20.95		0
	1	49	20.79	20.70	20.74		0
	25	0	20.34	20.27	20.35	0-3	0.5
	25	12	20.44	20.27	20.30		0.5
	25	25	20.61	20.66	20.29		0.5
	50	0	20.36	20.43	20.22		0.5
256QAM	1	0	18.03	18.00	18.28	0-5	2.5
	1	25	18.22	18.21	18.11		2.5
	1	49	18.03	18.22	18.21		2.5
	25	0	18.11	18.17	18.33		2.5
	25	12	18.27	18.26	18.25		2.5
	25	25	18.09	18.24	18.24		2.5
	50	0	18.18	18.16	18.28		2.5

Table 9-89
LTE Band 7 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 5 MHz Bandwidth

LTE Band 7 5 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20775 (2502.5 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21425 (2567.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	20.55	20.61	20.64	0	0
	1	12	20.63	20.62	20.67		0
	1	24	20.68	20.72	20.68		0
	12	0	20.53	20.71	20.77	0-1	0
	12	6	20.57	20.77	20.82		0
	12	13	20.50	20.78	20.82		0
	25	0	20.47	20.72	20.75		0
16QAM	1	0	21.08	21.29	21.37	0-1	0
	1	12	21.04	21.33	21.33		0
	1	24	21.09	21.43	21.34		0
	12	0	20.50	20.69	20.75	0-2	0
	12	6	20.61	20.72	20.86		0
	12	13	20.59	20.76	20.81		0
	25	0	20.55	20.91	20.75		0
64QAM	1	0	20.75	20.88	20.95	0-2	0
	1	12	20.50	20.99	20.94		0
	1	24	20.71	20.95	21.00		0
	12	0	20.07	20.24	20.28	0-3	0.5
	12	6	20.16	20.25	20.40		0.5
	12	13	20.16	20.78	20.30		0.5
	25	0	20.11	20.18	20.26		0.5
256QAM	1	0	18.17	18.13	18.28	0-5	2.5
	1	12	18.29	18.35	18.35		2.5
	1	24	18.15	18.15	18.17		2.5
	12	0	18.13	18.22	18.25		2.5
	12	6	18.76	18.28	18.40		2.5
	12	13	18.20	18.22	18.41		2.5
	25	0	18.18	18.18	18.25		2.5

9.4.12 LTE Band 48

Table 9-90
LTE Band 48 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered), or DSI = 1 (Phablet with grip sensor active), or DSI = 3 (Hotspot Mode), or DSI = 4 (Earjack active) - 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	23.33	23.34	23.27	23.15	0	0
	1	50	23.63	23.45	23.53	**23.75**		0
	1	99	23.37	23.16	23.20	23.54		0
	50	0	22.99	22.64	22.54	22.68	0-1	1
	50	25	22.74	22.59	22.62	**23.00**		1
	50	50	22.55	22.49	22.47	22.81		1
	100	0	22.57	22.53	22.55	22.84		1
16QAM	1	0	22.45	22.35	22.24	22.41	0-1	1
	1	50	22.63	22.55	22.48	22.75		1
	1	99	22.36	22.28	22.16	22.66		1
	50	0	21.71	21.65	21.53	21.80	0-2	2
	50	25	21.77	21.60	21.64	21.95		2
	50	50	21.57	21.58	21.47	21.85		2
	100	0	21.65	21.59	21.55	21.90		2
64QAM	1	0	21.25	21.19	21.21	21.26	0-2	2
	1	50	21.49	21.37	21.41	21.60		2
	1	99	21.10	21.02	21.06	21.37		2
	50	0	20.72	20.68	20.55	20.83	0-3	3
	50	25	20.80	20.65	20.64	20.97		3
	50	50	20.56	20.56	20.46	20.85		3
	100	0	20.61	20.54	20.47	20.85		3
256QAM	1	0	18.04	17.94	17.87	18.03	0-5	5
	1	50	18.30	18.10	18.06	18.36		5
	1	99	18.00	17.72	17.64	18.16		5
	50	0	18.70	18.65	18.53	18.80		5
	50	25	18.80	18.61	18.62	18.92		5
	50	50	18.62	18.52	18.44	18.86		5
	100	0	18.56	18.50	18.48	18.83		5

Table 9-91
LTE Band 48 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered), or DSI = 1 (Phablet with grip sensor active), or DSI = 3 (Hotspot Mode), or DSI = 4 (Earjack active) - 15 MHz Bandwidth

LTE Band 48 15 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55315 (3557.5 MHz)	55765 (3602.5 MHz)	56215 (3647.5 MHz)	56665 (3692.5 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	23.28	23.54	23.68	23.77	0	0
	1	36	23.39	23.56	23.88	23.95		0
	1	74	23.41	23.54	23.85	23.84		0
	36	0	22.63	22.74	22.88	22.92	0-1	1
	36	18	22.55	22.74	22.94	22.97		1
	36	37	22.50	22.71	22.92	22.65		1
	75	0	22.49	22.69	22.94	22.95		1
16QAM	1	0	21.97	22.47	22.41	22.77	0-1	1
	1	36	22.05	22.51	22.53	22.85		1
	1	74	22.26	22.41	22.45	22.83		1
	36	0	21.55	21.82	21.93	21.94	0-2	2
	36	18	21.70	21.76	22.00	22.00		2
	36	37	21.61	21.72	21.98	21.97		2
	75	0	21.57	21.72	21.92	21.98		2
64QAM	1	0	21.52	21.19	21.37	21.43	0-2	2
	1	36	21.52	21.21	21.64	21.45		2
	1	74	21.58	21.06	21.75	21.44		2
	36	0	20.59	20.77	20.94	20.85	0-3	3
	36	18	20.62	20.73	20.96	20.87		3
	36	37	20.61	20.80	20.94	20.84		3
	75	0	20.56	20.74	20.93	20.87		3
256QAM	1	0	18.86	18.19	18.96	18.98	0-5	5
	1	36	18.97	18.30	18.18	18.93		5
	1	74	18.90	18.15	19.00	19.00		5
	36	0	18.76	18.86	18.93	18.99		5
	36	18	18.75	18.85	18.98	18.97		5
	36	37	18.77	18.80	18.96	18.98		5
	75	0	18.73	18.86	18.98	18.96		5

Table 9-92
LTE Band 48 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered), or DSI = 1 (Phablet with grip sensor active), or DSI = 3 (Hotspot Mode), or DSI = 4 (Earjack active) - 10 MHz Bandwidth

LTE Band 48 10 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55290 (3555.0 MHz)	55757 (3601.7 MHz)	56223 (3648.3 MHz)	56690 (3695.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	23.26	23.27	23.51	23.71	0	0
	1	25	23.61	23.62	23.86	24.00		0
	1	49	23.38	23.42	23.70	23.95		0
	25	0	22.45	22.54	22.76	22.90	0-1	1
	25	12	22.48	22.57	22.78	23.00		1
	25	25	22.49	22.52	22.72	22.98		1
	50	0	22.46	22.49	22.74	22.93		1
16QAM	1	0	22.28	22.35	22.52	22.61	0-1	1
	1	25	22.62	22.71	22.65	22.91		1
	1	49	22.53	22.55	22.71	22.80		1
	25	0	21.51	21.52	21.74	21.78	0-2	2
	25	12	21.57	21.55	21.82	21.88		2
	25	25	21.55	21.59	21.77	21.87		2
	50	0	21.50	21.51	21.78	21.88		2
64QAM	1	0	20.89	20.90	21.12	21.53	0-2	2
	1	25	21.20	21.22	21.36	21.65		2
	1	49	20.91	21.01	21.19	21.97		2
	25	0	20.46	20.65	20.78	20.92	0-3	3
	25	12	20.54	20.67	20.94	20.74		3
	25	25	20.53	20.60	20.83	20.69		3
	50	0	20.47	20.52	20.77	20.69		3
256QAM	1	0	18.15	18.26	18.33	18.39	0-5	5
	1	25	18.34	18.67	18.63	18.86		5
	1	49	18.29	18.35	18.56	18.61		5
	25	0	18.34	18.44	18.49	18.64		5
	25	12	18.40	18.56	18.69	18.80		5
	25	25	18.37	18.55	18.59	18.74		5
	50	0	18.38	18.44	18.63	18.71		5

Table 9-93
LTE Band 48 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered), or DSI = 1 (Phablet with grip sensor active), or DSI = 3 (Hotspot Mode), or DSI = 4 (Earjack active) - 5 MHz Bandwidth

LTE Band 48 5 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55265 (3552.5 MHz)	55748 (3600.8 MHz)	56232 (3649.2 MHz)	56715 (3697.5 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	23.47	23.63	23.61	23.65	0	0
	1	12	23.57	23.70	23.71	23.77		0
	1	24	23.57	23.65	23.65	23.73		0
	12	0	22.49	22.70	22.80	22.74	0-1	1
	12	6	22.62	22.75	22.88	22.83		1
	12	13	22.58	22.69	22.84	22.79		1
	25	0	22.55	22.70	22.85	22.82		1
16QAM	1	0	22.45	22.63	22.38	22.65	0-1	1
	1	12	22.53	22.67	22.47	22.72		1
	1	24	22.56	22.61	22.41	22.75		1
	12	0	21.51	21.70	21.77	21.76	0-2	2
	12	6	21.61	21.74	21.85	21.84		2
	12	13	21.63	21.75	21.78	21.83		2
	25	0	21.56	21.72	21.85	21.86		2
64QAM	1	0	21.79	21.54	21.63	21.34	0-2	2
	1	12	21.85	21.63	21.83	21.38		2
	1	24	21.82	21.58	21.67	21.37		2
	12	0	20.61	20.67	20.65	20.88	0-3	3
	12	6	20.64	20.74	20.69	20.94		3
	12	13	20.67	20.70	20.65	20.94		3
	25	0	20.56	20.67	20.69	20.81		3
256QAM	1	0	18.57	18.20	18.55	18.40	0-5	5
	1	12	18.61	18.37	18.54	18.44		5
	1	24	18.69	18.27	18.58	18.60		5
	12	0	18.35	18.49	18.61	18.72		5
	12	6	18.35	18.46	18.59	18.80		5
	12	13	18.44	18.51	18.64	18.80		5
	25	0	18.41	18.44	18.65	18.74		5

Table 9-94
LTE Band 48 Measured P_{limit} for DSI = 2 (Head) - 20 MHz Bandwidth

LTE Band 48 20 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55340 (3560.0 MHz)	55773 (3603.3 MHz)	56207 (3646.7 MHz)	56640 (3690.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	18.46	18.49	18.55	18.64	0	0
	1	50	18.75	18.72	**19.05**	18.90		0
	1	99	18.44	18.30	18.54	18.51		0
	50	0	18.66	18.74	18.92	18.94	0-1	0
	50	25	18.76	18.82	**19.09**	19.03		0
	50	50	18.70	18.74	18.94	18.88		0
	100	0	18.67	18.71	18.92	18.91		0
16QAM	1	0	18.60	18.22	18.76	18.77	0-1	0
	1	50	18.97	18.44	19.25	19.09		0
	1	99	18.68	18.09	18.87	18.75		0
	50	0	18.70	18.80	18.92	19.00	0-2	0
	50	25	18.81	18.90	19.11	19.09		0
	50	50	18.74	18.79	18.90	18.95		0
	100	0	18.72	18.78	18.95	18.94		0
64QAM	1	0	18.15	18.40	18.40	18.52	0-2	0
	1	50	18.69	18.70	18.84	18.85		0
	1	99	18.39	18.37	18.45	18.34		0
	50	0	18.77	18.77	19.00	19.00	0-3	0
	50	25	18.90	18.87	19.15	19.12		0
	50	50	18.79	18.78	18.94	18.95		0
	100	0	18.78	18.80	18.99	18.98		0
256QAM	1	0	18.04	17.98	18.42	18.65	0-5	0.5
	1	50	18.07	18.09	18.35	18.56		0.5
	1	99	17.94	18.54	18.80	18.82		0.5
	50	0	17.85	17.93	18.45	18.66		0.5
	50	25	17.96	18.17	18.44	18.70		0.5
	50	50	18.02	18.28	18.53	18.76		0.5
	100	0	17.90	18.16	18.37	18.58		0.5

Table 9-95
LTE Band 48 Measured P_{limit} for DSI = 2 (Head) - 15 MHz Bandwidth

LTE Band 48 15 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55315 (3557.5 MHz)	55765 (3602.5 MHz)	56215 (3647.5 MHz)	56665 (3692.5 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	18.55	18.55	19.09	18.60	0	0
	1	36	18.56	18.77	19.05	18.67		0
	1	74	18.50	18.54	19.10	18.52		0
	36	0	18.49	18.58	18.96	18.56	0-1	0
	36	18	18.53	18.60	19.04	18.66		0
	36	37	18.54	18.81	19.17	18.61		0
	75	0	18.45	18.74	19.08	18.69		0
16QAM	1	0	18.70	18.45	18.81	18.58	0-1	0
	1	36	18.53	18.55	18.86	18.50		0
	1	74	18.58	18.70	18.99	18.49		0
	36	0	18.61	18.56	19.04	18.46	0-2	0
	36	18	18.58	18.57	18.91	18.42		0
	36	37	18.52	18.65	19.00	18.39		0
	75	0	18.49	18.66	18.99	18.42		0
64QAM	1	0	18.46	18.43	18.61	18.42	0-2	0
	1	36	18.51	18.46	18.65	18.49		0
	1	74	18.55	18.60	18.64	18.43		0
	36	0	18.58	18.51	18.62	18.62	0-3	0
	36	18	18.50	18.54	18.50	18.58		0
	36	37	18.55	18.59	18.54	18.56		0
	75	0	18.49	18.51	18.59	18.62		0
256QAM	1	0	18.20	18.24	18.61	18.62	0-5	0.5
	1	36	18.22	17.99	18.59	18.48		0.5
	1	74	17.99	18.45	17.98	18.76		0.5
	36	0	18.11	18.15	18.56	18.88		0.5
	36	18	18.20	18.20	18.52	18.83		0.5
	36	37	18.22	18.44	18.37	18.83		0.5
	75	0	18.30	18.34	18.47	18.87		0.5

Table 9-96
LTE Band 48 Measured P_{limit} for DSI = 2 (Head) - 10 MHz Bandwidth

LTE Band 48 10 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55290 (3555.0 MHz)	55757 (3601.7 MHz)	56223 (3648.3 MHz)	56690 (3695.0 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	18.54	18.60	19.16	18.97	0	0
	1	25	18.56	18.77	19.00	18.86		0
	1	49	18.62	18.75	19.21	18.91		0
	25	0	18.68	18.64	19.24	18.56	0-1	0
	25	12	18.65	18.73	19.26	18.55		0
	25	25	18.59	18.83	19.16	18.56		0
	50	0	18.55	18.63	19.06	18.57		0
16QAM	1	0	18.45	18.65	19.16	18.49	0-1	0
	1	25	18.54	18.85	19.00	18.54		0
	1	49	18.55	18.68	19.22	18.46		0
	25	0	18.60	18.67	19.07	18.53	0-2	0
	25	12	18.62	18.74	19.08	18.58		0
	25	25	18.54	18.61	19.20	18.60		0
	50	0	18.48	18.58	19.10	18.59		0
64QAM	1	0	18.49	18.91	18.90	18.48	0-2	0
	1	25	18.53	19.00	18.79	18.54		0
	1	49	18.59	18.96	19.04	18.64		0
	25	0	18.62	19.05	19.22	18.52	0-3	0
	25	12	18.50	18.73	19.24	18.61		0
	25	25	18.44	18.71	19.34	18.48		0
	50	0	18.52	18.62	19.22	18.50		0
256QAM	1	0	18.14	18.17	18.30	18.51	0-5	0.5
	1	25	18.07	18.13	18.24	18.60		0.5
	1	49	18.32	18.49	18.56	18.50		0.5
	25	0	18.16	18.11	18.30	18.48		0.5
	25	12	18.24	18.31	18.31	18.42		0.5
	25	25	18.20	18.33	18.44	18.44		0.5
	50	0	18.21	18.37	18.38	18.52		0.5

Table 9-97
LTE Band 48 Measured P_{limit} for DSI = 2 (Head) - 5 MHz Bandwidth

LTE Band 48 5 MHz Bandwidth								
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			55265 (3552.5 MHz)	55748 (3600.8 MHz)	56232 (3649.2 MHz)	56715 (3697.5 MHz)		
			Conducted Power [dBm]					
QPSK	1	0	18.50	18.68	19.20	19.00	0	0
	1	12	18.52	18.73	19.11	18.88		0
	1	24	18.59	18.71	19.17	18.77		0
	12	0	18.52	18.62	19.22	18.64	0-1	0
	12	6	18.61	18.75	19.24	18.61		0
	12	13	18.60	18.80	19.16	18.60		0
	25	0	18.65	18.70	19.26	18.54		0
16QAM	1	0	18.52	18.60	19.27	18.45	0-1	0
	1	12	18.49	18.62	19.22	18.60		0
	1	24	18.53	18.69	19.22	18.48		0
	12	0	18.61	18.67	19.00	18.45	0-2	0
	12	6	18.64	18.70	19.11	18.61		0
	12	13	18.58	18.60	19.15	18.55		0
	25	0	18.52	18.55	19.18	18.57		0
64QAM	1	0	18.49	18.71	19.07	18.61	0-2	0
	1	12	18.50	18.75	18.88	18.65		0
	1	24	18.61	18.88	19.01	18.58		0
	12	0	18.62	19.07	19.12	18.62	0-3	0
	12	6	18.57	18.82	19.22	18.61		0
	12	13	18.49	18.73	19.18	18.55		0
	25	0	18.52	18.62	19.10	18.58		0
256QAM	1	0	18.15	18.23	18.49	18.76	0-5	0.5
	1	12	18.11	18.18	18.48	18.64		0.5
	1	24	18.25	18.26	18.55	18.83		0.5
	12	0	18.10	18.06	18.35	18.65		0.5
	12	6	18.13	18.09	18.40	18.67		0.5
	12	13	18.15	18.18	18.39	18.66		0.5
	25	0	18.15	18.10	18.40	18.59		0.5

9.4.13 LTE Band 41

Table 9-98
LTE Band 41 PC3 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	24.67	24.41	**24.81**	24.32	24.18	0	0
	1	50	24.55	24.41	24.80	24.51	24.63		0
	1	99	24.48	24.34	24.59	24.08	24.58		0
	50	0	23.72	23.50	**24.00**	23.60	23.56	0-1	1
	50	25	23.72	23.60	23.63	23.74	23.74		1
	50	50	23.70	23.43	23.43	23.60	23.69		1
	100	0	23.66	23.64	23.62	23.58	23.58		1
16QAM	1	0	23.92	23.77	23.47	23.57	23.56	0-1	1
	1	50	23.81	23.60	23.61	23.80	23.77		1
	1	99	23.83	23.55	23.46	23.47	23.63		1
	50	0	22.68	22.46	22.58	22.65	22.69	0-2	2
	50	25	22.72	22.54	22.61	22.70	22.74		2
	50	50	22.69	22.62	22.52	22.51	22.71		2
	100	0	22.77	22.63	22.64	22.67	22.75		2
64QAM	1	0	22.57	22.26	22.02	21.99	22.15	0-2	2
	1	50	22.56	22.22	22.26	22.30	22.40		2
	1	99	22.33	22.24	22.00	21.95	22.21		2
	50	0	21.84	21.57	21.56	21.76	21.64	0-3	3
	50	25	21.79	21.59	21.75	21.74	21.82		3
	50	50	21.76	21.53	21.66	21.60	21.89		3
	100	0	21.69	21.50	21.61	21.75	21.69		3
256QAM	1	0	19.27	19.04	19.13	19.26	19.19	0-5	5
	1	50	19.58	19.42	19.49	19.52	19.56		5
	1	99	19.18	18.91	19.20	19.05	19.54		5
	50	0	19.77	19.48	19.56	19.67	19.75		5
	50	25	19.87	19.62	19.71	19.85	19.87		5
	50	50	19.69	19.41	19.64	19.72	19.88		5
	100	0	19.79	19.57	19.58	19.60	19.73		5

Table 9-99
LTE Band 41 PC3 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 15 MHz Bandwidth

LTE Band 41 15 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	24.80	24.66	24.61	24.75	24.72	0	0
	1	36	24.71	24.87	24.76	24.82	24.86		0
	1	74	24.79	24.58	24.62	24.57	24.82		0
	36	0	23.95	23.75	23.74	23.88	23.86	0-1	1
	36	18	23.85	23.78	23.83	23.91	23.85		1
	36	37	23.76	23.77	23.85	23.38	23.95		1
	75	0	23.91	23.76	23.79	23.88	23.93		1
16QAM	1	0	23.69	23.34	23.33	23.70	23.59	0-1	1
	1	36	23.61	23.49	23.44	23.75	23.69		1
	1	74	23.48	23.40	23.32	23.51	23.74		1
	36	0	22.98	22.73	22.72	22.97	22.90	0-2	2
	36	18	22.97	22.76	22.85	22.91	22.89		2
	36	37	22.96	22.75	22.83	22.92	22.92		2
	75	0	22.96	22.76	22.81	22.89	22.93		2
64QAM	1	0	22.56	22.22	22.13	22.71	22.55	0-2	2
	1	36	22.56	22.39	22.29	22.45	22.68		2
	1	74	22.52	22.22	22.19	22.35	22.76		2
	36	0	21.75	21.81	21.77	21.81	21.75	0-3	3
	36	18	21.73	21.87	21.90	21.70	21.67		3
	36	37	21.71	21.85	21.89	21.75	21.61		3
	75	0	21.64	21.78	21.84	21.67	21.78		3
256QAM	1	0	19.75	19.37	19.35	19.63	19.54	0-5	5
	1	36	19.88	19.50	19.68	19.60	19.85		5
	1	74	19.74	19.58	19.50	19.62	19.85		5
	36	0	19.72	19.39	19.50	19.54	19.68		5
	36	18	19.71	19.40	19.55	19.60	19.65		5
	36	37	19.74	19.46	19.65	19.61	19.77		5
	75	0	19.69	19.42	19.60	19.59	19.78		5

Table 9-100
LTE Band 41 PC3 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 10 MHz Bandwidth

LTE Band 41 10 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	24.80	24.33	24.41	24.53	24.60	0	0
	1	25	24.73	24.55	24.63	24.73	24.81		0
	1	49	24.72	24.55	24.35	24.53	24.70		0
	25	0	23.80	23.63	23.60	23.68	23.80	0-1	1
	25	12	23.77	23.65	23.68	23.73	23.85		1
	25	25	23.72	23.60	23.61	23.70	23.70		1
	50	0	23.68	23.64	23.59	23.75	23.75		1
16QAM	1	0	23.93	23.56	23.57	23.46	23.76	0-1	1
	1	25	23.75	23.74	23.80	23.66	23.78		1
	1	49	23.82	23.59	23.58	23.13	23.71		1
	25	0	22.83	22.59	22.61	22.71	22.77	0-2	2
	25	12	22.78	22.63	22.72	22.73	22.88		2
	25	25	22.77	22.68	22.64	22.76	22.81		2
	50	0	22.73	22.64	22.61	22.77	22.82		2
64QAM	1	0	22.62	22.28	22.01	22.42	22.52	0-2	2
	1	25	22.53	22.58	22.30	22.61	22.69		2
	1	49	22.51	22.41	22.00	22.43	22.61		2
	25	0	21.70	21.55	21.61	21.67	21.63	0-3	3
	25	12	21.73	21.61	21.73	21.61	21.54		3
	25	25	21.71	21.64	21.66	21.58	21.68		3
	50	0	21.67	21.62	21.60	21.60	21.63		3
256QAM	1	0	19.33	19.30	19.16	19.06	19.26	0-5	5
	1	25	19.52	19.69	19.23	19.23	19.51		5
	1	49	19.42	19.39	19.02	19.11	19.25		5
	25	0	19.48	19.35	19.30	19.38	19.43		5
	25	12	19.53	19.52	19.42	19.38	19.46		5
	25	25	19.41	19.45	19.45	19.43	19.43		5
	50	0	19.50	19.42	19.39	19.47	19.50		5

Table 9-101
LTE Band 41 PC3 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 5 MHz Bandwidth

LTE Band 41 5 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	24.75	24.49	24.54	24.64	24.72	0	0
	1	12	24.70	24.57	24.56	24.64	24.70		0
	1	24	24.71	24.56	24.57	24.65	24.77		0
	12	0	23.80	23.70	23.66	23.80	23.81	0-1	1
	12	6	23.82	23.71	23.72	23.84	23.84		1
	12	13	23.77	23.70	23.71	23.81	23.83		1
	25	0	23.76	23.69	23.67	23.82	23.82		1
16QAM	1	0	23.78	23.34	23.42	23.52	23.68	0-1	1
	1	12	23.64	23.47	23.55	23.58	23.70		1
	1	24	23.69	23.42	23.50	23.56	23.73		1
	12	0	22.82	22.61	22.00	22.74	22.79	0-2	2
	12	6	22.78	22.59	22.61	22.77	22.85		2
	12	13	22.77	22.57	22.68	22.76	22.88		2
	25	0	22.76	22.70	22.69	22.78	22.82		2
64QAM	1	0	22.75	22.68	22.43	22.34	22.86	0-2	2
	1	12	22.69	22.66	22.41	22.35	22.87		2
	1	24	22.71	22.72	22.42	22.34	22.90		2
	12	0	21.72	21.71	21.76	21.73	21.85	0-3	3
	12	6	21.61	21.60	21.75	21.72	21.73		3
	12	13	21.66	21.60	21.75	21.74	21.62		3
	25	0	21.57	21.63	21.73	21.64	21.63		3
256QAM	1	0	19.35	19.59	19.36	19.40	19.75	0-5	5
	1	12	19.69	19.59	19.40	19.48	19.77		5
	1	24	19.71	19.60	19.37	19.47	19.79		5
	12	0	19.52	19.48	19.40	19.50	19.53		5
	12	6	19.00	19.48	19.45	19.61	19.60		5
	12	13	19.57	19.45	19.47	19.56	19.56		5
	25	0	19.50	19.45	19.37	19.55	19.55		5

Table 9-102
LTE Band 41 PC2 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 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	26.92	**27.24**	27.04	26.82	26.75	0	0
	1	50	26.80	27.16	27.13	27.02	27.15		0
	1	99	26.69	27.08	26.76	26.59	27.00		0
	50	0	26.00	26.28	26.14	26.14	26.12	0-1	1
	50	25	25.95	**26.31**	26.28	26.25	26.28		1
	50	50	25.85	26.24	26.15	26.04	26.26		1
	100	0	25.89	26.20	26.21	26.15	26.15		1
16QAM	1	0	25.89	26.42	25.97	25.96	26.09	0-1	1
	1	50	25.73	26.34	26.27	26.21	26.04		1
	1	99	25.64	26.29	26.11	25.86	25.83		1
	50	0	24.54	25.28	25.04	25.19	24.65	0-2	2
	50	25	24.52	25.37	25.22	25.34	24.82		2
	50	50	24.44	25.31	25.19	25.19	24.76		2
	100	0	24.41	25.24	25.21	25.21	24.69		2
64QAM	1	0	25.03	25.05	25.22	25.28	24.56	0-2	2
	1	50	24.76	25.00	25.49	25.48	24.63		2
	1	99	24.79	25.15	25.52	25.10	24.47		2
	50	0	24.05	23.97	24.00	24.21	23.81	0-3	3
	50	25	24.02	24.01	24.14	24.23	23.86		3
	50	50	23.96	24.02	24.24	24.04	23.72		3
	100	0	23.94	23.92	24.02	24.14	23.77		3
256QAM	1	0	21.91	22.19	22.23	22.30	22.04	0-5	5
	1	50	22.08	22.47	22.57	22.47	22.44		5
	1	99	21.79	22.00	22.37	22.26	22.24		5
	50	0	22.21	22.18	22.12	22.14	22.17		5
	50	25	22.28	22.31	22.31	22.29	22.38		5
	50	50	22.18	22.21	22.18	22.17	22.32		5
	100	0	22.17	22.21	22.17	22.21	22.18		5

Table 9-103
LTE Band 41 PC2 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 15 MHz Bandwidth

LTE Band 41 15 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	26.84	27.01	26.97	26.95	26.83	0	0
	1	36	26.77	27.22	27.14	27.06	27.13		0
	1	74	26.77	26.96	26.87	26.73	27.03		0
	36	0	25.99	26.21	26.18	26.15	26.14	0-1	1
	36	18	25.98	26.32	26.30	26.19	26.23		1
	36	37	25.87	26.22	26.23	26.14	26.27		1
	75	0	25.91	26.28	26.25	26.21	26.25		1
16QAM	1	0	26.37	26.46	26.46	26.49	26.45	0-1	1
	1	36	26.28	26.54	26.54	26.52	26.57		1
	1	74	26.20	26.33	26.36	26.22	26.51		1
	36	0	24.98	25.19	25.15	25.14	25.16	0-2	2
	36	18	24.95	25.29	25.27	25.13	25.20		2
	36	37	24.89	25.20	25.21	25.11	25.25		2
	75	0	24.93	25.27	25.29	25.24	25.27		2
64QAM	1	0	25.04	25.13	25.17	25.24	24.71	0-2	2
	1	36	24.78	25.29	25.30	25.29	24.62		2
	1	74	24.76	25.04	25.11	24.95	24.64		2
	36	0	24.05	24.28	24.24	24.21	23.85	0-3	3
	36	18	24.03	24.39	24.35	24.25	23.87		3
	36	37	23.97	24.26	24.29	24.19	23.87		3
	75	0	23.94	24.31	24.25	24.21	23.86		3
256QAM	1	0	21.80	22.08	22.04	22.07	21.94	0-5	5
	1	36	21.89	22.26	22.24	22.14	22.21		5
	1	74	21.67	21.94	21.97	21.79	22.12		5
	36	0	21.97	22.27	22.21	22.20	22.18		5
	36	18	22.08	22.39	22.37	22.23	22.29		5
	36	37	21.99	22.25	22.27	22.19	22.33		5
	75	0	21.98	22.24	22.27	22.21	22.30		5

Table 9-104
LTE Band 41 PC2 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 10 MHz Bandwidth

LTE Band 41 10 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	26.76	26.87	26.79	26.67	26.70	0	0
	1	25	26.68	27.07	26.98	26.92	26.90		0
	1	49	26.65	26.79	26.68	26.60	26.67		0
	25	0	25.89	26.14	26.06	25.96	26.05	0-1	1
	25	12	25.87	26.27	26.18	26.04	26.18		1
	25	25	25.84	26.16	26.04	26.01	26.08		1
	50	0	25.81	26.18	26.11	26.06	26.10		1
16QAM	1	0	26.25	26.38	26.30	26.15	26.20	0-1	1
	1	25	26.24	26.55	26.52	26.43	26.52		1
	1	49	26.15	26.25	26.15	26.13	26.16		1
	25	0	24.92	25.14	25.07	25.01	25.07	0-2	2
	25	12	24.93	25.32	25.24	25.11	25.22		2
	25	25	24.86	25.18	25.07	25.02	25.09		2
	50	0	24.85	25.27	25.16	25.09	25.14		2
64QAM	1	0	24.91	25.04	24.94	24.92	24.64	0-2	2
	1	25	24.73	25.14	25.15	25.14	24.63		2
	1	49	24.71	24.98	24.94	24.85	24.59		2
	25	0	23.92	24.17	24.07	24.00	23.78	0-3	3
	25	12	23.93	24.30	24.18	24.07	23.80		3
	25	25	23.86	24.21	24.06	24.04	23.81		3
	50	0	23.85	24.28	24.15	24.16	23.83		3
256QAM	1	0	21.62	21.94	21.82	21.95	21.83	0-5	5
	1	25	21.87	22.21	22.13	22.02	22.13		5
	1	49	21.48	21.93	21.72	21.67	21.78		5
	25	0	21.92	22.18	22.10	22.04	22.12		5
	25	12	21.94	22.32	22.21	22.05	22.23		5
	25	25	21.86	22.21	22.08	22.01	22.07		5
	50	0	21.88	22.26	22.18	22.07	22.15		5

Table 9-105
LTE Band 41 PC2 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 5 MHz Bandwidth

LTE Band 41 5 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	26.75	27.09	26.98	26.88	26.95	0	0
	1	12	26.71	27.11	27.00	26.96	26.98		0
	1	24	26.73	27.10	26.95	26.92	26.96		0
	12	0	25.83	26.21	26.10	26.03	26.09	0-1	1
	12	6	25.84	26.23	26.17	26.13	26.13		1
	12	13	25.80	26.21	26.09	26.04	26.10		1
	25	0	25.81	26.21	26.14	26.08	26.17		1
16QAM	1	0	26.04	26.36	26.28	26.21	26.20	0-1	1
	1	12	25.84	26.40	26.22	26.15	26.21		1
	1	24	25.96	26.39	26.25	26.23	26.25		1
	12	0	24.85	25.24	25.09	25.03	25.10	0-2	2
	12	6	24.88	25.22	25.16	25.11	25.18		2
	12	13	24.82	25.19	25.12	25.06	25.13		2
	25	0	24.91	25.29	25.18	25.15	25.21		2
64QAM	1	0	24.84	25.16	25.12	25.10	24.63	0-2	2
	1	12	24.75	25.27	25.19	25.18	24.63		2
	1	24	24.74	25.22	25.13	25.08	24.67		2
	12	0	23.88	24.26	24.12	24.09	23.78	0-3	3
	12	6	23.91	24.28	24.17	24.13	23.81		3
	12	13	23.85	24.23	24.12	24.09	23.78		3
	25	0	23.84	24.26	24.17	24.12	23.78		3
256QAM	1	0	21.98	22.18	22.18	22.10	22.17	0-5	5
	1	12	21.92	22.20	22.14	22.15	22.23		5
	1	24	21.88	22.23	22.18	22.08	22.19		5
	12	0	22.02	22.37	22.23	22.14	22.26		5
	12	6	22.03	22.35	22.31	22.23	22.28		5
	12	13	21.94	22.32	22.24	22.18	22.24		5
	25	0	21.87	22.25	22.16	22.12	22.19		5

Table 9-106
LTE Band 41 PC3 Measured P_{limit} for DSI = 3 (Hotspot mode) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	**20.44**	20.40	20.12	20.19	20.07	0	0
	1	50	20.30	20.15	20.16	20.05	20.00		0
	1	99	20.28	20.21	20.13	20.07	20.10		0
	50	0	20.51	20.40	20.14	20.03	20.00	0-1	0
	50	25	**20.52**	20.27	20.25	20.17	20.16		0
	50	50	20.43	20.25	20.25	20.00	20.26		0
	100	0	20.43	20.36	20.18	20.11	20.14		0
16QAM	1	0	20.30	20.27	20.02	19.97	19.98	0-1	0
	1	50	20.19	20.25	20.28	20.11	20.19		0
	1	99	20.14	20.28	19.92	20.00	20.07		0
	50	0	20.59	20.40	20.21	20.13	20.23	0-2	0
	50	25	20.60	20.35	20.39	20.25	20.30		0
	50	50	20.49	20.31	20.32	20.08	20.35		0
	100	0	20.41	20.11	20.25	20.18	20.21		0
64QAM	1	0	20.24	20.10	19.93	20.08	20.01	0-2	0
	1	50	20.16	20.06	20.10	20.02	20.00		0
	1	99	20.11	20.00	19.97	20.02	20.09		0
	50	0	20.54	20.35	20.26	20.19	20.13	0-3	0
	50	25	20.53	20.42	20.45	20.29	20.26		0
	50	50	20.48	20.30	20.32	20.08	20.33		0
	100	0	20.41	20.27	20.21	20.16	20.17		0
256QAM	1	0	18.37	18.04	18.02	18.00	17.88	0-5	2
	1	50	18.26	18.33	18.32	18.20	18.26		2
	1	99	17.99	18.09	18.24	17.74	18.15		2
	50	0	18.26	18.39	17.95	17.70	17.78		2
	50	25	18.33	18.34	18.16	17.77	17.82		2
	50	50	18.24	18.37	18.07	17.65	17.65		2
	100	0	18.19	18.38	17.92	17.66	17.65		2

Table 9-107
LTE Band 41 PC3 Measured P_{limit} for DSI = 3 (Hotspot mode) - 15 MHz Bandwidth

LTE Band 41 15 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	20.44	20.36	20.40	20.11	20.05	0	0
	1	36	20.34	20.61	20.71	20.09	20.11		0
	1	74	20.38	20.40	20.41	19.83	20.26		0
	36	0	20.56	20.53	20.56	20.12	20.20	0-1	0
	36	18	20.49	20.75	20.66	20.12	20.30		0
	36	37	20.48	20.63	20.64	20.19	20.30		0
	75	0	20.49	20.60	20.66	20.24	20.28		0
16QAM	1	0	20.51	20.46	20.44	20.21	20.22	0-1	0
	1	36	20.40	20.64	20.67	20.19	20.28		0
	1	74	20.28	20.40	20.49	19.96	20.20		0
	36	0	20.48	20.56	20.65	20.23	20.21	0-2	0
	36	18	20.57	20.55	20.75	20.21	20.30		0
	36	37	20.45	20.69	20.72	20.24	20.29		0
	75	0	20.54	20.65	20.70	20.20	20.24		0
64QAM	1	0	20.32	20.16	20.21	19.76	19.99	0-2	0
	1	36	20.18	20.45	20.38	19.96	20.28		0
	1	74	20.12	20.19	20.28	19.78	20.23		0
	36	0	20.40	20.64	20.58	20.21	20.15	0-3	0
	36	18	20.50	20.73	20.72	20.27	20.26		0
	36	37	20.49	20.63	20.66	20.12	20.20		0
	75	0	20.53	20.66	20.72	20.26	20.30		0
256QAM	1	0	18.18	18.40	17.99	18.02	17.98	0-5	2
	1	36	18.20	18.58	18.17	18.08	17.79		2
	1	74	18.17	18.39	18.10	17.85	18.07		2
	36	0	18.09	18.50	18.51	18.18	18.25		2
	36	18	18.47	18.71	18.71	18.29	18.30		2
	36	37	18.42	18.59	18.67	18.26	18.29		2
	75	0	18.45	18.67	18.68	18.30	18.18		2

Table 9-108
LTE Band 41 PC3 Measured P_{limit} for DSI = 3 (Hotspot mode) - 10 MHz Bandwidth

LTE Band 41 10 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	20.41	20.40	20.62	20.01	20.10	0	0
	1	25	20.45	20.55	20.85	20.05	20.12		0
	1	49	20.35	20.51	20.65	19.93	20.15		0
	25	0	20.50	20.55	20.66	20.07	20.21	0-1	0
	25	12	20.40	20.68	20.80	20.11	20.25		0
	25	25	20.48	20.64	20.82	20.20	20.29		0
	50	0	20.38	20.55	20.84	20.25	20.26		0
16QAM	1	0	20.53	20.50	20.50	20.21	20.25	0-1	0
	1	25	20.41	20.65	20.66	20.15	20.26		0
	1	49	20.33	20.58	20.71	20.11	20.19		0
	25	0	20.35	20.51	20.78	20.20	20.18	0-2	0
	25	12	20.44	20.54	20.82	20.25	20.22		0
	25	25	20.38	20.50	20.88	20.24	20.30		0
	50	0	20.50	20.52	20.91	20.18	20.30		0
64QAM	1	0	20.41	20.34	20.72	19.96	20.05	0-2	0
	1	25	20.25	20.38	20.62	19.88	20.11		0
	1	49	20.21	20.20	20.55	19.90	20.12		0
	25	0	20.33	20.55	20.82	20.07	20.16	0-3	0
	25	12	20.44	20.61	20.90	20.17	20.15		0
	25	25	20.44	20.65	20.84	19.80	20.21		0
	50	0	20.50	20.60	20.86	20.25	20.29		0
256QAM	1	0	18.11	18.35	18.60	18.00	18.10	0-5	2
	1	25	18.19	18.53	18.55	18.12	18.05		2
	1	49	18.25	18.36	18.51	17.95	18.07		2
	25	0	18.28	18.40	18.51	18.01	18.28		2
	25	12	18.17	18.61	18.88	17.90	18.29		2
	25	25	18.28	18.46	18.84	18.19	18.30		2
	50	0	18.30	18.40	18.79	18.29	18.15		2

Table 9-109
LTE Band 41 PC3 Measured P_{limit} for DSI = 3 (Hotspot mode) - 5 MHz Bandwidth

LTE Band 41 5 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	20.41	20.25	20.40	20.20	20.10	0	0
	1	12	20.32	20.50	20.61	20.28	20.12		0
	1	24	20.37	20.45	20.51	20.01	20.24		0
	12	0	20.54	20.42	20.56	20.30	20.26	0-1	0
	12	6	20.48	20.61	20.75	20.31	20.29		0
	12	13	20.47	20.49	20.72	20.40	20.30		0
	25	0	20.47	20.58	20.66	20.35	20.20		0
16QAM	1	0	20.50	20.46	20.69	20.43	20.23	0-1	0
	1	12	20.38	20.55	20.77	20.48	20.18		0
	1	24	20.27	20.49	20.54	20.37	20.09		0
	12	0	20.52	20.43	20.64	20.50	20.23	0-2	0
	12	6	20.65	20.46	20.73	20.42	20.28		0
	12	13	20.44	20.61	20.81	20.46	20.30		0
	25	0	20.64	20.69	20.79	20.51	20.19		0
64QAM	1	0	20.54	20.55	20.52	20.26	20.05	0-2	0
	1	12	20.33	20.58	20.47	20.04	20.18		0
	1	24	20.32	20.44	20.56	20.09	20.12		0
	12	0	20.48	20.34	20.69	20.40	20.15	0-3	0
	12	6	20.52	20.43	20.81	20.46	20.20		0
	12	13	20.45	20.58	20.85	20.48	20.22		0
	25	0	20.52	20.67	20.77	20.55	20.29		0
256QAM	1	0	18.21	18.20	18.68	18.22	18.10	0-5	2
	1	12	18.22	18.38	18.45	18.24	18.05		2
	1	24	18.30	18.29	18.41	18.08	18.08		2
	12	0	18.30	18.40	18.60	18.33	18.10		2
	12	6	18.45	18.52	18.75	18.42	18.23		2
	12	13	18.48	18.47	18.76	18.50	18.26		2
	25	0	18.35	18.55	18.80	18.59	18.29		2

Table 9-110
LTE Band 41 PC2 Measured P_{limit} for DSI = 3 (Hotspot mode) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	**22.55**	22.43	22.08	22.04	21.90	0	0
	1	50	22.40	22.39	22.28	22.17	22.32		0
	1	99	22.20	22.31	21.99	21.73	22.16		0
	50	0	22.37	22.39	22.31	22.26	22.14	0-1	0
	50	25	**22.40**	22.39	22.30	22.37	22.30		0
	50	50	22.39	22.32	22.22	22.17	22.36		0
	100	0	22.30	22.23	22.31	22.29	22.22		0
16QAM	1	0	22.57	22.50	22.03	22.13	21.86	0-1	0
	1	50	22.50	22.42	22.35	22.30	22.28		0
	1	99	22.45	22.39	22.07	21.75	22.15		0
	50	0	22.66	22.50	22.38	22.35	22.23	0-2	0
	50	25	22.67	22.60	22.55	22.46	22.36		0
	50	50	22.62	22.51	22.47	22.29	22.43		0
	100	0	22.62	22.50	22.43	22.38	22.30		0
64QAM	1	0	22.24	22.28	21.77	21.88	21.63	0-2	0
	1	50	22.26	22.26	22.22	22.13	22.10		0
	1	99	22.25	22.20	22.10	21.55	21.96		0
	50	0	22.07	22.55	22.36	22.38	22.26	0-3	0
	50	25	22.10	22.58	22.56	22.48	22.41		0
	50	50	22.10	22.55	22.48	22.29	22.42		0
	100	0	21.96	22.45	22.36	22.35	22.28		0
256QAM	1	0	20.98	21.51	21.44	21.47	21.11	0-5	0.9
	1	50	21.42	21.86	21.57	21.46	21.46		0.9
	1	99	21.38	21.36	21.48	21.41	21.42		0.9
	50	0	21.72	21.77	21.73	21.51	21.62		0.9
	50	25	21.87	21.93	21.79	21.60	21.69		0.9
	50	50	21.78	21.80	21.82	21.45	21.67		0.9
	100	0	21.72	21.75	21.67	21.45	21.65		0.9

Table 9-111
LTE Band 41 PC2 Measured P_{limit} for DSI = 3 (Hotspot mode) - 15 MHz Bandwidth

LTE Band 41 15 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	22.38	22.50	22.18	22.18	21.64	0	0
	1	36	22.35	22.50	22.30	22.25	21.89		0
	1	74	22.30	22.49	22.11	22.20	21.88		0
	36	0	22.49	22.51	22.24	22.42	21.84	0-1	0
	36	18	22.50	22.61	22.32	22.60	21.84		0
	36	37	22.51	22.65	22.38	22.55	21.85		0
	75	0	22.50	22.62	22.40	22.59	21.86		0
16QAM	1	0	22.60	22.72	22.28	22.47	21.77	0-1	0
	1	36	22.58	22.76	22.32	22.64	21.85		0
	1	74	22.50	22.72	22.37	22.38	21.70		0
	36	0	22.58	22.60	22.37	22.64	21.68	0-2	0
	36	18	22.60	22.67	22.64	22.78	21.89		0
	36	37	22.50	22.72	22.42	22.68	21.82		0
	75	0	22.55	22.68	22.46	22.79	21.84		0
64QAM	1	0	22.38	22.50	22.08	22.40	21.59	0-2	0
	1	36	22.27	22.50	22.54	22.31	21.85		0
	1	74	22.19	22.49	22.15	22.42	21.77		0
	36	0	22.27	22.45	22.42	22.40	21.48	0-3	0
	36	18	21.95	22.60	22.25	22.28	21.49		0
	36	37	22.05	22.62	22.28	22.28	21.41		0
	75	0	21.94	22.50	22.22	22.20	21.38		0
256QAM	1	0	21.16	21.38	21.20	21.86	20.48	0-5	0.9
	1	36	21.18	21.44	21.51	21.75	20.95		0.9
	1	74	21.05	21.18	21.30	21.62	20.97		0.9
	36	0	21.40	21.94	21.31	21.75	20.96		0.9
	36	18	21.30	21.95	21.64	21.90	20.89		0.9
	36	37	21.10	22.05	21.65	21.68	20.88		0.9
	75	0	21.08	22.07	21.64	21.70	20.85		0.9

Table 9-112
LTE Band 41 PC2 Measured P_{limit} for DSI = 3 (Hotspot mode) - 10 MHz Bandwidth

LTE Band 41 10 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	22.47	22.45	22.47	22.50	21.80	0	0
	1	25	22.52	22.44	22.60	22.52	22.08		0
	1	49	22.49	22.49	22.50	22.50	22.02		0
	25	0	22.62	22.50	22.52	22.64	22.04	0-1	0
	25	12	22.68	22.65	22.60	22.70	22.02		0
	25	25	22.67	22.67	22.65	22.70	22.02		0
	50	0	22.65	22.64	22.60	22.78	22.04		0
16QAM	1	0	22.60	22.72	22.55	22.67	22.01	0-1	0
	1	25	22.70	22.75	22.61	22.62	21.81		0
	1	49	22.75	22.78	22.69	22.64	21.98		0
	25	0	22.74	22.69	22.60	22.82	21.87	0-2	0
	25	12	22.80	22.64	22.91	22.94	22.02		0
	25	25	22.70	22.68	22.73	22.82	21.72		0
	50	0	22.74	22.61	22.75	22.92	21.79		0
64QAM	1	0	22.54	22.48	22.39	22.60	22.14	0-2	0
	1	25	22.46	22.45	22.60	22.52	21.71		0
	1	49	22.39	22.42	22.50	22.64	21.92		0
	25	0	22.30	22.34	22.60	22.60	21.88	0-3	0
	25	12	22.28	22.16	22.57	22.55	21.87		0
	25	25	22.34	22.42	22.50	22.57	21.65		0
	50	0	22.15	22.38	22.51	22.61	21.60		0
256QAM	1	0	21.40	21.25	21.62	22.05	21.15	0-5	0.9
	1	25	21.42	21.34	21.64	22.06	21.24		0.9
	1	49	21.35	21.27	21.61	21.84	21.15		0.9
	25	0	21.55	21.50	21.61	22.10	21.14		0.9
	25	12	21.58	21.52	21.65	22.05	21.08		0.9
	25	25	21.34	21.72	21.84	21.81	21.02		0.9
	50	0	21.38	21.84	21.65	21.84	21.03		0.9

Table 9-113
LTE Band 41 PC2 Measured P_{limit} for DSI = 3 (Hotspot mode) - 5 MHz Bandwidth

LTE Band 41 5 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	22.47	22.45	22.47	22.50	21.88	0	0
	1	12	22.52	22.44	22.60	22.52	22.15		0
	1	24	22.49	22.49	22.50	22.50	22.20		0
	12	0	22.62	22.50	22.52	22.64	22.02	0-1	0
	12	6	22.68	22.65	22.60	22.70	21.98		0
	12	13	22.67	22.67	22.65	22.70	21.82		0
	25	0	22.65	22.64	22.60	22.78	22.18		0
16QAM	1	0	22.60	22.72	22.55	22.67	22.02	0-1	0
	1	12	22.70	22.75	22.61	22.62	21.70		0
	1	24	22.75	22.78	22.69	22.64	21.82		0
	12	0	22.74	22.69	22.60	22.82	21.86	0-2	0
	12	6	22.80	22.64	22.91	22.94	21.91		0
	12	13	22.70	22.68	22.73	22.82	21.62		0
	25	0	22.74	22.61	22.75	22.92	21.78		0
64QAM	1	0	22.54	22.48	22.39	22.60	22.04	0-2	0
	1	12	22.46	22.45	22.60	22.52	21.74		0
	1	24	22.39	22.42	22.50	22.64	22.06		0
	12	0	22.30	22.34	22.60	22.60	21.77	0-3	0
	12	6	22.28	22.16	22.57	22.55	21.86		0
	12	13	22.34	22.42	22.50	22.57	21.71		0
	25	0	22.15	22.38	22.51	22.61	21.65		0
256QAM	1	0	21.40	21.25	21.62	22.05	21.14	0-5	0.9
	1	12	21.42	21.34	21.64	22.06	21.26		0.9
	1	24	21.35	21.27	21.61	21.84	21.08		0.9
	12	0	21.55	21.50	21.61	22.10	20.94		0.9
	12	6	21.58	21.52	21.65	22.05	21.15		0.9
	12	13	21.34	21.72	21.84	21.81	20.94		0.9
	25	0	21.38	21.84	21.65	21.84	21.23		0.9

Table 9-114
LTE Band 41 PC3 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	**24.31**	24.05	23.82	23.90	23.76	0	0
	1	50	24.21	23.97	24.07	24.20	24.22		0
	1	99	23.99	23.98	23.73	23.88	23.94		0
	50	0	23.84	23.46	23.60	23.68	23.68	0-1	0.5
	50	25	**23.85**	23.52	23.60	23.80	23.83		0.5
	50	50	23.75	23.52	23.62	23.57	23.78		0.5
	100	0	23.71	23.51	23.64	23.81	23.63		0.5
16QAM	1	0	23.80	23.46	23.33	23.61	23.45	0-1	0.5
	1	50	23.79	23.47	23.58	23.65	23.73		0.5
	1	99	23.66	23.52	23.28	23.19	23.35		0.5
	50	0	22.81	22.53	22.74	22.72	22.65	0-2	1.5
	50	25	22.78	22.58	22.83	22.89	22.90		1.5
	50	50	22.77	22.54	22.68	22.58	22.80		1.5
	100	0	22.75	22.62	22.73	22.80	22.70		1.5
64QAM	1	0	22.32	22.32	22.02	22.29	22.10	0-2	1.5
	1	50	22.52	22.20	22.39	22.48	22.54		1.5
	1	99	22.25	22.26	22.02	22.02	22.33		1.5
	50	0	21.88	21.51	21.68	21.85	21.70	0-3	2.5
	50	25	21.82	21.67	21.70	21.85	21.94		2.5
	50	50	21.73	21.61	21.66	21.67	21.88		2.5
	100	0	21.65	21.50	21.63	21.75	21.63		2.5
256QAM	1	0	19.37	19.01	19.20	19.32	19.15	0-5	4.5
	1	50	19.62	19.38	19.59	19.59	19.76		4.5
	1	99	19.24	19.01	19.18	19.09	19.56		4.5
	50	0	19.81	19.52	19.63	19.82	19.73		4.5
	50	25	19.80	19.64	19.84	19.86	19.89		4.5
	50	50	19.77	19.55	19.67	19.75	19.91		4.5
	100	0	19.67	19.55	19.67	19.73	19.74		4.5

Table 9-115
LTE Band 41 PC3 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 15 MHz Bandwidth

LTE Band 41 15 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	24.31	23.83	23.85	24.06	24.00	0	0
	1	36	24.14	23.98	24.00	24.12	24.18		0
	1	74	24.05	23.73	23.83	23.84	24.12		0
	36	0	23.68	23.46	23.55	23.60	23.67	0-1	0.5
	36	18	23.54	23.60	23.67	23.70	23.75		0.5
	36	37	23.51	23.50	23.62	23.69	23.86		0.5
	75	0	23.58	23.50	23.62	23.71	23.77		0.5
16QAM	1	0	23.72	23.44	23.45	23.70	23.65	0-1	0.5
	1	36	23.55	23.61	23.64	23.77	23.84		0.5
	1	74	23.59	23.50	23.48	23.52	23.74		0.5
	36	0	22.78	22.48	22.54	22.70	22.69	0-2	1.5
	36	18	22.64	22.58	22.72	22.75	22.76		1.5
	36	37	22.58	22.53	22.64	22.68	22.80		1.5
	75	0	22.60	22.55	22.64	22.73	22.81		1.5
64QAM	1	0	22.18	21.92	21.97	22.00	22.07	0-2	1.5
	1	36	21.98	22.10	22.15	21.90	22.23		1.5
	1	74	21.91	21.79	21.96	21.77	22.27		1.5
	36	0	21.25	21.49	21.27	21.43	21.39	0-3	2.5
	36	18	21.22	21.47	21.49	21.44	21.48		2.5
	36	37	21.14	21.48	21.45	21.44	21.50		2.5
	75	0	21.18	21.45	21.47	21.49	21.50		2.5
256QAM	1	0	19.53	19.23	19.26	19.43	19.43	0-5	4.5
	1	36	19.61	19.42	19.45	19.60	19.67		4.5
	1	74	19.40	19.17	19.25	19.27	19.55		4.5
	36	0	19.77	19.50	19.52	19.69	19.70		4.5
	36	18	19.83	19.61	19.64	19.69	19.79		4.5
	36	37	19.74	19.54	19.62	19.68	19.81		4.5
	75	0	19.73	19.56	19.62	19.74	19.84		4.5

Table 9-116
LTE Band 41 PC3 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 10 MHz Bandwidth

LTE Band 41 10 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel 39750 (2506.0 MHz)	Low-Mid Channel 40185 (2549.5 MHz)	Mid Channel 40620 (2593.0 MHz)	Mid-High Channel 41055 (2636.5 MHz)	High Channel 41490 (2680.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]						
QPSK	1	0	24.18	23.55	23.69	23.81	23.85	0	0
	1	25	24.07	23.77	23.87	23.96	23.99		0
	1	49	24.06	23.46	23.62	23.66	23.69		0
	25	0	23.56	23.26	23.35	23.45	23.48	0-1	0.5
	25	12	23.61	23.39	23.48	23.48	23.63		0.5
	25	25	23.56	23.28	23.40	23.45	23.46		0.5
	50	0	23.51	23.32	23.45	23.52	23.55		0.5
16QAM	1	0	23.85	23.22	23.39	23.46	23.40	0-1	0.5
	1	25	23.72	23.32	23.58	23.56	23.39		0.5
	1	49	23.70	23.12	23.32	23.33	23.38		0.5
	25	0	22.57	22.24	22.36	22.40	22.42	0-2	1.5
	25	12	22.59	22.38	22.52	22.48	22.56		1.5
	25	25	22.53	22.25	22.40	22.44	22.47		1.5
	50	0	22.59	22.41	22.50	22.60	22.49		1.5
64QAM	1	0	22.16	21.60	21.95	21.88	22.40	0-2	1.5
	1	25	22.30	21.99	22.23	22.05	22.13		1.5
	1	49	22.26	21.86	21.95	21.84	22.30		1.5
	25	0	21.50	21.37	21.45	21.48	21.45	0-3	2.5
	25	12	21.50	21.41	21.50	21.48	21.50		2.5
	25	25	21.50	21.41	21.44	21.43	21.48		2.5
	50	0	21.36	21.41	21.48	21.39	21.49		2.5
256QAM	1	0	19.28	18.95	19.06	19.21	19.21	0-5	4.5
	1	25	19.43	19.20	19.29	19.42	19.44		4.5
	1	49	19.36	18.95	19.09	19.15	19.13		4.5
	25	0	19.72	19.30	19.43	19.54	19.55		4.5
	25	12	19.80	19.43	19.60	19.62	19.69		4.5
	25	25	19.70	19.32	19.45	19.62	19.59		4.5
	50	0	19.72	19.40	19.53	19.71	19.65		4.5

Table 9-117
LTE Band 41 PC3 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 5 MHz Bandwidth

LTE Band 41 5 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	24.00	23.70	23.79	23.90	23.90	0	0
	1	12	23.96	23.76	23.87	23.95	23.97		0
	1	24	23.98	23.72	23.83	23.93	23.96		0
	12	0	23.62	23.38	23.43	23.53	23.54	0-1	0.5
	12	6	23.60	23.42	23.49	23.60	23.60		0.5
	12	13	23.62	23.44	23.48	23.57	23.57		0.5
	25	0	23.65	23.39	23.46	23.57	23.57		0.5
16QAM	1	0	23.49	23.29	23.42	23.54	23.56	0-1	0.5
	1	12	23.45	23.35	23.46	23.56	23.57		0.5
	1	24	23.48	23.32	23.49	23.57	23.58		0.5
	12	0	22.51	22.39	22.45	22.57	22.56	0-2	1.5
	12	6	22.48	22.39	22.50	22.60	22.61		1.5
	12	13	22.54	22.36	22.50	22.56	22.59		1.5
	25	0	22.55	22.36	22.46	22.54	22.57		1.5
64QAM	1	0	22.32	21.85	21.99	22.12	22.12	0-2	1.5
	1	12	22.40	21.88	22.00	22.13	22.14		1.5
	1	24	22.21	21.87	21.98	22.08	22.09		1.5
	12	0	21.34	21.50	21.44	21.50	21.47	0-3	2.5
	12	6	21.29	21.49	21.50	21.49	21.50		2.5
	12	13	21.18	21.46	21.47	21.50	21.50		2.5
	25	0	20.96	21.48	21.48	21.48	21.50		2.5
256QAM	1	0	19.39	19.14	19.25	19.38	19.42	0-5	4.5
	1	12	19.32	19.14	19.20	19.37	19.41		4.5
	1	24	19.30	19.14	19.24	19.38	19.38		4.5
	12	0	19.58	19.42	19.46	19.59	19.65		4.5
	12	6	19.63	19.45	19.50	19.70	19.69		4.5
	12	13	19.58	19.40	19.50	19.66	19.65		4.5
	25	0	19.65	19.41	19.52	19.67	19.68		4.5

Table 9-118
LTE Band 41 PC2 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	**25.69**	25.55	25.21	25.56	25.19	0	0
	1	50	25.60	25.52	25.48	25.56	25.66		0
	1	99	25.52	25.43	25.21	25.44	25.52		0
	50	0	**25.77**	25.59	25.49	25.59	25.43	0-1	0
	50	25	25.35	25.62	25.68	25.66	25.75		0
	50	50	25.42	25.58	25.48	25.62	25.28		0
	100	0	25.36	25.54	25.47	25.55	25.23		0
16QAM	1	0	25.60	25.74	25.45	25.75	25.35	0-1	0
	1	50	25.55	25.71	25.68	25.70	25.42		0
	1	99	25.50	25.68	25.40	25.63	25.62		0
	50	0	24.64	24.74	24.66	24.74	24.68	0-2	0.4
	50	25	24.83	24.81	24.76	24.84	24.60		0.4
	50	50	24.68	24.70	24.71	24.64	24.67		0.4
	100	0	24.40	24.69	24.76	24.73	24.52		0.4
64QAM	1	0	24.48	24.75	24.47	24.74	24.54	0-2	0.4
	1	50	24.37	24.67	24.77	24.61	24.46		0.4
	1	99	24.40	24.69	24.48	24.67	24.35		0.4
	50	0	23.62	23.85	23.81	23.87	23.49	0-3	1.4
	50	25	23.65	23.87	23.95	23.92	23.42		1.4
	50	50	23.61	23.77	23.83	23.83	23.40		1.4
	100	0	23.54	23.73	23.71	23.74	23.47		1.4
256QAM	1	0	21.61	21.43	21.71	21.38	21.65	0-5	3.4
	1	50	21.95	21.84	21.76	21.77	21.87		3.4
	1	99	21.62	21.34	21.71	21.44	21.78		3.4
	50	0	21.91	21.74	21.70	21.72	21.89		3.4
	50	25	22.01	21.87	21.92	21.89	22.07		3.4
	50	50	21.90	21.68	21.69	21.73	21.95		3.4
	100	0	21.86	21.67	21.70	21.69	21.80		3.4

Table 9-119
LTE Band 41 PC2 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 15 MHz Bandwidth

LTE Band 41 15 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	26.07	25.53	25.55	25.76	25.82	0	0
	1	36	26.06	25.75	25.69	25.91	25.91		0
	1	74	26.02	25.55	25.56	25.59	25.62		0
	36	0	26.01	25.74	25.67	25.97	25.98	0-1	0
	36	18	25.65	25.86	25.89	25.98	26.02		0
	36	37	25.59	25.78	25.85	25.94	26.00		0
	75	0	25.60	25.80	25.84	25.97	26.02		0
16QAM	1	0	25.77	25.72	25.77	25.99	26.04	0-1	0
	1	36	25.70	25.91	25.90	26.03	26.03		0
	1	74	25.66	25.72	25.75	25.84	25.77		0
	36	0	25.05	25.37	25.39	25.60	25.59	0-2	0.4
	36	18	25.03	25.44	25.55	25.60	25.61		0.4
	36	37	24.91	25.35	25.44	25.56	25.61		0.4
	75	0	24.92	25.44	25.48	25.50	25.61		0.4
64QAM	1	0	24.81	24.82	24.83	25.01	25.00	0-2	0.4
	1	36	24.77	24.93	24.90	24.95	25.00		0.4
	1	74	24.67	24.83	24.94	24.82	24.81		0.4
	36	0	23.98	23.98	24.00	24.12	24.24	0-3	1.4
	36	18	23.97	24.09	24.22	24.03	24.10		1.4
	36	37	23.86	24.17	24.08	24.07	24.16		1.4
	75	0	23.86	24.03	24.02	24.17	24.27		1.4
256QAM	1	0	22.48	21.95	21.99	22.42	22.39	0-5	3.4
	1	36	22.49	22.15	22.21	22.39	22.11		3.4
	1	74	22.48	21.94	22.01	22.13	22.65		3.4
	36	0	22.60	22.34	22.38	22.51	22.64		3.4
	36	18	22.60	22.49	22.54	22.65	22.60		3.4
	36	37	22.54	22.42	22.50	22.64	22.65		3.4
	75	0	22.47	22.42	22.50	22.66	22.67		3.4

Table 9-120
LTE Band 41 PC2 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 10 MHz Bandwidth

LTE Band 41 10 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	25.95	25.21	25.27	25.36	25.47	0	0
	1	25	25.91	25.27	25.55	25.80	25.65		0
	1	49	25.88	25.53	25.18	25.32	25.38		0
	25	0	25.90	25.56	25.34	25.72	25.76	0-1	0
	25	12	25.71	25.71	25.52	25.78	25.90		0
	25	25	25.67	25.61	25.54	25.73	25.78		0
	50	0	25.50	25.62	25.58	25.79	25.68		0
16QAM	1	0	25.68	25.89	25.40	25.84	25.84	0-1	0
	1	25	25.66	25.94	25.46	26.04	25.88		0
	1	49	25.66	25.62	25.48	25.79	25.77		0
	25	0	25.11	25.21	24.61	25.36	25.11	0-2	0.4
	25	12	25.02	25.29	24.76	25.41	25.27		0.4
	25	25	24.90	25.27	24.66	25.40	25.27		0.4
	50	0	24.92	25.26	24.97	25.45	25.15		0.4
64QAM	1	0	24.78	24.64	24.75	24.79	24.63	0-2	0.4
	1	25	24.77	24.93	24.70	24.98	24.68		0.4
	1	49	24.65	24.74	24.62	24.72	24.56		0.4
	25	0	23.77	23.95	23.74	24.00	23.67	0-3	1.4
	25	12	23.72	24.17	23.89	24.00	23.75		1.4
	25	25	23.61	24.05	23.75	24.01	23.68		1.4
	50	0	23.77	24.00	23.82	23.95	23.68		1.4
256QAM	1	0	22.28	21.73	21.72	21.88	21.88	0-5	3.4
	1	25	22.29	22.11	21.97	22.08	22.20		3.4
	1	49	22.28	21.77	21.72	21.86	21.89		3.4
	25	0	22.39	22.24	22.23	22.46	22.45		3.4
	25	12	22.40	22.44	22.38	22.36	22.52		3.4
	25	25	22.54	22.30	22.34	22.40	22.46		3.4
	50	0	22.27	22.34	22.29	22.40	22.51		3.4

Table 9-121
LTE Band 41 PC2 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 5 MHz Bandwidth

LTE Band 41 5 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	26.06	25.41	25.57	25.50	25.70	0	0
	1	12	26.01	25.45	25.65	25.43	25.72		0
	1	24	25.90	25.47	25.59	25.66	25.75		0
	12	0	26.00	25.62	25.61	25.25	25.60	0-1	0
	12	6	25.83	25.64	25.74	25.25	25.74		0
	12	13	25.69	25.61	25.69	25.21	25.71		0
	25	0	25.64	25.71	25.73	25.20	25.67		0
16QAM	1	0	25.80	25.76	25.82	25.29	25.92	0-1	0
	1	12	25.81	25.83	25.82	25.57	25.80		0
	1	24	25.72	25.76	25.84	25.29	25.96		0
	12	0	25.61	25.28	25.30	24.57	24.99	0-2	0.4
	12	6	25.65	25.34	25.37	24.71	25.10		0.4
	12	13	25.55	25.31	25.31	24.55	25.17		0.4
	25	0	25.31	25.36	25.35	24.61	25.07		0.4
64QAM	1	0	25.10	24.91	24.82	24.51	24.61	0-2	0.4
	1	12	24.99	24.90	24.85	24.54	24.61		0.4
	1	24	24.85	24.97	24.94	24.64	24.69		0.4
	12	0	23.99	24.09	23.94	23.61	23.75	0-3	1.4
	12	6	23.93	24.10	24.03	23.74	23.66		1.4
	12	13	23.80	24.04	24.01	23.63	23.63		1.4
	25	0	23.95	24.13	24.02	23.68	23.65		1.4
256QAM	1	0	22.30	21.97	21.94	21.73	22.17	0-5	3.4
	1	12	22.25	21.71	22.05	22.14	22.27		3.4
	1	24	22.20	21.94	22.00	22.05	22.19		3.4
	12	0	22.28	22.45	22.33	22.25	22.50		3.4
	12	6	22.26	22.39	22.40	22.27	22.57		3.4
	12	13	22.33	22.39	22.37	22.20	22.53		3.4
	25	0	22.38	22.33	22.36	22.22	22.54		3.4

9.4.14 LTE Uplink Carrier Aggregation Conducted Powers

Table 9-122
LTE Uplink Carrier Aggregation Measured P_{max} for LTE Band 5/66/48/41 DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) or LTE Band 5/66/41 DSI = 2 (Head)

	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	25.80	24.90

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132072	1720.0	66536	2120.0	QPSK	1	99	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	1	0	24.98	23.88
CA_66C	LTE B66	20	132322	1745.0	66786	2145.0	QPSK	1	99	LTE B66	20	132520	1764.8	66984	2164.8	QPSK	1	0	24.79	24.06
CA_66B	LTE B66	10	132022	1715.0	66486	2115.0	QPSK	1	49	LTE B66	10	132121	1724.9	66585	2124.9	QPSK	1	0	24.30	23.78
CA_66B	LTE B66	10	132322	1745.0	66786	2145.0	QPSK	1	49	LTE B66	10	132421	1754.9	66885	2154.9	QPSK	1	0	24.50	23.80

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	55340	3560.0	QPSK	1	99	LTE B48	20	55538	3579.8	QPSK	1	0	23.96	23.37
CA_48C	LTE B48	20	56640	3690.0	QPSK	1	0	LTE B48	20	56442	3670.2	QPSK	1	99	23.65	23.15

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	40620	2593.0	QPSK	1	0	LTE B41	20	40422	2573.2	QPSK	1	99	24.92	24.81

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	40620	2593.0	QPSK	1	0	LTE B41 PC2	20	40422	2573.2	QPSK	1	99	27.45	27.04

Table 9-123
LTE Uplink Carrier Aggregation Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active)

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132072	1720.0	66536	2120.0	QPSK	50	50	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	50	0	20.80	20.10
CA_66B	LTE B66	10	132022	1715.0	66486	2115.0	QPSK	25	25	LTE B66	10	132121	1724.9	66585	2124.9	QPSK	25	0	20.30	19.81

	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	99	LTE B41	20	41253	2656.3	QPSK	1	0	24.50	23.88

	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	99	LTE B41 PC2	20	41253	2656.3	QPSK	1	0	26.10	25.44

Table 9-124
LTE Uplink Carrier Aggregation Measured P_{limit} for DSI = 2 (Head)

	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	19.35	18.70

Table 9-125
LTE Uplink Carrier Aggregation Measured P_{limit} for DSI = 3 (Hotspot mode)

	PCC									SCC								Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132322	1745.0	66786	2145.0	QPSK	1	99	LTE B66	20	132520	1764.8	66984	2164.8	QPSK	1	0	20.33	19.48
CA_66B	LTE B66	10	132322	1745.0	66786	2145.0	QPSK	1	49	LTE B66	10	132421	1754.9	66885	2154.9	QPSK	1	0	19.93	19.29

	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	39750	2506.0	QPSK	50	50	LTE B41	20	39948	2525.8	QPSK	50	0	21.29	20.43

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	39750	2506.0	QPSK	50	50	LTE B41 PC2	20	39948	2525.8	QPSK	50	0	23.35	22.39

Notes:

1. This device supports uplink carrier aggregation for LTE CA_5B, LTE CA_66B, LTE CA_66C, LTE CA_48C, and LTE CA_41C with a maximum of two component carriers. For intraband contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. 3GPP 36.101 6.2.3A allows for several dB of MPR to be applied when non-contiguous RB allocation is implemented. The conducted powers and MPR settings in this device are permanently implemented per the above 3GPP requirements.
2. Per FCC Guidance, the output power with uplink CA active was measured for the configuration with the highest reported SAR with single carrier for each exposure condition. The power was measured with wideband signal integration over both component carriers.

Figure 9-4
Power Measurement Setup

9.5 NR Conducted Powers

9.5.1 NR Band n71

Table 9-126
NR Band n71 Measured P_{max} for all DSI - 20 MHz Bandwidth

NR Band n71 20 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	24.83	0	0
	1	53	**24.96**		0
	1	104	24.91		0
	50	0	23.87	0-1	1
	50	28	**24.90**	0	0
	50	56	23.95	0-1	1
	100	0	24.00		1
DFT-s-OFDM 16QAM	1	1	23.97	0-1	1
CP-OFDM QPSK	1	1	23.45	0-1.5	1.5

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

Table 9-127
NR Band n71 Measured P_{max} for all DSI - 15 MHz Bandwidth

NR Band n71 15 MHz Bandwidth						
			Channel			
Modulation	RB Size	RB Offset	134100 (670.5 MHz)	138100 (690.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]			
DFT-s-OFDM QPSK	1	1	24.32	24.85	0	0
	1	40	24.51	24.86		0
	1	77	24.71	24.89		0
	36	0	23.56	24.03	0-1	1
	36	22	24.47	24.86	0	0
	36	43	23.70	23.90	0-1	1
	75	0	23.65	24.01		1
DFT-s-OFDM 16QAM	1	1	23.46	23.71	0-1	1
CP-OFDM QPSK	1	1	23.08	23.22	0-1.5	1.5

Table 9-128
NR Band n71 Measured P_{max} for all DSI - 10 MHz Bandwidth

NR Band n71 10 MHz Bandwidth							
			Channel				
Modulation	RB Size	RB Offset	133600 (668 MHz)	136100 (680.5 MHz)	138600 (693 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	24.37	24.63	24.92	0	0
	1	26	24.41	24.73	24.94		0
	1	50	24.52	24.60	24.76		0
	25	0	23.42	23.71	23.91	0-1	1
	25	14	24.31	24.68	24.77	0	0
	25	27	23.42	23.74	23.84	0-1	1
	50	0	23.41	23.85	23.91		1
DFT-s-OFDM 16QAM	1	1	23.26	24.05	23.97	0-1	1
CP-OFDM QPSK	1	1	22.83	23.03	23.40	0-1.5	1.5

Table 9-129
NR Band n71 Measured P_{max} for all DSI - 5 MHz Bandwidth

NR Band n71 5 MHz Bandwidth							
			Channel				
Modulation	RB Size	RB Offset	133100 (665.5 MHz)	136100 (680.5 MHz)	139100 (695.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	24.01	24.83	24.71	0	0
	1	13	24.24	24.60	24.74		0
	1	23	24.06	24.69	24.66		0
	12	0	23.30	23.83	23.91	0-1	1
	12	7	24.20	24.73	24.80	0	0
	12	13	23.22	23.83	23.88	0-1	1
	25	0	23.27	23.83	23.87		1
DFT-s-OFDM 16QAM	1	1	22.90	24.13	23.42	0-1	1
CP-OFDM QPSK	1	1	22.77	23.30	23.39	0-1.5	1.5

9.5.2 NR Band n5

Table 9-130
NR Band n5 Measured P_{max} for all DSI - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	**24.82**	0	0
	1	53	24.77		0
	1	104	23.82		0
	50	0	23.65	0-1	1
	50	28	**24.42**	0	0
	50	56	23.82	0-1	1
	100	0	23.50		1
DFT-s-OFDM 16QAM	1	1	23.42	0-1	1
CP-OFDM QPSK	1	1	23.10	0-1.5	1.5

Note: NR Band n5 (Cell) at 20 MHz bandwidth does not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 9-131
NR Band n5 Measured P_{max} for all DSI - 15 MHz Bandwidth

NR Band n5 15 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	24.33	0	0
	1	40	24.51		0
	1	77	24.08		0
	36	0	23.45	0-1	1
	36	22	24.37	0	0
	36	43	23.46	0-1	1
	75	0	23.40		1
DFT-s-OFDM 16QAM	1	1	23.31	0-1	1
CP-OFDM QPSK	1	1	23.01	0-1.5	1.5

Note: NR Band n5 (Cell) at 15 MHz bandwidth does not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

Table 9-132
NR Band n5 Measured P_{max} for all DSI - 10 MHz Bandwidth

NR Band n5 10 MHz Bandwidth						
			Channel			
Modulation	RB Size	RB Offset	165800 (829 MHz)	168800 (844 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]			
DFT-s-OFDM QPSK	1	1	24.45	24.66	0	0
	1	26	24.61	24.58		0
	1	50	24.22	23.88		0
	25	0	23.83	23.42	0-1	1
	25	14	24.62	24.38	0	0
	25	27	23.61	23.71	0-1	1
	50	0	23.56	23.46		1
DFT-s-OFDM 16QAM	1	1	23.62	23.65	0-1	1
CP-OFDM QPSK	1	1	23.05	23.32	0-1.5	1.5

Table 9-133
NR Band n5 Measured P_{max} for all DSI - 5 MHz Bandwidth

NR Band n5 5 MHz Bandwidth							
			Channel				
Modulation	RB Size	RB Offset	165300 (826.5 MHz)	167300 (836.5 MHz)	169300 (846.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	24.40	24.64	24.48	0	0
	1	13	24.34	24.62	24.83		0
	1	23	24.15	24.63	24.36		0
	12	0	23.60	23.23	23.42	0-1	1
	12	7	24.49	24.33	24.64	0	0
	12	13	23.67	23.43	23.97	0-1	1
	25	0	23.61	23.39	23.87		1
DFT-s-OFDM 16QAM	1	1	23.24	23.54	23.85	0-1	1
CP-OFDM QPSK	1	1	23.01	23.11	23.32	0-1.5	1.5

9.5.3 NR Band n66

Table 9-134
NR Band n66 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel				
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	24.02	23.80	23.44	0	0
	1	53	23.67	**24.28**	23.94		0
	1	104	23.02	23.80	23.65		0
	50	0	22.98	23.05	22.04	0-1	1
	50	28	23.43	**24.23**	23.64	0	0
	50	56	22.06	23.03	22.82	0-1	1
	100	0	22.72	23.01	22.52		1
DFT-s-OFDM 16QAM	1	1	22.63	22.31	22.50	0-1	1
CP-OFDM QPSK	1	1	22.27	21.79	21.49	0-1.5	1.5

Table 9-135
NR Band n66 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 15 MHz Bandwidth

NR Band n66 15 MHz Bandwidth								
			Channel					
Modulation	RB Size	RB Offset	343500 (1717.5 MHz)	347160 (1735.8 MHz)	350820 (1754.1 MHz)	354500 (1772.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
DFT-s-OFDM QPSK	1	1	23.32	23.38	23.77	22.69	0	0
	1	40	23.32	23.44	23.73	23.08		0
	1	77	23.13	23.48	23.18	23.19		0
	36	0	21.93	22.16	22.38	21.61	0-1	1
	36	22	22.80	23.13	23.36	22.70	0	0
	36	43	21.84	22.19	22.08	22.10	0-1	1
	75	0	21.88	22.16	22.26	21.80		1
DFT-s-OFDM 16QAM	1	1	22.38	21.68	22.22	21.64	0-1	1
CP-OFDM QPSK	1	1	21.26	21.43	21.57	21.04	0-1.5	1.5

Table 9-136
NR Band n66 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 10 MHz Bandwidth

NR Band n66 10 MHz Bandwidth								
			Channel				MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	343000 (1715 MHz)	347000 (1735 MHz)	351000 (1755 MHz)	355000 (1775 MHz)		
			Conducted Power [dBm]					
DFT-s-OFDM QPSK	1	1	23.19	23.56	23.61	22.65	0	0
	1	26	23.27	23.58	23.73	23.39		0
	1	50	23.05	23.44	23.16	23.07		0
	25	0	22.05	22.17	22.41	21.68	0-1	1
	25	14	22.95	23.23	23.14	23.02	0	0
	25	27	21.82	22.24	21.98	22.11	0-1	1
	50	0	21.94	22.23	22.12	22.00		1
DFT-s-OFDM 16QAM	1	1	22.38	22.10	22.09	21.51	0-1	1
CP-OFDM QPSK	1	1	21.53	21.39	21.65	21.07	0-1.5	1.5

Table 9-137
NR Band n66 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 5 MHz Bandwidth

NR Band n66 5 MHz Bandwidth								
			Channel				MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	342500 (1712.5 MHz)	346820 (1734.1 MHz)	351160 (1755.8 MHz)	355500 (1777.5 MHz)		
			Conducted Power [dBm]					
DFT-s-OFDM QPSK	1	1	23.28	23.40	23.71	23.36	0	0
	1	13	23.22	23.56	23.69	23.21		0
	1	23	23.18	23.46	23.35	23.37		0
	12	0	21.96	22.26	22.90	22.30	0-1	1
	12	7	22.94	23.19	23.24	23.27	0	0
	12	13	21.97	22.25	22.15	22.21	0-1	1
	25	0	21.96	22.12	22.25	22.03		1
DFT-s-OFDM 16QAM	1	1	22.22	22.16	22.05	21.92	0-1	1
CP-OFDM QPSK	1	1	21.34	21.46	21.78	21.33	0-1.5	1.5

Table 9-138
NR Band n66 Measured P_{limit} for DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 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 QPSK	1	1	20.40	20.47	20.36	0	0
	1	53	20.15	20.35	20.26		0
	1	104	20.28	**20.50**	20.28		0
	50	0	20.31	**20.51**	20.30	0-1	0
	50	28	20.27	20.41	20.30	0	0
	50	56	20.28	20.44	20.21	0-1	0
	100	0	20.29	20.45	20.24		0
DFT-s-OFDM 16QAM	1	1	20.30	20.61	20.01	0-1	0
CP-OFDM QPSK	1	1	20.30	20.33	20.11	0-1.5	0

Table 9-139
NR Band n66 Measured P_{limit} for DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 15 MHz Bandwidth

NR Band n66 15 MHz Bandwidth								
			Channel				MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	343500 (1717.5 MHz)	347160 (1735.8 MHz)	350820 (1754.1 MHz)	354500 (1772.5 MHz)		
			Conducted Power [dBm]					
DFT-s-OFDM QPSK	1	1	20.34	20.57	20.57	20.39	0	0
	1	40	20.36	20.42	20.38	20.29		0
	1	77	20.44	20.55	20.41	20.35		0
	36	0	20.44	20.46	20.50	20.36	0-1	0
	36	22	20.40	20.42	20.47	20.29	0	0
	36	43	20.39	20.48	20.48	20.34	0-1	0
	75	0	20.47	20.47	20.46	20.41		0
DFT-s-OFDM 16QAM	1	1	20.56	20.68	20.52	20.36	0-1	0
CP-OFDM QPSK	1	1	20.43	20.58	20.47	20.52	0-1.5	0

Table 9-140
NR Band n66 Measured P_{limit} for DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 10 MHz Bandwidth

NR Band n66 10 MHz Bandwidth								
			Channel					
Modulation	RB Size	RB Offset	343000 (1715 MHz)	347000 (1735 MHz)	351000 (1755 MHz)	355000 (1775 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
DFT-s-OFDM QPSK	1	1	20.19	20.32	20.33	20.19	0	0
	1	26	20.25	20.27	20.34	20.17		0
	1	50	20.22	20.23	20.39	20.19		0
	25	0	20.23	20.33	20.31	20.16	0-1	0
	25	14	20.25	20.31	20.39	20.14	0	0
	25	27	20.24	20.35	20.39	20.18	0-1	0
	50	0	20.27	20.28	20.34	20.14		0
DFT-s-OFDM 16QAM	1	1	20.34	20.43	20.37	20.13	0-1	0
CP-OFDM QPSK	1	1	20.32	20.36	20.43	20.25	0-1.5	0

Table 9-141
NR Band n66 Measured P_{limit} for DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 5 MHz Bandwidth

NR Band n66 5 MHz Bandwidth								
			Channel					
Modulation	RB Size	RB Offset	342500 (1712.5 MHz)	346820 (1734.1 MHz)	351160 (1755.8 MHz)	355500 (1777.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
DFT-s-OFDM QPSK	1	1	20.17	20.32	20.29	20.06	0	0
	1	13	20.21	20.22	20.26	20.01		0
	1	23	20.31	20.26	20.31	20.11		0
	12	0	20.20	20.25	20.27	20.08	0-1	0
	12	7	20.23	20.24	20.34	20.12	0	0
	12	13	20.19	20.26	20.33	20.11	0-1	0
	25	0	20.24	20.21	20.31	20.03		0
DFT-s-OFDM 16QAM	1	1	20.26	20.28	20.35	20.14	0-1	0
CP-OFDM QPSK	1	1	20.24	20.35	20.36	20.17	0-1.5	0

9.5.4 NR Band n2

Table 9-142
NR Band n2 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 20 MHz Bandwidth

NR Band n2 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376000 (1880 MHz)	380000 (1900 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	23.82	23.89	**23.90**	0	0
	1	53	23.74	23.75	23.78		0
	1	104	23.83	23.78	23.30		0
	50	0	22.88	22.90	22.88	0-1	1
	50	28	23.89	23.83	**23.90**	0	0
	50	56	22.89	22.76	22.96	0-1	1
	100	0	22.87	22.80	22.96		1
DFT-s-OFDM 16QAM	1	1	22.32	22.82	22.48	0-1	1
CP-OFDM QPSK	1	1	21.85	22.29	22.56	0-1.5	1.5

Table 9-143
NR Band n2 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 15 MHz Bandwidth

NR Band n2 15 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371500 (1857.5 MHz)	376000 (1880 MHz)	380500 (1902.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	23.79	23.35	23.90	0	0
	1	40	23.82	23.79	23.75		0
	1	77	23.96	23.82	23.58		0
	36	0	22.89	22.86	22.96	0-1	1
	36	22	23.83	23.76	23.87	0	0
	36	43	22.96	22.72	22.88	0-1	1
	75	0	22.92	22.81	22.88		1
DFT-s-OFDM 16QAM	1	1	22.33	22.88	22.94	0-1	1
CP-OFDM QPSK	1	1	22.00	22.42	22.38	0-1.5	1.5

Table 9-144
NR Band n2 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 10 MHz Bandwidth

NR Band n2 10 MHz Bandwidth							
			Channel				
Modulation	RB Size	RB Offset	371000 (1855 MHz)	376000 (1880 MHz)	381000 (1905 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	23.63	23.68	23.63	0	0
	1	26	23.81	23.60	23.64		0
	1	50	23.71	23.57	23.55		0
	25	0	22.71	22.65	22.66	0-1	1
	25	14	23.62	23.70	23.64	0	0
	25	27	22.73	22.65	22.70	0-1	1
	50	0	22.68	22.68	22.64		1
DFT-s-OFDM 16QAM	1	1	22.41	22.66	23.01	0-1	1
CP-OFDM QPSK	1	1	21.84	22.25	22.16	0-1.5	1.5

Table 9-145
NR Band n2 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 5 MHz Bandwidth

NR Band n2 5 MHz Bandwidth							
			Channel				
Modulation	RB Size	RB Offset	370500 (1852.5 MHz)	376000 (1880 MHz)	381500 (1907.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	23.64	23.47	23.56	0	0
	1	13	23.74	23.55	23.52		0
	1	23	23.80	23.50	23.45		0
	12	0	22.68	22.66	22.73	0-1	1
	12	7	23.65	23.65	23.59	0	0
	12	13	22.66	22.67	22.55	0-1	1
	25	0	22.68	22.57	22.59		1
DFT-s-OFDM 16QAM	1	1	22.65	22.33	22.32	0-1	1
CP-OFDM QPSK	1	1	21.89	22.13	22.19	0-1.5	1.5

Table 9-146
NR Band n2 Measured P_{limit} for DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 20 MHz Bandwidth

NR Band n2 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376000 (1880 MHz)	380000 (1900 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	18.87	18.73	**18.88**	0	0
	1	53	18.70	18.52	18.82		0
	1	104	18.80	18.58	18.64		0
	50	0	18.83	18.50	18.83	0-1	0
	50	28	18.78	18.44	18.74	0	0
	50	56	18.47	18.46	**18.87**	0-1	0
	100	0	18.49	18.46	18.86		0
DFT-s-OFDM 16QAM	1	1	18.50	18.34	18.94	0-1	0
CP-OFDM QPSK	1	1	18.93	18.75	18.86	0-1.5	0

Table 9-147
NR Band n2 Measured P_{limit} for DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 15 MHz Bandwidth

NR Band n2 15 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371500 (1857.5 MHz)	376000 (1880 MHz)	380500 (1902.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	18.82	18.66	18.75	0	0
	1	40	18.67	18.56	18.72		0
	1	77	18.80	18.65	18.65		0
	36	0	18.91	18.71	18.76	0-1	0
	36	22	18.85	18.62	18.69	0	0
	36	43	18.86	18.64	18.70	0-1	0
	75	0	18.90	18.66	18.73		0
DFT-s-OFDM 16QAM	1	1	18.86	18.65	18.64	0-1	0
CP-OFDM QPSK	1	1	18.73	18.76	18.86	0-1.5	0

Table 9-148
NR Band n2 Measured P_{limit} for DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 10 MHz Bandwidth

NR Band n2 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371000 (1855 MHz)	376000 (1880 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	18.59	18.64	18.62	0	0
	1	26	18.63	18.55	18.59		0
	1	50	18.63	18.61	18.55		0
	25	0	18.71	18.72	18.59	0-1	0
	25	14	18.69	18.70	18.59	0	0
	25	27	18.66	18.66	18.62	0-1	0
	50	0	18.60	18.65	18.63		0
DFT-s-OFDM 16QAM	1	1	18.63	18.57	18.51	0-1	0
CP-OFDM QPSK	1	1	18.71	18.67	18.64	0-1.5	0

Table 9-149
NR Band n2 Measured P_{limit} for DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 5 MHz Bandwidth

NR Band n2 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	370500 (1852.5 MHz)	376000 (1880 MHz)	381500 (1907.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	18.69	18.64	18.54	0	0
	1	13	18.65	18.58	18.52		0
	1	23	18.67	18.60	18.59		0
	12	0	18.74	18.69	18.54	0-1	0
	12	7	18.73	18.58	18.58	0	0
	12	13	18.71	18.57	18.60	0-1	0
	25	0	18.76	18.65	18.56		0
DFT-s-OFDM 16QAM	1	1	18.53	18.51	18.42	0-1	0
CP-OFDM QPSK	1	1	18.67	18.59	18.38	0-1.5	0

9.5.5 NR Band n41

Table 9-150
NR Band n41 Measured P_{max} for all DSI - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM QPSK	1	1	22.81	0	0
	1	137	**23.41**		0
	1	271	23.25		0
	135	0	22.58	0-1	1
	135	69	**23.28**	0	0
	135	138	22.65	0-1	1
	270	0	22.51		1
DFT-s-OFDM 16QAM	1	1	21.66	0-1	1
CP-OFDM QPSK	1	1	21.17	0-1.5	1.5

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

Table 9-151
NR Band n41 Measured P_{max} for all DSI - 90 MHz Bandwidth

NR Band n41 90 MHz Bandwidth						
			Channel			
Modulation	RB Size	RB Offset	508200 (2541 MHz)	528996 (2644.98 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]			
DFT-s-OFDM QPSK	1	1	23.90	23.52	0	0
	1	123	23.67	23.13		0
	1	243	23.82	23.65		0
	120	0	22.16	22.02	0-1	1
	120	63	23.35	23.29	0	0
	120	125	22.02	22.27	0-1	1
	243	0	22.52	22.16		1
DFT-s-OFDM 16QAM	1	1	23.00	22.46	0-1	1
CP-OFDM QPSK	1	1	22.03	21.78	0-1.5	1.5

Table 9-152
NR Band n41 Measured P_{max} for all DSI - 80 MHz Bandwidth

NR Band n41 80 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	507204 (2536.02 MHz)	529998 (2649.99 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM QPSK	1	1	23.38	23.03	0	0
	1	109	23.90	23.85		0
	1	215	23.25	23.23		0
	108	0	22.68	22.23	0-1	1
	108	55	23.27	23.01	0	0
	108	109	22.38	22.42	0-1	1
	216	0	22.41	22.13		1
DFT-s-OFDM 16QAM	1	1	23.00	22.41	0-1	1
CP-OFDM QPSK	1	1	22.74	21.83	0-1.5	1.5

Table 9-153
NR Band n41 Measured P_{max} for all DSI - 60 MHz Bandwidth

NR Band n41 60 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	505200 (2526 MHz)	518598 (2592.99 MHz)	531996 (2659.98 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	23.00	22.59	23.16	0	0
	1	81	23.07	22.69	22.84		0
	1	160	22.70	22.83	22.81		0
	81	0	22.08	21.63	21.78	0-1	1
	81	41	22.76	22.55	22.63	0	0
	81	81	21.60	21.74	21.50	0-1	1
	162	0	22.00	21.53	21.88		1
DFT-s-OFDM 16QAM	1	1	22.54	21.50	22.03	0-1	1
CP-OFDM QPSK	1	1	21.77	21.00	21.22	0-1.5	1.5

Table 9-154
NR Band n41 Measured P_{max} for all DSI - 50 MHz Bandwidth

NR Band n41 50 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	504204 (2521.02 MHz)	518598 (2592.99 MHz)	532998 (2664.99 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM QPSK	1	1	23.27	23.73	23.28	0	0
	1	67	23.22	23.32	23.23		0
	1	131	23.52	23.13	23.00		0
	64	0	21.99	22.00	22.71	0-1	1
	64	35	22.80	23.00	23.31	0	0
	64	69	21.87	22.13	22.12	0-1	1
	128	0	21.90	22.06	22.42		1
DFT-s-OFDM 16QAM	1	1	22.74	22.99	22.27	0-1	1
CP-OFDM QPSK	1	1	21.92	22.17	22.00	0-1.5	1.5

Table 9-155
NR Band n41 Measured P_{max} for all DSI - 40 MHz Bandwidth

NR Band n41 40 MHz Bandwidth								
			Channel				MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	503202 (2516.01 MHz)	513468 (2567.34 MHz)	523734 (2618.67 MHz)	534000 (2670 MHz)		
			Conducted Power [dBm]					
DFT-s-OFDM QPSK	1	1	23.72	23.37	23.00	23.35	0	0
	1	53	23.52	23.53	22.85	23.16		0
	1	104	23.63	23.56	23.10	22.75		0
	50	0	22.78	22.67	22.05	22.34	0-1	1
	50	28	23.57	23.19	22.97	23.13	0	0
	50	56	22.67	22.64	21.70	22.23	0-1	1
	100	0	22.63	22.45	22.00	22.21		1
DFT-s-OFDM 16QAM	1	1	23.00	22.83	22.13	22.56	0-1	1
CP-OFDM QPSK	1	1	22.40	22.23	21.73	21.67	0-1.5	1.5

Table 9-156
NR Band n41 Measured P_{max} for all DSI - 20 MHz Bandwidth

NR Band n41 20 MHz Bandwidth									
			Channel					MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	501204 (2506.02 MHz)	509898 (2549.49 MHz)	518598 (2592.99 MHz)	527298 (2636.49 MHz)	535998 (2679.99 MHz)		
			Conducted Power [dBm]						
DFT-s-OFDM QPSK	1	1	23.24	23.13	23.07	22.61	22.57	0	0
	1	26	23.00	23.03	22.99	22.50	22.50		0
	1	49	22.72	23.14	22.63	22.51	22.51		0
	25	0	21.89	22.12	22.00	21.56	21.65	0-1	1
	25	13	22.85	23.10	22.73	22.67	22.57	0	0
	25	26	21.87	22.13	21.64	21.63	21.61	0-1	1
	50	0	21.90	22.04	21.63	21.58	21.51		1
DFT-s-OFDM 16QAM	1	1	22.11	22.01	21.75	21.52	21.73	0-1	1
CP-OFDM QPSK	1	1	21.27	21.65	21.31	21.38	21.00	0-1.5	1.5

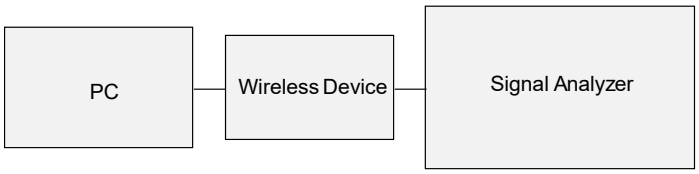


Figure 9-5
Power Measurement Setup

9.6 WLAN Conducted Powers

Table 9-157
2.4 GHz WLAN Maximum Average RF Power – Ant 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	20.51	17.92	17.35	16.47
2437	6	20.38	17.54	17.36	16.31
2457	10	N/A	17.72	17.66	16.58
2462	11	20.77	16.68	16.39	14.06

Table 9-158
2.4 GHz WLAN Maximum Average RF Power – Ant 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	20.86	17.25	17.15	16.73
2437	6	20.88	17.96	17.96	16.70
2457	10	N/A	17.76	17.69	16.26
2462	11	19.25	16.45	16.35	14.01

Table 9-159
5 GHz WLAN Maximum Average RF Power – Ant 1

5GHz (20MHz) Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11a	802.11n	802.11ac	802.11ax SU
		Average	Average	Average	Average
5180	36	16.01	15.93	16.06	15.93
5200	40	17.64	17.76	17.61	15.99
5220	44	17.72	17.71	17.56	15.92
5240	48	17.67	17.66	17.51	15.97
5260	52	17.32	17.18	17.25	15.73
5280	56	17.96	17.96	17.94	15.59
5300	60	17.84	17.77	17.77	15.34
5320	64	16.14	16.12	16.16	15.97
5500	100	16.48	16.34	16.41	15.99
5520	104	17.97	17.95	17.98	15.76
5600	120	17.68	17.76	17.64	15.97
5620	124	17.61	17.71	17.63	15.88
5720	144	17.77	17.75	17.71	15.98
5745	149	17.98	17.35	17.29	15.48
5765	153	17.61	17.71	17.58	15.84
5785	157	17.73	17.74	17.72	15.98
5805	161	17.72	17.83	17.70	15.95
5825	165	17.74	17.84	17.77	15.97

Table 9-160
5 GHz WLAN Maximum Average RF Power – Ant 2

5GHz (20MHz) Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11a	802.11n	802.11ac	802.11ax SU
		Average	Average	Average	Average
5180	36	16.20	16.16	16.13	15.55
5200	40	17.25	17.21	17.36	15.54
5220	44	17.26	17.10	17.33	15.48
5240	48	17.25	17.16	17.39	15.49
5260	52	17.26	17.25	17.44	15.59
5280	56	17.35	17.37	17.36	15.68
5300	60	17.34	17.49	17.58	15.70
5320	64	16.31	16.24	16.24	15.69
5500	100	16.08	16.02	16.06	15.32
5520	104	17.77	17.81	17.78	15.97
5600	120	17.53	17.16	17.23	15.55
5620	124	17.26	17.01	17.35	15.44
5720	144	17.29	17.91	17.15	15.40
5745	149	17.13	17.36	17.34	15.55
5765	153	17.36	17.39	17.56	15.79
5785	157	17.25	17.19	17.54	15.69
5805	161	17.31	17.16	17.37	15.56
5825	165	16.98	17.96	17.21	15.42

Table 9-161
5 GHz WLAN Maximum Average RF Power – MIMO

5GHz (20MHz) 802.11n Conducted Power [dBm]				
Freq [MHz]	**Channel**	**ANT1**	**ANT2**	**MIMO**
5180	36	15.93	16.16	19.06
5200	40	17.76	17.21	20.50
5220	44	17.71	17.10	20.43
5240	48	17.66	17.16	20.43
5260	52	17.18	17.25	20.23
5280	56	17.96	17.37	20.69
5300	60	17.77	17.49	20.64
5320	64	16.12	16.24	19.19
5500	100	16.34	16.02	19.19
5600	120	17.76	17.16	20.48
5620	124	17.71	17.01	20.38
5720	144	17.75	17.91	20.84
5745	149	17.35	17.36	20.37
5785	157	17.74	17.19	20.48
5825	165	17.84	17.96	20.91

Table 9-162
Maximum Output Powers During Conditions with 2.4 GHz and 5 GHz WLAN

2.4GHz 802.11n Conducted Power [dBm]			
Freq [MHz]	Channel	ANT1	ANT2
2412	1	16.31	15.68
2437	6	16.48	16.65
2462	11	16.39	16.35

5GHz (40MHz) 802.11n Conducted Power [dBm]			
Freq [MHz]	Channel	ANT1	ANT2
5190	38	13.37	13.21
5230	46	13.66	13.38
5270	54	13.92	13.78
5310	62	13.49	13.41

5GHz (80MHz) 802.11ac Conducted Power [dBm]			
Freq [MHz]	Channel	ANT1	ANT2
5530	106	12.36	12.28
5610	122	13.32	13.31
5690	138	13.63	13.37
5775	155	13.24	13.58

Table 9-163
2.4 GHz WLAN Reduced Average RF Power (RCV Active) – Ant 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	16.61	16.55	16.31	16.47
2437	6	16.72	16.56	16.48	16.31
2462	11	16.95	16.68	16.39	14.06

Table 9-164
2.4 GHz WLAN Reduced Average RF Power (RCV Active) – Ant 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	16.36	15.80	15.68	16.73
2437	6	16.23	16.68	16.65	16.70
2462	11	16.15	16.45	16.35	14.01

Table 9-165
5 GHz WLAN Reduced Average RF Power – Ant 1

5GHz (40MHz) Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11n	802.11ac	802.11ax
		Average	Average	Average
5190	38	13.37	13.37	12.89
5230	46	13.66	13.72	13.85
5270	54	13.92	13.89	13.97
5310	62	13.49	12.52	13.85

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5530	106	13.70	12.10
5610	122	13.32	12.72
5690	138	13.63	12.97
5775	155	13.24	12.62

Table 9-166
5 GHz WLAN Reduced Average RF Power – Ant 2

5GHz (40MHz) Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11n	802.11ac	802.11ax
		Average	Average	Average
5190	38	13.21	12.84	13.06
5230	46	13.38	13.13	13.33
5270	54	13.78	13.93	13.55
5310	62	13.41	12.72	13.85

5GHz (80MHz) Conducted Power [dBm]			
Freq [MHz]	Channel	IEEE Transmission Mode	
		802.11ac	802.11ax
		Average	Average
5530	106	13.21	12.78
5610	122	13.31	12.42
5690	138	13.37	12.60
5775	155	13.58	12.96

Table 9-167
5 GHz WLAN Reduced Average RF Power – MIMO

5GHz (40MHz) 802.11n Conducted Power [dBm]				
Freq [MHz]	**Channel**	**ANT1**	**ANT2**	**MIMO**
5190	38	13.37	13.21	16.30
5230	46	13.66	13.38	16.53
5270	54	13.92	13.78	16.86
5310	62	13.49	13.41	16.46
5GHz (80MHz) 802.11ac Conducted Power [dBm]				
Freq [MHz]	**Channel**	**ANT1**	**ANT2**	**MIMO**
5530	106	12.36	12.28	15.33
5610	122	13.32	13.31	16.33
5690	138	13.63	13.37	16.51
5775	155	13.24	13.58	16.42

Table 9-168
Reduced Output Powers when RCV Active During Conditions with 2.4 GHz and 5 GHz WLAN

2.4GHz 802.11n Conducted Power [dBm]			
Freq [MHz]	**Channel**	**ANT1**	**ANT2**
2412	1	13.05	13.11
2437	6	13.67	13.35
2462	11	13.15	13.97

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission modes with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured.

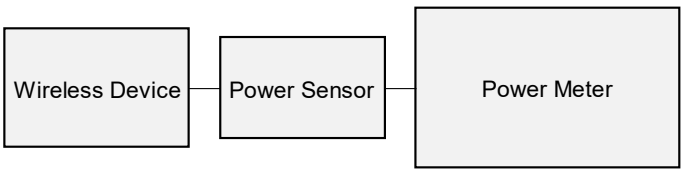


Figure 9-6
Power Measurement Setup

9.7 Bluetooth Conducted Powers

Table 9-169
Bluetooth Average RF Power

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
			[dBm]	[mW]
2402	1.0	0	12.53	17.902
2441	1.0	39	14.91	30.974
2480	1.0	78	13.49	22.325
2402	2.0	0	10.70	11.761
2441	2.0	39	12.16	16.436
2480	2.0	78	10.81	12.044
2402	3.0	0	10.42	11.011
2441	3.0	39	12.33	17.093
2480	3.0	78	10.84	12.134

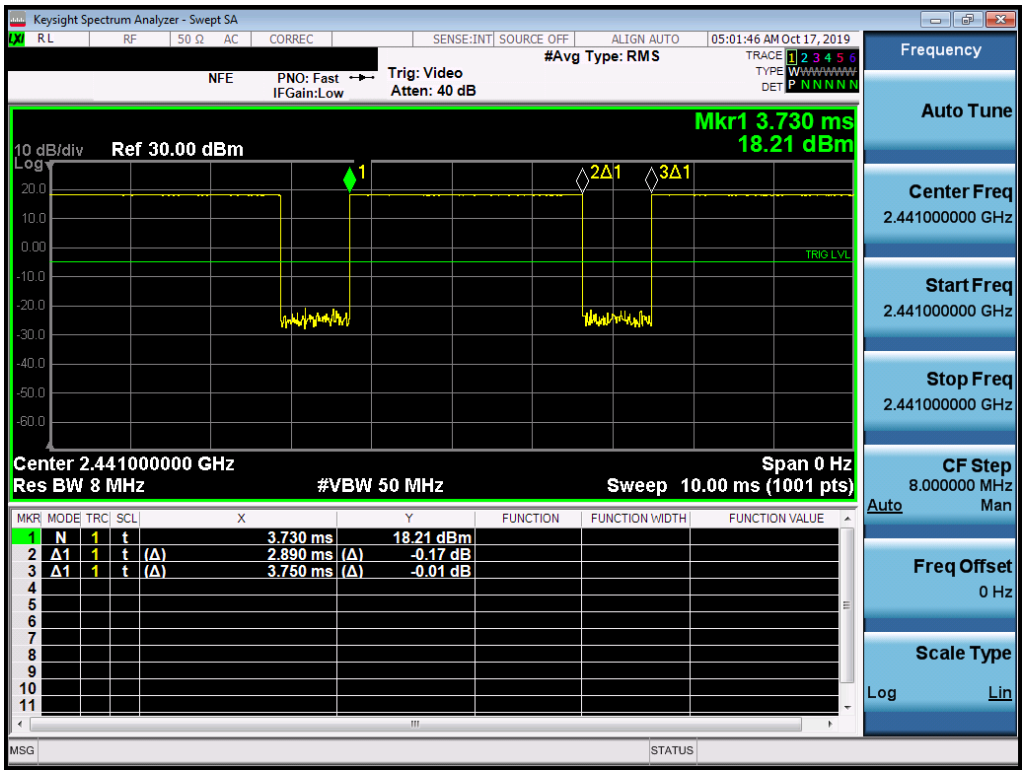


Figure 9-7
Bluetooth Transmission Plot

Equation 9-1
Bluetooth Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.89ms}{3.75ms} * 100\% = 77.1\%$$

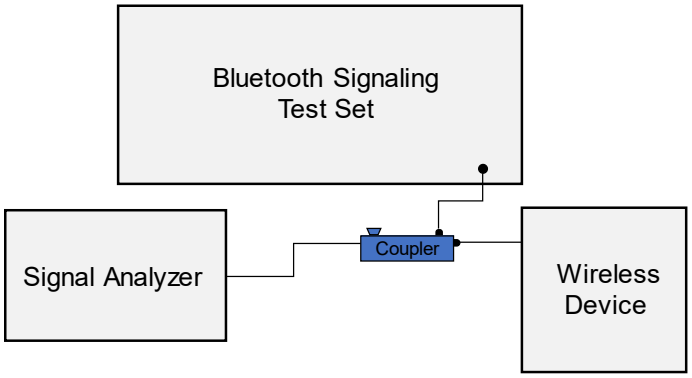


Figure 9-8
Power Measurement Setup

10 SYSTEM VERIFICATION

10.1 Tissue Verification

Table 10-1
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	%dev σ	%dev ε
10/28/2019	750 Head	22.3	680	0.872	40.895	0.888	42.305	-1.80%	-3.33%
			695	0.876	40.854	0.889	42.227	-1.46%	-3.25%
			700	0.878	40.840	0.889	42.201	-1.24%	-3.23%
			710	0.881	40.813	0.890	42.149	-1.01%	-3.17%
			725	0.887	40.775	0.891	42.071	-0.45%	-3.08%
			740	0.892	40.734	0.893	41.994	-0.11%	-3.00%
			750	0.895	40.706	0.894	41.942	0.11%	-2.95%
			755	0.897	40.693	0.894	41.916	0.34%	-2.92%
			770	0.902	40.654	0.895	41.838	0.78%	-2.83%
			785	0.907	40.615	0.896	41.760	1.23%	-2.74%
			800	0.913	40.570	0.897	41.682	1.78%	-2.67%
11/25/2019	750 Head	21.3	680	0.880	41.233	0.888	42.305	-0.90%	-2.53%
			695	0.885	41.178	0.889	42.227	-0.45%	-2.48%
			700	0.887	41.160	0.889	42.201	-0.22%	-2.47%
			710	0.891	41.127	0.890	42.149	0.11%	-2.42%
			725	0.896	41.083	0.891	42.071	0.56%	-2.35%
			740	0.901	41.032	0.893	41.994	0.90%	-2.29%
			750	0.905	40.992	0.894	41.942	1.23%	-2.27%
			755	0.906	40.974	0.894	41.916	1.34%	-2.25%
			770	0.912	40.922	0.895	41.838	1.90%	-2.19%
			785	0.917	40.874	0.896	41.760	2.34%	-2.12%
			800	0.922	40.820	0.897	41.682	2.79%	-2.07%
10/23/2019	835 Head	20.1	820	0.881	40.084	0.899	41.578	-2.00%	-3.59%
			835	0.886	40.029	0.900	41.500	-1.56%	-3.54%
			850	0.892	40.017	0.916	41.500	-2.62%	-3.57%
10/31/2019	835 Head	20.9	820	0.925	40.530	0.899	41.578	2.89%	-2.52%
			835	0.930	40.489	0.900	41.500	3.33%	-2.44%
			850	0.934	40.455	0.916	41.500	1.97%	-2.52%
11/25/2019	835 Head	21.3	820	0.929	40.758	0.899	41.578	3.34%	-1.97%
			835	0.933	40.723	0.900	41.500	3.67%	-1.87%
			850	0.939	40.698	0.916	41.500	2.51%	-1.93%
11/04/2019	1750 Head	21.9	1710	1.355	41.650	1.348	40.142	0.52%	3.76%
			1720	1.367	41.615	1.354	40.126	0.96%	3.71%
			1745	1.396	41.499	1.368	40.087	2.05%	3.52%
			1750	1.401	41.488	1.371	40.079	2.19%	3.52%
			1770	1.420	41.390	1.383	40.047	2.68%	3.35%
			1790	1.441	41.297	1.394	40.016	3.37%	3.20%
11/25/2019	1750 Head	21.3	1710	1.336	38.943	1.348	40.142	-0.89%	-2.99%
			1720	1.341	38.926	1.354	40.126	-0.96%	-2.99%
			1745	1.355	38.893	1.368	40.087	-0.95%	-2.98%
			1750	1.359	38.889	1.371	40.079	-0.88%	-2.97%
			1770	1.371	38.872	1.383	40.047	-0.87%	-2.93%
			1790	1.382	38.849	1.394	40.016	-0.86%	-2.92%
10/23/2019	1900 Head	22.0	1850	1.395	40.834	1.400	40.000	-0.36%	2.09%
			1880	1.427	40.711	1.400	40.000	1.93%	1.78%
			1910	1.460	40.556	1.400	40.000	4.29%	1.39%
10/30/2019	1900 Head	21.9	1850	1.395	40.412	1.400	40.000	-0.36%	1.03%
			1860	1.406	40.369	1.400	40.000	0.43%	0.92%
			1880	1.428	40.281	1.400	40.000	2.00%	0.70%
			1900	1.449	40.194	1.400	40.000	3.50%	0.49%
			1905	1.454	40.172	1.400	40.000	3.86%	0.43%
			1910	1.459	40.150	1.400	40.000	4.21%	0.37%
11/25/2019	1900 Head	21.3	1850	1.418	38.719	1.400	40.000	1.29%	-3.20%
			1860	1.424	38.704	1.400	40.000	1.71%	-3.24%
			1880	1.435	38.678	1.400	40.000	2.50%	-3.31%
			1900	1.445	38.648	1.400	40.000	3.21%	-3.38%
			1905	1.447	38.641	1.400	40.000	3.36%	-3.40%
			1910	1.450	38.631	1.400	40.000	3.57%	-3.42%

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
10/22/2019	2450 Head	22.2	2400	1.801	39.433	1.756	39.289	2.56%	0.37%
			2450	1.844	39.361	1.800	39.200	2.44%	0.41%
			2500	1.881	39.306	1.855	39.136	1.40%	0.43%
			2510	1.889	39.271	1.866	39.123	1.23%	0.38%
11/1/2019	2450 Head	20.6	2300	1.729	38.222	1.670	39.500	3.53%	-3.24%
			2310	1.736	38.202	1.679	39.480	3.39%	-3.24%
			2320	1.743	38.180	1.687	39.460	3.32%	-3.24%
			2400	1.805	38.078	1.756	39.289	2.79%	-3.08%
			2450	1.841	37.977	1.800	39.200	2.28%	-3.12%
			2500	1.883	37.915	1.855	39.136	1.51%	-3.12%
			2510	1.891	37.907	1.866	39.123	1.34%	-3.11%
			2535	1.909	37.873	1.893	39.092	0.85%	-3.12%
			2550	1.921	37.838	1.909	39.073	0.63%	-3.16%
			2560	1.929	37.812	1.920	39.060	0.47%	-3.20%
			2600	1.964	37.736	1.964	39.009	0.00%	-3.26%
			2650	2.007	37.673	2.018	38.945	-0.55%	-3.27%
			2680	2.030	37.591	2.051	38.907	-1.02%	-3.38%
			2700	2.047	37.544	2.073	38.882	-1.25%	-3.44%
11/04/2019	2450 Head	20.7	2300	1.701	37.703	1.670	39.500	1.86%	-4.55%
			2310	1.710	37.698	1.679	39.480	1.85%	-4.51%
			2320	1.717	37.694	1.687	39.460	1.78%	-4.48%
11/08/2019	2450 Head	20.4	2300	1.736	37.982	1.670	39.500	3.95%	-3.84%
			2310	1.743	37.965	1.679	39.480	3.81%	-3.84%
			2320	1.751	37.951	1.687	39.460	3.79%	-3.82%
			2400	1.810	37.811	1.756	39.289	3.08%	-3.76%
			2450	1.851	37.734	1.800	39.200	2.83%	-3.74%
			2500	1.888	37.642	1.855	39.136	1.78%	-3.82%
			2510	1.896	37.622	1.866	39.123	1.61%	-3.84%
			2535	1.917	37.571	1.893	39.092	1.27%	-3.89%
			2550	1.931	37.545	1.909	39.073	1.15%	-3.91%
			2560	1.939	37.532	1.920	39.060	0.99%	-3.91%
			2600	1.969	37.468	1.964	39.009	0.25%	-3.95%
			2650	2.011	37.358	2.018	38.945	-0.35%	-4.07%
			2680	2.036	37.298	2.051	38.907	-0.73%	-4.14%
			2700	2.052	37.262	2.073	38.882	-1.01%	-4.17%
12/02/2019	2450 Head	20.5	2300	1.704	38.376	1.670	39.500	2.04%	-2.85%
			2310	1.712	38.361	1.679	39.480	1.97%	-2.83%
			2320	1.720	38.346	1.687	39.460	1.96%	-2.82%
			2400	1.779	38.236	1.756	39.289	1.31%	-2.68%
			2450	1.820	38.152	1.800	39.200	1.11%	-2.67%
			2500	1.857	38.069	1.855	39.136	0.11%	-2.73%
			2510	1.865	38.048	1.866	39.123	-0.05%	-2.75%
			2535	1.887	37.997	1.893	39.092	-0.32%	-2.80%
			2550	1.899	37.978	1.909	39.073	-0.52%	-2.80%
			2560	1.907	37.967	1.920	39.060	-0.68%	-2.80%
			2600	1.937	37.910	1.964	39.009	-1.37%	-2.82%
			2650	1.978	37.801	2.018	38.945	-1.98%	-2.94%
			2680	2.002	37.751	2.051	38.907	-2.39%	-2.97%
			2700	2.017	37.724	2.073	38.882	-2.70%	-2.98%
12/19/2019	2450 Head	21	2300	1.740	40.558	1.670	39.500	4.19%	2.68%
			2310	1.748	40.541	1.679	39.480	4.11%	2.69%
			2320	1.756	40.524	1.687	39.460	4.09%	2.70%
			2400	1.821	40.425	1.756	39.289	3.70%	2.89%
			2450	1.861	40.327	1.800	39.200	3.39%	2.87%
			2500	1.904	40.248	1.855	39.136	2.64%	2.84%
			2510	1.913	40.232	1.866	39.123	2.52%	2.83%
			2535	1.933	40.183	1.893	39.092	2.11%	2.79%
			2550	1.945	40.154	1.909	39.073	1.89%	2.77%
			2560	1.954	40.136	1.920	39.060	1.77%	2.75%
			2600	1.987	40.065	1.964	39.009	1.17%	2.71%
			2650	2.030	39.981	2.018	38.945	0.59%	2.66%
			2680	2.055	39.926	2.051	38.907	0.20%	2.62%
			2700	2.072	39.884	2.073	38.882	-0.05%	2.58%
12/03/2019	3500-3800 Head	19.4	3500	2.782	39.061	2.913	37.929	-4.50%	2.98%
			3550	2.833	38.981	2.964	37.871	-4.42%	2.93%
			3560	2.843	38.957	2.974	37.860	-4.40%	2.90%
			3600	2.883	38.867	3.015	37.814	-4.38%	2.78%
			3650	2.932	38.799	3.066	37.757	-4.37%	2.76%
			3690	2.969	38.698	3.107	37.711	-4.44%	2.62%
			3700	2.980	38.679	3.117	37.700	-4.40%	2.60%
12/09/2019	3500-3800 Head	22.0	3500	2.930	36.782	2.913	37.929	0.58%	-3.02%
			3550	2.965	36.710	2.964	37.871	0.03%	-3.07%
			3560	2.973	36.697	2.974	37.860	-0.03%	-3.07%
			3600	3.008	36.651	3.015	37.814	-0.23%	-3.08%
			3650	3.048	36.597	3.066	37.757	-0.59%	-3.07%
			3690	3.079	36.546	3.107	37.711	-0.90%	-3.09%
			3700	3.088	36.526	3.117	37.700	-0.93%	-3.11%
12/09/2019	5200-5800 Head	22.0	5250	4.555	34.508	4.706	35.929	-3.21%	-3.96%
			5260	4.567	34.489	4.717	35.917	-3.18%	-3.98%
			5270	4.579	34.473	4.727	35.906	-3.13%	-3.99%
			5280	4.590	34.459	4.737	35.894	-3.10%	-4.00%
			5290	4.601	34.452	4.748	35.883	-3.10%	-3.99%
			5300	4.612	34.443	4.758	35.871	-3.07%	-3.98%
			5500	4.808	34.160	4.963	35.643	-3.12%	-4.16%
			5510	4.818	34.155	4.973	35.632	-3.12%	-4.15%
			5520	4.827	34.152	4.983	35.620	-3.13%	-4.12%
			5530	4.836	34.142	4.994	35.609	-3.16%	-4.12%
			5540	4.842	34.130	5.004	35.597	-3.24%	-4.12%
			5550	4.848	34.114	5.014	35.586	-3.31%	-4.14%
			5560	4.857	34.086	5.024	35.574	-3.32%	-4.18%
			5580	4.885	34.042	5.045	35.551	-3.17%	-4.24%
			5600	4.913	34.013	5.065	35.529	-3.00%	-4.27%
			5610	4.924	33.995	5.076	35.518	-2.99%	-4.29%
			5620	4.935	33.987	5.086	35.506	-2.97%	-4.28%
			5640	4.955	33.981	5.106	35.483	-2.96%	-4.23%
			5660	4.968	33.956	5.127	35.460	-3.10%	-4.24%
			5670	4.976	33.933	5.137	35.449	-3.13%	-4.28%
			5680	4.987	33.901	5.147	35.437	-3.11%	-4.33%
			5690	4.999	33.872	5.158	35.426	-3.08%	-4.39%
			5700	5.011	33.848	5.168	35.414	-3.04%	-4.42%
			5710	5.024	33.839	5.178	35.403	-2.97%	-4.42%
			5720	5.039	33.839	5.188	35.391	-2.87%	-4.39%
			5745	5.069	33.833	5.214	35.363	-2.78%	-4.33%
			5750	5.075	33.826	5.219	35.357	-2.76%	-4.33%
			5755	5.077	33.822	5.224	35.351	-2.81%	-4.33%
			5765	5.084	33.815	5.234	35.340	-2.87%	-4.32%
			5775	5.092	33.801	5.245	35.329	-2.92%	-4.33%
			5785	5.101	33.776	5.255	35.317	-2.93%	-4.36%
			5795	5.112	33.750	5.265	35.305	-2.91%	-4.40%
			5800	5.116	33.738	5.270	35.300	-2.92%	-4.42%

Table 10-2
Measured Body Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	%dev σ	%dev ε
10/23/2019	750 Body	23.6	695	0.916	56.698	0.959	55.745	-4.48%	1.71%
			700	0.921	56.650	0.959	55.726	-3.96%	1.66%
			710	0.930	56.556	0.960	55.687	-3.12%	1.56%
			725	0.944	56.416	0.961	55.629	-1.77%	1.41%
			740	0.958	56.270	0.963	55.570	-0.52%	1.26%
			755	0.972	56.121	0.964	55.512	0.83%	1.10%
			770	0.986	55.978	0.965	55.453	2.18%	0.95%
			785	1.000	55.834	0.966	55.395	3.52%	0.79%
			800	1.015	55.694	0.967	55.336	4.96%	0.65%
10/25/2019	750 Body	21.5	680	0.913	58.476	0.958	55.804	-4.70%	4.79%
			695	0.927	58.345	0.959	55.745	-3.34%	4.66%
			700	0.931	58.322	0.959	55.726	-2.92%	4.66%
			710	0.941	58.220	0.960	55.687	-1.98%	4.55%
			725	0.954	58.098	0.961	55.629	-0.73%	4.44%
			740	0.967	57.955	0.963	55.570	0.42%	4.29%
			750	0.977	57.856	0.964	55.531	1.35%	4.19%
			755	0.981	57.846	0.964	55.512	1.76%	4.20%
			770	0.995	57.660	0.965	55.453	3.11%	3.98%
			785	1.009	57.544	0.966	55.395	4.45%	3.88%
11/20/2019	750 Body	21.7	680	0.920	55.175	0.958	55.804	-3.97%	-1.13%
			695	0.925	55.137	0.959	55.745	-3.55%	-1.09%
			700	0.926	55.126	0.959	55.726	-3.44%	-1.08%
			710	0.929	55.107	0.960	55.687	-3.23%	-1.04%
			725	0.935	55.092	0.961	55.629	-2.71%	-0.97%
			740	0.940	55.069	0.963	55.570	-2.39%	-0.90%
			750	0.944	55.048	0.964	55.531	-2.07%	-0.87%
			755	0.946	55.036	0.964	55.512	-1.87%	-0.86%
			770	0.952	54.994	0.965	55.453	-1.35%	-0.83%
			785	0.958	54.944	0.966	55.395	-0.83%	-0.81%
			800	0.964	54.898	0.967	55.336	-0.31%	-0.79%
10/28/2019	835 Body	19.5	820	0.948	54.962	0.969	55.258	-2.17%	-0.54%
			835	0.964	54.811	0.970	55.200	-0.62%	-0.70%
			850	0.980	54.650	0.988	55.154	-0.81%	-0.91%
10/30/2019	835 Body	20.5	820	0.940	55.643	0.969	55.258	-2.99%	0.70%
			835	0.956	55.495	0.970	55.200	-1.44%	0.53%
			850	0.972	55.347	0.988	55.154	-1.62%	0.35%
11/18/2019	835 Body	20.0	820	0.951	56.241	0.969	55.258	-1.86%	1.78%
			835	0.967	56.103	0.970	55.200	-0.31%	1.64%
			850	0.982	55.964	0.988	55.154	-0.61%	1.47%
10/21/2019	1750 Body	21.8	1710	1.461	53.028	1.463	53.537	-0.14%	-0.95%
			1720	1.472	53.002	1.469	53.511	0.20%	-0.95%
			1745	1.502	52.883	1.485	53.445	1.14%	-1.05%
			1750	1.507	52.877	1.488	53.432	1.28%	-1.04%
			1770	1.529	52.771	1.501	53.379	1.87%	-1.14%
			1790	1.550	52.684	1.514	53.326	2.38%	-1.20%
11/18/2019	1750 Body	20.5	1710	1.475	52.421	1.463	53.537	0.82%	-2.08%
			1720	1.488	52.386	1.469	53.511	1.29%	-2.10%
			1745	1.516	52.310	1.485	53.445	2.09%	-2.12%
			1750	1.522	52.293	1.488	53.432	2.28%	-2.13%
			1770	1.544	52.214	1.501	53.379	2.86%	-2.18%
			1790	1.566	52.129	1.514	53.326	3.43%	-2.24%
11/20/2019	1750 Body	20.0	1710	1.445	53.061	1.463	53.537	-1.23%	-0.89%
			1720	1.457	53.024	1.469	53.511	-0.82%	-0.91%
			1745	1.486	52.944	1.485	53.445	0.07%	-0.94%
			1750	1.492	52.924	1.488	53.432	0.27%	-0.95%
			1770	1.513	52.836	1.501	53.379	0.80%	-1.02%
			1790	1.533	52.744	1.514	53.326	1.25%	-1.09%
11/25/2019	1750 Body	20.3	1710	1.486	53.262	1.463	53.537	1.57%	-0.51%
			1720	1.498	53.215	1.469	53.511	1.97%	-0.55%
			1745	1.528	53.106	1.485	53.445	2.90%	-0.63%
			1750	1.534	53.086	1.488	53.432	3.09%	-0.65%
			1770	1.556	53.005	1.501	53.379	3.66%	-0.70%
			1790	1.578	52.916	1.514	53.326	4.23%	-0.77%
12/3/2019	1750 Body	20.2	1710	1.483	52.891	1.463	53.537	1.37%	-1.21%
			1720	1.496	52.853	1.469	53.511	1.84%	-1.23%
			1745	1.526	52.755	1.485	53.445	2.76%	-1.29%
			1750	1.532	52.733	1.488	53.432	2.96%	-1.31%
			1770	1.555	52.646	1.501	53.379	3.60%	-1.37%
			1790	1.577	52.553	1.514	53.326	4.16%	-1.45%
12/25/2019	1750 Body	20.5	1710	1.490	53.093	1.463	53.537	1.85%	-0.83%
			1720	1.502	53.055	1.469	53.511	2.25%	-0.85%
			1745	1.532	52.964	1.485	53.445	3.16%	-0.90%
			1750	1.537	52.946	1.488	53.432	3.29%	-0.91%
			1770	1.559	52.864	1.501	53.379	3.86%	-0.96%
			1790	1.582	52.780	1.514	53.326	4.49%	-1.02%
01/01/2020	1750 Body	21.6	1710	1.442	53.322	1.463	53.537	-1.44%	-0.40%
			1720	1.453	53.280	1.469	53.511	-1.09%	-0.43%
			1745	1.480	53.185	1.485	53.445	-0.34%	-0.49%
			1750	1.485	53.166	1.488	53.432	-0.20%	-0.50%
			1770	1.504	53.096	1.501	53.379	0.20%	-0.53%
			1790	1.525	53.026	1.514	53.326	0.73%	-0.56%

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
10/28/2019	1900 Body	23.9	1850	1.513	52.061	1.520	53.300	-0.46%	-2.32%
			1860	1.525	52.022	1.520	53.300	0.33%	-2.40%
			1880	1.548	51.954	1.520	53.300	1.84%	-2.53%
			1900	1.573	51.897	1.520	53.300	3.49%	-2.63%
			1905	1.579	51.885	1.520	53.300	3.88%	-2.65%
			1910	1.585	51.871	1.520	53.300	4.28%	-2.68%
10/30/2019	1900 Body	21.5	1850	1.514	52.201	1.520	53.300	-0.39%	-2.06%
			1860	1.525	52.158	1.520	53.300	0.33%	-2.14%
			1880	1.549	52.081	1.520	53.300	1.91%	-2.29%
			1900	1.571	52.013	1.520	53.300	3.36%	-2.41%
			1905	1.577	51.994	1.520	53.300	3.75%	-2.45%
			1910	1.583	51.977	1.520	53.300	4.14%	-2.48%
11/20/2019	1900 Body	23.4	1850	1.515	51.806	1.520	53.300	-0.33%	-2.80%
			1860	1.526	51.781	1.520	53.300	0.39%	-2.85%
			1880	1.547	51.724	1.520	53.300	1.78%	-2.96%
			1900	1.568	51.656	1.520	53.300	3.16%	-3.08%
			1905	1.574	51.637	1.520	53.300	3.55%	-3.12%
			1910	1.580	51.619	1.520	53.300	3.95%	-3.15%
11/23/2019	1900 Body	24.3	1850	1.525	52.039	1.520	53.300	0.33%	-2.37%
			1860	1.535	51.997	1.520	53.300	0.99%	-2.44%
			1880	1.558	51.941	1.520	53.300	2.50%	-2.55%
			1900	1.579	51.868	1.520	53.300	3.88%	-2.69%
			1905	1.585	51.853	1.520	53.300	4.28%	-2.71%
			1910	1.590	51.834	1.520	53.300	4.61%	-2.75%
11/26/2019	1900 Body	23.4	1850	1.511	51.546	1.520	53.300	-0.59%	-3.29%
			1860	1.522	51.519	1.520	53.300	0.13%	-3.34%
			1880	1.544	51.465	1.520	53.300	1.58%	-3.44%
			1900	1.567	51.401	1.520	53.300	3.09%	-3.56%
			1905	1.573	51.383	1.520	53.300	3.49%	-3.60%
			1910	1.578	51.366	1.520	53.300	3.82%	-3.63%
11/29/2019	1900 Body	23.3	1850	1.526	51.463	1.520	53.300	0.39%	-3.45%
			1860	1.538	51.429	1.520	53.300	1.18%	-3.51%
			1880	1.561	51.363	1.520	53.300	2.70%	-3.63%
			1900	1.583	51.289	1.520	53.300	4.14%	-3.77%
			1905	1.589	51.270	1.520	53.300	4.54%	-3.81%
			1910	1.594	51.251	1.520	53.300	4.87%	-3.84%
12/2/2019	1900 Body	23.2	1850	1.522	51.044	1.520	53.300	0.13%	-4.23%
			1860	1.533	51.012	1.520	53.300	0.86%	-4.29%
			1880	1.555	50.942	1.520	53.300	2.30%	-4.42%
			1900	1.575	50.866	1.520	53.300	3.62%	-4.57%
			1905	1.581	50.848	1.520	53.300	4.01%	-4.60%
			1910	1.586	50.828	1.520	53.300	4.34%	-4.64%
12/09/2019	1900 Body	23.0	1850	1.518	51.591	1.520	53.300	-0.13%	-3.21%
			1860	1.529	51.565	1.520	53.300	0.59%	-3.26%
			1880	1.551	51.504	1.520	53.300	2.04%	-3.37%
			1900	1.572	51.438	1.520	53.300	3.42%	-3.49%
			1905	1.577	51.422	1.520	53.300	3.75%	-3.52%
			1910	1.582	51.407	1.520	53.300	4.08%	-3.55%
12/12/2019	1900 Body	19.7	1850	1.519	52.341	1.520	53.300	-0.07%	-1.80%
			1860	1.530	52.312	1.520	53.300	0.66%	-1.85%
			1880	1.551	52.252	1.520	53.300	2.04%	-1.97%
			1900	1.573	52.183	1.520	53.300	3.49%	-2.10%
			1905	1.579	52.163	1.520	53.300	3.88%	-2.13%
			1910	1.585	52.145	1.520	53.300	4.28%	-2.17%
12/12/2019	1900 Body	23.9	1850	1.496	51.665	1.520	53.300	-1.58%	-3.07%
			1860	1.506	51.633	1.520	53.300	-0.92%	-3.13%
			1880	1.528	51.562	1.520	53.300	0.53%	-3.26%
			1900	1.551	51.482	1.520	53.300	2.04%	-3.41%
			1905	1.556	51.461	1.520	53.300	2.37%	-3.45%
			1910	1.562	51.440	1.520	53.300	2.76%	-3.49%
12/16/2019	1900 Body	23.0	1850	1.470	52.043	1.520	53.300	-3.29%	-2.36%
			1860	1.481	52.007	1.520	53.300	-2.57%	-2.43%
			1880	1.501	51.936	1.520	53.300	-1.25%	-2.56%
			1900	1.522	51.870	1.520	53.300	0.13%	-2.68%
			1905	1.527	51.854	1.520	53.300	0.46%	-2.71%
			1910	1.532	51.837	1.520	53.300	0.79%	-2.74%
01/01/2020	1900 Body	23.1	1850	1.523	52.092	1.520	53.300	0.20%	-2.27%
			1860	1.534	52.058	1.520	53.300	0.92%	-2.33%
			1880	1.556	51.988	1.520	53.300	2.37%	-2.46%
			1900	1.579	51.919	1.520	53.300	3.88%	-2.59%
			1905	1.585	51.900	1.520	53.300	4.28%	-2.63%
			1910	1.590	51.880	1.520	53.300	4.61%	-2.66%

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
10/28/2019	2450 Body	22.9	2400	1.975	52.627	1.902	52.767	3.84%	-0.27%
			2450	2.035	52.494	1.950	52.700	4.36%	-0.39%
			2500	2.095	52.353	2.021	52.636	3.66%	-0.54%
			2510	2.107	52.324	2.035	52.623	3.51%	-0.57%
10/31/2019	2450 Body	22.9	2500	2.102	52.691	2.021	52.636	4.01%	0.10%
			2510	2.114	52.657	2.035	52.623	3.88%	0.06%
			2535	2.144	52.584	2.071	52.592	3.52%	-0.02%
			2550	2.163	52.544	2.092	52.573	3.39%	-0.06%
			2560	2.175	52.516	2.106	52.560	3.28%	-0.08%
			2600	2.224	52.396	2.163	52.509	2.82%	-0.22%
			2650	2.284	52.247	2.234	52.445	2.24%	-0.38%
			2680	2.321	52.155	2.277	52.407	1.93%	-0.48%
			2700	2.345	52.094	2.305	52.382	1.74%	-0.55%
11/4/2019	2450 Body	23.7	2300	1.870	52.761	1.809	52.900	3.37%	-0.26%
			2310	1.882	52.735	1.816	52.887	3.63%	-0.29%
			2320	1.893	52.710	1.826	52.873	3.67%	-0.31%
11/24/2019	2450 Body	24.0	2300	1.866	51.288	1.809	52.900	3.15%	-3.05%
			2310	1.877	51.257	1.816	52.887	3.36%	-3.08%
			2320	1.889	51.239	1.826	52.873	3.45%	-3.09%
11/30/2019	2450 Body	22.0	2300	1.790	51.273	1.809	52.900	-1.05%	-3.08%
			2310	1.800	51.249	1.816	52.887	-0.88%	-3.10%
			2320	1.811	51.225	1.826	52.873	-0.82%	-3.12%
			2400	1.896	51.009	1.902	52.767	-0.32%	-3.33%
			2450	1.950	50.884	1.950	52.700	0.00%	-3.45%
			2500	2.005	50.729	2.021	52.636	-0.79%	-3.62%
			2510	2.017	50.701	2.035	52.623	-0.88%	-3.65%
			2535	2.046	50.633	2.071	52.592	-1.21%	-3.72%
			2550	2.063	50.594	2.092	52.573	-1.39%	-3.76%
			2560	2.074	50.570	2.106	52.560	-1.52%	-3.79%
			2600	2.118	50.450	2.163	52.509	-2.08%	-3.92%
			2650	2.175	50.289	2.234	52.445	-2.64%	-4.11%
			2680	2.211	50.201	2.277	52.407	-2.90%	-4.21%
			2700	2.232	50.141	2.305	52.382	-3.17%	-4.28%
12/06/2019	2450 Body	23.2	2400	1.976	50.754	1.902	52.767	3.89%	-3.81%
			2450	2.044	50.559	1.950	52.700	4.82%	-4.06%
			2500	2.111	50.348	2.021	52.636	4.45%	-4.35%
12/9/2019	2450 Body	23.1	2400	1.975	52.011	1.902	52.767	3.84%	-1.43%
			2450	2.035	51.850	1.950	52.700	4.36%	-1.61%
			2500	2.093	51.711	2.021	52.636	3.56%	-1.76%
			2510	2.105	51.680	2.035	52.623	3.44%	-1.79%
			2535	2.133	51.594	2.071	52.592	2.99%	-1.90%
			2550	2.151	51.547	2.092	52.573	2.82%	-1.95%
			2560	2.163	51.522	2.106	52.560	2.71%	-1.97%
			2600	2.210	51.417	2.163	52.509	2.17%	-2.08%
			2650	2.271	51.262	2.234	52.445	1.66%	-2.26%
			2680	2.307	51.176	2.277	52.407	1.32%	-2.35%
			2700	2.331	51.115	2.305	52.382	1.13%	-2.42%
12/12/2019	2450 Body	23.1	2300	1.867	53.139	1.809	52.900	3.21%	0.45%
			2310	1.879	53.115	1.816	52.887	3.47%	0.43%
			2320	1.890	53.088	1.826	52.873	3.50%	0.41%
			2400	1.981	52.839	1.902	52.767	4.15%	0.14%
			2450	2.034	52.673	1.950	52.700	4.31%	-0.05%
			2500	2.096	52.525	2.021	52.636	3.71%	-0.21%
			2510	2.107	52.498	2.035	52.623	3.54%	-0.24%
			2535	2.134	52.414	2.071	52.592	3.04%	-0.34%
			2550	2.150	52.345	2.092	52.573	2.77%	-0.43%
			2560	2.162	52.303	2.106	52.560	2.66%	-0.49%
			2600	2.213	52.181	2.163	52.509	2.31%	-0.62%
			2650	2.269	52.022	2.234	52.445	1.57%	-0.81%
			2680	2.307	51.903	2.277	52.407	1.32%	-0.96%
			2700	2.332	51.853	2.305	52.382	1.17%	-1.01%
12/16/2019	2450 Body	22.9	2300	1.857	53.127	1.809	52.900	2.65%	0.43%
			2310	1.869	53.096	1.816	52.887	2.92%	0.40%
			2320	1.880	53.069	1.826	52.873	2.96%	0.37%
			2400	1.969	52.873	1.902	52.767	3.52%	0.20%
			2450	2.030	52.738	1.950	52.700	4.10%	0.07%
			2500	2.089	52.606	2.021	52.636	3.36%	-0.06%
			2510	2.100	52.577	2.035	52.623	3.19%	-0.09%
			2535	2.131	52.497	2.071	52.592	2.90%	-0.18%
			2550	2.151	52.457	2.092	52.573	2.82%	-0.22%
			2560	2.163	52.432	2.106	52.560	2.71%	-0.24%
			2600	2.212	52.320	2.163	52.509	2.27%	-0.36%
			2650	2.275	52.147	2.234	52.445	1.84%	-0.57%
			2680	2.312	52.057	2.277	52.407	1.54%	-0.67%
			2700	2.337	51.996	2.305	52.382	1.39%	-0.74%
12/19/2019	2450 Body	22.5	2300	1.874	52.302	1.809	52.900	3.59%	-1.13%
			2310	1.885	52.271	1.816	52.887	3.80%	-1.16%
			2320	1.896	52.237	1.826	52.873	3.83%	-1.20%
			2400	1.986	52.011	1.902	52.767	4.42%	-1.43%
			2450	2.042	51.863	1.950	52.700	4.72%	-1.59%
			2500	2.100	51.723	2.021	52.636	3.91%	-1.73%
			2510	2.112	51.695	2.035	52.623	3.78%	-1.76%
			2535	2.140	51.613	2.071	52.592	3.33%	-1.86%
			2550	2.157	51.563	2.092	52.573	3.11%	-1.92%
			2560	2.169	51.531	2.106	52.560	2.99%	-1.96%
			2600	2.219	51.418	2.163	52.509	2.59%	-2.08%
			2650	2.277	51.242	2.234	52.445	1.92%	-2.29%
			2680	2.313	51.132	2.277	52.407	1.58%	-2.43%
			2700	2.337	51.058	2.305	52.382	1.39%	-2.53%
12/24/2019	2450 Body	21.2	2300	1.875	51.543	1.809	52.900	3.65%	-2.57%
			2310	1.887	51.515	1.816	52.887	3.91%	-2.59%
			2320	1.898	51.489	1.826	52.873	3.94%	-2.62%
			2400	1.986	51.261	1.902	52.767	4.42%	-2.85%
			2450	2.047	51.113	1.950	52.700	4.97%	-3.01%
			2500	2.104	50.971	2.021	52.636	4.11%	-3.16%
			2510	2.115	50.942	2.035	52.623	3.93%	-3.19%
			2535	2.147	50.863	2.071	52.592	3.67%	-3.29%
			2550	2.165	50.819	2.092	52.573	3.49%	-3.34%
			2560	2.177	50.792	2.106	52.560	3.37%	-3.36%
			2600	2.224	50.683	2.163	52.509	2.82%	-3.48%
			2650	2.287	50.522	2.234	52.445	2.37%	-3.67%
			2680	2.323	50.426	2.277	52.407	2.02%	-3.78%
			2700	2.347	50.361	2.305	52.382	1.82%	-3.86%
12/30/2019	2450 Body	23.6	2400	1.980	51.217	1.902	52.767	4.10%	-2.94%
			2450	2.041	51.070	1.950	52.700	4.67%	-3.09%
			2500	2.099	50.917	2.021	52.636	3.86%	-3.27%
			2510	2.111	50.886	2.035	52.623	3.73%	-3.30%

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
11/06/2019	3500-3800 Body	21.1	3500	3.376	50.761	3.314	51.321	1.87%	-1.09%
			3550	3.427	50.679	3.372	51.254	1.63%	-1.12%
			3560	3.439	50.666	3.384	51.240	1.63%	-1.12%
			3600	3.482	50.615	3.431	51.186	1.49%	-1.12%
			3650	3.540	50.552	3.489	51.118	1.46%	-1.11%
			3690	3.581	50.483	3.536	51.063	1.27%	-1.14%
			3700	3.592	50.468	3.548	51.050	1.24%	-1.14%
11/11/2019	3500-3800 Body	19.2	3500	3.458	50.583	3.314	51.321	4.35%	-1.44%
			3550	3.510	50.493	3.372	51.254	4.09%	-1.48%
			3560	3.521	50.487	3.384	51.240	4.05%	-1.47%
			3600	3.570	50.431	3.431	51.186	4.05%	-1.48%
			3650	3.627	50.346	3.489	51.118	3.96%	-1.51%
			3690	3.671	50.274	3.536	51.063	3.82%	-1.55%
			3700	3.683	50.248	3.548	51.050	3.80%	-1.57%
12/01/2019	5200B-5800 Body	23.5	5240	5.444	47.224	5.346	48.960	1.83%	-3.55%
			5260	5.474	47.191	5.369	48.933	1.96%	-3.56%
			5280	5.503	47.181	5.393	48.906	2.04%	-3.53%
			5300	5.522	47.163	5.416	48.879	1.96%	-3.51%
			5320	5.542	47.110	5.439	48.851	1.89%	-3.56%
			5500	5.781	46.816	5.650	48.607	2.32%	-3.68%
			5520	5.811	46.782	5.673	48.580	2.43%	-3.70%
			5540	5.836	46.774	5.696	48.553	2.46%	-3.66%
			5560	5.855	46.727	5.720	48.526	2.36%	-3.71%
			5580	5.881	46.678	5.743	48.499	2.40%	-3.75%
			5600	5.915	46.652	5.766	48.471	2.58%	-3.75%
			5620	5.944	46.615	5.790	48.444	2.66%	-3.78%
			5640	5.976	46.601	5.813	48.417	2.80%	-3.75%
			5660	6.003	46.563	5.837	48.390	2.84%	-3.78%
			5680	6.018	46.509	5.860	48.363	2.70%	-3.83%
			5700	6.048	46.497	5.883	48.336	2.80%	-3.80%
			5745	6.115	46.438	5.936	48.275	3.02%	-3.81%
			5765	6.142	46.396	5.959	48.248	3.07%	-3.84%
			5785	6.167	46.375	5.982	48.220	3.09%	-3.83%
			5800	6.186	46.327	6.000	48.200	3.10%	-3.89%
			5805	6.193	46.316	6.006	48.193	3.11%	-3.89%
			5825	6.219	46.310	6.029	48.166	3.15%	-3.85%
12/09/2019	5200-5800 Body	21.8	5240	5.492	47.522	5.346	48.960	2.73%	-2.94%
			5250	5.505	47.502	5.358	48.947	2.74%	-2.95%
			5260	5.520	47.482	5.369	48.933	2.81%	-2.97%
			5270	5.533	47.467	5.381	48.919	2.82%	-2.97%
			5280	5.551	47.449	5.393	48.906	2.93%	-2.98%
			5290	5.564	47.438	5.404	48.892	2.96%	-2.97%
			5300	5.574	47.424	5.416	48.879	2.92%	-2.98%
			5310	5.585	47.405	5.428	48.865	2.89%	-2.99%
			5320	5.596	47.384	5.439	48.851	2.89%	-3.00%
			5500	5.837	47.097	5.650	48.607	3.31%	-3.11%
			5510	5.850	47.086	5.661	48.594	3.34%	-3.10%
			5520	5.862	47.074	5.673	48.580	3.33%	-3.10%
			5530	5.874	47.060	5.685	48.566	3.32%	-3.10%
			5540	5.887	47.041	5.696	48.553	3.35%	-3.11%
			5550	5.896	47.017	5.708	48.539	3.29%	-3.14%
			5560	5.909	46.984	5.720	48.526	3.30%	-3.18%
			5580	5.943	46.944	5.743	48.499	3.48%	-3.21%
			5600	5.981	46.917	5.766	48.471	3.73%	-3.21%
			5610	5.996	46.899	5.778	48.458	3.77%	-3.22%
			5620	6.009	46.888	5.790	48.444	3.78%	-3.21%
			5640	6.034	46.877	5.813	48.417	3.80%	-3.18%
			5660	6.052	46.839	5.837	48.390	3.68%	-3.21%
			5670	6.064	46.807	5.848	48.376	3.69%	-3.24%
			5680	6.080	46.771	5.860	48.363	3.75%	-3.29%
			5690	6.097	46.738	5.872	48.349	3.83%	-3.33%
			5700	6.113	46.710	5.883	48.336	3.91%	-3.36%
			5710	6.130	46.708	5.895	48.322	3.99%	-3.34%
			5720	6.148	46.714	5.907	48.309	4.08%	-3.30%
			5745	6.184	46.704	5.936	48.275	4.18%	-3.25%
			5750	6.190	46.693	5.942	48.268	4.17%	-3.26%
			5755	6.194	46.683	5.947	48.261	4.15%	-3.27%
			5765	6.204	46.669	5.959	48.248	4.11%	-3.27%
			5775	6.215	46.642	5.971	48.234	4.09%	-3.30%
			5785	6.229	46.617	5.982	48.220	4.13%	-3.32%
			5795	6.245	46.597	5.994	48.207	4.19%	-3.34%
			5800	6.252	46.585	6.000	48.200	4.20%	-3.35%
			5805	6.259	46.574	6.006	48.193	4.21%	-3.36%
			5825	6.295	46.540	6.029	48.166	4.41%	-3.38%

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.

10.2 Test System Verification

Prior to SAR assessment, the system is verified to ±10% of the SAR measurement on the reference dipole at the time of calibration by the calibration facility. Full system validation status and result summary can be found in Appendix D.

Table 10-3
System Verification Results – 1g Head

System Verification TARGET & MEASURED												
SAR System #	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp (°C)	Liquid Temp (°C)	Input Power (W)	Source SN	Probe SN	Measured SAR_{1g} (W/kg)	1 W Target SAR_{1g} (W/kg)	1 W Normalized SAR_{1g} (W/kg)	$Deviation_{1g}$ (%)
P	750	HEAD	10/28/2019	23.4	22.3	0.200	1054	7551	1.690	8.290	8.450	1.93%
P	750	HEAD	11/25/2019	22.2	21.3	0.200	1054	7551	1.630	8.290	8.150	-1.69%
P	835	HEAD	10/23/2019	21.5	20.1	0.200	4d047	7551	1.890	9.420	9.450	0.32%
P	835	HEAD	10/31/2019	21.3	20.9	0.200	4d047	7551	2.000	9.420	10.000	6.16%
P	835	HEAD	11/25/2019	22.2	21.3	0.200	4d047	7551	1.970	9.420	9.850	4.56%
D	1750	HEAD	11/04/2019	22.0	21.3	0.100	1008	3914	3.900	36.200	39.000	7.73%
P	1750	HEAD	11/25/2019	22.2	21.3	0.100	1150	7551	3.680	36.500	36.800	0.82%
D	1900	HEAD	10/23/2019	22.3	22.0	0.100	5d080	3914	4.180	39.800	41.800	5.03%
D	1900	HEAD	10/30/2019	21.6	21.4	0.100	5d149	3914	4.220	39.300	42.200	7.38%
P	1900	HEAD	11/25/2019	22.2	21.3	0.100	5d080	7551	4.060	39.800	40.600	2.01%
E	2300	HEAD	11/04/2019	22.3	20.7	0.100	1064	7417	5.040	47.600	50.400	5.88%
E	2450	HEAD	10/22/2019	22.6	22.0	0.100	797	7417	5.320	52.700	53.200	0.95%
E	2450	HEAD	11/01/2019	21.9	19.3	0.100	797	7417	5.330	52.700	53.300	1.14%
E	2450	HEAD	12/02/2019	22.1	20.5	0.100	981	7417	5.340	52.300	53.400	2.10%
E	2600	HEAD	11/01/2019	21.9	19.3	0.100	1004	7417	5.890	55.900	58.900	5.37%
E	2600	HEAD	11/08/2019	22.3	21.5	0.100	1004	7417	5.920	55.900	59.200	5.90%
E	2600	HEAD	12/02/2019	22.1	20.5	0.100	1064	7417	5.990	58.100	59.900	3.10%
E	2600	HEAD	12/19/2019	22.7	21.0	0.100	1064	7417	6.040	58.100	60.400	3.96%
H	3500	HEAD	12/03/2019	20.6	19.4	0.100	1059	3589	6.750	64.600	67.500	4.49%
H	3500	HEAD	12/09/2019	20.8	21.0	0.100	1059	3589	6.960	64.600	69.600	7.74%
H	3700	HEAD	12/03/2019	20.6	19.4	0.100	1018	3589	6.720	65.800	67.200	2.13%
H	3700	HEAD	12/09/2019	20.8	21.0	0.100	1018	3589	7.000	65.800	70.000	6.38%
H	5250	HEAD	12/09/2019	22.0	23.0	0.050	1191	7406	3.780	80.800	75.600	-6.44%
H	5600	HEAD	12/09/2019	22.0	23.0	0.050	1191	7406	4.030	82.700	80.600	-2.54%
H	5750	HEAD	12/09/2019	22.0	23.0	0.050	1191	7406	3.860	80.200	77.200	-3.74%

Table 10-4
System Verification Results – 1g Body

System Verification TARGET & MEASURED												
SAR System #	Tissue Frequency (MHz)	Tissue Type	Date	Amb. Temp (°C)	Liquid Temp (°C)	Input Power (W)	Source SN	Probe SN	Measured SAR_{1g} (W/kg)	1 W Target SAR_{1g} (W/kg)	1 W Normalized SAR_{1g} (W/kg)	$Deviation_{1g}$ (%)
L	750	BODY	10/23/2019	21.3	21.8	0.200	1003	7410	1.810	8.580	9.050	5.48%
L	750	BODY	10/25/2019	20.3	21.5	0.200	1003	7410	1.780	8.580	8.900	3.73%
L	750	BODY	11/20/2019	23.0	21.7	0.200	1161	7410	1.710	8.430	8.550	1.42%
I	835	BODY	10/28/2019	20.2	19.5	0.200	4d133	7357	1.940	9.750	9.700	-0.51%
I	835	BODY	10/30/2019	21.6	20.5	0.200	4d133	7357	1.970	9.750	9.850	1.03%
I	835	BODY	11/18/2019	20.6	20.0	0.200	4d133	7357	2.060	9.750	10.300	5.64%
J	1750	BODY	10/21/2019	21.5	20.0	0.100	1148	7488	3.810	37.700	38.100	1.06%
J	1750	BODY	11/18/2019	20.9	19.4	0.100	1148	7488	3.840	37.700	38.400	1.86%
I	1750	BODY	11/20/2019	20.6	20.0	0.100	1148	7357	3.550	37.700	35.500	-5.84%
I	1750	BODY	12/03/2019	21.2	20.2	0.100	1148	7357	4.030	37.700	40.300	6.90%
I	1750	BODY	12/25/2019	21.2	20.5	0.100	1150	7357	3.820	36.600	38.200	4.37%
I	1750	BODY	01/01/2020	23.4	21.6	0.100	1150	7357	3.840	36.600	38.400	4.92%
H	1900	BODY	10/28/2019	20.1	22.4	0.100	5d149	7406	4.140	39.400	41.400	5.08%
H	1900	BODY	10/30/2019	21.5	22.4	0.100	5d080	7406	4.210	39.200	42.100	7.40%
J	1900	BODY	11/20/2019	21.1	22.0	0.100	5d149	7488	4.210	39.400	42.100	6.85%
J	1900	BODY	11/23/2019	20.3	24.3	0.100	5d148	7488	3.990	39.100	39.900	2.05%
J	1900	BODY	11/29/2019	21.7	22.0	0.100	5d149	7488	4.150	39.400	41.500	5.33%
J	1900	BODY	12/02/2019	20.7	21.7	0.100	5d149	7488	4.150	39.400	41.500	5.33%
P	1900	BODY	12/09/2019	23.7	22.1	0.100	5d080	7551	4.140	39.200	41.400	5.61%
J	1900	BODY	12/12/2019	22.3	23.8	0.100	5d149	7488	4.210	39.400	42.100	6.85%
J	1900	BODY	01/01/2020	21.3	21.1	0.100	5d080	7571	4.230	39.200	42.300	7.91%
K	2300	BODY	11/04/2019	22.5	22.4	0.100	1064	7547	4.600	46.500	46.000	-1.08%
K	2300	BODY	11/24/2019	24.0	22.3	0.100	1073	7547	4.350	47.700	43.500	-8.81%
K	2450	BODY	10/28/2019	22.3	22.9	0.100	981	7547	5.060	50.900	50.600	-0.59%
K	2450	BODY	11/30/2019	23.9	22.0	0.100	797	7547	4.860	51.100	48.600	-4.89%
M	2450	BODY	12/06/2019	22.7	21.8	0.100	719	7308	5.240	50.800	52.400	3.15%
K	2450	BODY	12/09/2019	23.5	22.0	0.100	797	7547	5.040	51.100	50.400	-1.37%
M	2450	BODY	12/12/2019	22.8	22.0	0.100	719	7308	5.400	50.800	54.000	6.30%
K	2450	BODY	12/24/2019	23.7	21.5	0.100	797	7547	5.180	51.100	51.800	1.37%
K	2600	BODY	10/31/2019	22.7	22.5	0.100	1064	7547	5.330	55.600	53.300	-4.14%
K	2600	BODY	11/30/2019	23.9	22.0	0.100	1004	7547	5.300	54.800	53.000	-3.28%
K	2600	BODY	12/09/2019	23.5	22.0	0.100	1004	7547	5.510	54.800	55.100	0.55%
M	2600	BODY	12/12/2019	22.8	22.0	0.100	1004	7308	5.470	54.800	54.700	-0.18%
K	2600	BODY	12/16/2019	22.9	22.2	0.100	1004	7547	5.210	54.800	52.100	-4.93%
K	2600	BODY	12/24/2019	23.7	21.5	0.100	1004	7547	5.670	54.800	56.700	3.47%
D	3500	BODY	11/06/2019	22.1	21.1	0.100	1059	3914	6.130	65.100	61.300	-5.84%
D	3500	BODY	11/11/2019	21.2	19.2	0.100	1059	3914	6.160	65.100	61.600	-5.38%
D	3700	BODY	11/06/2019	22.1	21.1	0.100	1018	3914	6.410	64.300	64.100	-0.31%
D	3700	BODY	11/11/2019	21.2	19.2	0.100	1018	3914	6.560	64.300	65.600	2.02%
G	5250	BODY	12/01/2019	22.9	22.0	0.050	1191	7409	3.840	77.000	76.800	-0.26%
G	5600	BODY	12/01/2019	22.9	22.0	0.050	1191	7409	4.130	78.600	82.600	5.09%
G	5750	BODY	12/01/2019	22.9	22.0	0.050	1191	7409	3.820	76.900	76.400	-0.65%

Table 10-5
System Verification Results – 10g

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_{10g} (W/kg)	1 W Target SAR_{10g} (W/kg)	1 W Normalized SAR_{10g} (W/kg)	$Deviation_{10g}$ (%)
I	1750	BODY	11/20/2019	20.6	20.0	0.100	1148	7357	1.880	19.800	18.800	-5.05%
I	1750	BODY	11/25/2019	20.6	20.3	0.100	1148	7357	2.120	19.800	21.200	7.07%
I	1750	BODY	12/03/2019	21.2	20.2	0.100	1148	7357	2.120	19.800	21.200	7.07%
I	1750	BODY	12/25/2019	21.2	20.5	0.100	1150	7357	2.010	19.400	20.100	3.61%
I	1750	BODY	01/01/2020	23.4	21.6	0.100	1150	7357	2.040	19.400	20.400	5.15%
J	1900	BODY	11/23/2019	20.3	24.3	0.100	5d148	7488	2.010	20.500	20.100	-1.95%
J	1900	BODY	11/26/2019	20.9	22.8	0.100	5d148	7488	2.040	20.500	20.400	-0.49%
J	1900	BODY	12/02/2019	20.7	21.7	0.100	5d149	7488	2.090	20.700	20.900	0.97%
P	1900	BODY	12/12/2019	22.5	19.7	0.100	5d080	7551	2.050	20.600	20.500	-0.49%
J	1900	BODY	01/01/2020	21.3	21.1	0.100	5d080	7571	2.140	20.600	21.400	3.88%
P	1900	BODY	12/16/2019	21.2	21.1	0.100	5d080	7551	2.130	20.600	21.300	3.40%
K	2300	BODY	11/30/2019	23.9	22.0	0.100	1073	7547	2.330	23.200	23.300	0.43%
M	2450	BODY	12/12/2019	22.8	22.0	0.100	719	7308	2.490	24.000	24.900	3.75%
M	2450	BODY	12/19/2019	21.9	20.6	0.100	719	7308	2.480	24.000	24.800	3.33%
K	2450	BODY	12/30/2019	23.6	23.0	0.100	797	7547	2.300	24.200	23.000	-4.96%
M	2600	BODY	12/12/2019	22.8	22.0	0.100	1004	7308	2.420	24.700	24.200	-2.02%
M	2600	BODY	12/19/2019	21.9	20.6	0.100	1064	7308	2.420	25.000	24.200	-3.20%
G	5250	BODY	12/09/2019	22.6	21.8	0.050	1191	7409	1.050	21.400	21.000	-1.87%
G	5600	BODY	12/09/2019	22.6	21.8	0.050	1191	7409	1.110	21.900	22.200	1.37%
G	5750	BODY	12/09/2019	22.6	21.8	0.050	1191	7409	1.060	21.300	21.200	-0.47%

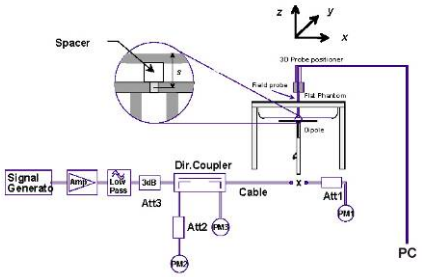


Figure 10-1
System Verification Setup Diagram

Figure 10-2
System Verification Setup Photo

11 SAR DATA SUMMARY

11.1 Standalone Head SAR Data

Table 11-1
CDMA BC10 (§90S) Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Ant State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	25.8	24.53	-0.03	Right	Cheek	0	0432M	1:1	0.160	1.340	0.214	
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	25.8	24.53	-0.17	Right	Tilt	0	0432M	1:1	0.075	1.340	0.101	
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	25.8	24.53	0.15	Left	Cheek	0	0432M	1:1	0.144	1.340	0.193	
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	25.8	24.53	0.15	Left	Tilt	0	0432M	1:1	0.093	1.340	0.125	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	25.8	24.58	-0.04	Right	Cheek	0	0432M	1:1	0.181	1.324	0.240	A1
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	25.8	24.58	-0.03	Right	Tilt	0	0432M	1:1	0.082	1.324	0.109	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	25.8	24.58	0.19	Left	Cheek	0	0432M	1:1	0.158	1.324	0.209	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	25.8	24.58	-0.11	Left	Tilt	0	0432M	1:1	0.098	1.324	0.130	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-2
CDMA BC0 (§22H) Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Ant State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.47	-0.10	Right	Cheek	0	0432M	1:1	0.163	1.358	0.221	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.47	-0.12	Right	Tilt	0	0432M	1:1	0.084	1.358	0.114	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.47	0.05	Left	Cheek	0	0432M	1:1	0.136	1.358	0.185	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.47	-0.13	Left	Tilt	0	0432M	1:1	0.086	1.358	0.117	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.54	0.10	Right	Cheek	0	0432M	1:1	0.222	1.337	0.297	A2
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.54	-0.18	Right	Tilt	0	0432M	1:1	0.096	1.337	0.128	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.54	0.06	Left	Cheek	0	0432M	1:1	0.150	1.337	0.201	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.54	0.19	Left	Tilt	0	0432M	1:1	0.103	1.337	0.138	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-3
PCS CDMA Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Ant State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1880.00	600	PCS CDMA	RC3 / SO55	24.5	23.02	0.21	Right	Cheek	13	0496M	1:1	0.050	1.406	0.070	
1880.00	600	PCS CDMA	RC3 / SO55	24.5	23.02	0.18	Right	Tilt	13	0496M	1:1	0.045	1.406	0.063	
1880.00	600	PCS CDMA	RC3 / SO55	24.5	23.02	0.06	Left	Cheek	13	0496M	1:1	0.111	1.406	0.156	A3
1880.00	600	PCS CDMA	RC3 / SO55	24.5	23.02	0.12	Left	Tilt	13	0496M	1:1	0.059	1.406	0.083	
1880.00	600	PCS CDMA	EVDO Rev. A	24.5	23.09	0.11	Right	Cheek	13	0496M	1:1	0.053	1.384	0.073	
1880.00	600	PCS CDMA	EVDO Rev. A	24.5	23.09	0.15	Right	Tilt	13	0496M	1:1	0.057	1.384	0.079	
1880.00	600	PCS CDMA	EVDO Rev. A	24.5	23.09	0.14	Left	Cheek	13	0496M	1:1	0.110	1.384	0.152	
1880.00	600	PCS CDMA	EVDO Rev. A	24.5	23.09	0.11	Left	Tilt	13	0496M	1:1	0.075	1.384	0.104	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-4
GSM 850 Head SAR

MEASUREMENT RESULTS														
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.										(W/kg)		(W/kg)	
836.60	190	GSM 850	GSM	33.0	31.54	0.05	Right	Cheek	0432M	1:8.3	0.132	1.400	0.185	A4
836.60	190	GSM 850	GSM	33.0	31.54	-0.03	Right	Tilt	0432M	1:8.3	0.057	1.400	0.080	
836.60	190	GSM 850	GSM	33.0	31.54	0.00	Left	Cheek	0432M	1:8.3	0.096	1.400	0.134	
836.60	190	GSM 850	GSM	33.0	31.54	0.05	Left	Tilt	0432M	1:8.3	0.060	1.400	0.084	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-5
GSM 1900 Head SAR

MEASUREMENT RESULTS														
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.										(W/kg)		(W/kg)	
1880.00	661	GSM 1900	GSM	30.0	29.02	0.18	Right	Cheek	0496M	1:8.3	0.023	1.253	0.029	
1880.00	661	GSM 1900	GSM	30.0	29.02	0.18	Right	Tilt	0496M	1:8.3	0.024	1.253	0.030	
1880.00	661	GSM 1900	GSM	30.0	29.02	-0.11	Left	Cheek	0496M	1:8.3	0.038	1.253	0.048	A5
1880.00	661	GSM 1900	GSM	30.0	29.02	0.11	Left	Tilt	0496M	1:8.3	0.027	1.253	0.034	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-6
UMTS 850 Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Ant State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
836.60	4183	UMTS 850	RMC	25.0	23.80	0.03	Right	Cheek	0	0432M	1:1	0.166	1.318	0.219	A6
836.60	4183	UMTS 850	RMC	25.0	23.80	0.03	Right	Tilt	0	0432M	1:1	0.075	1.318	0.099	
836.60	4183	UMTS 850	RMC	25.0	23.80	-0.07	Left	Cheek	0	0432M	1:1	0.110	1.318	0.145	
836.60	4183	UMTS 850	RMC	25.0	23.80	-0.02	Left	Tilt	0	0432M	1:1	0.077	1.318	0.101	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-7
UMTS 1750 Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Ant State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1732.40	1412	UMTS 1750	RMC	24.5	23.39	0.05	Right	Cheek	25	0496M	1:1	0.081	1.291	0.105	
1732.40	1412	UMTS 1750	RMC	24.5	23.39	0.11	Right	Tilt	25	0496M	1:1	0.115	1.291	0.148	
1732.40	1412	UMTS 1750	RMC	24.5	23.39	0.08	Left	Cheek	25	0496M	1:1	0.121	1.291	0.156	A7
1732.40	1412	UMTS 1750	RMC	24.5	23.39	0.07	Left	Tilt	25	0496M	1:1	0.118	1.291	0.152	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-8
UMTS 1900 Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Ant State	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1880.00	9400	UMTS 1900	RMC	24.5	23.24	0.05	Right	Cheek	14	0496M	1:1	0.085	1.337	0.114	
1880.00	9400	UMTS 1900	RMC	24.5	23.24	0.15	Right	Tilt	14	0496M	1:1	0.058	1.337	0.078	
1880.00	9400	UMTS 1900	RMC	24.5	23.24	0.18	Left	Cheek	14	0496M	1:1	0.108	1.337	0.144	A8
1880.00	9400	UMTS 1900	RMC	24.5	23.24	0.14	Left	Tilt	14	0496M	1:1	0.062	1.337	0.083	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-9
LTE Band 71 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	LTE Band 71	20	25.5	24.86	-0.12	0	Right	Cheek	43	QPSK	1	0	0473M	1:1	0.086	1.159	0.100	
680.50	133297	Mid	LTE Band 71	20	24.5	23.88	0.05	1	Right	Cheek	43	QPSK	50	0	0473M	1:1	0.077	1.153	0.089	
680.50	133297	Mid	LTE Band 71	20	25.5	24.86	0.21	0	Right	Tilt	43	QPSK	1	0	0473M	1:1	0.039	1.159	0.045	
680.50	133297	Mid	LTE Band 71	20	24.5	23.88	0.06	1	Right	Tilt	43	QPSK	50	0	0473M	1:1	0.033	1.153	0.038	
680.50	133297	Mid	LTE Band 71	20	25.5	24.86	-0.05	0	Left	Cheek	43	QPSK	1	0	0473M	1:1	0.088	1.159	0.102	A9
680.50	133297	Mid	LTE Band 71	20	24.5	23.88	0.07	1	Left	Cheek	43	QPSK	50	0	0473M	1:1	0.079	1.153	0.091	
680.50	133297	Mid	LTE Band 71	20	25.5	24.86	-0.11	0	Left	Tilt	43	QPSK	1	0	0473M	1:1	0.056	1.159	0.065	
680.50	133297	Mid	LTE Band 71	20	24.5	23.88	0.00	1	Left	Tilt	43	QPSK	50	0	0473M	1:1	0.050	1.153	0.058	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-10
LTE Band 12 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
707.50	23095	Mid	LTE Band 12	10	25.8	24.92	0.00	0	Right	Cheek	43	QPSK	1	0	0473M	1:1	0.103	1.225	0.126	
707.50	23095	Mid	LTE Band 12	10	24.8	23.82	-0.11	1	Right	Cheek	43	QPSK	25	12	0473M	1:1	0.094	1.253	0.118	
707.50	23095	Mid	LTE Band 12	10	25.8	24.92	0.19	0	Right	Tilt	43	QPSK	1	0	0473M	1:1	0.043	1.225	0.053	
707.50	23095	Mid	LTE Band 12	10	24.8	23.82	0.13	1	Right	Tilt	43	QPSK	25	12	0473M	1:1	0.037	1.253	0.046	
707.50	23095	Mid	LTE Band 12	10	25.8	24.92	0.10	0	Left	Cheek	43	QPSK	1	0	0473M	1:1	0.106	1.225	0.130	A10
707.50	23095	Mid	LTE Band 12	10	24.8	23.82	0.08	1	Left	Cheek	43	QPSK	25	12	0473M	1:1	0.087	1.253	0.109	
707.50	23095	Mid	LTE Band 12	10	25.8	24.92	0.11	0	Left	Tilt	43	QPSK	1	0	0473M	1:1	0.057	1.225	0.070	
707.50	23095	Mid	LTE Band 12	10	24.8	23.82	0.02	1	Left	Tilt	43	QPSK	25	12	0473M	1:1	0.051	1.253	0.064	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-11
LTE Band 13 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
782.00	23230	Mid	LTE Band 13	10	25.8	24.99	-0.14	0	Right	Cheek	0	QPSK	1	0	0473M	1:1	0.145	1.205	0.175	A11
782.00	23230	Mid	LTE Band 13	10	24.8	23.97	-0.02	1	Right	Cheek	0	QPSK	25	0	0473M	1:1	0.128	1.211	0.155	
782.00	23230	Mid	LTE Band 13	10	25.8	24.99	0.13	0	Right	Tilt	0	QPSK	1	0	0473M	1:1	0.070	1.205	0.084	
782.00	23230	Mid	LTE Band 13	10	24.8	23.97	-0.05	1	Right	Tilt	0	QPSK	25	0	0473M	1:1	0.059	1.211	0.071	
782.00	23230	Mid	LTE Band 13	10	25.8	24.99	-0.08	0	Left	Cheek	0	QPSK	1	0	0473M	1:1	0.122	1.205	0.147	
782.00	23230	Mid	LTE Band 13	10	24.8	23.97	0.09	1	Left	Cheek	0	QPSK	25	0	0473M	1:1	0.119	1.211	0.144	
782.00	23230	Mid	LTE Band 13	10	25.8	24.99	0.16	0	Left	Tilt	0	QPSK	1	0	0473M	1:1	0.084	1.205	0.101	
782.00	23230	Mid	LTE Band 13	10	24.8	23.97	0.05	1	Left	Tilt	0	QPSK	25	0	0473M	1:1	0.074	1.211	0.090	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-12
LTE Band 14 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
793.00	23330	Mid	LTE Band 14	10	25.8	24.78	-0.19	0	Right	Cheek	13	QPSK	1	0	0473M	1:1	0.203	1.265	0.257	A12
793.00	23330	Mid	LTE Band 14	10	24.8	23.64	0.07	1	Right	Cheek	13	QPSK	25	0	0473M	1:1	0.164	1.306	0.214	
793.00	23330	Mid	LTE Band 14	10	25.8	24.78	-0.04	0	Right	Tilt	13	QPSK	1	0	0473M	1:1	0.096	1.265	0.121	
793.00	23330	Mid	LTE Band 14	10	24.8	23.64	0.10	1	Right	Tilt	13	QPSK	25	0	0473M	1:1	0.076	1.306	0.099	
793.00	23330	Mid	LTE Band 14	10	25.8	24.78	-0.13	0	Left	Cheek	13	QPSK	1	0	0473M	1:1	0.137	1.265	0.173	
793.00	23330	Mid	LTE Band 14	10	24.8	23.64	0.10	1	Left	Cheek	13	QPSK	25	0	0473M	1:1	0.112	1.306	0.146	
793.00	23330	Mid	LTE Band 14	10	25.8	24.78	-0.13	0	Left	Tilt	13	QPSK	1	0	0473M	1:1	0.090	1.265	0.114	
793.00	23330	Mid	LTE Band 14	10	24.8	23.64	0.20	1	Left	Tilt	13	QPSK	25	0	0473M	1:1	0.073	1.306	0.095	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-13
LTE Band 26 (Cell) Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	24.72	0.10	0	Right	Cheek	0	QPSK	1	36	0473M	1:1	0.183	1.282	0.235	A13
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	23.89	0.07	1	Right	Cheek	0	QPSK	36	37	0473M	1:1	0.170	1.233	0.210	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	24.72	-0.18	0	Right	Tilt	0	QPSK	1	36	0473M	1:1	0.101	1.282	0.129	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	23.89	0.09	1	Right	Tilt	0	QPSK	36	37	0473M	1:1	0.084	1.233	0.104	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	24.72	0.12	0	Left	Cheek	0	QPSK	1	36	0473M	1:1	0.134	1.282	0.172	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	23.89	0.00	1	Left	Cheek	0	QPSK	36	37	0473M	1:1	0.111	1.233	0.137	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	24.72	0.09	0	Left	Tilt	0	QPSK	1	36	0473M	1:1	0.083	1.282	0.106	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	23.89	0.14	1	Left	Tilt	0	QPSK	36	37	0473M	1:1	0.072	1.233	0.089	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-14
LTE Band 5 (Cell) Head SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.90	-0.06	0	Right	Cheek	0	QPSK	1	0	0445M	1:1	0.203	1.230	0.250	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.87	-0.03	1	Right	Cheek	0	QPSK	25	25	0445M	1:1	0.160	1.239	0.198	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.80	0.05	0	Right	Cheek	0	QPSK	1	0	0445M	1:1	0.251	1.000	0.251	A14
	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	25.8	24.90	-0.10	0	Right	Tilt	0	QPSK	1	0	0445M	1:1	0.102	1.230	0.125	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.87	-0.10	1	Right	Tilt	0	QPSK	25	25	0445M	1:1	0.081	1.239	0.100	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.90	0.19	0	Left	Cheek	0	QPSK	1	0	0445M	1:1	0.163	1.230	0.200	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.87	0.08	1	Left	Cheek	0	QPSK	25	25	0445M	1:1	0.128	1.239	0.159	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.90	0.13	0	Left	Tilt	0	QPSK	1	0	0445M	1:1	0.111	1.230	0.137	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.87	0.18	1	Left	Tilt	0	QPSK	25	25	0445M	1:1	0.080	1.239	0.099	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-15
LTE Band 66 (AWS) Head SAR

MEASUREMENT RESULTS																								
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.16	0.13	0	Right	Cheek	22	QPSK	1	50	0492M	1:1	0.106	1.213	0.129	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.19	0.20	1	Right	Cheek	22	QPSK	50	0	0492M	1:1	0.082	1.205	0.099	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.16	-0.02	0	Right	Tilt	22	QPSK	1	50	0492M	1:1	0.054	1.213	0.066	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.19	0.12	1	Right	Tilt	22	QPSK	50	0	0492M	1:1	0.038	1.205	0.046	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.16	0.19	0	Left	Cheek	22	QPSK	1	50	0492M	1:1	0.144	1.213	0.175	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.06	-0.17	0	Left	Cheek	22	QPSK	1	99	0492M	1:1	0.113	1.242	0.140	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	10	25.0	23.80	0.18	0	Left	Cheek	22	QPSK	1	49	0492M	1:1	0.131	1.318	0.173	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.19	-0.07	1	Left	Cheek	22	QPSK	50	0	0492M	1:1	0.109	1.205	0.131	
2 CC Uplink CA_66C	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.79	-0.12	0	Left	Cheek	22	QPSK	1	99	0492M	1:1	0.131	1.050	0.138	
	SCC	1764.80	132520	Mid	LTE Band 66 (AWS)	20									1	0						
2 CC Uplink CA_66B	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	10	25.0	24.50	0.13	0	Left	Cheek	22	QPSK	1	49	0492M	1:1	0.153	1.122	0.172	A15
	SCC	1754.90	132421	Mid	LTE Band 66 (AWS)	10									1	0						
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.16	0.21	0	Left	Tilt	22	QPSK	1	50	0492M	1:1	0.036	1.213	0.044	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.19	0.21	1	Left	Tilt	22	QPSK	50	0	0492M	1:1	0.028	1.205	0.034	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-16
LTE Band 25 (PCS) Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	24.01	0.09	0	Right	Cheek	113	QPSK	1	99	0530M	1:1	0.072	1.119	0.081	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	23.04	0.20	1	Right	Cheek	113	QPSK	50	50	0530M	1:1	0.058	1.112	0.064	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	24.01	0.05	0	Right	Tilt	113	QPSK	1	99	0530M	1:1	0.072	1.119	0.081	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	23.04	0.13	1	Right	Tilt	113	QPSK	50	50	0530M	1:1	0.049	1.112	0.054	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	24.01	-0.12	0	Left	Cheek	113	QPSK	1	99	0530M	1:1	0.111	1.119	0.124	A16
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	23.04	0.07	1	Left	Cheek	113	QPSK	50	50	0530M	1:1	0.081	1.112	0.090	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	24.01	0.07	0	Left	Tilt	113	QPSK	1	99	0530M	1:1	0.083	1.119	0.093	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	23.04	0.14	1	Left	Tilt	113	QPSK	50	50	0530M	1:1	0.063	1.112	0.070	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-17
LTE Band 2 (PCS) Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1900.00	19100	High	LTE Band 2 (PCS)	20	24.5	23.89	-0.12	0	Right	Cheek	13	QPSK	1	99	0530M	1:1	0.073	1.151	0.084	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	23.5	22.98	0.13	1	Right	Cheek	13	QPSK	50	25	0530M	1:1	0.061	1.127	0.069	
1900.00	19100	High	LTE Band 2 (PCS)	20	24.5	23.89	0.21	0	Right	Tilt	13	QPSK	1	99	0530M	1:1	0.081	1.151	0.093	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	23.5	22.98	0.18	1	Right	Tilt	13	QPSK	50	25	0530M	1:1	0.049	1.127	0.055	
1900.00	19100	High	LTE Band 2 (PCS)	20	24.5	23.89	0.10	0	Left	Cheek	13	QPSK	1	99	0530M	1:1	0.122	1.151	0.140	A17
1880.00	18900	Mid	LTE Band 2 (PCS)	20	23.5	22.98	0.13	1	Left	Cheek	13	QPSK	50	25	0530M	1:1	0.091	1.127	0.103	
1900.00	19100	High	LTE Band 2 (PCS)	20	24.5	23.89	0.07	0	Left	Tilt	13	QPSK	1	99	0530M	1:1	0.044	1.151	0.051	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	23.5	22.98	0.10	1	Left	Tilt	13	QPSK	50	25	0530M	1:1	0.070	1.127	0.079	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-18
LTE Band 30 Head SAR

MEASUREMENT RESULTS																			
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.44	0.18	0	Right	Cheek	QPSK	1	0	0533M	1:1	0.042	1.138	0.048	
2310.00	27710	Mid	LTE Band 30	10	22.0	21.58	0.20	1	Right	Cheek	QPSK	25	12	0533M	1:1	0.034	1.102	0.037	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.44	0.17	0	Right	Tilt	QPSK	1	0	0533M	1:1	0.037	1.138	0.042	
2310.00	27710	Mid	LTE Band 30	10	22.0	21.58	0.19	1	Right	Tilt	QPSK	25	12	0533M	1:1	0.031	1.102	0.034	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.44	-0.13	0	Left	Cheek	QPSK	1	0	0533M	1:1	0.091	1.138	0.104	A18
2310.00	27710	Mid	LTE Band 30	10	22.0	21.58	0.20	1	Left	Cheek	QPSK	25	12	0533M	1:1	0.071	1.102	0.078	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.44	0.13	0	Left	Tilt	QPSK	1	0	0533M	1:1	0.033	1.138	0.038	
2310.00	27710	Mid	LTE Band 30	10	22.0	21.58	0.13	1	Left	Tilt	QPSK	25	12	0533M	1:1	0.024	1.102	0.026	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-19
LTE Band 7 Head SAR

MEASUREMENT RESULTS																			
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2510.00	20850	Low	LTE Band 7	20	24.0	23.45	0.12	0	Right	Cheek	QPSK	1	99	0486M	1:1	0.098	1.135	0.111	
2510.00	20850	Low	LTE Band 7	20	23.0	22.60	0.20	1	Right	Cheek	QPSK	50	50	0486M	1:1	0.077	1.096	0.084	
2510.00	20850	Low	LTE Band 7	20	24.0	23.45	0.17	0	Right	Tilt	QPSK	1	99	0486M	1:1	0.110	1.135	0.125	
2510.00	20850	Low	LTE Band 7	20	23.0	22.60	0.13	1	Right	Tilt	QPSK	50	50	0486M	1:1	0.083	1.096	0.091	
2510.00	20850	Low	LTE Band 7	20	24.0	23.45	0.20	0	Left	Cheek	QPSK	1	99	0486M	1:1	0.123	1.135	0.140	A19
2510.00	20850	Low	LTE Band 7	20	23.0	22.60	0.13	1	Left	Cheek	QPSK	50	50	0486M	1:1	0.098	1.096	0.107	
2510.00	20850	Low	LTE Band 7	20	24.0	23.45	0.19	0	Left	Tilt	QPSK	1	99	0486M	1:1	0.070	1.135	0.079	
2510.00	20850	Low	LTE Band 7	20	23.0	22.60	0.20	1	Left	Tilt	QPSK	50	50	0486M	1:1	0.056	1.096	0.061	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-20
LTE Band 48 Head SAR

MEASUREMENT RESULTS																					
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.															(W/kg)		(W/kg)	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	19.5	18.75	0.05	0	Right	Cheek	QPSK	1	50	0328M	1:1.58	0.718	1.189	0.854	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	19.5	18.72	-0.06	0	Right	Cheek	QPSK	1	50	0328M	1:1.58	0.623	1.197	0.746	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.5	19.05	0.06	0	Right	Cheek	QPSK	1	50	0328M	1:1.58	0.587	1.109	0.651	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	19.5	18.90	0.01	0	Right	Cheek	QPSK	1	50	0328M	1:1.58	0.537	1.148	0.616	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	19.5	18.76	-0.05	0	Right	Cheek	QPSK	50	25	0328M	1:1.58	0.743	1.186	0.881	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	19.5	18.82	0.03	0	Right	Cheek	QPSK	50	25	0328M	1:1.58	0.648	1.169	0.758	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.5	19.09	-0.01	0	Right	Cheek	QPSK	50	25	0328M	1:1.58	0.601	1.099	0.660	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	19.5	19.03	0.00	0	Right	Cheek	QPSK	50	25	0328M	1:1.58	0.561	1.114	0.625	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.5	18.92	-0.03	0	Right	Cheek	QPSK	100	0	0328M	1:1.58	0.593	1.143	0.678	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	19.5	18.75	0.07	0	Right	Tilt	QPSK	1	50	0328M	1:1.58	0.826	1.189	0.982	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	19.5	18.72	-0.05	0	Right	Tilt	QPSK	1	50	0328M	1:1.58	0.787	1.197	0.942	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.5	19.05	-0.07	0	Right	Tilt	QPSK	1	50	0328M	1:1.58	0.773	1.109	0.857	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	19.5	18.90	-0.04	0	Right	Tilt	QPSK	1	50	0328M	1:1.58	0.661	1.148	0.759	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	19.5	18.76	-0.14	0	Right	Tilt	QPSK	50	25	0328M	1:1.58	0.851	1.186	1.009	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	19.5	18.70	0.02	0	Right	Tilt	QPSK	50	50	0328M	1:1.58	0.885	1.202	1.064	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	19.5	19.35	-0.01	0	Right	Tilt	QPSK	50	50	0328M	1:1.58	1.040	1.035	**1.076**	A20
	SCC	3579.80	55538	Low										50	0						
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	19.5	18.82	-0.01	0	Right	Tilt	QPSK	50	25	0328M	1:1.58	0.826	1.169	0.966	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.5	19.09	-0.01	0	Right	Tilt	QPSK	50	25	0328M	1:1.58	0.750	1.099	0.824	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	19.5	19.03	0.00	0	Right	Tilt	QPSK	50	25	0328M	1:1.58	0.679	1.114	0.756	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.5	18.92	0.02	0	Right	Tilt	QPSK	100	0	0328M	1:1.58	0.773	1.143	0.884	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.5	19.05	0.02	0	Left	Cheek	QPSK	1	50	0328M	1:1.58	0.179	1.109	0.199	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.5	19.09	0.04	0	Left	Cheek	QPSK	50	25	0328M	1:1.58	0.180	1.099	0.198	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.5	19.05	-0.14	0	Left	Tilt	QPSK	1	50	0328M	1:1.58	0.221	1.109	0.245	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.5	19.09	0.07	0	Left	Tilt	QPSK	50	25	0328M	1:1.58	0.228	1.099	0.251	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	19.5	19.35	-0.13	0	Right	Tilt	QPSK	50	50	0328M	1:1.58	1.020	1.035	1.056	
	SCC	3579.80	55538	Low										50	0						
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	19.5	18.82	-0.01	0	Right	Tilt	QPSK	50	25	0328M	1:1.58	0.877	1.169	1.025	

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

Note: Blue entries represent variability measurements.

Table 11-21
LTE Band 41 Head SAR

MEASUREMENT RESULTS																					
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.															(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	25.0	24.81	0.13	0	Right	Cheek	QPSK	1	0	0480M	1:1.58	0.060	1.045	0.063	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.0	24.00	0.21	1	Right	Cheek	QPSK	50	0	0480M	1:1.58	0.046	1.000	0.046	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	25.0	24.81	0.18	0	Right	Tilt	QPSK	1	0	0480M	1:1.58	0.067	1.045	0.070	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.0	24.00	0.15	1	Right	Tilt	QPSK	50	0	0480M	1:1.58	0.051	1.000	0.051	
1 CC Uplink - Power Class 2	N/A	2593.00	40620	Mid	LTE Band 41	20	27.7	27.04	0.15	0	Right	Tilt	QPSK	1	0	0480M	1:2.31	0.070	1.164	0.081	
2 CC Uplink - Power Class 3	PCC	2593.00	40620	Mid	LTE Band 41	20	25.0	24.92	0.18	0	Right	Tilt	QPSK	1	0	0480M	1:1.58	0.066	1.019	0.067	
	SCC	2573.20	40422	Mid		20							QPSK	1	99						
2 CC Uplink - Power Class 2	PCC	2593.00	40620	Mid	LTE Band 41	20	27.7	27.45	0.16	0	Right	Tilt	QPSK	1	0	0480M	1:2.31	0.080	1.059	0.085	A21
	SCC	2573.20	40422	Mid		20							QPSK	1	99						
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	25.0	24.81	0.14	0	Left	Cheek	QPSK	1	0	0480M	1:1.58	0.042	1.045	0.044	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.0	24.00	0.14	1	Left	Cheek	QPSK	50	0	0480M	1:1.58	0.036	1.000	0.036	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	25.0	24.81	0.12	0	Left	Tilt	QPSK	1	0	0480M	1:1.58	0.029	1.045	0.030	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.0	24.00	0.15	1	Left	Tilt	QPSK	50	0	0480M	1:1.58	0.026	1.000	0.026	

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

Table 11-22
NR Band n71 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	136100	Mid	NR Band n71	20	25.5	24.96	0.07	0	Right	Cheek	43	DFT-S-OFDM QPSK	1	53	0999M	1:1	0.115	1.132	0.130	
680.50	136100	Mid	NR Band n71	20	25.5	24.90	0.04	0	Right	Cheek	43	DFT-S-OFDM QPSK	50	28	0999M	1:1	0.116	1.148	0.133	A22
680.50	136100	Mid	NR Band n71	20	24.0	23.45	0.09	1.5	Right	Cheek	43	CP-OFDM QPSK	1	1	0999M	1:1	0.069	1.135	0.078	
680.50	136100	Mid	NR Band n71	20	25.5	24.96	0.10	0	Right	Tilt	43	DFT-S-OFDM QPSK	1	53	0999M	1:1	0.050	1.132	0.057	
680.50	136100	Mid	NR Band n71	20	25.5	24.90	0.10	0	Right	Tilt	43	DFT-S-OFDM QPSK	50	28	0999M	1:1	0.052	1.148	0.060	
680.50	136100	Mid	NR Band n71	20	25.5	24.96	0.09	0	Left	Cheek	43	DFT-S-OFDM QPSK	1	53	0999M	1:1	0.096	1.132	0.109	
680.50	136100	Mid	NR Band n71	20	25.5	24.90	0.02	0	Left	Cheek	43	DFT-S-OFDM QPSK	50	28	0999M	1:1	0.106	1.148	0.122	
680.50	136100	Mid	NR Band n71	20	25.5	24.96	-0.05	0	Left	Tilt	43	DFT-S-OFDM QPSK	1	53	0999M	1:1	0.046	1.132	0.052	
680.50	136100	Mid	NR Band n71	20	25.5	24.90	-0.17	0	Left	Tilt	43	DFT-S-OFDM QPSK	50	28	0999M	1:1	0.048	1.148	0.055	

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

Table 11-23
NR Band n5 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.82	0.18	0	Right	Cheek	0	DFT-S-OFDM QPSK	1	1	0977M	1:1	0.181	1.253	0.227	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.42	0.03	0	Right	Cheek	0	DFT-S-OFDM QPSK	50	28	0977M	1:1	0.188	1.374	0.258	A23
836.50	167300	Mid	NR Band n5 (Cell)	20	24.3	23.10	0.04	1.5	Right	Cheek	0	CP-OFDM QPSK	1	1	0977M	1:1	0.116	1.318	0.153	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.82	0.05	0	Right	Tilt	0	DFT-S-OFDM QPSK	1	1	0977M	1:1	0.091	1.253	0.114	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.42	0.04	0	Right	Tilt	0	DFT-S-OFDM QPSK	50	28	0977M	1:1	0.086	1.374	0.118	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.82	0.10	0	Left	Cheek	0	DFT-S-OFDM QPSK	1	1	0977M	1:1	0.129	1.253	0.162	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.42	0.01	0	Left	Cheek	0	DFT-S-OFDM QPSK	50	28	0977M	1:1	0.139	1.374	0.191	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.82	0.07	0	Left	Tilt	0	DFT-S-OFDM QPSK	1	1	0977M	1:1	0.084	1.253	0.105	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.42	-0.01	0	Left	Tilt	0	DFT-S-OFDM QPSK	50	28	0977M	1:1	0.087	1.374	0.120	

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

Table 11-24
NR Band n66 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.28	0.04	0	Right	Cheek	22	DFT-S-OFDM QPSK	1	53	0909M	1:1	0.075	1.180	0.089	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.23	0.13	0	Right	Cheek	22	DFT-S-OFDM QPSK	50	28	0909M	1:1	0.070	1.194	0.084	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.28	0.14	0	Right	Tilt	22	DFT-S-OFDM QPSK	1	53	0909M	1:1	0.053	1.180	0.063	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.23	0.13	0	Right	Tilt	22	DFT-S-OFDM QPSK	50	28	0909M	1:1	0.046	1.194	0.055	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.28	0.02	0	Left	Cheek	22	DFT-S-OFDM QPSK	1	53	0909M	1:1	0.133	1.180	0.157	A24
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.23	0.02	0	Left	Cheek	22	DFT-S-OFDM QPSK	50	28	0909M	1:1	0.120	1.194	0.143	
1745.00	349000	Mid	NR Band n66 (AWS)	20	23.5	21.79	0.12	1.5	Left	Cheek	22	CP-OFDM QPSK	1	1	0909M	1:1	0.080	1.483	0.119	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.28	0.03	0	Left	Tilt	22	DFT-S-OFDM QPSK	1	53	0909M	1:1	0.053	1.180	0.063	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.23	0.14	0	Left	Tilt	22	DFT-S-OFDM QPSK	50	28	0909M	1:1	0.043	1.194	0.051	

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

Table 11-25
NR Band n2 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Ant State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.13	0	Right	Cheek	13	DFT-S-OFDM QPSK	1	1	0530M	1:1	0.077	1.148	0.088	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.13	0	Right	Cheek	13	DFT-S-OFDM QPSK	50	28	0530M	1:1	0.066	1.148	0.076	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.20	0	Right	Tilt	13	DFT-S-OFDM QPSK	1	1	0530M	1:1	0.047	1.148	0.054	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	-0.11	0	Right	Tilt	13	DFT-S-OFDM QPSK	50	28	0530M	1:1	0.049	1.148	0.056	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.01	0	Left	Cheek	13	DFT-S-OFDM QPSK	1	1	0530M	1:1	0.138	1.148	0.158	A25
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	-0.01	0	Left	Cheek	13	DFT-S-OFDM QPSK	50	28	0530M	1:1	0.124	1.148	0.142	
1900.00	380000	High	NR Band n2 (PCS)	20	23.0	22.56	-0.11	1.5	Left	Cheek	13	CP-OFDM QPSK	1	1	0530M	1:1	0.089	1.107	0.099	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.14	0	Left	Tilt	13	DFT-S-OFDM QPSK	1	1	0530M	1:1	0.055	1.148	0.063	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.21	0	Left	Tilt	13	DFT-S-OFDM QPSK	50	28	0530M	1:1	0.052	1.148	0.060	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Head 1.6 W/kg (mW/g) averaged over 1 gram												

Table 11-26
NR Band n41 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2592.99	518598	Mid	NR Band n41	100	24.5	23.41	0.04	0	Right	Cheek	DFT-S-OFDM QPSK	1	137	0353M	1:4	0.621	1.285	0.798	
2592.99	518598	Mid	NR Band n41	100	24.5	23.28	-0.03	0	Right	Cheek	DFT-S-OFDM QPSK	135	69	0353M	1:4	0.583	1.324	0.772	
2592.99	518598	Mid	NR Band n41	100	23.5	22.51	0.01	1	Right	Cheek	DFT-S-OFDM QPSK	270	0	0353M	1:4	0.423	1.256	0.531	
2592.99	518598	Mid	NR Band n41	100	24.5	23.41	0.04	0	Right	Tilt	DFT-S-OFDM QPSK	1	137	0353M	1:4	0.838	1.285	**1.077**	A26
2592.99	518598	Mid	NR Band n41	100	24.5	23.28	0.02	0	Right	Tilt	DFT-S-OFDM QPSK	135	69	0353M	1:4	0.815	1.324	**1.079**	
2592.99	518598	Mid	NR Band n41	100	23.5	22.51	0.06	1	Right	Tilt	DFT-S-OFDM QPSK	270	0	0353M	1:4	0.580	1.256	0.728	
2592.99	518598	Mid	NR Band n41	100	23.0	21.17	0.08	1.5	Right	Tilt	CP-OFDM QPSK	1	1	0353M	1:4	0.388	1.524	0.591	
2592.99	518598	Mid	NR Band n41	100	24.5	23.41	-0.19	0	Left	Cheek	DFT-S-OFDM QPSK	1	137	0353M	1:4	0.315	1.285	0.405	
2592.99	518598	Mid	NR Band n41	100	24.5	23.28	0.03	0	Left	Cheek	DFT-S-OFDM QPSK	135	69	0353M	1:4	0.301	1.324	0.399	
2592.99	518598	Mid	NR Band n41	100	24.5	23.41	0.01	0	Left	Tilt	DFT-S-OFDM QPSK	1	137	0353M	1:4	0.429	1.285	0.551	
2592.99	518598	Mid	NR Band n41	100	24.5	23.28	0.00	0	Left	Tilt	DFT-S-OFDM QPSK	135	69	0353M	1:4	0.412	1.324	0.545	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 11-27
DTS Head SISO SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Ant State	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
2462	11	802.11b	DSSS	22	17.0	16.95	0.21	Right	Cheek	1	0324M	1	99.9	0.560	-	1.012	1.001	-	
2462	11	802.11b	DSSS	22	17.0	16.95	0.17	Right	Tilt	1	0324M	1	99.9	0.890	0.463	1.012	1.001	**0.469**	A27
2462	11	802.11b	DSSS	22	17.0	16.95	-0.14	Left	Cheek	1	0324M	1	99.9	0.554	-	1.012	1.001	-	
2462	11	802.11b	DSSS	22	17.0	16.95	0.03	Left	Tilt	1	0324M	1	99.9	0.797	0.433	1.012	1.001	0.439	
2412	1	802.11b	DSSS	22	17.0	16.36	0.20	Right	Cheek	2	0324M	1	99.9	0.003	-	1.159	1.001	-	
2412	1	802.11b	DSSS	22	17.0	16.36	0.19	Right	Tilt	2	0324M	1	99.9	0.003	-	1.159	1.001	-	
2412	1	802.11b	DSSS	22	17.0	16.36	0.13	Left	Cheek	2	0324M	1	99.9	0.021	-	1.159	1.001	-	
2412	1	802.11b	DSSS	22	17.0	16.36	0.18	Left	Tilt	2	0324M	1	99.9	0.026	0.003	1.159	1.001	0.003	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Head 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-28
DTS Head MIMO SAR During Conditions with 2.4 GHz and 5 GHz WLAN

MEASUREMENT RESULTS																						
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Side	Test Position	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
2462	11	802.11n	OFDM	20	14.0	13.15	14.0	13.97	0.15	Right	Cheek	MIMO	0324M	13	98.7	0.311	-	1.216	1.013	-	
2462	11	802.11n	OFDM	20	14.0	13.15	14.0	13.97	0.12	Right	Tilt	MIMO	0324M	13	98.7	0.429	0.231	1.216	1.013	0.285	
2462	11	802.11n	OFDM	20	14.0	13.15	14.0	13.97	0.20	Left	Cheek	MIMO	0324M	13	98.7	0.257	-	1.216	1.013	-	
2462	11	802.11n	OFDM	20	14.0	13.15	14.0	13.97	0.20	Left	Tilt	MIMO	0324M	13	98.7	0.387	-	1.216	1.013	-	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

Note: DTS MIMO was additionally evaluated at the maximum allowed output power during operations with Simultaneous 2.4 GHz and 5 GHz WLAN. 5 GHz WIFI was not transmitting during the above evaluations.

Table 11-29
NII SISO Head SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
5270	54	802.11n	OFDM	40	14.0	13.92	0.16	Right	Cheek	1	0324M	13.5	97.3	0.444	0.177	1.019	1.028	**0.185**	
5270	54	802.11n	OFDM	40	14.0	13.92	0.16	Right	Tilt	1	0324M	13.5	97.3	0.427	-	1.019	1.028	-	
5270	54	802.11n	OFDM	40	14.0	13.92	0.17	Left	Cheek	1	0324M	13.5	97.3	0.148	-	1.019	1.028	-	
5270	54	802.11n	OFDM	40	14.0	13.92	0.14	Left	Tilt	1	0324M	13.5	97.3	0.171	-	1.019	1.028	-	
5270	54	802.11n	OFDM	40	14.0	13.78	0.12	Right	Cheek	2	0324M	13.5	97.4	0.105	0.049	1.052	1.027	0.053	
5270	54	802.11n	OFDM	40	14.0	13.78	0.16	Right	Tilt	2	0324M	13.5	97.4	0.067	-	1.052	1.027	-	
5270	54	802.11n	OFDM	40	14.0	13.78	0.13	Left	Cheek	2	0324M	13.5	97.4	0.067	-	1.052	1.027	-	
5270	54	802.11n	OFDM	40	14.0	13.78	-0.19	Left	Tilt	2	0324M	13.5	97.4	0.101	-	1.052	1.027	-	
5690	138	802.11ac	OFDM	80	14.0	13.63	0.13	Right	Cheek	1	0324M	29.3	94.7	0.243	0.070	1.089	1.056	0.080	
5690	138	802.11ac	OFDM	80	14.0	13.63	0.19	Right	Tilt	1	0324M	29.3	94.7	0.239	-	1.089	1.056	-	
5690	138	802.11ac	OFDM	80	14.0	13.63	0.19	Left	Cheek	1	0324M	29.3	94.7	0.084	-	1.089	1.056	-	
5690	138	802.11ac	OFDM	80	14.0	13.63	0.19	Left	Tilt	1	0324M	29.3	94.7	0.121	-	1.089	1.056	-	
5690	138	802.11ac	OFDM	80	14.0	13.37	0.15	Right	Cheek	2	0324M	29.3	94.7	0.027	-	1.156	1.056	-	
5690	138	802.11ac	OFDM	80	14.0	13.37	0.21	Right	Tilt	2	0324M	29.3	94.7	0.046	0.013	1.156	1.056	0.016	
5690	138	802.11ac	OFDM	80	14.0	13.37	-0.15	Left	Cheek	2	0324M	29.3	94.7	0.028	-	1.156	1.056	-	
5690	138	802.11ac	OFDM	80	14.0	13.37	0.00	Left	Tilt	2	0324M	29.3	94.7	0.042	-	1.156	1.056	-	
5775	155	802.11ac	OFDM	80	14.0	13.24	0.16	Right	Cheek	1	0324M	29.3	94.7	0.278	-	1.191	1.056	-	
5775	155	802.11ac	OFDM	80	14.0	13.24	0.02	Right	Tilt	1	0324M	29.3	94.7	0.375	0.143	1.191	1.056	0.180	
5775	155	802.11ac	OFDM	80	14.0	13.24	-0.14	Left	Cheek	1	0324M	29.3	94.7	0.127	-	1.191	1.056	-	
5775	155	802.11ac	OFDM	80	14.0	13.24	0.15	Left	Tilt	1	0324M	29.3	94.7	0.154	-	1.191	1.056	-	
5775	155	802.11ac	OFDM	80	14.0	13.58	0.19	Right	Cheek	2	0324M	29.3	94.7	0.022	-	1.102	1.056	-	
5775	155	802.11ac	OFDM	80	14.0	13.58	0.19	Right	Tilt	2	0324M	29.3	94.7	0.034	-	1.102	1.056	-	
5775	155	802.11ac	OFDM	80	14.0	13.58	0.00	Left	Cheek	2	0324M	29.3	94.7	0.034	-	1.102	1.056	-	
5775	155	802.11ac	OFDM	80	14.0	13.58	0.12	Left	Tilt	2	0324M	29.3	94.7	0.051	0.016	1.102	1.056	0.019	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-30
NII MIMO Head SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Side	Test Position	Ant State	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
5270	54	802.11n	OFDM	40	14.0	13.92	14.0	13.78	0.21	Right	Cheek	MIMO	0324M	27	97.4	0.317	-	1.052	1.027	-	
5270	54	802.11n	OFDM	40	14.0	13.92	14.0	13.78	0.14	Right	Tilt	MIMO	0324M	27	97.4	0.350	0.195	1.052	1.027	0.211	A28
5270	54	802.11n	OFDM	40	14.0	13.92	14.0	13.78	0.17	Left	Cheek	MIMO	0324M	27	97.4	0.097	-	1.052	1.027	-	
5270	54	802.11n	OFDM	40	14.0	13.92	14.0	13.78	0.15	Left	Tilt	MIMO	0324M	27	97.4	0.114	-	1.052	1.027	-	
5690	138	802.11ac	OFDM	80	14.0	13.63	14.0	13.37	0.12	Right	Cheek	MIMO	0324M	58.5	91.2	0.360	-	1.156	1.096	-	
5690	138	802.11ac	OFDM	80	14.0	13.63	14.0	13.37	0.15	Right	Tilt	MIMO	0324M	58.5	91.2	0.368	0.174	1.156	1.096	0.220	
5690	138	802.11ac	OFDM	80	14.0	13.63	14.0	13.37	0.16	Left	Cheek	MIMO	0324M	58.5	91.2	0.159	-	1.156	1.096	-	
5690	138	802.11ac	OFDM	80	14.0	13.63	14.0	13.37	0.12	Left	Tilt	MIMO	0324M	58.5	91.2	0.173	-	1.156	1.096	-	
5775	155	802.11ac	OFDM	80	14.0	13.24	14.0	13.58	0.16	Right	Cheek	MIMO	0324M	58.5	91.2	0.231	-	1.191	1.096	-	
5775	155	802.11ac	OFDM	80	14.0	13.24	14.0	13.58	0.14	Right	Tilt	MIMO	0324M	58.5	91.2	0.406	0.171	1.191	1.096	0.223	
5775	155	802.11ac	OFDM	80	14.0	13.24	14.0	13.58	0.15	Left	Cheek	MIMO	0324M	58.5	91.2	0.153	-	1.191	1.096	-	
5775	155	802.11ac	OFDM	80	14.0	13.24	14.0	13.58	0.15	Left	Tilt	MIMO	0324M	58.5	91.2	0.170	-	1.191	1.096	-	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

Note: To achieve the 17.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 14.0 dBm.

Table 11-31
DSS Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Side	Test Position	Device Serial Number	Data Rate (Mbps)	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)			(W/kg)	
2441.00	39	Bluetooth	FHSS	15.0	14.91	-0.15	Right	Cheek	0436M	1	77.1	0.151	1.020	1.297	0.200	
2441.00	39	Bluetooth	FHSS	15.0	14.91	0.12	Right	Tilt	0436M	1	77.1	0.218	1.020	1.297	**0.288**	A29
2441.00	39	Bluetooth	FHSS	15.0	14.91	0.16	Left	Cheek	0436M	1	77.1	0.092	1.020	1.297	0.122	
2441.00	39	Bluetooth	FHSS	15.0	14.91	-0.20	Left	Tilt	0436M	1	77.1	0.173	1.020	1.297	0.229	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram									

11.2 Standalone Body-Worn SAR Data

Table 11-32
GSM/UMTS/CDMA Body-Worn SAR Data

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Ant State	Device Serial Number	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
820.10	564	CDMA BC10 (§90S)	TDSO / SO32	25.8	24.54	0.03	15 mm	0	0432M	1:1	back	0.195	1.337	0.261	A30
836.52	384	CDMA BC0 (§22H)	TDSO / SO32	25.8	24.46	0.05	15 mm	0	0432M	1:1	back	0.231	1.361	0.314	A32
1851.25	25	PCS CDMA	TDSO / SO32	24.5	23.14	-0.03	15 mm	20	0496M	1:1	back	0.638	1.368	0.873	
1880.00	600	PCS CDMA	TDSO / SO32	24.5	23.06	-0.01	15 mm	20	0496M	1:1	back	0.667	1.393	0.929	A34
1908.75	1175	PCS CDMA	TDSO / SO32	24.5	23.00	-0.02	15 mm	20	0496M	1:1	back	0.636	1.413	0.899	
836.60	190	GSM 850	GSM	33.0	31.54	0.05	15 mm	N/A	0432M	1:8.3	back	0.139	1.400	0.195	A36
1880.00	661	GSM 1900	GSM	30.0	29.02	-0.07	15 mm	N/A	0496M	1:8.3	back	0.271	1.253	0.340	A38
836.60	4183	UMTS 850	RMC	25.0	23.80	0.01	15 mm	0	0432M	1:1	back	0.211	1.318	0.278	A40
1712.40	1312	UMTS 1750	RMC	24.5	23.29	-0.04	15 mm	23	0496M	1:1	back	0.703	1.321	0.929	
1732.40	1412	UMTS 1750	RMC	24.5	23.39	-0.06	15 mm	23	0496M	1:1	back	0.690	1.291	0.891	
1752.60	1513	UMTS 1750	RMC	24.5	23.20	-0.08	15 mm	23	0496M	1:1	back	0.759	1.349	**1.024**	A42
1852.40	9262	UMTS 1900	RMC	24.5	23.22	-0.03	15 mm	20	0496M	1:1	back	0.646	1.343	0.868	
1880.00	9400	UMTS 1900	RMC	24.5	23.24	0.00	15 mm	20	0496M	1:1	back	0.674	1.337	0.901	
1907.60	9538	UMTS 1900	RMC	24.5	23.19	-0.01	15 mm	20	0496M	1:1	back	0.681	1.352	0.921	A44
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**							**Body** **1.6 W/kg (mW/g)** averaged over 1 gram								

Table 11-33
LTE Body-Worn SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	LTE Band 71	20	25.5	24.86	-0.02	0	43	0473M	QPSK	1	0	15 mm	back	1:1	0.148	1.159	0.172	A46
680.50	133297	Mid	LTE Band 71	20	24.5	23.88	0.03	1	43	0473M	QPSK	50	0	15 mm	back	1:1	0.134	1.153	0.155	
707.50	23095	Mid	LTE Band 12	10	25.8	24.92	-0.03	0	43	0473M	QPSK	1	0	15 mm	back	1:1	0.166	1.225	0.203	A48
707.50	23095	Mid	LTE Band 12	10	24.8	23.82	0.08	1	43	0473M	QPSK	25	12	15 mm	back	1:1	0.144	1.253	0.180	
782.00	23230	Mid	LTE Band 13	10	25.8	24.99	-0.05	0	0	0473M	QPSK	1	0	15 mm	back	1:1	0.235	1.205	0.283	A50
782.00	23230	Mid	LTE Band 13	10	24.8	23.97	0.01	1	0	0473M	QPSK	25	0	15 mm	back	1:1	0.201	1.211	0.243	
793.00	23330	Mid	LTE Band 14	10	25.8	24.78	0.01	0	0	0473M	QPSK	1	0	15 mm	back	1:1	0.269	1.265	0.340	A52
793.00	23330	Mid	LTE Band 14	10	24.8	23.64	0.00	1	0	0473M	QPSK	25	0	15 mm	back	1:1	0.215	1.306	0.281	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	24.72	-0.02	0	0	0473M	QPSK	1	36	15 mm	back	1:1	0.259	1.282	0.332	A54
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	23.89	0.01	1	0	0473M	QPSK	36	37	15 mm	back	1:1	0.217	1.233	0.268	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.74	-0.03	0	18	0530M	QPSK	1	0	15 mm	back	1:1	0.717	1.191	0.854	A60
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	24.01	0.01	0	18	0530M	QPSK	1	99	15 mm	back	1:1	0.691	1.119	0.773	
1905.00	26590	High	LTE Band 25 (PCS)	20	24.5	23.96	0.01	0	18	0530M	QPSK	1	50	15 mm	back	1:1	0.704	1.132	0.797	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	23.04	0.00	1	18	0530M	QPSK	50	50	15 mm	back	1:1	0.578	1.112	0.643	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	22.92	0.00	1	18	0530M	QPSK	100	0	15 mm	back	1:1	0.576	1.143	0.658	
1860.00	18700	Low	LTE Band 2 (PCS)	20	24.5	23.87	-0.02	0	18	0530M	QPSK	1	99	15 mm	back	1:1	0.626	1.156	0.724	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	24.5	23.72	-0.03	0	18	0530M	QPSK	1	50	15 mm	back	1:1	0.627	1.197	0.751	
1900.00	19100	High	LTE Band 2 (PCS)	20	24.5	23.89	0.00	0	18	0530M	QPSK	1	99	15 mm	back	1:1	0.640	1.151	0.737	A62
1880.00	18900	Mid	LTE Band 2 (PCS)	20	23.5	22.98	-0.02	1	18	0530M	QPSK	50	25	15 mm	back	1:1	0.516	1.127	0.582	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.44	0.06	0	N/A	0486M	QPSK	1	0	15 mm	back	1:1	0.588	1.138	0.669	A64
2310.00	27710	Mid	LTE Band 30	10	22.0	21.58	0.07	1	N/A	0486M	QPSK	25	12	15 mm	back	1:1	0.472	1.102	0.520	
2510.00	20850	Low	LTE Band 7	20	24.0	23.45	-0.02	0	N/A	0533M	QPSK	1	99	15 mm	back	1:1	0.389	1.135	0.442	A66
2510.00	20850	Low	LTE Band 7	20	23.0	22.60	0.02	1	N/A	0533M	QPSK	50	50	15 mm	back	1:1	0.321	1.096	0.352	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram				

Table 11-34
LTE Band 5 (Cell) Body-Worn SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.90	0.21	0	0	0492M	QPSK	1	0	15 mm	back	1:1	0.227	1.230	0.279	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.87	0.09	1	0	0492M	QPSK	25	25	15 mm	back	1:1	0.199	1.239	0.247	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.80	-0.02	0	0	0492M	QPSK	1	0	15 mm	back	1:1	0.283	1.000	0.283	A56
	SCC	829.30	20453	Mid	LTE Band 5 (Cell)	5									24							
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-35
LTE Band 66 (AWS) Body-Worn SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	25.0	23.88	-0.09	0	23	0045M	QPSK	1	99	15 mm	back	1:1	0.740	1.294	0.958	
1 CC Uplink	N/A	1715.00	132022	Low	LTE Band 66 (AWS)	10	25.0	23.78	-0.01	0	23	0045M	QPSK	1	49	15 mm	back	1:1	0.653	1.324	0.865	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.16	-0.04	0	23	0045M	QPSK	1	50	15 mm	back	1:1	0.761	1.213	0.923	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	25.0	23.77	-0.20	0	23	0045M	QPSK	1	0	15 mm	back	1:1	0.672	1.327	0.892	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.0	23.18	0.02	1	23	0045M	QPSK	50	50	15 mm	back	1:1	0.628	1.208	0.759	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.19	0.04	1	23	0045M	QPSK	50	0	15 mm	back	1:1	0.691	1.205	0.833	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	24.0	23.03	0.02	1	23	0045M	QPSK	50	0	15 mm	back	1:1	0.537	1.250	0.671	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.14	0.03	1	23	0045M	QPSK	100	0	15 mm	back	1:1	0.670	1.219	0.817	
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	LTE Band 66 (AWS)	20	25.0	24.98	-0.08	0	23	0045M	QPSK	1	99	15 mm	back	1:1	0.939	1.005	0.944	A58
	SCC	1739.80	132270	Low	LTE Band 66 (AWS)	20									0							
2 CC Uplink CA_66B	PCC	1715.00	132022	Low	LTE Band 66 (AWS)	10	25.0	24.30	-0.01	0	23	0045M	QPSK	1	49	15 mm	back	1:1	0.740	1.175	0.870	
	SCC	1724.90	132121	Low	LTE Band 66 (AWS)	10									0							
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-36
LTE Band 48 Body-Worn SAR

MEASUREMENT RESULTS																					
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																		
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	24.0	23.15	0.03	0	0486M	QPSK	1	0	15 mm	back	1:1.58	0.198	1.216	0.241	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	24.0	23.75	0.03	0	0486M	QPSK	1	50	15 mm	back	1:1.58	0.193	1.059	0.204	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	23.0	23.00	0.07	1	0486M	QPSK	50	25	15 mm	back	1:1.58	0.155	1.000	0.155	
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	24.0	23.65	-0.06	0	0486M	QPSK	1	0	15 mm	back	1:1.58	0.233	1.084	**0.253**	A68
	SCC	3670.20	56442	High	LTE Band 48	20								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 11-37
LTE Band 41 Body-Worn SAR

MEASUREMENT RESULTS																					
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																		
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	25.0	24.81	0.00	0	0480M	QPSK	1	0	15 mm	back	1:1.58	0.184	1.045	0.192	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.0	24.00	0.03	1	0480M	QPSK	50	0	15 mm	back	1:1.58	0.178	1.000	0.178	
1 CC Uplink - Power Class 2	N/A	2593.00	40620	Mid	LTE Band 41	20	27.7	27.04	-0.02	0	0480M	QPSK	1	0	15 mm	back	1:2.31	0.209	1.164	0.243	
2 CC Uplink - Power Class 3	PCC	2593.00	40620	Mid	LTE Band 41	20	25.0	24.92	-0.02	0	0480M	QPSK	1	0	15 mm	back	1:1.58	0.171	1.019	0.174	
	SCC	2573.20	40422	Mid		20						QPSK	1	99							
2 CC Uplink - Power Class 2	PCC	2593.00	40620	Mid	LTE Band 41	20	27.7	27.45	0.03	0	0480M	QPSK	1	0	15 mm	back	1:2.31	0.216	1.059	0.229	A70
	SCC	2573.20	40422	Mid		20						QPSK	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 11-38
NR Body-Worn SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	136100	Mid	NR Band n71	20	25.5	24.96	0.05	0	43	0999M	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.197	1.132	0.223	
680.50	136100	Mid	NR Band n71	20	25.5	24.90	-0.03	0	43	0999M	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.198	1.148	0.227	A72
680.50	136100	Mid	NR Band n71	20	24.0	23.45	0.06	1.5	43	0999M	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.118	1.135	0.134	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.82	0.04	0	0	0977M	DFT-S-OFDM QPSK	1	1	15 mm	back	1:1	0.196	1.253	0.246	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.42	0.03	0	0	0977M	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.218	1.374	0.300	A74
836.50	167300	Mid	NR Band n5 (Cell)	20	24.3	23.10	-0.04	1.5	0	0977M	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.137	1.318	0.181	
1720.00	344000	Low	NR Band n66 (AWS)	20	25.0	24.02	-0.01	0	23	0909M	DFT-S-OFDM QPSK	1	1	15 mm	back	1:1	0.544	1.253	0.682	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.28	-0.10	0	23	0909M	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.677	1.180	0.799	A76
1770.00	354000	High	NR Band n66 (AWS)	20	25.0	23.94	-0.01	0	23	0909M	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.531	1.276	0.678	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.23	0.20	0	23	0909M	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.634	1.194	0.757	
1745.00	349000	Mid	NR Band n66 (AWS)	20	23.5	21.79	0.14	1.5	23	0909M	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.434	1.483	0.644	
1860.00	372000	Low	NR Band n2 (PCS)	20	24.5	23.83	0.05	0	18	1021M	DFT-S-OFDM QPSK	1	104	15 mm	back	1:1	0.526	1.167	0.614	
1880.00	376000	Mid	NR Band n2 (PCS)	20	24.5	23.89	0.00	0	18	1021M	DFT-S-OFDM QPSK	1	1	15 mm	back	1:1	0.553	1.151	0.637	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.12	0	18	1021M	DFT-S-OFDM QPSK	1	1	15 mm	back	1:1	0.609	1.148	0.699	A78
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	-0.01	0	18	1021M	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.561	1.148	0.644	
1900.00	380000	High	NR Band n2 (PCS)	20	23.0	22.56	-0.03	1.5	18	1021M	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.412	1.107	0.456	
2592.99	518598	Mid	NR Band n41	100	24.5	23.41	0.12	0	N/A	0353M	DFT-S-OFDM QPSK	1	137	15 mm	back	1:4	0.054	1.285	0.069	
2592.99	518598	Mid	NR Band n41	100	24.5	23.28	-0.10	0	N/A	0353M	DFT-S-OFDM QPSK	135	69	15 mm	back	1:4	0.063	1.324	0.083	A80
2592.99	518598	Mid	NR Band n41	100	23.0	21.17	0.08	1.5	N/A	0353M	CP-OFDM QPSK	1	1	15 mm	back	1:4	0.031	1.524	0.047	

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 11-39
DTS Body-Worn SAR

MEASUREMENT RESULTS																		
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Ant State	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
2462	11	802.11b	DSSS	22	21.0	20.77	0.12	15 mm	1	0324M	1	back	99.9	0.129	0.090	1.054	1.001	**0.095**	A82
2437	6	802.11b	DSSS	22	21.0	20.88	0.05	15 mm	2	0324M	1	back	99.9	0.104	0.072	1.028	1.001	0.074	

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 11-40
NII SISO Body-Worn SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Ant State	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
5280	56	802.11a	OFDM	20	18.0	17.96	-0.03	15 mm	1	0402M	6	back	98.8	0.421	0.203	1.009	1.012	0.207	
5280	56	802.11a	OFDM	20	18.0	17.35	0.17	15 mm	2	0402M	6	back	98.9	0.732	0.337	1.161	1.011	**0.396**	
5720	144	802.11a	OFDM	20	18.0	17.77	0.12	15 mm	1	0402M	6	back	98.8	0.161	0.077	1.054	1.012	0.082	
5600	120	802.11a	OFDM	20	18.0	17.53	0.13	15 mm	2	0402M	6	back	98.9	0.393	0.194	1.114	1.011	0.218	
5745	149	802.11a	OFDM	20	18.0	17.98	0.14	15 mm	1	0402M	6	back	98.8	0.213	0.103	1.005	1.012	0.105	
5785	157	802.11a	OFDM	20	18.0	17.25	0.09	15 mm	2	0402M	6	back	98.9	0.647	0.269	1.189	1.011	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											

Table 11-41
NII MIMO Body-Worn SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
5280	56	802.11n	OFDM	20	18.0	17.96	18.0	17.37	0.13	15 mm	MIMO	0402M	13	back	98.7	0.853	0.414	1.156	1.013	0.485	A84
5720	144	802.11n	OFDM	20	18.0	17.75	18.0	17.91	0.18	15 mm	MIMO	0402M	13	back	98.7	0.711	0.310	1.059	1.013	0.333	
5825	165	802.11n	OFDM	20	18.0	17.84	18.0	17.96	0.06	15 mm	MIMO	0402M	13	back	98.7	0.870	0.375	1.038	1.013	0.394	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram										

Note: To achieve the 21.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18.0 dBm.

Table 11-42
NII MIMO Body-Worn SAR for Conditions with 2.4 GHz and 5 GHz WLAN SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
5270	54	802.11n	OFDM	40	14.0	13.92	14.0	13.78	0.16	15 mm	MIMO	0402M	27	back	97.4	0.277	0.149	1.052	1.027	0.161	
5690	138	802.11ac	OFDM	80	14.0	13.63	14.0	13.37	0.18	15 mm	MIMO	0402M	58.5	back	91.2	0.177	0.083	1.156	1.096	0.105	
5775	155	802.11ac	OFDM	80	14.0	13.24	14.0	13.58	-0.04	15 mm	MIMO	0402M	58.5	back	91.2	0.224	0.111	1.191	1.096	0.145	
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: NII MIMO was additionally evaluated at the maximum allowed output power during operations with Simultaneous 2.4 GHz and 5 GHz WLAN. 2.4 GHz WIFI was not transmitting during the above evaluations.

Table 11-43
DSS Body-Worn SAR

MEASUREMENT RESULTS															
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)			(W/kg)	
2441	39	Bluetooth	FHSS	15.0	14.91	0.13	15 mm	0402M	1	back	77.1	0.017	1.020	1.297	**0.022**	A86
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram									

11.3 Standalone Hotspot SAR Data

Table 11-44
GPRS/UMTS/CDMA Hotspot SAR Data

MEASUREMENT RESULTS																	
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Ant State	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.61	0.03	10 mm	0	0432M	N/A	1:1	back	0.429	1.315	0.564	A31
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.61	0.02	10 mm	0	0432M	N/A	1:1	front	0.288	1.315	0.379	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.61	-0.02	10 mm	0	0432M	N/A	1:1	bottom	0.235	1.315	0.309	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.61	0.00	10 mm	0	0432M	N/A	1:1	right	0.257	1.315	0.338	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	25.8	24.61	0.04	10 mm	0	0432M	N/A	1:1	left	0.109	1.315	0.143	
824.70	1013	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.59	0.03	10 mm	0	0432M	N/A	1:1	back	0.364	1.321	0.481	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.52	0.01	10 mm	0	0432M	N/A	1:1	back	0.486	1.343	0.653	
848.31	777	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.40	0.04	10 mm	0	0432M	N/A	1:1	back	0.560	1.380	0.773	A33
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.52	0.01	10 mm	0	0432M	N/A	1:1	front	0.374	1.343	0.502	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.52	0.01	10 mm	0	0432M	N/A	1:1	bottom	0.313	1.343	0.420	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.52	0.02	10 mm	0	0432M	N/A	1:1	right	0.283	1.343	0.380	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.52	0.02	10 mm	0	0432M	N/A	1:1	left	0.107	1.343	0.144	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	18.34	0.02	10 mm	16	0406M	N/A	1:1	back	0.446	1.306	0.582	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	18.34	-0.11	10 mm	16	0406M	N/A	1:1	front	0.357	1.306	0.466	
1851.25	25	PCS CDMA	EVDO Rev. 0	19.5	18.31	-0.07	10 mm	16	0406M	N/A	1:1	bottom	0.734	1.315	0.965	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	18.34	-0.09	10 mm	16	0406M	N/A	1:1	bottom	0.817	1.306	1.067	
1908.75	1175	PCS CDMA	EVDO Rev. 0	19.5	18.26	-0.13	10 mm	16	0406M	N/A	1:1	bottom	0.941	1.330	**1.252**	A35
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	18.34	-0.07	10 mm	16	0406M	N/A	1:1	right	0.038	1.306	0.050	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.5	18.34	-0.06	10 mm	16	0406M	N/A	1:1	left	0.047	1.306	0.061	
1908.75	1175	PCS CDMA	EVDO Rev. 0	19.5	18.26	-0.02	10 mm	16	0406M	N/A	1:1	bottom	0.927	1.330	1.233	
836.60	190	GSM 850	GPRS	30.0	28.63	-0.07	10 mm	N/A	0432M	3	1:2.76	back	0.409	1.371	0.561	A37
836.60	190	GSM 850	GPRS	30.0	28.63	-0.06	10 mm	N/A	0432M	3	1:2.76	front	0.272	1.371	0.373	
836.60	190	GSM 850	GPRS	30.0	28.63	0.04	10 mm	N/A	0432M	3	1:2.76	bottom	0.246	1.371	0.337	
836.60	190	GSM 850	GPRS	30.0	28.63	-0.01	10 mm	N/A	0432M	3	1:2.76	right	0.218	1.371	0.299	
836.60	190	GSM 850	GPRS	30.0	28.63	-0.02	10 mm	N/A	0432M	3	1:2.76	left	0.079	1.371	0.108	
1880.00	661	GSM 1900	GPRS	23.0	22.50	-0.06	10 mm	N/A	0496M	4	1:2.076	back	0.296	1.122	0.332	
1880.00	661	GSM 1900	GPRS	23.0	22.50	0.00	10 mm	N/A	0496M	4	1:2.076	front	0.212	1.122	0.238	
1850.20	512	GSM 1900	GPRS	23.0	22.70	-0.04	10 mm	N/A	0496M	4	1:2.076	bottom	0.571	1.072	0.612	
1880.00	661	GSM 1900	GPRS	23.0	22.50	0.01	10 mm	N/A	0496M	4	1:2.076	bottom	0.569	1.122	0.638	
1909.80	810	GSM 1900	GPRS	23.0	22.49	-0.08	10 mm	N/A	0496M	4	1:2.076	bottom	0.703	1.125	0.791	A39
1880.00	661	GSM 1900	GPRS	23.0	22.50	0.19	10 mm	N/A	0496M	4	1:2.076	right	0.036	1.122	0.040	
1880.00	661	GSM 1900	GPRS	23.0	22.50	-0.17	10 mm	N/A	0496M	4	1:2.076	left	0.031	1.122	0.035	
826.40	4132	UMTS 850	RMC	25.0	23.77	-0.01	10 mm	0	0432M	N/A	1:1	back	0.423	1.327	0.561	
836.60	4183	UMTS 850	RMC	25.0	23.80	0.02	10 mm	0	0432M	N/A	1:1	back	0.479	1.318	0.631	
846.60	4233	UMTS 850	RMC	25.0	23.69	0.01	10 mm	0	0432M	N/A	1:1	back	0.501	1.352	0.677	A41
836.60	4183	UMTS 850	RMC	25.0	23.80	-0.01	10 mm	0	0432M	N/A	1:1	front	0.325	1.318	0.428	
836.60	4183	UMTS 850	RMC	25.0	23.80	0.00	10 mm	0	0432M	N/A	1:1	bottom	0.277	1.318	0.365	
836.60	4183	UMTS 850	RMC	25.0	23.80	0.03	10 mm	0	0432M	N/A	1:1	right	0.236	1.318	0.311	
836.60	4183	UMTS 850	RMC	25.0	23.80	0.10	10 mm	0	0432M	N/A	1:1	left	0.088	1.318	0.116	
1732.40	1412	UMTS 1750	RMC	20.0	19.82	-0.03	10 mm	23	0407M	N/A	1:1	back	0.603	1.042	0.628	
1732.40	1412	UMTS 1750	RMC	20.0	19.82	-0.03	10 mm	23	0407M	N/A	1:1	front	0.449	1.042	0.468	
1712.40	1312	UMTS 1750	RMC	20.0	19.88	0.03	10 mm	23	0407M	N/A	1:1	bottom	0.892	1.028	0.917	
1732.40	1412	UMTS 1750	RMC	20.0	19.82	-0.01	10 mm	23	0407M	N/A	1:1	bottom	0.893	1.042	0.931	A43
1752.60	1513	UMTS 1750	RMC	20.0	19.85	0.01	10 mm	23	0407M	N/A	1:1	bottom	0.879	1.035	0.910	
1732.40	1412	UMTS 1750	RMC	20.0	19.82	0.13	10 mm	23	0407M	N/A	1:1	right	0.074	1.042	0.077	
1732.40	1412	UMTS 1750	RMC	20.0	19.82	0.03	10 mm	23	0407M	N/A	1:1	left	0.077	1.042	0.080	
1880.00	9400	UMTS 1900	RMC	19.5	18.60	0.00	10 mm	20	0496M	N/A	1:1	back	0.443	1.230	0.545	
1880.00	9400	UMTS 1900	RMC	19.5	18.60	0.00	10 mm	20	0496M	N/A	1:1	front	0.388	1.230	0.477	
1852.40	9262	UMTS 1900	RMC	19.5	18.58	-0.07	10 mm	20	0496M	N/A	1:1	bottom	0.764	1.236	0.944	
1880.00	9400	UMTS 1900	RMC	19.5	18.60	-0.05	10 mm	20	0496M	N/A	1:1	bottom	0.848	1.230	1.043	
1907.60	9538	UMTS 1900	RMC	19.5	18.53	-0.06	10 mm	20	0496M	N/A	1:1	bottom	0.868	1.250	1.085	A45
1880.00	9400	UMTS 1900	RMC	19.5	18.60	-0.01	10 mm	20	0496M	N/A	1:1	right	0.048	1.230	0.059	
1880.00	9400	UMTS 1900	RMC	19.5	18.60	0.05	10 mm	20	0496M	N/A	1:1	left	0.050	1.230	0.062	
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 entries represent variability measurements.

Table 11-45
LTE Band 71 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	LTE Band 71	20	25.5	24.86	-0.09	0	43	0473M	QPSK	1	0	10 mm	back	1:1	0.182	1.159	0.211	A47
680.50	133297	Mid	LTE Band 71	20	24.5	23.88	-0.10	1	43	0473M	QPSK	50	0	10 mm	back	1:1	0.163	1.153	0.188	
680.50	133297	Mid	LTE Band 71	20	25.5	24.86	-0.01	0	43	0473M	QPSK	1	0	10 mm	front	1:1	0.164	1.159	0.190	
680.50	133297	Mid	LTE Band 71	20	24.5	23.88	-0.01	1	43	0473M	QPSK	50	0	10 mm	front	1:1	0.132	1.153	0.152	
680.50	133297	Mid	LTE Band 71	20	25.5	24.86	0.10	0	43	0473M	QPSK	1	0	10 mm	bottom	1:1	0.073	1.159	0.085	
680.50	133297	Mid	LTE Band 71	20	24.5	23.88	0.14	1	43	0473M	QPSK	50	0	10 mm	bottom	1:1	0.062	1.153	0.071	
680.50	133297	Mid	LTE Band 71	20	25.5	24.86	-0.02	0	43	0473M	QPSK	1	0	10 mm	right	1:1	0.142	1.159	0.165	
680.50	133297	Mid	LTE Band 71	20	24.5	23.88	-0.02	1	43	0473M	QPSK	50	0	10 mm	right	1:1	0.128	1.153	0.148	
680.50	133297	Mid	LTE Band 71	20	25.5	24.86	-0.14	0	43	0473M	QPSK	1	0	10 mm	left	1:1	0.116	1.159	0.134	
680.50	133297	Mid	LTE Band 71	20	24.5	23.88	-0.07	1	43	0473M	QPSK	50	0	10 mm	left	1:1	0.095	1.153	0.110	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-46
LTE Band 12 Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
707.50	23095	Mid	LTE Band 12	10	25.8	24.92	-0.08	0	43	0473M	QPSK	1	0	10 mm	back	1:1	0.242	1.225	0.296	A49
707.50	23095	Mid	LTE Band 12	10	24.8	23.82	-0.10	1	43	0473M	QPSK	25	12	10 mm	back	1:1	0.207	1.253	0.259	
707.50	23095	Mid	LTE Band 12	10	25.8	24.92	0.07	0	43	0473M	QPSK	1	0	10 mm	front	1:1	0.170	1.225	0.208	
707.50	23095	Mid	LTE Band 12	10	24.8	23.82	0.04	1	43	0473M	QPSK	25	12	10 mm	front	1:1	0.128	1.253	0.160	
707.50	23095	Mid	LTE Band 12	10	25.8	24.92	0.00	0	43	0473M	QPSK	1	0	10 mm	bottom	1:1	0.095	1.225	0.116	
707.50	23095	Mid	LTE Band 12	10	24.8	23.82	-0.04	1	43	0473M	QPSK	25	12	10 mm	bottom	1:1	0.084	1.253	0.105	
707.50	23095	Mid	LTE Band 12	10	25.8	24.92	0.03	0	43	0473M	QPSK	1	0	10 mm	right	1:1	0.169	1.225	0.207	
707.50	23095	Mid	LTE Band 12	10	24.8	23.82	-0.03	1	43	0473M	QPSK	25	12	10 mm	right	1:1	0.160	1.253	0.200	
707.50	23095	Mid	LTE Band 12	10	25.8	24.92	-0.18	0	43	0473M	QPSK	1	0	10 mm	left	1:1	0.122	1.225	0.149	
707.50	23095	Mid	LTE Band 12	10	24.8	23.82	0.10	1	43	0473M	QPSK	25	12	10 mm	left	1:1	0.107	1.253	0.134	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-47
LTE Band 13 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
782.00	23230	Mid	LTE Band 13	10	25.8	24.99	-0.11	0	0	0473M	QPSK	1	0	10 mm	back	1:1	0.392	1.205	0.472	A51
782.00	23230	Mid	LTE Band 13	10	24.8	23.97	-0.10	1	0	0473M	QPSK	25	0	10 mm	back	1:1	0.344	1.211	0.417	
782.00	23230	Mid	LTE Band 13	10	25.8	24.99	-0.13	0	0	0473M	QPSK	1	0	10 mm	front	1:1	0.296	1.205	0.357	
782.00	23230	Mid	LTE Band 13	10	24.8	23.97	0.08	1	0	0473M	QPSK	25	0	10 mm	front	1:1	0.251	1.211	0.304	
782.00	23230	Mid	LTE Band 13	10	25.8	24.99	-0.02	0	0	0473M	QPSK	1	0	10 mm	bottom	1:1	0.220	1.205	0.265	
782.00	23230	Mid	LTE Band 13	10	24.8	23.97	-0.06	1	0	0473M	QPSK	25	0	10 mm	bottom	1:1	0.188	1.211	0.228	
782.00	23230	Mid	LTE Band 13	10	25.8	24.99	0.02	0	0	0473M	QPSK	1	0	10 mm	right	1:1	0.330	1.205	0.398	
782.00	23230	Mid	LTE Band 13	10	24.8	23.97	0.04	1	0	0473M	QPSK	25	0	10 mm	right	1:1	0.253	1.211	0.306	
782.00	23230	Mid	LTE Band 13	10	25.8	24.99	0.03	0	0	0473M	QPSK	1	0	10 mm	left	1:1	0.167	1.205	0.201	
782.00	23230	Mid	LTE Band 13	10	24.8	23.97	0.13	1	0	0473M	QPSK	25	0	10 mm	left	1:1	0.132	1.211	0.160	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-48
LTE Band 14 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
793.00	23330	Mid	LTE Band 14	10	25.8	24.78	-0.16	0	0	0473M	QPSK	1	0	10 mm	back	1:1	0.487	1.265	0.616	A53
793.00	23330	Mid	LTE Band 14	10	24.8	23.64	-0.15	1	0	0473M	QPSK	25	0	10 mm	back	1:1	0.398	1.306	0.520	
793.00	23330	Mid	LTE Band 14	10	25.8	24.78	0.04	0	0	0473M	QPSK	1	0	10 mm	front	1:1	0.332	1.265	0.420	
793.00	23330	Mid	LTE Band 14	10	24.8	23.64	0.05	1	0	0473M	QPSK	25	0	10 mm	front	1:1	0.286	1.306	0.374	
793.00	23330	Mid	LTE Band 14	10	25.8	24.78	-0.02	0	0	0473M	QPSK	1	0	10 mm	bottom	1:1	0.282	1.265	0.357	
793.00	23330	Mid	LTE Band 14	10	24.8	23.64	0.04	1	0	0473M	QPSK	25	0	10 mm	bottom	1:1	0.222	1.306	0.290	
793.00	23330	Mid	LTE Band 14	10	25.8	24.78	-0.06	0	0	0473M	QPSK	1	0	10 mm	right	1:1	0.365	1.265	0.462	
793.00	23330	Mid	LTE Band 14	10	24.8	23.64	-0.01	1	0	0473M	QPSK	25	0	10 mm	right	1:1	0.284	1.306	0.371	
793.00	23330	Mid	LTE Band 14	10	25.8	24.78	-0.08	0	0	0473M	QPSK	1	0	10 mm	left	1:1	0.161	1.265	0.204	
793.00	23330	Mid	LTE Band 14	10	24.8	23.64	0.14	1	0	0473M	QPSK	25	0	10 mm	left	1:1	0.124	1.306	0.162	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-49
LTE Band 26 (Cell) Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	24.72	0.02	0	0	0473M	QPSK	1	36	10 mm	back	1:1	0.596	1.282	0.764	A55
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	23.89	0.01	1	0	0473M	QPSK	36	37	10 mm	back	1:1	0.485	1.233	0.598	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	24.72	0.05	0	0	0473M	QPSK	1	36	10 mm	front	1:1	0.419	1.282	0.537	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	23.89	0.00	1	0	0473M	QPSK	36	37	10 mm	front	1:1	0.343	1.233	0.423	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	24.72	0.05	0	0	0473M	QPSK	1	36	10 mm	bottom	1:1	0.325	1.282	0.417	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	23.89	0.00	1	0	0473M	QPSK	36	37	10 mm	bottom	1:1	0.266	1.233	0.328	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	24.72	0.03	0	0	0473M	QPSK	1	36	10 mm	right	1:1	0.271	1.282	0.347	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	23.89	0.05	1	0	0473M	QPSK	36	37	10 mm	right	1:1	0.216	1.233	0.266	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	24.72	0.05	0	0	0473M	QPSK	1	36	10 mm	left	1:1	0.096	1.282	0.123	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	23.89	-0.19	1	0	0473M	QPSK	36	37	10 mm	left	1:1	0.080	1.233	0.099	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-50
LTE Band 5 (Cell) Hotspot SAR

MEASUREMENT RESULTS																							
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.90	0.02	0	0	0492M	QPSK	1	0	10 mm	back	1:1	0.534	1.230	0.657	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.87	0.02	1	0	0492M	QPSK	25	25	10 mm	back	1:1	0.464	1.239	0.575	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.80	0.02	0	0	0492M	QPSK	1	0	10 mm	back	1:1	0.664	1.000	0.664	A57
	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	25.8	24.90	0.02	0	0	0492M	QPSK	1	0	10 mm	front	1:1	0.396	1.230	0.487	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.87	0.02	1	0	0492M	QPSK	25	25	10 mm	front	1:1	0.333	1.239	0.413	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.90	0.04	0	0	0492M	QPSK	1	0	10 mm	bottom	1:1	0.324	1.230	0.399	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.87	0.00	1	0	0492M	QPSK	25	25	10 mm	bottom	1:1	0.274	1.239	0.339	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.90	0.02	0	0	0492M	QPSK	1	0	10 mm	right	1:1	0.267	1.230	0.328	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.87	0.05	1	0	0492M	QPSK	25	25	10 mm	right	1:1	0.211	1.239	0.261	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	24.90	0.07	0	0	0492M	QPSK	1	0	10 mm	left	1:1	0.093	1.230	0.114	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	23.87	0.04	1	0	0492M	QPSK	25	25	10 mm	left	1:1	0.075	1.239	0.093	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-51
LTE Band 66 (AWS) Hotspot SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	19.63	0.04	0	23	0455M	QPSK	1	50	10 mm	back	1:1	0.559	1.222	0.683	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	19.89	-0.04	0	23	0455M	QPSK	50	25	10 mm	back	1:1	0.605	1.151	0.696	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	19.63	-0.01	0	23	0455M	QPSK	1	50	10 mm	front	1:1	0.474	1.222	0.579	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	19.89	0.15	0	23	0455M	QPSK	50	25	10 mm	front	1:1	0.512	1.151	0.589	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	19.63	0.03	0	23	0455M	QPSK	1	50	10 mm	bottom	1:1	0.923	1.222	1.128	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	19.62	0.00	0	23	0455M	QPSK	1	50	10 mm	bottom	1:1	0.981	1.225	1.202	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	19.48	0.04	0	23	0455M	QPSK	1	99	10 mm	bottom	1:1	0.977	1.265	1.236	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	10	20.5	19.29	0.06	0	23	0455M	QPSK	1	49	10 mm	bottom	1:1	0.902	1.321	1.192	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.5	19.60	0.00	0	23	0455M	QPSK	1	0	10 mm	bottom	1:1	0.973	1.230	1.197	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	19.89	-0.02	0	23	0455M	QPSK	50	25	10 mm	bottom	1:1	0.942	1.151	1.084	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	19.84	0.01	0	23	0455M	QPSK	50	25	10 mm	bottom	1:1	0.990	1.164	1.152	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.5	19.74	-0.02	0	23	0455M	QPSK	50	25	10 mm	bottom	1:1	1.000	1.191	1.191	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	19.61	0.00	0	23	0455M	QPSK	100	0	10 mm	bottom	1:1	0.974	1.227	1.195	
2 CC Uplink CA_66C	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	20.33	0.12	0	23	0455M	QPSK	1	99	10 mm	bottom	1:1	1.150	1.040	1.196	A59
	SCC	1764.80	132520	Mid	LTE Band 66 (AWS)	20								1	0							
2 CC Uplink CA_66B	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	10	20.5	19.93	0.05	0	23	0455M	QPSK	1	49	10 mm	bottom	1:1	1.050	1.140	1.197	
	SCC	1754.90	132421	Mid	LTE Band 66 (AWS)	10								1	0							
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	19.63	0.19	0	23	0455M	QPSK	1	50	10 mm	right	1:1	0.079	1.222	0.097	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	19.89	0.02	0	23	0455M	QPSK	50	25	10 mm	right	1:1	0.082	1.151	0.094	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	19.63	0.02	0	23	0455M	QPSK	1	50	10 mm	left	1:1	0.077	1.222	0.094	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	19.89	0.14	0	23	0455M	QPSK	50	25	10 mm	left	1:1	0.083	1.151	0.096	
2 CC Uplink CA_66C	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	20.33	0.12	0	23	0455M	QPSK	1	99	10 mm	bottom	1:1	1.130	1.040	1.175	
	SCC	1764.80	132520	Mid	LTE Band 66 (AWS)	20								1	0							
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram								

Note: Blue entries represent variability measurements.

Table 11-52
LTE Band 25 (PCS) Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.49	0.04	0	18	0407M	QPSK	1	0	10 mm	back	1:1	0.434	1.262	0.548	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.64	0.00	0	18	0407M	QPSK	50	25	10 mm	back	1:1	0.445	1.219	0.542	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.49	0.17	0	18	0407M	QPSK	1	0	10 mm	front	1:1	0.325	1.262	0.410	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.64	-0.14	0	18	0407M	QPSK	50	25	10 mm	front	1:1	0.331	1.219	0.403	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.49	-0.10	0	18	0407M	QPSK	1	0	10 mm	bottom	1:1	0.734	1.262	0.926	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	19.5	18.47	-0.19	0	18	0407M	QPSK	1	50	10 mm	bottom	1:1	0.778	1.268	0.987	
1905.00	26590	High	LTE Band 25 (PCS)	20	19.5	18.40	-0.19	0	18	0407M	QPSK	1	50	10 mm	bottom	1:1	0.793	1.288	1.021	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.64	-0.13	0	18	0407M	QPSK	50	25	10 mm	bottom	1:1	0.746	1.219	0.909	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	19.5	18.60	-0.21	0	18	0407M	QPSK	50	25	10 mm	bottom	1:1	0.793	1.230	0.975	
1905.00	26590	High	LTE Band 25 (PCS)	20	19.5	18.60	-0.20	0	18	0407M	QPSK	50	50	10 mm	bottom	1:1	0.863	1.230	1.061	
1905.00	26590	High	LTE Band 25 (PCS)	20	19.5	18.43	0.01	0	18	0407M	QPSK	100	0	10 mm	bottom	1:1	0.893	1.279	1.142	A61
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.49	0.03	0	18	0407M	QPSK	1	0	10 mm	right	1:1	0.044	1.262	0.056	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.64	0.07	0	18	0407M	QPSK	50	25	10 mm	right	1:1	0.046	1.219	0.056	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.49	-0.08	0	18	0407M	QPSK	1	0	10 mm	left	1:1	0.046	1.262	0.058	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.64	-0.09	0	18	0407M	QPSK	50	25	10 mm	left	1:1	0.045	1.219	0.055	
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 entries represent variability measurements.

Table 11-53
LTE Band 2 (PCS) Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	0.01	0	18	0530M	QPSK	1	0	10 mm	back	1:1	0.367	1.135	0.417	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	0.02	0	18	0530M	QPSK	50	50	10 mm	back	1:1	0.383	1.135	0.435	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	-0.07	0	18	0530M	QPSK	1	0	10 mm	front	1:1	0.355	1.135	0.403	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	-0.06	0	18	0530M	QPSK	50	50	10 mm	front	1:1	0.365	1.135	0.414	
1860.00	18700	Low	LTE Band 2 (PCS)	20	19.5	18.86	-0.09	0	18	0530M	QPSK	1	50	10 mm	bottom	1:1	0.758	1.159	0.879	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	0.11	0	18	0530M	QPSK	1	0	10 mm	bottom	1:1	0.733	1.135	0.832	
1900.00	19100	High	LTE Band 2 (PCS)	20	19.5	18.86	-0.02	0	18	0530M	QPSK	1	0	10 mm	bottom	1:1	0.714	1.159	0.828	
1860.00	18700	Low	LTE Band 2 (PCS)	20	19.5	18.92	-0.05	0	18	0530M	QPSK	50	25	10 mm	bottom	1:1	0.772	1.143	0.882	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	-0.02	0	18	0530M	QPSK	50	50	10 mm	bottom	1:1	0.773	1.135	0.877	
1900.00	19100	High	LTE Band 2 (PCS)	20	19.5	18.92	-0.02	0	18	0530M	QPSK	50	25	10 mm	bottom	1:1	0.885	1.143	1.012	A63
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.92	-0.04	0	18	0530M	QPSK	100	0	10 mm	bottom	1:1	0.806	1.143	0.921	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	-0.08	0	18	0530M	QPSK	1	0	10 mm	right	1:1	0.041	1.135	0.047	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	-0.03	0	18	0530M	QPSK	50	50	10 mm	right	1:1	0.045	1.135	0.051	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	0.03	0	18	0530M	QPSK	1	0	10 mm	left	1:1	0.039	1.135	0.044	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	-0.14	0	18	0530M	QPSK	50	50	10 mm	left	1:1	0.048	1.135	0.054	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram					

Table 11-54
LTE Band 30 Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.92	0.03	0	0486M	QPSK	1	25	10 mm	back	1:1	0.461	1.067	0.492	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.94	-0.01	0	0486M	QPSK	25	12	10 mm	back	1:1	0.476	1.062	0.506	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.92	-0.06	0	0486M	QPSK	1	25	10 mm	front	1:1	0.402	1.067	0.429	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.94	-0.03	0	0486M	QPSK	25	12	10 mm	front	1:1	0.406	1.062	0.431	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.92	-0.04	0	0486M	QPSK	1	25	10 mm	bottom	1:1	1.000	1.067	1.067	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.94	-0.04	0	0486M	QPSK	25	12	10 mm	bottom	1:1	1.020	1.062	1.083	A65
2310.00	27710	Mid	LTE Band 30	10	19.2	18.88	-0.03	0	0486M	QPSK	50	0	10 mm	bottom	1:1	0.994	1.076	1.070	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.92	-0.10	0	0486M	QPSK	1	25	10 mm	right	1:1	0.026	1.067	0.028	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.94	-0.15	0	0486M	QPSK	25	12	10 mm	right	1:1	0.026	1.062	0.028	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.92	0.03	0	0486M	QPSK	1	25	10 mm	left	1:1	0.033	1.067	0.035	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.94	0.04	0	0486M	QPSK	25	12	10 mm	left	1:1	0.032	1.062	0.034	
2310.00	27710	Mid	LTE Band 30	10	19.2	18.94	-0.04	0	0486M	QPSK	25	12	10 mm	bottom	1:1	1.010	1.062	1.073	
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 entries represent variability measurements.

Table 11-55
LTE Band 7 Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2510.00	20850	Low	LTE Band 7	20	20.5	19.93	0.02	0	0405M	QPSK	1	0	10 mm	back	1:1	0.351	1.140	0.400	
2510.00	20850	Low	LTE Band 7	20	20.5	20.03	0.01	0	0405M	QPSK	50	0	10 mm	back	1:1	0.364	1.114	0.405	
2510.00	20850	Low	LTE Band 7	20	20.5	19.93	0.00	0	0405M	QPSK	1	0	10 mm	front	1:1	0.410	1.140	0.467	
2510.00	20850	Low	LTE Band 7	20	20.5	20.03	-0.02	0	0405M	QPSK	50	0	10 mm	front	1:1	0.421	1.114	0.469	
2510.00	20850	Low	LTE Band 7	20	20.5	19.93	0.02	0	0405M	QPSK	1	0	10 mm	bottom	1:1	0.850	1.140	0.969	
2535.00	21100	Mid	LTE Band 7	20	20.5	19.68	-0.01	0	0405M	QPSK	1	0	10 mm	bottom	1:1	0.822	1.208	0.993	
2560.00	21350	High	LTE Band 7	20	20.5	19.82	0.06	0	0405M	QPSK	1	99	10 mm	bottom	1:1	0.771	1.169	0.901	
2510.00	20850	Low	LTE Band 7	20	20.5	20.03	-0.01	0	0405M	QPSK	50	0	10 mm	bottom	1:1	0.867	1.114	0.966	A67
2535.00	21100	Mid	LTE Band 7	20	20.5	19.73	0.01	0	0405M	QPSK	50	50	10 mm	bottom	1:1	0.842	1.194	1.005	
2560.00	21350	High	LTE Band 7	20	20.5	19.98	0.02	0	0405M	QPSK	50	50	10 mm	bottom	1:1	0.842	1.127	0.949	
2510.00	20850	Low	LTE Band 7	20	20.5	19.88	0.01	0	0405M	QPSK	100	0	10 mm	bottom	1:1	0.847	1.153	0.977	
2510.00	20850	Low	LTE Band 7	20	20.5	19.93	-0.07	0	0405M	QPSK	1	0	10 mm	left	1:1	0.147	1.140	0.168	
2510.00	20850	Low	LTE Band 7	20	20.5	20.03	0.01	0	0405M	QPSK	50	0	10 mm	left	1:1	0.129	1.114	0.144	
2510.00	20850	Low	LTE Band 7	20	20.5	20.03	-0.07	0	0405M	QPSK	50	0	10 mm	bottom	1:1	0.762	1.114	0.849	
2535.00	21100	Mid	LTE Band 7	20	20.5	19.73	-0.07	0	0405M	QPSK	50	50	10 mm	bottom	1:1	0.783	1.194	0.935	
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 entries represent variability measurements.

Table 11-56
LTE Band 48 Hotspot SAR

MEASUREMENT RESULTS																					
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.															(W/kg)		(W/kg)	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	24.0	23.75	-0.11	0	0486M	QPSK	1	50	10 mm	back	1:1.58	0.370	1.059	0.392	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	23.0	23.00	0.05	1	0486M	QPSK	50	25	10 mm	back	1:1.58	0.295	1.000	0.295	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	24.0	23.75	-0.20	0	0486M	QPSK	1	50	10 mm	front	1:1.58	0.197	1.059	0.209	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	23.0	23.00	0.09	1	0486M	QPSK	50	25	10 mm	front	1:1.58	0.157	1.000	0.157	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	24.0	23.63	-0.03	0	0486M	QPSK	1	50	10 mm	top	1:1.58	0.714	1.089	0.778	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	24.0	23.37	-0.01	0	0486M	QPSK	1	99	10 mm	top	1:1.58	0.702	1.156	0.812	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	24.0	23.45	-0.08	0	0486M	QPSK	1	50	10 mm	top	1:1.58	0.662	1.135	0.751	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	24.0	23.53	-0.18	0	0486M	QPSK	1	50	10 mm	top	1:1.58	0.642	1.114	0.715	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	24.0	23.75	-0.02	0	0486M	QPSK	1	50	10 mm	top	1:1.58	0.618	1.059	0.654	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	23.0	23.00	-0.16	1	0486M	QPSK	50	25	10 mm	top	1:1.58	0.525	1.000	0.525	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	23.0	22.84	-0.02	1	0486M	QPSK	100	0	10 mm	top	1:1.58	0.490	1.038	0.509	
2 CC Uplink	PCC	3560.00	55340	Low	LTE Band 48	20	24.0	23.96	0.01	0	0486M	QPSK	1	99	10 mm	top	1:1.58	0.838	1.009	**0.846**	A69
	SCC	3579.80	55538	Low	LTE Band 48	20						QPSK	1	0							
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	24.0	23.75	-0.06	0	0486M	QPSK	1	50	10 mm	left	1:1.58	0.340	1.059	0.360	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	23.0	23.00	0.01	1	0486M	QPSK	50	25	10 mm	left	1:1.58	0.274	1.000	0.274	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-57
LTE Band 41 Hotspot SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.															(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	20.44	0.00	0	0405M	QPSK	1	0	10 mm	back	1:1.58	0.233	1.432	0.334	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	20.52	0.00	0	0405M	QPSK	50	25	10 mm	back	1:1.58	0.237	1.406	0.333	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	20.44	0.12	0	0405M	QPSK	1	0	10 mm	front	1:1.58	0.245	1.432	0.351	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	20.52	0.02	0	0405M	QPSK	50	25	10 mm	front	1:1.58	0.255	1.406	0.359	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	20.44	0.02	0	0405M	QPSK	1	0	10 mm	bottom	1:1.58	0.568	1.432	0.813	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	22.0	20.40	-0.04	0	0405M	QPSK	1	0	10 mm	bottom	1:1.58	0.583	1.445	0.842	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	22.0	20.16	0.05	0	0405M	QPSK	1	50	10 mm	bottom	1:1.58	0.467	1.528	0.714	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	22.0	20.19	-0.05	0	0405M	QPSK	1	0	10 mm	bottom	1:1.58	0.446	1.517	0.677	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	22.0	20.10	-0.07	0	0405M	QPSK	1	99	10 mm	bottom	1:1.58	0.454	1.549	0.703	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	20.52	-0.02	0	0405M	QPSK	50	25	10 mm	bottom	1:1.58	0.600	1.406	0.844	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	20.43	-0.03	0	0405M	QPSK	50	50	10 mm	bottom	1:1.58	0.595	1.435	0.854	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	22.0	20.40	0.01	0	0405M	QPSK	50	0	10 mm	bottom	1:1.58	0.580	1.445	0.838	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	22.0	20.25	-0.03	0	0405M	QPSK	50	25	10 mm	bottom	1:1.58	0.479	1.496	0.717	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	22.0	20.17	-0.01	0	0405M	QPSK	50	25	10 mm	bottom	1:1.58	0.489	1.524	0.745	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	22.0	20.26	-0.03	0	0405M	QPSK	50	50	10 mm	bottom	1:1.58	0.494	1.493	0.738	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	20.43	0.14	0	0405M	QPSK	100	0	10 mm	bottom	1:1.58	0.542	1.435	0.778	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	23.6	22.40	0.17	0	0405M	QPSK	50	25	10 mm	bottom	1:2.31	0.582	1.318	0.767	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	23.6	22.39	0.17	0	0405M	QPSK	50	50	10 mm	bottom	1:2.31	0.619	1.321	0.818	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	LTE Band 41	20	22.0	21.29	-0.05	0	0405M	QPSK	50	50	10 mm	bottom	1:1.58	0.709	1.178	0.835	
	SCC	2525.80	39948	Low		20						QPSK	50	0							
2 CC Uplink - Power Class 2	PCC	2506.00	39750	Low	LTE Band 41	20	23.6	23.35	0.12	0	0405M	QPSK	50	50	10 mm	bottom	1:2.31	0.734	1.059	0.777	A71
	SCC	2525.80	39948	Low		20						QPSK	50	0							
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	20.44	0.03	0	0405M	QPSK	1	0	10 mm	left	1:1.58	0.094	1.432	0.135	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	20.52	0.08	0	0405M	QPSK	50	25	10 mm	left	1:1.58	0.094	1.406	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 11-58
NR Band n71 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	136100	Mid	NR Band n71	20	25.5	24.96	-0.13	0	43	0999M	DFT-S-OFDM QPSK	1	53	10 mm	back	1:1	0.247	1.132	0.280	
680.50	136100	Mid	NR Band n71	20	25.5	24.90	-0.12	0	43	0999M	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.247	1.148	0.284	A73
680.50	136100	Mid	NR Band n71	20	24.0	23.45	-0.02	1.5	43	0999M	CP-OFDM QPSK	1	1	10 mm	back	1:1	0.153	1.135	0.174	
680.50	136100	Mid	NR Band n71	20	25.5	24.96	-0.03	0	43	0999M	DFT-S-OFDM QPSK	1	53	10 mm	front	1:1	0.191	1.132	0.216	
680.50	136100	Mid	NR Band n71	20	25.5	24.90	-0.02	0	43	0999M	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.189	1.148	0.217	
680.50	136100	Mid	NR Band n71	20	25.5	24.96	0.17	0	43	0999M	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.111	1.132	0.126	
680.50	136100	Mid	NR Band n71	20	25.5	24.90	-0.19	0	43	0999M	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.114	1.148	0.131	
680.50	136100	Mid	NR Band n71	20	25.5	24.96	0.01	0	43	0999M	DFT-S-OFDM QPSK	1	53	10 mm	right	1:1	0.218	1.132	0.247	
680.50	136100	Mid	NR Band n71	20	25.5	24.90	-0.06	0	43	0999M	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.207	1.148	0.238	
680.50	136100	Mid	NR Band n71	20	25.5	24.96	-0.17	0	43	0999M	DFT-S-OFDM QPSK	1	53	10 mm	left	1:1	0.150	1.132	0.170	
680.50	136100	Mid	NR Band n71	20	25.5	24.90	-0.19	0	43	0999M	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.145	1.148	0.166	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-59
NR Band n5 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.82	0.05	0	0	0977M	DFT-S-OFDM QPSK	1	1	10 mm	back	1:1	0.470	1.253	0.589	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.42	-0.03	0	0	0977M	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.498	1.374	0.684	A75
836.50	167300	Mid	NR Band n5 (Cell)	20	24.3	23.10	0.13	1.5	0	0977M	CP-OFDM QPSK	1	1	10 mm	back	1:1	0.311	1.318	0.410	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.82	0.06	0	0	0977M	DFT-S-OFDM QPSK	1	1	10 mm	front	1:1	0.299	1.253	0.375	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.42	-0.02	0	0	0977M	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.336	1.374	0.462	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.82	0.09	0	0	0977M	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	0.269	1.253	0.337	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.42	0.06	0	0	0977M	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.314	1.374	0.431	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.82	-0.14	0	0	0977M	DFT-S-OFDM QPSK	1	1	10 mm	right	1:1	0.240	1.253	0.301	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.42	-0.02	0	0	0977M	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.242	1.374	0.333	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.82	0.08	0	0	0977M	DFT-S-OFDM QPSK	1	1	10 mm	left	1:1	0.089	1.253	0.112	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.8	24.42	0.00	0	0	0977M	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.090	1.374	0.124	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-60
NR Band n66 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.50	-0.02	0	23	0909M	DFT-S-OFDM QPSK	1	104	10 mm	back	1:1	0.558	1.072	0.598	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.51	-0.01	0	23	0909M	DFT-S-OFDM QPSK	50	0	10 mm	back	1:1	0.588	1.069	0.629	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.50	-0.03	0	23	0909M	DFT-S-OFDM QPSK	1	104	10 mm	front	1:1	0.509	1.072	0.546	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.51	-0.02	0	23	0909M	DFT-S-OFDM QPSK	50	0	10 mm	front	1:1	0.542	1.069	0.579	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.8	20.40	-0.01	0	23	0909M	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	1.140	1.096	1.249	A77
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.50	0.07	0	23	0909M	DFT-S-OFDM QPSK	1	104	10 mm	bottom	1:1	1.060	1.072	1.136	
1770.00	354000	High	NR Band n66 (AWS)	20	20.8	20.36	0.04	0	23	0909M	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	1.100	1.107	1.218	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.8	20.31	0.21	0	23	0909M	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	1.120	1.119	**1.253**	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.51	-0.03	0	23	0909M	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	1.060	1.069	1.133	
1770.00	354000	High	NR Band n66 (AWS)	20	20.8	20.30	-0.01	0	23	0909M	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	1.090	1.122	1.223	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.8	20.30	0.01	0	23	0909M	CP-OFDM QPSK	1	1	10 mm	bottom	1:1	1.050	1.122	1.178	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.45	0.05	0	23	0909M	DFT-S-OFDM QPSK	100	0	10 mm	bottom	1:1	1.070	1.084	1.160	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.50	0.13	0	23	0909M	DFT-S-OFDM QPSK	1	104	10 mm	right	1:1	0.069	1.072	0.074	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.51	0.06	0	23	0909M	DFT-S-OFDM QPSK	50	0	10 mm	right	1:1	0.075	1.069	0.080	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.50	0.03	0	23	0909M	DFT-S-OFDM QPSK	1	104	10 mm	left	1:1	0.074	1.072	0.079	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.51	0.12	0	23	0909M	DFT-S-OFDM QPSK	50	0	10 mm	left	1:1	0.084	1.069	0.090	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-61
NR Band n2 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.88	-0.02	0	18	1021M	DFT-S-OFDM QPSK	1	1	10 mm	back	1:1	0.366	1.153	0.422	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.87	-0.03	0	18	1021M	DFT-S-OFDM QPSK	50	56	10 mm	back	1:1	0.386	1.156	0.446	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.88	-0.07	0	18	1021M	DFT-S-OFDM QPSK	1	1	10 mm	front	1:1	0.322	1.153	0.371	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.87	-0.06	0	18	1021M	DFT-S-OFDM QPSK	50	56	10 mm	front	1:1	0.327	1.156	0.378	
1860.00	372000	Low	NR Band n2 (PCS)	20	19.5	18.87	-0.01	0	18	1021M	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	0.633	1.156	0.732	
1880.00	376000	Mid	NR Band n2 (PCS)	20	19.5	18.73	0.00	0	18	1021M	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	0.678	1.194	0.810	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.88	-0.03	0	18	1021M	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	0.773	1.153	0.891	
1860.00	372000	Low	NR Band n2 (PCS)	20	19.5	18.83	0.04	0	18	1021M	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.647	1.167	0.755	
1880.00	376000	Mid	NR Band n2 (PCS)	20	19.5	18.50	-0.03	0	18	1021M	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.678	1.259	0.854	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.87	-0.14	0	18	1021M	DFT-S-OFDM QPSK	50	56	10 mm	bottom	1:1	0.784	1.156	0.906	A79
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.86	-0.04	0	18	1021M	CP-OFDM QPSK	1	1	10 mm	bottom	1:1	0.752	1.159	0.872	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.86	0.16	0	18	1021M	DFT-S-OFDM QPSK	100	0	10 mm	bottom	1:1	0.748	1.159	0.867	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.88	-0.02	0	18	1021M	DFT-S-OFDM QPSK	1	1	10 mm	right	1:1	0.045	1.153	0.052	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.87	-0.02	0	18	1021M	DFT-S-OFDM QPSK	50	56	10 mm	right	1:1	0.047	1.156	0.054	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.88	-0.10	0	18	1021M	DFT-S-OFDM QPSK	1	1	10 mm	left	1:1	0.046	1.153	0.053	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.87	0.14	0	18	1021M	DFT-S-OFDM QPSK	50	56	10 mm	left	1:1	0.046	1.156	0.053	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram												

Table 11-62
NR Band n41 Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Device Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2592.99	518598	Mid	NR Band n41	100	24.5	23.41	0.09	0	0353M	DFT-S-OFDM QPSK	1	137	10 mm	back	1:4	0.099	1.285	0.127	
2592.99	518598	Mid	NR Band n41	100	24.5	23.28	0.07	0	0353M	DFT-S-OFDM QPSK	135	69	10 mm	back	1:4	0.104	1.324	0.138	
2592.99	518598	Mid	NR Band n41	100	24.5	23.41	0.00	0	0353M	DFT-S-OFDM QPSK	1	137	10 mm	front	1:4	0.051	1.285	0.066	
2592.99	518598	Mid	NR Band n41	100	24.5	23.28	-0.03	0	0353M	DFT-S-OFDM QPSK	135	69	10 mm	front	1:4	0.063	1.324	0.083	
2592.99	518598	Mid	NR Band n41	100	24.5	23.41	-0.19	0	0353M	DFT-S-OFDM QPSK	1	137	10 mm	top	1:4	0.139	1.285	0.179	
2592.99	518598	Mid	NR Band n41	100	24.5	23.28	-0.17	0	0353M	DFT-S-OFDM QPSK	135	69	10 mm	top	1:4	0.144	1.324	0.191	A81
2592.99	518598	Mid	NR Band n41	100	23.0	21.17	0.12	1.5	0353M	CP-OFDM QPSK	1	1	10 mm	top	1:4	0.065	1.524	0.099	
2592.99	518598	Mid	NR Band n41	100	24.5	23.41	0.12	0	0353M	DFT-S-OFDM QPSK	1	137	10 mm	left	1:4	0.028	1.285	0.036	
2592.99	518598	Mid	NR Band n41	100	24.5	23.28	0.11	0	0353M	DFT-S-OFDM QPSK	135	69	10 mm	left	1:4	0.028	1.324	0.037	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 11-63
WLAN Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Ant State	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
2462	11	802.11b	DSSS	22	21.0	20.77	0.05	10 mm	1	0324M	1	back	99.9	0.234	-	1.054	1.001	-	
2462	11	802.11b	DSSS	22	21.0	20.77	0.13	10 mm	1	0324M	1	front	99.9	0.172	-	1.054	1.001	-	
2462	11	802.11b	DSSS	22	21.0	20.77	0.08	10 mm	1	0324M	1	top	99.9	0.483	0.313	1.054	1.001	**0.330**	A83
2462	11	802.11b	DSSS	22	21.0	20.77	-0.01	10 mm	1	0324M	1	left	99.9	0.110	-	1.054	1.001	-	
2437	6	802.11b	DSSS	22	21.0	20.88	0.19	10 mm	2	0324M	1	back	99.9	0.292	0.190	1.028	1.001	0.196	
2437	6	802.11b	DSSS	22	21.0	20.88	0.21	10 mm	2	0324M	1	front	99.9	0.016	-	1.028	1.001	-	
2437	6	802.11b	DSSS	22	21.0	20.88	0.13	10 mm	2	0324M	1	top	99.9	0.038	-	1.028	1.001	-	
2437	6	802.11b	DSSS	22	21.0	20.88	0.19	10 mm	2	0324M	1	left	99.9	0.048	-	1.028	1.001	-	
5745	149	802.11a	OFDM	20	18.0	17.98	0.16	10 mm	1	0402M	6	back	98.8	0.374	0.176	1.005	1.012	0.179	
5745	149	802.11a	OFDM	20	18.0	17.98	-0.14	10 mm	1	0402M	6	front	98.8	0.105	0.042	1.005	1.012	0.043	
5745	149	802.11a	OFDM	20	18.0	17.98	-0.04	10 mm	1	0402M	6	top	98.8	0.173	-	1.005	1.012	-	
5745	149	802.11a	OFDM	20	18.0	17.98	0.13	10 mm	1	0402M	6	left	98.8	0.341	-	1.005	1.012	-	
5785	157	802.11a	OFDM	20	18.0	17.25	0.13	10 mm	2	0402M	6	back	98.9	0.976	0.407	1.189	1.011	**0.489**	
5785	157	802.11a	OFDM	20	18.0	17.25	0.19	10 mm	2	0402M	6	front	98.9	0.015	0.008	1.189	1.011	0.010	
5785	157	802.11a	OFDM	20	18.0	17.25	-0.17	10 mm	2	0402M	6	top	98.9	0.052	-	1.189	1.011	-	
5785	157	802.11a	OFDM	20	18.0	17.25	-0.14	10 mm	2	0402M	6	left	98.9	0.202	0.100	1.189	1.011	0.120	

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 11-64
WLAN MIMO Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Ant State	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
5825	165	802.11n	OFDM	20	18.0	17.84	18.0	17.96	-0.17	10 mm	MIMO	0402M	13	back	98.7	1.219	0.496	1.038	1.013	0.522	A85
5825	165	802.11n	OFDM	20	18.0	17.84	18.0	17.96	0.19	10 mm	MIMO	0402M	13	front	98.7	0.158	0.065	1.038	1.013	0.068	
5825	165	802.11n	OFDM	20	18.0	17.84	18.0	17.96	0.13	10 mm	MIMO	0402M	13	top	98.7	0.295	-	1.038	1.013	-	
5825	165	802.11n	OFDM	20	18.0	17.84	18.0	17.96	0.14	10 mm	MIMO	0402M	13	left	98.7	0.510	0.239	1.038	1.013	0.251	

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: To achieve the 21.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18.0 dBm

Table 11-65
WLAN MIMO Hotspot SAR for Conditions with 2.4 GHz and 5 GHz WLAN SAR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Ant State	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
2437	6	802.11n	OFDM	20	17.0	16.48	17.0	16.65	0.12	10 mm	MIMO	0402m	13	back	98.7	0.169	0.121	1.127	1.013	0.138	
2437	6	802.11n	OFDM	20	17.0	16.48	17.0	16.65	0.18	10 mm	MIMO	0402M	13	front	98.7	0.069	0.052	1.127	1.013	0.059	
2437	6	802.11n	OFDM	20	17.0	16.48	17.0	16.65	0.14	10 mm	MIMO	0402M	13	top	98.7	0.210	0.137	1.127	1.013	0.156	
2437	6	802.11n	OFDM	20	17.0	16.48	17.0	16.65	0.21	10 mm	MIMO	0402M	13	left	98.7	0.071	0.044	1.127	1.013	0.050	
5775	155	802.11ac	OFDM	80	14.0	13.24	14.0	13.58	-0.13	10 mm	MIMO	0402M	58.5	back	91.2	0.342	0.194	1.191	1.096	0.253	
5775	155	802.11ac	OFDM	80	14.0	13.24	14.0	13.58	-0.18	10 mm	MIMO	0402M	58.5	front	91.2	0.019	0.010	1.191	1.096	0.013	
5775	155	802.11ac	OFDM	80	14.0	13.24	14.0	13.58	0.16	10 mm	MIMO	0402M	58.5	top	91.2	0.051	0.022	1.191	1.096	0.029	
5775	155	802.11ac	OFDM	80	14.0	13.24	14.0	13.58	-0.19	10 mm	MIMO	0402M	58.5	left	91.2	0.144	-	1.191	1.096	-	

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

DTS and NII MIMO were additionally evaluated at the maximum allowed output power during operations with Simultaneous 2.4 GHz and 5 GHz WLAN. 2.4 GHz WIFI was not transmitting during NII MIMO evaluations and 5 GHz WIFI was not transmitting during DTS MIMO evaluations.

Table 11-66
DSS Hotspot SAR

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)			(W/kg)	
2441	39	Bluetooth	FHSS	15.0	14.91	0.20	10 mm	0402M	1	back	77.1	0.031	1.020	1.297	0.041	
2441	39	Bluetooth	FHSS	15.0	14.91	-0.19	10 mm	0402M	1	front	77.1	0.022	1.020	1.297	0.029	
2441	39	Bluetooth	FHSS	15.0	14.91	-0.01	10 mm	0402M	1	top	77.1	0.054	1.020	1.297	**0.071**	A87
2441	39	Bluetooth	FHSS	15.0	14.91	0.18	10 mm	0402M	1	left	77.1	0.012	1.020	1.297	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									

11.4 Standalone Phablet SAR Data

Table 11-67
GPRS/UMTS/CDMA Phablet SAR Data

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Ant State	Device Serial Number	# of Time Slots	Duty Cycle	Side	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1880.00	600	PCS CDMA	EVDO Rev. 0	24.5	23.11	-0.13	8 mm	16	0496M	N/A	1:1	back	0.834	1.377	1.148	
1880.00	600	PCS CDMA	EVDO Rev. 0	24.5	23.11	0.16	6 mm	16	0496M	N/A	1:1	front	0.987	1.377	1.359	
1880.00	600	PCS CDMA	EVDO Rev. 0	24.5	23.11	-0.06	11 mm	16	0496M	N/A	1:1	bottom	1.020	1.377	1.405	
1880.00	600	PCS CDMA	EVDO Rev. 0	24.5	23.11	0.05	0 mm	16	0496M	N/A	1:1	right	0.322	1.377	0.443	
1880.00	600	PCS CDMA	EVDO Rev. 0	24.5	23.11	-0.12	0 mm	16	0496M	N/A	1:1	left	0.304	1.377	0.419	
1880.00	600	PCS CDMA	EVDO Rev. 0	20.0	19.65	-0.06	0 mm	16	0406M	N/A	1:1	back	1.360	1.084	1.474	
1880.00	600	PCS CDMA	EVDO Rev. 0	20.0	19.65	0.06	0 mm	16	0406M	N/A	1:1	front	1.340	1.084	1.453	
1851.25	25	PCS CDMA	EVDO Rev. 0	20.0	19.73	-0.06	0 mm	16	0406M	N/A	1:1	bottom	1.890	1.064	2.011	
1880.00	600	PCS CDMA	EVDO Rev. 0	20.0	19.65	-0.15	0 mm	16	0406M	N/A	1:1	bottom	1.800	1.084	1.951	
1908.75	1175	PCS CDMA	EVDO Rev. 0	20.0	19.61	-0.13	0 mm	16	0406M	N/A	1:1	bottom	1.930	1.094	2.111	A88
1880.00	661	GSM 1900	GPRS	26.5	25.24	-0.02	8 mm	N/A	0496M	3	1:2.76	back	0.318	1.337	0.425	
1880.00	661	GSM 1900	GPRS	26.5	25.24	0.01	6 mm	N/A	0496M	3	1:2.76	front	0.403	1.337	0.539	
1880.00	661	GSM 1900	GPRS	26.5	25.24	-0.16	11 mm	N/A	0496M	3	1:2.76	bottom	0.397	1.337	0.531	
1880.00	661	GSM 1900	GPRS	26.5	25.24	0.08	0 mm	N/A	0496M	3	1:2.76	right	0.124	1.337	0.166	
1880.00	661	GSM 1900	GPRS	26.5	25.24	-0.09	0 mm	N/A	0496M	3	1:2.76	left	0.119	1.337	0.159	
1880.00	661	GSM 1900	GPRS	23.0	22.50	0.07	0 mm	N/A	0496M	4	1:2.076	back	1.390	1.122	1.560	
1880.00	661	GSM 1900	GPRS	23.0	22.50	0.08	0 mm	N/A	0496M	4	1:2.076	front	1.300	1.122	1.459	
1850.20	512	GSM 1900	GPRS	23.0	22.70	-0.05	0 mm	N/A	0496M	4	1:2.076	bottom	1.720	1.072	1.844	
1880.00	661	GSM 1900	GPRS	23.0	22.50	-0.11	0 mm	N/A	0496M	4	1:2.076	bottom	2.510	1.122	2.816	A89
1909.80	810	GSM 1900	GPRS	23.0	22.49	-0.07	0 mm	N/A	0496M	4	1:2.076	bottom	1.760	1.125	1.980	
1880.00	661	GSM 1900	GPRS	23.0	22.50	-0.16	0 mm	N/A	0496M	4	1:2.076	bottom	2.370	1.122	2.659	
1732.40	1412	UMTS 1750	RMC	24.5	23.39	-0.02	8 mm	23	0496M	N/A	1:1	back	1.060	1.291	1.368	
1732.40	1412	UMTS 1750	RMC	24.5	23.39	-0.14	6 mm	23	0496M	N/A	1:1	front	1.330	1.291	1.717	
1732.40	1412	UMTS 1750	RMC	24.5	23.39	-0.05	11 mm	23	0496M	N/A	1:1	bottom	1.140	1.291	1.472	
1732.40	1412	UMTS 1750	RMC	24.5	23.39	-0.06	0 mm	23	0496M	N/A	1:1	right	0.382	1.291	0.493	
1732.40	1412	UMTS 1750	RMC	24.5	23.39	-0.15	0 mm	23	0496M	N/A	1:1	left	0.353	1.291	0.456	
1732.40	1412	UMTS 1750	RMC	20.0	19.82	-0.03	0 mm	23	0496M	N/A	1:1	back	1.810	1.042	1.886	
1732.40	1412	UMTS 1750	RMC	20.0	19.82	-0.10	0 mm	23	0496M	N/A	1:1	front	1.800	1.042	1.876	
1712.40	1312	UMTS 1750	RMC	20.0	19.88	-0.05	0 mm	23	0496M	N/A	1:1	bottom	2.380	1.028	2.447	
1732.40	1412	UMTS 1750	RMC	20.0	19.82	-0.05	0 mm	23	0496M	N/A	1:1	bottom	2.350	1.042	2.449	
1752.60	1513	UMTS 1750	RMC	20.0	19.85	-0.06	0 mm	23	0496M	N/A	1:1	bottom	2.670	1.035	2.763	A90
1880.00	9400	UMTS 1900	RMC	24.5	23.24	-0.08	8 mm	20	0496M	N/A	1:1	back	0.844	1.337	1.128	
1880.00	9400	UMTS 1900	RMC	24.5	23.24	0.02	6 mm	20	0496M	N/A	1:1	front	1.150	1.337	1.538	
1880.00	9400	UMTS 1900	RMC	24.5	23.24	-0.03	11 mm	20	0496M	N/A	1:1	bottom	0.995	1.337	1.330	
1880.00	9400	UMTS 1900	RMC	24.5	23.24	-0.02	0 mm	20	0496M	N/A	1:1	right	0.355	1.337	0.475	
1880.00	9400	UMTS 1900	RMC	24.5	23.24	-0.05	0 mm	20	0496M	N/A	1:1	left	0.340	1.337	0.455	
1852.40	9262	UMTS 1900	RMC	19.5	18.58	0.00	0 mm	20	0496M	N/A	1:1	back	1.640	1.236	2.027	
1880.00	9400	UMTS 1900	RMC	19.5	18.60	0.01	0 mm	20	0496M	N/A	1:1	back	1.670	1.230	2.054	
1907.60	9538	UMTS 1900	RMC	19.5	18.53	0.02	0 mm	20	0496M	N/A	1:1	back	1.730	1.250	2.163	
1880.00	9400	UMTS 1900	RMC	19.5	18.60	-0.05	0 mm	20	0496M	N/A	1:1	front	1.510	1.230	1.857	
1852.40	9262	UMTS 1900	RMC	19.5	18.58	-0.20	0 mm	20	0496M	N/A	1:1	bottom	2.420	1.236	**2.991**	A91
1880.00	9400	UMTS 1900	RMC	19.5	18.60	-0.18	0 mm	20	0496M	N/A	1:1	bottom	2.360	1.230	2.903	
1907.60	9538	UMTS 1900	RMC	19.5	18.53	-0.19	0 mm	20	0496M	N/A	1:1	bottom	2.320	1.250	2.900	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Phablet 4.0 W/kg (mW/g) averaged over 10 grams							

Note: Blue entries represent variability measurements.

Table 11-68
LTE Band 66 (AWS) Phablet SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g) (W/kg)	Scaling Factor	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.16	-0.08	0	23	0530M	QPSK	1	50	8 mm	back	1:1	1.110	1.213	1.346	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.19	-0.01	1	23	0530M	QPSK	50	0	8 mm	back	1:1	0.946	1.205	1.140	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.16	0.05	0	23	0530M	QPSK	1	50	6 mm	front	1:1	1.270	1.213	1.541	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.19	0.14	1	23	0530M	QPSK	50	0	6 mm	front	1:1	1.060	1.205	1.277	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.16	-0.03	0	23	0530M	QPSK	1	50	11 mm	bottom	1:1	1.350	1.213	1.638	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.19	0.10	1	23	0530M	QPSK	50	0	11 mm	bottom	1:1	1.090	1.205	1.313	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.16	-0.09	0	23	0530M	QPSK	1	50	0 mm	right	1:1	0.368	1.213	0.446	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.19	-0.16	1	23	0530M	QPSK	50	0	0 mm	right	1:1	0.303	1.205	0.365	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	25.0	24.16	0.06	0	23	0530M	QPSK	1	50	0 mm	left	1:1	0.410	1.213	0.497	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.0	23.19	0.03	1	23	0530M	QPSK	50	0	0 mm	left	1:1	0.337	1.205	0.406	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.15	0.00	0	23	0407M	QPSK	1	50	0 mm	back	1:1	1.720	1.161	1.997	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.17	0.03	0	23	0407M	QPSK	50	25	0 mm	back	1:1	1.850	1.156	2.139	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.8	20.15	0.05	0	23	0407M	QPSK	50	0	0 mm	back	1:1	1.770	1.161	2.055	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.8	20.01	0.02	0	23	0407M	QPSK	50	50	0 mm	back	1:1	1.610	1.199	1.930	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.10	0.04	0	23	0407M	QPSK	100	0	0 mm	back	1:1	1.770	1.175	2.080	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.15	-0.09	0	23	0407M	QPSK	1	50	0 mm	front	1:1	1.840	1.161	2.136	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.8	19.99	-0.04	0	23	0407M	QPSK	1	99	0 mm	front	1:1	1.730	1.205	2.085	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.8	20.01	-0.12	0	23	0407M	QPSK	1	0	0 mm	front	1:1	2.020	1.199	2.422	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.17	-0.08	0	23	0407M	QPSK	50	25	0 mm	front	1:1	1.980	1.156	2.289	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.8	20.15	-0.11	0	23	0407M	QPSK	50	0	0 mm	front	1:1	2.000	1.161	2.322	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.8	20.01	0.14	0	23	0407M	QPSK	50	50	0 mm	front	1:1	1.790	1.199	2.146	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.10	-0.11	0	23	0407M	QPSK	100	0	0 mm	front	1:1	1.990	1.175	2.338	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.15	-0.08	0	23	0407M	QPSK	1	50	0 mm	bottom	1:1	2.230	1.161	2.589	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.8	19.99	0.01	0	23	0407M	QPSK	1	99	0 mm	bottom	1:1	2.220	1.205	2.675	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.8	20.01	0.02	0	23	0407M	QPSK	1	0	0 mm	bottom	1:1	2.370	1.199	2.842	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.17	-0.07	0	23	0407M	QPSK	50	25	0 mm	bottom	1:1	2.500	1.156	2.890	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.10	-0.14	0	23	0407M	QPSK	50	50	0 mm	bottom	1:1	2.420	1.175	2.844	
1 CC Uplink	N/A	1715.00	132022	Low	LTE Band 66 (AWS)	10	20.8	19.81	0.02	0	23	0407M	QPSK	25	25	0 mm	bottom	1:1	2.300	1.256	2.889	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.8	20.15	0.02	0	23	0407M	QPSK	50	0	0 mm	bottom	1:1	2.460	1.161	2.856	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.8	20.01	0.04	0	23	0407M	QPSK	50	50	0 mm	bottom	1:1	2.370	1.199	2.842	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.10	0.00	0	23	0407M	QPSK	100	0	0 mm	bottom	1:1	2.440	1.175	2.867	
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.80	0.07	0	23	0407M	QPSK	50	50	0 mm	bottom	1:1	2.960	1.000	2.960	A92
	SCC	1739.80	132270	Low	LTE Band 66 (AWS)	20					23			50	0							
2 CC Uplink CA_66B	PCC	1715.00	132022	Low	LTE Band 66 (AWS)	10	20.8	20.30	-0.02	0	23	0407M	QPSK	25	25	0 mm	bottom	1:1	2.600	1.122	2.917	
	SCC	1724.90	132121	Low	LTE Band 66 (AWS)	10					23			25	0							
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.8	20.80	-0.05	0	23	0407M	QPSK	50	50	0 mm	bottom	1:1	2.870	1.000	2.870	
	SCC	1739.80	132270	Low	LTE Band 66 (AWS)	20					23			50	0							

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

Note: Blue entries represent variability measurements.

Table 11-69
LTE Band 25 (PCS) Phablet SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	24.01	0.04	0	18	0530M	QPSK	1	99	8 mm	back	1:1	0.924	1.119	1.034	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	23.04	0.06	1	18	0530M	QPSK	50	50	8 mm	back	1:1	0.766	1.112	0.852	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	24.01	0.01	0	18	0530M	QPSK	1	99	6 mm	front	1:1	1.180	1.119	1.320	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	23.04	0.02	1	18	0530M	QPSK	50	50	6 mm	front	1:1	0.979	1.112	1.089	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	24.01	-0.01	0	18	0530M	QPSK	1	99	11 mm	bottom	1:1	1.150	1.119	1.287	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	23.04	0.00	1	18	0530M	QPSK	50	50	11 mm	bottom	1:1	0.929	1.112	1.033	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	24.01	-0.05	0	18	0530M	QPSK	1	99	0 mm	right	1:1	0.337	1.119	0.377	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	23.04	-0.02	1	18	0530M	QPSK	50	50	0 mm	right	1:1	0.285	1.112	0.317	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	24.01	-0.13	0	18	0530M	QPSK	1	99	0 mm	left	1:1	0.338	1.119	0.378	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	23.5	23.04	-0.13	1	18	0530M	QPSK	50	50	0 mm	left	1:1	0.272	1.112	0.302	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.49	0.03	0	18	0343M	QPSK	1	0	0 mm	back	1:1	1.150	1.262	1.451	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.64	0.00	0	18	0343M	QPSK	50	25	0 mm	back	1:1	1.150	1.219	1.402	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.49	0.00	0	18	0343M	QPSK	1	0	0 mm	front	1:1	1.210	1.262	1.527	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.64	-0.01	0	18	0343M	QPSK	50	25	0 mm	front	1:1	1.250	1.219	1.524	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.49	0.03	0	18	0343M	QPSK	1	0	0 mm	bottom	1:1	1.730	1.262	2.183	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	19.5	18.47	0.00	0	18	0343M	QPSK	1	50	0 mm	bottom	1:1	1.620	1.268	2.054	
1905.00	26590	High	LTE Band 25 (PCS)	20	19.5	18.40	0.00	0	18	0343M	QPSK	1	50	0 mm	bottom	1:1	1.730	1.288	2.228	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	18.64	0.00	0	18	0343M	QPSK	50	25	0 mm	bottom	1:1	1.730	1.219	2.109	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	19.5	18.60	-0.01	0	18	0343M	QPSK	50	25	0 mm	bottom	1:1	1.700	1.230	2.091	
1905.00	26590	High	LTE Band 25 (PCS)	20	19.5	18.60	0.02	0	18	0343M	QPSK	50	0	0 mm	bottom	1:1	1.780	1.230	2.189	A93
1905.00	26590	High	LTE Band 25 (PCS)	20	19.5	18.43	-0.03	0	18	0343M	QPSK	100	0	0 mm	bottom	1:1	1.740	1.279	2.225	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Phablet 4.0 W/kg (mW/g) averaged over 10 grams												

Table 11-70
LTE Band 2 (PCS) Phablet SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1900.00	19100	High	LTE Band 2 (PCS)	20	24.5	23.89	0.03	0	18	0530M	QPSK	1	99	8 mm	back	1:1	0.989	1.151	1.138	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	23.5	22.98	0.03	1	18	0530M	QPSK	50	25	8 mm	back	1:1	0.797	1.127	0.898	
1900.00	19100	High	LTE Band 2 (PCS)	20	24.5	23.89	-0.01	0	18	0530M	QPSK	1	99	6 mm	front	1:1	1.300	1.151	1.496	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	23.5	22.98	0.00	1	18	0530M	QPSK	50	25	6 mm	front	1:1	1.010	1.127	1.138	
1900.00	19100	High	LTE Band 2 (PCS)	20	24.5	23.89	-0.02	0	18	0530M	QPSK	1	99	11 mm	bottom	1:1	1.230	1.151	1.416	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	23.5	22.98	-0.04	1	18	0530M	QPSK	50	25	11 mm	bottom	1:1	0.966	1.127	1.089	
1900.00	19100	High	LTE Band 2 (PCS)	20	24.5	23.89	0.02	0	18	0530M	QPSK	1	99	0 mm	right	1:1	0.351	1.151	0.404	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	23.5	22.98	0.03	1	18	0530M	QPSK	50	25	0 mm	right	1:1	0.284	1.127	0.320	
1900.00	19100	High	LTE Band 2 (PCS)	20	24.5	23.89	-0.05	0	18	0530M	QPSK	1	99	0 mm	left	1:1	0.330	1.151	0.380	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	23.5	22.98	-0.05	1	18	0530M	QPSK	50	25	0 mm	left	1:1	0.273	1.127	0.308	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	0.00	0	18	0406M	QPSK	1	0	0 mm	back	1:1	0.918	1.135	1.042	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	0.01	0	18	0406M	QPSK	50	50	0 mm	back	1:1	0.981	1.135	1.113	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	-0.01	0	18	0406M	QPSK	1	0	0 mm	front	1:1	0.962	1.135	1.092	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	-0.02	0	18	0406M	QPSK	50	50	0 mm	front	1:1	1.000	1.135	1.135	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	-0.01	0	18	0406M	QPSK	1	0	0 mm	bottom	1:1	1.720	1.135	1.952	
1860.00	18700	Low	LTE Band 2 (PCS)	20	19.5	18.92	-0.02	0	18	0406M	QPSK	50	25	0 mm	bottom	1:1	1.880	1.143	2.149	
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.95	0.00	0	18	0406M	QPSK	50	50	0 mm	bottom	1:1	1.830	1.135	2.077	
1900.00	19100	High	LTE Band 2 (PCS)	20	19.5	18.92	-0.02	0	18	0406M	QPSK	50	25	0 mm	bottom	1:1	1.940	1.143	2.217	A94
1880.00	18900	Mid	LTE Band 2 (PCS)	20	19.5	18.92	-0.02	0	18	0406M	QPSK	100	0	0 mm	bottom	1:1	1.810	1.143	2.069	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Phablet 4.0 W/kg (mW/g) averaged over 10 grams			

Table 11-71
LTE Band 30 Phablet SAR

MEASUREMENT RESULTS																			
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.44	-0.01	0	0533M	QPSK	1	0	8 mm	back	1:1	0.741	1.138	0.843	
2310.00	27710	Mid	LTE Band 30	10	22.0	21.58	0.00	1	0533M	QPSK	25	12	8 mm	back	1:1	0.599	1.102	0.660	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.44	-0.09	0	0533M	QPSK	1	0	6 mm	front	1:1	0.993	1.138	1.130	
2310.00	27710	Mid	LTE Band 30	10	22.0	21.58	-0.07	1	0533M	QPSK	25	12	6 mm	front	1:1	0.814	1.102	0.897	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.44	-0.05	0	0533M	QPSK	1	0	11 mm	bottom	1:1	1.040	1.138	1.184	
2310.00	27710	Mid	LTE Band 30	10	22.0	21.58	-0.20	1	0533M	QPSK	25	12	11 mm	bottom	1:1	0.857	1.102	0.944	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.44	-0.03	0	0533M	QPSK	1	0	0 mm	right	1:1	0.225	1.138	0.256	
2310.00	27710	Mid	LTE Band 30	10	22.0	21.58	0.06	1	0533M	QPSK	25	12	0 mm	right	1:1	0.185	1.102	0.204	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.44	0.01	0	0533M	QPSK	1	0	0 mm	left	1:1	0.298	1.138	0.339	
2310.00	27710	Mid	LTE Band 30	10	22.0	21.58	0.01	1	0533M	QPSK	25	12	0 mm	left	1:1	0.247	1.102	0.272	
2310.00	27710	Mid	LTE Band 30	10	21.5	20.74	-0.01	0	0405M	QPSK	1	49	0 mm	back	1:1	1.790	1.191	2.132	
2310.00	27710	Mid	LTE Band 30	10	21.5	20.78	0.04	0	0405M	QPSK	25	12	0 mm	back	1:1	1.880	1.180	2.218	
2310.00	27710	Mid	LTE Band 30	10	21.5	20.30	0.03	0	0405M	QPSK	50	0	0 mm	back	1:1	1.840	1.318	2.425	
2310.00	27710	Mid	LTE Band 30	10	21.5	20.74	-0.09	0	0405M	QPSK	1	49	0 mm	front	1:1	1.730	1.191	2.060	
2310.00	27710	Mid	LTE Band 30	10	21.5	20.78	-0.08	0	0405M	QPSK	25	12	0 mm	front	1:1	1.820	1.180	2.148	
2310.00	27710	Mid	LTE Band 30	10	21.5	20.30	-0.10	0	0405M	QPSK	50	0	0 mm	front	1:1	1.790	1.318	2.359	
2310.00	27710	Mid	LTE Band 30	10	21.5	20.74	-0.10	0	0405M	QPSK	1	49	0 mm	bottom	1:1	2.060	1.191	2.453	
2310.00	27710	Mid	LTE Band 30	10	21.5	20.78	-0.20	0	0405M	QPSK	25	12	0 mm	bottom	1:1	2.210	1.180	2.608	A95
2310.00	27710	Mid	LTE Band 30	10	21.5	20.30	-0.17	0	0405M	QPSK	50	0	0 mm	bottom	1:1	2.150	1.318	2.834	
2310.00	27710	Mid	LTE Band 30	10	21.5	20.78	-0.07	0	0405M	QPSK	25	12	0 mm	bottom	1:1	2.150	1.180	2.537	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Phablet 4.0 W/kg (mW/g) averaged over 10 grams						

Note: Blue entries represent variability measurements.

Table 11-72
LTE Band 7 Phablet SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2510.00	20850	Low	LTE Band 7	20	24.0	23.45	-0.02	0	0533M	QPSK	1	99	8 mm	back	1:1	0.511	1.135	0.580	
2510.00	20850	Low	LTE Band 7	20	23.0	22.60	0.11	1	0533M	QPSK	50	50	8 mm	back	1:1	0.426	1.096	0.467	
2510.00	20850	Low	LTE Band 7	20	24.0	23.45	-0.06	0	0533M	QPSK	1	99	6 mm	front	1:1	0.617	1.135	0.700	
2510.00	20850	Low	LTE Band 7	20	23.0	22.60	-0.05	1	0533M	QPSK	50	50	6 mm	front	1:1	0.507	1.096	0.556	
2510.00	20850	Low	LTE Band 7	20	24.0	23.45	-0.06	0	0533M	QPSK	1	99	11 mm	bottom	1:1	0.669	1.135	0.759	
2510.00	20850	Low	LTE Band 7	20	23.0	22.60	-0.19	1	0533M	QPSK	50	50	11 mm	bottom	1:1	0.520	1.096	0.570	
2510.00	20850	Low	LTE Band 7	20	24.0	23.45	-0.05	0	0533M	QPSK	1	99	0 mm	left	1:1	0.423	1.135	0.480	
2510.00	20850	Low	LTE Band 7	20	23.0	22.60	-0.05	1	0533M	QPSK	50	50	0 mm	left	1:1	0.420	1.096	0.460	
2510.00	20850	Low	LTE Band 7	20	21.5	21.00	-0.04	0	0405M	QPSK	1	0	0 mm	back	1:1	1.110	1.122	1.245	
2510.00	20850	Low	LTE Band 7	20	21.5	21.05	-0.06	0	0405M	QPSK	50	0	0 mm	back	1:1	1.220	1.109	1.353	
2510.00	20850	Low	LTE Band 7	20	21.5	21.00	0.06	0	0405M	QPSK	1	0	0 mm	front	1:1	1.070	1.122	1.201	
2510.00	20850	Low	LTE Band 7	20	21.5	21.05	0.08	0	0405M	QPSK	50	0	0 mm	front	1:1	1.090	1.109	1.209	
2510.00	20850	Low	LTE Band 7	20	21.5	21.00	0.05	0	0405M	QPSK	1	0	0 mm	bottom	1:1	1.350	1.122	1.515	
2510.00	20850	Low	LTE Band 7	20	21.5	21.05	0.07	0	0405M	QPSK	50	0	0 mm	bottom	1:1	1.400	1.109	1.553	A96
2535.00	21100	Mid	LTE Band 7	20	21.5	20.94	0.04	0	0405M	QPSK	50	0	0 mm	bottom	1:1	1.170	1.138	1.331	
2560.00	21350	High	LTE Band 7	20	21.5	21.04	0.03	0	0405M	QPSK	50	50	0 mm	bottom	1:1	1.150	1.112	1.279	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Phablet 4.0 W/kg (mW/g) averaged over 10 grams			

Note: Blue entries represent variability measurements.

Table 11-73
LTE Band 41 Phablet SAR

MEASUREMENT RESULTS																						
1 CC Uplink | 2 CC Uplink, Power Class	Component Carrier	FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
		MHz	Ch.															(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	25.0	24.81	0.03	0	0480M	QPSK	1	0	8 mm	back	1:1.58	0.232	1.045	0.242	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.0	24.00	0.02	1	0480M	QPSK	50	0	8 mm	back	1:1.58	0.188	1.000	0.188	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	25.0	24.81	-0.13	0	0480M	QPSK	1	0	6 mm	front	1:1.58	0.243	1.045	0.254	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.0	24.00	0.01	1	0480M	QPSK	50	0	6 mm	front	1:1.58	0.199	1.000	0.199	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	25.0	24.81	-0.14	0	0480M	QPSK	1	0	11 mm	bottom	1:1.58	0.290	1.045	0.303	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.0	24.00	-0.03	1	0480M	QPSK	50	0	11 mm	bottom	1:1.58	0.240	1.000	0.240	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	25.0	24.81	-0.11	0	0480M	QPSK	1	0	0 mm	left	1:1.58	0.321	1.045	0.335	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.0	24.00	-0.13	1	0480M	QPSK	50	0	0 mm	left	1:1.58	0.264	1.000	0.264	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.5	24.31	0.04	0	0405M	QPSK	1	0	0 mm	back	1:1.58	1.570	1.045	1.641	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	24.5	24.05	0.14	0	0405M	QPSK	1	0	0 mm	back	1:1.58	1.370	1.109	1.519	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.5	24.07	0.13	0	0405M	QPSK	1	50	0 mm	back	1:1.58	2.030	1.104	2.241	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	24.5	24.20	-0.09	0	0405M	QPSK	1	50	0 mm	back	1:1.58	2.210	1.072	2.369	A97
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	24.5	23.88	-0.04	0	0405M	QPSK	1	99	0 mm	back	1:1.58	1.890	1.153	2.179	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.5	24.22	0.11	0	0405M	QPSK	1	50	0 mm	back	1:1.58	2.140	1.067	2.283	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.5	23.85	0.07	0	0405M	QPSK	50	25	0 mm	back	1:1.58	1.220	1.161	1.416	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	24.5	23.81	0.03	0	0405M	QPSK	100	0	0 mm	back	1:1.58	2.010	1.172	2.356	
1 CC Uplink - Power Class 2	N/A	2636.50	41055	Mid-High	LTE Band 41	20	26.1	25.56	0.10	0	0405M	QPSK	1	50	0 mm	back	1:2.31	2.000	1.132	2.264	
1 CC Uplink - Power Class 2	N/A	2636.50	41055	Mid-High	LTE Band 41	20	26.1	25.44	-0.10	0	0405M	QPSK	1	99	0 mm	back	1:2.31	1.810	1.164	2.107	
2 CC Uplink - Power Class 3	PCC	2636.50	41055	Mid-High	LTE Band 41	20	24.5	24.50	-0.06	0	0405M	QPSK	1	99	0 mm	back	1:1.58	1.990	1.000	1.990	
	SCC	2656.30	41253	Mid-High									1	0							
2 CC Uplink - Power Class 2	PCC	2636.50	41055	Mid-High	LTE Band 41	20	26.1	26.10	0.08	0	0405M	QPSK	1	99	0 mm	back	1:2.31	1.960	1.000	1.960	
	SCC	2656.30	41253	Mid-High									1	0							
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.5	24.31	-0.07	0	0405M	QPSK	1	0	0 mm	front	1:1.58	1.220	1.045	1.275	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.5	23.85	0.03	0	0405M	QPSK	50	25	0 mm	front	1:1.58	0.933	1.161	1.083	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.5	24.31	0.03	0	0405M	QPSK	1	0	0 mm	bottom	1:1.58	1.640	1.045	1.714	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	24.5	24.05	0.02	0	0405M	QPSK	1	0	0 mm	bottom	1:1.58	1.440	1.109	1.597	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	24.5	24.07	0.00	0	0405M	QPSK	1	50	0 mm	bottom	1:1.58	1.700	1.104	1.877	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	24.5	24.20	0.07	0	0405M	QPSK	1	50	0 mm	bottom	1:1.58	1.700	1.072	1.822	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	24.5	24.22	-0.04	0	0405M	QPSK	1	50	0 mm	bottom	1:1.58	1.600	1.067	1.707	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.5	23.85	0.04	0	0405M	QPSK	50	25	0 mm	bottom	1:1.58	1.260	1.161	1.463	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	24.5	23.81	-0.03	0	0405M	QPSK	100	0	0 mm	bottom	1:1.58	1.540	1.172	1.805	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	24.5	24.20	-0.14	0	0405M	QPSK	1	50	0 mm	back	1:1.58	2.110	1.072	2.262	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																		Phablet 4.0 W/kg (mW/g) averaged over 10 grams			

Note: Blue entries represent variability measurements.

Table 11-74
NR Band n66 Phablet SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.28	0.00	0	23	0909M	DFT-S-OFDM QPSK	1	53	8 mm	back	1:1	1.090	1.180	1.286	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.23	-0.09	0	23	0909M	DFT-S-OFDM QPSK	50	28	8 mm	back	1:1	1.020	1.194	1.218	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.28	-0.15	0	23	0909M	DFT-S-OFDM QPSK	1	53	6 mm	front	1:1	1.120	1.180	1.322	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.23	-0.18	0	23	0909M	DFT-S-OFDM QPSK	50	28	6 mm	front	1:1	1.150	1.194	1.373	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.28	0.00	0	23	0909M	DFT-S-OFDM QPSK	1	53	11 mm	bottom	1:1	1.050	1.180	1.239	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.23	0.01	0	23	0909M	DFT-S-OFDM QPSK	50	28	11 mm	bottom	1:1	1.020	1.194	1.218	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.28	0.02	0	23	0909M	DFT-S-OFDM QPSK	1	53	0 mm	right	1:1	0.363	1.180	0.428	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.23	0.01	0	23	0909M	DFT-S-OFDM QPSK	50	28	0 mm	right	1:1	0.355	1.194	0.424	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.28	0.00	0	23	0909M	DFT-S-OFDM QPSK	1	53	0 mm	left	1:1	0.449	1.180	0.530	
1745.00	349000	Mid	NR Band n66 (AWS)	20	25.0	24.23	0.00	0	23	0909M	DFT-S-OFDM QPSK	50	28	0 mm	left	1:1	0.429	1.194	0.512	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.50	0.01	0	23	0909M	DFT-S-OFDM QPSK	1	104	0 mm	back	1:1	1.670	1.072	1.790	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.51	0.03	0	23	0909M	DFT-S-OFDM QPSK	50	0	0 mm	back	1:1	1.790	1.069	1.914	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.50	-0.10	0	23	0909M	DFT-S-OFDM QPSK	1	104	0 mm	front	1:1	1.720	1.072	1.844	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.8	20.31	-0.02	0	23	0909M	DFT-S-OFDM QPSK	50	0	0 mm	front	1:1	2.160	1.119	2.417	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.51	-0.10	0	23	0909M	DFT-S-OFDM QPSK	50	0	0 mm	front	1:1	1.870	1.069	1.999	
1770.00	354000	High	NR Band n66 (AWS)	20	20.8	20.30	-0.13	0	23	0909M	DFT-S-OFDM QPSK	50	0	0 mm	front	1:1	1.740	1.122	1.952	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.45	-0.06	0	23	0909M	DFT-S-OFDM QPSK	100	0	0 mm	front	1:1	1.840	1.084	1.995	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.8	20.40	0.05	0	23	0909M	DFT-S-OFDM QPSK	1	1	0 mm	bottom	1:1	2.760	1.096	3.025	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.50	0.02	0	23	0909M	DFT-S-OFDM QPSK	1	104	0 mm	bottom	1:1	2.580	1.072	2.766	
1770.00	354000	High	NR Band n66 (AWS)	20	20.8	20.36	0.01	0	23	0909M	DFT-S-OFDM QPSK	1	1	0 mm	bottom	1:1	2.650	1.107	2.934	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.8	20.31	0.03	0	23	0909M	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	2.770	1.119	**3.100**	A98
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.51	0.03	0	23	0909M	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	2.640	1.069	2.822	
1770.00	354000	High	NR Band n66 (AWS)	20	20.8	20.30	0.01	0	23	0909M	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	2.740	1.122	3.074	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.8	20.45	0.03	0	23	0909M	DFT-S-OFDM QPSK	100	0	0 mm	bottom	1:1	2.660	1.084	2.883	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.8	20.30	0.09	0	23	0909M	CP-OFDM QPSK	1	1	0 mm	bottom	1:1	2.610	1.122	2.928	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Phablet 4.0 W/kg (mW/g) averaged over 10 grams												

Note: Blue entries represent variability measurements.

Table 11-75
NR Band n2 Phablet SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Ant State	Serial Number	Modulation	RB Size	RB Offset	Spacing	Side	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	-0.04	0	18	1021M	DFT-S-OFDM QPSK	1	1	8 mm	back	1:1	0.903	1.148	1.037	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.03	0	18	1021M	DFT-S-OFDM QPSK	50	28	8 mm	back	1:1	0.832	1.148	0.955	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	-0.16	0	18	1021M	DFT-S-OFDM QPSK	1	1	6 mm	front	1:1	1.260	1.148	1.446	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.01	0	18	1021M	DFT-S-OFDM QPSK	50	28	6 mm	front	1:1	1.180	1.148	1.355	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	-0.14	0	18	1021M	DFT-S-OFDM QPSK	1	1	11 mm	bottom	1:1	1.110	1.148	1.274	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.06	0	18	1021M	DFT-S-OFDM QPSK	50	28	11 mm	bottom	1:1	1.060	1.148	1.217	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	-0.19	0	18	1021M	DFT-S-OFDM QPSK	1	1	0 mm	right	1:1	0.314	1.148	0.360	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.02	0	18	1021M	DFT-S-OFDM QPSK	50	28	0 mm	right	1:1	0.319	1.148	0.366	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.00	0	18	1021M	DFT-S-OFDM QPSK	1	1	0 mm	left	1:1	0.313	1.148	0.359	
1900.00	380000	High	NR Band n2 (PCS)	20	24.5	23.90	0.01	0	18	1021M	DFT-S-OFDM QPSK	50	28	0 mm	left	1:1	0.325	1.148	0.373	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.88	0.01	0	18	0406M	DFT-S-OFDM QPSK	1	1	0 mm	back	1:1	1.260	1.153	1.453	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.87	-0.04	0	18	0406M	DFT-S-OFDM QPSK	50	56	0 mm	back	1:1	1.300	1.156	1.503	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.88	0.01	0	18	0406M	DFT-S-OFDM QPSK	1	1	0 mm	front	1:1	1.210	1.153	1.395	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.87	-0.02	0	18	0406M	DFT-S-OFDM QPSK	50	56	0 mm	front	1:1	1.260	1.156	1.457	
1860.00	372000	Low	NR Band n2 (PCS)	20	19.5	18.87	0.07	0	18	0406M	DFT-S-OFDM QPSK	1	1	0 mm	bottom	1:1	1.930	1.156	2.231	
1880.00	376000	Mid	NR Band n2 (PCS)	20	19.5	18.73	0.01	0	18	0406M	DFT-S-OFDM QPSK	1	1	0 mm	bottom	1:1	1.920	1.194	2.292	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.88	0.12	0	18	0406M	DFT-S-OFDM QPSK	1	1	0 mm	bottom	1:1	2.010	1.153	2.318	
1860.00	372000	Low	NR Band n2 (PCS)	20	19.5	18.83	0.06	0	18	0406M	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	1.990	1.167	2.322	
1880.00	376000	Mid	NR Band n2 (PCS)	20	19.5	18.50	-0.01	0	18	0406M	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	1.970	1.259	2.480	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.87	-0.12	0	18	0406M	DFT-S-OFDM QPSK	50	56	0 mm	bottom	1:1	2.120	1.156	2.451	A99
1880.00	376000	Mid	NR Band n2 (PCS)	20	19.5	18.75	-0.01	0	18	0406M	CP-OFDM QPSK	1	1	0 mm	bottom	1:1	1.860	1.189	2.212	
1900.00	380000	High	NR Band n2 (PCS)	20	19.5	18.86	-0.01	0	18	0406M	DFT-S-OFDM QPSK	100	0	0 mm	bottom	1:1	2.090	1.159	2.422	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Phablet 4.0 W/kg (mW/g) averaged over 10 grams			

Table 11-76
WLAN SISO Phablet SAR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (10g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																		
5280	56	802.11a	OFDM	20	18.0	17.96	0.21	0 mm	1	0402M	6	back	98.8	6.214	0.847	1.009	1.012	0.865	
5280	56	802.11a	OFDM	20	18.0	17.96	0.18	0 mm	1	0402M	6	front	98.8	1.042	0.154	1.009	1.012	0.157	
5280	56	802.11a	OFDM	20	18.0	17.96	-0.15	0 mm	1	0402M	6	top	98.8	2.984	-	1.009	1.012	-	
5280	56	802.11a	OFDM	20	18.0	17.96	-0.02	0 mm	1	0402M	6	left	98.8	8.041	0.859	1.009	1.012	0.877	
5260	52	802.11a	OFDM	20	18.0	17.26	0.12	0 mm	2	0402M	6	back	98.9	6.050	1.150	1.186	1.011	1.379	
5280	56	802.11a	OFDM	20	18.0	17.35	0.13	0 mm	2	0402M	6	back	98.9	7.996	1.360	1.161	1.011	1.596	
5300	60	802.11a	OFDM	20	18.0	17.34	0.13	0 mm	2	0402M	6	back	98.9	5.511	1.090	1.164	1.011	1.283	
5280	56	802.11a	OFDM	20	18.0	17.35	0.19	0 mm	2	0402M	6	front	98.9	0.324	0.064	1.161	1.011	0.075	
5280	56	802.11a	OFDM	20	18.0	17.35	0.17	0 mm	2	0402M	6	top	98.9	0.684	-	1.161	1.011	-	
5280	56	802.11a	OFDM	20	18.0	17.35	0.16	0 mm	2	0402M	6	left	98.9	3.488	0.304	1.161	1.011	0.357	
5720	144	802.11a	OFDM	20	18.0	17.77	0.12	0 mm	1	0402M	6	back	98.8	5.805	0.866	1.054	1.012	0.924	
5720	144	802.11a	OFDM	20	18.0	17.77	0.15	0 mm	1	0402M	6	front	98.8	0.521	0.096	1.054	1.012	0.102	
5720	144	802.11a	OFDM	20	18.0	17.77	0.15	0 mm	1	0402M	6	top	98.8	2.144	-	1.054	1.012	-	
5720	144	802.11a	OFDM	20	18.0	17.77	0.19	0 mm	1	0402M	6	left	98.8	7.380	0.471	1.054	1.012	0.502	
5600	120	802.11a	OFDM	20	18.0	17.53	-0.14	0 mm	2	0402M	6	back	98.9	9.256	1.040	1.114	1.011	1.171	
5600	120	802.11a	OFDM	20	18.0	17.53	0.13	0 mm	2	0402M	6	front	98.9	0.139	0.016	1.114	1.011	0.018	
5600	120	802.11a	OFDM	20	18.0	17.53	0.16	0 mm	2	0402M	6	top	98.9	0.308	-	1.114	1.011	-	
5600	120	802.11a	OFDM	20	18.0	17.53	-0.16	0 mm	2	0402M	6	left	98.9	1.572	0.171	1.114	1.011	0.193	

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

Table 11-77
WLAN MIMO Phablet SAR

MEASUREMENT RESULTS																				
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan W/kg	SAR (10g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																			
5260	52	802.11n	OFDM	20	18.0	17.18	18.0	17.25	0.15	0 mm	MIMO	0402M	13	back	98.7	9.655	1.590	1.208	1.013	1.946	
5280	56	802.11n	OFDM	20	18.0	17.96	18.0	17.37	-0.05	0 mm	MIMO	0402M	13	back	98.7	13.477	2.060	1.156	1.013	2.412	A100
5300	60	802.11n	OFDM	20	18.0	17.77	18.0	17.49	0.12	0 mm	MIMO	0402M	13	back	98.7	13.403	1.970	1.125	1.013	2.245	
5280	56	802.11n	OFDM	20	18.0	17.96	18.0	17.37	0.15	0 mm	MIMO	0402M	13	front	98.7	1.768	0.262	1.156	1.013	0.307	
5280	56	802.11n	OFDM	20	18.0	17.96	18.0	17.37	0.13	0 mm	MIMO	0402M	13	top	98.7	3.765	-	1.156	1.013	-	
5280	56	802.11n	OFDM	20	18.0	17.96	18.0	17.37	0.17	0 mm	MIMO	0402M	13	left	98.7	11.073	1.050	1.156	1.013	1.230	
5720	144	802.11n	OFDM	20	18.0	17.75	18.0	17.91	0.14	0 mm	MIMO	0402M	13	back	98.7	12.270	1.780	1.059	1.013	1.910	
5720	144	802.11n	OFDM	20	18.0	17.75	18.0	17.91	0.15	0 mm	MIMO	0402M	13	front	98.7	1.019	0.122	1.059	1.013	0.131	
5720	144	802.11n	OFDM	20	18.0	17.75	18.0	17.91	0.18	0 mm	MIMO	0402M	13	top	98.7	2.833	-	1.059	1.013	-	
5720	144	802.11n	OFDM	20	18.0	17.75	18.0	17.91	-0.12	0 mm	MIMO	0402M	13	left	98.7	9.698	0.667	1.059	1.013	0.716	
5280	56	802.11n	OFDM	20	18.0	17.96	18.0	17.37	0.07	0 mm	MIMO	0402M	13	back	98.7	10.685	1.990	1.156	1.013	2.330	

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

Note: To achieve the 21.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18.0 dBm. Blue entries represent variability measurements.

Table 11-78
WLAN SISO Phablet SAR During Conditions with 5G NR

MEASUREMENT RESULTS																			
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
5270	54	802.11n	OFDM	40	14.0	13.78	0.20	0 mm	2	0402M	13.5	back	97.4	3.560	0.586	1.052	1.027	0.633	
5270	54	802.11n	OFDM	40	14.0	13.78	0.19	0 mm	2	0402M	13.5	front	97.4	0.155	0.019	1.052	1.027	0.021	
5270	54	802.11n	OFDM	40	14.0	13.78	0.13	0 mm	2	0402M	13.5	top	97.4	0.227	-	1.052	1.027	-	
5270	54	802.11n	OFDM	40	14.0	13.78	0.19	0 mm	2	0402M	13.5	left	97.4	1.311	0.097	1.052	1.027	0.105	
5690	138	802.11ac	OFDM	80	14.0	13.37	0.12	0 mm	2	0402M	29.3	back	94.7	4.098	0.465	1.156	1.056	0.568	
5690	138	802.11ac	OFDM	80	14.0	13.37	0.21	0 mm	2	0402M	29.3	front	94.7	0.047	0.003	1.156	1.056	0.004	
5690	138	802.11ac	OFDM	80	14.0	13.37	-0.16	0 mm	2	0402M	29.3	top	94.7	0.068	-	1.156	1.056	-	
5690	138	802.11ac	OFDM	80	14.0	13.37	0.17	0 mm	2	0402M	29.3	left	94.7	0.582	0.050	1.156	1.056	0.061	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Phablet 4.0 W/kg (mW/g) averaged over 10 grams											

Table 11-79
WLAN MIMO Phablet SAR During Conditions with 5G NR

MEASUREMENT RESULTS																					
FREQUENCY		Mode	Service	Bandwidth [MHz]	Maximum Allowed Power (Ant 1) [dBm]	Conducted Power (Ant 1) [dBm]	Maximum Allowed Power (Ant 2) [dBm]	Conducted Power (Ant 2) [dBm]	Power Drift [dB]	Spacing	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Side	Duty Cycle (%)	Peak SAR of Area Scan	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
5270	54	802.11n	OFDM	40	14.0	13.92	14.0	13.78	-0.13	0 mm	MIMO	0402M	27	back	97.4	3.455	0.796	1.052	1.027	0.860	
5270	54	802.11n	OFDM	40	14.0	13.92	14.0	13.78	0.20	0 mm	MIMO	0402M	27	front	97.4	0.511	0.078	1.052	1.027	0.084	
5270	54	802.11n	OFDM	40	14.0	13.92	14.0	13.78	0.20	0 mm	MIMO	0402M	27	top	97.4	1.248	-	1.052	1.027	-	
5270	54	802.11n	OFDM	40	14.0	13.92	14.0	13.78	-0.14	0 mm	MIMO	0402M	27	left	97.4	4.352	0.093	1.052	1.027	0.100	
5690	138	802.11ac	OFDM	80	14.0	13.63	14.0	13.37	0.13	0 mm	MIMO	0402M	58.5	back	91.2	3.441	0.669	1.156	1.096	0.848	
5690	138	802.11ac	OFDM	80	14.0	13.63	14.0	13.37	0.19	0 mm	MIMO	0402M	58.5	front	91.2	0.234	0.026	1.156	1.096	0.033	
5690	138	802.11ac	OFDM	80	14.0	13.63	14.0	13.37	-0.13	0 mm	MIMO	0402M	58.5	top	91.2	0.600	-	1.156	1.096	-	
5690	138	802.11ac	OFDM	80	14.0	13.63	14.0	13.37	0.12	0 mm	MIMO	0402M	58.5	left	91.2	3.387	0.186	1.156	1.096	0.236	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Phablet 4.0 W/kg (mW/g) averaged over 10 grams											

Note: To achieve the 17.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 14.0 dBm

11.5 SAR Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, and FCC KDB Publication 447498 D01v06.
2. Batteries are fully charged at the beginning of the SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB Publication 447498 D01v06.
6. Device was tested using a fixed spacing for body-worn accessory testing. A separation distance of 15 mm was considered because the manufacturer has determined that there will be body-worn accessories available in the marketplace for users to support this separation distance.
7. Per FCC KDB Publication 648474 D04v01r03, body-worn SAR was evaluated without a headset connected to the device. Since the standalone reported body-worn SAR was ≤ 1.2 W/kg, no additional body-worn SAR evaluations using a headset cable were required.
8. Repeated SAR measurements are highlighted in the tables above for clarity. Please see Section 13 for variability analysis.
9. During SAR Testing for the Wireless Router conditions per FCC KDB Publication 941225 D06v02r01, the actual Portable Hotspot operation (with actual simultaneous transmission of a transmitter with WIFI) was not activated (See Section 6.7 for more details).
10. Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" since the diagonal dimension is > 160 mm and < 200 mm. Therefore, phablet SAR tests are required when wireless router mode does not apply or if wireless router 1g SAR > 1.2 W/kg.
11. This device supports dynamic antenna tuning for some bands. Per FCC Guidance, SAR was measured according to the normally required SAR measurement configurations with tuner active. The auto-tune state determined by the device was verified before and after each SAR measurement and is listed in tables above. Please see Section 14 for supplemental data.
12. 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.
13. Additional SAR tests for phablet SAR were evaluated per KDB 616217 Section 6 (See Section 6.9 for more information).
14. Unless otherwise noted, when 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds below.
15. This device uses Qualcomm 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. Body-Worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn SAR.
2. Justification for reduced test configurations per KDB Publication 941225 D01v03r01 and October 2013 TCB Workshop Notes: The source-based frame-averaged output power was evaluated for all GPRS/EDGE slot configurations. The configuration with the highest target frame averaged output power was evaluated for hotspot SAR. When the maximum frame-averaged powers are equivalent across two or more slots (within 0.25 dB), the configuration with the most number of time slots was tested.
3. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the 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.

CDMA Notes:

1. Head SAR for CDMA2000 mode was tested under RC3/SO55 per FCC KDB Publication 941225 D01v03r01.
2. Body-Worn SAR was tested with 1x RTT with TDSO / SO32 FCH Only. EVDO Rev0 and RevA and TDSO / SO32 FCH+SCH SAR tests were not required per the 3G SAR Test Reduction Procedure in FCC KDB Publication 941225 D01v03r01.
3. CDMA Wireless Router SAR is measured using Subtype 0/1 Physical Layer configurations for Rev. 0 according to KDB 941225 D01v03r01 procedures for data devices. Wireless Router SAR tests for Subtype 2 of Rev.A and 1x RTT configurations were not required per the 3G SAR Test Reduction Policy in KDB Publication 941225 D01v03r01.
4. Head SAR was additionally evaluated using EVDO Rev. A to determine compliance for VoIP operations.
5. 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.
6. CDMA 1X Advanced technology was not required for SAR since the maximum allowed output powers for 1X Advanced was not more than 0.25 dB higher than the maximum powers for 1X.

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 8.6.4.
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 or 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 14 for linearity results.
8. For LTE Band 5, LTE Band 66, LTE Band 48, and LTE Band 41, per FCC guidance, SAR was first measured with only a single carrier active in the uplink (carrier aggregation not active). For each exposure condition, the uplink CA scenario with two component carriers was additionally tested for the configuration with the highest SAR when carrier aggregation was not active. The SCC was configured with the closest available contiguous channel. The two component carriers were configured so the resource blocks are physically allocated side by side to achieve the maximum output power.
9. This device supports LTE Band 41 ULCA active with Power Class 2. Highest SAR test configuration for each exposure condition in Power Class 3 with ULCA active was repeated with Power Class 2 with ULCA active.

NR Notes:

1. NR implementation of n71, n5, n66, n2, and n41 is limited to EN-DC operations only, with LTE Bands 2/5/7/12/13/30/66 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. Simultaneous transmission analysis for EN-DC operations is addressed in the Part 2 Test Report (Serial Number can be found in the bibliography).
4. This device additionally supports some EN-DC conditions where additional LTE carriers are added on the downlink only.
5. Per FCC Guidance, the device was configured with the tuner state selected by the device in LTE mode with auto-tune active at the same frequency as the NR test results. Additional tuner states were evaluated per April 2019 TCBC Workshop Guidance. Please see Section 14 for supplemental data.
6. Per FCC Guidance, NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power were evaluated for SAR tests.
7. For final implementation, NR Band n41 slot configuration is synchronized using maximum duty cycle of 25%. SAR testing was performed using FTM mode with a 25% duty cycle applied to match final duty cycle.

WLAN Notes:

1. For held-to-ear, and hotspot, and phablet operations, the initial test position procedures were applied. The test position with the highest extrapolated peak SAR will be used as the initial test position. When reported SAR for the initial test position is ≤ 0.4 W/kg for 1g evaluations, no additional testing for the remaining test positions was required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured.
2. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 2.4 GHz WIFI single transmission chain operations, the highest measured maximum output power channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4 GHz 802.11g/n/ax) was not required due to the maximum allowed powers and the highest reported DSSS SAR. See Section 8.7.5 for more information.
3. 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 8.7.6 for more information.
4. Per KDB Publication 248227 D01v02r02, SAR for MIMO was evaluated by following the simultaneous SAR provisions from KDB Publication 447498 D01v06 by either evaluating the sum of the 1g SAR values

of each antenna transmitting independently or making a SAR measurement with both antennas transmitting simultaneously. Please see Section 12 for complete analysis.

5. When the maximum reported 1g averaged SAR is ≤0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg for 1g evaluations or all test channels were measured.
6. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated EMC test reports.
7. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

Bluetooth Notes

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests test mode type. Per October 2016 TCB Workshop Notes, the reported SAR was scaled to the 100% transmission duty factor to determine compliance. See Section 9.7 for the time domain plot and calculation for the duty factor of the device.
2. Head and Hotspot Bluetooth SAR were evaluated for BT BR tethering applications.

12 FCC MULTI-TX AND ANTENNA SAR CONSIDERATIONS

12.1 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.

12.2 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.

12.3 Head SAR Simultaneous Transmission Analysis

Per FCC KDB Publication 941225 D06v02r01, the devices edges with antennas more than 2.5 cm from edge are not required to be evaluated for SAR ("-").

(*) For test positions that were not required to be evaluated for WLAN SAR per FCC KDB publication 248227, the worst case WLAN SAR result for the applicable exposure conditions was used for simultaneous transmission analysis.

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

Table 12-1
Simultaneous Transmission Scenario with 2.4 GHz WLAN (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Head SAR	CDMA/EVDO BC10 (§90S)	0.240	0.469	0.003	0.709	0.243	0.712
	CDMA/EVDO BC0 (§22H)	0.297	0.469	0.003	0.766	0.300	0.769
	PCS CDMA/EVDO	0.156	0.469	0.003	0.625	0.159	0.628
	GSM 850	0.185	0.469	0.003	0.654	0.188	0.657
	GSM 1900	0.048	0.469	0.003	0.517	0.051	0.520
	UMTS 850	0.219	0.469	0.003	0.688	0.222	0.691
	UMTS 1750	0.156	0.469	0.003	0.625	0.159	0.628
	UMTS 1900	0.144	0.469	0.003	0.613	0.147	0.616
	LTE Band 71	0.102	0.469	0.003	0.571	0.105	0.574
	LTE Band 12	0.130	0.469	0.003	0.599	0.133	0.602
	LTE Band 13	0.175	0.469	0.003	0.644	0.178	0.647
	LTE Band 14	0.257	0.469	0.003	0.726	0.260	0.729
	LTE Band 26 (Cell)	0.235	0.469	0.003	0.704	0.238	0.707
	LTE Band 5 (Cell)	0.251	0.469	0.003	0.720	0.254	0.723
	LTE Band 66 (AWS)	0.175	0.469	0.003	0.644	0.178	0.647
	LTE Band 25 (PCS)	0.124	0.469	0.003	0.593	0.127	0.596
	LTE Band 2 (PCS)	0.140	0.469	0.003	0.609	0.143	0.612
	LTE Band 30	0.104	0.469	0.003	0.573	0.107	0.576
	LTE Band 7	0.140	0.469	0.003	0.609	0.143	0.612
	LTE Band 48	1.076	0.469	0.003	1.545	1.079	1.548
	LTE Band 41	0.085	0.469	0.003	0.554	0.088	0.557
	NR Band n71	0.133	0.469	0.003	0.602	0.136	0.605
	NR Band n5	0.258	0.469	0.003	0.727	0.261	0.730
	NR Band n66	0.157	0.469	0.003	0.626	0.160	0.629
	NR Band n2	0.158	0.469	0.003	0.627	0.161	0.630
	NR Band n41	1.079	0.469	0.003	1.548	1.082	**1.551**

Table 12-2
Simultaneous Transmission Scenario with 5 GHz WLAN (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Head SAR	CDMA/EVDO BC10 (§90S)	0.240	0.185	0.053	0.425	0.293	0.478
	CDMA/EVDO BC0 (§22H)	0.297	0.185	0.053	0.482	0.350	0.535
	PCS CDMA/EVDO	0.156	0.185	0.053	0.341	0.209	0.394
	GSM 850	0.185	0.185	0.053	0.370	0.238	0.423
	GSM 1900	0.048	0.185	0.053	0.233	0.101	0.286
	UMTS 850	0.219	0.185	0.053	0.404	0.272	0.457
	UMTS 1750	0.156	0.185	0.053	0.341	0.209	0.394
	UMTS 1900	0.144	0.185	0.053	0.329	0.197	0.382
	LTE Band 71	0.102	0.185	0.053	0.287	0.155	0.340
	LTE Band 12	0.130	0.185	0.053	0.315	0.183	0.368
	LTE Band 13	0.175	0.185	0.053	0.360	0.228	0.413
	LTE Band 14	0.257	0.185	0.053	0.442	0.310	0.495
	LTE Band 26 (Cell)	0.235	0.185	0.053	0.420	0.288	0.473
	LTE Band 5 (Cell)	0.251	0.185	0.053	0.436	0.304	0.489
	LTE Band 66 (AWS)	0.175	0.185	0.053	0.360	0.228	0.413
	LTE Band 25 (PCS)	0.124	0.185	0.053	0.309	0.177	0.362
	LTE Band 2 (PCS)	0.140	0.185	0.053	0.325	0.193	0.378
	LTE Band 30	0.104	0.185	0.053	0.289	0.157	0.342
	LTE Band 7	0.140	0.185	0.053	0.325	0.193	0.378
	LTE Band 48	1.076	0.185	0.053	1.261	1.129	1.314
	LTE Band 41	0.085	0.185	0.053	0.270	0.138	0.323
	NR Band n71	0.133	0.185	0.053	0.318	0.186	0.371
	NR Band n5	0.258	0.185	0.053	0.443	0.311	0.496
	NR Band n66	0.157	0.185	0.053	0.342	0.210	0.395
	NR Band n2	0.158	0.185	0.053	0.343	0.211	0.396
	NR Band n41	1.079	0.185	0.053	1.264	1.132	**1.317**

Table 12-3
Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO and 5 GHz WLAN MIMO (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO at 16 dBm SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Head SAR	CDMA/EVDO BC10 (§90S)	0.240	0.285	0.223	0.748
	CDMA/EVDO BC0 (§22H)	0.297	0.285	0.223	0.805
	PCS CDMA/EVDO	0.156	0.285	0.223	0.664
	GSM 850	0.185	0.285	0.223	0.693
	GSM 1900	0.048	0.285	0.223	0.556
	UMTS 850	0.219	0.285	0.223	0.727
	UMTS 1750	0.156	0.285	0.223	0.664
	UMTS 1900	0.144	0.285	0.223	0.652
	LTE Band 71	0.102	0.285	0.223	0.610
	LTE Band 12	0.130	0.285	0.223	0.638
	LTE Band 13	0.175	0.285	0.223	0.683
	LTE Band 14	0.257	0.285	0.223	0.765
	LTE Band 26 (Cell)	0.235	0.285	0.223	0.743
	LTE Band 5 (Cell)	0.251	0.285	0.223	0.759
	LTE Band 66 (AWS)	0.175	0.285	0.223	0.683
	LTE Band 25 (PCS)	0.124	0.285	0.223	0.632
	LTE Band 2 (PCS)	0.140	0.285	0.223	0.648
	LTE Band 30	0.104	0.285	0.223	0.612
	LTE Band 7	0.140	0.285	0.223	0.648
	LTE Band 48	1.076	0.285	0.223	1.584
	LTE Band 41	0.085	0.285	0.223	0.593
	NR Band n71	0.133	0.285	0.223	0.641
	NR Band n5	0.258	0.285	0.223	0.766
	NR Band n66	0.157	0.285	0.223	0.665
	NR Band n2	0.158	0.285	0.223	0.666
	NR Band n41	1.079	0.285	0.223	**1.587**

Table 12-4
Simultaneous Transmission Scenario with Bluetooth (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	CDMA/EVDO BC10 (§90S)	0.240	0.288	0.528
	CDMA/EVDO BC0 (§22H)	0.297	0.288	0.585
	PCS CDMA/EVDO	0.156	0.288	0.444
	GSM 850	0.185	0.288	0.473
	GSM 1900	0.048	0.288	0.336
	UMTS 850	0.219	0.288	0.507
	UMTS 1750	0.156	0.288	0.444
	UMTS 1900	0.144	0.288	0.432
	LTE Band 71	0.102	0.288	0.390
	LTE Band 12	0.130	0.288	0.418
	LTE Band 13	0.175	0.288	0.463
	LTE Band 14	0.257	0.288	0.545
	LTE Band 26 (Cell)	0.235	0.288	0.523
	LTE Band 5 (Cell)	0.251	0.288	0.539
	LTE Band 66 (AWS)	0.175	0.288	0.463
	LTE Band 25 (PCS)	0.124	0.288	0.412
	LTE Band 2 (PCS)	0.140	0.288	0.428
	LTE Band 30	0.104	0.288	0.392
	LTE Band 7	0.140	0.288	0.428
	LTE Band 48	1.076	0.288	1.364
	LTE Band 41	0.085	0.288	0.373
	NR Band n71	0.133	0.288	0.421
	NR Band n5	0.258	0.288	0.546
	NR Band n66	0.157	0.288	0.445
	NR Band n2	0.158	0.288	0.446
	NR Band n41	1.079	0.288	**1.367**

Table 12-5
Simultaneous Transmission Scenario with Bluetooth and 5 GHz WLAN SISO (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	4	1+2+3	1+2+4
Head SAR	CDMA/EVDO BC10 (§90S)	0.240	0.288	0.185	0.053	0.713	0.581
	CDMA/EVDO BC0 (§22H)	0.297	0.288	0.185	0.053	0.770	0.638
	PCS CDMA/EVDO	0.156	0.288	0.185	0.053	0.629	0.497
	GSM 850	0.185	0.288	0.185	0.053	0.658	0.526
	GSM 1900	0.048	0.288	0.185	0.053	0.521	0.389
	UMTS 850	0.219	0.288	0.185	0.053	0.692	0.560
	UMTS 1750	0.156	0.288	0.185	0.053	0.629	0.497
	UMTS 1900	0.144	0.288	0.185	0.053	0.617	0.485
	LTE Band 71	0.102	0.288	0.185	0.053	0.575	0.443
	LTE Band 12	0.130	0.288	0.185	0.053	0.603	0.471
	LTE Band 13	0.175	0.288	0.185	0.053	0.648	0.516
	LTE Band 14	0.257	0.288	0.185	0.053	0.730	0.598
	LTE Band 26 (Cell)	0.235	0.288	0.185	0.053	0.708	0.576
	LTE Band 5 (Cell)	0.251	0.288	0.185	0.053	0.724	0.592
	LTE Band 66 (AWS)	0.175	0.288	0.185	0.053	0.648	0.516
	LTE Band 25 (PCS)	0.124	0.288	0.185	0.053	0.597	0.465
	LTE Band 2 (PCS)	0.140	0.288	0.185	0.053	0.613	0.481
	LTE Band 30	0.104	0.288	0.185	0.053	0.577	0.445
	LTE Band 7	0.140	0.288	0.185	0.053	0.613	0.481
	LTE Band 48	1.076	0.288	0.185	0.053	1.549	1.417
	LTE Band 41	0.085	0.288	0.185	0.053	0.558	0.426
	NR Band n71	0.133	0.288	0.185	0.053	0.606	0.474
	NR Band n5	0.258	0.288	0.185	0.053	0.731	0.599
	NR Band n66	0.157	0.288	0.185	0.053	0.630	0.498
	NR Band n2	0.158	0.288	0.185	0.053	0.631	0.499
	NR Band n41	1.079	0.288	0.185	0.053	**1.552**	1.420

Table 12-6
Simultaneous Transmission Scenario with Bluetooth and 5 GHz WLAN MIMO (Held to Ear)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Head SAR	CDMA/EVDO BC10 (§90S)	0.240	0.288	0.223	0.528	0.463	0.751
	CDMA/EVDO BC0 (§22H)	0.297	0.288	0.223	0.585	0.520	0.808
	PCS CDMA/EVDO	0.156	0.288	0.223	0.444	0.379	0.667
	GSM 850	0.185	0.288	0.223	0.473	0.408	0.696
	GSM 1900	0.048	0.288	0.223	0.336	0.271	0.559
	UMTS 850	0.219	0.288	0.223	0.507	0.442	0.730
	UMTS 1750	0.156	0.288	0.223	0.444	0.379	0.667
	UMTS 1900	0.144	0.288	0.223	0.432	0.367	0.655
	LTE Band 71	0.102	0.288	0.223	0.390	0.325	0.613
	LTE Band 12	0.130	0.288	0.223	0.418	0.353	0.641
	LTE Band 13	0.175	0.288	0.223	0.463	0.398	0.686
	LTE Band 14	0.257	0.288	0.223	0.545	0.480	0.768
	LTE Band 26 (Cell)	0.235	0.288	0.223	0.523	0.458	0.746
	LTE Band 5 (Cell)	0.251	0.288	0.223	0.539	0.474	0.762
	LTE Band 66 (AWS)	0.175	0.288	0.223	0.463	0.398	0.686
	LTE Band 25 (PCS)	0.124	0.288	0.223	0.412	0.347	0.635
	LTE Band 2 (PCS)	0.140	0.288	0.223	0.428	0.363	0.651
	LTE Band 30	0.104	0.288	0.223	0.392	0.327	0.615
	LTE Band 7	0.140	0.288	0.223	0.428	0.363	0.651
	LTE Band 48	1.076	0.288	0.223	1.364	1.299	1.587
	LTE Band 41	0.085	0.288	0.223	0.373	0.308	0.596
	NR Band n71	0.133	0.288	0.223	0.421	0.356	0.644
	NR Band n5	0.258	0.288	0.223	0.546	0.481	0.769
	NR Band n66	0.157	0.288	0.223	0.445	0.380	0.668
	NR Band n2	0.158	0.288	0.223	0.446	0.381	0.669
	NR Band n41	1.079	0.288	0.223	1.367	1.302	**1.590**

12.4 Body-Worn Simultaneous Transmission Analysis

Table 12-7
Simultaneous Transmission Scenario with 2.4 GHz WLAN (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Body-Worn	CDMA BC10 (§90S)	0.261	0.095	0.074	0.356	0.335	0.430
	CDMA BC0 (§22H)	0.314	0.095	0.074	0.409	0.388	0.483
	PCS CDMA	0.929	0.095	0.074	1.024	1.003	1.098
	GSM 850	0.195	0.095	0.074	0.290	0.269	0.364
	GSM 1900	0.340	0.095	0.074	0.435	0.414	0.509
	UMTS 850	0.278	0.095	0.074	0.373	0.352	0.447
	UMTS 1750	1.024	0.095	0.074	1.119	1.098	**1.193**
	UMTS 1900	0.921	0.095	0.074	1.016	0.995	1.090
	LTE Band 71	0.172	0.095	0.074	0.267	0.246	0.341
	LTE Band 12	0.203	0.095	0.074	0.298	0.277	0.372
	LTE Band 13	0.283	0.095	0.074	0.378	0.357	0.452
	LTE Band 14	0.340	0.095	0.074	0.435	0.414	0.509
	LTE Band 26 (Cell)	0.332	0.095	0.074	0.427	0.406	0.501
	LTE Band 5 (Cell)	0.283	0.095	0.074	0.378	0.357	0.452
	LTE Band 66 (AWS)	0.958	0.095	0.074	1.053	1.032	1.127
	LTE Band 25 (PCS)	0.854	0.095	0.074	0.949	0.928	1.023
	LTE Band 2 (PCS)	0.751	0.095	0.074	0.846	0.825	0.920
	LTE Band 30	0.669	0.095	0.074	0.764	0.743	0.838
	LTE Band 7	0.442	0.095	0.074	0.537	0.516	0.611
	LTE Band 48	0.253	0.095	0.074	0.348	0.327	0.422
	LTE Band 41	0.243	0.095	0.074	0.338	0.317	0.412
	NR Band n71	0.227	0.095	0.074	0.322	0.301	0.396
	NR Band n5	0.300	0.095	0.074	0.395	0.374	0.469
	NR Band n66	0.799	0.095	0.074	0.894	0.873	0.968
	NR Band n2	0.699	0.095	0.074	0.794	0.773	0.868
	NR Band n41	0.083	0.095	0.074	0.178	0.157	0.252

Table 12-8
Simultaneous Transmission Scenario with 5 GHz WLAN SISO (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Body-Worn	CDMA BC10 (§90S)	0.261	0.207	0.396	0.468	0.657
	CDMA BC0 (§22H)	0.314	0.207	0.396	0.521	0.710
	PCS CDMA	0.929	0.207	0.396	1.136	1.325
	GSM 850	0.195	0.207	0.396	0.402	0.591
	GSM 1900	0.340	0.207	0.396	0.547	0.736
	UMTS 850	0.278	0.207	0.396	0.485	0.674
	UMTS 1750	1.024	0.207	0.396	1.231	**1.420**
	UMTS 1900	0.921	0.207	0.396	1.128	1.317
	LTE Band 71	0.172	0.207	0.396	0.379	0.568
	LTE Band 12	0.203	0.207	0.396	0.410	0.599
	LTE Band 13	0.283	0.207	0.396	0.490	0.679
	LTE Band 14	0.340	0.207	0.396	0.547	0.736
	LTE Band 26 (Cell)	0.332	0.207	0.396	0.539	0.728
	LTE Band 5 (Cell)	0.283	0.207	0.396	0.490	0.679
	LTE Band 66 (AWS)	0.958	0.207	0.396	1.165	1.354
	LTE Band 25 (PCS)	0.854	0.207	0.396	1.061	1.250
	LTE Band 2 (PCS)	0.751	0.207	0.396	0.958	1.147
	LTE Band 30	0.669	0.207	0.396	0.876	1.065
	LTE Band 7	0.442	0.207	0.396	0.649	0.838
	LTE Band 48	0.253	0.207	0.396	0.460	0.649
	LTE Band 41	0.243	0.207	0.396	0.450	0.639
	NR Band n71	0.227	0.207	0.396	0.434	0.623
	NR Band n5	0.300	0.207	0.396	0.507	0.696
	NR Band n66	0.799	0.207	0.396	1.006	1.195
	NR Band n2	0.699	0.207	0.396	0.906	1.095
	NR Band n41	0.083	0.207	0.396	0.290	0.479

Table 12-9
Simultaneous Transmission Scenario with 5 GHz WLAN MIMO (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	CDMA BC10 (§90S)	0.261	0.485	0.746
	CDMA BC0 (§22H)	0.314	0.485	0.799
	PCS CDMA	0.929	0.485	1.414
	GSM 850	0.195	0.485	0.680
	GSM 1900	0.340	0.485	0.825
	UMTS 850	0.278	0.485	0.763
	UMTS 1750	1.024	0.485	**1.509**
	UMTS 1900	0.921	0.485	1.406
	LTE Band 71	0.172	0.485	0.657
	LTE Band 12	0.203	0.485	0.688
	LTE Band 13	0.283	0.485	0.768
	LTE Band 14	0.340	0.485	0.825
	LTE Band 26 (Cell)	0.332	0.485	0.817
	LTE Band 5 (Cell)	0.283	0.485	0.768
	LTE Band 66 (AWS)	0.958	0.485	1.443
	LTE Band 25 (PCS)	0.854	0.485	1.339
	LTE Band 2 (PCS)	0.751	0.485	1.236
	LTE Band 30	0.669	0.485	1.154
	LTE Band 7	0.442	0.485	0.927
	LTE Band 48	0.253	0.485	0.738
	LTE Band 41	0.243	0.485	0.728
	NR Band n71	0.227	0.485	0.712
	NR Band n5	0.300	0.485	0.785
	NR Band n66	0.799	0.485	1.284
	NR Band n2	0.699	0.485	1.184
	NR Band n41	0.083	0.485	0.568

Table 12-10
Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO and 5 GHz WLAN MIMO (Body-Worn at 1.5 cm)

Configuration	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Back Side	CDMA BC10 (§90S)	0.261	0.095	0.074	0.161	0.591
	CDMA BC0 (§22H)	0.314	0.095	0.074	0.161	0.644
	PCS CDMA	0.929	0.095	0.074	0.161	1.259
	GPRS 850	0.195	0.095	0.074	0.161	0.525
	GPRS 1900	0.340	0.095	0.074	0.161	0.670
	UMTS 850	0.278	0.095	0.074	0.161	0.608
	UMTS 1750	1.024	0.095	0.074	0.161	**1.354**
	UMTS 1900	0.921	0.095	0.074	0.161	1.251
	LTE Band 71	0.172	0.095	0.074	0.161	0.502
	LTE Band 12	0.203	0.095	0.074	0.161	0.533
	LTE Band 13	0.283	0.095	0.074	0.161	0.613
	LTE Band 14	0.340	0.095	0.074	0.161	0.670
	LTE Band 26 (Cell)	0.332	0.095	0.074	0.161	0.662
	LTE Band 5 (Cell)	0.283	0.095	0.074	0.161	0.613
	LTE Band 66 (AWS)	0.958	0.095	0.074	0.161	1.288
	LTE Band 25 (PCS)	0.854	0.095	0.074	0.161	1.184
	LTE Band 2 (PCS)	0.751	0.095	0.074	0.161	1.081
	LTE Band 30	0.669	0.095	0.074	0.161	0.999
	LTE Band 7	0.442	0.095	0.074	0.161	0.772
	LTE Band 48	0.253	0.095	0.074	0.161	0.583
	LTE Band 41	0.243	0.095	0.074	0.161	0.573
	NR Band n71	0.227	0.095	0.074	0.161	0.557
	NR Band n5 (Cell)	0.300	0.095	0.074	0.161	0.630
	NR Band n66 (AWS)	0.799	0.095	0.074	0.161	1.129
	NR Band n2 (PCS)	0.699	0.095	0.074	0.161	1.029
	NR Band n41	0.083	0.095	0.074	0.161	0.413

Table 12-11
Simultaneous Transmission Scenario with Bluetooth (Body-Worn at 1.5 cm)

Configuration	Mode	2G/3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Back Side	CDMA BC10 (§90S)	0.261	0.022	0.283
	CDMA BC0 (§22H)	0.314	0.022	0.336
	PCS CDMA	0.929	0.022	0.951
	GPRS 850	0.195	0.022	0.217
	GPRS 1900	0.340	0.022	0.362
	UMTS 850	0.278	0.022	0.300
	UMTS 1750	1.024	0.022	**1.046**
	UMTS 1900	0.921	0.022	0.943
	LTE Band 71	0.172	0.022	0.194
	LTE Band 12	0.203	0.022	0.225
	LTE Band 13	0.283	0.022	0.305
	LTE Band 14	0.340	0.022	0.362
	LTE Band 26 (Cell)	0.332	0.022	0.354
	LTE Band 5 (Cell)	0.283	0.022	0.305
	LTE Band 66 (AWS)	0.958	0.022	0.980
	LTE Band 25 (PCS)	0.854	0.022	0.876
	LTE Band 2 (PCS)	0.751	0.022	0.773
	LTE Band 30	0.669	0.022	0.691
	LTE Band 7	0.442	0.022	0.464
	LTE Band 48	0.253	0.022	0.275
	LTE Band 41	0.243	0.022	0.265
	NR Band n71	0.227	0.022	0.249
	NR Band n5 (Cell)	0.300	0.022	0.322
	NR Band n66 (AWS)	0.799	0.022	0.821
	NR Band n2 (PCS)	0.699	0.022	0.721
	NR Band n41	0.083	0.022	0.105

Table 12-12
Simultaneous Transmission Scenario with Bluetooth and 5 GHz WLAN (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	4	1+2+3	1+2+4
Body-Worn	CDMA BC10 (§90S)	0.261	0.022	0.207	0.396	0.490	0.679
	CDMA BC0 (§22H)	0.314	0.022	0.207	0.396	0.543	0.732
	PCS CDMA	0.929	0.022	0.207	0.396	1.158	1.347
	GSM 850	0.195	0.022	0.207	0.396	0.424	0.613
	GSM 1900	0.340	0.022	0.207	0.396	0.569	0.758
	UMTS 850	0.278	0.022	0.207	0.396	0.507	0.696
	UMTS 1750	1.024	0.022	0.207	0.396	1.253	**1.442**
	UMTS 1900	0.921	0.022	0.207	0.396	1.150	1.339
	LTE Band 71	0.172	0.022	0.207	0.396	0.401	0.590
	LTE Band 12	0.203	0.022	0.207	0.396	0.432	0.621
	LTE Band 13	0.283	0.022	0.207	0.396	0.512	0.701
	LTE Band 14	0.340	0.022	0.207	0.396	0.569	0.758
	LTE Band 26 (Cell)	0.332	0.022	0.207	0.396	0.561	0.750
	LTE Band 5 (Cell)	0.283	0.022	0.207	0.396	0.512	0.701
	LTE Band 66 (AWS)	0.958	0.022	0.207	0.396	1.187	1.376
	LTE Band 25 (PCS)	0.854	0.022	0.207	0.396	1.083	1.272
	LTE Band 2 (PCS)	0.751	0.022	0.207	0.396	0.980	1.169
	LTE Band 30	0.669	0.022	0.207	0.396	0.898	1.087
	LTE Band 7	0.442	0.022	0.207	0.396	0.671	0.860
	LTE Band 48	0.253	0.022	0.207	0.396	0.482	0.671
	LTE Band 41	0.243	0.022	0.207	0.396	0.472	0.661
	NR Band n71	0.227	0.022	0.207	0.396	0.456	0.645
	NR Band n5	0.300	0.022	0.207	0.396	0.529	0.718
	NR Band n66	0.799	0.022	0.207	0.396	1.028	1.217
	NR Band n2	0.699	0.022	0.207	0.396	0.928	1.117
	NR Band n41	0.083	0.022	0.207	0.396	0.312	0.501

Configuration	Mode	3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Back Side	CDMA BC10 (§90S)	0.261	0.022	0.485	0.768
	CDMA BC0 (§22H)	0.314	0.022	0.485	0.821
	PCS CDMA	0.929	0.022	0.485	1.436
	GPRS 850	0.195	0.022	0.485	0.702
	GPRS 1900	0.340	0.022	0.485	0.847
	UMTS 850	0.278	0.022	0.485	0.785
	UMTS 1750	1.024	0.022	0.485	**1.531**
	UMTS 1900	0.921	0.022	0.485	1.428
	LTE Band 71	0.172	0.022	0.485	0.679
	LTE Band 12	0.203	0.022	0.485	0.710
	LTE Band 13	0.283	0.022	0.485	0.790
	LTE Band 14	0.340	0.022	0.485	0.847
	LTE Band 26 (Cell)	0.332	0.022	0.485	0.839
	LTE Band 5 (Cell)	0.283	0.022	0.485	0.790
	LTE Band 66 (AWS)	0.958	0.022	0.485	1.465
	LTE Band 25 (PCS)	0.854	0.022	0.485	1.361
	LTE Band 2 (PCS)	0.751	0.022	0.485	1.258
	LTE Band 30	0.669	0.022	0.485	1.176
	LTE Band 7	0.442	0.022	0.485	0.949
	LTE Band 48	0.253	0.022	0.485	0.760
	LTE Band 41	0.243	0.022	0.485	0.750
	NR Band n71	0.227	0.022	0.485	0.734
	NR Band n5 (Cell)	0.300	0.022	0.485	0.807
	NR Band n66 (AWS)	0.799	0.022	0.485	1.306
	NR Band n2 (PCS)	0.699	0.022	0.485	1.206
	NR Band n41	0.083	0.022	0.485	0.590

12.5 Hotspot SAR Simultaneous Transmission Analysis

Table 12-13
Simultaneous Transmission Scenario with 2.4 GHz WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	1+2	1+3	1+2+3
Hotspot SAR	EVDO BC10 (§90S)	0.564	0.330	0.196	0.894	0.760	1.090
	EVDO BC0 (§22H)	0.773	0.330	0.196	1.103	0.969	1.299
	PCS EVDO	1.252	0.330	0.196	**1.582**	1.448	See Table Below
	GPRS 850	0.561	0.330	0.196	0.891	0.757	1.087
	GPRS 1900	0.791	0.330	0.196	1.121	0.987	1.317
	UMTS 850	0.677	0.330	0.196	1.007	0.873	1.203
	UMTS 1750	0.931	0.330	0.196	1.261	1.127	1.457
	UMTS 1900	1.085	0.330	0.196	1.415	1.281	See Table Below
	LTE Band 71	0.211	0.330	0.196	0.541	0.407	0.737
	LTE Band 12	0.296	0.330	0.196	0.626	0.492	0.822
	LTE Band 13	0.472	0.330	0.196	0.802	0.668	0.998
	LTE Band 14	0.616	0.330	0.196	0.946	0.812	1.142
	LTE Band 26 (Cell)	0.764	0.330	0.196	1.094	0.960	1.290
	LTE Band 5 (Cell)	0.664	0.330	0.196	0.994	0.860	1.190
	LTE Band 66 (AWS)	1.236	0.330	0.196	1.566	1.432	See Table Below
	LTE Band 25 (PCS)	1.142	0.330	0.196	1.472	1.338	See Table Below
	LTE Band 2 (PCS)	1.012	0.330	0.196	1.342	1.208	1.538
	LTE Band 30	1.083	0.330	0.196	1.413	1.279	See Table Below
	LTE Band 7	1.005	0.330	0.196	1.335	1.201	1.531
	LTE Band 48	0.846	0.330	0.196	1.176	1.042	1.372
	LTE Band 41	0.854	0.330	0.196	1.184	1.050	1.380
	NR Band n71	0.284	0.330	0.196	0.614	0.480	0.810
	NR Band n5	0.684	0.330	0.196	1.014	0.880	1.210
	NR Band n66	1.253	0.330	0.196	1.583	1.449	See Table Below
	NR Band n2	0.906	0.330	0.196	1.236	1.102	1.432
	NR Band n41	0.191	0.330	0.196	0.521	0.387	0.717

Simult Tx	Configuration	PCS EVDO SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.582	0.330*	0.196	1.108
	Front	0.466	0.330*	0.196*	0.992
	Top	-	0.330	0.196*	0.526
	Bottom	1.252	-	-	**1.252**
	Right	0.050	-	-	0.050
	Left	0.061	0.330*	0.196*	0.587

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.545	0.330*	0.196	1.071
	Front	0.477	0.330*	0.196*	1.003
	Top	-	0.330	0.196*	0.526
	Bottom	1.085	-	-	**1.085**
	Right	0.059	-	-	0.059
	Left	0.062	0.330*	0.196*	0.588

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.696	0.330*	0.196	1.222
	Front	0.589	0.330*	0.196*	1.115
	Top	-	0.330	0.196*	0.526
	Bottom	1.236	-	-	**1.236**
	Right	0.097	-	-	0.097
	Left	0.096	0.330*	0.196*	0.622

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.548	0.330*	0.196	1.074
	Front	0.410	0.330*	0.196*	0.936
	Top	-	0.330	0.196*	0.526
	Bottom	1.142	-	-	**1.142**
	Right	0.056	-	-	0.056
	Left	0.058	0.330*	0.196*	0.584

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.506	0.330*	0.196	1.032
	Front	0.431	0.330*	0.196*	0.957
	Top	-	0.330	0.196*	0.526
	Bottom	1.083	-	-	**1.083**
	Right	0.028	-	-	0.028
	Left	0.035	0.330*	0.196*	0.561

Simult Tx	Configuration	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.629	0.330*	0.196	1.155
	Front	0.579	0.330*	0.196*	1.105
	Top	-	0.330	0.196*	0.526
	Bottom	1.253	-	-	**1.253**
	Right	0.080	-	-	0.080
	Left	0.090	0.330*	0.196*	0.616

Table 12-14
Simultaneous Transmission Scenario with 5 GHz WLAN SISO (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Hotspot SAR	EVDO BC10 (§90S)	0.564	0.179	0.489	0.743	1.053
	EVDO BC0 (§22H)	0.773	0.179	0.489	0.952	1.262
	PCS EVDO	1.252	0.179	0.489	1.431	See Table Below
	GPRS 850	0.561	0.179	0.489	0.740	1.050
	GPRS 1900	0.791	0.179	0.489	0.970	1.280
	UMTS 850	0.677	0.179	0.489	0.856	1.166
	UMTS 1750	0.931	0.179	0.489	1.110	1.420
	UMTS 1900	1.085	0.179	0.489	1.264	**1.574**
	LTE Band 71	0.211	0.179	0.489	0.390	0.700
	LTE Band 12	0.296	0.179	0.489	0.475	0.785
	LTE Band 13	0.472	0.179	0.489	0.651	0.961
	LTE Band 14	0.616	0.179	0.489	0.795	1.105
	LTE Band 26 (Cell)	0.764	0.179	0.489	0.943	1.253
	LTE Band 5 (Cell)	0.664	0.179	0.489	0.843	1.153
	LTE Band 66 (AWS)	1.236	0.179	0.489	1.415	See Table Below
	LTE Band 25 (PCS)	1.142	0.179	0.489	1.321	See Table Below
	LTE Band 2 (PCS)	1.012	0.179	0.489	1.191	1.501
	LTE Band 30	1.083	0.179	0.489	1.262	1.572
	LTE Band 7	1.005	0.179	0.489	1.184	1.494
	LTE Band 48	0.846	0.179	0.489	1.025	1.335
	LTE Band 41	0.854	0.179	0.489	1.033	1.343
	NR Band n71	0.284	0.179	0.489	0.463	0.773
	NR Band n5	0.684	0.179	0.489	0.863	1.173
	NR Band n66	1.253	0.179	0.489	1.432	See Table Below
	NR Band n2	0.906	0.179	0.489	1.085	1.395
	NR Band n41	0.191	0.179	0.489	0.370	0.680

Simult Tx	Configuration	PCS EVDO SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.582	0.489	1.071
	Front	0.466	0.010	0.476
	Top	-	0.489*	0.489
	Bottom	1.252	-	**1.252**
	Right	0.050	-	0.050
	Left	0.061	0.120	0.181

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.696	0.489	1.185
	Front	0.589	0.010	0.599
	Top	-	0.489*	0.489
	Bottom	1.236	-	**1.236**
	Right	0.097	-	0.097
	Left	0.096	0.120	0.216

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.548	0.489	1.037
	Front	0.410	0.010	0.420
	Top	-	0.489*	0.489
	Bottom	1.142	-	**1.142**
	Right	0.056	-	0.056
	Left	0.058	0.120	0.178

Simult Tx	Configuration	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+3
Hotspot SAR	Back	0.629	0.489	1.118
	Front	0.579	0.010	0.589
	Top	-	0.489*	0.489
	Bottom	1.253	-	**1.253**
	Right	0.080	-	0.080
	Left	0.090	0.120	0.210

Table 12-15
Simultaneous Transmission Scenario with 5 GHz WLAN MIMO (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	EVDO BC10 (§90S)	0.564	0.522	1.086
	EVDO BC0 (§22H)	0.773	0.522	1.295
	PCS EVDO	1.252	0.522	See Table Below
	GPRS 850	0.561	0.522	1.083
	GPRS 1900	0.791	0.522	1.313
	UMTS 850	0.677	0.522	1.199
	UMTS 1750	0.931	0.522	1.453
	UMTS 1900	1.085	0.522	See Table Below
	LTE Band 71	0.211	0.522	0.733
	LTE Band 12	0.296	0.522	0.818
	LTE Band 13	0.472	0.522	0.994
	LTE Band 14	0.616	0.522	1.138
	LTE Band 26 (Cell)	0.764	0.522	1.286
	LTE Band 5 (Cell)	0.664	0.522	1.186
	LTE Band 66 (AWS)	1.236	0.522	See Table Below
	LTE Band 25 (PCS)	1.142	0.522	See Table Below
	LTE Band 2 (PCS)	1.012	0.522	**1.534**
	LTE Band 30	1.083	0.522	See Table Below
	LTE Band 7	1.005	0.522	1.527
	LTE Band 48	0.846	0.522	1.368
	LTE Band 41	0.854	0.522	1.376
	NR Band n71	0.284	0.522	0.806
	NR Band n5	0.684	0.522	1.206
	NR Band n66	1.253	0.522	See Table Below
	NR Band n2	0.906	0.522	1.428
	NR Band n41	0.191	0.522	0.713

Simult Tx	Configuration	PCS EVDO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.582	0.522	1.104
	Front	0.466	0.068	0.534
	Top	-	0.522*	0.522
	Bottom	1.252	-	**1.252**
	Right	0.050	-	0.050
	Left	0.061	0.251	0.312

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.545	0.522	1.067
	Front	0.477	0.068	0.545
	Top	-	0.522*	0.522
	Bottom	1.085	-	**1.085**
	Right	0.059	-	0.059
	Left	0.062	0.251	0.313

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.696	0.522	1.218
	Front	0.589	0.068	0.657
	Top	-	0.522*	0.522
	Bottom	1.236	-	**1.236**
	Right	0.097	-	0.097
	Left	0.096	0.251	0.347

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.548	0.522	1.070
	Front	0.410	0.068	0.478
	Top	-	0.522*	0.522
	Bottom	1.142	-	**1.142**
	Right	0.056	-	0.056
	Left	0.058	0.251	0.309

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.506	0.522	1.028
	Front	0.431	0.068	0.499
	Top	-	0.522*	0.522
	Bottom	1.083	-	**1.083**
	Right	0.028	-	0.028
	Left	0.035	0.251	0.286

Simult Tx	Configuration	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.629	0.522	1.151
	Front	0.579	0.068	0.647
	Top	-	0.522*	0.522
	Bottom	1.253	-	**1.253**
	Right	0.080	-	0.080
	Left	0.090	0.251	0.341

Table 12-16
Simultaneous Transmission Scenario with 2.4 GHz WLAN MIMO and 5 GHz WLAN MIMO (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	2.4 GHz WLAN MIMO at 16 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	EVDO BC10 (§90S)	0.564	0.156	0.253	0.973
	EVDO BC0 (§22H)	0.773	0.156	0.253	1.182
	PCS EVDO	1.252	0.156	0.253	See Table Below
	GPRS 850	0.561	0.156	0.253	0.970
	GPRS 1900	0.791	0.156	0.253	1.200
	UMTS 850	0.677	0.156	0.253	1.086
	UMTS 1750	0.931	0.156	0.253	1.340
	UMTS 1900	1.085	0.156	0.253	1.494
	LTE Band 71	0.211	0.156	0.253	0.620
	LTE Band 12	0.296	0.156	0.253	0.705
	LTE Band 13	0.472	0.156	0.253	0.881
	LTE Band 14	0.616	0.156	0.253	1.025
	LTE Band 26 (Cell)	0.764	0.156	0.253	1.173
	LTE Band 5 (Cell)	0.664	0.156	0.253	1.073
	LTE Band 66 (AWS)	1.236	0.156	0.253	See Table Below
	LTE Band 25 (PCS)	1.142	0.156	0.253	**1.551**
	LTE Band 2 (PCS)	1.012	0.156	0.253	1.421
	LTE Band 30	1.083	0.156	0.253	1.492
	LTE Band 7	1.005	0.156	0.253	1.414
	LTE Band 48	0.846	0.156	0.253	1.255
	LTE Band 41	0.854	0.156	0.253	1.263
	NR Band n71	0.284	0.156	0.253	0.693
	NR Band n5	0.684	0.156	0.253	1.093
	NR Band n66	1.253	0.156	0.253	See Table Below
	NR Band n2	0.906	0.156	0.253	1.315
	NR Band n41	0.191	0.156	0.253	0.600

Simult Tx	Configuration	PCS EVDO SAR (W/kg)	2.4 GHz WLAN MIMO at 16 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.582	0.138	0.253	0.973
	Front	0.466	0.059	0.013	0.538
	Top	-	0.156	0.029	0.185
	Bottom	1.252	-	-	**1.252**
	Right	0.050	-	-	0.050
	Left	0.061	0.050	0.253*	0.364

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO at 16 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.696	0.138	0.253	1.087
	Front	0.589	0.059	0.013	0.661
	Top	-	0.156	0.029	0.185
	Bottom	1.236	-	-	**1.236**
	Right	0.097	-	-	0.097
	Left	0.096	0.050	0.253*	0.399

Simult Tx	Configuration	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO at 16 dBm SAR (W/kg)	5 GHz WLAN MIMO at 16 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.629	0.138	0.253	1.020
	Front	0.579	0.059	0.013	0.651
	Top	-	0.156	0.029	0.185
	Bottom	1.253	-	-	**1.253**
	Right	0.080	-	-	0.080
	Left	0.090	0.050	0.253*	0.393

Table 12-17
Simultaneous Transmission Scenario with Bluetooth (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G SAR (W/kg)	Bluetooth SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	EVDO BC10 (§90S)	0.564	0.071	0.635
	EVDO BC0 (§22H)	0.773	0.071	0.844
	PCS EVDO	1.252	0.071	**1.323**
	GPRS 850	0.561	0.071	0.632
	GPRS 1900	0.791	0.071	0.862
	UMTS 850	0.677	0.071	0.748
	UMTS 1750	0.931	0.071	1.002
	UMTS 1900	1.085	0.071	1.156
	LTE Band 71	0.211	0.071	0.282
	LTE Band 12	0.296	0.071	0.367
	LTE Band 13	0.472	0.071	0.543
	LTE Band 14	0.616	0.071	0.687
	LTE Band 26 (Cell)	0.764	0.071	0.835
	LTE Band 5 (Cell)	0.664	0.071	0.735
	LTE Band 66 (AWS)	1.236	0.071	1.307
	LTE Band 25 (PCS)	1.142	0.071	1.213
	LTE Band 2 (PCS)	1.012	0.071	1.083
	LTE Band 30	1.083	0.071	1.154
	LTE Band 7	1.005	0.071	1.076
	LTE Band 48	0.846	0.071	0.917
	LTE Band 41	0.854	0.071	0.925
	NR Band n71	0.284	0.071	0.355
	NR Band n5	0.684	0.071	0.755
	NR Band n66	1.253	0.071	1.324
	NR Band n2	0.906	0.071	0.977
	NR Band n41	0.191	0.071	0.262

Table 12-18
Simultaneous Transmission Scenario with Bluetooth and 5 GHz WLAN (Hotspot at 1.0 cm)

Simult Tx	Configuration	CDMA BC10 (§90S) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.564	0.041	0.179	0.489	0.784	1.094	**1.273**
	Front	0.379	0.029	0.043	0.010	0.451	0.418	0.461
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.309	-	-	-	0.309	0.309	0.309
	Right	0.338	-	-	-	0.338	0.338	0.338
	Left	0.143	0.016	0.179*	0.120	0.338	0.279	0.458

Simult Tx	Configuration	CDMA BC0 (§22H) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.773	0.041	0.179	0.489	0.993	1.303	**1.482**
	Front	0.502	0.029	0.043	0.010	0.574	0.541	0.584
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.420	-	-	-	0.420	0.420	0.420
	Right	0.380	-	-	-	0.380	0.380	0.380
	Left	0.144	0.016	0.179*	0.120	0.339	0.280	0.459

Simult Tx	Configuration	PCS CDMA SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.582	0.041	0.179	0.489	0.802	1.112	**1.291**
	Front	0.466	0.029	0.043	0.010	0.538	0.505	0.548
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	1.252	-	-	-	1.252	1.252	1.252
	Right	0.050	-	-	-	0.050	0.050	0.050
	Left	0.061	0.016	0.179*	0.120	0.256	0.197	0.376

Simult Tx	Configuration	GPRS 850 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.561	0.041	0.179	0.489	0.781	1.091	**1.270**
	Front	0.373	0.029	0.043	0.010	0.445	0.412	0.455
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.337	-	-	-	0.337	0.337	0.337
	Right	0.299	-	-	-	0.299	0.299	0.299
	Left	0.108	0.016	0.179*	0.120	0.303	0.244	0.423

Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.332	0.041	0.179	0.489	0.552	0.862	**1.041**
	Front	0.238	0.029	0.043	0.010	0.310	0.277	0.320
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.791	-	-	-	0.791	0.791	0.791
	Right	0.040	-	-	-	0.040	0.040	0.040
	Left	0.035	0.016	0.179*	0.120	0.230	0.171	0.350

Simult Tx	Configuration	UMTS 850 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.677	0.041	0.179	0.489	0.897	1.207	**1.386**
	Front	0.428	0.029	0.043	0.010	0.500	0.467	0.510
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.365	-	-	-	0.365	0.365	0.365
	Right	0.311	-	-	-	0.311	0.311	0.311
	Left	0.116	0.016	0.179*	0.120	0.311	0.252	0.431

Simult Tx	Configuration	UMTS 1750 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.628	0.041	0.179	0.489	0.848	1.158	**1.337**
	Front	0.468	0.029	0.043	0.010	0.540	0.507	0.550
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.931	-	-	-	0.931	0.931	0.931
	Right	0.077	-	-	-	0.077	0.077	0.077
	Left	0.080	0.016	0.179*	0.120	0.275	0.216	0.395

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.545	0.041	0.179	0.489	0.765	1.075	**1.254**
	Front	0.477	0.029	0.043	0.010	0.549	0.516	0.559
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	1.085	-	-	-	1.085	1.085	1.085
	Right	0.059	-	-	-	0.059	0.059	0.059
	Left	0.062	0.016	0.179*	0.120	0.257	0.198	0.377

Simult Tx	Configuration	LTE Band 71 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.211	0.041	0.179	0.489	0.431	0.741	**0.920**
	Front	0.190	0.029	0.043	0.010	0.262	0.229	0.272
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.085	-	-	-	0.085	0.085	0.085
	Right	0.165	-	-	-	0.165	0.165	0.165
	Left	0.134	0.016	0.179*	0.120	0.329	0.270	0.449

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.296	0.041	0.179	0.489	0.516	0.826	**1.005**
	Front	0.208	0.029	0.043	0.010	0.280	0.247	0.290
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.116	-	-	-	0.116	0.116	0.116
	Right	0.207	-	-	-	0.207	0.207	0.207
	Left	0.149	0.016	0.179*	0.120	0.344	0.285	0.464

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.472	0.041	0.179	0.489	0.692	1.002	**1.181**
	Front	0.357	0.029	0.043	0.010	0.429	0.396	0.439
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.265	-	-	-	0.265	0.265	0.265
	Right	0.398	-	-	-	0.398	0.398	0.398
	Left	0.201	0.016	0.179*	0.120	0.396	0.337	0.516

Simult Tx	Configuration	LTE Band 14 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.616	0.041	0.179	0.489	0.836	1.146	**1.325**
	Front	0.420	0.029	0.043	0.010	0.492	0.459	0.502
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.357	-	-	-	0.357	0.357	0.357
	Right	0.462	-	-	-	0.462	0.462	0.462
	Left	0.204	0.016	0.179*	0.120	0.399	0.340	0.519

Simult Tx	Configuration	LTE Band 26 (Cell) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.764	0.041	0.179	0.489	0.984	1.294	**1.473**
	Front	0.537	0.029	0.043	0.010	0.609	0.576	0.619
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.417	-	-	-	0.417	0.417	0.417
	Right	0.347	-	-	-	0.347	0.347	0.347
	Left	0.123	0.016	0.179*	0.120	0.318	0.259	0.438

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.664	0.041	0.179	0.489	0.884	1.194	**1.373**
	Front	0.487	0.029	0.043	0.010	0.559	0.526	0.569
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.399	-	-	-	0.399	0.399	0.399
	Right	0.328	-	-	-	0.328	0.328	0.328
	Left	0.114	0.016	0.179*	0.120	0.309	0.250	0.429

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.696	0.041	0.179	0.489	0.916	1.226	**1.405**
	Front	0.589	0.029	0.043	0.010	0.661	0.628	0.671
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	1.236	-	-	-	1.236	1.236	1.236
	Right	0.097	-	-	-	0.097	0.097	0.097
	Left	0.096	0.016	0.179*	0.120	0.291	0.232	0.411

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.548	0.041	0.179	0.489	0.768	1.078	**1.257**
	Front	0.410	0.029	0.043	0.010	0.482	0.449	0.492
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	1.142	-	-	-	1.142	1.142	1.142
	Right	0.056	-	-	-	0.056	0.056	0.056
	Left	0.058	0.016	0.179*	0.120	0.253	0.194	0.373

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.435	0.041	0.179	0.489	0.655	0.965	**1.144**
	Front	0.414	0.029	0.043	0.010	0.486	0.453	0.496
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	1.012	-	-	-	1.012	1.012	1.012
	Right	0.051	-	-	-	0.051	0.051	0.051
	Left	0.054	0.016	0.179*	0.120	0.249	0.190	0.369

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.506	0.041	0.179	0.489	0.726	1.036	**1.215**
	Front	0.431	0.029	0.043	0.010	0.503	0.470	0.513
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	1.083	-	-	-	1.083	1.083	1.083
	Right	0.028	-	-	-	0.028	0.028	0.028
	Left	0.035	0.016	0.179*	0.120	0.230	0.171	0.350

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.392	0.041	0.179	0.489	0.612	0.922	1.101
	Front	0.209	0.029	0.043	0.010	0.281	0.248	0.291
	Top	0.846	0.071	0.179*	0.489*	1.096	1.406	**1.585**
	Bottom	-	-	-	-	-	-	-
	Right	-	-	-	-	-	-	-
	Left	0.360	0.016	0.179*	0.120	0.555	0.496	0.675

Simult Tx	Configuration	LTE Band 41 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.334	0.041	0.179	0.489	0.554	0.864	**1.043**
	Front	0.359	0.029	0.043	0.010	0.431	0.398	0.441
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.854	-	-	-	0.854	0.854	0.854
	Right	-	-	-	-	-	-	-
	Left	0.135	0.016	0.179*	0.120	0.330	0.271	0.450

Simult Tx	Configuration	LTE Band 7 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.405	0.041	0.179	0.489	0.625	0.935	**1.114**
	Front	0.469	0.029	0.043	0.010	0.541	0.508	0.551
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	1.005	-	-	-	1.005	1.005	1.005
	Right	-	-	-	-	-	-	-
	Left	0.168	0.016	0.179*	0.120	0.363	0.304	0.483

Simult Tx	Configuration	NR Band n71 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.284	0.041	0.179	0.489	0.504	0.814	**0.993**
	Front	0.217	0.029	0.043	0.010	0.289	0.256	0.299
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.131	-	-	-	0.131	0.131	0.131
	Right	0.247	-	-	-	0.247	0.247	0.247
	Left	0.170	0.016	0.179*	0.120	0.365	0.306	0.485

Simult Tx	Configuration	NR Band n5 (Cell) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.684	0.041	0.179	0.489	0.904	1.214	**1.393**
	Front	0.462	0.029	0.043	0.010	0.534	0.501	0.544
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.431	-	-	-	0.431	0.431	0.431
	Right	0.333	-	-	-	0.333	0.333	0.333
	Left	0.124	0.016	0.179*	0.120	0.319	0.260	0.439

Simult Tx	Configuration	NR Band n66 (AWS) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.629	0.041	0.179	0.489	0.849	1.159	**1.338**
	Front	0.579	0.029	0.043	0.010	0.651	0.618	0.661
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	1.253	-	-	-	1.253	1.253	1.253
	Right	0.080	-	-	-	0.080	0.080	0.080
	Left	0.090	0.016	0.179*	0.120	0.285	0.226	0.405

Simult Tx	Configuration	NR Band n2 (PCS) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.446	0.041	0.179	0.489	0.666	0.976	**1.155**
	Front	0.378	0.029	0.043	0.010	0.450	0.417	0.460
	Top	-	0.071	0.179*	0.489*	0.250	0.560	0.739
	Bottom	0.906	-	-	-	0.906	0.906	0.906
	Right	0.054	-	-	-	0.054	0.054	0.054
	Left	0.053	0.016	0.179*	0.120	0.248	0.189	0.368

Simult Tx	Configuration	NR Band n41 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		
		1	2	3	4	1+2+3	1+2+4	1+2+3+4
Hotspot SAR	Back	0.138	0.041	0.179	0.489	0.358	0.668	0.847
	Front	0.083	0.029	0.043	0.010	0.155	0.122	0.165
	Top	0.191	0.071	0.179*	0.489*	0.441	0.751	**0.930**
	Bottom	-	-	-	-	-	-	-
	Right	-	-	-	-	-	-	-
	Left	0.037	0.016	0.179*	0.120	0.232	0.173	0.352

12.6 Phablet Simultaneous Transmission Analysis

For SAR summation, the highest reported SAR across all test distances was used as the most conservative evaluation for simultaneous transmission analysis for each device edge.

Per FCC KDB Publication 648474 D04 Handset SAR, Phablet SAR tests were not required if wireless router 1g SAR (scaled to the maximum output power, including tolerance) < 1.2 W/kg. Therefore no further analysis beyond the tables included in this section was required to determine that possible simultaneous transmission scenarios would not exceed the SAR limit.

Table 12-19
Simultaneous Transmission Scenario with 5 GHz WLAN SISO (Phablet)

Simult Tx	Configuration	PCS EVDO SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	1.474	0.924	1.596	2.398	**3.070**
	Front	1.453	0.157	0.075	1.610	1.528
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	2.111	-	-	2.111	2.111
	Right	0.443	-	-	0.443	0.443
	Left	0.419	0.877	0.357	1.296	0.776

Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	1.560	0.924	1.596	2.484	**3.156**
	Front	1.459	0.157	0.075	1.616	1.534
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	2.816	-	-	2.816	2.816
	Right	0.166	-	-	0.166	0.166
	Left	0.159	0.877	0.357	1.036	0.516

Simult Tx	Configuration	UMTS 1750 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	1.886	0.924	1.596	2.810	**3.482**
	Front	1.876	0.157	0.075	2.033	1.951
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	2.763	-	-	2.763	2.763
	Right	0.493	-	-	0.493	0.493
	Left	0.456	0.877	0.357	1.333	0.813

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	2.163	0.924	1.596	3.087	**3.759**
	Front	1.857	0.157	0.075	2.014	1.932
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	2.991	-	-	2.991	2.991
	Right	0.475	-	-	0.475	0.475
	Left	0.455	0.877	0.357	1.332	0.812

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	2.139	0.924	1.596	3.063	**3.735**
	Front	2.422	0.157	0.075	2.579	2.497
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	2.960	-	-	2.960	2.960
	Right	0.446	-	-	0.446	0.446
	Left	0.497	0.877	0.357	1.374	0.854

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	1.451	0.924	1.596	2.375	**3.047**
	Front	1.527	0.157	0.075	1.684	1.602
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	2.228	-	-	2.228	2.228
	Right	0.377	-	-	0.377	0.377
	Left	0.378	0.877	0.357	1.255	0.735

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	1.138	0.924	1.596	2.062	**2.734**
	Front	1.496	0.157	0.075	1.653	1.571
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	2.217	-	-	2.217	2.217
	Right	0.404	-	-	0.404	0.404
	Left	0.380	0.877	0.357	1.257	0.737

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)		SPLSR
		1	2	3	1+2	1+3	1+3
Phablet SAR	Back	2.425	0.924	1.596	**3.349**	See Note 1	0.06
	Front	2.359	0.157	0.075	2.516	2.434	N/A
	Top	-	0.924*	1.596*	0.924	1.596	N/A
	Bottom	2.834	-	-	2.834	2.834	N/A
	Right	0.256	-	-	0.256	0.256	N/A
	Left	0.339	0.877	0.357	1.216	0.696	N/A

Simult Tx	Configuration	LTE Band 7 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	1.353	0.924	1.596	2.277	**2.949**
	Front	1.209	0.157	0.075	1.366	1.284
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	1.553	-	-	1.553	1.553
	Right	-	-	-	-	-
	Left	0.480	0.877	0.357	1.357	0.837

Simult Tx	Configuration	LTE Band 41 SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	2.369	0.924	1.596	3.293	**3.965**
	Front	1.275	0.157	0.075	1.432	1.350
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	1.877	-	-	1.877	1.877
	Right	-	-	-	0.000	0.000
	Left	0.335	0.877	0.357	1.212	0.692

Simult Tx	Configuration	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	1.914	0.924	1.596	2.838	**3.510**
	Front	2.417	0.157	0.075	2.574	2.492
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	3.100	-	-	3.100	3.100
	Right	0.428	-	-	0.428	0.428
	Left	0.530	0.877	0.357	1.407	0.887

Simult Tx	Configuration	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN Ant 1 SAR (W/kg)	5 GHz WLAN Ant 2 SAR (W/kg)	Σ SAR (W/kg)	
		1	2	3	1+2	1+3
Phablet SAR	Back	1.503	0.924	1.596	2.427	**3.099**
	Front	1.457	0.157	0.075	1.614	1.532
	Top	-	0.924*	1.596*	0.924	1.596
	Bottom	2.480	-	-	2.480	2.480
	Right	0.366	-	-	0.366	0.366
	Left	0.373	0.877	0.357	1.250	0.730

Table 12-20
Simultaneous Transmission Scenario with 5 GHz WLAN MIMO (Phablet)

Simult Tx	Configuration	PCS EVDO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Phablet SAR	Back	1.474	2.412	**3.886**
	Front	1.453	0.307	1.760
	Top	-	2.412*	2.412
	Bottom	2.111	-	2.111
	Right	0.443	-	0.443
	Left	0.419	1.230	1.649

Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Phablet SAR	Back	1.560	2.412	**3.972**
	Front	1.459	0.307	1.766
	Top	-	2.412*	2.412
	Bottom	2.816	-	2.816
	Right	0.166	-	0.166
	Left	0.159	1.230	1.389

Simult Tx	Configuration	UMTS 1750 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2
Phablet SAR	Back	1.886	2.412	See Note 1	0.06
	Front	1.876	0.307	2.183	N/A
	Top	-	2.412*	2.412	N/A
	Bottom	2.763	-	**2.763**	N/A
	Right	0.493	-	0.493	N/A
	Left	0.456	1.230	1.686	N/A

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2
Phablet SAR	Back	2.163	2.412	See Note 1	0.06
	Front	1.857	0.307	2.164	N/A
	Top	-	2.412*	2.412	N/A
	Bottom	2.991	-	**2.991**	N/A
	Right	0.475	-	0.475	N/A
	Left	0.455	1.230	1.685	N/A

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2
Phablet SAR	Back	2.139	2.412	See Note 1	0.06
	Front	2.422	0.307	2.729	N/A
	Top	-	2.412*	2.412	N/A
	Bottom	2.960	-	**2.960**	N/A
	Right	0.446	-	0.446	N/A
	Left	0.497	1.230	1.727	N/A

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Phablet SAR	Back	1.451	2.412	**3.863**
	Front	1.527	0.307	1.834
	Top	-	2.412*	2.412
	Bottom	2.228	-	2.228
	Right	0.377	-	0.377
	Left	0.378	1.230	1.608

Simult Tx	Configuration	LTE Band 2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2
Phablet SAR	Back	1.138	2.412	**3.550**	N/A
	Front	1.496	0.307	1.803	N/A
	Top	-	2.412*	2.412	N/A
	Bottom	2.217	-	2.217	N/A
	Right	0.404	-	0.404	N/A
	Left	0.380	1.230	1.610	N/A

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2
Phablet SAR	Back	2.425	2.412	See Note 1	0.07
	Front	2.359	0.307	2.666	N/A
	Top	-	2.412*	2.412	N/A
	Bottom	2.834	-	**2.834**	N/A
	Right	0.256	-	0.256	N/A
	Left	0.339	1.230	1.569	N/A

Simult Tx	Configuration	LTE Band 7 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Phablet SAR	Back	1.353	2.412	**3.765**
	Front	1.209	0.307	1.516
	Top	-	2.412*	2.412
	Bottom	1.553	-	1.553
	Right	-	-	-
	Left	0.480	1.230	1.710

Simult Tx	Configuration	LTE Band 41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2
Phablet SAR	Back	2.369	2.412	See Note 1	0.07
	Front	1.275	0.307	1.582	N/A
	Top	-	2.412*	**2.412**	N/A
	Bottom	1.877	-	1.877	N/A
	Right	-	-	-	-
	Left	0.335	1.230	1.565	N/A

Simult Tx	Configuration	NR Band n66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2
Phablet SAR	Back	1.914	2.412	See Note 1	0.06
	Front	2.417	0.307	2.724	N/A
	Top	-	2.412*	2.412	N/A
	Bottom	3.100	-	**3.100**	N/A
	Right	0.428	-	0.428	N/A
	Left	0.530	1.230	1.760	N/A

Simult Tx	Configuration	NR Band n2 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Phablet SAR	Back	1.503	2.412	**3.915**
	Front	1.457	0.307	1.764
	Top	-	2.412*	2.412
	Bottom	2.480	-	2.480
	Right	0.366	-	0.366
	Left	0.373	1.230	1.603

Note 1 - No evaluation was performed to determine the aggregate 10g SAR for these configurations as the SPLS ratio between the antenna pairs was not greater than 0.10 per FCC KDB 447498 D01v06. See Section 12.7 for detailed SPLS ratio analysis.

12.7 SPLSR Evaluation and Analysis

Per FCC KDB Publication 447498 D01v06, when the sum of the standalone transmitters is more than 1.6 W/kg for 1g and 4 W/kg for 10g, the SAR sum to peak locations can be analyzed to determine SAR distribution overlaps. When the SAR peak to location ratio (shown below) for each pair of antennas is ≤ 0.04 for 1g and ≤ 0.10 for 10g, simultaneous SAR evaluation is not required. The distance between the transmitters was calculated using the following formula.

$$\text{Distance}_{Tx1-Tx2} = R_i = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2} \text{ (Phablet)}$$

$$\text{SPLS Ratio} = \frac{(SAR_1 + SAR_2)^{1.5}}{R_i}$$

12.7.1 Phablet Back Side SPLSR Evaluation and Analysis

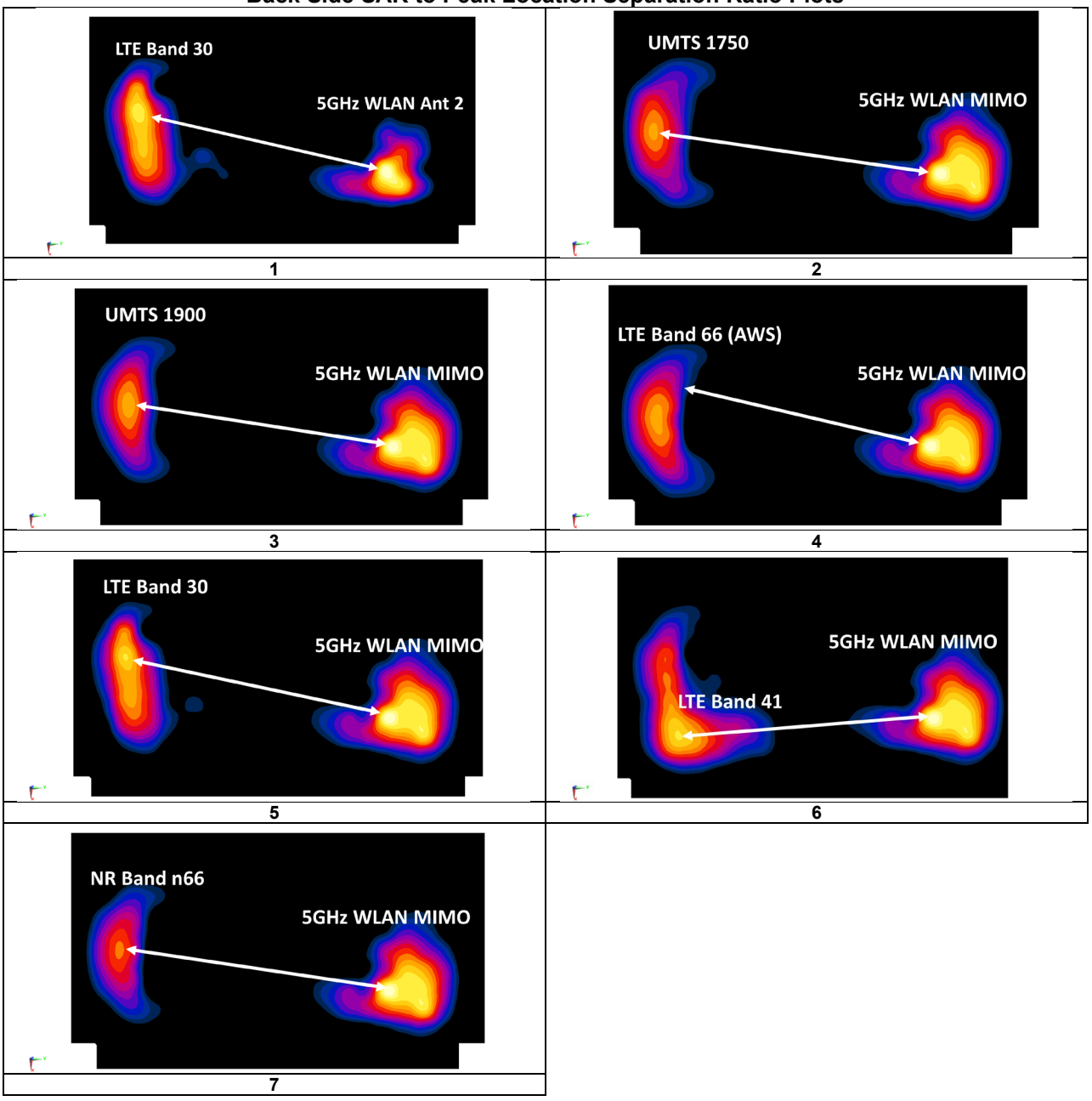
Table 12-21
Peak SAR Locations for Phablet Back Side

Mode/Band	x (mm)	y (mm)
5 GHz WLAN Ant 2	-8.00	57.00
5 GHz WLAN MIMO	0.70	72.20
GPRS 1900	-17.00	-78.00
UMTS 1750	-25.00	-85.50
UMTS 1900	-18.50	-78.00
LTE Band 66 (AWS)	-17.50	-81.00
LTE Band 41	0.00	-81.20
LTE Band 30	-34.60	-76.80
NR Band n66	-25.00	-81.00

Table 12-22
Phablet Back Side SAR to Peak Location Separation Ratio Calculations

Antenna Pair		Standalone SAR (W/kg)		Standalone SAR Sum (W/kg)	Peak SAR Separation Distance (mm)	SPLS Ratio	Plot Number
Ant "a"	Ant "b"	a	b	a+b	D_{a-b}	$(a+b)^{1.5}/D_{a-b}$	
LTE Band 30	5 GHz WLAN Ant 2	2.425	1.596	4.021	136.42	0.06	1
UMTS 1750	5 GHz WLAN MIMO	1.886	2.412	4.298	159.78	0.06	2
UMTS 1900	5 GHz WLAN MIMO	2.163	2.412	4.575	151.42	0.06	3
LTE Band 66 (AWS)	5 GHz WLAN MIMO	1.996	2.412	4.408	154.28	0.06	4
LTE Band 30	5 GHz WLAN MIMO	2.425	2.412	4.837	153.12	0.07	5
LTE Band 41	5 GHz WLAN MIMO	2.369	2.412	4.781	153.40	0.07	6
NR Band n66	5 GHz WLAN MIMO	1.914	2.412	4.326	155.34	0.06	7

Table 12-23
Back Side SAR to Peak Location Separation Ratio Plots



12.8 Simultaneous Transmission Conclusion

The above numerical summed SAR results and SPLSR analysis are sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore no measured volumetric simultaneous SAR summation is required per FCC KDB Publication 447498 D01v06 and IEEE 1528- 2013 Section 6.3.4.1.

13 SAR MEASUREMENT VARIABILITY

13.1 Measurement Variability

Per FCC KDB Publication 865664 D01v01r04, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1g SAR limit).
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg
5) When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

Table 13-1
Head SAR Measurement Variability Results

HEAD VARIABILITY RESULTS													
Band	FREQUENCY		Mode	Service	Side	Test Position	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)	
3500	3560.00	55340	LTE Band 48, ULCA, 20 MHz Bandwidth	QPSK, 50 RB, 50 RB Offset	Right	Tilt	1.040	1.020	1.02	N/A	N/A	N/A	N/A
	3579.80	55538		QPSK, 50 RB, 0 RB Offset									
3700	3603.30	55773	LTE Band 48, 20 MHz Bandwidth	QPSK, 50 RB, 25 RB Offset	Right	Tilt	0.826	0.877	1.06	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population					Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 13-2
Body SAR Measurement Variability Results

BODY VARIABILITY RESULTS													
Band	FREQUENCY		Mode	Service	Side	Spacing	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.					(W/kg)	(W/kg)		(W/kg)		(W/kg)	
1750	1745.00	132322	LTE Band 66 (AWS), ULCA, 20 MHz Bandwidth	QPSK, 1 RB, 99 RB Offset	bottom	10 mm	1.150	1.130	1.02	N/A	N/A	N/A	N/A
	1764.80	132520		QPSK, 1 RB, 0 RB Offset									
1900	1908.75	1175	PCS CDMA	EVDO Rev. 0	bottom	10 mm	0.941	0.927	1.02	N/A	N/A	N/A	N/A
2300	2310.00	27710	LTE Band 30, 10 MHz Bandwidth	QPSK, 25 RB, 12 RB Offset	bottom	10 mm	1.020	1.010	1.01	N/A	N/A	N/A	N/A
2450	2510.00	20850	LTE Band 7, 20 MHz Bandwidth	QPSK, 50 RB, 0 RB Offset	bottom	10 mm	0.867	0.762	1.14	N/A	N/A	N/A	N/A
2600	2535.00	21100	LTE Band 7, 20 MHz Bandwidth	QPSK, 50 RB, 50 RB Offset	bottom	10mm	0.842	0.783	1.08	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 13-3
Phablet SAR Measurement Variability Results

PHABLET VARIABILITY RESULTS															
Band	FREQUENCY		Mode	Service	# of Time Slots	Data Rate (Mbps)	Side	Spacing	Measured SAR (10g)	1st Repeated SAR (10g)	Ratio	2nd Repeated SAR (10g)	Ratio	3rd Repeated SAR (10g)	Ratio
	MHz	Ch.							(W/kg)	(W/kg)		(W/kg)		(W/kg)	
1750	1720.00	344000	LTE Band 66 (AWS), ULCA, 20 MHz Bandwidth	QPSK, 50 RB, 50 RB Offset	N/A	N/A	bottom	0 mm	2.960	2.870	1.03	N/A	N/A	N/A	N/A
	1750.20	132270		QPSK, 50 RB, 0 RB Offset	N/A										
1900	1880.00	661	GSM 1900	GPRS	4	N/A	bottom	0 mm	2.510	2.370	1.06	N/A	N/A	N/A	N/A
2300	2310.00	27710	LTE Band 30, 10 MHz Bandwidth	QPSK, 25 RB, 12 RB Offset	N/A	N/A	bottom	0 mm	2.210	2.150	1.03	N/A	N/A	N/A	N/A
2600	2636.50	41055	LTE Band 41, 20 MHz Bandwidth	QPSK, 1 RB, 50 RB Offset	N/A	N/A	back	0 mm	2.210	2.110	1.05	N/A	N/A	N/A	N/A
5250	5280.00	56	802.11n, 20 MHz Bandwidth	OFDM, MIMO	N/A	13	back	0 mm	2.060	1.990	1.04	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Phablet 4.0 W/kg (mW/g) averaged over 10 grams						

13.2 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.

14 ADDITIONAL TESTING PER FCC GUIDANCE

14.1 Tuner Testing

Per April 2019 TCB Workshop Notes, the following test procedures were followed to demonstrate that the SAR results in Section 11 represented the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR was measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Per FCC Guidance, during NR testing the device was configured with the tuner state selected by the device in LTE mode with auto-tune active at the same frequency. Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence on the antenna characteristics, other than impedance matching.

To evaluate all the tuner states, the 120 tuner states were divided among the aggregate band, mode and exposure combinations. Single point time-sweep measurements were performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination. When the single point SAR or 1g SAR was > 1.2 W/kg for a particular band/mode/exposure condition, point SAR measurements were made for all 120 states.

The operational description contains more information about the design and implementation of the dynamic antenna tuning.

Table 14-1
UMTS/CDMA Supplemental Head SAR Data

Suplemental Head SAR Data											
UMTS B5		UMTS B4		UMTS B2		CDMA BC10		CDMA BC0		CDMA BC1	
RMC		RMC		RMC		EVDO		EVDO		CDMA	
Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Left Cheek
Frequency (MHz)	836.6	Frequency (MHz)	1732.4	Frequency (MHz)	1880.0	Frequency (MHz)	820.1	Frequency (MHz)	836.52	Frequency (MHz)	1880.0
Channel	4183	Channel	1412	Channel	9400	Channel	564	Channel	384	Channel	600
Measured 1g SAR (W/kg)	0.166	Measured 1g SAR (W/kg)	0.121	Measured 1g SAR (W/kg)	0.108	Measured 1g SAR (W/kg)	0.181	Measured 1g SAR (W/kg)	0.222	Measured 1g SAR (W/kg)	0.111
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.183	Auto-tune (State 25)	0.190	Auto-tune (State 14)	0.164	Auto-tune (State 0)	0.203	Auto-tune (State 0)	0.270	Auto-tune (State 13)	0.132
Default (State 0)	0.178	Default (State 0)	0.115	Default (State 0)	0.161	Default (State 0)	0.194	Default (State 0)	0.274	Default (State 0)	0.126
State 0	0.178	State 25	0.185	State 14	0.172	State 0	0.194	State 0	0.274	State 3	0.115
State 1	0.169	State 33	0.094	State 42	0.017	State 54	0.178	State 20	0.221	State 13	0.134
State 19	0.165	State 68	0.017	State 75	0.011	State 83	0.114	State 45	0.100	State 14	0.135
State 32	0.132	State 79	0.011	State 93	0.018	State 101	0.030	State 61	0.125	State 58	0.105
State 50	0.055	State 104	0.115	State 119	0.017	State 116	0.150	State 111	0.218	State 76	0.006

Table 14-2
LTE Supplemental Head SAR Data

Suplemental Head SAR Data									
LTE B71		LTE B12		LTE B13		LTE B14		LTE B5	
QPSK, 20 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset	
Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	680.5	Frequency (MHz)	707.5	Frequency (MHz)	782.0	Frequency (MHz)	793.0	Frequency (MHz)	836.5
Channel	133297	Channel	23095	Channel	23230	Channel	23330	Channel	20525
Measured 1g SAR (W/kg)	0.088	Measured 1g SAR (W/kg)	0.106	Measured 1g SAR (W/kg)	0.145	Measured 1g SAR (W/kg)	0.203	Measured 1g SAR (W/kg)	0.203
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 43)	0.109	Auto-tune (State 43)	0.116	Auto-tune (State 0)	0.185	Auto-tune (State 13)	0.240	Auto-tune (State 0)	0.320
Default (State 0)	0.044	Default (State 0)	0.061	Default (State 0)	0.193	Default (State 0)	0.224	Default (State 0)	0.313
State 5	0.101	State 7	0.116	State 0	0.193	State 13	0.236	State 0	0.313
State 23	0.003	State 10	0.040	State 28	0.131	State 35	0.037	State 2	0.274
State 43	0.113	State 17	0.043	State 57	0.193	State 70	0.154	State 8	0.146
State 109	0.032	State 43	0.112	State 81	0.077	State 86	0.029	State 18	0.328
State 117	0.033	State 49	0.025	State 89	0.010	State 98	0.095	State 62	0.099

Suplemental Head SAR Data							
LTE B26		LTE B66/4		LTE B2		LTE B25	
QPSK, 15 MHz Bandwidth, 1 RB, 36 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 50 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 99 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 99 RB Offset	
Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Left Cheek
Frequency (MHz)	831.5	Frequency (MHz)	1745.0	Frequency (MHz)	1900.0	Frequency (MHz)	1882.5
Channel	26865	Channel	132322	Channel	19100	Channel	26365
Measured 1g SAR (W/kg)	0.183	Measured 1g SAR (W/kg)	0.144	Measured 1g SAR (W/kg)	0.122	Measured 1g SAR (W/kg)	0.111
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.256	Auto-tune (State 22)	0.206	Auto-tune (State 13)	0.171	Auto-tune (State 113)	0.184
Default (State 0)	0.265	Default (State 0)	0.166	Default (State 0)	0.151	Default (State 0)	0.179
State 0	0.265	State 16	0.186	State 13	0.168	State 21	0.159
State 4	0.221	State 22	0.210	State 64	0.043	State 30	0.126
State 6	0.176	State 41	0.016	State 92	0.018	State 37	0.055
State 67	0.231	State 94	0.016	State 106	0.122	State 65	0.022
State 88	0.029	State 115	0.014	State 112	0.148	State 113	0.187

Table 14-3
NR Supplemental Head SAR Data

Suplemental Head SAR Data							
NR Band n71		NR Band n5		NR Band n66		NR Band n2	
DFT-s-OFDM QPSK, 20 MHz Bandwidth, 50 RB, 28 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 50 RB, 28 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 53 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 1 RB Offset	
Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Left Cheek
Frequency (MHz)	680.5	Frequency (MHz)	836.5	Frequency (MHz)	1745.0	Frequency (MHz)	1900.0
Channel	136100	Channel	167300	Channel	349000	Channel	380000
Measured 1g SAR (W/kg)	0.116	Measured 1g SAR (W/kg)	0.188	Measured 1g SAR (W/kg)	0.133	Measured 1g SAR (W/kg)	0.138
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 43)	0.145	Auto-tune (State 0)	0.247	Auto-tune (State 22)	0.197	Auto-tune (State 13)	0.192
Default (State 0)	0.086	Default (State 0)	0.247	Default (State 0)	0.138	Default (State 0)	0.169
State 2	0.121	State 0	0.247	State 1	0.134	State 13	0.192
State 15	0.055	State 47	0.065	State 11	0.101	State 28	0.127
State 32	0.152	State 70	0.199	State 22	0.197	State 49	0.006
State 43	0.145	State 99	0.096	State 51	0.004	State 76	0.009
State 44	0.151	State 117	0.203	State 68	0.015	State 114	0.140

Table 14-4
UMTS/CDMA Supplemental Body SAR Data

Suplemental Body SAR Data												
UMTS B5		UMTS B4		UMTS B2		CDMA BC10		CDMA BC0		CDMA BC1	
RMC		RMC		RMC		EVDO		EVDO		EVDO	
Test Position	Back Side	Test Position	Back Side	Test Position	Bottom	Test Position	Back Side	Test Position	Back Side	Test Position	Bottom Edge
Spacing	10 mm	Spacing	15 mm	Spacing	10mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	846.6	Frequency (MHz)	1752.6	Frequency (MHz)	1907.6	Frequency (MHz)	820.1	Frequency (MHz)	848.3	Frequency (MHz)	1908.75
Channel	4233	Channel	1513	Channel	9538	Channel	564	Channel	777	Channel	1175
Measured 1g SAR (W/kg)	0.501	Measured 1g SAR (W/kg)	0.759	Measured 1g SAR (W/kg)	0.868	Measured 1g SAR (W/kg)	0.429	Measured 1g SAR (W/kg)	0.560	Measured 1g SAR (W/kg)	0.941
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 0)	0.809	Auto-tune (State 23)	1.126	Auto-tune (State 20)	1.338	Auto-tune (State 0)	0.692	Auto-tune (State 0)	0.928	Auto-tune (State 16)	1.688
Default (State 0)	0.816	Default (State 0)	0.728	Default (State 0)	1.325	Default (State 0)	0.681	Default (State 0)	0.912	Default (State 0)	1.580
State 0	0.816	State 0	0.728	State 0	1.325	State 0	0.681	State 0	0.912	State 0	1.580
State 27	0.683	State 13	0.680	State 1	1.322	State 9	0.429	State 51	0.048	State 1	1.542
State 69	0.572	State 23	1.112	State 2	1.312	State 29	0.671	State 96	0.508	State 2	1.532
State 91	0.674	State 25	1.157	State 3	1.305	State 52	0.51	State 100	0.158	State 3	1.534
State 118	0.542	State 39	0.096	State 4	1.294	State 71	0.441	State 108	0.884	State 4	1.507
				State 5	1.3					State 5	1.51
				State 6	1.25					State 6	1.447
				State 7	1.217					State 7	1.422
				State 8	1.158					State 8	1.335
				State 9	1.068					State 9	1.226
				State 10	0.984					State 10	1.131
				State 11	0.869					State 11	1.002
				State 12	0.701					State 12	0.797
				State 13	1.354					State 13	1.623
				State 14	1.363					State 14	1.635
				State 15	1.356					State 15	1.643
				State 16	1.353					State 16	1.646
				State 17	1.36					State 17	1.645
				State 18	1.363					State 18	1.624
				State 19	1.343					State 19	1.616
				State 20	1.352					State 20	1.605
				State 21	1.316					State 21	1.576
				State 22	1.255					State 22	1.51
				State 23	1.2					State 23	1.43
				State 24	1.097					State 24	1.314
				State 25	0.908					State 25	1.075
				State 26	1.084					State 26	1.332
				State 27	1.059					State 27	1.303
				State 28	1.055					State 28	1.287
				State 29	1.04					State 29	1.273
				State 30	1.024					State 30	1.244
				State 31	1.024					State 31	1.25
				State 32	0.97					State 32	1.186
				State 33	0.941					State 33	1.14
				State 34	0.884					State 34	1.067
				State 35	0.797					State 35	0.965
				State 36	0.727					State 36	0.873
				State 37	0.629					State 37	0.75
				State 38	0.498					State 38	0.591
				State 39	0.121					State 39	0.165
				State 40	0.138					State 40	0.186
				State 41	0.135					State 41	0.182
				State 42	0.131					State 42	0.178
				State 43	0.129					State 43	0.173
				State 44	0.137					State 44	0.184
				State 45	0.126					State 45	0.169
				State 46	0.122					State 46	0.163
				State 47	0.111					State 47	0.148
				State 48	0.096					State 48	0.126
				State 49	0.083					State 49	0.109
				State 50	0.066					State 50	0.087
				State 51	0.046					State 51	0.06
				State 52	1.173					State 52	1.42
				State 53	1.183					State 53	1.43
				State 54	1.179					State 54	1.431
				State 55	1.171					State 55	1.424
				State 56	1.181					State 56	1.436
				State 57	1.183					State 57	1.428
				State 58	1.166					State 58	1.407
				State 59	1.151					State 59	1.389
				State 60	1.119					State 60	1.344
				State 61	1.052					State 61	1.261
				State 62	0.984					State 62	1.176
				State 63	0.876					State 63	1.04
				State 64	0.692					State 64	0.831
				State 65	0.124					State 65	0.17
				State 66	0.153					State 66	0.206
				State 67	0.152					State 67	0.204
				State 68	0.15					State 68	0.202
				State 69	0.149					State 69	0.203
				State 70	0.161					State 70	0.218
				State 71	0.16					State 71	0.212
				State 72	0.162					State 72	0.215
				State 73	0.157					State 73	0.206
				State 74	0.146					State 74	0.191
				State 75	0.131					State 75	0.171
				State 76	0.11					State 76	0.144
				State 77	0.079					State 77	0.103
				State 78	0.111					State 78	0.151
				State 79	0.123					State 79	0.166
				State 80	0.121					State 80	0.161
				State 81	0.118					State 81	0.158
				State 82	0.115					State 82	0.154
				State 83	0.122					State 83	0.162
				State 84	0.113					State 84	0.149
				State 85	0.109					State 85	0.145
				State 86	0.099					State 86	0.131
				State 87	0.086					State 87	0.113
				State 88	0.074					State 88	0.097
				State 89	0.06					State 89	0.078
				State 90	0.041					State 90	0.055
				State 91	0.113					State 91	0.152
				State 92	0.135					State 92	0.181
				State 93	0.134					State 93	0.18
				State 94	0.134					State 94	0.178
				State 95	0.134					State 95	0.179
				State 96	0.143					State 96	0.189
				State 97	0.142					State 97	0.186
				State 98	0.144					State 98	0.189
				State 99	0.139					State 99	0.183
				State 100	0.13					State 100	0.17
				State 101	0.118					State 101	0.153
				State 102	0.099					State 102	0.129
				State 103	0.071					State 103	0.092
				State 104	1.339					State 104	1.593
				State 105	1.371					State 105	1.639
				State 106	1.111					State 106	1.339
				State 107	0.121					State 107	0.164
				State 108	1.196					State 108	1.447
				State 109	0.123					State 109	0.167
				State 110	0.111					State 110	0.149
				State 111	0.112					State 111	0.15
				State 112	1.35					State 112	1.59
				State 113	1.376					State 113	1.633
				State 114	1.108					State 114	1.341
				State 115	0.122					State 115	0.166
				State 116	1.201					State 116	1.437
				State 117	0.125					State 117	0.169
				State 118	0.113					State 118	0.152
				State 119	0.115					State 119	0.153

Table 14-5
LTE Supplemental Body SAR Data

Supplemental Body SAR Data

LTE B71		LTE B12		LTE B13		LTE B14		LTE B5		LTE B26		LTE B66/4		LTE B2		LTE B25	
QPSK, 20 MHz Bandwidth, 1RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 15 MHz Bandwidth, 1 RB, 36 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 99 RB Offset		QPSK, 20 MHz Bandwidth, 50 RB, 25 RB Offset		QPSK, 20 MHz Bandwidth, 100 RB, 0 RB Offset	
Test Position	Back Side	Test Position	Back Side	Test Position	Back Side	Test Position	Back Side	Test Position	Back Side	Test Position	Back Side	Test Position	Bottom Edge	Test Position	Bottom Edge	Test Position	Bottom Edge
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10mm	Spacing	10mm
Frequency (MHz)	680.5 MHz	Frequency (MHz)	707.5 MHz	Frequency (MHz)	782.0	Frequency (MHz)	793.0	Frequency (MHz)	836.5	Frequency (MHz)	831.5	Frequency (MHz)	1745.0	Frequency (MHz)	1900.0	Frequency (MHz)	1905.0
Channel	133297	Channel	23095	Channel	23230	Channel	23330	Channel	20525	Channel	26865	Channel	132322	Channel	19100	Channel	26590
Measured 1g SAR (W/kg)	0.182	Measured 1g SAR (W/kg)	0.242	Measured 1g SAR (W/kg)	0.392	Measured 1g SAR (W/kg)	0.487	Measured 1g SAR (W/kg)	0.534	Measured 1g SAR (W/kg)	0.596	Measured 1g SAR (W/kg)	0.977	Measured 1g SAR (W/kg)	0.885	Measured 1g SAR (W/kg)	0.893
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 43)	0.318	Auto-tune (State 43)	0.361	Auto-tune (State 0)	0.608	Auto-tune (State 0)	0.740	Auto-tune (State 0)	0.934	Auto-tune (State 0)	0.951	Auto-tune (State 23)	1.589	Auto-tune (State 18)	1.424	Auto-tune (State 18)	1.474
Default (State 0)	0.136	Default (State 0)	0.210	Default (State 0)	0.599	Default (State 0)	0.741	Default (State 0)	0.934	Default (State 0)	0.950	Default (State 0)	0.984	Default (State 0)	1.360	Default (State 0)	1.386
State 11	0.051	State 15	0.143	State 0	0.599	State 0	0.741	State 0	0.934	State 0	0.950	State 0	0.984	State 0	1.367	State 0	1.386
State 43	0.318	State 43	0.356	State 31	0.344	State 22	0.277	State 34	0.099	State 26	0.923	State 1	0.995	State 1	1.340	State 1	1.352
State 102	0.003	State 60	0.036	State 53	0.608	State 47	0.124	State 40	0.262	State 36	0.263	State 2	0.996	State 2	1.333	State 2	1.342
State 110	0.187	State 84	0.356	State 74	0.148	State 77	0.051	State 66	0.256	State 55	0.887	State 3	0.998	State 3	1.323	State 3	1.332
State 114	0.145	State 99	0.021	State 103	0.037	State 107	0.52	State 105	0.402	State 95	0.718	State 4	1	State 4	1.304	State 4	1.311
												State 5	1.001	State 5	1.305	State 5	1.313
												State 6	1.014	State 6	1.254	State 6	1.257
												State 7	1.022	State 7	1.215	State 7	1.218
												State 8	1.024	State 8	1.146	State 8	1.149
												State 9	1.013	State 9	1.053	State 9	1.049
												State 10	1.009	State 10	0.969	State 10	0.965
												State 11	0.979	State 11	0.852	State 11	0.847
												State 12	0.907	State 12	0.686	State 12	0.676
												State 13	0.976	State 13	1.403	State 13	1.408
												State 14	1.052	State 14	1.408	State 14	1.416
												State 15	1.069	State 15	1.405	State 15	1.414
												State 16	1.084	State 16	1.405	State 16	1.411
												State 17	1.12	State 17	1.396	State 17	1.408
												State 18	1.131	State 18	1.411	State 18	1.415
												State 19	1.221	State 19	1.388	State 19	1.396
												State 20	1.296	State 20	1.382	State 20	1.381
												State 21	1.394	State 21	1.348	State 21	1.349
												State 22	1.52	State 22	1.291	State 22	1.288
												State 23	1.584	State 23	1.229	State 23	1.221
												State 24	1.581	State 24	1.12	State 24	1.109
												State 25	1.336	State 25	0.94	State 25	0.918
												State 26	0.827	State 26	1.136	State 26	1.15
												State 27	0.838	State 27	1.105	State 27	1.117
												State 28	0.84	State 28	1.097	State 28	1.108
												State 29	0.841	State 29	1.086	State 29	1.094
												State 30	0.845	State 30	1.063	State 30	1.073
												State 31	0.845	State 31	1.062	State 31	1.072
												State 32	0.851	State 32	1.006	State 32	1.017
												State 33	0.855	State 33	0.97	State 33	0.977
												State 34	0.855	State 34	0.909	State 34	0.912
												State 35	0.848	State 35	0.816	State 35	0.82
												State 36	0.839	State 36	0.744	State 36	0.742
												State 37	0.813	State 37	0.644	State 37	0.641
												State 38	0.746	State 38	0.506	State 38	0.5
												State 39	0.145	State 39	0.146	State 39	0.148
												State 40	0.168	State 40	0.163	State 40	0.166
												State 41	0.167	State 41	0.159	State 41	0.161
												State 42	0.165	State 42	0.155	State 42	0.158
												State 43	0.165	State 43	0.15	State 43	0.153
												State 44	0.175	State 44	0.16	State 44	0.162
												State 45	0.174	State 45	0.145	State 45	0.148
												State 46	0.179	State 46	0.14	State 46	0.143
												State 47	0.177	State 47	0.126	State 47	0.128
												State 48	0.175	State 48	0.108	State 48	0.109
												State 49	0.171	State 49	0.093	State 49	0.094
												State 50	0.161	State 50	0.074	State 50	0.074
												State 51	0.14	State 51	0.052	State 51	0.051
												State 52	0.878	State 52	1.218	State 52	1.235
												State 53	0.961	State 53	1.222	State 53	1.239
												State 54	0.98	State 54	1.222	State 54	1.235
												State 55	0.995	State 55	1.217	State 55	1.226
												State 56	1.027	State 56	1.21	State 56	1.222
												State 57	1.033	State 57	1.213	State 57	1.221
												State 58	1.12	State 58	1.192	State 58	1.202
												State 59	1.194	State 59	1.174	State 59	1.18
												State 60	1.293	State 60	1.137	State 60	1.138
												State 61	1.419	State 61	1.068	State 61	1.064
												State 62	1.467	State 62	1.002	State 62	0.992
												State 63	1.436	State 63	0.894	State 63	0.88
												State 64	1.158	State 64	0.724	State 64	0.706
												State 65	0.155	State 65	0.149	State 65	0.151
												State 66	0.201	State 66	0.179	State 66	0.183
												State 67	0.204	State 67	0.177	State 67	0.181
												State 68	0.207	State 68	0.176	State 68	0.178
												State 69	0.216	State 69	0.175	State 69	0.178
												State 70	0.233	State 70	0.187	State 70	0.19
												State 71	0.261	State 71	0.183	State 71	0.185
												State 72	0.294	State 72	0.185	State 72	0.188
												State 73	0.334	State 73	0.177	State 73	0.178
												State 74	0.395	State 74	0.163	State 74	0.163
												State 75	0.429	State 75	0.147	State 75	0.146
												State 76	0.429	State 76	0.124	State 76	0.122
												State 77	0.315	State 77	0.09	State 77	0.087
												State 78	0.127	State 78	0.131	State 78	0.134
												State 79	0.144	State 79	0.142	State 79	0.146
												State 80	0.144	State 80	0.139	State 80	0.143
												State 81	0.143	State 81	0.136	State 81	0.139
												State 82	0.144	State 82	0.132	State 82	0.135
												State 83	0.151	State 83	0.14	State 83	0.142
												State 84	0.15	State 84	0.128	State 84	0.13
												State 85	0.153	State 85	0.123	State 85	0.126
												State 86	0.153	State 86	0.111	State 86	0.113
												State 87	0.152	State 87	0.094	State 87	0.096
												State 88	0.148	State 88	0.081	State 88	0.082
												State 89	0.14	State 89	0.065	State 89	0.066
												State 90	0.123	State 90	0.046	State 90	0.045
												State 91	0.133	State 91	0.133	State 91	0.135
												State 92	0.171	State 92	0.156	State 92	0.16
												State 93	0.173	State 93	0.155	State 93	0.158
												State 94	0.176	State 94	0.153	State 94	0.156
												State 95	0.184	State 95	0.153	State 95	0.156
												State 96	0.198	State 96	0.163	State 96	0.166
												State 97	0.221	State 97	0.16	State 97	0.163
												State 98	0.251	State 98	0.162	State 98	0.164
												State 99	0.286	State 99	0.155	State 99	0.156
												State 100	0.342	State 100	0.143	State 100	0.143
												State 101	0.375	State 101	0.129	State 101	0.129
												State 102	0.378	State 102	0.109	State 102	0.108
												State 103	0.281	State 103	0.079	State 103	0.077
												State 104	0.98	State 104	1.337	State 104	1.358
												State 105	0.979	State 105	1.367	State 105	1.387
												State 106	0.817	State 106	1.12	State 106	1.137
												State 107	0.143	State 107	0.142	State 107	0.144
												State 108	0.871	State 108	1.21	State 108	1.221
												State 109	0.152	State 109	0.144	State 109	0.147
												State 110	0.126	State 110	0.129	State 110	0.132
												State 111	0.132	State 111	0.13	State 111	0.133
												State 112	0.982	State 112	1.333	State 112	1.35
												State 113	0.978	State 113	1.365	State 113	1.38
												State 114	0.819	State 114	1.117	State 114	1.133
												State 115	0.143	State 115	0.142	State 115	0.145
												State 116	0.873	State 116	1.208	State 116	1.219
												State 117	0.153	State 117	0.146	State 117	0.148
												State 118	0.126	State 118	0.13	State 118	0.134
												State 119	0.133	State 119	0.133	State 119	0.135

Table 14-6
NR Supplemental Body SAR Data

Suplemental Body SAR Data							
NR Band n71		NR Band n5		NR Band n66		NR Band n2	
DFT-s-OFDM QPSK, 20 MHz Bandwidth, 50 RB, 28 RB Offset		DFT-s-OFDM QPSK, 10 MHz Bandwidth, 50 RB, 28 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 1 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 50 RB, 0 RB Offset	
Test Position	Back Side	Test Position	Back Side	Test Position	Bottom Edge	Test Position	Bottom Edge
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	680.5 MHz	Frequency (MHz)	836.5	Frequency (MHz)	1720.0	Frequency (MHz)	1900.0
Channel	136100	Channel	167300	Channel	344000	Channel	380000
Measured 1g SAR (W/kg)	0.247	Measured 1g SAR (W/kg)	0.498	Measured 1g SAR (W/kg)	1.140	Measured 1g SAR (W/kg)	0.784
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 43)	0.397	Auto-tune (State 0)	0.556	Auto-tune (State 23)	1.697	Auto-tune (State 18)	1.233
Default (State 0)	0.251	Default (State 0)	0.556	Default (State 0)	1.038	Default (State 0)	1.233
State 3	0.353	State 0	0.556	State 0	1.038	State 0	1.140
State 20	0.066	State 61	0.241	State 1	1.054	State 1	1.102
State 43	0.397	State 77	0.041	State 2	1.058	State 2	1.090
State 46	0.292	State 92	0.476	State 3	1.059	State 3	1.078
State 64	0.005	State 116	0.459	State 4	1.065	State 4	1.056
				State 5	1.07	State 5	1.051
				State 6	1.075	State 6	0.989
				State 7	1.083	State 7	0.951
				State 8	1.087	State 8	0.899
				State 9	1.092	State 9	0.807
				State 10	1.086	State 10	0.732
				State 11	1.063	State 11	0.632
				State 12	0.974	State 12	0.501
				State 13	1.027	State 13	1.222
				State 14	1.111	State 14	1.234
				State 15	1.129	State 15	1.233
				State 16	1.145	State 16	1.236
				State 17	1.175	State 17	1.232
				State 18	1.176	State 18	1.234
				State 19	1.279	State 19	1.211
				State 20	1.365	State 20	1.194
				State 21	1.463	State 21	1.179
				State 22	1.621	State 22	1.12
				State 23	1.697	State 23	1.063
				State 24	1.66	State 24	0.976
				State 25	1.375	State 25	0.81
				State 26	0.877	State 26	0.888
				State 27	0.9	State 27	0.857
				State 28	0.902	State 28	0.847
				State 29	0.904	State 29	0.841
				State 30	0.907	State 30	0.823
				State 31	0.91	State 31	0.822
				State 32	0.917	State 32	0.77
				State 33	0.923	State 33	0.732
				State 34	0.926	State 34	0.677
				State 35	0.932	State 35	0.604
				State 36	0.911	State 36	0.544
				State 37	0.886	State 37	0.464
				State 38	0.807	State 38	0.362
				State 39	0.175	State 39	0.125
				State 40	0.2	State 40	0.138
				State 41	0.199	State 41	0.134
				State 42	0.198	State 42	0.13
				State 43	0.199	State 43	0.126
				State 44	0.209	State 44	0.134
				State 45	0.209	State 45	0.122
				State 46	0.215	State 46	0.116
				State 47	0.215	State 47	0.104
				State 48	0.214	State 48	0.089
				State 49	0.207	State 49	0.076
				State 50	0.198	State 50	0.061
				State 51	0.173	State 51	0.043
				State 52	0.909	State 52	0.998
				State 53	0.997	State 53	1.002
				State 54	1.02	State 54	1.003
				State 55	1.035	State 55	1.002
				State 56	1.064	State 56	1.002
				State 57	1.074	State 57	1
				State 58	1.175	State 58	0.98
				State 59	1.246	State 59	0.974
				State 60	1.361	State 60	0.944
				State 61	1.48	State 61	0.888
				State 62	1.546	State 62	0.839
				State 63	1.471	State 63	0.749
				State 64	1.155	State 64	0.615
				State 65	0.187	State 65	0.129
				State 66	0.241	State 66	0.156
				State 67	0.245	State 67	0.154
				State 68	0.249	State 68	0.152
				State 69	0.261	State 69	0.152
				State 70	0.281	State 70	0.163
				State 71	0.316	State 71	0.16
				State 72	0.358	State 72	0.163
				State 73	0.41	State 73	0.157
				State 74	0.486	State 74	0.147
				State 75	0.524	State 75	0.135
				State 76	0.501	State 76	0.117
				State 77	0.35	State 77	0.089
				State 78	0.148	State 78	0.111
				State 79	0.168	State 79	0.12
				State 80	0.167	State 80	0.117
				State 81	0.167	State 81	0.114
				State 82	0.167	State 82	0.111
				State 83	0.175	State 83	0.117
				State 84	0.175	State 84	0.106
				State 85	0.18	State 85	0.102
				State 86	0.18	State 86	0.091
				State 87	0.178	State 87	0.078
				State 88	0.174	State 88	0.067
				State 89	0.165	State 89	0.054
				State 90	0.147	State 90	0.038
				State 91	0.157	State 91	0.114
				State 92	0.199	State 92	0.134
				State 93	0.204	State 93	0.133
				State 94	0.207	State 94	0.132
				State 95	0.217	State 95	0.132
				State 96	0.233	State 96	0.141
				State 97	0.264	State 97	0.139
				State 98	0.3	State 98	0.141
				State 99	0.347	State 99	0.137
				State 100	0.413	State 100	0.129
				State 101	0.445	State 101	0.118
				State 102	0.439	State 102	0.103
				State 103	0.302	State 103	0.079
				State 104	1.017	State 104	1.112
				State 105	0.995	State 105	1.203
				State 106	0.847	State 106	0.878
				State 107	0.17	State 107	0.121
				State 108	0.897	State 108	0.982
				State 109	0.183	State 109	0.125
				State 110	0.145	State 110	0.11
				State 111	0.153	State 111	0.113
				State 112	1.009	State 112	1.11
				State 113	0.99	State 113	1.202
				State 114	0.848	State 114	0.878
				State 115	0.17	State 115	0.122
				State 116	0.89	State 116	0.98
				State 117	0.183	State 117	0.126
				State 118	0.147	State 118	0.112
				State 119	0.154	State 119	0.115

14.2 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.

LTE Band 41 SAR testing 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.

Table 14-7
LTE Band 41 Head Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25	27.7
Measured Output Power (dBm)	24.81	27.04
Measured SAR (W/kg)	0.067	0.070
Measured Power (mW)	302.69	505.82
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	191.60	219.02
% deviation from expected linearity		-7.79%

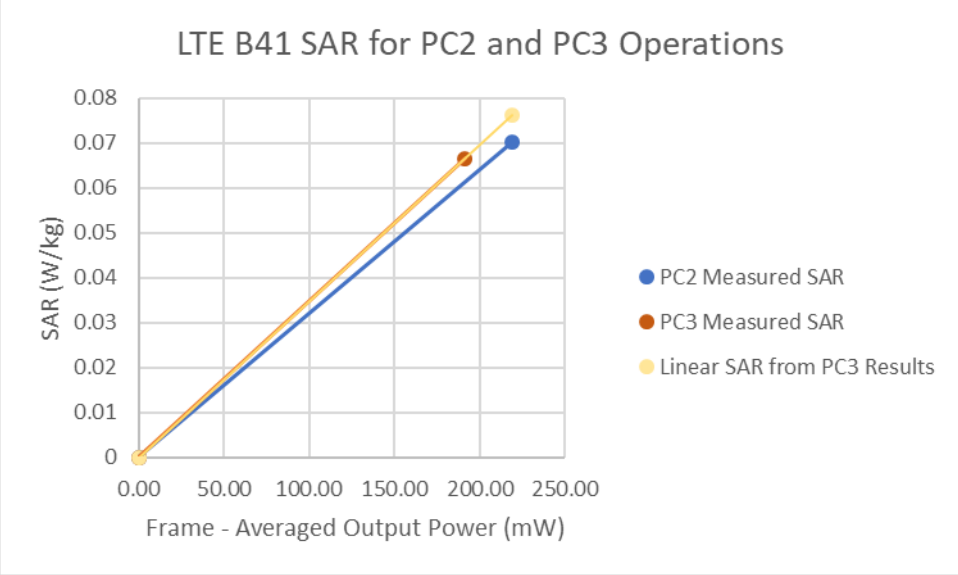


Figure 14-1
LTE Band 41 Head Linearity

Table 14-8
LTE Band 41 ULCA Head Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25	27.7
Measured Output Power (dBm)	24.92	27.45
Measured SAR (W/kg)	0.066	0.080
Measured Power (mW)	310.46	555.90
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	196.52	240.71
% deviation from expected linearity		-1.56%

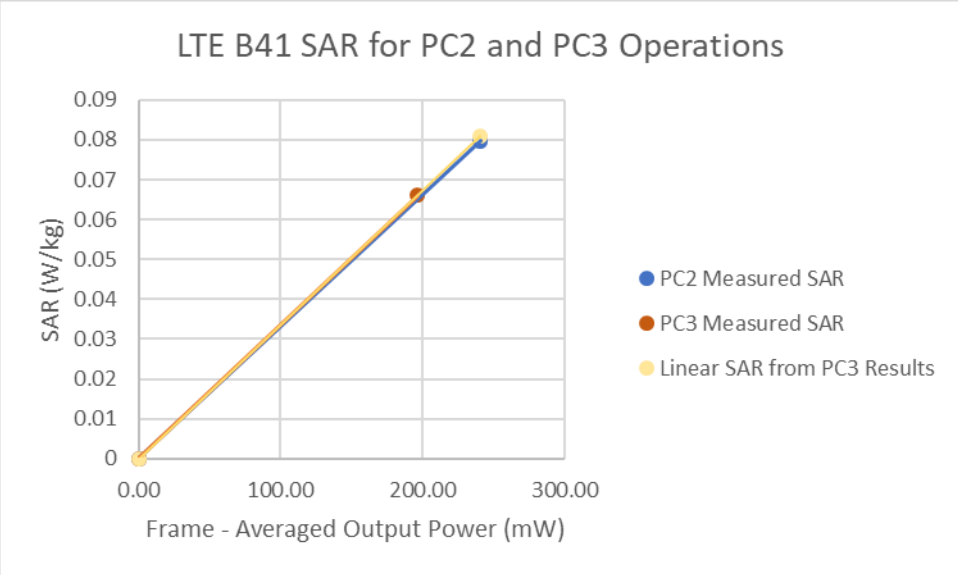


Figure 14-2
LTE Band 41 ULCA Head Linearity

Table 14-9
LTE Band 41 Body-Worn Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25	27.7
Measured Output Power (dBm)	24.81	27.04
Measured SAR (W/kg)	0.184	0.209
Measured Power (mW)	302.69	505.82
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	191.60	219.02
% deviation from expected linearity		-0.63%

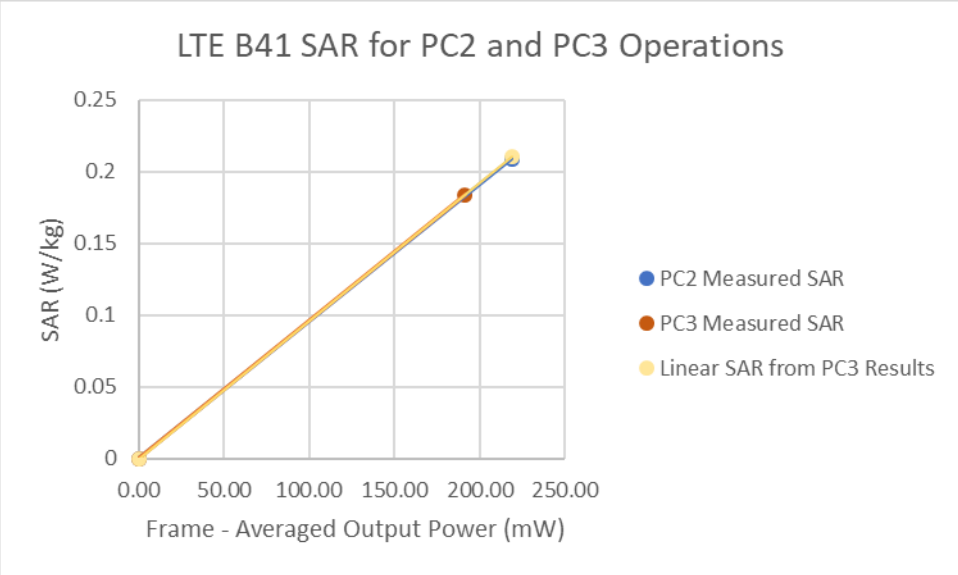


Figure 14-3
LTE Band 41 Body-Worn Linearity

Table 14-10
LTE Band 41 ULCA Body-Worn Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25	27.7
Measured Output Power (dBm)	24.92	27.45
Measured SAR (W/kg)	0.171	0.216
Measured Power (mW)	310.46	555.90
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	196.52	240.71
% deviation from expected linearity		3.13%

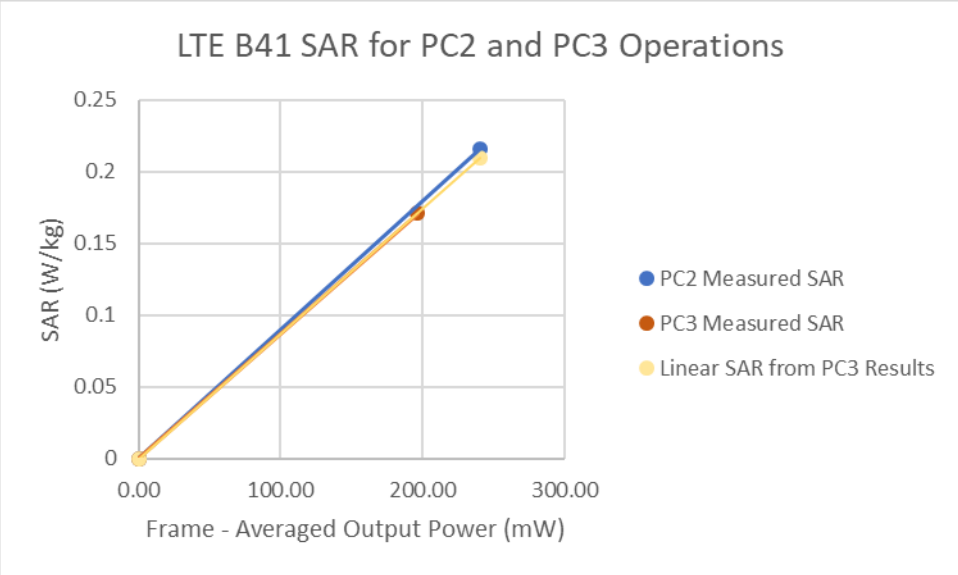


Figure 14-4
LTE Band 41 ULCA Body-Worn Linearity

Table 14-11
LTE Band 41 Hotspot Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	22	23.6
Measured Output Power (dBm)	20.52	22.4
Measured SAR (W/kg)	0.6	0.582
Measured Power (mW)	112.72	173.78
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	71.35	75.25
% deviation from expected linearity		-8.02%

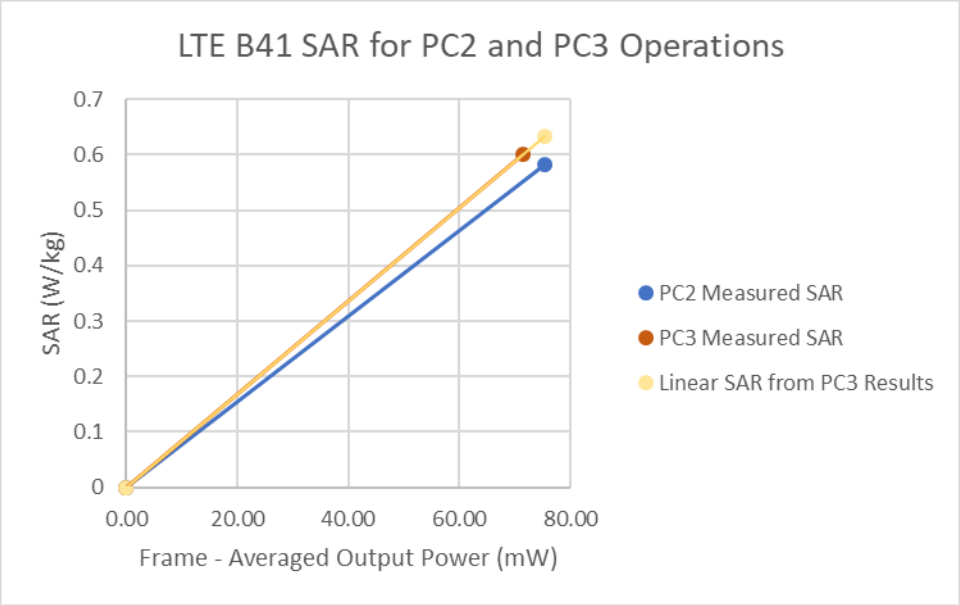


Figure 14-5
LTE Band 41 Hotspot Linearity

Table 14-12
LTE Band 41 ULCA Hotspot Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	22	23.6
Measured Output Power (dBm)	21.29	23.35
Measured SAR (W/kg)	0.709	0.734
Measured Power (mW)	134.59	216.27
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	85.19	93.65
% deviation from expected linearity		-5.82%

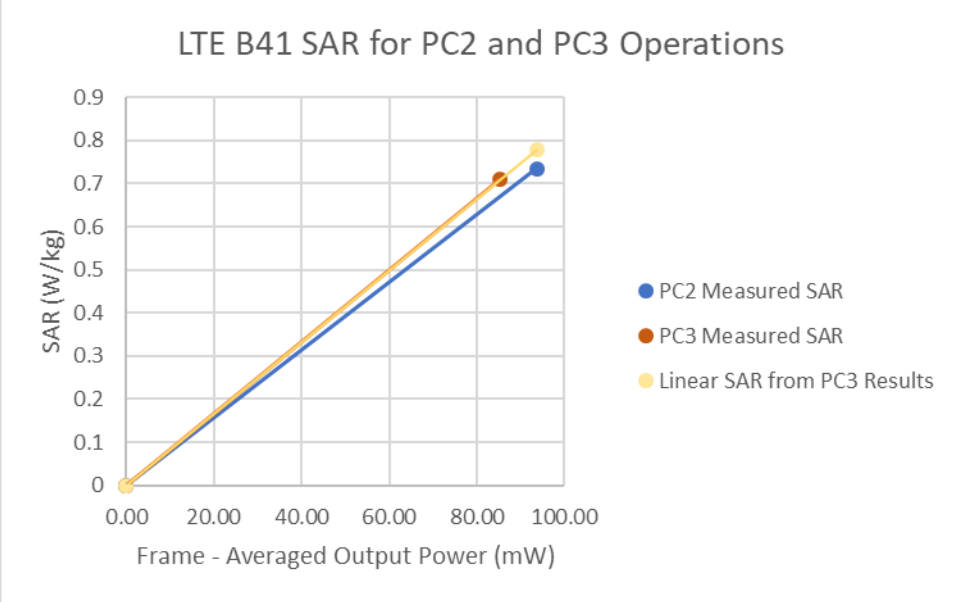


Figure 14-6
LTE Band 41 ULCA Hotspot Linearity

Table 14-13
LTE Band 41 Phablet Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	24.5	26.1
Measured Output Power (dBm)	24.2	25.56
Measured SAR (W/kg)	2.21	2
Measured Power (mW)	263.03	359.75
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	166.50	155.77
% deviation from expected linearity		-3.27%

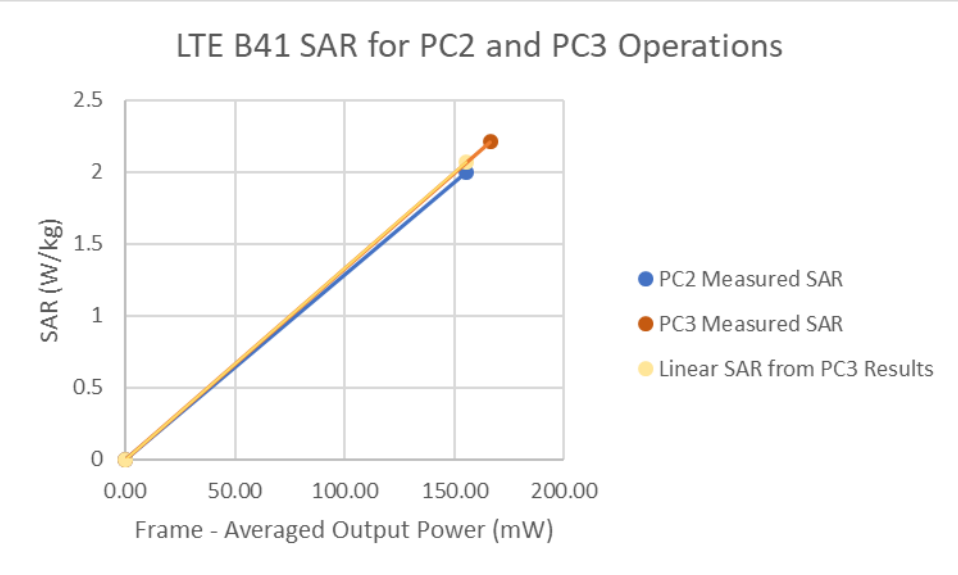


Figure 14-7
LTE Band 41 Phablet Linearity

Table 14-14
LTE Band 41 ULCA Phablet Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	24.5	26.1
Measured Output Power (dBm)	24.5	26.1
Measured SAR (W/kg)	1.99	1.96
Measured Power (mW)	281.84	407.38
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	178.40	176.40
% deviation from expected linearity		-0.39%

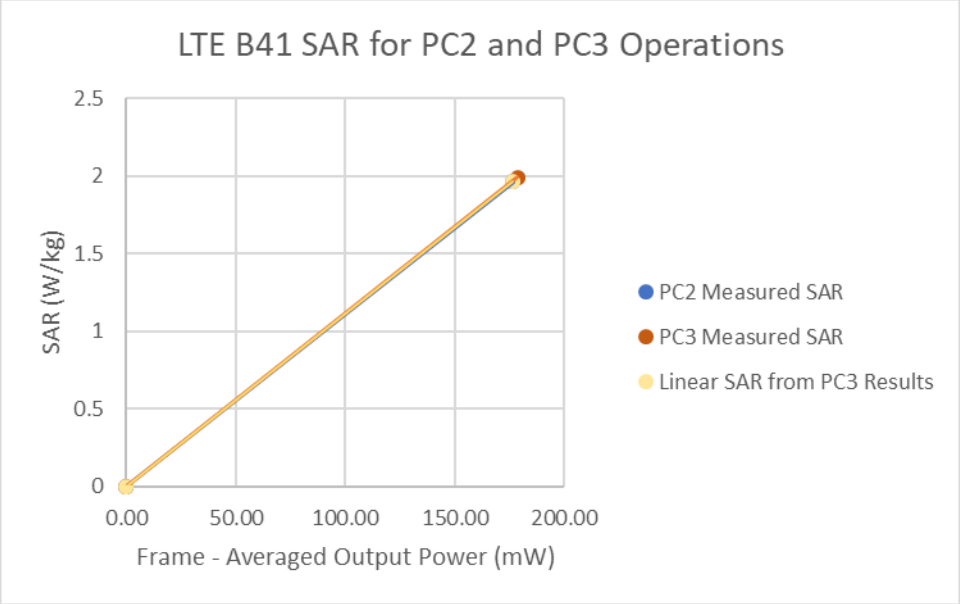


Figure 14-8
LTE Band 41 ULCA Phablet Linearity

15 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	8753ES	S-Parameter Network Analyzer	3/11/2019	Annual	3/11/2020	US39170122
Agilent	8753ES	S-Parameter Network Analyzer	8/26/2019	Annual	8/26/2020	MY40000670
Agilent	8753ES	S-Parameter Vector Network Analyzer	9/19/2019	Annual	9/19/2020	MY40003841
Agilent	E4438C	ESG Vector Signal Generator	5/22/2019	Annual	5/22/2020	MY45091346
Agilent	E4438C	ESG Vector Signal Generator	5/23/2019	Annual	5/23/2020	MY47270002
Agilent	E4438C	ESG Vector Signal Generator	3/8/2019	Biennial	3/8/2021	MY42082385
Agilent	E4438C	ESG Vector Signal Generator	3/11/2019	Biennial	3/11/2021	MY45090700
Agilent	E5515C	Wireless Communications Test Set	6/26/2019	Annual	6/26/2020	MY50267125
Agilent	E5515C	Wireless Communications Test Set	9/25/2019	Annual	9/25/2020	GB43304278
Agilent	E5515C	Wireless Communications Test Set	2/7/2018	Triennial	2/7/2021	GB43304447
Agilent	N4010A	Wireless Connectivity Test Set	N/A	N/A	N/A	GB46170464
Agilent	N5182A	MXG Vector Signal Generator	7/10/2019	Annual	7/10/2020	MY47420800
Agilent	N9020A	MXA Signal Analyzer	4/20/2019	Annual	4/20/2020	US46470561
Agilent	N9030A	PXA Signal Analyzer (44GHz)	6/12/2019	Annual	6/12/2020	MY52350166
Amplifier Research	1S51G6	Amplifier	CBT	N/A	CBT	433972
Amplifier Research	1S51G6	Amplifier	CBT	N/A	CBT	433974
Amplifier Research	1S51G6	Amplifier	CBT	N/A	CBT	433976
Anritsu	MA24106A	USB Power Sensor	1/31/2019	Annual	1/31/2020	1244524
Anritsu	MA24106A	USB Power Sensor	3/5/2019	Annual	3/5/2020	1344555
Anritsu	MA24106A	USB Power Sensor	4/17/2019	Annual	4/17/2020	1344556
Anritsu	MA24106A	USB Power Sensor	7/15/2019	Annual	7/15/2020	1349513
Anritsu	MA2411B	Pulse Power Sensor	3/6/2019	Annual	3/6/2020	1339018
Anritsu	MA2411B	Pulse Power Sensor	6/11/2019	Annual	6/11/2020	1207364
Anritsu	MA2411B	Pulse Power Sensor	8/8/2019	Annual	8/8/2020	1339008
Anritsu	MT8820C	Radio Communication Analyzer	3/29/2019	Annual	3/29/2020	6201300731
Anritsu	MT8821C	Radio Communication Analyzer	1/25/2019	Annual	1/25/2020	6261895213
Anritsu	MT8821C	Radio Communication Analyzer	3/6/2019	Annual	3/6/2020	6201381794
Anritsu	MT8821C	Radio Communication Analyzer	5/13/2019	Annual	5/13/2020	6201524637
Anritsu	MT8821C	Radio Communication Analyzer	11/22/2019	Annual	11/22/2020	6262044715
Anritsu	MT8862A	Wireless Connectivity Test Set	8/8/2019	Annual	8/8/2020	6261782395
Anritsu	ML2496A	Power Meter	11/6/2019	Annual	11/6/2020	1405003
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	4040	Therm./Clock/Humidity Monitor	6/29/2019	Biennial	6/29/2021	192291463
Control Company	4352	Long Stem Thermometer	6/26/2019	Biennial	6/26/2021	192282744
Control Company	4352	Long Stem Thermometer	6/26/2019	Biennial	6/26/2021	192282753
Control Company	4352	Ultra Long Stem Thermometer	11/29/2018	Biennial	11/29/2020	181766801
Control Company	4352	Ultra Long Stem Thermometer	11/29/2018	Biennial	11/29/2020	181766777
Keysight	7720	Dual Directional Coupler	CBT	N/A	CBT	MY52180215
Keysight Technologies	85033E	Standard Mechanical Calibration Kit (DC to 9GHz, 3.5mm)	7/2/2019	Annual	7/2/2020	MY53401181
Keysight Technologies	N6705B	DC Power Analyzer	4/27/2019	Biennial	4/27/2021	MY53004059
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
Mini Circuits	PWR-SEN-4GHS	USB Power Sensor	4/19/2019	Annual	4/19/2020	11401010036
MiniCircuits	SLP-2400+	Low Pass Filter	CBT	N/A	CBT	R8979500903
MiniCircuits	VLF-6000+	Low Pass Filter	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Pasternack	NC-100	Torque Wrench	5/23/2018	Biennial	5/23/2020	N/A
Pasternack	PE2209-10	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	8/26/2019	Annual	8/26/2020	100976
Rohde & Schwarz	CMW500	Radio Communication Tester	8/27/2019	Annual	8/27/2020	116743
Rohde & Schwarz	CMW500	Radio Communication Tester	10/4/2019	Annual	10/4/2020	166462
Rohde & Schwarz	ZNLE6	Vector Network Analyzer	10/11/2019	Annual	10/11/2020	101307
Rohde& Schwarz	CMW500	Wideband Radio Communication Tester	7/12/2019	Annual	7/12/2020	145645
Rohde& Schwarz	CMW500	Wideband Radio Communication Tester	7/24/2019	Annual	7/24/2020	151849
SPEAG	DAK-3.5	Dielectric Assessment Kit	5/7/2019	Annual	5/7/2020	1070
SPEAG	DAK-3.5	Dielectric Assessment Kit	10/22/2019	Annual	10/22/2020	1091
SPEAG	D2300V2	2300 MHz SAR Dipole	11/12/2019	Annual	11/12/2020	1064
SPEAG	D2600V2	2600 MHz SAR Dipole	6/14/2019	Annual	6/14/2020	1064
SPEAG	D2450V2	2450 MHz SAR Dipole	9/11/2017	Triennial	9/11/2020	797
SPEAG	D2450V2	2450 MHz SAR Dipole	8/16/2018	Biennial	8/16/2020	981
SPEAG	D2600V2	2600 MHz SAR Dipole	4/11/2018	Biennial	4/11/2020	1004
SPEAG	D3500V2	3500 MHz SAR Dipole	1/11/2018	Biennial	1/11/2020	1059
SPEAG	D3700V2	3700 MHz SAR Dipole	1/11/2018	Biennial	1/11/2020	1018
SPEAG	D5GHzV2	5 GHz SAR Dipole	9/17/2019	Annual	9/17/2020	1191
SPEAG	D750V3	750 MHz SAR Dipole	1/15/2018	Biennial	1/15/2020	1003
SPEAG	D750V3	750 MHz SAR Dipole	10/19/2018	Biennial	10/19/2020	1161
SPEAG	D835V2	835 MHz SAR Dipole	10/19/2018	Biennial	10/19/2020	4d133
SPEAG	D1750V2	1750 MHz SAR Dipole	5/15/2019	Annual	5/15/2020	1148
SPEAG	D1900V2	1900 MHz SAR Dipole	10/23/2018	Biennial	10/23/2020	5d149
SPEAG	D1900V2	1900 MHz SAR Dipole	10/23/2018	Biennial	10/23/2020	5d080
SPEAG	D1900V2	1900 MHz SAR Dipole	2/21/2019	Annual	2/21/2020	5d148
SPEAG	D2300V2	2300 MHz SAR Dipole	8/13/2018	Biennial	8/13/2020	1073
SPEAG	D2450V2	2450 MHz SAR Dipole	8/14/2019	Annual	8/14/2020	719
SPEAG	D750V3	750 MHz Dipole	3/18/2019	Annual	3/18/2020	1054
SPEAG	D835V2	835 MHz SAR Dipole	3/13/2019	Annual	3/13/2020	4d047
SPEAG	D1765V2	1765 MHz SAR Dipole	5/23/2018	Biennial	5/23/2020	1008
SPEAG	D1750V2	1750 MHz SAR Dipole	10/22/2018	Biennial	10/22/2020	1150
SPEAG	EX3DV4	SAR Probe	9/19/2019	Annual	9/19/2020	7551
SPEAG	EX3DV4	SAR Probe	2/19/2019	Annual	2/19/2020	3914
SPEAG	EX3DV4	SAR Probe	2/19/2019	Annual	2/19/2020	7417
SPEAG	EX3DV4	SAR Probe	1/25/2019	Annual	1/25/2020	3589
SPEAG	EX3DV4	SAR Probe	6/19/2019	Annual	6/19/2020	7409
SPEAG	EX3DV4	SAR Probe	7/16/2019	Annual	7/16/2020	7410
SPEAG	EX3DV4	SAR Probe	4/24/2019	Annual	4/24/2020	7357
SPEAG	EX3DV4	SAR Probe	1/24/2019	Annual	1/24/2020	7488
SPEAG	EX3DV4	SAR Probe	5/16/2019	Annual	5/16/2020	7406
SPEAG	EX3DV4	SAR Probe	7/15/2019	Annual	7/15/2020	7547
SPEAG	EX3DV4	SAR Probe	8/16/2019	Annual	8/16/2020	7308
SPEAG	EX3DV4	SAR Probe	12/11/2019	Annual	12/11/2020	7571
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/18/2019	Annual	4/18/2020	1407
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/15/2019	Annual	1/15/2020	1530
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/17/2019	Annual	9/17/2020	1333
SPEAG	DAE4	Dasy Data Acquisition Electronics	8/14/2019	Annual	8/14/2020	1450
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/20/2019	Annual	6/20/2020	1334
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/14/2019	Annual	2/14/2020	1272
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/13/2019	Annual	2/13/2020	665
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2019	Annual	5/8/2020	859
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/8/2019	Annual	5/8/2020	728
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/11/2019	Annual	7/11/2020	1322
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/11/2019	Annual	7/11/2020	1323
SPEAG	DAE4	Data Acquisition Electronics	12/5/2019	Annual	12/5/2020	1533

Note:

1. 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.
2. Each equipment item was used solely within its respective calibration period.

16 MEASUREMENT UNCERTAINTIES

a	c	d	e=	f	g	h =	i =	k
			f(d,k)			c x f/e	c x g/e	
Uncertainty Component	**Tol. (± %)**	**Prob. Dist.**	**Div.**	**c_i 1gm**	**c_i 10 gms**	**1gm u_i (± %)**	**10gms u_i (± %)**	**v_i**
Measurement System								
Probe Calibration	6.55	N	1	1.0	1.0	6.6	6.6	∞
Axial Isotropy	0.25	N	1	0.7	0.7	0.2	0.2	∞
Hemishperical Isotropy	1.3	N	1	0.7	0.7	0.9	0.9	∞
Boundary Effect	2.0	R	1.73	1.0	1.0	1.2	1.2	∞
Linearity	0.3	N	1	1.0	1.0	0.3	0.3	∞
System Detection Limits	0.25	R	1.73	1.0	1.0	0.1	0.1	∞
Readout Electronics	0.3	N	1	1.0	1.0	0.3	0.3	∞
Response Time	0.8	R	1.73	1.0	1.0	0.5	0.5	∞
Integration Time	2.6	R	1.73	1.0	1.0	1.5	1.5	∞
RF Ambient Conditions - Noise	3.0	R	1.73	1.0	1.0	1.7	1.7	∞
RF Ambient Conditions - Reflections	3.0	R	1.73	1.0	1.0	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	0.4	R	1.73	1.0	1.0	0.2	0.2	∞
Probe Positioning w/ respect to Phantom	6.7	R	1.73	1.0	1.0	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	4.0	R	1.73	1.0	1.0	2.3	2.3	∞
Test Sample Related								
Test Sample Positioning	2.7	N	1	1.0	1.0	2.7	2.7	35
Device Holder Uncertainty	1.67	N	1	1.0	1.0	1.7	1.7	5
Output Power Variation - SAR drift measurement	5.0	R	1.73	1.0	1.0	2.9	2.9	∞
SAR Scaling	0.0	R	1.73	1.0	1.0	0.0	0.0	∞
Phantom & Tissue Parameters								
Phantom Uncertainty (Shape & Thickness tolerances)	7.6	R	1.73	1.0	1.0	4.4	4.4	∞
Liquid Conductivity - measurement uncertainty	4.2	N	1	0.78	0.71	3.3	3.0	10
Liquid Permittivity - measurement uncertainty	4.1	N	1	0.23	0.26	1.0	1.1	10
Liquid Conductivity - Temperature Uncertainty	3.4	R	1.73	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Unceritainty	0.6	R	1.73	0.23	0.26	0.1	0.1	∞
Liquid Conductivity - deviation from target values	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Permittivity - deviation from target values	5.0	R	1.73	0.60	0.49	1.7	1.4	∞
Combined Standard Uncertainty (k=1)		RSS				11.5	11.3	60
Expanded Uncertainty (95% CONFIDENCE LEVEL)		k=2				23.0	22.6	

17 CONCLUSION

17.1 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]

18 REFERENCES

[1] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, Aug. 1996.

[2] ANSI/IEEE C95.1-2005, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, 2006.

[3] ANSI/IEEE C95.1-1992, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, Sept. 1992.

[4] ANSI/IEEE C95.3-2002, IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave, New York: IEEE, December 2002.

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APPENDIX A: SAR TEST DATA

PCTEST ENGINEERING LABORATORY, INC.

DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M

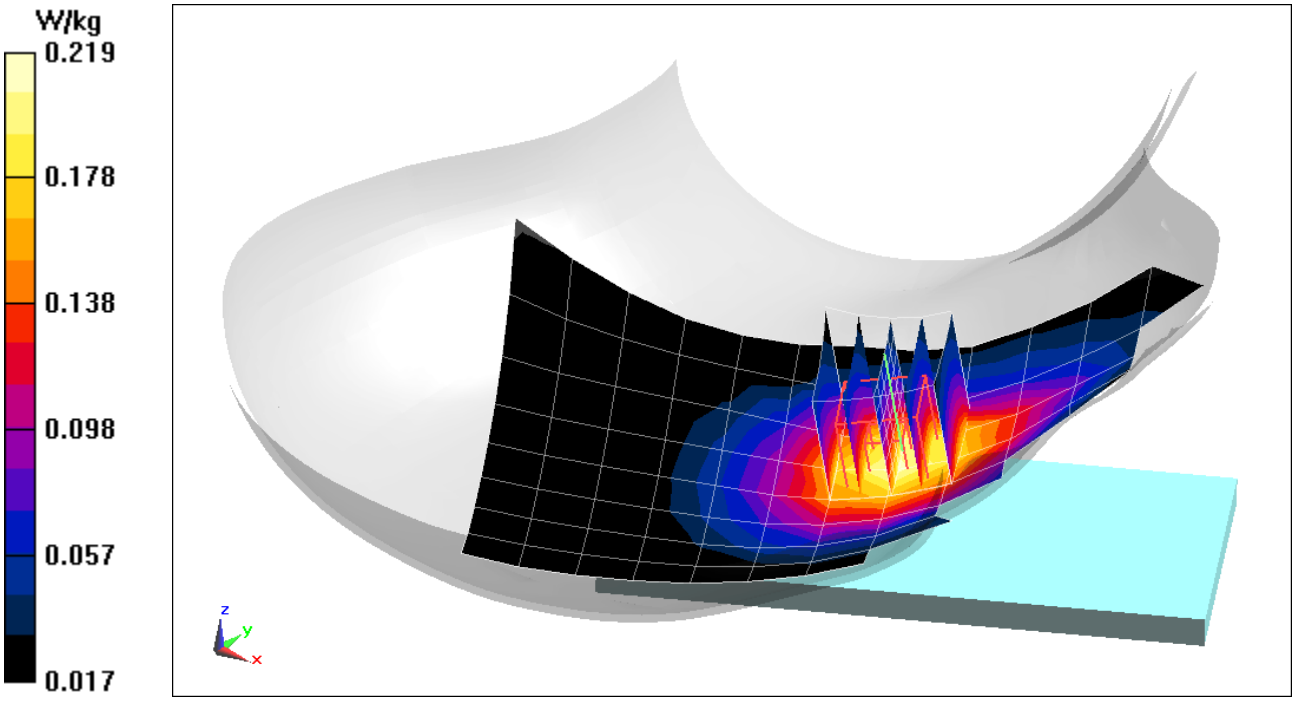
Communication System: UID 0, Cellular CDMA; Frequency: 820.1 MHz; Duty Cycle: 1:1
Medium: 835 Head Medium parameters used (interpolated):
$f = 820.1$ MHz; $\sigma = 0.881$ S/m; $\varepsilon_r = 40.084$; $\rho = 1000$ kg/m^3
Phantom section: Right Section

Test Date: 10/23/2019; Ambient Temp: 21.5°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 820.1 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: Cell. EVDO Rev. A, Rule Part 90S, Right Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.58 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.245 W/kg
SAR(1 g) = 0.181 W/kg



PCTEST ENGINEERING LABORATORY, INC.

DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M

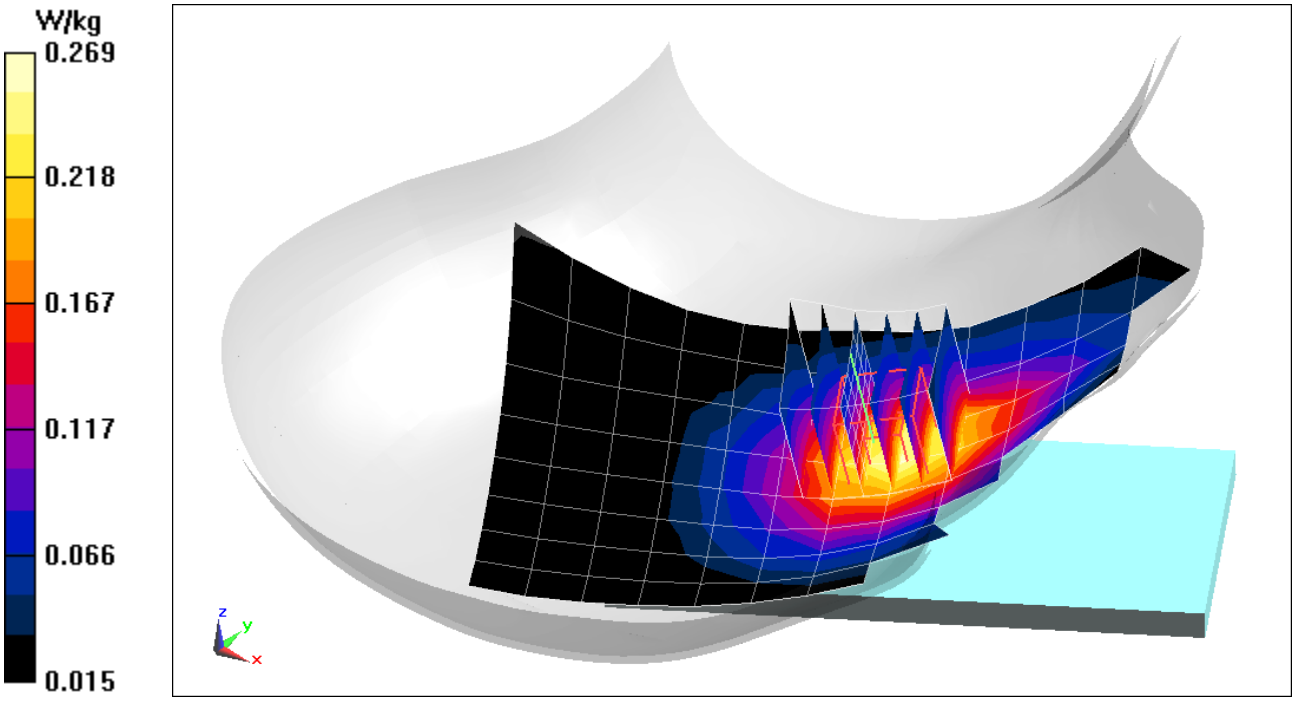
Communication System: UID 0, CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: 835 Head Medium parameters used (interpolated):
f = 836.52 MHz; σ = 0.887 S/m; ε_r = 40.028; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 10/23/2019; Ambient Temp: 21.5°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.52 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: Cell. EVDO Rev. A, Rule Part §22H, Right Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.23 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.303 W/kg
SAR(1 g) = 0.222 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M

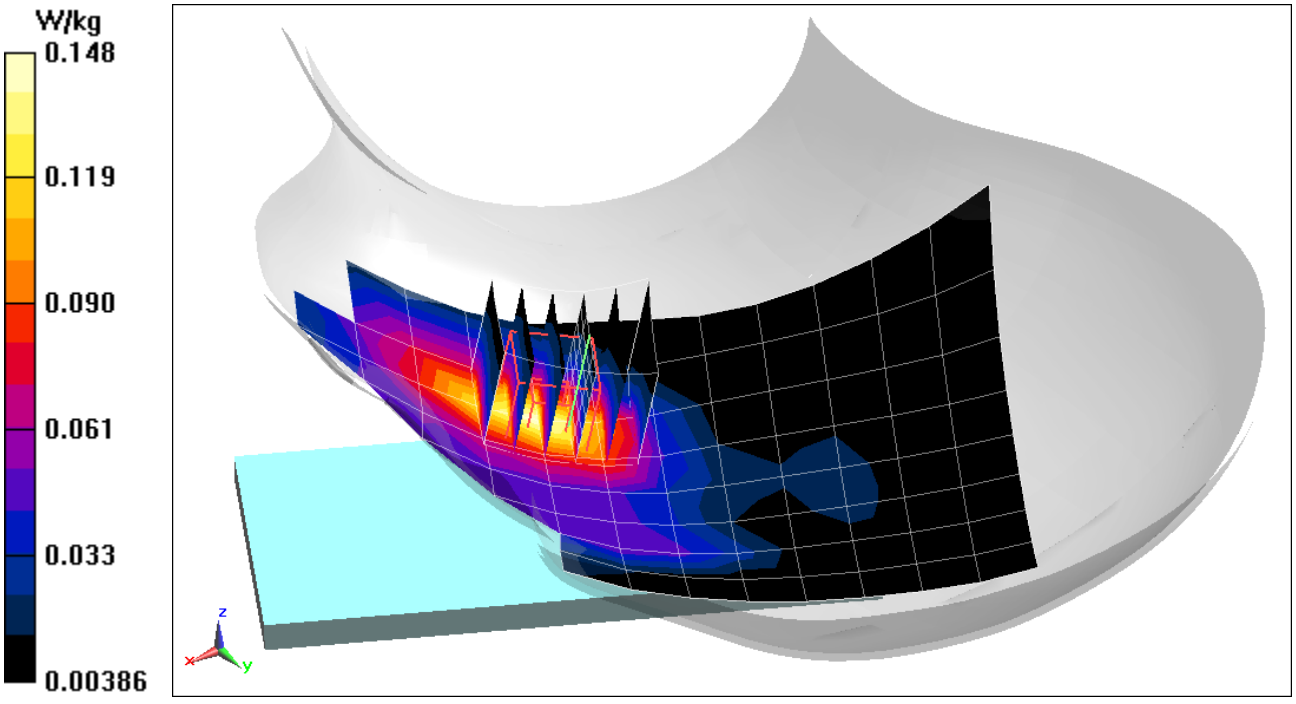
Communication System: UID 0, PCS CDMA; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 Head Medium parameters used:
f = 1880 MHz; σ = 1.428 S/m; ε_r = 40.281; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 10/30/2019; Ambient Temp: 21.6°C; Tissue Temp: 21.4°C

Probe: EX3DV4 - SN3914; ConvF(7.8, 7.8, 7.8) @ 1880 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1272; Calibrated: 2/14/2019
Phantom: Twin-SAM V5.0 Front 30; Type: QD 000 P40 CD; Serial: 1646
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: PCS CDMA, Left Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.119 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.176 W/kg
SAR(1 g) = 0.111 W/kg;



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M

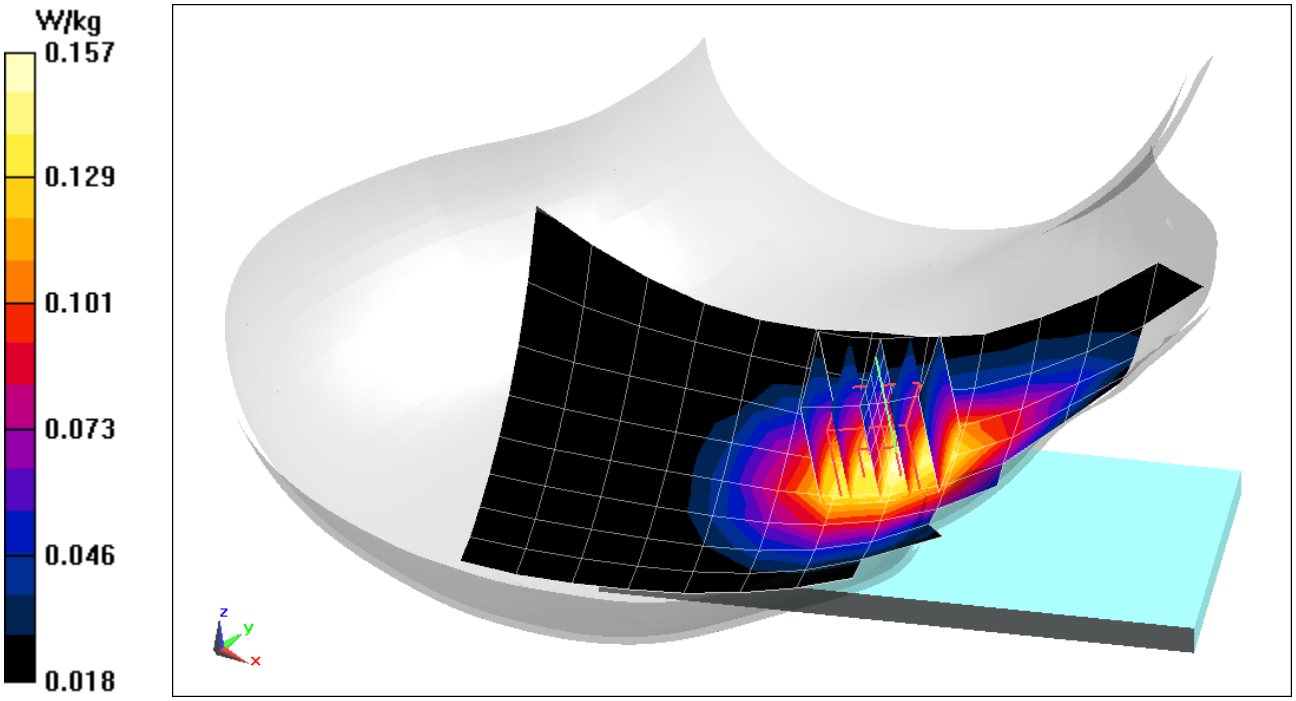
Communication System: UID 0, GSM; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium: 835 Head Medium parameters used (interpolated):
$f = 836.6$ MHz; $\sigma = 0.887$ S/m; $\varepsilon_r = 40.028$; $\rho = 1000$ kg/m^3
Phantom section: Right Section

Test Date: 10/23/2019; Ambient Temp: 21.5°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.6 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: GSM 850, Right Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.50 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.172 W/kg
SAR(1 g) = 0.132 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M

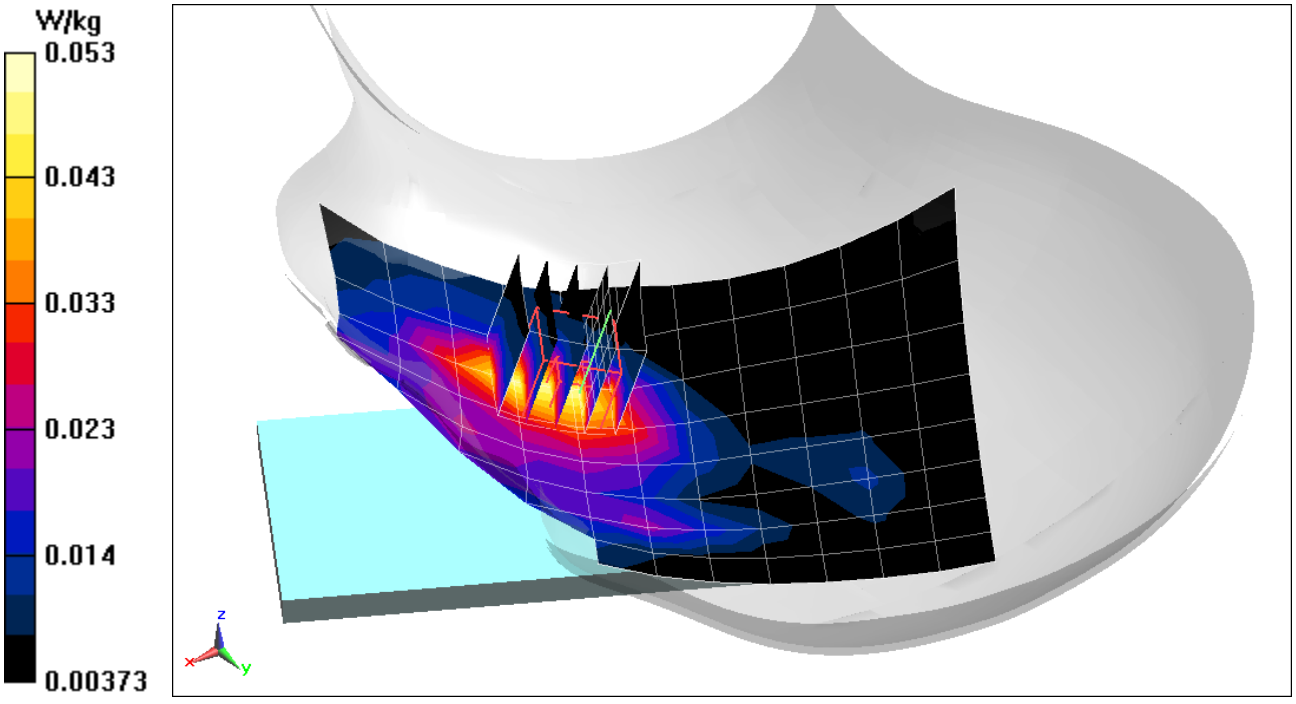
Communication System: UID 0, GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: 1900 Head Medium parameters used:
f = 1880 MHz; σ = 1.427 S/m; ε_r = 40.711; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 10/23/2019; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3914; ConvF(7.8, 7.8, 7.8) @ 1880 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1272; Calibrated: 2/14/2019
Phantom: Twin-SAM V5.0 Front 30; Type: QD 000 P40 CD; Serial: 1646
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: GSM 1900, Left Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.371 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.0640 W/kg
SAR(1 g) = 0.038 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0432M

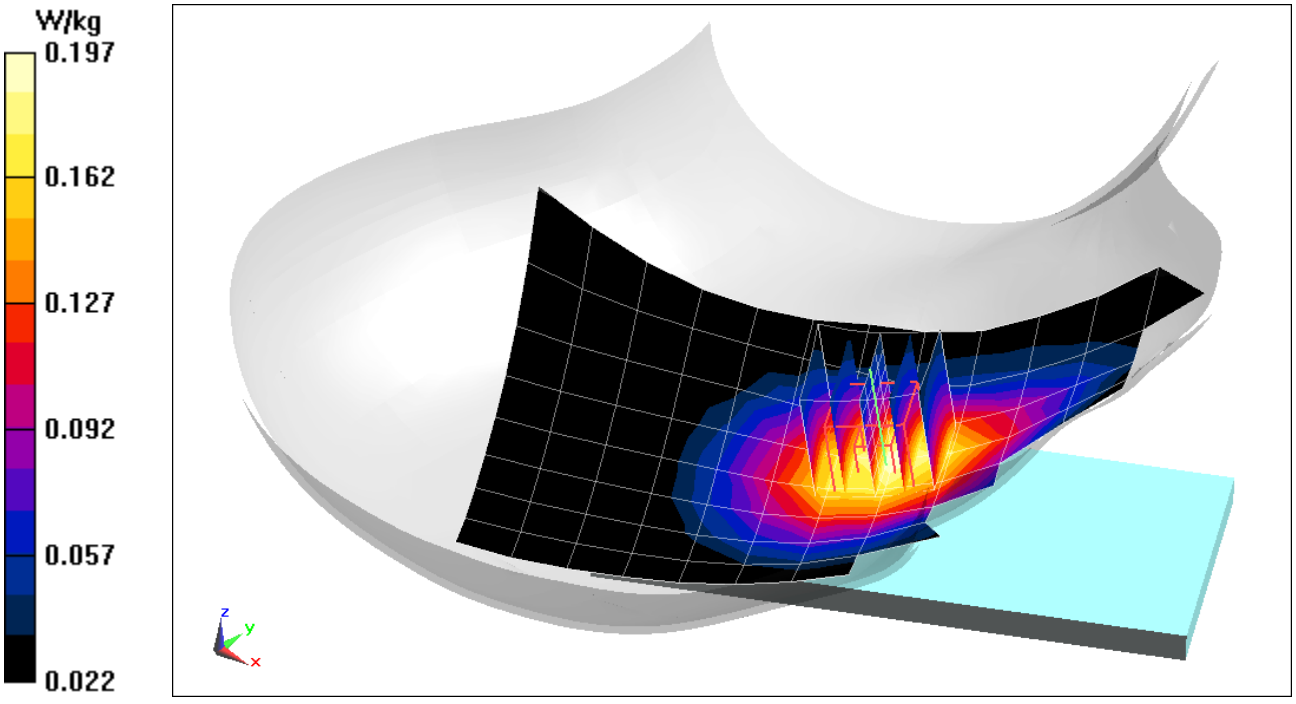
Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium: 835 Head Medium parameters used (interpolated):
$f = 836.6$ MHz; $\sigma = 0.887$ S/m; $\varepsilon_r = 40.028$; $\rho = 1000$ kg/m^3
Phantom section: Right Section

Test Date: 10/23/2019; Ambient Temp: 21.5°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.6 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: UMTS 850, Right Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.08 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.217 W/kg
SAR(1 g) = 0.166 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M

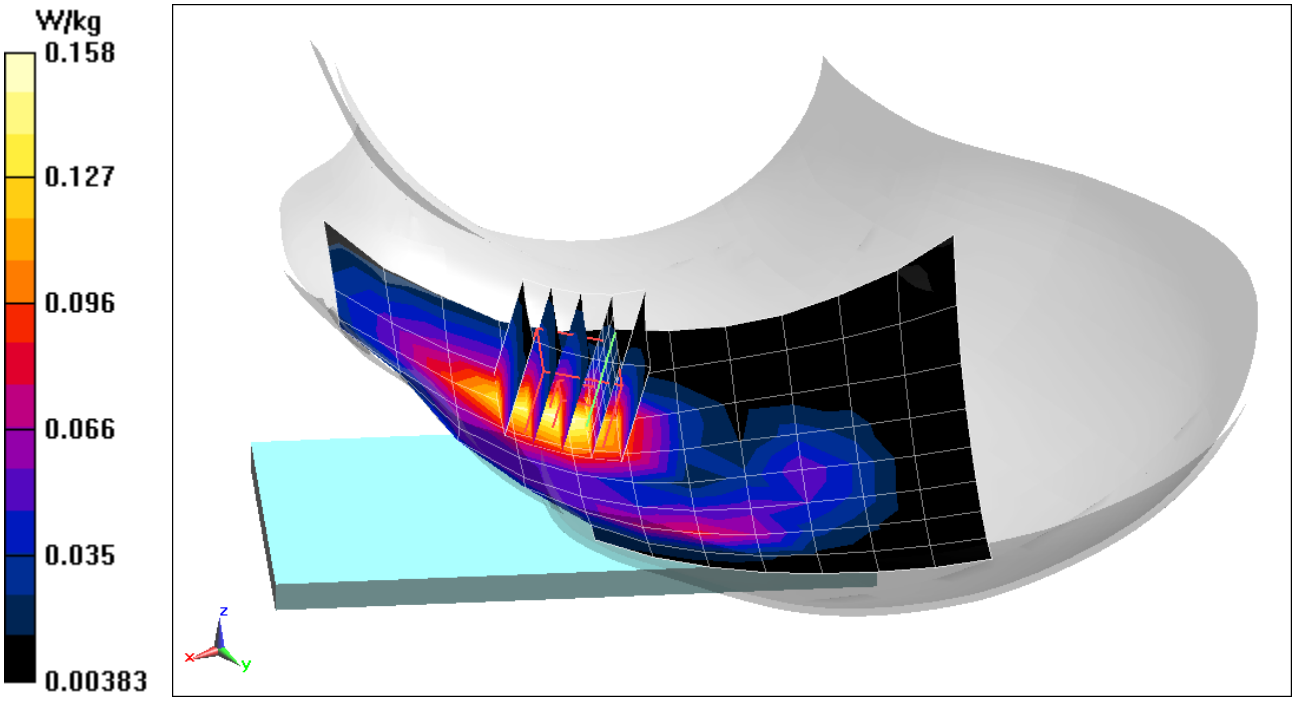
Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1
Medium: 1750 Head Medium parameters used (interpolated):
f = 1732.4 MHz; σ = 1.381 S/m; ε_r = 41.558; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 11/04/2019; Ambient Temp: 22.0°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN3914; ConvF(8.16, 8.16, 8.16) @ 1732.4 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1272; Calibrated: 2/14/2019
Phantom: Twin-SAM V5.0 Front 30; Type: QD 000 P40 CD; Serial: 1646
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: UMTS 1750, Left Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.596 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.188 W/kg
SAR(1 g) = 0.121 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0496M

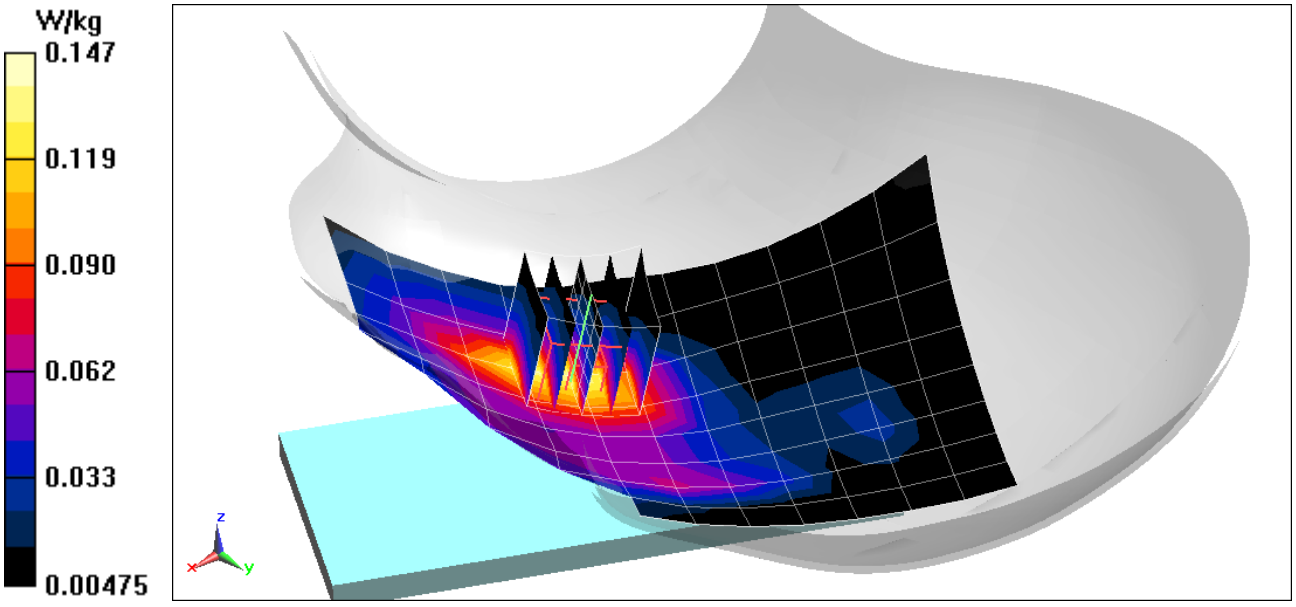
Communication System: UID 0, UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 Head Medium parameters used:
f = 1880 MHz; σ = 1.427 S/m; ε_r = 40.711; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 10/23/2019; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3914; ConvF(7.8, 7.8, 7.8) @ 1880 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1272; Calibrated: 2/14/2019
Phantom: Twin-SAM V5.0 Front 30; Type: QD 000 P40 CD; Serial: 1646
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: UMTS 1900, Left Head, Cheek, Mid.ch

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.893 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.172 W/kg
SAR(1 g) = 0.108 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M

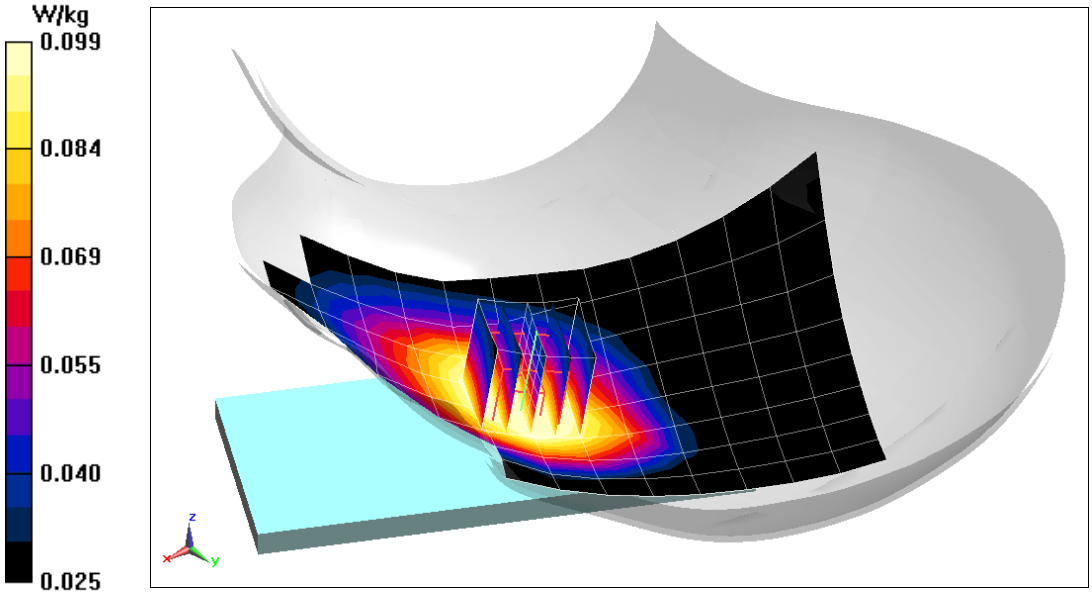
Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1
Medium: 750 Head Medium parameters used (interpolated):
$f = 680.5$ MHz; $\sigma = 0.872$ S/m; $\varepsilon_r = 40.894$; $\rho = 1000$ kg/m^3
Phantom section: Left Section

Test Date: 10/28/2019; Ambient Temp: 23.4°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7551; ConvF(10.11, 10.11, 10.11) @ 680.5 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 71, Left Head, Cheek, Mid.ch, 20 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.59 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.104 W/kg
SAR(1 g) = 0.088 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M

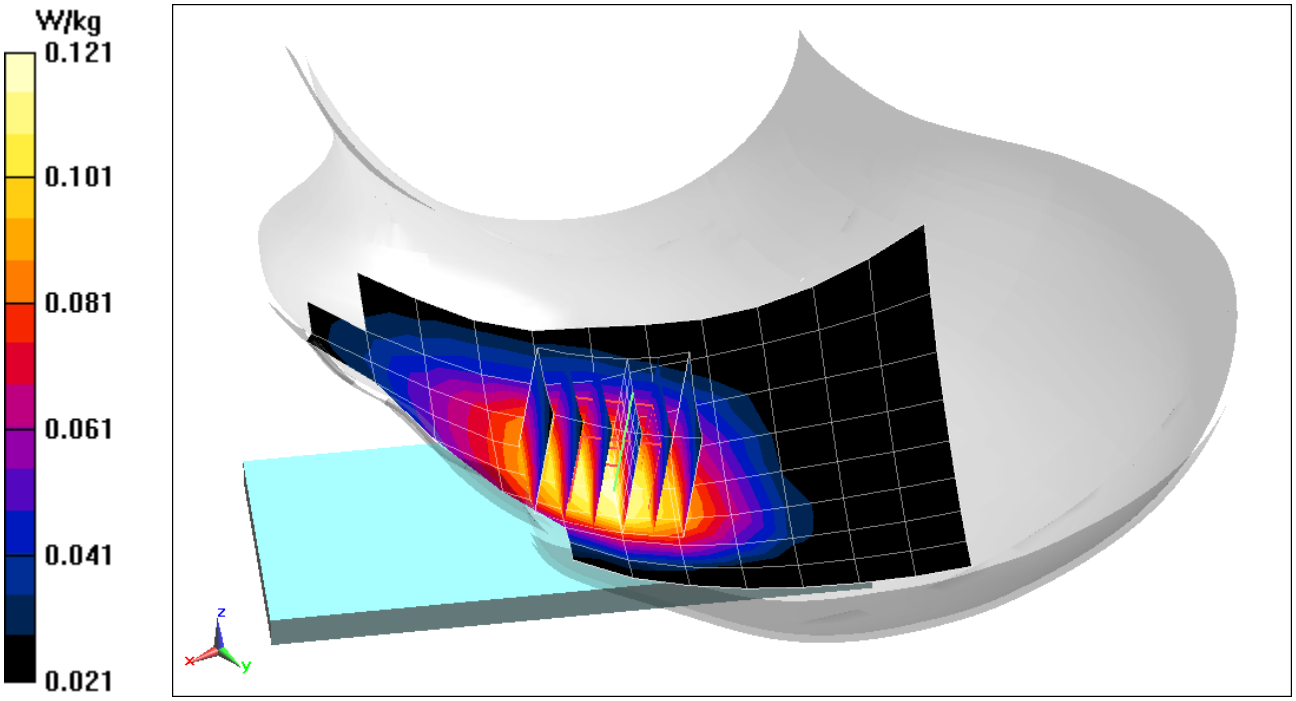
Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1
Medium: 750 Head Medium parameters used (interpolated):
f = 707.5 MHz; σ = 0.881 S/m; ε_r = 40.82; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 10/28/2019; Ambient Temp: 23.4°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7551; ConvF(10.11, 10.11, 10.11) @ 707.5 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 12, Left Head, Cheek, Mid.ch, QPSK, 10 MHz Bandwidth, 1 RB, 0 RB Offset

Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.17 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.129 W/kg
SAR(1 g) = 0.106 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M

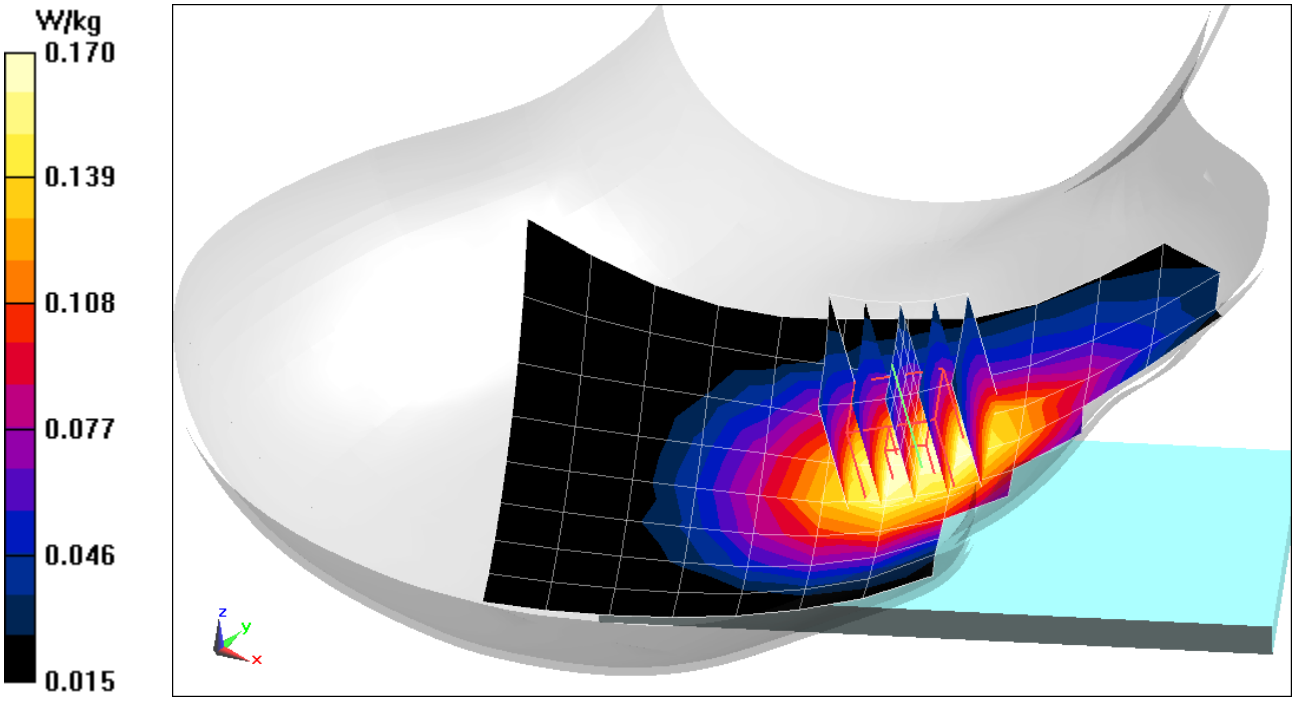
Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1
Medium: 750 Head Medium parameters used (interpolated):
f = 782 MHz; σ = 0.906 S/m; ε_r = 40.623; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 10/28/2019; Ambient Temp: 23.4°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7551; ConvF(10.11, 10.11, 10.11) @ 782 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 13, Right Head, Cheek, Mid.ch, 10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.32 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.183 W/kg
SAR(1 g) = 0.145 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M

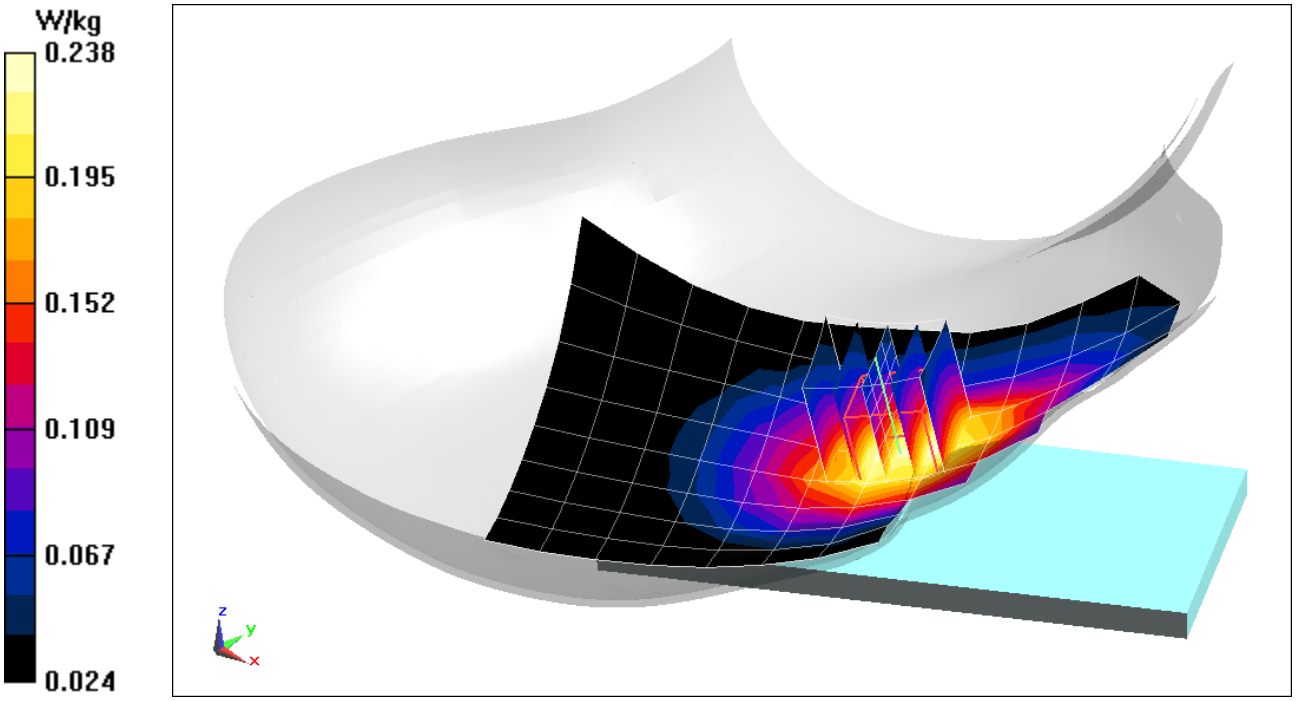
Communication System: UID 0, LTE Band 14; Frequency: 793 MHz; Duty Cycle: 1:1
Medium: 750 Head Medium parameters used (interpolated):
f = 793 MHz; σ = 0.91 S/m; ε_r = 40.591; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 10/28/2019; Ambient Temp: 23.4°C; Tissue Temp: 22.3°C

Probe: EX3DV4 - SN7551; ConvF(10.11, 10.11, 10.11) @ 793 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 14, Right Head, Cheek, Mid.ch, 10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.73 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.259 W/kg
SAR(1 g) = 0.203 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0473M

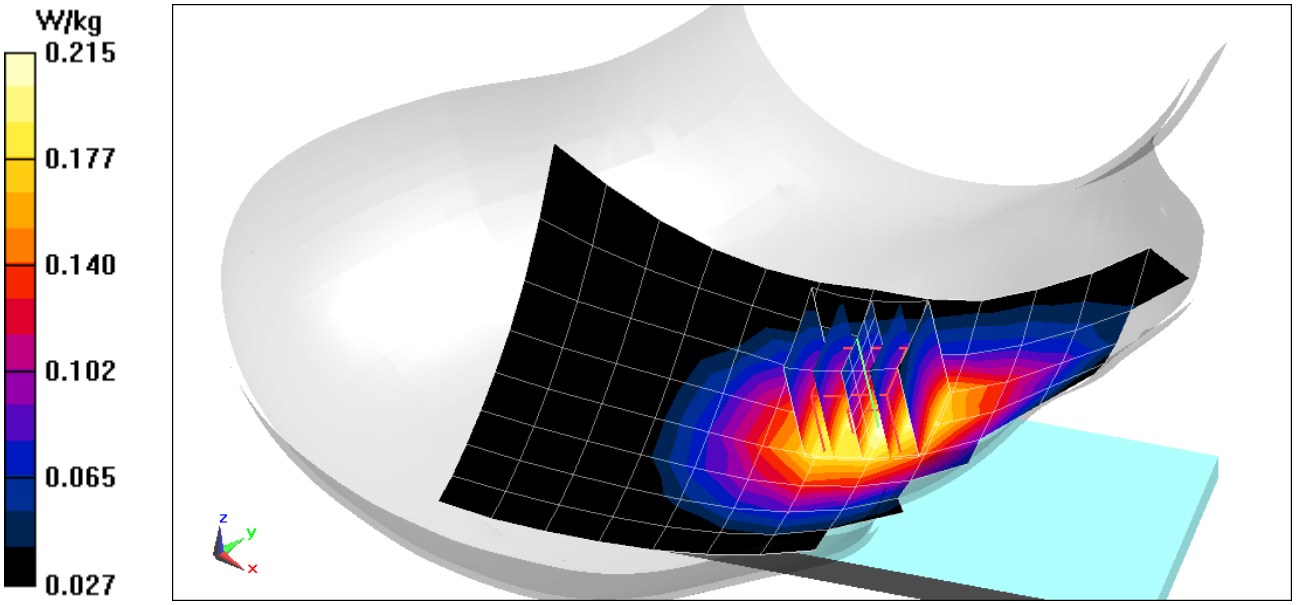
Communication System: UID 0, LTE Band 26; Frequency: 831.5 MHz; Duty Cycle: 1:1
Medium: 835 Head Medium parameters used (interpolated):
f = 831.5 MHz; σ = 0.885 S/m; ε_r = 40.042; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 10/23/2019; Ambient Temp: 21.5°C; Tissue Temp: 20.1°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 831.5 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 26 (Cell.), Right Head, Cheek, Mid.ch, 15 MHz Bandwidth, QPSK, 1 RB, 36 RB Offset

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.06 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.231 W/kg
SAR(1 g) = 0.183 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0445M

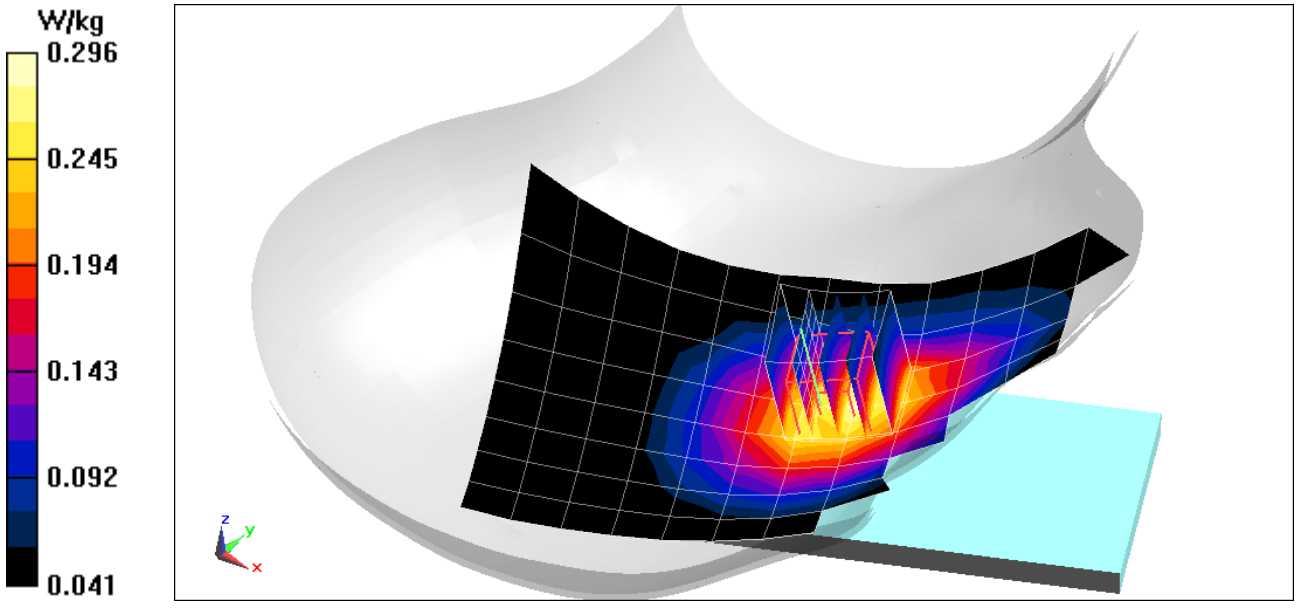
Communication System: UID 0, LTE Band 5 (Cell.); Frequency: 836.5 MHz; Duty Cycle: 1:1
Medium: 835 Head Medium parameters used (interpolated):
$f = 836.5$ MHz; $\sigma = 0.93$ S/m; $\varepsilon_r = 40.486$; $\rho = 1000$ kg/m^3
Phantom section: Right Section

Test Date: 10/31/2019; Ambient Temp: 21.3°C; Tissue Temp: 20.9°C

Probe: EX3DV4 - SN7551; ConvF(9.88, 9.88, 9.88) @ 836.5 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 5 (Cell.), ULCA, Right Head, Cheek,
PCC: 10 MHz Bandwidth, Ch. 20525, QPSK, 1 RB, 0 RB Offset
SCC: 5 MHz Bandwidth, Ch. 20453, QPSK, 1 RB, 24 RB Offset

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.09 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.325 W/kg
SAR(1 g) = 0.251 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0492M

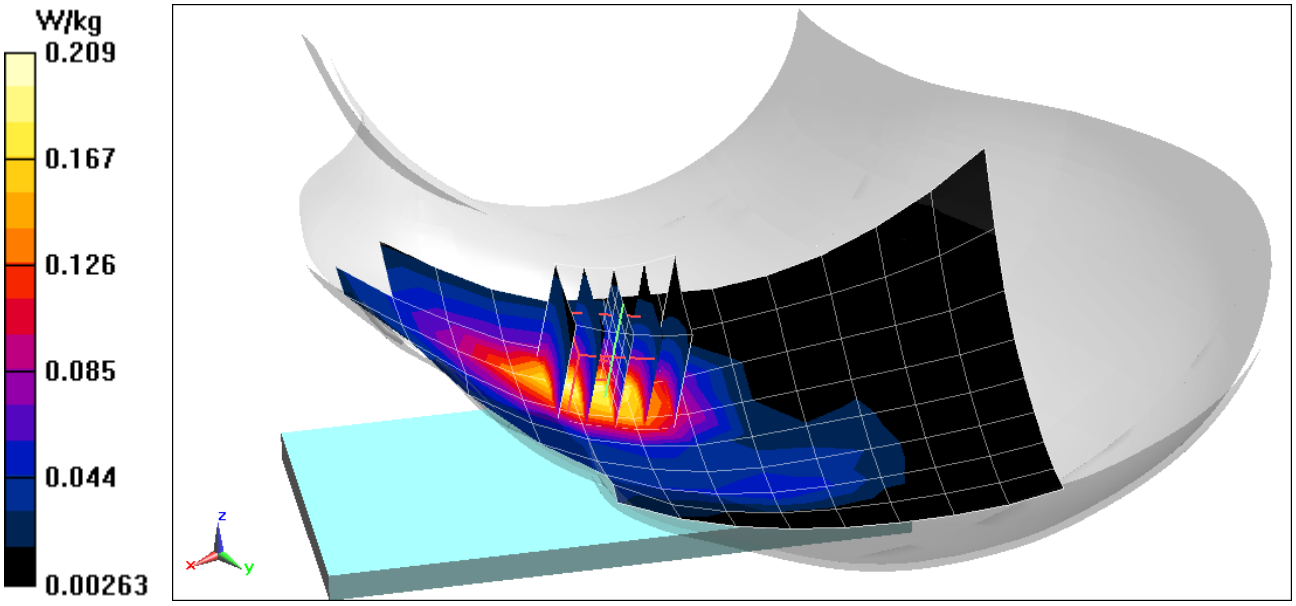
Communication System: UID 0, LTE Band 66 (AWS); Frequency: 1745 MHz; Duty Cycle: 1:1
Medium: 1750 Head Medium parameters used:
f = 1745 MHz; σ = 1.355 S/m; ε_r = 38.893; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 11/25/2019; Ambient Temp: 22.2°C; Tissue Temp: 21.3°C

Probe: EX3DV4 - SN7551; ConvF(8.34, 8.34, 8.34) @ 1745 MHz; Calibrated: 9/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1333; Calibrated: 9/17/2019
Phantom: Twin-SAM V5.0 (); Type: QD 000 P40 CD; Serial: 1792
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 66 (AWS), ULCA CA_66B Left Head, Cheek,
PCC: 10 MHz Bandwidth, Ch. 132322, QPSK, 1 RB, 49 RB Offset
SCC: 10 MHz Bandwidth, Ch. 132421, QPSK, 1 RB, 0 Offset

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.38 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.242 W/kg
SAR(1 g) = 0.153 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0530M

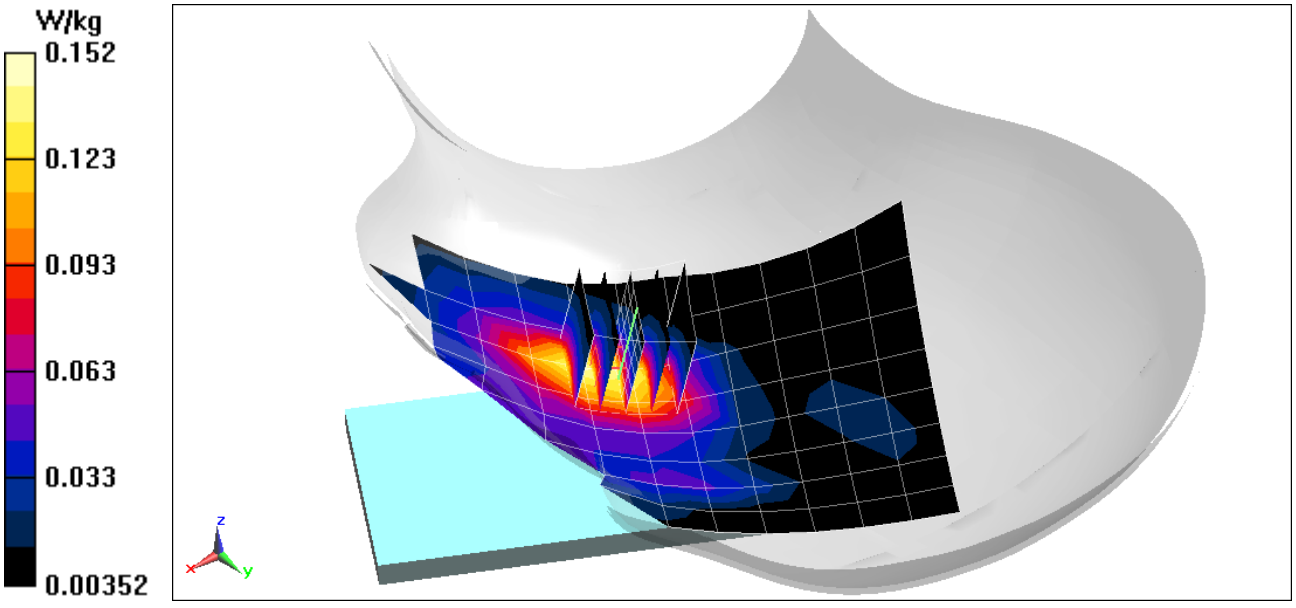
Communication System: UID 0, LTE Band 25 (PCS); Frequency: 1882.5 MHz; Duty Cycle: 1:1
Medium: 1900 Head Medium parameters used (interpolated):
f = 1882.5 MHz; σ = 1.43 S/m; ε_r = 40.698; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 10/23/2019; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3914; ConvF(7.8, 7.8, 7.8) @ 1882.5 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1272; Calibrated: 2/14/2019
Phantom: Twin-SAM V5.0 Front 30; Type: QD 000 P40 CD; Serial: 1646
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 25 (PCS), Left Head, Cheek, Mid.ch, 20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset

Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.726 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.177 W/kg
SAR(1 g) = 0.111 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0530M

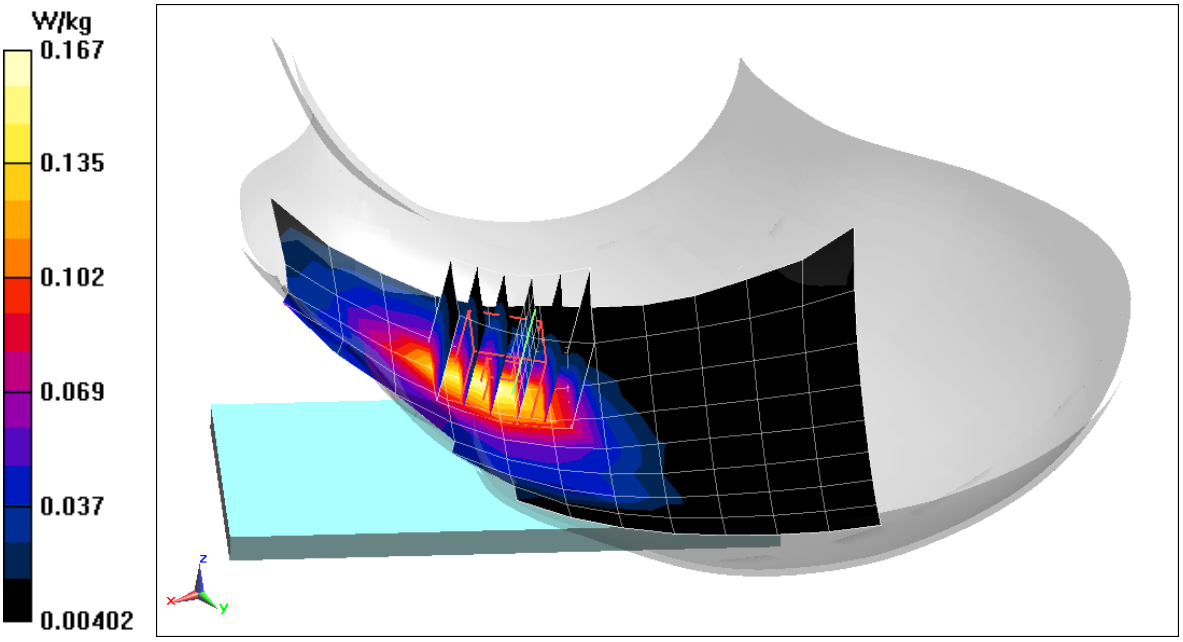
Communication System: UID 0, _LTE Band 2 (PCS); Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: 1900 Head Medium parameters used (interpolated):
f = 1900 MHz; σ = 1.449 S/m; ε_r = 40.608; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 10/23/2019; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3914; ConvF(7.8, 7.8, 7.8) @ 1900 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1272; Calibrated: 2/14/2019
Phantom: Twin-SAM V5.0 Front 30; Type: QD 000 P40 CD; Serial: 1646
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 2 (PCS), Left Head, Cheek, High.ch, 20 MHz Bandwidth, QPSK, 1 RB, 99 RB Offset

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.875 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.197 W/kg
SAR(1 g) = 0.122 W/kg



DUT: A3LSMG986U; Type: Portable Handset; Serial: 0533M

Communication System: UID 0, LTE Band 30; Frequency: 2310 MHz; Duty Cycle: 1:1
Medium: 2450 Head Medium parameters used:
f = 2310 MHz; σ = 1.71 S/m; ε_r = 37.698; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 11/04/2019; Ambient Temp: 22.3°C; Tissue Temp: 20.7°C

Probe: EX3DV4 - SN7417; ConvF(7.73, 7.73, 7.73) @ 2310 MHz; Calibrated: 2/19/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn665; Calibrated: 2/13/2019
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647
Measurement SW: DASY52, Version 52.10 (2);SEMCAD X Version 14.6.12 (7470)

Mode: LTE Band 30, Left Head, Cheek, Mid.ch, 10 MHz Bandwidth, QPSK, 1 RB, 0 RB Offset

Area Scan (11x18x1): Measurement grid: dx=12mm, dy=12mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.138 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.161 W/kg
SAR(1 g) = 0.091 W/kg