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SAR EVALUATION REPORT

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

Date of Testing:
04/22/20 - 06/07/20
Test Site/Location:
PCTEST Lab, Columbia, MD, USA
Document Serial No.:
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FCC ID: **A3LSMN986U**

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

DUT Type: Portable Handset
Application Type: Certification
FCC Rule Part(s): CFR §2.1093
Model: SM-N986U
Additional Model(s): SM-N986U1

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	0.27	0.47	1.16	N/A
PCE	CDMA/EVDO BC0 (§22H)	824.70 - 848.31 MHz	0.19	0.41	0.89	N/A
PCE	PCS CDMA/EVDO	1851.25 - 1908.75 MHz	0.12	0.68	1.10	3.03
PCE	GSM/GPRS/EDGE 850	824.20 - 848.80 MHz	< 0.1	0.28	0.86	N/A
PCE	GSM/GPRS/EDGE 1900	1850.20 - 1909.80 MHz	< 0.1	0.40	0.81	1.90
PCE	UMTS 850	826.40 - 846.60 MHz	0.16	0.37	0.72	N/A
PCE	UMTS 1750	1712.4 - 1752.6 MHz	0.15	0.79	1.18	3.11
PCE	UMTS 1900	1852.4 - 1907.6 MHz	0.11	0.77	1.10	2.67
PCE	LTE Band 71	665.5 - 695.5 MHz	0.12	0.25	0.39	N/A
PCE	LTE Band 12	699.7 - 715.3 MHz	0.13	0.25	0.42	N/A
PCE	LTE Band 13	779.5 - 784.5 MHz	0.24	0.38	0.74	N/A
PCE	LTE Band 14	790.5 - 795.5 MHz	0.19	0.43	0.68	N/A
PCE	LTE Band 26 (Cell)	814.7 - 848.3 MHz	0.17	0.34	0.69	N/A
PCE	LTE Band 5 (Cell)	824.7 - 848.3 MHz	0.19	0.39	0.68	N/A
PCE	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	0.15	1.01	1.13	2.99
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	0.13	0.83	1.17	3.14
PCE	LTE Band 2 (PCS)	1850.7 - 1909.3 MHz	N/A	N/A	N/A	N/A
PCE	LTE Band 30	2307.5 - 2312.5 MHz	< 0.1	0.53	1.04	2.91
PCE	LTE Band 7	2502.5 - 2567.5 MHz	0.13	0.47	0.57	1.82
CBE	LTE Band 48	3552.5 - 3697.5 MHz	0.51	0.36	0.85	N/A
PCE	LTE Band 41	2498.5 - 2687.5 MHz	< 0.1	0.32	0.47	2.68
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	0.37	N/A
PCE	NR Band n12	701.5 - 713.5 MHz	0.13	0.23	0.40	N/A
PCE	NR Band n5 (Cell)	826.5 - 846.5 MHz	0.18	0.31	0.68	N/A
PCE	NR Band n66 (AWS)	1712.5 - 1777.5 MHz	0.15	1.04	1.16	2.73
PCE	NR Band n25 (PCS)	1852.5 - 1912.5 MHz	0.15	0.76	1.17	2.47
PCE	NR Band n2 (PCS)	1852.5 - 1907.5 MHz	N/A	N/A	N/A	N/A
PCE	NR Band n41	2506.02 - 2679.99	0.78	0.10	0.53	N/A
DTS	2.4 GHz WLAN	2412 - 2462 MHz	0.83	0.10	0.49	N/A
NII	U-NII-1	5180 - 5240 MHz	N/A	N/A	N/A	N/A
NII	U-NII-2A	5260 - 5320 MHz	< 0.1	0.25	N/A	1.70
NII	U-NII-2C	5500 - 5720 MHz	< 0.1	0.41	N/A	2.19
NII	U-NII-3	5745 - 5825 MHz	< 0.1	0.50	0.59	N/A
DSS/DTS	Bluetooth	2402 - 2480 MHz	0.59	< 0.1	0.25	N/A
Simultaneous SAR per KDB 690783 D01v01r03:			1.51	1.59	1.59	3.92

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 1.9 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

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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 n12	Data	701.5 - 713.5 MHz
NR Band n5	Data	826.5 - 846.5 MHz
NR Band n66	Data	1712.5 - 1777.5 MHz
NR Band n25	Data	1852.5 - 1912.5 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
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).

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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	Earjack	Maximum Tune-up Output Power*
Averaging Volume:		1g	10g	10g	1g	1g	10g	
Spacing:		15 mm	8, 6, 12	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)						Pmax
CDMA/EVDO BC10	A	29.3		27.3	31.8	25.4	27.3	25.0
CDMA/EVDO BC0	A	29.7		27.3	33.0	26.3	27.3	24.8
CDMA/EVDO BC1	A	25.4		21.0	33.1	18.0	21.0	23.0
GSM/GPRS/EDGE 850 MHz	A	29.9		29.1	37.5	26.7	29.1	25.3
GSM/GPRS/EDGE 1900 MHz	A	22.7		20.1	33.8	18.6	20.1	22.3
UMTS B5	A	30.1		27.0	33.7	27.0	27.0	24.8
UMTS B4	A	25.5		20.0	32.8	19.0	20.0	23.5
UMTS B2	A	25.1		20.0	33.6	18.0	20.0	23.0
LTE FDD B71	A	31.9		26.7	34.9	26.7	26.7	24.8
LTE FDD B12	A	31.8		27.4	34.5	27.4	27.4	24.8
LTE FDD B13	A	30.0		28.0	32.2	27.1	28.0	24.8
LTE FDD B14	A	29.5		27.6	32.7	27.5	27.6	24.8
LTE FDD B26	A	30.6		26.5	33.6	26.5	26.5	24.8
LTE FDD B5	A	30.1		27.1	33.1	27.1	27.1	24.8
LTE FDD B66/4	A	24.7		19.5	32.9	19.0	19.5	23.5
LTE FDD B25/2	A	25.3		21.0	33.0	18.5	21.0	23.5
LTE FDD B30	A	26.4		23.1	36.6	19.0	23.1	23.0
LTE FDD B7	B	26.9		19.0	32.6	19.0	19.0	23.0
LTE TDD B48	G	22.0		22.0	16.0	22.0	22.0	22.0
LTE TDD B41/38 PC3	B	29.2		20.0	34.7	19.0	20.0	22.0
LTE TDD B41 PC2	B	29.2		20.0	34.7	19.0	20.0	22.9
NR FDD n71	A	31.7		28.5	34.4	28.5	28.5	24.5
NR FDD n12	A	32.0		26.5	34.4	26.5	26.5	24.5
NR FDD n5	A	30.6		28.1	32.9	27.2	28.1	24.5
NR FDD n66	A	24.3		19.5	32.9	19.0	19.5	23.5
NR FDD n2/25	A	25.7		19.5	32.8	18.0	19.5	23.5
NR TDD n41	F	27.3		27.3	16.5	21.1	27.3	18.5

*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.

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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	26.0	26.0	26.0
	Nominal	25.0	25.0	25.0
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	24.0	24.0	24.0
	Nominal	23.0	23.0	23.0
Earjack Active (DSI = 4)	Max allowed power	22.0	22.0	22.0
	Nominal	21.0	21.0	21.0
Hotspot Mode Active (DSI = 3)	Max allowed power	19.0	19.0	19.0
	Nominal	18.0	18.0	18.0
Proximity Sensor (DSI = 1)	Max allowed power	22.0	22.0	22.0
	Nominal	21.0	21.0	21.0

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	33.5	33.5	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.5	32.5	31.5	29.5	27.5	27.0	25.0	23.0	22.0
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	30.5	30.5	29.5	27.5	25.5	27.0	25.0	23.0	22.0
	Nominal	29.5	29.5	28.5	26.5	24.5	26.0	24.0	22.0	21.0
Earjack Active (DSI = 4)	Max allowed power	30.3	30.3	27.3	25.5	24.3	27.0	25.0	23.0	22.0
	Nominal	29.3	29.3	26.3	24.5	23.3	26.0	24.0	22.0	21.0
Hotspot Mode Active (DSI = 3)	Max allowed power	N/A	28.8	25.8	24.0	22.8	27.0	25.0	23.0	22.0
	Nominal	N/A	27.8	24.8	23.0	21.8	26.0	24.0	22.0	21.0
Proximity Sensor (DSI = 1)	Max allowed power	30.3	30.3	27.3	25.5	24.3	27.0	25.0	23.0	22.0
	Nominal	29.3	29.3	26.3	24.5	23.3	26.0	24.0	22.0	21.0

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

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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	25.8	24.8	24.8	24.8
	Nominal	24.8	23.8	23.8	23.8
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	21.0	20.0	20.0	20.0
	Nominal	20.0	19.0	19.0	19.0
Hotspot Mode Active (DSI = 3)	Max allowed power	20.0	19.0	19.0	19.0
	Nominal	19.0	18.0	18.0	18.0
Proximity Sensor (DSI = 1)	Max allowed power	21.0	20.0	20.0	20.0
	Nominal	20.0	19.0	19.0	19.0
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	24.0	23.0	23.0	23.0
	Nominal	23.0	22.0	22.0	22.0
Earjack Active (DSI = 4)	Max allowed power	21.0	20.0	20.0	20.0
	Nominal	20.0	19.0	19.0	19.0
Hotspot Mode Active (DSI = 3)	Max allowed power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
Proximity Sensor (DSI = 1)	Max allowed power	21.0	20.0	20.0	20.0
	Nominal	20.0	19.0	19.0	19.0

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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	25.8	25.8	25.8	25.8	25.8
	Nominal	24.8	24.8	24.8	24.8	24.8
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	24.5	24.5	20.0	20.5	20.5
	Nominal	23.5	23.5	19.0	19.5	19.5
LTE FDD Band 4	Max allowed power	24.5	24.5	20.0	20.5	20.5
	Nominal	23.5	23.5	19.0	19.5	19.5
LTE FDD Band 2	Max allowed power	24.5	24.5	19.5	22.0	22.0
	Nominal	23.5	23.5	18.5	21.0	21.0
LTE FDD Band 25	Max allowed power	24.5	24.5	19.5	22.0	22.0
	Nominal	23.5	23.5	18.5	21.0	21.0
LTE FDD Band 7	Max allowed power	24.0	24.0	20.0	20.0	20.0
	Nominal	23.0	23.0	19.0	19.0	19.0
LTE FDD Band 30	Max allowed power	24.0	24.0	20.0	24.0	24.0
	Nominal	23.0	23.0	19.0	23.0	23.0
LTE TDD Band 38	Max allowed power	25.0	25.0	22.0	23.0	23.0
	Nominal	24.0	24.0	21.0	22.0	22.0
LTE TDD Band 48	Max allowed power	25.0	19.0	25.0	25.0	25.0
	Nominal	24.0	18.0	24.0	24.0	24.0
LTE TDD Band 41 (PC2)	Max allowed power	27.5	27.5	23.6	24.6	24.6
	Nominal	26.5	26.5	22.6	23.6	23.6
LTE TDD Band 41 (PC3)	Max allowed power	25.0	25.0	22.0	23.0	23.0
	Nominal	24.0	24.0	21.0	22.0	22.0

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)
NR FDD Band n71	Max allowed power	25.5	25.5	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5	24.5	24.5
NR FDD Band n12	Max allowed power	25.5	25.5	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5	24.5	24.5
NR FDD Band n5	Max allowed power	25.5	25.5	25.5	25.5	25.5
	Nominal	24.5	24.5	24.5	24.5	24.5
NR FDD Band n66	Max allowed power	24.5	24.5	20.0	20.5	20.5
	Nominal	23.5	23.5	19.0	19.5	19.5
NR FDD Band n25	Max allowed power	24.5	24.5	19.0	20.5	20.5
	Nominal	23.5	23.5	18.0	19.5	19.5
NR FDD Band n2	Max allowed power	24.5	24.5	19.0	20.5	20.5
	Nominal	23.5	23.5	18.0	19.5	19.5
NR TDD Band n41	Max allowed power	25.5	23.5	25.5	25.5	25.5
	Nominal	24.5	22.5	24.5	24.5	24.5

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

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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	IEEE 802.11 (in dBm)													
		SISO								MIMO					
		Antenna 1 & Antenna 2													
		b		g		n		ax (SU)		g (CDD + STBC)		n		ax (SU)	
Nominal / Maximum Power		Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max
2.4 GHz WIFI	2.45 GHz	19.5	20.5	17.5	18.5	17.5 Ch 1: 15.5 Ch 11: 13.5	18.5 16.5 14.5	17.0 Ch 1: 15.5 Ch 11: 13.5	18.0 16.5 14.5	20.5	21.5	20.5 Ch. 1: 18.5 Ch. 11: 16.5	21.5 19.5 17.5	17.0 Ch. 1: 15.5 Ch. 11: 13.5	18.0 16.5 14.5

Mode / Band		Modulated Average (dBm)
Bluetooth	Maximum	**16.5**
	Nominal	**15.5**
Bluetooth (EDR)	Maximum	**12.0**
	Nominal	**11.0**
Bluetooth LE 2Mbps	Maximum	**9.0**
	Nominal	**8.0**
Bluetooth LE 1 Bbps, 125/500 Kbps	Maximum	**7.5**
	Nominal	**6.5**

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

Mode	Band	IEEE 802.11 (in dBm)													
		SISO Antenna 1 & Antenna 2								MIMO					
		b		g		n		ax (SU)		g (CDD + STBC)		n		ax (SU)	
Nominal / Maximum Power		Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max
2.4 GHz WIFI	2.45 GHz	15.0	16.0	15.0	16.0	15.0 Ch 11: 13.5	16.0 14.5	15.0 Ch 11: 13.5	16.0 14.5	18.0	19.0	18.0 Ch. 11: 16.5	19.0 17.5	17.0 Ch. 1: 15.5 Ch. 11: 13.5	18.0 16.5 14.5

The below table is applicable in the following conditions:

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

Mode	Band	IEEE 802.11 (in dBm)													
		SISO Antenna 1 & Antenna 2								MIMO					
		b		g		n		ax (SU)		g (CDD + STBC)		n		ax (SU)	
Nominal / Maximum Power		Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max
2.4 GHz WIFI	2.45 GHz	12.0	13.0	12.0	13.0	12.0	13.0	12.0	13.0	15.0	16.0	15.0	16.0	15.0 Ch. 11: 13.5	16.0 14.5

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1.4.4 5 GHz Maximum SISO/MIMO WLAN Output Power

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

Mode	Band	IEEE 802.11 (in dBm)															
		SISO Antenna 1 & Antenna 2								MIMO							
		a		n		ac		ax (SU)		a (CDD + STBC)		n		ac		ax (SU)	
Nominal / Maximum Power		Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max
5 GHz WIFI (20MHz BW)	5200 MHz	17.5	18.5	17.5 Ch. 36: 16.5	18.5 17.5	17.5 Ch. 36: 16.5	18.5 17.5	17.0 Ch. 36: 16.0	18.0 17.0	20.5	21.5	20.5 Ch. 36: 19.5	21.5 20.5	20.5 Ch. 36: 19.5	21.5 20.5	17.0 Ch. 36: 16.0	18.0 17.0
	5300 MHz	17.5	18.5	17.5 Ch. 64: 16.0	18.5 17.0	17.5 Ch. 64: 16.0	18.5 17.0	17.0	18.0	20.5	21.5	20.5 Ch. 64: 19.0	21.5 20.0	20.5 Ch. 64: 19.0	21.5 20.0	17.0 Ch. 64: 16.0	18.0 17.0
	5500 MHz	17.5	18.5	17.5	18.5	17.5	18.5	17.0	18.0	20.5	21.5	20.5	21.5	20.5	21.5	17.0	18.0
	5800 MHz	17.5	18.5	17.5	18.5	17.5	18.5	17.0	18.0	19.0	20.0	19.0	20.0	19.0	20.0	17.0	18.0
5 GHz WIFI (40MHz BW)	5200 MHz			16.5 Ch. 38: 13.0	17.5 14.0	16.5 Ch. 38: 13.0	17.5 14.0	16.0 Ch. 38: 15.0	17.0 16.0			19.5 Ch. 38: 16.0	20.5 17.0	19.5 Ch. 38: 16.0	20.5 17.0	16.0 Ch. 38: 15.0	17.0 16.0
	5300 MHz			16.5 Ch. 62 14.0	17.5 15.0	16.5 Ch. 62 14.0	17.5 15.0	16.0 Ch. 62 15.0	17.0 16.0			19.5 Ch. 62 17.0	20.5 18.0	19.5 Ch. 62 17.0	20.5 18.0	16.0 Ch. 62 14.0	17.0 15.0
	5500 MHz			16.5	17.5	16.5	17.5	16.0	17.0			19.5	20.5	19.5	20.5	16.0	17.0
	5800 MHz			16.5	17.5	16.5	17.5	16.0	17.0			19.0	20.0	19.0	20.0	16.0	17.0
5 GHz WIFI (80MHz BW)	5200 MHz					13.5	14.5	14.0	15.0					16.5	17.5	14.0	15.0
	5300 MHz					13.0	14.0	14.0	15.0					16.0	17.0	14.0	15.0
	5500 MHz					15.5	16.5	15.0	16.0					18.5	19.5	15.0	16.0
	5800 MHz					15.5	16.5	15.0	16.0					18.5	19.5	15.0	16.0

1.4.5 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
- Simultaneous conditions with 5G NR and/or 2.4 GHz WLAN
- Head Conditions during simultaneous conditions with 2.4 GHz WLAN
- Head Conditions during simultaneous conditions with 5G NR and/or 2.4 GHz WLAN

Mode	Band	IEEE 802.11 (in dBm)															
		SISO Antenna 1 & Antenna 2								MIMO							
		a		n		ac		ax (SU)		a (CDD + STBC)		n		ac		ax (SU)	
Nominal / Maximum Power		Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max	Nominal	Max
5 GHz WIFI (20MHz BW)	5200 MHz	12.0	13.0	12.0	13.0	12.0	13.0	12.0	13.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0
	5300 MHz	12.0	13.0	12.0	13.0	12.0	13.0	12.0	13.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0
	5500 MHz	12.0	13.0	12.0	13.0	12.0	13.0	12.0	13.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0
	5800 MHz	12.0	13.0	12.0	13.0	12.0	13.0	12.0	13.0	15.0	16.0	15.0	16.0	15.0	16.0	15.0	16.0
5 GHz WIFI (40MHz BW)	5200 MHz			12.0	13.0	12.0	13.0	12.0	13.0			15.0	16.0	15.0	16.0	15.0	16.0
	5300 MHz			12.0	13.0	12.0	13.0	12.0	13.0			15.0	16.0	15.0	16.0	15.0 Ch. 62: 14.0	16.0 15.0
	5500 MHz			12.0	13.0	12.0	13.0	12.0	13.0			15.0	16.0	15.0	16.0	15.0	16.0
	5800 MHz			12.0	13.0	12.0	13.0	12.0	13.0			15.0	16.0	15.0	16.0	15.0	16.0
5 GHz WIFI (80MHz BW)	5200 MHz					12.0	13.0	12.0	13.0					15.0	16.0	15.0	16.0
	5300 MHz					12.0	13.0	12.0	13.0					15.0	16.0	14.0	15.0
	5500 MHz					12.0	13.0	12.0	13.0					15.0	16.0	15.0	16.0
	5800 MHz					12.0	13.0	12.0	13.0					15.0	16.0	15.0	16.0

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1.5 DUT Antenna Locations

The overall dimensions of this device are > 9 x 5 cm. 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 30	Yes	Yes	No	Yes	Yes	Yes
LTE Band 7	Yes	Yes	No	Yes	Yes	No
LTE Band 48	Yes	Yes	Yes	No	No	Yes
LTE Band 41	Yes	Yes	No	Yes	Yes	No
NR Band n71	Yes	Yes	No	Yes	Yes	Yes
NR Band n12	Yes	Yes	No	Yes	Yes	Yes
NR Band n5 (Cell)	Yes	Yes	No	Yes	Yes	Yes
NR Band n66 (AWS)	Yes	Yes	No	Yes	Yes	Yes
NR Band n25 (PCS)	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
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.

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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.

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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 B2/5/12/13/30/48/66.
11. 5G NR FR2 n260 and n261 cannot transmit simultaneously.
12. LTE + 5G NR FR2 n260 and n261 operations are possible only with LTE 2/5/12/13/14/30/48/66 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 WLAN, 2.4 GHz Bluetooth, 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 WLAN, 2.4 GHz Bluetooth, 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.

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(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.

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

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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 the Near Field PD Report (report SN can be found in Section 1.11 – Bibliography).

NR implementation of n71, n12, n5, n66, n2, n25, and n41 is limited to EN-DC operations only, with LTE Band 2/66/5/12/13/30/48 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
PD Exposure Part 0 Test Report	Revision B.
Near Field PD Report (Part 1)	1M2004170065-22.A3L
RF Exposure Part 0 Test Report	1M2004170065-24.A3L
RF Exposure Part 2 Test Report	1M2004170065-25.A3L
RF Exposure Compliance Summary Report	1M2004170065-26.A3L

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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, UL UE Cat 18				
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.				

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NR Information					
Form Factor	Portable Handset				
Frequency Range of each NR transmission band	NR Band n71 (2507.5 - 2562.5 MHz)				
	NR Band n12 (701.5 - 713.5 MHz)				
	NR Band n5 (Cell) (826.5 - 846.5 MHz)				
	NR Band n66 (AWS) (1712.5 - 1777.5 MHz)				
	NR Band n25 (PCS) (1852.5 - 1912.5 MHz)				
	NR Band n2 (PCS) (1852.5 - 1907.5 MHz)				
	NR Band n41 (2506.02 - 2679.99 MHz)				
Channel Bandwidths	NR Band n71: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n12: 5 MHz, 10 MHz, 15 MHz				
	NR Band n5 (Cell): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n66 (AWS): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n25 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n2 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	NR Band n41: 20 MHz, 30 MHz, 40 MHz, 60 MHz 80 MHz 90 MHz, 100 MHz				
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid	Mid-High	High
NR Band n71: 5 MHz	665.5 (133147)		680.5 (133297)	695.5 (133447)	
NR Band n71: 10 MHz	668 (133600)		680.5 (136100)	693 (138600)	
NR Band n71: 15 MHz	670.5 (134100)		680.5 (136100)	690.5 (138100)	
NR Band n71: 20 MHz	673 (134600)		680.5 (136100)	688 (137600)	
NR Band n12: 5 MHz	701.5 (140300)		707.5 (141500)	713.5 (142700)	
NR Band n12: 10 MHz	704 (140800)		707.5 (141500)	711 (142200)	
NR Band n12: 15 MHz	706.5 (141300)		707.5 (141500)	708.5 (141700)	
NR Band n5 (Cell): 5 MHz	826.5 (165300)		836.5 (167300)	846.5 (169300)	
NR Band n5 (Cell): 10 MHz	829 (165800)		836.5 (167300)	844 (168800)	
NR Band n5 (Cell): 15 MHz	831.5 (166300)		836.5 (167300)	841.5 (168300)	
NR Band n5 (Cell): 20 MHz	834 (166800)		836.5 (167300)	839 (167800)	
NR Band n66 (AWS): 5 MHz	1712.5 (342500)		1745 (349000)	1777.5 (355500)	
NR Band n66 (AWS): 10 MHz	1715 (343000)		1745 (349000)	1775 (355000)	
NR Band n66 (AWS): 15 MHz	1717.5 (343500)		1745 (349000)	1772.5 (354500)	
NR Band n66 (AWS): 20 MHz	1720 (344000)		1745 (349000)	1770 (354000)	
NR Band n25 (PCS): 5 MHz	1852.5 (370500)		1882.5 (376500)	1912.5 (382500)	
NR Band n25 (PCS): 10 MHz	1855 (371000)		1882.5 (376500)	1910 (382000)	
NR Band n25 (PCS): 15 MHz	1857.5 (371500)		1882.5 (376500)	1907.5 (381500)	
NR Band n25 (PCS): 20 MHz	1860 (372000)		1882.5 (376500)	1905 (381000)	
NR Band n2 (PCS): 5 MHz	1852.5 (386500)		1880 (392000)	1907.5 (397500)	
NR Band n2 (PCS): 10 MHz	1855 (387000)		1880 (392000)	1905 (397000)	
NR Band n2 (PCS): 15 MHz	1857.5 (387500)		1880 (392000)	1902.5 (396500)	
NR Band n2 (PCS): 20 MHz	1860 (388000)		1880 (392000)	1900 (396000)	
NR Band n41: 20 MHz	2506.02 (501204)	2549.49 (509898)	2592.99 (518598)	2636.49 (527298)	2679.99 (535998)
NR Band n41: 30 MHz	2511 (502200)	2552.01 (510402)	2592.99 (518598)	2634 (526800)	2674.98 (534996)
NR Band n41: 40 MHz	2516.01 (503202)	2567.34 (513468)	N/A	2618.67 (523734)	2670 (534000)
NR Band n41: 60 MHz	2526 (505200)		2592.99 (518598)	2659.98 (531996)	
NR Band n41: 80 MHz	2536.02 (507204)		N/A	2649.99 (529998)	
NR Band n41: 90 MHz	2541 (508200)		N/A	2644.98 (528996)	
NR Band n41: 100 MHz	2546.01 (509202)		2592.99 (518598)	2640 (528000)	
SCS for NR Band n71/n12/n5/n66/n25/n2	15 kHz				
SCS for NR Band n41	30 kHz				
Modulations Supported in UL	DFT-s-OFDM: π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM				
NR MPR Permanently implemented per 3GPP TS 38.101	YES				
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 2/66				
LTE Anchor Bands for NR Band n12	LTE Band 2/66				
LTE Anchor Bands for NR Band n5 (Cell)	LTE Band 2/30/66				
LTE Anchor Bands for NR Band n66 (AWS)	LTE Band 5/12/13/48				
LTE Anchor Bands for NR Band n25 (PCS)	LTE Band 12				
LTE Anchor Bands for NR Band n2 (PCS)	LTE Band 5/12/13				
LTE Anchor Bands for NR Band n41	LTE Band 2/66				

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3 INTRODUCTION

The FCC and Innovation, Science, and Economic Development Canada have adopted the guidelines for evaluating the environmental effects of radio frequency (RF) radiation in ET Docket 93-62 on Aug. 6, 1996 and Health Canada Safety Code 6 to protect the public and workers from the potential hazards of RF emissions due to FCC-regulated portable devices. [1]

The safety limits used for the environmental evaluation measurements are based on the criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (SAR) in IEEE/ANSI C95.1-1992 Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz [3] and Health Canada RF Exposure Guidelines Safety Code 6 [22]. The measurement procedure described in IEEE/ANSI C95.3-2002 Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave [4] is used for guidance in measuring the Specific Absorption Rate (SAR) due to the RF radiation exposure from the Equipment Under Test (EUT). These criteria for SAR evaluation are similar to those recommended by the International Committee for Non-Ionizing Radiation Protection (ICNIRP) in Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," Report No. Vol 74. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards.

3.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 3-1).

Equation 3-1
SAR Mathematical Equation

$$SAR = \frac{d}{dt}\left(\frac{dU}{dm}\right) = \frac{d}{dt}\left(\frac{dU}{\rho dv}\right)$$

SAR is expressed in units of Watts per Kilogram (W/kg).

$$SAR = \frac{\sigma \cdot E^2}{\rho}$$

where:

σ = conductivity of the tissue-simulating material (S/m)
ρ = mass density of the tissue-simulating material (kg/m^3)
E = Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]

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4 DOSIMETRIC ASSESSMENT

4.1 Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

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.

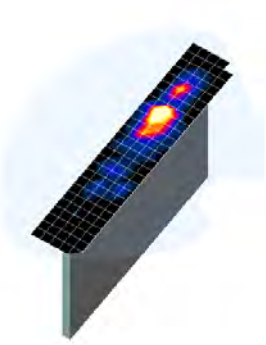


Figure 4-1
Sample SAR Area Scan

3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):

   a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 4-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).

   b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot" condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.

   c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

Table 4-1
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

Frequency	Maximum Area Scan Resolution (mm) (Δx_{area}, Δy_{area})	Maximum Zoom Scan Resolution (mm) (Δx_{zoom}, Δy_{zoom})	Maximum Zoom Scan Spatial Resolution (mm)			Minimum Zoom Scan Volume (mm) (x,y,z)
			Uniform Grid	Graded Grid		
			$\Delta z_{zoom}(n)$	$\Delta z_{zoom}(1)$*	$\Delta z_{zoom}(n>1)$*	
≤ 2 GHz	≤ 15	≤ 8	≤ 5	≤ 4	≤ 1.5*Δz_{zoom}(n-1)	≥ 30
2-3 GHz	≤ 12	≤ 5	≤ 5	≤ 4	≤ 1.5*Δz_{zoom}(n-1)	≥ 30
3-4 GHz	≤ 12	≤ 5	≤ 4	≤ 3	≤ 1.5*Δz_{zoom}(n-1)	≥ 28
4-5 GHz	≤ 10	≤ 4	≤ 3	≤ 2.5	≤ 1.5*Δz_{zoom}(n-1)	≥ 25
5-6 GHz	≤ 10	≤ 4	≤ 2	≤ 2	≤ 1.5*Δz_{zoom}(n-1)	≥ 22

*Also compliant to IEEE 1528-2013 Table 6

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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].

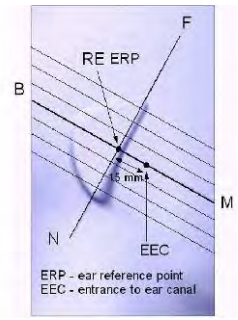


Figure 5-1
Close-Up Side view of ERP

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

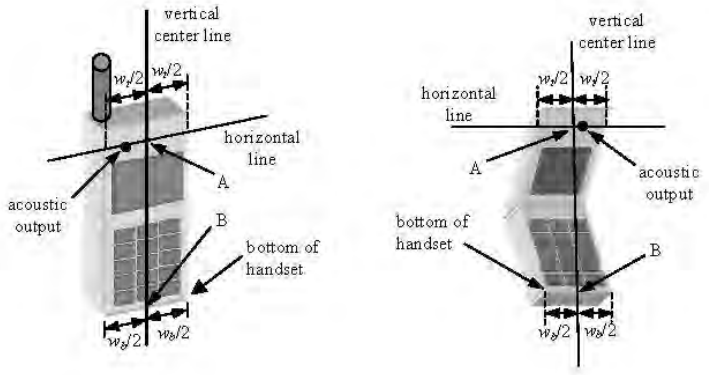


Figure 5-3
Handset Vertical Center & Horizontal Line Reference Points

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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).

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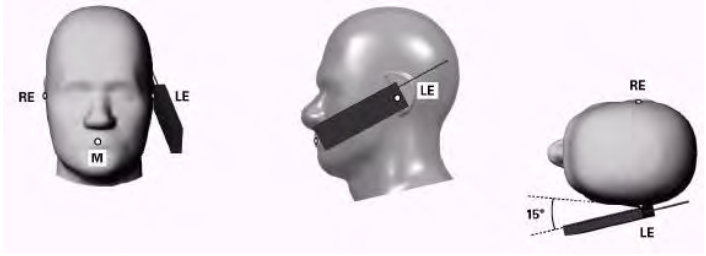


Figure 6-2 Front, Side and Top View of Ear/15º Tilt Position

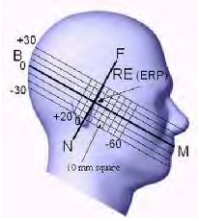


Figure 6-3
Side view w/ relevant markings

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.

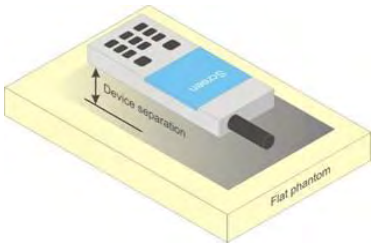


Figure 6-4
Sample Body-Worn Diagram

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

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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

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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.

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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.

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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.

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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.

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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

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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.

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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

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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

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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.

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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.

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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	24.76	24.75	24.55	24.70	24.69	24.38	24.50
Cellular	1013	22H	824.7	24.87	24.86	24.79	24.82	24.83	24.61	24.88
	384	22H	836.52	24.93	24.93	24.83	24.91	24.92	24.38	24.78
	777	22H	848.31	24.35	24.42	24.34	24.41	24.42	24.21	24.39
PCS	25	24E	1851.25	23.62	23.60	23.54	23.60	23.59	23.37	23.63
	600	24E	1880	23.20	23.21	23.20	23.21	23.36	22.99	23.25
	1175	24E	1908.75	23.59	23.59	23.60	23.57	23.82	23.20	23.56

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	18.92	18.92	18.99	18.99
	600	24E	1880	18.60	18.60	18.70	18.71
	1175	24E	1908.75	18.88	18.88	18.93	18.95

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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	21.55	21.59	21.60	21.32	21.57	21.80	21.77
	600	24E	1880	21.13	21.12	21.14	21.00	21.13	21.41	21.43
	1175	24E	1908.75	21.53	21.51	21.51	21.28	21.52	21.78	21.78

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

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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	33.06	32.91	31.88	**29.71**	27.91	27.40	25.75	23.33	22.53
	190	32.86	32.95	31.88	**29.42**	27.76	27.23	25.83	23.26	22.55
	251	32.95	32.81	31.72	**29.81**	27.68	27.17	25.42	23.54	22.52
GSM 1900	512	30.15	30.14	28.80	**27.30**	25.22	26.45	25.00	22.69	21.79
	661	29.74	29.72	28.80	**27.14**	25.09	26.12	24.71	22.77	21.61
	810	30.03	30.00	28.71	**27.07**	25.15	26.05	24.86	22.90	21.81

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	23.86	23.71	25.69	**25.28**	24.73	18.20	19.56	18.90	19.35
	190	23.66	23.75	25.69	**24.99**	24.58	18.03	19.64	18.83	19.37
	251	23.75	23.61	25.53	**25.38**	24.50	17.97	19.23	19.11	19.34
GSM 1900	512	20.95	20.94	22.61	**22.87**	22.04	17.25	18.81	18.26	18.61
	661	20.54	20.52	22.61	**22.71**	21.91	16.92	18.52	18.34	18.43
	810	20.83	20.80	22.52	**22.64**	21.97	16.85	18.67	18.47	18.63

GSM 850	**Frame Avg.Targets:**	23.30	23.30	25.31	**25.07**	24.32	17.80	18.81	18.57	18.82
GSM 1900		20.30	20.30	22.31	**22.07**	21.32	16.80	17.81	17.57	17.82

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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	28.44	25.18	23.47	**22.26**	26.45	25.00	22.69	21.79
	661	28.04	24.93	23.34	**22.10**	26.12	24.71	22.77	21.61
	810	28.29	25.38	23.43	**22.20**	26.05	24.86	22.90	21.81

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	19.24	18.99	19.04	**19.08**	17.25	18.81	18.26	18.61
	661	18.84	18.74	18.91	**18.92**	16.92	18.52	18.34	18.43
	810	19.09	19.19	19.00	**19.02**	16.85	18.67	18.47	18.63
GSM 1900	**Frame Avg.Targets:**	18.60	18.61	18.57	**18.62**	16.80	17.81	17.57	17.82

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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	29.72	29.74	26.80	24.86	**23.34**	26.45	25.00	22.69	21.79
	661	29.55	29.59	26.64	24.65	**23.21**	26.12	24.71	22.77	21.61
	810	29.70	29.72	26.61	24.91	**23.15**	26.05	24.86	22.90	21.81

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	20.52	20.54	20.61	20.43	**20.16**	17.25	18.81	18.26	18.61
	661	20.35	20.39	20.45	20.22	**20.03**	16.92	18.52	18.34	18.43
	810	20.50	20.52	20.42	20.48	**19.97**	16.85	18.67	18.47	18.63
GSM 1900	**Frame Avg.Targets:**	20.10	20.10	20.11	20.07	**20.12**	16.80	17.81	17.57	17.82

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

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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	25.18	25.20	24.85	23.91	23.89	23.88	23.75	23.34	23.68	-
99		12.2 kbps AMR	25.26	25.33	24.85	23.89	23.88	23.86	23.77	23.34	23.71	-
6	HSDPA	Subtest 1	24.26	24.28	23.85	22.92	22.95	22.97	22.66	22.34	22.68	0
6		Subtest 2	24.26	24.30	23.94	22.86	22.84	22.96	22.62	22.23	22.61	0
6		Subtest 3	23.77	23.84	23.42	22.42	22.38	22.45	22.10	21.72	22.21	0.5
6		Subtest 4	23.76	23.81	23.38	22.42	22.47	22.49	22.04	21.70	22.12	0.5
6	HSUPA	Subtest 1	24.28	24.30	23.88	22.92	22.90	22.93	22.59	22.23	22.64	0
6		Subtest 2	22.30	22.31	21.89	20.90	20.89	20.95	20.61	20.20	20.67	2
6		Subtest 3	23.26	23.25	22.88	21.93	21.88	21.94	21.59	21.19	21.67	1
6		Subtest 4	22.25	22.30	21.84	20.90	20.88	20.95	20.60	20.20	20.63	2
6		Subtest 5	24.28	24.29	23.89	22.91	22.89	22.93	22.61	22.21	22.64	0
8	DC-HSDPA	Subtest 1	24.27	24.35	23.88	22.93	22.88	22.90	22.63	22.26	22.67	0
8		Subtest 2	23.89	24.33	23.88	22.97	22.94	22.96	22.64	22.23	22.53	0
8		Subtest 3	23.38	23.77	23.41	22.43	22.35	22.46	22.12	21.77	22.12	0.5
8		Subtest 4	23.79	23.81	23.40	22.39	22.40	22.44	22.13	21.72	22.14	0.5

Table 9-8
Measured P_{limit} for DSI = 3 (Hotspot mode)

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	19.32	19.24	19.80	18.59	18.26	18.49	-
99		12.2 kbps AMR	19.30	19.29	19.89	18.57	18.25	18.56	-
6	HSDPA	Subtest 1	18.36	18.40	18.45	17.60	17.25	17.61	0
6		Subtest 2	18.54	18.71	18.47	17.60	17.20	17.53	0
6		Subtest 3	17.90	17.94	17.98	17.18	16.73	17.11	0.5
6		Subtest 4	17.85	17.91	17.97	17.16	16.71	17.05	0.5
6	HSUPA	Subtest 1	18.32	18.35	18.40	17.50	17.12	17.53	0
6		Subtest 2	16.36	16.41	16.45	15.57	15.16	15.56	2
6		Subtest 3	17.31	17.35	17.48	16.58	16.15	16.56	1
6		Subtest 4	16.39	16.39	16.47	15.59	15.19	15.56	2
6		Subtest 5	18.31	18.35	18.42	17.58	17.14	17.50	0
8	DC-HSDPA	Subtest 1	18.34	18.37	18.40	17.65	17.21	17.56	0
8		Subtest 2	18.28	18.37	18.47	17.44	17.08	17.52	0
8		Subtest 3	17.81	17.92	17.94	17.11	16.70	17.01	0.5
8		Subtest 4	17.87	17.89	17.97	17.13	16.70	17.07	0.5

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Table 9-9
Measured P_{limit} for 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	20.60	20.58	20.53	20.40	20.25	20.50	-
99		12.2 kbps AMR	20.59	20.54	20.47	20.39	20.26	20.52	-
6	HSDPA	Subtest 1	19.36	19.43	19.46	19.70	19.25	19.63	0
6		Subtest 2	19.37	19.39	19.42	19.66	19.21	19.56	0
6		Subtest 3	18.86	18.93	18.93	19.12	18.75	19.15	0.5
6		Subtest 4	18.88	18.85	18.92	19.12	18.73	19.07	0.5
6	HSUPA	Subtest 1	19.37	19.39	19.45	19.61	19.20	19.58	0
6		Subtest 2	17.35	17.51	17.48	17.66	17.23	17.62	2
6		Subtest 3	18.37	18.39	18.48	18.67	18.25	18.61	1
6		Subtest 4	17.38	17.44	17.49	17.67	17.26	17.62	2
6		Subtest 5	19.50	19.42	19.50	19.68	19.22	19.59	0
8	DC-HSDPA	Subtest 1	19.39	19.49	19.47	19.77	19.32	19.59	0
8		Subtest 2	19.38	19.45	19.49	19.68	19.32	19.62	0
8		Subtest 3	18.90	18.91	18.98	19.19	18.73	19.11	0.5
8		Subtest 4	18.88	18.93	18.99	19.15	18.74	19.12	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

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9.4 LTE Conducted Powers

9.4.1 LTE Band 71

Table 9-10
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	**25.17**	0	0
	1	50	25.02		0
	1	99	24.98		0
	50	0	**24.20**	0-1	1
	50	25	24.08		1
	50	50	24.09		1
	100	0	24.12		1
16QAM	1	0	24.50	0-1	1
	1	50	24.41		1
	1	99	24.32		1
	50	0	23.10	0-2	2
	50	25	23.14		2
	50	50	23.09		2
	100	0	23.07		2
64QAM	1	0	23.32	0-2	2
	1	50	23.31		2
	1	99	23.27		2
	50	0	22.16	0-3	3
	50	25	22.22		3
	50	50	22.14		3
	100	0	22.15		3
256QAM	1	0	20.01	0-5	5
	1	50	20.32		5
	1	99	20.03		5
	50	0	20.02		5
	50	25	20.22		5
	50	50	20.12		5
	100	0	20.13		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.

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Table 9-11
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	25.07	0	0
	1	36	25.14		0
	1	74	25.04		0
	36	0	24.30	0-1	1
	36	18	24.33		1
	36	37	24.28		1
	75	0	24.20		1
16QAM	1	0	24.18	0-1	1
	1	36	24.27		1
	1	74	24.10		1
	36	0	23.33	0-2	2
	36	18	23.34		2
	36	37	23.32		2
	75	0	23.23		2
64QAM	1	0	23.41	0-2	2
	1	36	23.45		2
	1	74	23.41		2
	36	0	22.41	0-3	3
	36	18	22.40		3
	36	37	22.39		3
	75	0	22.17		3
256QAM	1	0	20.51	0-5	5
	1	36	20.64		5
	1	74	20.67		5
	36	0	20.31		5
	36	18	20.37		5
	36	37	20.36		5
	75	0	20.33		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.

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Table 9-12
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	25.10	25.21	25.19	0	0
	1	25	24.98	25.20	25.09		0
	1	49	25.04	25.21	25.07		0
	25	0	24.25	24.20	24.18	0-1	1
	25	12	24.30	24.22	24.16		1
	25	25	24.22	24.21	24.16		1
	50	0	24.21	24.25	24.17		1
16QAM	1	0	24.03	24.19	24.20	0-1	1
	1	25	24.01	24.20	24.30		1
	1	49	23.98	23.91	24.08		1
	25	0	23.33	23.25	23.26	0-2	2
	25	12	23.39	23.22	23.24		2
	25	25	23.33	23.18	23.28		2
	50	0	23.29	23.20	23.09		2
64QAM	1	0	23.37	23.27	23.52	0-2	2
	1	25	23.43	23.30	23.43		2
	1	49	23.35	23.24	23.42		2
	25	0	22.34	22.18	22.24	0-3	3
	25	12	22.40	22.20	22.23		3
	25	25	22.36	22.24	22.28		3
	50	0	22.23	22.22	22.15		3
256QAM	1	0	19.91	19.99	20.25	0-5	5
	1	25	19.95	20.38	20.18		5
	1	49	19.86	20.03	20.23		5
	25	0	20.24	20.20	20.18		5
	25	12	20.42	20.29	20.25		5
	25	25	20.29	20.29	20.20		5
	50	0	20.29	20.19	20.18		5

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Table 9-13
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	25.25	24.98	24.91	0	0
	1	12	25.22	25.21	25.01		0
	1	24	25.29	25.03	24.97		0
	12	0	24.20	23.92	24.01	0-1	1
	12	6	24.32	24.30	24.02		1
	12	13	24.31	24.29	23.99		1
	25	0	24.27	24.31	23.97		1
16QAM	1	0	24.36	24.21	23.96	0-1	1
	1	12	24.33	24.31	24.08		1
	1	24	24.29	24.32	24.22		1
	12	0	23.30	23.28	23.11	0-2	2
	12	6	23.42	23.31	23.14		2
	12	13	23.39	23.28	23.15		2
	25	0	23.34	23.33	23.29		2
64QAM	1	0	23.47	23.29	22.98	0-2	2
	1	12	23.47	23.29	23.01		2
	1	24	23.43	23.28	23.20		2
	12	0	22.21	22.24	22.17	0-3	3
	12	6	22.30	22.30	22.14		3
	12	13	22.31	22.17	22.12		3
	25	0	22.35	22.32	22.22		3
256QAM	1	0	20.38	20.16	20.27	0-5	5
	1	12	20.55	20.36	20.17		5
	1	24	20.42	20.32	20.29		5
	12	0	20.29	20.22	20.16		5
	12	6	20.39	20.32	20.28		5
	12	13	20.40	20.35	20.29		5
	25	0	20.36	20.30	20.14		5

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9.4.2 LTE Band 12

Table 9-14
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	**25.23**	0	0
	1	25	25.15		0
	1	49	25.09		0
	25	0	24.24	0-1	1
	25	12	**24.31**		1
	25	25	24.15		1
	50	0	24.20		1
16QAM	1	0	24.68	0-1	1
	1	25	24.59		1
	1	49	24.55		1
	25	0	23.28	0-2	2
	25	12	23.33		2
	25	25	23.16		2
	50	0	23.21		2
64QAM	1	0	23.10	0-2	2
	1	25	23.15		2
	1	49	23.23		2
	25	0	21.79	0-3	3
	25	12	21.88		3
	25	25	22.12		3
	50	0	21.84		3
256QAM	1	0	20.14	0-5	5
	1	25	20.26		5
	1	49	20.11		5
	25	0	20.26		5
	25	12	20.32		5
	25	25	20.17		5
	50	0	20.22		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.

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Table 9-15
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	25.50	25.29	25.18	0	0
	1	12	25.31	25.34	25.29		0
	1	24	25.24	25.26	25.13		0
	12	0	24.55	24.31	24.28	0-1	1
	12	6	24.51	24.32	24.27		1
	12	13	24.45	24.30	24.23		1
	25	0	24.49	24.32	24.24		1
16QAM	1	0	24.77	24.38	24.47	0-1	1
	1	12	24.76	24.29	24.13		1
	1	24	24.70	24.47	24.04		1
	12	0	23.52	23.39	23.29	0-2	2
	12	6	23.55	23.39	23.28		2
	12	13	23.55	23.30	23.28		2
	25	0	23.57	23.37	23.21		2
64QAM	1	0	23.21	23.56	23.47	0-2	2
	1	12	23.22	23.39	23.35		2
	1	24	23.32	23.12	23.28		2
	12	0	22.25	21.86	22.36	0-3	3
	12	6	22.16	21.95	22.33		3
	12	13	22.03	22.13	22.19		3
	25	0	22.05	22.00	22.23		3
256QAM	1	0	20.64	20.17	20.43	0-5	5
	1	12	20.56	20.39	20.45		5
	1	24	20.47	19.92	20.50		5
	12	0	20.62	20.28	20.25		5
	12	6	20.47	20.33	20.23		5
	12	13	20.42	20.31	20.24		5
	25	0	20.52	20.28	20.24		5

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Table 9-16
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	25.44	25.35	25.18	0	0
	1	7	25.28	25.17	24.99		0
	1	14	25.30	25.24	25.03		0
	8	0	24.55	24.38	24.21	0-1	1
	8	4	24.49	24.32	24.22		1
	8	7	24.45	24.29	24.22		1
	15	0	24.52	24.28	24.20		1
16QAM	1	0	24.66	24.44	24.49	0-1	1
	1	7	24.54	24.31	24.06		1
	1	14	24.32	24.21	24.02		1
	8	0	23.55	23.39	23.17	0-2	2
	8	4	23.59	23.31	23.33		2
	8	7	23.51	23.35	23.18		2
	15	0	23.53	23.33	23.08		2
64QAM	1	0	23.23	22.96	23.33	0-2	2
	1	7	23.51	23.26	23.26		2
	1	14	23.15	23.12	22.83		2
	8	0	22.08	22.07	22.29	0-3	3
	8	4	22.29	22.18	22.26		3
	8	7	22.21	22.11	22.35		3
	15	0	22.04	21.97	22.19		3
256QAM	1	0	20.36	20.43	20.51	0-5	5
	1	7	20.66	20.12	20.42		5
	1	14	20.42	20.43	20.33		5
	8	0	20.53	20.33	20.21		5
	8	4	20.62	20.33	20.38		5
	8	7	20.51	20.18	20.31		5
	15	0	20.69	20.40	20.21		5

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Table 9-17
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	25.26	25.25	25.03	0	0
	1	2	25.38	25.21	25.08		0
	1	5	25.17	25.08	25.04		0
	3	0	25.35	25.16	24.98		0
	3	2	25.29	25.22	25.03		0
	3	3	25.21	25.12	25.04		0
	6	0	24.41	24.22	24.07	0-1	1
16QAM	1	0	24.10	24.16	24.28	0-1	1
	1	2	24.33	24.03	23.84		1
	1	5	24.36	24.11	24.22		1
	3	0	24.28	24.07	24.18		1
	3	2	24.39	24.12	24.28		1
	3	3	24.30	24.18	23.97		1
	6	0	23.42	23.28	23.18	0-2	2
64QAM	1	0	23.30	23.12	23.40	0-2	2
	1	2	23.23	23.05	22.92		2
	1	5	23.21	23.07	22.99		2
	3	0	23.23	23.18	23.29		2
	3	2	23.32	22.88	23.24		2
	3	3	22.98	23.27	23.04		2
	6	0	22.01	22.07	22.02	0-3	3
256QAM	1	0	20.42	20.28	19.92	0-5	5
	1	2	20.37	20.38	20.20		5
	1	5	20.53	20.32	20.01		5
	3	0	20.30	20.41	20.08		5
	3	2	20.27	20.05	20.03		5
	3	3	20.57	20.30	20.09		5
	6	0	20.37	20.25	20.07		5

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9.4.3 LTE Band 13

Table 9-18
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	25.20	0	0
	1	25	**25.21**		0
	1	49	25.00		0
	25	0	**24.28**	0-1	1
	25	12	24.18		1
	25	25	24.01		1
	50	0	24.05		1
16QAM	1	0	24.50	0-1	1
	1	25	24.43		1
	1	49	24.47		1
	25	0	23.16	0-2	2
	25	12	23.08		2
	25	25	23.02		2
	50	0	23.06		2
64QAM	1	0	23.57	0-2	2
	1	25	23.38		2
	1	49	23.20		2
	25	0	22.22	0-3	3
	25	12	22.18		3
	25	25	22.06		3
	50	0	22.09		3
256QAM	1	0	20.17	0-5	5
	1	25	20.29		5
	1	49	19.89		5
	25	0	20.09		5
	25	12	20.15		5
	25	25	19.99		5
	50	0	20.04		5

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Table 9-19
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	24.89	0	0
	1	12	24.76		0
	1	24	24.75		0
	12	0	23.93	0-1	1
	12	6	23.89		1
	12	13	23.87		1
	25	0	23.90		1
16QAM	1	0	24.30	0-1	1
	1	12	24.10		1
	1	24	24.15		1
	12	0	23.06	0-2	2
	12	6	22.98		2
	12	13	23.00		2
	25	0	22.89		2
64QAM	1	0	23.41	0-2	2
	1	12	23.27		2
	1	24	23.26		2
	12	0	22.05	0-3	3
	12	6	21.98		3
	12	13	21.96		3
	25	0	21.97		3
256QAM	1	0	20.00	0-5	5
	1	12	19.98		5
	1	24	19.91		5
	12	0	20.05		5
	12	6	20.02		5
	12	13	19.91		5
	25	0	19.89		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.

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9.4.4 LTE Band 14

Table 9-20
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	**25.06**	0	0
	1	25	24.97		0
	1	49	25.01		0
	25	0	24.04	0-1	1
	25	12	24.02		1
	25	25	**24.07**		1
	50	0	23.96		1
16QAM	1	0	24.49	0-1	1
	1	25	24.47		1
	1	49	24.35		1
	25	0	22.98	0-2	2
	25	12	23.08		2
	25	25	23.05		2
	50	0	23.01		2
64QAM	1	0	23.16	0-2	2
	1	25	22.85		2
	1	49	23.17		2
	25	0	22.03	0-3	3
	25	12	21.53		3
	25	25	21.55		3
	50	0	21.72		3
256QAM	1	0	19.89	0-5	5
	1	25	20.15		5
	1	49	20.07		5
	25	0	20.02		5
	25	12	20.06		5
	25	25	20.02		5
	50	0	19.97		5

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Table 9-21
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	24.92	0	0
	1	12	24.99		0
	1	24	24.77		0
	12	0	24.08	0-1	1
	12	6	24.14		1
	12	13	24.03		1
	25	0	24.08		1
16QAM	1	0	24.31	0-1	1
	1	12	24.29		1
	1	24	24.01		1
	12	0	23.18	0-2	2
	12	6	23.18		2
	12	13	23.13		2
	25	0	23.11		2
64QAM	1	0	23.06	0-2	2
	1	12	22.58		2
	1	24	22.34		2
	12	0	21.64	0-3	3
	12	6	21.49		3
	12	13	21.38		3
	25	0	21.36		3
256QAM	1	0	20.10	0-5	5
	1	12	20.19		5
	1	24	20.16		5
	12	0	20.15		5
	12	6	20.14		5
	12	13	20.11		5
	25	0	20.07		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.

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9.4.5 LTE Band 26 (Cell)

Table 9-22
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	25.15	0	0
	1	36	**25.25**		0
	1	74	25.09		0
	36	0	24.12	0-1	1
	36	18	**24.24**		1
	36	37	24.20		1
	75	0	24.19		1
16QAM	1	0	24.47	0-1	1
	1	36	24.51		1
	1	74	24.43		1
	36	0	23.15	0-2	2
	36	18	23.20		2
	36	37	23.23		2
	75	0	23.24		2
64QAM	1	0	23.20	0-2	2
	1	36	23.39		2
	1	74	23.34		2
	36	0	22.18	0-3	3
	36	18	22.28		3
	36	37	22.23		3
	75	0	22.17		3
256QAM	1	0	20.05	0-5	5
	1	36	20.35		5
	1	74	20.14		5
	36	0	20.08		5
	36	18	20.17		5
	36	37	20.23		5
	75	0	20.15		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.

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Table 9-23
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	25.22	25.30	25.25	0	0
	1	25	25.23	25.23	25.17		0
	1	49	25.29	25.30	24.61		0
	25	0	23.97	24.33	24.10	0-1	1
	25	12	24.16	24.30	24.11		1
	25	25	24.11	24.37	24.10		1
	50	0	24.05	24.21	24.16		1
16QAM	1	0	24.28	24.43	24.23	0-1	1
	1	25	24.14	24.41	23.77		1
	1	49	24.68	24.34	23.97		1
	25	0	23.10	23.30	23.06	0-2	2
	25	12	23.21	23.48	23.18		2
	25	25	23.22	23.51	23.21		2
	50	0	23.12	23.32	23.10		2
64QAM	1	0	23.03	23.25	23.10	0-2	2
	1	25	23.20	23.68	23.09		2
	1	49	23.56	23.34	23.05		2
	25	0	22.02	22.27	21.68	0-3	3
	25	12	22.20	22.49	21.80		3
	25	25	22.16	22.44	21.73		3
	50	0	22.05	22.21	21.85		3
256QAM	1	0	20.15	20.07	20.12	0-5	5
	1	25	20.30	20.25	20.02		5
	1	49	20.30	20.68	20.27		5
	25	0	20.02	20.34	20.13		5
	25	12	20.14	20.30	20.23		5
	25	25	20.26	20.35	20.26		5
	50	0	20.10	20.32	20.22		5

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Table 9-24
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	24.70	24.96	24.82	0	0
	1	12	24.80	25.07	24.84		0
	1	24	24.79	25.04	24.80		0
	12	0	23.77	24.08	23.87	0-1	1
	12	6	23.89	24.13	23.91		1
	12	13	23.85	24.13	23.76		1
	25	0	23.83	24.10	23.85		1
16QAM	1	0	24.14	24.18	23.99	0-1	1
	1	12	24.21	24.26	24.00		1
	1	24	24.22	24.26	23.51		1
	12	0	22.68	23.16	22.94	0-2	2
	12	6	22.79	23.22	23.01		2
	12	13	22.77	23.22	22.95		2
	25	0	22.85	23.09	22.89		2
64QAM	1	0	22.69	23.18	22.59	0-2	2
	1	12	23.11	23.31	22.42		2
	1	24	23.19	23.29	22.60		2
	12	0	21.61	22.02	21.51	0-3	3
	12	6	21.82	22.10	21.40		3
	12	13	21.86	22.11	21.30		3
	25	0	21.63	22.05	21.22		3
256QAM	1	0	19.67	19.60	19.47	0-5	5
	1	12	19.79	19.82	19.57		5
	1	24	19.82	19.70	19.49		5
	12	0	19.89	20.05	19.86		5
	12	6	20.00	20.10	19.92		5
	12	13	20.01	20.12	19.92		5
	25	0	19.90	20.10	19.90		5

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Table 9-25
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	24.86	24.97	24.80	0	0
	1	7	24.82	25.04	24.52		0
	1	14	24.67	25.08	24.21		0
	8	0	23.81	24.07	23.92	0-1	1
	8	4	23.86	24.11	23.89		1
	8	7	23.78	24.16	23.64		1
	15	0	23.87	24.11	23.90		1
16QAM	1	0	23.79	24.16	23.91	0-1	1
	1	7	23.80	24.21	23.73		1
	1	14	23.86	24.19	23.43		1
	8	0	22.93	23.27	22.97	0-2	2
	8	4	22.99	23.29	23.06		2
	8	7	22.92	23.32	22.84		2
	15	0	22.87	23.15	22.90		2
64QAM	1	0	22.59	23.16	22.63	0-2	2
	1	7	22.82	23.26	22.73		2
	1	14	22.93	23.24	22.74		2
	8	0	21.60	22.07	21.87	0-3	3
	8	4	21.78	22.14	21.65		3
	8	7	21.83	22.14	21.42		3
	15	0	21.60	22.28	21.54		3
256QAM	1	0	19.59	20.60	19.58	0-5	5
	1	7	19.58	20.73	19.65		5
	1	14	19.63	20.64	19.67		5
	8	0	19.96	20.21	19.96		5
	8	4	19.96	20.21	20.09		5
	8	7	19.90	20.25	20.02		5
	15	0	19.92	20.08	19.99		5

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Table 9-26
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	24.84	24.89	24.42	0	0
	1	2	24.87	25.03	24.31		0
	1	5	24.80	24.98	24.14		0
	3	0	24.72	24.97	24.46		0
	3	2	24.74	25.07	24.42		0
	3	3	24.70	25.03	24.28		0
	6	0	23.77	24.05	23.56	0-1	1
16QAM	1	0	23.54	24.05	23.59	0-1	1
	1	2	23.61	24.18	23.50		1
	1	5	23.57	24.10	23.35		1
	3	0	23.79	24.03	23.48		1
	3	2	23.84	24.18	23.43		1
	3	3	23.81	24.09	23.35		1
	6	0	22.81	23.12	22.61	0-2	2
64QAM	1	0	22.60	23.11	22.42	0-2	2
	1	2	22.77	23.26	22.36		2
	1	5	22.76	23.15	22.19		2
	3	0	22.45	23.29	22.37		2
	3	2	22.57	23.43	22.28		2
	3	3	22.62	23.35	22.17		2
	6	0	21.53	22.24	21.30	0-3	3
256QAM	1	0	19.84	19.79	19.88	0-5	5
	1	2	19.96	19.90	19.92		5
	1	5	19.85	19.80	19.92		5
	3	0	19.88	20.06	19.89		5
	3	2	19.93	20.17	20.00		5
	3	3	19.84	20.09	19.94		5
	6	0	19.86	20.13	19.75		5

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9.4.6 LTE Band 5 (Cell)

Table 9-27
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	**25.15**	0	0
	1	25	25.08		0
	1	49	25.00		0
	25	0	24.09	0-1	1
	25	12	**24.16**		1
	25	25	24.00		1
	50	0	24.03		1
16QAM	1	0	24.66	0-1	1
	1	25	24.61		1
	1	49	24.45		1
	25	0	23.13	0-2	2
	25	12	23.17		2
	25	25	23.02		2
	50	0	23.06		2
64QAM	1	0	23.40	0-2	2
	1	25	23.41		2
	1	49	22.86		2
	25	0	22.11	0-3	3
	25	12	22.20		3
	25	25	22.04		3
	50	0	22.08		3
256QAM	1	0	20.47	0-5	5
	1	25	20.67		5
	1	49	20.22		5
	25	0	20.18		5
	25	12	20.32		5
	25	25	20.10		5
	50	0	20.08		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.

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Table 9-28
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	24.75	24.85	24.65	0	0
	1	12	24.88	24.89	24.64		0
	1	24	24.83	24.79	24.70		0
	12	0	24.01	23.98	23.71	0-1	1
	12	6	24.04	24.02	23.75		1
	12	13	24.00	23.94	23.65		1
	25	0	24.07	23.98	23.67		1
16QAM	1	0	23.93	24.37	24.08	0-1	1
	1	12	24.02	24.44	24.08		1
	1	24	23.96	24.31	24.12		1
	12	0	23.06	22.88	23.12	0-2	2
	12	6	23.11	22.94	23.12		2
	12	13	23.06	22.85	23.05		2
	25	0	23.03	23.03	22.95		2
64QAM	1	0	23.01	23.13	22.92	0-2	2
	1	12	23.16	23.17	22.93		2
	1	24	23.11	23.05	22.95		2
	12	0	21.93	21.97	21.83	0-3	3
	12	6	21.96	22.04	21.67		3
	12	13	21.84	21.95	22.12		3
	25	0	21.83	21.94	22.10		3
256QAM	1	0	20.31	20.08	20.00	0-5	5
	1	12	20.38	20.22	20.04		5
	1	24	20.32	20.05	19.95		5
	12	0	20.08	20.11	19.70		5
	12	6	20.15	20.10	19.81		5
	12	13	20.07	20.03	19.74		5
	25	0	20.00	20.03	19.69		5

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Table 9-29
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	24.84	24.90	24.77	0	0
	1	7	24.83	24.83	24.80		0
	1	14	24.86	24.79	24.67		0
	8	0	24.04	23.91	23.64	0-1	1
	8	4	24.02	23.94	23.68		1
	8	7	24.01	23.98	23.64		1
	15	0	24.06	23.99	23.65		1
16QAM	1	0	24.45	24.35	24.33	0-1	1
	1	7	24.43	24.17	24.34		1
	1	14	24.41	24.17	24.37		1
	8	0	23.21	23.11	22.80	0-2	2
	8	4	23.22	23.15	22.84		2
	8	7	23.16	23.11	22.79		2
	15	0	23.12	22.95	22.71		2
64QAM	1	0	22.91	23.02	22.83	0-2	2
	1	7	22.87	23.05	22.69		2
	1	14	22.94	22.96	22.68		2
	8	0	21.87	21.93	21.85	0-3	3
	8	4	21.92	21.98	22.00		3
	8	7	21.94	21.94	21.62		3
	15	0	21.90	22.09	21.77		3
256QAM	1	0	20.07	20.51	19.72	0-5	5
	1	7	20.02	20.47	19.66		5
	1	14	20.07	20.32	19.66		5
	8	0	20.03	20.05	19.68		5
	8	4	20.04	20.12	19.72		5
	8	7	20.00	20.07	19.65		5
	15	0	20.08	20.00	19.68		5

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Table 9-30
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	25.12	25.05	24.73	0	0
	1	2	25.16	25.11	24.75		0
	1	5	25.09	25.05	24.64		0
	3	0	25.21	25.15	24.59		0
	3	2	25.25	25.21	24.67		0
	3	3	25.20	25.15	24.66		0
	6	0	24.30	24.17	23.77	0-1	1
16QAM	1	0	23.96	24.18	23.84	0-1	1
	1	2	23.97	24.21	23.82		1
	1	5	23.95	24.17	23.68		1
	3	0	23.90	24.12	23.82		1
	3	2	23.92	24.19	23.76		1
	3	3	23.85	24.09	23.68		1
	6	0	22.99	23.16	22.92	0-2	2
64QAM	1	0	23.04	23.33	23.16	0-2	2
	1	2	23.07	23.41	23.10		2
	1	5	23.05	23.38	22.86		2
	3	0	22.97	23.29	23.25		2
	3	2	23.01	23.36	23.22		2
	3	3	22.95	23.28	23.08		2
	6	0	21.97	22.26	22.20	0-3	3
256QAM	1	0	19.92	20.41	19.80	0-5	5
	1	2	20.04	20.49	19.94		5
	1	5	19.94	20.32	19.83		5
	3	0	19.91	20.16	19.78		5
	3	2	19.95	20.19	19.84		5
	3	3	19.96	20.12	19.83		5
	6	0	20.09	20.29	19.99		5

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9.4.7 LTE Band 66 (AWS)

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) - 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	23.46	23.35	23.67	0	0
	1	50	**23.68**	23.54	23.59		0
	1	99	23.50	23.31	23.59		0
	50	0	22.88	22.62	22.61	0-1	1
	50	25	**22.91**	22.73	22.62		1
	50	50	22.79	22.59	22.63		1
	100	0	22.84	22.64	22.54		1
16QAM	1	0	23.18	22.60	23.10	0-1	1
	1	50	23.37	22.80	23.04		1
	1	99	23.06	22.60	23.00		1
	50	0	21.89	21.66	21.59	0-2	2
	50	25	21.90	21.73	21.63		2
	50	50	21.79	21.67	21.61		2
	100	0	21.84	21.67	21.60		2
64QAM	1	0	21.53	21.52	22.01	0-2	2
	1	50	21.65	21.83	22.01		2
	1	99	21.47	21.60	21.97		2
	50	0	20.92	20.71	20.61	0-3	3
	50	25	20.96	20.82	20.65		3
	50	50	20.84	20.70	20.63		3
	100	0	20.90	20.71	20.60		3
256QAM	1	0	18.72	18.85	18.85	0-5	5
	1	50	19.00	19.13	19.16		5
	1	99	18.72	18.98	18.90		5
	50	0	18.89	18.63	18.64		5
	50	25	18.95	18.76	18.67		5
	50	50	18.77	18.63	18.62		5
	100	0	18.91	18.71	18.63		5

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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) - 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	23.54	23.41	23.48	0	0
	1	36	23.64	23.57	23.53		0
	1	74	23.41	23.36	23.42		0
	36	0	22.68	22.42	22.42	0-1	1
	36	18	22.69	22.50	22.43		1
	36	37	22.57	22.43	22.41		1
	75	0	22.62	22.44	22.34		1
16QAM	1	0	22.38	22.37	22.62	0-1	1
	1	36	22.53	22.50	22.60		1
	1	74	22.25	22.50	22.50		1
	36	0	21.72	21.47	21.51	0-2	2
	36	18	21.78	21.53	21.57		2
	36	37	21.63	21.42	21.54		2
	75	0	21.62	21.47	21.37		2
64QAM	1	0	21.64	21.34	21.44	0-2	2
	1	36	21.89	21.53	21.54		2
	1	74	21.61	21.27	21.36		2
	36	0	20.71	20.55	20.51	0-3	3
	36	18	20.71	20.60	20.53		3
	36	37	20.60	20.53	20.52		3
	75	0	20.69	20.54	20.34		3
256QAM	1	0	19.04	18.69	18.93	0-5	5
	1	36	19.24	18.89	18.84		5
	1	74	18.98	18.66	18.88		5
	36	0	19.10	18.80	18.84		5
	36	18	19.10	18.89	18.83		5
	36	37	18.99	18.77	18.78		5
	75	0	19.03	18.84	18.76		5

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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) - 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	23.66	23.49	23.42	0	0
	1	25	23.91	23.71	23.66		0
	1	49	23.61	23.51	23.45		0
	25	0	22.90	22.65	22.63	0-1	1
	25	12	22.96	22.77	22.75		1
	25	25	22.83	22.65	22.69		1
	50	0	22.89	22.67	22.63		1
16QAM	1	0	22.48	22.41	22.50	0-1	1
	1	25	22.66	22.49	22.75		1
	1	49	22.66	22.30	22.54		1
	25	0	21.48	21.18	21.42	0-2	2
	25	12	21.55	21.33	21.44		2
	25	25	21.46	21.18	21.42		2
	50	0	21.36	21.14	21.29		2
64QAM	1	0	21.36	21.26	21.45	0-2	2
	1	25	21.60	21.26	21.50		2
	1	49	21.49	21.00	21.50		2
	25	0	20.54	20.44	20.40	0-3	3
	25	12	20.56	20.51	20.45		3
	25	25	20.45	20.53	20.41		3
	50	0	20.42	20.41	20.36		3
256QAM	1	0	18.64	18.53	19.03	0-5	5
	1	25	18.73	18.86	19.04		5
	1	49	18.54	18.58	19.00		5
	25	0	19.08	18.74	18.76		5
	25	12	19.14	18.89	18.85		5
	25	25	19.06	18.72	18.85		5
	50	0	18.98	18.78	18.70		5

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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) - 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	23.42	23.47	23.43	0	0
	1	12	23.39	23.48	23.40		0
	1	24	23.26	23.45	23.35		0
	12	0	22.50	22.50	22.47	0-1	1
	12	6	22.49	22.53	22.43		1
	12	13	22.43	22.45	22.33		1
	25	0	22.40	22.49	22.36		1
16QAM	1	0	22.88	22.38	22.38	0-1	1
	1	12	22.89	22.41	22.40		1
	1	24	22.82	22.30	22.39		1
	12	0	21.43	21.55	21.45	0-2	2
	12	6	21.42	21.59	21.46		2
	12	13	21.30	21.50	21.39		2
	25	0	21.53	21.51	21.39		2
64QAM	1	0	21.70	21.37	21.40	0-2	2
	1	12	21.62	21.47	21.40		2
	1	24	21.52	21.37	21.30		2
	12	0	20.52	20.32	20.48	0-3	3
	12	6	20.52	20.36	20.46		3
	12	13	20.42	20.28	20.41		3
	25	0	20.43	20.32	20.38		3
256QAM	1	0	19.09	18.99	18.80	0-5	5
	1	12	19.11	18.99	18.79		5
	1	24	19.02	18.88	18.66		5
	12	0	19.16	18.87	18.82		5
	12	6	19.10	18.89	18.81		5
	12	13	19.07	18.82	18.74		5
	25	0	19.03	18.83	18.77		5

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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) - 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	23.66	23.43	23.34	0	0
	1	7	23.59	23.36	23.28		0
	1	14	23.55	23.36	23.26		0
	8	0	22.51	22.50	22.43	0-1	1
	8	4	22.52	22.50	22.42		1
	8	7	22.39	22.48	22.43		1
	15	0	22.49	22.49	22.38		1
16QAM	1	0	22.51	22.58	22.49	0-1	1
	1	7	22.39	22.49	22.45		1
	1	14	22.40	22.42	22.40		1
	8	0	21.63	21.42	21.54	0-2	2
	8	4	21.56	21.38	21.51		2
	8	7	21.53	21.50	21.46		2
	15	0	21.47	21.42	21.39		2
64QAM	1	0	21.76	21.53	21.47	0-2	2
	1	7	21.69	21.49	21.47		2
	1	14	21.60	21.45	21.36		2
	8	0	20.64	20.42	20.45	0-3	3
	8	4	20.60	20.46	20.43		3
	8	7	20.57	20.37	20.35		3
	15	0	20.47	20.39	20.38		3
256QAM	1	0	18.83	18.98	18.86	0-5	5
	1	7	18.77	18.93	18.86		5
	1	14	18.71	18.81	18.92		5
	8	0	19.14	18.80	18.87		5
	8	4	19.11	18.76	18.91		5
	8	7	19.08	18.69	18.76		5
	15	0	19.06	18.87	18.83		5

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Table 9-36
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	23.47	23.40	23.43	0	0
	1	2	23.50	23.49	23.41		0
	1	5	23.45	23.38	23.42		0
	3	0	23.47	23.47	23.35		0
	3	2	23.59	23.49	23.35		0
	3	3	23.55	23.44	23.31		0
	6	0	22.59	22.47	22.33	0-1	1
16QAM	1	0	22.42	22.42	22.38	0-1	1
	1	2	22.42	22.49	22.44		1
	1	5	22.33	22.44	22.46		1
	3	0	22.36	22.44	22.47		1
	3	2	22.32	22.49	22.37		1
	3	3	22.30	22.36	22.32		1
	6	0	21.42	21.41	21.38	0-2	2
64QAM	1	0	21.53	21.47	21.36	0-2	2
	1	2	21.63	21.51	21.50		2
	1	5	21.57	21.39	21.35		2
	3	0	21.51	21.43	21.50		2
	3	2	21.55	21.42	21.51		2
	3	3	21.46	21.39	21.47		2
	6	0	20.49	20.30	20.47	0-3	3
256QAM	1	0	18.98	18.53	18.76	0-5	5
	1	2	19.06	18.53	18.76		5
	1	5	18.93	18.43	18.71		5
	3	0	19.05	18.77	18.77		5
	3	2	19.07	18.74	18.81		5
	3	3	18.99	18.75	18.74		5
	6	0	19.05	18.84	18.62		5

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Table 9-37
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	19.58	19.29	19.37	0	0
	1	50	19.56	**19.61**	19.43		0
	1	99	19.57	19.35	19.32		0
	50	0	19.58	19.50	19.60	0-1	0
	50	25	19.56	**19.66**	19.59		0
	50	50	19.55	19.55	19.64		0
	100	0	19.55	19.56	19.54		0
16QAM	1	0	19.57	19.54	19.90	0-1	0
	1	50	19.58	19.83	20.00		0
	1	99	19.56	19.56	19.98		0
	50	0	19.58	19.47	19.66	0-2	0
	50	25	19.55	19.62	19.74		0
	50	50	19.56	19.47	19.70		0
	100	0	19.57	19.50	19.62		0
64QAM	1	0	19.56	19.46	19.92	0-2	0
	1	50	19.58	19.79	19.85		0
	1	99	19.58	19.51	19.69		0
	50	0	19.59	19.56	19.78	0-3	0
	50	25	19.55	19.70	19.73		0
	50	50	19.56	19.56	19.64		0
	100	0	18.92	19.64	19.65		0
256QAM	1	0	19.27	18.64	19.02	0-5	0.5
	1	50	18.92	18.96	19.44		0.5
	1	99	19.01	18.72	19.12		0.5
	50	0	19.14	19.05	19.17		0.5
	50	25	19.00	19.23	19.20		0.5
	50	50	19.01	19.06	19.21		0.5
	100	0	19.02	19.14	19.08		0.5

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Table 9-38
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	19.39	19.32	19.32	0	0
	1	36	19.56	19.30	19.35		0
	1	74	19.28	19.33	19.02		0
	36	0	19.53	19.35	19.25	0-1	0
	36	18	19.56	19.33	19.27		0
	36	37	19.43	19.38	19.22		0
	75	0	19.49	19.33	19.19		0
16QAM	1	0	19.25	19.34	19.48	0-1	0
	1	36	19.33	19.32	19.48		0
	1	74	19.09	19.36	19.30		0
	36	0	19.66	19.33	19.34	0-2	0
	36	18	19.61	19.32	19.36		0
	36	37	19.49	19.37	19.35		0
	75	0	19.49	19.37	19.23		0
64QAM	1	0	19.55	19.34	19.25	0-2	0
	1	36	19.73	19.33	19.34		0
	1	74	19.44	19.34	19.36		0
	36	0	19.55	19.33	19.32	0-3	0
	36	18	19.56	19.32	19.34		0
	36	37	19.44	19.32	19.33		0
	75	0	19.54	19.32	19.36		0
256QAM	1	0	19.28	18.95	19.36	0-5	0.5
	1	36	19.50	19.19	19.38		0.5
	1	74	19.25	18.90	19.32		0.5
	36	0	19.37	19.10	19.07		0.5
	36	18	19.37	19.14	19.08		0.5
	36	37	19.26	19.02	19.00		0.5
	75	0	19.29	19.09	19.02		0.5

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Table 9-39
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	19.42	19.35	19.33	0	0
	1	25	19.58	19.58	19.48		0
	1	49	19.55	19.38	19.37		0
	25	0	19.53	19.55	19.55	0-1	0
	25	12	19.56	19.65	19.50		0
	25	25	19.57	19.54	19.62		0
	50	0	19.43	19.52	19.64		0
16QAM	1	0	19.47	19.50	19.88	0-1	0
	1	25	19.40	19.88	19.82		0
	1	49	19.50	19.59	19.95		0
	25	0	19.48	19.58	19.65	0-2	0
	25	12	19.58	19.72	19.77		0
	25	25	19.48	19.55	19.66		0
	50	0	19.33	19.52	19.65		0
64QAM	1	0	19.34	19.48	19.80	0-2	0
	1	25	19.42	19.66	19.82		0
	1	49	19.48	19.62	19.64		0
	25	0	19.44	19.64	19.72	0-3	0
	25	12	19.42	19.65	19.74		0
	25	25	19.58	19.62	19.65		0
	50	0	19.00	19.56	19.66		0
256QAM	1	0	19.12	18.88	19.00	0-5	0.5
	1	25	19.00	18.99	19.22		0.5
	1	49	18.99	18.84	19.28		0.5
	25	0	18.92	19.00	19.18		0.5
	25	12	18.94	19.12	19.22		0.5
	25	25	18.91	19.05	19.20		0.5
	50	0	19.08	19.12	19.18		0.5

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Table 9-40
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	18.82	19.39	19.12	0	0
	1	12	18.78	19.38	19.15		0
	1	24	18.73	19.38	19.13		0
	12	0	19.01	19.38	19.14	0-1	0
	12	6	19.03	19.38	19.10		0
	12	13	18.91	19.35	19.09		0
	25	0	19.04	19.37	19.11		0
16QAM	1	0	19.01	19.37	19.10	0-1	0
	1	12	18.97	19.37	19.12		0
	1	24	18.88	19.37	19.12		0
	12	0	19.06	19.36	19.11	0-2	0
	12	6	19.06	19.38	19.12		0
	12	13	18.95	19.39	19.12		0
	25	0	18.96	19.38	19.12		0
64QAM	1	0	19.13	19.38	19.12	0-2	0
	1	12	19.15	19.40	19.13		0
	1	24	19.08	19.38	19.11		0
	12	0	18.96	19.39	19.13	0-3	0
	12	6	19.00	19.38	19.11		0
	12	13	18.89	19.38	19.12		0
	25	0	19.01	19.36	19.12		0
256QAM	1	0	19.03	19.03	18.84	0-5	0.5
	1	12	19.05	19.06	18.86		0.5
	1	24	18.90	18.90	18.80		0.5
	12	0	19.04	18.81	18.87		0.5
	12	6	19.05	18.87	18.88		0.5
	12	13	18.97	18.79	18.78		0.5
	25	0	19.01	18.83	18.77		0.5

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Table 9-41
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	19.61	19.33	19.44	0	0
	1	7	19.50	19.26	19.35		0
	1	14	19.49	19.22	19.26		0
	8	0	19.68	19.48	19.50	0-1	0
	8	4	19.63	19.49	19.57		0
	8	7	19.60	19.37	19.49		0
	15	0	19.63	19.43	19.51		0
16QAM	1	0	19.67	19.52	19.68	0-1	0
	1	7	19.57	19.38	19.58		0
	1	14	19.55	19.39	19.60		0
	8	0	19.37	19.31	19.16	0-2	0
	8	4	19.32	19.29	19.19		0
	8	7	19.29	19.18	19.14		0
	15	0	19.17	19.15	19.09		0
64QAM	1	0	19.56	19.53	19.42	0-2	0
	1	7	19.57	19.45	19.36		0
	1	14	19.46	19.40	19.29		0
	8	0	19.51	19.43	19.35	0-3	0
	8	4	19.47	19.42	19.35		0
	8	7	19.44	19.35	19.34		0
	15	0	19.61	19.28	19.33		0
256QAM	1	0	19.35	18.79	19.29	0-5	0.5
	1	7	19.25	18.68	19.23		0.5
	1	14	19.19	18.70	19.12		0.5
	8	0	19.11	19.07	19.15		0.5
	8	4	19.14	19.05	19.14		0.5
	8	7	19.02	18.99	19.05		0.5
	15	0	19.21	19.00	18.99		0.5

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Table 9-42
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	19.51	19.25	19.51	0	0
	1	2	19.53	19.31	19.54		0
	1	5	19.44	19.22	19.45		0
	3	0	19.55	19.34	19.41		0
	3	2	19.53	19.33	19.37		0
	3	3	19.49	19.33	19.35		0
	6	0	19.53	19.39	19.40	0-1	0
16QAM	1	0	19.59	19.40	19.19	0-1	0
	1	2	19.63	19.40	19.26		0
	1	5	19.54	19.30	19.15		0
	3	0	19.61	19.32	19.42		0
	3	2	19.61	19.34	19.48		0
	3	3	19.54	19.25	19.39		0
	6	0	19.62	19.44	19.41	0-2	0
64QAM	1	0	19.43	19.29	19.40	0-2	0
	1	2	19.44	19.31	19.48		0
	1	5	19.36	19.27	19.32		0
	3	0	19.55	19.23	19.22		0
	3	2	19.59	19.28	19.24		0
	3	3	19.54	19.19	19.20		0
	6	0	19.48	19.18	19.21	0-3	0
256QAM	1	0	19.16	18.66	18.94	0-5	0.5
	1	2	19.19	18.68	19.07		0.5
	1	5	19.11	18.58	18.91		0.5
	3	0	19.18	18.89	19.08		0.5
	3	2	19.21	18.94	19.06		0.5
	3	3	19.12	18.87	18.97		0.5
	6	0	19.04	18.98	18.99		0.5

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Table 9-43
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	20.06	20.08	20.26	0	0
	1	50	**20.49**	20.05	20.22		0
	1	99	20.07	19.90	20.12		0
	50	0	20.46	20.27	20.25	0-1	0
	50	25	**20.49**	20.38	20.33		0
	50	50	20.34	20.26	20.30		0
	100	0	20.43	20.35	20.17		0
16QAM	1	0	20.30	20.15	20.32	0-1	0
	1	50	20.44	20.19	20.31		0
	1	99	20.14	20.22	20.33		0
	50	0	20.46	20.23	20.28	0-2	0
	50	25	20.50	20.41	20.34		0
	50	50	20.41	20.26	20.27		0
	100	0	20.49	20.33	20.19		0
64QAM	1	0	20.33	20.35	20.47	0-2	0
	1	50	20.43	20.38	20.49		0
	1	99	20.33	20.26	20.40		0
	50	0	20.01	19.84	19.77	0-3	0
	50	25	20.07	19.94	19.82		0
	50	50	19.90	19.80	19.73		0
	100	0	19.95	19.86	19.65		0
256QAM	1	0	18.54	18.42	18.56	0-5	1
	1	50	18.75	18.73	18.70		1
	1	99	18.56	18.52	18.66		1
	50	0	18.76	18.42	18.56		1
	50	25	18.77	18.67	18.55		1
	50	50	18.71	18.59	18.60		1
	100	0	18.72	18.61	18.66		1

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Table 9-44
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	19.87	19.86	19.81	0	0
	1	36	20.01	20.02	19.86		0
	1	74	19.73	19.73	19.71		0
	36	0	20.16	19.90	19.94	0-1	0
	36	18	20.14	20.01	19.98		0
	36	37	20.06	19.91	19.94		0
	75	0	20.08	19.93	19.89		0
16QAM	1	0	19.98	19.70	20.19	0-1	0
	1	36	20.18	19.85	20.16		0
	1	74	19.92	19.60	20.06		0
	36	0	20.15	19.99	20.05	0-2	0
	36	18	20.19	20.12	20.10		0
	36	37	20.08	19.99	20.09		0
	75	0	20.14	19.92	19.96		0
64QAM	1	0	19.98	20.01	19.97	0-2	0
	1	36	20.19	20.20	20.05		0
	1	74	19.92	19.96	19.91		0
	36	0	20.16	19.86	19.95	0-3	0
	36	18	20.17	19.92	19.98		0
	36	37	20.05	19.84	19.94		0
	75	0	20.10	19.89	19.79		0
256QAM	1	0	18.32	18.34	18.36	0-5	1
	1	36	18.82	18.77	18.67		1
	1	74	18.76	18.48	18.70		1
	36	0	18.67	18.63	18.63		1
	36	18	18.78	18.71	18.62		1
	36	37	18.66	18.61	18.58		1
	75	0	18.65	18.71	18.57		1

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Table 9-45
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	20.05	20.03	20.05	0	0
	1	25	20.27	20.22	20.18		0
	1	49	20.12	20.00	20.06		0
	25	0	20.45	20.25	20.27	0-1	0
	25	12	20.50	20.41	20.31		0
	25	25	20.47	20.30	20.26		0
	50	0	20.47	20.35	20.24		0
16QAM	1	0	20.13	20.11	20.39	0-1	0
	1	25	20.13	20.16	20.41		0
	1	49	20.00	20.07	20.34		0
	25	0	20.19	20.05	19.96	0-2	0
	25	12	20.21	20.12	19.94		0
	25	25	20.08	20.05	19.89		0
	50	0	20.13	19.95	20.07		0
64QAM	1	0	20.28	19.94	20.24	0-2	0
	1	25	20.32	20.03	20.20		0
	1	49	20.23	19.85	20.11		0
	25	0	20.08	19.96	19.96	0-3	0
	25	12	20.11	20.03	19.93		0
	25	25	19.97	19.91	19.87		0
	50	0	20.02	19.92	19.91		0
256QAM	1	0	18.84	18.56	18.77	0-5	1
	1	25	18.91	18.81	18.87		1
	1	49	18.73	18.55	18.81		1
	25	0	18.82	18.49	18.84		1
	25	12	18.87	18.41	18.78		1
	25	25	18.76	18.57	18.77		1
	50	0	18.72	18.52	18.94		1

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Table 9-46
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	19.94	19.92	19.98	0	0
	1	12	19.91	19.95	19.91		0
	1	24	19.85	19.87	19.87		0
	12	0	20.21	19.99	20.03	0-1	0
	12	6	20.16	20.02	20.08		0
	12	13	20.10	19.96	19.94		0
	25	0	20.19	19.99	19.98		0
16QAM	1	0	20.13	20.11	20.39	0-1	0
	1	12	20.13	20.16	20.41		0
	1	24	20.00	20.07	20.34		0
	12	0	20.19	20.05	19.96	0-2	0
	12	6	20.21	20.12	19.94		0
	12	13	20.08	20.05	19.89		0
	25	0	20.13	19.95	20.07		0
64QAM	1	0	20.28	19.94	20.24	0-2	0
	1	12	20.32	20.03	20.20		0
	1	24	20.23	19.85	20.11		0
	12	0	20.08	19.96	19.96	0-3	0
	12	6	20.11	20.03	19.93		0
	12	13	19.97	19.91	19.87		0
	25	0	20.02	19.92	19.91		0
256QAM	1	0	18.94	18.53	18.61	0-5	1
	1	12	18.93	18.57	18.59		1
	1	24	18.85	18.46	18.51		1
	12	0	18.87	18.55	18.65		1
	12	6	18.89	18.62	18.64		1
	12	13	18.77	18.51	18.58		1
	25	0	18.78	18.59	18.54		1

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Table 9-47
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	20.08	19.91	19.88	0	0
	1	7	20.00	19.82	19.82		0
	1	14	19.92	19.82	19.76		0
	8	0	20.18	20.01	19.99	0-1	0
	8	4	20.18	19.98	19.98		0
	8	7	20.12	19.92	19.96		0
	15	0	20.14	19.98	20.00		0
16QAM	1	0	20.30	20.00	20.02	0-1	0
	1	7	20.24	19.93	19.87		0
	1	14	20.18	19.88	19.90		0
	8	0	20.33	20.10	20.08	0-2	0
	8	4	20.36	20.12	20.10		0
	8	7	20.26	20.11	20.07		0
	15	0	20.23	20.00	20.03		0
64QAM	1	0	20.21	20.04	20.24	0-2	0
	1	7	20.24	20.00	20.19		0
	1	14	20.16	19.97	20.08		0
	8	0	20.08	19.84	20.01	0-3	0
	8	4	20.13	19.84	20.04		0
	8	7	20.01	19.76	19.98		0
	15	0	20.07	19.97	19.87		0
256QAM	1	0	18.56	18.70	19.11	0-5	1
	1	7	18.60	18.65	19.04		1
	1	14	18.51	18.56	18.89		1
	8	0	18.74	18.51	18.67		1
	8	4	18.68	18.49	18.66		1
	8	7	18.61	18.40	18.57		1
	15	0	18.69	18.58	18.50		1

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Table 9-48
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	19.94	19.94	19.80	0	0
	1	2	19.99	19.99	19.82		0
	1	5	19.90	19.90	19.72		0
	3	0	19.99	19.87	19.81		0
	3	2	20.04	19.85	19.83		0
	3	3	19.99	19.83	19.81		0
	6	0	20.06	19.91	19.86	0-1	0
16QAM	1	0	20.07	19.69	19.88	0-1	0
	1	2	20.07	19.72	19.94		0
	1	5	20.02	19.64	19.84		0
	3	0	19.96	19.88	19.88		0
	3	2	20.02	19.91	19.91		0
	3	3	19.96	19.90	19.84		0
	6	0	20.12	19.82	19.95	0-2	0
64QAM	1	0	20.22	20.19	20.00	0-2	0
	1	2	20.29	20.27	20.04		0
	1	5	20.19	20.10	19.92		0
	3	0	20.17	19.95	20.15		0
	3	2	20.22	20.01	20.18		0
	3	3	20.09	19.92	20.12		0
	6	0	20.00	19.86	19.98	0-3	0
256QAM	1	0	18.71	18.75	18.64	0-5	1
	1	2	18.72	18.74	18.73		1
	1	5	18.60	18.73	18.58		1
	3	0	18.75	18.77	18.73		1
	3	2	18.76	18.84	18.72		1
	3	3	18.71	18.76	18.65		1
	6	0	18.79	18.67	18.67		1

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9.4.8 LTE Band 25 (PCS)

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) - 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	23.66	23.66	23.57	0	0
	1	50	**23.75**	23.67	23.64		0
	1	99	23.58	23.61	23.66		0
	50	0	**22.82**	22.61	22.72	0-1	1
	50	25	22.81	22.61	22.70		1
	50	50	22.67	22.65	22.68		1
	100	0	22.63	22.67	22.68		1
16QAM	1	0	22.93	23.27	23.02	0-1	1
	1	50	22.85	22.62	23.05		1
	1	99	22.77	22.99	22.98		1
	50	0	21.80	21.64	21.69	0-2	2
	50	25	21.83	21.61	21.68		2
	50	50	21.62	21.52	21.72		2
	100	0	21.59	21.59	21.64		2
64QAM	1	0	21.96	21.77	21.84	0-2	2
	1	50	21.85	21.82	21.93		2
	1	99	21.79	21.61	22.05		2
	50	0	20.75	20.53	20.71	0-3	3
	50	25	20.78	20.64	20.75		3
	50	50	20.66	20.52	20.84		3
	100	0	20.70	20.54	20.61		3
256QAM	1	0	18.52	18.52	18.57	0-5	5
	1	50	18.84	18.60	18.87		5
	1	99	18.63	18.88	18.67		5
	50	0	18.60	18.50	18.61		5
	50	25	18.79	18.63	18.74		5
	50	50	18.67	18.54	18.78		5
	100	0	18.60	18.55	18.63		5

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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) - 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	23.43	23.40	23.41	0	0
	1	36	23.58	23.43	23.39		0
	1	74	23.43	23.35	23.37		0
	36	0	22.62	22.33	22.39	0-1	1
	36	18	22.63	22.42	22.58		1
	36	37	22.59	22.46	22.56		1
	75	0	22.56	22.45	22.41		1
16QAM	1	0	22.64	22.70	22.83	0-1	1
	1	36	22.86	22.68	22.71		1
	1	74	22.88	22.69	22.68		1
	36	0	21.60	21.36	21.39	0-2	2
	36	18	21.64	21.43	21.53		2
	36	37	21.61	21.48	21.55		2
	75	0	21.59	21.40	21.39		2
64QAM	1	0	21.66	21.53	21.64	0-2	2
	1	36	21.86	21.68	21.67		2
	1	74	21.63	21.67	21.64		2
	36	0	20.65	20.38	20.45	0-3	3
	36	18	20.70	20.49	20.62		3
	36	37	20.62	20.54	20.60		3
	75	0	20.60	20.45	20.44		3
256QAM	1	0	18.63	18.34	18.38	0-5	5
	1	36	18.81	18.58	18.56		5
	1	74	18.58	18.52	18.44		5
	36	0	18.66	18.38	18.36		5
	36	18	18.67	18.48	18.54		5
	36	37	18.59	18.53	18.54		5
	75	0	18.60	18.46	18.49		5

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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) - 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	23.35	23.35	23.38	0	0
	1	25	23.55	23.55	23.35		0
	1	49	23.32	23.42	23.38		0
	25	0	22.59	22.34	22.37	0-1	1
	25	12	22.72	22.44	22.47		1
	25	25	22.59	22.46	22.48		1
	50	0	22.54	22.39	22.41		1
16QAM	1	0	22.73	22.53	22.70	0-1	1
	1	25	22.98	22.75	22.78		1
	1	49	22.64	22.49	22.74		1
	25	0	21.61	21.31	21.28	0-2	2
	25	12	21.70	21.40	21.38		2
	25	25	21.58	21.43	21.42		2
	50	0	21.56	21.36	21.40		2
64QAM	1	0	21.60	21.27	21.52	0-2	2
	1	25	21.76	21.58	21.47		2
	1	49	21.50	21.41	21.64		2
	25	0	20.65	20.37	20.38	0-3	3
	25	12	20.76	20.50	20.48		3
	25	25	20.56	20.46	20.44		3
	50	0	20.60	20.39	20.43		3
256QAM	1	0	18.58	18.23	18.28	0-5	5
	1	25	18.70	18.60	18.59		5
	1	49	18.46	18.54	18.36		5
	25	0	18.59	18.36	18.32		5
	25	12	18.73	18.46	18.51		5
	25	25	18.55	18.48	18.43		5
	50	0	18.56	18.38	18.41		5

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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) - 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	23.40	23.47	23.36	0	0
	1	12	23.48	23.57	23.40		0
	1	24	23.51	23.42	23.41		0
	12	0	22.56	22.22	22.22	0-1	1
	12	6	22.56	22.31	22.33		1
	12	13	22.62	22.38	22.28		1
	25	0	22.55	22.26	22.33		1
16QAM	1	0	22.89	22.40	22.51	0-1	1
	1	12	22.95	22.54	22.46		1
	1	24	23.00	22.49	22.44		1
	12	0	21.47	21.37	21.33	0-2	2
	12	6	21.52	21.36	21.35		2
	12	13	21.48	21.44	21.32		2
	25	0	21.62	21.26	21.29		2
64QAM	1	0	21.71	21.40	21.47	0-2	2
	1	12	21.68	21.51	21.46		2
	1	24	21.77	21.50	21.50		2
	12	0	20.58	20.39	20.29	0-3	3
	12	6	20.61	20.40	20.33		3
	12	13	20.56	20.48	20.37		3
	25	0	20.52	20.37	20.27		3
256QAM	1	0	18.72	18.53	18.45	0-5	5
	1	12	18.79	18.67	18.49		5
	1	24	18.83	18.67	18.46		5
	12	0	18.78	18.45	18.44		5
	12	6	18.80	18.55	18.53		5
	12	13	18.81	18.56	18.47		5
	25	0	18.73	18.46	18.50		5

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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) - 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	23.41	23.38	23.40	0	0
	1	7	23.42	23.47	23.43		0
	1	14	23.52	23.53	23.42		0
	8	0	22.54	22.34	22.49	0-1	1
	8	4	22.59	22.53	22.52		1
	8	7	22.56	22.56	22.52		1
	15	0	22.58	22.48	22.53		1
16QAM	1	0	22.54	22.55	22.47	0-1	1
	1	7	22.57	22.42	22.44		1
	1	14	22.62	22.45	22.36		1
	8	0	21.73	21.41	21.37	0-2	2
	8	4	21.76	21.42	21.44		2
	8	7	21.75	21.49	21.44		2
	15	0	21.61	21.37	21.36		2
64QAM	1	0	21.61	21.50	21.53	0-2	2
	1	7	21.63	21.41	21.54		2
	1	14	21.66	21.42	21.50		2
	8	0	20.55	20.47	20.38	0-3	3
	8	4	20.57	20.33	20.42		3
	8	7	20.57	20.36	20.41		3
	15	0	20.69	20.50	20.31		3
256QAM	1	0	18.74	18.84	18.51	0-5	5
	1	7	18.78	18.84	18.51		5
	1	14	18.77	18.79	18.51		5
	8	0	18.59	18.49	18.51		5
	8	4	18.67	18.54	18.60		5
	8	7	18.63	18.56	18.57		5
	15	0	18.74	18.40	18.50		5

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Table 9-54
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	23.49	23.26	23.37	0	0
	1	2	23.52	23.43	23.41		0
	1	5	23.51	23.38	23.39		0
	3	0	23.40	23.36	23.41		0
	3	2	23.42	23.48	23.45		0
	3	3	23.42	23.48	23.44		0
	6	0	22.47	22.48	22.50	0-1	1
16QAM	1	0	22.41	22.36	22.38	0-1	1
	1	2	22.50	22.56	22.47		1
	1	5	22.47	22.51	22.41		1
	3	0	22.46	22.36	22.28		1
	3	2	22.53	22.50	22.37		1
	3	3	22.53	22.45	22.32		1
	6	0	21.51	21.47	21.43	0-2	2
64QAM	1	0	21.72	21.29	21.33	0-2	2
	1	2	21.85	21.41	21.40		2
	1	5	21.75	21.44	21.41		2
	3	0	21.56	21.23	21.38		2
	3	2	21.60	21.40	21.34		2
	3	3	21.56	21.33	21.38		2
	6	0	20.58	20.24	20.31	0-3	3
256QAM	1	0	18.63	18.39	18.38	0-5	5
	1	2	18.72	18.43	18.49		5
	1	5	18.65	18.50	18.40		5
	3	0	18.70	18.43	18.43		5
	3	2	18.74	18.52	18.42		5
	3	3	18.67	18.46	18.34		5
	6	0	18.66	18.40	18.44		5

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Table 9-55
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode) - 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	19.32	19.15	19.03	0	0
	1	50	**19.36**	19.08	19.07		0
	1	99	19.26	19.11	19.06		0
	50	0	**19.36**	19.15	19.06	0-1	0
	50	25	19.35	19.11	19.21		0
	50	50	19.18	19.15	19.15		0
	100	0	19.14	19.08	19.18		0
16QAM	1	0	19.43	19.22	19.20	0-1	0
	1	50	19.43	19.34	19.11		0
	1	99	19.22	19.13	19.30		0
	50	0	19.36	19.18	19.16	0-2	0
	50	25	19.39	19.13	19.22		0
	50	50	19.21	19.17	19.05		0
	100	0	19.17	19.07	19.15		0
64QAM	1	0	19.26	19.23	19.25	0-2	0
	1	50	19.18	19.26	19.38		0
	1	99	19.37	19.24	19.35		0
	50	0	19.28	19.15	19.07	0-3	0
	50	25	19.28	19.14	19.12		0
	50	50	19.19	19.22	19.27		0
	100	0	19.23	19.03	19.08		0
256QAM	1	0	19.27	18.54	18.64	0-5	0
	1	50	19.12	19.17	18.97		0
	1	99	19.10	19.03	18.68		0
	50	0	19.07	18.85	18.87		0
	50	25	19.24	18.81	18.86		0
	50	50	19.03	18.87	18.95		0
	100	0	19.09	18.84	18.79		0

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Table 9-56
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode) - 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	18.91	18.78	18.77	0	0
	1	36	19.20	18.84	18.84		0
	1	74	18.93	18.80	18.79		0
	36	0	19.09	18.88	18.82	0-1	0
	36	18	19.13	18.97	19.02		0
	36	37	19.09	19.02	18.99		0
	75	0	19.05	18.97	18.82		0
16QAM	1	0	19.40	19.37	19.41	0-1	0
	1	36	19.38	19.24	19.44		0
	1	74	19.32	19.22	19.38		0
	36	0	19.20	18.86	18.88	0-2	0
	36	18	19.24	19.00	19.08		0
	36	37	19.18	19.03	19.07		0
	75	0	19.09	18.99	18.87		0
64QAM	1	0	19.43	19.36	19.27	0-2	0
	1	36	19.44	19.46	19.39		0
	1	74	19.42	19.39	19.31		0
	36	0	19.20	18.89	18.84	0-3	0
	36	18	19.24	19.02	19.04		0
	36	37	19.19	19.04	18.99		0
	75	0	19.17	19.03	18.90		0
256QAM	1	0	19.17	19.22	18.55	0-5	0
	1	36	19.11	19.25	18.64		0
	1	74	19.08	19.11	18.62		0
	36	0	19.01	18.85	18.74		0
	36	18	19.12	18.75	18.75		0
	36	37	19.13	18.68	18.71		0
	75	0	19.10	18.59	18.65		0

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Table 9-57
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode) - 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	19.04	18.54	18.88	0	0
	1	25	19.15	18.75	18.86		0
	1	49	18.96	18.59	18.90		0
	25	0	19.15	18.84	18.84	0-1	0
	25	12	19.27	18.95	18.92		0
	25	25	19.11	18.98	18.94		0
	50	0	19.10	18.86	18.88		0
16QAM	1	0	19.34	19.34	19.38	0-1	0
	1	25	19.44	19.32	19.50		0
	1	49	19.36	19.33	19.43		0
	25	0	19.25	18.90	18.83	0-2	0
	25	12	19.35	19.04	18.90		0
	25	25	19.17	19.03	18.96		0
	50	0	19.13	18.89	18.89		0
64QAM	1	0	19.38	19.04	19.34	0-2	0
	1	25	19.42	19.35	19.37		0
	1	49	19.23	19.14	19.41		0
	25	0	19.17	18.85	18.89	0-3	0
	25	12	19.30	18.93	19.02		0
	25	25	19.08	18.97	19.00		0
	50	0	19.13	18.89	18.93		0
256QAM	1	0	19.11	18.90	18.85	0-5	0
	1	25	19.07	18.85	18.78		0
	1	49	19.06	18.79	18.65		0
	25	0	19.10	18.86	18.59		0
	25	12	19.11	18.80	18.60		0
	25	25	19.00	18.71	18.65		0
	50	0	19.02	18.60	18.50		0

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Table 9-58
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode) - 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	18.94	18.67	18.76	0	0
	1	12	19.01	18.76	18.77		0
	1	24	19.03	18.82	18.80		0
	12	0	19.17	18.77	18.90	0-1	0
	12	6	19.26	18.86	18.96		0
	12	13	19.27	18.96	18.92		0
	25	0	19.23	18.87	18.93		0
16QAM	1	0	19.50	19.31	19.39	0-1	0
	1	12	19.47	19.43	19.33		0
	1	24	19.46	19.47	19.30		0
	12	0	19.22	18.95	18.91	0-2	0
	12	6	19.29	19.04	19.01		0
	12	13	19.30	19.11	19.01		0
	25	0	19.22	18.95	18.99		0
64QAM	1	0	19.25	19.28	19.27	0-2	0
	1	12	19.29	19.40	19.22		0
	1	24	19.38	19.39	19.23		0
	12	0	19.28	18.93	18.97	0-3	0
	12	6	19.31	18.99	19.03		0
	12	13	19.35	19.01	19.01		0
	25	0	19.24	18.90	18.95		0
256QAM	1	0	19.22	18.94	18.88	0-5	0
	1	12	19.15	18.96	18.75		0
	1	24	19.18	19.00	18.77		0
	12	0	19.19	18.66	18.61		0
	12	6	19.22	18.62	18.55		0
	12	13	19.05	18.55	18.72		0
	25	0	19.07	18.48	18.55		0

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Table 9-59
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode) - 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	19.04	18.74	18.91	0	0
	1	7	18.97	18.78	18.91		0
	1	14	19.12	18.85	18.95		0
	8	0	19.21	18.91	18.90	0-1	0
	8	4	19.19	18.95	18.93		0
	8	7	19.23	19.02	18.98		0
	15	0	19.22	18.89	18.97		0
16QAM	1	0	19.21	19.43	19.49	0-1	0
	1	7	19.14	19.48	19.45		0
	1	14	19.24	19.44	19.46		0
	8	0	19.22	18.82	18.95	0-2	0
	8	4	19.27	18.91	19.00		0
	8	7	19.22	18.97	18.94		0
	15	0	19.23	18.95	18.97		0
64QAM	1	0	19.20	19.25	19.45	0-2	0
	1	7	19.14	19.33	19.47		0
	1	14	19.21	19.44	19.36		0
	8	0	19.27	18.91	19.07	0-3	0
	8	4	19.33	18.94	19.08		0
	8	7	19.35	18.97	19.06		0
	15	0	19.34	18.96	18.95		0
256QAM	1	0	19.22	18.85	18.88	0-5	0
	1	7	19.25	18.80	18.81		0
	1	14	19.20	18.77	18.72		0
	8	0	19.14	18.81	18.74		0
	8	4	19.19	18.80	18.55		0
	8	7	19.04	18.73	18.66		0
	15	0	19.01	18.65	18.52		0

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Table 9-60
LTE Band 25 (PCS) Measured Plimit for DSI = 3 (Hotspot mode) – 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	19.00	18.74	18.85	0	0
	1	2	19.06	18.89	18.86		0
	1	5	19.02	18.85	18.88		0
	3	0	19.04	18.63	18.71		0
	3	2	19.08	18.71	18.72		0
	3	3	19.05	18.69	18.68		0
	6	0	19.17	18.83	18.85	0-1	0
16QAM	1	0	19.45	19.21	19.42	0-1	0
	1	2	19.50	19.36	19.29		0
	1	5	19.45	19.31	19.30		0
	3	0	19.23	18.96	18.98		0
	3	2	19.26	19.08	19.02		0
	3	3	19.26	19.05	18.99		0
	6	0	19.24	18.71	18.95	0-2	0
64QAM	1	0	19.50	19.49	19.36	0-2	0
	1	2	19.35	19.39	19.46		0
	1	5	19.25	19.24	19.45		0
	3	0	19.21	19.05	18.94		0
	3	2	19.27	19.10	19.02		0
	3	3	19.22	19.09	18.97		0
	6	0	19.17	18.84	18.76	0-3	0
256QAM	1	0	19.00	18.85	18.66	0-5	0
	1	2	19.11	18.88	18.75		0
	1	5	19.07	18.77	18.76		0
	3	0	18.77	18.77	18.76		0
	3	2	18.85	18.76	18.67		0
	3	3	18.86	18.70	18.66		0
	6	0	18.86	18.65	18.50		0

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Table 9-61
LTE Band 25 (PCS) Measured Plimit for 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	**21.80**	21.29	21.31	0	0
	1	50	21.74	21.68	21.76		0
	1	99	21.69	21.33	21.36		0
	50	0	21.82	21.55	21.60	0-1	0
	50	25	**21.90**	21.59	21.88		0
	50	50	21.68	21.84	21.60		0
	100	0	21.60	21.57	21.75		0
16QAM	1	0	22.00	21.89	21.91	0-1	0
	1	50	21.98	21.90	21.92		0
	1	99	21.90	22.00	21.90		0
	50	0	21.75	21.58	21.93	0-2	0
	50	25	21.64	21.63	21.91		0
	50	50	21.62	21.67	21.92		0
	100	0	21.65	21.56	21.92		0
64QAM	1	0	21.84	21.76	21.91	0-2	0
	1	50	21.79	21.85	21.89		0
	1	99	21.80	21.78	21.90		0
	50	0	20.85	20.68	20.91	0-3	0.5
	50	25	20.83	20.68	20.89		0.5
	50	50	20.72	20.68	20.90		0.5
	100	0	20.85	20.66	20.87		0.5
256QAM	1	0	18.56	18.59	18.53	0-5	2.5
	1	50	18.66	18.83	18.90		2.5
	1	99	18.55	18.60	18.58		2.5
	50	0	18.72	18.50	18.55		2.5
	50	25	18.86	18.63	18.67		2.5
	50	50	18.68	18.64	18.69		2.5
	100	0	18.70	18.56	18.66		2.5

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Table 9-62
LTE Band 25 (PCS) Measured Plimit for 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	21.33	21.53	21.30	0	0
	1	36	21.62	21.55	21.38		0
	1	74	21.38	21.50	21.27		0
	36	0	21.64	21.34	21.34	0-1	0
	36	18	21.69	21.50	21.56		0
	36	37	21.58	21.51	21.51		0
	75	0	21.56	21.43	21.37		0
16QAM	1	0	21.48	21.35	21.65	0-1	0
	1	36	21.76	21.43	21.73		0
	1	74	21.50	21.36	21.65		0
	36	0	21.64	21.46	21.48	0-2	0
	36	18	21.71	21.56	21.69		0
	36	37	21.63	21.59	21.64		0
	75	0	21.62	21.49	21.44		0
64QAM	1	0	21.47	21.61	21.44	0-2	0
	1	36	21.75	21.72	21.58		0
	1	74	21.44	21.72	21.49		0
	36	0	20.74	20.41	20.49	0-3	0.5
	36	18	20.81	20.51	20.70		0.5
	36	37	20.74	20.56	20.63		0.5
	75	0	20.71	20.55	20.39		0.5
256QAM	1	0	18.80	19.04	19.02	0-5	2.5
	1	36	18.75	19.08	19.13		2.5
	1	74	18.62	19.12	18.85		2.5
	36	0	18.73	18.88	19.02		2.5
	36	18	18.77	18.95	18.92		2.5
	36	37	18.69	18.91	18.88		2.5
	75	0	18.63	18.80	18.85		2.5

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Table 9-63
LTE Band 25 (PCS) Measured Plimit for 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	21.36	21.08	21.34	0	0
	1	25	21.53	21.23	21.29		0
	1	49	21.29	21.01	21.29		0
	25	0	21.67	21.31	21.31	0-1	0
	25	12	21.75	21.43	21.41		0
	25	25	21.62	21.45	21.44		0
	50	0	21.61	21.39	21.34		0
16QAM	1	0	21.52	21.15	21.51	0-1	0
	1	25	21.71	21.37	21.52		0
	1	49	21.42	21.16	21.54		0
	25	0	21.75	21.44	21.38	0-2	0
	25	12	21.85	21.55	21.48		0
	25	25	21.68	21.59	21.47		0
	50	0	21.63	21.36	21.37		0
64QAM	1	0	21.50	21.31	21.38	0-2	0
	1	25	21.73	21.62	21.50		0
	1	49	21.37	21.33	21.45		0
	25	0	20.82	20.45	20.42	0-3	0.5
	25	12	20.88	20.58	20.53		0.5
	25	25	20.75	20.55	20.51		0.5
	50	0	20.69	20.45	20.38		0.5
256QAM	1	0	18.90	18.72	18.81	0-5	2.5
	1	25	19.10	19.03	18.80		2.5
	1	49	18.84	18.85	18.75		2.5
	25	0	19.02	18.85	19.00		2.5
	25	12	19.14	18.76	18.88		2.5
	25	25	18.78	18.77	18.89		2.5
	50	0	18.73	18.77	18.77		2.5

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Table 9-64
LTE Band 25 (PCS) Measured Plimit for 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	21.68	21.33	21.22	0	0
	1	12	21.69	21.39	21.25		0
	1	24	21.72	21.43	21.28		0
	12	0	21.70	21.39	21.39	0-1	0
	12	6	21.75	21.43	21.45		0
	12	13	21.77	21.52	21.44		0
	25	0	21.74	21.45	21.46		0
16QAM	1	0	21.84	21.89	21.48	0-1	0
	1	12	21.93	21.90	21.42		0
	1	24	21.93	21.94	21.41		0
	12	0	21.87	21.32	21.47	0-2	0
	12	6	21.94	21.37	21.52		0
	12	13	21.85	21.40	21.49		0
	25	0	21.72	21.48	21.45		0
64QAM	1	0	21.65	21.58	21.63	0-2	0
	1	12	21.75	21.63	21.66		0
	1	24	21.71	21.73	21.64		0
	12	0	20.87	20.65	20.49	0-3	0.5
	12	6	20.92	20.74	20.52		0.5
	12	13	20.87	20.53	20.47		0.5
	25	0	20.84	20.65	20.44		0.5
256QAM	1	0	18.99	18.76	18.79	0-5	2.5
	1	12	19.04	18.95	18.82		2.5
	1	24	19.05	18.98	18.81		2.5
	12	0	18.94	18.83	18.83		2.5
	12	6	18.96	18.88	18.86		2.5
	12	13	18.97	18.95	18.84		2.5
	25	0	18.90	18.80	18.87		2.5

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Table 9-65
LTE Band 25 (PCS) Measured Plimit for 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	21.60	21.18	21.26	0	0
	1	7	21.57	21.27	21.26		0
	1	14	21.67	21.31	21.32		0
	8	0	21.67	21.36	21.41	0-1	0
	8	4	21.71	21.43	21.46		0
	8	7	21.68	21.46	21.47		0
	15	0	21.74	21.38	21.43		0
16QAM	1	0	21.73	21.36	21.53	0-1	0
	1	7	21.71	21.42	21.51		0
	1	14	21.76	21.54	21.63		0
	8	0	21.86	21.50	21.58	0-2	0
	8	4	21.91	21.55	21.63		0
	8	7	21.90	21.60	21.60		0
	15	0	21.75	21.44	21.49		0
64QAM	1	0	21.75	21.57	21.48	0-2	0
	1	7	21.77	21.67	21.50		0
	1	14	21.82	21.68	21.52		0
	8	0	20.71	20.53	20.42	0-3	0.5
	8	4	20.77	20.59	20.49		0.5
	8	7	20.75	20.58	20.47		0.5
	15	0	20.89	20.44	20.44		0.5
256QAM	1	0	18.87	18.59	19.08	0-5	2.5
	1	7	18.87	18.69	19.14		2.5
	1	14	18.88	18.73	19.06		2.5
	8	0	18.64	18.95	18.65		2.5
	8	4	18.70	18.95	18.72		2.5
	8	7	18.67	19.01	18.70		2.5
	15	0	18.81	18.93	18.57		2.5

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Table 9-66
LTE Band 25 (PCS) Measured Plimit for 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	21.58	21.12	21.36	0	0
	1	2	21.58	21.28	21.41		0
	1	5	21.58	21.23	21.42		0
	3	0	21.56	21.21	21.27		0
	3	2	21.63	21.32	21.29		0
	3	3	21.62	21.32	21.30		0
	6	0	21.65	21.29	21.32	0-1	0
16QAM	1	0	21.65	21.52	21.48	0-1	0
	1	2	21.71	21.63	21.56		0
	1	5	21.69	21.59	21.50		0
	3	0	21.64	21.54	21.74		0
	3	2	21.70	21.65	21.82		0
	3	3	21.67	21.63	21.77		0
	6	0	21.71	21.33	21.38	0-2	0
64QAM	1	0	21.72	21.45	21.60	0-2	0
	1	2	21.84	21.58	21.73		0
	1	5	21.71	21.58	21.60		0
	3	0	21.90	21.39	21.43		0
	3	2	21.95	21.51	21.50		0
	3	3	21.92	21.42	21.43		0
	6	0	20.86	20.42	20.46	0-3	0.5
256QAM	1	0	18.89	18.79	18.51	0-5	2.5
	1	2	19.01	18.90	18.56		2.5
	1	5	18.90	18.91	18.50		2.5
	3	0	18.96	18.82	18.77		2.5
	3	2	18.99	18.95	18.83		2.5
	3	3	18.95	18.89	18.76		2.5
	6	0	18.93	18.70	18.85		2.5

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9.4.9 LTE Band 30

Table 9-67
LTE Band 30 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) or 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	23.51	0	0
	1	25	23.55		0
	1	49	**23.58**		0
	25	0	22.57	0-1	1
	25	12	**22.63**		1
	25	25	22.47		1
	50	0	22.60		1
16QAM	1	0	23.00	0-1	1
	1	25	22.71		1
	1	49	22.91		1
	25	0	21.59	0-2	2
	25	12	21.66		2
	25	25	21.52		2
	50	0	21.57		2
64QAM	1	0	21.52	0-2	2
	1	25	21.80		2
	1	49	21.64		2
	25	0	20.18	0-3	3
	25	12	20.37		3
	25	25	20.25		3
	50	0	20.12		3
256QAM	1	0	18.63	0-5	5
	1	25	18.68		5
	1	49	18.42		5
	25	0	18.66		5
	25	12	18.70		5
	25	25	18.56		5
	50	0	18.64		5

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Table 9-68
LTE Band 30 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) or 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	23.62	0	0
	1	12	23.77		0
	1	24	23.80		0
	12	0	22.98	0-1	1
	12	6	23.00		1
	12	13	22.97		1
	25	0	22.87		1
16QAM	1	0	22.88	0-1	1
	1	12	22.99		1
	1	24	22.96		1
	12	0	21.87	0-2	2
	12	6	21.86		2
	12	13	21.82		2
	25	0	21.97		2
64QAM	1	0	21.50	0-2	2
	1	12	21.48		2
	1	24	21.68		2
	12	0	20.38	0-3	3
	12	6	20.51		3
	12	13	20.50		3
	25	0	20.40		3
256QAM	1	0	18.87	0-5	5
	1	12	18.88		5
	1	24	18.78		5
	12	0	18.80		5
	12	6	18.79		5
	12	13	18.74		5
	25	0	18.71		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.

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Table 9-69
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	**19.44**	0	0
	1	25	19.26		0
	1	49	19.28		0
	25	0	19.54	0-1	0
	25	12	**19.58**		0
	25	25	19.40		0
	50	0	19.42		0
16QAM	1	0	19.40	0-1	0
	1	25	19.18		0
	1	49	19.18		0
	25	0	19.62	0-2	0
	25	12	19.71		0
	25	25	19.46		0
	50	0	19.53		0
64QAM	1	0	19.66	0-2	0
	1	25	19.53		0
	1	49	19.57		0
	25	0	19.64	0-3	0
	25	12	19.66		0
	25	25	19.45		0
	50	0	19.49		0
256QAM	1	0	18.70	0-5	0.5
	1	25	18.69		0.5
	1	49	18.51		0.5
	25	0	19.12		0.5
	25	12	19.19		0.5
	25	25	19.01		0.5
	50	0	19.09		0.5

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Table 9-70
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	19.60	0	0
	1	12	19.65		0
	1	24	19.48		0
	12	0	19.77	0-1	0
	12	6	19.73		0
	12	13	19.69		0
	25	0	19.74		0
16QAM	1	0	19.27	0-1	0
	1	12	19.36		0
	1	24	19.15		0
	12	0	19.45	0-2	0
	12	6	19.39		0
	12	13	19.38		0
	25	0	19.28		0
64QAM	1	0	19.24	0-2	0
	1	12	19.22		0
	1	24	19.09		0
	12	0	19.09	0-3	0
	12	6	19.10		0
	12	13	19.03		0
	25	0	19.11		0
256QAM	1	0	18.65	0-5	0.5
	1	12	18.62		0.5
	1	24	18.48		0.5
	12	0	19.05		0.5
	12	6	19.11		0.5
	12	13	18.88		0.5
	25	0	18.89		0.5

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.

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9.4.10 LTE Band 7

Table 9-71
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	**23.17**	22.91	22.85	0	0
	1	50	23.11	22.85	22.73		0
	1	99	23.10	22.76	22.83		0
	50	0	**22.22**	22.06	21.82	0-1	1
	50	25	22.21	22.08	21.85		1
	50	50	22.11	21.96	21.92		1
	100	0	22.15	22.02	21.80		1
16QAM	1	0	22.67	22.63	22.00	0-1	1
	1	50	22.57	22.51	22.00		1
	1	99	22.53	22.43	22.06		1
	50	0	21.23	21.09	20.90	0-2	2
	50	25	21.22	21.06	20.88		2
	50	50	21.14	20.97	21.02		2
	100	0	21.14	21.04	20.80		2
64QAM	1	0	21.21	20.97	20.99	0-2	2
	1	50	21.54	20.88	21.04		2
	1	99	21.43	20.77	21.04		2
	50	0	20.25	20.13	19.93	0-3	3
	50	25	20.25	20.12	19.95		3
	50	50	20.14	20.00	20.03		3
	100	0	20.20	20.04	19.85		3
256QAM	1	0	18.35	17.95	18.21	0-5	5
	1	50	18.64	18.15	18.40		5
	1	99	18.29	17.85	18.00		5
	50	0	18.18	17.99	17.84		5
	50	25	18.28	18.08	17.90		5
	50	50	18.10	17.84	17.84		5
	100	0	18.22	18.02	17.86		5

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Table 9-72
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	23.18	23.04	22.79	0	0
	1	36	23.18	22.97	22.70		0
	1	74	22.82	22.91	22.75		0
	36	0	22.30	22.13	21.81	0-1	1
	36	18	22.29	22.06	21.84		1
	36	37	22.19	22.00	21.95		1
	75	0	22.18	21.97	21.82		1
16QAM	1	0	22.36	22.62	22.14	0-1	1
	1	36	22.36	22.50	22.10		1
	1	74	22.11	22.41	22.29		1
	36	0	21.35	21.20	20.85	0-2	2
	36	18	21.27	21.12	20.92		2
	36	37	21.17	21.14	20.92		2
	75	0	21.15	20.96	20.80		2
64QAM	1	0	20.88	20.94	21.36	0-2	2
	1	36	21.04	21.21	21.22		2
	1	74	20.97	21.44	20.88		2
	36	0	19.98	20.11	20.31	0-3	3
	36	18	20.04	20.30	20.25		3
	36	37	19.88	20.40	20.01		3
	75	0	19.91	20.26	20.16		3
256QAM	1	0	18.54	18.05	18.14	0-5	5
	1	36	18.61	18.06	18.15		5
	1	74	18.50	18.06	18.17		5
	36	0	18.17	18.02	17.87		5
	36	18	18.18	17.93	17.83		5
	36	37	18.13	17.87	17.81		5
	75	0	18.14	17.94	17.83		5

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Table 9-73
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	22.83	23.18	22.90	0	0
	1	25	23.19	23.06	22.82		0
	1	49	23.17	23.13	22.83		0
	25	0	22.24	22.10	21.85	0-1	1
	25	12	22.25	22.07	21.96		1
	25	25	22.22	21.99	21.92		1
	50	0	22.20	21.98	21.79		1
16QAM	1	0	22.24	22.52	22.16	0-1	1
	1	25	22.67	22.45	22.26		1
	1	49	22.71	22.52	22.27		1
	25	0	21.26	21.09	20.85	0-2	2
	25	12	21.25	21.12	20.95		2
	25	25	21.15	20.98	20.95		2
	50	0	21.20	21.01	20.79		2
64QAM	1	0	21.05	21.08	21.36	0-2	2
	1	25	21.33	21.30	21.11		2
	1	49	21.44	21.54	20.92		2
	25	0	20.19	20.16	20.20	0-3	3
	25	12	20.08	20.32	20.09		3
	25	25	20.00	20.45	19.95		3
	50	0	19.97	20.22	20.01		3
256QAM	1	0	18.50	18.18	18.12	0-5	5
	1	25	18.56	18.32	18.36		5
	1	49	18.32	18.14	17.97		5
	25	0	18.25	18.28	17.96		5
	25	12	18.38	18.23	17.89		5
	25	25	18.35	18.26	17.90		5
	50	0	18.34	18.21	17.87		5

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Table 9-74
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	23.18	23.39	22.93	0	0
	1	12	23.42	23.30	22.98		0
	1	24	23.59	23.25	22.92		0
	12	0	22.41	22.51	22.05	0-1	1
	12	6	22.57	22.48	22.09		1
	12	13	22.67	22.42	22.01		1
	25	0	22.53	22.45	22.04		1
16QAM	1	0	22.71	22.75	22.26	0-1	1
	1	12	22.66	22.74	22.16		1
	1	24	22.67	22.63	22.25		1
	12	0	21.52	21.56	21.37	0-2	2
	12	6	21.67	21.48	21.45		2
	12	13	21.81	21.44	21.37		2
	25	0	21.60	21.37	21.34		2
64QAM	1	0	21.22	21.12	21.36	0-2	2
	1	12	21.15	21.23	21.21		2
	1	24	21.24	21.37	21.16		2
	12	0	20.17	20.29	20.00	0-3	3
	12	6	20.15	20.35	19.98		3
	12	13	20.18	20.43	19.92		3
	25	0	20.08	20.26	19.81		3
256QAM	1	0	18.61	18.19	18.34	0-5	5
	1	12	18.55	18.18	18.39		5
	1	24	18.57	18.04	18.27		5
	12	0	18.32	18.16	17.92		5
	12	6	18.36	18.13	17.95		5
	12	13	18.28	18.13	17.92		5
	25	0	18.29	18.01	17.87		5

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Table 9-75
LTE Band 7 Measured P_{limit} for DSI = 3 (Hotspot mode), or 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	**19.60**	19.40	19.31	0	0
	1	50	19.57	19.44	19.27		0
	1	99	19.58	19.31	19.28		0
	50	0	19.56	19.47	19.28	0-1	0
	50	25	19.58	19.45	19.33		0
	50	50	**19.61**	19.36	19.30		0
	100	0	19.59	19.34	19.35		0
16QAM	1	0	19.59	19.68	19.32	0-1	0
	1	50	19.58	19.69	19.29		0
	1	99	19.55	19.56	19.28		0
	50	0	19.58	19.38	19.33	0-2	0
	50	25	19.56	19.40	19.34		0
	50	50	19.60	19.35	19.33		0
	100	0	19.59	19.33	19.33		0
64QAM	1	0	19.59	19.63	19.31	0-2	0
	1	50	19.59	19.63	19.28		0
	1	99	19.62	19.43	19.35		0
	50	0	19.60	19.55	19.31	0-3	0
	50	25	19.57	19.51	19.33		0
	50	50	19.58	19.40	19.32		0
	100	0	19.59	19.52	19.28		0
256QAM	1	0	18.50	18.51	18.52	0-5	0.5
	1	50	18.88	18.61	18.54		0.5
	1	99	18.50	18.50	18.50		0.5
	50	0	18.65	18.52	18.52		0.5
	50	25	18.69	18.53	18.50		0.5
	50	50	18.58	18.50	18.51		0.5
	100	0	18.55	18.52	18.53		0.5

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Table 9-76
LTE Band 7 Measured P_{limit} for DSI = 3 (Hotspot mode), or 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	19.41	19.06	18.93	0	0
	1	36	19.44	19.09	18.94		0
	1	74	19.35	18.98	18.93		0
	36	0	19.50	19.22	19.02	0-1	0
	36	18	19.50	19.20	19.02		0
	36	37	19.37	19.15	19.11		0
	75	0	19.35	19.17	18.99		0
16QAM	1	0	19.92	19.73	19.54	0-1	0
	1	36	19.95	19.76	19.53		0
	1	74	19.89	19.66	19.58		0
	36	0	19.55	19.26	19.10	0-2	0
	36	18	19.59	19.20	19.13		0
	36	37	19.45	19.17	19.20		0
	75	0	19.38	19.17	19.03		0
64QAM	1	0	19.94	19.65	19.41	0-2	0
	1	36	19.98	19.63	19.47		0
	1	74	19.81	19.49	19.50		0
	36	0	19.55	19.30	19.08	0-3	0
	36	18	19.61	19.25	19.10		0
	36	37	19.44	19.19	19.12		0
	75	0	19.47	19.21	19.04		0
256QAM	1	0	18.64	18.52	18.62	0-5	0.5
	1	36	18.90	18.63	18.81		0.5
	1	74	18.66	18.63	18.70		0.5
	36	0	18.50	18.55	18.47		0.5
	36	18	18.62	18.54	18.53		0.5
	36	37	18.77	18.65	18.55		0.5
	75	0	18.61	18.66	18.50		0.5

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Table 9-77
LTE Band 7 Measured P_{limit} for DSI = 3 (Hotspot mode), or 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	19.39	19.21	19.14	0	0
	1	25	19.33	19.17	19.08		0
	1	49	19.34	19.18	19.08		0
	25	0	19.49	19.28	19.01	0-1	0
	25	12	19.44	19.21	19.15		0
	25	25	19.42	19.25	19.10		0
	50	0	19.40	19.18	18.97		0
16QAM	1	0	19.86	19.83	19.67	0-1	0
	1	25	19.94	19.73	19.71		0
	1	49	19.83	19.66	19.74		0
	25	0	19.59	19.28	19.10	0-2	0
	25	12	19.52	19.18	19.18		0
	25	25	19.48	19.24	19.12		0
	50	0	19.42	19.16	19.02		0
64QAM	1	0	19.94	19.79	19.69	0-2	0
	1	25	19.93	19.75	19.75		0
	1	49	19.85	19.70	19.72		0
	25	0	19.56	19.32	19.06	0-3	0
	25	12	19.44	19.31	19.13		0
	25	25	19.44	19.29	19.11		0
	50	0	19.41	19.25	19.02		0
256QAM	1	0	18.63	18.69	18.50	0-5	0.5
	1	25	18.83	18.75	18.55		0.5
	1	49	18.55	18.56	18.63		0.5
	25	0	18.52	18.46	18.60		0.5
	25	12	18.53	18.56	18.64		0.5
	25	25	18.63	18.58	18.63		0.5
	50	0	18.66	18.50	18.60		0.5

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Table 9-78
LTE Band 7 Measured P_{limit} for DSI = 3 (Hotspot mode), or 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	19.42	19.16	19.16	0	0
	1	12	19.43	19.13	19.00		0
	1	24	19.54	19.08	19.14		0
	12	0	19.47	19.24	19.10	0-1	0
	12	6	19.53	19.22	19.15		0
	12	13	19.46	19.24	19.11		0
	25	0	19.47	19.23	19.12		0
16QAM	1	0	19.88	19.82	19.62	0-1	0
	1	12	19.85	19.75	19.60		0
	1	24	19.81	19.75	19.65		0
	12	0	19.59	19.48	19.16	0-2	0
	12	6	19.58	19.42	19.23		0
	12	13	19.53	19.34	19.14		0
	25	0	19.48	19.33	19.11		0
64QAM	1	0	19.80	19.82	19.55	0-2	0
	1	12	19.90	19.81	19.50		0
	1	24	19.94	19.74	19.53		0
	12	0	19.48	19.37	19.20	0-3	0
	12	6	19.55	19.37	19.25		0
	12	13	19.51	19.30	19.21		0
	25	0	19.50	19.28	19.14		0
256QAM	1	0	19.11	18.63	18.71	0-5	0.5
	1	12	19.13	18.63	18.74		0.5
	1	24	19.13	18.53	18.72		0.5
	12	0	18.50	18.64	18.51		0.5
	12	6	18.56	18.60	18.58		0.5
	12	13	18.50	18.53	18.49		0.5
	25	0	18.56	18.55	18.56		0.5

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9.4.11 LTE Band 48

Table 9-79
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	24.11	24.29	24.13	24.17	0	0
	1	50	24.39	**24.80**	24.49	24.34		0
	1	99	24.21	24.26	24.20	23.98		0
	50	0	23.39	23.65	23.51	23.45	0-1	1
	50	25	23.42	**23.66**	23.61	23.43		1
	50	50	23.45	23.61	23.51	23.34		1
	100	0	23.40	23.60	23.53	23.39		1
16QAM	1	0	23.16	23.46	23.19	23.06	0-1	1
	1	50	23.49	23.61	23.53	23.14		1
	1	99	23.33	23.31	23.15	22.90		1
	50	0	22.34	22.57	22.44	22.46	0-2	2
	50	25	22.49	22.65	22.55	22.52		2
	50	50	22.48	22.52	22.47	22.31		2
	100	0	22.31	22.57	22.46	22.38		2
64QAM	1	0	22.50	22.80	22.59	22.05	0-2	2
	1	50	22.90	22.90	22.88	22.26		2
	1	99	22.65	22.60	22.49	22.02		2
	50	0	21.47	21.43	21.43	21.50	0-3	3
	50	25	21.49	21.61	21.59	21.46		3
	50	50	21.43	21.57	21.42	21.32		3
	100	0	21.31	21.51	21.50	21.38		3
256QAM	1	0	19.48	19.23	19.18	19.40	0-5	5
	1	50	19.54	19.24	19.21	19.51		5
	1	99	19.41	19.02	19.04	19.12		5
	50	0	19.48	19.53	19.42	19.46		5
	50	25	19.50	19.60	19.66	19.46		5
	50	50	19.42	19.50	19.43	19.33		5
	100	0	19.37	19.47	19.51	19.42		5

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Table 9-80
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	24.14	24.26	24.31	24.17	0	0
	1	36	24.49	24.39	24.56	24.15		0
	1	74	24.28	24.17	24.33	24.08		0
	36	0	23.44	23.47	23.47	23.33	0-1	1
	36	18	23.54	23.49	23.60	23.34		1
	36	37	23.41	23.45	23.54	23.32		1
	75	0	23.35	23.44	23.46	23.25		1
16QAM	1	0	23.17	23.17	23.36	23.28	0-1	1
	1	36	23.13	23.13	23.61	23.48		1
	1	74	23.19	23.17	23.40	23.17		1
	36	0	22.47	22.47	22.49	22.38	0-2	2
	36	18	22.58	22.55	22.61	22.42		2
	36	37	22.39	22.47	22.56	22.34		2
	75	0	22.35	22.44	22.48	22.29		2
64QAM	1	0	22.11	22.22	22.04	22.35	0-2	2
	1	36	22.43	22.36	22.28	22.32		2
	1	74	22.18	22.15	22.04	22.10		2
	36	0	21.51	21.53	21.47	21.31	0-3	3
	36	18	21.62	21.60	21.54	21.34		3
	36	37	21.46	21.50	21.52	21.26		3
	75	0	21.42	21.53	21.46	21.33		3
256QAM	1	0	19.73	18.95	19.33	19.76	0-5	5
	1	36	19.75	19.05	19.60	19.93		5
	1	74	19.83	18.87	19.30	19.61		5
	36	0	19.47	19.50	19.38	19.42		5
	36	18	19.59	19.54	19.49	19.48		5
	36	37	19.47	19.49	19.50	19.41		5
	75	0	19.41	19.49	19.46	19.37		5

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Table 9-81
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	24.42	24.22	24.22	24.00	0	0
	1	25	24.79	24.50	24.53	24.36		0
	1	49	24.57	24.33	24.28	24.16		0
	25	0	23.65	23.42	23.43	23.34	0-1	1
	25	12	23.77	23.58	23.56	23.48		1
	25	25	23.71	23.54	23.54	23.39		1
	50	0	23.68	23.48	23.51	23.39		1
16QAM	1	0	23.32	23.26	23.29	23.16	0-1	1
	1	25	23.85	23.61	23.63	23.48		1
	1	49	23.50	23.45	23.42	23.28		1
	25	0	22.70	22.43	22.47	22.38	0-2	2
	25	12	22.85	22.61	22.59	22.52		2
	25	25	22.82	22.55	22.56	22.43		2
	50	0	22.72	22.50	22.53	22.39		2
64QAM	1	0	22.12	21.94	21.97	22.12	0-2	2
	1	25	22.40	22.33	22.35	22.44		2
	1	49	22.23	22.14	22.07	22.19		2
	25	0	21.66	21.44	21.43	21.31	0-3	3
	25	12	21.83	21.56	21.57	21.40		3
	25	25	21.71	21.56	21.52	21.32		3
	50	0	21.70	21.48	21.50	21.39		3
256QAM	1	0	19.46	18.96	18.83	19.25	0-5	5
	1	25	19.86	19.35	19.09	19.51		5
	1	49	19.68	19.22	18.97	19.29		5
	25	0	19.59	19.40	19.45	19.22		5
	25	12	19.68	19.52	19.59	19.38		5
	25	25	19.63	19.47	19.46	19.33		5
	50	0	19.64	19.41	19.53	19.33		5

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Table 9-82
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	24.58	24.38	24.43	24.28	0	0
	1	12	24.55	24.47	24.53	24.41		0
	1	24	24.57	24.47	24.52	24.35		0
	12	0	23.55	23.44	23.52	23.41	0-1	1
	12	6	23.60	23.57	23.56	23.51		1
	12	13	23.53	23.52	23.55	23.47		1
	25	0	23.56	23.53	23.52	23.41		1
16QAM	1	0	23.59	23.62	23.40	23.51	0-1	1
	1	12	23.60	23.79	23.48	23.67		1
	1	24	23.62	23.71	23.53	23.59		1
	12	0	22.59	22.48	22.50	22.45	0-2	2
	12	6	22.58	22.61	22.61	22.49		2
	12	13	22.58	22.57	22.55	22.48		2
	25	0	22.58	22.46	22.50	22.40		2
64QAM	1	0	22.58	22.17	22.37	22.09	0-2	2
	1	12	22.59	22.33	22.46	22.27		2
	1	24	22.57	22.28	22.42	22.20		2
	12	0	21.57	21.57	21.50	21.53	0-3	3
	12	6	21.60	21.66	21.62	21.62		3
	12	13	21.58	21.64	21.61	21.58		3
	25	0	21.57	21.50	21.51	21.47		3
256QAM	1	0	19.71	19.74	18.96	19.39	0-5	5
	1	12	19.84	19.81	19.03	19.52		5
	1	24	19.83	19.81	19.09	19.47		5
	12	0	19.60	19.28	19.46	19.25		5
	12	6	19.66	19.34	19.51	19.29		5
	12	13	19.66	19.32	19.50	19.29		5
	25	0	19.70	19.37	19.51	19.35		5

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Table 9-83
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	18.07	18.13	18.06	18.00	0	0
	1	50	18.35	18.33	**18.40**	18.15		0
	1	99	18.13	18.13	18.03	17.80		0
	50	0	18.36	18.52	18.45	18.29	0-1	0
	50	25	18.36	18.55	**18.58**	18.31		0
	50	50	18.32	18.42	18.40	18.20		0
	100	0	18.27	18.32	18.37	18.17		0
16QAM	1	0	18.05	18.15	18.08	18.03	0-1	0
	1	50	18.19	18.44	18.46	18.24		0
	1	99	18.14	18.11	18.14	17.89		0
	50	0	18.26	18.41	18.40	18.23	0-2	0
	50	25	18.29	18.48	18.51	18.29		0
	50	50	18.22	18.37	18.33	18.19		0
	100	0	18.26	18.32	18.41	18.16		0
64QAM	1	0	18.14	18.37	18.00	17.76	0-2	0
	1	50	18.41	18.61	18.17	18.00		0
	1	99	18.16	18.31	18.01	17.58		0
	50	0	18.33	18.65	18.41	18.31	0-3	0
	50	25	18.36	18.69	18.56	18.32		0
	50	50	18.33	18.54	18.42	18.23		0
	100	0	18.26	18.62	18.38	18.23		0
256QAM	1	0	18.56	18.48	18.13	18.05	0-5	0
	1	50	18.42	18.59	18.52	18.21		0
	1	99	18.57	18.29	18.22	17.87		0
	50	0	18.31	18.46	18.43	18.32		0
	50	25	18.32	18.53	18.53	18.38		0
	50	50	18.27	18.45	18.44	18.19		0
	100	0	18.23	18.39	18.39	18.19		0

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Table 9-84
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	18.32	18.33	18.25	18.28	0	0
	1	36	18.57	18.47	18.53	18.42		0
	1	74	18.40	18.46	18.26	18.17		0
	36	0	18.50	18.53	18.54	18.43	0-1	0
	36	18	18.63	18.62	18.63	18.47		0
	36	37	18.49	18.54	18.59	18.41		0
	75	0	18.45	18.52	18.51	18.36		0
16QAM	1	0	18.25	18.50	18.41	18.25	0-1	0
	1	36	18.52	18.63	18.65	18.28		0
	1	74	18.30	18.53	18.40	18.07		0
	36	0	18.59	18.50	18.59	18.50	0-2	0
	36	18	18.68	18.55	18.68	18.56		0
	36	37	18.54	18.48	18.62	18.44		0
	75	0	18.46	18.50	18.52	18.37		0
64QAM	1	0	18.12	18.29	18.52	18.08	0-2	0
	1	36	18.44	18.41	18.79	18.22		0
	1	74	18.17	18.41	18.49	17.89		0
	36	0	18.54	18.54	18.60	18.44	0-3	0
	36	18	18.64	18.55	18.73	18.49		0
	36	37	18.50	18.53	18.67	18.37		0
	75	0	18.50	18.53	18.60	18.39		0
256QAM	1	0	18.84	18.08	18.48	18.41	0-5	0
	1	36	18.61	18.20	18.72	18.21		0
	1	74	18.63	18.02	18.61	18.18		0
	36	0	18.56	18.63	18.53	18.36		0
	36	18	18.68	18.70	18.64	18.41		0
	36	37	18.51	18.60	18.62	18.32		0
	75	0	18.49	18.68	18.56	18.31		0

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Table 9-85
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 55290 (3555.0 MHz)	Low-Mid Channel 55757 (3601.7 MHz)	Mid-High Channel 56223 (3648.3 MHz)	High Channel 56690 (3695.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	18.18	18.28	18.27	18.07	0	0
	1	25	18.54	18.62	18.57	18.41		0
	1	49	18.37	18.42	18.34	18.18		0
	25	0	18.45	18.45	18.46	18.27	0-1	0
	25	12	18.60	18.62	18.57	18.42		0
	25	25	18.57	18.56	18.51	18.37		0
	50	0	18.54	18.51	18.49	18.32		0
16QAM	1	0	18.47	18.20	18.18	17.96	0-1	0
	1	25	18.57	18.44	18.44	18.29		0
	1	49	18.41	18.33	18.25	18.02		0
	25	0	18.53	18.45	18.44	18.26	0-2	0
	25	12	18.64	18.56	18.53	18.37		0
	25	25	18.67	18.51	18.54	18.33		0
	50	0	18.51	18.49	18.49	18.31		0
64QAM	1	0	18.16	18.09	18.06	17.95	0-2	0
	1	25	18.56	18.46	18.44	18.23		0
	1	49	18.31	18.26	18.17	18.06		0
	25	0	18.45	18.52	18.52	18.34	0-3	0
	25	12	18.61	18.67	18.63	18.44		0
	25	25	18.58	18.58	18.60	18.40		0
	50	0	18.54	18.57	18.57	18.36		0
256QAM	1	0	18.42	18.38	18.37	17.98	0-5	0
	1	25	18.74	18.73	18.69	18.23		0
	1	49	18.52	18.56	18.46	18.09		0
	25	0	18.44	18.46	18.40	18.34		0
	25	12	18.58	18.64	18.60	18.43		0
	25	25	18.53	18.54	18.52	18.30		0
	50	0	18.54	18.53	18.54	18.36		0

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Table 9-86
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 55265 (3552.5 MHz)	Low-Mid Channel 55748 (3600.8 MHz)	Mid-High Channel 56232 (3649.2 MHz)	High Channel 56715 (3697.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]					
QPSK	1	0	18.55	18.47	18.35	18.28	0	0
	1	12	18.62	18.55	18.51	18.35		0
	1	24	18.64	18.53	18.39	18.35		0
	12	0	18.58	18.52	18.50	18.32	0-1	0
	12	6	18.63	18.63	18.61	18.42		0
	12	13	18.63	18.62	18.54	18.41		0
	25	0	18.59	18.57	18.57	18.38		0
16QAM	1	0	18.53	18.61	18.47	18.67	0-1	0
	1	12	18.55	18.70	18.54	18.72		0
	1	24	18.63	18.74	18.55	18.73		0
	12	0	18.56	18.49	18.64	18.35	0-2	0
	12	6	18.65	18.63	18.72	18.39		0
	12	13	18.63	18.63	18.70	18.39		0
	25	0	18.59	18.54	18.60	18.34		0
64QAM	1	0	18.34	18.38	18.58	18.13	0-2	0
	1	12	18.49	18.53	18.68	18.25		0
	1	24	18.48	18.49	18.61	18.27		0
	12	0	18.63	18.55	18.55	18.42	0-3	0
	12	6	18.72	18.65	18.60	18.46		0
	12	13	18.73	18.66	18.62	18.45		0
	25	0	18.60	18.61	18.57	18.36		0
256QAM	1	0	18.65	18.10	18.87	17.94	0-5	0
	1	12	18.61	18.21	18.87	17.98		0
	1	24	18.64	18.20	18.83	18.02		0
	12	0	18.46	18.59	18.41	18.37		0
	12	6	18.55	18.65	18.49	18.49		0
	12	13	18.55	18.65	18.49	18.46		0
	25	0	18.60	18.57	18.51	18.41		0

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9.4.12 LTE Band 41

Table 9-87
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	24.09	23.84	23.32	23.50	23.56	0	0
	1	50	24.10	23.81	23.61	23.78	24.01		0
	1	99	**24.11**	23.72	23.38	23.39	23.92		0
	50	0	23.22	22.88	22.57	22.74	22.87	0-1	1
	50	25	**23.23**	22.91	22.72	22.94	23.12		1
	50	50	23.18	22.76	22.64	22.77	23.11		1
	100	0	23.12	22.80	22.64	22.83	22.96		1
16QAM	1	0	22.85	23.04	22.48	22.73	22.25	0-1	1
	1	50	22.78	22.97	22.74	22.95	22.61		1
	1	99	22.81	22.90	22.57	22.59	22.44		1
	50	0	22.22	21.89	21.58	21.86	21.84	0-2	2
	50	25	22.22	21.90	21.72	21.94	22.10		2
	50	50	22.28	21.75	21.66	21.79	22.09		2
	100	0	22.18	21.82	21.64	21.78	21.97		2
64QAM	1	0	22.19	22.04	21.46	21.17	21.35	0-2	2
	1	50	22.13	22.03	21.80	21.52	21.95		2
	1	99	22.12	21.86	21.48	21.05	21.83		2
	50	0	21.26	20.89	20.60	20.80	20.89	0-3	3
	50	25	21.26	20.89	20.71	20.94	21.16		3
	50	50	21.27	20.78	20.67	20.81	21.16		3
	100	0	21.20	20.78	20.59	20.84	21.11		3
256QAM	1	0	18.99	18.67	18.42	18.53	18.76	0-5	5
	1	50	19.37	18.86	18.73	18.82	19.18		5
	1	99	19.14	18.57	18.58	18.40	19.10		5
	50	0	19.12	18.83	18.62	18.79	18.90		5
	50	25	19.24	18.89	18.72	18.89	19.11		5
	50	50	19.20	18.68	18.60	18.77	19.08		5
	100	0	19.18	18.78	18.61	18.82	19.00		5

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Table 9-88
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	23.60	23.44	23.56	23.53	23.20	0	0
	1	36	23.63	23.60	23.71	23.64	23.41		0
	1	74	23.80	23.40	23.60	23.37	23.42		0
	36	0	22.63	22.61	22.65	22.60	22.37	0-1	1
	36	18	22.72	22.73	22.75	22.62	22.52		1
	36	37	22.70	22.66	22.80	22.61	22.58		1
	75	0	22.71	22.65	22.70	22.52	22.44		1
16QAM	1	0	22.93	22.38	22.44	22.38	22.42	0-1	1
	1	36	22.90	22.53	22.59	22.53	22.70		1
	1	74	22.95	22.35	22.51	22.22	22.63		1
	36	0	21.61	21.64	21.69	21.58	21.42	0-2	2
	36	18	21.70	21.75	21.75	21.63	21.53		2
	36	37	21.68	21.67	21.83	21.65	21.59		2
	75	0	21.63	21.66	21.68	21.54	21.49		2
64QAM	1	0	21.58	21.47	21.47	21.30	21.35	0-2	2
	1	36	21.68	21.70	21.67	21.48	21.71		2
	1	74	21.75	21.47	21.56	21.21	21.67		2
	36	0	20.66	20.59	20.72	20.60	20.34	0-3	3
	36	18	20.74	20.78	20.78	20.60	20.51		3
	36	37	20.70	20.69	20.80	20.59	20.51		3
	75	0	20.68	20.70	20.70	20.58	20.52		3
256QAM	1	0	18.51	18.78	18.05	17.97	18.35	0-5	5
	1	36	18.77	19.02	18.23	18.18	18.70		5
	1	74	18.69	18.79	18.13	17.91	18.62		5
	36	0	18.54	18.56	18.71	18.62	18.35		5
	36	18	18.71	18.73	18.81	18.61	18.50		5
	36	37	18.75	18.66	18.83	18.62	18.53		5
	75	0	18.71	18.68	18.72	18.59	18.46		5

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Table 9-89
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 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	23.72	23.55	23.55	23.50	23.35	0	0
	1	25	23.71	23.84	23.83	23.72	23.60		0
	1	49	23.87	23.53	23.58	23.58	23.28		0
	25	0	22.63	22.75	22.76	22.60	22.51	0-1	1
	25	12	22.84	22.82	22.83	22.67	22.59		1
	25	25	22.68	22.72	22.79	22.62	22.46		1
	50	0	22.66	22.74	22.73	22.58	22.51		1
16QAM	1	0	22.88	22.40	22.80	22.73	22.27	0-1	1
	1	25	22.72	22.66	23.08	22.80	22.51		1
	1	49	22.74	22.42	22.83	22.55	22.25		1
	25	0	21.65	21.77	21.73	21.63	21.62	0-2	2
	25	12	21.77	21.85	21.79	21.69	21.52		2
	25	25	21.79	21.74	21.80	21.63	21.48		2
	50	0	21.68	21.70	21.72	21.57	21.52		2
64QAM	1	0	21.70	21.50	21.64	21.22	21.23	0-2	2
	1	25	21.78	21.77	22.03	21.46	21.40		2
	1	49	21.82	21.54	21.78	21.15	21.08		2
	25	0	20.57	20.78	20.73	20.58	20.50	0-3	3
	25	12	20.67	20.85	20.77	20.70	20.58		3
	25	25	20.69	20.76	20.76	20.66	20.52		3
	50	0	20.65	20.71	20.72	20.54	20.50		3
256QAM	1	0	18.38	18.02	18.72	18.34	17.86	0-5	5
	1	25	18.57	18.23	19.05	18.55	18.00		5
	1	49	18.26	18.06	18.71	18.30	17.99		5
	25	0	18.52	18.75	18.72	18.60	18.56		5
	25	12	18.71	18.85	18.77	18.63	18.65		5
	25	25	18.62	18.71	18.76	18.63	18.48		5
	50	0	18.64	18.80	18.75	18.62	18.55		5

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Table 9-90
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	23.56	23.62	23.73	23.59	23.51	0	0
	1	12	23.60	23.63	23.86	23.63	23.53		0
	1	24	23.66	23.58	23.76	23.58	23.43		0
	12	0	22.72	22.68	22.80	22.70	22.59	0-1	1
	12	6	22.77	22.74	22.95	22.73	22.57		1
	12	13	22.78	22.64	22.84	22.74	22.54		1
	25	0	22.72	22.66	22.80	22.61	22.56		1
16QAM	1	0	22.82	22.58	22.64	22.76	22.44	0-1	1
	1	12	22.95	22.54	22.84	22.82	22.40		1
	1	24	22.91	22.54	22.71	22.82	22.43		1
	12	0	21.73	21.73	21.85	21.68	21.54	0-2	2
	12	6	21.78	21.74	21.93	21.75	21.60		2
	12	13	21.79	21.66	21.90	21.66	21.57		2
	25	0	21.63	21.63	21.86	21.61	21.52		2
64QAM	1	0	21.49	21.88	22.06	21.51	21.73	0-2	2
	1	12	21.58	21.84	22.12	21.57	21.71		2
	1	24	21.52	21.82	22.07	21.52	21.71		2
	12	0	20.84	20.71	20.93	20.61	20.59	0-3	3
	12	6	20.85	20.72	20.98	20.65	20.64		3
	12	13	20.86	20.73	20.94	20.65	20.61		3
	25	0	20.74	20.65	20.86	20.67	20.49		3
256QAM	1	0	18.43	18.93	18.91	18.44	18.84	0-5	5
	1	12	18.49	18.92	18.95	18.46	18.81		5
	1	24	18.50	18.86	18.91	18.46	18.79		5
	12	0	18.77	18.61	18.80	18.69	18.56		5
	12	6	18.74	18.63	18.85	18.74	18.54		5
	12	13	18.74	18.62	18.82	18.70	18.51		5
	25	0	18.71	18.62	18.82	18.65	18.48		5

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Table 9-91
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	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	26.78	26.97	26.76	26.72	26.34	0	0
	1	50	26.76	27.02	**27.03**	26.92	26.58		0
	1	99	26.72	26.96	26.72	26.55	26.49		0
	50	0	25.94	26.07	26.04	25.95	25.53	0-1	1
	50	25	25.95	26.11	**26.13**	25.98	25.66		1
	50	50	25.90	26.04	26.00	25.91	25.57		1
	100	0	25.83	26.00	26.05	25.90	25.47		1

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Table 9-92
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	21.38	21.19	21.03	21.07	20.88	0	0
	1	50	**21.40**	21.27	21.37	21.37	21.29		0
	1	99	21.36	21.24	21.14	20.90	21.14		0
	50	0	21.40	21.29	21.29	21.27	21.16	0-1	0
	50	25	**21.53**	21.36	21.45	21.38	21.37		0
	50	50	21.45	21.32	21.41	21.30	21.33		0
	100	0	21.39	21.24	21.34	21.26	21.26		0
16QAM	1	0	21.50	20.99	20.80	21.34	21.01	0-1	0
	1	50	21.57	21.01	21.19	21.67	21.46		0
	1	99	21.48	20.95	20.75	21.21	21.30		0
	50	0	21.43	21.27	21.30	21.34	21.18	0-2	0
	50	25	21.55	21.36	21.45	21.39	21.40		0
	50	50	21.45	21.29	21.46	21.35	21.35		0
	100	0	21.43	21.26	21.30	21.28	21.26		0
64QAM	1	0	21.10	21.19	20.88	20.86	20.66	0-2	0
	1	50	21.30	21.26	21.34	21.22	21.07		0
	1	99	21.21	21.22	21.03	20.69	20.83		0
	50	0	21.45	21.25	21.32	21.33	21.14	0-3	0
	50	25	21.52	21.41	21.46	21.43	21.34		0
	50	50	21.49	21.35	21.43	21.34	21.32		0
	100	0	21.41	21.31	21.36	21.31	21.28		0
256QAM	1	0	18.64	18.54	18.57	18.77	18.50	0-5	2
	1	50	18.88	18.87	18.97	19.00	18.71		2
	1	99	18.60	18.50	18.70	18.71	18.59		2
	50	0	18.73	18.66	18.73	18.82	18.61		2
	50	25	18.89	18.83	18.87	18.88	18.78		2
	50	50	18.85	18.67	18.86	18.80	18.70		2
	100	0	18.83	18.65	18.74	18.70	18.68		2

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Table 9-93
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	20.84	20.73	20.74	20.71	20.44	0	0
	1	36	20.89	20.98	21.02	20.77	20.74		0
	1	74	20.86	20.70	20.81	20.57	20.66		0
	36	0	20.87	20.86	20.93	20.81	20.67	0-1	0
	36	18	20.98	21.00	21.00	20.89	20.83		0
	36	37	20.94	20.95	21.04	20.84	20.83		0
	75	0	20.88	20.88	20.91	20.73	20.74		0
16QAM	1	0	20.48	20.81	20.42	20.75	20.11	0-1	0
	1	36	20.58	21.07	20.71	20.99	20.44		0
	1	74	20.54	20.80	20.49	20.65	20.31		0
	36	0	20.91	20.91	20.95	20.89	20.66	0-2	0
	36	18	21.01	21.00	21.02	20.92	20.85		0
	36	37	20.99	20.94	21.08	20.87	20.84		0
	75	0	20.89	20.88	20.92	20.79	20.77		0
64QAM	1	0	21.01	20.44	20.92	20.59	20.61	0-2	0
	1	36	21.13	20.75	21.21	20.84	20.98		0
	1	74	21.09	20.47	21.01	20.53	20.86		0
	36	0	20.96	20.87	21.00	20.77	20.73	0-3	0
	36	18	21.04	20.98	21.12	20.85	20.91		0
	36	37	21.05	20.91	21.14	20.75	20.91		0
	75	0	20.94	20.90	20.97	20.76	20.80		0
256QAM	1	0	18.60	18.71	18.31	18.74	18.63	0-5	2
	1	36	18.95	18.81	18.56	18.89	18.84		2
	1	74	18.78	18.76	18.47	18.66	18.75		2
	36	0	18.30	18.33	18.31	18.28	18.62		2
	36	18	18.49	18.48	18.43	18.39	18.64		2
	36	37	18.46	18.39	18.50	18.32	18.64		2
	75	0	18.37	18.43	18.34	18.33	18.63		2

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Table 9-94
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	21.07	20.92	20.80	20.72	20.53	0	0
	1	25	21.04	21.11	21.06	20.97	20.74		0
	1	49	21.23	20.81	20.81	20.68	20.47		0
	25	0	20.91	21.02	21.02	20.85	20.77	0-1	0
	25	12	21.03	21.12	21.13	20.96	20.87		0
	25	25	20.97	20.98	21.06	20.91	20.72		0
	50	0	20.94	21.02	21.03	20.84	20.77		0
16QAM	1	0	21.08	20.72	20.94	20.83	20.65	0-1	0
	1	25	21.21	21.11	21.17	21.08	20.82		0
	1	49	21.17	21.00	20.92	20.81	20.61		0
	25	0	20.97	21.06	21.07	20.90	20.84	0-2	0
	25	12	21.06	21.16	21.14	20.96	20.91		0
	25	25	21.05	21.01	21.10	20.97	20.77		0
	50	0	20.95	21.08	21.03	20.90	20.77		0
64QAM	1	0	21.31	21.07	20.68	20.60	20.48	0-2	0
	1	25	21.41	21.45	20.97	20.79	20.69		0
	1	49	21.36	21.20	20.72	20.57	20.37		0
	25	0	20.93	20.98	21.01	20.86	20.77	0-3	0
	25	12	21.01	21.08	21.07	20.98	20.82		0
	25	25	20.98	20.98	21.06	20.92	20.73		0
	50	0	20.92	21.01	21.00	20.84	20.75		0
256QAM	1	0	18.60	18.69	18.31	18.62	18.58	0-5	2
	1	25	18.67	18.63	18.68	18.60	18.63		2
	1	49	18.60	18.75	18.41	18.83	18.58		2
	25	0	18.91	18.62	18.35	18.28	18.37		2
	25	12	18.84	18.74	18.46	18.39	18.41		2
	25	25	18.68	18.63	18.41	18.30	18.30		2
	50	0	18.69	18.63	18.39	18.32	18.38		2

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Table 9-95
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	20.95	21.02	21.10	20.82	20.91	0	0
	1	12	20.97	21.04	21.17	20.87	20.83		0
	1	24	21.07	21.04	21.14	20.81	20.82		0
	12	0	21.04	21.10	21.13	20.95	20.85	0-1	0
	12	6	21.06	21.15	21.18	21.00	20.85		0
	12	13	21.00	21.10	21.14	20.98	20.84		0
	25	0	21.01	21.09	21.12	20.97	20.85		0
16QAM	1	0	20.97	21.20	21.06	21.15	20.83	0-1	0
	1	12	21.00	21.34	21.09	21.15	20.78		0
	1	24	21.02	21.25	21.11	21.14	20.75		0
	12	0	21.04	21.15	21.11	20.99	20.88	0-2	0
	12	6	21.08	21.12	21.19	21.06	20.85		0
	12	13	21.09	21.09	21.19	21.01	20.83		0
	25	0	21.00	21.02	21.08	20.94	20.79		0
64QAM	1	0	20.84	20.87	20.90	21.02	20.62	0-2	0
	1	12	20.84	20.95	20.97	21.11	20.70		0
	1	24	20.92	20.95	20.91	21.04	20.62		0
	12	0	21.04	21.15	21.13	20.97	20.87	0-3	0
	12	6	21.08	21.17	21.23	21.03	20.89		0
	12	13	21.09	21.15	21.21	21.03	20.84		0
	25	0	21.01	21.12	21.09	20.94	20.79		0
256QAM	1	0	18.75	18.65	18.92	18.40	18.63	0-5	2
	1	12	18.80	18.71	18.98	18.49	18.56		2
	1	24	18.78	18.61	18.91	18.44	18.54		2
	12	0	18.32	18.54	18.41	18.28	18.15		2
	12	6	18.31	18.58	18.46	18.35	18.09		2
	12	13	18.29	18.54	18.46	18.33	18.11		2
	25	0	18.35	18.54	18.44	18.33	18.19		2

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Table 9-96
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	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	22.94	22.83	22.63	22.81	22.63	0	0
	1	50	**23.03**	22.88	22.98	22.94	23.02		0
	1	99	23.00	22.89	22.70	22.54	22.87		0
	50	0	23.07	22.97	22.97	22.98	22.78	0-1	0
	50	25	**23.17**	23.07	23.09	23.04	23.01		0
	50	50	23.12	23.04	23.11	22.96	22.98		0
	100	0	23.02	22.97	22.99	22.95	22.93		0

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Table 9-97
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 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	22.36	22.28	22.04	22.10	21.85	0	0
	1	50	22.41	22.35	**22.44**	22.40	22.22		0
	1	99	22.35	22.30	22.16	21.91	22.08		0
	50	0	22.43	22.31	22.39	22.31	22.12	0-1	0
	50	25	22.48	22.42	**22.51**	22.41	22.35		0
	50	50	22.45	22.40	22.47	22.29	22.31		0
	100	0	22.40	22.31	22.36	22.26	22.24		0
16QAM	1	0	22.08	22.08	22.36	22.41	22.00	0-1	0
	1	50	22.14	22.11	22.40	22.45	22.42		0
	1	99	22.09	21.99	22.43	22.20	22.21		0
	50	0	21.77	21.69	22.08	21.80	21.60	0-2	0
	50	25	21.91	21.85	21.88	21.81	21.80		0
	50	50	21.85	21.76	21.89	21.79	21.78		0
	100	0	21.79	21.70	21.81	21.72	21.69		0
64QAM	1	0	22.20	22.42	21.90	22.10	21.80	0-2	0
	1	50	22.27	22.32	22.38	22.50	22.11		0
	1	99	22.30	22.27	21.98	22.20	21.92		0
	50	0	21.75	21.64	21.70	21.61	21.50	0-3	1
	50	25	21.69	21.60	21.62	21.69	21.53		1
	50	50	21.74	21.59	21.72	21.68	21.51		1
	100	0	21.66	21.62	21.65	21.65	21.50		1
256QAM	1	0	18.80	18.67	18.77	18.70	18.66	0-5	3
	1	50	18.89	18.90	18.96	19.06	18.90		3
	1	99	18.90	18.89	19.02	18.70	18.73		3
	50	0	18.91	18.70	18.90	18.88	18.60		3
	50	25	18.93	18.75	18.97	18.90	18.83		3
	50	50	18.82	18.86	18.94	18.77	18.78		3
	100	0	18.80	18.77	18.80	18.70	18.98		3

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Table 9-98
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	21.89	21.78	21.76	21.77	21.46	0	0
	1	36	21.93	22.02	22.06	21.79	21.77		0
	1	74	21.91	21.77	21.83	21.60	21.68		0
	36	0	21.94	21.90	21.95	21.85	21.68	0-1	0
	36	18	22.04	22.05	22.03	21.91	21.89		0
	36	37	21.99	21.95	22.10	21.87	21.84		0
	75	0	21.98	21.95	21.99	21.79	21.79		0
16QAM	1	0	22.03	21.65	21.93	21.97	21.61	0-1	0
	1	36	22.06	21.96	22.18	22.00	21.86		0
	1	74	22.03	21.65	21.96	21.81	21.82		0
	36	0	21.98	21.96	22.02	21.80	21.77	0-2	0
	36	18	22.14	22.16	22.14	21.83	21.93		0
	36	37	22.08	22.08	22.14	21.82	21.92		0
	75	0	21.97	21.97	21.94	21.79	21.80		0
64QAM	1	0	22.28	21.72	22.10	21.80	21.83	0-2	0
	1	36	22.38	22.01	22.47	22.06	22.21		0
	1	74	22.34	21.72	22.26	21.57	22.06		0
	36	0	21.23	21.11	21.24	20.94	20.95	0-3	1
	36	18	21.32	21.26	21.31	21.02	21.15		1
	36	37	21.25	21.16	21.36	21.11	21.10		1
	75	0	21.21	21.15	21.22	20.89	21.03		1
256QAM	1	0	18.92	18.92	18.59	18.70	18.30	0-5	3
	1	36	19.28	19.26	18.92	18.87	18.65		3
	1	74	19.10	18.95	18.71	18.54	18.56		3
	36	0	19.04	19.02	19.14	18.28	18.90		3
	36	18	19.00	18.93	18.83	18.36	18.61		3
	36	37	18.91	18.80	18.93	18.31	18.66		3
	75	0	18.93	18.89	18.72	18.26	18.65		3

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Table 9-99
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	22.16	21.87	21.82	21.74	21.53	0	0
	1	25	22.05	22.13	22.08	22.01	21.75		0
	1	49	21.97	21.85	21.82	21.72	21.49		0
	25	0	21.95	22.06	22.00	21.88	21.80	0-1	0
	25	12	22.03	22.11	22.10	21.99	21.87		0
	25	25	21.99	22.00	22.07	21.94	21.74		0
	50	0	22.01	22.04	22.02	21.86	21.78		0
16QAM	1	0	22.23	21.97	21.99	21.63	21.66	0-1	0
	1	25	22.12	22.09	22.32	21.80	21.86		0
	1	49	22.12	21.90	21.94	21.58	21.63		0
	25	0	21.98	21.96	22.07	21.80	21.80	0-2	0
	25	12	22.11	22.17	22.13	21.92	21.85		0
	25	25	22.08	22.07	22.15	21.88	21.78		0
	50	0	21.93	22.01	22.03	21.85	21.77		0
64QAM	1	0	22.28	21.82	21.64	21.43	21.39	0-2	0
	1	25	22.35	22.14	21.97	21.74	21.59		0
	1	49	22.32	21.64	21.69	21.49	21.34		0
	25	0	21.23	21.29	21.45	21.31	21.20	0-3	1
	25	12	21.43	21.49	21.48	21.39	21.28		1
	25	25	21.36	21.20	21.44	21.35	21.14		1
	50	0	21.35	21.44	21.43	21.30	21.16		1
256QAM	1	0	18.80	18.51	18.99	18.94	18.61	0-5	3
	1	25	19.06	18.89	19.20	19.25	18.85		3
	1	49	18.85	18.75	19.01	19.01	18.60		3
	25	0	18.86	19.01	18.97	18.78	19.02		3
	25	12	18.99	19.13	19.01	18.86	19.04		3
	25	25	18.89	18.95	19.01	18.81	18.92		3
	50	0	18.96	19.06	19.00	18.75	18.98		3

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Table 9-100
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 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	22.04	21.99	22.12	21.79	21.85	0	0
	1	12	22.02	22.04	22.14	21.88	21.83		0
	1	24	22.08	22.04	22.15	21.81	21.82		0
	12	0	22.03	22.11	22.11	21.93	21.82	0-1	0
	12	6	22.07	22.14	22.17	22.02	21.86		0
	12	13	22.03	22.09	22.15	21.97	21.83		0
	25	0	22.06	22.12	22.10	21.96	21.86		0
16QAM	1	0	22.39	22.14	22.45	21.93	22.18	0-1	0
	1	12	22.35	22.15	22.49	21.89	22.18		0
	1	24	22.46	22.18	22.48	21.88	22.16		0
	12	0	22.05	22.07	22.07	22.00	21.80	0-2	0
	12	6	22.07	22.10	22.13	22.08	21.85		0
	12	13	22.02	22.14	22.14	22.06	21.77		0
	25	0	22.01	22.13	22.06	21.94	21.82		0
64QAM	1	0	22.16	22.31	22.27	22.31	22.01	0-2	0
	1	12	22.16	22.33	22.33	22.38	22.00		0
	1	24	22.23	22.29	22.31	22.34	21.95		0
	12	0	21.43	21.47	21.46	21.23	21.20	0-3	1
	12	6	21.38	21.45	21.51	21.34	21.21		1
	12	13	21.39	21.46	21.50	21.26	21.17		1
	25	0	21.37	21.41	21.41	21.26	21.09		1
256QAM	1	0	18.75	18.53	18.86	18.42	18.62	0-5	3
	1	12	18.79	18.57	18.91	18.50	18.59		3
	1	24	18.82	18.58	18.89	18.42	18.56		3
	12	0	18.57	18.53	18.71	18.55	18.45		3
	12	6	18.56	18.52	18.75	18.68	18.42		3
	12	13	18.54	18.54	18.72	18.58	18.40		3
	25	0	18.63	18.52	18.73	18.66	18.47		3

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Table 9-101
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	23.95	23.88	23.56	23.67	23.66	0	0
	1	50	**24.05**	23.90	23.99	23.98	24.03		0
	1	99	23.94	23.95	23.66	23.46	23.93		0
	50	0	24.07	24.00	23.98	23.97	23.80	0-1	0
	50	25	**24.19**	24.06	24.13	24.10	24.02		0
	50	50	24.14	24.06	24.11	24.01	24.01		0
	100	0	24.00	23.97	23.98	24.03	23.95		0

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9.4.13 LTE Uplink Carrier Aggregation Conducted Powers

Table 9-102
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) or LTE Band 5/48 DSI = 1 (Phablet with grip sensor triggered), and/or DSI = 4 (Earjack Active) and/or 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_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	25.35	25.15

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_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	24.15	23.50
CA_66C	LTE B66	20	132322	1745.0	66786	2145.0	QPSK	1	0	LTE B66	20	132124	1725.2	66588	2125.2	QPSK	1	99	24.11	23.35
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	24.13	23.61
CA_66B	LTE B66	10	132322	1745.0	66786	2145.0	QPSK	1	0	LTE B66	10	132223	1735.1	66687	2135.1	QPSK	1	49	23.92	23.49

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	55773	3603.3	QPSK	1	0	LTE B48	20	55575	3583.5	QPSK	1	99	24.89	24.29
CA_48C	LTE B48	20	56640	3690.0	QPSK	1	0	LTE B48	20	56442	3670.2	QPSK	1	99	24.78	24.17

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	39750	2506.0	QPSK	1	99	LTE B41	20	39948	2525.8	QPSK	1	0	24.41	24.11

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	39750	2506.0	QPSK	1	99	LTE B41 PC2	20	39948	2525.8	QPSK	1	0	27.15	26.72

Table 9-103
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	66536	2120	QPSK	100	0	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	100	0	20.50	20.43
CA_66B	LTE B66	10	132022	1715	66486	2115	QPSK	50	0	LTE B66	10	132121	1724.9	66585	2124.9	QPSK	50	0	20.46	20.47

	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	50	0	LTE B41	20	40857	2616.7	QPSK	50	50	22.58	22.31

	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	50	0	LTE B41 PC2	20	40857	2616.7	QPSK	50	50	24.47	23.97

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Table 9-104
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	56207	3646.7	QPSK	50	0	LTE B48	20	56009	3626.9	QPSK	50	50	18.77	18.45

Table 9-105
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	132572	1770.0	67036	2170.0	QPSK	1	0	LTE B66	20	132374	1750.2	66838	2150.2	QPSK	1	99	19.55	19.37
CA_66B	LTE B66	10	132622	1775.0	67086	2175.0	QPSK	1	0	LTE B66	10	132523	1765.1	66987	2165.1	QPSK	1	49	19.30	19.33

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	39750	2506.0	QPSK	1	99	LTE B41	20	39948	2525.8	QPSK	1	0	21.25	21.36

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	39750	2506.0	QPSK	1	99	LTE B41 PC2	20	39948	2525.8	QPSK	1	0	23.06	23.00

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

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9.5 NR Conducted Powers

9.5.1 NR Band n71

Table 9-106
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 π/2 BPSK	1	1	24.81	0	0
	1	53	24.85		0
	1	104	24.48		0
	50	0	24.23	0-0.5	0.5
	50	28	24.65	0	0
	50	56	24.06	0-0.5	0.5
	100	0	24.13		0.5
DFT-s-OFDM QPSK	1	1	24.88	0	0
	1	53	**25.05**		0
	1	104	24.52		0
	50	0	23.85	0-1	1
	50	28	**24.66**	0	0
	50	56	23.58	0-1	1
	100	0	23.75		1
DFT-s-OFDM 16QAM	1	1	24.01	0-1	1
CP-OFDM QPSK	1	1	23.41	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.

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Table 9-107
NR Band n71 Measured P_{max} for all DSI - 15 MHz Bandwidth

NR Band n71 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	136100 (680.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.84	0	0
	1	40	24.72		0
	1	77	24.61		0
	36	0	24.32	0-0.5	0.5
	36	22	24.63	0	0
	36	43	24.05	0-0.5	0.5
	75	0	24.19		0.5
DFT-s-OFDM QPSK	1	1	24.83	0	0
	1	40	24.70		0
	1	77	24.55		0
	36	0	23.91	0-1	1
	36	22	24.65	0	0
	36	43	23.66	0-1	1
	75	0	23.75		1
DFT-s-OFDM 16QAM	1	1	24.07	0-1	1
CP-OFDM QPSK	1	1	23.57	0-1.5	1.5

Note: NR Band n71 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.

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Table 9-108
NR Band n71 Measured P_{max} for all DSI - 10 MHz Bandwidth

NR Band n71 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	133600 (668 MHz)	136100 (680.5 MHz)	138600 (693 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.91	24.83	24.43	0	0
	1	26	25.08	24.87	24.46		0
	1	50	24.79	24.61	24.12		0
	25	0	24.53	24.35	23.86	0-0.5	0.5
	25	14	24.92	24.68	24.30	0	0
	25	27	24.31	24.13	23.69	0-0.5	0.5
	50	0	24.44	24.23	23.80		0.5
DFT-s-OFDM QPSK	1	1	24.93	24.82	24.39	0	0
	1	26	25.06	24.80	24.43		0
	1	50	24.70	24.65	24.27		0
	25	0	24.09	23.93	23.49	0-1	1
	25	14	24.88	24.68	24.32	0	0
	25	27	23.88	23.70	23.31	0-1	1
	50	0	24.02	23.85	23.45		1
DFT-s-OFDM 16QAM	1	1	23.90	24.03	23.63	0-1	1
CP-OFDM QPSK	1	1	23.39	23.36	23.00	0-1.5	1.5

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Table 9-109
NR Band n71 Measured P_{max} for all DSI - 5 MHz Bandwidth

NR Band n71 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	133100 (665.5 MHz)	136100 (680.5 MHz)	139100 (695.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	25.00	24.84	24.40	0	0
	1	13	24.88	24.78	24.29		0
	1	23	24.79	24.64	24.18		0
	12	0	24.47	24.22	23.90	0-0.5	0.5
	12	7	24.89	24.70	24.14	0	0
	12	13	24.21	24.17	23.63	0-0.5	0.5
	25	0	24.43	24.18	23.71		0.5
DFT-s-OFDM QPSK	1	1	24.87	24.84	24.42	0	0
	1	13	24.77	24.80	24.38		0
	1	23	24.85	24.72	24.18		0
	12	0	23.97	23.77	23.43	0-1	1
	12	7	24.87	24.74	24.34	0	0
	12	13	23.88	23.73	23.30	0-1	1
	25	0	23.95	23.76	23.37		1
DFT-s-OFDM 16QAM	1	1	24.06	24.03	23.61	0-1	1
CP-OFDM QPSK	1	1	23.62	23.43	22.91	0-1.5	1.5

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9.5.1 NR Band n12

Table 9-110
NR Band n12 Measured P_{max} for all DSI - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.51	0	0
	1	40	24.72		0
	1	77	24.88		0
	36	0	23.83	0-0.5	0.5
	36	22	24.48	0	0
	36	43	24.06	0-0.5	0.5
	75	0	23.91		0.5
DFT-s-OFDM QPSK	1	1	24.46	0	0
	1	40	24.64		0
	1	77	**24.78**		0
	36	0	23.49	0-1	1
	36	22	**24.54**	0	0
	36	43	23.66	0-1	1
	75	0	23.60		1
DFT-s-OFDM 16QAM	1	1	23.49	0-1	1
CP-OFDM QPSK	1	1	22.95	0-1.5	1.5

Note: NR Band n12 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.

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Table 9-111
NR Band n12 Measured P_{max} for all DSI – 10 MHz Bandwidth

NR Band n12 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.41	0	0
	1	26	24.71		0
	1	50	24.66		0
	25	0	23.92	0-0.5	0.5
	25	14	24.47	0	0
	25	27	23.97	0-0.5	0.5
	50	0	23.97		0.5
DFT-s-OFDM QPSK	1	1	24.26	0	0
	1	26	24.53		0
	1	50	24.43		0
	25	0	23.52	0-1	1
	25	14	24.40	0	0
	25	27	23.62	0-1	1
	50	0	23.53		1
DFT-s-OFDM 16QAM	1	1	23.45	0-1	1
CP-OFDM QPSK	1	1	22.78	0-1.5	1.5

Note: NR Band n12 at 10 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.

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Table 9-112
NR Band n12 Measured P_{max} for all DSI – 5 MHz Bandwidth

NR Band n12 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	140300 (701.5 MHz)	141500 (707.5 MHz)	142700 (713.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.47	24.53	24.82	0	0
	1	13	24.36	24.69	24.73		0
	1	23	24.44	24.69	24.69		0
	12	0	23.71	24.06	24.08	0-0.5	0.5
	12	7	24.21	24.46	24.58	0	0
	12	13	23.62	23.93	24.07	0-0.5	0.5
	25	0	23.66	23.97	24.14		0.5
DFT-s-OFDM QPSK	1	1	24.22	24.32	24.50	0	0
	1	13	24.19	24.18	24.42		0
	1	23	24.02	24.39	24.34		0
	12	0	23.35	23.65	23.74	0-1	1
	12	7	24.23	24.51	24.66	0	0
	12	13	23.21	23.52	23.65	0-1	1
	25	0	23.22	23.59	23.72		1
DFT-s-OFDM 16QAM	1	1	23.37	23.41	23.64	0-1	1
CP-OFDM QPSK	1	1	22.75	22.84	22.91	0-1.5	1.5

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9.5.2 NR Band n5

Table 9-113
NR Band n5 Measured P_{max} for all DSI - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.72	0	0
	1	53	24.95		0
	1	104	24.64		0
	50	0	24.10	0-0.5	0.5
	50	28	24.76	0	0
	50	56	24.15	0-0.5	0.5
	100	0	24.23		0.5
DFT-s-OFDM QPSK	1	1	24.73	0	0
	1	53	**25.06**		0
	1	104	24.57		0
	50	0	23.74	0-1	1
	50	28	**24.67**	0	0
	50	56	23.75	0-1	1
	100	0	23.75		1
DFT-s-OFDM 16QAM	1	1	23.65	0-1	1
CP-OFDM QPSK	1	1	23.04	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.

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Table 9-114
NR Band n5 Measured P_{max} for all DSI - 15 MHz Bandwidth

NR Band n5 15 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.70	0	0
	1	40	24.72		0
	1	77	24.61		0
	36	0	24.18	0-0.5	0.5
	36	22	24.63	0	0
	36	43	24.07	0-0.5	0.5
	75	0	24.17		0.5
DFT-s-OFDM QPSK	1	1	24.73	0	0
	1	40	24.71		0
	1	77	24.58		0
	36	0	23.81	0-1	1
	36	22	24.62	0	0
	36	43	23.66	0-1	1
	75	0	23.74		1
DFT-s-OFDM 16QAM	1	1	23.62	0-1	1
CP-OFDM QPSK	1	1	23.14	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.

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Table 9-115
NR Band n5 Measured P_{max} for all DSI - 10 MHz Bandwidth

NR Band n5 10 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.69	0	0
	1	26	24.87		0
	1	50	24.71		0
	25	0	24.26	0-0.5	0.5
	25	14	24.72	0	0
	25	27	24.09	0-0.5	0.5
	50	0	24.22		0.5
DFT-s-OFDM QPSK	1	1	24.58	0	0
	1	26	24.82		0
	1	50	24.59		0
	25	0	23.79	0-1	1
	25	14	24.64	0	0
	25	27	23.66	0-1	1
	50	0	23.78		1
DFT-s-OFDM 16QAM	1	1	24.06	0-1	1
CP-OFDM QPSK	1	1	22.75	0-1.5	1.5

Note: NR Band n5 (Cell) at 10 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.

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Table 9-116
NR Band n5 Measured P_{max} for all DSI - 5 MHz Bandwidth

NR Band n5 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	165300 (826.5 MHz)	167300 (836.5 MHz)	169300 (846.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	24.66	24.76	24.61	0	0
	1	13	24.69	24.57	24.42		0
	1	23	24.41	24.69	24.37		0
	12	0	24.12	24.19	24.01	0-0.5	0.5
	12	7	24.56	24.66	24.43	0	0
	12	13	23.99	24.09	23.82	0-0.5	0.5
	25	0	24.08	24.15	23.95		0.5
DFT-s-OFDM QPSK	1	1	24.51	24.73	24.56	0	0
	1	13	24.54	24.63	24.31		0
	1	23	24.42	24.54	24.27		0
	12	0	23.79	23.79	23.57	0-1	1
	12	7	24.47	24.62	24.37	0	0
	12	13	23.64	23.72	23.37	0-1	1
	25	0	23.75	23.72	23.51		1
DFT-s-OFDM 16QAM	1	1	24.13	24.16	23.93	0-1	1
CP-OFDM QPSK	1	1	22.94	22.96	22.67	0-1.5	1.5

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9.5.3 NR Band n66

Table 9-117
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			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.78	23.64	23.74	0	0
	1	53	23.84	23.73	23.59		0
	1	104	23.74	23.55	23.64		0
	50	0	23.28	23.13	23.30	0-0.5	0.5
	50	28	23.67	23.58	23.62	0	0
	50	56	23.25	23.17	23.23	0-0.5	0.5
	100	0	23.29	23.12	23.26		0.5
DFT-s-OFDM QPSK	1	1	23.56	23.71	23.42	0	0
	1	53	**23.93**	23.78	23.76		0
	1	104	23.77	23.48	23.40		0
	50	0	22.68	22.51	22.65	0-1	1
	50	28	**23.67**	23.54	23.56	0	0
	50	56	22.72	22.46	22.57	0-1	1
	100	0	22.69	22.55	22.59		1
DFT-s-OFDM 16QAM	1	1	22.64	22.83	22.52	0-1	1
CP-OFDM QPSK	1	1	22.04	22.12	21.78	0-1.5	1.5

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Table 9-118
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			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	343500 (1717.5 MHz)	349000 (1745 MHz)	354500 (1772.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.93	23.73	23.75	0	0
	1	40	23.82	23.61	23.65		0
	1	77	23.80	23.61	23.75		0
	36	0	23.42	23.19	23.27	0-0.5	0.5
	36	22	23.77	23.59	23.59	0	0
	36	43	23.39	23.11	23.15	0-0.5	0.5
	75	0	23.41	23.23	23.24		0.5
DFT-s-OFDM QPSK	1	1	23.75	23.70	23.65	0	0
	1	40	23.84	23.54	23.57		0
	1	77	23.86	23.58	23.57		0
	36	0	22.85	22.57	22.64	0-1	1
	36	22	23.79	23.57	23.68	0	0
	36	43	22.86	22.62	22.57	0-1	1
	75	0	22.86	22.62	22.66		1
DFT-s-OFDM 16QAM	1	1	22.90	22.87	22.86	0-1	1
CP-OFDM QPSK	1	1	22.25	22.15	22.06	0-1.5	1.5

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Table 9-119
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)	349000 (1745 MHz)	355000 (1775 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.94	23.77	23.92	0	0
	1	26	24.10	23.93	24.06		0
	1	50	23.97	23.67	23.94		0
	25	0	23.48	23.36	23.49	0-0.5	0.5
	25	14	23.87	23.77	23.95	0	0
	25	27	23.48	23.37	23.36	0-0.5	0.5
	50	0	23.47	23.34	23.51		0.5
DFT-s-OFDM QPSK	1	1	23.74	23.81	23.69	0	0
	1	26	23.85	23.85	23.72		0
	1	50	23.77	23.74	23.35		0
	25	0	22.75	22.85	22.78	0-1	1
	25	14	23.82	23.73	23.75	0	0
	25	27	22.85	22.75	22.56	0-1	1
	50	0	22.78	22.70	22.67		1
DFT-s-OFDM 16QAM	1	1	22.87	22.86	22.77	0-1	1
CP-OFDM QPSK	1	1	22.21	22.26	22.23	0-1.5	1.5

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Table 9-120
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)	349000 (1745 MHz)	355500 (1777.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.82	23.78	23.62	0	0
	1	13	23.84	23.89	23.68		0
	1	23	23.75	23.86	23.70		0
	12	0	23.46	23.41	23.33	0-0.5	0.5
	12	7	23.81	23.80	23.72	0	0
	12	13	23.47	23.42	23.35	0-0.5	0.5
	25	0	23.44	23.21	23.27		0.5
DFT-s-OFDM QPSK	1	1	23.89	23.74	23.81	0	0
	1	13	23.86	23.80	23.68		0
	1	23	23.79	23.71	23.52		0
	12	0	22.72	22.72	22.72	0-1	1
	12	7	23.77	23.73	23.59	0	0
	12	13	22.83	22.72	22.60	0-1	1
	25	0	22.70	22.70	22.64		1
DFT-s-OFDM 16QAM	1	1	22.81	22.86	22.91	0-1	1
CP-OFDM QPSK	1	1	22.15	22.05	22.13	0-1.5	1.5

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Table 9-121
NR Band n66 Measured P_{limit} for DSI = 3 (Hotspot mode) - 20 MHz Bandwidth

NR Band n66 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	344000 (1720 MHz)	349000 (1745 MHz)	354000 (1770 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	19.91	19.63	19.72	0	0.0
	1	53	19.71	19.65	19.70		0.0
	1	104	19.68	19.55	19.53		0.0
	50	0	19.74	19.67	19.51	0-0.5	0.0
	50	28	19.66	19.62	19.52	0	0.0
	50	56	19.66	19.58	19.51	0-0.5	0.0
	100	0	19.67	19.64	19.51		0.0
DFT-s-OFDM QPSK	1	1	**19.79**	19.48	19.68	0	0.0
	1	53	19.69	19.57	19.59		0.0
	1	104	19.56	19.45	19.45		0.0
	50	0	**19.70**	19.69	19.61	0-1	0.0
	50	28	19.65	19.60	19.60	0	0.0
	50	56	19.68	19.69	19.55	0-1	0.0
	100	0	19.64	19.58	19.59		0.0
DFT-s-OFDM 16QAM	1	1	19.67	19.61	19.42	0-1	0.0
CP-OFDM QPSK	1	1	19.90	19.87	19.72	0-1.5	0.0

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Table 9-122
NR Band n66 Measured P_{limit} for DSI = 3 (Hotspot mode) - 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)	349000 (1745 MHz)	354500 (1772.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	19.68	19.61	19.69	0	0.0
	1	40	19.58	19.42	19.57		0.0
	1	77	19.61	19.43	19.67		0.0
	36	0	19.64	19.50	19.57	0-0.5	0.0
	36	22	19.60	19.46	19.51	0	0.0
	36	43	19.57	19.41	19.50	0-0.5	0.0
	75	0	19.65	19.48	19.58		0.0
DFT-s-OFDM QPSK	1	1	19.63	19.57	19.63	0	0.0
	1	40	19.57	19.44	19.46		0.0
	1	77	19.62	19.41	19.56		0.0
	36	0	19.66	19.51	19.57	0-1	0.0
	36	22	19.66	19.48	19.55	0	0.0
	36	43	19.62	19.41	19.49	0-1	0.0
	75	0	19.63	19.49	19.58		0.0
DFT-s-OFDM 16QAM	1	1	19.45	19.37	19.84	0-1	0.0
CP-OFDM QPSK	1	1	19.56	19.36	19.73	0-1.5	0.0

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Table 9-123
NR Band n66 Measured P_{limit} for DSI = 3 (Hotspot mode) - 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)	349000 (1745 MHz)	355000 (1775 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	19.87	19.58	19.68	0	0.0
	1	26	20.00	19.84	19.77		0.0
	1	50	19.77	19.52	19.59		0.0
	25	0	19.73	19.56	19.51	0-0.5	0.0
	25	14	19.86	19.55	19.58	0	0.0
	25	27	19.75	19.46	19.48	0-0.5	0.0
	50	0	19.74	19.43	19.47		0.0
DFT-s-OFDM QPSK	1	1	19.70	19.51	19.52	0	0.0
	1	26	19.76	19.52	19.54		0.0
	1	50	19.65	19.42	19.46		0.0
	25	0	19.73	19.49	19.55	0-1	0.0
	25	14	19.75	19.51	19.52	0	0.0
	25	27	19.74	19.52	19.54	0-1	0.0
	50	0	19.73	19.54	19.50		0.0
DFT-s-OFDM 16QAM	1	1	19.97	19.77	19.81	0-1	0.0
CP-OFDM QPSK	1	1	19.73	19.55	19.66	0-1.5	0.0

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Table 9-124
NR Band n66 Measured P_{limit} for DSI = 3 (Hotspot mode) - 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)	349000 (1745 MHz)	355500 (1777.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	19.85	19.69	19.64	0	0.0
	1	13	19.85	19.56	19.67		0.0
	1	23	19.71	19.61	19.52		0.0
	12	0	19.74	19.47	19.51	0-0.5	0.0
	12	7	19.72	19.50	19.49	0	0.0
	12	13	19.68	19.48	19.46	0-0.5	0.0
	25	0	19.75	19.50	19.44		0.0
DFT-s-OFDM QPSK	1	1	19.71	19.44	19.46	0	0.0
	1	13	19.65	19.39	19.55		0.0
	1	23	19.65	19.42	19.36		0.0
	12	0	19.75	19.50	19.53	0-1	0.0
	12	7	19.81	19.53	19.48	0	0.0
	12	13	19.76	19.51	19.51	0-1	0.0
	25	0	19.79	19.49	19.53		0.0
DFT-s-OFDM 16QAM	1	1	19.92	19.67	19.72	0-1	0.0
CP-OFDM QPSK	1	1	19.85	19.56	19.54	0-1.5	0.0

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Table 9-125
NR Band n66 Measured P_{limit} for 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 π/2 BPSK	1	1	20.02	19.80	20.15	0	0.0
	1	53	19.96	19.77	19.99		0.0
	1	104	20.03	19.66	19.99		0.0
	50	0	19.81	19.63	19.94	0-0.5	0.0
	50	28	19.77	19.54	19.89	0	0.0
	50	56	19.50	19.52	19.91	0-0.5	0.0
	100	0	19.81	19.54	19.91		0.0
DFT-s-OFDM QPSK	1	1	19.95	19.72	20.02	0	0.0
	1	53	19.98	19.53	**20.03**		0.0
	1	104	19.77	19.54	19.91		0.0
	50	0	19.85	19.64	**19.96**	0-1	0.0
	50	28	19.84	19.61	19.92	0	0.0
	50	56	19.74	19.45	19.88	0-1	0.0
	100	0	19.80	19.60	19.87		0.0
DFT-s-OFDM 16QAM	1	1	19.59	19.52	19.89	0-1	0.0
CP-OFDM QPSK	1	1	19.63	19.42	19.80	0-1.5	0.0

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Table 9-126
NR Band n66 Measured P_{limit} for 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)	349000 (1745 MHz)	354500 (1772.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	20.18	19.94	20.13	0	0.0
	1	40	20.14	19.87	20.02		0.0
	1	77	20.05	19.91	20.11		0.0
	36	0	20.08	19.88	20.03	0-0.5	0.0
	36	22	20.05	19.81	19.98	0	0.0
	36	43	20.08	19.84	19.93	0-0.5	0.0
	75	0	20.09	19.88	19.99		0.0
DFT-s-OFDM QPSK	1	1	20.12	20.03	20.06	0	0.0
	1	40	20.01	19.85	19.95		0.0
	1	77	20.13	19.89	19.87		0.0
	36	0	20.17	19.89	20.00	0-1	0.0
	36	22	20.08	19.83	19.88	0	0.0
	36	43	20.11	19.84	19.94	0-1	0.0
	75	0	20.10	19.86	19.95		0.0
DFT-s-OFDM 16QAM	1	1	19.97	19.95	20.29	0-1	0.0
CP-OFDM QPSK	1	1	19.93	19.85	20.11	0-1.5	0.0

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Table 9-127
NR Band n66 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 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)	349000 (1745 MHz)	355000 (1775 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	20.30	20.18	20.13	0	0.0
	1	26	20.24	20.05	20.15		0.0
	1	50	20.16	20.04	20.08		0.0
	25	0	20.17	20.00	20.05	0-0.5	0.0
	25	14	20.23	20.11	20.14	0	0.0
	25	27	20.12	19.98	20.01	0-0.5	0.0
	50	0	20.15	19.96	20.03		0.0
DFT-s-OFDM QPSK	1	1	20.08	20.03	19.97	0	0.0
	1	26	20.11	20.05	20.03		0.0
	1	50	20.08	19.87	20.06		0.0
	25	0	20.14	19.98	20.04	0-1	0.0
	25	14	20.15	20.02	20.07	0	0.0
	25	27	20.11	19.96	19.98	0-1	0.0
	50	0	20.14	20.01	20.05		0.0
DFT-s-OFDM 16QAM	1	1	19.99	19.96	19.98	0-1	0.0
CP-OFDM QPSK	1	1	19.97	19.72	19.75	0-1.5	0.0

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Table 9-128
NR Band n66 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 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)	349000 (1745 MHz)	355500 (1777.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	20.27	20.01	19.95	0	0.0
	1	13	20.19	19.95	20.05		0.0
	1	23	20.21	19.93	20.13		0.0
	12	0	20.13	19.91	19.97	0-0.5	0.0
	12	7	20.11	19.94	19.98	0	0.0
	12	13	20.08	19.93	19.94	0-0.5	0.0
	25	0	20.10	20.01	19.97		0.0
DFT-s-OFDM QPSK	1	1	20.16	19.85	19.91	0	0.0
	1	13	20.11	20.04	19.95		0.0
	1	23	20.02	19.89	19.87		0.0
	12	0	20.16	20.00	20.01	0-1	0.0
	12	7	20.15	20.03	19.95	0	0.0
	12	13	20.08	19.96	19.99	0-1	0.0
	25	0	20.17	20.01	20.01		0.0
DFT-s-OFDM 16QAM	1	1	20.01	19.95	19.94	0-1	0.0
CP-OFDM QPSK	1	1	19.85	19.77	19.72	0-1.5	0.0

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9.5.4 NR Band n25

Table 9-129
NR Band n25 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.95	23.72	23.81	0	0
	1	53	23.84	23.85	24.00		0
	1	104	23.70	23.82	23.87		0
	50	0	23.36	23.27	23.47	0-0.5	0.5
	50	28	23.78	23.64	23.94	0	0
	50	56	23.28	23.25	23.49	0-0.5	0.5
	100	0	23.32	23.16	23.50		0.5
DFT-s-OFDM QPSK	1	1	23.71	23.47	23.84	0	0
	1	53	23.87	23.30	**23.91**		0
	1	104	23.69	23.46	23.28		0
	50	0	22.77	22.42	22.85	0-1	1
	50	28	23.74	23.25	**23.91**	0	0
	50	56	22.66	22.13	22.71	0-1	1
	100	0	22.68	22.35	22.92		1
DFT-s-OFDM 16QAM	1	1	22.64	22.29	22.52	0-1	1
CP-OFDM QPSK	1	1	22.28	21.95	22.31	0-1.5	1.5

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Table 9-130
NR Band n25 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 15 MHz Bandwidth

NR Band n25 15 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371500 (1857.5 MHz)	376500 (1882.5 MHz)	381500 (1907.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.76	23.65	23.83	0	0
	1	40	23.72	23.62	23.97		0
	1	77	23.78	23.76	23.78		0
	36	0	23.33	23.17	23.62	0-0.5	0.5
	36	22	23.68	23.56	23.88	0	0
	36	43	23.21	22.79	23.31	0-0.5	0.5
	75	0	23.26	23.16	23.62		0.5
DFT-s-OFDM QPSK	1	1	23.78	23.43	23.97	0	0
	1	40	23.79	23.07	23.42		0
	1	77	23.71	23.36	23.38		0
	36	0	22.76	22.41	23.07	0-1	1
	36	22	23.75	23.08	23.58	0	0
	36	43	22.65	22.11	22.64	0-1	1
	75	0	22.70	22.22	22.96		1
DFT-s-OFDM 16QAM	1	1	22.96	22.57	23.08	0-1	1
CP-OFDM QPSK	1	1	22.38	21.81	22.40	0-1.5	1.5

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Table 9-131
NR Band n25 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 10 MHz Bandwidth

NR Band n25 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371000 (1855 MHz)	376500 (1882.5 MHz)	382000 (1910 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.77	23.45	23.92	0	0
	1	26	24.11	23.85	24.06		0
	1	50	23.73	23.46	23.87		0
	25	0	23.21	23.10	23.52	0-0.5	0.5
	25	14	23.63	23.57	23.96	0	0
	25	27	23.23	23.05	23.61	0-0.5	0.5
	50	0	23.27	23.10	23.54		0.5
DFT-s-OFDM QPSK	1	1	23.73	23.35	23.82	0	0
	1	26	24.13	23.37	23.64		0
	1	50	23.68	23.31	23.26		0
	25	0	23.20	22.37	22.74	0-1	1
	25	14	23.70	23.10	23.47	0	0
	25	27	23.25	22.14	22.67	0-1	1
	50	0	22.65	22.23	22.67		1
DFT-s-OFDM 16QAM	1	1	22.94	22.48	22.82	0-1	1
CP-OFDM QPSK	1	1	22.05	21.63	21.86	0-1.5	1.5

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Table 9-132
NR Band n25 Measured P_{max} for DSI = 2 (Head) or DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) - 5 MHz Bandwidth

NR Band n25 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	370500 (1852.5 MHz)	376500 (1882.5 MHz)	382500 (1912.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	23.62	23.48	23.54	0	0
	1	13	23.76	23.51	23.68		0
	1	23	23.75	23.52	23.68		0
	12	0	23.21	23.06	23.26	0-0.5	0.5
	12	7	23.68	23.46	23.58	0	0
	12	13	23.25	23.09	23.25	0-0.5	0.5
	25	0	23.24	23.04	23.21		0.5
DFT-s-OFDM QPSK	1	1	23.62	23.35	23.27	0	0
	1	13	23.69	22.94	23.30		0
	1	23	23.68	23.07	23.11		0
	12	0	22.61	22.04	22.35	0-1	1
	12	7	23.68	22.78	23.50	0	0
	12	13	22.71	22.09	22.76	0-1	1
	25	0	22.65	21.78	22.60		1
DFT-s-OFDM 16QAM	1	1	22.49	21.96	22.45	0-1	1
CP-OFDM QPSK	1	1	22.19	21.56	21.84	0-1.5	1.5

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Table 9-133
NR Band n25 Measured P_{limit} for DSI = 3 (Hotspot mode) - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	18.71	18.67	18.85	0	0.0
	1	53	18.74	18.47	18.99		0.0
	1	104	18.61	18.40	18.83		0.0
	50	0	18.60	18.47	18.82	0-0.5	0.0
	50	28	18.56	18.42	18.83	0	0.0
	50	56	18.53	18.41	18.78	0-0.5	0.0
	100	0	18.60	18.41	18.85		0.0
DFT-s-OFDM QPSK	1	1	18.68	18.48	18.84	0	0.0
	1	53	18.66	18.52	**18.94**		0.0
	1	104	18.59	18.43	18.85		0.0
	50	0	18.65	18.40	18.78	0-1	0.0
	50	28	18.57	18.41	**18.83**	0	0.0
	50	56	18.49	18.37	18.71	0-1	0.0
	100	0	18.56	18.39	18.85		0.0
DFT-s-OFDM 16QAM	1	1	18.96	18.71	18.92	0-1	0.0
CP-OFDM QPSK	1	1	18.57	18.45	18.75	0-1.5	0.0

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Table 9-134
NR Band n2 Measured P_{limit} for DSI = 3 (Hotspot mode) - 15 MHz Bandwidth

NR Band n25 15 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371500 (1857.5 MHz)	376500 (1882.5 MHz)	381500 (1907.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	18.73	18.57	18.73	0	0.0
	1	40	18.78	18.54	18.85		0.0
	1	77	18.65	18.67	18.75		0.0
	36	0	18.59	18.43	18.82	0-0.5	0.0
	36	22	18.56	18.36	18.86	0	0.0
	36	43	18.50	18.35	18.79	0-0.5	0.0
	75	0	18.61	18.38	18.52		0.0
DFT-s-OFDM QPSK	1	1	18.49	18.12	18.23	0	0.0
	1	40	18.71	18.61	18.90		0.0
	1	77	18.65	18.64	18.88		0.0
	36	0	18.66	18.66	18.85	0-1	0.0
	36	22	18.65	18.41	18.84	0	0.0
	36	43	18.56	18.35	18.77	0-1	0.0
	75	0	18.61	18.42	18.80		0.0
DFT-s-OFDM 16QAM	1	1	18.37	18.55	18.56	0-1	0.0
CP-OFDM QPSK	1	1	18.52	18.38	18.61	0-1.5	0.0

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Table 9-135
NR Band n25 Measured P_{limit} for DSI = 3 (Hotspot mode) - 10 MHz Bandwidth

NR Band n25 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371000 (1855 MHz)	376500 (1882.5 MHz)	382000 (1910 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	18.71	18.52	18.86	0	0.0
	1	26	18.73	18.87	19.00		0.0
	1	50	18.61	18.56	18.89		0.0
	25	0	18.56	18.51	18.83	0-0.5	0.0
	25	14	18.62	18.47	18.85	0	0.0
	25	27	18.65	18.53	18.87	0-0.5	0.0
	50	0	18.59	18.54	18.83		0.0
DFT-s-OFDM QPSK	1	1	18.64	18.65	18.94	0	0.0
	1	26	18.85	18.66	18.88		0.0
	1	50	18.34	18.56	18.93		0.0
	25	0	18.63	18.53	18.80	0-1	0.0
	25	14	18.55	18.52	18.85	0	0.0
	25	27	18.54	18.51	18.82	0-1	0.0
	50	0	18.68	18.49	18.86		0.0
DFT-s-OFDM 16QAM	1	1	18.57	18.85	19.00	0-1	0.0
CP-OFDM QPSK	1	1	18.48	18.47	18.72	0-1.5	0.0

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Table 9-136
NR Band n25 Measured P_{limit} for DSI = 3 (Hotspot mode)- 5 MHz Bandwidth

NR Band n25 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	370500 (1852.5 MHz)	376500 (1882.5 MHz)	382500 (1912.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	18.75	18.74	18.85	0	0.0
	1	13	18.68	18.72	18.87		0.0
	1	23	18.78	18.77	18.83		0.0
	12	0	18.74	18.63	18.88	0-0.5	0.0
	12	7	18.74	18.67	18.94	0	0.0
	12	13	18.79	18.72	18.86	0-0.5	0.0
	25	0	18.67	18.68	18.88		0.0
DFT-s-OFDM QPSK	1	1	17.94	18.10	18.78	0	0.0
	1	13	18.23	18.47	18.82		0.0
	1	23	18.15	18.45	18.75		0.0
	12	0	18.67	18.72	18.92	0-1	0.0
	12	7	18.78	18.68	18.93	0	0.0
	12	13	18.71	18.71	18.92	0-1	0.0
	25	0	18.76	18.72	18.90		0.0
DFT-s-OFDM 16QAM	1	1	18.85	18.65	18.97	0-1	0.0
CP-OFDM QPSK	1	1	18.63	18.58	18.72	0-1.5	0.0

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Table 9-137
NR Band n25 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 20 MHz Bandwidth

NR Band n25 20 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	372000 (1860 MHz)	376500 (1882.5 MHz)	381000 (1905 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	20.09	19.94	20.09	0	0.0
	1	53	20.01	19.84	20.36		0.0
	1	104	19.82	19.86	20.25		0.0
	50	0	19.90	19.78	20.12	0-0.5	0.0
	50	28	19.86	19.76	20.16	0	0.0
	50	56	19.80	19.77	20.15	0-0.5	0.0
	100	0	19.93	19.74	20.21		0.0
DFT-s-OFDM QPSK	1	1	19.97	19.75	20.07	0	0.0
	1	53	20.04	19.82	**20.31**		0.0
	1	104	19.82	19.86	20.21		0.0
	50	0	19.97	19.79	20.07	0-1	0.0
	50	28	19.94	19.75	**20.17**	0	0.0
	50	56	19.83	19.81	20.08	0-1	0.0
	100	0	19.89	19.77	20.13		0.0
DFT-s-OFDM 16QAM	1	1	20.14	20.05	20.44	0-1	0.0
CP-OFDM QPSK	1	1	19.92	19.67	20.10	0-1.5	0.0

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Table 9-138
NR Band n2 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 15 MHz Bandwidth

NR Band n25 15 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371500 (1857.5 MHz)	376500 (1882.5 MHz)	381500 (1907.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	20.04	19.92	20.15	0	0.0
	1	40	20.06	19.89	20.31		0.0
	1	77	19.98	19.88	20.31		0.0
	36	0	19.92	19.80	20.26	0-0.5	0.0
	36	22	19.91	19.94	20.22	0	0.0
	36	43	19.84	19.58	20.21	0-0.5	0.0
	75	0	19.90	19.83	20.28		0.0
DFT-s-OFDM QPSK	1	1	20.01	19.92	20.23	0	0.0
	1	40	19.92	19.86	20.31		0.0
	1	77	19.97	19.97	20.25		0.0
	36	0	19.90	19.87	20.31	0-1	0.0
	36	22	19.87	19.85	20.26	0	0.0
	36	43	19.88	19.80	20.21	0-1	0.0
	75	0	19.94	19.79	20.25		0.0
DFT-s-OFDM 16QAM	1	1	20.05	19.87	20.04	0-1	0.0
CP-OFDM QPSK	1	1	19.77	19.57	20.06	0-1.5	0.0

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Table 9-139
NR Band n25 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 10 MHz Bandwidth

NR Band n25 10 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	371000 (1855 MHz)	376500 (1882.5 MHz)	382000 (1910 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	20.03	19.86	20.06	0	0.0
	1	26	20.35	20.23	20.50		0.0
	1	50	19.95	19.85	20.23		0.0
	25	0	19.91	19.73	20.15	0-0.5	0.0
	25	14	19.93	19.76	20.17	0	0.0
	25	27	19.92	19.73	20.23	0-0.5	0.0
	50	0	19.93	19.76	20.20		0.0
DFT-s-OFDM QPSK	1	1	19.94	19.83	20.09	0	0.0
	1	26	20.06	19.91	20.42		0.0
	1	50	19.85	19.89	20.26		0.0
	25	0	19.93	19.75	20.17	0-1	0.0
	25	14	19.93	19.76	20.23	0	0.0
	25	27	19.90	19.77	20.21	0-1	0.0
	50	0	19.92	19.72	20.20		0.0
DFT-s-OFDM 16QAM	1	1	20.19	20.07	20.47	0-1	0.0
CP-OFDM QPSK	1	1	20.06	19.75	20.04	0-1.5	0.0

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Table 9-140
NR Band n25 Measured P_{limit} for DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 5 MHz Bandwidth

NR Band n25 5 MHz Bandwidth							
			Channel			MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	370500 (1852.5 MHz)	376500 (1882.5 MHz)	382500 (1912.5 MHz)		
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	20.05	19.97	20.29	0	0.0
	1	13	20.05	20.06	20.17		0.0
	1	23	20.10	20.14	20.32		0.0
	12	0	20.07	19.92	20.27	0-0.5	0.0
	12	7	20.12	19.99	20.22	0	0.0
	12	13	20.17	19.95	20.34	0-0.5	0.0
	25	0	20.03	19.99	20.28		0.0
DFT-s-OFDM QPSK	1	1	19.97	19.88	20.15	0	0.0
	1	13	20.13	20.02	20.13		0.0
	1	23	20.07	20.04	20.21		0.0
	12	0	20.11	19.95	20.20	0-1	0.0
	12	7	20.08	19.97	20.25	0	0.0
	12	13	20.11	19.96	20.32	0-1	0.0
	25	0	20.08	19.98	20.39		0.0
DFT-s-OFDM 16QAM	1	1	20.12	19.89	20.43	0-1	0.0
CP-OFDM QPSK	1	1	19.98	19.84	20.09	0-1.5	0.0

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9.5.5 NR Band n41

Table 9-141
NR Band n41 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) and/or DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	24.55	0	0.0
	1	137	24.42		0.0
	1	271	24.63		0.0
	135	0	24.27	0-0.5	0.5
	135	69	24.48	0	0.0
	135	138	23.92	0-0.5	0.5
	270	0	24.00		0.5
DFT-s-OFDM QPSK	1	1	24.42	0	0.0
	1	137	**24.56**		0.0
	1	271	24.29		0.0
	135	0	23.65	0-1	1.0
	135	69	**24.32**	0	0.0
	135	138	23.43	0-1	1.0
	270	0	23.60		1.0
DFT-s-OFDM 16QAM	1	1	23.51	0-1	1.0
CP-OFDM QPSK	1	1	23.03	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.

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Table 9-142
NR Band n41 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) and/or DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 90 MHz Bandwidth

NR Band n41 90 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	508200 (2541 MHz)	528996 (2644.98 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	24.41	24.50	0	0.0
	1	123	24.62	24.79		0.0
	1	243	24.61	24.44		0.0
	120	0	24.09	23.80	0-0.5	0.5
	120	63	24.62	24.24	0	0.0
	120	125	24.21	23.88	0-0.5	0.5
	243	0	24.20	23.74		0.5
DFT-s-OFDM QPSK	1	1	24.52	24.24	0	0.0
	1	123	24.77	24.56		0.0
	1	243	24.63	24.33		0.0
	120	0	23.42	23.22	0-1	1.0
	120	63	24.54	24.25	0	0.0
	120	125	23.55	23.30	0-1	1.0
	243	0	23.61	23.13		1.0
DFT-s-OFDM 16QAM	1	1	23.98	23.50	0-1	1.0
CP-OFDM QPSK	1	1	23.27	22.82	0-1.5	1.5

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Table 9-143
NR Band n41 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) and/or DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 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 π/2 BPSK	1	1	24.47	24.33	0	0.0
	1	109	24.45	24.42		0.0
	1	215	24.64	24.61		0.0
	108	0	24.08	24.02	0-0.5	0.5
	108	55	24.52	24.44	0	0.0
	108	109	24.25	24.15	0-0.5	0.5
	216	0	24.20	24.02		0.5
DFT-s-OFDM QPSK	1	1	24.58	24.50	0	0.0
	1	109	25.16	25.17		0.0
	1	215	24.74	24.76		0.0
	108	0	23.44	23.41	0-1	1.0
	108	55	24.62	24.59	0	0.0
	108	109	23.72	23.51	0-1	1.0
	216	0	23.55	23.41		1.0
DFT-s-OFDM 16QAM	1	1	23.43	23.41	0-1	1.0
CP-OFDM QPSK	1	1	23.02	22.91	0-1.5	1.5

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Table 9-144
NR Band n41 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) and/or DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 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 π/2 BPSK	1	1	24.61	24.42	24.21	0	0.0
	1	81	24.83	24.66	24.62		0.0
	1	160	25.16	24.51	24.48		0.0
	81	0	24.16	23.88	24.01	0-0.5	0.5
	81	41	24.52	24.35	24.36	0	0.0
	81	81	24.26	23.94	23.95	0-0.5	0.5
	162	0	24.01	23.87	23.83		0.5
DFT-s-OFDM QPSK	1	1	24.58	24.46	24.25	0	0.0
	1	81	24.89	24.49	24.62		0.0
	1	160	24.90	24.33	24.32		0.0
	81	0	23.62	23.24	23.31	0-1	1.0
	81	41	24.62	24.27	24.34	0	0.0
	81	81	23.69	23.19	23.17	0-1	1.0
	162	0	23.64	23.31	23.27		1.0
DFT-s-OFDM 16QAM	1	1	23.85	23.77	23.68	0-1	1.0
CP-OFDM QPSK	1	1	22.83	22.83	22.67	0-1.5	1.5

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Table 9-145
NR Band n41 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) and/or DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 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 π/2 BPSK	1	1	24.38	24.47	24.44	0	0.0
	1	67	24.96	24.83	24.90		0.0
	1	131	24.92	24.80	24.71		0.0
	64	0	23.96	23.87	23.97	0-0.5	0.5
	64	35	24.31	24.26	24.28	0	0.0
	64	69	24.16	24.12	23.98	0-0.5	0.5
	128	0	23.97	23.92	23.94		0.5
DFT-s-OFDM QPSK	1	1	24.52	24.76	24.65	0	0.0
	1	67	24.62	24.48	24.55		0.0
	1	131	24.64	24.35	24.25		0.0
	64	0	23.50	23.32	23.36	0-1	1.0
	64	35	24.59	24.37	24.46	0	0.0
	64	69	23.55	23.55	23.42	0-1	1.0
	128	0	23.44	23.36	23.35		1.0
DFT-s-OFDM 16QAM	1	1	24.11	23.74	23.56	0-1	1.0
CP-OFDM QPSK	1	1	22.82	22.75	22.44	0-1.5	1.5

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Table 9-146
NR Band n41 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) and/or DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 40 MHz Bandwidth

NR Band n41 40 MHz Bandwidth								
			Channel				MPR Allowed per 3GPP [dB]	MPR Allowed per 3GPP [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 π/2 BPSK	1	1	24.68	25.29	24.83	25.33	0	0.0
	1	53	25.31	25.10	24.98	25.29		0.0
	1	104	25.09	24.92	24.96	24.89		0.0
	50	0	24.57	24.83	24.62	24.82	0-0.5	0.5
	50	28	24.83	25.09	25.05	25.25	0	0.0
	50	56	24.64	24.56	24.56	25.00	0-0.5	0.5
	100	0	24.36	24.74	24.37	24.72		0.5
DFT-s-OFDM QPSK	1	1	25.09	25.35	24.89	25.28	0	0.0
	1	53	25.17	25.09	25.07	25.19		0.0
	1	104	25.08	25.07	25.04	24.85		0.0
	50	0	24.07	24.20	23.92	24.35	0-1	1.0
	50	28	24.86	25.00	24.85	25.17	0	0.0
	50	56	23.97	24.15	23.94	24.23	0-1	1.0
	100	0	23.92	24.21	23.78	24.07		1.0
DFT-s-OFDM 16QAM	1	1	23.42	24.45	23.71	24.35	0-1	1.0
CP-OFDM QPSK	1	1	23.31	23.97	23.59	23.56	0-1.5	1.5

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Table 9-147
NR Band n41 Measured P_{max} for DSI = 0 (Body-worn, or Phablet with grip sensor not triggered) and/or DSI = 3 (Hotspot mode) / DSI = 1 (Phablet with grip sensor active) and/or DSI = 4 (Earjack active) - 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 π/2 BPSK	1	1	24.85	24.95	24.78	24.75	24.98	0	0.0
	1	26	24.88	24.61	24.52	24.79	24.91		0.0
	1	49	24.96	24.83	24.64	24.68	24.93		0.0
	25	0	24.54	24.59	24.29	24.32	24.62	0-0.5	0.5
	25	13	24.86	24.98	24.55	24.61	24.78	0	0.0
	25	26	24.29	24.53	24.28	24.38	24.63	0-0.5	0.5
	50	0	24.27	24.37	24.18	24.18	24.52		0.5
DFT-s-OFDM QPSK	1	1	25.12	25.09	24.74	24.57	25.03	0	0.0
	1	26	24.92	25.07	24.56	24.71	24.88		0.0
	1	49	24.99	25.05	24.67	24.52	24.82		0.0
	25	0	23.91	24.23	23.55	23.75	23.98	0-1	1.0
	25	13	24.76	24.91	24.59	24.78	24.88	0	0.0
	25	26	23.57	23.99	23.56	23.69	23.72	0-1	1.0
	50	0	23.86	23.98	23.65	23.56	23.97		1.0
DFT-s-OFDM 16QAM	1	1	24.18	23.77	23.68	23.71	23.85	0-1	1.0
CP-OFDM QPSK	1	1	23.31	23.22	23.24	23.58	23.95	0-1.5	1.5

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Table 9-148
NR Band n41 Measured P_{max} for DSI = 2 (Head) - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	23.01	0	0.0
	1	137	22.94		0.0
	1	271	22.82		0.0
	135	0	22.88	0-0.5	0.0
	135	69	22.81	0	0.0
	135	138	22.92	0-0.5	0.0
	270	0	22.72		0.0
DFT-s-OFDM QPSK	1	1	**22.91**	0	0.0
	1	137	22.82		0.0
	1	271	22.87		0.0
	135	0	**22.87**	0-1	0.0
	135	69	22.85	0	0.0
	135	138	22.83	0-1	0.0
	270	0	22.82		0.0
DFT-s-OFDM 16QAM	1	1	23.12	0-1	0.0
CP-OFDM QPSK	1	1	22.87	0-1.5	0.0

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.

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Table 9-149
NR Band n41 Measured P_{max} for DSI = 2 (Head) - 90 MHz Bandwidth

NR Band n41 90 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	508200 (2541 MHz)	528996 (2644.98 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	22.94	22.86	0	0.0
	1	123	22.97	22.98		0.0
	1	243	23.16	22.78		0.0
	120	0	22.94	22.81	0-0.5	0.0
	120	63	23.09	22.86	0	0.0
	120	125	22.93	22.85	0-0.5	0.0
	243	0	23.05	22.79		0.0
DFT-s-OFDM QPSK	1	1	23.06	23.15	0	0.0
	1	123	23.12	22.96		0.0
	1	243	23.18	22.87		0.0
	120	0	22.89	22.90	0-1	0.0
	120	63	23.05	22.89	0	0.0
	120	125	23.11	22.85	0-1	0.0
	243	0	23.02	22.74		0.0
DFT-s-OFDM 16QAM	1	1	22.87	23.14	0-1	0.0
CP-OFDM QPSK	1	1	22.90	23.03	0-1.5	0.0

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Table 9-150
NR Band n41 Measured P_{max} for DSI = 2 (Head) - 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 π/2 BPSK	1	1	23.12	23.07	0	0.0
	1	109	23.22	23.14		0.0
	1	215	23.15	23.15		0.0
	108	0	23.06	23.12	0-0.5	0.0
	108	55	23.16	23.05	0	0.0
	108	109	23.22	23.12	0-0.5	0.0
	216	0	23.18	22.92		0.0
DFT-s-OFDM QPSK	1	1	23.02	23.01	0	0.0
	1	109	23.19	23.09		0.0
	1	215	23.02	22.87		0.0
	108	0	23.08	23.17	0-1	0.0
	108	55	23.14	23.11	0	0.0
	108	109	23.27	22.91	0-1	0.0
	216	0	23.05	22.99		0.0
DFT-s-OFDM 16QAM	1	1	23.31	23.24	0-1	0.0
CP-OFDM QPSK	1	1	23.10	23.01	0-1.5	0.0

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Table 9-151
NR Band n41 Measured P_{max} for DSI = 2 (Head) - 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 π/2 BPSK	1	1	23.08	23.06	23.08	0	0.0
	1	81	23.12	22.85	23.07		0.0
	1	160	23.35	22.90	22.91		0.0
	81	0	23.16	22.89	22.98	0-0.5	0.0
	81	41	23.11	22.92	22.95	0	0.0
	81	81	23.27	22.87	22.97	0-0.5	0.0
	162	0	23.28	22.84	22.93		0.0
DFT-s-OFDM QPSK	1	1	23.01	22.98	23.07	0	0.0
	1	81	23.28	23.14	23.21		0.0
	1	160	23.21	22.86	22.97		0.0
	81	0	23.13	22.91	23.03	0-1	0.0
	81	41	23.07	22.85	22.96	0	0.0
	81	81	23.26	22.83	23.01	0-1	0.0
	162	0	23.14	22.94	22.97		0.0
DFT-s-OFDM 16QAM	1	1	23.21	23.07	23.00	0-1	0.0
CP-OFDM QPSK	1	1	23.33	23.18	23.02	0-1.5	0.0

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Table 9-152
NR Band n41 Measured P_{max} for DSI = 2 (Head) - 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 π/2 BPSK	1	1	22.84	23.04	23.07	0	0.0
	1	67	23.04	22.97	22.98		0.0
	1	131	23.02	22.81	22.84		0.0
	64	0	23.03	22.79	22.93	0-0.5	0.0
	64	35	22.97	22.94	22.90	0	0.0
	64	69	22.85	22.92	22.83	0-0.5	0.0
	128	0	22.94	22.80	22.78		0.0
DFT-s-OFDM QPSK	1	1	23.07	23.06	22.95	0	0.0
	1	67	23.11	22.84	22.73		0.0
	1	131	23.22	22.87	22.94		0.0
	64	0	23.07	22.78	22.88	0-1	0.0
	64	35	23.05	22.93	22.86	0	0.0
	64	69	22.92	22.82	22.76	0-1	0.0
	128	0	23.01	22.86	22.81		0.0
DFT-s-OFDM 16QAM	1	1	22.97	22.73	22.83	0-1	0.0
CP-OFDM QPSK	1	1	22.83	22.63	22.72	0-1.5	0.0

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Table 9-153
NR Band n41 Measured P_{max} for DSI = 2 (Head) - 40 MHz Bandwidth

NR Band n41 40 MHz Bandwidth								
			Channel				MPR Allowed per 3GPP [dB]	MPR Allowed per 3GPP [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 π/2 BPSK	1	1	23.28	23.42	23.35	23.12		0.0
	1	53	23.44	23.49	23.32	23.26	0	0.0
	1	104	23.02	23.18	23.19	23.33		0.0
	50	0	23.36	23.30	23.11	23.27	0-0.5	0.0
	50	28	23.24	23.24	23.09	23.34	0	0.0
	50	56	23.25	23.31	23.13	23.29	0-0.5	0.0
	100	0	23.26	23.27	23.12	23.30		0.0
DFT-s-OFDM QPSK	1	1	23.25	23.50	23.21	23.20		0.0
	1	53	23.36	23.38	23.16	23.39	0	0.0
	1	104	23.29	23.39	23.21	23.23		0.0
	50	0	23.32	23.36	23.10	23.25	0-1	0.0
	50	28	23.21	23.20	23.07	23.34	0	0.0
	50	56	23.34	23.39	23.18	23.41	0-1	0.0
	100	0	23.23	23.33	23.10	23.36		0.0
DFT-s-OFDM 16QAM	1	1	23.16	23.45	23.43	23.18	0-1	0.0
CP-OFDM QPSK	1	1	23.11	23.48	23.31	23.27	0-1.5	0.0

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Table 9-154
NR Band n41 Measured P_{max} for DSI = 2 (Head) - 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 π/2 BPSK	1	1	23.15	23.24	22.95	22.86	23.18	0	0.0
	1	26	23.13	23.14	23.11	22.88	23.15		0.0
	1	49	23.39	22.98	23.17	23.00	23.07		0.0
	25	0	23.32	22.94	23.00	23.04	23.08	0-0.5	0.0
	25	13	23.33	23.25	23.11	22.98	23.01	0	0.0
	25	26	23.14	23.09	22.93	23.02	23.16	0-0.5	0.0
	50	0	23.05	23.04	22.99	23.14	23.24		0.0
DFT-s-OFDM QPSK	1	1	23.08	23.10	22.91	23.09	23.04	0	0.0
	1	26	23.12	22.96	22.96	23.02	23.12		0.0
	1	49	22.97	23.13	22.78	22.96	23.08		0.0
	25	0	23.01	23.02	22.85	23.01	23.13	0-1	0.0
	25	13	22.98	23.20	22.79	22.95	23.22	0	0.0
	25	26	23.07	23.07	22.96	22.89	23.12	0-1	0.0
	50	0	23.13	23.21	22.94	22.93	23.17		0.0
DFT-s-OFDM 16QAM	1	1	23.05	23.10	22.90	23.04	23.14	0-1	0.0
CP-OFDM QPSK	1	1	23.35	23.17	23.10	22.99	22.92	0-1.5	0.0

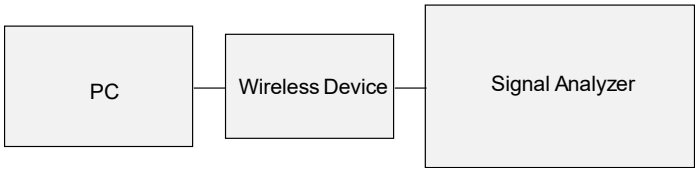


Figure 9-5
Power Measurement Setup

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9.6 WLAN Conducted Powers

Table 9-155
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
		Average	Average	Average	Average
2412	1	20.41	18.04	15.72	16.01
2417	2			18.37	17.66
2437	6	20.11	18.31	18.48	17.76
2457	10			18.46	17.65
2462	11	20.49	17.94	14.19	13.76

Table 9-156
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
		Average	Average	Average	Average
2412	1	20.43	17.84	15.89	16.11
2417	2			18.45	17.48
2437	6	20.15	18.12	18.42	17.52
2457	10			18.40	17.59
2462	11	20.01	18.21	13.67	13.58

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Table 9-157
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
		Average	Average	Average	Average
5180	36	18.30	17.39	17.44	16.91
5200	40	18.26	18.30	18.24	17.56
5220	44	18.18	18.25	18.16	17.44
5240	48	18.26	18.22	18.23	17.50
5260	52	18.13	18.24	18.16	17.51
5280	56	18.12	18.25	18.19	17.52
5300	60	18.18	18.30	18.28	17.63
5320	64	18.15	16.71	16.74	17.57
5500	100	17.96	17.90	17.97	17.33
5600	120	18.28	18.23	18.23	17.63
5620	124	18.22	18.26	18.17	17.56
5720	144	18.17	18.20	18.11	17.50
5745	149	18.03	18.05	17.93	17.34
5785	157	18.04	18.04	18.02	17.34
5825	165	17.74	17.78	17.73	17.98

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Table 9-158
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
		Average	Average	Average	Average
5180	36	18.47	17.40	17.44	16.89
5200	40	18.40	18.43	18.36	17.74
5220	44	18.32	18.32	18.34	17.65
5240	48	18.23	18.31	18.31	17.68
5260	52	18.30	18.31	18.30	17.65
5280	56	18.26	18.20	18.21	17.61
5300	60	18.25	18.25	18.26	17.62
5320	64	18.12	16.49	16.52	17.46
5500	100	17.93	18.10	18.06	17.52
5600	120	17.90	18.18	18.10	17.52
5620	124	18.19	18.16	18.10	17.44
5720	144	18.42	18.32	18.27	17.65
5745	149	18.33	18.30	18.26	17.35
5785	157	18.49	18.48	18.45	17.59
5825	165	18.49	18.49	18.49	17.58

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

5GHz (20MHz) 802.11n Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
5180	36	17.39	17.40	20.41
5200	40	18.30	18.43	21.38
5220	44	18.25	18.32	21.30
5240	48	18.22	18.31	21.28
5260	52	18.24	18.31	21.29
5280	56	18.25	18.20	21.24
5300	60	18.30	18.25	21.29
5320	64	16.71	16.49	19.61
5500	100	17.90	18.10	21.01
5600	120	18.23	18.18	21.22
5620	124	18.26	18.16	21.22
5720	144	18.20	18.32	21.27
5GHz (40MHz) 802.11n Conducted Power [dBm]				
Freq [MHz]	**Channel**	**ANT1**	**ANT2**	**MIMO**
5755	151	16.98	16.92	19.96
5795	159	17.00	16.84	19.93

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Table 9-160
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	15.90	15.44
2437	6	15.67	15.99
2457	10	15.43	15.83
2462	11	14.49	13.74
5GHz (80MHz) 802.11ac Conducted Power [dBm]			
Freq [MHz]	Channel	ANT1	ANT2
5210	42	12.01	12.99
5290	58	12.97	12.83
5530	106	12.20	12.51
5610	122	12.50	12.54
5690	138	12.61	12.62
5775	155	12.74	12.88

Table 9-161
2.4 GHz WLAN Reduced Average RF Power– Ant 1

2.4GHz Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11b	802.11g	802.11n
		Average	Average	Average
2412	1	15.99	15.98	15.90
2437	6	15.76	15.76	15.67
2457	10			15.43
2462	11	15.15	15.71	14.49

Table 9-162
2.4 GHz WLAN Reduced Average RF Power – Ant 2

2.4GHz Conducted Power [dBm]				
Freq [MHz]	Channel	IEEE Transmission Mode		
		802.11b	802.11g	802.11n
		Average	Average	Average
2412	1	15.30	15.85	15.44
2437	6	15.98	15.90	15.99
2457	10			15.83
2462	11	15.52	15.87	13.74

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Table 9-163
5 GHz WLAN Reduced Average RF Power – Ant 1

5GHz (80MHz) Conducted Power [dBm]		
Freq [MHz]	Channel	IEEE Transmission Mode
		802.11ac
		Average
5210	42	12.01
5290	58	12.97
5530	106	12.20
5610	122	12.50
5690	138	12.61
5775	155	12.74

Table 9-164
5 GHz WLAN Reduced Average RF Power – Ant 2

5GHz (80MHz) Conducted Power [dBm]		
Freq [MHz]	Channel	IEEE Transmission Mode
		802.11ac
		Average
5210	42	12.99
5290	58	12.83
5530	106	12.51
5610	122	12.54
5690	138	12.62
5775	155	12.88

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

5GHz (80MHz) 802.11ac Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
5210	42	12.01	12.99	15.54
5290	58	12.97	12.83	15.91
5530	106	12.20	12.51	15.37
5610	122	12.50	12.54	15.53
5690	138	12.61	12.62	15.63
5775	155	12.74	12.88	15.82

Table 9-166
Reduced 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	12.57	12.79
2437	6	12.63	12.87
2462	11	12.57	12.84

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.

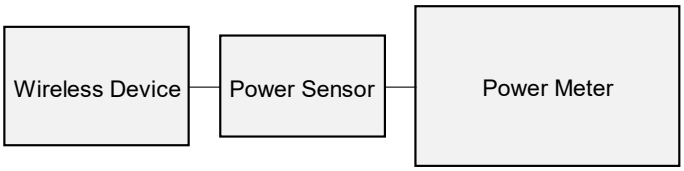


Figure 9-6
Power Measurement Setup

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9.7 Bluetooth Conducted Powers

Table 9-167
Bluetooth Average RF Power

Frequency [MHz]	Data Rate [Mbps]	Channel No.	Avg Conducted Power	
			[dBm]	[mW]
2402	1.0	0	14.69	29.448
2441	1.0	39	15.69	37.052
2480	1.0	78	16.26	42.235
2402	2.0	0	10.45	11.096
2441	2.0	39	10.73	11.832
2480	2.0	78	10.62	11.524
2402	3.0	0	10.68	11.705
2441	3.0	39	11.41	13.836
2480	3.0	78	10.70	11.759

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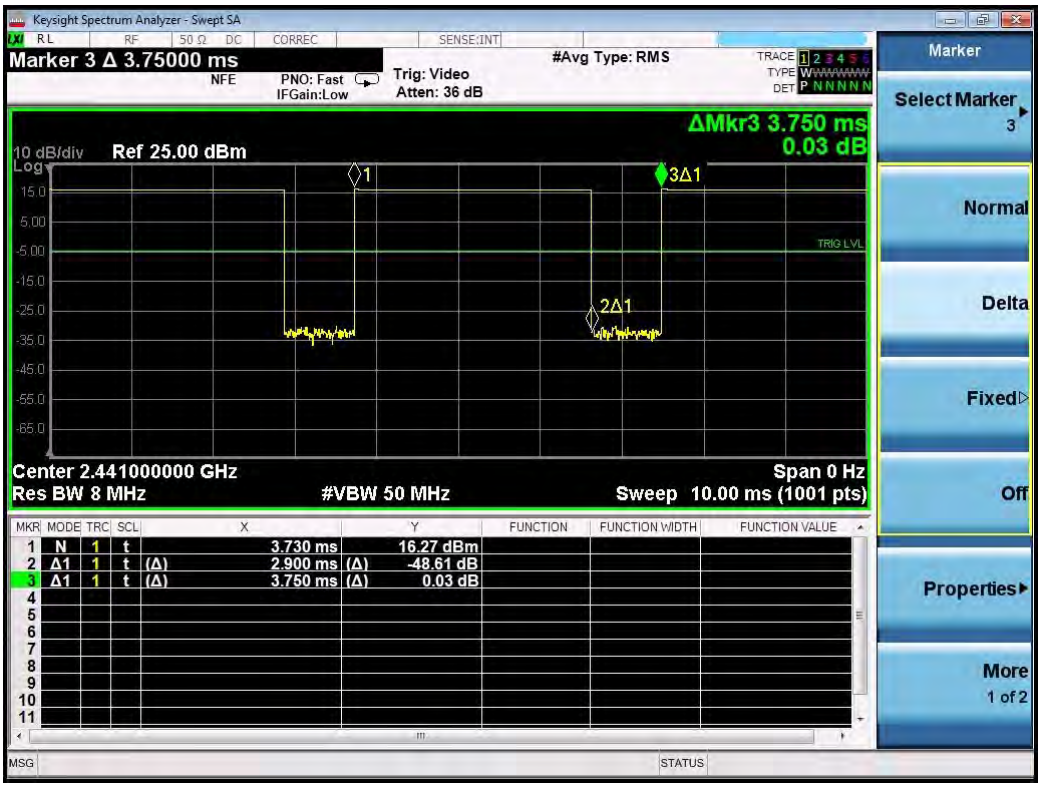


Figure 9-7
Bluetooth Transmission Plot

Equation 9-1
Bluetooth Duty Cycle Calculation

$$\boldsymbol{Duty\ Cycle} = \frac{\boldsymbol{Pulse\ Width}}{\boldsymbol{Period}} * \mathbf{100\%} = \frac{\mathbf{2.90}\boldsymbol{ms}}{\mathbf{3.75}\boldsymbol{ms}} * \mathbf{100\%} = \mathbf{77.3\%}$$

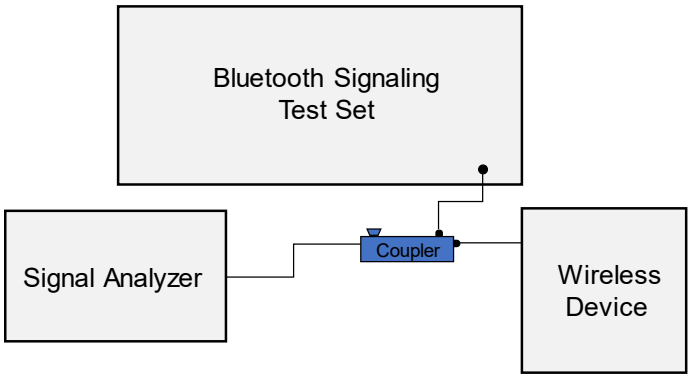


Figure 9-8
Power Measurement Setup

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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
05/13/2020	750 Head	21.1	680	0.847	43.753	0.888	42.305	-4.62%	3.42%
			695	0.853	43.701	0.889	42.227	-4.05%	3.49%
			700	0.854	43.686	0.889	42.201	-3.94%	3.52%
			710	0.858	43.656	0.890	42.149	-3.60%	3.58%
			725	0.863	43.615	0.891	42.071	-3.14%	3.67%
			750	0.871	43.529	0.894	41.942	-2.57%	3.78%
			770	0.878	43.462	0.895	41.838	-1.90%	3.88%
			785	0.884	43.420	0.896	41.760	-1.34%	3.98%
			800	0.889	43.384	0.897	41.682	-0.89%	4.08%
05/17/2020	750 Head	24.0	680	0.884	42.699	0.888	42.305	-0.45%	0.93%
			695	0.889	42.652	0.889	42.227	0.00%	1.01%
			700	0.891	42.638	0.889	42.201	0.22%	1.04%
			710	0.894	42.604	0.890	42.149	0.45%	1.08%
			725	0.899	42.559	0.891	42.071	0.90%	1.16%
			750	0.908	42.487	0.894	41.942	1.57%	1.30%
			770	0.914	42.424	0.895	41.838	2.12%	1.40%
			785	0.920	42.372	0.896	41.760	2.68%	1.47%
			800	0.925	42.322	0.897	41.682	3.12%	1.54%
05/20/2020	750 Head	21.7	680	0.851	41.787	0.888	42.305	-4.17%	-1.22%
			695	0.855	41.733	0.889	42.227	-3.82%	-1.17%
			700	0.857	41.715	0.889	42.201	-3.60%	-1.15%
			710	0.861	41.681	0.890	42.149	-3.26%	-1.11%
			725	0.866	41.633	0.891	42.071	-2.81%	-1.04%
			750	0.875	41.554	0.894	41.942	-2.13%	-0.93%
			770	0.881	41.495	0.895	41.838	-1.56%	-0.82%
			785	0.886	41.447	0.896	41.760	-1.12%	-0.75%
			800	0.891	41.399	0.897	41.682	-0.67%	-0.68%
05/06/2020	835 Head	20.8	820	0.867	41.992	0.899	41.578	-3.56%	1.00%
			835	0.873	41.945	0.900	41.500	-3.00%	1.07%
			850	0.879	41.902	0.916	41.500	-4.04%	0.97%
05/11/2020	835 Head	20.6	820	0.880	40.668	0.899	41.578	-2.11%	-2.19%
			835	0.885	40.622	0.900	41.500	-1.67%	-2.12%
			850	0.891	40.576	0.916	41.500	-2.73%	-2.23%
05/13/2020	835 Head	20.9	820	0.900	41.020	0.899	41.578	0.11%	-1.34%
			835	0.906	40.974	0.900	41.500	0.67%	-1.27%
			850	0.912	40.931	0.916	41.500	-0.44%	-1.37%
05/13/2020	1750 Head	21.0	1710	1.312	40.663	1.348	40.142	-2.67%	1.30%
			1720	1.318	40.656	1.354	40.126	-2.66%	1.32%
			1745	1.335	40.627	1.368	40.087	-2.41%	1.35%
			1750	1.338	40.620	1.371	40.079	-2.41%	1.35%
			1770	1.351	40.589	1.383	40.047	-2.31%	1.35%
			1790	1.362	40.552	1.394	40.016	-2.30%	1.34%

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Table 10-2
Measured Head Tissue Properties (Cont.)

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
05/11/2020	1900 Head	21.0	1850	1.420	41.014	1.400	40.000	1.43%	2.54%
			1860	1.426	40.998	1.400	40.000	1.86%	2.49%
			1880	1.438	40.978	1.400	40.000	2.71%	2.45%
			1900	1.450	40.959	1.400	40.000	3.57%	2.40%
			1905	1.453	40.952	1.400	40.000	3.79%	2.38%
			1910	1.456	40.945	1.400	40.000	4.00%	2.36%
04/29/2020	2450 Head	23.3	2300	1.683	39.993	1.670	39.500	0.78%	1.25%
			2310	1.689	39.976	1.679	39.480	0.60%	1.26%
			2320	1.696	39.961	1.687	39.460	0.53%	1.27%
			2400	1.752	39.856	1.756	39.289	-0.23%	1.44%
05/03/2020	2450 Head	23.2	2400	1.761	38.465	1.756	39.289	0.28%	-2.10%
			2450	1.799	38.404	1.800	39.200	-0.06%	-2.03%
			2480	1.821	38.364	1.833	39.162	-0.65%	-2.04%
			2500	1.835	38.328	1.855	39.136	-1.08%	-2.06%
			2510	1.843	38.311	1.866	39.123	-1.23%	-2.08%
			2535	1.864	38.272	1.893	39.092	-1.53%	-2.10%
05/24/2020	2450 Head	22.0	2400	1.743	40.164	1.756	39.289	-0.74%	2.23%
			2450	1.781	40.093	1.800	39.200	-1.06%	2.28%
			2480	1.802	40.049	1.833	39.162	-1.69%	2.26%
			2500	1.817	40.011	1.855	39.136	-2.05%	2.24%
			2510	1.825	39.994	1.866	39.123	-2.20%	2.23%
			2535	1.846	39.954	1.893	39.092	-2.48%	2.21%
			2550	1.858	39.935	1.909	39.073	-2.67%	2.21%
05/27/2020	2450 Head	23.5	2400	1.754	39.596	1.756	39.289	-0.11%	0.78%
			2450	1.793	39.534	1.800	39.200	-0.39%	0.85%
			2480	1.813	39.486	1.833	39.162	-1.09%	0.83%
			2500	1.827	39.446	1.855	39.136	-1.51%	0.79%
05/31/2020	2450 Head	22.5	2400	1.750	40.729	1.756	39.289	-0.34%	3.67%
			2450	1.789	40.669	1.800	39.200	-0.61%	3.75%
			2480	1.809	40.631	1.833	39.162	-1.31%	3.75%
			2500	1.823	40.592	1.855	39.136	-1.73%	3.72%
			2510	1.831	40.577	1.866	39.123	-1.88%	3.72%
			2535	1.851	40.546	1.893	39.092	-2.22%	3.72%
			2550	1.863	40.535	1.909	39.073	-2.41%	3.74%
			2560	1.870	40.527	1.920	39.060	-2.60%	3.76%
			2600	1.899	40.473	1.964	39.009	-3.31%	3.75%
06/01/2020	3600 Head	21.8	3500	2.918	39.665	2.913	37.929	0.17%	4.58%
			3550	2.959	39.592	2.964	37.871	-0.17%	4.54%
			3560	2.968	39.577	2.974	37.860	-0.20%	4.54%
			3600	3.001	39.523	3.015	37.814	-0.46%	4.52%
			3650	3.042	39.454	3.066	37.757	-0.78%	4.49%
			3690	3.076	39.374	3.107	37.711	-1.00%	4.41%
			3700	3.084	39.355	3.117	37.700	-1.06%	4.39%
05/28/2020	5200-5800 Head	21.1	5180	4.590	35.085	4.635	36.009	-0.97%	-2.57%
			5190	4.599	35.076	4.645	35.998	-0.99%	-2.56%
			5200	4.609	35.066	4.655	35.986	-0.99%	-2.56%
			5210	4.620	35.050	4.666	35.975	-0.99%	-2.57%
			5220	4.630	35.032	4.676	35.963	-0.98%	-2.59%
			5240	4.653	34.985	4.696	35.940	-0.92%	-2.66%
			5250	4.667	34.962	4.706	35.929	-0.83%	-2.69%
			5260	4.679	34.944	4.717	35.917	-0.81%	-2.71%
			5270	4.690	34.924	4.727	35.906	-0.78%	-2.73%
			5280	4.698	34.904	4.737	35.894	-0.82%	-2.76%
			5290	4.709	34.882	4.748	35.883	-0.82%	-2.79%
			5300	4.720	34.866	4.758	35.871	-0.80%	-2.80%
			5310	4.729	34.845	4.768	35.860	-0.82%	-2.83%
			5320	4.739	34.820	4.778	35.849	-0.82%	-2.87%
			5500	4.937	34.446	4.963	35.643	-0.52%	-3.36%
			5510	4.949	34.424	4.973	35.632	-0.48%	-3.39%
			5520	4.962	34.399	4.983	35.620	-0.42%	-3.43%
			5530	4.974	34.377	4.994	35.609	-0.40%	-3.46%
			5540	4.987	34.361	5.004	35.597	-0.34%	-3.47%
			5550	5.001	34.347	5.014	35.586	-0.26%	-3.48%
			5560	5.013	34.328	5.024	35.574	-0.22%	-3.50%
			5580	5.035	34.289	5.045	35.551	-0.20%	-3.55%
			5600	5.063	34.248	5.065	35.529	-0.04%	-3.61%
			5610	5.076	34.234	5.076	35.518	0.00%	-3.62%
			5620	5.088	34.216	5.086	35.506	0.04%	-3.63%
			5640	5.111	34.185	5.106	35.483	0.10%	-3.66%
			5660	5.135	34.164	5.127	35.460	0.16%	-3.65%
			5670	5.144	34.145	5.137	35.449	0.14%	-3.68%
			5680	5.155	34.123	5.147	35.437	0.16%	-3.71%
			5690	5.169	34.103	5.158	35.426	0.21%	-3.73%
			5700	5.186	34.085	5.168	35.414	0.35%	-3.75%
			5710	5.199	34.072	5.178	35.403	0.41%	-3.76%
			5720	5.210	34.060	5.188	35.391	0.42%	-3.76%
			5745	5.236	34.032	5.214	35.363	0.42%	-3.76%
			5750	5.240	34.024	5.219	35.357	0.40%	-3.77%
			5755	5.244	34.015	5.224	35.351	0.38%	-3.78%
			5765	5.255	33.997	5.234	35.340	0.40%	-3.80%
			5775	5.267	33.975	5.245	35.329	0.42%	-3.83%
			5785	5.280	33.953	5.255	35.317	0.48%	-3.86%
			5795	5.294	33.935	5.265	35.305	0.55%	-3.88%
			5800	5.300	33.927	5.270	35.300	0.57%	-3.89%
			5805	5.306	33.919	5.275	35.294	0.59%	-3.90%
			5825	5.330	33.900	5.296	35.271	0.64%	-3.89%

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Table 10-3
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
04/22/2020	750 Body	20.5	680	0.941	53.655	0.958	55.804	-1.77%	-3.85%
			695	0.946	53.611	0.959	55.745	-1.36%	-3.83%
			700	0.948	53.597	0.959	55.726	-1.15%	-3.82%
			710	0.952	53.569	0.960	55.687	-0.83%	-3.80%
			725	0.957	53.526	0.961	55.629	-0.42%	-3.78%
			750	0.967	53.449	0.964	55.531	0.31%	-3.75%
			770	0.975	53.394	0.965	55.453	1.04%	-3.71%
			785	0.980	53.352	0.966	55.395	1.45%	-3.69%
			800	0.985	53.316	0.967	55.336	1.86%	-3.65%
04/27/2020	750 Body	20.3	680	0.931	53.768	0.958	55.804	-2.82%	-3.65%
			695	0.936	53.737	0.959	55.745	-2.40%	-3.60%
			700	0.938	53.728	0.959	55.726	-2.19%	-3.59%
			710	0.942	53.705	0.960	55.687	-1.88%	-3.56%
			725	0.948	53.665	0.961	55.629	-1.35%	-3.53%
			750	0.957	53.587	0.964	55.531	-0.73%	-3.50%
			770	0.964	53.534	0.965	55.453	-0.10%	-3.46%
			785	0.970	53.502	0.966	55.395	0.41%	-3.42%
			800	0.976	53.468	0.967	55.336	0.93%	-3.38%
05/06/2020	835 Body	21.0	820	0.929	53.582	0.969	55.258	-4.13%	-3.03%
			835	0.944	53.429	0.970	55.200	-2.68%	-3.21%
			850	0.960	53.280	0.988	55.154	-2.83%	-3.40%
05/08/2020	835 Body	21.2	820	0.932	52.922	0.969	55.258	-3.82%	-4.23%
			835	0.948	52.764	0.970	55.200	-2.27%	-4.41%
			850	0.965	52.616	0.988	55.154	-2.33%	-4.60%
05/11/2020	835 Body	21.6	820	0.949	53.217	0.969	55.258	-2.06%	-3.69%
			835	0.965	53.068	0.970	55.200	-0.52%	-3.86%
			850	0.981	52.914	0.988	55.154	-0.71%	-4.06%
05/13/2020	835 Body	21.8	820	0.945	54.645	0.969	55.258	-2.48%	-1.11%
			835	0.961	54.496	0.970	55.200	-0.93%	-1.28%
			850	0.976	54.344	0.988	55.154	-1.21%	-1.47%
05/18/2020	835 Body	21.2	820	0.944	54.277	0.969	55.258	-2.58%	-1.78%
			835	0.960	54.120	0.970	55.200	-1.03%	-1.96%
			850	0.975	53.965	0.988	55.154	-1.32%	-2.16%
04/29/2020	1750 Body	22.2	1710	1.487	52.019	1.463	53.537	1.64%	-2.84%
			1720	1.498	51.988	1.469	53.511	1.97%	-2.85%
			1745	1.526	51.885	1.485	53.445	2.76%	-2.92%
			1750	1.532	51.860	1.488	53.432	2.96%	-2.94%
			1770	1.554	51.756	1.501	53.379	3.53%	-3.04%
			1790	1.575	51.661	1.514	53.326	4.03%	-3.12%
05/03/2020	1750 Body	21.2	1710	1.478	52.241	1.463	53.537	1.03%	-2.42%
			1720	1.489	52.200	1.469	53.511	1.36%	-2.45%
			1745	1.518	52.107	1.485	53.445	2.22%	-2.50%
			1750	1.523	52.088	1.488	53.432	2.35%	-2.52%
			1770	1.544	52.014	1.501	53.379	2.86%	-2.56%
			1790	1.566	51.939	1.514	53.326	3.43%	-2.60%
05/06/2020	1750 Body	21.9	1710	1.452	52.786	1.463	53.537	-0.75%	-1.40%
			1720	1.464	52.746	1.469	53.511	-0.34%	-1.43%
			1745	1.492	52.646	1.485	53.445	0.47%	-1.49%
			1750	1.498	52.627	1.488	53.432	0.67%	-1.51%
			1770	1.519	52.547	1.501	53.379	1.20%	-1.56%
			1790	1.539	52.468	1.514	53.326	1.65%	-1.61%
05/14/2020	1750 Body	21.6	1710	1.466	53.267	1.463	53.537	0.21%	-0.50%
			1720	1.478	53.229	1.469	53.511	0.61%	-0.53%
			1745	1.507	53.133	1.485	53.445	1.48%	-0.58%
			1750	1.513	53.115	1.488	53.432	1.68%	-0.59%
			1770	1.534	53.037	1.501	53.379	2.20%	-0.64%
			1790	1.556	52.958	1.514	53.326	2.77%	-0.69%
05/20/2020	1750 Body	20.6	1710	1.498	52.540	1.463	53.537	2.39%	-1.86%
			1720	1.510	52.504	1.469	53.511	2.79%	-1.88%
			1745	1.538	52.409	1.485	53.445	3.57%	-1.94%
			1750	1.544	52.389	1.488	53.432	3.76%	-1.95%
			1770	1.565	52.305	1.501	53.379	4.26%	-2.01%
			1790	1.587	52.217	1.514	53.326	4.82%	-2.08%
05/29/2020	1750 Body	21.8	1710	1.466	52.637	1.463	53.537	0.21%	-1.68%
			1720	1.477	52.609	1.469	53.511	0.54%	-1.69%
			1745	1.507	52.539	1.485	53.445	1.48%	-1.70%
			1750	1.513	52.524	1.488	53.432	1.68%	-1.70%
			1770	1.536	52.458	1.501	53.379	2.33%	-1.73%
			1790	1.559	52.376	1.514	53.326	2.97%	-1.78%
06/01/2020	1750 Body	21.1	1710	1.499	53.159	1.463	53.537	2.46%	-0.71%
			1720	1.512	53.118	1.469	53.511	2.93%	-0.73%
			1745	1.541	53.029	1.485	53.445	3.77%	-0.78%
			1750	1.546	53.012	1.488	53.432	3.90%	-0.79%
			1770	1.565	52.938	1.501	53.379	4.26%	-0.83%
			1790	1.584	52.850	1.514	53.326	4.62%	-0.89%
05/03/2020	1900 Body	22.8	1850	1.515	55.342	1.520	53.300	-0.33%	3.83%
			1860	1.527	55.303	1.520	53.300	0.46%	3.76%
			1880	1.550	55.235	1.520	53.300	1.97%	3.63%
			1900	1.573	55.175	1.520	53.300	3.49%	3.52%
			1905	1.578	55.160	1.520	53.300	3.82%	3.49%
			1910	1.584	55.145	1.520	53.300	4.21%	3.46%

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Table 10-4
Measured Body Tissue Properties (Cont.)

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
05/06/2020	1900 Body	22.5	1850	1.520	52.876	1.520	53.300	0.00%	-0.80%
			1860	1.531	52.846	1.520	53.300	0.72%	-0.85%
			1880	1.554	52.782	1.520	53.300	2.24%	-0.97%
			1900	1.578	52.713	1.520	53.300	3.82%	-1.10%
			1905	1.584	52.694	1.520	53.300	4.21%	-1.14%
			1910	1.590	52.675	1.520	53.300	4.61%	-1.17%
05/10/2020	1900 Body	22.0	1850	1.494	53.414	1.520	53.300	-1.71%	0.21%
			1860	1.504	53.387	1.520	53.300	-1.05%	0.16%
			1880	1.526	53.339	1.520	53.300	0.39%	0.07%
			1900	1.548	53.291	1.520	53.300	1.84%	-0.02%
			1905	1.554	53.279	1.520	53.300	2.24%	-0.04%
			1910	1.560	53.267	1.520	53.300	2.63%	-0.06%
05/12/2020	1900 Body	22.3	1850	1.509	52.828	1.520	53.300	-0.72%	-0.89%
			1860	1.521	52.792	1.520	53.300	0.07%	-0.95%
			1880	1.545	52.726	1.520	53.300	1.64%	-1.08%
			1900	1.568	52.646	1.520	53.300	3.16%	-1.23%
			1905	1.574	52.627	1.520	53.300	3.55%	-1.26%
			1910	1.579	52.606	1.520	53.300	3.88%	-1.30%
5/17/2020	1900 Body	24.0	1850	1.491	54.756	1.520	53.300	-1.91%	2.73%
			1860	1.501	54.732	1.520	53.300	-1.25%	2.69%
			1880	1.523	54.679	1.520	53.300	0.20%	2.59%
			1900	1.545	54.617	1.520	53.300	1.64%	2.47%
			1905	1.550	54.600	1.520	53.300	1.97%	2.44%
			1910	1.556	54.583	1.520	53.300	2.37%	2.41%
05/20/2020	1900 Body	24.0	1850	1.518	54.223	1.520	53.300	-0.13%	1.73%
			1860	1.530	54.195	1.520	53.300	0.66%	1.68%
			1880	1.553	54.129	1.520	53.300	2.17%	1.56%
			1900	1.577	54.055	1.520	53.300	3.75%	1.42%
			1905	1.583	54.036	1.520	53.300	4.14%	1.38%
			1910	1.588	54.018	1.520	53.300	4.47%	1.35%
05/23/2020	1900 Body	23.8	1850	1.489	53.667	1.520	53.300	-2.04%	0.69%
			1860	1.500	53.644	1.520	53.300	-1.32%	0.65%
			1880	1.522	53.602	1.520	53.300	0.13%	0.57%
			1900	1.544	53.552	1.520	53.300	1.58%	0.47%
			1905	1.549	53.538	1.520	53.300	1.91%	0.45%
			1910	1.555	53.524	1.520	53.300	2.30%	0.42%
05/26/2020	1900 Body	24.7	1850	1.502	53.157	1.520	53.300	-1.18%	-0.27%
			1860	1.513	53.133	1.520	53.300	-0.46%	-0.31%
			1880	1.536	53.097	1.520	53.300	1.05%	-0.38%
			1900	1.558	53.035	1.520	53.300	2.50%	-0.50%
			1905	1.565	52.998	1.520	53.300	2.96%	-0.57%
			1910	1.571	52.998	1.520	53.300	3.36%	-0.57%
05/04/2020	2450 Body	23.1	2300	1.846	53.120	1.809	52.900	2.05%	0.42%
			2310	1.857	53.097	1.816	52.887	2.26%	0.40%
			2320	1.869	53.073	1.826	52.873	2.35%	0.38%
			2400	1.960	52.861	1.902	52.767	3.05%	0.18%
05/13/2020	2450 Body	21.4	2400	1.987	51.744	1.902	52.767	4.47%	-1.94%
			2450	2.047	51.610	1.950	52.700	4.97%	-2.07%
			2480	2.081	51.517	1.993	52.662	4.42%	-2.17%
			2500	2.105	51.453	2.021	52.636	4.16%	-2.25%
			2510	2.118	51.421	2.035	52.623	4.08%	-2.28%
			2535	2.149	51.345	2.071	52.592	3.77%	-2.37%
05/18/2020	2450 Body	23.2	2400	1.954	52.787	1.902	52.767	2.73%	0.04%
			2450	2.011	52.642	1.950	52.700	3.13%	-0.11%
			2480	2.045	52.558	1.993	52.662	2.61%	-0.20%
			2500	2.069	52.497	2.021	52.636	2.38%	-0.26%
05/20/2020	2450 Body	23.5	2400	1.973	51.175	1.902	52.767	3.73%	-3.02%
			2450	2.033	51.036	1.950	52.700	4.26%	-3.16%
			2480	2.067	50.947	1.993	52.662	3.71%	-3.26%
			2500	2.091	50.879	2.021	52.636	3.46%	-3.34%
			2510	2.103	50.845	2.035	52.623	3.34%	-3.38%
			2535	2.134	50.773	2.071	52.592	3.04%	-3.46%
			2550	2.152	50.735	2.092	52.573	2.87%	-3.50%
			2560	2.164	50.711	2.106	52.560	2.75%	-3.52%
			2600	2.211	50.595	2.163	52.509	2.22%	-3.65%
			2650	2.274	50.421	2.234	52.445	1.79%	-3.86%
			2680	2.310	50.330	2.277	52.407	1.45%	-3.96%
			2700	2.333	50.267	2.305	52.382	1.21%	-4.04%
05/27/2020	2450 Body	21.8	2400	1.986	50.938	1.902	52.767	4.42%	-3.47%
			2450	2.045	50.783	1.950	52.700	4.87%	-3.64%
			2480	2.079	50.688	1.993	52.662	4.32%	-3.75%
			2500	2.103	50.620	2.021	52.636	4.06%	-3.83%
			2510	2.115	50.588	2.035	52.623	3.93%	-3.87%
			2535	2.144	50.510	2.071	52.592	3.52%	-3.96%
			2550	2.162	50.468	2.092	52.573	3.35%	-4.00%
			2560	2.174	50.443	2.106	52.560	3.23%	-4.03%
			2600	2.220	50.325	2.163	52.509	2.64%	-4.16%
			2650	2.280	50.155	2.234	52.445	2.06%	-4.37%
			2680	2.317	50.069	2.277	52.407	1.76%	-4.46%
			2700	2.341	50.014	2.305	52.382	1.56%	-4.52%
06/01/2020	2450 Body	23.1	2400	1.976	52.738	1.902	52.767	3.89%	-0.05%
			2450	2.031	52.584	1.950	52.700	4.15%	-0.22%
			2480	2.068	52.487	1.993	52.662	3.76%	-0.33%
			2500	2.091	52.435	2.021	52.636	3.46%	-0.38%
			2510	2.103	52.408	2.035	52.623	3.34%	-0.41%
			2535	2.131	52.330	2.071	52.592	2.90%	-0.50%
			2550	2.149	52.277	2.092	52.573	2.72%	-0.56%
			2560	2.162	52.242	2.106	52.560	2.66%	-0.61%
			2600	2.211	52.130	2.163	52.509	2.22%	-0.72%
			2650	2.270	51.980	2.234	52.445	1.61%	-0.89%
			2680	2.308	51.881	2.277	52.407	1.36%	-1.00%
			2700	2.332	51.824	2.305	52.382	1.17%	-1.07%
06/07/2020	2450 Body	23.6	2300	1.873	53.083	1.809	52.900	3.54%	0.35%
			2310	1.884	53.055	1.816	52.887	3.74%	0.32%
			2320	1.896	53.028	1.826	52.873	3.83%	0.29%
			2400	1.986	52.800	1.902	52.767	4.42%	0.06%
06/03/2020	3600 Body	21.9	3500	3.390	49.566	3.314	51.321	2.29%	-3.42%
			3550	3.441	49.503	3.372	51.254	2.05%	-3.42%
			3560	3.455	49.509	3.384	51.240	2.10%	-3.38%
			3600	3.492	49.447	3.431	51.186	1.78%	-3.40%
			3650	3.552	49.347	3.489	51.118	1.81%	-3.46%
			3690	3.587	49.254	3.536	51.063	1.44%	-3.54%
			3700	3.603	49.250	3.548	51.050	1.55%	-3.53%

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Table 10-5
Measured Body Tissue Properties (Cont.)

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
05/24/2020	5200-5800 Body	21.3	5180	5.431	46.958	5.276	49.041	2.94%	-4.25%
			5190	5.440	46.955	5.288	49.028	2.87%	-4.23%
			5200	5.450	46.941	5.299	49.014	2.85%	-4.23%
			5210	5.463	46.918	5.311	49.001	2.86%	-4.25%
			5220	5.475	46.901	5.323	48.987	2.86%	-4.26%
			5240	5.505	46.858	5.346	48.960	2.97%	-4.29%
			5250	5.522	46.842	5.358	48.947	3.06%	-4.30%
			5260	5.536	46.819	5.369	48.933	3.11%	-4.32%
			5270	5.550	46.805	5.381	48.919	3.14%	-4.32%
			5280	5.565	46.788	5.393	48.906	3.19%	-4.33%
			5290	5.578	46.775	5.404	48.892	3.22%	-4.33%
			5300	5.589	46.775	5.416	48.879	3.19%	-4.30%
			5310	5.600	46.763	5.428	48.865	3.17%	-4.30%
			5320	5.612	46.744	5.439	48.851	3.18%	-4.31%
			5500	5.851	46.428	5.650	48.607	3.56%	-4.48%
			5510	5.869	46.416	5.661	48.594	3.67%	-4.48%
			5520	5.885	46.402	5.673	48.580	3.74%	-4.48%
			5530	5.897	46.388	5.685	48.566	3.73%	-4.48%
			5540	5.907	46.379	5.696	48.553	3.70%	-4.48%
			5550	5.917	46.363	5.708	48.539	3.66%	-4.48%
			5560	5.929	46.340	5.720	48.526	3.65%	-4.50%
			5580	5.951	46.303	5.743	48.499	3.62%	-4.53%
			5600	5.985	46.274	5.766	48.471	3.80%	-4.53%
			5610	6.000	46.250	5.778	48.458	3.84%	-4.56%
			5620	6.014	46.234	5.790	48.444	3.87%	-4.56%
			5640	6.044	46.223	5.813	48.417	3.97%	-4.53%
			5660	6.073	46.164	5.837	48.390	4.04%	-4.60%
			5670	6.086	46.140	5.848	48.376	4.07%	-4.62%
			5680	6.100	46.133	5.860	48.363	4.10%	-4.61%
			5690	6.114	46.123	5.872	48.349	4.12%	-4.60%
			5700	6.126	46.098	5.883	48.336	4.13%	-4.63%
			5710	6.137	46.074	5.895	48.322	4.11%	-4.65%
			5720	6.148	46.060	5.907	48.309	4.08%	-4.66%
			5745	6.184	46.034	5.936	48.275	4.18%	-4.64%
			5750	6.191	46.023	5.942	48.268	4.19%	-4.65%
			5755	6.198	46.011	5.947	48.261	4.22%	-4.66%
			5765	6.213	45.997	5.959	48.248	4.26%	-4.67%
			5775	6.226	45.984	5.971	48.234	4.27%	-4.66%
			5785	6.244	45.958	5.982	48.220	4.38%	-4.69%
			5795	6.257	45.933	5.994	48.207	4.39%	-4.72%
			5800	6.262	45.921	6.000	48.200	4.37%	-4.73%
			5805	6.268	45.919	6.006	48.193	4.36%	-4.72%
			5825	6.298	45.910	6.029	48.166	4.46%	-4.68%
6/1/2020	5200-5800 Body	21.4	5180	5.334	48.644	5.276	49.041	1.10%	-0.81%
			5190	5.344	48.647	5.288	49.028	1.06%	-0.78%
			5200	5.357	48.634	5.299	49.014	1.09%	-0.78%
			5210	5.369	48.618	5.311	49.001	1.09%	-0.78%
			5220	5.381	48.594	5.323	48.987	1.09%	-0.80%
			5240	5.406	48.553	5.346	48.960	1.12%	-0.83%
			5250	5.419	48.521	5.358	48.947	1.14%	-0.87%
			5260	5.431	48.491	5.369	48.933	1.15%	-0.90%
			5270	5.443	48.456	5.381	48.919	1.15%	-0.95%
			5280	5.456	48.409	5.393	48.906	1.17%	-1.02%
			5290	5.467	48.346	5.404	48.892	1.17%	-1.12%
			5300	5.475	48.294	5.416	48.879	1.09%	-1.20%
			5310	5.481	48.243	5.428	48.865	0.98%	-1.27%
			5320	5.491	48.185	5.439	48.851	0.96%	-1.36%
			5500	5.733	47.778	5.650	48.607	1.47%	-1.71%
			5510	5.745	47.752	5.661	48.594	1.48%	-1.73%
			5520	5.754	47.726	5.673	48.580	1.43%	-1.76%
			5530	5.767	47.686	5.685	48.566	1.44%	-1.81%
			5540	5.781	47.650	5.696	48.553	1.49%	-1.86%
			5550	5.794	47.614	5.708	48.539	1.51%	-1.91%
			5560	5.811	47.590	5.720	48.526	1.59%	-1.93%
			5580	5.843	47.522	5.743	48.499	1.74%	-2.01%
			5600	5.872	47.456	5.766	48.471	1.84%	-2.09%
			5610	5.888	47.434	5.778	48.458	1.90%	-2.11%
			5620	5.901	47.421	5.790	48.444	1.92%	-2.11%
			5640	5.924	47.391	5.813	48.417	1.91%	-2.12%
			5660	5.947	47.326	5.837	48.390	1.88%	-2.20%
			5670	5.961	47.281	5.848	48.376	1.93%	-2.26%
			5680	5.973	47.230	5.860	48.363	1.93%	-2.34%
			5690	5.983	47.176	5.872	48.349	1.89%	-2.43%
			5700	5.992	47.114	5.883	48.336	1.85%	-2.53%
			5710	6.003	47.050	5.895	48.322	1.83%	-2.63%
			5720	6.015	46.993	5.907	48.309	1.83%	-2.72%
			5745	6.045	46.903	5.936	48.275	1.84%	-2.84%
			5750	6.050	46.893	5.942	48.268	1.82%	-2.85%
			5755	6.057	46.893	5.947	48.261	1.85%	-2.83%
			5765	6.072	46.885	5.959	48.248	1.90%	-2.82%
			5775	6.084	46.868	5.971	48.234	1.89%	-2.83%
			5785	6.099	46.833	5.982	48.220	1.96%	-2.88%
			5795	6.114	46.789	5.994	48.207	2.00%	-2.94%
			5800	6.123	46.766	6.000	48.200	2.05%	-2.98%
			5805	6.131	46.750	6.006	48.193	2.08%	-2.99%
			5825	6.167	46.703	6.029	48.166	2.29%	-3.04%

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

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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 10-6
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)	$Deviation_{1g}$ (%)
E	750	HEAD	05/13/2020	21.6	20.6	0.200	1003	3589	1.630	8.780	8.150	-7.18%
E	750	HEAD	05/17/2020	22.3	22.0	0.200	1003	3589	1.830	8.780	9.150	4.21%
E	750	HEAD	05/20/2020	22.5	21.7	0.200	1003	3589	1.670	8.780	8.350	-4.90%
P	835	HEAD	05/06/2020	21.3	20.8	0.200	4d133	7551	1.890	9.430	9.450	0.21%
P	835	HEAD	05/11/2020	21.9	20.6	0.200	4d047	7551	1.870	9.420	9.350	-0.74%
P	835	HEAD	05/13/2020	21.5	20.9	0.200	4d132	7551	1.900	9.650	9.500	-1.55%
L	1750	HEAD	05/13/2020	23.9	20.5	0.100	1150	7410	3.610	36.500	36.100	-1.10%
L	1900	HEAD	05/11/2020	21.8	21.0	0.100	5d080	7410	4.290	39.800	42.900	7.79%
E	2300	HEAD	04/29/2020	22.5	21.8	0.100	1073	3589	4.730	49.200	47.300	-3.86%
E	2450	HEAD	05/03/2020	22.9	22.4	0.100	719	3589	5.240	53.100	52.400	-1.32%
E	2450	HEAD	05/24/2020	23.2	21.5	0.100	719	3589	5.340	53.100	53.400	0.56%
E	2450	HEAD	05/27/2020	22.9	22.7	0.100	797	3589	5.120	52.700	51.200	-2.85%
E	2450	HEAD	05/31/2020	22.2	21.9	0.100	719	3589	5.210	53.100	52.100	-1.88%
E	2600	HEAD	05/31/2020	22.2	21.9	0.100	1064	3589	5.810	58.100	58.100	0.00%
D	3500	HEAD	06/01/2020	22.3	21.8	0.100	1059	7488	6.190	64.600	61.900	-4.18%
D	3700	HEAD	06/01/2020	22.3	21.8	0.100	1018	7488	6.150	65.800	61.500	-6.53%
H	5250	HEAD	05/28/2020	22.2	21.1	0.050	1191	7357	3.730	80.800	74.600	-7.67%
H	5600	HEAD	05/28/2020	22.2	21.1	0.050	1191	7357	3.930	82.700	78.600	-4.96%
H	5750	HEAD	05/28/2020	22.2	21.1	0.050	1191	7357	3.710	80.200	74.200	-7.48%

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Table 10-7
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)	$Deviation_{1g}$ (%)
E	750	HEAD	05/13/2020	21.6	20.6	0.200	1003	3589	1.630	8.780	8.150	-7.18%
E	750	HEAD	05/17/2020	22.3	22.0	0.200	1003	3589	1.830	8.780	9.150	4.21%
E	750	HEAD	05/20/2020	22.5	21.7	0.200	1003	3589	1.670	8.780	8.350	-4.90%
P	835	HEAD	05/06/2020	21.3	20.8	0.200	4d133	7551	1.890	9.430	9.450	0.21%
P	835	HEAD	05/11/2020	21.9	20.6	0.200	4d047	7551	1.870	9.420	9.350	-0.74%
P	835	HEAD	05/13/2020	21.5	20.9	0.200	4d132	7551	1.900	9.650	9.500	-1.55%
L	1750	HEAD	05/13/2020	23.9	20.5	0.100	1150	7410	3.610	36.500	36.100	-1.10%
L	1900	HEAD	05/11/2020	21.8	21.0	0.100	5d080	7410	4.290	39.800	42.900	7.79%
E	2300	HEAD	04/29/2020	22.5	21.8	0.100	1073	3589	4.730	49.200	47.300	-3.86%
E	2450	HEAD	05/03/2020	22.9	22.4	0.100	719	3589	5.240	53.100	52.400	-1.32%
E	2450	HEAD	05/24/2020	23.2	21.5	0.100	719	3589	5.340	53.100	53.400	0.56%
E	2450	HEAD	05/27/2020	22.9	22.7	0.100	797	3589	5.120	52.700	51.200	-2.85%
E	2450	HEAD	05/31/2020	22.2	21.9	0.100	719	3589	5.210	53.100	52.100	-1.88%
E	2600	HEAD	05/31/2020	22.2	21.9	0.100	1064	3589	5.810	58.100	58.100	0.00%
D	3500	HEAD	06/01/2020	22.3	21.8	0.100	1059	7488	6.190	64.600	61.900	-4.18%
D	3700	HEAD	06/01/2020	22.3	21.8	0.100	1018	7488	6.150	65.800	61.500	-6.53%
H	5250	HEAD	05/28/2020	22.2	21.1	0.050	1191	7357	3.730	80.800	74.600	-7.67%
H	5600	HEAD	05/28/2020	22.2	21.1	0.050	1191	7357	3.930	82.700	78.600	-4.96%
H	5750	HEAD	05/28/2020	22.2	21.1	0.050	1191	7357	3.710	80.200	74.200	-7.48%
L	750	BODY	04/22/2020	21.2	20.5	0.200	1161	7410	1.820	8.430	9.100	7.95%
L	750	BODY	04/27/2020	21.4	20.3	0.200	1161	7410	1.750	8.430	8.750	3.80%
M	835	BODY	05/06/2020	21.6	21.0	0.200	4d133	7570	1.930	9.750	9.650	-1.03%
M	835	BODY	05/08/2020	22.6	21.4	0.200	4d133	7570	1.930	9.750	9.650	-1.03%
D	835	BODY	05/11/2020	22.1	21.6	0.200	4d047	7488	1.910	9.470	9.550	0.84%
D	835	BODY	05/13/2020	22.6	21.8	0.200	4d047	7488	1.910	9.470	9.550	0.84%
D	835	BODY	05/18/2020	22.1	21.8	0.200	4d047	7488	1.900	9.470	9.500	0.32%
I	1750	BODY	04/29/2020	23.1	22.2	0.100	1150	7527	3.820	36.600	38.200	4.37%
I	1750	BODY	05/03/2020	21.6	21.2	0.100	1150	7527	3.880	36.600	38.800	6.01%
I	1750	BODY	05/06/2020	21.1	21.9	0.100	1150	7527	3.510	36.600	35.100	-4.10%
I	1750	BODY	05/14/2020	21.6	21.6	0.100	1150	7527	3.750	36.600	37.500	2.46%
I	1750	BODY	05/20/2020	21.4	20.6	0.100	1008	7527	3.830	37.400	38.300	2.41%
I	1750	BODY	06/01/2020	21.4	21.2	0.100	1008	7527	4.010	37.400	40.100	7.22%
J	1900	BODY	05/03/2020	21.1	22.8	0.100	5d080	7571	4.210	39.200	42.100	7.40%
O	1900	BODY	05/06/2020	21.9	21.7	0.100	5d148	7552	3.910	39.100	39.100	0.00%
O	1900	BODY	05/10/2020	22.6	20.8	0.100	5d148	7552	4.130	39.100	41.300	5.63%
J	1900	BODY	05/17/2020	22.5	24.0	0.100	5d080	7571	4.040	39.200	40.400	3.06%
J	1900	BODY	05/20/2020	22.9	22.0	0.100	5d080	7571	4.020	39.200	40.200	2.55%
J	1900	BODY	05/23/2020	23.1	23.9	0.100	5d080	7571	4.150	39.200	41.500	5.87%
J	1900	BODY	05/26/2020	24.1	22.7	0.100	5d080	7571	4.050	39.200	40.500	3.32%
K	2300	BODY	05/04/2020	22.5	21.9	0.100	1073	7547	5.130	47.700	51.300	7.55%
K	2450	BODY	05/13/2020	24.0	21.4	0.100	797	7547	5.000	51.100	50.000	-2.15%
K	2450	BODY	05/18/2020	22.2	22.0	0.100	719	7547	5.250	50.800	52.500	3.35%
K	2450	BODY	05/20/2020	22.9	21.5	0.100	719	7547	5.090	50.800	50.900	0.20%
K	2450	BODY	05/27/2020	22.9	21.8	0.100	719	7547	5.250	50.800	52.500	3.35%
K	2600	BODY	05/27/2020	22.9	21.8	0.100	1064	7547	5.430	55.600	54.300	-2.34%
D	3500	BODY	06/03/2020	22.1	21.9	0.100	1059	7488	6.520	65.100	65.200	0.15%
D	3700	BODY	06/03/2020	22.1	21.9	0.100	1018	7488	6.640	64.300	66.400	3.27%
G	5250	BODY	05/24/2020	22.0	20.9	0.050	1057	7409	3.670	75.900	73.400	-3.29%
G	5600	BODY	05/24/2020	22.0	20.9	0.050	1057	7409	4.090	79.900	81.800	2.38%
G	5750	BODY	05/24/2020	22.0	20.9	0.050	1057	7409	3.920	76.700	78.400	2.22%
G	5250	BODY	06/01/2020	21.9	21.4	0.050	1057	7409	3.710	75.900	74.200	-2.24%
G	5600	BODY	06/01/2020	21.9	21.4	0.050	1057	7409	3.970	79.900	79.400	-0.63%
G	5750	BODY	06/01/2020	21.9	21.4	0.050	1057	7409	3.780	76.700	75.600	-1.43%

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Table 10-8
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	05/20/2020	21.4	20.6	0.100	1008	7527	2.010	19.900	20.100	1.01%
I	1750	BODY	05/29/2020	21.6	21.8	0.100	1008	7527	1.940	19.900	19.400	-2.51%
I	1750	BODY	06/01/2020	21.4	21.2	0.100	1008	7527	2.110	19.900	21.100	6.03%
O	1900	BODY	05/06/2020	21.9	21.7	0.100	5d148	7552	2.020	20.500	20.200	-1.46%
O	1900	BODY	05/12/2020	24.9	22.3	0.100	5d148	7552	2.160	20.500	21.600	5.37%
J	1900	BODY	05/17/2020	22.5	24.0	0.100	5d080	7571	2.070	20.600	20.700	0.49%
J	1900	BODY	05/23/2020	23.1	23.9	0.100	5d080	7571	2.160	20.600	21.600	4.85%
K	2300	BODY	06/07/2020	23.6	23.3	0.100	1073	7547	2.460	23.200	24.600	6.03%
K	2450	BODY	05/20/2020	22.9	21.5	0.100	719	7547	2.330	24.000	23.300	-2.92%
K	2450	BODY	06/01/2020	22.5	21.6	0.100	719	7547	2.400	24.000	24.000	0.00%
K	2600	BODY	06/01/2020	22.5	21.6	0.100	1064	7547	2.400	25.000	24.000	-4.00%
K	2600	BODY	05/20/2020	22.9	21.5	0.100	1064	7547	2.450	25.000	24.500	-2.00%
G	5250	BODY	05/24/2020	22.0	20.9	0.050	1057	7409	1.020	21.100	20.400	-3.32%
G	5600	BODY	05/24/2020	22.0	20.9	0.050	1057	7409	1.130	22.300	22.600	1.35%
G	5750	BODY	05/24/2020	22.0	20.9	0.050	1057	7409	1.070	21.200	21.400	0.94%

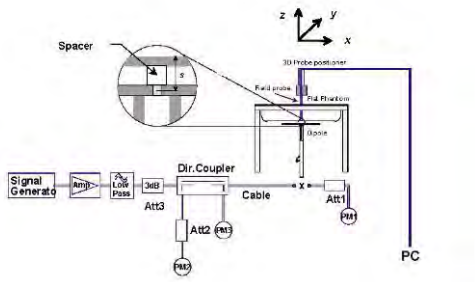


Figure 10-1
System Verification Setup Diagram



Figure 10-2
System Verification Setup Photo

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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	Antenna 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	26.0	24.75	0.03	Right	Cheek	27	0120M	1:1	0.117	1.334	0.156	
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	26.0	24.75	-0.10	Right	Tilt	27	0120M	1:1	0.103	1.334	0.137	
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	26.0	24.75	0.01	Left	Cheek	27	0120M	1:1	0.159	1.334	0.212	
820.10	564	CDMA BC10 (§90S)	RC3 / SO55	26.0	24.75	0.03	Left	Tilt	27	0120M	1:1	0.098	1.334	0.131	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	26.0	24.50	0.02	Right	Cheek	27	0120M	1:1	0.122	1.413	0.172	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	26.0	24.50	0.04	Right	Tilt	27	0120M	1:1	0.112	1.413	0.158	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	26.0	24.50	-0.05	Left	Cheek	27	0120M	1:1	0.188	1.413	0.266	A1
820.10	564	CDMA BC10 (§90S)	EVDO Rev. A	26.0	24.50	0.19	Left	Tilt	27	0120M	1:1	0.100	1.413	0.141	
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	Antenna 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	24.93	0.01	Right	Cheek	41	0120M	1:1	0.112	1.222	0.137	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.93	0.04	Right	Tilt	41	0120M	1:1	0.087	1.222	0.106	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.93	-0.18	Left	Cheek	41	0120M	1:1	0.140	1.222	0.171	
836.52	384	CDMA BC0 (§22H)	RC3 / SO55	25.8	24.93	0.10	Left	Tilt	41	0120M	1:1	0.091	1.222	0.111	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.78	0.13	Right	Cheek	41	0120M	1:1	0.108	1.265	0.137	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.78	0.13	Right	Tilt	41	0120M	1:1	0.089	1.265	0.113	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.78	0.15	Left	Cheek	41	0120M	1:1	0.150	1.265	0.190	A2
836.52	384	CDMA BC0 (§22H)	EVDO Rev. A	25.8	24.78	0.02	Left	Tilt	41	0120M	1:1	0.092	1.265	0.116	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

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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	Antenna 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	24.0	23.21	0.08	Right	Cheek	26	0116M	1:1	0.101	1.199	0.121	
1880.00	600	PCS CDMA	RC3 / SO55	24.0	23.21	0.08	Right	Tilt	26	0116M	1:1	0.064	1.199	0.077	
1880.00	600	PCS CDMA	RC3 / SO55	24.0	23.21	0.16	Left	Cheek	26	0116M	1:1	0.086	1.199	0.103	
1880.00	600	PCS CDMA	RC3 / SO55	24.0	23.21	0.11	Left	Tilt	26	0116M	1:1	0.076	1.199	0.091	
1880.00	600	PCS CDMA	EVDO Rev. A	24.0	23.25	0.08	Right	Cheek	26	0116M	1:1	0.104	1.189	0.124	A3
1880.00	600	PCS CDMA	EVDO Rev. A	24.0	23.25	0.16	Right	Tilt	26	0116M	1:1	0.068	1.189	0.081	
1880.00	600	PCS CDMA	EVDO Rev. A	24.0	23.25	0.09	Left	Cheek	26	0116M	1:1	0.089	1.189	0.106	
1880.00	600	PCS CDMA	EVDO Rev. A	24.0	23.25	0.10	Left	Tilt	26	0116M	1:1	0.087	1.189	0.103	
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	33.5	32.86	0.12	Right	Cheek	0120M	1:8.3	0.030	1.159	0.035	
836.60	190	GSM 850	GSM	33.5	32.86	0.03	Right	Tilt	0120M	1:8.3	0.022	1.159	0.025	
836.60	190	GSM 850	GSM	33.5	32.86	0.05	Left	Cheek	0120M	1:8.3	0.041	1.159	0.048	A4
836.60	190	GSM 850	GSM	33.5	32.86	0.11	Left	Tilt	0120M	1:8.3	0.023	1.159	0.027	
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	30.5	29.74	0.07	Right	Cheek	0116M	1:8.3	0.047	1.191	0.056	A5
1880.00	661	GSM 1900	GSM	30.5	29.74	-0.18	Right	Tilt	0116M	1:8.3	0.032	1.191	0.038	
1880.00	661	GSM 1900	GSM	30.5	29.74	-0.14	Left	Cheek	0116M	1:8.3	0.036	1.191	0.043	
1880.00	661	GSM 1900	GSM	30.5	29.74	0.19	Left	Tilt	0116M	1:8.3	0.032	1.191	0.038	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram							

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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	Antenna 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	25.8	25.20	-0.09	Right	Cheek	41	0120M	1:1	0.097	1.148	0.111	
836.60	4183	UMTS 850	RMC	25.8	25.20	-0.09	Right	Tilt	41	0120M	1:1	0.068	1.148	0.078	
836.60	4183	UMTS 850	RMC	25.8	25.20	0.12	Left	Cheek	41	0120M	1:1	0.142	1.148	0.163	A6
836.60	4183	UMTS 850	RMC	25.8	25.20	-0.11	Left	Tilt	41	0120M	1:1	0.080	1.148	0.092	
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	Antenna 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	23.89	0.07	Right	Cheek	108	0116M	1:1	0.129	1.151	0.148	A7
1732.40	1412	UMTS 1750	RMC	24.5	23.89	0.06	Right	Tilt	108	0116M	1:1	0.091	1.151	0.105	
1732.40	1412	UMTS 1750	RMC	24.5	23.89	0.04	Left	Cheek	108	0116M	1:1	0.097	1.151	0.112	
1732.40	1412	UMTS 1750	RMC	24.5	23.89	0.12	Left	Tilt	108	0116M	1:1	0.106	1.151	0.122	
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	Antenna 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	24.0	23.34	0.19	Right	Cheek	26	0116M	1:1	0.094	1.164	0.109	A8
1880.00	9400	UMTS 1900	RMC	24.0	23.34	0.04	Right	Tilt	26	0116M	1:1	0.055	1.164	0.064	
1880.00	9400	UMTS 1900	RMC	24.0	23.34	0.13	Left	Cheek	26	0116M	1:1	0.070	1.164	0.081	
1880.00	9400	UMTS 1900	RMC	24.0	23.34	0.08	Left	Tilt	26	0116M	1:1	0.070	1.164	0.081	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

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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	Antenna 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	25.8	25.17	0.13	0	Right	Cheek	19	QPSK	1	0	0061M	1:1	0.078	1.156	0.090	
680.50	133297	Mid	LTE Band 71	20	24.8	24.20	0.19	1	Right	Cheek	19	QPSK	50	0	0061M	1:1	0.064	1.148	0.073	
680.50	133297	Mid	LTE Band 71	20	25.8	25.17	0.13	0	Right	Tilt	19	QPSK	1	0	0061M	1:1	0.039	1.156	0.045	
680.50	133297	Mid	LTE Band 71	20	24.8	24.20	0.10	1	Right	Tilt	19	QPSK	50	0	0061M	1:1	0.033	1.148	0.038	
680.50	133297	Mid	LTE Band 71	20	25.8	25.17	0.08	0	Left	Cheek	19	QPSK	1	0	0061M	1:1	0.106	1.156	0.123	A9
680.50	133297	Mid	LTE Band 71	20	24.8	24.20	0.11	1	Left	Cheek	19	QPSK	50	0	0061M	1:1	0.091	1.148	0.104	
680.50	133297	Mid	LTE Band 71	20	25.8	25.17	-0.19	0	Left	Tilt	19	QPSK	1	0	0061M	1:1	0.047	1.156	0.054	
680.50	133297	Mid	LTE Band 71	20	24.8	24.20	0.00	1	Left	Tilt	19	QPSK	50	0	0061M	1:1	0.036	1.148	0.041	
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	Antenna 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	25.23	0.09	0	Right	Cheek	1	QPSK	1	0	0061M	1:1	0.087	1.140	0.099	
707.50	23095	Mid	LTE Band 12	10	24.8	24.31	0.15	1	Right	Cheek	1	QPSK	25	12	0061M	1:1	0.082	1.119	0.092	
707.50	23095	Mid	LTE Band 12	10	25.8	25.23	-0.16	0	Right	Tilt	1	QPSK	1	0	0061M	1:1	0.046	1.140	0.052	
707.50	23095	Mid	LTE Band 12	10	24.8	24.31	-0.05	1	Right	Tilt	1	QPSK	25	12	0061M	1:1	0.044	1.119	0.049	
707.50	23095	Mid	LTE Band 12	10	25.8	25.23	0.08	0	Left	Cheek	1	QPSK	1	0	0061M	1:1	0.111	1.140	0.127	A10
707.50	23095	Mid	LTE Band 12	10	24.8	24.31	0.08	1	Left	Cheek	1	QPSK	25	12	0061M	1:1	0.095	1.119	0.106	
707.50	23095	Mid	LTE Band 12	10	25.8	25.23	0.02	0	Left	Tilt	1	QPSK	1	0	0061M	1:1	0.048	1.140	0.055	
707.50	23095	Mid	LTE Band 12	10	24.8	24.31	0.04	1	Left	Tilt	1	QPSK	25	12	0061M	1:1	0.042	1.119	0.047	
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	Antenna 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	25.21	0.09	0	Right	Cheek	112	QPSK	1	25	0122M	1:1	0.127	1.146	0.146	
782.00	23230	Mid	LTE Band 13	10	24.8	24.28	0.09	1	Right	Cheek	112	QPSK	25	0	0122M	1:1	0.107	1.127	0.121	
782.00	23230	Mid	LTE Band 13	10	25.8	25.21	-0.05	0	Right	Tilt	112	QPSK	1	25	0122M	1:1	0.095	1.146	0.109	
782.00	23230	Mid	LTE Band 13	10	24.8	24.28	-0.13	1	Right	Tilt	112	QPSK	25	0	0122M	1:1	0.071	1.127	0.080	
782.00	23230	Mid	LTE Band 13	10	25.8	25.21	-0.01	0	Left	Cheek	112	QPSK	1	25	0122M	1:1	0.213	1.146	0.244	A11
782.00	23230	Mid	LTE Band 13	10	24.8	24.28	0.02	1	Left	Cheek	112	QPSK	25	0	0122M	1:1	0.151	1.127	0.170	
782.00	23230	Mid	LTE Band 13	10	25.8	25.21	0.06	0	Left	Tilt	112	QPSK	1	25	0122M	1:1	0.098	1.146	0.112	
782.00	23230	Mid	LTE Band 13	10	24.8	24.28	-0.03	1	Left	Tilt	112	QPSK	25	0	0122M	1:1	0.073	1.127	0.082	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram										

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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	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
793.00	23330	Mid	LTE Band 14	10	25.8	25.06	0.09	0	Right	Cheek	52	QPSK	1	0	0061M	1:1	0.128	1.186	0.152	
793.00	23330	Mid	LTE Band 14	10	24.8	24.07	-0.14	1	Right	Cheek	52	QPSK	25	25	0061M	1:1	0.091	1.183	0.108	
793.00	23330	Mid	LTE Band 14	10	25.8	25.06	-0.14	0	Right	Tilt	52	QPSK	1	0	0061M	1:1	0.090	1.186	0.107	
793.00	23330	Mid	LTE Band 14	10	24.8	24.07	-0.08	1	Right	Tilt	52	QPSK	25	25	0061M	1:1	0.061	1.183	0.072	
793.00	23330	Mid	LTE Band 14	10	25.8	25.06	-0.02	0	Left	Cheek	52	QPSK	1	0	0061M	1:1	0.158	1.186	0.187	A12
793.00	23330	Mid	LTE Band 14	10	24.8	24.07	-0.02	1	Left	Cheek	52	QPSK	25	25	0061M	1:1	0.136	1.183	0.161	
793.00	23330	Mid	LTE Band 14	10	25.8	25.06	0.07	0	Left	Tilt	52	QPSK	1	0	0061M	1:1	0.080	1.186	0.095	
793.00	23330	Mid	LTE Band 14	10	24.8	24.07	0.11	1	Left	Tilt	52	QPSK	25	25	0061M	1:1	0.061	1.183	0.072	
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	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.25	0.10	0	Right	Cheek	66	QPSK	1	36	0061M	1:1	0.111	1.135	0.126	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.24	0.07	1	Right	Cheek	66	QPSK	36	18	0061M	1:1	0.088	1.138	0.100	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.25	0.06	0	Right	Tilt	66	QPSK	1	36	0061M	1:1	0.078	1.135	0.089	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.24	0.15	1	Right	Tilt	66	QPSK	36	18	0061M	1:1	0.061	1.138	0.069	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.25	0.04	0	Left	Cheek	66	QPSK	1	36	0061M	1:1	0.147	1.135	0.167	A13
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.24	0.01	1	Left	Cheek	66	QPSK	36	18	0061M	1:1	0.122	1.138	0.139	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.25	-0.07	0	Left	Tilt	66	QPSK	1	36	0061M	1:1	0.087	1.135	0.099	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.24	0.06	1	Left	Tilt	66	QPSK	36	18	0061M	1:1	0.069	1.138	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 11-14
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	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.15	-0.04	0	Right	Cheek	66	QPSK	1	0	0086M	1:1	0.108	1.161	0.125	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	24.16	0.15	1	Right	Cheek	66	QPSK	25	12	0086M	1:1	0.094	1.159	0.109	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.15	0.06	0	Right	Tilt	66	QPSK	1	0	0086M	1:1	0.096	1.161	0.111	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	24.16	-0.03	1	Right	Tilt	66	QPSK	25	12	0086M	1:1	0.078	1.159	0.090	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.15	0.10	0	Left	Cheek	66	QPSK	1	0	0086M	1:1	0.159	1.161	0.185	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	24.16	0.12	1	Left	Cheek	66	QPSK	25	12	0086M	1:1	0.122	1.159	0.141	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.35	0.04	0	Left	Cheek	66	QPSK	1	0	0086M	1:1	0.167	1.109	0.185	A14
	SCC	829.30	20453	Mid	LTE Band 5 (Cell)	5								QPSK	1	24						
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.15	-0.11	0	Left	Tilt	66	QPSK	1	0	0086M	1:1	0.090	1.161	0.104	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	24.16	0.11	1	Left	Tilt	66	QPSK	25	12	0086M	1:1	0.074	1.159	0.086	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Head 1.6 W/kg (mW/g) averaged over 1 gram					

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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	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	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	24.5	23.68	-0.01	0	Right	Cheek	108	QPSK	1	50	0071M	1:1	0.119	1.208	0.144	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.5	23.50	-0.12	0	Right	Cheek	108	QPSK	1	99	0071M	1:1	0.117	1.259	0.147	
1 CC Uplink	N/A	1715.00	132022	Low	LTE Band 66 (AWS)	10	24.5	23.61	0.01	0	Right	Cheek	108	QPSK	1	49	0071M	1:1	0.110	1.227	0.135	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.91	0.08	1	Right	Cheek	108	QPSK	50	25	0071M	1:1	0.101	1.146	0.116	
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.5	24.15	-0.13	0	Right	Cheek	108	QPSK	1	99	0071M	1:1	0.131	1.084	0.142	A15
	SCC	1739.80	132270	Low	LTE Band 66 (AWS)	20								QPSK	1	0						
2 CC Uplink CA_66B	PCC	1715.00	132022	Low	LTE Band 66 (AWS)	10	24.5	24.13	0.19	0	Right	Cheek	108	QPSK	1	49	0071M	1:1	0.128	1.089	0.139	
	SCC	1724.90	132121	Low	LTE Band 66 (AWS)	10								QPSK	1	0						
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.5	23.68	0.14	0	Right	Tilt	108	QPSK	1	50	0071M	1:1	0.086	1.208	0.104	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.91	0.19	1	Right	Tilt	108	QPSK	50	25	0071M	1:1	0.073	1.146	0.084	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.5	23.68	0.07	0	Left	Cheek	108	QPSK	1	50	0071M	1:1	0.102	1.208	0.123	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.91	0.11	1	Left	Cheek	108	QPSK	50	25	0071M	1:1	0.078	1.146	0.089	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.5	23.68	0.17	0	Left	Tilt	108	QPSK	1	50	0071M	1:1	0.099	1.208	0.120	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.91	0.02	1	Left	Tilt	108	QPSK	50	25	0071M	1:1	0.075	1.146	0.086	
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	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.75	0.15	0	Right	Cheek	109	QPSK	1	50	0121M	1:1	0.111	1.189	0.132	A16
1860.00	26140	Low	LTE Band 25 (PCS)	20	23.5	22.82	0.02	1	Right	Cheek	109	QPSK	50	0	0121M	1:1	0.097	1.169	0.113	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.75	0.14	0	Right	Tilt	109	QPSK	1	50	0121M	1:1	0.078	1.189	0.093	
1860.00	26140	Low	LTE Band 25 (PCS)	20	23.5	22.82	0.15	1	Right	Tilt	109	QPSK	50	0	0121M	1:1	0.059	1.169	0.069	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.75	0.04	0	Left	Cheek	109	QPSK	1	50	0121M	1:1	0.083	1.189	0.099	
1860.00	26140	Low	LTE Band 25 (PCS)	20	23.5	22.82	0.08	1	Left	Cheek	109	QPSK	50	0	0121M	1:1	0.077	1.169	0.090	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.75	0.15	0	Left	Tilt	109	QPSK	1	50	0121M	1:1	0.074	1.189	0.088	
1860.00	26140	Low	LTE Band 25 (PCS)	20	23.5	22.82	0.11	1	Left	Tilt	109	QPSK	50	0	0121M	1:1	0.064	1.169	0.075	
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 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) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
2310.00	27710	Mid	LTE Band 30	10	24.0	23.58	-0.18	0	Right	Cheek	QPSK	1	49	0060M	1:1	0.046	1.102	0.051	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.63	0.14	1	Right	Cheek	QPSK	25	12	0060M	1:1	0.040	1.089	0.044	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.58	0.11	0	Right	Tilt	QPSK	1	49	0060M	1:1	0.020	1.102	0.022	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.63	-0.10	1	Right	Tilt	QPSK	25	12	0060M	1:1	0.016	1.089	0.017	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.58	-0.04	0	Left	Cheek	QPSK	1	49	0060M	1:1	0.050	1.102	0.055	A17
2310.00	27710	Mid	LTE Band 30	10	23.0	22.63	0.13	1	Left	Cheek	QPSK	25	12	0060M	1:1	0.039	1.089	0.042	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.58	-0.10	0	Left	Tilt	QPSK	1	49	0060M	1:1	0.029	1.102	0.032	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.63	0.10	1	Left	Tilt	QPSK	25	12	0060M	1:1	0.027	1.089	0.029	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram						

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Table 11-18
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	23.17	-0.02	0	Right	Cheek	QPSK	1	0	0090M	1:1	0.106	1.211	0.128	A18
2510.00	20850	Low	LTE Band 7	20	23.0	22.22	0.13	1	Right	Cheek	QPSK	50	0	0090M	1:1	0.092	1.197	0.110	
2510.00	20850	Low	LTE Band 7	20	24.0	23.17	0.19	0	Right	Tilt	QPSK	1	0	0090M	1:1	0.048	1.211	0.058	
2510.00	20850	Low	LTE Band 7	20	23.0	22.22	0.04	1	Right	Tilt	QPSK	50	0	0090M	1:1	0.034	1.197	0.041	
2510.00	20850	Low	LTE Band 7	20	24.0	23.17	0.16	0	Left	Cheek	QPSK	1	0	0090M	1:1	0.071	1.211	0.086	
2510.00	20850	Low	LTE Band 7	20	23.0	22.22	0.12	1	Left	Cheek	QPSK	50	0	0090M	1:1	0.052	1.197	0.062	
2510.00	20850	Low	LTE Band 7	20	24.0	23.17	-0.02	0	Left	Tilt	QPSK	1	0	0090M	1:1	0.072	1.211	0.087	
2510.00	20850	Low	LTE Band 7	20	23.0	22.22	0.07	1	Left	Tilt	QPSK	50	0	0090M	1:1	0.069	1.197	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 11-19
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	3646.70	56207	Mid-High	LTE Band 48	20	19.0	18.40	-0.09	0	Right	Cheek	QPSK	1	50	1184M	1:1.58	0.331	1.148	0.380	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.0	18.58	0.02	0	Right	Cheek	QPSK	50	25	1184M	1:1.58	0.337	1.102	0.371	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.0	18.40	-0.02	0	Right	Tilt	QPSK	1	50	1184M	1:1.58	0.427	1.148	0.490	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.0	18.45	-0.01	0	Right	Tilt	QPSK	50	0	1184M	1:1.58	0.438	1.135	0.497	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.0	18.58	0.08	0	Right	Tilt	QPSK	50	25	1184M	1:1.58	0.449	1.102	0.495	
2 CC Uplink	PCC	3646.70	56207	Mid-High	LTE Band 48	20	19.0	18.77	0.06	0	Right	Tilt	QPSK	50	0	1184M	1:1.58	0.479	1.054	**0.505**	A19
	SCC	3626.90	56009	Mid-High	LTE Band 48	20							QPSK	50	50						
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.0	18.40	0.02	0	Left	Cheek	QPSK	1	50	1184M	1:1.58	0.094	1.148	0.108	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.0	18.58	0.16	0	Left	Cheek	QPSK	50	25	1184M	1:1.58	0.097	1.102	0.107	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.0	18.40	-0.03	0	Left	Tilt	QPSK	1	50	1184M	1:1.58	0.106	1.148	0.122	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	19.0	18.58	0.13	0	Left	Tilt	QPSK	50	25	1184M	1:1.58	0.105	1.102	0.116	
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 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	2506.00	39750	Low	LTE Band 41	20	25.0	24.11	0.21	0	Right	Cheek	QPSK	1	99	0085M	1:1.58	0.052	1.227	0.064	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.0	23.23	0.08	1	Right	Cheek	QPSK	50	25	0085M	1:1.58	0.043	1.194	0.051	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	25.0	24.11	0.19	0	Right	Tilt	QPSK	1	99	0085M	1:1.58	0.028	1.227	0.034	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.0	23.23	-0.20	1	Right	Tilt	QPSK	50	25	0085M	1:1.58	0.021	1.194	0.025	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	25.0	24.11	0.15	0	Left	Cheek	QPSK	1	99	0085M	1:1.58	0.055	1.227	0.067	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.0	23.23	0.17	1	Left	Cheek	QPSK	50	25	0085M	1:1.58	0.040	1.194	0.048	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	27.5	26.72	0.17	0	Left	Cheek	QPSK	1	99	0085M	1:2.31	0.073	1.197	0.087	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	LTE Band 41	20	25.0	24.41	0.13	0	Left	Cheek	QPSK	1	99	0085M	1:1.58	0.056	1.146	0.064	
	SCC	2525.80	39948	Low	LTE Band 41	20							QPSK	1	0	0085M					
2 CC Uplink - Power Class 2	PCC	2506.00	39750	Low	LTE Band 41	20	27.5	27.15	0.21	0	Left	Cheek	QPSK	1	99	0085M	1:2.31	0.077	1.084	0.083	A20
	SCC	2525.80	39948	Low	LTE Band 41	20							QPSK	1	0	0085M					
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	25.0	24.11	0.17	0	Left	Tilt	QPSK	1	99	0085M	1:1.58	0.048	1.227	0.059	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.0	23.23	0.15	1	Left	Tilt	QPSK	50	25	0085M	1:1.58	0.041	1.194	0.049	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Head 1.6 W/kg (mW/g) averaged over 1 gram										

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Table 11-21
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	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
680.50	136100	Mid	NR Band n71	20	25.5	25.05	-0.02	0	Right	Cheek	19	DFT-S-OFDM QPSK	1	53	0070M	1:1	0.083	1.109	0.092	
680.50	136100	Mid	NR Band n71	20	25.5	24.66	0.10	0	Right	Cheek	19	DFT-S-OFDM QPSK	50	28	0070M	1:1	0.083	1.213	0.101	
680.50	136100	Mid	NR Band n71	20	25.5	25.05	0.10	0	Right	Tilt	19	DFT-S-OFDM QPSK	1	53	0070M	1:1	0.043	1.109	0.048	
680.50	136100	Mid	NR Band n71	20	25.5	24.66	0.10	0	Right	Tilt	19	DFT-S-OFDM QPSK	50	28	0070M	1:1	0.046	1.213	0.056	
680.50	136100	Mid	NR Band n71	20	25.5	25.05	0.10	0	Left	Cheek	19	DFT-S-OFDM QPSK	1	53	0070M	1:1	0.112	1.109	0.124	A21
680.50	136100	Mid	NR Band n71	20	25.5	24.66	0.06	0	Left	Cheek	19	DFT-S-OFDM QPSK	50	28	0070M	1:1	0.105	1.213	0.127	
680.50	136100	Mid	NR Band n71	20	24.0	23.41	0.16	1.5	Left	Cheek	19	CP-OFDM QPSK	1	1	0070M	1:1	0.068	1.146	0.078	
680.50	136100	Mid	NR Band n71	20	25.5	25.05	0.05	0	Left	Tilt	19	DFT-S-OFDM QPSK	1	53	0070M	1:1	0.049	1.109	0.054	
680.50	136100	Mid	NR Band n71	20	25.5	24.66	0.12	0	Left	Tilt	19	DFT-S-OFDM QPSK	50	28	0070M	1:1	0.047	1.213	0.057	
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 n12 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
707.50	141500	Mid	NR Band n12	15	25.5	24.78	0.08	0	Right	Cheek	1	DFT-S-OFDM QPSK	1	77	0095M	1:1	0.080	1.180	0.094	
707.50	141500	Mid	NR Band n12	15	25.5	24.54	0.12	0	Right	Cheek	1	DFT-S-OFDM QPSK	36	22	0095M	1:1	0.095	1.247	0.118	
707.50	141500	Mid	NR Band n12	15	25.5	24.78	0.13	0	Right	Tilt	1	DFT-S-OFDM QPSK	1	77	0095M	1:1	0.041	1.180	0.048	
707.50	141500	Mid	NR Band n12	15	25.5	24.54	0.14	0	Right	Tilt	1	DFT-S-OFDM QPSK	36	22	0095M	1:1	0.051	1.247	0.064	
707.50	141500	Mid	NR Band n12	15	25.5	24.78	0.13	0	Left	Cheek	1	DFT-S-OFDM QPSK	1	77	0095M	1:1	0.110	1.180	0.130	A22
707.50	141500	Mid	NR Band n12	15	25.5	24.54	0.08	0	Left	Cheek	1	DFT-S-OFDM QPSK	36	22	0095M	1:1	0.104	1.247	0.130	
707.50	141500	Mid	NR Band n12	15	24.0	22.95	0.12	1.5	Left	Cheek	1	CP-OFDM QPSK	1	1	0095M	1:1	0.053	1.274	0.068	
707.50	141500	Mid	NR Band n12	15	25.5	24.78	0.16	0	Left	Tilt	1	DFT-S-OFDM QPSK	1	77	0095M	1:1	0.043	1.180	0.051	
707.50	141500	Mid	NR Band n12	15	25.5	24.54	0.15	0	Left	Tilt	1	DFT-S-OFDM QPSK	36	22	0095M	1:1	0.048	1.247	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 11-23
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	Antenna State	Modulation	RB Size	RB Offset	Device Serial Number	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	25.06	0.03	0	Right	Cheek	66	DFT-S-OFDM QPSK	1	53	0089M	1:1	0.111	1.107	0.123	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.67	0.12	0	Right	Cheek	66	DFT-S-OFDM QPSK	50	28	0089M	1:1	0.107	1.211	0.130	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	25.06	0.12	0	Right	Tilt	66	DFT-S-OFDM QPSK	1	53	0089M	1:1	0.090	1.107	0.100	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.67	0.10	0	Right	Tilt	66	DFT-S-OFDM QPSK	50	28	0089M	1:1	0.082	1.211	0.099	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	25.06	0.12	0	Left	Cheek	66	DFT-S-OFDM QPSK	1	53	0089M	1:1	0.161	1.107	0.178	A23
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.67	0.04	0	Left	Cheek	66	DFT-S-OFDM QPSK	50	28	0089M	1:1	0.149	1.211	0.180	
836.50	167300	Mid	NR Band n5 (Cell)	20	24.0	23.04	-0.14	1.5	Left	Cheek	66	CP-OFDM QPSK	1	1	0089M	1:1	0.104	1.247	0.130	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	25.06	0.03	0	Left	Tilt	66	DFT-S-OFDM QPSK	1	53	0089M	1:1	0.086	1.107	0.095	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.67	0.06	0	Left	Tilt	66	DFT-S-OFDM QPSK	50	28	0089M	1:1	0.087	1.211	0.105	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram							

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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	Antenna 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)	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.93	0.14	0	Right	Cheek	108	DFT-S-OFDM QPSK	1	53	0066M	1:1	0.120	1.140	0.137	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.67	0.21	0	Right	Cheek	108	DFT-S-OFDM QPSK	50	28	0066M	1:1	0.120	1.211	0.145	A24
1745.00	349000	Mid	NR Band n66 (AWS)	20	23.0	22.12	0.20	1.5	Right	Cheek	108	CP-OFDM QPSK	1	1	0066M	1:1	0.077	1.225	0.094	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.93	0.16	0	Right	Tilt	108	DFT-S-OFDM QPSK	1	53	0066M	1:1	0.091	1.140	0.104	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.67	0.15	0	Right	Tilt	108	DFT-S-OFDM QPSK	50	28	0066M	1:1	0.085	1.211	0.103	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.93	0.19	0	Left	Cheek	108	DFT-S-OFDM QPSK	1	53	0066M	1:1	0.107	1.140	0.122	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.67	0.17	0	Left	Cheek	108	DFT-S-OFDM QPSK	50	28	0066M	1:1	0.098	1.211	0.119	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.93	0.18	0	Left	Tilt	108	DFT-S-OFDM QPSK	1	53	0066M	1:1	0.097	1.140	0.111	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.67	0.15	0	Left	Tilt	108	DFT-S-OFDM QPSK	50	28	0066M	1:1	0.089	1.211	0.108	
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 11-25
NR Band n25 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Side	Test Position	Antenna 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)	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.13	0	Right	Cheek	109	DFT-S-OFDM QPSK	1	53	0065M	1:1	0.124	1.146	0.142	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.18	0	Right	Cheek	109	DFT-S-OFDM QPSK	50	28	0065M	1:1	0.129	1.146	0.148	A25
1905.00	381000	High	NR Band n25 (PCS)	20	23.0	22.31	0.21	1.5	Right	Cheek	109	CP-OFDM QPSK	1	1	0065M	1:1	0.090	1.172	0.105	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.10	0	Right	Tilt	109	DFT-S-OFDM QPSK	1	53	0065M	1:1	0.058	1.146	0.066	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.10	0	Right	Tilt	109	DFT-S-OFDM QPSK	50	28	0065M	1:1	0.051	1.146	0.058	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.15	0	Left	Cheek	109	DFT-S-OFDM QPSK	1	53	0065M	1:1	0.099	1.146	0.113	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.02	0	Left	Cheek	109	DFT-S-OFDM QPSK	50	28	0065M	1:1	0.091	1.146	0.104	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.17	0	Left	Tilt	109	DFT-S-OFDM QPSK	1	53	0065M	1:1	0.101	1.146	0.116	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.19	0	Left	Tilt	109	DFT-S-OFDM QPSK	50	28	0065M	1:1	0.098	1.146	0.112	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram							

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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	23.5	22.91	-0.03	0	Right	Cheek	DFT-S-OFDM QPSK	1	1	1187M	1:4	0.511	1.146	0.586	
2592.99	518598	Mid	NR Band n41	100	23.5	22.87	0.03	0	Right	Cheek	DFT-S-OFDM QPSK	135	0	1187M	1:4	0.467	1.156	0.540	
2592.99	518598	Mid	NR Band n41	100	23.5	22.91	-0.07	0	Right	Tilt	DFT-S-OFDM QPSK	1	1	1187M	1:4	0.682	1.146	**0.782**	A6
2592.99	518598	Mid	NR Band n41	100	23.5	22.87	-0.03	0	Right	Tilt	DFT-S-OFDM QPSK	135	0	1187M	1:4	0.580	1.156	0.670	
2592.99	518598	Mid	NR Band n41	100	23.5	22.87	0.02	0	Right	Tilt	CP-OFDM QPSK	1	1	1187M	1:4	0.501	1.156	0.579	
2592.99	518598	Mid	NR Band n41	100	23.5	22.82	-0.13	0	Right	Tilt	DFT-S-OFDM QPSK	270	0	1187M	1:4	0.590	1.169	0.690	
2592.99	518598	Mid	NR Band n41	100	23.5	22.91	0.10	0	Left	Cheek	DFT-S-OFDM QPSK	1	1	1187M	1:4	0.547	1.146	0.627	
2592.99	518598	Mid	NR Band n41	100	23.5	22.87	0.05	0	Left	Cheek	DFT-S-OFDM QPSK	135	0	1187M	1:4	0.487	1.156	0.563	
2592.99	518598	Mid	NR Band n41	100	23.5	22.82	0.13	0	Left	Cheek	DFT-S-OFDM QPSK	270	0	1187M	1:4	0.477	1.169	0.558	
2592.99	518598	Mid	NR Band n41	100	23.5	22.91	-0.02	0	Left	Tilt	DFT-S-OFDM QPSK	1	1	1187M	1:4	0.627	1.146	0.719	
2592.99	518598	Mid	NR Band n41	100	23.5	22.87	0.05	0	Left	Tilt	DFT-S-OFDM QPSK	135	0	1187M	1:4	0.609	1.156	0.704	
2592.99	518598	Mid	NR Band n41	100	23.5	22.82	-0.01	0	Left	Tilt	DFT-S-OFDM QPSK	270	0	1187M	1:4	0.518	1.169	0.606	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram					

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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	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)	
2412	1	802.11b	DSSS	22	16.0	15.99	0.16	Right	Cheek	1	0704M	1	99.9	0.605	-	1.002	1.001	-	
2412	1	802.11b	DSSS	22	16.0	15.99	0.10	Right	Tilt	1	0704M	1	99.9	1.099	0.650	1.002	1.001	0.652	
2437	6	802.11b	DSSS	22	16.0	15.76	0.14	Right	Tilt	1	0704M	1	99.9	1.458	0.786	1.057	1.001	**0.832**	A27
2462	11	802.11b	DSSS	22	16.0	15.15	0.19	Right	Tilt	1	0704M	1	99.9	1.001	0.568	1.216	1.001	0.691	
2412	1	802.11b	DSSS	22	16.0	15.99	0.15	Left	Cheek	1	0704M	1	99.9	0.674	-	1.002	1.001	-	
2412	1	802.11b	DSSS	22	16.0	15.99	0.20	Left	Tilt	1	0704M	1	99.9	0.806	0.465	1.002	1.001	0.466	
2437	6	802.11b	DSSS	22	16.0	15.98	0.19	Right	Cheek	2	0704M	1	99.0	0.014	-	1.005	1.010	-	
2437	6	802.11b	DSSS	22	16.0	15.98	0.19	Right	Tilt	2	0704M	1	99.0	0.020	-	1.005	1.010	-	
2437	6	802.11b	DSSS	22	16.0	15.98	0.19	Left	Cheek	2	0704M	1	99.0	0.021	-	1.005	1.010	-	
2437	6	802.11b	DSSS	22	16.0	15.98	0.21	Left	Tilt	2	0704M	1	99.0	0.037	0.024	1.005	1.010	0.024	
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
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)	
5290	58	802.11ac	OFDM	80	13.0	12.97	0.00	Right	Cheek	1	0704M	29.3	93.9	0.064	0.021	1.007	1.065	0.023	
5290	58	802.11ac	OFDM	80	13.0	12.97	0.00	Right	Tilt	1	0704M	29.3	93.9	0.042	-	1.007	1.065	-	
5290	58	802.11ac	OFDM	80	13.0	12.97	0.00	Left	Cheek	1	0704M	29.3	93.9	0.009	-	1.007	1.065	-	
5290	58	802.11ac	OFDM	80	13.0	12.97	0.00	Left	Tilt	1	0704M	29.3	93.9	0.009	-	1.007	1.065	-	
5290	58	802.11ac	OFDM	80	13.0	12.83	0.00	Right	Cheek	2	0704M	29.3	94.8	0.049	0.015	1.040	1.055	0.016	
5290	58	802.11ac	OFDM	80	13.0	12.83	0.00	Right	Tilt	2	0704M	29.3	94.8	0.026	-	1.040	1.055	-	
5290	58	802.11ac	OFDM	80	13.0	12.83	0.00	Left	Cheek	2	0704M	29.3	94.8	0.009	-	1.040	1.055	-	
5290	58	802.11ac	OFDM	80	13.0	12.83	0.00	Left	Tilt	2	0704M	29.3	94.8	0.013	-	1.040	1.055	-	
5690	138	802.11ac	OFDM	80	13.0	12.61	0.18	Right	Cheek	1	0704M	29.3	93.9	0.086	0.017	1.094	1.065	0.020	
5690	138	802.11ac	OFDM	80	13.0	12.61	0.13	Right	Tilt	1	0704M	29.3	93.9	0.063	-	1.094	1.065	-	
5690	138	802.11ac	OFDM	80	13.0	12.61	0.00	Left	Cheek	1	0704M	29.3	93.9	0.014	-	1.094	1.065	-	
5690	138	802.11ac	OFDM	80	13.0	12.61	0.00	Left	Tilt	1	0704M	29.3	93.9	0.011	-	1.094	1.065	-	
5690	138	802.11ac	OFDM	80	13.0	12.62	0.00	Right	Cheek	2	0704M	29.3	94.8	0.055	0.016	1.091	1.055	0.018	
5690	138	802.11ac	OFDM	80	13.0	12.62	0.00	Right	Tilt	2	0704M	29.3	94.8	0.027	-	1.091	1.055	-	
5690	138	802.11ac	OFDM	80	13.0	12.62	0.00	Left	Cheek	2	0704M	29.3	94.8	0.023	-	1.091	1.055	-	
5690	138	802.11ac	OFDM	80	13.0	12.62	0.00	Left	Tilt	2	0704M	29.3	94.8	0.028	-	1.091	1.055	-	
5775	155	802.11ac	OFDM	80	13.0	12.74	0.01	Right	Cheek	1	0704M	29.3	93.9	0.114	0.039	1.062	1.065	**0.044**	A28
5775	155	802.11ac	OFDM	80	13.0	12.74	0.00	Right	Tilt	1	0704M	29.3	93.9	0.075	-	1.062	1.065	-	
5775	155	802.11ac	OFDM	80	13.0	12.74	0.00	Left	Cheek	1	0704M	29.3	93.9	0.019	-	1.062	1.065	-	
5775	155	802.11ac	OFDM	80	13.0	12.74	0.00	Left	Tilt	1	0704M	29.3	93.9	0.016	-	1.062	1.065	-	
5775	155	802.11ac	OFDM	80	13.0	12.88	0.00	Right	Cheek	2	0704M	29.3	94.8	0.034	0.015	1.028	1.055	0.016	
5775	155	802.11ac	OFDM	80	13.0	12.88	0.00	Right	Tilt	2	0704M	29.3	94.8	0.022	-	1.028	1.055	-	
5775	155	802.11ac	OFDM	80	13.0	12.88	0.00	Left	Cheek	2	0704M	29.3	94.8	0.013	-	1.028	1.055	-	
5775	155	802.11ac	OFDM	80	13.0	12.88	0.00	Left	Tilt	2	0704M	29.3	94.8	0.013	-	1.028	1.055	-	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**														**Head** **1.6 W/kg (mW/g)** averaged over 1 gram					

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Table 11-29
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)	
2480.00	78	Bluetooth	FHSS	16.5	16.26	-0.01	Right	Cheek	1175M	1	77.3	0.300	1.057	1.294	0.410	
2402.00	0	Bluetooth	FHSS	16.5	14.69	0.09	Right	Tilt	1175M	1	77.3	0.197	1.517	1.294	0.387	
2441.00	39	Bluetooth	FHSS	16.5	15.69	-0.18	Right	Tilt	1175M	1	77.3	0.289	1.205	1.294	0.451	
2480.00	78	Bluetooth	FHSS	16.5	16.26	0.19	Right	Tilt	1175M	1	77.3	0.432	1.057	1.294	**0.591**	A29
2480.00	78	Bluetooth	FHSS	16.5	16.26	0.09	Left	Cheek	1175M	1	77.3	0.317	1.057	1.294	0.434	
2480.00	78	Bluetooth	FHSS	16.5	16.26	0.10	Left	Tilt	1175M	1	77.3	0.384	1.057	1.294	0.525	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**							**Head** **1.6 W/kg (mW/g)** averaged over 1 gram									

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11.2 Standalone Body-Worn SAR Data

Table 11-30
GSM/UMTS/CDMA Body-Worn SAR Data

MEASUREMENT RESULTS																
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna 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)	TDSO / SO32	26.0	24.69	-0.01	15 mm	27	0120M	N/A	1:1	back	0.349	1.352	0.472	A30
836.52	384	CDMA BC0 (§22H)	TDSO / SO32	25.8	24.92	0.00	15 mm	27	0120M	N/A	1:1	back	0.335	1.225	0.410	A32
1851.25	25	PCS CDMA	TDSO / SO32	24.0	23.59	-0.02	15 mm	35	0100M	N/A	1:1	back	0.604	1.099	0.664	
1880.00	600	PCS CDMA	TDSO / SO32	24.0	23.36	-0.02	15 mm	35	0100M	N/A	1:1	back	0.585	1.159	0.678	
1908.75	1175	PCS CDMA	TDSO / SO32	24.0	23.82	-0.04	15 mm	35	0100M	N/A	1:1	back	0.656	1.042	0.684	A34
836.60	190	GSM 850	GSM	33.5	32.86	-0.02	15 mm	N/A	0120M	1	1:8.3	back	0.238	1.159	0.276	A36
1880.00	661	GSM 1900	GSM	30.5	29.74	0.02	15 mm	N/A	0100M	1	1:8.3	back	0.334	1.191	0.398	A38
836.60	4183	UMTS 850	RMC	25.8	25.20	-0.01	15 mm	27	0120M	N/A	1:1	back	0.324	1.148	0.372	A40
1712.40	1312	UMTS 1750	RMC	24.5	23.91	-0.03	15 mm	9	0100M	N/A	1:1	back	0.618	1.146	0.708	
1732.40	1412	UMTS 1750	RMC	24.5	23.89	0.01	15 mm	9	0100M	N/A	1:1	back	0.690	1.151	0.794	A42
1752.60	1513	UMTS 1750	RMC	24.5	23.88	0.17	15 mm	9	0100M	N/A	1:1	back	0.610	1.153	0.703	
1852.40	9262	UMTS 1900	RMC	24.0	23.75	0.01	15 mm	109	0116M	N/A	1:1	back	0.586	1.059	0.621	
1880.00	9400	UMTS 1900	RMC	24.0	23.34	0.02	15 mm	109	0116M	N/A	1:1	back	0.661	1.164	0.769	
1907.60	9538	UMTS 1900	RMC	24.0	23.68	-0.02	15 mm	109	0116M	N/A	1:1	back	0.710	1.076	0.764	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									

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Table 11-31
LTE Body-Worn SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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	25.8	25.17	0.02	0	3	0122M	QPSK	1	0	15 mm	back	1:1	0.213	1.156	0.246	A46
680.50	133297	Mid	LTE Band 71	20	24.8	24.20	-0.03	1	3	0122M	QPSK	50	0	15 mm	back	1:1	0.185	1.148	0.212	
707.50	23095	Mid	LTE Band 12	10	25.8	25.23	0.02	0	108	0122M	QPSK	1	0	15 mm	back	1:1	0.220	1.140	0.251	A48
707.50	23095	Mid	LTE Band 12	10	24.8	24.31	0.03	1	108	0122M	QPSK	25	12	15 mm	back	1:1	0.183	1.119	0.205	
782.00	23230	Mid	LTE Band 13	10	25.8	25.21	-0.02	0	1	0061M	QPSK	1	25	15 mm	back	1:1	0.335	1.146	0.384	A50
782.00	23230	Mid	LTE Band 13	10	24.8	24.28	-0.05	1	1	0061M	QPSK	25	0	15 mm	back	1:1	0.306	1.127	0.345	
793.00	23330	Mid	LTE Band 14	10	25.8	25.06	-0.10	0	52	0122M	QPSK	1	0	15 mm	back	1:1	0.361	1.186	0.428	A52
793.00	23330	Mid	LTE Band 14	10	24.8	24.07	0.02	1	52	0122M	QPSK	25	25	15 mm	back	1:1	0.264	1.183	0.312	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.25	0.00	0	66	0061M	QPSK	1	36	15 mm	back	1:1	0.295	1.135	0.335	A54
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.24	0.02	1	66	0061M	QPSK	36	18	15 mm	back	1:1	0.237	1.138	0.270	
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.75	0.02	0	108	0060M	QPSK	1	50	15 mm	back	1:1	0.680	1.189	0.809	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	24.5	23.67	0.00	0	116	0060M	QPSK	1	50	15 mm	back	1:1	0.641	1.211	0.776	
1905.00	26590	High	LTE Band 25 (PCS)	20	24.5	23.66	-0.09	0	116	0060M	QPSK	1	99	15 mm	back	1:1	0.684	1.213	0.830	A60
1860.00	26140	Low	LTE Band 25 (PCS)	20	23.5	22.82	-0.04	1	108	0060M	QPSK	50	0	15 mm	back	1:1	0.548	1.169	0.641	
1905.00	26590	High	LTE Band 25 (PCS)	20	23.5	22.68	-0.04	1	116	0060M	QPSK	100	0	15 mm	back	1:1	0.550	1.208	0.664	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.58	-0.01	0	N/A	0060M	QPSK	1	49	15 mm	back	1:1	0.481	1.102	0.530	A62
2310.00	27710	Mid	LTE Band 30	10	23.0	22.63	-0.02	1	N/A	0060M	QPSK	25	12	15 mm	back	1:1	0.415	1.089	0.452	
2510.00	20850	Low	LTE Band 7	20	24.0	23.17	0.01	0	N/A	0090M	QPSK	1	0	15 mm	back	1:1	0.387	1.211	0.469	A64
2510.00	20850	Low	LTE Band 7	20	23.0	22.22	0.01	1	N/A	0090M	QPSK	50	0	15 mm	back	1:1	0.342	1.197	0.409	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram			

Table 11-32
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]	Antenna 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	25.15	-0.03	0	65	0086M	QPSK	1	0	15 mm	back	1:1	0.319	1.161	0.370	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	24.16	0.01	1	65	0086M	QPSK	25	12	15 mm	back	1:1	0.276	1.159	0.320	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.35	-0.01	0	65	0086M	QPSK	1	0	15 mm	back	1:1	0.350	1.109	0.388	A56
	SCC	829.30	20453	Mid	LTE Band 5 (Cell)	5							QPSK	1	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					

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Table 11-33
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]	Antenna 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	24.5	23.68	0.02	0	0	0071M	QPSK	1	50	15 mm	back	1:1	0.717	1.208	0.866	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	10	24.5	23.49	-0.03	0	0	0071M	QPSK	1	0	15 mm	back	1:1	0.760	1.262	0.959	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	23.35	-0.01	0	0	0071M	QPSK	1	0	15 mm	back	1:1	0.739	1.303	0.963	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	23.54	-0.03	0	0	0071M	QPSK	1	50	15 mm	back	1:1	0.738	1.247	0.920	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	24.5	23.67	-0.02	0	4	0071M	QPSK	1	0	15 mm	back	1:1	0.760	1.211	0.920	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.91	0.01	1	0	0071M	QPSK	50	25	15 mm	back	1:1	0.585	1.146	0.670	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.84	-0.02	1	0	0071M	QPSK	100	0	15 mm	back	1:1	0.586	1.164	0.682	
2 CC Uplink CA_66C	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	20	24.5	24.11	0.08	0	0	0071M	QPSK	1	0	15 mm	back	1:1	0.922	1.094	1.009	A58
	SCC	1725.20	132124	Mid	LTE Band 66 (AWS)	20							QPSK	1	99							
2 CC Uplink CA_66B	PCC	1745.00	132322	Mid	LTE Band 66 (AWS)	10	24.5	23.92	-0.03	0	0	0071M	QPSK	1	0	15 mm	back	1:1	0.838	1.143	0.958	
	SCC	1735.10	132223	Mid	LTE Band 66 (AWS)	10							QPSK	1	49							
ANSI / 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 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	3603.30	55773	Low-Mid	LTE Band 48	20	25.0	24.29	0.03	0	1184M	QPSK	1	0	15 mm	back	1:1.58	0.289	1.178	0.340	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	25.0	24.80	-0.05	0	1184M	QPSK	1	50	15 mm	back	1:1.58	0.249	1.047	0.261	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	24.0	23.66	0.05	1	1184M	QPSK	50	25	15 mm	back	1:1.58	0.202	1.081	0.218	
2 CC Uplink	PCC	3603.30	55773	Low-Mid	LTE Band 48	20	25.0	24.89	0.07	0	1184M	QPSK	1	0	15 mm	back	1:1.58	0.348	1.026	**0.357**	A66
	SCC	3583.50	55575	Low-Mid	LTE Band 48	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 11-35
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	2506.00	39750	Low	LTE Band 41	20	25.0	24.11	0.00	0	0085M	QPSK	1	99	15 mm	back	1:1.58	0.203	1.227	0.249	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.0	23.23	0.05	1	0085M	QPSK	50	25	15 mm	back	1:1.58	0.161	1.194	0.192	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	27.5	26.72	-0.06	0	0085M	QPSK	1	99	15 mm	back	1:2.31	0.253	1.197	0.303	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	LTE Band 41	20	25.0	24.41	-0.13	0	0085M	QPSK	1	99	15 mm	back	1:1.58	0.208	1.146	0.238	
	SCC	2525.80	39948	Low	LTE Band 41	20						QPSK	1	0							
2 CC Uplink - Power Class 2	PCC	2506.00	39750	Low	LTE Band 41	20	27.5	27.15	0.04	0	0085M	QPSK	1	99	15 mm	back	1:2.31	0.291	1.084	0.315	A68
	SCC	2525.80	39948	Low	LTE Band 41	20						QPSK	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									

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Table 11-36
NR Body-Worn SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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	25.05	0.17	0	3	0070M	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.205	1.109	0.227	A70
680.50	136100	Mid	NR Band n71	20	25.5	24.66	0.03	0	3	0070M	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.193	1.213	0.234	
680.50	136100	Mid	NR Band n71	20	24.0	23.41	0.08	1.5	3	0070M	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.146	1.146	0.167	
707.50	141500	Mid	NR Band n12	15	25.5	24.78	-0.01	0	108	0095M	DFT-S-OFDM QPSK	1	77	15 mm	back	1:1	0.192	1.180	0.227	A72
707.50	141500	Mid	NR Band n12	15	25.5	24.54	-0.05	0	108	0095M	DFT-S-OFDM QPSK	36	22	15 mm	back	1:1	0.174	1.247	0.217	
707.50	141500	Mid	NR Band n12	15	24.0	22.95	-0.01	1.5	108	0095M	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.101	1.274	0.129	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	25.06	0.01	0	65	0089M	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.264	1.107	0.292	A74
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.67	-0.01	0	65	0089M	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.255	1.211	0.309	
836.50	167300	Mid	NR Band n5 (Cell)	20	24.0	23.04	-0.07	1.5	65	0089M	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.146	1.247	0.182	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.93	-0.05	0	0	0066M	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.782	1.140	0.891	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.5	23.78	-0.03	0	0	0066M	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.860	1.180	1.015	A76
1770.00	354000	High	NR Band n66 (AWS)	20	24.5	23.76	-0.14	0	4	0066M	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.707	1.186	0.839	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.67	-0.03	0	0	0066M	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.765	1.211	0.926	
1745.00	349000	Mid	NR Band n66 (AWS)	20	24.5	23.54	0.06	0	0	0066M	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.831	1.247	**1.036**	
1745.00	349000	Mid	NR Band n66 (AWS)	20	23.0	22.12	0.06	1.5	0	0066M	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.557	1.225	0.682	
1770.00	354000	High	NR Band n66 (AWS)	20	24.5	23.56	0.13	0	0	0066M	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.752	1.242	0.934	
1720.00	344000	Low	NR Band n66 (AWS)	20	23.5	22.69	0.03	1	0	0066M	DFT-S-OFDM QPSK	100	0	15 mm	back	1:1	0.683	1.205	0.823	
1860.00	372000	Low	NR Band n25 (PCS)	20	24.5	23.87	-0.06	0	108	0065M	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.641	1.156	0.741	
1882.50	376500	Mid	NR Band n25 (PCS)	20	24.5	23.47	0.10	0	116	0065M	DFT-S-OFDM QPSK	1	1	15 mm	back	1:1	0.546	1.268	0.692	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.13	0	116	0065M	DFT-S-OFDM QPSK	1	53	15 mm	back	1:1	0.659	1.146	0.755	A78
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.11	0	108	0065M	DFT-S-OFDM QPSK	50	28	15 mm	back	1:1	0.653	1.146	0.748	
1905.00	381000	High	NR Band n25 (PCS)	20	23.0	22.31	0.15	1.5	116	0065M	CP-OFDM QPSK	1	1	15 mm	back	1:1	0.397	1.172	0.465	
2592.99	518598	Mid	NR Band n41	100	25.5	24.56	0.12	0	N/A	1187M	DFT-S-OFDM QPSK	1	137	15 mm	back	1:4	0.081	1.242	0.101	A80
2592.99	518598	Mid	NR Band n41	100	25.5	24.32	0.12	0	N/A	1187M	DFT-S-OFDM QPSK	135	69	15 mm	back	1:4	0.078	1.312	0.102	
2592.99	518598	Mid	NR Band n41	100	24.0	23.03	0.08	1.5	N/A	1187M	CP-OFDM QPSK	1	1	15 mm	back	1:4	0.072	1.250	0.090	

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 11-37
DTS Body-Worn 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	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	20.5	20.49	0.04	15 mm	1	0697M	1	back	99.9	0.150	0.104	1.002	1.001	**0.104**	A82
2412	1	802.11b	DSSS	22	20.5	20.43	0.15	15 mm	2	0697M	1	back	99.0	0.089	0.056	1.016	1.010	0.057	

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

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Table 11-38
NII SISO Body-Worn 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 (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
5300	60	802.11a	OFDM	20	18.5	18.18	0.18	15 mm	1	0697M	6	back	99.0	0.458	0.225	1.076	1.010	0.245	
5260	52	802.11a	OFDM	20	18.5	18.30	0.11	15 mm	2	0697M	6	back	98.9	0.460	0.230	1.047	1.011	0.243	
5600	120	802.11a	OFDM	20	18.5	18.28	0.17	15 mm	1	0697M	6	back	99.0	0.377	0.186	1.052	1.010	0.198	
5720	144	802.11a	OFDM	20	18.5	18.42	-0.12	15 mm	2	0697M	6	back	98.9	0.822	0.398	1.019	1.011	0.410	
5785	157	802.11a	OFDM	20	18.5	18.04	-0.06	15 mm	1	0697M	6	back	99.0	1.034	0.447	1.112	1.010	0.502	
5785	157	802.11a	OFDM	20	18.5	18.49	0.01	15 mm	2	0697M	6	back	98.9	0.673	0.393	1.002	1.011	0.398	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 11-39
NII SISO Body-Worn SAR for Conditions with NR Active

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 (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
5290	58	802.11ac	OFDM	80	13.0	12.97	0.17	15 mm	1	0697M	29.3	back	93.9	0.080	0.038	1.007	1.065	0.041	
5290	58	802.11ac	OFDM	80	13.0	12.83	-0.16	15 mm	2	0697M	29.3	back	94.8	0.095	0.042	1.040	1.055	0.046	
5690	138	802.11ac	OFDM	80	13.0	12.61	0.04	15 mm	1	0697M	29.3	back	93.9	0.096	0.039	1.094	1.065	0.045	
5690	138	802.11ac	OFDM	80	13.0	12.62	-0.13	15 mm	2	0697M	29.3	back	94.8	0.223	0.115	1.091	1.055	0.132	
5775	155	802.11ac	OFDM	80	13.0	12.74	-0.18	15 mm	1	0697M	29.3	back	93.9	0.209	0.092	1.062	1.065	0.104	
5775	155	802.11ac	OFDM	80	13.0	12.88	0.12	15 mm	2	0697M	29.3	back	94.8	0.198	0.090	1.028	1.055	0.098	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 11-40
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 W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
5300	60	802.11n	OFDM	20	18.5	18.30	18.5	18.25	0.00	15 mm	MIMO	0697M	13	back	97.6	0.710	0.316	1.059	1.025	0.343	
5500	100	802.11n	OFDM	20	18.5	17.90	18.5	18.10	-0.11	15 mm	MIMO	0697M	13	back	97.6	1.021	0.526	1.148	1.025	0.619	
5620	124	802.11n	OFDM	20	18.5	18.26	18.5	18.16	-0.05	15 mm	MIMO	0697M	13	back	97.6	1.365	0.676	1.081	1.025	0.749	
5720	144	802.11n	OFDM	20	18.5	18.20	18.5	18.32	-0.01	15 mm	MIMO	0697M	13	back	97.6	1.847	0.787	1.072	1.025	0.865	A84
5755	151	802.11n	OFDM	40	17.0	16.98	17.0	16.92	-0.11	15 mm	MIMO	0697M	27	back	95.1	1.339	0.591	1.019	1.052	0.634	
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 21.5 dBm maximum allowed MIMO power shown in the documentation for channels 60, 100, 124, 144, each antenna transmits at a maximum allowed power of 18.5 dBm. To achieve the 20.0 dBm maximum allowed MIMO power shown in the documentation for channels 151, each antenna transmits at a maximum allowed power of 17.0 dBm.

Table 11-41
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 W/kg	SAR (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
5290	58	802.11ac	OFDM	80	13.0	12.97	13.0	12.83	0.16	15 mm	MIMO	0697M	58.5	back	91.0	0.125	0.054	1.040	1.099	0.062	
5690	138	802.11ac	OFDM	80	13.0	12.61	13.0	12.62	0.15	15 mm	MIMO	0697M	58.5	back	91.0	0.303	0.135	1.094	1.099	0.162	
5775	155	802.11ac	OFDM	80	13.0	12.74	13.0	12.88	0.17	15 mm	MIMO	0697M	58.5	back	91.0	0.344	0.150	1.062	1.099	0.175	
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.

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Table 11-42
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)	
2480	78	Bluetooth	FHSS	16.5	16.26	-0.10	15 mm	1175M	1	back	77.3	0.033	1.057	1.294	**0.045**	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**									

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11.3 Standalone Hotspot SAR Data

Table 11-43
GPRS/UMTS/CDMA Hotspot SAR Data

MEASUREMENT RESULTS																	
FREQUENCY		Mode	Service	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Spacing	Antenna 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	26.0	24.38	-0.02	10 mm	27	0120M	N/A	1:1	back	0.799	1.452	1.160	A31
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	26.0	24.38	-0.05	10 mm	27	0120M	N/A	1:1	front	0.529	1.452	0.768	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	26.0	24.38	-0.09	10 mm	27	0120M	N/A	1:1	bottom	0.400	1.452	0.581	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	26.0	24.38	0.02	10 mm	27	0120M	N/A	1:1	right	0.060	1.452	0.087	
820.10	564	CDMA BC10 (§90S)	EVDO Rev. 0	26.0	24.38	-0.03	10 mm	27	0120M	N/A	1:1	left	0.226	1.452	0.328	
824.70	1013	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.61	0.03	10 mm	27	0120M	N/A	1:1	back	0.626	1.315	0.823	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.38	0.04	10 mm	27	0120M	N/A	1:1	back	0.641	1.387	0.889	A33
848.31	777	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.21	0.01	10 mm	27	0120M	N/A	1:1	back	0.571	1.442	0.823	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.38	-0.01	10 mm	27	0120M	N/A	1:1	front	0.460	1.387	0.638	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.38	-0.01	10 mm	27	0120M	N/A	1:1	bottom	0.366	1.387	0.508	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.38	0.03	10 mm	27	0120M	N/A	1:1	right	0.045	1.387	0.062	
836.52	384	CDMA BC0 (§22H)	EVDO Rev. 0	25.8	24.38	-0.01	10 mm	27	0120M	N/A	1:1	left	0.211	1.387	0.293	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.0	18.70	-0.02	10 mm	35	0100M	N/A	1:1	back	0.534	1.072	0.572	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.0	18.70	0.00	10 mm	35	0100M	N/A	1:1	front	0.362	1.072	0.388	
1851.25	25	PCS CDMA	EVDO Rev. 0	19.0	18.99	0.03	10 mm	35	0100M	N/A	1:1	bottom	0.876	1.002	0.878	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.0	18.70	0.04	10 mm	35	0100M	N/A	1:1	bottom	0.913	1.072	0.979	
1908.75	1175	PCS CDMA	EVDO Rev. 0	19.0	18.93	-0.01	10 mm	35	0100M	N/A	1:1	bottom	1.080	1.016	1.097	A35
1880.00	600	PCS CDMA	EVDO Rev. 0	19.0	18.70	0.01	10 mm	35	0100M	N/A	1:1	right	0.066	1.072	0.071	
1880.00	600	PCS CDMA	EVDO Rev. 0	19.0	18.70	0.03	10 mm	35	0100M	N/A	1:1	left	0.050	1.072	0.054	
824.20	128	GSM 850	GPRS	30.5	29.71	0.00	10 mm	N/A	0120M	3	1:2.76	back	0.574	1.199	0.688	
836.60	190	GSM 850	GPRS	30.5	29.42	0.17	10 mm	N/A	0120M	3	1:2.76	back	0.668	1.282	0.856	A37
848.80	251	GSM 850	GPRS	30.5	29.81	-0.01	10 mm	N/A	0120M	3	1:2.76	back	0.547	1.172	0.641	
836.60	190	GSM 850	GPRS	30.5	29.42	-0.06	10 mm	N/A	0120M	3	1:2.76	front	0.295	1.282	0.378	
836.60	190	GSM 850	GPRS	30.5	29.42	0.09	10 mm	N/A	0120M	3	1:2.76	bottom	0.227	1.282	0.291	
836.60	190	GSM 850	GPRS	30.5	29.42	0.09	10 mm	N/A	0120M	3	1:2.76	right	0.033	1.282	0.042	
836.60	190	GSM 850	GPRS	30.5	29.42	0.03	10 mm	N/A	0120M	3	1:2.76	left	0.134	1.282	0.172	
1880.00	661	GSM 1900	GPRS	22.8	22.10	0.02	10 mm	N/A	0100M	4	1:2.076	back	0.315	1.175	0.370	
1880.00	661	GSM 1900	GPRS	22.8	22.10	-0.01	10 mm	N/A	0100M	4	1:2.076	front	0.255	1.175	0.300	
1850.20	512	GSM 1900	GPRS	22.8	22.26	0.03	10 mm	N/A	0100M	4	1:2.076	bottom	0.630	1.132	0.713	
1880.00	661	GSM 1900	GPRS	22.8	22.10	-0.01	10 mm	N/A	0100M	4	1:2.076	bottom	0.617	1.175	0.725	
1909.80	810	GSM 1900	GPRS	22.8	22.20	0.01	10 mm	N/A	0100M	4	1:2.076	bottom	0.708	1.148	0.813	A39
1880.00	661	GSM 1900	GPRS	22.8	22.10	0.19	10 mm	N/A	0100M	4	1:2.076	right	0.037	1.175	0.043	
1880.00	661	GSM 1900	GPRS	22.8	22.10	0.13	10 mm	N/A	0100M	4	1:2.076	left	0.036	1.175	0.042	
826.40	4132	UMTS 850	RMC	25.8	25.18	0.00	10 mm	27	0120M	N/A	1:1	back	0.561	1.153	0.647	
836.60	4183	UMTS 850	RMC	25.8	25.20	0.04	10 mm	27	0120M	N/A	1:1	back	0.628	1.148	0.721	A41
846.60	4233	UMTS 850	RMC	25.8	24.85	0.02	10 mm	27	0120M	N/A	1:1	back	0.473	1.245	0.589	
836.60	4183	UMTS 850	RMC	25.8	25.20	-0.01	10 mm	27	0120M	N/A	1:1	front	0.434	1.148	0.498	
836.60	4183	UMTS 850	RMC	25.8	25.20	-0.02	10 mm	27	0120M	N/A	1:1	bottom	0.353	1.148	0.405	
836.60	4183	UMTS 850	RMC	25.8	25.20	0.02	10 mm	27	0120M	N/A	1:1	right	0.042	1.148	0.048	
836.60	4183	UMTS 850	RMC	25.8	25.20	-0.02	10 mm	27	0120M	N/A	1:1	left	0.206	1.148	0.236	
1752.60	1513	UMTS 1750	RMC	20.0	19.80	0.01	10 mm	9	0100M	N/A	1:1	back	0.341	1.047	0.357	
1752.60	1513	UMTS 1750	RMC	20.0	19.80	0.02	10 mm	9	0100M	N/A	1:1	front	0.273	1.047	0.286	
1712.40	1312	UMTS 1750	RMC	20.0	19.32	0.03	10 mm	9	0100M	N/A	1:1	bottom	0.927	1.169	1.084	
1732.40	1412	UMTS 1750	RMC	20.0	19.24	0.01	10 mm	9	0100M	N/A	1:1	bottom	0.991	1.191	**1.180**	A43
1752.60	1513	UMTS 1750	RMC	20.0	19.80	0.00	10 mm	9	0100M	N/A	1:1	bottom	0.968	1.047	1.013	
1752.60	1513	UMTS 1750	RMC	20.0	19.80	0.10	10 mm	9	0100M	N/A	1:1	right	0.055	1.047	0.058	
1752.60	1513	UMTS 1750	RMC	20.0	19.80	-0.04	10 mm	9	0100M	N/A	1:1	left	0.053	1.047	0.055	
1880.00	9400	UMTS 1900	RMC	19.0	18.26	0.01	10 mm	109	0116M	N/A	1:1	back	0.427	1.186	0.506	
1880.00	9400	UMTS 1900	RMC	19.0	18.26	0.00	10 mm	109	0116M	N/A	1:1	front	0.288	1.186	0.342	
1852.40	9262	UMTS 1900	RMC	19.0	18.59	0.03	10 mm	109	0116M	N/A	1:1	bottom	0.840	1.099	0.923	
1880.00	9400	UMTS 1900	RMC	19.0	18.26	-0.01	10 mm	109	0116M	N/A	1:1	bottom	0.854	1.186	1.013	
1907.60	9538	UMTS 1900	RMC	19.0	18.49	-0.02	10 mm	109	0116M	N/A	1:1	bottom	0.975	1.125	1.097	A45
1880.00	9400	UMTS 1900	RMC	19.0	18.26	-0.04	10 mm	109	0116M	N/A	1:1	right	0.043	1.186	0.051	
1880.00	9400	UMTS 1900	RMC	19.0	18.26	-0.07	10 mm	109	0116M	N/A	1:1	left	0.046	1.186	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				

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Table 11-44
LTE Band 71 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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	25.8	25.17	0.00	0	3	0122M	QPSK	1	0	10 mm	back	1:1	0.333	1.156	0.385	A47
680.50	133297	Mid	LTE Band 71	20	24.8	24.20	0.02	1	3	0122M	QPSK	50	0	10 mm	back	1:1	0.281	1.148	0.323	
680.50	133297	Mid	LTE Band 71	20	25.8	25.17	-0.04	0	3	0122M	QPSK	1	0	10 mm	front	1:1	0.204	1.156	0.236	
680.50	133297	Mid	LTE Band 71	20	24.8	24.20	0.01	1	3	0122M	QPSK	50	0	10 mm	front	1:1	0.164	1.148	0.188	
680.50	133297	Mid	LTE Band 71	20	25.8	25.17	0.04	0	4	0122M	QPSK	1	0	10 mm	bottom	1:1	0.173	1.156	0.200	
680.50	133297	Mid	LTE Band 71	20	24.8	24.20	0.00	1	4	0122M	QPSK	50	0	10 mm	bottom	1:1	0.145	1.148	0.166	
680.50	133297	Mid	LTE Band 71	20	25.8	25.17	-0.17	0	4	0122M	QPSK	1	0	10 mm	right	1:1	0.136	1.156	0.157	
680.50	133297	Mid	LTE Band 71	20	24.8	24.20	-0.19	1	4	0122M	QPSK	50	0	10 mm	right	1:1	0.105	1.148	0.121	
680.50	133297	Mid	LTE Band 71	20	25.8	25.17	-0.07	0	3	0122M	QPSK	1	0	10 mm	left	1:1	0.259	1.156	0.299	
680.50	133297	Mid	LTE Band 71	20	24.8	24.20	-0.06	1	3	0122M	QPSK	50	0	10 mm	left	1:1	0.212	1.148	0.243	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-45
LTE Band 12 Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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	25.23	-0.01	0	1	0122M	QPSK	1	0	10 mm	back	1:1	0.368	1.140	0.420	A49
707.50	23095	Mid	LTE Band 12	10	24.8	24.31	0.01	1	1	0122M	QPSK	25	12	10 mm	back	1:1	0.311	1.119	0.348	
707.50	23095	Mid	LTE Band 12	10	25.8	25.23	-0.01	0	108	0122M	QPSK	1	0	10 mm	front	1:1	0.227	1.140	0.259	
707.50	23095	Mid	LTE Band 12	10	24.8	24.31	-0.01	1	108	0122M	QPSK	25	12	10 mm	front	1:1	0.197	1.119	0.220	
707.50	23095	Mid	LTE Band 12	10	25.8	25.23	0.01	0	108	0122M	QPSK	1	0	10 mm	bottom	1:1	0.189	1.140	0.215	
707.50	23095	Mid	LTE Band 12	10	24.8	24.31	0.05	1	108	0122M	QPSK	25	12	10 mm	bottom	1:1	0.168	1.119	0.188	
707.50	23095	Mid	LTE Band 12	10	25.8	25.23	0.21	0	4	0122M	QPSK	1	0	10 mm	right	1:1	0.145	1.140	0.165	
707.50	23095	Mid	LTE Band 12	10	24.8	24.31	0.08	1	4	0122M	QPSK	25	12	10 mm	right	1:1	0.122	1.119	0.137	
707.50	23095	Mid	LTE Band 12	10	25.8	25.23	-0.09	0	1	0122M	QPSK	1	0	10 mm	left	1:1	0.268	1.140	0.306	
707.50	23095	Mid	LTE Band 12	10	24.8	24.31	0.04	1	1	0122M	QPSK	25	12	10 mm	left	1:1	0.241	1.119	0.270	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

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Table 11-46
LTE Band 13 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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.																			
782.00	23230	Mid	LTE Band 13	10	25.8	25.21	-0.10	0	1	0061M	QPSK	1	25	10 mm	back	1:1	0.648	1.146	0.743	A51
782.00	23230	Mid	LTE Band 13	10	24.8	24.28	0.16	1	1	0061M	QPSK	25	0	10 mm	back	1:1	0.528	1.127	0.595	
782.00	23230	Mid	LTE Band 13	10	25.8	25.21	-0.07	0	1	0061M	QPSK	1	25	10 mm	front	1:1	0.482	1.146	0.552	
782.00	23230	Mid	LTE Band 13	10	24.8	24.28	-0.11	1	1	0061M	QPSK	25	0	10 mm	front	1:1	0.418	1.127	0.471	
782.00	23230	Mid	LTE Band 13	10	25.8	25.21	-0.13	0	1	0061M	QPSK	1	25	10 mm	bottom	1:1	0.377	1.146	0.432	
782.00	23230	Mid	LTE Band 13	10	24.8	24.28	-0.06	1	1	0061M	QPSK	25	0	10 mm	bottom	1:1	0.294	1.127	0.331	
782.00	23230	Mid	LTE Band 13	10	25.8	25.21	-0.15	0	1	0061M	QPSK	1	25	10 mm	right	1:1	0.088	1.146	0.101	
782.00	23230	Mid	LTE Band 13	10	24.8	24.28	-0.07	1	1	0061M	QPSK	25	0	10 mm	right	1:1	0.078	1.127	0.088	
782.00	23230	Mid	LTE Band 13	10	25.8	25.21	0.15	0	1	0061M	QPSK	1	25	10 mm	left	1:1	0.282	1.146	0.323	
782.00	23230	Mid	LTE Band 13	10	24.8	24.28	0.01	1	1	0061M	QPSK	25	0	10 mm	left	1:1	0.257	1.127	0.290	
ANSI / 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 14 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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.																			
793.00	23330	Mid	LTE Band 14	10	25.8	25.06	-0.02	0	52	0122M	QPSK	1	0	10 mm	back	1:1	0.574	1.186	0.681	A53
793.00	23330	Mid	LTE Band 14	10	24.8	24.07	0.01	1	52	0122M	QPSK	25	25	10 mm	back	1:1	0.431	1.183	0.510	
793.00	23330	Mid	LTE Band 14	10	25.8	25.06	-0.02	0	52	0122M	QPSK	1	0	10 mm	front	1:1	0.460	1.186	0.546	
793.00	23330	Mid	LTE Band 14	10	24.8	24.07	0.01	1	52	0122M	QPSK	25	25	10 mm	front	1:1	0.333	1.183	0.394	
793.00	23330	Mid	LTE Band 14	10	25.8	25.06	-0.05	0	52	0122M	QPSK	1	0	10 mm	bottom	1:1	0.369	1.186	0.438	
793.00	23330	Mid	LTE Band 14	10	24.8	24.07	-0.10	1	52	0122M	QPSK	25	25	10 mm	bottom	1:1	0.293	1.183	0.347	
793.00	23330	Mid	LTE Band 14	10	25.8	25.06	0.03	0	52	0122M	QPSK	1	0	10 mm	right	1:1	0.088	1.186	0.104	
793.00	23330	Mid	LTE Band 14	10	24.8	24.07	-0.12	1	52	0122M	QPSK	25	25	10 mm	right	1:1	0.052	1.183	0.062	
793.00	23330	Mid	LTE Band 14	10	25.8	25.06	0.05	0	52	0122M	QPSK	1	0	10 mm	left	1:1	0.308	1.186	0.365	
793.00	23330	Mid	LTE Band 14	10	24.8	24.07	0.00	1	52	0122M	QPSK	25	25	10 mm	left	1:1	0.199	1.183	0.235	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram					

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Table 11-48
LTE Band 26 (Cell) Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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	25.25	0.02	0	66	0061M	QPSK	1	36	10 mm	back	1:1	0.611	1.135	0.693	A55
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.24	0.03	1	66	0061M	QPSK	36	18	10 mm	back	1:1	0.491	1.138	0.559	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.25	-0.02	0	66	0061M	QPSK	1	36	10 mm	front	1:1	0.434	1.135	0.493	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.24	0.01	1	66	0061M	QPSK	36	18	10 mm	front	1:1	0.349	1.138	0.397	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.25	-0.10	0	66	0061M	QPSK	1	36	10 mm	bottom	1:1	0.318	1.135	0.361	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.24	0.02	1	66	0061M	QPSK	36	18	10 mm	bottom	1:1	0.256	1.138	0.291	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.25	-0.01	0	66	0061M	QPSK	1	36	10 mm	right	1:1	0.064	1.135	0.073	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.24	0.07	1	66	0061M	QPSK	36	18	10 mm	right	1:1	0.050	1.138	0.057	
831.50	26865	Mid	LTE Band 26 (Cell)	15	25.8	25.25	0.01	0	66	0061M	QPSK	1	36	10 mm	left	1:1	0.226	1.135	0.257	
831.50	26865	Mid	LTE Band 26 (Cell)	15	24.8	24.24	0.00	1	66	0061M	QPSK	36	18	10 mm	left	1:1	0.182	1.138	0.207	
ANSI / 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 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]	Antenna 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	25.15	-0.01	0	65	0086M	QPSK	1	0	10 mm	back	1:1	0.559	1.161	0.649	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	24.16	-0.03	1	65	0086M	QPSK	25	12	10 mm	back	1:1	0.480	1.159	0.556	
2 CC Uplink	PCC	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.35	-0.03	0	65	0086M	QPSK	1	0	10 mm	back	1:1	0.613	1.109	0.680	A57
	SCC	829.30	20453	Mid	LTE Band 5 (Cell)	5							QPSK	1	24							
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.15	-0.01	0	65	0086M	QPSK	1	0	10 mm	front	1:1	0.435	1.161	0.505	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	24.16	0.02	1	65	0086M	QPSK	25	12	10 mm	front	1:1	0.375	1.159	0.435	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.15	-0.04	0	66	0086M	QPSK	1	0	10 mm	bottom	1:1	0.328	1.161	0.381	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	24.16	-0.01	1	66	0086M	QPSK	25	12	10 mm	bottom	1:1	0.263	1.159	0.305	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.15	0.05	0	65	0086M	QPSK	1	0	10 mm	right	1:1	0.057	1.161	0.066	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	24.16	-0.02	1	65	0086M	QPSK	25	12	10 mm	right	1:1	0.051	1.159	0.059	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	25.8	25.15	0.04	0	65	0086M	QPSK	1	0	10 mm	left	1:1	0.212	1.161	0.246	
1 CC Uplink	N/A	836.50	20525	Mid	LTE Band 5 (Cell)	10	24.8	24.16	0.03	1	65	0086M	QPSK	25	12	10 mm	left	1:1	0.171	1.159	0.198	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram											

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Table 11-50
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]	Antenna 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	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.01	0	108	0071M	QPSK	1	50	10 mm	back	1:1	0.495	1.094	0.542	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.66	-0.02	0	108	0071M	QPSK	50	25	10 mm	back	1:1	0.527	1.081	0.570	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.01	0	109	0071M	QPSK	1	50	10 mm	front	1:1	0.351	1.094	0.384	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.66	0.00	0	109	0071M	QPSK	50	25	10 mm	front	1:1	0.376	1.081	0.406	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.0	19.58	-0.01	0	11	0071M	QPSK	1	0	10 mm	bottom	1:1	0.784	1.102	0.864	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	-0.02	0	5	0071M	QPSK	1	50	10 mm	bottom	1:1	0.914	1.094	1.000	
1 CC Uplink	N/A	1775.00	132622	High	LTE Band 66 (AWS)	10	20.0	19.33	0.01	0	6	0071M	QPSK	1	0	10 mm	bottom	1:1	0.939	1.167	1.096	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	19.37	0.00	0	6	0071M	QPSK	1	0	10 mm	bottom	1:1	0.963	1.156	1.113	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	19.43	-0.03	0	6	0071M	QPSK	1	50	10 mm	bottom	1:1	0.957	1.140	1.091	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.0	19.58	0.00	0	11	0071M	QPSK	50	0	10 mm	bottom	1:1	0.855	1.102	0.942	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.66	0.01	0	5	0071M	QPSK	50	25	10 mm	bottom	1:1	0.963	1.081	1.041	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	19.64	-0.03	0	6	0071M	QPSK	50	50	10 mm	bottom	1:1	0.983	1.086	1.068	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.56	0.01	0	5	0071M	QPSK	100	0	10 mm	bottom	1:1	0.946	1.107	1.047	
2 CC Uplink CA_66B	PCC	1775.00	132622	High	LTE Band 66 (AWS)	10	20.0	19.30	0.03	0	6	0071M	QPSK	1	0	10 mm	bottom	1:1	0.927	1.175	1.089	
	SCC	1765.10	132523	High	LTE Band 66 (AWS)	10							QPSK	1	49							
2 CC Uplink CA_66C	PCC	1770.00	132572	High	LTE Band 66 (AWS)	20	20.0	19.55	-0.02	0	6	0071M	QPSK	1	0	10 mm	bottom	1:1	1.020	1.109	1.131	A59
	SCC	1750.20	132374	High	LTE Band 66 (AWS)	20							QPSK	1	99							
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.04	0	109	0071M	QPSK	1	50	10 mm	right	1:1	0.070	1.094	0.077	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.66	0.04	0	109	0071M	QPSK	50	25	10 mm	right	1:1	0.075	1.081	0.081	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.61	0.04	0	109	0071M	QPSK	1	50	10 mm	left	1:1	0.062	1.094	0.068	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.0	19.66	0.02	0	109	0071M	QPSK	50	25	10 mm	left	1:1	0.066	1.081	0.071	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram												

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Table 11-51
LTE Band 25 (PCS) Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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	19.36	0.02	0	109	0060M	QPSK	1	50	10 mm	back	1:1	0.548	1.033	0.566	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	19.36	0.00	0	109	0060M	QPSK	50	0	10 mm	back	1:1	0.572	1.033	0.591	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	19.36	0.02	0	109	0060M	QPSK	1	50	10 mm	front	1:1	0.389	1.033	0.402	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	19.36	0.04	0	109	0060M	QPSK	50	0	10 mm	front	1:1	0.404	1.033	0.417	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	19.36	-0.08	0	108	0060M	QPSK	1	50	10 mm	bottom	1:1	0.933	1.033	0.964	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	19.5	19.15	-0.13	0	108	0060M	QPSK	1	0	10 mm	bottom	1:1	0.952	1.084	1.032	
1905.00	26590	High	LTE Band 25 (PCS)	20	19.5	19.07	-0.03	0	108	0060M	QPSK	1	50	10 mm	bottom	1:1	1.050	1.104	1.159	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	19.36	-0.01	0	108	0060M	QPSK	50	0	10 mm	bottom	1:1	0.947	1.033	0.978	
1882.50	26365	Mid	LTE Band 25 (PCS)	20	19.5	19.15	-0.08	0	108	0060M	QPSK	50	0	10 mm	bottom	1:1	0.982	1.084	1.064	
1905.00	26590	High	LTE Band 25 (PCS)	20	19.5	19.21	-0.06	0	108	0060M	QPSK	50	25	10 mm	bottom	1:1	1.090	1.069	1.165	A61
1905.00	26590	High	LTE Band 25 (PCS)	20	19.5	19.18	-0.10	0	108	0060M	QPSK	100	0	10 mm	bottom	1:1	1.060	1.076	1.141	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	19.36	0.14	0	109	0060M	QPSK	1	50	10 mm	right	1:1	0.055	1.033	0.057	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	19.36	-0.01	0	109	0060M	QPSK	50	0	10 mm	right	1:1	0.064	1.033	0.066	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	19.36	-0.08	0	109	0060M	QPSK	1	50	10 mm	left	1:1	0.050	1.033	0.052	
1860.00	26140	Low	LTE Band 25 (PCS)	20	19.5	19.36	0.00	0	109	0060M	QPSK	50	0	10 mm	left	1:1	0.054	1.033	0.056	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram										

Table 11-52
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	20.0	19.44	0.10	0	0060M	QPSK	1	0	10 mm	back	1:1	0.395	1.138	0.450	
2310.00	27710	Mid	LTE Band 30	10	20.0	19.58	-0.03	0	0060M	QPSK	25	12	10 mm	back	1:1	0.387	1.102	0.426	
2310.00	27710	Mid	LTE Band 30	10	20.0	19.44	-0.03	0	0060M	QPSK	1	0	10 mm	front	1:1	0.313	1.138	0.356	
2310.00	27710	Mid	LTE Band 30	10	20.0	19.58	-0.01	0	0060M	QPSK	25	12	10 mm	front	1:1	0.301	1.102	0.332	
2310.00	27710	Mid	LTE Band 30	10	20.0	19.44	-0.01	0	0060M	QPSK	1	0	10 mm	bottom	1:1	0.911	1.138	1.037	A63
2310.00	27710	Mid	LTE Band 30	10	20.0	19.58	0.01	0	0060M	QPSK	25	12	10 mm	bottom	1:1	0.893	1.102	0.984	
2310.00	27710	Mid	LTE Band 30	10	20.0	19.42	-0.02	0	0060M	QPSK	50	0	10 mm	bottom	1:1	0.869	1.143	0.993	
2310.00	27710	Mid	LTE Band 30	10	20.0	19.44	-0.06	0	0060M	QPSK	1	0	10 mm	right	1:1	0.070	1.138	0.080	
2310.00	27710	Mid	LTE Band 30	10	20.0	19.58	0.06	0	0060M	QPSK	25	12	10 mm	right	1:1	0.070	1.102	0.077	
2310.00	27710	Mid	LTE Band 30	10	20.0	19.44	-0.03	0	0060M	QPSK	1	0	10 mm	left	1:1	0.029	1.138	0.033	
2310.00	27710	Mid	LTE Band 30	10	20.0	19.58	0.12	0	0060M	QPSK	25	12	10 mm	left	1:1	0.027	1.102	0.030	
2310.00	27710	Mid	LTE Band 30	10	20.0	19.44	-0.01	0	0060M	QPSK	1	0	10 mm	bottom	1:1	0.908	1.138	1.033	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram									

Note: Blue entry represents variability measurement.

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Table 11-53
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	20.0	19.60	0.15	0	0090M	QPSK	1	0	10 mm	back	1:1	0.259	1.096	0.284	
2510.00	20850	Low	LTE Band 7	20	20.0	19.61	0.13	0	0090M	QPSK	50	50	10 mm	back	1:1	0.254	1.094	0.278	
2510.00	20850	Low	LTE Band 7	20	20.0	19.60	-0.03	0	0090M	QPSK	1	0	10 mm	front	1:1	0.203	1.096	0.222	
2510.00	20850	Low	LTE Band 7	20	20.0	19.61	0.02	0	0090M	QPSK	50	50	10 mm	front	1:1	0.204	1.094	0.223	
2510.00	20850	Low	LTE Band 7	20	20.0	19.60	0.00	0	0090M	QPSK	1	0	10 mm	bottom	1:1	0.452	1.096	0.495	
2510.00	20850	Low	LTE Band 7	20	20.0	19.61	-0.02	0	0090M	QPSK	50	50	10 mm	bottom	1:1	0.520	1.094	0.569	A65
2510.00	20850	Low	LTE Band 7	20	20.0	19.60	0.02	0	0090M	QPSK	1	0	10 mm	right	1:1	0.131	1.096	0.144	
2510.00	20850	Low	LTE Band 7	20	20.0	19.61	0.00	0	0090M	QPSK	50	50	10 mm	right	1:1	0.132	1.094	0.144	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-54
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	3603.30	55773	Low-Mid	LTE Band 48	20	25.0	24.80	0.09	0	1184M	QPSK	1	50	10 mm	back	1:1.58	0.445	1.047	0.466	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	24.0	23.66	0.02	1	1184M	QPSK	50	25	10 mm	back	1:1.58	0.364	1.081	0.393	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	25.0	24.80	0.02	0	1184M	QPSK	1	50	10 mm	front	1:1.58	0.137	1.047	0.143	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	24.0	23.66	0.06	1	1184M	QPSK	50	25	10 mm	front	1:1.58	0.109	1.081	0.118	
1 CC Uplink	N/A	3560.00	55340	Low	LTE Band 48	20	25.0	24.39	-0.03	0	1184M	QPSK	1	50	10 mm	top	1:1.58	0.623	1.151	0.717	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	25.0	24.80	0.03	0	1184M	QPSK	1	50	10 mm	top	1:1.58	0.587	1.047	0.615	
1 CC Uplink	N/A	3646.70	56207	Mid-High	LTE Band 48	20	25.0	24.49	0.13	0	1184M	QPSK	1	50	10 mm	top	1:1.58	0.668	1.125	0.752	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	25.0	24.17	0.16	0	1184M	QPSK	1	0	10 mm	top	1:1.58	0.667	1.211	0.808	
1 CC Uplink	N/A	3690.00	56640	High	LTE Band 48	20	25.0	24.34	0.11	0	1184M	QPSK	1	50	10 mm	top	1:1.58	0.732	1.164	**0.852**	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	24.0	23.66	-0.01	1	1184M	QPSK	50	25	10 mm	top	1:1.58	0.477	1.081	0.516	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	24.0	23.60	0.04	1	1184M	QPSK	100	0	10 mm	top	1:1.58	0.478	1.096	0.524	
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	25.0	24.78	0.11	0	1184M	QPSK	1	0	10 mm	top	1:1.58	0.806	1.052	**0.848**	A67
	SCC	3670.20	56442	High	LTE Band 48	20						QPSK	1	99						
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	25.0	24.80	0.02	0	1184M	QPSK	1	50	10 mm	left	1:1.58	0.165	1.047	0.173	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	LTE Band 48	20	24.0	23.66	-0.10	1	1184M	QPSK	50	25	10 mm	left	1:1.58	0.130	1.081	0.141	
2 CC Uplink	PCC	3690.00	56640	High	LTE Band 48	20	25.0	24.78	0.16	0	1184M	QPSK	1	0	10 mm	top	1:1.58	0.796	1.052	0.837	
	SCC	3670.20	56442	High	LTE Band 48	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										

Note: Blue entry represents variability measurement.

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Table 11-55
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	21.40	0.01	0	0085M	QPSK	1	50	10 mm	back	1:1.58	0.177	1.148	0.203	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	21.53	0.18	0	0085M	QPSK	50	25	10 mm	back	1:1.58	0.179	1.114	0.199	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	21.40	-0.04	0	0085M	QPSK	1	50	10 mm	front	1:1.58	0.143	1.148	0.164	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	21.53	-0.01	0	0085M	QPSK	50	25	10 mm	front	1:1.58	0.145	1.114	0.162	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	21.40	0.02	0	0085M	QPSK	1	50	10 mm	bottom	1:1.58	0.358	1.148	0.411	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	21.36	-0.04	0	0085M	QPSK	1	99	10 mm	bottom	1:1.58	0.389	1.159	0.451	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	21.53	-0.02	0	0085M	QPSK	50	25	10 mm	bottom	1:1.58	0.367	1.114	0.409	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	23.6	23.03	-0.10	0	0085M	QPSK	1	50	10 mm	bottom	1:2.31	0.345	1.140	0.393	
1 CC Uplink - Power Class 2	N/A	2506.00	39750	Low	LTE Band 41	20	23.6	23.00	0.02	0	0085M	QPSK	1	99	10 mm	bottom	1:2.31	0.373	1.148	0.428	
2 CC Uplink - Power Class 3	PCC	2506.00	39750	Low	LTE Band 41	20	22.0	21.25	-0.04	0	0085M	QPSK	1	99	10 mm	bottom	1:1.58	0.393	1.189	0.467	A69
	SCC	2525.80	39948	Low	LTE Band 41	20						QPSK	1	0							
2 CC Uplink - Power Class 2	PCC	2506.00	39750	Low	LTE Band 41	20	23.6	23.06	-0.07	0	0085M	QPSK	1	99	10 mm	bottom	1:2.31	0.384	1.132	0.435	
	SCC	2525.80	39948	Low	LTE Band 41	20						QPSK	1	0							
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	21.40	0.02	0	0085M	QPSK	1	50	10 mm	right	1:1.58	0.098	1.148	0.113	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	22.0	21.53	0.07	0	0085M	QPSK	50	25	10 mm	right	1:1.58	0.099	1.114	0.110	

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 11-56
NR Band n71 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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	25.05	0.15	0	3	0070M	DFT-S-OFDM QPSK	1	53	10 mm	back	1:1	0.310	1.109	0.344	A71
680.50	136100	Mid	NR Band n71	20	25.5	24.66	0.02	0	3	0070M	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.302	1.213	0.366	
680.50	136100	Mid	NR Band n71	20	24.0	23.41	0.00	1.5	3	0070M	CP-OFDM QPSK	1	1	10 mm	back	1:1	0.215	1.146	0.246	
680.50	136100	Mid	NR Band n71	20	25.5	25.05	-0.08	0	3	0070M	DFT-S-OFDM QPSK	1	53	10 mm	front	1:1	0.196	1.109	0.217	
680.50	136100	Mid	NR Band n71	20	25.5	24.66	-0.05	0	3	0070M	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.193	1.213	0.234	
680.50	136100	Mid	NR Band n71	20	25.5	25.05	-0.01	0	4	0070M	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.176	1.109	0.195	
680.50	136100	Mid	NR Band n71	20	25.5	24.66	0.00	0	4	0070M	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.166	1.213	0.201	
680.50	136100	Mid	NR Band n71	20	25.5	25.05	-0.13	0	4	0070M	DFT-S-OFDM QPSK	1	53	10 mm	right	1:1	0.135	1.109	0.150	
680.50	136100	Mid	NR Band n71	20	25.5	24.66	-0.01	0	4	0070M	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.118	1.213	0.143	
680.50	136100	Mid	NR Band n71	20	25.5	25.05	0.02	0	3	0070M	DFT-S-OFDM QPSK	1	53	10 mm	left	1:1	0.250	1.109	0.277	
680.50	136100	Mid	NR Band n71	20	25.5	24.66	0.02	0	3	0070M	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.226	1.213	0.274	

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

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Table 11-57
NR Band n12 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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	141500	Mid	NR Band n12	15	25.5	24.78	0.15	0	1	0095M	DFT-S-OFDM QPSK	1	77	10 mm	back	1:1	0.340	1.180	0.401	A73
707.50	141500	Mid	NR Band n12	15	25.5	24.54	0.01	0	1	0095M	DFT-S-OFDM QPSK	36	22	10 mm	back	1:1	0.309	1.247	0.385	
707.50	141500	Mid	NR Band n12	15	24.0	22.95	0.04	1.5	1	0095M	CP-OFDM QPSK	1	1	10 mm	back	1:1	0.188	1.274	0.240	
707.50	141500	Mid	NR Band n12	15	25.5	24.78	-0.12	0	108	0095M	DFT-S-OFDM QPSK	1	77	10 mm	front	1:1	0.211	1.180	0.249	
707.50	141500	Mid	NR Band n12	15	25.5	24.54	-0.13	0	108	0095M	DFT-S-OFDM QPSK	36	22	10 mm	front	1:1	0.179	1.247	0.223	
707.50	141500	Mid	NR Band n12	15	25.5	24.78	0.03	0	108	0095M	DFT-S-OFDM QPSK	1	77	10 mm	bottom	1:1	0.179	1.180	0.211	
707.50	141500	Mid	NR Band n12	15	25.5	24.54	0.01	0	108	0095M	DFT-S-OFDM QPSK	36	22	10 mm	bottom	1:1	0.152	1.247	0.190	
707.50	141500	Mid	NR Band n12	15	25.5	24.78	-0.02	0	4	0095M	DFT-S-OFDM QPSK	1	77	10 mm	right	1:1	0.118	1.180	0.139	
707.50	141500	Mid	NR Band n12	15	25.5	24.54	0.05	0	4	0095M	DFT-S-OFDM QPSK	36	22	10 mm	right	1:1	0.132	1.247	0.165	
707.50	141500	Mid	NR Band n12	15	25.5	24.78	0.00	0	1	0095M	DFT-S-OFDM QPSK	1	77	10 mm	left	1:1	0.246	1.180	0.290	
707.50	141500	Mid	NR Band n12	15	25.5	24.54	0.00	0	1	0095M	DFT-S-OFDM QPSK	36	22	10 mm	left	1:1	0.228	1.247	0.284	
ANSI / 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 n5 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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	25.5	25.06	-0.03	0	65	0089M	DFT-S-OFDM QPSK	1	53	10 mm	back	1:1	0.570	1.107	0.631	A75
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.67	0.16	0	65	0089M	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.558	1.211	0.676	
836.50	167300	Mid	NR Band n5 (Cell)	20	24.0	23.04	-0.06	1.5	65	0089M	CP-OFDM QPSK	1	1	10 mm	back	1:1	0.337	1.247	0.420	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	25.06	0.00	0	65	0089M	DFT-S-OFDM QPSK	1	53	10 mm	front	1:1	0.365	1.107	0.404	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.67	0.02	0	65	0089M	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.358	1.211	0.434	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	25.06	-0.05	0	66	0089M	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.328	1.107	0.363	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.67	-0.02	0	66	0089M	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.313	1.211	0.379	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	25.06	0.02	0	65	0089M	DFT-S-OFDM QPSK	1	53	10 mm	right	1:1	0.056	1.107	0.062	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.67	-0.07	0	65	0089M	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.054	1.211	0.065	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	25.06	-0.02	0	65	0089M	DFT-S-OFDM QPSK	1	53	10 mm	left	1:1	0.186	1.107	0.206	
836.50	167300	Mid	NR Band n5 (Cell)	20	25.5	24.67	0.00	0	65	0089M	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.184	1.211	0.223	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram			

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Table 11-59
NR Band n66 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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)	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.79	0.00	0	108	0066M	DFT-S-OFDM QPSK	1	1	10 mm	back	1:1	0.680	1.050	0.714	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	-0.03	0	108	0066M	DFT-S-OFDM QPSK	50	0	10 mm	back	1:1	0.686	1.072	0.735	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.79	-0.02	0	109	0066M	DFT-S-OFDM QPSK	1	1	10 mm	front	1:1	0.368	1.050	0.386	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	0.00	0	109	0066M	DFT-S-OFDM QPSK	50	0	10 mm	front	1:1	0.376	1.072	0.403	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.79	0.01	0	11	0066M	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	0.819	1.050	0.860	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.0	19.57	0.02	0	5	0066M	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.966	1.104	1.066	
1770.00	354000	High	NR Band n66 (AWS)	20	20.0	19.68	-0.01	0	6	0066M	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	1.080	1.076	1.162	A77
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	0.08	0	11	0066M	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.848	1.072	0.909	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.90	0.02	0	11	0066M	CP-OFDM QPSK	1	1	10 mm	bottom	1:1	0.829	1.023	0.848	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.0	19.69	0.02	0	5	0066M	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.967	1.074	1.039	
1770.00	354000	High	NR Band n66 (AWS)	20	20.0	19.61	-0.01	0	6	0066M	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	1.040	1.094	1.138	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.64	0.05	0	5	0066M	DFT-S-OFDM QPSK	100	0	10 mm	bottom	1:1	0.844	1.086	0.917	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.79	0.10	0	109	0066M	DFT-S-OFDM QPSK	1	1	10 mm	right	1:1	0.078	1.050	0.082	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	0.09	0	109	0066M	DFT-S-OFDM QPSK	50	0	10 mm	right	1:1	0.080	1.072	0.086	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.79	-0.06	0	109	0066M	DFT-S-OFDM QPSK	1	1	10 mm	left	1:1	0.065	1.050	0.068	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.0	19.70	0.03	0	109	0066M	DFT-S-OFDM QPSK	50	0	10 mm	left	1:1	0.067	1.072	0.072	
1770.00	354000	High	NR Band n66 (AWS)	20	20.0	19.68	0.01	0	6	0066M	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	1.070	1.076	1.151	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram													

Note: Blue entry represents variability measurement.

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Table 11-60
NR Band n25 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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)	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.94	0.02	0	109	0065M	DFT-S-OFDM QPSK	1	53	10 mm	back	1:1	0.550	1.014	0.558	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.83	0.01	0	109	0065M	DFT-S-OFDM QPSK	50	28	10 mm	back	1:1	0.531	1.040	0.552	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.94	-0.03	0	109	0065M	DFT-S-OFDM QPSK	1	53	10 mm	front	1:1	0.380	1.014	0.385	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.83	0.03	0	109	0065M	DFT-S-OFDM QPSK	50	28	10 mm	front	1:1	0.365	1.040	0.380	
1860.00	372000	Low	NR Band n25 (PCS)	20	19.0	18.68	-0.02	0	108	0065M	DFT-S-OFDM QPSK	1	1	10 mm	bottom	1:1	0.850	1.076	0.915	
1882.50	376500	Mid	NR Band n25 (PCS)	20	19.0	18.52	0.00	0	108	0065M	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	0.998	1.117	1.115	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.94	0.02	0	108	0065M	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	1.150	1.014	1.166	A79
1860.00	372000	Low	NR Band n25 (PCS)	20	19.0	18.65	-0.11	0	108	0065M	DFT-S-OFDM QPSK	50	0	10 mm	bottom	1:1	0.899	1.084	0.975	
1882.50	376500	Mid	NR Band n25 (PCS)	20	19.0	18.41	-0.04	0	108	0065M	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	0.958	1.146	1.098	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.83	0.00	0	108	0065M	DFT-S-OFDM QPSK	50	28	10 mm	bottom	1:1	1.080	1.040	1.123	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.75	-0.10	0	108	0065M	CP-OFDM QPSK	1	1	10 mm	bottom	1:1	1.070	1.059	1.133	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.85	-0.02	0	108	0065M	DFT-S-OFDM QPSK	100	0	10 mm	bottom	1:1	1.080	1.035	1.118	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.94	-0.02	0	109	0065M	DFT-S-OFDM QPSK	1	53	10 mm	right	1:1	0.051	1.014	0.052	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.83	0.14	0	109	0065M	DFT-S-OFDM QPSK	50	28	10 mm	right	1:1	0.047	1.040	0.049	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.94	-0.03	0	109	0065M	DFT-S-OFDM QPSK	1	53	10 mm	left	1:1	0.046	1.014	0.047	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.83	0.13	0	109	0065M	DFT-S-OFDM QPSK	50	28	10 mm	left	1:1	0.041	1.040	0.043	
1905.00	381000	High	NR Band n25 (PCS)	20	19.0	18.94	0.06	0	108	0065M	DFT-S-OFDM QPSK	1	53	10 mm	bottom	1:1	1.100	1.014	1.115	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram								

Note: Blue entry represents variability measurement.

Table 11-61
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	25.5	24.56	-0.01	0	1187M	DFT-S-OFDM QPSK	1	137	10 mm	back	1:4	0.135	1.242	0.168	
2592.99	518598	Mid	NR Band n41	100	25.5	24.32	-0.01	0	1187M	DFT-S-OFDM QPSK	135	69	10 mm	back	1:4	0.131	1.312	0.172	
2592.99	518598	Mid	NR Band n41	100	25.5	24.56	0.08	0	1187M	DFT-S-OFDM QPSK	1	137	10 mm	front	1:4	0.152	1.242	0.189	
2592.99	518598	Mid	NR Band n41	100	25.5	24.32	0.03	0	1187M	DFT-S-OFDM QPSK	135	69	10 mm	front	1:4	0.151	1.312	0.198	
2592.99	518598	Mid	NR Band n41	100	25.5	24.56	-0.08	0	1187M	DFT-S-OFDM QPSK	1	137	10 mm	top	1:4	0.406	1.242	0.504	A81
2592.99	518598	Mid	NR Band n41	100	25.5	24.32	0.00	0	1187M	DFT-S-OFDM QPSK	135	69	10 mm	top	1:4	0.402	1.312	0.527	
2592.99	518598	Mid	NR Band n41	100	24.0	23.03	-0.09	1.5	1187M	CP-OFDM QPSK	1	1	10 mm	top	1:4	0.389	1.250	0.486	
2592.99	518598	Mid	NR Band n41	100	25.5	24.56	0.16	0	1187M	DFT-S-OFDM QPSK	1	137	10 mm	left	1:4	0.025	1.242	0.031	
2592.99	518598	Mid	NR Band n41	100	25.5	24.32	0.16	0	1187M	DFT-S-OFDM QPSK	135	69	10 mm	left	1:4	0.024	1.312	0.031	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram							

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Table 11-62
WLAN Hotspot 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 (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
2462	11	802.11b	DSSS	22	20.5	20.49	0.17	10 mm	1	0697M	1	back	99.9	0.286	0.206	1.002	1.001	0.207	
2462	11	802.11b	DSSS	22	20.5	20.49	0.14	10 mm	1	0697M	1	front	99.9	0.268	-	1.002	1.001	-	
2462	11	802.11b	DSSS	22	20.5	20.49	0.13	10 mm	1	0697M	1	top	99.9	0.750	0.488	1.002	1.001	**0.489**	A83
2462	11	802.11b	DSSS	22	20.5	20.49	0.12	10 mm	1	0697M	1	left	99.9	0.076	0.050	1.002	1.001	0.050	
2412	1	802.11b	DSSS	22	20.5	20.43	0.18	10 mm	2	0697M	1	back	99.0	0.212	0.127	1.016	1.010	0.130	
2412	1	802.11b	DSSS	22	20.5	20.43	0.00	10 mm	2	0697M	1	front	99.0	0.015	-	1.016	1.010	-	
2412	1	802.11b	DSSS	22	20.5	20.43	0.12	10 mm	2	0697M	1	top	99.0	0.047	-	1.016	1.010	-	
2412	1	802.11b	DSSS	22	20.5	20.43	0.12	10 mm	2	0697M	1	left	99.0	0.081	-	1.016	1.010	-	
5785	157	802.11a	OFDM	20	18.5	18.04	0.00	10 mm	1	0697M	6	back	99.0	1.367	0.524	1.112	1.010	**0.589**	
5785	157	802.11a	OFDM	20	18.5	18.04	-0.12	10 mm	1	0697M	6	front	99.0	0.034	-	1.112	1.010	-	
5785	157	802.11a	OFDM	20	18.5	18.04	-0.17	10 mm	1	0697M	6	top	99.0	0.128	0.049	1.112	1.010	0.055	
5785	157	802.11a	OFDM	20	18.5	18.04	0.03	10 mm	1	0697M	6	left	99.0	0.249	0.109	1.112	1.010	0.122	
5785	157	802.11a	OFDM	20	18.5	18.49	-0.13	10 mm	2	0697M	6	back	98.9	1.150	0.582	1.002	1.011	**0.590**	
5785	157	802.11a	OFDM	20	18.5	18.49	0.16	10 mm	2	0697M	6	front	98.9	0.038	-	1.002	1.011	-	
5785	157	802.11a	OFDM	20	18.5	18.49	0.12	10 mm	2	0697M	6	top	98.9	0.197	0.069	1.002	1.011	0.070	
5785	157	802.11a	OFDM	20	18.5	18.49	0.11	10 mm	2	0697M	6	left	98.9	0.437	0.186	1.002	1.011	0.188	

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 11-63
WLAN SISO Hotspot SAR for Conditions with NR Active

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 (1g) (W/kg)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																		
5775	155	802.11ac	OFDM	80	13.0	12.74	0.00	10 mm	1	0697M	29.3	back	93.9	0.299	0.125	1.062	1.065	0.141	
5775	155	802.11ac	OFDM	80	13.0	12.74	0.00	10 mm	1	0697M	29.3	front	93.9	0.014	-	1.062	1.065	-	
5775	155	802.11ac	OFDM	80	13.0	12.74	0.00	10 mm	1	0697M	29.3	top	93.9	0.028	-	1.062	1.065	-	
5775	155	802.11ac	OFDM	80	13.0	12.74	0.00	10 mm	1	0697M	29.3	left	93.9	0.068	-	1.062	1.065	-	
5775	155	802.11ac	OFDM	80	13.0	12.88	0.01	10 mm	2	0697M	29.3	back	94.8	0.337	0.176	1.028	1.055	0.191	
5775	155	802.11ac	OFDM	80	13.0	12.88	0.00	10 mm	2	0697M	29.3	front	94.8	0.012	-	1.028	1.055	-	
5775	155	802.11ac	OFDM	80	13.0	12.88	0.00	10 mm	2	0697M	29.3	top	94.8	0.069	-	1.028	1.055	-	
5775	155	802.11ac	OFDM	80	13.0	12.88	0.00	10 mm	2	0697M	29.3	left	94.8	0.144	-	1.028	1.055	-	

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

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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	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)	
5755	151	802.11n	OFDM	40	17.0	16.98	17.0	16.92	0.15	10 mm	MIMO	0697M	27	back	95.1	1.826	0.852	1.019	1.052	0.913	
5795	159	802.11n	OFDM	40	17.0	17.00	17.0	16.84	0.16	10 mm	MIMO	0697M	27	back	95.1	2.128	0.854	1.038	1.052	0.933	A85
5755	151	802.11n	OFDM	40	17.0	16.98	17.0	16.92	-0.10	10 mm	MIMO	0697M	27	front	95.1	0.077	0.025	1.019	1.052	0.027	
5755	151	802.11n	OFDM	40	17.0	16.98	17.0	16.92	-0.05	10 mm	MIMO	0697M	27	top	95.1	0.246	0.088	1.019	1.052	0.094	
5755	151	802.11n	OFDM	40	17.0	16.98	17.0	16.92	0.14	10 mm	MIMO	0697M	27	left	95.1	0.617	0.283	1.019	1.052	0.303	
5795	159	802.11n	OFDM	40	17.0	17.00	17.0	16.84	-0.16	10 mm	MIMO	0697M	27	back	95.1	1.945	0.854	1.038	1.052	0.933	
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 20.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 17.0 dBm. Blue entry represents variability measurement.

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	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)	
2437	6	802.11n	OFDM	20	16.0	15.67	16.0	15.99	0.10	10 mm	MIMO	0697M	13	back	97.3	0.160	0.094	1.079	1.028	0.104	
2437	6	802.11n	OFDM	20	16.0	15.67	16.0	15.99	0.14	10 mm	MIMO	0697M	13	front	97.3	0.060	-	1.079	1.028	-	
2437	6	802.11n	OFDM	20	16.0	15.67	16.0	15.99	0.15	10 mm	MIMO	0697M	13	top	97.3	0.239	0.151	1.079	1.028	0.167	
2437	6	802.11n	OFDM	20	16.0	15.67	16.0	15.99	0.12	10 mm	MIMO	0697M	13	left	97.3	0.057	-	1.079	1.028	-	
5775	155	802.11ac	OFDM	80	13.0	12.74	13.0	12.88	-0.17	10 mm	MIMO	0697M	58.5	back	91.0	0.569	0.233	1.062	1.099	0.272	
5775	155	802.11ac	OFDM	80	13.0	12.74	13.0	12.88	0.00	10 mm	MIMO	0697M	58.5	front	91.0	0.025	0.008	1.062	1.099	0.009	
5775	155	802.11ac	OFDM	80	13.0	12.74	13.0	12.88	-0.16	10 mm	MIMO	0697M	58.5	top	91.0	0.057	-	1.062	1.099	-	
5775	155	802.11ac	OFDM	80	13.0	12.74	13.0	12.88	0.19	10 mm	MIMO	0697M	58.5	left	91.0	0.178	0.066	1.062	1.099	0.077	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram							

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)	
2480	78	Bluetooth	FHSS	16.5	16.26	-0.12	10 mm	1175M	1	back	77.3	0.055	1.057	1.294	0.075	
2480	78	Bluetooth	FHSS	16.5	16.26	0.14	10 mm	1175M	1	front	77.3	0.064	1.057	1.294	0.088	
2480	78	Bluetooth	FHSS	16.5	16.26	-0.14	10 mm	1175M	1	top	77.3	0.182	1.057	1.294	**0.249**	A87
2480	78	Bluetooth	FHSS	16.5	16.26	0.12	10 mm	1175M	1	left	77.3	0.014	1.057	1.294	0.019	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram				

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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	Antenna 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	24.0	22.99	-0.02	8 mm	35	0100M	N/A	1:1	back	0.810	1.262	1.022	
1880.00	600	PCS CDMA	EVDO Rev. 0	24.0	22.99	0.02	6 mm	35	0100M	N/A	1:1	front	0.896	1.262	1.131	
1880.00	600	PCS CDMA	EVDO Rev. 0	24.0	22.99	0.00	12 mm	35	0100M	N/A	1:1	bottom	1.070	1.262	1.350	
1880.00	600	PCS CDMA	EVDO Rev. 0	24.0	22.99	-0.11	0 mm	35	0100M	N/A	1:1	right	0.363	1.262	0.458	
1880.00	600	PCS CDMA	EVDO Rev. 0	24.0	22.99	0.00	0 mm	35	0100M	N/A	1:1	left	0.281	1.262	0.355	
1851.25	25	PCS CDMA	EVDO Rev. 0	22.0	21.80	-0.05	0 mm	35	0100M	N/A	1:1	back	2.650	1.047	2.775	
1880.00	600	PCS CDMA	EVDO Rev. 0	22.0	21.41	-0.11	0 mm	35	0100M	N/A	1:1	back	2.550	1.146	2.922	
1908.75	1175	PCS CDMA	EVDO Rev. 0	22.0	21.78	0.13	0 mm	35	0100M	N/A	1:1	back	2.840	1.052	2.988	
1851.25	25	PCS CDMA	EVDO Rev. 0	22.0	21.80	0.01	0 mm	35	0100M	N/A	1:1	front	2.360	1.047	2.471	
1880.00	600	PCS CDMA	EVDO Rev. 0	22.0	21.41	0.03	0 mm	35	0100M	N/A	1:1	front	2.260	1.146	2.590	
1908.75	1175	PCS CDMA	EVDO Rev. 0	22.0	21.78	0.08	0 mm	35	0100M	N/A	1:1	front	2.500	1.052	2.630	
1851.25	25	PCS CDMA	EVDO Rev. 0	22.0	21.80	-0.16	0 mm	35	0100M	N/A	1:1	bottom	2.740	1.047	2.869	
1880.00	600	PCS CDMA	EVDO Rev. 0	22.0	21.41	-0.12	0 mm	35	0100M	N/A	1:1	bottom	2.380	1.146	2.727	
1908.75	1175	PCS CDMA	EVDO Rev. 0	22.0	21.78	-0.20	0 mm	35	0100M	N/A	1:1	bottom	2.880	1.052	3.030	A88
1880.00	661	GSM 1900	GPRS	27.5	27.14	-0.03	8 mm	N/A	0100M	3	1:2.76	back	0.696	1.086	0.756	
1880.00	661	GSM 1900	GPRS	27.5	27.14	0.01	6 mm	N/A	0100M	3	1:2.76	front	0.790	1.086	0.858	
1880.00	661	GSM 1900	GPRS	27.5	27.14	-0.02	12 mm	N/A	0100M	3	1:2.76	bottom	0.709	1.086	0.770	
1880.00	661	GSM 1900	GPRS	27.5	27.14	-0.07	0 mm	N/A	0100M	3	1:2.76	right	0.324	1.086	0.352	
1880.00	661	GSM 1900	GPRS	27.5	27.14	-0.01	0 mm	N/A	0100M	3	1:2.76	left	0.246	1.086	0.267	
1850.20	512	GSM 1900	GPRS	24.3	23.34	0.00	0 mm	N/A	0100M	4	1:2.076	back	1.350	1.247	1.683	
1880.00	661	GSM 1900	GPRS	24.3	23.21	-0.07	0 mm	N/A	0100M	4	1:2.076	back	1.260	1.285	1.619	
1909.80	810	GSM 1900	GPRS	24.3	23.15	0.00	0 mm	N/A	0100M	4	1:2.076	back	1.460	1.303	1.902	A89
1880.00	661	GSM 1900	GPRS	24.3	23.21	0.05	0 mm	N/A	0100M	4	1:2.076	front	1.140	1.285	1.465	
1880.00	661	GSM 1900	GPRS	24.3	23.21	-0.10	0 mm	N/A	0100M	4	1:2.076	bottom	1.120	1.285	1.439	
1732.40	1412	UMTS 1750	RMC	24.5	23.89	-0.03	8 mm	9	0100M	N/A	1:1	back	1.080	1.151	1.243	
1732.40	1412	UMTS 1750	RMC	24.5	23.89	-0.04	6 mm	9	0100M	N/A	1:1	front	1.230	1.151	1.416	
1732.40	1412	UMTS 1750	RMC	24.5	23.89	0.02	12 mm	9	0100M	N/A	1:1	bottom	0.945	1.151	1.088	
1732.40	1412	UMTS 1750	RMC	24.5	23.89	0.00	0 mm	9	0100M	N/A	1:1	right	0.378	1.151	0.435	
1732.40	1412	UMTS 1750	RMC	24.5	23.89	0.16	0 mm	9	0100M	N/A	1:1	left	0.161	1.151	0.185	
1712.40	1312	UMTS 1750	RMC	21.0	20.60	-0.08	0 mm	9	0100M	N/A	1:1	back	2.220	1.096	2.433	
1732.40	1412	UMTS 1750	RMC	21.0	20.58	-0.04	0 mm	9	0100M	N/A	1:1	back	2.210	1.102	2.435	
1752.60	1513	UMTS 1750	RMC	21.0	20.53	-0.17	0 mm	9	0100M	N/A	1:1	back	2.140	1.114	2.384	
1712.40	1312	UMTS 1750	RMC	21.0	20.60	-0.03	0 mm	9	0100M	N/A	1:1	front	2.040	1.096	2.236	
1732.40	1412	UMTS 1750	RMC	21.0	20.58	0.18	0 mm	9	0100M	N/A	1:1	front	2.080	1.102	2.292	
1752.60	1513	UMTS 1750	RMC	21.0	20.53	-0.02	0 mm	9	0100M	N/A	1:1	front	1.970	1.114	2.195	
1712.40	1312	UMTS 1750	RMC	21.0	20.60	0.04	0 mm	9	0100M	N/A	1:1	bottom	2.840	1.096	3.113	A90
1732.40	1412	UMTS 1750	RMC	21.0	20.58	0.04	0 mm	9	0100M	N/A	1:1	bottom	2.750	1.102	3.031	
1752.60	1513	UMTS 1750	RMC	21.0	20.53	0.04	0 mm	9	0100M	N/A	1:1	bottom	2.490	1.114	2.774	
1880.00	9400	UMTS 1900	RMC	24.0	23.34	-0.03	8 mm	109	0100M	N/A	1:1	back	0.954	1.164	1.110	
1880.00	9400	UMTS 1900	RMC	24.0	23.34	-0.01	6 mm	109	0100M	N/A	1:1	front	1.060	1.164	1.234	
1880.00	9400	UMTS 1900	RMC	24.0	23.34	0.01	12 mm	109	0100M	N/A	1:1	bottom	1.030	1.164	1.199	
1880.00	9400	UMTS 1900	RMC	24.0	23.34	-0.02	0 mm	109	0100M	N/A	1:1	right	0.419	1.164	0.488	
1880.00	9400	UMTS 1900	RMC	24.0	23.34	0.00	0 mm	109	0100M	N/A	1:1	left	0.301	1.164	0.350	
1852.40	9262	UMTS 1900	RMC	21.0	20.40	-0.05	0 mm	109	0100M	N/A	1:1	back	2.280	1.148	2.617	
1880.00	9400	UMTS 1900	RMC	21.0	20.25	-0.06	0 mm	109	0100M	N/A	1:1	back	2.190	1.189	2.604	
1907.60	9538	UMTS 1900	RMC	21.0	20.50	-0.06	0 mm	109	0100M	N/A	1:1	back	2.380	1.122	2.670	A91
1852.40	9262	UMTS 1900	RMC	21.0	20.40	-0.02	0 mm	109	0100M	N/A	1:1	front	2.030	1.148	2.330	
1880.00	9400	UMTS 1900	RMC	21.0	20.25	0.00	0 mm	109	0100M	N/A	1:1	front	1.900	1.189	2.259	
1907.60	9538	UMTS 1900	RMC	21.0	20.50	-0.01	0 mm	109	0100M	N/A	1:1	front	2.050	1.122	2.300	
1852.40	9262	UMTS 1900	RMC	21.0	20.40	0.00	0 mm	109	0100M	N/A	1:1	bottom	2.180	1.148	2.503	
1880.00	9400	UMTS 1900	RMC	21.0	20.25	-0.02	0 mm	109	0100M	N/A	1:1	bottom	1.940	1.189	2.307	
1907.60	9538	UMTS 1900	RMC	21.0	20.50	-0.02	0 mm	109	0100M	N/A	1:1	bottom	2.240	1.122	2.513	

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

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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]	Antenna 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	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.5	23.68	-0.03	0	2	0071M	QPSK	1	50	8 mm	back	1:1	1.040	1.208	1.256	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.91	-0.04	1	2	0071M	QPSK	50	25	8 mm	back	1:1	0.883	1.146	1.012	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.5	23.68	-0.05	0	5	0071M	QPSK	1	50	6 mm	front	1:1	1.300	1.208	1.570	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.91	-0.03	1	5	0071M	QPSK	50	25	6 mm	front	1:1	1.090	1.146	1.249	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.5	23.68	-0.02	0	20	0071M	QPSK	1	50	12 mm	bottom	1:1	0.996	1.208	1.203	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.91	-0.04	1	20	0071M	QPSK	50	25	12 mm	bottom	1:1	0.824	1.146	0.944	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.5	23.68	0.00	0	4	0071M	QPSK	1	50	0 mm	right	1:1	0.470	1.208	0.568	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.91	0.00	1	4	0071M	QPSK	50	25	0 mm	right	1:1	0.391	1.146	0.448	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	24.5	23.68	0.00	0	4	0071M	QPSK	1	50	0 mm	left	1:1	0.309	1.208	0.373	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	23.5	22.91	-0.02	1	4	0071M	QPSK	50	25	0 mm	left	1:1	0.256	1.146	0.293	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.49	0.03	0	0	0071M	QPSK	1	50	0 mm	back	1:1	2.630	1.002	2.635	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	20.08	-0.01	0	108	0071M	QPSK	1	0	0 mm	back	1:1	2.500	1.102	2.755	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.5	20.26	-0.01	0	108	0071M	QPSK	1	0	0 mm	back	1:1	2.790	1.057	2.949	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.49	-0.01	0	0	0071M	QPSK	50	25	0 mm	back	1:1	2.810	1.002	2.816	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	20.38	0.16	0	108	0071M	QPSK	50	25	0 mm	back	1:1	2.690	1.028	2.765	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.5	20.33	-0.04	0	108	0071M	QPSK	50	25	0 mm	back	1:1	2.860	1.040	2.974	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.43	-0.02	0	108	0071M	QPSK	100	0	0 mm	back	1:1	2.760	1.016	2.804	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.49	-0.06	0	0	0071M	QPSK	1	50	0 mm	front	1:1	2.160	1.002	2.164	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	20.08	-0.04	0	0	0071M	QPSK	1	0	0 mm	front	1:1	2.110	1.102	2.325	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.5	20.26	0.04	0	0	0071M	QPSK	1	0	0 mm	front	1:1	2.360	1.057	2.495	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.49	-0.07	0	0	0071M	QPSK	50	25	0 mm	front	1:1	2.290	1.002	2.295	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	20.38	-0.05	0	0	0071M	QPSK	50	25	0 mm	front	1:1	2.370	1.028	2.436	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.5	20.33	-0.06	0	0	0071M	QPSK	50	25	0 mm	front	1:1	2.390	1.040	2.486	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.43	-0.07	0	0	0071M	QPSK	100	0	0 mm	front	1:1	2.240	1.016	2.276	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.49	0.01	0	7	0071M	QPSK	1	50	0 mm	bottom	1:1	2.850	1.002	2.856	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	20.08	0.19	0	18	0071M	QPSK	1	0	0 mm	bottom	1:1	2.580	1.102	2.843	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.5	20.26	0.13	0	18	0071M	QPSK	1	0	0 mm	bottom	1:1	2.690	1.057	2.843	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.49	0.01	0	7	0071M	QPSK	50	25	0 mm	bottom	1:1	2.840	1.002	2.846	
1 CC Uplink	N/A	1745.00	132322	Mid	LTE Band 66 (AWS)	20	20.5	20.38	0.18	0	18	0071M	QPSK	50	25	0 mm	bottom	1:1	2.710	1.028	2.786	
1 CC Uplink	N/A	1770.00	132572	High	LTE Band 66 (AWS)	20	20.5	20.33	0.17	0	18	0071M	QPSK	50	25	0 mm	bottom	1:1	2.840	1.040	2.954	
1 CC Uplink	N/A	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.43	0.16	0	7	0071M	QPSK	100	0	0 mm	bottom	1:1	2.940	1.016	2.987	
1 CC Uplink	N/A	1715.00	132022	Low	LTE Band 66 (AWS)	10	20.5	20.47	0.06	0	47	0071M	QPSK	50	0	0 mm	bottom	1:1	2.850	1.007	2.870	
2 CC Uplink CA_66B	PCC	1715.00	132022	Low	LTE Band 66 (AWS)	10	20.5	20.46	0.07	0	47	0071M	QPSK	50	0	0 mm	bottom	1:1	2.720	1.009	2.744	
	SCC	1724.90	132121	Low	LTE Band 66 (AWS)	10							QPSK	50	0							
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.50	-0.04	0	7	0071M	QPSK	100	0	0 mm	bottom	1:1	2.980	1.000	2.980	A92
	SCC	1739.80	132270	Low	LTE Band 66 (AWS)	20							QPSK	100	0							
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	LTE Band 66 (AWS)	20	20.5	20.50	-0.04	0	7	0071M	QPSK	100	0	0 mm	bottom	1:1	2.940	1.000	2.940	
	SCC	1739.80	132270	Low	LTE Band 66 (AWS)	20							QPSK	100	0			1:1				
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 entry represents variability measurement.

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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]	Antenna 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.																				
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.75	-0.08	0	109	0060M	QPSK	1	50	8 mm	back	1:1	1.180	1.189	1.403		
1860.00	26140	Low	LTE Band 25 (PCS)	20	23.5	22.82	-0.04	1	109	0060M	QPSK	50	0	8 mm	back	1:1	0.967	1.169	1.130		
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.75	-0.04	0	108	0060M	QPSK	1	50	6 mm	front	1:1	1.230	1.189	1.462		
1860.00	26140	Low	LTE Band 25 (PCS)	20	23.5	22.82	-0.03	1	108	0060M	QPSK	50	0	6 mm	front	1:1	1.010	1.169	1.181		
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.75	-0.03	0	108	0060M	QPSK	1	50	12 mm	bottom	1:1	0.991	1.189	1.178		
1860.00	26140	Low	LTE Band 25 (PCS)	20	23.5	22.82	0.00	1	108	0060M	QPSK	50	0	12 mm	bottom	1:1	0.830	1.169	0.970		
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.75	-0.15	0	109	0060M	QPSK	1	50	0 mm	right	1:1	0.442	1.189	0.526		
1860.00	26140	Low	LTE Band 25 (PCS)	20	23.5	22.82	-0.15	1	109	0060M	QPSK	50	0	0 mm	right	1:1	0.378	1.169	0.442		
1860.00	26140	Low	LTE Band 25 (PCS)	20	24.5	23.75	0.00	0	26	0060M	QPSK	1	50	0 mm	left	1:1	0.244	1.189	0.290		
1860.00	26140	Low	LTE Band 25 (PCS)	20	23.5	22.82	-0.07	1	26	0060M	QPSK	50	0	0 mm	left	1:1	0.218	1.169	0.255		
1860.00	26140	Low	LTE Band 25 (PCS)	20	22.0	21.80	0.02	0	109	0060M	QPSK	1	0	0 mm	back	1:1	2.490	1.047	2.607		
1882.50	26365	Mid	LTE Band 25 (PCS)	20	22.0	21.68	-0.07	0	109	0060M	QPSK	1	50	0 mm	back	1:1	2.400	1.076	2.582		
1905.00	26590	High	LTE Band 25 (PCS)	20	22.0	21.76	-0.04	0	109	0060M	QPSK	1	50	0 mm	back	1:1	2.380	1.057	2.516		
1860.00	26140	Low	LTE Band 25 (PCS)	20	22.0	21.90	0.02	0	109	0060M	QPSK	50	25	0 mm	back	1:1	2.540	1.023	2.598		
1882.50	26365	Mid	LTE Band 25 (PCS)	20	22.0	21.84	-0.08	0	109	0060M	QPSK	50	50	0 mm	back	1:1	2.480	1.038	2.574		
1905.00	26590	High	LTE Band 25 (PCS)	20	22.0	21.88	-0.06	0	109	0060M	QPSK	50	25	0 mm	back	1:1	2.540	1.028	2.611		
1905.00	26590	High	LTE Band 25 (PCS)	20	22.0	21.75	-0.02	0	109	0060M	QPSK	100	0	0 mm	back	1:1	2.480	1.059	2.626		
1860.00	26140	Low	LTE Band 25 (PCS)	20	22.0	21.80	-0.01	0	109	0060M	QPSK	1	0	0 mm	front	1:1	2.320	1.047	2.429		
1882.50	26365	Mid	LTE Band 25 (PCS)	20	22.0	21.68	0.07	0	109	0060M	QPSK	1	50	0 mm	front	1:1	2.140	1.076	2.303		
1905.00	26590	High	LTE Band 25 (PCS)	20	22.0	21.76	0.08	0	109	0060M	QPSK	1	50	0 mm	front	1:1	2.100	1.057	2.220		
1860.00	26140	Low	LTE Band 25 (PCS)	20	22.0	21.90	0.00	0	109	0060M	QPSK	50	25	0 mm	front	1:1	2.340	1.023	2.394		
1882.50	26365	Mid	LTE Band 25 (PCS)	20	22.0	21.84	0.06	0	109	0060M	QPSK	50	50	0 mm	front	1:1	2.140	1.038	2.221		
1905.00	26590	High	LTE Band 25 (PCS)	20	22.0	21.88	0.10	0	109	0060M	QPSK	50	25	0 mm	front	1:1	2.180	1.028	2.241		
1905.00	26590	High	LTE Band 25 (PCS)	20	22.0	21.75	0.11	0	109	0060M	QPSK	100	0	0 mm	front	1:1	2.120	1.059	2.245		
1860.00	26140	Low	LTE Band 25 (PCS)	20	22.0	21.80	-0.17	0	108	0060M	QPSK	1	0	0 mm	bottom	1:1	2.800	1.047	2.932		
1882.50	26365	Mid	LTE Band 25 (PCS)	20	22.0	21.68	-0.15	0	108	0060M	QPSK	1	50	0 mm	bottom	1:1	2.800	1.076	3.013		
1905.00	26590	High	LTE Band 25 (PCS)	20	22.0	21.76	-0.17	0	18	0060M	QPSK	1	50	0 mm	bottom	1:1	2.830	1.057	2.991		
1860.00	26140	Low	LTE Band 25 (PCS)	20	22.0	21.90	-0.12	0	108	0060M	QPSK	50	25	0 mm	bottom	1:1	2.820	1.023	2.885		
1882.50	26365	Mid	LTE Band 25 (PCS)	20	22.0	21.84	-0.16	0	108	0060M	QPSK	50	50	0 mm	bottom	1:1	2.930	1.038	3.041		
1905.00	26590	High	LTE Band 25 (PCS)	20	22.0	21.88	-0.14	0	18	0060M	QPSK	50	25	0 mm	bottom	1:1	3.050	1.028	**3.135**	A93	
1905.00	26590	High	LTE Band 25 (PCS)	20	22.0	21.75	-0.15	0	18	0060M	QPSK	100	0	0 mm	bottom	1:1	2.950	1.059	3.124		
1905.00	26590	High	LTE Band 25 (PCS)	20	22.0	21.88	-0.14	0	18	0060M	QPSK	50	25	0 mm	bottom	1:1	3.030	1.028	3.115		
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 entry represents variability measurement.

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Table 11-70
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	24.0	23.58	0.12	0	0060M	QPSK	1	49	0 mm	back	1:1	2.640	1.102	2.909	A94
2310.00	27710	Mid	LTE Band 30	10	23.0	22.63	0.17	1	0060M	QPSK	25	12	0 mm	back	1:1	2.220	1.089	2.418	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.60	0.18	1	0060M	QPSK	50	0	0 mm	back	1:1	2.200	1.096	2.411	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.58	0.17	0	0060M	QPSK	1	49	0 mm	front	1:1	1.970	1.102	2.171	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.63	0.16	1	0060M	QPSK	25	12	0 mm	front	1:1	1.700	1.089	1.851	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.60	0.08	1	0060M	QPSK	50	0	0 mm	front	1:1	1.720	1.096	1.885	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.58	-0.14	0	0060M	QPSK	1	49	0 mm	bottom	1:1	2.300	1.102	2.535	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.63	-0.21	1	0060M	QPSK	25	12	0 mm	bottom	1:1	2.080	1.089	2.265	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.60	0.13	1	0060M	QPSK	50	0	0 mm	bottom	1:1	2.030	1.096	2.225	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.58	-0.10	0	0060M	QPSK	1	49	0 mm	right	1:1	0.385	1.102	0.424	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.63	-0.14	1	0060M	QPSK	25	12	0 mm	right	1:1	0.349	1.089	0.380	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.58	-0.01	0	0060M	QPSK	1	49	0 mm	left	1:1	0.173	1.102	0.191	
2310.00	27710	Mid	LTE Band 30	10	23.0	22.63	0.00	1	0060M	QPSK	25	12	0 mm	left	1:1	0.140	1.089	0.152	
2310.00	27710	Mid	LTE Band 30	10	24.0	23.58	0.12	0	0060M	QPSK	1	49	0 mm	back	1:1	2.620	1.102	2.887	
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 entry represents variability measurement.

Table 11-71
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	23.17	0.10	0	0090M	QPSK	1	0	8 mm	back	1:1	0.471	1.211	0.570	
2510.00	20850	Low	LTE Band 7	20	23.0	22.22	0.18	1	0090M	QPSK	50	0	8 mm	back	1:1	0.386	1.197	0.462	
2510.00	20850	Low	LTE Band 7	20	24.0	23.17	-0.19	0	0090M	QPSK	1	0	6 mm	front	1:1	0.491	1.211	0.595	
2510.00	20850	Low	LTE Band 7	20	23.0	22.22	-0.12	1	0090M	QPSK	50	0	6 mm	front	1:1	0.408	1.197	0.488	
2510.00	20850	Low	LTE Band 7	20	24.0	23.17	0.02	0	0090M	QPSK	1	0	12 mm	bottom	1:1	0.413	1.211	0.500	
2510.00	20850	Low	LTE Band 7	20	23.0	22.22	-0.01	1	0090M	QPSK	50	0	12 mm	bottom	1:1	0.356	1.197	0.426	
2510.00	20850	Low	LTE Band 7	20	24.0	23.17	-0.16	0	0090M	QPSK	1	0	0 mm	right	1:1	1.150	1.211	1.393	
2510.00	20850	Low	LTE Band 7	20	23.0	22.22	-0.19	1	0090M	QPSK	50	0	0 mm	right	1:1	0.938	1.197	1.123	
2510.00	20850	Low	LTE Band 7	20	20.0	19.60	0.04	0	0090M	QPSK	1	0	0 mm	back	1:1	1.380	1.096	1.512	
2510.00	20850	Low	LTE Band 7	20	20.0	19.61	0.06	0	0090M	QPSK	50	50	0 mm	back	1:1	1.370	1.094	1.499	
2510.00	20850	Low	LTE Band 7	20	20.0	19.60	0.21	0	0090M	QPSK	1	0	0 mm	front	1:1	1.190	1.096	1.304	
2510.00	20850	Low	LTE Band 7	20	20.0	19.61	0.19	0	0090M	QPSK	50	50	0 mm	front	1:1	1.190	1.094	1.302	
2510.00	20850	Low	LTE Band 7	20	20.0	19.60	-0.10	0	0090M	QPSK	1	0	0 mm	bottom	1:1	1.610	1.096	1.765	
2510.00	20850	Low	LTE Band 7	20	20.0	19.61	-0.17	0	0090M	QPSK	50	50	0 mm	bottom	1:1	1.660	1.094	1.816	A95
2535.00	21100	Mid	LTE Band 7	20	20.0	19.47	-0.13	0	0090M	QPSK	50	0	0 mm	bottom	1:1	1.420	1.130	1.605	
2560.00	21350	High	LTE Band 7	20	20.0	19.33	-0.14	0	0090M	QPSK	50	25	0 mm	bottom	1:1	1.450	1.167	1.692	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Phablet 4.0 W/kg (mW/g) averaged over 10 grams						

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Table 11-72
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	2506.00	39750	Low	LTE Band 41	20	25.0	24.11	0.18	0	0085M	QPSK	1	99	8 mm	back	1:1.58	0.214	1.227	0.263	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.0	23.23	0.17	1	0085M	QPSK	50	25	8 mm	back	1:1.58	0.174	1.194	0.208	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	25.0	24.11	-0.10	0	0085M	QPSK	1	99	6 mm	front	1:1.58	0.264	1.227	0.324	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.0	23.23	-0.01	1	0085M	QPSK	50	25	6 mm	front	1:1.58	0.219	1.194	0.261	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	25.0	24.11	0.02	0	0085M	QPSK	1	99	12 mm	bottom	1:1.58	0.217	1.227	0.266	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.0	23.23	0.00	1	0085M	QPSK	50	25	12 mm	bottom	1:1.58	0.192	1.194	0.229	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	25.0	24.11	-0.13	0	0085M	QPSK	1	99	0 mm	right	1:1.58	0.526	1.227	0.645	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	24.0	23.23	-0.11	1	0085M	QPSK	50	25	0 mm	right	1:1.58	0.439	1.194	0.524	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	23.0	22.41	-0.01	0	0085M	QPSK	1	50	0 mm	back	1:1.58	1.290	1.146	1.478	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	23.0	22.35	-0.01	0	0085M	QPSK	1	50	0 mm	back	1:1.58	1.290	1.161	1.498	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	23.0	22.44	-0.06	0	0085M	QPSK	1	50	0 mm	back	1:1.58	1.360	1.138	1.548	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	23.0	22.40	0.04	0	0085M	QPSK	1	50	0 mm	back	1:1.58	1.370	1.148	1.573	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	23.0	22.22	-0.03	0	0085M	QPSK	1	50	0 mm	back	1:1.58	1.370	1.197	1.640	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	23.0	22.48	0.02	0	0085M	QPSK	50	25	0 mm	back	1:1.58	1.350	1.127	1.521	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	23.0	22.42	-0.02	0	0085M	QPSK	50	25	0 mm	back	1:1.58	1.320	1.143	1.509	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	23.0	22.51	-0.01	0	0085M	QPSK	50	25	0 mm	back	1:1.58	1.370	1.119	1.533	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	23.0	22.41	-0.02	0	0085M	QPSK	50	25	0 mm	back	1:1.58	1.390	1.146	1.593	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	23.0	22.35	-0.07	0	0085M	QPSK	50	25	0 mm	back	1:1.58	1.440	1.161	1.672	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	23.0	22.40	0.02	0	0085M	QPSK	100	0	0 mm	back	1:1.58	1.320	1.148	1.515	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	23.0	22.44	0.09	0	0085M	QPSK	1	50	0 mm	front	1:1.58	1.230	1.138	1.400	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	23.0	22.51	0.08	0	0085M	QPSK	50	25	0 mm	front	1:1.58	1.260	1.119	1.410	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	23.0	22.41	-0.18	0	0085M	QPSK	1	50	0 mm	bottom	1:1.58	1.850	1.146	2.120	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	23.0	22.35	-0.14	0	0085M	QPSK	1	50	0 mm	bottom	1:1.58	1.940	1.161	2.252	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	23.0	22.44	0.19	0	0085M	QPSK	1	50	0 mm	bottom	1:1.58	2.000	1.138	2.276	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	23.0	22.40	-0.13	0	0085M	QPSK	1	50	0 mm	bottom	1:1.58	2.090	1.148	2.399	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	23.0	22.22	-0.15	0	0085M	QPSK	1	50	0 mm	bottom	1:1.58	2.030	1.197	2.430	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	23.0	22.48	-0.13	0	0085M	QPSK	50	25	0 mm	bottom	1:1.58	1.950	1.127	2.198	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	LTE Band 41	20	23.0	22.42	-0.12	0	0085M	QPSK	50	25	0 mm	bottom	1:1.58	2.050	1.143	2.343	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	LTE Band 41	20	23.0	22.51	-0.18	0	0085M	QPSK	50	25	0 mm	bottom	1:1.58	2.090	1.119	2.339	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	23.0	22.31	-0.19	0	0085M	QPSK	50	0	0 mm	bottom	1:1.58	2.180	1.172	2.555	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	LTE Band 41	20	23.0	22.41	-0.18	0	0085M	QPSK	50	25	0 mm	bottom	1:1.58	2.180	1.146	2.498	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	LTE Band 41	20	23.0	22.35	-0.14	0	0085M	QPSK	50	25	0 mm	bottom	1:1.58	2.120	1.161	2.461	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	LTE Band 41	20	23.0	22.40	-0.12	0	0085M	QPSK	100	0	0 mm	bottom	1:1.58	1.930	1.148	2.216	
1 CC Uplink - Power Class 2	N/A	2636.50	41055	Mid-High	LTE Band 41	20	24.6	23.97	-0.13	0	0085M	QPSK	50	0	0 mm	bottom	1:2.31	2.150	1.156	2.485	
1 CC Uplink - Power Class 2	N/A	2636.50	41055	Mid-High	LTE Band 41	20	24.6	24.10	-0.18	0	0085M	QPSK	50	25	0 mm	bottom	1:2.31	2.170	1.122	2.435	
2 CC Uplink - Power Class 3	PCC	2636.50	41055	Mid-High	LTE Band 41	20	23.0	22.58	-0.19	0	0085M	QPSK	50	0	0 mm	bottom	1:1.58	2.430	1.102	2.678	
	SCC	2616.70	40857	Mid-High	LTE Band 41	20						QPSK	50	50							
2 CC Uplink - Power Class 2	PCC	2636.50	41055	Mid-High	LTE Band 41	20	24.6	24.47	-0.16	0	0085M	QPSK	50	0	0 mm	bottom	1:2.31	2.530	1.030	2.606	A96
	SCC	2616.70	40857	Mid-High	LTE Band 41	20						QPSK	50	50							
2 CC Uplink - Power Class 2	PCC	2636.50	41055	Mid-High	LTE Band 41	20	24.6	24.47	-0.16	0	0085M	QPSK	50	0	0 mm	bottom	1:2.31	2.470	1.030	2.544	
	SCC	2616.70	40857	Mid-High	LTE Band 41	20						QPSK	50	50							
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 entry represents variability measurement.

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Table 11-73
NR Band n66 Phablet SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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)	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.93	-0.12	0	2	0066M	DFT-S-OFDM QPSK	1	53	8 mm	back	1:1	1.280	1.140	1.459	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.67	0.02	0	2	0066M	DFT-S-OFDM QPSK	50	28	8 mm	back	1:1	1.220	1.211	1.477	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.93	-0.06	0	5	0066M	DFT-S-OFDM QPSK	1	53	6 mm	front	1:1	1.400	1.140	1.596	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.67	-0.12	0	5	0066M	DFT-S-OFDM QPSK	50	28	6 mm	front	1:1	1.380	1.211	1.671	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.93	-0.01	0	20	0066M	DFT-S-OFDM QPSK	1	53	12 mm	bottom	1:1	0.946	1.140	1.078	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.67	-0.04	0	20	0066M	DFT-S-OFDM QPSK	50	28	12 mm	bottom	1:1	0.963	1.211	1.166	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.93	0.17	0	4	0066M	DFT-S-OFDM QPSK	1	53	0 mm	right	1:1	0.509	1.140	0.580	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.67	-0.01	0	4	0066M	DFT-S-OFDM QPSK	50	28	0 mm	right	1:1	0.491	1.211	0.595	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.93	0.04	0	4	0066M	DFT-S-OFDM QPSK	1	53	0 mm	left	1:1	0.311	1.140	0.355	
1720.00	344000	Low	NR Band n66 (AWS)	20	24.5	23.67	-0.04	0	4	0066M	DFT-S-OFDM QPSK	50	28	0 mm	left	1:1	0.305	1.211	0.369	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.5	19.98	-0.19	0	0	0066M	DFT-S-OFDM QPSK	1	53	0 mm	back	1:1	2.200	1.127	2.479	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.5	19.72	-0.03	0	108	0066M	DFT-S-OFDM QPSK	1	1	0 mm	back	1:1	2.150	1.197	2.574	
1770.00	354000	High	NR Band n66 (AWS)	20	20.5	20.03	-0.07	0	108	0066M	DFT-S-OFDM QPSK	1	53	0 mm	back	1:1	2.450	1.114	2.729	A97
1720.00	344000	Low	NR Band n66 (AWS)	20	20.5	19.85	-0.11	0	0	0066M	DFT-S-OFDM QPSK	50	0	0 mm	back	1:1	2.130	1.161	2.473	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.5	19.64	-0.11	0	108	0066M	DFT-S-OFDM QPSK	50	0	0 mm	back	1:1	2.150	1.219	2.621	
1770.00	354000	High	NR Band n66 (AWS)	20	20.5	19.96	-0.07	0	108	0066M	DFT-S-OFDM QPSK	50	0	0 mm	back	1:1	2.160	1.132	2.445	
1770.00	354000	High	NR Band n66 (AWS)	20	20.5	19.80	-0.04	0	108	0066M	CP-OFDM QPSK	1	1	0 mm	back	1:1	2.200	1.175	2.585	
1770.00	354000	High	NR Band n66 (AWS)	20	20.5	19.87	-0.07	0	108	0066M	DFT-S-OFDM QPSK	100	0	0 mm	back	1:1	2.160	1.156	2.497	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.5	19.98	-0.14	0	0	0066M	DFT-S-OFDM QPSK	1	53	0 mm	front	1:1	1.840	1.127	2.074	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.5	19.72	-0.05	0	0	0066M	DFT-S-OFDM QPSK	1	1	0 mm	front	1:1	1.820	1.197	2.179	
1770.00	354000	High	NR Band n66 (AWS)	20	20.5	20.03	-0.07	0	0	0066M	DFT-S-OFDM QPSK	1	53	0 mm	front	1:1	1.880	1.114	2.094	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.5	19.85	0.00	0	0	0066M	DFT-S-OFDM QPSK	50	0	0 mm	front	1:1	1.740	1.161	2.020	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.5	19.64	-0.09	0	0	0066M	DFT-S-OFDM QPSK	50	0	0 mm	front	1:1	1.820	1.219	2.219	
1770.00	354000	High	NR Band n66 (AWS)	20	20.5	19.96	-0.08	0	0	0066M	DFT-S-OFDM QPSK	50	0	0 mm	front	1:1	1.810	1.132	2.049	
1770.00	354000	High	NR Band n66 (AWS)	20	20.5	19.87	-0.10	0	0	0066M	DFT-S-OFDM QPSK	100	0	0 mm	front	1:1	1.810	1.156	2.092	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.5	19.98	-0.09	0	7	0066M	DFT-S-OFDM QPSK	1	53	0 mm	bottom	1:1	1.910	1.127	2.153	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.5	19.72	-0.08	0	18	0066M	DFT-S-OFDM QPSK	1	1	0 mm	bottom	1:1	1.930	1.197	2.310	
1770.00	354000	High	NR Band n66 (AWS)	20	20.5	20.03	-0.07	0	18	0066M	DFT-S-OFDM QPSK	1	53	0 mm	bottom	1:1	1.910	1.114	2.128	
1720.00	344000	Low	NR Band n66 (AWS)	20	20.5	19.85	-0.03	0	7	0066M	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	1.880	1.161	2.183	
1745.00	349000	Mid	NR Band n66 (AWS)	20	20.5	19.64	-0.11	0	18	0066M	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	1.900	1.219	2.316	
1770.00	354000	High	NR Band n66 (AWS)	20	20.5	19.96	-0.04	0	18	0066M	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	1.850	1.132	2.094	
1770.00	354000	High	NR Band n66 (AWS)	20	20.5	19.87	-0.20	0	7	0066M	DFT-S-OFDM QPSK	100	0	0 mm	bottom	1:1	2.030	1.156	2.347	
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Table 11-74
NR Band n25 Phablet SAR

MEASUREMENT RESULTS																					
FREQUENCY			Mode	Bandwidth [MHz]	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	MPR [dB]	Antenna 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)	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	-0.02	0	109	0065M	DFT-S-OFDM QPSK	1	53	8 mm	back	1:1	1.070	1.146	1.226	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.01	0	109	0065M	DFT-S-OFDM QPSK	50	28	8 mm	back	1:1	1.080	1.146	1.238	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	-0.01	0	108	0065M	DFT-S-OFDM QPSK	1	53	6 mm	front	1:1	1.220	1.146	1.398	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.04	0	108	0065M	DFT-S-OFDM QPSK	50	28	6 mm	front	1:1	1.180	1.146	1.352	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	-0.11	0	108	0065M	DFT-S-OFDM QPSK	1	53	12 mm	bottom	1:1	1.450	1.146	1.662	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	-0.02	0	108	0065M	DFT-S-OFDM QPSK	50	28	12 mm	bottom	1:1	1.370	1.146	1.570	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	-0.19	0	109	0065M	DFT-S-OFDM QPSK	1	53	0 mm	right	1:1	0.582	1.146	0.667	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	0.10	0	109	0065M	DFT-S-OFDM QPSK	50	28	0 mm	right	1:1	0.545	1.146	0.625	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	-0.03	0	26	0065M	DFT-S-OFDM QPSK	1	53	0 mm	left	1:1	0.350	1.146	0.401	
1905.00	381000	High	NR Band n25 (PCS)	20	24.5	23.91	-0.03	0	26	0065M	DFT-S-OFDM QPSK	50	28	0 mm	left	1:1	0.323	1.146	0.370	
1860.00	372000	Low	NR Band n25 (PCS)	20	20.5	20.04	0.06	0	109	0065M	DFT-S-OFDM QPSK	1	53	0 mm	back	1:1	1.990	1.112	2.213	
1882.50	376500	Mid	NR Band n25 (PCS)	20	20.5	19.86	0.07	0	109	0065M	DFT-S-OFDM QPSK	1	104	0 mm	back	1:1	1.950	1.159	2.260	
1905.00	381000	High	NR Band n25 (PCS)	20	20.5	20.31	0.01	0	109	0065M	DFT-S-OFDM QPSK	1	53	0 mm	back	1:1	2.120	1.045	2.215	
1860.00	372000	Low	NR Band n25 (PCS)	20	20.5	19.97	0.08	0	109	0065M	DFT-S-OFDM QPSK	50	0	0 mm	back	1:1	2.020	1.130	2.283	
1882.50	376500	Mid	NR Band n25 (PCS)	20	20.5	19.81	0.01	0	109	0065M	DFT-S-OFDM QPSK	50	56	0 mm	back	1:1	1.990	1.172	2.332	
1905.00	381000	High	NR Band n25 (PCS)	20	20.5	20.17	-0.01	0	109	0065M	DFT-S-OFDM QPSK	50	28	0 mm	back	1:1	2.130	1.079	2.298	
1905.00	381000	High	NR Band n25 (PCS)	20	20.5	20.13	-0.08	0	109	0065M	DFT-S-OFDM QPSK	100	0	0 mm	back	1:1	2.150	1.089	2.341	
1905.00	381000	High	NR Band n25 (PCS)	20	20.5	20.31	0.02	0	109	0065M	DFT-S-OFDM QPSK	1	53	0 mm	front	1:1	1.750	1.045	1.829	
1905.00	381000	High	NR Band n25 (PCS)	20	20.5	20.17	-0.02	0	109	0065M	DFT-S-OFDM QPSK	50	28	0 mm	front	1:1	1.750	1.079	1.888	
1860.00	372000	Low	NR Band n25 (PCS)	20	20.5	20.04	-0.15	0	108	0065M	DFT-S-OFDM QPSK	1	53	0 mm	bottom	1:1	1.920	1.112	2.135	
1882.50	376500	Mid	NR Band n25 (PCS)	20	20.5	19.86	-0.18	0	108	0065M	DFT-S-OFDM QPSK	1	104	0 mm	bottom	1:1	1.940	1.159	2.248	
1905.00	381000	High	NR Band n25 (PCS)	20	20.5	20.31	-0.14	0	18	0065M	DFT-S-OFDM QPSK	1	53	0 mm	bottom	1:1	2.180	1.045	2.278	
1860.00	372000	Low	NR Band n25 (PCS)	20	20.5	19.97	-0.15	0	108	0065M	DFT-S-OFDM QPSK	50	0	0 mm	bottom	1:1	1.990	1.130	2.249	
1882.50	376500	Mid	NR Band n25 (PCS)	20	20.5	19.81	-0.12	0	108	0065M	DFT-S-OFDM QPSK	50	56	0 mm	bottom	1:1	1.830	1.172	2.145	
1905.00	381000	High	NR Band n25 (PCS)	20	20.5	20.17	-0.20	0	18	0065M	DFT-S-OFDM QPSK	50	28	0 mm	bottom	1:1	2.160	1.079	2.331	
1905.00	381000	High	NR Band n25 (PCS)	20	20.5	20.10	-0.19	0	18	0065M	CP-OFDM QPSK	1	1	0 mm	bottom	1:1	2.110	1.096	2.313	
1905.00	381000	High	NR Band n25 (PCS)	20	20.5	20.13	-0.01	0	18	0065M	DFT-S-OFDM QPSK	100	0	0 mm	bottom	1:1	2.270	1.089	2.472	A98
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Phablet 4.0 W/kg (mW/g) averaged over 10 grams								

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Table 11-75
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	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.													W/kg	(W/kg)			(W/kg)	
5300	60	802.11a	OFDM	20	18.5	18.18	0.00	0 mm	1	0697M	6	back	99.0	11.275	1.370	1.076	1.010	1.489	
5300	60	802.11a	OFDM	20	18.5	18.18	-0.17	0 mm	1	0697M	6	front	99.0	0.550	0.085	1.076	1.010	0.092	
5300	60	802.11a	OFDM	20	18.5	18.18	-0.15	0 mm	1	0697M	6	top	99.0	0.467	-	1.076	1.010	-	
5300	60	802.11a	OFDM	20	18.5	18.18	-0.05	0 mm	1	0697M	6	left	99.0	5.580	0.474	1.076	1.010	0.515	
5260	52	802.11a	OFDM	20	18.5	18.30	0.13	0 mm	2	0697M	6	back	98.9	20.485	1.610	1.047	1.011	1.704	
5260	52	802.11a	OFDM	20	18.5	18.30	-0.05	0 mm	2	0697M	6	front	98.9	0.111	0.009	1.047	1.011	0.010	
5260	52	802.11a	OFDM	20	18.5	18.30	0.08	0 mm	2	0697M	6	top	98.9	0.317	-	1.047	1.011	-	
5260	52	802.11a	OFDM	20	18.5	18.30	0.10	0 mm	2	0697M	6	left	98.9	0.697	0.099	1.047	1.011	0.105	
5600	120	802.11a	OFDM	20	18.5	18.28	-0.14	0 mm	1	0697M	6	back	99.0	8.492	0.863	1.052	1.010	0.917	
5600	120	802.11a	OFDM	20	18.5	18.28	0.00	0 mm	1	0697M	6	front	99.0	0.718	0.089	1.052	1.010	0.095	
5600	120	802.11a	OFDM	20	18.5	18.28	0.01	0 mm	1	0697M	6	top	99.0	0.450	-	1.052	1.010	-	
5600	120	802.11a	OFDM	20	18.5	18.28	-0.10	0 mm	1	0697M	6	left	99.0	4.195	0.348	1.052	1.010	0.370	
5500	100	802.11a	OFDM	20	18.5	17.93	-0.10	0 mm	2	0697M	6	back	98.9	9.033	1.790	1.140	1.011	2.063	
5620	124	802.11a	OFDM	20	18.5	18.19	-0.09	0 mm	2	0697M	6	back	98.9	14.057	2.020	1.074	1.011	**2.193**	
5720	144	802.11a	OFDM	20	18.5	18.42	-0.13	0 mm	2	0697M	6	back	98.9	10.712	1.820	1.019	1.011	1.875	
5720	144	802.11a	OFDM	20	18.5	18.42	0.01	0 mm	2	0697M	6	front	98.9	0.361	0.053	1.019	1.011	0.055	
5720	144	802.11a	OFDM	20	18.5	18.42	0.10	0 mm	2	0697M	6	top	98.9	0.834	-	1.019	1.011	-	
5720	144	802.11a	OFDM	20	18.5	18.42	0.11	0 mm	2	0697M	6	left	98.9	3.519	0.387	1.019	1.011	0.399	

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 11-76
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	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
5260	52	802.11n	OFDM	20	18.5	18.24	18.5	18.31	-0.18	0 mm	MIMO	0697M	13	back	97.6	25.538	2.450	1.062	1.025	2.667	
5280	56	802.11n	OFDM	20	18.5	18.25	18.5	18.20	-0.08	0 mm	MIMO	0697M	13	back	97.6	24.067	2.340	1.072	1.025	2.571	
5300	60	802.11n	OFDM	20	18.5	18.30	18.5	18.25	-0.10	0 mm	MIMO	0697M	13	back	97.6	24.776	2.520	1.059	1.025	2.735	A99
5300	60	802.11n	OFDM	20	18.5	18.30	18.5	18.25	0.00	0 mm	MIMO	0697M	13	front	97.6	0.851	0.106	1.059	1.025	0.115	
5300	60	802.11n	OFDM	20	18.5	18.30	18.5	18.25	0.19	0 mm	MIMO	0697M	13	top	97.6	0.655	-	1.059	1.025	-	
5300	60	802.11n	OFDM	20	18.5	18.30	18.5	18.25	0.00	0 mm	MIMO	0697M	13	left	97.6	6.415	0.544	1.059	1.025	0.590	
5500	100	802.11n	OFDM	20	18.5	17.90	18.5	18.10	-0.12	0 mm	MIMO	0697M	13	back	97.6	26.624	2.350	1.148	1.025	2.765	
5620	124	802.11n	OFDM	20	18.5	18.26	18.5	18.16	-0.18	0 mm	MIMO	0697M	13	back	97.6	25.242	2.450	1.081	1.025	2.715	
5720	144	802.11n	OFDM	20	18.5	18.20	18.5	18.32	-0.14	0 mm	MIMO	0697M	13	back	97.6	18.226	2.420	1.072	1.025	2.659	
5720	144	802.11n	OFDM	20	18.5	18.20	18.5	18.32	0.05	0 mm	MIMO	0697M	13	front	97.6	1.413	0.141	1.072	1.025	0.155	
5720	144	802.11n	OFDM	20	18.5	18.20	18.5	18.32	0.10	0 mm	MIMO	0697M	13	top	97.6	1.288	-	1.072	1.025	-	
5720	144	802.11n	OFDM	20	18.5	18.20	18.5	18.32	-0.18	0 mm	MIMO	0697M	13	left	97.6	6.824	0.649	1.072	1.025	0.713	
5300	60	802.11n	OFDM	20	18.5	18.30	18.5	18.25	-0.14	0 mm	MIMO	0697M	13	back	97.6	13.393	2.360	1.059	1.025	2.562	
5620	124	802.11n	OFDM	20	18.5	18.26	18.5	18.16	-0.11	0 mm	MIMO	0697M	13	back	97.6	16.844	2.260	1.081	1.025	2.504	
5720	144	802.11n	OFDM	20	18.5	18.20	18.5	18.32	0.16	0 mm	MIMO	0697M	13	back	97.6	17.782	2.420	1.072	1.025	2.659	

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 21.5 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18.5 dBm. Blue entries represent variability measurements.

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Table 11-77
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)	
5290	58	802.11ac	OFDM	80	13.0	12.97	0.00	0 mm	1	0697M	29.3	back	93.9	2.925	0.363	1.007	1.065	0.389	
5290	58	802.11ac	OFDM	80	13.0	12.97	0.02	0 mm	1	0697M	29.3	front	93.9	0.140	0.025	1.007	1.065	0.027	
5290	58	802.11ac	OFDM	80	13.0	12.97	0.19	0 mm	1	0697M	29.3	top	93.9	0.129	-	1.007	1.065	-	
5290	58	802.11ac	OFDM	80	13.0	12.97	0.00	0 mm	1	0697M	29.3	left	93.9	1.432	-	1.007	1.065	-	
5290	58	802.11ac	OFDM	80	13.0	12.83	0.11	0 mm	2	0697M	29.3	back	94.8	3.261	0.318	1.040	1.055	0.349	
5290	58	802.11ac	OFDM	80	13.0	12.83	0.00	0 mm	2	0697M	29.3	front	94.8	0.029	0.001	1.040	1.055	0.001	
5290	58	802.11ac	OFDM	80	13.0	12.83	0.00	0 mm	2	0697M	29.3	top	94.8	0.041	-	1.040	1.055	-	
5290	58	802.11ac	OFDM	80	13.0	12.83	0.00	0 mm	2	0697M	29.3	left	94.8	0.164	-	1.040	1.055	-	
5690	138	802.11ac	OFDM	80	13.0	12.61	0.12	0 mm	1	0697M	29.3	back	93.9	2.185	0.182	1.094	1.065	0.212	
5690	138	802.11ac	OFDM	80	13.0	12.61	0.00	0 mm	1	0697M	29.3	front	93.9	0.168	0.020	1.094	1.065	0.023	
5690	138	802.11ac	OFDM	80	13.0	12.61	0.08	0 mm	1	0697M	29.3	top	93.9	0.144	-	1.094	1.065	-	
5690	138	802.11ac	OFDM	80	13.0	12.61	0.00	0 mm	1	0697M	29.3	left	93.9	0.748	-	1.094	1.065	-	
5690	138	802.11ac	OFDM	80	13.0	12.62	-0.15	0 mm	2	0697M	29.3	back	94.8	3.950	0.478	1.091	1.055	0.550	
5690	138	802.11ac	OFDM	80	13.0	12.62	0.00	0 mm	2	0697M	29.3	front	94.8	0.137	0.013	1.091	1.055	0.015	
5690	138	802.11ac	OFDM	80	13.0	12.62	0.18	0 mm	2	0697M	29.3	top	94.8	0.297	-	1.091	1.055	-	
5690	138	802.11ac	OFDM	80	13.0	12.62	-0.16	0 mm	2	0697M	29.3	left	94.8	1.015	-	1.091	1.055	-	

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 11-78
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)	
5290	58	802.11ac	OFDM	80	13.0	12.97	13.0	12.83	-0.16	0 mm	MIMO	0697M	58.5	back	91.0	0.928	0.168	1.040	1.099	0.192	
5290	58	802.11ac	OFDM	80	13.0	12.97	13.0	12.83	0.00	0 mm	MIMO	0697M	58.5	front	91.0	0.243	0.021	1.040	1.099	0.024	
5290	58	802.11ac	OFDM	80	13.0	12.97	13.0	12.83	0.16	0 mm	MIMO	0697M	58.5	top	91.0	0.132	-	1.040	1.099	-	
5290	58	802.11ac	OFDM	80	13.0	12.97	13.0	12.83	0.00	0 mm	MIMO	0697M	58.5	left	91.0	1.174	0.103	1.040	1.099	0.118	
5690	138	802.11ac	OFDM	80	13.0	12.61	13.0	12.62	0.14	0 mm	MIMO	0697M	58.5	back	91.0	2.032	0.258	1.094	1.099	0.310	
5690	138	802.11ac	OFDM	80	13.0	12.61	13.0	12.62	0.00	0 mm	MIMO	0697M	58.5	front	91.0	0.283	0.031	1.094	1.099	0.037	
5690	138	802.11ac	OFDM	80	13.0	12.61	13.0	12.62	-0.19	0 mm	MIMO	0697M	58.5	top	91.0	0.271	-	1.094	1.099	-	
5690	138	802.11ac	OFDM	80	13.0	12.61	13.0	12.62	0.14	0 mm	MIMO	0697M	58.5	left	91.0	1.114	-	1.094	1.099	-	

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 16.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 13.0 dBm

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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. Per FCC KDB 865664 D01v01r04, variability SAR tests were performed when the measured SAR results for a frequency band were greater than or equal to 0.8 W/kg. Repeated SAR measurements are highlighted in the tables above for clarity. Please see Section 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. Additional SAR tests for phablet SAR were evaluated per KDB 616217 Section 6 (See Section 6.9 for more information).
13. Unless otherwise noted, when 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds below.
14. 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:

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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

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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, n12, n5, n66, n2, n25, and n41 is limited to EN-DC operations only, with LTE Bands 2/5/12/13/30/48/66 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.

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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.

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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.

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.

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12.3 Head SAR Simultaneous Transmission Analysis

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

Exposure Condition	Mode	2G/3G/4G/5G 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)	0.266	0.832	0.024	1.098	0.290	1.122
	CDMA/EVDO BC0 (§22H)	0.190	0.832	0.024	1.022	0.214	1.046
	PCS CDMA/EVDO	0.124	0.832	0.024	0.956	0.148	0.980
	GSM 850	0.048	0.832	0.024	0.880	0.072	0.904
	GSM 1900	0.056	0.832	0.024	0.888	0.080	0.912
	UMTS 850	0.163	0.832	0.024	0.995	0.187	1.019
	UMTS 1750	0.148	0.832	0.024	0.980	0.172	1.004
	UMTS 1900	0.109	0.832	0.024	0.941	0.133	0.965
	LTE Band 71	0.123	0.832	0.024	0.955	0.147	0.979
	LTE Band 12	0.127	0.832	0.024	0.959	0.151	0.983
	LTE Band 13	0.244	0.832	0.024	1.076	0.268	1.100
	LTE Band 14	0.187	0.832	0.024	1.019	0.211	1.043
	LTE Band 26 (Cell)	0.167	0.832	0.024	0.999	0.191	1.023
	LTE Band 5 (Cell)	0.185	0.832	0.024	1.017	0.209	1.041
	LTE Band 66 (AWS)	0.147	0.832	0.024	0.979	0.171	1.003
	LTE Band 25 (PCS)	0.132	0.832	0.024	0.964	0.156	0.988
	LTE Band 30	0.055	0.832	0.024	0.887	0.079	0.911
	LTE Band 7	0.128	0.832	0.024	0.960	0.152	0.984
	LTE Band 48	0.505	0.832	0.024	1.337	0.529	1.361
	LTE Band 41	0.087	0.832	0.024	0.919	0.111	0.943
	NR Band n71	0.127	0.832	0.024	0.959	0.151	0.983
	NR Band n12	0.130	0.832	0.024	0.962	0.154	0.986
	NR Band n5 (Cell)	0.180	0.832	0.024	1.012	0.204	1.036
	NR Band n66 (AWS)	0.145	0.832	0.024	0.977	0.169	1.001
	NR Band n25 (PCS)	0.148	0.832	0.024	0.980	0.172	1.004
	NR Band n41	0.587	0.832	0.024	1.419	0.611	**1.443**

Note: The above n41 SAR result is the reported time-averaged SAR. The analysis for this calculation can be found in Table 12-6

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

Exposure Condition	Mode	2G/3G/4G/5G 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)	0.266	0.044	0.018	0.310	0.284	0.328
	CDMA/EVDO BC0 (§22H)	0.190	0.044	0.018	0.234	0.208	0.252
	PCS CDMA/EVDO	0.124	0.044	0.018	0.168	0.142	0.186
	GSM 850	0.048	0.044	0.018	0.092	0.066	0.110
	GSM 1900	0.056	0.044	0.018	0.100	0.074	0.118
	UMTS 850	0.163	0.044	0.018	0.207	0.181	0.225
	UMTS 1750	0.148	0.044	0.018	0.192	0.166	0.210
	UMTS 1900	0.109	0.044	0.018	0.153	0.127	0.171
	LTE Band 71	0.123	0.044	0.018	0.167	0.141	0.185
	LTE Band 12	0.127	0.044	0.018	0.171	0.145	0.189
	LTE Band 13	0.244	0.044	0.018	0.288	0.262	0.306
	LTE Band 14	0.187	0.044	0.018	0.231	0.205	0.249
	LTE Band 26 (Cell)	0.167	0.044	0.018	0.211	0.185	0.229
	LTE Band 5 (Cell)	0.185	0.044	0.018	0.229	0.203	0.247
	LTE Band 66 (AWS)	0.147	0.044	0.018	0.191	0.165	0.209
	LTE Band 25 (PCS)	0.132	0.044	0.018	0.176	0.150	0.194
	LTE Band 30	0.055	0.044	0.018	0.099	0.073	0.117
	LTE Band 7	0.128	0.044	0.018	0.172	0.146	0.190
	LTE Band 48	0.505	0.044	0.018	0.549	0.523	0.567
	LTE Band 41	0.087	0.044	0.018	0.131	0.105	0.149
	NR Band n71	0.127	0.044	0.018	0.171	0.145	0.189
	NR Band n12	0.130	0.044	0.018	0.174	0.148	0.192
	NR Band n5 (Cell)	0.180	0.044	0.018	0.224	0.198	0.242
	NR Band n66 (AWS)	0.145	0.044	0.018	0.189	0.163	0.207
	NR Band n25 (PCS)	0.148	0.044	0.018	0.192	0.166	0.210
	NR Band n41	0.587	0.044	0.018	0.631	0.605	**0.649**

Note: The above n41 SAR result is the reported time-averaged SAR. The analysis for this calculation can be found in Table 12-6

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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/5G SAR (W/kg)	2.4 GHz WLAN Ant 1 SAR (W/kg)	2.4 GHz WLAN Ant 2 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	5	1+2+3+4+5
Head SAR	CDMA/EVDO BC10 (§90S)	0.266	0.832	0.024	0.044	0.018	1.184
	CDMA/EVDO BC0 (§22H)	0.190	0.832	0.024	0.044	0.018	1.108
	PCS CDMA/EVDO	0.124	0.832	0.024	0.044	0.018	1.042
	GSM 850	0.048	0.832	0.024	0.044	0.018	0.966
	GSM 1900	0.056	0.832	0.024	0.044	0.018	0.974
	UMTS 850	0.163	0.832	0.024	0.044	0.018	1.081
	UMTS 1750	0.148	0.832	0.024	0.044	0.018	1.066
	UMTS 1900	0.109	0.832	0.024	0.044	0.018	1.027
	LTE Band 71	0.123	0.832	0.024	0.044	0.018	1.041
	LTE Band 12	0.127	0.832	0.024	0.044	0.018	1.045
	LTE Band 13	0.244	0.832	0.024	0.044	0.018	1.162
	LTE Band 14	0.187	0.832	0.024	0.044	0.018	1.105
	LTE Band 26 (Cell)	0.167	0.832	0.024	0.044	0.018	1.085
	LTE Band 5 (Cell)	0.185	0.832	0.024	0.044	0.018	1.103
	LTE Band 66 (AWS)	0.147	0.832	0.024	0.044	0.018	1.065
	LTE Band 25 (PCS)	0.132	0.832	0.024	0.044	0.018	1.050
	LTE Band 30	0.055	0.832	0.024	0.044	0.018	0.973
	LTE Band 7	0.128	0.832	0.024	0.044	0.018	1.046
	LTE Band 48	0.505	0.832	0.024	0.044	0.018	1.423
	LTE Band 41	0.087	0.832	0.024	0.044	0.018	1.005
	NR Band n71	0.127	0.832	0.024	0.044	0.018	1.045
	NR Band n12	0.130	0.832	0.024	0.044	0.018	1.048
	NR Band n5 (Cell)	0.180	0.832	0.024	0.044	0.018	1.098
	NR Band n66 (AWS)	0.145	0.832	0.024	0.044	0.018	1.063
	NR Band n25 (PCS)	0.148	0.832	0.024	0.044	0.018	1.066
	NR Band n41	0.587	0.832	0.024	0.044	0.018	**1.505**

Note: The above n41 SAR result is the reported time-averaged SAR. The analysis for this calculation can be found in Table 12-6

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

Exposure Condition	Mode	2G/3G/4G/5G SAR (W/kg)	Bluetooth SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Head SAR	CDMA/EVDO BC10 (§90S)	0.266	0.591	0.857
	CDMA/EVDO BC0 (§22H)	0.190	0.591	0.781
	PCS CDMA/EVDO	0.124	0.591	0.715
	GSM 850	0.048	0.591	0.639
	GSM 1900	0.056	0.591	0.647
	UMTS 850	0.163	0.591	0.754
	UMTS 1750	0.148	0.591	0.739
	UMTS 1900	0.109	0.591	0.700
	LTE Band 71	0.123	0.591	0.714
	LTE Band 12	0.127	0.591	0.718
	LTE Band 13	0.244	0.591	0.835
	LTE Band 14	0.187	0.591	0.778
	LTE Band 26 (Cell)	0.167	0.591	0.758
	LTE Band 5 (Cell)	0.185	0.591	0.776
	LTE Band 66 (AWS)	0.147	0.591	0.738
	LTE Band 25 (PCS)	0.132	0.591	0.723
	LTE Band 30	0.055	0.591	0.646
	LTE Band 7	0.128	0.591	0.719
	LTE Band 48	0.505	0.591	1.096
	LTE Band 41	0.087	0.591	0.678
	NR Band n71	0.127	0.591	0.718
	NR Band n12	0.130	0.591	0.721
	NR Band n5 (Cell)	0.180	0.591	0.771
	NR Band n66 (AWS)	0.145	0.591	0.736
	NR Band n25 (PCS)	0.148	0.591	0.739
	NR Band n41	0.587	0.591	**1.178**

Note: The above n41 SAR result is the reported time-averaged SAR. The analysis for this calculation can be found in Table 12-6

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

Exposure Condition	Mode	2G/3G/4G/5G 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
Head SAR	CDMA/EVDO BC10 (§90S)	0.266	0.591	0.044	0.018	0.901	0.875	0.919
	CDMA/EVDO BC0 (§22H)	0.190	0.591	0.044	0.018	0.825	0.799	0.843
	PCS CDMA/EVDO	0.124	0.591	0.044	0.018	0.759	0.733	0.777
	GSM 850	0.048	0.591	0.044	0.018	0.683	0.657	0.701
	GSM 1900	0.056	0.591	0.044	0.018	0.691	0.665	0.709
	UMTS 850	0.163	0.591	0.044	0.018	0.798	0.772	0.816
	UMTS 1750	0.148	0.591	0.044	0.018	0.783	0.757	0.801
	UMTS 1900	0.109	0.591	0.044	0.018	0.744	0.718	0.762
	LTE Band 71	0.123	0.591	0.044	0.018	0.758	0.732	0.776
	LTE Band 12	0.127	0.591	0.044	0.018	0.762	0.736	0.780
	LTE Band 13	0.244	0.591	0.044	0.018	0.879	0.853	0.897
	LTE Band 14	0.187	0.591	0.044	0.018	0.822	0.796	0.840
	LTE Band 26 (Cell)	0.167	0.591	0.044	0.018	0.802	0.776	0.820
	LTE Band 5 (Cell)	0.185	0.591	0.044	0.018	0.820	0.794	0.838
	LTE Band 66 (AWS)	0.147	0.591	0.044	0.018	0.782	0.756	0.800
	LTE Band 25 (PCS)	0.132	0.591	0.044	0.018	0.767	0.741	0.785
	LTE Band 30	0.055	0.591	0.044	0.018	0.690	0.664	0.708
	LTE Band 7	0.128	0.591	0.044	0.018	0.763	0.737	0.781
	LTE Band 48	0.505	0.591	0.044	0.018	1.140	1.114	1.158
	LTE Band 41	0.087	0.591	0.044	0.018	0.722	0.696	0.740
	NR Band n71	0.127	0.591	0.044	0.018	0.762	0.736	0.780
	NR Band n12	0.130	0.591	0.044	0.018	0.765	0.739	0.783
	NR Band n5 (Cell)	0.180	0.591	0.044	0.018	0.815	0.789	0.833
	NR Band n66 (AWS)	0.145	0.591	0.044	0.018	0.780	0.754	0.798
	NR Band n25 (PCS)	0.148	0.591	0.044	0.018	0.783	0.757	0.801
	NR Band n41	0.587	0.591	0.044	0.018	1.222	1.196	**1.240**

Note: The above n41 SAR result is the reported time-averaged SAR. The analysis for this calculation can be found in Table 12-6

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Table 12-6
Time-Averaged n41 Head SAR Calculation

Target NR Pmax (dBm)	18.5
Target NR Plimit (dBm)	16.5
NR Plimit * 0.75 (dBm)	15.25
NR Reported SAR at Plimit (W/kg)	0.782
NR Reported SAR for Simultaneous (W/kg)	0.587

Note: The smart transmit algorithm with reserve power margin 3 limits 5G NR exposure to 75% of the Plimit for that band. Therefore, the time-averaged n41 SAR was calculated with respect to 75% of Plimit. The validation of this time-averaged parameter is included in the Part 2 test report.

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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/5G 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	0.472	0.104	0.057	0.576	0.529	0.633
	CDMA BC0	0.410	0.104	0.057	0.514	0.467	0.571
	PCS CDMA	0.684	0.104	0.057	0.788	0.741	0.845
	GPRS 850	0.276	0.104	0.057	0.380	0.333	0.437
	GPRS 1900	0.398	0.104	0.057	0.502	0.455	0.559
	UMTS 850	0.372	0.104	0.057	0.476	0.429	0.533
	UMTS 1750	0.794	0.104	0.057	0.898	0.851	0.955
	UMTS 1900	0.769	0.104	0.057	0.873	0.826	0.930
	LTE Band 71	0.246	0.104	0.057	0.350	0.303	0.407
	LTE Band 12	0.251	0.104	0.057	0.355	0.308	0.412
	LTE Band 13	0.384	0.104	0.057	0.488	0.441	0.545
	LTE Band 14	0.428	0.104	0.057	0.532	0.485	0.589
	LTE Band 26	0.335	0.104	0.057	0.439	0.392	0.496
	LTE Band 5 (Cell)	0.388	0.104	0.057	0.492	0.445	0.549
	LTE Band 66	1.009	0.104	0.057	1.113	1.066	1.170
	LTE Band 25	0.830	0.104	0.057	0.934	0.887	0.991
	LTE Band 30	0.530	0.104	0.057	0.634	0.587	0.691
	LTE Band 7	0.469	0.104	0.057	0.573	0.526	0.630
	LTE Band 48	0.357	0.104	0.057	0.461	0.414	0.518
	LTE Band 41	0.315	0.104	0.057	0.419	0.372	0.476
	NR Band n71	0.234	0.104	0.057	0.338	0.291	0.395
	NR Band n12	0.227	0.104	0.057	0.331	0.284	0.388
	NR Band n5 (Cell)	0.309	0.104	0.057	0.413	0.366	0.470
	NR Band n66	1.036	0.104	0.057	1.140	1.093	**1.197**
	NR Band n25	0.755	0.104	0.057	0.859	0.812	0.916
	NR Band n41	0.102	0.104	0.057	0.206	0.159	0.263

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

Exposure Condition	Mode	2G/3G/4G/5G 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)	0.472	0.502	0.410	0.974	0.882
	CDMA BC0 (§22H)	0.410	0.502	0.410	0.912	0.820
	PCS CDMA	0.684	0.502	0.410	1.186	1.094
	GPRS 850	0.276	0.502	0.410	0.778	0.686
	GPRS 1900	0.398	0.502	0.410	0.900	0.808
	UMTS 850	0.372	0.502	0.410	0.874	0.782
	UMTS 1750	0.794	0.502	0.410	1.296	1.204
	UMTS 1900	0.769	0.502	0.410	1.271	1.179
	LTE Band 71	0.246	0.502	0.410	0.748	0.656
	LTE Band 12	0.251	0.502	0.410	0.753	0.661
	LTE Band 13	0.384	0.502	0.410	0.886	0.794
	LTE Band 14	0.428	0.502	0.410	0.930	0.838
	LTE Band 26 (Cell)	0.335	0.502	0.410	0.837	0.745
	LTE Band 5 (Cell)	0.388	0.502	0.410	0.890	0.798
	LTE Band 66 (AWS)	1.009	0.502	0.410	1.511	1.419
	LTE Band 25 (PCS)	0.830	0.502	0.410	1.332	1.240
	LTE Band 30	0.530	0.502	0.410	1.032	0.940
	LTE Band 7	0.469	0.502	0.410	0.971	0.879
	LTE Band 48	0.357	0.502	0.410	0.859	0.767
	LTE Band 41	0.315	0.502	0.410	0.817	0.725
	NR Band n71	0.234	0.502	0.410	0.736	0.644
	NR Band n12	0.227	0.502	0.410	0.729	0.637
	NR Band n5 (Cell)	0.309	0.502	0.410	0.811	0.719
	NR Band n66 (AWS)	1.036	0.502	0.410	**1.538**	1.446
	NR Band n25 (PCS)	0.755	0.502	0.410	1.257	1.165
	NR Band n41	0.102	0.502	0.410	0.604	0.512

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

Exposure Condition	Mode	2G/3G/4G/5G SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2
Body-Worn	CDMA BC10 (§90S)	0.472	0.865	1.337	N/A
	CDMA BC0 (§22H)	0.410	0.865	1.275	N/A
	PCS CDMA	0.684	0.865	**1.549**	N/A
	GPRS 850	0.276	0.865	1.141	N/A
	GPRS 1900	0.398	0.865	1.263	N/A
	UMTS 850	0.372	0.865	1.237	N/A
	UMTS 1750	0.794	0.865	See Note 1	0.01
	UMTS 1900	0.769	0.865	See Note 1	0.01
	LTE Band 71	0.246	0.865	1.111	N/A
	LTE Band 12	0.251	0.865	1.116	N/A
	LTE Band 13	0.384	0.865	1.249	N/A
	LTE Band 14	0.428	0.865	1.293	N/A
	LTE Band 26 (Cell)	0.335	0.865	1.200	N/A
	LTE Band 5 (Cell)	0.388	0.865	1.253	N/A
	LTE Band 66 (AWS)	1.009	0.865	See Note 1	0.02
	LTE Band 25 (PCS)	0.830	0.865	See Note 1	0.01
	LTE Band 30	0.530	0.865	1.395	N/A
	LTE Band 7	0.469	0.865	1.334	N/A
	LTE Band 48	0.357	0.865	1.222	N/A
	LTE Band 41	0.315	0.865	1.180	N/A
	NR Band n71	0.234	0.865	1.099	N/A
	NR Band n12	0.227	0.865	1.092	N/A
	NR Band n5 (Cell)	0.309	0.865	1.174	N/A
	NR Band n66 (AWS)	1.036	0.865	See Note 1	0.02
	NR Band n25 (PCS)	0.755	0.865	See Note 1	0.01
	NR Band n41	0.102	0.865	0.967	N/A

Note 1 - No evaluation was performed to determine the aggregate 1g SAR for these configurations as the SPLS ratio between the antenna pairs was not greater than 0.04 per FCC KDB 447498 D01v06. See Section 12.7 for detailed SPLS ratio analysis.

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

Exposure Condition	Mode	2G/3G/4G/5G 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 15 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	4	1+2+3+4
Body-Worn	CDMA BC10 (§90S)	0.472	0.104	0.057	0.175	0.808
	CDMA BC0 (§22H)	0.410	0.104	0.057	0.175	0.746
	PCS CDMA	0.684	0.104	0.057	0.175	1.020
	GPRS 850	0.276	0.104	0.057	0.175	0.612
	GPRS 1900	0.398	0.104	0.057	0.175	0.734
	UMTS 850	0.372	0.104	0.057	0.175	0.708
	UMTS 1750	0.794	0.104	0.057	0.175	1.130
	UMTS 1900	0.769	0.104	0.057	0.175	1.105
	LTE Band 71	0.246	0.104	0.057	0.175	0.582
	LTE Band 12	0.251	0.104	0.057	0.175	0.587
	LTE Band 13	0.384	0.104	0.057	0.175	0.720
	LTE Band 14	0.428	0.104	0.057	0.175	0.764
	LTE Band 26 (Cell)	0.335	0.104	0.057	0.175	0.671
	LTE Band 5 (Cell)	0.388	0.104	0.057	0.175	0.724
	LTE Band 66 (AWS)	1.009	0.104	0.057	0.175	1.345
	LTE Band 25 (PCS)	0.830	0.104	0.057	0.175	1.166
	LTE Band 30	0.530	0.104	0.057	0.175	0.866
	LTE Band 7	0.469	0.104	0.057	0.175	0.805
	LTE Band 48	0.357	0.104	0.057	0.175	0.693
	LTE Band 41	0.315	0.104	0.057	0.175	0.651
	NR Band n71	0.234	0.104	0.057	0.175	0.570
	NR Band n12	0.227	0.104	0.057	0.175	0.563
	NR Band n5 (Cell)	0.309	0.104	0.057	0.175	0.645
	NR Band n66 (AWS)	1.036	0.104	0.057	0.175	**1.372**
	NR Band n25 (PCS)	0.755	0.104	0.057	0.175	1.091
	NR Band n41	0.102	0.104	0.057	0.175	0.438

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

Exposure Condtion	Mode	2G/3G/4G/5G SAR (W/kg)	Bluetooth SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Body-Worn	CDMA BC10 (§90S)	0.472	0.045	0.517
	CDMA BC0 (§22H)	0.410	0.045	0.455
	PCS CDMA	0.684	0.045	0.729
	GPRS 850	0.276	0.045	0.321
	GPRS 1900	0.398	0.045	0.443
	UMTS 850	0.372	0.045	0.417
	UMTS 1750	0.794	0.045	0.839
	UMTS 1900	0.769	0.045	0.814
	LTE Band 71	0.246	0.045	0.291
	LTE Band 12	0.251	0.045	0.296
	LTE Band 13	0.384	0.045	0.429
	LTE Band 14	0.428	0.045	0.473
	LTE Band 26 (Cell)	0.335	0.045	0.380
	LTE Band 5 (Cell)	0.388	0.045	0.433
	LTE Band 66 (AWS)	1.009	0.045	1.054
	LTE Band 25 (PCS)	0.830	0.045	0.875
	LTE Band 30	0.530	0.045	0.575
	LTE Band 7	0.469	0.045	0.514
	LTE Band 48	0.357	0.045	0.402
	LTE Band 41	0.315	0.045	0.360
	NR Band n71	0.234	0.045	0.279
	NR Band n12	0.227	0.045	0.272
	NR Band n5 (Cell)	0.309	0.045	0.354
	NR Band n66 (AWS)	1.036	0.045	**1.081**
	NR Band n25 (PCS)	0.755	0.045	0.800
	NR Band n41	0.102	0.045	0.147

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

Exposure Condition	Mode	2G/3G/4G/5G 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)	0.472	0.045	0.502	0.410	1.019	0.927
	CDMA BC0 (§22H)	0.410	0.045	0.502	0.410	0.957	0.865
	PCS CDMA	0.684	0.045	0.502	0.410	1.231	1.139
	GPRS 850	0.276	0.045	0.502	0.410	0.823	0.731
	GPRS 1900	0.398	0.045	0.502	0.410	0.945	0.853
	UMTS 850	0.372	0.045	0.502	0.410	0.919	0.827
	UMTS 1750	0.794	0.045	0.502	0.410	1.341	1.249
	UMTS 1900	0.769	0.045	0.502	0.410	1.316	1.224
	LTE Band 71	0.246	0.045	0.502	0.410	0.793	0.701
	LTE Band 12	0.251	0.045	0.502	0.410	0.798	0.706
	LTE Band 13	0.384	0.045	0.502	0.410	0.931	0.839
	LTE Band 14	0.428	0.045	0.502	0.410	0.975	0.883
	LTE Band 26 (Cell)	0.335	0.045	0.502	0.410	0.882	0.790
	LTE Band 5 (Cell)	0.388	0.045	0.502	0.410	0.935	0.843
	LTE Band 66 (AWS)	1.009	0.045	0.502	0.410	1.556	1.464
	LTE Band 25 (PCS)	0.830	0.045	0.502	0.410	1.377	1.285
	LTE Band 30	0.530	0.045	0.502	0.410	1.077	0.985
	LTE Band 7	0.469	0.045	0.502	0.410	1.016	0.924
	LTE Band 48	0.357	0.045	0.502	0.410	0.904	0.812
	LTE Band 41	0.315	0.045	0.502	0.410	0.862	0.770
	NR Band n71	0.234	0.045	0.502	0.410	0.781	0.689
	NR Band n12	0.227	0.045	0.502	0.410	0.774	0.682
	NR Band n5 (Cell)	0.309	0.045	0.502	0.410	0.856	0.764
	NR Band n66 (AWS)	1.036	0.045	0.502	0.410	**1.583**	1.491
	NR Band n25 (PCS)	0.755	0.045	0.502	0.410	1.302	1.210
	NR Band n41	0.102	0.045	0.502	0.410	0.649	0.557

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Table 12-13
Simultaneous Transmission Scenario with Bluetooth and 5 GHz WLAN MIMO (Body-Worn at 1.5 cm)

Exposure Condition	Mode	2G/3G/4G/5G SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Body-Worn	CDMA BC10 (§90S)	0.472	0.045	0.865	1.382	N/A	N/A	N/A
	CDMA BC0 (§22H)	0.410	0.045	0.865	1.320	N/A	N/A	N/A
	PCS CDMA	0.684	0.045	0.865	**1.594**	N/A	N/A	N/A
	GPRS 850	0.276	0.045	0.865	1.186	N/A	N/A	N/A
	GPRS 1900	0.398	0.045	0.865	1.308	N/A	N/A	N/A
	UMTS 850	0.372	0.045	0.865	1.282	N/A	N/A	N/A
	UMTS 1750	0.794	0.045	0.865	See Note 1	0.00	0.01	0.02
	UMTS 1900	0.769	0.045	0.865	See Note 1	0.00	0.01	0.02
	LTE Band 71	0.246	0.045	0.865	1.156	N/A	N/A	N/A
	LTE Band 12	0.251	0.045	0.865	1.161	N/A	N/A	N/A
	LTE Band 13	0.384	0.045	0.865	1.294	N/A	N/A	N/A
	LTE Band 14	0.428	0.045	0.865	1.338	N/A	N/A	N/A
	LTE Band 26 (Cell)	0.335	0.045	0.865	1.245	N/A	N/A	N/A
	LTE Band 5 (Cell)	0.388	0.045	0.865	1.298	N/A	N/A	N/A
	LTE Band 66 (AWS)	1.009	0.045	0.865	See Note 1	0.01	0.02	0.02
	LTE Band 25 (PCS)	0.830	0.045	0.865	See Note 1	0.00	0.01	0.02
	LTE Band 30	0.530	0.045	0.865	1.440	N/A	N/A	N/A
	LTE Band 7	0.469	0.045	0.865	1.379	N/A	N/A	N/A
	LTE Band 48	0.357	0.045	0.865	1.267	N/A	N/A	N/A
	LTE Band 41	0.315	0.045	0.865	1.225	N/A	N/A	N/A
	NR Band n71	0.234	0.045	0.865	1.144	N/A	N/A	N/A
	NR Band n12	0.227	0.045	0.865	1.137	N/A	N/A	N/A
	NR Band n5 (Cell)	0.309	0.045	0.865	1.219	N/A	N/A	N/A
	NR Band n66 (AWS)	1.036	0.045	0.865	See Note 1	0.01	0.02	0.02
	NR Band n25 (PCS)	0.755	0.045	0.865	See Note 1	0.00	0.01	0.02
	NR Band n41	0.102	0.045	0.865	1.012	N/A	N/A	N/A

Note 1 - No evaluation was performed to determine the aggregate 1g SAR for these configurations as the SPLS ratio between the antenna pairs was not greater than 0.04 per FCC KDB 447498 D01v06. See Section 12.7 for detailed SPLS ratio analysis.

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12.5 Hotspot SAR Simultaneous Transmission Analysis

Table 12-14
Simultaneous Transmission Scenario with 2.4 GHz WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G/5G 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)	1.160	0.489	0.130	See Table Below	1.290	See Table Below
	EVDO BC0 (§22H)	0.889	0.489	0.130	1.378	1.019	1.508
	PCS EVDO	1.097	0.489	0.130	**1.586**	1.227	See Table Below
	GPRS 850	0.856	0.489	0.130	1.345	0.986	1.475
	GPRS 1900	0.813	0.489	0.130	1.302	0.943	1.432
	UMTS 850	0.721	0.489	0.130	1.210	0.851	1.340
	UMTS 1750	1.180	0.489	0.130	See Table Below	1.310	See Table Below
	UMTS 1900	1.097	0.489	0.130	**1.586**	1.227	See Table Below
	LTE Band 71	0.385	0.489	0.130	0.874	0.515	1.004
	LTE Band 12	0.420	0.489	0.130	0.909	0.550	1.039
	LTE Band 13	0.743	0.489	0.130	1.232	0.873	1.362
	LTE Band 14	0.681	0.489	0.130	1.170	0.811	1.300
	LTE Band 26 (Cell)	0.693	0.489	0.130	1.182	0.823	1.312
	LTE Band 5 (Cell)	0.680	0.489	0.130	1.169	0.810	1.299
	LTE Band 66 (AWS)	1.131	0.489	0.130	See Table Below	1.261	See Table Below
	LTE Band 25 (PCS)	1.165	0.489	0.130	See Table Below	1.295	See Table Below
	LTE Band 30	1.037	0.489	0.130	1.526	1.167	See Table Below
	LTE Band 7	0.569	0.489	0.130	1.058	0.699	1.188
	LTE Band 48	0.852	0.489	0.130	1.341	0.982	1.471
	LTE Band 41	0.467	0.489	0.130	0.956	0.597	1.086
	NR Band n71	0.366	0.489	0.130	0.855	0.496	0.985
	NR Band n12	0.401	0.489	0.130	0.890	0.531	1.020
	NR Band n5 (Cell)	0.676	0.489	0.130	1.165	0.806	1.295
	NR Band n66 (AWS)	1.162	0.489	0.130	See Table Below	1.292	See Table Below
	NR Band n25 (PCS)	1.166	0.489	0.130	See Table Below	1.296	See Table Below
	NR Band n41	0.527	0.489	0.130	1.016	0.657	1.146

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Simult Tx	Configuration	EVDO BC10 (§90S) 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)			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	1+3	1+2+3			1	2	3	1+2	1+3	1+2+3
Hotspot SAR	Back	1.160	0.207	0.130	1.367	1.290	**1.497**	Hotspot SAR	Back	0.572	0.207	0.130	0.779	0.702	0.909
	Front	0.768	0.489*	0.130*	1.257	0.898	1.387		Front	0.388	0.489*	0.130*	0.877	0.518	1.007
	Top	-	0.489	0.130*	0.489	0.130	0.619		Top	-	0.489	0.130*	0.489	0.130	0.619
	Bottom	0.581	-	-	0.581	0.581	0.581		Bottom	1.097	-	-	**1.097**	**1.097**	**1.097**
	Right	0.087	-	-	0.087	0.087	0.087		Right	0.071	-	-	0.071	0.071	0.071
	Left	0.328	0.050	0.130*	0.378	0.458	0.508		Left	0.054	0.050	0.130*	0.104	0.184	0.234

Simult Tx	Configuration	UMTS 1750 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)			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	1+3	1+2+3			1	2	3	1+2	1+3	1+2+3
Hotspot SAR	Back	0.357	0.207	0.130	0.564	0.487	0.694	Hotspot SAR	Back	0.506	0.207	0.130	0.713	0.636	0.843
	Front	0.286	0.489*	0.130*	0.775	0.416	0.905		Front	0.342	0.489*	0.130*	0.831	0.472	0.961
	Top	-	0.489	0.130*	0.489	0.130	0.619		Top	-	0.489	0.130*	0.489	0.130	0.619
	Bottom	1.180	-	-	**1.180**	**1.180**	**1.180**		Bottom	1.097	-	-	**1.097**	**1.097**	**1.097**
	Right	0.058	-	-	0.058	0.058	0.058		Right	0.051	-	-	0.051	0.051	0.051
	Left	0.055	0.050	0.130*	0.105	0.185	0.235		Left	0.055	0.050	0.130*	0.105	0.185	0.235

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)			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	1+3	1+2+3			1	2	3	1+2	1+3	1+2+3
Hotspot SAR	Back	0.570	0.207	0.130	0.777	0.700	0.907	Hotspot SAR	Back	0.591	0.207	0.130	0.798	0.721	0.928
	Front	0.406	0.489*	0.130*	0.895	0.536	1.025		Front	0.417	0.489*	0.130*	0.906	0.547	1.036
	Top	-	0.489	0.130*	0.489	0.130	0.619		Top	-	0.489	0.130*	0.489	0.130	0.619
	Bottom	1.131	-	-	**1.131**	**1.131**	**1.131**		Bottom	1.165	-	-	**1.165**	**1.165**	**1.165**
	Right	0.081	-	-	0.081	0.081	0.081		Right	0.066	-	-	0.066	0.066	0.066
	Left	0.071	0.050	0.130*	0.121	0.201	0.251		Left	0.056	0.050	0.130*	0.106	0.186	0.236

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)			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	1+3	1+2+3			1	2	3	1+2	1+3	1+2+3
Hotspot SAR	Back	0.450	0.207	0.130	0.657	0.580	0.787	Hotspot SAR	Back	0.735	0.207	0.130	0.942	0.865	1.072
	Front	0.356	0.489*	0.130*	0.845	0.486	0.975		Front	0.403	0.489*	0.130*	0.892	0.533	1.022
	Top	-	0.489	0.130*	0.489	0.130	0.619		Top	-	0.489	0.130*	0.489	0.130	0.619
	Bottom	1.037	-	-	**1.037**	**1.037**	**1.037**		Bottom	1.162	-	-	**1.162**	**1.162**	**1.162**
	Right	0.080	-	-	0.080	0.080	0.080		Right	0.086	-	-	0.086	0.086	0.086
	Left	0.033	0.050	0.130*	0.083	0.163	0.213		Left	0.072	0.050	0.130*	0.122	0.202	0.252

Simult Tx	Configuration	NR Band n25 (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	1+3	1+2+3
Hotspot SAR	Back	0.558	0.207	0.130	0.765	0.688	0.895
	Front	0.385	0.489*	0.130*	0.874	0.515	1.004
	Top	-	0.489	0.130*	0.489	0.130	0.619
	Bottom	1.166	-	-	**1.166**	**1.166**	**1.166**
	Right	0.052	-	-	0.052	0.052	0.052
	Left	0.047	0.050	0.130*	0.097	0.177	0.227

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

Exposure Condition	Mode	2G/3G/4G/5G 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)	1.160	0.589	0.590	See Table Below	See Table Below
	EVDO BC0 (§22H)	0.889	0.589	0.590	1.478	**1.479**
	PCS EVDO	1.097	0.589	0.590	See Table Below	See Table Below
	GPRS 850	0.856	0.589	0.590	1.445	1.446
	GPRS 1900	0.813	0.589	0.590	1.402	1.403
	UMTS 850	0.721	0.589	0.590	1.310	1.311
	UMTS 1750	1.180	0.589	0.590	See Table Below	See Table Below
	UMTS 1900	1.097	0.589	0.590	See Table Below	See Table Below
	LTE Band 71	0.385	0.589	0.590	0.974	0.975
	LTE Band 12	0.420	0.589	0.590	1.009	1.010
	LTE Band 13	0.743	0.589	0.590	1.332	1.333
	LTE Band 14	0.681	0.589	0.590	1.270	1.271
	LTE Band 26 (Cell)	0.693	0.589	0.590	1.282	1.283
	LTE Band 5 (Cell)	0.680	0.589	0.590	1.269	1.270
	LTE Band 66 (AWS)	1.131	0.589	0.590	See Table Below	See Table Below
	LTE Band 25 (PCS)	1.165	0.589	0.590	See Table Below	See Table Below
	LTE Band 30	1.037	0.589	0.590	See Table Below	See Table Below
	LTE Band 7	0.569	0.589	0.590	1.158	1.159
	LTE Band 48	0.852	0.589	0.590	1.441	1.442
	LTE Band 41	0.467	0.589	0.590	1.056	1.057
	NR Band n71	0.366	0.589	0.590	0.955	0.956
	NR Band n12	0.401	0.589	0.590	0.990	0.991
	NR Band n5 (Cell)	0.676	0.589	0.590	1.265	1.266
	NR Band n66 (AWS)	1.162	0.589	0.590	See Table Below	See Table Below
	NR Band n25 (PCS)	1.166	0.589	0.590	See Table Below	See Table Below
	NR Band n41	0.527	0.589	0.590	1.116	1.117

Simult Tx	Configuration	EVDO BC10 (§90S) 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+2	1+3
Hotspot SAR	Back	1.160	0.589	0.590	See Note 1	See Note 1	0.01	0.01
	Front	0.768	0.589*	0.590*	1.357	**1.358**	N/A	N/A
	Top	-	0.055	0.070	0.055	0.070	N/A	N/A
	Bottom	0.581	-	-	0.581	0.581	N/A	N/A
	Right	0.087	-	-	0.087	0.087	N/A	N/A
	Left	0.328	0.122	0.188	0.450	0.516	N/A	N/A

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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
Hotspot SAR	Back	0.572	0.589	0.590	1.161	**1.162**
	Front	0.388	0.589*	0.590*	0.977	0.978
	Top	-	0.055	0.070	0.055	0.070
	Bottom	1.097	-	-	1.097	1.097
	Right	0.071	-	-	0.071	0.071
	Left	0.054	0.122	0.188	0.176	0.242

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
Hotspot SAR	Back	0.357	0.589	0.590	0.946	0.947
	Front	0.286	0.589*	0.590*	0.875	0.876
	Top	-	0.055	0.070	0.055	0.070
	Bottom	1.180	-	-	**1.180**	**1.180**
	Right	0.058	-	-	0.058	0.058
	Left	0.055	0.122	0.188	0.177	0.243

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
Hotspot SAR	Back	0.506	0.589	0.590	1.095	1.096
	Front	0.342	0.589*	0.590*	0.931	0.932
	Top	-	0.055	0.070	0.055	0.070
	Bottom	1.097	-	-	**1.097**	**1.097**
	Right	0.051	-	-	0.051	0.051
	Left	0.055	0.122	0.188	0.177	0.243

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
Hotspot SAR	Back	0.570	0.589	0.590	1.159	**1.160**
	Front	0.406	0.589*	0.590*	0.995	0.996
	Top	-	0.055	0.070	0.055	0.070
	Bottom	1.131	-	-	1.131	1.131
	Right	0.081	-	-	0.081	0.081
	Left	0.071	0.122	0.188	0.193	0.259

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
Hotspot SAR	Back	0.591	0.589	0.590	1.180	**1.181**
	Front	0.417	0.589*	0.590*	1.006	1.007
	Top	-	0.055	0.070	0.055	0.070
	Bottom	1.165	-	-	1.165	1.165
	Right	0.066	-	-	0.066	0.066
	Left	0.056	0.122	0.188	0.178	0.244

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)	
		1	2	3	1+2	1+3
Hotspot SAR	Back	0.450	0.589	0.590	1.039	**1.040**
	Front	0.356	0.589*	0.590*	0.945	0.946
	Top	-	0.055	0.070	0.055	0.070
	Bottom	1.037	-	-	1.037	1.037
	Right	0.080	-	-	0.080	0.080
	Left	0.033	0.122	0.188	0.155	0.221

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
Hotspot SAR	Back	0.735	0.589	0.590	1.324	**1.325**
	Front	0.403	0.589*	0.590*	0.992	0.993
	Top	-	0.055	0.070	0.055	0.070
	Bottom	1.162	-	-	1.162	1.162
	Right	0.086	-	-	0.086	0.086
	Left	0.072	0.122	0.188	0.194	0.260

Simult Tx	Configuration	NR Band n25 (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
Hotspot SAR	Back	0.558	0.589	0.590	1.147	1.148
	Front	0.385	0.589*	0.590*	0.974	0.975
	Top	-	0.055	0.070	0.055	0.070
	Bottom	1.166	-	-	**1.166**	**1.166**
	Right	0.052	-	-	0.052	0.052
	Left	0.047	0.122	0.188	0.169	0.235

Note 1 - No evaluation was performed to determine the aggregate 1g SAR for these configurations as the SPLS ratio between the antenna pairs was not greater than 0.04 per FCC KDB 447498 D01v06. See Section 12.7 for detailed SPLS ratio analysis.

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

Simult Tx	Configuration	EVDO BC10 (§90S) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR	Simult Tx	Configuration	EVDO BC0 (§22H) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2			1	2	1+2	1+2
Hotspot SAR	Back	1.160	0.933	See Note 1	0.02	Hotspot SAR	Back	0.889	0.933	See Note 1	0.02
	Front	0.768	0.027	**0.795**	N/A		Front	0.638	0.027	**0.665**	N/A
	Top	-	0.094	0.094	N/A		Top	-	0.094	0.094	N/A
	Bottom	0.581	-	0.581	N/A		Bottom	0.508	-	0.508	N/A
	Right	0.087	-	0.087	N/A		Right	0.062	-	0.062	N/A
	Left	0.328	0.303	0.631	N/A		Left	0.293	0.303	0.596	N/A

Simult Tx	Configuration	PCS EVDO SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	GPRS 850 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2			1	2	1+2	1+2
Hotspot SAR	Back	0.572	0.933	**1.505**	Hotspot SAR	Back	0.856	0.933	See Note 1	0.02
	Front	0.388	0.027	0.415		Front	0.378	0.027	0.405	N/A
	Top	-	0.094	0.094		Top	-	0.094	0.094	N/A
	Bottom	1.097	-	1.097		Bottom	0.291	-	0.291	N/A
	Right	0.071	-	0.071		Right	0.042	-	0.042	N/A
	Left	0.054	0.303	0.357		Left	0.172	0.303	**0.475**	N/A

Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	UMTS 850 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2			1	2	1+2	1+2
Hotspot SAR	Back	0.370	0.933	**1.303**	Hotspot SAR	Back	0.721	0.933	See Note 1	0.01
	Front	0.300	0.027	0.327		Front	0.498	0.027	0.525	N/A
	Top	-	0.094	0.094		Top	-	0.094	0.094	N/A
	Bottom	0.813	-	0.813		Bottom	0.405	-	0.405	N/A
	Right	0.043	-	0.043		Right	0.048	-	0.048	N/A
	Left	0.042	0.303	0.345		Left	0.236	0.303	**0.539**	N/A

Simult Tx	Configuration	UMTS 1750 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2			1	2	1+2
Hotspot SAR	Back	0.357	0.933	**1.290**	Hotspot SAR	Back	0.506	0.933	**1.439**
	Front	0.286	0.027	0.313		Front	0.342	0.027	0.369
	Top	-	0.094	0.094		Top	-	0.094	0.094
	Bottom	1.180	-	1.180		Bottom	1.097	-	1.097
	Right	0.058	-	0.058		Right	0.051	-	0.051
	Left	0.055	0.303	0.358		Left	0.055	0.303	0.358

Simult Tx	Configuration	LTE Band 71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2			1	2	1+2
Hotspot SAR	Back	0.385	0.933	**1.318**	Hotspot SAR	Back	0.420	0.933	**1.353**
	Front	0.236	0.027	0.263		Front	0.259	0.027	0.286
	Top	-	0.094	0.094		Top	-	0.094	0.094
	Bottom	0.200	-	0.200		Bottom	0.215	-	0.215
	Right	0.157	-	0.157		Right	0.165	-	0.165
	Left	0.299	0.303	0.602		Left	0.306	0.303	0.609

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Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR	Simult Tx	Configuration	LTE Band 14 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2			1	2	1+2	1+2
Hotspot SAR	Back	0.743	0.933	See Note 1	0.01	Hotspot SAR	Back	0.681	0.933	See Note 1	0.01
	Front	0.552	0.027	0.579	N/A		Front	0.546	0.027	0.573	N/A
	Top	-	0.094	0.094	N/A		Top	-	0.094	0.094	N/A
	Bottom	0.432	-	0.432	N/A		Bottom	0.438	-	0.438	N/A
	Right	0.101	-	0.101	N/A		Right	0.104	-	0.104	N/A
	Left	0.323	0.303	**0.626**	N/A		Left	0.365	0.303	**0.668**	N/A

Simult Tx	Configuration	LTE Band 26 (Cell) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR	Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2			1	2	1+2	1+2
Hotspot SAR	Back	0.693	0.933	See Note 1	0.01	Hotspot SAR	Back	0.680	0.933	See Note 1	0.01
	Front	0.493	0.027	0.520	N/A		Front	0.505	0.027	0.532	N/A
	Top	-	0.094	0.094	N/A		Top	-	0.094	0.094	N/A
	Bottom	0.361	-	0.361	N/A		Bottom	0.381	-	0.381	N/A
	Right	0.073	-	0.073	N/A		Right	0.066	-	0.066	N/A
	Left	0.257	0.303	**0.560**	N/A		Left	0.246	0.303	**0.549**	N/A

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	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			1	2	1+2
Hotspot SAR	Back	0.570	0.933	**1.503**	Hotspot SAR	Back	0.591	0.933	**1.524**
	Front	0.406	0.027	0.433		Front	0.417	0.027	0.444
	Top	-	0.094	0.094		Top	-	0.094	0.094
	Bottom	1.131	-	1.131		Bottom	1.165	-	1.165
	Right	0.081	-	0.081		Right	0.066	-	0.066
	Left	0.071	0.303	0.374		Left	0.056	0.303	0.359

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 7 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2			1	2	1+2
Hotspot SAR	Back	0.450	0.933	**1.383**	Hotspot SAR	Back	0.284	0.933	**1.217**
	Front	0.356	0.027	0.383		Front	0.223	0.027	0.250
	Top	-	0.094	0.094		Top	-	0.094	0.094
	Bottom	1.037	-	1.037		Bottom	0.569	-	0.569
	Right	0.080	-	0.080		Right	0.144	-	0.144
	Left	0.033	0.303	0.336		Left	-	0.303	0.303

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2			1	2	1+2
Hotspot SAR	Back	0.466	0.933	**1.399**	Hotspot SAR	Back	0.203	0.933	**1.136**
	Front	0.143	0.027	0.170		Front	0.164	0.027	0.191
	Top	0.852	0.094	0.946		Top	-	0.094	0.094
	Left	0.173	0.303	0.476		Bottom	0.467	-	0.467
						Right	0.113	-	0.113
						Left	-	0.303	0.303

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Simult Tx	Configuration	NR Band n71 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.366	0.933	**1.299**
	Front	0.234	0.027	0.261
	Top	-	0.094	0.094
	Bottom	0.201	-	0.201
	Right	0.150	-	0.150
	Left	0.277	0.303	0.580

Simult Tx	Configuration	NR Band n12 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.401	0.933	**1.334**
	Front	0.249	0.027	0.276
	Top	-	0.094	0.094
	Bottom	0.211	-	0.211
	Right	0.165	-	0.165
	Left	0.290	0.303	0.593

Simult Tx	Configuration	NR Band n5 (Cell) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2
Hotspot SAR	Back	0.676	0.933	See Note 1	0.01
	Front	0.434	0.027	0.461	N/A
	Top	-	0.094	0.094	N/A
	Bottom	0.379	-	0.379	N/A
	Right	0.065	-	0.065	N/A
	Left	0.223	0.303	**0.526**	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
Hotspot SAR	Back	0.735	0.933	See Note 1	0.01
	Front	0.403	0.027	0.430	N/A
	Top	-	0.094	0.094	N/A
	Bottom	1.162	-	**1.162**	N/A
	Right	0.086	-	0.086	N/A
	Left	0.072	0.303	0.375	N/A

Simult Tx	Configuration	NR Band n25 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.558	0.933	**1.491**
	Front	0.385	0.027	0.412
	Top	-	0.094	0.094
	Bottom	1.166	-	1.166
	Right	0.052	-	0.052
	Left	0.047	0.303	0.350

Simult Tx	Configuration	NR Band n41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	Back	0.172	0.933	**1.105**
	Front	0.198	0.027	0.225
	Top	0.527	0.094	0.621
	Left	0.031	0.303	0.334

Note 1 - No evaluation was performed to determine the aggregate 1g SAR for these configurations as the SPLS ratio between the antenna pairs was not greater than 0.04 per FCC KDB 447498 D01v06. See Section 12.7 for detailed SPLS ratio analysis.

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Table 12-17
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/5G SAR (W/kg)	2.4 GHz WLAN MIMO at 18 dBm SAR (W/kg)	5 GHz WLAN MIMO at 15 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	EVDO BC10 (§90S)	1.160	0.167	0.272	See Table Below
	EVDO BC0 (§22H)	0.889	0.167	0.272	1.328
	PCS EVDO	1.097	0.167	0.272	1.536
	GPRS 850	0.856	0.167	0.272	1.295
	GPRS 1900	0.813	0.167	0.272	1.252
	UMTS 850	0.721	0.167	0.272	1.160
	UMTS 1750	1.180	0.167	0.272	See Table Below
	UMTS 1900	1.097	0.167	0.272	1.536
	LTE Band 71	0.385	0.167	0.272	0.824
	LTE Band 12	0.420	0.167	0.272	0.859
	LTE Band 13	0.743	0.167	0.272	1.182
	LTE Band 14	0.681	0.167	0.272	1.120
	LTE Band 26 (Cell)	0.693	0.167	0.272	1.132
	LTE Band 5 (Cell)	0.680	0.167	0.272	1.119
	LTE Band 66 (AWS)	1.131	0.167	0.272	**1.570**
	LTE Band 25 (PCS)	1.165	0.167	0.272	See Table Below
	LTE Band 30	1.037	0.167	0.272	1.476
	LTE Band 7	0.569	0.167	0.272	1.008
	LTE Band 48	0.852	0.167	0.272	1.291
	LTE Band 41	0.467	0.167	0.272	0.906
	NR Band n71	0.366	0.167	0.272	0.805
	NR Band n12	0.401	0.167	0.272	0.840
	NR Band n5 (Cell)	0.676	0.167	0.272	1.115
	NR Band n66 (AWS)	1.162	0.167	0.272	See Table Below
	NR Band n25 (PCS)	1.166	0.167	0.272	See Table Below
	NR Band n41	0.527	0.167	0.272	0.966

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Simult Tx	Configuration	EVDO BC10 (§90S) SAR (W/kg)	2.4 GHz WLAN MIMO at 18 dBm SAR (W/kg)	5 GHz WLAN MIMO at 15 dBm SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	UMTS 1750 SAR (W/kg)	2.4 GHz WLAN MIMO at 18 dBm SAR (W/kg)	5 GHz WLAN MIMO at 15 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	1.160	0.104	0.272	**1.536**	Hotspot SAR	Back	0.357	0.104	0.272	0.733
	Front	0.768	0.167*	0.009	0.944		Front	0.286	0.167*	0.009	0.462
	Top	-	0.167	0.272*	0.439		Top	-	0.167	0.272*	0.439
	Bottom	0.581	-	-	0.581		Bottom	1.180	-	-	**1.180**
	Right	0.087	-	-	0.087		Right	0.058	-	-	0.058
	Left	0.328	0.167*	0.077	0.572		Left	0.055	0.167*	0.077	0.299

Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO at 18 dBm SAR (W/kg)	5 GHz WLAN MIMO at 15 dBm SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	NR Band n66 (AWS) SAR (W/kg)	2.4 GHz WLAN MIMO at 18 dBm SAR (W/kg)	5 GHz WLAN MIMO at 15 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.591	0.104	0.272	0.967	Hotspot SAR	Back	0.735	0.104	0.272	1.111
	Front	0.417	0.167*	0.009	0.593		Front	0.403	0.167*	0.009	0.579
	Top	-	0.167	0.272*	0.439		Top	-	0.167	0.272*	0.439
	Bottom	1.165	-	-	**1.165**		Bottom	1.162	-	-	**1.162**
	Right	0.066	-	-	0.066		Right	0.086	-	-	0.086
	Left	0.056	0.167*	0.077	0.300		Left	0.072	0.167*	0.077	0.316

Simult Tx	Configuration	NR Band n25 (PCS) SAR (W/kg)	2.4 GHz WLAN MIMO at 18 dBm SAR (W/kg)	5 GHz WLAN MIMO at 15 dBm SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.558	0.104	0.272	0.934
	Front	0.385	0.167*	0.009	0.561
	Top	-	0.167	0.272*	0.439
	Bottom	1.166	-	-	**1.166**
	Right	0.052	-	-	0.052
	Left	0.047	0.167*	0.077	0.291

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Table 12-18
Simultaneous Transmission Scenario with Bluetooth (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G/5G SAR (W/kg)	Bluetooth SAR (W/kg)	Σ SAR (W/kg)
		1	2	1+2
Hotspot SAR	EVDO BC10 (§90S)	1.160	0.249	1.409
	EVDO BC0 (§22H)	0.889	0.249	1.138
	PCS EVDO	1.097	0.249	1.346
	GPRS 850	0.856	0.249	1.105
	GPRS 1900	0.813	0.249	1.062
	UMTS 850	0.721	0.249	0.970
	UMTS 1750	1.180	0.249	**1.429**
	UMTS 1900	1.097	0.249	1.346
	LTE Band 71	0.385	0.249	0.634
	LTE Band 12	0.420	0.249	0.669
	LTE Band 13	0.743	0.249	0.992
	LTE Band 14	0.681	0.249	0.930
	LTE Band 26 (Cell)	0.693	0.249	0.942
	LTE Band 5 (Cell)	0.680	0.249	0.929
	LTE Band 66 (AWS)	1.131	0.249	1.380
	LTE Band 25 (PCS)	1.165	0.249	1.414
	LTE Band 30	1.037	0.249	1.286
	LTE Band 7	0.569	0.249	0.818
	LTE Band 48	0.852	0.249	1.101
	LTE Band 41	0.467	0.249	0.716
	NR Band n71	0.366	0.249	0.615
	NR Band n12	0.401	0.249	0.650
	NR Band n5 (Cell)	0.676	0.249	0.925
	NR Band n66 (AWS)	1.162	0.249	1.411
	NR Band n25 (PCS)	1.166	0.249	1.415
	NR Band n41	0.527	0.249	0.776

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Table 12-19
Simultaneous Transmission Scenario with Bluetooth and 5 GHz WLAN (Hotspot at 1.0 cm)

Exposure Condition	Mode	2G/3G/4G/5G 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
Hotspot SAR	EVDO BC10 (§90S)	1.160	0.249	0.589	0.590	See Table Below	See Table Below
	EVDO BC0 (§22H)	0.889	0.249	0.589	0.590	See Table Below	See Table Below
	PCS EVDO	1.097	0.249	0.589	0.590	See Table Below	See Table Below
	GPRS 850	0.856	0.249	0.589	0.590	See Table Below	See Table Below
	GPRS 1900	0.813	0.249	0.589	0.590	See Table Below	See Table Below
	UMTS 850	0.721	0.249	0.589	0.590	1.559	1.560
	UMTS 1750	1.180	0.249	0.589	0.590	See Table Below	See Table Below
	UMTS 1900	1.097	0.249	0.589	0.590	See Table Below	See Table Below
	LTE Band 71	0.385	0.249	0.589	0.590	1.223	1.224
	LTE Band 12	0.420	0.249	0.589	0.590	1.258	1.259
	LTE Band 13	0.743	0.249	0.589	0.590	1.581	**1.582**
	LTE Band 14	0.681	0.249	0.589	0.590	1.519	1.520
	LTE Band 26 (Cell)	0.693	0.249	0.589	0.590	1.531	1.532
	LTE Band 5 (Cell)	0.680	0.249	0.589	0.590	1.518	1.519
	LTE Band 66 (AWS)	1.131	0.249	0.589	0.590	See Table Below	See Table Below
	LTE Band 25 (PCS)	1.165	0.249	0.589	0.590	See Table Below	See Table Below
	LTE Band 30	1.037	0.249	0.589	0.590	See Table Below	See Table Below
	LTE Band 7	0.569	0.249	0.589	0.590	1.407	1.408
	LTE Band 48	0.852	0.249	0.589	0.590	See Table Below	See Table Below
	LTE Band 41	0.467	0.249	0.589	0.590	1.305	1.306
	NR Band n71	0.366	0.249	0.589	0.590	1.204	1.205
	NR Band n12	0.401	0.249	0.589	0.590	1.239	1.240
	NR Band n5 (Cell)	0.676	0.249	0.589	0.590	1.514	1.515
	NR Band n66 (AWS)	1.162	0.249	0.589	0.590	See Table Below	See Table Below
	NR Band n25 (PCS)	1.166	0.249	0.589	0.590	See Table Below	See Table Below
	NR Band n41	0.527	0.249	0.589	0.590	1.365	1.366

Simult Tx	Configuration	EVDO 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)		SPLSR				
		1	2	3	4	1+2+3	1+2+4	1+2	1+3	1+4	2+3	2+4
Hotspot SAR	Back	1.160	0.075	0.589	0.590	See Note 1	See Note 1	0.01	0.01	0.01	0.01	0.01
	Front	0.768	0.088	0.589*	0.590*	1.445	**1.446**	N/A	N/A	N/A	N/A	N/A
	Top	-	0.249	0.055	0.070	0.304	0.319	N/A	N/A	N/A	N/A	N/A
	Bottom	0.581	-	-	-	0.581	0.581	N/A	N/A	N/A	N/A	N/A
	Right	0.087	-	-	-	0.087	0.087	N/A	N/A	N/A	N/A	N/A
	Left	0.328	0.019	0.122	0.188	0.469	0.535	N/A	N/A	N/A	N/A	N/A

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Simult Tx	Configuration	EVDO 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
Hotspot SAR	Back	0.889	0.075	0.589	0.590	1.553	**1.554**
	Front	0.638	0.088	0.589*	0.590*	1.315	1.316
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	0.508	-	-	-	0.508	0.508
	Right	0.062	-	-	-	0.062	0.062
	Left	0.293	0.019	0.122	0.188	0.434	0.500

Simult Tx	Configuration	PCS EVDO 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
Hotspot SAR	Back	0.572	0.075	0.589	0.590	1.236	**1.237**
	Front	0.388	0.088	0.589*	0.590*	1.065	1.066
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	1.097	-	-	-	1.097	1.097
	Right	0.071	-	-	-	0.071	0.071
	Left	0.054	0.019	0.122	0.188	0.195	0.261

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
Hotspot SAR	Back	0.856	0.075	0.589	0.590	1.520	**1.521**
	Front	0.378	0.088	0.589*	0.590*	1.055	1.056
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	0.291	-	-	-	0.291	0.291
	Right	0.042	-	-	-	0.042	0.042
	Left	0.172	0.019	0.122	0.188	0.313	0.379

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
Hotspot SAR	Back	0.370	0.075	0.589	0.590	1.034	**1.035**
	Front	0.300	0.088	0.589*	0.590*	0.977	0.978
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	0.813	-	-	-	0.813	0.813
	Right	0.043	-	-	-	0.043	0.043
	Left	0.042	0.019	0.122	0.188	0.183	0.249

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
Hotspot SAR	Back	0.357	0.075	0.589	0.590	1.021	1.022
	Front	0.286	0.088	0.589*	0.590*	0.963	0.964
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	1.180	-	-	-	**1.180**	**1.180**
	Right	0.058	-	-	-	0.058	0.058
	Left	0.055	0.019	0.122	0.188	0.196	0.262

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
Hotspot SAR	Back	0.506	0.075	0.589	0.590	1.170	**1.171**
	Front	0.342	0.088	0.589*	0.590*	1.019	1.020
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	1.097	-	-	-	1.097	1.097
	Right	0.051	-	-	-	0.051	0.051
	Left	0.055	0.019	0.122	0.188	0.196	0.262

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
Hotspot SAR	Back	0.570	0.075	0.589	0.590	1.234	**1.235**
	Front	0.406	0.088	0.589*	0.590*	1.083	1.084
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	1.131	-	-	-	1.131	1.131
	Right	0.081	-	-	-	0.081	0.081
	Left	0.071	0.019	0.122	0.188	0.212	0.278

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
Hotspot SAR	Back	0.591	0.075	0.589	0.590	1.255	**1.256**
	Front	0.417	0.088	0.589*	0.590*	1.094	1.095
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	1.165	-	-	-	1.165	1.165
	Right	0.066	-	-	-	0.066	0.066
	Left	0.056	0.019	0.122	0.188	0.197	0.263

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
Hotspot SAR	Back	0.450	0.075	0.589	0.590	1.114	**1.115**
	Front	0.356	0.088	0.589*	0.590*	1.033	1.034
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	1.037	-	-	-	1.037	1.037
	Right	0.080	-	-	-	0.080	0.080
	Left	0.033	0.019	0.122	0.188	0.174	0.240

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
Hotspot SAR	Back	0.466	0.075	0.589	0.590	1.130	1.131
	Front	0.143	0.088	0.589*	0.590*	0.820	0.821
	Top	0.852	0.249	0.055	0.070	1.156	**1.171**
	Left	0.173	0.019	0.122	0.188	0.314	0.380

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
Hotspot SAR	Back	0.735	0.075	0.589	0.590	1.399	**1.400**
	Front	0.403	0.088	0.589*	0.590*	1.080	1.081
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	1.162	-	-	-	1.162	1.162
	Right	0.086	-	-	-	0.086	0.086
	Left	0.072	0.019	0.122	0.188	0.213	0.279

Simult Tx	Configuration	NR Band n25 (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
Hotspot SAR	Back	0.558	0.075	0.589	0.590	1.222	**1.223**
	Front	0.385	0.088	0.589*	0.590*	1.062	1.063
	Top	-	0.249	0.055	0.070	0.304	0.319
	Bottom	1.166	-	-	-	1.166	1.166
	Right	0.052	-	-	-	0.052	0.052
	Left	0.047	0.019	0.122	0.188	0.188	0.254

Note 1 - No evaluation was performed to determine the aggregate 1g SAR for these configurations as the SPLS ratio between the antenna pairs was not greater than 0.04 per FCC KDB 447498 D01v06. See Section 12.7 for detailed SPLS ratio analysis.

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Table 12-20
Simultaneous Transmission Scenario with Bluetooth and 5 GHz WLAN MIMO (Hotspot at 1.0 cm)

Simult Tx	Configuration	EVDO BC10 (§90S) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	1.160	0.075	0.933	See Note 1	0.01	0.02	0.03
	Front	0.768	0.088	0.027	**0.883**	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	0.581	-	-	0.581	N/A	N/A	N/A
	Right	0.087	-	-	0.087	N/A	N/A	N/A
	Left	0.328	0.019	0.303	0.650	N/A	N/A	N/A

Simult Tx	Configuration	EVDO BC0 (§22H) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.889	0.075	0.933	See Note 1	0.01	0.02	0.03
	Front	0.638	0.088	0.027	**0.753**	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	0.508	-	-	0.508	N/A	N/A	N/A
	Right	0.062	-	-	0.062	N/A	N/A	N/A
	Left	0.293	0.019	0.303	0.615	N/A	N/A	N/A

Simult Tx	Configuration	PCS EVDO SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.572	0.075	0.933	**1.580**	0.01	0.02	0.03
	Front	0.388	0.088	0.027	0.503	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	1.097	-	-	1.097	N/A	N/A	N/A
	Right	0.071	-	-	0.071	N/A	N/A	N/A
	Left	0.054	0.019	0.303	0.376	N/A	N/A	N/A

Simult Tx	Configuration	GPRS 850 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.856	0.075	0.933	See Note 1	0.01	0.02	0.03
	Front	0.378	0.088	0.027	0.493	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	0.291	-	-	0.291	N/A	N/A	N/A
	Right	0.042	-	-	0.042	N/A	N/A	N/A
	Left	0.172	0.019	0.303	**0.494**	N/A	N/A	N/A

Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.370	0.075	0.933	**1.378**	0.00	0.01	0.03
	Front	0.300	0.088	0.027	0.415	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	0.813	-	-	0.813	N/A	N/A	N/A
	Right	0.043	-	-	0.043	N/A	N/A	N/A
	Left	0.042	0.019	0.303	0.364	N/A	N/A	N/A

Simult Tx	Configuration	UMTS 850 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.721	0.075	0.933	See Note 1	0.00	0.01	0.03
	Front	0.498	0.088	0.027	**0.613**	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	0.405	-	-	0.405	N/A	N/A	N/A
	Right	0.048	-	-	0.048	N/A	N/A	N/A
	Left	0.236	0.019	0.303	0.558	N/A	N/A	N/A

Simult Tx	Configuration	UMTS 1750 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.357	0.075	0.933	**1.365**
	Front	0.286	0.088	0.027	0.401
	Top	-	0.249	0.094	0.343
	Bottom	1.180	-	-	1.180
	Right	0.058	-	-	0.058
	Left	0.055	0.019	0.303	0.377

Simult Tx	Configuration	UMTS 1900 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.506	0.075	0.933	**1.514**
	Front	0.342	0.088	0.027	0.457
	Top	-	0.249	0.094	0.343
	Bottom	1.097	-	-	1.097
	Right	0.051	-	-	0.051
	Left	0.055	0.019	0.303	0.377

Simult Tx	Configuration	LTE Band 71 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.385	0.075	0.933	**1.393**
	Front	0.236	0.088	0.027	0.351
	Top	-	0.249	0.094	0.343
	Bottom	0.200	-	-	0.200
	Right	0.157	-	-	0.157
	Left	0.299	0.019	0.303	0.621

Simult Tx	Configuration	LTE Band 12 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3
Hotspot SAR	Back	0.420	0.075	0.933	**1.428**
	Front	0.259	0.088	0.027	0.374
	Top	-	0.249	0.094	0.343
	Bottom	0.215	-	-	0.215
	Right	0.165	-	-	0.165
	Left	0.306	0.019	0.303	0.628

Simult Tx	Configuration	LTE Band 13 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.743	0.075	0.933	See Note 1	0.00	0.01	0.03
	Front	0.552	0.088	0.027	**0.667**	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	0.432	-	-	0.432	N/A	N/A	N/A
	Right	0.101	-	-	0.101	N/A	N/A	N/A
	Left	0.323	0.019	0.303	0.645	N/A	N/A	N/A

Simult Tx	Configuration	LTE Band 14 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.681	0.075	0.933	See Note 1	0.00	0.01	0.03
	Front	0.546	0.088	0.027	**0.661**	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	0.438	-	-	0.438	N/A	N/A	N/A
	Right	0.104	-	-	0.104	N/A	N/A	N/A
	Left	0.365	0.019	0.303	0.687	N/A	N/A	N/A

Simult Tx	Configuration	LTE Band 26 (Cell) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.693	0.075	0.933	See Note 1	0.00	0.01	0.03
	Front	0.493	0.088	0.027	**0.608**	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	0.361	-	-	0.361	N/A	N/A	N/A
	Right	0.073	-	-	0.073	N/A	N/A	N/A
	Left	0.257	0.019	0.303	0.579	N/A	N/A	N/A

Simult Tx	Configuration	LTE Band 5 (Cell) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.680	0.075	0.933	See Note 1	0.00	0.01	0.03
	Front	0.505	0.088	0.027	**0.620**	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	0.381	-	-	0.381	N/A	N/A	N/A
	Right	0.066	-	-	0.066	N/A	N/A	N/A
	Left	0.246	0.019	0.303	0.568	N/A	N/A	N/A

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Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3			1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.570	0.075	0.933	**1.578**	Hotspot SAR	Back	0.591	0.075	0.933	See Note 1	0.00	0.01	0.03
	Front	0.406	0.088	0.027	0.521		Front	0.417	0.088	0.027	0.532	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343		Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	1.131	-	-	1.131		Bottom	1.165	-	-	**1.165**	N/A	N/A	N/A
	Right	0.081	-	-	0.081		Right	0.066	-	-	0.066	N/A	N/A	N/A
	Left	0.071	0.019	0.303	0.393		Left	0.056	0.019	0.303	0.378	N/A	N/A	N/A

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 7 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.450	0.075	0.933	**1.458**	Hotspot SAR	Back	0.284	0.075	0.933	**1.292**
	Front	0.356	0.088	0.027	0.471		Front	0.223	0.088	0.027	0.338
	Top	-	0.249	0.094	0.343		Top	-	0.249	0.094	0.343
	Bottom	1.037	-	-	1.037		Bottom	0.569	-	-	0.569
	Right	0.080	-	-	0.080		Right	0.144	-	-	0.144
	Left	0.033	0.019	0.303	0.355		Left	-	0.019	0.303	0.322

Simult Tx	Configuration	LTE Band 48 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	LTE Band 41 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.466	0.075	0.933	**1.474**	Hotspot SAR	Back	0.203	0.075	0.933	**1.211**
	Front	0.143	0.088	0.027	0.258		Front	0.164	0.088	0.027	0.279
	Top	0.852	0.249	0.094	1.195		Top	-	0.249	0.094	0.343
	Left	0.173	0.019	0.303	0.495		Bottom	0.467	-	-	0.467
							Right	0.113	-	-	0.113
							Left	-	0.019	0.303	0.322

Simult Tx	Configuration	NR Band n71 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	NR Band n12 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.366	0.075	0.933	**1.374**	Hotspot SAR	Back	0.401	0.075	0.933	**1.409**
	Front	0.234	0.088	0.027	0.349		Front	0.249	0.088	0.027	0.364
	Top	-	0.249	0.094	0.343		Top	-	0.249	0.094	0.343
	Bottom	0.201	-	-	0.201		Bottom	0.211	-	-	0.211
	Right	0.150	-	-	0.150		Right	0.165	-	-	0.165
	Left	0.277	0.019	0.303	0.599		Left	0.290	0.019	0.303	0.612

Simult Tx	Configuration	NR Band n5 (Cell) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR			Simult Tx	Configuration	NR Band n66 (AWS) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR		
		1	2	3	1+2+3	1+2	1+3	2+3			1	2	3	1+2+3	1+2	1+3	2+3
Hotspot SAR	Back	0.676	0.075	0.933	See Note 1	0.00	0.01	0.03	Hotspot SAR	Back	0.735	0.075	0.933	See Note 1	0.00	0.01	0.03
	Front	0.434	0.088	0.027	**0.549**	N/A	N/A	N/A		Front	0.403	0.088	0.027	0.518	N/A	N/A	N/A
	Top	-	0.249	0.094	0.343	N/A	N/A	N/A		Top	-	0.249	0.094	0.343	N/A	N/A	N/A
	Bottom	0.379	-	-	0.379	N/A	N/A	N/A		Bottom	1.162	-	-	**1.162**	N/A	N/A	N/A
	Right	0.065	-	-	0.065	N/A	N/A	N/A		Right	0.086	-	-	0.086	N/A	N/A	N/A
	Left	0.223	0.019	0.303	0.545	N/A	N/A	N/A		Left	0.072	0.019	0.303	0.394	N/A	N/A	N/A

Simult Tx	Configuration	NR Band n25 (PCS) SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	Simult Tx	Configuration	NR Band n41 SAR (W/kg)	Bluetooth SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)
		1	2	3	1+2+3			1	2	3	1+2+3
Hotspot SAR	Back	0.558	0.075	0.933	**1.566**	Hotspot SAR	Back	0.172	0.075	0.933	**1.180**
	Front	0.385	0.088	0.027	0.500		Front	0.198	0.088	0.027	0.313
	Top	-	0.249	0.094	0.343		Top	0.527	0.249	0.094	0.870
	Bottom	1.166	-	-	1.166		Left	0.031	0.019	0.303	0.353
	Right	0.052	-	-	0.052						
	Left	0.047	0.019	0.303	0.369						

Note 1 - No evaluation was performed to determine the aggregate 1g SAR for these configurations as the SPLS ratio between the antenna pairs was not greater than 0.04 per FCC KDB 447498 D01v06. See Section 12.7 for detailed SPLS ratio analysis.

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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 12-21
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)		SPLSR	
		1	2	3	1+2	1+3	1+2	1+3
Phablet SAR	Back	2.988	1.489	2.193	See Note 1	See Note 1	0.06	0.08
	Front	2.630	0.095	0.055	2.725	2.685	N/A	N/A
	Top	-	1.489*	2.193*	1.489	2.193	N/A	N/A
	Bottom	3.030	-	-	**3.030**	**3.030**	N/A	N/A
	Right	0.458	-	-	0.458	0.458	N/A	N/A
	Left	0.355	0.515	0.399	0.870	0.754	N/A	N/A

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)		SPLSR	
		1	2	3	1+2	1+3	1+2	1+3
Phablet SAR	Back	1.902	1.489	2.193	**3.391**	See Note 1	N/A	0.06
	Front	1.465	0.095	0.055	1.560	1.520	N/A	N/A
	Top	-	1.489*	2.193*	1.489	2.193	N/A	N/A
	Bottom	1.439	-	-	1.439	1.439	N/A	N/A
	Right	0.352	-	-	0.352	0.352	N/A	N/A
	Left	0.267	0.515	0.399	0.782	0.666	N/A	N/A

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)		SPLSR	
		1	2	3	1+2	1+3	1+2	1+3
Phablet SAR	Back	2.435	1.489	2.193	**3.924**	See Note 1	N/A	0.07
	Front	2.292	0.095	0.055	2.387	2.347	N/A	N/A
	Top	-	1.489*	2.193*	1.489	2.193	N/A	N/A
	Bottom	3.113	-	-	3.113	3.113	N/A	N/A
	Right	0.435	-	-	0.435	0.435	N/A	N/A
	Left	0.185	0.515	0.399	0.700	0.584	N/A	N/A

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)		SPLSR	
		1	2	3	1+2	1+3	1+2	1+3
Phablet SAR	Back	2.670	1.489	2.193	See Note 1	See Note 1	0.06	0.08
	Front	2.330	0.095	0.055	2.425	2.385	N/A	N/A
	Top	-	1.489*	2.193*	1.489	2.193	N/A	N/A
	Bottom	2.513	-	-	**2.513**	**2.513**	N/A	N/A
	Right	0.488	-	-	0.488	0.488	N/A	N/A
	Left	0.350	0.515	0.399	0.865	0.749	N/A	N/A

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)		SPLSR	
		1	2	3	1+2	1+3	1+2	1+3
Phablet SAR	Back	2.974	1.489	2.193	See Note 1	See Note 1	0.06	0.08
	Front	2.495	0.095	0.055	2.590	2.550	N/A	N/A
	Top	-	1.489*	2.193*	1.489	2.193	N/A	N/A
	Bottom	2.987	-	-	**2.987**	**2.987**	N/A	N/A
	Right	0.568	-	-	0.568	0.568	N/A	N/A
	Left	0.373	0.515	0.399	0.888	0.772	N/A	N/A

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)		SPLSR	
		1	2	3	1+2	1+3	1+2	1+3
Phablet SAR	Back	2.626	1.489	2.193	See Note 1	See Note 1	0.06	0.07
	Front	2.429	0.095	0.055	2.524	2.484	N/A	N/A
	Top	-	1.489*	2.193*	1.489	2.193	N/A	N/A
	Bottom	3.135	-	-	**3.135**	**3.135**	N/A	N/A
	Right	0.526	-	-	0.526	0.526	N/A	N/A
	Left	0.290	0.515	0.399	0.805	0.689	N/A	N/A

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+2	1+3
Phablet SAR	Back	2.909	1.489	2.193	See Note 1	See Note 1	0.06	0.08
	Front	2.171	0.095	0.055	2.266	2.226	N/A	N/A
	Top	-	1.489*	2.193*	1.489	2.193	N/A	N/A
	Bottom	2.535	-	-	**2.535**	**2.535**	N/A	N/A
	Right	0.424	-	-	0.424	0.424	N/A	N/A
	Left	0.191	0.515	0.399	0.706	0.590	N/A	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	1.512	1.489	2.193	3.001	**3.705**
	Front	1.304	0.095	0.055	1.399	1.359
	Top	-	1.489*	2.193*	1.489	2.193
	Bottom	1.816	-	-	1.816	1.816
	Right	1.393	-	-	1.393	1.393
	Left	-	0.515	0.399	0.515	0.399

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	1.672	1.489	2.193	3.161	**3.865**
	Front	1.410	0.095	0.055	1.505	1.465
	Top	-	1.489*	2.193*	1.489	2.193
	Bottom	2.678	-	-	2.678	2.678
	Right	0.645	-	-	0.645	0.645
	Left	-	0.515	0.399	0.515	0.399

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)		SPLSR	
		1	2	3	1+2	1+3	1+2	1+3
Phablet SAR	Back	2.729	1.489	2.193	See Note 1	See Note 1	0.06	0.07
	Front	2.219	0.095	0.055	2.314	2.274	N/A	N/A
	Top	-	1.489*	2.193*	1.489	2.193	N/A	N/A
	Bottom	2.347	-	-	**2.347**	**2.347**	N/A	N/A
	Right	0.595	-	-	0.595	0.595	N/A	N/A
	Left	0.369	0.515	0.399	0.884	0.768	N/A	N/A

Simult Tx	Configuration	NR Band n25 (PCS) 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+2	1+3
Phablet SAR	Back	2.341	1.489	2.193	**3.830**	See Note 1	N/A	0.07
	Front	1.888	0.095	0.055	1.983	1.943	N/A	N/A
	Top	-	1.489*	2.193*	1.489	2.193	N/A	N/A
	Bottom	2.472	-	-	2.472	2.472	N/A	N/A
	Right	0.667	-	-	0.667	0.667	N/A	N/A
	Left	0.401	0.515	0.399	0.916	0.800	N/A	N/A

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Table 12-22
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)	SPLSR	Simult Tx	Configuration	GPRS 1900 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2			1	2	1+2	1+2
Phablet SAR	Back	2.988	2.765	See Note 1	0.10	Phablet SAR	Back	1.902	2.765	See Note 1	0.07
	Front	2.630	0.155	2.785	N/A		Front	1.465	0.155	1.620	N/A
	Top	-	2.765*	2.765	N/A		Top	-	2.765*	**2.765**	N/A
	Bottom	3.030	-	**3.030**	N/A		Bottom	1.439	-	1.439	N/A
	Right	0.458	-	0.458	N/A		Right	0.352	-	0.352	N/A
	Left	0.355	0.713	1.068	N/A		Left	0.267	0.713	0.980	N/A

Simult Tx	Configuration	UMTS 1750 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR	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			1	2	1+2	1+2
Phablet SAR	Back	2.435	2.765	See Note 1	0.08	Phablet SAR	Back	2.670	2.765	See Note 1	0.09
	Front	2.292	0.155	2.447	N/A		Front	2.330	0.155	2.485	N/A
	Top	-	2.765*	2.765	N/A		Top	-	2.765*	**2.765**	N/A
	Bottom	3.113	-	**3.113**	N/A		Bottom	2.513	-	2.513	N/A
	Right	0.435	-	0.435	N/A		Right	0.488	-	0.488	N/A
	Left	0.185	0.713	0.898	N/A		Left	0.350	0.713	1.063	N/A

Simult Tx	Configuration	LTE Band 66 (AWS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR	Simult Tx	Configuration	LTE Band 25 (PCS) SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2			1	2	1+2	1+2
Phablet SAR	Back	2.974	2.765	See Note 1	0.09	Phablet SAR	Back	2.626	2.765	See Note 1	0.09
	Front	2.495	0.155	2.650	N/A		Front	2.429	0.155	2.584	N/A
	Top	-	2.765*	2.765	N/A		Top	-	2.765*	2.765	N/A
	Bottom	2.987	-	**2.987**	N/A		Bottom	3.135	-	**3.135**	N/A
	Right	0.568	-	0.568	N/A		Right	0.526	-	0.526	N/A
	Left	0.373	0.713	1.086	N/A		Left	0.290	0.713	1.003	N/A

Simult Tx	Configuration	LTE Band 30 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR	Simult Tx	Configuration	LTE Band 7 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR
		1	2	1+2	1+2			1	2	1+2	1+2
Phablet SAR	Back	2.909	2.765	See Note 1	0.09	Phablet SAR	Back	1.512	2.765	See Note 1	0.06
	Front	2.171	0.155	2.326	N/A		Front	1.304	0.155	1.459	N/A
	Top	-	2.765*	**2.765**	N/A		Top	-	2.765*	**2.765**	N/A
	Bottom	2.535	-	2.535	N/A		Bottom	1.816	-	1.816	N/A
	Right	0.424	-	0.424	N/A		Right	1.393	-	1.393	N/A
	Left	0.191	0.713	0.904	N/A		Left	-	0.713	0.713	N/A

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Simult Tx	Configuration	LTE Band 41 SAR (W/kg)	5 GHz WLAN MIMO SAR (W/kg)	Σ SAR (W/kg)	SPLSR	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			1	2	1+2	1+2
Phablet SAR	Back	1.672	2.765	See Note 1	0.06	Phablet SAR	Back	2.729	2.765	See Note 1	0.09
	Front	1.410	0.155	1.565	N/A		Front	2.219	0.155	2.374	N/A
	Top	-	2.765*	**2.765**	N/A		Top	-	2.765*	**2.765**	N/A
	Bottom	2.678	-	2.678	N/A		Bottom	2.347	-	2.347	N/A
	Right	0.645	-	0.645	N/A		Right	0.595	-	0.595	N/A
	Left	-	0.713	0.713	N/A		Left	0.369	0.713	1.082	N/A

Simult Tx	Configuration	NR Band n25 (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	2.341	2.765	See Note 1	0.08
	Front	1.888	0.155	2.043	N/A
	Top	-	2.765*	**2.765**	N/A
	Bottom	2.472	-	2.472	N/A
	Right	0.667	-	0.667	N/A
	Left	0.401	0.713	1.114	N/A

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.

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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.

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

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

12.7.1 Body-Worn Back Side SPLSR Evaluation and Analysis

Table 12-23
Peak SAR Locations for Body-Worn Back Side

Mode/Band	x (mm)	y (mm)
5 GHz WLAN MIMO	-4.00	68.00
Bluetooth	-45.40	78.60
UMTS 1750	-23.50	-84.00
UMTS 1900	-23.50	-76.50
LTE Band 66 (AWS)	-25.00	-84.00
LTE Band 25 (PCS)	-14.00	-84.00
NR Band n66	-23.50	-87.00
NR Band n25	-11.00	-84.00

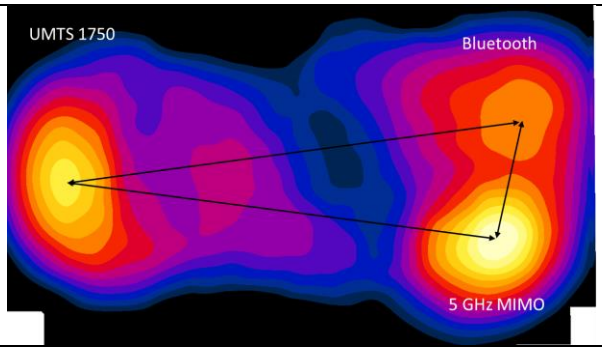
Table 12-24
Body-Worn Back Side SAR to Peak Location Separation Ratio Calculations

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}	$(a+b)^{1.5}/D_{a-b}$	
5 GHz WLAN MIMO	UMTS 1750	0.865	0.794	1.659	153.25	0.01	1
Bluetooth	UMTS 1750	0.045	0.794	0.839	164.07	0.00	
5 GHz WLAN MIMO	Bluetooth	0.865	0.045	0.91	42.74	0.02	
5 GHz WLAN MIMO	UMTS 1900	0.865	0.769	1.634	145.81	0.01	2
Bluetooth	UMTS 1900	0.045	0.769	0.814	156.64	0.00	
5 GHz WLAN MIMO	Bluetooth	0.865	0.045	0.91	42.74	0.02	
5 GHz WLAN MIMO	LTE Band 66 (AWS)	0.865	1.009	1.874	153.44	0.02	3
Bluetooth	LTE Band 66 (AWS)	0.045	1.009	1.054	163.87	0.01	
5 GHz WLAN MIMO	Bluetooth	0.865	0.045	0.91	42.74	0.02	
5 GHz WLAN MIMO	LTE Band 25 (PCS)	0.865	0.830	1.695	152.33	0.01	4
Bluetooth	LTE Band 25 (PCS)	0.045	0.830	0.875	165.60	0.00	
5 GHz WLAN MIMO	Bluetooth	0.865	0.045	0.91	42.74	0.02	
5 GHz WLAN MIMO	NR Band n66	0.865	1.036	1.901	156.22	0.02	5
Bluetooth	NR Band n66	0.045	1.036	1.081	167.04	0.01	
5 GHz WLAN MIMO	Bluetooth	0.865	0.045	0.91	42.74	0.02	
5 GHz WLAN MIMO	NR Band n25	0.865	0.755	1.62	152.16	0.01	6
Bluetooth	NR Band n25	0.045	0.755	0.8	166.20	0.00	
5 GHz WLAN MIMO	Bluetooth	0.865	0.045	0.91	42.74	0.02	

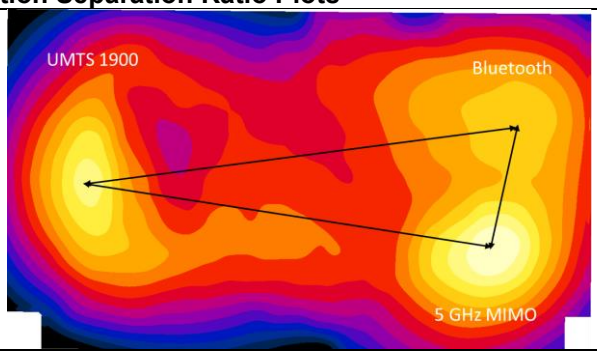
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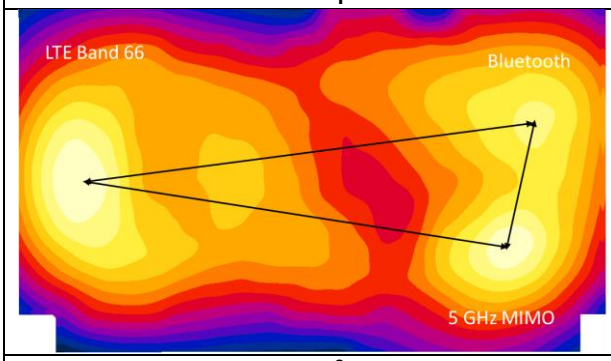
Table 12-25
Back Side SAR to Peak Location Separation Ratio Plots



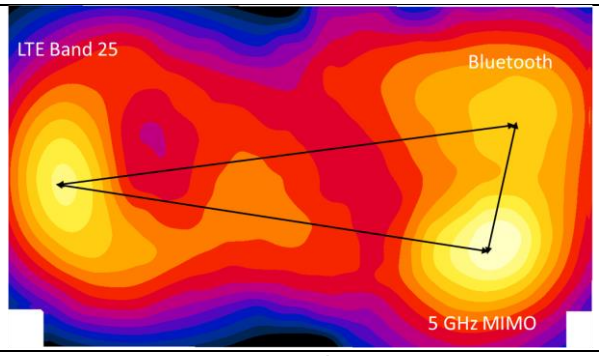
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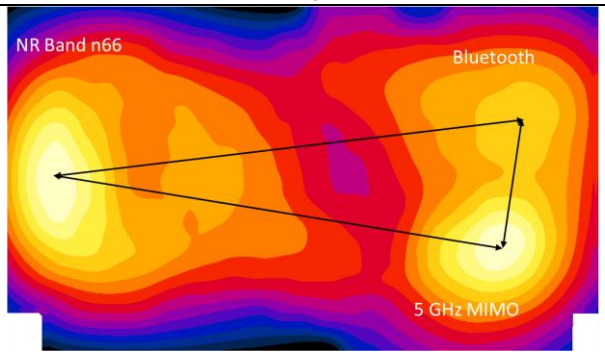
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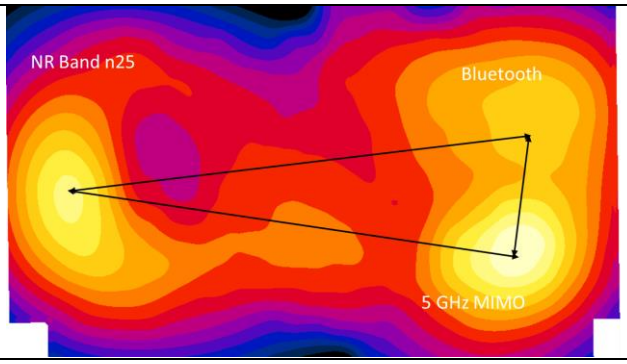
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12.7.2 Hotspot Back Side SPLSR Evaluation and Analysis

Table 12-26
Peak SAR Locations for Hotspot Back Side

Mode/Band	x (mm)	y (mm)
5 GHz WLAN Ant 1	-4.00	68.00
5 GHz WLAN Ant 2	1.00	64.00
5 GHz WLAN MIMO	-3.00	69.00
Bluetooth	-42.00	78.00
EVDO BC10 (§90S)	-41.50	-85.50
EVDO BC0 (§22H)	-41.50	-73.50
GPRS 850	-41.50	-73.50
UMTS 850	-41.50	-72.00
LTE Band 13	-40.00	-87.00
LTE Band 14	-40.00	-87.00
LTE Band 26 (Cell)	-43.00	-78.50
LTE Band 5 (Cell)	-41.00	-80.00
LTE Band 25 (PCS)	-11.00	-82.50
NR Band n5	-46.00	-78.50
NR Band n66	-23.50	-85.50

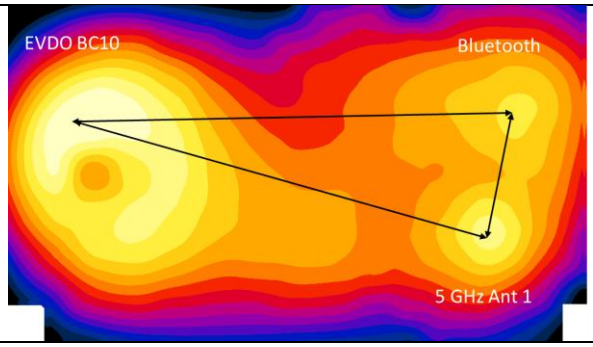
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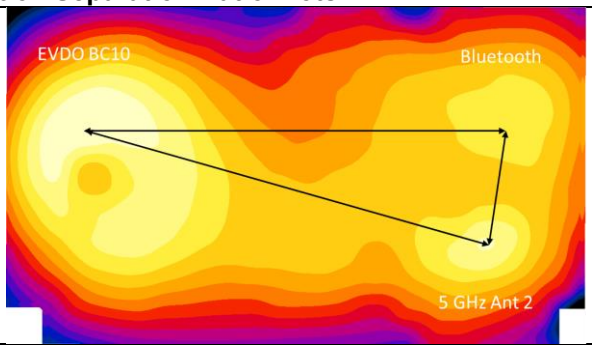
Table 12-27
Hotspot Back Side SAR to Peak Location Separation Ratio Calculations

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}	$(a+b)^{1.5}/D_{a-b}$	
5 GHz WLAN Ant 1	EVDO BC10 (§90S)	0.589	1.160	1.749	158.01	0.01	1
Bluetooth	EVDO BC10 (§90S)	0.075	1.160	1.235	163.50	0.01	
5 GHz WLAN Ant 1	Bluetooth	0.589	0.075	0.664	39.29	0.01	
5 GHz WLAN Ant 2	EVDO BC10 (§90S)	0.590	1.160	1.75	155.42	0.01	2
5 GHz WLAN Ant 2	Bluetooth	0.590	0.075	0.665	45.22	0.01	
Bluetooth	EVDO BC10 (§90S)	0.075	1.160	1.235	163.50	0.01	
5 GHz WLAN MIMO	EVDO BC10 (§90S)	0.933	1.160	2.093	159.22	0.02	3
Bluetooth	EVDO BC10 (§90S)	0.075	1.160	1.235	163.50	0.01	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	
5 GHz WLAN MIMO	EVDO BC0 (§22H)	0.933	0.889	1.822	147.61	0.02	4
Bluetooth	EVDO BC0 (§22H)	0.075	0.889	0.964	151.50	0.01	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	
5 GHz WLAN MIMO	GPRS 850	0.933	0.856	1.789	147.61	0.02	5
Bluetooth	GPRS 850	0.075	0.856	0.931	151.50	0.01	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	
5 GHz WLAN MIMO	UMTS 850	0.933	0.721	1.654	146.16	0.01	6
Bluetooth	UMTS 850	0.075	0.721	0.796	150.00	0.00	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	
5 GHz WLAN MIMO	LTE Band 13	0.933	0.743	1.676	160.33	0.01	7
Bluetooth	LTE Band 13	0.075	0.743	0.818	165.01	0.00	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	
5 GHz WLAN MIMO	LTE Band 14	0.933	0.681	1.614	160.33	0.01	8
Bluetooth	LTE Band 14	0.075	0.681	0.756	165.01	0.00	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	
5 GHz WLAN MIMO	LTE Band 26 (Cell)	0.933	0.693	1.626	152.83	0.01	9
Bluetooth	LTE Band 26 (Cell)	0.075	0.693	0.768	156.50	0.00	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	
5 GHz WLAN MIMO	LTE Band 5 (Cell)	0.933	0.680	1.613	153.77	0.01	10
Bluetooth	LTE Band 5 (Cell)	0.075	0.680	0.755	158.00	0.00	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	
5 GHz WLAN MIMO	LTE Band 25 (PCS)	0.933	0.591	1.524	151.71	0.01	11
Bluetooth	LTE Band 25 (PCS)	0.075	0.591	0.666	163.47	0.00	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	
5 GHz WLAN MIMO	NR Band n5	0.933	0.676	1.609	153.64	0.01	12
Bluetooth	NR Band n5	0.075	0.676	0.751	156.55	0.00	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	
5 GHz WLAN MIMO	NR Band n66	0.933	0.735	1.668	155.85	0.01	13
Bluetooth	NR Band n66	0.075	0.735	0.81	164.54	0.00	
5 GHz WLAN MIMO	Bluetooth	0.933	0.075	1.008	40.02	0.03	

Table 12-28
Back Side SAR to Peak Location Separation Ratio Plots



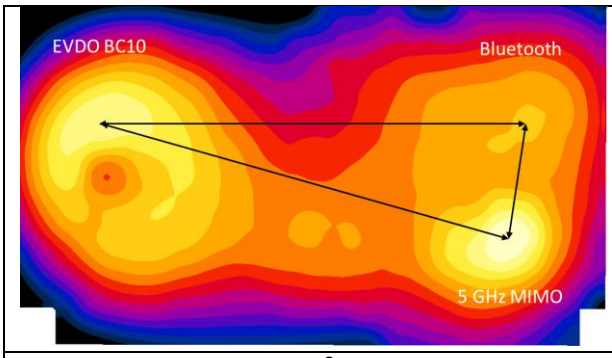
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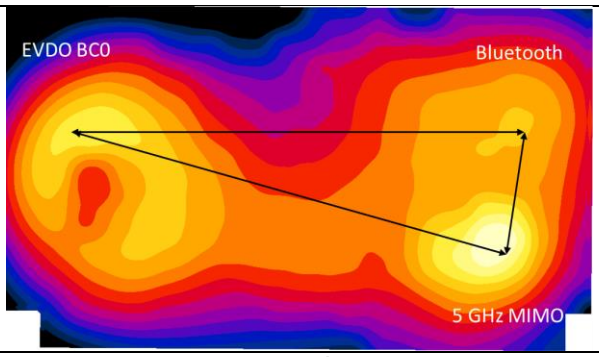
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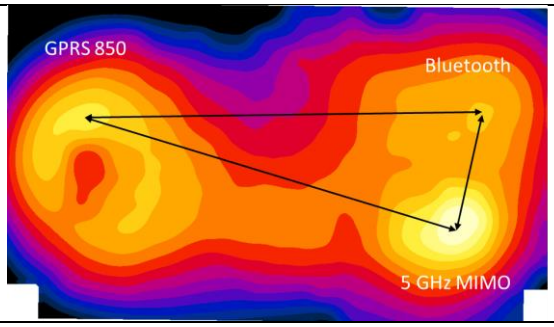
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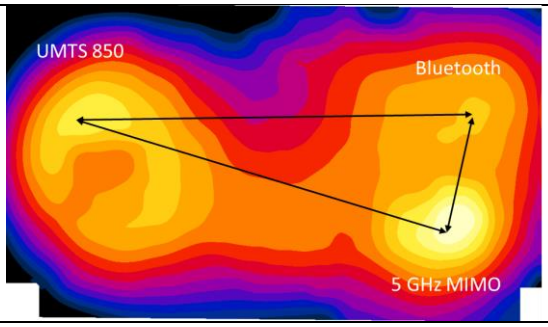
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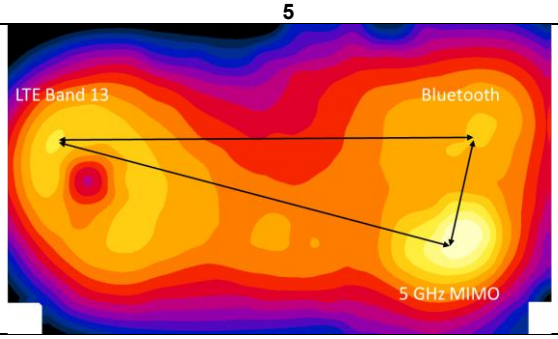
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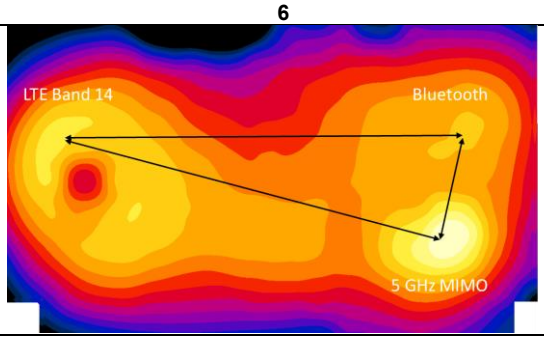
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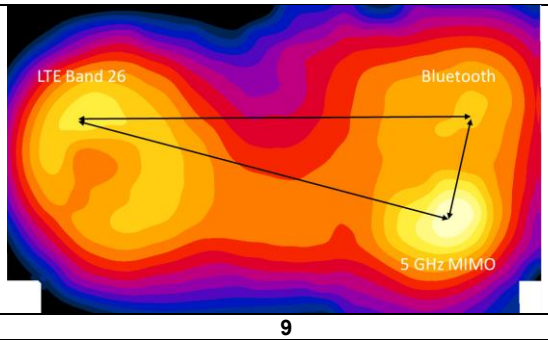
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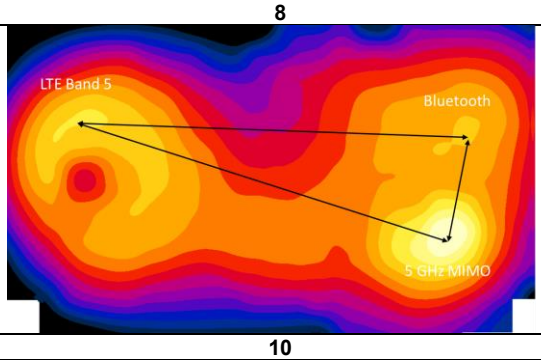
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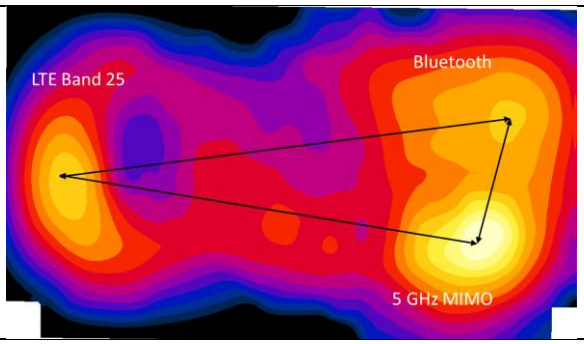
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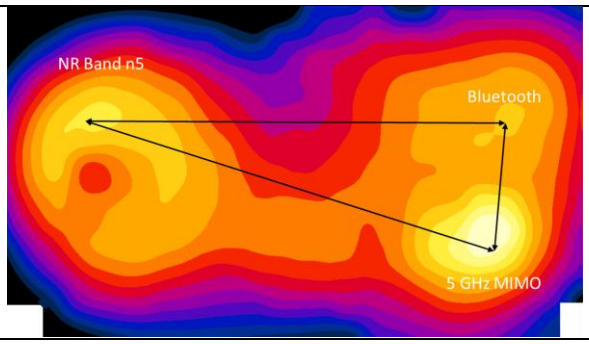
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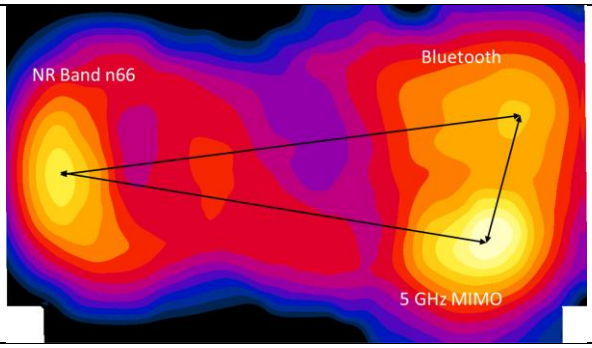
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12.7.3 Phablet Back Side SPLSR Evaluation and Analysis

Table 12-29
Peak SAR Locations for Phablet Back Side

Mode/Band	x (mm)	y (mm)
5 GHz WLAN Ant 1	3.00	67.00
5 GHz WLAN Ant 2	-0.10	62.80
5 GHz WLAN MIMO	-4.00	64.00
PCS EVDO	-9.00	-81.00
GPRS 1900	-22.30	-83.60
UMTS 1750	-23.50	-85.50
UMTS 1900	-20.80	-76.90
LTE Band 66 (AWS)	-20.50	-85.50
LTE Band 25 (PCS)	-12.50	-81.00
LTE Band 7	-57.40	-83.60
LTE Band 30	-26.20	-78.00
LTE Band 41	-58.60	-75.60
NR Band n66	-23.10	-83.60
NR Band n25	-11.00	-81.00

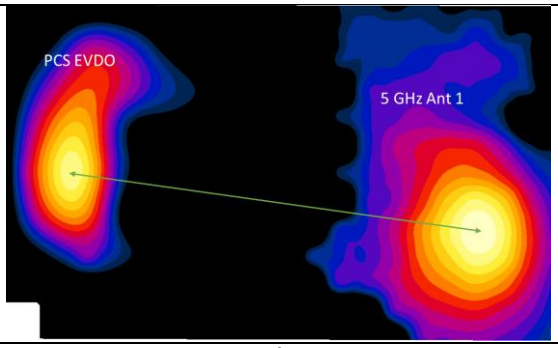
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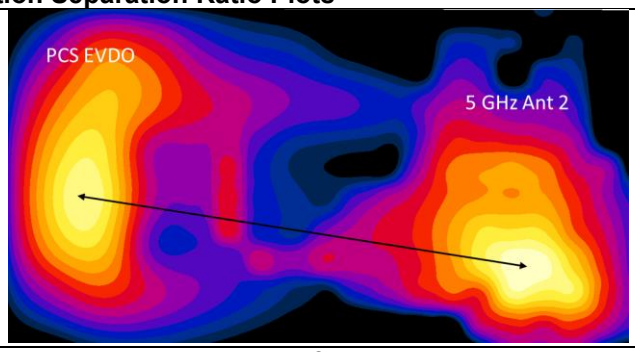
Table 12-30
Phablet Back Side SAR to Peak Location Separation Ratio Calculations

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}	$(a+b)^{1.5}/D_{a-b}$	
5 GHz WLAN Ant 1	PCS EVDO	1.489	2.988	4.477	148.49	0.06	1
5 GHz WLAN Ant 2	PCS EVDO	2.193	2.988	5.181	144.08	0.08	2
5 GHz WLAN MIMO	PCS EVDO	2.765	2.988	5.753	145.09	0.10	3
5 GHz WLAN Ant 2	GPRS 1900	2.193	1.902	4.095	148.07	0.06	4
5 GHz WLAN MIMO	GPRS 1900	2.765	1.902	4.667	148.73	0.07	5
5 GHz WLAN Ant 2	UMTS 1750	2.193	2.435	4.628	150.13	0.07	6
5 GHz WLAN MIMO	UMTS 1750	2.765	2.435	5.2	150.77	0.08	7
5 GHz WLAN Ant 1	UMTS 1900	1.489	2.670	4.159	145.85	0.06	8
5 GHz WLAN Ant 2	UMTS 1900	2.193	2.670	4.863	141.23	0.08	9
5 GHz WLAN MIMO	UMTS 1900	2.765	2.670	5.435	141.90	0.09	10
5 GHz WLAN Ant 1	LTE Band 66 (AWS)	1.489	2.974	4.463	154.30	0.06	11
5 GHz WLAN Ant 2	LTE Band 66 (AWS)	2.193	2.974	5.167	149.70	0.08	12
5 GHz WLAN MIMO	LTE Band 66 (AWS)	2.765	2.974	5.739	150.41	0.09	13
5 GHz WLAN Ant 1	LTE Band 25 (PCS)	1.489	2.626	4.115	148.81	0.06	14
5 GHz WLAN Ant 2	LTE Band 25 (PCS)	2.193	2.626	4.819	144.33	0.07	15
5 GHz WLAN MIMO	LTE Band 25 (PCS)	2.765	2.626	5.391	145.25	0.09	16
5 GHz WLAN Ant 1	LTE Band 30	1.489	2.909	4.398	147.91	0.06	17
5 GHz WLAN Ant 2	LTE Band 30	2.193	2.909	5.102	143.20	0.08	18
5 GHz WLAN MIMO	LTE Band 30	2.765	2.909	5.674	143.72	0.09	19
5 GHz WLAN MIMO	LTE Band 7	2.765	1.512	4.277	156.96	0.06	20
5 GHz WLAN MIMO	LTE Band 41	2.765	1.672	4.437	149.90	0.06	21
5 GHz WLAN Ant 1	NR Band n66	1.489	2.729	4.218	152.84	0.06	22
5 GHz WLAN Ant 2	NR Band n66	2.193	2.729	4.922	148.20	0.07	23
5 GHz WLAN MIMO	NR Band n66	2.765	2.729	5.494	148.83	0.09	24
5 GHz WLAN Ant 2	NR Band n25	2.193	2.341	4.534	144.21	0.07	25
5 GHz WLAN MIMO	NR Band n25	2.765	2.341	5.106	145.17	0.08	26

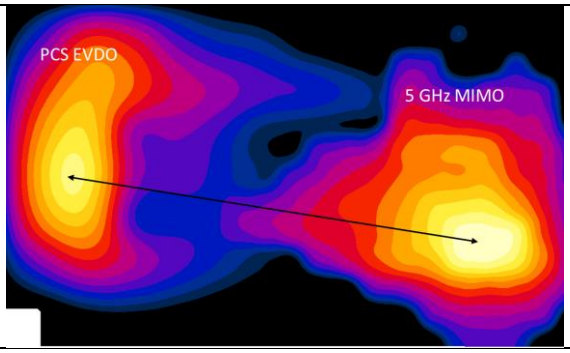
Table 12-31
Back Side SAR to Peak Location Separation Ratio Plots



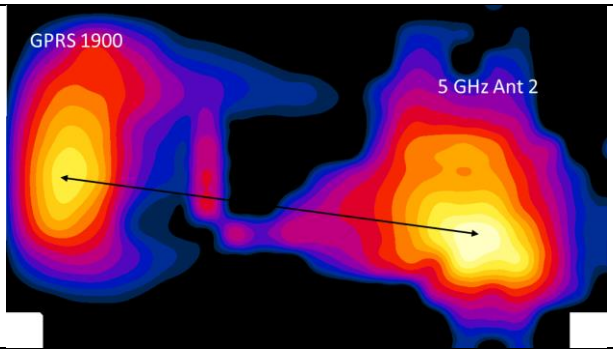
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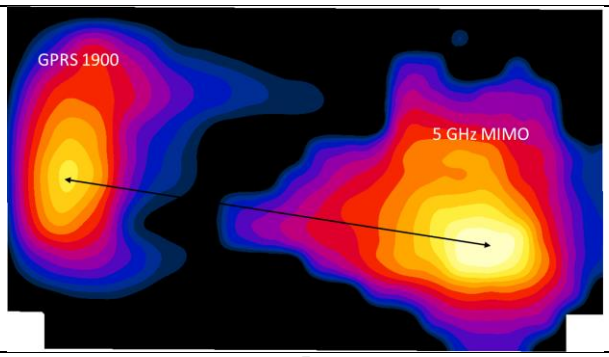
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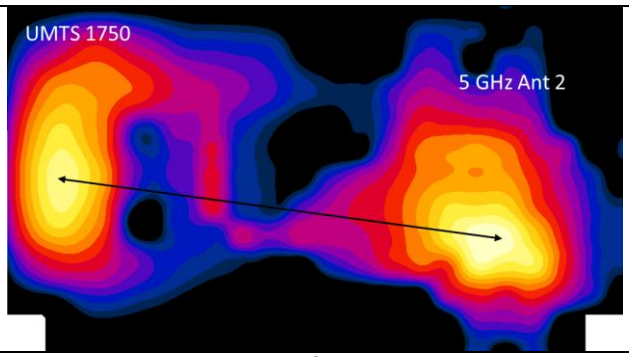
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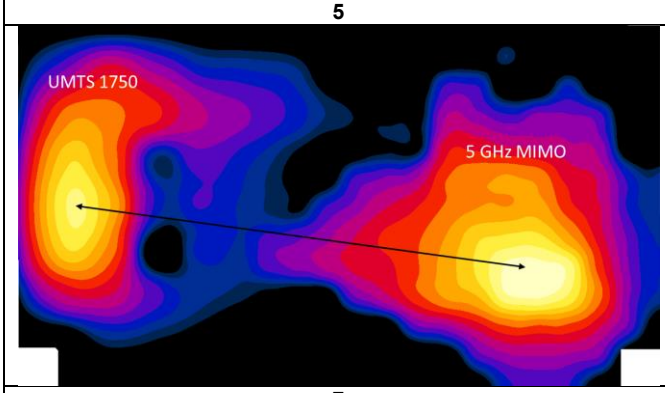
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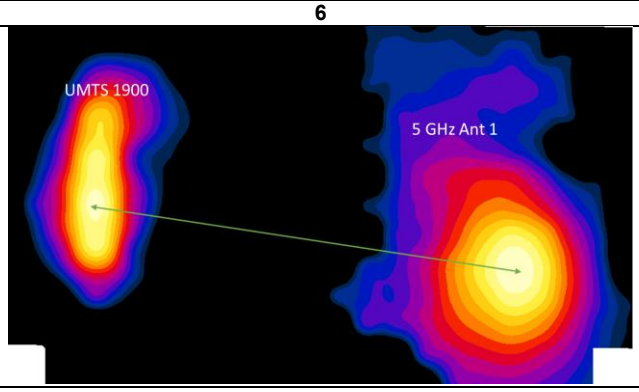
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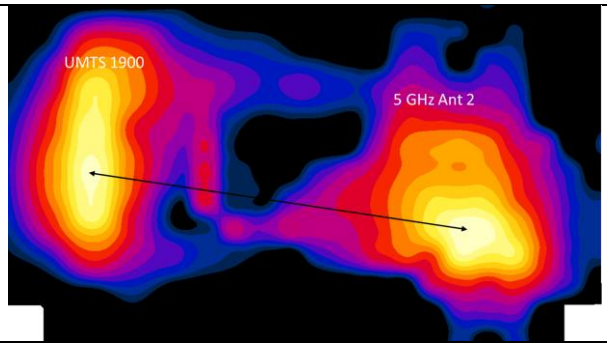
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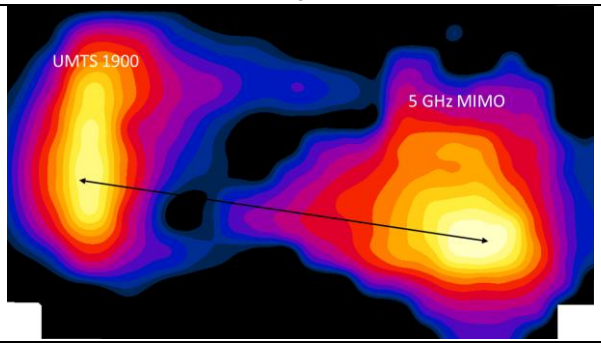
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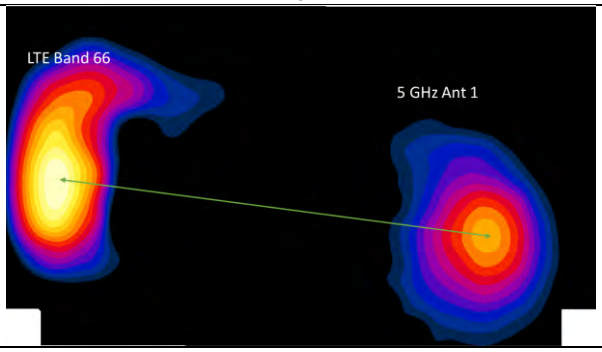
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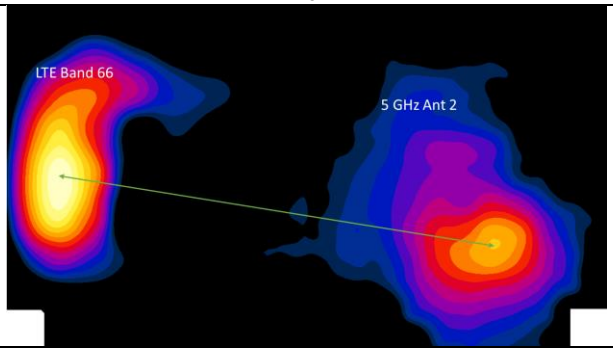
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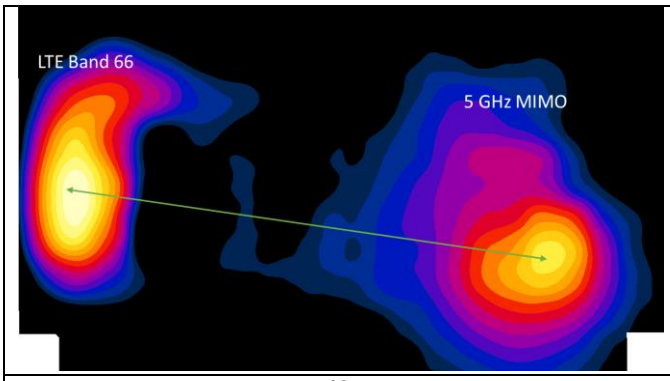
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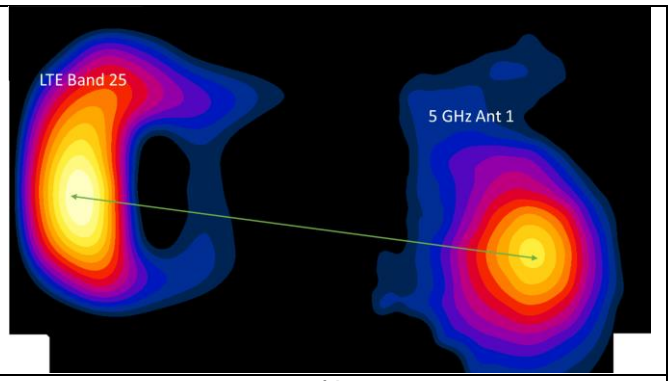
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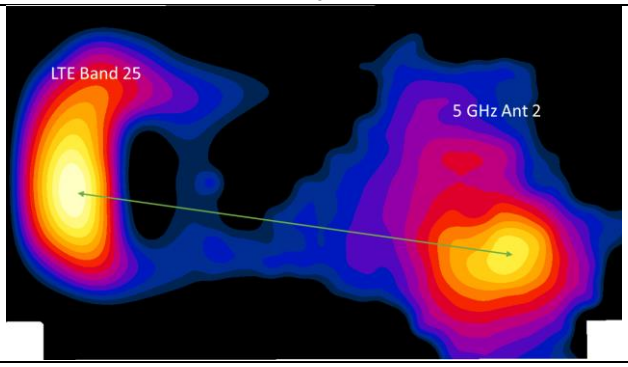
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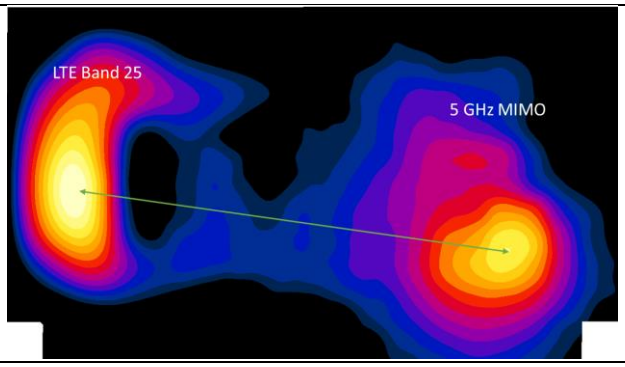
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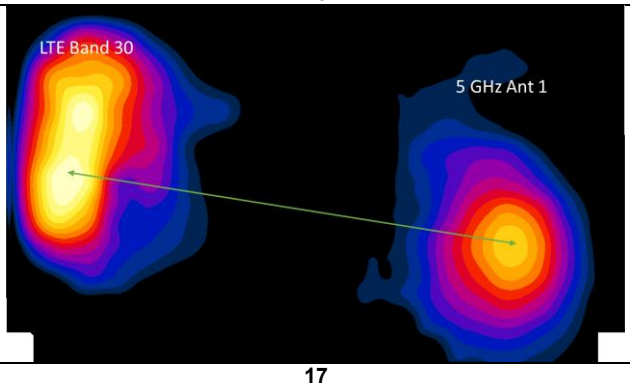
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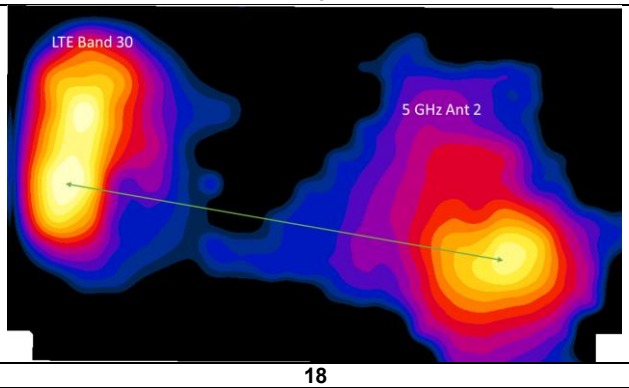
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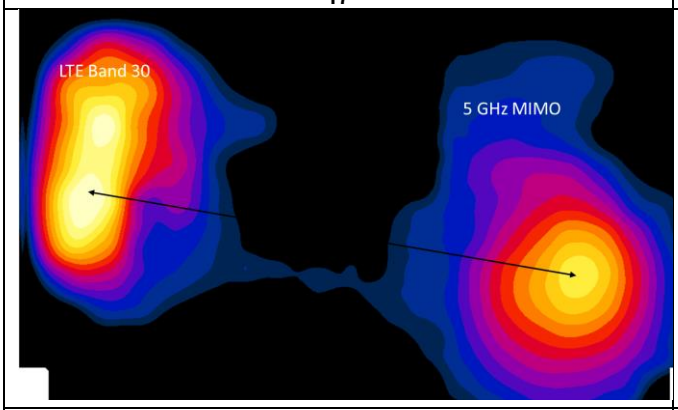
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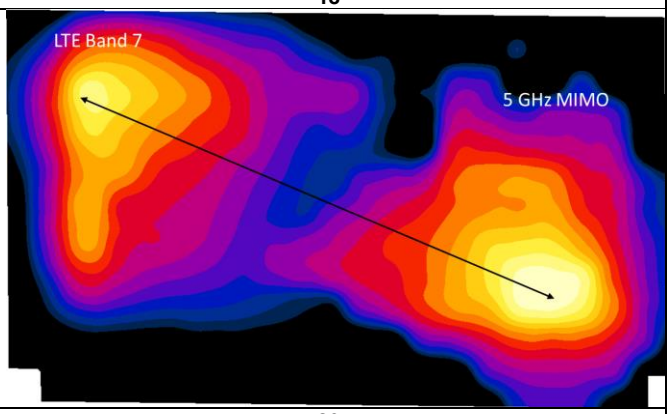
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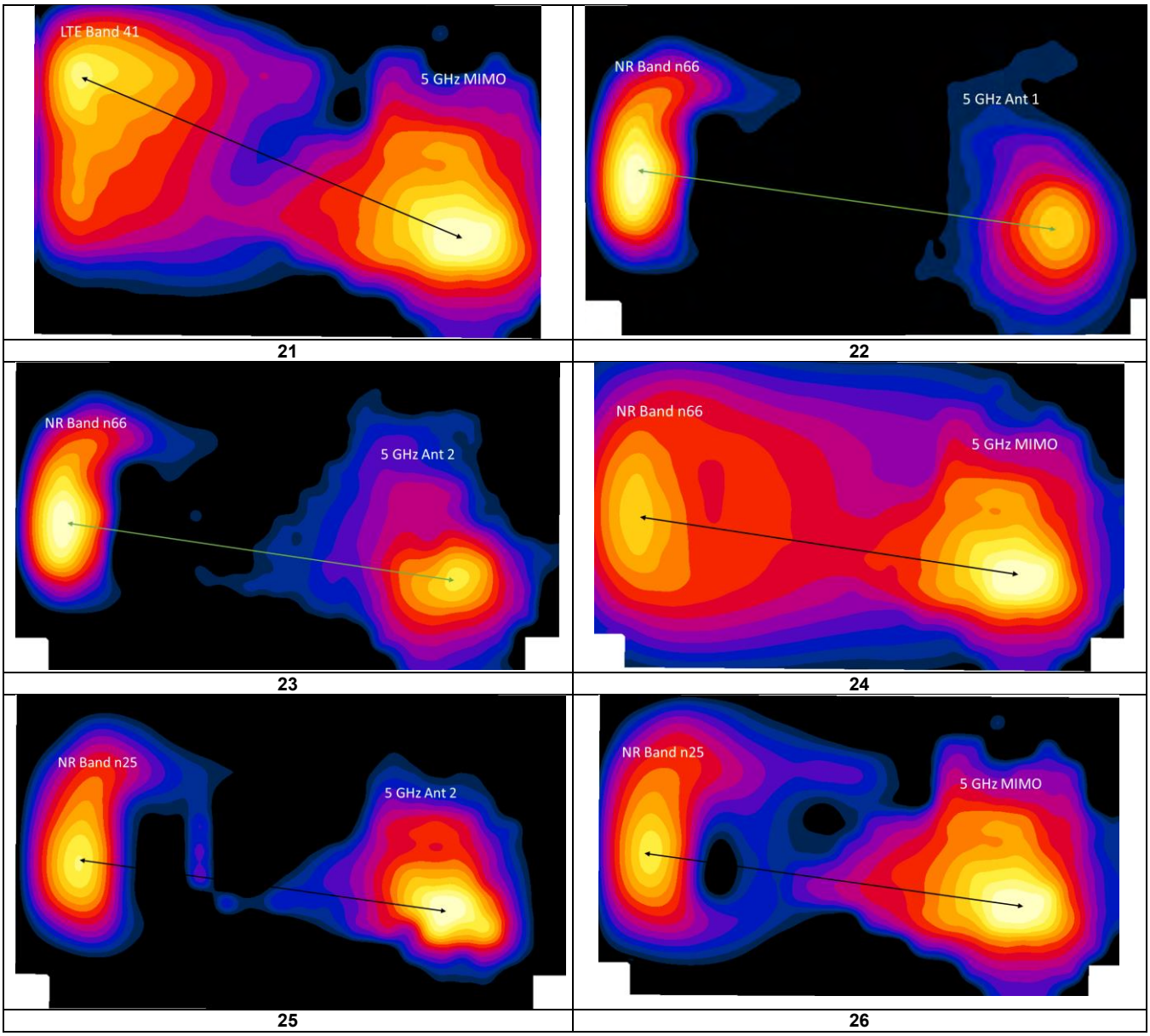
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12.8 Simultaneous Transmission Conclusion

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.

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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
Body SAR Measurement Variability Results

BODY VARIABILITY RESULTS														
Band	FREQUENCY		Mode	Service	Data Rate (Mbps)	Side	Spacing	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	Ratio	3rd Repeated SAR (1g)	Ratio
	MHz	Ch.						(W/kg)	(W/kg)		(W/kg)		(W/kg)	
1750	1770.00	354000	NR Band n66 (AWS), 20 MHz Bandwidth	DFT-S-OFDM QPSK, 1 RB, 1 RB Offset	N/A	bottom	10 mm	1.080	1.070	1.01	N/A	N/A	N/A	N/A
1900	1905.00	381000	NR Band n25 (PCS), 20 MHz Bandwidth	DFT-S-OFDM QPSK, 1 RB, 53 RB Offset	N/A	bottom	10 mm	1.150	1.100	1.05	N/A	N/A	N/A	N/A
2300	2310.00	27710	LTE Band 30, 10 MHz Bandwidth	QPSK, 1 RB, 0 RB Offset	N/A	bottom	10 mm	0.911	0.908	1.00	N/A	N/A	N/A	N/A
3700	3690.00	56640	LTE Band 48, ULCA, 20 MHz Bandwidth	QPSK, 1 RB, 0 RB Offset	N/A	top	10 mm	0.806	0.796	1.01	N/A	N/A	N/A	N/A
	3670.20	56442		QPSK, 1 RB, 99 RB Offset										
5750	5795.00	159	802.11n, 40 MHz Bandwidth	OFDM , MIMO	27	back	10 mm	0.854	0.854	1.00	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram						

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Table 13-2
Phablet SAR Measurement Variability Results

PHABLET VARIABILITY RESULTS														
Band	FREQUENCY		Mode	Service	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	132072	LTE Band 66 (AWS), ULCA, 20 MHz Bandwidth	QPSK, 100 RB, 0 RB Offset	N/A	bottom	0 mm	2.980	2.940	1.01	N/A	N/A	N/A	N/A
	1739.80	132270		QPSK, 100 RB, 0 RB Offset										
1900	1905.00	26590	LTE Band 25 (PCS), 20 MHz Bandwidth	QPSK, 50 RB, 25 RB Offset	N/A	bottom	0 mm	3.050	3.030	1.01	N/A	N/A	N/A	N/A
2300	2310.00	27710	LTE Band 30, 10 MHz Bandwidth	QPSK, 1 RB, 49 RB Offset	N/A	back	0 mm	2.640	2.620	1.01	N/A	N/A	N/A	N/A
2600	2636.50	41055	LTE Band 41, ULCA, 20 MHz Bandwidth	QPSK, 50 RB, 0 RB Offset	N/A	bottom	0 mm	2.530	2.470	1.02	N/A	N/A	N/A	N/A
	2616.70	40857		QPSK, 50 RB, 50 RB Offset										
5250	5300.00	60	802.11n, 20 MHz Bandwidth	OFDM, MIMO	13	back	0 mm	2.520	2.360	1.07	N/A	N/A	N/A	N/A
5600	5620.00	124	802.11n, 20 MHz Bandwidth	OFDM, MIMO	13	back	0 mm	2.450	2.260	1.08	N/A	N/A	N/A	N/A
5750	5720.00	144	802.11n, 20 MHz Bandwidth	OFDM, MIMO	13	back	0 mm	2.420	2.420	1.00	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.

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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.

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Table 14-1
UMTS/CDMA Supplemental Head SAR Data

Supplemental Head SAR Data											
UMTS B5		UMTS B4		UMTS B2		CDMA BC10		CDMA BC0		CDMA BC1	
RMC		RMC		RMC		EVDO		EVDO		EVDO	
Test Position	Left Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Right 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)	0.142	Measured 1g SAR (W/kg)	0.129	Measured 1g SAR (W/kg)	0.094	Measured 1g SAR (W/kg)	0.188	Measured 1g SAR (W/kg)	0.150	Measured 1g SAR (W/kg)	0.104
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 41)	0.186	Auto-tune (State 108)	0.178	Auto-tune (State 26)	0.134	Auto-tune (State 27)	0.236	Auto-tune (State 41)	0.205	Auto-tune (State 26)	0.151
Default (State 0)	0.169	Default (State 0)	0.173	Default (State 0)	0.124	Default (State 0)	0.241	Default (State 0)	0.199	Default (State 0)	0.143
State 2	0.160	State 22	0.119	State 26	0.130	State 27	0.245	State 41	0.210	State 1	0.139
State 5	0.143	State 27	0.168	State 50	0.051	State 75	0.019	State 99	0.058	State 4	0.133
State 9	0.053	State 32	0.166	State 55	0.017	State 79	0.221	State 105	0.178	State 7	0.116
State 12	0.014	State 37	0.135	State 59	0.012	State 81	0.199	State 111	0.175	State 10	0.078
State 41	0.178	State 108	0.174	State 64	0.000	State 87	0.204	State 116	0.200	State 26	0.145

Table 14-2
LTE Supplemental Head SAR Data

Supplemental Head SAR Data															
LTE B71		LTE B12		LTE B13		LTE B14		LTE B5		LTE B26		LTE B66/4		LTE B25/2	
QPSK, 20MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10MHz 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, 50 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 50 RB Offset	
Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Left 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	Frequency (MHz)	831.5	Frequency (MHz)	1720.0	Frequency (MHz)	1860.0
Channel	133297	Channel	23095	Channel	23230	Channel	23330	Channel	20525	Channel	26865	Channel	132072	Channel	26140
Measured 1g SAR (W/kg)	0.106	Measured 1g SAR (W/kg)	0.111	Measured 1g SAR (W/kg)	0.213	Measured 1g SAR (W/kg)	0.158	Measured 1g SAR (W/kg)	0.159	Measured 1g SAR (W/kg)	0.147	Measured 1g SAR (W/kg)	0.119	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)		Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 19)	0.125	Auto-tune (State 1)	0.154	Auto-tune (State 112)	0.282	Auto-tune (State 52)	0.257	Auto-tune (State 66)	0.209	Auto-tune (State 66)	0.186	Auto-tune (State 108)	0.181	Auto-tune (State 109)	0.160
Default (State 0)	0.101	Default (State 0)	0.146	Default (State 0)	0.265	Default (State 0)	0.253	Default (State 0)	0.146	Default (State 0)	0.123	Default (State 0)	0.184	Default (State 0)	0.155
State 19	0.121	State 1	0.156	State 1	0.270	State 1	0.268	State 3	0.184	State 15	0.155	State 39	0.176	State 60	0.011
State 24	0.061	State 53	0.108	State 80	0.262	State 52	0.256	State 6	0.188	State 18	0.160	State 43	0.171	State 66	0.020
State 29	0.060	State 56	0.091	State 83	0.191	State 107	0.230	State 8	0.145	State 25	0.017	State 45	0.167	State 69	0.016
State 34	0.071	State 67	0.097	State 93	0.261	State 114	0.254	State 13	0.166	State 30	0.136	State 47	0.160	State 75	0.001
State 46	0.076	State 72	0.052	State 112	0.280	State 119	0.234	State 66	0.217	State 66	0.179	State 108	0.183	State 109	0.164

Table 14-3
NR Supplemental Head SAR Data

Supplemental Head SAR Data									
NR Band n71		NR Band n12		NR Band n5		NR Band n66		NR Band n25/n2	
DFT-s-OFDM QPSK, 20MHz Bandwidth, 50 RB, 28 RB Offset		DFT-s-OFDM QPSK, 15 MHz Bandwidth, 1 RB, 77 RB Offset		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, 50 RB, 28 RB Offset	
Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Left Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	680.5	Frequency (MHz)	707.5	Frequency (MHz)	836.5	Frequency (MHz)	1720.0	Frequency (MHz)	1905.0
Channel	136100	Channel	141500	Channel	167300	Channel	344000	Channel	381000
Measured 1g SAR (W/kg)	0.105	Measured 1g SAR (W/kg)	0.110	Measured 1g SAR (W/kg)	0.149	Measured 1g SAR (W/kg)	0.120	Measured 1g SAR (W/kg)	0.129
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 19)	0.136	Auto-tune (State 1)	0.144	Auto-tune (State 66)	0.201	Auto-tune (State 108)	0.170	Auto-tune (State 109)	0.187
Default (State 0)	0.105	Default (State 0)	0.137	Default (State 0)	0.141	Default (State 0)	0.169	Default (State 0)	0.186
State 19	0.136	State 1	0.144	State 48	0.081	State 11	0.113	State 14	0.164
State 85	0.028	State 96	0.058	State 54	0.203	State 21	0.118	State 23	0.076
State 89	0.007	State 104	0.132	State 66	0.201	State 36	0.142	State 33	0.167
State 95	0.053	State 109	0.074	State 68	0.198	State 40	0.163	State 41	0.175
State 102	0.008	State 118	0.120	State 78	0.134	State 108	0.170	State 109	0.187

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Table 14-4
UMTS/CDMA Supplemental Body SAR Data

Supplemental Body SAR Data												
UMTS B5		UMTS B4		UMTS B2		CDMA BC10		CDMA BC0		CDMA BC1	
RMC		RMC		RMC		EVDO		EVDO		EVDO	
Test Position	Back	Test Position	Bottom	Test Position	Bottom	Test Position	Back	Test Position	Back	Test Position	Bottom
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	836.6	Frequency (MHz)	1732.4	Frequency (MHz)	1907.6	Frequency (MHz)	820.1	Frequency (MHz)	836.52	Frequency (MHz)	1908.75
Channel	4183	Channel	1412	Channel	9538	Channel	564	Channel	384	Channel	1175
Measured 1g SAR (W/kg)	0.628	Measured 1g SAR (W/kg)	0.991	Measured 1g SAR (W/kg)	0.975	Measured 1g SAR (W/kg)	0.799	Measured 1g SAR (W/kg)	0.641	Measured 1g SAR (W/kg)	1.080
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 27)	1.021	Auto-tune (State 9)	1.537	Auto-tune (State 109)	1.681	Auto-tune (State 27)	1.001	Auto-tune (State 27)	1.023	Auto-tune (State 35)	1.781
Default (State 0)	1.016	Default (State 0)	1.240	Default (State 0)	1.592	Default (State 0)	0.994	Default (State 0)	1.004	Default (State 0)	1.893
State 16	0.924	State 0	1.240	State 0	1.592	State 17	0.812	State 27	1.014	State 0	1.893
State 26	0.861	State 1	1.295	State 1	1.551	State 20	0.526	State 31	0.981	State 1	1.890
State 27	1.031	State 2	1.308	State 2	1.539	State 27	1.001	State 42	1.015	State 2	1.890
State 38	0.071	State 3	1.32	State 3	1.525	State 28	0.979	State 44	0.974	State 3	1.895
State 51	0.078	State 4	1.342	State 4	1.498	State 49	0.135	State 57	0.693	State 4	1.878
		State 5	1.347	State 5	1.501					State 5	1.884
		State 6	1.41	State 6	1.425					State 6	1.867
		State 7	1.453	State 7	1.37					State 7	1.843
		State 8	1.505	State 8	1.286					State 8	1.785
		State 9	1.539	State 9	1.144					State 9	1.682
		State 10	1.535	State 10	1.033					State 10	1.562
		State 11	1.451	State 11	0.87					State 11	1.368
		State 12	1.197	State 12	0.651					State 12	1.074
		State 13	1.204	State 13	1.409					State 13	1.667
		State 14	1.268	State 14	1.361					State 14	1.682
		State 15	1.284	State 15	1.343					State 15	1.688
		State 16	1.294	State 16	1.321					State 16	1.686
		State 17	1.318	State 17	1.293					State 17	1.697
		State 18	1.325	State 18	1.288					State 18	1.683
		State 19	1.381	State 19	1.198					State 19	1.669
		State 20	1.417	State 20	1.138					State 20	1.633
		State 21	1.455	State 21	1.046					State 21	1.564
		State 22	1.464	State 22	0.902					State 22	1.438
		State 23	1.423	State 23	0.792					State 23	1.323
		State 24	1.294	State 24	0.653					State 24	1.132
		State 25	0.997	State 25	0.478					State 25	0.844
		State 26	1.102	State 26	1.634					State 26	1.94
		State 27	1.156	State 27	1.613					State 27	1.942
		State 28	1.17	State 28	1.607					State 28	1.954
		State 29	1.184	State 29	1.593					State 29	1.956
		State 30	1.212	State 30	1.573					State 30	1.949
		State 31	1.215	State 31	1.575					State 31	1.942
		State 32	1.28	State 32	1.523					State 32	1.955
		State 33	1.331	State 33	1.478					State 33	1.952
		State 34	1.4	State 34	1.401					State 34	1.924
		State 35	1.483	State 35	1.274					State 35	1.824
		State 36	1.521	State 36	1.157					State 36	1.702
		State 37	1.505	State 37	0.995					State 37	1.513
		State 38	1.328	State 38	0.769					State 38	1.208
		State 39	1.179	State 39	1.554					State 39	1.821
		State 40	1.233	State 40	1.518					State 40	1.824
		State 41	1.25	State 41	1.505					State 41	1.825
		State 42	1.261	State 42	1.496					State 42	1.814
		State 43	1.286	State 43	1.463					State 43	1.803
		State 44	1.286	State 44	1.466					State 44	1.82
		State 45	1.351	State 45	1.386					State 45	1.792
		State 46	1.394	State 46	1.326					State 46	1.776
		State 47	1.449	State 47	1.237					State 47	1.733
		State 48	1.498	State 48	1.095					State 48	1.619
		State 49	1.499	State 49	0.975					State 49	1.509
		State 50	1.432	State 50	0.822					State 50	1.315
		State 51	1.192	State 51	0.621					State 51	1.022
		State 52	0.261	State 52	0.266					State 52	0.34
		State 53	0.247	State 53	0.26					State 53	0.319
		State 54	0.238	State 54	0.25					State 54	0.305
		State 55	0.23	State 55	0.24					State 55	0.291
		State 56	0.218	State 56	0.236					State 56	0.271
		State 57	0.221	State 57	0.198					State 57	0.278
		State 58	0.189	State 58	0.198					State 58	0.278
		State 59	0.17	State 59	0.179					State 59	0.199
		State 60	0.141	State 60	0.146					State 60	0.158
		State 61	0.108	State 61	0.11					State 61	0.114
		State 62	0.086	State 62	0.086					State 62	0.087
		State 63	0.061	State 63	0.06					State 63	0.059
		State 64	0.037	State 64	0.035					State 64	0.033
		State 65	0.236	State 65	0.253					State 65	0.32
		State 66	0.211	State 66	0.232					State 66	0.285
		State 67	0.202	State 67	0.22					State 67	0.27
		State 68	0.194	State 68	0.209					State 68	0.256
		State 69	0.181	State 69	0.194					State 69	0.234
		State 70	0.181	State 70	0.2					State 70	0.24
		State 71	0.15	State 71	0.161					State 71	0.188
		State 72	0.132	State 72	0.141					State 72	0.161
		State 73	0.107	State 73	0.112					State 73	0.125
		State 74	0.079	State 74	0.08					State 74	0.087
		State 75	0.062	State 75	0.061					State 75	0.065
		State 76	0.043	State 76	0.041					State 76	0.043
		State 77	0.025	State 77	0.022					State 77	0.023
		State 78	0.288	State 78	0.272					State 78	0.351
		State 79	0.289	State 79	0.281					State 79	0.347
		State 80	0.282	State 80	0.273					State 80	0.333
		State 81	0.275	State 81	0.267					State 81	0.319
		State 82	0.264	State 82	0.254					State 82	0.3
		State 83	0.269	State 83	0.266					State 83	0.31
		State 84	0.237	State 84	0.232					State 84	0.261
		State 85	0.216	State 85	0.214					State 85	0.233
		State 86	0.184	State 86	0.181					State 86	0.189
		State 87	0.142	State 87	0.141					State 87	0.14
		State 88	0.114	State 88	0.112					State 88	0.109
		State 89	0.082	State 89	0.081					State 89	0.076
		State 90	0.05	State 90	0.048					State 90	0.044
		State 91	0.268	State 91	0.268					State 91	0.34
		State 92	0.256	State 92	0.26					State 92	0.319
		State 93	0.248	State 93	0.25					State 93	0.305
		State 94	0.241	State 94	0.241					State 94	0.292
		State 95	0.228	State 95	0.228					State 95	0.271
		State 96	0.23	State 96	0.237					State 96	0.278
		State 97	0.198	State 97	0.199					State 97	0.136
		State 98	0.178	State 98	0.179					State 98	0.225
		State 99	0.149	State 99	0.148					State 99	0.199
		State 100	0.114	State 100	0.11					State 100	0.159
		State 101	0.091	State 101	0.086					State 101	0.115
		State 102	0.065	State 102	0.061					State 102	0.06
		State 103	0.041	State 103	0.036					State 103	0.035
		State 104	1.234	State 104	1.608					State 104	1.879
		State 105	1.102	State 105	1.647					State 105	1.917
		State 106	0.258	State 106	0.261					State 106	0.332
		State 107	0.284	State 107	0.268					State 107	0.346
		State 108	1.234	State 108	1.599					State 108	1.864
		State 109	1.1	State 109	1.64					State 109	1.913
		State 110	0.258	State 110	0.264					State 110	0.33
		State 111	0.285	State 111	0.27					State 111	0.345
		State 112	1.201	State 112	1.405					State 112	1.642
		State 113	1.179	State 113	1.545					State 113	1.803
		State 114	0.233	State 114	0.253					State 114	0.313
		State 115	0.265	State 115	0.267					State 115	0.333
		State 116	1.201	State 116	1.409					State 116	1.646
		State 117	1.179	State 117	1.555					State 117	1.801
		State 118	0.233	State 118	0.256					State 118	0.316
		State 119	0.265	State 119	0.269					State 119	0.337

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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 B25/2	
QPSK, 20MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10MHz 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, 0 RB offset		QPSK, 20 MHz Bandwidth, 50 RB 25 RB Offset	
Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Bottom	Test Position	Bottom
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	680.5	Frequency (MHz)	707.5	Frequency (MHz)	782.0	Frequency (MHz)	793.0	Frequency (MHz)	836.5	Frequency (MHz)	831.5	Frequency (MHz)	1770.0	Frequency (MHz)	1905.0
Channel	133297	Channel	23095	Channel	23230	Channel	23330	Channel	20525	Channel	26865	Channel	132572	Channel	26590
Measured 1g SAR (W/kg)	0.333	Measured 1g SAR (W/kg)	0.368	Measured 1g SAR (W/kg)	0.648	Measured 1g SAR (W/kg)	0.574	Measured 1g SAR (W/kg)	0.559	Measured 1g SAR (W/kg)	0.611	Measured 1g SAR (W/kg)	0.963	Measured 1g SAR (W/kg)	1.090
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 3)	0.548	Auto-tune (State 1)	0.625	Auto-tune (State 1)	1.043	Auto-tune (State 52)	0.919	Auto-tune (State 65)	0.892	Auto-tune (State 66)	0.941	Auto-tune (State 6)	1.535	Auto-tune (State 108)	1.806
Default (State 0)	0.498	Default (State 0)	0.601	Default (State 0)	0.906	Default (State 0)	0.737	Default (State 0)	0.614	Default (State 0)	0.587	Default (State 0)	1.547	Default (State 0)	1.828
State 1	0.550	State 1	0.624	State 1	1.045	State 52	0.921	State 10	0.258	State 22	0.314	State 0	1.547	State 0	1.828
State 3	0.561	State 2	0.631	State 32	0.733	State 74	0.324	State 16	0.799	State 28	0.568	State 1	1.542	State 1	1.792
State 4	0.569	State 4	0.641	State 41	1.001	State 83	0.767	State 20	0.666	State 34	0.583	State 2	1.541	State 2	1.778
State 48	0.266	State 7	0.577	State 49	0.128	State 89	0.149	State 25	0.086	State 38	0.056	State 3	1.543	State 3	1.771
State 63	0.092	State 12	0.177	State 56	0.839	State 97	0.692	State 27	0.575	State 42	0.6124	State 4	1.543	State 4	1.747
State 74	0.153	State 17	0.633	State 61	0.268	State 102	0.158	State 35	0.347772	State 47	0.5843	State 5	1.541	State 5	1.749
State 82	0.251	State 108	0.602	State 67	0.869	State 112	0.792	State 65	0.906121	State 66	0.9111	State 6	1.545	State 6	1.671
												State 7	1.533	State 7	1.607
												State 8	1.506	State 8	1.504
												State 9	1.465	State 9	1.346
												State 10	1.402	State 10	1.198
												State 11	1.304	State 11	1.016
												State 12	1.115	State 12	0.767
												State 13	1.425	State 13	1.648
												State 14	1.427	State 14	1.588
												State 15	1.418	State 15	1.584
												State 16	1.418	State 16	1.568
												State 17	1.405	State 17	1.53
												State 18	1.403	State 18	1.527
												State 19	1.383	State 19	1.43
												State 20	1.362	State 20	1.358
												State 21	1.329	State 21	1.249
												State 22	1.252	State 22	1.086
												State 23	1.179	State 23	0.954
												State 24	1.063	State 24	0.788
												State 25	0.869	State 25	0.579
												State 26	1.411	State 26	1.893
												State 27	1.425	State 27	1.862
												State 28	1.432	State 28	1.853
												State 29	1.439	State 29	1.838
												State 30	1.45	State 30	1.825
												State 31	1.448	State 31	1.822
												State 32	1.468	State 32	1.766
												State 33	1.474	State 33	1.714
												State 34	1.481	State 34	1.633
												State 35	1.469	State 35	1.506
												State 36	1.45	State 36	1.371
												State 37	1.382	State 37	1.185
												State 38	1.219	State 38	0.912
												State 39	1.462	State 39	1.804
												State 40	1.478	State 40	1.751
												State 41	1.478	State 41	1.729
												State 42	1.478	State 42	1.718
												State 43	1.475	State 43	1.685
												State 44	1.474	State 44	1.682
												State 45	1.471	State 45	1.609
												State 46	1.471	State 46	1.553
												State 47	1.459	State 47	1.447
												State 48	1.42	State 48	1.285
												State 49	1.361	State 49	1.158
												State 50	1.271	State 50	0.981
												State 51	1.092	State 51	0.741
												State 52	0.233	State 52	0.333
												State 53	0.23	State 53	0.329
												State 54	0.225	State 54	0.318
												State 55	0.218	State 55	0.308
												State 56	0.212	State 56	0.291
												State 57	0.216	State 57	0.302
												State 58	0.191	State 58	0.259
												State 59	0.177	State 59	0.236
												State 60	0.154	State 60	0.197
												State 61	0.122	State 61	0.15
												State 62	0.1	State 62	0.12
												State 63	0.074	State 63	0.086
												State 64	0.046	State 64	0.051
												State 65	0.214	State 65	0.318
												State 66	0.197	State 66	0.294
												State 67	0.191	State 67	0.281
												State 68	0.184	State 68	0.269
												State 69	0.173	State 69	0.251
												State 70	0.176	State 70	0.258
												State 71	0.149	State 71	0.211
												State 72	0.133	State 72	0.187
												State 73	0.111	State 73	0.151
												State 74	0.084	State 74	0.11
												State 75	0.067	State 75	0.085
												State 76	0.048	State 76	0.059
												State 77	0.029	State 77	0.034
												State 78	0.251	State 78	0.347
												State 79	0.268	State 79	0.36
												State 80	0.264	State 80	0.352
												State 81	0.261	State 81	0.342
												State 82	0.255	State 82	0.33
												State 83	0.264	State 83	0.343
												State 84	0.246	State 84	0.305
												State 85	0.234	State 85	0.285
												State 86	0.208	State 86	0.244
												State 87	0.17	State 87	0.194
												State 88	0.14	State 88	0.157
												State 89	0.103	State 89	0.115
												State 90	0.063	State 90	0.071
												State 91	0.239	State 91	0.341
												State 92	0.237	State 92	0.335
												State 93	0.233	State 93	0.324
												State 94	0.227	State 94	0.313
												State 95	0.219	State 95	0.297
												State 96	0.225	State 96	0.306
												State 97	0.2	State 97	0.262
												State 98	0.185	State 98	0.238
												State 99	0.161	State 99	0.199
												State 100	0.128	State 100	0.152
												State 101	0.105	State 101	0.121
												State 102	0.078	State 102	0.087
												State 103	0.049	State 103	0.054
												State 104	1.51	State 104	1.838
												State 105	1.391	State 105	1.868
												State 106	0.23	State 106	0.329
												State 107	0.248	State 107	0.339
												State 108	1.514	State 108	1.819
												State 109	1.391	State 109	1.87
												State 110	0.231	State 110	0.329
												State 111	0.248	State 111	0.341
												State 112	1.403	State 112	1.648
												State 113	1.452	State 113	1.78
												State 114	0.211	State 114	0.316
												State 115	0.236	State 115	0.333
												State 116	1.403	State 116	1.642
												State 117	1.451	State 117	1.784
												State 118	0.211	State 118	0.317
												State 119	0.236	State 119	0.334

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Table 14-6
NR Supplemental Body SAR Data

Supplemental Body SAR Data									
NR Band n71		NR Band n12		NR Band n5		NR Band n66		NR Band n25/n2	
DFT-s-OFDM QPSK, 20MHz Bandwidth, 50 RB, 28 RB Offset		DFT-s-OFDM QPSK, 15MHz Bandwidth, 1 RB, 77 RB Offset		DFT-s-OFDM QPSK, 20MHz Bandwidth, 50 RB, 28 RB Offset		DFT-s-OFDM QPSK, 20MHz Bandwidth, 1 RB, 1 RB Offset		DFT-s-OFDM QPSK, 20MHz Bandwidth, 1 RB, 53 RB Offset	
Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Bottom	Test Position	Bottom
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	680.5	Frequency (MHz)	707.5	Frequency (MHz)	836.5	Frequency (MHz)	1770.0	Frequency (MHz)	1905.0
Channel	136100	Channel	141500	Channel	167300	Channel	354000	Channel	381000
Measured 1g SAR (W/kg)	0.302	Measured 1g SAR (W/kg)	0.340	Measured 1g SAR (W/kg)	0.558	Measured 1g SAR (W/kg)	1.080	Measured 1g SAR (W/kg)	1.150
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 3)	0.506	Auto-tune (State 1)	0.564	Auto-tune (State 65)	0.852	Auto-tune (State 6)	1.751	Auto-tune (State 108)	1.928
Default (State 0)	0.443	Default (State 0)	0.531	Default (State 0)	0.821	Default (State 0)	1.763	Default (State 0)	1.881
State 3	0.506	State 1	0.564	State 65	0.852	State 0	1.763	State 0	1.881
State 4	0.515	State 4	0.574	State 66	0.738	State 1	1.761	State 1	1.835
State 99	0.112	State 92	0.352	State 72	0.422	State 2	1.760	State 2	1.827
State 106	0.469	State 100	0.083	State 76	0.128	State 3	1.758	State 3	1.818
State 110	0.468	State 108	0.538	State 84	0.515	State 4	1.775	State 4	1.789
State 115	0.355	State 112	0.544	State 94	0.819	State 5	1.771	State 5	1.791
						State 6	1.751	State 6	1.692
						State 7	1.74	State 7	1.654
						State 8	1.712	State 8	1.559
						State 9	1.642	State 9	1.371
						State 10	1.57	State 10	1.242
						State 11	1.444	State 11	1.064
						State 12	1.234	State 12	0.81
						State 13	1.591	State 13	1.686
						State 14	1.591	State 14	1.659
						State 15	1.588	State 15	1.639
						State 16	1.597	State 16	1.599
						State 17	1.585	State 17	1.559
						State 18	1.589	State 18	1.552
						State 19	1.552	State 19	1.47
						State 20	1.506	State 20	1.408
						State 21	1.474	State 21	1.314
						State 22	1.384	State 22	1.144
						State 23	1.306	State 23	1.01
						State 24	1.169	State 24	0.853
						State 25	0.952	State 25	0.629
						State 26	1.658	State 26	1.94
						State 27	1.663	State 27	1.89
						State 28	1.678	State 28	1.885
						State 29	1.69	State 29	1.893
						State 30	1.698	State 30	1.881
						State 31	1.694	State 31	1.883
						State 32	1.69	State 32	1.796
						State 33	1.696	State 33	1.754
						State 34	1.701	State 34	1.675
						State 35	1.673	State 35	1.561
						State 36	1.637	State 36	1.423
						State 37	1.568	State 37	1.211
						State 38	1.374	State 38	0.938
						State 39	1.685	State 39	1.837
						State 40	1.708	State 40	1.832
						State 41	1.713	State 41	1.816
						State 42	1.711	State 42	1.781
						State 43	1.703	State 43	1.725
						State 44	1.7	State 44	1.732
						State 45	1.701	State 45	1.673
						State 46	1.668	State 46	1.609
						State 47	1.656	State 47	1.493
						State 48	1.588	State 48	1.343
						State 49	1.525	State 49	1.212
						State 50	1.433	State 50	1.025
						State 51	1.217	State 51	0.775
						State 52	0.275	State 52	0.312
						State 53	0.275	State 53	0.31
						State 54	0.266	State 54	0.301
						State 55	0.262	State 55	0.289
						State 56	0.249	State 56	0.271
						State 57	0.256	State 57	0.282
						State 58	0.227	State 58	0.24
						State 59	0.209	State 59	0.218
						State 60	0.181	State 60	0.18
						State 61	0.144	State 61	0.133
						State 62	0.118	State 62	0.104
						State 63	0.087	State 63	0.072
						State 64	0.054	State 64	0.041
						State 65	0.254	State 65	0.299
						State 66	0.237	State 66	0.28
						State 67	0.227	State 67	0.268
						State 68	0.217	State 68	0.256
						State 69	0.205	State 69	0.249
						State 70	0.206	State 70	0.256
						State 71	0.175	State 71	0.207
						State 72	0.156	State 72	0.177
						State 73	0.131	State 73	0.14
						State 74	0.099	State 74	0.097
						State 75	0.078	State 75	0.074
						State 76	0.056	State 76	0.049
						State 77	0.034	State 77	0.027
						State 78	0.302	State 78	0.318
						State 79	0.323	State 79	0.333
						State 80	0.315	State 80	0.324
						State 81	0.313	State 81	0.315
						State 82	0.307	State 82	0.302
						State 83	0.315	State 83	0.315
						State 84	0.291	State 84	0.28
						State 85	0.28	State 85	0.255
						State 86	0.247	State 86	0.218
						State 87	0.204	State 87	0.164
						State 88	0.167	State 88	0.129
						State 89	0.125	State 89	0.091
						State 90	0.077	State 90	0.053
						State 91	0.282	State 91	0.313
						State 92	0.285	State 92	0.311
						State 93	0.275	State 93	0.301
						State 94	0.272	State 94	0.291
						State 95	0.262	State 95	0.274
						State 96	0.267	State 96	0.282
						State 97	0.238	State 97	0.24
						State 98	0.218	State 98	0.214
						State 99	0.191	State 99	0.177
						State 100	0.153	State 100	0.13
						State 101	0.125	State 101	0.102
						State 102	0.092	State 102	0.071
						State 103	0.059	State 103	0.042
						State 104	1.751	State 104	1.821
						State 105	1.65	State 105	1.85
						State 106	0.273	State 106	0.304
						State 107	0.298	State 107	0.314
						State 108	1.759	State 108	1.928
						State 109	1.654	State 109	1.837
						State 110	0.273	State 110	0.305
						State 111	0.299	State 111	0.315
						State 112	1.589	State 112	1.643
						State 113	1.684	State 113	1.77
						State 114	0.249	State 114	0.293
						State 115	0.281	State 115	0.308
						State 116	1.589	State 116	1.651
						State 117	1.682	State 117	1.765
						State 118	0.25	State 118	0.293
						State 119	0.281	State 119	0.31

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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.

Table 14-7
LTE Band 41 Head Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25	27.5
Measured Output Power (dBm)	24.11	26.72
Measured SAR (W/kg)	0.055	0.073
Measured Power (mW)	257.63	469.89
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	163.08	203.46
% deviation from expected linearity		6.19%

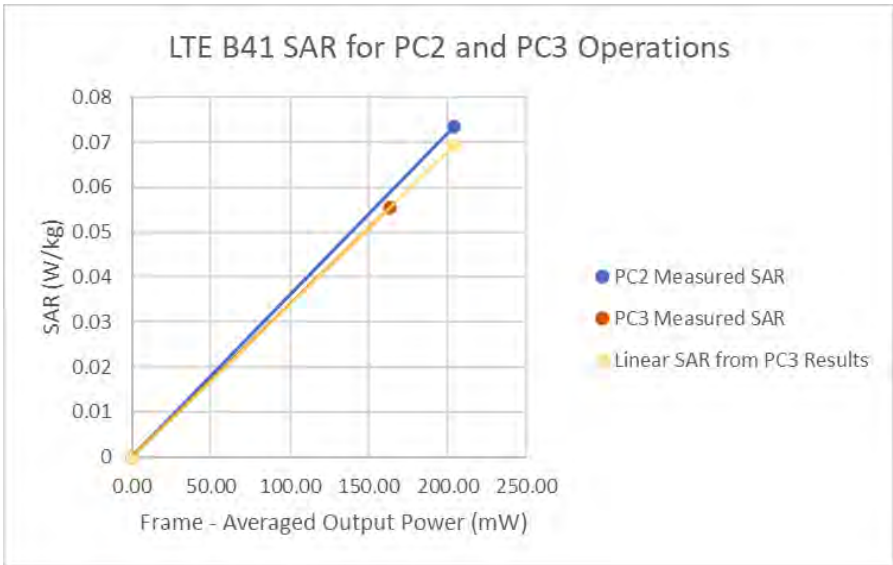


Figure 14-1
LTE Band 41 Head Linearity

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Table 14-8
LTE Band 41 ULCA Head Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25	27.5
Measured Output Power (dBm)	24.41	27.15
Measured SAR (W/kg)	0.056	0.077
Measured Power (mW)	276.06	518.80
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	174.74	224.64
% deviation from expected linearity		7.90%

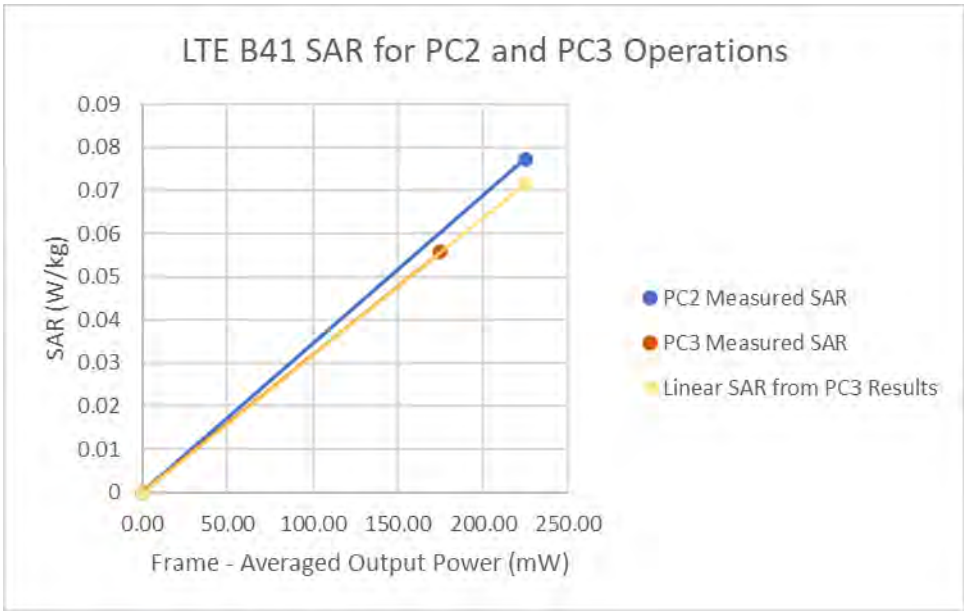


Figure 14-2
LTE Band 41 ULCA Head Linearity

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

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25	27.5
Measured Output Power (dBm)	24.11	26.72
Measured SAR (W/kg)	0.203	0.253
Measured Power (mW)	257.63	469.89
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	163.08	203.46
% deviation from expected linearity		-0.11%

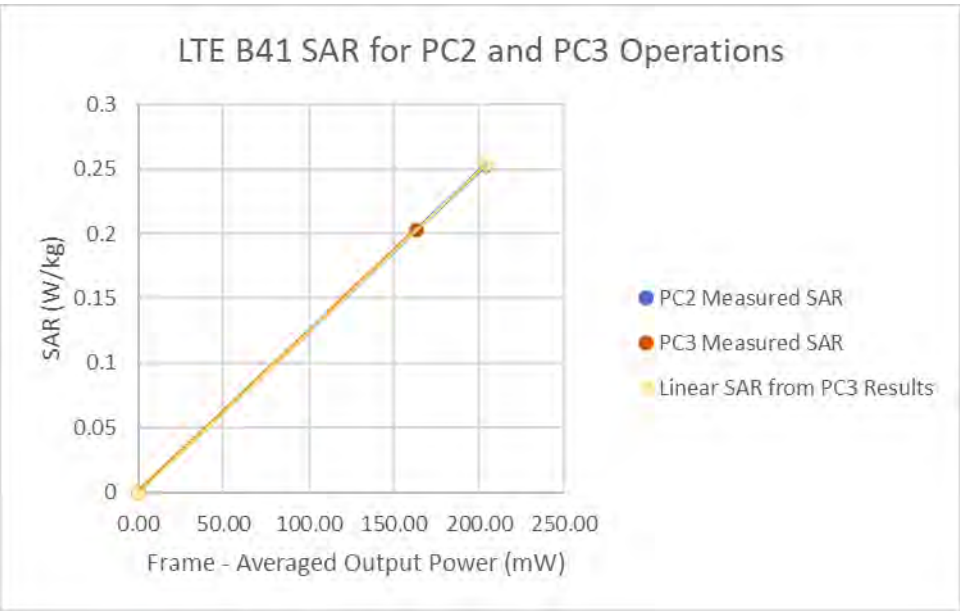


Figure 14-3
LTE Band 41 Body-Worn Linearity

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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	27.5
Measured Output Power (dBm)	24.41	27.15
Measured SAR (W/kg)	0.208	0.291
Measured Power (mW)	276.06	518.80
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	174.74	224.64
% deviation from expected linearity		8.83%

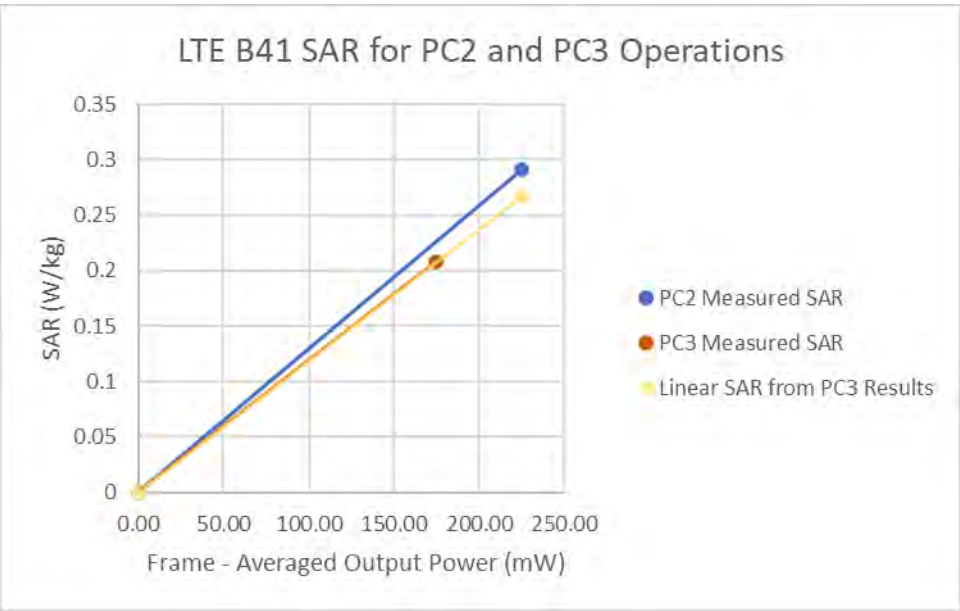


Figure 14-4
LTE Band 41 ULCA Body-Worn Linearity

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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)	21.36	23
Measured SAR (W/kg)	0.389	0.373
Measured Power (mW)	136.77	199.53
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	86.58	86.39
% deviation from expected linearity		-3.91%

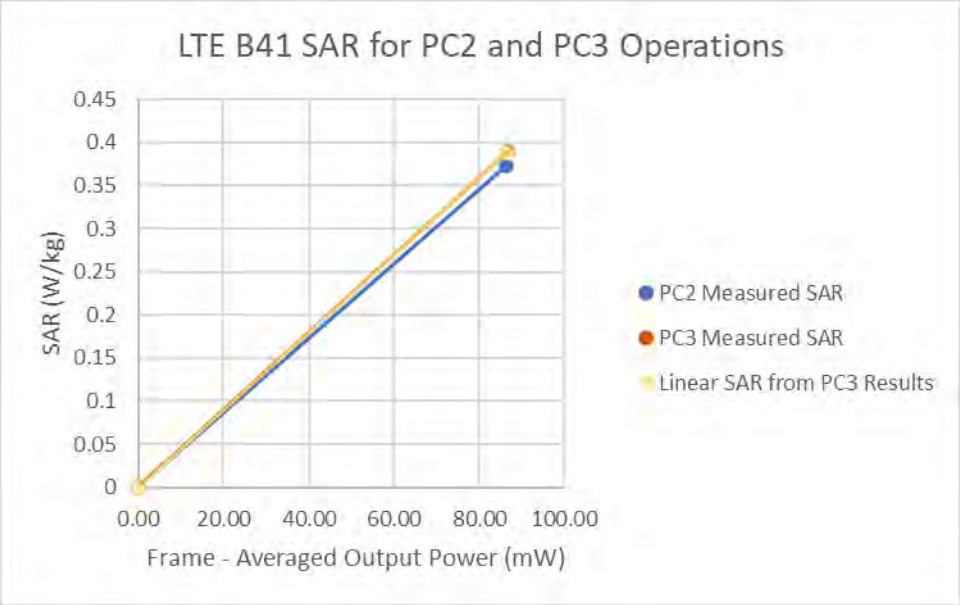


Figure 14-5
LTE Band 41 Hotspot Linearity

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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)	21.25	23.06
Measured SAR (W/kg)	0.393	0.384
Measured Power (mW)	133.35	202.30
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	84.41	87.60
% deviation from expected linearity		-5.84%

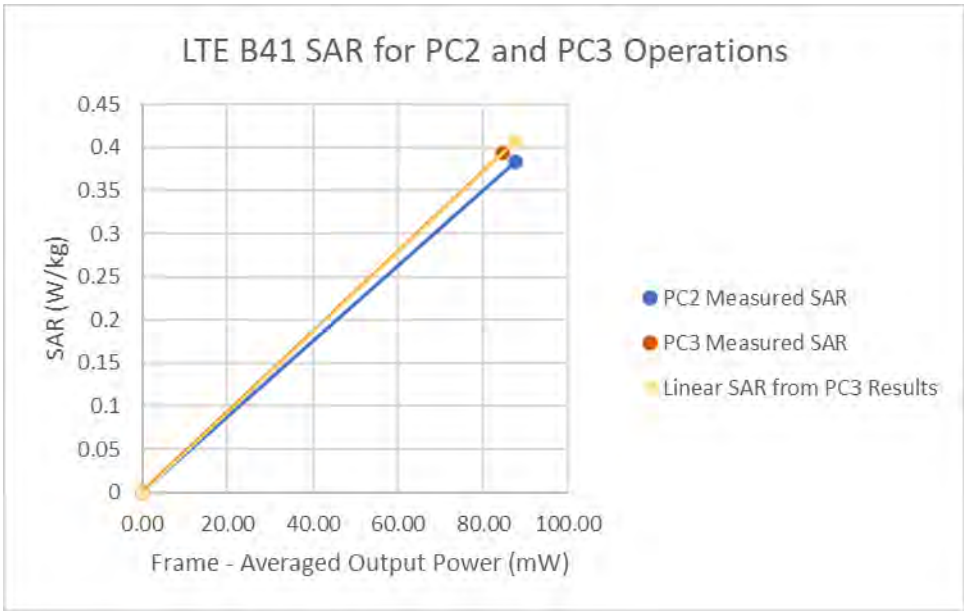


Figure 14-6
LTE Band 41 ULCA Hotspot Linearity

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Table 14-13
LTE Band 41 Phablet Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	23	24.6
Measured Output Power (dBm)	22.31	23.97
Measured SAR (W/kg)	2.18	2.15
Measured Power (mW)	170.22	249.46
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	107.75	108.02
% deviation from expected linearity		-1.62%

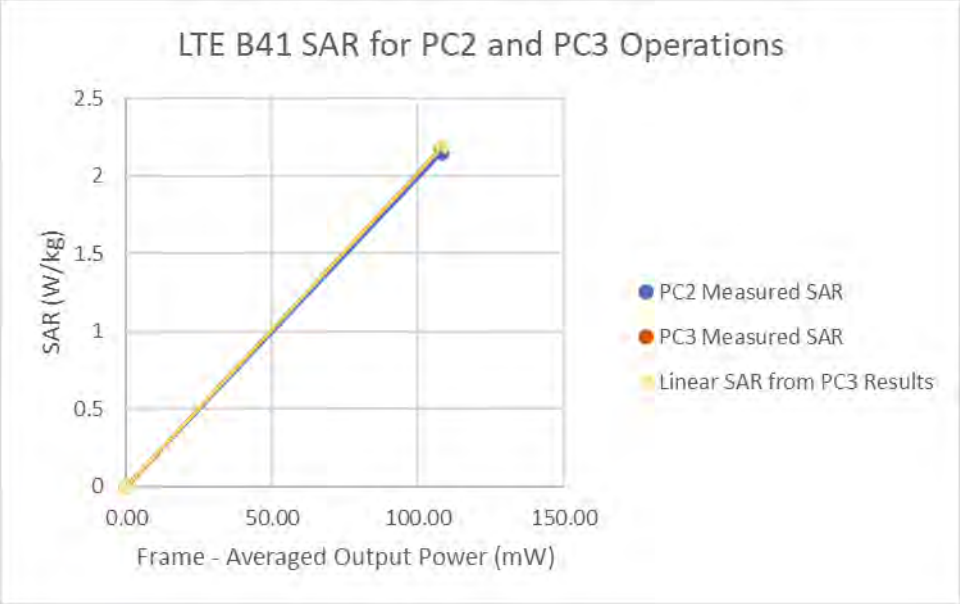


Figure 14-7
LTE Band 41 Phablet Linearity

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Table 14-14
LTE Band 41 ULCA Phablet Linearity Data

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	23	24.6
Measured Output Power (dBm)	22.58	24.47
Measured SAR (W/kg)	2.43	2.53
Measured Power (mW)	181.13	279.90
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	114.66	121.20
% deviation from expected linearity		-1.50%

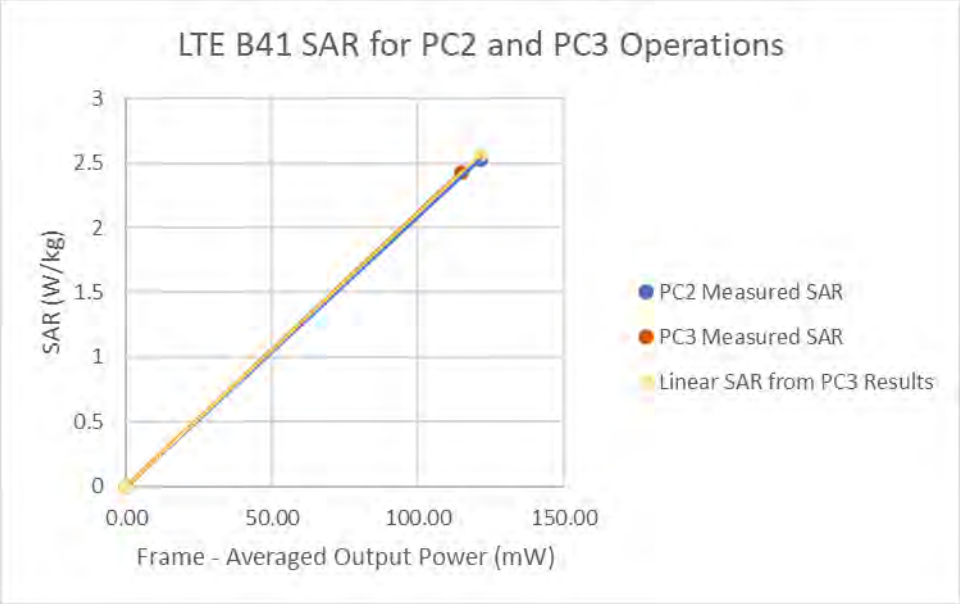


Figure 14-8
LTE Band 41 ULCA Phablet Linearity

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15 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4404B	Spectrum Analyzer (9KHZ-6.7GHZ)	1/16/2020	Triennial	1/16/2023	US41441489
Agilent	8753ES	S-Parameter Network Analyzer	12/31/2019	Annual	12/31/2020	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	E4432B	ESG-D Series Signal Generator	7/14/2019	Annual	7/14/2020	US40053896
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	E4438C	ESG Vector Signal Generator	12/13/2019	Annual	12/13/2020	MY42082659
Agilent	E5515C	8960 Series 10 Wireless Communications Test Set	2/10/2020	Annual	2/10/2021	GB42230325
Agilent	E5515C	Wireless Communications Test Set	1/14/2020	Triennial	1/14/2023	GB43304447
Agilent	E5515C	Wireless Communications Test Set	6/26/2019	Annual	6/26/2020	MY50267125
Agilent	E5515C	Wireless Communications Test Set	2/26/2020	Annual	2/26/2021	GB44400860
Agilent	E5515C	Wireless Communications Test Set	9/25/2019	Annual	9/25/2020	GB43304278
Agilent	N5182A	MXG Vector Signal Generator	7/10/2019	Annual	7/10/2020	MY47420800
Agilent	N5182A	MXG Vector Signal Generator	2/19/2020	Annual	2/19/2021	MY47420651
Agilent	N9030A	PXA Signal Analyzer (44GHz)	6/12/2019	Annual	6/12/2020	MY52350166
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433972
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433974
Amplifier Research	15S1G6	Amplifier	CBT	N/A	CBT	433976
Anritsu	MA24106A	USB Power Sensor	2/27/2020	Annual	2/27/2021	1244524
Anritsu	MA24106A	USB Power Sensor	10/10/2019	Annual	10/10/2020	1344545
Anritsu	MA24106A	USB Power Sensor	10/10/2019	Annual	10/10/2020	1344559
Anritsu	MA2411B	Pulse Power Sensor	6/11/2019	Annual	6/11/2020	1207364
Anritsu	MA2411B	Pulse Power Sensor	12/4/2019	Annual	12/4/2020	1126066
Anritsu	ML2495A	Power Meter	12/17/2019	Annual	12/17/2020	941001
Anritsu	ML2496A	Power Meter	3/23/2020	Annual	3/23/2021	1351001
Anritsu	MT8821C	Radio Communication Analyzer	3/10/2020	Annual	3/10/2021	6200901190
Anritsu	MT8821C	Radio Communication Analyzer	10/2/2019	Annual	10/2/2020	6201664756
Anritsu	MT8821C	Radio Communication Analyzer	2/22/2020	Annual	2/22/2021	6261895213
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
COMTech	AR85729-5	Solid State Amplifier	CBT	N/A	CBT	M1SSA00-009
COMTECH	AR85729-5/5759B	Solid State Amplifier	CBT	N/A	CBT	M3W1A00-1002
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	1/24/2020	Biennial	1/24/2022	200043588
Control Company	4352	Long Stem Thermometer	1/24/2020	Biennial	1/24/2022	200043655
Control Company	4352	Long Stem Thermometer	1/24/2020	Biennial	1/24/2022	200043647
Control Company	4352	Ultra Long Stem Thermometer	11/29/2018	Biennial	11/29/2020	181766816
Control Company	4352	Ultra Long Stem Thermometer	11/29/2018	Biennial	11/29/2020	181766817
Keysight	772D	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
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
MiniCircuits	SLP-2400+	Low Pass Filter	CBT	N/A	CBT	R8979500903
MiniCircuits	VLF-6000+	Low Pass Filter	CBT	N/A	CBT	N/A
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	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Pasternack	PE2208-6	Bidirectional Coupler	CBT	N/A	CBT	N/A
Pasternack	PE2209-10	Bidirectional Coupler	CBT	N/A	CBT	N/A
Seekonk	NC-100	Torque Wrench	7/18/2019	Annual	7/18/2020	N/A
Rohde & Schwarz	CMW500	Radio Communication Tester	3/27/2020	Annual	3/27/2021	128633
Rohde & Schwarz	CMW500	Radio Communication Tester	8/14/2019	Annual	8/14/2020	140144
Rohde & Schwarz	CMW500	Radio Communication Tester	10/4/2019	Annual	10/4/2020	166462
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	2/4/2020	Annual	2/4/2021	162125
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	11/14/2019	Annual	11/14/2020	164948
Rohde & Schwarz	ZNLE6	Vector Network Analyzer	10/11/2019	Annual	10/11/2020	101307
Rohde & Schwarz	CMU200	Base Station Simulator	6/3/2019	Annual	6/3/2020	109892
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	D1750V2	1750 MHz SAR Dipole	10/22/2018	Biennial	10/22/2020	1150
SPEAG	D1765V2	1765 MHz SAR Dipole	5/23/2018	Triennial	5/23/2021	1008
SPEAG	D1900V2	1900 MHz SAR Dipole	10/23/2018	Biennial	10/23/2020	5d080
SPEAG	D1900V2	1900 MHz SAR Dipole	2/21/2019	Biennial	2/21/2021	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	D2450V2	2450 MHz SAR Dipole	9/11/2017	Triennial	9/11/2020	797
SPEAG	D2600V2	2600 MHz SAR Dipole	6/14/2019	Annual	6/14/2020	1064
SPEAG	D3500V2	3500 MHz SAR Dipole	1/11/2018	Triennial	1/11/2021	1059
SPEAG	D3700V2	3700 MHz SAR Dipole	1/11/2018	Triennial	1/11/2021	1018
SPEAG	D5GHzV2	5 GHz SAR Dipole	1/16/2018	Triennial	1/16/2021	1057
SPEAG	D5GHzV2	5 GHz SAR Dipole	9/17/2019	Annual	9/17/2020	1191
SPEAG	D750V3	750 MHz SAR Dipole	3/16/2020	Annual	3/16/2021	1003
SPEAG	D750V3	750 MHz SAR Dipole	10/19/2018	Biennial	10/19/2020	1161
SPEAG	D835V2	835 MHz SAR Dipole	3/13/2019	Biennial	3/13/2021	4d047
SPEAG	D835V2	835 MHz SAR Dipole	10/19/2018	Biennial	10/19/2020	4d133
SPEAG	D835V2	835 MHz SAR Dipole	1/13/2020	Annual	1/13/2021	4d132
SPEAG	DAE4	Dasy Data Acquisition Electronics	12/18/2019	Annual	12/18/2020	859
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/11/2019	Annual	7/11/2020	1323
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/17/2019	Annual	9/17/2020	1333
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/11/2019	Annual	7/11/2020	1322
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/20/2019	Annual	6/20/2020	1334
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/12/2020	Annual	3/12/2021	1368
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/15/2020	Annual	4/15/2021	1407
SPEAG	DAE4	Dasy Data Acquisition Electronics	9/12/2019	Annual	9/12/2020	1449
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/13/2020	Annual	1/13/2021	1530
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/13/2020	Annual	1/13/2021	1558
SPEAG	DAE4	Dasy Data Acquisition Electronics	12/5/2019	Annual	12/5/2020	1533
SPEAG	DAK-3.5	Dielectric Assessment Kit	10/22/2019	Annual	10/22/2020	1091
SPEAG	EX3DV4	SAR Probe	1/21/2020	Annual	1/21/2021	3589
SPEAG	EX3DV4	SAR Probe	9/19/2019	Annual	9/19/2020	7551
SPEAG	EX3DV4	SAR Probe	4/21/2020	Annual	4/21/2021	7357
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	1/21/2020	Annual	1/21/2021	7488
SPEAG	EX3DV4	SAR Probe	3/17/2020	Annual	3/17/2021	7527
SPEAG	EX3DV4	SAR Probe	7/15/2019	Annual	7/15/2020	7547
SPEAG	EX3DV4	SAR Probe	9/19/2019	Annual	9/19/2020	7552
SPEAG	EX3DV4	SAR Probe	12/11/2019	Annual	12/11/2020	7570
SPEAG	EX3DV4	SAR Probe	12/11/2019	Annual	12/11/2020	7571

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.

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16 MEASUREMENT UNCERTAINTIES

a	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
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	

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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]

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APPENDIX A: SAR TEST DATA

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DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

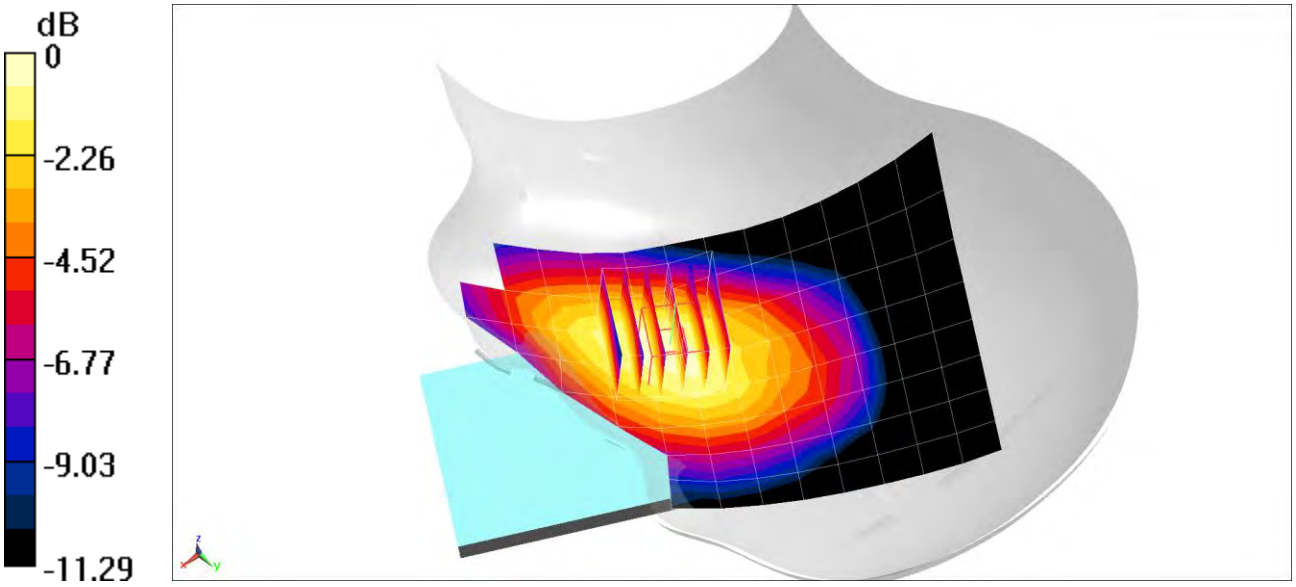
Communication System: UID 0, Cellular CDMA; Frequency: 820.1 MHz; Duty Cycle: 1:1
Medium: 835 Head; Medium parameters used (interpolated):
f = 820.1 MHz; σ = 0.88 S/m; ε_r = 40.668; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 05/11/2020; Ambient Temp: 21.9°C; Tissue Temp: 20.6°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 (4);SEMCAD X Version 14.6.14 (7483)

Mode: Cell. EVDO Rev. A, Rule Part 90S, Left 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 = 14.88 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.247 W/kg
SAR(1 g) = 0.188 W/kg



0 dB = 0.227 W/kg = -6.44 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

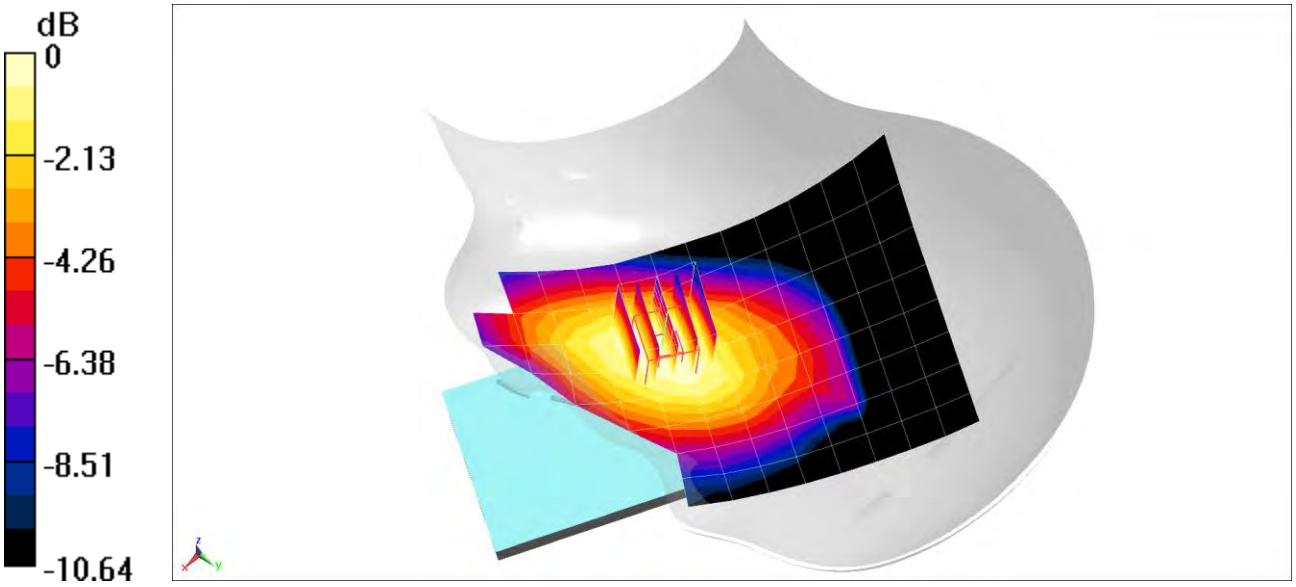
Communication System: UID 0, Cellular CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: 835 Head; Medium parameters used (interpolated):
f = 836.52 MHz; σ = 0.886 S/m; ε_r = 40.617; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 05/11/2020; Ambient Temp: 21.9°C; Tissue Temp: 20.6°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 (4);SEMCAD X Version 14.6.14 (7483)

Mode: Cell. EVDO Rev. A, Rule Part 22H, 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 = 13.23 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.199 W/kg
SAR(1 g) = 0.150 W/kg



0 dB = 0.180 W/kg = -7.45 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0116M

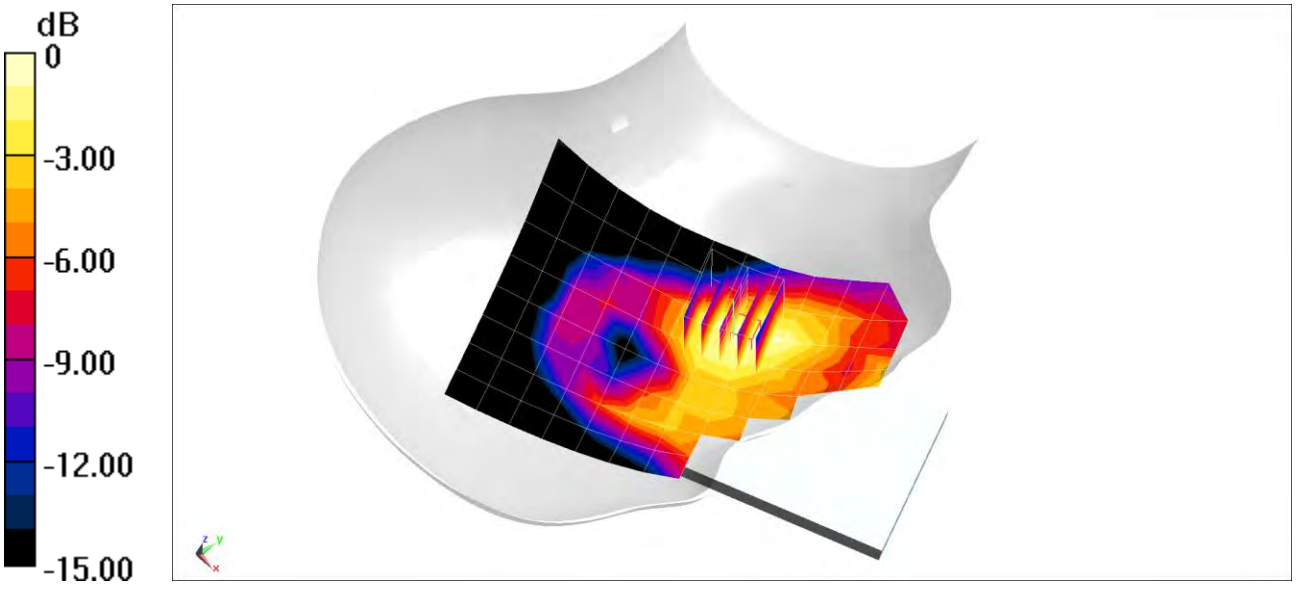
Communication System: UID 0, CDMA; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 Head; Medium parameters used:
f = 1880 MHz; σ = 1.438 S/m; ε_r = 40.978; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 05/11/2020; Ambient Temp: 21.8°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7410; ConvF(8.11, 8.11, 8.11) @ 1880 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1322; Calibrated: 7/11/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: PCS EVDO Rev A, Right Head, Cheek, Mid.ch

Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.909 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.155 W/kg
SAR(1 g) = 0.104 W/kg



0 dB = 0.132 W/kg = -8.79 dBW/kg

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

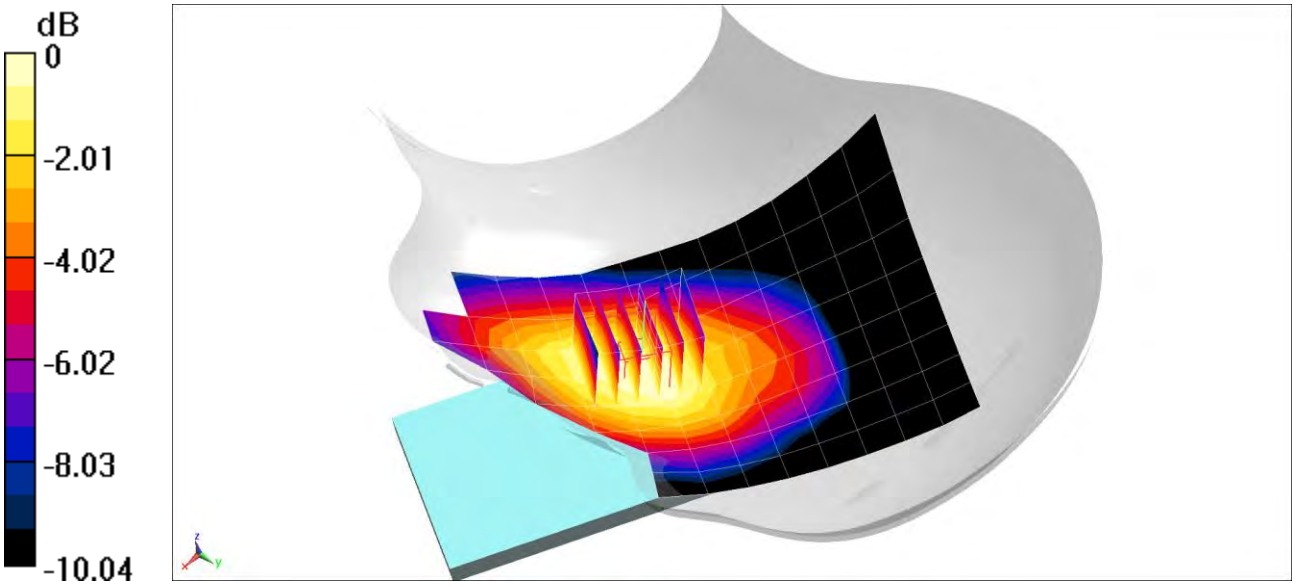
Communication System: UID 0, GSM; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium: 835 Head; Medium parameters used (interpolated):
f = 836.6 MHz; σ = 0.886 S/m; ε_r = 40.617; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 05/11/2020; Ambient Temp: 21.9°C; Tissue Temp: 20.6°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 (4);SEMCAD X Version 14.6.14 (7483)

Mode: GSM 850, 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 = 7.084 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.0560 W/kg
SAR(1 g) = 0.041 W/kg



0 dB = 0.0497 W/kg = -13.04 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0116M

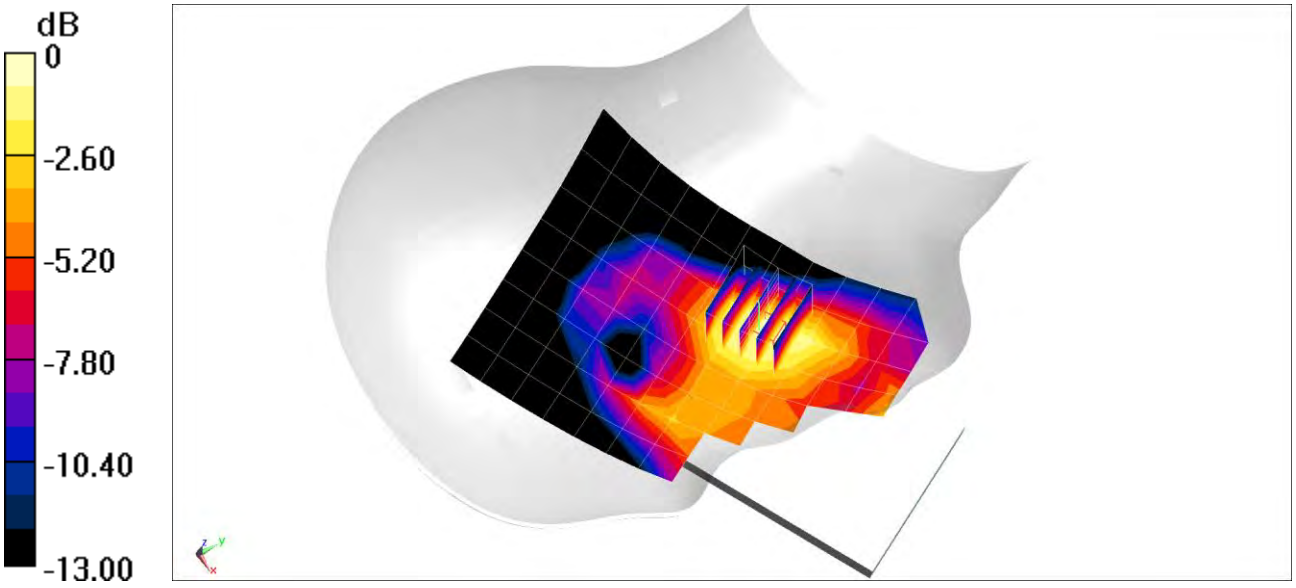
Communication System: UID 0, GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: 1900 Head; Medium parameters used:
f = 1880 MHz; σ = 1.438 S/m; ε_r = 40.978; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 05/11/2020; Ambient Temp: 21.8°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7410; ConvF(8.11, 8.11, 8.11) @ 1880 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1322; Calibrated: 7/11/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: GSM 1900, Right Head, Cheek, Mid.ch

Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.948 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.0710 W/kg
SAR(1 g) = 0.047 W/kg



0 dB = 0.0619 W/kg = -12.08 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0120M

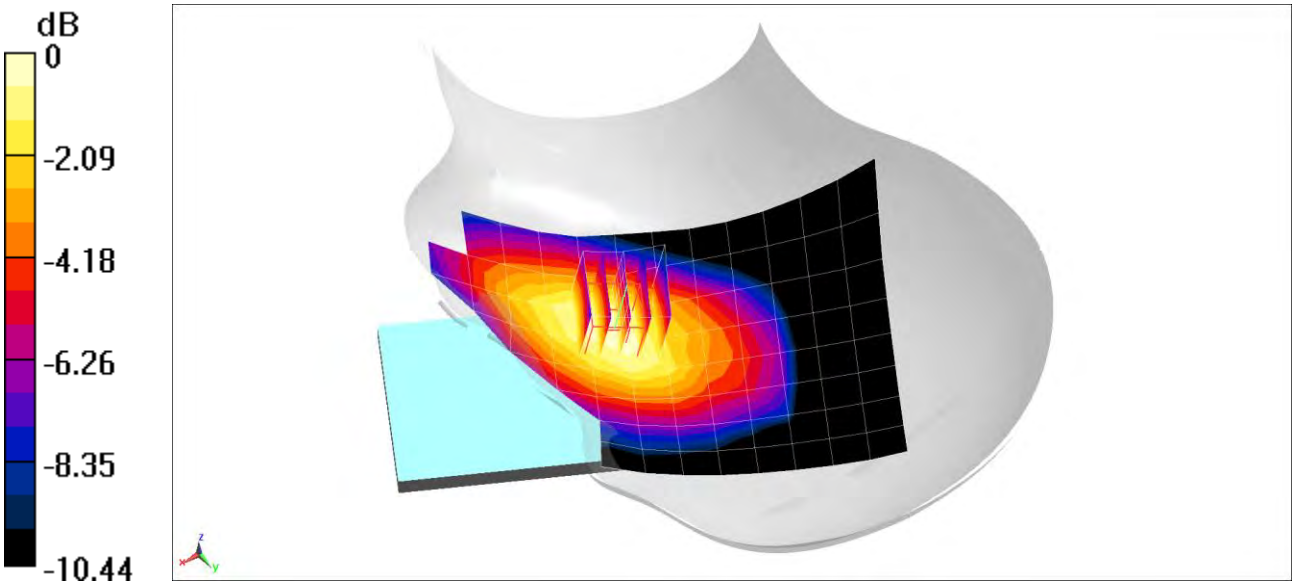
Communication System: UID 0, UMTS; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium: 835 Head; Medium parameters used (interpolated):
f = 836.6 MHz; σ = 0.874 S/m; ε_r = 41.94; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 05/06/2020; Ambient Temp: 21.3°C; Tissue Temp: 20.8°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 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 850, 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 = 12.78 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.189 W/kg
SAR(1 g) = 0.142 W/kg



0 dB = 0.173 W/kg = -7.62 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0116M

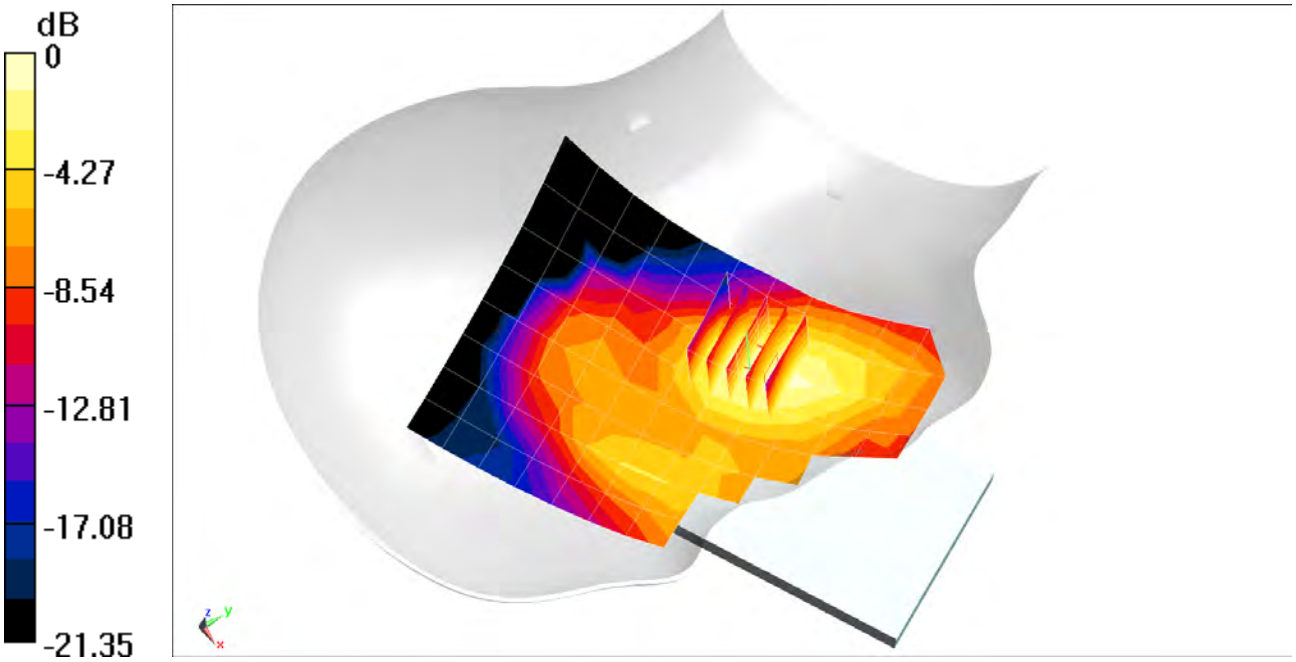
Communication System: UID 0, UMTS; Frequency: 1732.4 MHz; Duty Cycle: 1:1
Medium: 1750 Head; Medium parameters used (interpolated):
f = 1732.4 MHz; σ = 1.326 S/m; ε_r = 40.642; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 05/13/2020; Ambient Temp: 23.9°C; Tissue Temp: 20.5°C

Probe: EX3DV4 - SN7410; ConvF(8.46, 8.46, 8.46) @ 1732.4 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1322; Calibrated: 7/11/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1750, Right Head, Cheek, Mid.ch

Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.25 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.193 W/kg
SAR(1 g) = 0.129 W/kg



0 dB = 0.166 W/kg = -7.80 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0116M

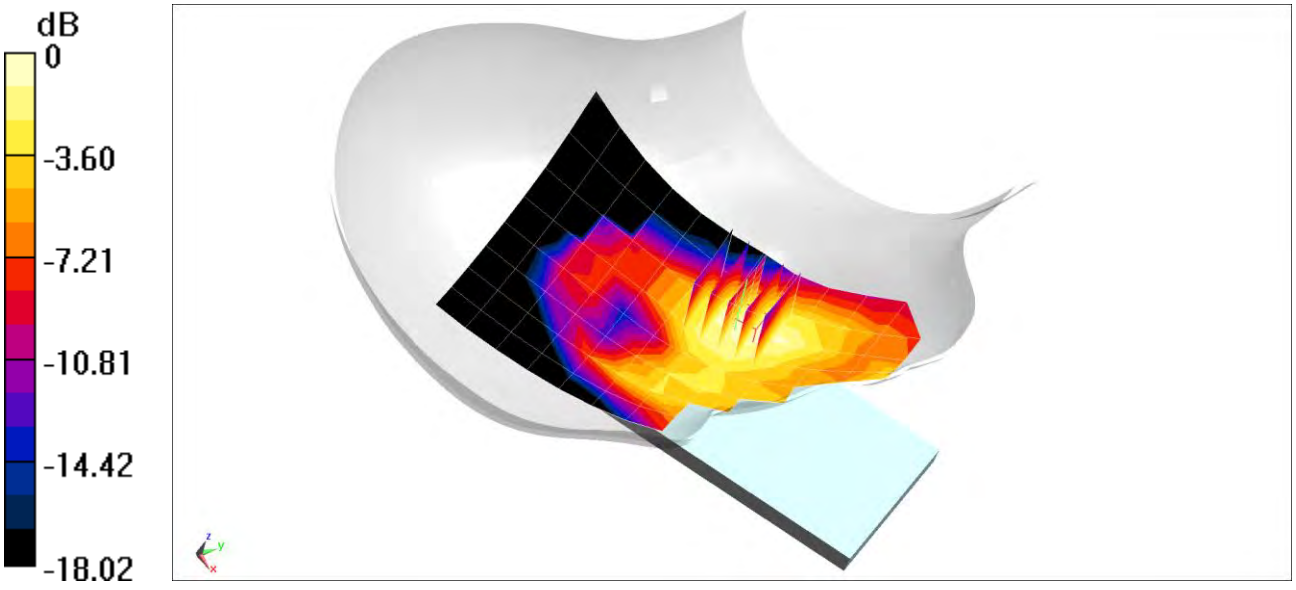
Communication System: UID 0, UMTS; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: 1900 Head; Medium parameters used:
f = 1880 MHz; σ = 1.438 S/m; ε_r = 40.978; ρ = 1000 kg/m^3
Phantom section: Right Section

Test Date: 05/11/2020; Ambient Temp: 21.8°C; Tissue Temp: 21.0°C

Probe: EX3DV4 - SN7410; ConvF(8.11, 8.11, 8.11) @ 1880 MHz; Calibrated: 7/16/2019
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1322; Calibrated: 7/11/2019
Phantom: Twin-SAM V8.0; Type: QD 000 P41 Ax; Serial: 1966
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: UMTS 1900, Right Head, Cheek, Mid.ch

Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.307 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 0.139 W/kg
SAR(1 g) = 0.094 W/kg



0 dB = 0.120 W/kg = -9.21 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0061M

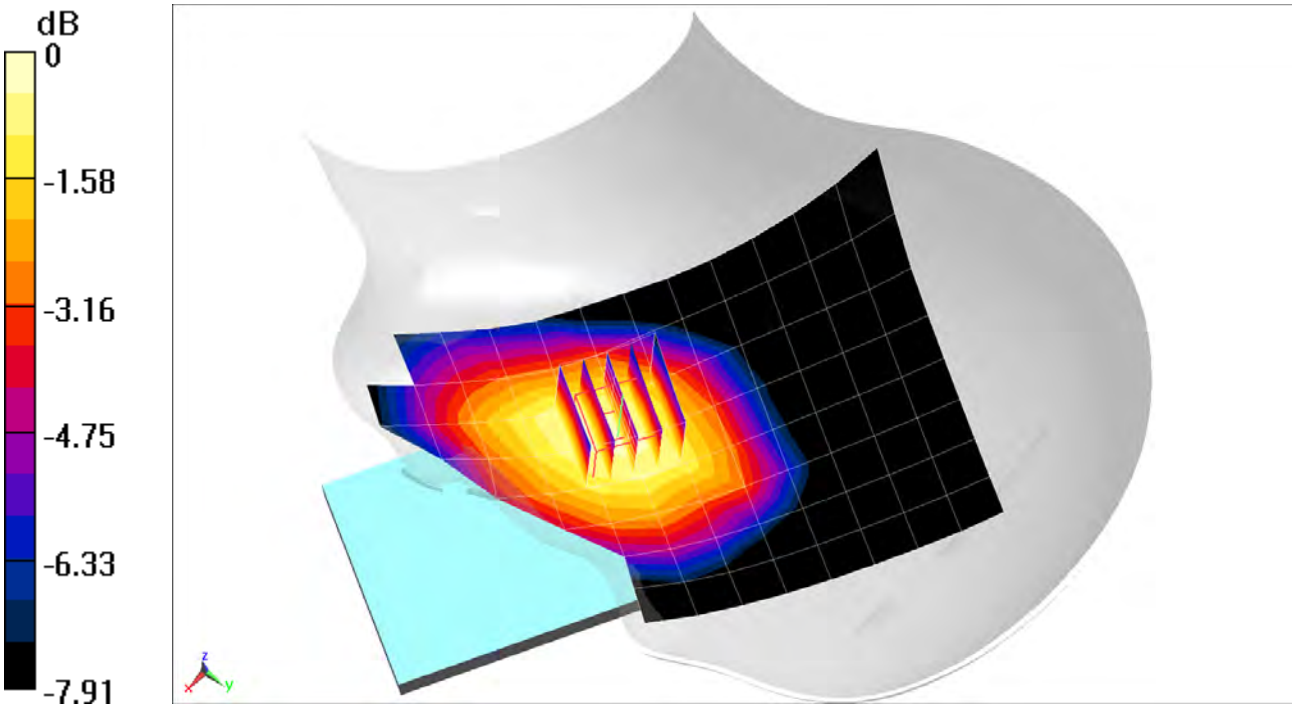
Communication System: UID 0, LTE Band 71; Frequency: 680.5 MHz; Duty Cycle: 1:1
Medium: 750 Head; Medium parameters used (interpolated):
f = 680.5 MHz; σ = 0.884 S/m; ε_r = 42.697; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 05/17/2020; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3589; ConvF(8.7, 8.7, 8.7) @ 680.5 MHz; Calibrated: 1/21/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1558; Calibrated: 1/13/2020
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

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 = 11.48 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.134 W/kg
SAR(1 g) = 0.106 W/kg



0 dB = 0.125 W/kg = -9.03 dBW/kg

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0061M

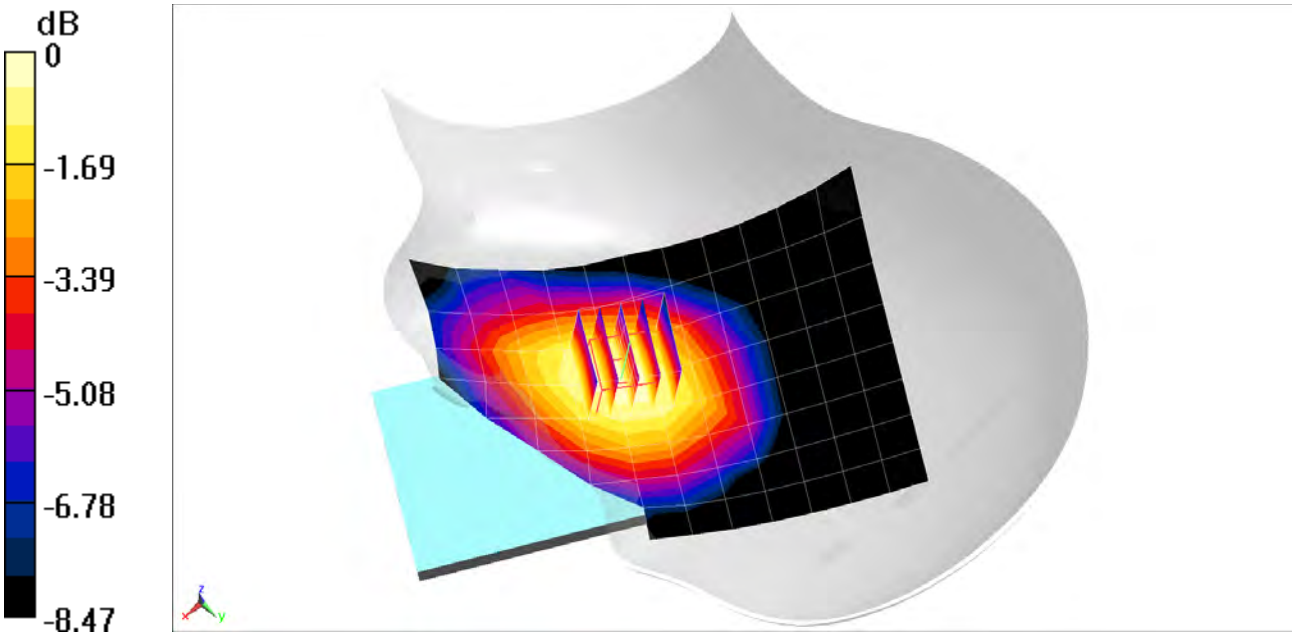
Communication System: UID 0, LTE Band 12; Frequency: 707.5 MHz; Duty Cycle: 1:1
Medium: 750 Head; Medium parameters used (interpolated):
f = 707.5 MHz; σ = 0.857 S/m; ε_r = 43.663; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 05/13/2020; Ambient Temp: 21.6°C; Tissue Temp: 20.6°C

Probe: EX3DV4 - SN3589; ConvF(8.7, 8.7, 8.7) @ 707.5 MHz; Calibrated: 1/21/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1558; Calibrated: 1/13/2020
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 12, Left Head, Cheek, Mid.ch
10 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 = 11.96 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.140 W/kg
SAR(1 g) = 0.111 W/kg



0 dB = 0.130 W/kg = -8.86 dBW/kg

PCTEST

DUT: A3LSMN986U; Type: Portable Handset; Serial: 0122M

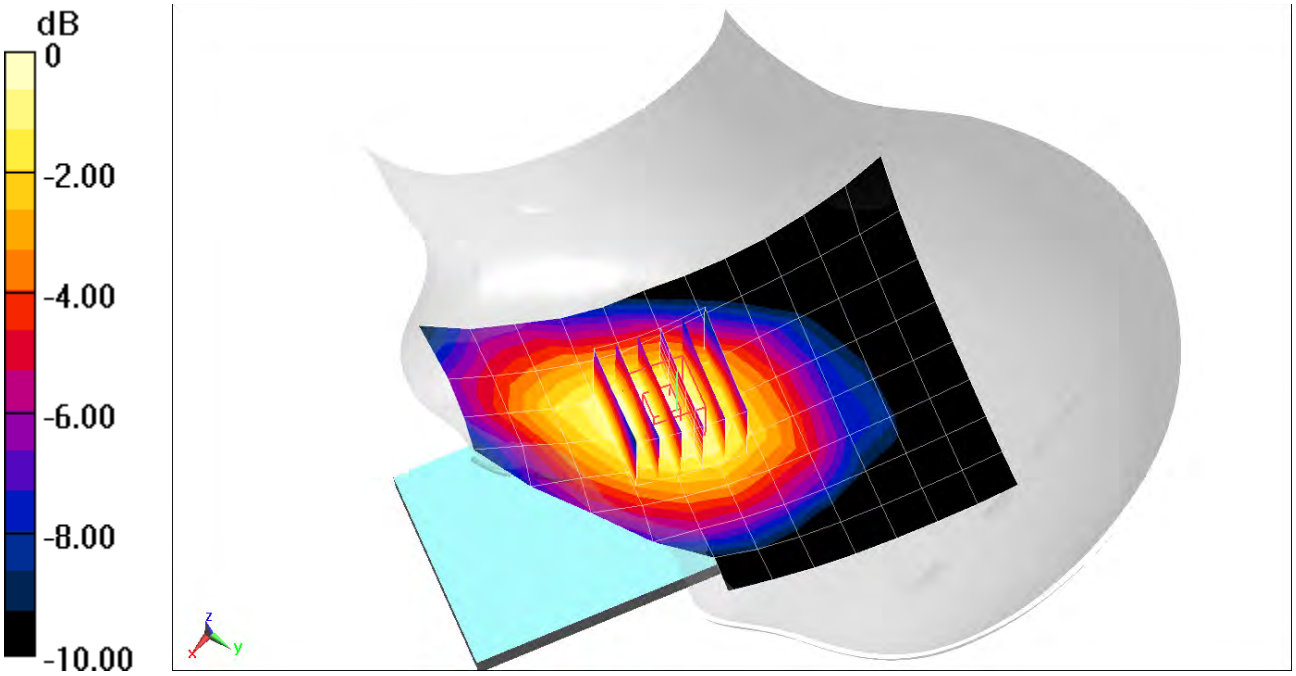
Communication System: UID 0, LTE Band 13; Frequency: 782 MHz; Duty Cycle: 1:1
Medium: 750 Head; Medium parameters used (interpolated):
f = 782 MHz; σ = 0.919 S/m; ε_r = 42.382; ρ = 1000 kg/m^3
Phantom section: Left Section

Test Date: 05/17/2020; Ambient Temp: 22.3°C; Tissue Temp: 22.0°C

Probe: EX3DV4 - SN3589; ConvF(8.7, 8.7, 8.7) @ 782 MHz; Calibrated: 1/21/2020
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Electronics: DAE4 Sn1558; Calibrated: 1/13/2020
Phantom: Twin-SAM V5.0 (30); Type: QD 000 P40 CD; Serial: 1647
Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Mode: LTE Band 13, Left Head, Cheek, Mid.ch
10 MHz Bandwidth, QPSK, 1 RB, 25 RB Offset

Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.93 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.276 W/kg
SAR(1 g) = 0.213 W/kg



0 dB = 0.250 W/kg = -6.02 dBW/kg