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SAR EVALUATION REPORT

Applicant Name:
Samsung Electronics Co., Ltd.
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Yeongtong-gu, Suwon-si
Gyeonggi-do, 16677, Korea

Date of Testing:
04/20/2022 - 06/23/2022
Test Site/Location:
Element, Columbia, MD, USA
Document Serial No.:
1M2204010046-22.A3L (Rev1)

FCC ID: **A3LSMF936U**

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

DUT Type: Portable Handset
Application Type: Certification
FCC Rule Part(s): CFR §2.1093
Model(s): SM-F936U
Additional Model(s): SM-F936U1

Equipment Class	Band & Mode	Tx Frequency	SAR					
			1g Head (W/kg)	1g Body-Worn (W/kg)	1g Hotspot (W/kg)	10g Phablet (W/kg)	1g UMPC Body (W/kg)	10g UMPC Extremity (W/kg)
PCE	GSM/GPRS/EDGE 850	824.20 - 848.80 MHz	< 0.1	0.11	0.38	N/A	0.51	1.81
PCE	GSM/GPRS/EDGE 1900	1850.20 - 1909.80 MHz	< 0.1	0.25	0.28	0.81	0.37	1.34
PCE	UMTS 850	826.40 - 846.60 MHz	0.20	0.17	0.36	N/A	0.40	1.24
PCE	UMTS 1750	1712.4 - 1752.6 MHz	0.13	0.55	0.40	1.33	0.55	2.01
PCE	UMTS 1900	1852.4 - 1907.6 MHz	< 0.1	0.45	0.35	1.22	0.57	2.43
PCE	LTE Band 71	665.5 - 695.5 MHz	0.15	0.22	0.31	N/A	0.53	1.11
PCE	LTE Band 12	699.7 - 715.3 MHz	0.21	0.24	0.34	N/A	0.45	1.19
PCE	LTE Band 13	779.5 - 784.5 MHz	0.19	0.20	0.34	N/A	0.49	0.99
PCE	LTE Band 14	790.5 - 795.5 MHz	0.22	0.18	0.32	N/A	0.45	1.03
PCE	LTE Band 26 (Cell)	814.7 - 848.3 MHz	0.17	0.17	0.34	N/A	0.54	1.65
PCE	LTE Band 5 (Cell)	824.7 - 848.3 MHz	0.18	0.20	0.40	N/A	0.47	1.31
PCE	LTE Band 66 (AWS)	1710.7 - 1779.3 MHz	0.79	0.51	0.66	1.88	0.47	2.30
PCE	LTE Band 4 (AWS)	1710.7 - 1754.3 MHz	N/A	N/A	N/A	N/A	N/A	N/A
PCE	LTE Band 25 (PCS)	1850.7 - 1914.3 MHz	0.43	0.38	0.48	2.09	0.53	2.31
PCE	LTE Band 2 (PCS)	1850.7 - 1909.3 MHz	N/A	N/A	N/A	N/A	N/A	N/A
PCE	LTE Band 30	2307.5 - 2312.5 MHz	0.56	0.45	0.37	1.15	0.59	1.63
PCE	LTE Band 7	2502.5 - 2567.5 MHz	0.75	0.25	0.52	2.21	0.74	2.55
PCE	LTE Band 41	2498.5 - 2687.5 MHz	0.38	0.25	0.47	1.99	0.54	2.41
PCE	LTE Band 38	2572.5 - 2617.5 MHz	N/A	N/A	N/A	N/A	N/A	N/A
CBE	LTE Band 48	3552.5 - 3697.5 MHz	0.35	< 0.1	0.25	N/A	0.55	1.91
PCE	NR Band n71	665.5 - 695.5 MHz	0.19	0.22	0.38	N/A	0.41	1.40
PCE	NR Band n12	701.5 - 713.5 MHz	0.18	0.27	0.41	N/A	0.46	1.50
PCE	NR Band n5 (Cell)	826.5 - 846.5 MHz	0.19	0.18	0.50	N/A	0.53	1.28
PCE	NR Band n66 (AWS)	1712.5 - 1777.5 MHz	0.73	0.53	0.84	2.45	0.52	2.53
PCE	NR Band n25 (PCS)	1852.5 - 1912.5 MHz	0.44	0.63	0.63	2.15	0.75	2.63
PCE	NR Band n2 (PCS)	1852.5 - 1907.5 MHz	N/A	N/A	N/A	N/A	N/A	N/A
PCE	NR Band n30	2307.5 - 2312.5 MHz	0.51	0.38	0.35	1.10	0.60	2.33
PCE	NR Band n7	2502.5 - 2567.5 MHz	0.61	0.43	0.65	2.51	0.92	2.82
PCE	NR Band n41	2506.02 - 2679.99 MHz	0.20	0.13	0.46	2.12	0.57	2.34
PCE	NR Band n38	2575 - 2615 MHz	N/A	N/A	N/A	N/A	N/A	N/A
CBE	NR Band n48	3555 - 3694.98 MHz	0.41	0.11	0.43	2.26	0.69	2.72
PCE	NR Band n77 DoD	3455.01 - 3544.98 MHz	0.96	0.12	0.35	2.41	0.51	2.50
PCE	NR Band n77	3705 - 3975 MHz	0.38	0.12	0.61	2.16	0.64	2.31
DTS	2.4 GHz WLAN	2412 - 2472 MHz	< 0.1	< 0.1	0.14	N/A	0.28	1.04
NII	U-NII-1	5180 - 5240 MHz	N/A	N/A	N/A	N/A	N/A	N/A
NII	U-NII-2A	5260 - 5320 MHz	0.17*	<0.1*	N/A	0.92*	0.23*	1.08*
NII	U-NII-2C	5500 - 5720 MHz	0.24*	<0.1*	N/A	1.27*	0.26*	1.23*
NII	U-NII-3	5745 - 5825 MHz	0.24*	<0.1*	0.18*	N/A	0.23*	1.25*
NII	U-NII-4	5845 - 5885 MHz	0.31*	<0.1*	N/A	1.54*	0.22*	1.20*
DSS/DTS	Bluetooth	2402 - 2480 MHz	0.31	< 0.1	0.28	N/A	0.36	1.40
DXX	NFC	13.56 MHz	N/A	N/A	N/A	< 0.1	N/A	< 0.1
Simultaneous SAR per KDB 690783 D01v01r03:			1.59	0.87	1.35	3.99	1.58	3.99

Note: * SAR values represent RF exposure during MIMO operations.

Note: This revised Test Report (S/N: 1M2204010046-22.A3L (Rev1)) supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment/general population exposure limits specified in ANSI/IEEE C95.1-1992 and has been tested in accordance with the measurement procedures specified in Section 1.9 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.

RJ Ortanez
Executive Vice President

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

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1 DEVICE UNDER TEST

1.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
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 41	Voice/Data	2498.5 - 2687.5 MHz
LTE Band 38	Voice/Data	2572.5 - 2617.5 MHz
LTE Band 48	Voice/Data	3552.5 - 3697.5 MHz
NR Band n71	Voice/Data	665.5 - 695.5 MHz
NR Band n12	Voice/Data	701.5 - 713.5 MHz
NR Band n5 (Cell)	Voice/Data	826.5 - 846.5 MHz
NR Band n66 (AWS)	Voice/Data	1712.5 - 1777.5 MHz
NR Band n25 (PCS)	Voice/Data	1852.5 - 1912.5 MHz
NR Band n2 (PCS)	Voice/Data	1852.5 - 1907.5 MHz
NR Band n30	Voice/Data	2307.5 - 2312.5 MHz
NR Band n7	Voice/Data	2502.5 - 2567.5 MHz
NR Band n41	Voice/Data	2506.02 - 2679.99 MHz
NR Band n38	Voice/Data	2575 - 2615 MHz
NR Band n48	Voice/Data	3555 - 3694.98 MHz
NR Band n77 DoD	Voice/Data	3455.01 - 3544.98 MHz
NR Band n77	Voice/Data	3705 - 3975 MHz
2.4 GHz WLAN	Voice/Data	2412 - 2472 MHz
U-NII-1	Voice/Data	5180 - 5240 MHz
U-NII-2A	Voice/Data	5260 - 5320 MHz
U-NII-2C	Voice/Data	5500 - 5720 MHz
U-NII-3	Voice/Data	5745 - 5825 MHz
U-NII-4	Voice/Data	5845 - 5885 MHz
U-NII-5	Voice/Data	5935 - 6415 MHz
U-NII-6	Voice/Data	6435 - 6525 MHz
U-NII-7	Voice/Data	6535 - 6875 MHz
U-NII-8	Voice/Data	6895 - 7115 MHz
Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
NR Band n258	Data	24250 - 24450 MHz; 24750 - 25250 MHz
NR Band n260	Data	37000 - 40000 MHz
NR Band n261	Data	27500 - 28350 MHz
UWB	Data	6489.6 - 7987.2 MHz

1.2 Time-Averaging Algorithm for RF Exposure Compliance

This Device is enabled with the Qualcomm® Smart Transmit Gen2 feature. This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit feature (report SN could be found in Section 1.11 – Bibliography).

Note that WLAN operations are not enabled with Smart Transmit.

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of *SAR_design_target*, below the predefined time-averaged power limit (i.e., P_{limit} for sub-6 radio), for each characterized technology and band (see RF Exposure Part 0 Test Report, report SN could be found in Section 1.11 - Bibliography).

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 can 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 Senario			Folder Closed - Body-Worn	Folder Closed - Phablet Max	Folder Open - Body	Folder Open - Extremity	Folder Closed - Head	Folder Open - Head	Folder Closed - Grip Sensor Active	Folder Open - Grip Sensor Active	Folder Open - Grip Sensor Active	Folder Closed - Hotspot	Folder Open - Hotspot	Folder Closed - Earjack	Folder Open - Earjack	Maximum Tune-Up Output Power*
Averaging Volume			1g	10g	1g	10g	1g	1g	10g	1g	10g	1g	1g	10g	10g	
Spacing			15 mm	14, 12, 0 mm	18, 14, 12, 10 mm	18, 14, 12, 0 mm	0 mm	0 mm	0 mm	10 mm	0 mm	10 mm	10 mm	0 mm	0 mm	
Configuration			Folder Closed	Folder Closed	Folder Open	Folder Open	Folder Closed	Folder Open	Folder Closed	Folder Open	Folder Open	Folder Closed	Folder Open	Folder Closed	Folder Open	
DSI			1	1	0	0	5	4	3	2	2	7	6	9	8	
Technology/Band	Antenna	Antenna Group														Pmax
GSM 850	A, A+B	AG0	29.5				34.7		29.1	27.5		30.3	29.0	29.1	27.5	25.3
GSM 1900	B	AG0	27.4				34.8		16.8	16.8		16.8	16.8	16.8	16.8	22.1
UMTS 850	A, A+B	AG0	28.0				32.6		28.0	28.5		30.0	29.5	28.0	28.5	24.5
UMTS 1750	B	AG0	27.7				34.1		18.0	18.0		18.0	18.0	18.0	18.0	24.0
UMTS 1900	B	AG0	27.5				35.6		18.0	18.0		18.0	18.0	18.0	18.0	24.0
LTE Band 71	A, A+B	AG0	27.8				33.3		27.8	28.3		30.4	28.3	27.8	29.0	24.5
LTE Band 12	A, A+B	AG0	27.8				32.4		27.8	28.7		30.2	29.0	27.8	28.7	24.5
LTE Band 13	A, A+B	AG0	28.2				32.6		28.2	28.2		30.1	28.5	28.2	29.4	24.5
LTE Band 14	A, A+B	AG0	28.2				32.0		28.2	28.2		30.4	28.9	28.2	29.3	24.5
LTE Band 26 (Cell)	A, A+B	AG0	26.8				33.1		26.8	27.2		30.1	28.2	26.8	27.2	24.5
LTE Band 5 (Cell)	A, A+B	AG0	27.0				33.0		27.0	28.3		29.4	28.8	27.0	28.3	24.5
LTE Band 66/4 (AWS)	B	AG0	28.5				34.3		18.0	18.0		18.0	18.0	18.0	18.0	24.0
LTE Band 66 (AWS)	F	AG1	19.5				21.0		19.5	19.5		19.5	19.5	19.5	19.5	24.0
LTE Band 4 (AWS)	F	AG1	19.5		N/A		21.0	N/A	19.5	N/A		19.5	N/A	19.5	N/A	24.0
LTE Band 25/2 (PCS)	B	AG0	27.9				34.9		18.0	18.0		18.0	18.0	18.0	18.0	24.0
LTE Band 25/2 (PCS)	F	AG1	19.5		N/A		21.5	N/A	19.5	N/A		19.5	N/A	19.5	N/A	24.0
LTE Band 30	B	AG0	21.5				21.5		16.0	16.0		16.0	16.0	16.0	16.0	23.0
LTE Band 30	F	AG1	19.5		N/A		26.5	N/A	19.5	N/A		19.5	N/A	19.5	N/A	23.0
LTE Band 7	B	AG0	21.5				21.5		17.0	17.0		17.0	17.0	17.0	17.0	24.0
LTE Band 7	F	AG1	18.0		N/A		26.2	N/A	18.0	N/A		18.0	N/A	18.0	N/A	24.0
LTE Band 48	F	AG1	17.5				19.0		17.5	17.5		17.5	17.5	17.5	17.5	22.0
LTE Band 41/38 (PC3)	B	AG0	20.0				20.0		16.0	16.0		16.0	16.0	16.0	16.0	22.0
LTE Band 41 (PC2)	B	AG0	20.0				20.0		16.0	16.0		16.0	16.0	16.0	16.0	22.1
LTE Band 41 (PC3)	F	AG1	18.0		N/A		27.2	N/A	18.0	N/A		18.0	N/A	18.0	N/A	22.0
LTE Band 41 (PC2)	F	AG1	18.0		N/A		27.2	N/A	18.0	N/A		18.0	N/A	18.0	N/A	22.1
NR Band n71	A, A+B	AG0	28.0				32.5		28.0	28.0		29.7	28.8	28.0	28.0	24.5
NR Band n12	A, A+B	AG0	28.4				32.9		28.4	27.7		29.4	28.9	28.4	27.7	24.5
NR Band n5 (Cell)	A, A+B	AG0	27.2				32.7		27.2	28.3		28.5	28.3	27.2	28.4	24.5
NR Band n66 (AWS)	B	AG0	27.4				37.5		18.0	18.0		18.0	18.0	18.0	18.0	23.5
NR Band n66 (AWS)	F	AG1	19.5				22.0		19.5	19.5		19.5	19.5	19.5	19.5	23.5
NR Band n25/n2 (PCS)	B	AG0	25.8				33.3		18.0	18.0		18.0	18.0	18.0	18.0	23.5
NR Band n25/n2 (PCS)	F	AG1	19.5				21.5		19.5	19.5		19.5	19.5	19.5	19.5	23.5
NR Band n30	B	AG0	21.5				21.5		16.0	16.0		16.0	16.0	16.0	16.0	22.5
NR Band n30	F	AG1	19.5				26.5		19.5	19.5		19.5	19.5	19.5	19.5	22.5
NR Band n7	B	AG0	21.5				21.5		17.0	17.0		17.0	17.0	17.0	17.0	23.0
NR Band n7	F	AG1	18.0		N/A		26.1	N/A	18.0	N/A		18.0	N/A	18.0	N/A	23.0
NR Band n41 (PC3)/n38	F	AG1	18.0				18.0		18.0	18.0		18.0	18.0	18.0	18.0	24.0
NR Band n41 (PC2)	F	AG1	18.0				18.0		18.0	18.0		18.0	18.0	18.0	18.0	26.0
NR Band n41 (PC3)	B	AG0	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	16.0
NR Band n41 (PC2)	B	AG0	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	18.0
NR Band n41 (PC3)	E	AG1	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	19.0
NR Band n41 (PC2)	E	AG1	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	21.0
NR Band n41 (PC3)	C	AG0	11.0				11.0		11.0	11.0		11.0	11.0	11.0	11.0	14.0
NR Band n41 (PC2)	C	AG0	11.0				11.0		11.0	11.0		11.0	11.0	11.0	11.0	16.0
NR Band n48	F	AG1	17.5				17.5		17.5	17.5		17.5	17.5	17.5	17.5	23.0
NR Band n48	E	AG1	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	22.0
NR Band n48	G	AG1	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	22.5
NR Band n48	D	AG0	12.0				12.0		12.0	12.0		12.0	12.0	12.0	12.0	16.5
NR Band n77 DoD (PC3)	F	AG1	18.0				18.0		18.0	18.0		18.0	18.0	18.0	18.0	24.0
NR Band n77 DoD (PC2)	F	AG1	18.0				18.0		18.0	18.0		18.0	18.0	18.0	18.0	26.0
NR Band n77 DoD (PC3)	E	AG1	18.5				18.5		18.5	18.5		18.5	18.5	18.5	18.5	23.0
NR Band n77 DoD (PC2)	E	AG1	18.5				18.5		18.5	18.5		18.5	18.5	18.5	18.5	25.0
NR Band n77 DoD (PC3)	G	AG1	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	23.0
NR Band n77 DoD (PC2)	G	AG1	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	25.0
NR Band n77 DoD (PC3)	D	AG0	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	20.0
NR Band n77 DoD (PC2)	D	AG0	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	22.0
NR Band n77 (PC3)	F	AG1	18.0				18.0		18.0	18.0		18.0	18.0	18.0	18.0	24.0
NR Band n77 (PC2)	F	AG1	18.0				18.0		18.0	18.0		18.0	18.0	18.0	18.0	26.0
NR Band n77 (PC3)	E	AG1	18.5				18.5		18.5	18.5		18.5	18.5	18.5	18.5	23.0
NR Band n77 (PC2)	E	AG1	18.5				18.5		18.5	18.5		18.5	18.5	18.5	18.5	25.0
NR Band n77 (PC3)	G	AG1	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	23.0
NR Band n77 (PC2)	G	AG1	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	25.0
NR Band n77 (PC3)	D	AG0	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	20.0
NR Band n77 (PC2)	D	AG0	15.0				15.0		15.0	15.0		15.0	15.0	15.0	15.0	22.0

*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 (e.g. GSM and LTE TDD).

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

The maximum time-averaged output power (dBm) for any 2G/3G/4G/5G Sub6 WWAN technology, band, and DSI = minimum of "P_{limit} EFS" and "Maximum tune up output power P_{max}" + 1dB device uncertainty. SAR values in this report were scaled to this maximum time-averaged output power to determine compliance per KDB Publication 447498 D01v06.
The purpose of this report (Part 1 test) is to demonstrate that the EUT meets FCC SAR limits when transmitting in static transmission scenario at maximum allowable time-averaged power levels.

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

1.3 Power Reduction for SAR

This device uses an independent fixed level power reduction mechanism for WLAN/BT operations during voice or VoIP held to ear scenarios and when 5G NR is active, and for BT operations when 5/6 GHz WLAN is active. 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.

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

1.4.1 2G/3G/4G/5G Output Power

GSM/GPRS/EDGE 850										
Power Level		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
Pmax	Max Allowed Power	33.0	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.0	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 1 (Folder Closed - Body-Worn or Folder Closed - Phablet Max)	Max Allowed Power	33.0	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.0	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 3 (Folder Closed - Grip Sensor Active)	Max Allowed Power	33.0	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.0	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 5 (Folder Closed - Head)	Max Allowed Power	33.0	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.0	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 7 (Folder Closed - Hotspot)	Max Allowed Power	N/A	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	N/A	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 9 (Folder Closed - Earjack)	Max Allowed Power	33.0	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.0	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 0 (Folder Open - Body or Folder Open - Extremity)	Max Allowed Power	33.0	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.0	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 2 (Folder Open - Grip Sensor Active)	Max Allowed Power	33.0	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.0	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 4 (Folder Open - Head)	Max Allowed Power	33.0	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.0	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 6 (Folder Open - Hotspot)	Max Allowed Power	N/A	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	N/A	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
DSI = 8 (Folder Open - Earjack)	Max Allowed Power	33.0	33.0	32.5	30.5	28.5	28.0	26.0	24.0	23.0
	Nominal	32.0	32.0	31.5	29.5	27.5	27.0	25.0	23.0	22.0
GSM/GPRS/EDGE 1900										
Power Level		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
Pmax	Max Allowed Power	30.5	30.5	29.0	27.5	25.5	26.5	25.0	23.0	22.0
	Nominal	29.5	29.5	28.0	26.5	24.5	25.5	24.0	22.0	21.0
DSI = 1 (Folder Closed - Body-Worn or Folder Closed - Phablet Max)	Max Allowed Power	30.5	30.5	29.0	27.5	25.5	26.5	25.0	23.0	22.0
	Nominal	29.5	29.5	28.0	26.5	24.5	25.5	24.0	22.0	21.0
DSI = 3 (Folder Closed - Grip Sensor Active)	Max Allowed Power	27.0	27.0	24.0	22.2	21.0	26.5	24.0	22.2	21.0
	Nominal	26.0	26.0	23.0	21.2	20.0	25.5	23.0	21.2	20.0
DSI = 5 (Folder Closed - Head)	Max Allowed Power	30.5	30.5	29.0	27.5	25.5	26.5	25.0	23.0	22.0
	Nominal	29.5	29.5	28.0	26.5	24.5	25.5	24.0	22.0	21.0
DSI = 7 (Folder Closed - Hotspot)	Max Allowed Power	N/A	27.0	24.0	22.2	21.0	26.5	24.0	22.2	21.0
	Nominal	N/A	26.0	23.0	21.2	20.0	25.5	23.0	21.2	20.0
DSI = 9 (Folder Closed - Earjack)	Max Allowed Power	27.0	27.0	24.0	22.2	21.0	26.5	24.0	22.2	21.0
	Nominal	26.0	26.0	23.0	21.2	20.0	25.5	23.0	21.2	20.0
DSI = 0 (Folder Open - Body or Folder Open - Extremity)	Max Allowed Power	30.5	30.5	29.0	27.5	25.5	26.5	25.0	23.0	22.0
	Nominal	29.5	29.5	28.0	26.5	24.5	25.5	24.0	22.0	21.0
DSI = 2 (Folder Open - Grip Sensor Active)	Max Allowed Power	27.0	27.0	24.0	22.2	21.0	26.5	24.0	22.2	21.0
	Nominal	26.0	26.0	23.0	21.2	20.0	25.5	23.0	21.2	20.0
DSI = 4 (Folder Open - Head)	Max Allowed Power	30.5	30.5	29.0	27.5	25.5	26.5	25.0	23.0	22.0
	Nominal	29.5	29.5	28.0	26.5	24.5	25.5	24.0	22.0	21.0
DSI = 6 (Folder Open - Hotspot)	Max Allowed Power	N/A	27.0	24.0	22.2	21.0	26.5	24.0	22.2	21.0
	Nominal	N/A	26.0	23.0	21.2	20.0	25.5	23.0	21.2	20.0
DSI = 8 (Folder Open - Earjack)	Max Allowed Power	27.0	27.0	24.0	22.2	21.0	26.5	24.0	22.2	21.0
	Nominal	26.0	26.0	23.0	21.2	20.0	25.5	23.0	21.2	20.0

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

UMTS Band 5 (850 MHz)					
Power Level		Modulated Average Output Power			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
DSI = 1 (Folder Closed - Body-Worn or Folder Closed - Phablet Max)	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
DSI = 3 (Folder Closed - Grip Sensor Active)	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
DSI = 5 (Folder Closed - Head)	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
DSI = 7 (Folder Closed - Hotspot)	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
DSI = 9 (Folder Closed - Earjack)	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
DSI = 0 (Folder Open - Body or Folder Open - Extremity)	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
DSI = 2 (Folder Open - Grip Sensor Active)	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
DSI = 4 (Folder Open - Head)	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
DSI = 6 (Folder Open - Hotspot)	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
DSI = 8 (Folder Open - Earjack)	Max Allowed Power	25.5	24.5	24.5	24.5
	Nominal	24.5	23.5	23.5	23.5
UMTS Band 4 (1750 MHz)					
Power Level		Modulated Average Output Power			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 1 (Folder Closed - Body-Worn or Folder Closed - Phablet Max)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 3 (Folder Closed - Grip Sensor Active)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 5 (Folder Closed - Head)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 7 (Folder Closed - Hotspot)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 9 (Folder Closed - Earjack)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 0 (Folder Open - Body or Folder Open - Extremity)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 2 (Folder Open - Grip Sensor Active)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 4 (Folder Open - Head)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 6 (Folder Open - Hotspot)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 8 (Folder Open - Earjack)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
UMTS Band 2 (1900 MHz)					
Power Level		Modulated Average Output Power			
		3GPP WCDMA Rel 99	3GPP HSDPA Rel 5	3GPP HSUPA Rel 6	3GPP DC-HSDPA Rel 8
Pmax	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 1 (Folder Closed - Body-Worn or Folder Closed - Phablet Max)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 3 (Folder Closed - Grip Sensor Active)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 5 (Folder Closed - Head)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 7 (Folder Closed - Hotspot)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 9 (Folder Closed - Earjack)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 0 (Folder Open - Body or Folder Open - Extremity)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 2 (Folder Open - Grip Sensor Active)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 4 (Folder Open - Head)	Max Allowed Power	25.0	24.0	24.0	24.0
	Nominal	24.0	23.0	23.0	23.0
DSI = 6 (Folder Open - Hotspot)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0
DSI = 8 (Folder Open - Earjack)	Max Allowed Power	19.0	18.0	18.0	18.0
	Nominal	18.0	17.0	17.0	17.0

Mode / Band	Antenna		Modulated Average Output Power (in dBm)										
			Pmax	DSI = 1 (Folder Closed - Body-Worn or Folder Closed - Phablet Max)	DSI = 3 (Folder Closed - Grip Sensor Active)	DSI = 5 (Folder Closed - Head)	DSI = 7 (Folder Closed - Hotspot)	DSI = 9 (Folder Closed - Earjack)	DSI = 0 (Folder Open - Body or Folder Open - Extremity)	DSI = 2 (Folder Open - Grip Sensor Active)	DSI = 4 (Folder Open - Head)	DSI = 6 (Folder Open - Hotspot)	DSI = 8 (Folder Open - Earjack)
LTE Band 71	A, A+B	Max Allowed Power	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
		Nominal	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band 12	A, A+B	Max Allowed Power	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
		Nominal	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band 13	A, A+B	Max Allowed Power	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
		Nominal	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band 14	A, A+B	Max Allowed Power	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
		Nominal	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band 26 (Cell)	A, A+B	Max Allowed Power	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
		Nominal	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band 5 (Cell)	A, A+B	Max Allowed Power	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
		Nominal	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
LTE Band 66 (AWS)	B	Max Allowed Power	25.0	25.0	19.0	25.0	19.0	19.0	25.0	19.0	25.0	19.0	19.0
		Nominal	24.0	24.0	18.0	24.0	18.0	18.0	24.0	18.0	24.0	18.0	18.0
LTE Band 66 (AWS)	F	Max Allowed Power	25.0	20.5	20.5	22.0	20.5	20.5	20.5	20.5	22.0	20.5	20.5
		Nominal	24.0	19.5	19.5	21.0	19.5	19.5	19.5	19.5	21.0	19.5	19.5
LTE Band 4 (AWS)	B	Max Allowed Power	25.0	25.0	19.0	25.0	19.0	19.0	25.0	19.0	25.0	19.0	19.0
		Nominal	24.0	24.0	18.0	24.0	18.0	18.0	24.0	18.0	24.0	18.0	18.0
LTE Band 4 (AWS)	F	Max Allowed Power	25.0	20.5	20.5	22.0	20.5	20.5	N/A	N/A	N/A	N/A	N/A
		Nominal	24.0	19.5	19.5	21.0	19.5	19.5	N/A	N/A	N/A	N/A	N/A
LTE Band 25 (PCS)	B	Max Allowed Power	25.0	25.0	19.0	25.0	19.0	19.0	25.0	19.0	25.0	19.0	19.0
		Nominal	24.0	24.0	18.0	24.0	18.0	18.0	24.0	18.0	24.0	18.0	18.0
LTE Band 25 (PCS)	F	Max Allowed Power	25.0	20.5	20.5	22.5	20.5	20.5	N/A	N/A	N/A	N/A	N/A
		Nominal	24.0	19.5	19.5	21.5	19.5	19.5	N/A	N/A	N/A	N/A	N/A
LTE Band 2 (PCS)	B	Max Allowed Power	25.0	25.0	19.0	25.0	19.0	19.0	25.0	19.0	25.0	19.0	19.0
		Nominal	24.0	24.0	18.0	24.0	18.0	18.0	24.0	18.0	24.0	18.0	18.0
LTE Band 2 (PCS)	F	Max Allowed Power	25.0	20.5	20.5	22.5	20.5	20.5	N/A	N/A	N/A	N/A	N/A
		Nominal	24.0	19.5	19.5	21.5	19.5	19.5	N/A	N/A	N/A	N/A	N/A
LTE Band 30	B	Max Allowed Power	24.0	22.5	17.0	22.5	17.0	17.0	22.5	17.0	22.5	17.0	17.0
		Nominal	23.0	21.5	16.0	21.5	16.0	16.0	21.5	16.0	21.5	16.0	16.0
LTE Band 30	F	Max Allowed Power	24.0	20.5	20.5	24.0	20.5	20.5	N/A	N/A	N/A	N/A	N/A
		Nominal	23.0	19.5	19.5	23.0	19.5	19.5	N/A	N/A	N/A	N/A	N/A
LTE Band 7	B	Max Allowed Power	25.0	22.5	18.0	22.5	18.0	18.0	22.5	18.0	22.5	18.0	18.0
		Nominal	24.0	21.5	17.0	21.5	17.0	17.0	21.5	17.0	21.5	17.0	17.0
LTE Band 7	F	Max Allowed Power	25.0	19.0	19.0	25.0	19.0	19.0	N/A	N/A	N/A	N/A	N/A
		Nominal	24.0	18.0	18.0	24.0	18.0	18.0	N/A	N/A	N/A	N/A	N/A
LTE Band 48	F	Max Allowed Power	25.0	20.5	20.5	22.0	20.5	20.5	20.5	20.5	22.0	20.5	20.5
		Nominal	24.0	19.5	19.5	21.0	19.5	19.5	19.5	19.5	21.0	19.5	19.5
LTE Band 41 (PC3)	B	Max Allowed Power	25.0	23.0	19.0	23.0	19.0	19.0	23.0	19.0	23.0	19.0	19.0
		Nominal	24.0	22.0	18.0	22.0	18.0	18.0	22.0	18.0	22.0	18.0	18.0
LTE Band 41 (PC2)	B	Max Allowed Power	26.7	24.6	20.6	24.6	20.6	20.6	24.6	20.6	24.6	20.6	20.6
		Nominal	25.7	23.6	19.6	23.6	19.6	19.6	23.6	19.6	23.6	19.6	19.6
LTE Band 41 (PC3)	F	Max Allowed Power	25.0	21.0	21.0	25.0	21.0	21.0	N/A	N/A	N/A	N/A	N/A
		Nominal	24.0	20.0	20.0	24.0	20.0	20.0	N/A	N/A	N/A	N/A	N/A
LTE Band 41 (PC2)	F	Max Allowed Power	26.7	22.6	22.6	26.7	22.6	22.6	N/A	N/A	N/A	N/A	N/A
		Nominal	25.7	21.6	21.6	25.7	21.6	21.6	N/A	N/A	N/A	N/A	N/A
LTE Band 38	B	Max Allowed Power	25.0	23.0	19.0	23.0	19.0	19.0	23.0	19.0	23.0	19.0	19.0
		Nominal	24.0	22.0	18.0	22.0	18.0	18.0	22.0	18.0	22.0	18.0	18.0

Mode / Band	Antenna		Modulated Average Output Power (in dBm)										
			Pmax	DSI = 1 (Folder Closed - Body-Worn or Folder Closed - Phablet Max)	DSI = 3 (Folder Closed - Grip Sensor Active)	DSI = 5 (Folder Closed - Head)	DSI = 7 (Folder Closed - Hotspot)	DSI = 9 (Folder Closed - Earjack)	DSI = 0 (Folder Open - Body or Folder Open - Extremity)	DSI = 2 (Folder Open - Grip Sensor Active)	DSI = 4 (Folder Open - Head)	DSI = 6 (Folder Open - Hotspot)	DSI = 8 (Folder Open - Earjack)
NR Band n71	A, A+B	Max Allowed Power	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
		Nominal	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
NR Band n12	A, A+B	Max Allowed Power	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
		Nominal	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
NR Band n5 (Cell)	A, A+B	Max Allowed Power	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
		Nominal	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
NR Band n66 (AWS)	B	Max Allowed Power	24.5	24.5	19.0	24.5	19.0	19.0	24.5	19.0	24.5	19.0	19.0
		Nominal	23.5	23.5	18.0	23.5	18.0	18.0	23.5	18.0	23.5	18.0	18.0
NR Band n66 (AWS)	F	Max Allowed Power	24.5	20.5	20.5	22.0	20.5	20.5	20.5	20.5	22.0	20.5	20.5
		Nominal	23.5	19.5	19.5	21.0	19.5	19.5	19.5	19.5	21.0	19.5	19.5
NR Band n25 (PCS)	B	Max Allowed Power	24.5	24.5	19.0	24.5	19.0	19.0	24.5	19.0	24.5	19.0	19.0
		Nominal	23.5	23.5	18.0	23.5	18.0	18.0	23.5	18.0	23.5	18.0	18.0
NR Band n25 (PCS)	F	Max Allowed Power	24.5	20.5	20.5	22.5	20.5	20.5	20.5	20.5	22.5	20.5	20.5
		Nominal	23.5	19.5	19.5	21.5	19.5	19.5	19.5	19.5	21.5	19.5	19.5
NR Band n2 (PCS)	B	Max Allowed Power	24.5	24.5	19.0	24.5	19.0	19.0	24.5	19.0	24.5	19.0	19.0
		Nominal	23.5	23.5	18.0	23.5	18.0	18.0	23.5	18.0	23.5	18.0	18.0
NR Band n2 (PCS)	F	Max Allowed Power	24.5	20.5	20.5	22.5	20.5	20.5	20.5	20.5	22.5	20.5	20.5
		Nominal	23.5	19.5	19.5	21.5	19.5	19.5	19.5	19.5	21.5	19.5	19.5
NR Band n30	B	Max Allowed Power	23.5	22.5	17.0	22.5	17.0	17.0	22.5	17.0	22.5	17.0	17.0
		Nominal	22.5	21.5	16.0	21.5	16.0	16.0	21.5	16.0	21.5	16.0	16.0
NR Band n30	F	Max Allowed Power	23.5	20.5	20.5	23.5	20.5	20.5	20.5	20.5	23.5	20.5	20.5
		Nominal	22.5	19.5	19.5	22.5	19.5	19.5	19.5	19.5	22.5	19.5	19.5
NR Band n7	B	Max Allowed Power	24.0	22.5	18.0	22.5	18.0	18.0	22.5	18.0	22.5	18.0	18.0
		Nominal	23.0	21.5	17.0	21.5	17.0	17.0	21.5	17.0	21.5	17.0	17.0
NR Band n7	F	Max Allowed Power	24.0	19.0	19.0	24.0	19.0	19.0	N/A	N/A	N/A	N/A	N/A
		Nominal	23.0	18.0	18.0	23.0	18.0	18.0	N/A	N/A	N/A	N/A	N/A
NR Band n41 (PC3)	F	Max Allowed Power	25.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
		Nominal	24.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
NR Band n41 (PC2)	F	Max Allowed Power	27.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
		Nominal	26.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
NR Band n41 (PC3)	B	Max Allowed Power	17.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	16.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n41 (PC2)	B	Max Allowed Power	19.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	18.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n41 (PC3)	E	Max Allowed Power	20.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	19.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n41 (PC2)	E	Max Allowed Power	22.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	21.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n41 (PC3)	C	Max Allowed Power	15.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
		Nominal	14.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
NR Band n41 (PC2)	C	Max Allowed Power	17.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
		Nominal	16.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
NR Band n38	F	Max Allowed Power	25.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
		Nominal	24.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
NR Band n48	F	Max Allowed Power	24.0	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
		Nominal	23.0	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
NR Band n48	E	Max Allowed Power	23.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	22.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n48	G	Max Allowed Power	23.5	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	22.5	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n48	D	Max Allowed Power	17.5	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
		Nominal	16.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
NR Band n77 DoD (PC3)	F	Max Allowed Power	25.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
		Nominal	24.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
NR Band n77 DoD (PC2)	F	Max Allowed Power	27.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
		Nominal	26.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
NR Band n77 DoD (PC3)	E	Max Allowed Power	24.0	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
		Nominal	23.0	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
NR Band n77 DoD (PC2)	E	Max Allowed Power	26.0	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
		Nominal	25.0	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
NR Band n77 DoD (PC3)	G	Max Allowed Power	24.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	23.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n77 DoD (PC2)	G	Max Allowed Power	26.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	25.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n77 DoD (PC3)	D	Max Allowed Power	21.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	20.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n77 DoD (PC2)	D	Max Allowed Power	23.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	22.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n77 (PC3)	F	Max Allowed Power	25.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
		Nominal	24.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
NR Band n77 (PC2)	F	Max Allowed Power	27.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
		Nominal	26.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
NR Band n77 (PC3)	E	Max Allowed Power	24.0	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
		Nominal	23.0	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
NR Band n77 (PC2)	E	Max Allowed Power	26.0	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
		Nominal	25.0	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
NR Band n77 (PC3)	G	Max Allowed Power	24.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	23.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n77 (PC2)	G	Max Allowed Power	26.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	25.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n77 (PC3)	D	Max Allowed Power	21.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	20.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
NR Band n77 (PC2)	D	Max Allowed Power	23.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
		Nominal	22.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0

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

1.4.2 2.4 GHz Maximum SISO/MIMO WLAN Output Power

Mode	Band	IEEE 802.11 (in dBm)															
		SISO Antenna 2								MIMO							
		b		g		n		ax		b (CDD + STBC)		g (CDD + STBC)		n (CDD + STBC, SDM)		ax (SU) (CDD + STBC, SDM)	
		Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum
2.4 GHz WIFI	2.45 GHz	18.0 Ch. 12: 5.0 Ch. 13: -1.0	19.0 Ch. 12: 6.0 Ch. 13: 0.0	17.0 Ch. 12: 5.0 Ch. 13: -1.0	18.0 Ch. 12: 6.0 Ch. 13: 0.0	17.0 Ch. 12: 5.0 Ch. 13: -1.0	18.0 Ch. 12: 6.0 Ch. 13: 0.0	17.0 Ch. 12: 5.0 Ch. 13: -1.0	18.0 Ch. 12: 6.0 Ch. 13: 0.0	21.0 Ch. 12: 8.0 Ch. 13: 2.0	22.0 Ch. 12: 9.0 Ch. 13: 3.0	20.0 Ch. 12: 8.0 Ch. 13: 2.0	21.0 Ch. 12: 9.0 Ch. 13: 3.0	20.0 Ch. 12: 8.0 Ch. 13: 2.0	21.0 Ch. 12: 9.0 Ch. 13: 3.0	20.0 Ch. 12: 8.0 Ch. 13: 2.0	21.0 Ch. 12: 9.0 Ch. 13: 3.0

1.4.3 2.4 GHz Reduced WLAN Output Powers

The below table is applicable in the following conditions:

- Simultaneous conditions with 5/6 GHz WLAN (RCV not Active)
- Simultaneous conditions with 5G FR1/FR2 NR (RCV not Active)
- Simultaneous conditions with 5G FR1/FR2 NR and 5/6 GHz WLAN (RCV not Active)

Mode	Band	IEEE 802.11 (in dBm)															
		SISO Antenna 2								MIMO							
		b		g		n		ax		b (CDD + STBC)		g (CDD + STBC)		n (CDD + STBC, SDM)		ax (SU) (CDD + STBC, SDM)	
		Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum
2.4 GHz WIFI	2.45 GHz	14.0 Ch. 12: 5.0 Ch. 13: -1.0	15.0 Ch. 12: 6.0 Ch. 13: 0.0	14.0 Ch. 12: 5.0 Ch. 13: -1.0	15.0 Ch. 12: 6.0 Ch. 13: 0.0	14.0 Ch. 12: 5.0 Ch. 13: -1.0	15.0 Ch. 12: 6.0 Ch. 13: 0.0	14.0 Ch. 12: 5.0 Ch. 13: -1.0	15.0 Ch. 12: 6.0 Ch. 13: 0.0	17.0 Ch. 12: 8.0 Ch. 13: 2.0	18.0 Ch. 12: 9.0 Ch. 13: 3.0	17.0 Ch. 12: 8.0 Ch. 13: 2.0	18.0 Ch. 12: 9.0 Ch. 13: 3.0	17.0 Ch. 12: 8.0 Ch. 13: 2.0	18.0 Ch. 12: 9.0 Ch. 13: 3.0	17.0 Ch. 12: 8.0 Ch. 13: 2.0	18.0 Ch. 12: 9.0 Ch. 13: 3.0

The below table is applicable in the following conditions:

- RCV Active
- RCV Active during simultaneous conditions with 5/6 GHz WLAN
- RCV Active during simultaneous conditions with 5G FR1 NR
- RCV Active during simultaneous conditions with 5G FR1 NR and 5/6 GHz WLAN

Mode	Band	IEEE 802.11 (in dBm)															
		SISO Antenna 2								MIMO							
		b		g		n		ax		b (CDD + STBC)		g (CDD + STBC)		n (CDD + STBC, SDM)		ax (SU) (CDD + STBC, SDM)	
		Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum
2.4 GHz WIFI	2.45 GHz	12.0 Ch. 12: 5.0 Ch. 13: -1.0	13.0 Ch. 12: 6.0 Ch. 13: 0.0	12.0 Ch. 12: 5.0 Ch. 13: -1.0	13.0 Ch. 12: 6.0 Ch. 13: 0.0	12.0 Ch. 12: 5.0 Ch. 13: -1.0	13.0 Ch. 12: 6.0 Ch. 13: 0.0	12.0 Ch. 12: 5.0 Ch. 13: -1.0	13.0 Ch. 12: 6.0 Ch. 13: 0.0	15.0 Ch. 12: 8.0 Ch. 13: 2.0	16.0 Ch. 12: 9.0 Ch. 13: 3.0	15.0 Ch. 12: 8.0 Ch. 13: 2.0	16.0 Ch. 12: 9.0 Ch. 13: 3.0	15.0 Ch. 12: 8.0 Ch. 13: 2.0	16.0 Ch. 12: 9.0 Ch. 13: 3.0	15.0 Ch. 12: 8.0 Ch. 13: 2.0	16.0 Ch. 12: 9.0 Ch. 13: 3.0

The below table is applicable in the following conditions:

- RCV Active during simultaneous conditions with 5G FR2 NR
- RCV Active during simultaneous conditions with 5G FR2 NR and 5/6 GHz WLAN

Mode	Band	IEEE 802.11 (in dBm)															
		SISO Antenna 2								MIMO							
		b		g		n		ax		b (CDD + STBC)		g (CDD + STBC)		n (CDD + STBC, SDM)		ax (SU) (CDD + STBC, SDM)	
		Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum
2.4 GHz WIFI	2.45 GHz	10.0 Ch. 12: 5.0 Ch. 13: -1.0	11.0 Ch. 12: 6.0 Ch. 13: 0.0	10.0 Ch. 12: 5.0 Ch. 13: -1.0	11.0 Ch. 12: 6.0 Ch. 13: 0.0	10.0 Ch. 12: 5.0 Ch. 13: -1.0	11.0 Ch. 12: 6.0 Ch. 13: 0.0	10.0 Ch. 12: 5.0 Ch. 13: -1.0	11.0 Ch. 12: 6.0 Ch. 13: 0.0	13.0 Ch. 12: 8.0 Ch. 13: 2.0	14.0 Ch. 12: 9.0 Ch. 13: 3.0	13.0 Ch. 12: 8.0 Ch. 13: 2.0	14.0 Ch. 12: 9.0 Ch. 13: 3.0	13.0 Ch. 12: 8.0 Ch. 13: 2.0	14.0 Ch. 12: 9.0 Ch. 13: 3.0	13.0 Ch. 12: 8.0 Ch. 13: 2.0	14.0 Ch. 12: 9.0 Ch. 13: 3.0

1.4.4 5 GHz Maximum SISO/MIMO WLAN Output Power

Mode	Band	IEEE 802.11 (in dBm)							
		MIMO							
		a (CDD + STBC)		n (CDD + STBC, SDM)		ac (CDD + STBC, SDM)		ax (SU) (CDD + STBC, SDM)	
		Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum
5 GHz WIFI (20MHz BW)	UNII-1	20.0	21.0	20.0	21.0	20.0	21.0	20.0	21.0
	UNII-2A	20.0	21.0	20.0	21.0	20.0	21.0	20.0	21.0
	UNII-2C	20.0	21.0	20.0	21.0	20.0	21.0	20.0	21.0
	UNII-3	20.0	21.0	20.0	21.0	20.0	21.0	20.0	21.0
	UNII-4	20.0	21.0	20.0	21.0	20.0	21.0	20.0	21.0
5 GHz WIFI (40MHz BW)	UNII-1			19.0 Ch. 38: 17.5	20.0 Ch. 38: 18.5	19.0 Ch. 38: 17.5	20.0 Ch. 38: 18.5	19.0 Ch. 38: 17.5	20.0 Ch. 38: 18.5
	UNII-2A			19.0	20.0	19.0	20.0	19.0	20.0
	UNII-2C			19.0	20.0	19.0	20.0	19.0	20.0
	UNII-3			19.0	20.0	19.0	20.0	19.0	20.0
	UNII-4			19.0	20.0	19.0	20.0	19.0	20.0
5 GHz WIFI (80MHz BW)	UNII-1					17.0	18.0	17.0	18.0
	UNII-2A					18.0	19.0	18.0	19.0
	UNII-2C					18.0	19.0	18.0	19.0
	UNII-3					18.0	19.0	18.0	19.0
	UNII-4					18.0	19.0	18.0	19.0
5 GHz WIFI (160MHz BW)	UNII-1/2A					18.0	19.0	18.0	19.0
	UNII-2C					18.0	19.0	18.0	19.0
	UNII-3/4					18.0	19.0	18.0	19.0

1.4.5 5 GHz Reduced WLAN Output Powers

The below table is applicable in the following conditions:

- Simultaneous conditions with 2.4 GHz WLAN
- Simultaneous conditions with 5G FR1/FR2 NR
- Simultaneous conditions with 5G FR1/FR2 NR and 2.4 GHz WLAN

Mode	Band	IEEE 802.11 (in dBm)							
		MIMO							
		a (CDD + STBC)		n (CDD + STBC, SDM)		ac (CDD + STBC, SDM)		ax (SU) (CDD + STBC, SDM)	
		Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum
5 GHz WIFI (20MHz BW)	UNII-1	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0
	UNII-2A	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0
	UNII-2C	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0
	UNII-3	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0
	UNII-4	17.0	18.0	17.0	18.0	17.0	18.0	17.0	18.0
5 GHz WIFI (40MHz BW)	UNII-1			17.0	18.0	17.0	18.0	17.0	18.0
	UNII-2A			17.0	18.0	17.0	18.0	17.0	18.0
	UNII-2C			17.0	18.0	17.0	18.0	17.0	18.0
	UNII-3			17.0	18.0	17.0	18.0	17.0	18.0
	UNII-4			17.0	18.0	17.0	18.0	17.0	18.0
5 GHz WIFI (80MHz BW)	UNII-1					17.0	18.0	17.0	18.0
	UNII-2A					17.0	18.0	17.0	18.0
	UNII-2C					17.0	18.0	17.0	18.0
	UNII-3					17.0	18.0	17.0	18.0
	UNII-4					17.0	18.0	17.0	18.0
5 GHz WIFI (160MHz BW)	UNII-1/2A					17.0	18.0	17.0	18.0
	UNII-2C					17.0	18.0	17.0	18.0
	UNII-3/4					17.0	18.0	17.0	18.0

The below table is applicable in the following conditions:

- RCV Active
- RCV Active during simultaneous conditions with 2.4 GHz WLAN
- RCV Active during simultaneous conditions with 5G FR1/FR2 NR
- RCV Active during simultaneous conditions with 5G FR1/FR2 NR and 2.4 GHz WLAN

Mode	Band	IEEE 802.11 (in dBm)							
		MIMO							
		a (CDD + STBC)		n (CDD + STBC, SDM)		ac (CDD + STBC, SDM)		ax (SU) (CDD + STBC, SDM)	
		Nominal	Maximum	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum
5 GHz WIFI (20MHz BW)	UNII-1	14.0	15.0	14.0	15.0	14.0	15.0	14.0	15.0
	UNII-2A	14.0	15.0	14.0	15.0	14.0	15.0	14.0	15.0
	UNII-2C	14.0	15.0	14.0	15.0	14.0	15.0	14.0	15.0
	UNII-3	14.0	15.0	14.0	15.0	14.0	15.0	14.0	15.0
	UNII-4	14.0	15.0	14.0	15.0	14.0	15.0	14.0	15.0
5 GHz WIFI (40MHz BW)	UNII-1			14.0	15.0	14.0	15.0	14.0	15.0
	UNII-2A			14.0	15.0	14.0	15.0	14.0	15.0
	UNII-2C			14.0	15.0	14.0	15.0	14.0	15.0
	UNII-3			14.0	15.0	14.0	15.0	14.0	15.0
	UNII-4			14.0	15.0	14.0	15.0	14.0	15.0
5 GHz WIFI (80MHz BW)	UNII-1					14.0	15.0	14.0	15.0
	UNII-2A					14.0	15.0	14.0	15.0
	UNII-2C					14.0	15.0	14.0	15.0
	UNII-3					14.0	15.0	14.0	15.0
	UNII-4					14.0	15.0	14.0	15.0
5 GHz WIFI (160MHz BW)	UNII-1/2A					14.0	15.0	14.0	15.0
	UNII-2C					14.0	15.0	14.0	15.0
	UNII-3/4					14.0	15.0	14.0	15.0

1.4.6 2.4 GHz Maximum Bluetooth Output Power

Mode	Antenna 1		Antenna 2	
	Nominal	Maximum	Nominal	Maximum
Bluetooth (in dBm)	18.5	19.5	15.0	16.0
Bluetooth EDR (in dBm)	15.5	16.5	12.0	13.0
Bluetooth LE 1Mbps, 2Mbps (in dBm)	18.5	19.5	15.0	16.0
Bluetooth LE 125/500 kbps (in dBm)	10.0	11.0	N/A	N/A

1.4.7 2.4 GHz Reduced Bluetooth Output Power

The below table is applicable in the following conditions:

- Simultaneous conditions with 5/6 GHz WLAN
- Simultaneous conditions with 5G FR1/FR2 NR

Mode	Antenna 1		Antenna 2	
	Nominal	Maximum	Nominal	Maximum
Bluetooth (in dBm)	14.0	15.0	12.0	13.0
Bluetooth EDR (in dBm)	14.0	15.0	12.0	13.0
Bluetooth LE 1Mbps, 2Mbps (in dBm)	14.0	15.0	12.0	13.0
Bluetooth LE 125/500 kbps (in dBm)	10.0	11.0	N/A	N/A

The below table is applicable in the following conditions:

- RCV active

Mode	Antenna 1		Antenna 2	
	Nominal	Maximum	Nominal	Maximum
Bluetooth (in dBm)	10.5	11.5	8.5	9.5
Bluetooth EDR (in dBm)	10.5	11.5	8.5	9.5
Bluetooth LE 1Mbps, 2Mbps (in dBm)	10.5	11.5	8.5	9.5
Bluetooth LE 125/500 kbps (in dBm)	10.0	11.0	N/A	N/A

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 DUT Antenna Diagram & SAR Test Setup Photographs Appendix. This device is considered a "phablet" when it is in closed configuration and a "UMPC mini-tablet" when it is in open configuration. Exact antenna dimensions and separation distances are shown in the Technical Descriptions in the FCC filing.

Table 1-1
Device Edges/Sides for Closed Configuration SAR Testing

Device Sides/Edges for SAR Testing						
Mode	Back	Front	Top	Bottom	Right	Left
GPRS 850 Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
GPRS 850 Antenna A	Yes	Yes	No	Yes	Yes	No
GPRS 1900 Antenna B	Yes	Yes	No	Yes	Yes	Yes
UMTS 850 Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
UMTS 850 Antenna A	Yes	Yes	No	Yes	Yes	No
UMTS 1750 Antenna B	Yes	Yes	No	Yes	Yes	Yes
UMTS 1900 Antenna B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 71 Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 71 Antenna A	Yes	Yes	No	Yes	Yes	No
LTE Band 12 Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 12 Antenna A	Yes	Yes	No	Yes	Yes	No
LTE Band 13 Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 13 Antenna A	Yes	Yes	No	Yes	Yes	No
LTE Band 14 Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 14 Antenna A	Yes	Yes	No	Yes	Yes	No
LTE Band 26 (Cell) Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 26 (Cell) Antenna A	Yes	Yes	No	Yes	Yes	No
LTE Band 5 (Cell) Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 5 (Cell) Antenna A	Yes	Yes	No	Yes	Yes	No
LTE Band 66 (AWS) Antenna B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 66 (AWS) Antenna F	Yes	Yes	Yes	No	No	Yes
LTE Band 25 (PCS) Antenna B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 25 (PCS) Antenna F	Yes	Yes	Yes	No	No	Yes
LTE Band 30 Antenna B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 30 Antenna F	Yes	Yes	Yes	No	No	Yes
LTE Band 7 Antenna B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 7 Antenna F	Yes	Yes	Yes	No	No	Yes
LTE Band 41 Antenna B	Yes	Yes	No	Yes	Yes	Yes
LTE Band 41 Antenna F	Yes	Yes	Yes	No	No	Yes
LTE Band 48 Antenna F	Yes	Yes	Yes	No	No	Yes
NR Band n71 Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
NR Band n71 Antenna A	Yes	Yes	No	Yes	Yes	No
NR Band n12 Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
NR Band n12 Antenna A	Yes	Yes	No	Yes	Yes	No
NR Band n5 (Cell) Antenna A+B	Yes	Yes	No	Yes	Yes	Yes
NR Band n5 (Cell) Antenna A	Yes	Yes	No	Yes	Yes	No
NR Band n66 (AWS) Antenna B	Yes	Yes	No	Yes	Yes	Yes
NR Band n66 (AWS) Antenna F	Yes	Yes	Yes	No	No	Yes
NR Band n25 (PCS) Antenna B	Yes	Yes	No	Yes	Yes	Yes
NR Band n25 (PCS) Antenna F	Yes	Yes	Yes	No	No	Yes
NR Band n30 Antenna B	Yes	Yes	No	Yes	Yes	Yes
NR Band n30 Antenna F	Yes	Yes	Yes	No	No	Yes
NR Band n7 Antenna B	Yes	Yes	No	Yes	Yes	Yes
NR Band n7 Antenna F	Yes	Yes	Yes	No	No	Yes
NR Band n41 Antenna F	Yes	Yes	Yes	No	No	Yes
NR Band n41 Antenna B	Yes	Yes	No	Yes	Yes	Yes
NR Band n41 Antenna E	Yes	Yes	Yes	No	No	No
NR Band n41 Antenna C	Yes	Yes	No	Yes	No	No
NR Band n48 Antenna F	Yes	Yes	Yes	No	No	Yes
NR Band n48 Antenna E	Yes	Yes	Yes	No	Yes	Yes
NR Band n48 Antenna G	Yes	Yes	Yes	No	Yes	No
NR Band n48 Antenna D	Yes	Yes	No	Yes	No	Yes
NR Band n77 DoD Antenna F	Yes	Yes	Yes	No	No	Yes
NR Band n77 DoD Antenna E	Yes	Yes	Yes	No	Yes	No
NR Band n77 DoD Antenna G	Yes	Yes	Yes	No	Yes	No
NR Band n77 DoD Antenna D	Yes	Yes	No	Yes	No	No
NR Band n77 Antenna F	Yes	Yes	Yes	No	No	Yes
NR Band n77 Antenna E	Yes	Yes	Yes	No	Yes	No
NR Band n77 Antenna G	Yes	Yes	Yes	No	Yes	No
NR Band n77 Antenna D	Yes	Yes	No	Yes	No	Yes
2.4 GHz WLAN Ant 2	Yes	Yes	No	Yes	No	Yes
2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	No	Yes
5 GHz WLAN Ant 1	Yes	Yes	Yes	No	No	Yes
5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	No	Yes
Bluetooth Ant 1	Yes	Yes	Yes	No	No	Yes
Bluetooth Ant 2	Yes	Yes	No	Yes	No	Yes
NFC	Yes	Yes	No	No	Yes	Yes

Table 1-2
Device Edges/Sides for Open Configuration SAR Testing

Device Sides/Edges for SAR Testing						
Mode	Back	Front	Top	Bottom	Right	Left
GPRS 850 Antenna A+B	Yes	Yes	No	Yes	Yes	No
GPRS 1900 Antenna B	Yes	Yes	No	Yes	Yes	No
UMTS 850 Antenna A+B	Yes	Yes	No	Yes	Yes	No
UMTS 1750 Antenna B	Yes	Yes	No	Yes	Yes	No
UMTS 1900 Antenna B	Yes	Yes	No	Yes	Yes	No
LTE Band 71 Antenna A+B	Yes	Yes	No	Yes	Yes	No
LTE Band 12 Antenna A+B	Yes	Yes	No	Yes	Yes	No
LTE Band 13 Antenna A+B	Yes	Yes	No	Yes	Yes	No
LTE Band 14 Antenna A+B	Yes	Yes	No	Yes	Yes	No
LTE Band 26 (Cell) Antenna A+B	Yes	Yes	No	Yes	Yes	No
LTE Band 5 (Cell) Antenna A+B	Yes	Yes	No	Yes	Yes	No
LTE Band 66 (AWS) Antenna B	Yes	Yes	No	Yes	Yes	No
LTE Band 66 (AWS) Antenna F	Yes	Yes	Yes	No	No	No
LTE Band 25 (PCS) Antenna B	Yes	Yes	No	Yes	Yes	No
LTE Band 30 Antenna B	Yes	Yes	No	Yes	Yes	No
LTE Band 7 Antenna B	Yes	Yes	No	Yes	Yes	No
LTE Band 41 Antenna B	Yes	Yes	No	Yes	Yes	No
LTE Band 48 Antenna F	Yes	Yes	Yes	No	No	No
NR Band n71 Antenna A+B	Yes	Yes	No	Yes	Yes	No
NR Band n12 Antenna A+B	Yes	Yes	No	Yes	Yes	No
NR Band n5 (Cell) Antenna A+B	Yes	Yes	No	Yes	Yes	No
NR Band n66 (AWS) Antenna B	Yes	Yes	No	Yes	Yes	No
NR Band n66 (AWS) Antenna F	Yes	Yes	Yes	No	No	No
NR Band n25 (PCS) Antenna B	Yes	Yes	No	Yes	Yes	No
NR Band n25 (PCS) Antenna F	Yes	Yes	Yes	No	No	No
NR Band n30 Antenna B	Yes	Yes	No	Yes	Yes	No
NR Band n30 Antenna F	Yes	Yes	Yes	No	No	No
NR Band n7 Antenna B	Yes	Yes	No	Yes	Yes	No
NR Band n7 Antenna F	Yes	Yes	Yes	No	No	No
NR Band n41 Antenna F	Yes	Yes	Yes	No	No	No
NR Band n41 Antenna B	Yes	Yes	No	Yes	Yes	No
NR Band n41 Antenna E	Yes	Yes	Yes	No	Yes	No
NR Band n41 Antenna C	Yes	Yes	No	Yes	No	No
NR Band n48 Antenna F	Yes	Yes	Yes	No	No	No
NR Band n48 Antenna E	Yes	Yes	Yes	No	Yes	No
NR Band n48 Antenna G	Yes	Yes	Yes	No	Yes	No
NR Band n48 Antenna D	Yes	Yes	No	Yes	No	No
NR Band n77 DoD Antenna F	Yes	Yes	Yes	No	No	No
NR Band n77 DoD Antenna E	Yes	Yes	Yes	No	Yes	No
NR Band n77 DoD Antenna G	Yes	Yes	Yes	No	Yes	No
NR Band n77 DoD Antenna D	Yes	Yes	No	Yes	No	No
NR Band n77 Antenna F	Yes	Yes	Yes	No	No	No
NR Band n77 Antenna E	Yes	Yes	Yes	No	Yes	No
NR Band n77 Antenna G	Yes	Yes	Yes	No	Yes	No
NR Band n77 Antenna D	Yes	Yes	No	Yes	No	No
2.4 GHz WLAN Ant 2	Yes	Yes	No	No	No	No
2.4 GHz WLAN MIMO	Yes	Yes	Yes	No	No	No
5 GHz WLAN Ant 1	Yes	Yes	No	No	No	No
5 GHz WLAN MIMO	Yes	Yes	Yes	No	No	No
Bluetooth Ant 1	Yes	Yes	Yes	No	No	No
Bluetooth Ant 2	Yes	Yes	No	No	No	No
NFC	Yes	Yes	No	No	Yes	No

Note: Particular DUT edges were not required to be evaluated for wireless router SAR, phablet SAR or UMPC mini-tablet SAR if the edges were greater than 2.5 cm from the transmitting antenna according to FCC KDB Publication 941225 D06v02r01 Section III, FCC KDB Publication 941225 D07v01r02 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, UNII-4, and WIFI6E 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 DUT Antenna Diagram & SAR Test Setup Photographs Appendix.

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 1-3
Simultaneous Transmission Scenarios

No.	Capable Transmit Configuration	Head	Body-Worn Accessory	Wireless Router	Phablet	UMPC Body	UMPC Extremity	Notes
1	GSM voice + 2.4 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
2	GSM voice + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
3	GSM voice + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
4	GSM voice + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
5	GSM voice + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
6	GSM voice + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
7	GSM voice + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
8	GSM voice + 2.4 GHz WLAN Ant 2 + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
9	GSM voice + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
10	GSM voice + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
11	GSM voice + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
12	GSM voice + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
13	GSM voice + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
14	GSM voice + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
15	UMTS + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
16	UMTS + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
17	UMTS + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
18	UMTS + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
19	UMTS + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
20	UMTS + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
21	UMTS + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
22	UMTS + 2.4 GHz WLAN Ant 2 + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
23	UMTS + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
24	UMTS + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
25	UMTS + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
26	UMTS + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
27	UMTS + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
28	UMTS + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
29	LTE + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
30	LTE + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
31	LTE + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
32	LTE + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
33	LTE + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
34	LTE + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
35	LTE + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
36	LTE + 2.4 GHz WLAN Ant 2 + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
37	LTE + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
38	LTE + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
39	LTE + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
40	LTE + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
41	LTE + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
42	LTE + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
43	LTE + NR	Yes	Yes	Yes	Yes	Yes	Yes	
44	LTE + NR + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
45	LTE + NR + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
46	LTE + NR + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
47	LTE + NR + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
48	LTE + NR + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
49	LTE + NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
50	LTE + NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
51	LTE + NR + 2.4 GHz WLAN Ant 2 + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
52	LTE + NR + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
53	LTE + NR + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
54	LTE + NR + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
55	LTE + NR + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
56	LTE + NR + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
57	LTE + NR + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	N/A	Yes	Yes	Yes	^ Bluetooth Tethering is considered
58	NR + 2.4 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
59	NR + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
60	NR + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
61	NR + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
62	NR + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
63	NR + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	Yes	Yes	Yes	Yes	Yes	Yes	
64	NR + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	Yes	Yes	N/A	Yes	Yes	Yes	
65	NR + 2.4 GHz WLAN Ant 2 + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
66	NR + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
67	NR + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	Yes^	Yes	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
68	NR + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes*	N/A	Yes	Yes	Yes	* Pre-installed VOIP applications are considered. ^ Bluetooth Tethering is considered
69	NR + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	Yes^	Yes*	N/A	Yes	Yes	Yes	* Pre-installed VOIP applications are considered. ^ Bluetooth Tethering is considered
70	NR + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes*	Yes^	Yes	Yes	Yes	* Pre-installed VOIP applications are considered. ^ Bluetooth Tethering is considered
71	NR + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	Yes^	Yes*	N/A	Yes	Yes	Yes	* Pre-installed VOIP applications are considered. ^ Bluetooth Tethering is considered
72	GPRS/EDGE + 2.4 GHz WLAN MIMO	N/A	N/A	Yes	Yes	Yes	Yes	
73	GPRS/EDGE + 5 GHz WLAN MIMO	N/A	N/A	Yes	Yes	Yes	Yes	
74	GPRS/EDGE + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	Yes	Yes	
75	GPRS/EDGE + 2.4 GHz Bluetooth Ant 1	N/A	N/A	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
76	GPRS/EDGE + 2.4 GHz Bluetooth Ant 2	N/A	N/A	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
77	GPRS/EDGE + 2.4 GHz WLAN MIMO + 5 GHz WLAN MIMO	N/A	N/A	Yes	Yes	Yes	Yes	
78	GPRS/EDGE + 2.4 GHz WLAN MIMO + 6 GHz WLAN MIMO	N/A	N/A	N/A	Yes	Yes	Yes	
79	GPRS/EDGE + 2.4 GHz WLAN Ant 2 + 2.4 GHz Bluetooth Ant 1	N/A	N/A	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
80	GPRS/EDGE + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	N/A	N/A	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
81	GPRS/EDGE + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	N/A	N/A	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
82	GPRS/EDGE + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	N/A	N/A	N/A	Yes	Yes	Yes	
83	GPRS/EDGE + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 2	N/A	N/A	N/A	Yes	Yes	Yes	
84	GPRS/EDGE + 2.4 GHz WLAN Ant 2 + 5 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	N/A	N/A	Yes^	Yes	Yes	Yes	^ Bluetooth Tethering is considered
85	GPRS/EDGE + 2.4 GHz WLAN Ant 2 + 6 GHz WLAN MIMO + 2.4 GHz Bluetooth Ant 1	N/A	N/A	N/A	Yes	Yes	Yes	

1. 2.4 GHz WLAN ant 1 and 2.4 GHz Bluetooth ant 1 share the same antenna path and cannot transmit simultaneously.
2. 5 GHz WLAN and 6 GHz WLAN share the same antenna path and cannot transmit simultaneously.
3. When the user utilizes multiple services in UMTS 3G mode it uses multi-Radio Access Bearer or multi-RAB. The power control is based on a physical control channel (Dedicated Physical Control Channel [DPCCH]) and power control will be adjusted to meet the needs of both services. Therefore, the UMTS+WLAN scenario also represents the UMTS Voice/DATA + WLAN Hotspot scenario.
4. Per the manufacturer, WIFI Direct is not expected to be used in conjunction with a held-to-ear or body-worn accessory voice call. Therefore, there are no simultaneous transmission scenarios involving WIFI direct beyond that listed in the above table.
5. 5 GHz Wireless Router is only supported for the U-NII-3 by S/W, therefore U-NII-1, U-NII-2A, U-NII-2C, and U-NII-4 were not evaluated for wireless router conditions.
6. 6 GHz Wireless Router is not supported, therefore it was not evaluated for wireless router conditions.
7. This device supports 2x2 MIMO Tx for WLAN 802.11a/b/g/n/ac/ax. 802.11a/b/g/n/ac/ax supports CDD and STBC and 802.11n/ac/ax additionally supports SDM.
8. This device supports VoWIFI.
9. This device supports Bluetooth Tethering in SISO Mode.
10. This device supports VoLTE.
11. This device supports VoNR.
12. LTE + 5G NR FR1 Scenarios are limited to EN-DC combinations with anchor bands as shown in the NR FR1 checklist.
13. 5G NR FR2 n258, n260, and n261 cannot transmit simultaneously.
14. LTE + 5G NR FR2 Scenarios are limited to EN-DC combinations with anchor bands as shown in the NR FR2 checklist.
15. UWB and NFC were evaluated for phablet and UMPC extremity based on expected usage conditions.

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.

This device supports channel 1-13 for 2.4 GHZ WLAN. However, because channel 12/13 targets are not higher than that of channels 1-11, default channels for SAR testing are determined per FCC KDB 248227 D01v02r02.

Since Wireless Router operations are not allowed by the chipset firmware using U-NII-1, U-NII-2A, U-NII-2C, and U-NII-4 WIFI, only 2.4 GHz WIFI, 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 160 MHz Bandwidth only for 5/6 GHz
b) Up to 20 MHz Bandwidth only for 2.4 GHz
c) 2 Tx antenna output
d) Up to 1024 QAM is supported
e) TDWR and Band gap channels are supported for 5/6 GHz
f) MU-MIMO UL Operations are not supported

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" when it is in a closed configuration 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, and U-NII-4 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.

This device supports 6 GHz WIFI Operations. RF Exposure assessment for these bands can be found in the WIFI 6E RF Exposure Report (report SN can be found in Section 1.11 – Bibliography). Simultaneous transmission analysis is addressed in Multi-TX and Antenna SAR Considerations Appendix of this report.

(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.

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 Downlink LTE CA RF Conducted Powers Appendix.

Per FCC KDB Publication 648474 D04v01r03, this device is considered a "phablet" when it is in a closed configuration 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/NR capabilities with overlapping transmission frequency ranges. When the supported frequency range of an LTE/NR Band falls completely within an LTE/NR band with a larger transmission frequency range, both LTE/NR bands have the same target power (or the band with the larger transmission frequency range has a higher target power), and both LTE/NR bands share the same transmission path and signal characteristics, SAR was only assessed for the band with the larger transmission frequency range.

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

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

For closed phablet test conditions only, this device can transmit with antenna F for LTE B2/25/30/7/41. SAR tests for antenna F were additionally performed for these LTE bands to ensure compliance.

For NR band n77, this device can transmit with antenna E or with antenna F during certain use conditions. SAR test for these NR bands were fully evaluated with antenna E and F for all exposure conditions.

This device supports 5G NR for Bands n258, n260, and n261. RF Exposure assessment and simultaneous transmission analysis for these bands can be found in the Near Field PD Report (report SN can be found in Section 1.11 – Bibliography).

NR implementation supports SA and NSA mode. In EN-DC mode, NR operates with the LTE Bands shown in the NR FR1 checklist acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.

SRS was tested with CW signal per Qualcomm guidance in 80-w2112-4.

For 2G/3G/4G/5G bands operating < 1 GHz, this device can transmit with Ant A or with Ant A+ Ant B. The RF path for both conditions is identical, therefore separate conducted powers are not required for these conditions. For closed phablet test conditions, both Ant A and Ant A + Ant B conditions were fully evaluated for all exposure conditions. For open UMPC Body or UMPC Extremity conditions, only Ant A + Ant B conditions are supported as described in the operational description.

1.9 Guidance Applied

- IEEE 1528-2013
- FCC KDB Publication 941225 D01v03r01, D05v02r05, 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 (Tablet, 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)
- November 2017, April 2018, October 2018 TCB Workshop Notes (LTE Carrier Aggregation)
- April 2019 TCB Workshop Notes (IEEE 802.11ax, Dynamic Antenna Tuning)
- FCC KDB Publication 941225 D07v01r02 (UMPC Mini-Tablet Devices)

1.10 Device Serial Numbers

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

1.11 Bibliography

Report Type	Report Serial Number
Near Field PD Report (Part 1)	1M2204010046-25.A3L
Near Field PD Part 0 Report	
RF Exposure Part 2 Test Report	1M2204010046-26.A3L
RF Exposure Compliance Summary Report	1M2204010046-27.A3L
RF Exposure Part 0 Test Report	1M2204010046-28.A3L
WIFI 6GHz RF exposure	1M2204010046-29.A3L

2 LTE AND NR INFORMATION

LTE Information					
Form Factor	Portable Handset				
Frequency Range of each LTE transmission band	LTE Band 71 (665.5 - 695.5 MHz)				
	LTE Band 12 (699.7 - 715.3 MHz)				
	LTE Band 13 (779.5 - 784.5 MHz)				
	LTE Band 14 (790.5 - 795.5 MHz)				
	LTE Band 26 (Cell) (814.7 - 848.3 MHz)				
	LTE Band 5 (Cell) (824.7 - 848.3 MHz)				
	LTE Band 66 (AWS) (1710.7 - 1779.3 MHz)				
	LTE Band 4 (AWS) (1710.7 - 1754.3 MHz)				
	LTE Band 25 (PCS) (1850.7 - 1914.3 MHz)				
	LTE Band 2 (PCS) (1850.7 - 1909.3 MHz)				
	LTE Band 30 (2307.5 - 2312.5 MHz)				
	LTE Band 7 (2502.5 - 2567.5 MHz)				
	LTE Band 41 (2498.5 - 2687.5 MHz)				
	LTE Band 38 (2572.5 - 2617.5 MHz)				
	LTE Band 48 (3552.5 - 3697.5 MHz)				
Channel Bandwidths	LTE Band 71: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 12: 1.4 MHz, 3 MHz, 5 MHz, 10 MHz				
	LTE Band 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 41: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 38: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
	LTE Band 48: 5 MHz, 10 MHz, 15 MHz, 20 MHz				
Channel Numbers and Frequencies (MHz)	Low	Low-Mid	Mid	Mid-High	High
LTE Band 71: 5 MHz	665.5 (133147)		680.5 (133297)	695.5 (133447)	
LTE Band 71: 10 MHz	668 (133172)		680.5 (133297)	693 (133422)	
LTE Band 71: 15 MHz	670.5 (133197)		680.5 (133297)	690.5 (133397)	
LTE Band 71: 20 MHz	673 (133222)		680.5 (133297)	688 (133372)	
LTE Band 12: 1.4 MHz	699.7 (23017)		707.5 (23095)	715.3 (23173)	
LTE Band 12: 3 MHz	700.5 (23025)		707.5 (23095)	714.5 (23165)	
LTE Band 12: 5 MHz	701.5 (23035)		707.5 (23095)	713.5 (23155)	
LTE Band 12: 10 MHz	704 (23060)		707.5 (23095)	711 (23130)	
LTE Band 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)		2405 (21100)	2562.5 (21375)	
LTE Band 7: 20 MHz	2510 (20850)		2535 (21100)	2560 (21350)	
LTE Band 41: 5 MHz	2506 (39750)	2549.5 (40185)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 10 MHz	2506 (39750)	2549.5 (40185)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 15 MHz	2506 (39750)	2549.5 (40185)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 41: 20 MHz	2506 (39750)	2549.5 (40185)	2549.5 (40185)	2593 (40620)	2636.5 (41055)
LTE Band 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)	
LTE Band 48: 5 MHz	3552.5 (55265)	3600.8 (55748)	N/A	3649.2 (56232)	3697.5 (56715)
LTE Band 48: 10 MHz	3555 (55290)	3601.7 (55757)	N/A	3648.3 (56223)	3695 (56690)
LTE Band 48: 15 MHz	3557.5 (55315)	3602.5 (55765)	N/A	3647.5 (56215)	3692.5 (56665)
LTE Band 48: 20 MHz	3560 (55340)	3603.3 (55773)	N/A	3646.7 (56207)	3690 (56640)
UE Category	DL UE Cat 20, 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 RF conducted Powers Section and Downlink LTE CA RF Conductive Powers Appendix. All uplink communications are identical to the Release 8 Specifications. Uplink communications are done on the PCC. The following LTE Release 16 Features are not supported: Relay, HetNet, Enhanced MIMO, eICIC, eMBMS, Cross-Carrier Scheduling, Enhanced SC-FDMA.				

NR Information						
Form Factor	Portable Handset					
Frequency Range of each NR transmission band	NR Band n71 (665.5 - 695.5 MHz) NR Band n12 (701.5 - 713.5 MHz) NR Band n5 (Cell) (826.5 - 846.5 MHz) NR Band n66 (AWS) (1712.5 - 1777.5 MHz) NR Band n25 (PCS) (1852.5 - 1912.5 MHz) NR Band n2 (PCS) (1852.5 - 1907.5 MHz) NR Band n30 (2307.5 - 2312.5 MHz) NR Band n7 (2502.5 - 2567.5 MHz) NR Band n41 (2506.02 - 2679.99 MHz) NR Band n38 (2575 - 2615 MHz) NR Band n48 (3555 - 3694.98 MHz) NR Band n77 DoD (3455.01 - 3544.98 MHz) NR Band n77 (3705 - 3975 MHz)					
Channel Bandwidths	NR Band n71: 5 MHz, 10 MHz, 15 MHz, 20 MHz NR Band n12: 5 MHz, 10 MHz, 15 MHz NR Band n5 (Cell): 5 MHz, 10 MHz, 15 MHz, 20 MHz NR Band n66 (AWS): 5 MHz, 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz NR Band n25 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz NR Band n2 (PCS): 5 MHz, 10 MHz, 15 MHz, 20 MHz NR Band n30: 5 MHz, 10 MHz NR Band n7: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz NR Band n41: 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz NR Band n38: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz NR Band n48: 10 MHz, 20 MHz, 30 MHz, 40 MHz NR Band n77 DoD: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz NR Band n77: 10 MHz, 15 MHz, 20 MHz, 30 MHz, 40 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 90 MHz, 100 MHz					
Channel Numbers and Frequencies (MHz)						
NR Band n71: 5 MHz	665.5 (133100)		680.5 (136100)		695.5 (139100)	
NR Band n71: 10 MHz	668 (133600)		680.5 (136100)		693 (138600)	
NR Band n71: 15 MHz	670.5 (134100)		680.5 (136100)		690.5 (138100)	
NR Band n71: 20 MHz	673 (134600)		680.5 (136100)		688 (137600)	
NR Band n12: 5 MHz	701.5 (140300)		707.5 (141500)		713.5 (142700)	
NR Band n12: 10 MHz	704 (140800)		707.5 (141500)		711 (142200)	
NR Band n12: 15 MHz	706.5 (141300)		707.5 (141500)		708.5 (141700)	
NR Band n5 (Cell): 5 MHz	826.5 (165300)		836.5 (167300)		846.5 (169300)	
NR Band n5 (Cell): 10 MHz	829 (165800)		836.5 (167300)		844 (168800)	
NR Band n5 (Cell): 15 MHz	831.5 (166300)		836.5 (167300)		841.5 (168300)	
NR Band n5 (Cell): 20 MHz	834 (166800)		836.5 (167300)		839 (167800)	
NR Band n66 (AWS): 5 MHz	1712.5 (342500)		1745 (349000)		1777.5 (355500)	
NR Band n66 (AWS): 10 MHz	1715 (343000)		1745 (349000)		1775 (355000)	
NR Band n66 (AWS): 15 MHz	1717.5 (343500)		1745 (349000)		1772.5 (354500)	
NR Band n66 (AWS): 20 MHz	1720 (344000)		1745 (349000)		1770 (354000)	
NR Band n66 (AWS): 30 MHz	1725 (345000)		1745 (349000)		1765 (353000)	
NR Band n66 (AWS): 40 MHz	1730 (346000)		1745 (349000)		1760 (352000)	
NR Band n25 (PCS): 5 MHz	1852.5 (370500)		1882.5 (376500)		1912.5 (382500)	
NR Band n25 (PCS): 10 MHz	1855 (371000)		1882.5 (376500)		1910 (382000)	
NR Band n25 (PCS): 15 MHz	1857.5 (371500)		1882.5 (376500)		1907.5 (381500)	
NR Band n25 (PCS): 20 MHz	1860 (372000)		1882.5 (376500)		1905 (381000)	
NR Band n25 (PCS): 25 MHz	1862.5 (372500)		1882.5 (376500)		1902.5 (380500)	
NR Band n25 (PCS): 30 MHz	1865 (373000)		1882.5 (376500)		1900 (380000)	
NR Band n25 (PCS): 40 MHz	1870 (374000)		1882.5 (376500)		1895 (379000)	
NR Band n2 (PCS): 5 MHz	1852.5 (370500)		1880 (376000)		1907.5 (381500)	
NR Band n2 (PCS): 10 MHz	1855 (371000)		1880 (376000)		1905 (381000)	
NR Band n2 (PCS): 15 MHz	1857.5 (371500)		1880 (376000)		1902.5 (380500)	
NR Band n2 (PCS): 20 MHz	1860 (372000)		1880 (376000)		1900 (380000)	
NR Band n30: 5 MHz	2307.5 (461500)		2310 (462000)		2312.5 (462500)	
NR Band n30: 10 MHz	N/A		2310 (462000)		N/A	
NR Band n7: 5 MHz	2502.5 (500500)		2535 (507000)		2567.5 (513500)	
NR Band n7: 10 MHz	2505 (501000)		2535 (507000)		2565 (513000)	
NR Band n7: 15 MHz	2507.5 (501500)		2535 (507000)		2562.5 (512500)	
NR Band n7: 20 MHz	2510 (502000)		2535 (507000)		2560 (512000)	
NR Band n7: 25 MHz	2512.5 (502500)		2535 (507000)		2557.5 (511500)	
NR Band n7: 30 MHz	2515 (503000)		2535 (507000)		2555 (511000)	
NR Band n7: 40 MHz	2520 (504000)		2535 (507000)		2550 (510000)	
NR Band n41: 20 MHz	2506.02 (501204)	2549.49 (509898)	2592.99 (518598)		2636.49 (527298)	2679.99 (535998)
NR Band n41: 30 MHz	2511 (502200)	2552.01 (510402)	2592.99 (518598)		2634 (526800)	2674.98 (534996)
NR Band n41: 40 MHz	2516.01 (503202)	2567.34 (513468)	N/A		2618.67 (523734)	2670 (534000)
NR Band n41: 50 MHz	2521.02 (504204)		2592.99 (518598)		2664.99 (532998)	
NR Band n41: 60 MHz	2526 (505200)		2592.99 (518598)		2659.98 (531996)	
NR Band n41: 70 MHz	2531.01 (506202)		N/A		2655 (531000)	
NR Band n41: 80 MHz	2536.02 (507204)		N/A		2649.99 (529998)	
NR Band n41: 90 MHz	2541 (508200)		N/A		2644.98 (528996)	
NR Band n41: 100 MHz	2546.01 (509202)		2592.99 (518598)		2640 (528000)	
NR Band n38: 10 MHz	2575 (515000)		2595 (519000)		2615 (523000)	
NR Band n38: 15 MHz	2577.5 (515500)		2595 (519000)		2612.5 (522500)	
NR Band n38: 20 MHz	2580 (516000)		2595 (519000)		2610 (522000)	
NR Band n38: 30 MHz	2585 (517000)		2595 (519000)		2605 (521000)	
NR Band n38: 40 MHz	2590 (518000)		2595 (519000)		2600 (520000)	
NR Band n48: 10 MHz	3555 (637000)	3601.68 (640112)	N/A		3648.33 (643222)	3694.98 (646332)
NR Band n48: 20 MHz	3560.01 (637334)	3603.33 (640222)	N/A		3646.68 (643112)	3690 (646000)
NR Band n48: 30 MHz	3565.02 (637668)	3605.01 (640334)	N/A		3645 (643000)	3684.99 (645666)
NR Band n48: 40 MHz	3570 (638000)		3624.99 (641666)		3679.98 (645332)	
NR Band n77 DoD: 10 MHz	3455.01 (630334)		3500.01 (633334)		3544.98 (636332)	
NR Band n77 DoD: 15 MHz	3457.5 (630500)		3500.01 (633334)		3542.49 (636166)	
NR Band n77 DoD: 20 MHz	3460.02 (630668)		3500.01 (633334)		3540 (636000)	
NR Band n77 DoD: 25 MHz					3537.48 (635832)	
NR Band n77 DoD: 30 MHz	3465 (631000)		3500.01 (633334)		3534.99 (635666)	
NR Band n77 DoD: 40 MHz	3470.01 (631334)		N/A		3470.01 (631334)	
NR Band n77 DoD: 50 MHz	3475.02 (631668)		N/A		3475.02 (631668)	
NR Band n77 DoD: 60 MHz	N/A		3500.01(633334)		N/A	
NR Band n77 DoD: 70 MHz	N/A		3500.01(633334)		N/A	
NR Band n77 DoD: 80 MHz	N/A		3500.01(633334)		N/A	
NR Band n77 DoD: 90 MHz	N/A		3500.01(633334)		N/A	
NR Band n77 DoD: 100 MHz	N/A		3500.01(633334)		N/A	
NR Band n77: 10 MHz	3705 (647000)	3759 (650600)	3813 (654200)	3867 (657800)	3921 (661400)	3975 (665000)
NR Band n77: 15 MHz	3707.52 (647168)	3760.5 (650700)	3813.51 (654234)	3866.49 (657766)	3919.5 (661300)	3972.48 (664832)
NR Band n77: 20 MHz	3710.01 (647334)	3762 (650800)	3813.99 (654266)	3866.01 (657734)	3918 (661200)	3969.99 (664666)
NR Band n77: 30 MHz	3715.02 (647668)	3765 (651000)	3815.01 (654334)	3864.99 (657666)	3915 (661000)	3964.98 (664332)
NR Band n77: 40 MHz	3720 (648000)	3768 (651200)	3816 (654400)	3864 (657600)	3912 (660800)	3960 (664000)
NR Band n77: 50 MHz	3725.01 (648334)	3782.49 (652166)	3840 (656000)		3897.51 (659834)	3954.99 (663666)
NR Band n77: 60 MHz	3730.02 (648668)	3803.34 (653556)	N/A	N/A	3876.66 (658444)	3949.98 (663332)
NR Band n77: 70 MHz	3735 (649000)	3804.99 (653666)	N/A		3875.01 (658334)	3945 (663000)
NR Band n77: 80 MHz	3740.01 (649334)	N/A	3840 (656000)		N/A	3939.99 (662666)
NR Band n77: 90 MHz	3745.02 (649668)	N/A	3840 (656000)		N/A	3934.98 (662332)
NR Band n77: 100 MHz	3750 (650000)	N/A	N/A	N/A	N/A	3930 (662000)
SCS for NR Band n71/n12/n5/n66/n25/n2/n30/n7	15 kHz					
SCS for NR Band n41/n38/n48/n77	30 kHz					
Modulations Supported in UL	DFT-s-OFDM: π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM					
A-MPR (Additional MPR) disabled for SAR Testing?	YES					
EN-DC Carrier Aggregation Possible Combinations	The technical description includes all the possible carrier aggregation combinations					
LTE Anchor Bands for NR Band n71	LTE Band 2/48/66					
LTE Anchor Bands for NR Band n12	LTE Band 2/66/48					
LTE Anchor Bands for NR Band n5 (Cell)	LTE Band 2/30/48/66					
LTE Anchor Bands for NR Band n66 (AWS)	LTE Band 2/5/12/13/14/30/48					
LTE Anchor Bands for NR Band n25 (PCS)	LTE Band 12/66					
LTE Anchor Bands for NR Band n2 (PCS)	LTE Band 5/12/13/14/30/48/66					
LTE Anchor Bands for NR Band n30	LTE Band 2/5/12/14/66					
LTE Anchor Bands for NR Band n7	N/A					
LTE Anchor Bands for NR Band n41	LTE Band 2/25/66					
LTE Anchor Bands for NR Band n38	N/A					
LTE Anchor Bands for NR Band n48	LTE Band 2/66					
LTE Anchor Bands for NR Band n77	LTE Band 2/5/12/13/14/30/66					

3 INTRODUCTION

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

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

3.1 SAR Definition

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

Equation 3-1
SAR Mathematical Equation

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

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

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

where:

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

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

4 DOSIMETRIC ASSESSMENT

4.1 Measurement Procedure

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

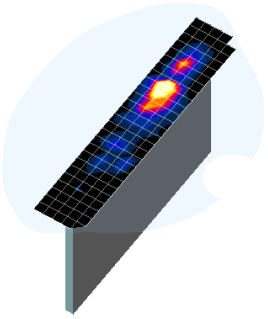

Figure 4-1
Sample SAR Area Scan

1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013.
2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.
3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 4-1) and IEEE 1528-2013. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):

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

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

   c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.
4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

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

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

*Also compliant to IEEE 1528-2013 Table 6

5 DEFINITION OF REFERENCE POINTS

5.1 EAR REFERENCE POINT

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

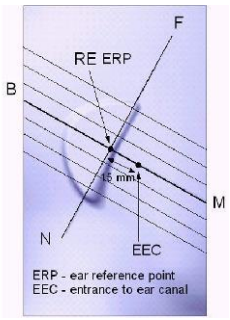

Figure 5-1
Close-Up Side view of ERP

5.2 HANDSET REFERENCE POINTS

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

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

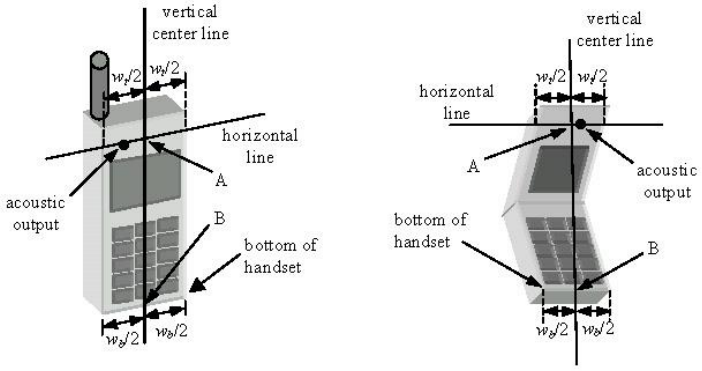

Figure 5-3
Handset Vertical Center & Horizontal Line Reference Points

6 TEST CONFIGURATION POSITIONS

6.1 Device Holder

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

6.2 Positioning for Cheek

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

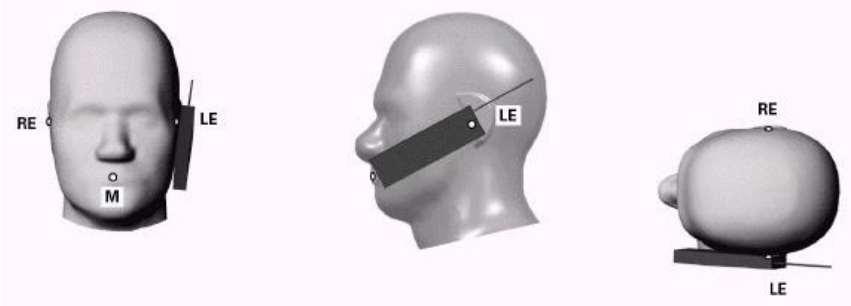

Figure 6-1 Front, Side and Top View of Cheek Position

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

6.3 Positioning for Ear / 15º Tilt

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

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

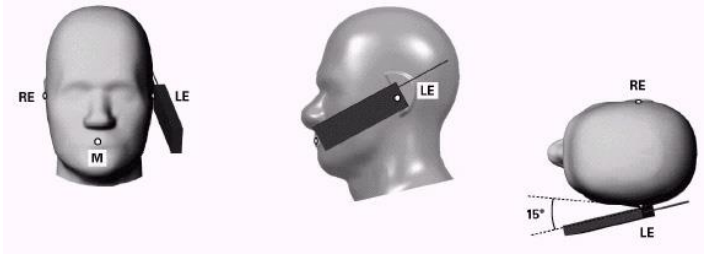

Figure 6-2 Front, Side and Top View of Ear/15º Tilt Position

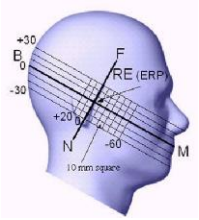

Figure 6-3
Side view w/ relevant markings

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

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

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

6.5 Body-Worn Accessory Configurations

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

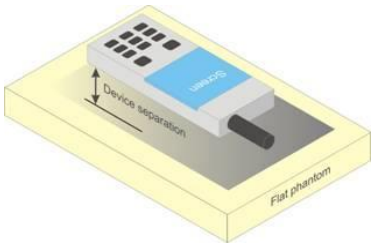

Figure 6-4
Sample Body-Worn Diagram

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

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

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

6.6 Extremity Exposure Configurations

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

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

6.7 Wireless Router Configurations

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

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

6.8 Phablet Configurations

For smart phones with a display diagonal dimension > 150 mm or an overall diagonal dimension > 160 mm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, the phablets procedures outlined in KDB Publication 648474 D04v01r03

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

6.9 Proximity Sensor Considerations

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

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

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.

6.10 UMPC Mini-Tablet Configurations

Small hand-held tablets (and devices of similar form factors that are designed primarily for interactive hand-held use next to or near the body of users) require body SAR and extremity SAR evaluation. These types of mini-tablets are normally optimized for mobile web access and multimedia use. UMPC test procedures are applicable for devices with displays and overall diagonal dimension ≤ 20 cm. Devices are to be set up according to KDB publication 941225 D07v01r02 requirements and are configured with maximum output power during SAR assessment for a worst case SAR evaluation.

Per KDB Publication 941225 D07v01r02, UMPC mini-tablet devices must be tested for all surfaces and edges ≤ 25 mm from a transmitting antenna. A test separation distance of 10 mm may be considered for 1g SAR, with the addition of 10g SAR measurement at 0 mm test separation distance for all measured 1g SAR (at 10 mm) configurations to address hand exposure.

7 RF EXPOSURE LIMITS

7.1 Uncontrolled Environment

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

7.2 Controlled Environment

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

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

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

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

8 FCC MEASUREMENT PROCEDURES

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

8.1 Measured and Reported SAR

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

8.2 3G SAR Test Reduction Procedure

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

8.3 Procedures Used to Establish RF Signal for SAR

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

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

8.4 SAR Measurement Conditions for UMTS

8.4.1 Output Power Verification

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

8.4.2 Head SAR Measurements

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.

8.4.3 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.

8.4.4 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.

8.4.5 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.

8.4.6 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.

8.5 SAR Measurement Conditions for LTE

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

8.5.1 Spectrum Plots for RB Configurations

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

8.5.2 MPR

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

8.5.3 A-MPR

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

8.5.4 Required RB Size and RB Offsets for SAR Testing

According to FCC KDB 941225 D05v02r04:

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

8.5.5 TDD

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

8.5.6 Downlink Only Carrier Aggregation

Conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink

carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band. Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for downlink only carrier aggregation configurations when the average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive.

8.6 SAR Testing with 802.11 Transmitters

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

8.6.1 General Device Setup

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

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

8.6.2 U-NII-1 and U-NII-2A

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

8.6.3 U-NII-2C and U-NII-3

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

8.6.4 Initial Test Position Procedure

For exposure conditions with multiple test positions, such as handset operating next to the ear, devices with hotspot mode or UMPC mini-tablet, procedures for initial test position can be applied. Using the transmission

mode determined by the DSSS procedure or initial test configuration, area scans are measured for all positions in an exposure condition. The test position with the highest extrapolated (peak) SAR is used as the initial test position. When reported SAR for the initial test position is ≤ 0.4 W/kg, no additional testing for the remaining test positions is required. Otherwise, SAR is evaluated at the subsequent highest peak SAR positions until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.6.5 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.

8.6.6 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.

8.6.7 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 8.6.6). When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

8.6.8 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.

8.6.9 MIMO SAR considerations

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

9 RF CONDUCTED POWERS

All conducted power measurements for 2G/3G/4G/5G Sub6 WWAN technologies and bands in this section were performed by setting *Reserve_power_margin* (Qualcomm® Smart Transmit EFS entry) to 0dB, so that the EUT transmits continuously at minimum (P_{limit}, maximum tune up output power P_{max}).

9.1 GSM Conducted Powers

Table 9-1
Measured P_{max} for all DSI for GSM 850
Measured P_{max} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) for GSM 1900

Maximum Burst-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	31.30	31.35	31.16	**28.97**	27.10	25.93	24.56	22.55	21.56
	190	31.82	31.84	31.33	**29.20**	27.10	26.24	24.58	22.79	21.76
	251	31.65	31.71	30.85	**28.95**	27.00	26.08	24.31	22.55	21.51
GSM 1900	512	29.18	29.17	27.62	**26.05**	23.97	24.75	23.70	21.62	20.84
	661	28.87	28.86	27.39	**25.58**	23.96	24.46	23.49	21.37	20.51
	810	29.11	29.12	27.47	**25.57**	23.88	24.68	23.58	21.51	20.75

Calculated Maximum Frame-Averaged Output Power										
		Voice	*GPRS/EDGE Data (GMSK)*				*EDGE Data (8-PSK)*			
Band	**Channel**	**GSM [dBm] CS (1 Slot)**	**GPRS [dBm] 1 Tx Slot**	**GPRS [dBm] 2 Tx Slot**	**GPRS [dBm] 3 Tx Slot**	**GPRS [dBm] 4 Tx Slot**	**EDGE [dBm] 1 Tx Slot**	**EDGE [dBm] 2 Tx Slot**	**EDGE [dBm] 3 Tx Slot**	**EDGE [dBm] 4 Tx Slot**
GSM 850	128	22.10	22.15	24.97	**24.54**	23.92	16.73	18.37	18.12	18.38
	190	22.62	22.64	25.14	**24.77**	23.92	17.04	18.39	18.36	18.58
	251	22.45	22.51	24.66	**24.52**	23.82	16.88	18.12	18.12	18.33
GSM 1900	512	19.98	19.97	21.43	**21.62**	20.79	15.55	17.51	17.19	17.66
	661	19.67	19.66	21.20	**21.15**	20.78	15.26	17.30	16.94	17.33
	810	19.91	19.92	21.28	**21.14**	20.70	15.48	17.39	17.08	17.57

GSM 850	**Frame Avg.Targets:**	22.80	22.80	25.31	**25.07**	24.32	17.80	18.81	18.57	18.82
GSM 1900		20.30	20.30	21.81	**22.07**	21.32	16.30	17.81	17.57	17.82

Table 9-2

Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (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	25.72	25.75	22.93	20.93	**20.00**	25.78	22.74	20.89	19.03
	661	25.67	25.66	22.72	20.66	**19.90**	25.73	22.69	20.88	19.97
	810	25.88	25.80	22.70	20.80	**19.78**	25.92	22.66	20.90	19.85

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	16.52	16.55	16.74	16.50	**16.82**	16.58	16.55	16.46	15.85
	661	16.47	16.46	16.53	16.23	**16.72**	16.53	16.50	16.45	16.79
	810	16.68	16.60	16.51	16.37	**16.60**	16.72	16.47	16.47	16.67
GSM 1900	**Frame Avg.Targets:**	16.80	16.80	16.81	16.77	**16.82**	16.30	16.81	16.77	16.82

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 9-1
Power Measurement Setup

9.2 UMTS Conducted Powers

Table 9-3
Measured P_{max} for all DSI for UMTS 850
Measured P_{max} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) for UMTS Band 4
Measured P_{max} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) UMTS Band 2

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	24.52	24.51	24.33	23.73	23.65	23.72	23.86	24.12	23.85	-
99		12.2 kbps AMR	24.52	24.48	24.32	23.70	23.64	23.67	23.81	24.10	23.85	-
6	HSDPA	Subtest 1	23.42	23.55	23.46	22.66	22.70	22.73	22.93	22.73	22.90	0
6		Subtest 2	23.39	23.57	23.44	22.71	22.69	22.74	23.01	22.73	22.84	0
6		Subtest 3	22.89	23.09	22.91	22.20	22.09	22.25	22.48	22.24	22.32	0.5
6		Subtest 4	22.93	23.09	22.91	22.21	22.22	22.24	22.43	22.20	22.32	0.5
6	HSUPA	Subtest 1	23.46	23.70	23.45	22.78	22.77	22.82	23.01	22.83	22.93	0
6		Subtest 2	21.51	21.67	21.43	20.80	20.80	20.82	21.08	20.81	20.92	2
6		Subtest 3	22.46	22.63	22.41	21.80	21.81	21.82	22.01	21.82	21.94	1
6		Subtest 4	21.45	21.61	21.42	20.82	20.79	20.83	21.05	20.83	20.97	2
6		Subtest 5	23.48	23.66	23.45	22.80	22.71	22.82	23.07	22.82	22.96	0
8	DC-HSDPA	Subtest 1	23.51	23.65	23.48	22.73	22.73	22.83	23.00	22.80	22.91	0
8		Subtest 2	23.53	23.68	23.53	22.74	22.57	22.81	23.00	22.74	22.91	0
8		Subtest 3	23.10	23.18	23.00	22.28	22.38	22.31	22.48	22.24	22.52	0.5
8		Subtest 4	22.99	23.22	23.03	22.26	22.30	22.32	22.48	22.28	22.37	0.5

Table 9-4
Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (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	18.25	18.16	18.28	18.43	18.29	18.36	-
99		12.2 kbps AMR	18.26	18.19	18.26	18.32	18.12	18.32	-
6	HSDPA	Subtest 1	16.92	16.95	16.95	17.20	16.84	17.10	0
6		Subtest 2	16.93	16.97	16.91	17.16	16.94	17.08	0
6		Subtest 3	16.42	16.44	16.45	16.69	16.45	16.60	0.5
6		Subtest 4	16.40	16.47	16.48	16.67	16.50	16.57	0.5
6	HSUPA	Subtest 1	16.96	16.96	17.00	17.20	17.01	17.12	0
6		Subtest 2	14.98	14.99	15.05	15.23	15.00	15.16	2
6		Subtest 3	16.00	15.97	16.05	16.23	16.02	16.15	1
6		Subtest 4	14.99	14.99	15.04	15.24	15.04	15.15	2
6		Subtest 5	17.03	17.01	17.07	17.27	17.06	17.20	0
8	DC-HSDPA	Subtest 1	16.98	16.96	17.01	17.19	16.98	17.17	0
8		Subtest 2	16.98	16.94	17.00	17.18	17.02	17.13	0
8		Subtest 3	16.45	16.48	16.51	16.75	16.54	16.67	0.5
8		Subtest 4	16.48	16.46	16.52	16.75	16.49	16.64	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 9-2
Power Measurement Setup

9.3 LTE Conducted Powers

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

Note: Some bands do 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.

LTE Carrier Aggregation 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. Note that only LTE B66/41 Antenna B support uplink carrier aggregation. LTE B66/41 Antenna F do not support uplink carrier aggregation.
3. 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.

9.3.1 LTE Band 71

Table 9-5
LTE Band 71 Measured P_{Max} for all DSI - 20 MHz Bandwidth

LTE Band 71 20 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 133297 (680.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	**24.33**	0	0
	1	50	24.05		0
	1	99	24.13		0
	50	0	**23.26**	0-1	1
	50	25	23.21		1
	50	50	23.18		1
	100	0	23.00		1
16QAM	1	0	23.39	0-1	1
	1	50	23.10		1
	1	99	23.22		1
	50	0	22.15	0-2	2
	50	25	22.10		2
	50	50	22.04		2
	100	0	22.07		2
64QAM	1	0	22.30	0-2	2
	1	50	22.35		2
	1	99	22.26		2
	50	0	21.05	0-3	3
	50	25	21.01		3
	50	50	21.05		3
	100	0	21.07		3
256QAM	1	0	19.05	0-5	5
	1	50	19.13		5
	1	99	18.96		5
	50	0	18.85		5
	50	25	18.92		5
	50	50	19.11		5
	100	0	19.05		5

9.3.2 LTE Band 12

Table 9-6
LTE Band 12 Measured P_{Max} for all DSI - 10 MHz Bandwidth

LTE Band 12 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23095 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.35	0	0
	1	25	**24.41**		0
	1	49	24.20		0
	25	0	**23.44**	0-1	1
	25	12	23.37		1
	25	25	23.28		1
	50	0	23.38		1
16QAM	1	0	23.51	0-1	1
	1	25	23.67		1
	1	49	23.57		1
	25	0	22.41	0-2	2
	25	12	22.37		2
	25	25	22.21		2
	50	0	22.29		2
64QAM	1	0	22.63	0-2	2
	1	25	22.76		2
	1	49	22.50		2
	25	0	21.27	0-3	3
	25	12	21.29		3
	25	25	21.20		3
	50	0	21.27		3
256QAM	1	0	19.42	0-5	5
	1	25	19.27		5
	1	49	19.09		5
	25	0	19.38		5
	25	12	19.39		5
	25	25	19.30		5
	50	0	19.26		5

9.3.3 LTE Band 13

Table 9-7
LTE Band 13 Measured P_{Max} for all DSI - 10 MHz Bandwidth

LTE Band 13 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23230 (782.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.75	0	0
	1	25	**24.90**		0
	1	49	24.80		0
	25	0	23.70	0-1	1
	25	12	**23.72**		1
	25	25	23.55		1
	50	0	23.62		1
16QAM	1	0	24.05	0-1	1
	1	25	24.06		1
	1	49	23.99		1
	25	0	22.67	0-2	2
	25	12	22.71		2
	25	25	22.58		2
	50	0	22.62		2
64QAM	1	0	22.87	0-2	2
	1	25	22.89		2
	1	49	22.95		2
	25	0	21.69	0-3	3
	25	12	21.63		3
	25	25	21.54		3
	50	0	21.43		3
256QAM	1	0	19.46	0-5	5
	1	25	19.37		5
	1	49	19.57		5
	25	0	19.50		5
	25	12	19.57		5
	25	25	19.49		5
	50	0	19.50		5

9.3.4 LTE Band 14

Table 9-8
LTE Band 14 Measured P_{Max} for all DSI - 10 MHz Bandwidth

LTE Band 14 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 23330 (793.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.68	0	0
	1	25	**24.71**		0
	1	49	24.61		0
	25	0	23.67	0-1	1
	25	12	**23.68**		1
	25	25	23.52		1
	50	0	23.61		1
16QAM	1	0	23.97	0-1	1
	1	25	23.76		1
	1	49	23.76		1
	25	0	22.69	0-2	2
	25	12	22.53		2
	25	25	22.65		2
	50	0	22.58		2
64QAM	1	0	22.90	0-2	2
	1	25	22.84		2
	1	49	22.80		2
	25	0	21.66	0-3	3
	25	12	21.60		3
	25	25	21.49		3
	50	0	21.53		3
256QAM	1	0	19.68	0-5	5
	1	25	19.62		5
	1	49	19.88		5
	25	0	19.65		5
	25	12	19.59		5
	25	25	19.32		5
	50	0	19.56		5

9.3.5 LTE Band 26

Table 9-9
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	23.88	0	0
	1	36	**24.02**		0
	1	74	23.90		0
	36	0	22.90	0-1	1
	36	18	22.95		1
	36	37	**23.02**		1
	75	0	22.95		1
16QAM	1	0	23.36	0-1	1
	1	36	23.41		1
	1	74	23.24		1
	36	0	21.84	0-2	2
	36	18	22.02		2
	36	37	22.02		2
	75	0	21.89		2
64QAM	1	0	22.21	0-2	2
	1	36	22.00		2
	1	74	22.05		2
	36	0	20.88	0-3	3
	36	18	20.97		3
	36	37	21.04		3
	75	0	20.90		3
256QAM	1	0	18.75	0-5	5
	1	36	19.15		5
	1	74	18.88		5
	36	0	18.89		5
	36	18	18.87		5
	36	37	18.98		5
	75	0	18.90		5

9.3.6 LTE Band 5

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

LTE Band 5 (Cell) 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 20525 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	24.26	0	0
	1	25	**24.38**		0
	1	49	24.31		0
	25	0	23.30	0-1	1
	25	12	23.28		1
	25	25	**23.33**		1
	50	0	23.20		1
16QAM	1	0	23.60	0-1	1
	1	25	23.66		1
	1	49	23.63		1
	25	0	22.32	0-2	2
	25	12	22.32		2
	25	25	22.36		2
	50	0	22.23		2
64QAM	1	0	22.61	0-2	2
	1	25	22.70		2
	1	49	22.66		2
	25	0	21.29	0-3	3
	25	12	21.34		3
	25	25	21.33		3
	50	0	21.31		3
256QAM	1	0	19.18	0-5	5
	1	25	19.54		5
	1	49	19.22		5
	25	0	19.23		5
	25	12	19.32		5
	25	25	19.31		5
	50	0	19.22		5

Table 9-11
LTE Band 5 (Cell) Uplink Carrier Aggregation Measured P_{Max} for all DSI

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC UL Channel	PCC UL Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC UL Channel	SCC UL Frequency [MHz]	SCC DL Channel	SCC DL Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_5B	LTE B5	10	20525	836.5	2525	881.5	QPSK	1	49	LTE B5	5	20597	843.7	2597	888.7	QPSK	1	0	24.39	24.31

9.3.7 LTE Band 66

Table 9-12

LTE Band 66 (AWS) Antenna B Measured P_{Max} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 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	23.64	24.00	24.25	0	0
	1	50	24.29	24.16	24.34		0
	1	99	24.08	24.08	**24.40**		0
	50	0	22.96	22.92	**23.47**	0-1	1
	50	25	23.00	23.00	23.33		1
	50	50	22.97	22.94	23.23		1
	100	0	22.89	22.97	23.22		1
16QAM	1	0	23.00	23.21	23.55	0-1	1
	1	50	23.24	23.39	23.53		1
	1	99	23.40	23.08	23.33		1
	50	0	22.06	21.93	22.13	0-2	2
	50	25	22.20	21.97	22.20		2
	50	50	22.08	21.80	22.20		2
	100	0	22.12	21.98	22.21		2
64QAM	1	0	22.02	22.00	22.29	0-2	2
	1	50	22.12	22.20	22.32		2
	1	99	22.03	21.99	22.40		2
	50	0	21.10	20.87	21.04	0-3	3
	50	25	21.03	20.97	21.32		3
	50	50	21.05	20.93	21.16		3
	100	0	21.16	20.91	21.22		3
256QAM	1	0	18.89	18.82	19.21	0-5	5
	1	50	19.12	19.09	19.46		5
	1	99	19.24	18.89	19.58		5
	50	0	19.04	18.95	19.13		5
	50	25	19.08	18.88	19.26		5
	50	50	19.05	18.89	19.21		5
	100	0	19.05	19.00	19.11		5

Table 9-13

LTE Band 66 (AWS) Antenna B Measured P_{Max} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 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	24.13	23.76	24.21	0	0
	1	25	24.31	24.01	24.52		0
	1	49	24.04	23.74	24.27		0
	25	0	23.31	22.96	23.33	0-1	1
	25	12	23.37	23.03	23.40		1
	25	25	23.22	22.92	23.33		1
	50	0	23.28	22.92	23.27		1
16QAM	1	0	23.24	23.40	23.45	0-1	1
	1	25	23.52	23.55	23.87		1
	1	49	23.32	23.39	23.58		1
	25	0	22.25	22.22	22.38	0-2	2
	25	12	22.36	22.19	22.40		2
	25	25	22.22	22.23	22.41		2
	50	0	22.23	22.20	22.32		2
64QAM	1	0	22.25	22.16	22.43	0-2	2
	1	25	22.45	22.41	22.55		2
	1	49	22.26	22.15	22.45		2
	25	0	21.24	21.20	21.35	0-3	3
	25	12	21.28	21.26	21.35		3
	25	25	21.27	21.21	21.40		3
	50	0	21.26	21.18	21.24		3
256QAM	1	0	19.12	19.05	19.25	0-5	5
	1	25	19.38	19.26	19.44		5
	1	49	19.07	19.17	19.56		5
	25	0	19.29	19.22	19.34		5
	25	12	19.36	19.29	19.39		5
	25	25	19.20	19.15	19.37		5
	50	0	19.23	19.20	19.31		5

Table 9-14

LTE Band 66 (AWS) Antenna B Uplink Carrier Aggregation Measured P_{Max} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head)

	PCC									SCC									Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_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	24.42	24.25
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	24.38	24.21

Table 9-15
LTE Band 66 (AWS) Antenna B Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (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	17.90	17.78	18.48	0	0
	1	50	18.24	18.12	**18.51**		0
	1	99	17.98	17.81	18.45		0
	50	0	18.20	18.25	18.30	0-1	0
	50	25	18.27	18.28	**18.44**		0
	50	50	18.18	18.17	18.36		0
	100	0	18.18	18.18	18.37		0
16QAM	1	0	17.86	18.11	18.56	0-1	0
	1	50	18.20	18.20	18.59		0
	1	99	17.76	18.07	18.40		0
	50	0	17.98	17.99	18.07	0-2	0
	50	25	18.04	18.06	18.21		0
	50	50	17.95	17.96	18.08		0
	100	0	17.95	17.97	18.10		0
64QAM	1	0	17.86	17.89	18.38	0-2	0
	1	50	18.35	18.16	18.49		0
	1	99	17.85	17.96	18.42		0
	50	0	17.92	18.00	18.00	0-3	0
	50	25	18.04	18.04	18.20		0
	50	50	17.93	17.95	18.04		0
	100	0	17.93	17.96	18.11		0
256QAM	1	0	17.91	17.83	17.91	0-5	0
	1	50	18.31	18.26	18.27		0
	1	99	17.98	17.80	18.04		0
	50	0	17.93	17.96	18.02		0
	50	25	18.06	18.05	18.17		0
	50	50	17.96	17.92	18.05		0
	100	0	17.93	17.93	18.12		0

Table 9-16
LTE Band 66 (AWS) Antenna B Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (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	18.02	18.14	18.27	0	0
	1	25	18.37	18.41	18.57		0
	1	49	18.06	18.15	18.36		0
	25	0	18.33	18.33	18.48	0-1	0
	25	12	18.40	18.40	18.55		0
	25	25	18.30	18.29	18.51		0
	50	0	18.32	18.31	18.44		0
16QAM	1	0	18.01	18.03	18.31	0-1	0
	1	25	18.38	18.36	18.63		0
	1	49	18.09	18.16	18.35		0
	25	0	18.09	18.12	18.23	0-2	0
	25	12	18.15	18.17	18.30		0
	25	25	18.05	18.06	18.25		0
	50	0	18.02	18.07	18.19		0
64QAM	1	0	18.10	17.96	18.25	0-2	0
	1	25	18.42	18.38	18.49		0
	1	49	18.14	18.04	18.25		0
	25	0	18.08	18.08	18.26	0-3	0
	25	12	18.12	18.15	18.31		0
	25	25	18.00	18.02	18.29		0
	50	0	18.05	18.04	18.25		0
256QAM	1	0	17.92	17.92	18.08	0-5	0
	1	25	18.28	18.20	18.49		0
	1	49	17.99	17.89	18.09		0
	25	0	18.00	18.05	18.17		0
	25	12	18.12	18.13	18.27		0
	25	25	18.03	18.08	18.22		0
	50	0	18.06	18.05	18.18		0

Table 9-17
LTE Band 66 (AWS) Antenna B Uplink Carrier Aggregation Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active)

	PCC									SCC								Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	PCC DL Channel	PCC DL Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL) Channel	SCC (UL) Frequency [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66C	LTE B66	20	132072	1720.0	66536	2120.0	QPSK	1	99	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	1	0	18.20	17.98
CA_66C	LTE B66	20	132072	1720.0	66536	2120.0	QPSK	50	50	LTE B66	20	132270	1739.8	66734	2139.8	QPSK	50	0	18.24	18.18
CA_66C	LTE B66	20	132572	1770.0	67036	2170.0	QPSK	50	0	LTE B66	20	132374	1750.2	66838	2150.2	QPSK	50	50	18.24	18.30
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	18.22	18.06
CA_66B	LTE B66	10	132022	1715.0	66486	2115.0	QPSK	25	25	LTE B66	10	132121	1724.9	66734	2124.9	QPSK	25	0	18.31	18.30
CA_66B	LTE B66	10	132622	1775.0	67086	2175.0	QPSK	25	0	LTE B66	10	132523	1765.1	66987	2165.1	QPSK	25	25	18.19	18.48

Table 9-18
LTE Band 66 (AWS) Antenna F Measured P_{limit} for DSI = 4/5 (Head) - 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	21.22	21.15	21.54	0	0
	1	50	**21.64**	21.49	21.62		0
	1	99	21.30	21.33	21.53		0
	50	0	21.33	21.28	21.53	0-1	0
	50	25	**21.61**	21.42	21.57		0
	50	50	21.40	21.31	21.56		0
	100	0	21.54	21.37	21.45		0
16QAM	1	0	21.29	21.21	21.79	0-1	0
	1	50	21.77	21.68	21.84		0
	1	99	21.55	21.42	21.89		0
	50	0	21.39	21.30	21.55	0-2	0
	50	25	21.56	21.52	21.76		0
	50	50	21.36	21.43	21.69		0
	100	0	21.48	21.42	21.64		0
64QAM	1	0	21.28	21.18	21.71	0-2	0
	1	50	21.70	21.67	21.72		0
	1	99	21.38	21.39	21.81		0
	50	0	20.87	20.80	21.07	0-3	0
	50	25	21.01	21.00	21.24		0
	50	50	20.92	20.90	21.14		0
	100	0	20.93	20.93	21.11		0
256QAM	1	0	18.80	18.72	18.95	0-5	2
	1	50	19.13	19.14	19.22		2
	1	99	18.89	18.84	19.11		2
	50	0	18.84	18.79	18.99		2
	50	25	18.99	18.99	19.17		2
	50	50	18.94	18.88	19.12		2
	100	0	18.91	18.94	19.07		2

Table 9-19
LTE Band 66 (AWS) Antenna F Measured P_{limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active) - 20 MHz Bandwidth

LTE Band 66 (AWS) 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 132072 (1720.0 MHz)	Mid Channel 132322 (1745.0 MHz)	High Channel 132572 (1770.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	19.90	19.86	**20.11**	0	0
	1	50	19.96	19.88	20.01		0
	1	99	19.66	19.64	19.87		0
	50	0	19.93	19.71	19.94	0-1	0
	50	25	19.97	19.77	**20.05**		0
	50	50	19.83	19.65	19.90		0
	100	0	19.85	19.74	19.90		0
16QAM	1	0	19.83	19.50	19.79	0-1	0
	1	50	20.08	19.80	19.75		0
	1	99	19.81	19.74	19.69		0
	50	0	19.84	19.69	19.75	0-2	0
	50	25	19.89	19.73	19.84		0
	50	50	19.77	19.60	19.76		0
	100	0	19.79	19.58	19.84		0
64QAM	1	0	19.89	19.74	19.79	0-2	0
	1	50	19.79	19.89	19.96		0
	1	99	19.88	19.58	19.75		0
	50	0	19.73	19.70	19.84	0-3	0
	50	25	19.89	19.68	19.88		0
	50	50	19.76	19.61	19.75		0
	100	0	19.80	19.62	19.83		0
256QAM	1	0	19.55	19.08	19.17	0-5	0.5
	1	50	19.50	19.48	19.35		0.5
	1	99	19.35	19.03	19.24		0.5
	50	0	19.40	19.19	19.34		0.5
	50	25	19.37	19.23	19.46		0.5
	50	50	19.35	19.12	19.28		0.5
	100	0	19.27	19.16	19.22		0.5

9.3.8 LTE Band 25

Table 9-20
LTE Band 25 (PCS) Antenna B Measured P_{Max} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 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	23.83	23.92	24.00	0	0
	1	50	24.01	**24.26**	24.13		0
	1	99	24.25	23.93	24.03		0
	50	0	22.90	**22.98**	22.81	0-1	1
	50	25	22.97	22.90	22.85		1
	50	50	22.90	22.92	22.95		1
	100	0	22.86	22.80	22.81		1
16QAM	1	0	23.43	22.59	23.09	0-1	1
	1	50	23.09	22.51	23.25		1
	1	99	23.18	22.60	23.08		1
	50	0	21.88	21.78	21.95	0-2	2
	50	25	22.03	22.03	21.92		2
	50	50	22.00	21.92	22.02		2
	100	0	21.89	21.93	21.82		2
64QAM	1	0	22.05	21.99	21.98	0-2	2
	1	50	21.76	22.09	21.97		2
	1	99	22.10	22.04	22.15		2
	50	0	20.95	20.97	21.00	0-3	3
	50	25	21.01	20.99	20.98		3
	50	50	20.92	20.94	20.84		3
	100	0	20.85	20.83	20.95		3
256QAM	1	0	18.55	18.56	18.81	0-5	5
	1	50	19.15	19.15	19.11		5
	1	99	18.78	18.81	18.78		5
	50	0	18.77	18.75	18.81		5
	50	25	18.86	18.96	18.86		5
	50	50	18.89	18.95	18.94		5
	100	0	18.87	18.77	18.80		5

Table 9-21
LTE Band 25 (PCS) Antenna B Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (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	17.93	18.11	**18.15**	0	0
	1	50	17.89	17.96	18.01		0
	1	99	17.92	18.06	18.06		0
	50	0	17.95	17.98	17.99	0-1	0
	50	25	18.01	17.92	17.96		0
	50	50	18.05	18.10	**18.11**		0
	100	0	17.90	17.92	17.93		0
16QAM	1	0	17.81	18.16	18.12	0-1	0
	1	50	18.04	18.20	18.20		0
	1	99	17.96	18.18	18.04		0
	50	0	17.95	18.03	18.06	0-2	0
	50	25	18.02	18.02	18.02		0
	50	50	18.07	18.11	18.03		0
	100	0	17.92	17.97	17.99		0
64QAM	1	0	18.14	18.18	18.05	0-2	0
	1	50	18.15	18.25	18.11		0
	1	99	18.02	18.23	18.07		0
	50	0	17.98	18.06	18.01	0-3	0
	50	25	18.06	18.11	18.05		0
	50	50	18.02	18.08	18.03		0
	100	0	17.94	17.96	17.96		0
256QAM	1	0	17.92	17.84	18.07	0-5	0
	1	50	17.97	18.18	18.03		0
	1	99	18.07	17.99	18.04		0
	50	0	17.89	17.94	17.90		0
	50	25	18.05	18.04	18.00		0
	50	50	17.94	18.05	18.06		0
	100	0	18.02	17.96	17.93		0

Table 9-22
LTE Band 25 (PCS) Antenna F Measured P_{limit} for DSI = 5 (Head) - 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	22.16	22.02	22.00	0	0
	1	50	**22.19**	22.10	22.03		0
	1	99	22.11	22.09	21.97		0
	50	0	22.09	22.01	21.99	0-1	0
	50	25	**22.10**	22.03	22.00		0
	50	50	22.07	22.00	21.96		0
	100	0	22.03	21.91	21.91		0
16QAM	1	0	22.21	22.24	22.15	0-1	0
	1	50	22.27	22.27	22.22		0
	1	99	22.20	22.18	22.17		0
	50	0	22.07	22.04	21.99	0-2	0
	50	25	22.12	22.05	22.01		0
	50	50	22.08	22.01	21.99		0
	100	0	21.95	21.91	21.89		0
64QAM	1	0	22.20	22.20	22.20	0-2	0
	1	50	22.30	22.22	22.24		0
	1	99	22.23	22.19	22.10		0
	50	0	21.05	21.02	21.00	0-3	0.5
	50	25	21.08	21.03	21.03		0.5
	50	50	21.09	21.00	20.92		0.5
	100	0	20.98	20.93	20.96		0.5
256QAM	1	0	19.25	19.14	19.09	0-5	2.5
	1	50	19.65	19.55	19.20		2.5
	1	99	19.41	19.32	19.18		2.5
	50	0	19.36	19.23	19.14		2.5
	50	25	19.52	19.42	19.32		2.5
	50	50	19.46	19.38	19.26		2.5
	100	0	19.42	19.29	19.20		2.5

Table 9-23
LTE Band 25 (PCS) Antenna F Measured P_{limit} for DSI = 1 (Body-worn, or Phablet with grip sensor inactive), DSI = 3 (Phablet with grip sensor active), or DSI = 7 (Hotspot Mode), and/or DSI = 9 (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	**20.05**	19.73	19.73	0	0
	1	50	19.91	19.43	19.72		0
	1	99	19.64	19.45	19.43		0
	50	0	**19.96**	19.61	19.33	0-1	0
	50	25	19.86	19.45	19.52		0
	50	50	19.70	19.44	19.45		0
	100	0	19.76	19.44	19.42		0
16QAM	1	0	20.41	19.93	19.76	0-1	0
	1	50	20.41	19.94	19.64		0
	1	99	20.18	19.83	19.69		0
	50	0	20.05	19.74	19.50	0-2	0
	50	25	20.02	19.73	19.50		0
	50	50	19.87	19.68	19.71		0
	100	0	19.92	19.61	19.66		0
64QAM	1	0	20.24	19.96	19.56	0-2	0
	1	50	20.16	19.89	19.66		0
	1	99	19.99	19.84	19.54		0
	50	0	20.23	19.74	19.49	0-3	0
	50	25	20.00	19.72	19.39		0
	50	50	19.82	19.67	19.53		0
	100	0	19.93	19.61	19.26		0
256QAM	1	0	19.35	19.01	18.76	0-5	0.5
	1	50	19.63	19.41	18.93		0.5
	1	99	19.17	19.04	18.75		0.5
	50	0	19.39	19.09	18.79		0.5
	50	25	19.50	19.21	18.80		0.5
	50	50	19.33	19.12	18.81		0.5
	100	0	19.42	19.11	18.91		0.5

9.3.9 LTE Band 30

Table 9-24
LTE Band 30 Antenna B Measured P_{Limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 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	**21.85**	0	0
	1	25	21.74		0
	1	49	21.65		0
	25	0	21.75	0-1	0
	25	12	**21.81**		0
	25	25	21.60		0
	50	0	21.77		0
16QAM	1	0	21.90	0-1	0
	1	25	21.85		0
	1	49	21.75		0
	25	0	21.18	0-2	0.5
	25	12	21.25		0.5
	25	25	21.00		0.5
	50	0	21.08		0.5
64QAM	1	0	21.44	0-2	0.5
	1	25	21.42		0.5
	1	49	21.19		0.5
	25	0	20.05	0-3	1.5
	25	12	20.14		1.5
	25	25	19.93		1.5
	50	0	20.14		1.5
256QAM	1	0	17.95	0-5	3.5
	1	25	18.07		3.5
	1	49	17.85		3.5
	25	0	18.02		3.5
	25	12	18.26		3.5
	25	25	18.02		3.5
	50	0	18.08		3.5

Table 9-25
LTE Band 30 Antenna B Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (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	**16.41**	0	0
	1	25	16.31		0
	1	49	16.22		0
	25	0	**16.29**	0-1	0
	25	12	16.27		0
	25	25	16.20		0
	50	0	16.21		0
16QAM	1	0	16.45	0-1	0
	1	25	16.47		0
	1	49	16.21		0
	25	0	16.17	0-2	0
	25	12	16.23		0
	25	25	16.15		0
	50	0	16.28		0
64QAM	1	0	16.42	0-2	0
	1	25	16.27		0
	1	49	16.12		0
	25	0	16.21	0-3	0
	25	12	16.32		0
	25	25	16.12		0
	50	0	16.28		0
256QAM	1	0	16.21	0-5	0
	1	25	16.44		0
	1	49	16.33		0
	25	0	16.34		0
	25	12	16.33		0
	25	25	16.12		0
	50	0	16.18		0

Table 9-26
LTE Band 30 Antenna F Measured P_{max} for DSI = 5 (Head) - 10 MHz Bandwidth

LTE Band 30 10 MHz Bandwidth					
Modulation	RB Size	RB Offset	Mid Channel 27710 (2310.0 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
QPSK	1	0	22.91	0	0
	1	25	**22.97**		0
	1	49	22.91		0
	25	0	21.78	0-1	1
	25	12	**21.87**		1
	25	25	21.80		1
	50	0	21.79		1
16QAM	1	0	22.16	0-1	1
	1	25	22.20		1
	1	49	22.12		1
	25	0	20.79	0-2	2
	25	12	20.85		2
	25	25	20.76		2
	50	0	20.81		2
64QAM	1	0	21.03	0-2	2
	1	25	21.16		2
	1	49	21.01		2
	25	0	19.79	0-3	3
	25	12	19.89		3
	25	25	19.77		3
	50	0	19.78		3
256QAM	1	0	17.62	0-5	5
	1	25	17.89		5
	1	49	17.48		5
	25	0	17.67		5
	25	12	17.75		5
	25	25	17.61		5
	50	0	17.63		5

Table 9-27
LTE Band 30 Antenna F Measured P_{limit} for DSI = 1 (Body-worn, or Phablet with grip sensor inactive), DSI = 3 (Phablet with grip sensor active), or DSI = 7 (Hotspot Mode), and/or DSI = 9 (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	**19.93**	0	0
	1	25	19.91		0
	1	49	19.83		0
	25	0	**19.88**	0-1	0
	25	12	19.87		0
	25	25	19.77		0
	50	0	19.77		0
16QAM	1	0	20.24	0-1	0
	1	25	20.25		0
	1	49	20.17		0
	25	0	19.92	0-2	0
	25	12	19.91		0
	25	25	19.81		0
	50	0	19.80		0
64QAM	1	0	20.10	0-2	0
	1	25	20.12		0
	1	49	20.03		0
	25	0	19.91	0-3	0
	25	12	19.91		0
	25	25	19.83		0
	50	0	19.84		0
256QAM	1	0	18.16	0-5	1.5
	1	25	18.47		1.5
	1	49	17.99		1.5
	25	0	18.23		1.5
	25	12	18.24		1.5
	25	25	18.12		1.5
	50	0	18.09		1.5

9.3.10 LTE Band 7

Table 9-28
LTE Band 7 Antenna B Measured P_{limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 20 MHz Bandwidth

LTE Band 7 20 MHz Bandwidth							
Modulation	RB Size	RB Offset	Low Channel 20850 (2510.0 MHz)	Mid Channel 21100 (2535.0 MHz)	High Channel 21350 (2560.0 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
QPSK	1	0	21.47	21.76	21.82	0	0
	1	50	21.66	**21.88**	21.84		0
	1	99	21.74	21.84	21.81		0
	50	0	21.54	21.70	21.70	0-1	0
	50	25	21.65	21.74	21.72		0
	50	50	21.67	**21.88**	21.76		0
	100	0	21.60	21.64	21.68		0
16QAM	1	0	21.39	21.61	21.71	0-1	0
	1	50	21.47	21.84	21.82		0
	1	99	21.53	21.69	21.85		0
	50	0	21.15	21.39	21.76	0-2	0
	50	25	21.25	21.43	21.79		0
	50	50	21.19	21.46	21.62		0
	100	0	21.17	21.31	21.65		0
64QAM	1	0	21.26	21.65	21.81	0-2	0
	1	50	21.39	21.63	21.84		0
	1	99	21.35	21.62	21.96		0
	50	0	20.63	20.73	21.25	0-3	0.5
	50	25	20.74	20.83	21.29		0.5
	50	50	20.77	20.88	21.36		0.5
	100	0	20.60	20.85	21.15		0.5
256QAM	1	0	18.47	18.86	19.21	0-5	2.5
	1	50	18.92	19.04	19.36		2.5
	1	99	18.87	18.99	19.21		2.5
	50	0	18.56	18.88	19.20		2.5
	50	25	18.72	18.89	19.23		2.5
	50	50	18.71	18.97	19.16		2.5
	100	0	18.62	18.83	19.17		2.5

Table 9-29
LTE Band 7 Antenna B Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (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	17.04	17.10	**17.45**	0	0
	1	50	17.23	17.22	17.41		0
	1	99	17.24	17.19	17.43		0
	50	0	17.04	17.29	17.26	0-1	0
	50	25	17.14	17.35	17.25		0
	50	50	17.18	17.40	**17.41**		0
	100	0	17.14	17.21	17.23		0
16QAM	1	0	16.78	17.09	17.16	0-1	0
	1	50	16.89	17.13	17.16		0
	1	99	16.98	17.12	17.15		0
	50	0	16.71	16.91	17.22	0-2	0
	50	25	16.72	16.91	17.21		0
	50	50	16.78	16.97	17.27		0
	100	0	16.60	16.83	17.17		0
64QAM	1	0	16.91	17.07	17.32	0-2	0
	1	50	16.71	16.96	17.30		0
	1	99	16.88	17.08	17.33		0
	50	0	16.61	16.89	17.28	0-3	0
	50	25	16.71	16.89	17.23		0
	50	50	16.73	16.99	17.24		0
	100	0	16.56	16.71	17.22		0
256QAM	1	0	16.70	16.75	17.18	0-5	0
	1	50	16.76	17.03	17.12		0
	1	99	16.61	16.82	17.03		0
	50	0	16.53	16.79	17.17		0
	50	25	16.70	16.83	17.15		0
	50	50	16.81	16.96	17.13		0
	100	0	16.66	16.82	17.16		0

Table 9-30
LTE Band 7 Antenna F Measured P_{max} for DSI = 5 (Head) - 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	24.10	**24.52**	24.47	0	0
	1	50	24.32	24.46	24.51		0
	1	99	24.20	24.34	24.41		0
	50	0	23.44	23.39	23.48	0-1	1
	50	25	23.48	**23.51**	23.50		1
	50	50	23.47	23.39	23.49		1
	100	0	23.42	23.43	23.41		1
16QAM	1	0	23.64	23.71	23.70	0-1	1
	1	50	23.76	23.76	23.64		1
	1	99	23.49	23.60	23.59		1
	50	0	22.42	22.38	22.48	0-2	2
	50	25	22.52	22.47	22.59		2
	50	50	22.45	22.41	22.52		2
	100	0	22.41	22.36	22.50		2
64QAM	1	0	22.69	22.59	22.68	0-2	2
	1	50	22.76	22.66	22.72		2
	1	99	22.57	22.48	22.67		2
	50	0	21.42	21.39	21.50	0-3	3
	50	25	21.52	21.45	21.57		3
	50	50	21.45	21.39	21.49		3
	100	0	21.40	21.34	21.47		3
256QAM	1	0	19.15	19.21	19.45	0-5	5
	1	50	19.55	19.52	19.75		5
	1	99	19.38	19.34	19.31		5
	50	0	19.32	19.25	19.42		5
	50	25	19.48	19.41	19.54		5
	50	50	19.40	19.30	19.41		5
	100	0	19.41	19.31	19.43		5

Table 9-31
LTE Band 7 Antenna F Measured P_{limit} for DSI = 1 (Body-worn, or Phablet with grip sensor inactive), DSI = 3 (Phablet with grip sensor active), or DSI = 7 (Hotspot Mode), and/or DSI = 9 (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	18.08	17.95	18.04	0	0
	1	50	18.09	18.07	18.02		0
	1	99	18.08	18.00	**18.30**		0
	50	0	17.96	18.06	18.00	0-1	0
	50	25	18.00	18.05	**18.07**		0
	50	50	17.95	18.01	17.98		0
	100	0	18.00	17.95	18.01		0
16QAM	1	0	18.31	18.34	18.40	0-1	0
	1	50	18.22	18.35	18.51		0
	1	99	18.35	18.21	18.52		0
	50	0	18.14	18.04	18.00	0-2	0
	50	25	18.11	18.04	18.12		0
	50	50	18.07	18.05	18.13		0
	100	0	18.06	17.95	18.06		0
64QAM	1	0	18.27	18.32	18.27	0-2	0
	1	50	18.21	18.31	18.30		0
	1	99	18.31	18.28	18.32		0
	50	0	18.00	17.97	17.93	0-3	0
	50	25	18.03	18.08	18.05		0
	50	50	18.00	18.04	18.07		0
	100	0	18.02	17.98	17.92		0
256QAM	1	0	17.77	18.14	18.08	0-5	0
	1	50	17.69	18.08	18.32		0
	1	99	17.92	18.06	18.03		0
	50	0	18.01	18.00	18.01		0
	50	25	18.10	17.99	18.02		0
	50	50	18.12	17.99	17.95		0
	100	0	17.96	17.98	17.97		0

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Table 9-32
LTE Band 41 Antenna B PC3 Measured P_{Limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 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	21.84	22.10	21.65	21.75	21.96	0	0
	1	50	22.03	22.23	22.16	22.21	**22.55**		0
	1	99	21.96	22.12	21.86	21.77	22.38		0
	50	0	21.89	22.09	21.97	22.01	22.25	0-1	0
	50	25	22.04	22.20	22.15	22.16	22.48		0
	50	50	22.03	22.16	22.12	22.11	**22.54**		0
	100	0	21.95	22.05	22.03	22.04	22.34		0
16QAM	1	0	21.85	22.12	21.76	21.93	21.96	0-1	0
	1	50	22.23	22.31	22.35	22.41	22.57		0
	1	99	22.11	22.17	21.95	22.03	22.36		0
	50	0	21.89	22.08	21.98	22.02	22.25	0-2	0
	50	25	22.00	22.15	22.16	22.09	22.46		0
	50	50	22.02	22.14	22.11	22.12	22.57		0
	100	0	21.93	22.05	22.04	22.00	22.37		0
64QAM	1	0	21.59	22.18	21.68	21.64	22.04	0-2	0
	1	50	21.93	22.24	22.22	22.13	22.52		0
	1	99	22.03	22.16	21.86	21.70	22.40		0
	50	0	20.91	21.08	21.01	21.03	21.27	0-3	1
	50	25	21.04	21.18	21.17	21.14	21.49		1
	50	50	21.06	21.13	21.12	21.16	21.54		1
	100	0	20.93	21.07	21.03	20.99	21.42		1
256QAM	1	0	18.35	18.78	18.68	18.72	18.83	0-5	3
	1	50	18.94	19.23	19.15	19.19	19.43		3
	1	99	18.95	18.86	18.81	18.84	19.36		3
	50	0	18.76	18.96	18.98	19.01	19.21		3
	50	25	18.99	19.19	19.14	19.13	19.43		3
	50	50	19.01	19.06	19.11	19.06	19.51		3
	100	0	18.91	19.05	19.02	18.99	19.35		3

Table 9-33
LTE Band 41 Antenna B PC3 Uplink Carrier Aggregation Measured P_{Limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (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_41C	LTE B41	20	41490	2680.0	QPSK	50	0	LTE B41	20	41292	2660.2	QPSK	50	50	22.31	22.25

Table 9-34
LTE Band 41 Antenna B PC2 Measured P_{Limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 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	23.63	24.03	23.46	23.53	23.62	0	0
	1	50	23.82	24.17	24.00	24.01	24.27		0
	1	99	23.76	24.08	23.67	23.59	24.13		0
	50	0	23.71	23.95	23.81	23.82	24.05	0-1	0
	50	25	23.87	24.07	23.97	23.98	24.27		0
	50	50	23.84	24.03	23.93	23.92	24.32		0
	100	0	23.75	23.93	23.88	23.85	24.12		0

Table 9-35
LTE Band 41 Antenna B PC2 Uplink Carrier Aggregation Measured P_{Limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (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_41C	LTE B41 PC2	20	41490	2680.0	QPSK	50	0	LTE B41 PC2	20	41292	2660.2	QPSK	50	50	24.13	24.05

Table 9-36
LTE Band 41 Antenna B PC3 Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (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	17.69	17.76	17.59	17.58	17.67	0	0
	1	50	17.59	17.64	**17.91**	17.82	17.86		0
	1	99	17.56	17.82	17.66	17.45	17.75		0
	50	0	17.62	17.68	17.83	17.78	17.72	0-1	0
	50	25	17.73	17.74	**18.03**	17.79	17.92		0
	50	50	17.70	17.63	17.93	17.75	17.90		0
	100	0	17.66	17.59	17.82	17.71	17.86		0
16QAM	1	0	17.77	17.71	17.52	17.76	17.60	0-1	0
	1	50	17.86	17.72	17.60	17.58	17.88		0
	1	99	17.64	17.77	17.58	17.51	17.70		0
	50	0	17.78	17.66	17.87	17.76	17.78	0-2	0
	50	25	17.71	17.63	17.98	17.81	17.91		0
	50	50	17.77	17.66	17.90	17.72	17.93		0
	100	0	17.62	17.52	17.91	17.66	17.83		0
64QAM	1	0	17.74	17.67	17.78	17.75	17.64	0-2	0
	1	50	17.62	17.78	17.91	17.82	17.93		0
	1	99	17.88	17.65	17.70	17.55	17.76		0
	50	0	17.64	17.59	17.82	17.76	17.73	0-3	0
	50	25	17.78	17.65	17.89	17.79	17.89		0
	50	50	17.64	17.78	17.86	17.77	17.84		0
	100	0	17.61	17.64	17.92	17.69	17.82		0
256QAM	1	0	17.55	17.56	17.86	17.88	17.50	0-5	0
	1	50	17.66	17.60	17.81	17.73	17.76		0
	1	99	17.51	17.52	17.67	17.78	17.83		0
	50	0	17.57	17.56	17.84	17.68	17.76		0
	50	25	17.69	17.69	17.89	17.79	17.91		0
	50	50	17.58	17.57	17.90	17.66	17.94		0
	100	0	17.59	17.57	17.87	17.64	17.83		0

Table 9-37
LTE Band 41 Antenna B PC3 Uplink Carrier Aggregation Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active) - 20 MHz Bandwidth

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41	20	40620	2593.0	QPSK	1	99	LTE B41	20	40818	2612.8	QPSK	1	0	17.83	17.66
CA_41C	LTE B41	20	41490	2680.0	QPSK	1	0	LTE B41	20	41292	2660.2	QPSK	1	99	18.01	17.67

Table 9-38
LTE Band 41 Antenna B PC2 Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (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	19.45	19.46	19.74	19.35	19.57	0	0
	1	50	19.44	19.52	19.94	19.68	19.74		0
	1	99	19.51	19.54	19.75	19.49	19.69		0
	50	0	19.47	19.46	19.60	19.53	19.49	0-1	0
	50	25	19.44	19.42	19.72	19.49	19.61		0
	50	50	19.47	19.43	19.64	19.47	19.69		0
	100	0	19.35	19.39	19.60	19.38	19.57		0

Table 9-39
LTE Band 41 Antenna B PC2 Uplink Carrier Aggregation Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active) - 20 MHz Bandwidth

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C	LTE B41 PC2	20	40620	2593.0	QPSK	1	99	LTE B41 PC2	20	40818	2612.8	QPSK	1	0	19.67	19.75
CA_41C	LTE B41 PC2	20	41490	2680.0	QPSK	1	0	LTE B41 PC2	20	41292	2660.2	QPSK	1	99	19.78	19.57

Table 9-40
LTE Band 41 Antenna F PC3 Measured P_{max} for DSI = 5 (Head) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	24.14	24.35	23.97	23.80	23.69	0	0
	1	50	24.37	24.44	24.35	24.11	24.24		0
	1	99	24.30	**24.53**	24.10	23.74	24.18		0
	50	0	23.23	23.34	23.20	22.96	22.97	0-1	1
	50	25	23.34	23.37	23.28	23.13	23.14		1
	50	50	23.29	**23.43**	23.31	23.01	23.24		1
	100	0	23.25	23.27	23.22	23.06	23.06		1
16QAM	1	0	23.34	23.34	23.08	22.95	22.71	0-1	1
	1	50	23.60	23.60	23.55	23.39	23.39		1
	1	99	23.36	23.55	23.23	22.88	23.18		1
	50	0	22.22	22.33	22.12	22.00	22.00	0-2	2
	50	25	22.34	22.37	22.28	22.12	22.17		2
	50	50	22.31	22.42	22.29	22.01	22.24		2
	100	0	22.26	22.28	22.18	22.06	22.09		2
64QAM	1	0	22.36	22.42	21.90	21.70	21.78	0-2	2
	1	50	22.42	22.56	22.40	22.07	22.26		2
	1	99	22.44	22.52	21.95	21.64	22.16		2
	50	0	21.23	21.37	21.18	20.97	20.98	0-3	3
	50	25	21.32	21.40	21.29	21.14	21.14		3
	50	50	21.29	21.45	21.28	21.01	21.21		3
	100	0	21.26	21.26	21.19	21.00	21.04		3
256QAM	1	0	18.81	18.84	18.93	18.81	18.76	0-5	5
	1	50	19.27	19.44	19.36	19.15	19.25		5
	1	99	19.05	19.11	19.11	18.76	19.22		5
	50	0	19.09	19.24	19.16	18.98	18.99		5
	50	25	19.29	19.36	19.29	19.14	19.17		5
	50	50	19.28	19.35	19.30	19.00	19.24		5
	100	0	19.20	19.27	19.18	19.04	19.10		5

Table 9-41
LTE Band 41 Antenna F PC2 Measured P_{max} for DSI = 5 (Head) - 20 MHz Bandwidth

LTE Band 41 20 MHz Bandwidth									
Modulation	RB Size	RB Offset	Low Channel	Low-Mid Channel	Mid Channel	Mid-High Channel	High Channel	MPR Allowed per 3GPP [dB]	MPR [dB]
			39750 (2506.0 MHz)	40185 (2549.5 MHz)	40620 (2593.0 MHz)	41055 (2636.5 MHz)	41490 (2680.0 MHz)		
			Conducted Power [dBm]						
QPSK	1	0	25.94	26.00	25.63	25.48	25.36	0	0
	1	50	25.98	26.11	26.02	25.83	25.87		0
	1	99	25.93	26.16	25.75	25.47	25.78		0
	50	0	24.90	25.06	24.89	24.73	24.70	0-1	1
	50	25	25.01	25.07	25.03	24.83	24.93		1
	50	50	24.98	25.16	25.02	24.71	24.95		1
	100	0	24.94	24.97	24.91	24.77	24.80		1

Table 9-42
LTE Band 41 Antenna F PC3 Measured P_{limit} for DSI = 1 (Body-worn, or Phablet with grip sensor inactive), DSI = 3 (Phablet with grip sensor active), or DSI = 7 (Hotspot Mode), and/or DSI = 9 (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	20.17	20.29	19.82	19.90	19.57	0	0
	1	50	20.27	**20.38**	20.10	19.89	19.99		0
	1	99	20.16	20.26	19.86	19.75	19.83		0
	50	0	20.22	**20.37**	20.19	19.86	19.63	0-1	0
	50	25	20.24	20.24	20.18	19.89	19.70		0
	50	50	20.19	20.33	20.11	19.93	19.94		0
	100	0	20.15	20.23	20.09	19.96	19.84		0
16QAM	1	0	20.29	20.31	19.82	19.89	19.56	0-1	0
	1	50	20.33	20.41	20.21	19.98	19.97		0
	1	99	20.41	20.43	19.91	19.97	19.85		0
	50	0	20.24	20.37	20.09	19.89	19.92	0-2	0
	50	25	20.16	20.44	20.24	19.75	19.95		0
	50	50	20.23	20.40	20.19	19.83	19.87		0
	100	0	20.29	20.35	20.00	19.86	19.81		0
64QAM	1	0	20.19	20.40	19.93	19.70	19.83	0-2	0
	1	50	20.18	20.42	20.44	19.99	19.56		0
	1	99	20.16	20.46	20.02	19.54	19.99		0
	50	0	20.15	20.36	20.24	19.77	19.80	0-3	0
	50	25	20.19	20.33	20.22	19.88	19.84		0
	50	50	20.17	20.40	20.25	19.75	19.83		0
	100	0	20.08	20.30	20.11	19.82	19.89		0
256QAM	1	0	18.79	18.77	18.95	18.45	18.50	0-5	1
	1	50	19.09	19.55	19.16	18.64	18.99		1
	1	99	19.16	19.05	19.10	18.40	19.12		1
	50	0	19.25	19.43	19.21	18.80	18.89		1
	50	25	19.27	19.40	19.08	18.78	18.88		1
	50	50	19.08	19.39	19.20	18.79	18.98		1
	100	0	19.19	19.37	19.08	18.90	18.79		1

Table 9-43
LTE Band 41 Antenna F PC2 Measured P_{limit} for DSI = 1 (Body-worn, or Phablet with grip sensor inactive), DSI = 3 (Phablet with grip sensor active), or DSI = 7 (Hotspot Mode), and/or DSI = 9 (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	21.98	22.14	21.75	21.36	21.20	0	0
	1	50	21.99	22.10	22.00	21.45	21.70		0
	1	99	21.89	22.30	21.79	21.29	21.64		0
	50	0	22.07	22.15	21.95	21.58	21.50	0-1	0
	50	25	22.06	22.20	22.04	21.54	21.67		0
	50	50	22.06	22.22	21.96	21.50	21.50		0
	100	0	22.02	22.06	21.93	21.64	21.59		0

9.3.12 LTE Band 48

Table 9-44
LTE Band 48 Measured P_{limit} for DSI = 4/5 (Head) - 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	20.75	20.88	21.30	21.04	0	0
	1	50	20.96	21.20	**21.35**	21.07		0
	1	99	20.97	21.19	21.30	20.98		0
	50	0	20.57	21.01	21.24	20.96	0-1	0
	50	25	20.86	21.19	**21.37**	21.06		0
	50	50	20.84	21.11	21.25	20.91		0
	100	0	20.75	21.09	21.26	20.94		0
16QAM	1	0	20.92	21.01	21.42	21.25	0-1	0
	1	50	21.14	21.26	21.52	21.30		0
	1	99	21.30	21.20	21.41	21.11		0
	50	0	21.00	21.02	21.26	21.00	0-2	0
	50	25	21.27	21.23	21.42	21.11		0
	50	50	21.21	21.17	21.25	20.96		0
	100	0	21.16	21.14	21.29	21.01		0
64QAM	1	0	20.98	20.98	21.25	21.09	0-2	0
	1	50	21.24	21.21	21.36	21.05		0
	1	99	21.26	21.16	21.26	20.95		0
	50	0	21.03	21.02	21.24	20.97	0-3	0
	50	25	21.26	21.22	21.41	21.07		0
	50	50	21.21	21.18	21.29	20.90		0
	100	0	21.16	21.15	21.27	20.99		0
256QAM	1	0	18.77	18.69	19.30	18.75	0-5	2
	1	50	19.35	19.18	19.20	19.10		2
	1	99	19.12	18.82	18.99	18.61		2
	50	0	19.02	19.01	19.25	18.99		2
	50	25	19.26	19.21	19.40	19.08		2
	50	50	19.23	19.16	19.28	18.94		2
	100	0	19.19	19.12	19.27	19.01		2

Table 9-45
LTE Band 48 Uplink Carrier Aggregation Measured P_{limit} for DSI = 4/5 (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	1	99	LTE B48	20	56405	3666.5	QPSK	1	0	21.07	21.30

Table 9-46
LTE Band 48 Measured P_{limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (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	19.31	19.57	**19.87**	19.54	0	0
	1	50	19.43	19.74	19.84	19.53		0
	1	99	19.51	19.81	19.79	19.43		0
	50	0	19.24	19.60	19.76	19.51	0-1	0
	50	25	19.45	19.82	**19.91**	19.58		0
	50	50	19.42	19.75	19.77	19.41		0
	100	0	19.35	19.71	19.80	19.50		0
16QAM	1	0	19.43	19.61	19.98	19.61	0-1	0
	1	50	19.61	19.91	20.18	19.76		0
	1	99	19.58	19.90	19.98	19.57		0
	50	0	19.21	19.62	19.76	19.52	0-2	0
	50	25	19.46	19.84	19.90	19.61		0
	50	50	19.39	19.75	19.76	19.42		0
	100	0	19.35	19.73	19.78	19.54		0
64QAM	1	0	19.35	19.62	19.97	19.62	0-2	0
	1	50	19.54	19.73	19.98	19.66		0
	1	99	19.63	19.81	19.92	19.56		0
	50	0	19.18	19.67	19.78	19.49	0-3	0
	50	25	19.47	19.86	19.95	19.56		0
	50	50	19.41	19.78	19.85	19.44		0
	100	0	19.33	19.72	19.85	19.47		0
256QAM	1	0	18.54	18.86	18.94	18.84	0-5	0.5
	1	50	18.97	19.19	19.33	19.12		0.5
	1	99	18.86	18.94	18.88	18.63		0.5
	50	0	18.71	19.15	19.27	18.98		0.5
	50	25	18.96	19.33	19.44	19.06		0.5
	50	50	18.92	19.30	19.31	18.91		0.5
	100	0	18.84	19.25	19.32	18.96		0.5

Table 9-47
LTE Band 48 Uplink Carrier Aggregation Measured P_{limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active)

	PCC							SCC							Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	LTE Tx.Power with UL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_48C	LTE B48	20	56207	3646.7	QPSK	1	0	LTE B48	20	56009	3626.9	QPSK	1	99	19.65	19.87
CA_48C	LTE B48	20	55340	3560.0	QPSK	50	50	LTE B48	20	55538	3579.8	QPSK	50	0	19.39	19.42
CA_48C	LTE B48	20	56207	3646.7	QPSK	50	50	LTE B48	20	56405	3666.5	QPSK	50	0	19.51	19.77

Figure 9-3
Power Measurement Setup

9.4 NR Conducted Powers

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

Note: Some bands do not support non-overlapping channels. Per FCC Guidance, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

9.4.1 NR Band n71

Table 9-48
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	24.39	0	0.0
	1	53	24.11		0.0
	1	104	24.06		0.0
	50	0	23.86	0-0.5	0.5
	50	28	24.30	0	0.0
	50	56	23.71	0-0.5	0.5
	100	0	23.81		0.5
DFT-s-OFDM QPSK	1	1	**24.38**	0	0.0
	1	53	24.20		0.0
	1	104	23.93		0.0
	50	0	23.40	0-1	1.0
	50	28	**24.39**	0	0.0
	50	56	23.25	0-1	1.0
	100	0	23.42		1.0
DFT-s-OFDM 16QAM	1	1	23.51	0-1	1.0
CP-OFDM QPSK	1	1	22.75	0-1.5	1.5

9.4.2 NR Band n12

Table 9-49
NR Band n12 Measured P_{Max} for all DSI - 15 MHz Bandwidth

NR Band n12 15 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	141500 (707.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	24.80	0	0.0
	1	40	24.74		0.0
	1	77	24.69		0.0
	36	0	24.34	0-0.5	0.5
	36	22	24.79	0	0.0
	36	43	24.28	0-0.5	0.5
	75	0	24.36		0.5
DFT-s-OFDM QPSK	1	1	**24.66**	0	0.0
	1	40	24.61		0.0
	1	77	24.55		0.0
	36	0	23.87	0-1	1.0
	36	22	**24.78**	0	0.0
	36	43	23.77	0-1	1.0
	75	0	23.82		1.0
DFT-s-OFDM 16QAM	1	1	23.76	0-1	1.0
CP-OFDM QPSK	1	1	23.30	0-1.5	1.5

9.4.3 NR Band n5

Table 9-50
NR Band n5 Measured P_{Max} for all DSI - 20 MHz Bandwidth

NR Band n5 20 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	167300 (836.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	24.44	0	0.0
	1	53	24.64		0.0
	1	104	24.49		0.0
	50	0	24.10	0-0.5	0.5
	50	28	24.64	0	0.0
	50	56	24.17	0-0.5	0.5
	100	0	24.18		0.5
DFT-s-OFDM QPSK	1	1	24.29	0	0.0
	1	53	**24.47**		0.0
	1	104	24.38		0.0
	50	0	23.59	0-1	1.0
	50	28	**24.67**	0	0.0
	50	56	23.62	0-1	1.0
	100	0	23.67		1.0
DFT-s-OFDM 16QAM	1	1	23.47	0-1	1.0
CP-OFDM QPSK	1	1	23.05	0-1.5	1.5

9.4.4 NR Band n66

Table 9-51
NR Band n66 Antenna B Measured P_{Max} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	23.07	0	0.0
	1	108	23.37		0.0
	1	214	23.04		0.0
	108	0	22.82	0-0.5	0.5
	108	54	23.37	0	0.0
	108	108	22.86	0-0.5	0.5
	216	0	22.89		0.5
DFT-s-OFDM QPSK	1	1	23.25	0	0.0
	1	108	**23.47**		0.0
	1	214	23.21		0.0
	108	0	22.42	0-1	1.0
	108	54	**23.41**	0	0.0
	108	108	22.45	0-1	1.0
	216	0	22.41		1.0
DFT-s-OFDM 16QAM	1	1	22.34	0-1	1.0
CP-OFDM QPSK	1	1	21.70	0-1.5	1.5

Table 9-52
NR Band n66 Antenna B Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active) - 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	18.16	0	0.0
	1	108	18.35		0.0
	1	214	18.10		0.0
	108	0	18.39	0-0.5	0.0
	108	54	18.44	0	0.0
	108	108	18.34	0-0.5	0.0
	216	0	18.39		0.0
DFT-s-OFDM QPSK	1	1	18.25	0	0.0
	1	108	**18.51**		0.0
	1	214	18.16		0.0
	108	0	18.37	0-1	0.0
	108	54	18.39	0	0.0
	108	108	**18.40**	0-1	0.0
	216	0	18.37		0.0
DFT-s-OFDM 16QAM	1	1	18.21	0-1	0.0
CP-OFDM QPSK	1	1	18.29	0-1.5	0.0

Table 9-53
NR Band n66 Antenna F Measured P_{limit} for DSI = 4/5 (Head) - 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	21.74	0	0.0
	1	108	21.87		0.0
	1	214	21.70		0.0
	108	0	21.82	0-0.5	0.0
	108	54	21.83	0	0.0
	108	108	21.91	0-0.5	0.0
	216	0	21.82		0.0
DFT-s-OFDM QPSK	1	1	21.76	0	0.0
	1	108	**21.85**		0.0
	1	214	21.74		0.0
	108	0	21.82	0-1	0.0
	108	54	**21.94**	0	0.0
	108	108	21.92	0-1	0.0
	216	0	21.83		0.0
DFT-s-OFDM 16QAM	1	1	21.61	0-1	0.0
CP-OFDM QPSK	1	1	21.82	0-1.5	0.0

Table 9-54
NR Band n66 Antenna F Measured P_{limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active) - 40 MHz Bandwidth

NR Band n66 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	349000 (1745 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	19.15	0	0.0
	1	108	19.39		0.0
	1	214	19.29		0.0
	108	0	19.32	0-0.5	0.0
	108	54	19.38	0	0.0
	108	108	19.47	0-0.5	0.0
	216	0	19.33		0.0
DFT-s-OFDM QPSK	1	1	19.18	0	0.0
	1	108	**19.47**		0.0
	1	214	19.39		0.0
	108	0	19.35	0-1	0.0
	108	54	19.41	0	0.0
	108	108	**19.45**	0-1	0.0
	216	0	19.37		0.0
DFT-s-OFDM 16QAM	1	1	19.31	0-1	0.0
CP-OFDM QPSK	1	1	19.35	0-1.5	0.0

9.4.5 NR Band n25

Table 9-55
NR Band n25 Antenna B Measured P_{Max} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	22.94	0	0.0
	1	108	23.11		0.0
	1	214	22.85		0.0
	108	0	22.60	0-0.5	0.5
	108	54	23.03	0	0.0
	108	108	22.52	0-0.5	0.5
	216	0	22.56		0.5
DFT-s-OFDM QPSK	1	1	22.98	0	0.0
	1	108	**23.16**		0.0
	1	214	22.91		0.0
	108	0	22.16	0-1	1.0
	108	54	**23.03**	0	0.0
	108	108	22.06	0-1	1.0
	216	0	22.07		1.0
DFT-s-OFDM 16QAM	1	1	22.05	0-1	1.0
CP-OFDM QPSK	1	1	21.49	0-1.5	1.5

Table 9-56
NR Band n25 Antenna B Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	376500 (1882.5 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	17.40	0	0.0
	1	108	17.50		0.0
	1	214	17.18		0.0
	108	0	17.48	0-0.5	0.0
	108	54	17.42	0	0.0
	108	108	17.40	0-0.5	0.0
	216	0	17.40		0.0
DFT-s-OFDM QPSK	1	1	17.34	0	0.0
	1	108	**17.53**		0.0
	1	214	17.24		0.0
	108	0	**17.49**	0-1	0.0
	108	54	17.41	0	0.0
	108	108	17.39	0-1	0.0
	216	0	17.43		0.0
DFT-s-OFDM 16QAM	1	1	17.32	0-1	0.0
CP-OFDM QPSK	1	1	17.29	0-1.5	0.0

Table 9-57
NR Band n25 Antenna F Measured P_{limit} for DSI = 4/5 (Head) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	376500 (1882.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	21.85	0	0.0
	1	108	22.12		0.0
	1	214	21.93		0.0
	108	0	22.13	0-0.5	0.0
	108	54	22.16	0	0.0
	108	108	22.15	0-0.5	0.0
	216	0	22.10		0.0
DFT-s-OFDM QPSK	1	1	21.96	0	0.0
	1	108	**22.28**		0.0
	1	214	22.13		0.0
	108	0	22.20	0-1	0.0
	108	54	**22.24**	0	0.0
	108	108	22.22	0-1	0.0
	216	0	22.20		0.0
DFT-s-OFDM 16QAM	1	1	21.85	0-1	0.0
CP-OFDM QPSK	1	1	22.06	0-1.5	0.0

Table 9-58
NR Band n25 Antenna F Measured P_{limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active) - 40 MHz Bandwidth

NR Band n25 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	376500 (1882.5 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	19.37	0	0.0
	1	108	19.61		0.0
	1	214	19.43		0.0
	108	0	19.56	0-0.5	0.0
	108	54	19.56	0	0.0
	108	108	19.63	0-0.5	0.0
	216	0	19.56		0.0
DFT-s-OFDM QPSK	1	1	19.49	0	0.0
	1	108	**19.69**		0.0
	1	214	19.55		0.0
	108	0	19.56	0-1	0.0
	108	54	19.60	0	0.0
	108	108	**19.66**	0-1	0.0
	216	0	19.58		0.0
DFT-s-OFDM 16QAM	1	1	19.54	0-1	0.0
CP-OFDM QPSK	1	1	19.54	0-1.5	0.0

9.4.6 NR Band n30

Table 9-59
NR Band n30 Antenna B Measured P_{Limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	22.23	0	0.0
	1	26	22.27		0.0
	1	50	22.28		0.0
	25	0	21.74	0-0.5	0.0
	25	14	21.54	0	0.0
	25	27	22.07	0-0.5	0.0
	50	0	22.18		0.0
DFT-s-OFDM QPSK	1	1	**21.65**	0	0.0
	1	26	21.40		0.0
	1	50	21.56		0.0
	25	0	21.67	0-1	0.0
	25	14	**21.82**	0	0.0
	25	27	21.36	0-1	0.0
	50	0	21.61		0.0
DFT-s-OFDM 16QAM	1	1	22.10	0-1	0.0
CP-OFDM QPSK	1	1	21.19	0-1.5	0.5

Table 9-60
NR Band n30 Antenna B Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	16.80	0	0.0
	1	26	16.82		0.0
	1	50	16.65		0.0
	25	0	16.80	0-0.5	0.0
	25	14	16.77	0	0.0
	25	27	16.71	0-0.5	0.0
	50	0	16.75		0.0
DFT-s-OFDM QPSK	1	1	16.60	0	0.0
	1	26	**16.69**		0.0
	1	50	16.51		0.0
	25	0	16.65	0-1	0.0
	25	14	**16.69**	0	0.0
	25	27	16.65	0-1	0.0
	50	0	16.66		0.0
DFT-s-OFDM 16QAM	1	1	16.72	0-1	0.0
CP-OFDM QPSK	1	1	16.66	0-1.5	0.0

Table 9-61
NR Band n30 Antenna F Measured P_{max} for DSI = 4/5 (Head) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	22.02	0	0.0
	1	26	22.05		0.0
	1	50	21.97		0.0
	25	0	21.61	0-0.5	0.5
	25	14	22.08	0	0.0
	25	27	21.58	0-0.5	0.5
	50	0	21.56		0.5
DFT-s-OFDM QPSK	1	1	22.01	0	0.0
	1	26	**22.03**		0.0
	1	50	21.87		0.0
	25	0	21.17	0-1	1.0
	25	14	**22.11**	0	0.0
	25	27	21.10	0-1	1.0
	50	0	21.13		1.0
DFT-s-OFDM 16QAM	1	1	21.42	0-1	1.0
CP-OFDM QPSK	1	1	20.60	0-1.5	1.5

Table 9-62
NR Band n30 Antenna F Measured P_{limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active) - 10 MHz Bandwidth

NR Band n30 10 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	462000 (2310 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	19.59	0	0.0
	1	26	19.55		0.0
	1	50	19.46		0.0
	25	0	19.59	0-0.5	0.0
	25	14	19.60	0	0.0
	25	27	19.52	0-0.5	0.0
	50	0	19.56		0.0
DFT-s-OFDM QPSK	1	1	**19.55**	0	0.0
	1	26	19.42		0.0
	1	50	19.31		0.0
	25	0	**19.49**	0-1	0.0
	25	14	19.48	0	0.0
	25	27	19.47	0-1	0.0
	50	0	19.46		0.0
DFT-s-OFDM 16QAM	1	1	19.72	0-1	0.0
CP-OFDM QPSK	1	1	19.65	0-1.5	0.0

9.4.7 NR Band n7

Table 9-63
NR Band n7 Antenna B Measured P_{Limit} for DSI = 0/1 (Body-worn, or Phablet/UMPC with grip sensor inactive), or DSI = 4/5 (Head) - 40 MHz Bandwidth

NR Band n7 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	507000 (2535 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	21.46	0	0.0
	1	108	21.28		0.0
	1	214	21.56		0.0
	108	0	21.39	0-0.5	0.0
	108	54	21.29	0	0.0
	108	108	21.33	0-0.5	0.0
	216	0	21.46		0.0
DFT-s-OFDM QPSK	1	1	21.57	0	0.0
	1	108	21.30		0.0
	1	214	**21.62**		0.0
	108	0	**21.45**	0-1	0.0
	108	54	21.25	0	0.0
	108	108	21.43	0-1	0.0
	216	0	21.44		0.0
DFT-s-OFDM 16QAM	1	1	21.50	0-1	0.0
CP-OFDM QPSK	1	1	21.53	0-1.5	0.0

Table 9-64
NR Band n7 Antenna B Measured P_{limit} for DSI = 2/3 (Phablet or UMPC Extremity with grip sensor active), or DSI = 6/7 (Hotspot Mode), and/or DSI = 8/9 (Earjack active) - 40 MHz Bandwidth

NR Band n7 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	507000 (2535 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	17.13	0	0.0
	1	108	16.82		0.0
	1	214	17.16		0.0
	108	0	17.01	0-0.5	0.0
	108	54	16.84	0	0.0
	108	108	16.94	0-0.5	0.0
	216	0	16.98		0.0
DFT-s-OFDM QPSK	1	1	17.05	0	0.0
	1	108	16.88		0.0
	1	214	**17.08**		0.0
	108	0	16.97	0-1	0.0
	108	54	16.85	0	0.0
	108	108	**16.99**	0-1	0.0
	216	0	16.98		0.0
DFT-s-OFDM 16QAM	1	1	17.01	0-1	0.0
CP-OFDM QPSK	1	1	17.13	0-1.5	0.0

Table 9-65
NR Band n7 Antenna F Measured P_{max} for DSI = 5 (Head) - 40 MHz Bandwidth

NR Band n7 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	507000 (2535 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	23.31	0	0.0
	1	108	23.10		0.0
	1	214	23.44		0.0
	108	0	22.80	0-0.5	0.5
	108	54	23.16	0	0.0
	108	108	22.83	0-0.5	0.5
	216	0	22.80		0.5
DFT-s-OFDM QPSK	1	1	23.26	0	0.0
	1	108	23.06		0.0
	1	214	**23.28**		0.0
	108	0	22.33	0-1	1.0
	108	54	**23.16**	0	0.0
	108	108	22.36	0-1	1.0
	216	0	22.34		1.0
DFT-s-OFDM 16QAM	1	1	22.62	0-1	1.0
CP-OFDM QPSK	1	1	21.71	0-1.5	1.5

Table 9-66
NR Band n7 Antenna F Measured P_{limit} for DSI = 1 (Body-worn, or Phablet with grip sensor inactive), DSI = 3 (Phablet with grip sensor active), or DSI = 7 (Hotspot Mode), and/or DSI = 9 (Earjack active) - 40 MHz Bandwidth

NR Band n7 40 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	507000 (2535 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]		
DFT-s-OFDM π/2 BPSK	1	1	17.83	0	0.0
	1	108	17.64		0.0
	1	214	17.99		0.0
	108	0	17.75	0-0.5	0.0
	108	54	17.63	0	0.0
	108	108	17.81	0-0.5	0.0
	216	0	17.76		0.0
DFT-s-OFDM QPSK	1	1	17.85	0	0.0
	1	108	17.65		0.0
	1	214	**17.96**		0.0
	108	0	17.72	0-1	0.0
	108	54	17.67	0	0.0
	108	108	**17.81**	0-1	0.0
	216	0	17.78		0.0
DFT-s-OFDM 16QAM	1	1	17.80	0-1	0.0
CP-OFDM QPSK	1	1	17.84	0-1.5	0.0

9.4.8 NR Band n41

Table 9-67
NR Band n41 Antenna F Measured P_{Limit} for all DSI - 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	518598 (2592.99 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	17.99	0	0.0
	1	137	17.88		0.0
	1	271	17.82		0.0
	135	0	17.86	0-0.5	0.0
	135	69	17.90	0	0.0
	135	138	17.83	0-0.5	0.0
	270	0	17.89		0.0
DFT-s-OFDM QPSK	1	1	**18.02**	0	0.0
	1	137	17.88		0.0
	1	271	17.84		0.0
	135	0	17.87	0-1	0.0
	135	69	**17.90**	0	0.0
	135	138	17.87	0-1	0.0
	270	0	17.88		0.0
DFT-s-OFDM 16QAM	1	1	18.21	0-1	0.0
CP-OFDM QPSK	1	1	17.86	0-1.5	0.0

Table 9-68
NR Band n41 Antenna B, E, C Measured P_{Limit} for all DSI – 100 MHz Bandwidth

NR Band n41 100 MHz Bandwidth	
	Channel
Antenna	518598 (2592.99 MHz) Conducted Power [dBm]
SRS#2 Ant B	15.19
SRS#3 Ant E	14.94
SRS#4 Ant C	10.97

9.4.9 NR Band n48

Table 9-69
NR Band n48 Antenna F Measured P_{Limit} for all DSI - 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth							
			Channel				
Modulation	RB Size	RB Offset	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)	MPR Allowed per 3GPP [dB]	MPR [dB]
			Conducted Power [dBm]				
DFT-s-OFDM π/2 BPSK	1	1	17.54	17.99	17.81	0	0.0
	1	53	17.69	18.21	17.58		0.0
	1	104	17.93	18.07	17.48		0.0
	50	0	17.54	18.04	17.68	0-0.5	0.0
	50	28	17.62	18.04	17.51	0	0.0
	50	56	17.73	18.00	17.43	0-0.5	0.0
	100	0	17.62	18.05	17.55		0.0
DFT-s-OFDM QPSK	1	1	17.51	18.01	17.83	0	0.0
	1	53	17.67	**18.19**	17.59		0.0
	1	104	17.95	18.06	17.51		0.0
	50	0	17.51	18.02	17.67	0-1	0.0
	50	28	17.57	**18.04**	17.50	0	0.0
	50	56	17.70	18.01	17.43	0-1	0.0
	100	0	17.61	18.02	17.54		0.0
DFT-s-OFDM 16QAM	1	1	17.24	18.21	17.97	0-1	0.0
CP-OFDM QPSK	1	1	17.31	17.75	17.54	0-1.5	0.0

Table 9-70
NR Band n48 Antenna E, G, D Measured P_{Limit} for all DSI – 40 MHz Bandwidth

NR Band n48 40 MHz Bandwidth			
	Channel		
Modulation	638000 (3570 MHz)	641666 (3624.99 MHz)	645332 (3679.98 MHz)
	Conducted Power [dBm]		
SRS #2 Ant E	14.16	14.35	14.04
SRS #3 Ant G	15.08	15.66	15.05
SRS #4 Ant D	12.44	12.73	11.85

9.4.10 NR Band n77 DoD

Table 9-71
NR Band n77 Antenna F DoD Measured P_{Limit} for all DSI - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	633334 (3500.01 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	17.94	0	0.0
	1	137	18.01		0.0
	1	271	18.20		0.0
	135	0	18.12	0-0.5	0.0
	135	69	18.07	0	0.0
	135	138	18.02	0-0.5	0.0
	270	0	18.07		0.0
DFT-s-OFDM QPSK	1	1	18.01	0	0.0
	1	137	18.03		0.0
	1	271	**18.22**		0.0
	135	0	18.04	0-1	0.0
	135	69	18.05	0	0.0
	135	138	**18.07**	0-1	0.0
	270	0	18.06		0.0
DFT-s-OFDM 16QAM	1	1	18.30	0-1	0.0
CP-OFDM QPSK	1	1	17.94	0-1.5	0.0

Table 9-72
NR Band n77 Antenna E DoD Measured P_{Limit} for all DSI - 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth					
			Channel		
Modulation	RB Size	RB Offset	633334 (3500.01 MHz) Conducted Power [dBm]	MPR Allowed per 3GPP [dB]	MPR [dB]
DFT-s-OFDM π/2 BPSK	1	1	18.45	0	0.0
	1	137	18.69		0.0
	1	271	18.77		0.0
	135	0	18.63	0-0.5	0.0
	135	69	18.60	0	0.0
	135	138	18.60	0-0.5	0.0
	270	0	18.59		0.0
DFT-s-OFDM QPSK	1	1	**18.83**	0	0.0
	1	137	18.71		0.0
	1	271	18.55		0.0
	135	0	**18.71**	0-1	0.0
	135	69	18.66	0	0.0
	135	138	18.60	0-1	0.0
	270	0	18.70		0.0
DFT-s-OFDM 16QAM	1	1	18.68	0-1	0.0
CP-OFDM QPSK	1	1	18.36	0-1.5	0.0

Table 9-73
NR Band n77 Antenna G, D DoD Measured P_{Limit} for all DSI – 100 MHz Bandwidth

NR Band n77 DoD 100 MHz Bandwidth	
	Channel
Antenna	633334 (3500.01 MHz)
	Conducted Power [dBm]
SRS#3 Ant G	14.82
SRS#3 Ant D	14.97

9.4.11 NR Band n77 C-Band

Table 9-74
NR Band n77 Antenna F C-Band Measured P_{Limit} for all DSI - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	18.31	18.19	0	0.0
	1	137	18.28	18.36		0.0
	1	271	18.19	18.11		0.0
	135	0	18.27	18.26	0-0.5	0.0
	135	69	18.22	18.29	0	0.0
	135	138	18.16	18.19	0-0.5	0.0
	270	0	18.30	18.24		0.0
DFT-s-OFDM QPSK	1	1	**18.40**	18.29	0	0.0
	1	137	18.38	18.39		0.0
	1	271	18.25	18.19		0.0
	135	0	**18.39**	18.29	0-1	0.0
	135	69	18.30	18.27	0	0.0
	135	138	18.19	18.25	0-1	0.0
	270	0	18.37	18.27		0.0
DFT-s-OFDM 16QAM	1	1	18.28	18.38	0-1	0.0
CP-OFDM QPSK	1	1	18.38	18.05	0-1.5	0.0

Table 9-75
NR Band n77 Antenna E C-Band Measured P_{Limit} for all DSI - 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth						
			Channel		MPR Allowed per 3GPP [dB]	MPR [dB]
Modulation	RB Size	RB Offset	650000 (3750 MHz)	662000 (3930 MHz)		
			Conducted Power [dBm]			
DFT-s-OFDM π/2 BPSK	1	1	18.52	19.02	0	0.0
	1	137	18.84	19.36		0.0
	1	271	18.91	19.32		0.0
	135	0	18.74	19.15	0-0.5	0.0
	135	69	18.78	19.23	0	0.0
	135	138	18.82	19.31	0-0.5	0.0
	270	0	18.81	19.22		0.0
DFT-s-OFDM QPSK	1	1	18.58	19.07	0	0.0
	1	137	18.81	**19.32**		0.0
	1	271	18.83	19.28		0.0
	135	0	18.74	19.18	0-1	0.0
	135	69	18.80	**19.28**	0	0.0
	135	138	18.82	19.27	0-1	0.0
	270	0	18.81	19.20		0.0
DFT-s-OFDM 16QAM	1	1	18.80	19.20	0-1	0.0
CP-OFDM QPSK	1	1	18.42	18.86	0-1.5	0.0

Table 9-76
NR Band n77 Antenna G, D C-Band Measured P_{Limit} for all DSI – 100 MHz Bandwidth

NR Band n77 100 MHz Bandwidth		
	Channel	
Antenna	650000 (3750 MHz)	662000 (3930 MHz)
	Conducted Power [dBm]	
SRS#3 Ant G	14.74	15.02
SRS#4 Ant D	15.10	14.41

Figure 9-4
Power Measurement Setup – NR FDD

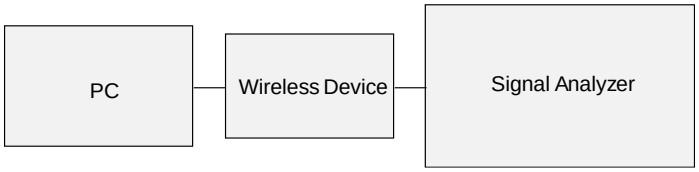

Figure 9-5
Power Measurement Setup – NR TDD

9.5 WLAN Conducted Powers

Table 9-77
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
2412	1	18.41	17.61	17.89	17.64
2437	6	18.41	17.54	17.81	17.63
2462	11	18.44	17.63	17.48	17.70

Table 9-78
2.4 GHz WLAN Maximum Average RF Power – MIMO

2.4GHz 802.11b Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
2412	1	18.99	18.41	21.72
2437	6	18.88	18.41	21.66
2462	11	18.97	18.44	21.72

Table 9-79
2.4 GHz WLAN Reduced Average RF Power with RCV Active – Ant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax
2412	1	12.49	12.51	12.89	12.38
2437	6	12.85	12.33	12.73	12.44
2462	11	12.45	12.44	12.86	12.33

Table 9-80
2.4 GHz WLAN Reduced Average RF Power with RCV Active – MIMO

2.4GHz 802.11n Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
2412	1	12.49	12.89	15.70
2437	6	12.36	12.73	15.56
2462	11	12.44	12.86	15.67

Table 9-81
2.4 GHz WLAN Reduced Average RF Power During Conditions with 5/6 GHz WLAN and/or 5G NR – Ant 2

2.4GHz Conducted Power [dBm]					
Freq [MHz]	Channel	IEEE Transmission Mode			
		802.11b	802.11g	802.11n	802.11ax
2412	1	14.87	14.62	14.73	14.38
2437	6	14.44	14.47	14.62	14.23
2462	11	14.88	14.71	14.78	14.78

Table 9-82
2.4 GHz WLAN Reduced Average RF Power During Conditions with 5/6 GHz WLAN and/or 5G NR – MIMO

2.4GHz 802.11n Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
2412	1	14.22	14.73	17.49
2437	6	14.65	14.62	17.65
2462	11	14.13	14.78	17.48

Table 9-83
5 GHz WLAN Maximum Average RF Power – MIMO

5GHz (20MHz) 802.11n Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
5180	36	17.63	17.56	20.61
5200	40	17.58	17.92	20.76
5220	44	17.81	17.59	20.71
5240	48	17.71	17.67	20.70
5260	52	17.90	17.42	20.68
5280	56	17.84	17.44	20.65
5300	60	17.71	17.68	20.71
5320	64	17.67	17.70	20.70
5500	100	17.85	17.99	20.93
5600	120	17.79	17.55	20.68
5620	124	17.69	17.54	20.63
5720	144	17.68	17.76	20.73
5745	149	17.58	17.71	20.66
5785	157	17.74	17.74	20.75
5825	165	17.95	17.78	20.88
5845	169	17.88	17.49	20.70
5865	173	17.65	17.60	20.64
5885	177	17.43	17.38	20.42

Table 9-84
5 GHz WLAN Reduced Average RF Power with RCV Active – MIMO

5GHz (80MHz) 802.11ac Conducted Power [dBm]				
Freq [MHz]	Channel	ANT1	ANT2	MIMO
5210	42	11.56	10.27	13.97
5290	58	11.74	11.21	14.49
5530	106	11.88	10.64	14.31
5610	122	11.42	10.50	13.99
5690	138	11.57	11.28	14.44
5775	155	11.73	10.84	14.32
5855	171	11.90	10.74	14.37

Table 9-85
5 GHz WLAN Reduced Average RF Power During Conditions with 5/6 GHz WLAN and/or 5G NR – MIMO

5GHz (80MHz) 802.11ac Conducted Power [dBm]				
Freq [MHz]	**Channel**	**ANT1**	**ANT2**	**MIMO**
5210	42	14.93	14.34	17.66
5290	58	14.53	14.05	17.31
5530	106	14.91	14.19	17.58
5610	122	14.68	14.19	17.45
5690	138	14.43	14.09	17.27
5775	155	14.61	14.47	17.55
5855	171	14.49	14.16	17.34

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

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

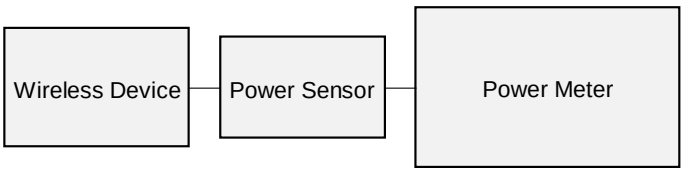

Figure 9-6
Power Measurement Setup

9.6 Bluetooth Conducted Powers

Table 9-86
Bluetooth Maximum Average RF Power– Antenna 1

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Avg Conducted Power	
					[dBm]	[mW]
2402	1.0	GFSK	ePA	0	18.57	71.928
2441	1.0	GFSK	ePA	39	18.77	75.266
2480	1.0	GFSK	ePA	78	18.58	72.078
2402	2.0	π/4-DQPSK	ePA	0	15.55	35.892
2441	2.0	π/4-DQPSK	ePA	39	15.16	32.817
2480	2.0	π/4-DQPSK	ePA	78	14.85	30.514
2402	3.0	8DPSK	ePA	0	15.56	35.975
2441	3.0	8DPSK	ePA	39	15.18	32.984
2480	3.0	8DPSK	ePA	78	15.14	32.651

Table 9-87
Bluetooth Maximum Average RF Power– Antenna 2

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Avg Conducted Power	
					[dBm]	[mW]
2402	1.0	GFSK	ePA	0	15.30	33.908
2441	1.0	GFSK	ePA	39	15.82	38.186
2480	1.0	GFSK	ePA	78	14.01	25.188
2402	2.0	π/4-DQPSK	ePA	0	12.25	16.784
2441	2.0	π/4-DQPSK	ePA	39	12.89	19.440
2480	2.0	π/4-DQPSK	ePA	78	11.07	12.800
2402	3.0	8DPSK	ePA	0	12.29	16.959
2441	3.0	8DPSK	ePA	39	12.97	19.792
2480	3.0	8DPSK	ePA	78	11.15	13.032

Table 9-88
Bluetooth Reduced Average RF Power with RCV Active – Antenna 1

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Avg Conducted Power	
					[dBm]	[mW]
2402	1.0	GFSK	ePA	0	11.00	12.589
2441	1.0	GFSK	ePA	39	11.14	13.002
2480	1.0	GFSK	ePA	78	11.11	12.912

Table 9-89
Bluetooth Reduced Average RF Power with RCV Active – Antenna 2

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Avg Conducted Power	
					[dBm]	[mW]
2402	1.0	GFSK	ePA	0	8.44	6.982
2441	1.0	GFSK	ePA	39	9.10	8.128
2480	1.0	GFSK	ePA	78	7.50	5.623

Table 9-90
Bluetooth Reduced Average RF Power During Conditions with 5/6 GHz WLAN and/or 5G NR – Antenna 1

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Avg Conducted Power	
					[dBm]	[mW]
2402	1.0	GFSK	ePA	0	14.50	28.184
2441	1.0	GFSK	ePA	39	14.80	30.200
2480	1.0	GFSK	ePA	78	14.63	29.040

Table 9-91
Bluetooth Reduced Average RF Power During Conditions with 5/6 GHz WLAN and/or 5G NR – Antenna 2

Frequency [MHz]	Data Rate [Mbps]	Mod.	Power Scheme	Channel No.	Avg Conducted Power	
					[dBm]	[mW]
2402	1.0	GFSK	ePA	0	11.96	15.704
2441	1.0	GFSK	ePA	39	12.72	18.707
2480	1.0	GFSK	ePA	78	11.00	12.589

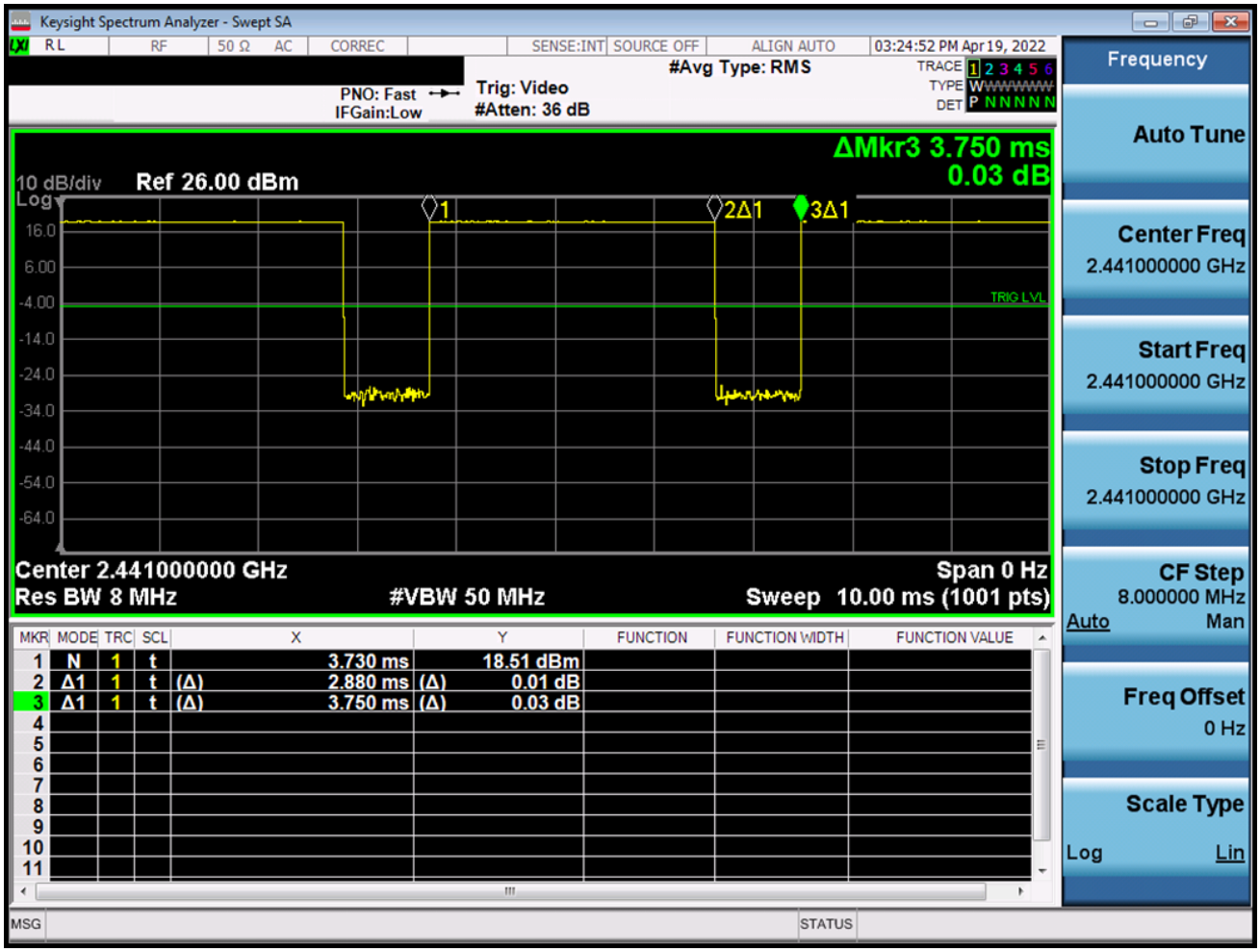

Figure 9-7
Bluetooth Antenna 1 Transmission Plot

Equation 9-1
Bluetooth Antenna 1 Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.880ms}{3.750ms} * 100\% = 76.80\%$$

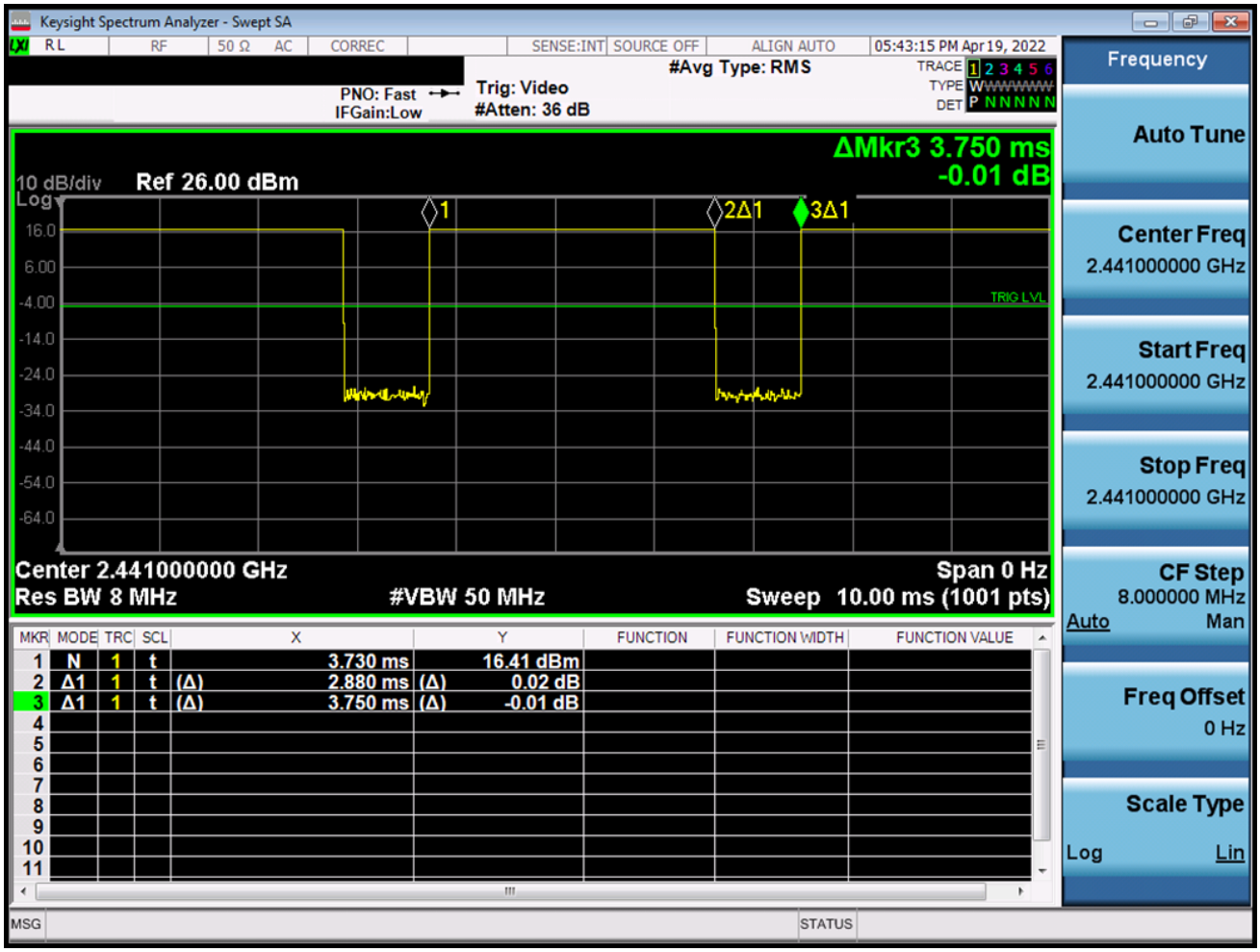

Figure 9-8
Bluetooth Antenna 2 Transmission Plot

Equation 9-2
Bluetooth Antenna 2 Duty Cycle Calculation

$$Duty\ Cycle = \frac{Pulse\ Width}{Period} * 100\% = \frac{2.880ms}{3.750ms} * 100\% = 76.80\%$$

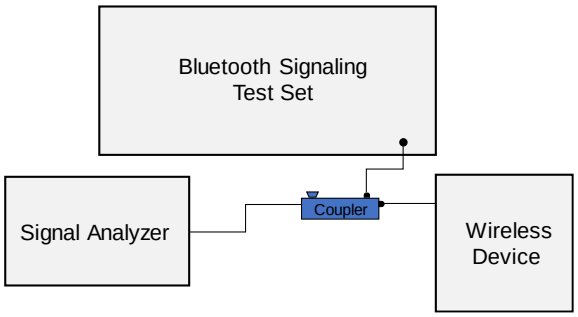

Figure 9-9
Power Measurement Setup

10 SYSTEM VERIFICATION

10.1 Tissue Verification

Table 10-1
Measured Head Tissue Properties

Calibrated for Tests Performed on:	Tissue Type	Tissue Temp During Calibration (°C)	Measured Frequency (MHz)	Measured Conductivity, σ (S/m)	Measured Dielectric Constant, ε	TARGET Conductivity, σ (S/m)	TARGET Dielectric Constant, ε	% dev σ	% dev ε
06/09/2022	30 Head	21.5	12	0.762	52.265	0.750	55.000	1.60%	-4.97%
			13	0.762	52.537	0.750	55.000	1.60%	-4.48%
			14	0.762	52.681	0.750	55.000	1.60%	-4.22%
			30	0.764	53.410	0.750	55.000	1.87%	-2.89%
			60	0.769	53.180	0.753	54.325	2.12%	-2.11%
			65	0.771	53.098	0.753	54.213	2.39%	-2.06%
04/28/2022	750 Head	20.9	680	0.881	40.276	0.888	42.305	-0.79%	-4.80%
			695	0.885	40.240	0.889	42.227	-0.45%	-4.71%
			700	0.887	40.233	0.889	42.201	-0.22%	-4.66%
			710	0.890	40.209	0.890	42.149	0.00%	-4.60%
			725	0.895	40.176	0.891	42.071	0.45%	-4.50%
			750	0.904	40.118	0.894	41.942	1.12%	-4.35%
			770	0.911	40.069	0.895	41.838	1.79%	-4.23%
			785	0.916	40.032	0.896	41.760	2.23%	-4.14%
			800	0.922	39.991	0.897	41.682	2.79%	-4.06%
05/03/2022	750 Head	21.2	680	0.879	40.460	0.888	42.305	-1.01%	-4.36%
			695	0.884	40.419	0.889	42.227	-0.56%	-4.28%
			700	0.885	40.407	0.889	42.201	-0.45%	-4.25%
			710	0.888	40.379	0.890	42.149	-0.22%	-4.20%
			725	0.893	40.336	0.891	42.071	0.22%	-4.12%
			750	0.902	40.278	0.894	41.942	0.89%	-3.97%
			770	0.909	40.237	0.895	41.838	1.56%	-3.83%
			785	0.914	40.206	0.896	41.760	2.01%	-3.72%
			800	0.920	40.161	0.897	41.682	2.56%	-3.65%
05/10/2022	750 Head	21.6	680	0.895	41.255	0.888	42.305	0.79%	-2.48%
			695	0.899	41.214	0.889	42.227	1.12%	-2.40%
			700	0.901	41.200	0.889	42.201	1.35%	-2.37%
			710	0.904	41.172	0.890	42.149	1.57%	-2.32%
			725	0.909	41.122	0.891	42.071	2.02%	-2.26%
			750	0.917	41.039	0.894	41.942	2.57%	-2.15%
			770	0.924	40.985	0.895	41.838	3.24%	-2.04%
			785	0.929	40.950	0.896	41.760	3.68%	-1.94%
			800	0.935	40.915	0.897	41.682	4.24%	-1.84%
05/31/2022	750 Head	22.5	680	0.887	42.994	0.888	42.305	-0.11%	1.63%
			695	0.891	42.965	0.889	42.227	0.22%	1.75%
			700	0.893	42.955	0.889	42.201	0.45%	1.79%
			710	0.897	42.925	0.890	42.149	0.79%	1.84%
			725	0.902	42.878	0.891	42.071	1.23%	1.92%
			750	0.910	42.812	0.894	41.942	1.79%	2.07%
			770	0.916	42.756	0.895	41.838	2.35%	2.19%
			785	0.921	42.704	0.896	41.760	2.79%	2.26%
			800	0.926	42.647	0.897	41.682	3.23%	2.32%
04/27/2022	835 Head	21.5	815	0.937	40.150	0.898	41.594	4.34%	-3.47%
			820	0.939	40.134	0.899	41.578	4.45%	-3.47%
			835	0.944	40.086	0.900	41.500	4.89%	-3.41%
			850	0.950	40.049	0.916	41.500	3.71%	-3.50%
05/02/2022	835 Head	20.5	815	0.937	39.705	0.898	41.594	4.34%	-4.54%
			820	0.939	39.690	0.899	41.578	4.45%	-4.54%
			835	0.944	39.651	0.900	41.500	4.89%	-4.46%
			850	0.950	39.623	0.916	41.500	3.71%	-4.52%
05/16/2022	835 Head	21.5	815	0.934	40.011	0.898	41.594	4.01%	-3.81%
			820	0.936	39.996	0.899	41.578	4.12%	-3.80%
			835	0.942	39.956	0.900	41.500	4.67%	-3.72%
			850	0.947	39.920	0.916	41.500	3.38%	-3.81%
05/18/2022	835 Head	21.2	815	0.937	39.714	0.898	41.594	4.34%	-4.52%
			820	0.939	39.697	0.899	41.578	4.45%	-4.52%
			835	0.944	39.656	0.900	41.500	4.89%	-4.44%
			850	0.950	39.627	0.916	41.500	3.71%	-4.51%
06/02/2022	835 Head	22.5	815	0.933	43.273	0.898	41.594	3.90%	4.04%
			820	0.935	43.257	0.899	41.578	4.00%	4.04%
			835	0.940	43.222	0.900	41.500	4.44%	4.15%
			850	0.946	43.195	0.916	41.500	3.28%	4.08%
04/20/2022	1750 Head	21.0	1710	1.284	38.922	1.348	40.142	-4.75%	-3.04%
			1720	1.295	38.873	1.354	40.126	-4.36%	-3.12%
			1745	1.322	38.760	1.368	40.087	-3.36%	-3.31%
			1750	1.327	38.737	1.371	40.079	-3.21%	-3.35%
			1770	1.348	38.641	1.383	40.047	-2.53%	-3.51%
			1790	1.367	38.537	1.394	40.016	-1.94%	-3.70%
06/09/2022	1750 Head	22.1	1710	1.308	40.768	1.348	40.142	-2.97%	1.56%
			1720	1.314	40.758	1.354	40.126	-2.95%	1.58%
			1745	1.330	40.746	1.368	40.087	-2.78%	1.64%
			1750	1.333	40.744	1.371	40.079	-2.77%	1.66%
			1770	1.344	40.721	1.383	40.047	-2.82%	1.68%
			1790	1.357	40.685	1.394	40.016	-2.65%	1.67%
04/24/2022	1900 Head	21.1	1850	1.399	40.111	1.400	40.000	-0.07%	0.28%
			1860	1.411	40.069	1.400	40.000	0.79%	0.17%
			1880	1.432	39.989	1.400	40.000	2.29%	-0.03%
			1900	1.453	39.902	1.400	40.000	3.79%	-0.24%
			1905	1.458	39.881	1.400	40.000	4.14%	-0.30%
			1910	1.464	39.860	1.400	40.000	4.57%	-0.35%

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
06/12/2022	1900 Head	20.1	1850	1.377	39.269	1.400	40.000	-1.64%	-1.83%
			1860	1.382	39.250	1.400	40.000	-1.29%	-1.88%
			1880	1.392	39.205	1.400	40.000	-0.57%	-1.99%
			1900	1.405	39.170	1.400	40.000	0.36%	-2.08%
			1905	1.408	39.164	1.400	40.000	0.57%	-2.09%
			1910	1.411	39.158	1.400	40.000	0.79%	-2.11%
05/11/2022	2450 Head	21.0	2300	1.745	40.566	1.670	39.500	4.49%	2.70%
			2310	1.753	40.550	1.679	39.480	4.41%	2.71%
			2320	1.762	40.537	1.687	39.460	4.45%	2.73%
			2400	1.828	40.420	1.756	39.289	4.10%	2.88%
			2450	1.873	40.336	1.800	39.200	4.06%	2.90%
			2480	1.897	40.292	1.833	39.162	3.49%	2.89%
			2500	1.913	40.253	1.855	39.136	3.13%	2.85%
			2510	1.922	40.232	1.866	39.123	3.00%	2.83%
			2535	1.945	40.177	1.893	39.092	2.75%	2.78%
			2550	1.959	40.152	1.909	39.073	2.62%	2.76%
			2560	1.968	40.138	1.920	39.060	2.50%	2.76%
			2600	2.002	40.075	1.964	39.009	1.93%	2.73%
			2650	2.045	39.974	2.018	38.945	1.34%	2.64%
			2680	2.072	39.914	2.051	38.907	1.02%	2.59%
			2700	2.087	39.878	2.073	38.882	0.68%	2.56%
05/11/2022	2450 Head	22.6	2300	1.695	39.173	1.670	39.500	1.50%	-0.83%
			2310	1.706	39.134	1.679	39.480	1.61%	-0.88%
			2320	1.717	39.099	1.687	39.460	1.78%	-0.91%
			2400	1.803	38.831	1.756	39.289	2.68%	-1.17%
			2450	1.859	38.650	1.800	39.200	3.28%	-1.40%
			2480	1.890	38.535	1.833	39.162	3.11%	-1.60%
			2500	1.911	38.456	1.855	39.136	3.02%	-1.74%
			2510	1.922	38.419	1.866	39.123	3.00%	-1.80%
			2535	1.951	38.331	1.893	39.092	3.06%	-1.95%
			2550	1.968	38.275	1.909	39.073	3.09%	-2.04%
			2560	1.978	38.237	1.920	39.060	3.02%	-2.11%
			2600	2.020	38.085	1.964	39.009	2.85%	-2.37%
			2650	2.075	37.906	2.018	38.945	2.82%	-2.67%
			2680	2.106	37.793	2.051	38.907	2.68%	-2.86%
			2700	2.125	37.721	2.073	38.882	2.51%	-2.99%
05/15/2022	2450 Head	22.7	2300	1.661	39.890	1.670	39.500	-0.54%	0.99%
			2310	1.671	39.864	1.679	39.480	-0.48%	0.97%
			2320	1.680	39.828	1.687	39.460	-0.41%	0.93%
			2400	1.765	39.562	1.756	39.289	0.51%	0.69%
			2450	1.811	39.334	1.800	39.200	0.61%	0.34%
			2480	1.847	39.259	1.833	39.162	0.76%	0.25%
			2500	1.867	39.213	1.855	39.136	0.65%	0.20%
			2510	1.876	39.174	1.866	39.123	0.54%	0.13%
			2535	1.898	39.041	1.893	39.092	0.26%	-0.13%
			2550	1.916	38.972	1.909	39.073	0.37%	-0.26%
			2560	1.929	38.944	1.920	39.060	0.47%	-0.30%
			2600	1.976	38.864	1.964	39.009	0.61%	-0.37%
			2650	2.025	38.604	2.018	38.945	0.35%	-0.88%
			2680	2.065	38.554	2.051	38.907	0.68%	-0.91%
			2700	2.083	38.515	2.073	38.882	0.48%	-0.94%
05/18/2022	2450 Head	22.8	2300	1.700	39.420	1.670	39.500	1.80%	-0.20%
			2310	1.710	39.372	1.679	39.480	1.85%	-0.27%
			2320	1.721	39.322	1.687	39.460	2.02%	-0.35%
			2400	1.802	39.053	1.756	39.289	2.62%	-0.60%
			2450	1.853	38.868	1.800	39.200	2.94%	-0.85%
			2480	1.883	38.789	1.833	39.162	2.73%	-0.95%
			2500	1.903	38.720	1.855	39.136	2.59%	-1.06%
			2510	1.913	38.681	1.866	39.123	2.52%	-1.13%
			2535	1.942	38.590	1.893	39.092	2.59%	-1.28%
			2550	1.960	38.541	1.909	39.073	2.67%	-1.36%
			2560	1.972	38.506	1.920	39.060	2.71%	-1.42%
			2600	2.015	38.354	1.964	39.009	2.60%	-1.68%
			2650	2.074	38.156	2.018	38.945	2.78%	-2.03%
			2680	2.107	38.046	2.051	38.907	2.73%	-2.21%
			2700	2.126	37.970	2.073	38.882	2.56%	-2.35%
06/05/2022	2450 Head	23.2	2300	1.614	38.967	1.670	39.500	-3.35%	-1.35%
			2310	1.624	38.928	1.679	39.480	-3.28%	-1.40%
			2320	1.635	38.894	1.687	39.460	-3.08%	-1.43%
			2400	1.717	38.631	1.756	39.289	-2.22%	-1.67%
			2450	1.768	38.468	1.800	39.200	-1.78%	-1.87%
			2480	1.799	38.370	1.833	39.162	-1.85%	-2.02%
			2500	1.819	38.301	1.855	39.136	-1.94%	-2.13%
			2510	1.829	38.268	1.866	39.123	-1.98%	-2.19%
			2535	1.856	38.184	1.893	39.092	-1.95%	-2.32%
			2550	1.873	38.138	1.909	39.073	-1.89%	-2.39%
			2560	1.884	38.106	1.920	39.060	-1.88%	-2.44%
			2600	1.925	37.978	1.964	39.009	-1.99%	-2.64%
			2650	1.979	37.809	2.018	38.945	-1.93%	-2.92%
			2680	2.010	37.713	2.051	38.907	-2.00%	-3.07%
			2700	2.029	37.645	2.073	38.882	-2.12%	-3.18%

Table 10-3
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
06/08/2022	2450 Head	23.0	2300	1.703	39.713	1.670	39.500	1.98%	0.54%
			2310	1.715	39.673	1.679	39.480	2.14%	0.49%
			2320	1.726	39.647	1.687	39.460	2.31%	0.47%
			2400	1.811	39.339	1.756	39.289	3.13%	0.13%
			2450	1.867	39.217	1.800	39.200	3.72%	0.04%
			2480	1.898	39.077	1.833	39.162	3.55%	-0.22%
			2500	1.921	38.981	1.855	39.136	3.56%	-0.40%
			2510	1.933	38.951	1.866	39.123	3.59%	-0.44%
			2535	1.963	38.910	1.893	39.092	3.70%	-0.47%
			2550	1.979	38.876	1.909	39.073	3.67%	-0.50%
			2560	1.990	38.839	1.920	39.060	3.65%	-0.57%
			2600	2.034	38.645	1.964	39.009	3.56%	-0.93%
			2650	2.093	38.516	2.018	38.945	3.72%	-1.10%
			2680	2.122	38.382	2.051	38.907	3.46%	-1.35%
			2700	2.143	38.287	2.073	38.882	3.38%	-1.53%
04/24/2022	3600 Head	21.2	3300	2.596	39.884	2.708	38.157	-4.14%	4.53%
			3350	2.645	39.833	2.759	38.100	-4.13%	4.55%
			3450	2.738	39.673	2.861	37.986	-4.30%	4.44%
			3500	2.782	39.543	2.913	37.929	-4.50%	4.26%
			3550	2.826	39.485	2.964	37.871	-4.66%	4.26%
			3560	2.834	39.450	2.974	37.860	-4.71%	4.20%
			3600	2.874	39.381	3.015	37.814	-4.68%	4.14%
			3650	2.918	39.320	3.066	37.757	-4.83%	4.14%
			3690	2.959	39.236	3.107	37.711	-4.76%	4.04%
			3700	2.969	39.231	3.117	37.700	-4.75%	4.06%
			3750	3.011	39.149	3.169	37.643	-4.99%	4.00%
			3900	3.169	38.936	3.323	37.471	-4.63%	3.91%
			3930	3.194	38.902	3.353	37.437	-4.74%	3.91%
			4100	3.377	38.655	3.528	37.243	-4.28%	3.79%
			4150	3.427	38.545	3.579	37.186	-4.25%	3.65%
05/02/2022	3600 Head	21.0	3300	2.627	39.984	2.708	38.157	-2.99%	4.79%
			3350	2.673	39.904	2.759	38.100	-3.12%	4.73%
			3450	2.767	39.724	2.861	37.986	-3.29%	4.58%
			3500	2.815	39.649	2.913	37.929	-3.36%	4.53%
			3550	2.862	39.553	2.964	37.871	-3.44%	4.44%
			3560	2.872	39.528	2.974	37.860	-3.43%	4.41%
			3600	2.911	39.470	3.015	37.814	-3.45%	4.38%
			3650	2.959	39.370	3.066	37.757	-3.49%	4.27%
			3690	2.998	39.321	3.107	37.711	-3.51%	4.27%
			3700	3.009	39.286	3.117	37.700	-3.46%	4.21%
			3750	3.063	39.198	3.169	37.643	-3.34%	4.13%
			3900	3.210	38.971	3.323	37.471	-3.40%	4.00%
			3930	3.248	38.911	3.353	37.437	-3.13%	3.94%
			4100	3.428	38.635	3.528	37.243	-2.83%	3.74%
			4150	3.488	38.578	3.579	37.186	-2.54%	3.74%
05/10/2022	3600 Head	20.0	3300	2.635	39.493	2.708	38.157	-2.70%	3.50%
			3350	2.677	39.397	2.759	38.100	-2.97%	3.40%
			3450	2.771	39.206	2.861	37.986	-3.15%	3.21%
			3500	2.824	39.147	2.913	37.929	-3.06%	3.21%
			3550	2.868	39.038	2.964	37.871	-3.24%	3.08%
			3560	2.880	39.028	2.974	37.860	-3.16%	3.09%
			3600	2.921	38.976	3.015	37.814	-3.12%	3.07%
			3650	2.966	38.862	3.066	37.757	-3.26%	2.93%
			3690	3.009	38.815	3.107	37.711	-3.15%	2.93%
			3700	3.016	38.800	3.117	37.700	-3.24%	2.92%
			3750	3.072	38.690	3.169	37.643	-3.06%	2.78%
			3900	3.220	38.461	3.323	37.471	-3.10%	2.64%
			3930	3.257	38.385	3.353	37.437	-2.86%	2.53%
			4100	3.434	38.102	3.528	37.243	-2.66%	2.31%
			4150	3.500	38.052	3.579	37.186	-2.21%	2.33%
06/05/2022	3600 Head	21.3	3300	2.633	39.610	2.708	38.157	-2.77%	3.81%
			3350	2.675	39.518	2.759	38.100	-3.04%	3.72%
			3450	2.769	39.342	2.861	37.986	-3.22%	3.57%
			3500	2.819	39.256	2.913	37.929	-3.23%	3.50%
			3550	2.865	39.153	2.964	37.871	-3.34%	3.39%
			3560	2.878	39.141	2.974	37.860	-3.23%	3.38%
			3600	2.918	39.097	3.015	37.814	-3.22%	3.39%
			3650	2.968	38.999	3.066	37.757	-3.20%	3.29%
			3690	3.010	38.951	3.107	37.711	-3.12%	3.29%
			3700	3.017	38.938	3.117	37.700	-3.21%	3.28%
			3750	3.068	38.829	3.169	37.643	-3.19%	3.15%
			3900	3.217	38.596	3.323	37.471	-3.19%	3.00%
			3930	3.255	38.537	3.353	37.437	-2.92%	2.94%
			4100	3.435	38.256	3.528	37.243	-2.64%	2.72%
			4150	3.496	38.197	3.579	37.186	-2.32%	2.72%

Table 10-4
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
05/19/2022	5200-5800 Head	22.2	5180	4.558	35.629	4.635	36.009	-1.66%	-1.06%
			5190	4.568	35.603	4.645	35.998	-1.66%	-1.10%
			5200	4.582	35.575	4.655	35.986	-1.57%	-1.14%
			5210	4.595	35.562	4.666	35.975	-1.52%	-1.15%
			5220	4.606	35.532	4.676	35.963	-1.50%	-1.20%
			5240	4.631	35.507	4.696	35.940	-1.38%	-1.20%
			5250	4.643	35.498	4.706	35.929	-1.34%	-1.20%
			5260	4.655	35.487	4.717	35.917	-1.31%	-1.20%
			5270	4.669	35.464	4.727	35.906	-1.23%	-1.23%
			5280	4.683	35.445	4.737	35.894	-1.14%	-1.25%
			5290	4.694	35.429	4.748	35.883	-1.14%	-1.27%
			5300	4.703	35.419	4.758	35.871	-1.16%	-1.26%
			5310	4.708	35.407	4.768	35.860	-1.26%	-1.26%
			5320	4.716	35.389	4.778	35.849	-1.30%	-1.28%
			5500	4.939	35.105	4.963	35.643	-0.48%	-1.51%
			5510	4.952	35.103	4.973	35.632	-0.42%	-1.48%
			5520	4.963	35.101	4.983	35.620	-0.40%	-1.46%
			5530	4.970	35.099	4.994	35.609	-0.48%	-1.43%
			5540	4.976	35.082	5.004	35.597	-0.56%	-1.45%
			5550	4.982	35.058	5.014	35.586	-0.64%	-1.48%
			5560	4.994	35.032	5.024	35.574	-0.60%	-1.52%
			5580	5.026	34.984	5.045	35.551	-0.38%	-1.59%
			5600	5.056	34.949	5.065	35.529	-0.18%	-1.63%
			5610	5.071	34.948	5.076	35.518	-0.10%	-1.60%
			5620	5.081	34.945	5.086	35.506	-0.10%	-1.58%
			5640	5.098	34.922	5.106	35.483	-0.16%	-1.58%
			5660	5.112	34.883	5.127	35.460	-0.29%	-1.63%
			5670	5.121	34.854	5.137	35.449	-0.31%	-1.68%
			5680	5.135	34.830	5.147	35.437	-0.23%	-1.71%
			5690	5.150	34.809	5.158	35.426	-0.16%	-1.74%
			5700	5.165	34.792	5.168	35.414	-0.06%	-1.76%
			5710	5.179	34.772	5.178	35.403	0.02%	-1.78%
			5720	5.192	34.759	5.188	35.391	0.08%	-1.79%
			5745	5.213	34.727	5.214	35.363	-0.02%	-1.80%
			5750	5.217	34.718	5.219	35.357	-0.04%	-1.81%
			5755	5.222	34.708	5.224	35.351	-0.04%	-1.82%
			5765	5.233	34.684	5.234	35.340	-0.02%	-1.86%
			5775	5.247	34.661	5.245	35.329	0.04%	-1.89%
			5785	5.261	34.636	5.255	35.317	0.11%	-1.93%
			5795	5.274	34.616	5.265	35.305	0.17%	-1.95%
			5805	5.285	34.589	5.275	35.294	0.19%	-2.00%
			5825	5.311	34.542	5.296	35.271	0.28%	-2.07%
			5835	5.323	34.536	5.305	35.230	0.34%	-1.97%
			5845	5.331	34.529	5.315	35.210	0.30%	-1.93%
			5855	5.336	34.512	5.325	35.197	0.21%	-1.95%
			5875	5.355	34.451	5.347	35.183	0.15%	-2.08%
			5885	5.367	34.426	5.357	35.177	0.19%	-2.13%
			5905	5.391	34.377	5.379	35.163	0.22%	-2.24%

Table 10-5
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
04/27/2022	750 Body	20.2	680	0.911	54.809	0.958	55.804	-4.91%	-1.78%
			695	0.917	54.797	0.959	55.745	-4.38%	-1.70%
			700	0.919	54.794	0.959	55.726	-4.17%	-1.67%
			710	0.922	54.788	0.960	55.687	-3.96%	-1.61%
			725	0.928	54.755	0.961	55.629	-3.43%	-1.57%
			750	0.937	54.693	0.964	55.531	-2.80%	-1.51%
			770	0.944	54.645	0.965	55.453	-2.18%	-1.46%
			785	0.950	54.613	0.966	55.395	-1.66%	-1.41%
			800	0.955	54.591	0.967	55.336	-1.24%	-1.35%
05/02/2022	750 Body	22.6	680	0.948	54.750	0.958	55.804	-1.04%	-1.89%
			695	0.953	54.714	0.959	55.745	-0.63%	-1.85%
			700	0.955	54.700	0.959	55.726	-0.42%	-1.84%
			710	0.958	54.675	0.960	55.687	-0.21%	-1.82%
			725	0.964	54.626	0.961	55.629	0.31%	-1.80%
			750	0.973	54.549	0.964	55.531	0.93%	-1.77%
			770	0.980	54.549	0.965	55.453	1.55%	-1.63%
			785	0.986	54.544	0.966	55.395	2.07%	-1.54%
			800	0.991	54.507	0.967	55.336	2.48%	-1.50%
05/04/2022	750 Body	21.4	680	0.938	54.898	0.958	55.804	-2.09%	-1.62%
			695	0.943	54.873	0.959	55.745	-1.67%	-1.56%
			700	0.945	54.863	0.959	55.726	-1.46%	-1.55%
			710	0.948	54.849	0.960	55.687	-1.25%	-1.50%
			725	0.954	54.818	0.961	55.629	-0.73%	-1.46%
			750	0.963	54.775	0.964	55.531	-0.10%	-1.36%
			770	0.971	54.727	0.965	55.453	0.62%	-1.31%
			785	0.977	54.693	0.966	55.395	1.14%	-1.27%
			800	0.983	54.659	0.967	55.336	1.65%	-1.22%
05/06/2022	750 Body	20.7	680	0.927	55.160	0.958	55.804	-3.24%	-1.15%
			695	0.931	55.133	0.959	55.745	-2.92%	-1.10%
			700	0.933	55.122	0.959	55.726	-2.71%	-1.08%
			710	0.936	55.099	0.960	55.687	-2.50%	-1.06%
			725	0.941	55.071	0.961	55.629	-2.08%	-1.00%
			750	0.951	55.029	0.964	55.531	-1.35%	-0.90%
			770	0.959	55.010	0.965	55.453	-0.62%	-0.80%
			785	0.965	54.980	0.966	55.395	-0.10%	-0.75%
			800	0.972	54.940	0.967	55.336	0.52%	-0.72%
05/09/2022	750 Body	21.0	680	0.940	54.501	0.958	55.804	-1.88%	-2.33%
			695	0.944	54.473	0.959	55.745	-1.56%	-2.28%
			700	0.946	54.465	0.959	55.726	-1.36%	-2.26%
			710	0.949	54.451	0.960	55.687	-1.15%	-2.22%
			725	0.955	54.419	0.961	55.629	-0.62%	-2.18%
			750	0.964	54.348	0.964	55.531	0.00%	-2.13%
			770	0.972	54.301	0.965	55.453	0.73%	-2.08%
			785	0.977	54.271	0.966	55.395	1.14%	-2.03%
			800	0.982	54.245	0.967	55.336	1.55%	-1.97%
05/11/2022	750 Body	21.0	680	0.946	55.239	0.958	55.804	-1.25%	-1.01%
			695	0.951	55.197	0.959	55.745	-0.83%	-0.98%
			700	0.953	55.181	0.959	55.726	-0.63%	-0.98%
			710	0.957	55.154	0.960	55.687	-0.31%	-0.96%
			725	0.962	55.118	0.961	55.629	0.10%	-0.92%
			750	0.972	55.058	0.964	55.531	0.83%	-0.85%
			770	0.981	55.014	0.965	55.453	1.66%	-0.79%
			785	0.987	54.973	0.966	55.395	2.17%	-0.76%
			800	0.992	54.933	0.967	55.336	2.59%	-0.73%
05/24/2022	750 Body	20.3	680	0.962	53.181	0.958	55.804	0.42%	-4.70%
			695	0.967	53.139	0.959	55.745	0.83%	-4.67%
			700	0.969	53.126	0.959	55.726	1.04%	-4.67%
			710	0.973	53.097	0.960	55.687	1.35%	-4.65%
			725	0.979	53.053	0.961	55.629	1.87%	-4.63%
			750	0.988	52.974	0.964	55.531	2.49%	-4.60%
			770	0.996	52.919	0.965	55.453	3.21%	-4.57%
			785	1.002	52.883	0.966	55.395	3.73%	-4.53%
			800	1.008	52.840	0.967	55.336	4.24%	-4.51%
05/26/2022	750 Body	20.8	680	0.963	53.030	0.958	55.804	0.52%	-4.97%
			695	0.968	53.002	0.959	55.745	0.94%	-4.92%
			700	0.970	52.992	0.959	55.726	1.15%	-4.91%
			710	0.973	52.968	0.960	55.687	1.35%	-4.88%
			725	0.978	52.925	0.961	55.629	1.77%	-4.86%
			750	0.987	52.863	0.964	55.531	2.39%	-4.80%
			770	0.995	52.830	0.965	55.453	3.11%	-4.73%
			785	1.001	52.803	0.966	55.395	3.62%	-4.68%
			800	1.006	52.773	0.967	55.336	4.03%	-4.63%
06/04/2022	750 Body	20.9	680	0.947	53.408	0.958	55.804	-1.15%	-4.29%
			695	0.952	53.379	0.959	55.745	-0.73%	-4.24%
			700	0.954	53.370	0.959	55.726	-0.52%	-4.23%
			710	0.958	53.349	0.960	55.687	-0.21%	-4.20%
			725	0.964	53.306	0.961	55.629	0.31%	-4.18%
			750	0.974	53.233	0.964	55.531	1.04%	-4.14%
			770	0.981	53.173	0.965	55.453	1.66%	-4.11%
			785	0.985	53.128	0.966	55.395	1.97%	-4.09%
			800	0.991	53.096	0.967	55.336	2.48%	-4.05%

Table 10-6
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
06/07/2022	750 Body	20.9	680	0.931	53.991	0.958	55.804	-2.82%	-3.25%
			695	0.937	53.962	0.959	55.745	-2.29%	-3.20%
			700	0.939	53.948	0.959	55.726	-2.09%	-3.19%
			710	0.944	53.926	0.960	55.687	-1.67%	-3.16%
			725	0.950	53.885	0.961	55.629	-1.14%	-3.14%
			750	0.959	53.834	0.964	55.531	-0.52%	-3.06%
			770	0.966	53.774	0.965	55.453	0.10%	-3.03%
			785	0.971	53.715	0.966	55.395	0.52%	-3.03%
			800	0.977	53.661	0.967	55.336	1.03%	-3.03%
06/09/2022	750 Body	21.9	680	0.920	53.282	0.958	55.804	-3.97%	-4.52%
			695	0.925	53.240	0.959	55.745	-3.55%	-4.49%
			700	0.927	53.224	0.959	55.726	-3.34%	-4.49%
			710	0.931	53.197	0.960	55.687	-3.02%	-4.47%
			725	0.936	53.158	0.961	55.629	-2.60%	-4.44%
			750	0.945	53.108	0.964	55.531	-1.97%	-4.36%
			770	0.951	53.057	0.965	55.453	-1.45%	-4.32%
			785	0.956	53.005	0.966	55.395	-1.04%	-4.31%
			800	0.962	52.947	0.967	55.336	-0.52%	-4.32%
06/12/2022	750 Body	22.1	680	0.945	53.738	0.958	55.804	-1.36%	-3.70%
			695	0.950	53.688	0.959	55.745	-0.94%	-3.69%
			700	0.952	53.673	0.959	55.726	-0.73%	-3.68%
			710	0.956	53.649	0.960	55.687	-0.42%	-3.66%
			725	0.961	53.615	0.961	55.629	0.00%	-3.62%
			750	0.971	53.562	0.964	55.531	0.73%	-3.55%
			770	0.978	53.515	0.965	55.453	1.35%	-3.49%
			785	0.984	53.475	0.966	55.395	1.86%	-3.47%
			800	0.990	53.434	0.967	55.336	2.38%	-3.44%
05/17/2022	835 Body	20.0	815	0.981	54.532	0.968	55.271	1.34%	-1.34%
			820	0.983	54.519	0.969	55.258	1.44%	-1.34%
			835	0.989	54.489	0.970	55.200	1.96%	-1.29%
			850	0.996	54.467	0.988	55.154	0.81%	-1.25%
05/19/2022	835 Body	20.9	815	0.994	53.852	0.968	55.271	2.69%	-2.57%
			820	0.996	53.839	0.969	55.258	2.79%	-2.57%
			835	1.002	53.805	0.970	55.200	3.30%	-2.53%
			850	1.008	53.777	0.988	55.154	2.02%	-2.50%
05/22/2022	835 Body	21.3	815	0.943	53.742	0.968	55.271	-2.58%	-2.77%
			820	0.948	53.687	0.969	55.258	-2.17%	-2.84%
			835	0.964	53.539	0.970	55.200	-0.62%	-3.01%
			850	0.981	53.389	0.988	55.154	-0.71%	-3.20%
05/22/2022	835 Body	21.2	815	1.006	53.521	0.968	55.271	3.93%	-3.17%
			820	1.008	53.511	0.969	55.258	4.02%	-3.16%
			835	1.013	53.482	0.970	55.200	4.43%	-3.11%
			850	1.019	53.462	0.988	55.154	3.14%	-3.07%
05/24/2022	835 Body	21.3	815	0.948	53.234	0.968	55.271	-2.07%	-3.69%
			820	0.953	53.179	0.969	55.258	-1.65%	-3.76%
			835	0.969	53.021	0.970	55.200	-0.10%	-3.95%
			850	0.986	52.871	0.988	55.154	-0.20%	-4.14%
05/26/2022	835 Body	21.1	815	0.946	53.007	0.968	55.271	-2.27%	-4.10%
			820	0.951	52.953	0.969	55.258	-1.86%	-4.17%
			835	0.967	52.787	0.970	55.200	-0.31%	-4.37%
			850	0.983	52.629	0.988	55.154	-0.51%	-4.58%
05/30/2022	835 Body	20.8	815	0.934	55.846	0.968	55.271	-3.51%	1.04%
			820	0.939	55.798	0.969	55.258	-3.10%	0.98%
			835	0.955	55.651	0.970	55.200	-1.55%	0.82%
			850	0.970	55.508	0.988	55.154	-1.82%	0.64%
06/06/2022	835 Body	22.5	815	0.927	55.056	0.968	55.271	-4.24%	-0.39%
			820	0.932	55.006	0.969	55.258	-3.82%	-0.46%
			835	0.948	54.861	0.970	55.200	-2.27%	-0.61%
			850	0.963	54.721	0.988	55.154	-2.53%	-0.79%
05/05/2022	1750 Body	21.0	1710	1.445	52.951	1.463	53.537	-1.23%	-1.09%
			1720	1.451	52.934	1.469	53.511	-1.23%	-1.08%
			1745	1.465	52.890	1.485	53.445	-1.35%	-1.04%
			1750	1.468	52.887	1.488	53.432	-1.34%	-1.02%
			1770	1.484	52.877	1.501	53.379	-1.13%	-0.94%
			1790	1.502	52.874	1.514	53.326	-0.79%	-0.85%
05/08/2022	1750 Body	20.3	1710	1.467	52.633	1.463	53.537	0.27%	-1.69%
			1720	1.474	52.628	1.469	53.511	0.34%	-1.65%
			1745	1.493	52.618	1.485	53.445	0.54%	-1.55%
			1750	1.497	52.613	1.488	53.432	0.60%	-1.53%
			1770	1.512	52.589	1.501	53.379	0.73%	-1.48%
			1790	1.526	52.558	1.514	53.326	0.79%	-1.44%
05/12/2022	1750 Body	20.5	1710	1.487	51.741	1.463	53.537	1.64%	-3.35%
			1720	1.494	51.728	1.469	53.511	1.70%	-3.33%
			1745	1.510	51.707	1.485	53.445	1.68%	-3.25%
			1750	1.513	51.701	1.488	53.432	1.68%	-3.24%
			1770	1.525	51.664	1.501	53.379	1.60%	-3.21%
			1790	1.538	51.614	1.514	53.326	1.59%	-3.21%
05/14/2022	1750 Body	20.2	1710	1.481	51.364	1.463	53.537	1.23%	-4.06%
			1720	1.487	51.351	1.469	53.511	1.23%	-4.04%
			1745	1.504	51.339	1.485	53.445	1.28%	-3.94%
			1750	1.508	51.335	1.488	53.432	1.34%	-3.92%
			1770	1.521	51.310	1.501	53.379	1.33%	-3.88%
			1790	1.534	51.276	1.514	53.326	1.32%	-3.84%

Table 10-7
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
05/16/2022	1750 Body	21.9	1710	1.477	51.850	1.463	53.537	0.96%	-3.15%
			1720	1.484	51.838	1.469	53.511	1.02%	-3.13%
			1745	1.499	51.819	1.485	53.445	0.94%	-3.04%
			1750	1.502	51.816	1.488	53.432	0.94%	-3.02%
			1770	1.515	51.794	1.501	53.379	0.93%	-2.97%
			1790	1.528	51.769	1.514	53.326	0.92%	-2.92%
05/18/2022	1750 Body	21.4	1710	1.501	51.699	1.463	53.537	2.60%	-3.43%
			1720	1.508	51.688	1.469	53.511	2.65%	-3.41%
			1745	1.525	51.662	1.485	53.445	2.69%	-3.34%
			1750	1.528	51.657	1.488	53.432	2.69%	-3.32%
			1770	1.542	51.627	1.501	53.379	2.73%	-3.28%
			1790	1.556	51.586	1.514	53.326	2.77%	-3.26%
06/05/2022	1750 Body	21.7	1710	1.443	52.337	1.463	53.537	-1.37%	-2.24%
			1720	1.450	52.332	1.469	53.511	-1.29%	-2.20%
			1745	1.466	52.324	1.485	53.445	-1.28%	-2.10%
			1750	1.469	52.322	1.488	53.432	-1.28%	-2.08%
			1770	1.481	52.292	1.501	53.379	-1.33%	-2.04%
			1790	1.494	52.253	1.514	53.326	-1.32%	-2.01%
06/23/2022	1750 Body	20.3	1710	1.493	54.120	1.463	53.537	2.05%	1.09%
			1720	1.504	54.089	1.469	53.511	2.38%	1.08%
			1745	1.532	54.008	1.485	53.445	3.16%	1.05%
			1750	1.538	53.991	1.488	53.432	3.36%	1.05%
			1770	1.560	53.917	1.501	53.379	3.93%	1.01%
			1790	1.583	53.835	1.514	53.326	4.56%	0.95%
04/26/2022	1900 Body	21.3	1850	1.494	51.415	1.520	53.300	-1.71%	-3.54%
			1860	1.505	51.379	1.520	53.300	-0.99%	-3.60%
			1880	1.526	51.318	1.520	53.300	0.39%	-3.72%
			1900	1.547	51.245	1.520	53.300	1.78%	-3.86%
			1905	1.553	51.229	1.520	53.300	2.17%	-3.89%
			1910	1.558	51.212	1.520	53.300	2.50%	-3.92%
04/28/2022	1900 Body	22.1	1850	1.482	52.263	1.520	53.300	-2.50%	-1.95%
			1860	1.493	52.238	1.520	53.300	-1.78%	-1.99%
			1880	1.515	52.177	1.520	53.300	-0.33%	-2.11%
			1900	1.538	52.103	1.520	53.300	1.18%	-2.25%
			1905	1.544	52.085	1.520	53.300	1.58%	-2.28%
			1910	1.550	52.068	1.520	53.300	1.97%	-2.31%
05/01/2022	1900 Body	22.4	1850	1.513	51.763	1.520	53.300	-0.46%	-2.88%
			1860	1.524	51.731	1.520	53.300	0.26%	-2.94%
			1880	1.546	51.675	1.520	53.300	1.71%	-3.05%
			1900	1.569	51.613	1.520	53.300	3.22%	-3.17%
			1905	1.574	51.596	1.520	53.300	3.55%	-3.20%
			1910	1.580	51.581	1.520	53.300	3.95%	-3.23%
05/03/2022	1900 Body	23.0	1850	1.517	51.574	1.520	53.300	-0.20%	-3.24%
			1860	1.529	51.536	1.520	53.300	0.59%	-3.31%
			1880	1.551	51.466	1.520	53.300	2.04%	-3.44%
			1900	1.573	51.382	1.520	53.300	3.49%	-3.60%
			1905	1.579	51.362	1.520	53.300	3.88%	-3.64%
			1910	1.585	51.342	1.520	53.300	4.28%	-3.67%
05/05/2022	1900 Body	23.5	1850	1.485	52.403	1.520	53.300	-2.30%	-1.68%
			1860	1.496	52.372	1.520	53.300	-1.58%	-1.74%
			1880	1.517	52.320	1.520	53.300	-0.20%	-1.84%
			1900	1.540	52.262	1.520	53.300	1.32%	-1.95%
			1905	1.546	52.246	1.520	53.300	1.71%	-1.98%
			1910	1.551	52.230	1.520	53.300	2.04%	-2.01%
05/08/2022	1900 Body	20.9	1850	1.512	52.213	1.520	53.300	-0.53%	-2.04%
			1860	1.523	52.178	1.520	53.300	0.20%	-2.11%
			1880	1.546	52.102	1.520	53.300	1.71%	-2.25%
			1900	1.569	52.017	1.520	53.300	3.22%	-2.41%
			1905	1.575	51.995	1.520	53.300	3.62%	-2.45%
			1910	1.581	51.973	1.520	53.300	4.01%	-2.49%
06/06/2022	1900 Body	23.0	1850	1.524	51.946	1.520	53.300	0.26%	-2.54%
			1860	1.534	51.923	1.520	53.300	0.92%	-2.58%
			1880	1.553	51.870	1.520	53.300	2.17%	-2.68%
			1900	1.572	51.801	1.520	53.300	3.42%	-2.81%
			1905	1.577	51.782	1.520	53.300	3.75%	-2.85%
			1910	1.583	51.759	1.520	53.300	4.14%	-2.89%
06/08/2022	1900 Body	23.0	1850	1.511	51.258	1.520	53.300	-0.59%	-3.83%
			1860	1.520	51.215	1.520	53.300	0.00%	-3.91%
			1880	1.544	51.137	1.520	53.300	1.58%	-4.06%
			1900	1.571	51.089	1.520	53.300	3.36%	-4.15%
			1905	1.577	51.081	1.520	53.300	3.75%	-4.16%
			1910	1.583	51.076	1.520	53.300	4.14%	-4.17%
05/01/2022	2450 Body	23.2	2300	1.805	51.573	1.809	52.900	-0.22%	-2.51%
			2310	1.818	51.539	1.816	52.887	0.11%	-2.55%
			2320	1.831	51.508	1.826	52.873	0.27%	-2.58%
			2400	1.939	51.227	1.902	52.767	1.95%	-2.92%
			2450	2.008	51.057	1.950	52.700	2.97%	-3.12%
			2480	2.049	50.945	1.993	52.662	2.81%	-3.26%
			2500	2.077	50.862	2.021	52.636	2.77%	-3.37%
			2510	2.092	50.825	2.035	52.623	2.80%	-3.42%
			2535	2.127	50.737	2.071	52.592	2.70%	-3.53%
			2550	2.149	50.686	2.092	52.573	2.72%	-3.59%
			2560	2.163	50.650	2.106	52.560	2.71%	-3.63%
			2600	2.217	50.494	2.163	52.509	2.50%	-3.84%
			2650	2.287	50.280	2.234	52.445	2.37%	-4.13%
			2680	2.329	50.167	2.277	52.407	2.28%	-4.27%
			2700	2.355	50.090	2.305	52.382	2.17%	-4.38%

Table 10-8
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
05/05/2022	2450 Body	20.2	2300	1.771	51.317	1.809	52.900	-2.10%	-2.99%
			2310	1.784	51.285	1.816	52.887	-1.76%	-3.03%
			2320	1.798	51.248	1.826	52.873	-1.53%	-3.07%
			2400	1.901	50.968	1.902	52.767	-0.05%	-3.41%
			2450	1.970	50.800	1.950	52.700	1.03%	-3.61%
			2480	2.010	50.684	1.993	52.662	0.85%	-3.76%
			2500	2.037	50.600	2.021	52.636	0.79%	-3.87%
			2510	2.050	50.559	2.035	52.623	0.74%	-3.92%
			2535	2.086	50.471	2.071	52.592	0.72%	-4.03%
			2550	2.107	50.424	2.092	52.573	0.72%	-4.09%
			2560	2.120	50.390	2.106	52.560	0.66%	-4.13%
			2600	2.172	50.240	2.163	52.509	0.42%	-4.32%
			2650	2.242	50.038	2.234	52.445	0.36%	-4.59%
			2680	2.284	49.934	2.277	52.407	0.31%	-4.72%
			2700	2.309	49.861	2.305	52.382	0.17%	-4.81%
05/06/2022	2450 Body	23.1	2300	1.817	51.382	1.809	52.900	0.44%	-2.87%
			2310	1.830	51.344	1.816	52.887	0.77%	-2.92%
			2320	1.843	51.308	1.826	52.873	0.93%	-2.96%
			2400	1.947	51.013	1.902	52.767	2.37%	-3.32%
			2450	2.014	50.852	1.950	52.700	3.28%	-3.51%
			2480	2.054	50.754	1.993	52.662	3.06%	-3.62%
			2500	2.082	50.682	2.021	52.636	3.02%	-3.71%
			2510	2.097	50.645	2.035	52.623	3.05%	-3.76%
			2535	2.133	50.558	2.071	52.592	2.99%	-3.87%
			2550	2.155	50.509	2.092	52.573	3.01%	-3.93%
			2560	2.169	50.477	2.106	52.560	2.99%	-3.96%
			2600	2.224	50.327	2.163	52.509	2.82%	-4.16%
			2650	2.296	50.120	2.234	52.445	2.78%	-4.43%
			2680	2.340	50.009	2.277	52.407	2.77%	-4.58%
			2700	2.366	49.931	2.305	52.382	2.65%	-4.68%
05/10/2022	2450 Body	24.0	2300	1.738	51.740	1.809	52.900	-3.92%	-2.19%
			2310	1.750	51.704	1.816	52.887	-3.63%	-2.24%
			2320	1.762	51.668	1.826	52.873	-3.50%	-2.28%
			2400	1.866	51.425	1.902	52.767	-1.89%	-2.54%
			2450	1.934	51.252	1.950	52.700	-0.82%	-2.75%
			2480	1.975	51.153	1.993	52.662	-0.90%	-2.87%
			2500	2.001	51.079	2.021	52.636	-0.99%	-2.96%
			2510	2.014	51.042	2.035	52.623	-1.03%	-3.00%
			2535	2.049	50.947	2.071	52.592	-1.06%	-3.13%
			2550	2.071	50.892	2.092	52.573	-1.00%	-3.20%
			2560	2.085	50.858	2.106	52.560	-1.00%	-3.24%
			2600	2.138	50.710	2.163	52.509	-1.16%	-3.43%
			2650	2.208	50.508	2.234	52.445	-1.16%	-3.69%
			2680	2.248	50.406	2.277	52.407	-1.27%	-3.82%
			2700	2.274	50.328	2.305	52.382	-1.34%	-3.92%
05/15/2022	2450 Body	22.8	2300	1.792	51.280	1.809	52.900	-0.94%	-3.06%
			2310	1.805	51.244	1.816	52.887	-0.61%	-3.11%
			2320	1.819	51.208	1.826	52.873	-0.38%	-3.15%
			2400	1.924	50.888	1.902	52.767	1.16%	-3.56%
			2450	1.987	50.670	1.950	52.700	1.90%	-3.85%
			2480	2.028	50.575	1.993	52.662	1.76%	-3.96%
			2500	2.052	50.516	2.021	52.636	1.53%	-4.03%
			2510	2.065	50.479	2.035	52.623	1.47%	-4.07%
			2535	2.096	50.369	2.071	52.592	1.21%	-4.23%
			2550	2.118	50.310	2.092	52.573	1.24%	-4.30%
			2560	2.134	50.278	2.106	52.560	1.33%	-4.34%
			2600	2.189	50.163	2.163	52.509	1.20%	-4.47%
			2650	2.258	49.938	2.234	52.445	1.07%	-4.78%
			2680	2.302	49.851	2.277	52.407	1.10%	-4.88%
			2700	2.326	49.780	2.305	52.382	0.91%	-4.97%
05/18/2022	2450 Body	23.2	2300	1.793	51.721	1.809	52.900	-0.88%	-2.23%
			2310	1.806	51.682	1.816	52.887	-0.55%	-2.28%
			2320	1.819	51.646	1.826	52.873	-0.38%	-2.32%
			2400	1.923	51.355	1.902	52.767	1.10%	-2.68%
			2450	1.991	51.161	1.950	52.700	2.10%	-2.92%
			2480	2.031	51.055	1.993	52.662	1.91%	-3.05%
			2500	2.056	50.990	2.021	52.636	1.73%	-3.13%
			2510	2.069	50.955	2.035	52.623	1.67%	-3.17%
			2535	2.103	50.860	2.071	52.592	1.55%	-3.29%
			2550	2.125	50.801	2.092	52.573	1.58%	-3.37%
			2560	2.139	50.766	2.106	52.560	1.57%	-3.41%
			2600	2.194	50.622	2.163	52.509	1.43%	-3.59%
			2650	2.266	50.414	2.234	52.445	1.43%	-3.87%
			2680	2.308	50.309	2.277	52.407	1.36%	-4.00%
			2700	2.334	50.230	2.305	52.382	1.26%	-4.11%

Table 10-9
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
05/21/2022	2450 Body	21.2	2300	1.839	52.462	1.809	52.900	1.66%	-0.83%
			2310	1.851	52.431	1.816	52.887	1.93%	-0.86%
			2320	1.863	52.404	1.826	52.873	2.03%	-0.89%
			2400	1.948	52.214	1.902	52.767	2.42%	-1.05%
			2450	2.005	52.084	1.950	52.700	2.82%	-1.17%
			2480	2.038	52.009	1.993	52.662	2.26%	-1.24%
			2500	2.061	51.957	2.021	52.636	1.98%	-1.29%
			2510	2.072	51.928	2.035	52.623	1.82%	-1.32%
			2535	2.102	51.854	2.071	52.592	1.50%	-1.40%
			2550	2.120	51.817	2.092	52.573	1.34%	-1.44%
			2560	2.132	51.794	2.106	52.560	1.23%	-1.46%
			2600	2.176	51.688	2.163	52.509	0.60%	-1.56%
			2650	2.236	51.542	2.234	52.445	0.09%	-1.72%
			2680	2.271	51.462	2.277	52.407	-0.26%	-1.80%
			2700	2.293	51.407	2.305	52.382	-0.52%	-1.86%
05/22/2022	2450 Body	20.3	2300	1.819	51.922	1.809	52.900	0.55%	-1.85%
			2310	1.831	51.904	1.816	52.887	0.83%	-1.86%
			2320	1.842	51.871	1.826	52.873	0.88%	-1.90%
			2400	1.952	51.572	1.902	52.767	2.63%	-2.26%
			2450	2.009	51.294	1.950	52.700	3.03%	-2.67%
			2480	2.059	51.216	1.993	52.662	3.31%	-2.75%
			2500	2.084	51.184	2.021	52.636	3.12%	-2.76%
			2510	2.094	51.139	2.035	52.623	2.90%	-2.82%
			2535	2.121	50.961	2.071	52.592	2.41%	-3.10%
			2550	2.146	50.869	2.092	52.573	2.58%	-3.24%
			2560	2.164	50.836	2.106	52.560	2.75%	-3.28%
			2600	2.222	50.780	2.163	52.509	2.73%	-3.29%
			2650	2.288	50.447	2.234	52.445	2.42%	-3.81%
			2680	2.339	50.423	2.277	52.407	2.72%	-3.79%
			2700	2.359	50.368	2.305	52.382	2.34%	-3.84%
05/24/2022	2450 Body	22.5	2300	1.850	51.879	1.809	52.900	2.27%	-1.93%
			2310	1.863	51.858	1.816	52.887	2.59%	-1.95%
			2320	1.874	51.838	1.826	52.873	2.63%	-1.96%
			2400	1.966	51.618	1.902	52.767	3.36%	-2.18%
			2450	2.026	51.476	1.950	52.700	3.90%	-2.32%
			2480	2.060	51.395	1.993	52.662	3.36%	-2.41%
			2500	2.083	51.331	2.021	52.636	3.07%	-2.48%
			2510	2.094	51.298	2.035	52.623	2.90%	-2.52%
			2535	2.125	51.221	2.071	52.592	2.61%	-2.61%
			2550	2.143	51.182	2.092	52.573	2.44%	-2.65%
			2560	2.155	51.157	2.106	52.560	2.33%	-2.67%
			2600	2.200	51.052	2.163	52.509	1.71%	-2.77%
			2650	2.261	50.917	2.234	52.445	1.21%	-2.91%
			2680	2.297	50.837	2.277	52.407	0.88%	-3.00%
			2700	2.320	50.781	2.305	52.382	0.65%	-3.06%
05/25/2022	2450 Body	23.2	2300	1.799	51.309	1.809	52.900	-0.55%	-3.01%
			2310	1.813	51.273	1.816	52.887	-0.17%	-3.05%
			2320	1.826	51.239	1.826	52.873	0.00%	-3.09%
			2400	1.932	50.962	1.902	52.767	1.58%	-3.42%
			2450	2.001	50.779	1.950	52.700	2.62%	-3.65%
			2480	2.041	50.678	1.993	52.662	2.41%	-3.77%
			2500	2.068	50.599	2.021	52.636	2.33%	-3.87%
			2510	2.083	50.559	2.035	52.623	2.36%	-3.92%
			2535	2.119	50.458	2.071	52.592	2.32%	-4.06%
			2550	2.141	50.401	2.092	52.573	2.34%	-4.13%
			2560	2.155	50.367	2.106	52.560	2.33%	-4.17%
			2600	2.210	50.220	2.163	52.509	2.17%	-4.36%
			2650	2.279	50.019	2.234	52.445	2.01%	-4.63%
			2680	2.321	49.902	2.277	52.407	1.93%	-4.78%
			2700	2.348	49.822	2.305	52.382	1.87%	-4.89%
05/25/2022	2450 Body	23.5	2300	1.765	51.879	1.809	52.900	-2.43%	-1.93%
			2310	1.778	51.834	1.816	52.887	-2.09%	-1.99%
			2320	1.791	51.797	1.826	52.873	-1.92%	-2.04%
			2400	1.898	51.533	1.902	52.767	-0.21%	-2.34%
			2450	1.967	51.366	1.950	52.700	0.87%	-2.53%
			2480	2.005	51.260	1.993	52.662	0.60%	-2.66%
			2500	2.032	51.184	2.021	52.636	0.54%	-2.76%
			2510	2.046	51.146	2.035	52.623	0.54%	-2.81%
			2535	2.081	51.060	2.071	52.592	0.48%	-2.91%
			2550	2.102	51.004	2.092	52.573	0.48%	-2.98%
			2560	2.116	50.961	2.106	52.560	0.47%	-3.04%
			2600	2.170	50.799	2.163	52.509	0.32%	-3.26%
			2650	2.238	50.610	2.234	52.445	0.18%	-3.50%
			2680	2.276	50.482	2.277	52.407	-0.04%	-3.67%
			2700	2.302	50.406	2.305	52.382	-0.13%	-3.77%

Table 10-10
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
05/29/2022	2450 Body	23.0	2300	1.790	51.883	1.809	52.900	-1.05%	-1.92%
			2310	1.804	51.853	1.816	52.887	-0.66%	-1.96%
			2320	1.818	51.822	1.826	52.873	-0.44%	-1.99%
			2400	1.925	51.559	1.902	52.767	1.21%	-2.29%
			2450	1.996	51.397	1.950	52.700	2.36%	-2.47%
			2480	2.037	51.298	1.993	52.662	2.21%	-2.59%
			2500	2.064	51.218	2.021	52.636	2.13%	-2.69%
			2510	2.078	51.179	2.035	52.623	2.11%	-2.74%
			2535	2.115	51.088	2.071	52.592	2.12%	-2.86%
			2550	2.138	51.039	2.092	52.573	2.20%	-2.92%
			2560	2.152	51.007	2.106	52.560	2.18%	-2.95%
			2600	2.207	50.866	2.163	52.509	2.03%	-3.13%
			2650	2.278	50.665	2.234	52.445	1.97%	-3.39%
			2680	2.320	50.551	2.277	52.407	1.89%	-3.54%
			2700	2.346	50.480	2.305	52.382	1.78%	-3.63%
05/29/2022	2450 Body	23.8	2300	1.764	52.093	1.809	52.900	-2.49%	-1.53%
			2310	1.777	52.053	1.816	52.887	-2.15%	-1.58%
			2320	1.790	52.026	1.826	52.873	-1.97%	-1.60%
			2400	1.898	51.782	1.902	52.767	-0.21%	-1.87%
			2450	1.970	51.619	1.950	52.700	1.03%	-2.05%
			2480	2.010	51.495	1.993	52.662	0.85%	-2.22%
			2500	2.035	51.416	2.021	52.636	0.69%	-2.32%
			2510	2.049	51.379	2.035	52.623	0.69%	-2.36%
			2535	2.086	51.293	2.071	52.592	0.72%	-2.47%
			2550	2.109	51.232	2.092	52.573	0.81%	-2.55%
			2560	2.123	51.186	2.106	52.560	0.81%	-2.61%
			2600	2.174	51.017	2.163	52.509	0.51%	-2.84%
			2650	2.248	50.829	2.234	52.445	0.63%	-3.08%
			2680	2.287	50.719	2.277	52.407	0.44%	-3.22%
			2700	2.311	50.635	2.305	52.382	0.26%	-3.34%
05/31/2022	2450 Body	23.0	2300	1.816	51.480	1.809	52.900	0.39%	-2.68%
			2310	1.830	51.443	1.816	52.887	0.77%	-2.73%
			2320	1.844	51.410	1.826	52.873	0.99%	-2.77%
			2400	1.950	51.129	1.902	52.767	2.52%	-3.10%
			2450	2.022	50.946	1.950	52.700	3.69%	-3.33%
			2480	2.063	50.843	1.993	52.662	3.51%	-3.45%
			2500	2.090	50.770	2.021	52.636	3.41%	-3.55%
			2510	2.104	50.732	2.035	52.623	3.39%	-3.59%
			2535	2.141	50.629	2.071	52.592	3.38%	-3.73%
			2550	2.163	50.570	2.092	52.573	3.39%	-3.81%
			2560	2.178	50.533	2.106	52.560	3.42%	-3.86%
			2600	2.233	50.388	2.163	52.509	3.24%	-4.04%
			2650	2.306	50.178	2.234	52.445	3.22%	-4.32%
			2680	2.348	50.053	2.277	52.407	3.12%	-4.49%
			2700	2.375	49.974	2.305	52.382	3.04%	-4.60%
06/02/2022	2450 Body	22.5	2300	1.865	52.527	1.809	52.900	3.10%	-0.71%
			2310	1.877	52.498	1.816	52.887	3.36%	-0.74%
			2320	1.888	52.475	1.826	52.873	3.40%	-0.75%
			2400	1.979	52.258	1.902	52.767	4.05%	-0.96%
			2450	2.039	52.132	1.950	52.700	4.56%	-1.08%
			2480	2.074	52.053	1.993	52.662	4.06%	-1.16%
			2500	2.097	51.995	2.021	52.636	3.76%	-1.22%
			2510	2.110	51.965	2.035	52.623	3.69%	-1.25%
			2535	2.141	51.888	2.071	52.592	3.38%	-1.34%
			2550	2.161	51.849	2.092	52.573	3.30%	-1.38%
			2560	2.173	51.825	2.106	52.560	3.18%	-1.40%
			2600	2.220	51.717	2.163	52.509	2.64%	-1.51%
			2650	2.279	51.563	2.234	52.445	2.01%	-1.68%
			2680	2.316	51.474	2.277	52.407	1.71%	-1.78%
			2700	2.340	51.420	2.305	52.382	1.52%	-1.84%
06/12/2022	2450 Body	21.1	2300	1.856	50.525	1.809	52.900	2.60%	-4.49%
			2310	1.865	50.509	1.816	52.887	2.70%	-4.50%
			2320	1.873	50.497	1.826	52.873	2.57%	-4.49%
			2400	1.944	50.383	1.902	52.767	2.21%	-4.52%
			2450	1.990	50.289	1.950	52.700	2.05%	-4.57%
			2480	2.018	50.251	1.993	52.662	1.25%	-4.58%
			2500	2.034	50.219	2.021	52.636	0.64%	-4.59%
			2510	2.043	50.202	2.035	52.623	0.39%	-4.60%
			2535	2.065	50.146	2.071	52.592	-0.29%	-4.65%
			2550	2.081	50.118	2.092	52.573	-0.53%	-4.67%
			2560	2.092	50.104	2.106	52.560	-0.66%	-4.67%
			2600	2.127	50.056	2.163	52.509	-1.66%	-4.67%
			2650	2.174	49.930	2.234	52.445	-2.69%	-4.80%
			2680	2.202	49.894	2.277	52.407	-3.29%	-4.80%
			2700	2.217	49.859	2.305	52.382	-3.82%	-4.82%

Table 10-11
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
06/16/2022	2450 Body	21.4	2300	1.836	50.525	1.809	52.900	1.49%	-4.49%
			2310	1.843	50.506	1.816	52.887	1.49%	-4.50%
			2320	1.852	50.489	1.826	52.873	1.42%	-4.51%
			2400	1.925	50.445	1.902	52.767	1.21%	-4.40%
			2450	1.972	50.358	1.950	52.700	1.13%	-4.44%
			2480	2.001	50.325	1.993	52.662	0.40%	-4.44%
			2500	2.016	50.288	2.021	52.636	-0.25%	-4.46%
			2510	2.024	50.264	2.035	52.623	-0.54%	-4.48%
			2535	2.049	50.196	2.071	52.592	-1.06%	-4.56%
			2550	2.065	50.166	2.092	52.573	-1.29%	-4.58%
			2560	2.076	50.155	2.106	52.560	-1.42%	-4.58%
			2600	2.108	50.106	2.163	52.509	-2.54%	-4.58%
			2650	2.158	49.974	2.234	52.445	-3.40%	-4.71%
			2680	2.186	49.967	2.277	52.407	-4.00%	-4.66%
			2700	2.200	49.929	2.305	52.382	-4.56%	-4.68%
05/04/2022	3600 Body	20.7	3300	2.968	51.314	3.080	51.593	-3.64%	-0.54%
			3350	3.028	51.235	3.139	51.525	-3.54%	-0.56%
			3450	3.142	51.080	3.256	51.389	-3.50%	-0.60%
			3500	3.198	50.986	3.314	51.321	-3.50%	-0.65%
			3550	3.257	50.914	3.372	51.254	-3.41%	-0.66%
			3560	3.267	50.900	3.384	51.240	-3.46%	-0.66%
			3600	3.315	50.830	3.431	51.186	-3.38%	-0.70%
			3650	3.374	50.757	3.489	51.118	-3.30%	-0.71%
			3690	3.420	50.668	3.536	51.063	-3.28%	-0.77%
			3700	3.433	50.658	3.548	51.050	-3.24%	-0.77%
			3750	3.488	50.572	3.606	50.982	-3.27%	-0.80%
			3900	3.675	50.283	3.781	50.779	-2.80%	-0.98%
			3930	3.716	50.220	3.816	50.738	-2.62%	-1.02%
			4100	3.949	49.908	4.015	50.507	-1.64%	-1.19%
			4150	4.016	49.817	4.073	50.439	-1.40%	-1.23%
05/12/2022	3600 Body	19.7	3300	2.946	51.310	3.080	51.593	-4.35%	-0.55%
			3350	3.003	51.240	3.139	51.525	-4.33%	-0.55%
			3450	3.120	51.055	3.256	51.389	-4.18%	-0.65%
			3500	3.174	50.973	3.314	51.321	-4.22%	-0.68%
			3550	3.234	50.889	3.372	51.254	-4.09%	-0.71%
			3560	3.246	50.874	3.384	51.240	-4.08%	-0.71%
			3600	3.291	50.814	3.431	51.186	-4.08%	-0.73%
			3650	3.351	50.724	3.489	51.118	-3.96%	-0.77%
			3690	3.400	50.647	3.536	51.063	-3.85%	-0.81%
			3700	3.411	50.631	3.548	51.050	-3.86%	-0.82%
			3750	3.473	50.556	3.606	50.982	-3.69%	-0.84%
			3900	3.657	50.273	3.781	50.779	-3.28%	-1.00%
			3930	3.703	50.202	3.816	50.738	-2.96%	-1.06%
			4100	3.930	49.927	4.015	50.507	-2.12%	-1.15%
			4150	3.999	49.832	4.073	50.439	-1.82%	-1.20%
05/15/2022	3600 Body	20.9	3300	2.931	50.672	3.080	51.593	-4.84%	-1.79%
			3350	2.987	50.610	3.139	51.525	-4.84%	-1.78%
			3450	3.103	50.431	3.256	51.389	-4.70%	-1.86%
			3500	3.159	50.355	3.314	51.321	-4.68%	-1.88%
			3550	3.217	50.267	3.372	51.254	-4.60%	-1.93%
			3560	3.230	50.255	3.384	51.240	-4.55%	-1.92%
			3600	3.277	50.199	3.431	51.186	-4.49%	-1.93%
			3650	3.336	50.112	3.489	51.118	-4.39%	-1.97%
			3690	3.383	50.047	3.536	51.063	-4.33%	-1.99%
			3700	3.395	50.032	3.548	51.050	-4.31%	-1.99%
			3750	3.452	49.957	3.606	50.982	-4.27%	-2.01%
			3900	3.643	49.685	3.781	50.779	-3.65%	-2.15%
			3930	3.687	49.625	3.816	50.738	-3.38%	-2.19%
			4100	3.920	49.307	4.015	50.507	-2.37%	-2.38%
			4150	3.986	49.228	4.073	50.439	-2.14%	-2.40%

Table 10-12
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
05/19/2022	3600 Body	20.0	3300	2.937	50.575	3.080	51.593	-4.64%	-1.97%
			3350	2.990	50.494	3.139	51.525	-4.75%	-2.00%
			3450	3.109	50.310	3.256	51.389	-4.51%	-2.10%
			3500	3.164	50.218	3.314	51.321	-4.53%	-2.15%
			3550	3.222	50.130	3.372	51.254	-4.45%	-2.19%
			3560	3.234	50.117	3.384	51.240	-4.43%	-2.19%
			3600	3.281	50.065	3.431	51.186	-4.37%	-2.19%
			3650	3.336	49.979	3.489	51.118	-4.39%	-2.23%
			3690	3.383	49.903	3.536	51.063	-4.33%	-2.27%
			3700	3.395	49.891	3.548	51.050	-4.31%	-2.27%
			3750	3.455	49.820	3.606	50.982	-4.19%	-2.28%
			3900	3.639	49.555	3.781	50.779	-3.76%	-2.41%
			3930	3.682	49.496	3.816	50.738	-3.51%	-2.45%
			4100	3.914	49.217	4.015	50.507	-2.52%	-2.55%
			4150	3.982	49.108	4.073	50.439	-2.23%	-2.64%
05/23/2022	3600 Body	19.0	3300	2.946	51.381	3.080	51.593	-4.35%	-0.41%
			3350	3.006	51.317	3.139	51.525	-4.24%	-0.40%
			3450	3.130	51.130	3.256	51.389	-3.87%	-0.50%
			3500	3.187	51.050	3.314	51.321	-3.83%	-0.53%
			3550	3.248	50.954	3.372	51.254	-3.68%	-0.59%
			3560	3.260	50.947	3.384	51.240	-3.66%	-0.57%
			3600	3.308	50.885	3.431	51.186	-3.58%	-0.59%
			3650	3.366	50.796	3.489	51.118	-3.53%	-0.63%
			3690	3.415	50.711	3.536	51.063	-3.42%	-0.69%
			3700	3.428	50.692	3.548	51.050	-3.38%	-0.70%
			3750	3.485	50.608	3.606	50.982	-3.36%	-0.73%
			3900	3.673	50.298	3.781	50.779	-2.86%	-0.95%
			3930	3.715	50.215	3.816	50.738	-2.65%	-1.03%
			4100	3.955	49.861	4.015	50.507	-1.49%	-1.28%
			4150	4.026	49.789	4.073	50.439	-1.15%	-1.29%
05/26/2022	3600 Body	20.8	3300	2.946	49.772	3.080	51.593	-4.35%	-3.53%
			3350	3.004	49.700	3.139	51.525	-4.30%	-3.54%
			3450	3.125	49.495	3.256	51.389	-4.02%	-3.69%
			3500	3.182	49.412	3.314	51.321	-3.98%	-3.72%
			3550	3.241	49.315	3.372	51.254	-3.88%	-3.78%
			3560	3.254	49.299	3.384	51.240	-3.84%	-3.79%
			3600	3.304	49.249	3.431	51.186	-3.70%	-3.78%
			3650	3.363	49.155	3.489	51.118	-3.61%	-3.84%
			3690	3.409	49.067	3.536	51.063	-3.59%	-3.91%
			3700	3.422	49.046	3.548	51.050	-3.55%	-3.93%
			3750	3.481	48.976	3.606	50.982	-3.47%	-3.93%
			3900	3.675	48.678	3.781	50.779	-2.80%	-4.14%
			3930	3.716	48.623	3.816	50.738	-2.62%	-4.17%
			4100	3.951	48.293	4.015	50.507	-1.59%	-4.38%
			4150	4.021	48.189	4.073	50.439	-1.28%	-4.46%
05/30/2022	3600 Body	19.5	3300	2.934	49.837	3.080	51.593	-4.74%	-3.40%
			3350	2.991	49.797	3.139	51.525	-4.71%	-3.35%
			3450	3.108	49.625	3.256	51.389	-4.55%	-3.43%
			3500	3.161	49.551	3.314	51.321	-4.62%	-3.45%
			3550	3.218	49.476	3.372	51.254	-4.57%	-3.47%
			3560	3.230	49.465	3.384	51.240	-4.55%	-3.46%
			3600	3.275	49.420	3.431	51.186	-4.55%	-3.45%
			3650	3.329	49.329	3.489	51.118	-4.59%	-3.50%
			3690	3.375	49.252	3.536	51.063	-4.55%	-3.55%
			3700	3.385	49.241	3.548	51.050	-4.59%	-3.54%
			3750	3.441	49.167	3.606	50.982	-4.58%	-3.56%
			3900	3.619	48.835	3.781	50.779	-4.28%	-3.83%
			3930	3.657	48.746	3.816	50.738	-4.17%	-3.93%
			4100	3.887	48.442	4.015	50.507	-3.19%	-4.09%
			4150	3.949	48.337	4.073	50.439	-3.04%	-4.17%
06/19/2022	3600 Body	19.6	3300	2.998	50.977	3.080	51.593	-2.66%	-1.19%
			3350	3.053	50.893	3.139	51.525	-2.74%	-1.23%
			3450	3.168	50.692	3.256	51.389	-2.70%	-1.36%
			3500	3.228	50.611	3.314	51.321	-2.60%	-1.38%
			3550	3.289	50.514	3.372	51.254	-2.46%	-1.44%
			3560	3.302	50.501	3.384	51.240	-2.42%	-1.44%
			3600	3.352	50.434	3.431	51.186	-2.30%	-1.47%
			3650	3.413	50.326	3.489	51.118	-2.18%	-1.55%
			3690	3.460	50.270	3.536	51.063	-2.15%	-1.55%
			3700	3.473	50.250	3.548	51.050	-2.11%	-1.57%
			3750	3.538	50.148	3.606	50.982	-1.89%	-1.64%
			3900	3.731	49.897	3.781	50.779	-1.32%	-1.74%
			3930	3.771	49.853	3.816	50.738	-1.18%	-1.74%
			4100	4.008	49.519	4.015	50.507	-0.17%	-1.96%
			4150	4.076	49.432	4.073	50.439	0.07%	-2.00%

Table 10-13
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
05/02/2022	5200-5800 Body	22.4	5180	5.267	47.496	5.276	49.041	-0.17%	-3.15%
			5190	5.279	47.477	5.288	49.028	-0.17%	-3.16%
			5200	5.290	47.443	5.299	49.014	-0.17%	-3.21%
			5210	5.303	47.419	5.311	49.001	-0.15%	-3.23%
			5220	5.314	47.396	5.323	48.987	-0.17%	-3.25%
			5240	5.354	47.356	5.346	48.960	0.15%	-3.28%
			5250	5.373	47.330	5.358	48.947	0.28%	-3.30%
			5260	5.389	47.307	5.369	48.933	0.37%	-3.32%
			5270	5.399	47.298	5.381	48.919	0.33%	-3.31%
			5280	5.411	47.285	5.393	48.906	0.33%	-3.31%
			5290	5.425	47.274	5.404	48.892	0.39%	-3.31%
			5300	5.439	47.258	5.416	48.879	0.42%	-3.32%
			5310	5.450	47.238	5.428	48.865	0.41%	-3.33%
			5320	5.462	47.205	5.439	48.851	0.42%	-3.37%
			5500	5.726	46.890	5.650	48.607	1.35%	-3.53%
			5510	5.743	46.874	5.661	48.594	1.45%	-3.54%
			5520	5.758	46.861	5.673	48.580	1.50%	-3.54%
			5530	5.770	46.857	5.685	48.566	1.50%	-3.52%
			5540	5.779	46.844	5.696	48.553	1.46%	-3.52%
			5550	5.790	46.810	5.708	48.539	1.44%	-3.56%
			5560	5.805	46.779	5.720	48.526	1.49%	-3.60%
			5580	5.836	46.736	5.743	48.499	1.62%	-3.64%
			5600	5.868	46.695	5.766	48.471	1.77%	-3.66%
			5610	5.884	46.678	5.778	48.458	1.83%	-3.67%
			5620	5.899	46.667	5.790	48.444	1.88%	-3.67%
			5640	5.929	46.645	5.813	48.417	2.00%	-3.66%
			5660	5.953	46.599	5.837	48.390	1.99%	-3.70%
			5670	5.966	46.583	5.848	48.376	2.02%	-3.71%
			5680	5.981	46.565	5.860	48.363	2.06%	-3.72%
			5690	5.995	46.533	5.872	48.349	2.09%	-3.76%
			5700	6.011	46.504	5.883	48.336	2.18%	-3.79%
			5710	6.029	46.482	5.895	48.322	2.27%	-3.81%
			5720	6.044	46.467	5.907	48.309	2.32%	-3.81%
			5745	6.079	46.437	5.936	48.275	2.41%	-3.81%
			5750	6.085	46.430	5.942	48.268	2.41%	-3.81%
			5755	6.092	46.422	5.947	48.261	2.44%	-3.81%
			5765	6.104	46.407	5.959	48.248	2.43%	-3.82%
			5775	6.117	46.387	5.971	48.234	2.45%	-3.83%
			5785	6.132	46.360	5.982	48.220	2.51%	-3.86%
			5795	6.148	46.328	5.994	48.207	2.57%	-3.90%
			5800	6.157	46.314	6.000	48.200	2.62%	-3.91%
			5805	6.165	46.306	6.006	48.193	2.65%	-3.92%
			5825	6.195	46.278	6.029	48.166	2.75%	-3.92%
			5835	6.212	46.253	6.042	48.130	2.81%	-3.90%
			5845	6.225	46.231	6.054	48.110	2.82%	-3.91%
			5855	6.237	46.213	6.066	48.093	2.82%	-3.91%
			5865	6.249	46.201	6.077	48.080	2.83%	-3.91%
			5875	6.264	46.171	6.088	48.067	2.89%	-3.94%
			5885	6.277	46.137	6.100	48.053	2.90%	-3.99%
			5905	6.303	46.108	6.122	48.027	2.96%	-4.00%

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

10.2 Test System Verification

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

Table 10-14
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 SAR1g (W/kg)	1W Target SAR1g (W/kg)	1W Normalized SAR 1g (W/kg)	Deviation1g (%)
K2	750	HEAD	04/28/2022	22.1	20.9	0.20	1046	7640	1.750	8.54	8.750	2.46%
K2	750	HEAD	05/03/2022	21.5	21.2	0.20	1046	7640	1.770	8.54	8.850	3.63%
K2	750	HEAD	05/10/2022	21.3	21.6	0.20	1046	7640	1.670	8.54	8.350	-2.22%
L	750	HEAD	05/31/2022	24.2	22.5	0.20	1054	7670	1.800	8.52	9.000	5.63%
K2	835	HEAD	04/27/2022	21.2	21.5	0.20	4d180	7640	1.980	9.45	9.900	4.76%
K2	835	HEAD	05/02/2022	21.1	21.0	0.20	4d180	7640	2.040	9.45	10.200	7.94%
K2	835	HEAD	05/16/2022	21.3	21.5	0.20	4d119	7640	2.010	9.66	10.050	4.04%
K2	835	HEAD	05/18/2022	21.1	21.2	0.20	4d119	7640	2.050	9.66	10.250	6.11%
L	835	HEAD	06/02/2022	24.6	22.5	0.20	4d047	7670	2.070	9.65	10.350	7.25%
K	1750	HEAD	04/20/2022	22.3	21.0	0.10	1008	3914	3.860	37.40	38.600	3.21%
L	1750	HEAD	06/09/2022	24.4	22.2	0.10	1008	7670	3.680	37.40	36.800	-1.60%
G	1900	HEAD	04/24/2022	21.7	21.1	0.10	5d080	7527	4.230	40.50	42.300	4.44%
L	1900	HEAD	06/12/2022	21.0	20.1	0.10	5d148	7670	4.250	40.10	42.500	5.99%
P	2300	HEAD	05/11/2022	24.4	21.3	0.10	1073	7410	4.810	49.50	48.100	-2.83%
P	2300	HEAD	05/15/2022	22.3	21.8	0.10	1116	7410	4.800	49.60	48.000	-3.23%
J	2450	HEAD	05/11/2022	20.0	21.0	0.10	719	7570	5.460	55.00	54.600	-0.73%
P	2450	HEAD	06/05/2022	22.7	22.2	0.10	797	7410	5.340	52.40	53.400	1.91%
P	2450	HEAD	06/08/2022	22.7	21.5	0.10	981	7410	5.510	53.90	55.100	2.23%
P	2600	HEAD	05/11/2022	24.4	21.3	0.10	1064	7410	6.080	58.10	60.800	4.65%
P	2600	HEAD	05/18/2022	22.7	21.5	0.10	1064	7410	5.510	58.10	55.100	-5.16%
P	2600	HEAD	06/05/2022	22.7	22.2	0.10	1064	7410	5.680	58.10	56.800	-2.24%
P	2600	HEAD	06/08/2022	22.7	21.5	0.10	1071	7410	5.820	56.10	58.200	3.74%
L	3500	HEAD	04/24/2022	21.5	21.6	0.10	1059	7670	6.410	63.70	64.100	0.63%
L	3500	HEAD	05/02/2022	22.4	21.8	0.10	1059	7670	6.430	63.70	64.300	0.94%
L	3500	HEAD	06/05/2022	24.4	21.0	0.10	1059	7670	6.680	63.70	66.800	4.87%
L	3700	HEAD	04/24/2022	21.5	21.6	0.10	1067	7670	6.580	67.20	65.800	-2.08%
L	3700	HEAD	05/02/2022	22.4	21.8	0.10	1067	7670	6.910	67.20	69.100	2.83%
L	3700	HEAD	05/10/2022	22.2	20.2	0.10	1067	7670	6.740	67.20	67.400	0.30%
L	3900	HEAD	05/10/2022	22.2	20.2	0.10	1056	7670	7.080	68.90	70.800	2.76%
G	5250	HEAD	05/19/2022	23.5	22.2	0.05	1057	7527	3.870	81.20	77.400	-4.68%
G	5600	HEAD	05/19/2022	23.5	22.2	0.05	1057	7527	4.140	84.20	82.800	-1.66%
G	5750	HEAD	05/19/2022	23.5	22.2	0.05	1057	7527	3.970	80.80	79.400	-1.73%
G	5800	HEAD	05/19/2022	23.5	22.2	0.05	1057	7527	3.880	82.10	77.600	-5.48%

Table 10-15
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 SAR1g (W/kg)	1W Target SAR1g (W/kg)	1W Normalized SAR 1g (W/kg)	Deviation1g (%)
K3	750	BODY	04/27/2022	20.5	20.2	0.20	1034	7565	1.690	8.91	8.450	-5.16%
K3	750	BODY	05/02/2022	22.0	22.6	0.20	1034	7565	1.780	8.91	8.900	-0.11%
K3	750	BODY	05/04/2022	21.9	21.4	0.20	1046	7565	1.710	8.68	8.550	-1.50%
K3	750	BODY	05/06/2022	20.1	20.7	0.20	1046	7565	1.720	8.68	8.600	-0.92%
K3	750	BODY	05/09/2022	21.8	21.0	0.20	1046	7565	1.760	8.68	8.800	1.38%
K3	750	BODY	05/11/2022	21.3	21.0	0.20	1046	7565	1.750	8.68	8.750	0.81%
K3	750	BODY	05/24/2022	20.5	20.3	0.20	1046	7565	1.810	8.68	9.050	4.26%
K3	750	BODY	05/26/2022	21.1	20.8	0.20	1046	7565	1.770	8.68	8.850	1.96%
I	750	BODY	06/04/2022	20.5	20.9	0.20	1161	7661	1.850	8.79	9.250	5.23%
I	750	BODY	06/07/2022	21.9	20.5	0.20	1161	7660	1.800	8.79	9.000	2.39%
I	750	BODY	06/09/2022	23.0	21.3	0.20	1054	7660	1.750	8.63	8.750	1.39%
I	750	BODY	06/12/2022	22.2	21.3	0.20	1161	7660	1.810	8.79	9.050	2.96%
K3	835	BODY	05/17/2022	20.2	20.0	0.20	4d119	7565	2.050	9.91	10.250	3.43%
K3	835	BODY	05/19/2022	21.1	20.9	0.20	4d119	7565	2.080	9.91	10.400	4.94%
K3	835	BODY	05/22/2022	21.0	21.2	0.20	4d119	7565	2.090	9.91	10.450	5.45%
K2	835	BODY	05/22/2022	20.9	21.3	0.20	4d119	7640	2.030	9.91	10.150	2.42%
K2	835	BODY	05/24/2022	21.1	21.3	0.20	4d119	7640	1.990	9.91	9.950	0.40%
K2	835	BODY	05/26/2022	21.1	21.1	0.20	4d119	7640	1.980	9.91	9.900	-0.10%
D	835	BODY	05/30/2022	21.3	20.8	0.20	4d047	7571	2.090	9.68	10.450	7.95%
D	835	BODY	06/06/2022	22.1	21.0	0.20	4d133	7571	2.010	9.69	10.050	3.72%
L	1750	BODY	05/05/2022	21.5	21.0	0.10	1008	7670	3.700	37.80	37.000	-2.12%
L	1750	BODY	05/08/2022	21.5	20.5	0.10	1008	7670	3.680	37.80	36.800	-2.65%
L	1750	BODY	05/12/2022	20.9	20.5	0.10	1008	7670	3.630	37.80	36.300	-3.97%
L	1750	BODY	05/14/2022	21.5	20.2	0.10	1008	7670	3.860	37.80	38.600	2.12%
L	1750	BODY	05/16/2022	24.0	20.2	0.10	1008	7670	3.750	37.80	37.500	-0.79%
L	1750	BODY	06/05/2022	24.0	21.7	0.10	1008	7670	3.830	37.80	38.300	1.32%
P	1750	BODY	06/23/2022	21.2	20.3	0.10	1008	7410	3.940	37.80	39.400	4.23%
A	1900	BODY	04/26/2022	24.0	21.3	0.10	5d149	7406	4.130	40.40	41.300	2.23%
A	1900	BODY	04/28/2022	22.9	22.1	0.10	5d149	7406	4.300	40.40	43.000	6.44%
A	1900	BODY	05/01/2022	24.7	22.4	0.10	5d149	7406	4.220	40.40	42.200	4.46%
A	1900	BODY	05/05/2022	24.5	23.5	0.10	5d149	7406	3.940	40.40	39.400	-2.48%
A	1900	BODY	05/08/2022	22.1	20.9	0.10	5d149	7406	4.000	40.40	40.000	-0.99%
H	2300	BODY	05/06/2022	21.0	21.1	0.10	1073	7409	4.670	48.40	46.700	-3.51%
H	2300	BODY	05/25/2022	21.5	21.3	0.10	1073	7409	4.910	48.40	49.100	1.45%
H	2300	BODY	05/31/2022	24.4	22.0	0.10	1073	7409	5.100	48.40	51.000	5.37%
O	2300	BODY	06/12/2022	22.1	21.6	0.10	1073	7417	4.580	48.40	45.800	-5.37%
H	2450	BODY	05/01/2022	21.5	21.3	0.10	719	7409	5.080	52.00	50.800	-2.31%
S	2450	BODY	05/10/2022	23.4	22.0	0.10	797	7552	4.740	49.40	47.400	-4.05%
S	2450	BODY	05/15/2022	20.9	23.2	0.10	797	7552	4.840	49.40	48.400	-2.02%
S	2450	BODY	05/18/2022	21.5	22.2	0.10	797	7552	4.870	49.40	48.700	-1.42%
J	2450	BODY	05/21/2022	20.1	20.2	0.10	981	7570	5.030	50.30	50.300	0.00%
J	2450	BODY	05/24/2022	20.0	21.5	0.10	719	7570	4.960	52.00	49.600	-4.62%
J	2450	BODY	06/02/2022	21.0	22.0	0.10	719	7570	4.970	52.00	49.700	-4.42%
H	2600	BODY	05/01/2022	21.5	21.3	0.10	1004	7409	5.630	55.40	56.300	1.62%
S	2600	BODY	05/10/2022	23.4	22.0	0.10	1064	7552	5.480	55.60	54.800	-1.44%
S	2600	BODY	05/15/2022	20.9	23.2	0.10	1064	7552	5.430	55.60	54.300	-2.34%
S	2600	BODY	05/18/2022	21.5	22.2	0.10	1064	7552	5.470	55.60	54.700	-1.62%
S	2600	BODY	05/22/2022	20.3	20.8	0.10	1064	7552	5.540	55.60	55.400	-0.36%
S	2600	BODY	05/25/2022	20.5	23.2	0.10	1064	7552	5.350	55.60	53.500	-3.78%
S	2600	BODY	05/29/2022	21.2	21.8	0.10	1064	7552	5.460	55.60	54.600	-1.80%
E	3500	BODY	05/04/2022	23.7	22.6	0.10	1097	7538	6.360	64.20	63.600	-0.93%
I	3500	BODY	05/12/2022	23.5	21.6	0.10	1097	7661	6.230	64.20	62.300	-2.96%
I	3500	BODY	05/26/2022	21.5	21.0	0.10	1097	7661	6.430	64.20	64.300	0.16%
E	3500	BODY	05/30/2022	21.6	20.4	0.10	1097	7538	5.990	64.20	59.900	-6.70%
L	3500	BODY	06/19/2022	21.6	20.8	0.10	1097	7670	6.030	64.20	60.300	-6.07%
E	3700	BODY	05/04/2022	23.7	22.6	0.10	1018	7538	5.950	63.50	59.500	-6.30%
I	3700	BODY	05/12/2022	23.5	21.6	0.10	1018	7661	6.520	63.50	65.200	2.68%
I	3700	BODY	05/15/2022	21.5	20.9	0.10	1067	7661	6.720	65.20	67.200	3.07%
I	3700	BODY	05/19/2022	21.0	20.5	0.10	1018	7661	5.840	63.50	58.400	-8.03%
E	3700	BODY	05/30/2022	21.6	20.4	0.10	1018	7538	6.300	63.50	63.000	-0.79%
L	3700	BODY	06/07/2022	23.2	21.9	0.10	1067	7670	6.440	65.20	64.400	-1.23%
L	3700	BODY	06/19/2022	21.6	20.8	0.10	1018	7670	6.090	63.50	60.900	-4.09%
I	3900	BODY	05/15/2022	21.5	20.9	0.10	1056	7661	6.850	66.30	68.500	3.32%
I	3900	BODY	05/19/2022	21.0	20.5	0.10	1073	7661	6.540	64.30	65.400	1.71%
L	3900	BODY	06/07/2022	23.2	21.9	0.10	1056	7670	6.390	66.30	63.900	-3.62%
G	5250	BODY	05/02/2022	22.6	21.2	0.05	1191	7527	3.490	74.10	69.800	-5.80%
G	5600	BODY	05/02/2022	22.6	21.2	0.05	1191	7527	3.600	76.90	72.000	-6.37%
G	5750	BODY	05/02/2022	22.6	21.2	0.05	1191	7527	3.500	74.40	70.000	-5.91%
G	5800	BODY	05/02/2022	22.6	21.2	0.05	1191	7527	3.420	73.50	68.400	-6.94%

Table 10-16
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 SAR10g (W/kg)	1W Target SAR10g (W/kg)	1W Normalized SAR10g (W/kg)	Deviation10g (%)
G	13	HEAD	06/09/2022	24.0	21.9	1.00	1002	7527	0.317	0.34	0.317	-7.85%
K3	750	BODY	05/02/2022	22.0	22.6	0.20	1034	7565	1.180	5.88	5.900	0.34%
K3	750	BODY	05/09/2022	21.8	21.0	0.20	1046	7565	1.170	5.72	5.850	2.27%
K3	750	BODY	05/24/2022	20.5	20.3	0.20	1046	7565	1.200	5.72	6.000	4.90%
K3	750	BODY	05/26/2022	21.1	20.8	0.20	1046	7565	1.170	5.72	5.850	2.27%
I	750	BODY	06/09/2022	23.0	21.3	0.20	1054	7660	1.150	5.72	5.750	0.52%
I	750	BODY	06/12/2022	22.2	21.3	0.20	1161	7660	1.190	5.84	5.950	1.88%
K2	835	BODY	05/22/2022	20.9	21.3	0.20	4d119	7640	1.330	6.59	6.650	0.91%
K2	835	BODY	05/24/2022	21.1	21.3	0.20	4d119	7640	1.310	6.59	6.550	-0.61%
D	835	BODY	05/30/2022	21.3	20.8	0.20	4d047	7571	1.380	6.40	6.900	7.81%
L	1750	BODY	05/08/2022	21.5	20.5	0.10	1008	7670	1.950	19.90	19.500	-2.01%
L	1750	BODY	05/12/2022	20.9	20.5	0.10	1008	7670	1.910	19.90	19.100	-4.02%
L	1750	BODY	05/16/2022	24.0	20.2	0.10	1008	7670	1.980	19.90	19.800	-0.50%
L	1750	BODY	05/18/2022	21.3	21.4	0.10	1008	7670	2.060	19.90	20.600	3.52%
A	1900	BODY	04/26/2022	24.0	21.3	0.10	5d149	7406	2.140	21.10	21.400	1.42%
A	1900	BODY	05/03/2022	24.5	23.0	0.10	5d080	7406	2.290	21.40	22.900	7.01%
A	1900	BODY	05/05/2022	24.5	23.5	0.10	5d149	7406	2.070	21.10	20.700	-1.90%
A	1900	BODY	05/08/2022	22.1	20.9	0.10	5d149	7406	2.080	21.10	20.800	-1.42%
E	1900	BODY	06/06/2022	21.5	22.1	0.10	5d149	7538	2.090	21.10	20.900	-0.95%
E	1900	BODY	06/08/2022	23.5	22.5	0.10	5d080	7538	2.250	21.40	22.500	5.14%
H	2300	BODY	05/29/2022	21.2	21.0	0.10	1073	7409	2.220	23.40	22.200	-5.13%
H	2300	BODY	05/31/2022	24.4	22.0	0.10	1073	7409	2.430	23.40	24.300	3.85%
S	2450	BODY	05/15/2022	20.9	23.2	0.10	797	7552	2.210	23.40	22.100	-5.56%
S	2450	BODY	05/18/2022	21.5	22.2	0.10	797	7552	2.230	23.40	22.300	-4.70%
J	2450	BODY	05/24/2022	20.0	21.5	0.10	719	7570	2.240	24.70	22.400	-9.31%
J	2450	BODY	06/02/2022	21.0	22.0	0.10	719	7570	2.270	24.70	22.700	-8.10%
S	2600	BODY	05/15/2022	20.9	23.2	0.10	1064	7552	2.380	25.00	23.800	-4.80%
S	2600	BODY	05/18/2022	21.5	22.2	0.10	1064	7552	2.410	25.00	24.100	-3.60%
S	2600	BODY	05/22/2022	20.3	20.8	0.10	1064	7552	2.430	25.00	24.300	-2.80%
S	2600	BODY	05/25/2022	20.5	23.2	0.10	1064	7552	2.370	25.00	23.700	-5.20%
S	2600	BODY	05/29/2022	21.2	21.8	0.10	1064	7552	2.390	25.00	23.900	-4.40%
O	2600	BODY	06/16/2022	22.9	22.0	0.10	1071	7417	2.410	24.10	24.100	0.00%
E	3500	BODY	05/04/2022	23.7	22.6	0.10	1097	7538	2.460	23.80	24.600	3.36%
I	3500	BODY	05/12/2022	23.5	21.6	0.10	1097	7661	2.370	23.80	23.700	-0.42%
I	3500	BODY	05/26/2022	21.5	21.0	0.10	1097	7661	2.460	23.80	24.600	3.36%
L	3500	BODY	06/19/2022	21.6	20.8	0.10	1097	7670	2.300	23.80	23.000	-3.36%
E	3700	BODY	05/04/2022	23.7	22.6	0.10	1018	7538	2.230	22.50	22.300	-0.89%
I	3700	BODY	05/12/2022	23.5	21.6	0.10	1018	7661	2.410	22.50	24.100	7.11%
I	3700	BODY	05/15/2022	21.5	20.9	0.10	1067	7661	2.460	23.30	24.600	5.58%
I	3700	BODY	05/23/2022	20.9	20.5	0.10	1018	7661	2.470	22.50	24.700	9.78%
L	3700	BODY	06/19/2022	21.6	20.8	0.10	1018	7670	2.280	22.50	22.800	1.33%
I	3900	BODY	05/15/2022	21.5	20.9	0.10	1056	7661	2.380	23.00	23.800	3.48%
I	3900	BODY	05/23/2022	20.9	20.5	0.10	1073	7661	2.400	22.00	24.000	9.09%
G	5250	BODY	05/02/2022	22.6	21.2	0.05	1191	7527	0.975	20.80	19.500	-6.25%
G	5600	BODY	05/02/2022	22.6	21.2	0.05	1191	7527	0.994	21.30	19.880	-6.67%
G	5750	BODY	05/02/2022	22.6	21.2	0.05	1191	7527	0.981	20.70	19.620	-5.22%
G	5800	BODY	05/02/2022	22.6	21.2	0.05	1191	7527	0.952	20.20	19.040	-5.74%

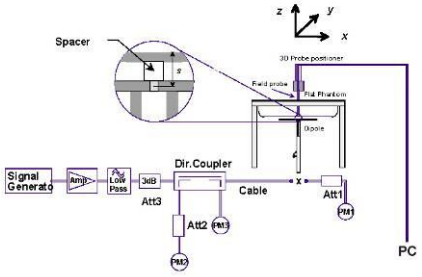

Figure 10-1
System Verification Setup Diagram

Figure 10-2
System Verification Setup Photo

11 SAR DATA SUMMARY

11.1 Standalone Head SAR Data

Table 11-1
GSM 850 Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
836.60	190	Right	Cheek	GSM 850	GSM	A+B	1792M	33.0	31.82	-0.02	1:8.3	0.062	1.312	0.081	A1
836.60	190	Right	Tilt	GSM 850	GSM	A+B	1792M	33.0	31.82	0.07	1:8.3	0.025	1.312	0.033	
836.60	190	Left	Cheek	GSM 850	GSM	A+B	1792M	33.0	31.82	0.01	1:8.3	0.053	1.312	0.070	
836.60	190	Left	Tilt	GSM 850	GSM	A+B	1792M	33.0	31.82	0.01	1:8.3	0.035	1.312	0.046	
836.60	190	Right	Cheek	GSM 850	GSM	A	1792M	33.0	31.82	0.19	1:8.3	0.035	1.312	0.046	
836.60	190	Right	Tilt	GSM 850	GSM	A	1792M	33.0	31.82	-0.14	1:8.3	0.013	1.312	0.017	
836.60	190	Left	Cheek	GSM 850	GSM	A	1792M	33.0	31.82	-0.06	1:8.3	0.026	1.312	0.034	
836.60	190	Left	Tilt	GSM 850	GSM	A	1792M	33.0	31.82	0.13	1:8.3	0.014	1.312	0.018	
ICNIRP 1998 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-2
GSM 1900 Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1850.20	512	Right	Cheek	GSM 1900	GSM	B	1317M	30.5	29.18	0.16	1:8.3	0.033	1.355	0.045	A2
1850.20	512	Right	Tilt	GSM 1900	GSM	B	1317M	30.5	29.18	0.00	1:8.3	0.024	1.355	0.033	
1850.20	512	Left	Cheek	GSM 1900	GSM	B	1317M	30.5	29.18	0.01	1:8.3	0.031	1.355	0.042	
1850.20	512	Left	Tilt	GSM 1900	GSM	B	1317M	30.5	29.18	0.02	1:8.3	0.019	1.355	0.026	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-3
UMTS 850 Head SAR

MEASUREMENT RESULTS																
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Tune State	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
826.40	4132	Right	Cheek	UMTS 850	RMC	A+B	108	1792M	25.5	24.52	0.07	1:1	0.156	1.253	0.195	A3
826.40	4132	Right	Tilt	UMTS 850	RMC	A+B	108	1792M	25.5	24.52	0.04	1:1	0.035	1.253	0.044	
826.40	4132	Left	Cheek	UMTS 850	RMC	A+B	108	1792M	25.5	24.52	-0.05	1:1	0.094	1.253	0.118	
826.40	4132	Left	Tilt	UMTS 850	RMC	A+B	108	1792M	25.5	24.52	-0.13	1:1	0.062	1.253	0.078	
826.40	4132	Right	Cheek	UMTS 850	RMC	A	9	1792M	25.5	24.52	-0.04	1:1	0.114	1.253	0.143	
826.40	4132	Right	Tilt	UMTS 850	RMC	A	9	1792M	25.5	24.52	-0.04	1:1	0.034	1.253	0.043	
826.40	4132	Left	Cheek	UMTS 850	RMC	A	9	1792M	25.5	24.52	-0.03	1:1	0.074	1.253	0.093	
826.40	4132	Left	Tilt	UMTS 850	RMC	A	9	1792M	25.5	24.52	0.12	1:1	0.042	1.253	0.053	
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
UMTS 1750 Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.														
1712.40	1312	Right	Cheek	UMTS 1750	RMC	B	1328M	25.0	23.73	0.02	1:1	0.093	1.340	0.125	A4
1712.40	1312	Right	Tilt	UMTS 1750	RMC	B	1328M	25.0	23.73	0.04	1:1	0.051	1.340	0.068	
1712.40	1312	Left	Cheek	UMTS 1750	RMC	B	1328M	25.0	23.73	0.02	1:1	0.084	1.340	0.113	
1712.40	1312	Left	Tilt	UMTS 1750	RMC	B	1328M	25.0	23.73	0.04	1:1	0.045	1.340	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 11-5
UMTS 1900 Head SAR

MEASUREMENT RESULTS															
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.														
1880.00	9400	Right	Cheek	UMTS 1900	RMC	B	1317M	25.0	24.12	0.10	1:1	0.062	1.225	0.076	
1880.00	9400	Right	Tilt	UMTS 1900	RMC	B	1317M	25.0	24.12	0.14	1:1	0.059	1.225	0.072	
1880.00	9400	Left	Cheek	UMTS 1900	RMC	B	1317M	25.0	24.12	-0.08	1:1	0.071	1.225	0.087	A5
1880.00	9400	Left	Tilt	UMTS 1900	RMC	B	1317M	25.0	24.12	0.03	1:1	0.032	1.225	0.039	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Head 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-6
LTE Band 71 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																				
680.50	133297	Mid	Right	Cheek	LTE Band 71	A+B	9	1792M	20	QPSK	1	0	25.5	24.33	0	0.02	1:1	0.113	1.309	0.148	A6
680.50	133297	Mid	Right	Cheek	LTE Band 71	A+B	9	1792M	20	QPSK	50	0	24.5	23.26	1	-0.02	1:1	0.099	1.330	0.132	
680.50	133297	Mid	Right	Tilt	LTE Band 71	A+B	9	1792M	20	QPSK	1	0	25.5	24.33	0	-0.08	1:1	0.056	1.309	0.073	
680.50	133297	Mid	Right	Tilt	LTE Band 71	A+B	9	1792M	20	QPSK	50	0	24.5	23.26	1	-0.10	1:1	0.048	1.330	0.064	
680.50	133297	Mid	Left	Cheek	LTE Band 71	A+B	45	1792M	20	QPSK	1	0	25.5	24.33	0	-0.02	1:1	0.105	1.309	0.137	
680.50	133297	Mid	Left	Cheek	LTE Band 71	A+B	9	1792M	20	QPSK	50	0	24.5	23.26	1	-0.06	1:1	0.080	1.330	0.106	
680.50	133297	Mid	Left	Tilt	LTE Band 71	A+B	9	1792M	20	QPSK	1	0	25.5	24.33	0	0.05	1:1	0.057	1.309	0.075	
680.50	133297	Mid	Left	Tilt	LTE Band 71	A+B	9	1792M	20	QPSK	50	0	24.5	23.26	1	0.08	1:1	0.044	1.330	0.059	
680.50	133297	Mid	Right	Cheek	LTE Band 71	A	49	1792M	20	QPSK	1	0	25.5	24.33	0	-0.04	1:1	0.064	1.309	0.084	
680.50	133297	Mid	Right	Cheek	LTE Band 71	A	49	1792M	20	QPSK	50	0	24.5	23.26	1	-0.02	1:1	0.058	1.330	0.077	
680.50	133297	Mid	Right	Tilt	LTE Band 71	A	49	1792M	20	QPSK	1	0	25.5	24.33	0	-0.02	1:1	0.030	1.309	0.039	
680.50	133297	Mid	Right	Tilt	LTE Band 71	A	49	1792M	20	QPSK	50	0	24.5	23.26	1	-0.02	1:1	0.026	1.330	0.035	
680.50	133297	Mid	Left	Cheek	LTE Band 71	A	49	1792M	20	QPSK	1	0	25.5	24.33	0	-0.04	1:1	0.060	1.309	0.079	
680.50	133297	Mid	Left	Cheek	LTE Band 71	A	49	1792M	20	QPSK	50	0	24.5	23.26	1	-0.01	1:1	0.047	1.330	0.063	
680.50	133297	Mid	Left	Tilt	LTE Band 71	A	49	1792M	20	QPSK	1	0	25.5	24.33	0	-0.20	1:1	0.032	1.309	0.042	
680.50	133297	Mid	Left	Tilt	LTE Band 71	A	49	1792M	20	QPSK	50	0	24.5	23.26	1	-0.02	1:1	0.025	1.330	0.033	
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
LTE Band 12 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
707.50	23095	Mid	Right	Cheek	LTE Band 12	A+B	1	1792M	10	QPSK	1	25	25.5	24.41	0	-0.04	1:1	0.160	1.285	0.206	A7
707.50	23095	Mid	Right	Cheek	LTE Band 12	A+B	1	1792M	10	QPSK	25	0	24.5	23.44	1	0.00	1:1	0.117	1.276	0.149	
707.50	23095	Mid	Right	Tilt	LTE Band 12	A+B	1	1792M	10	QPSK	1	25	25.5	24.41	0	0.01	1:1	0.086	1.285	0.111	
707.50	23095	Mid	Right	Tilt	LTE Band 12	A+B	1	1792M	10	QPSK	25	0	24.5	23.44	1	-0.01	1:1	0.062	1.276	0.079	
707.50	23095	Mid	Left	Cheek	LTE Band 12	A+B	108	1792M	10	QPSK	1	25	25.5	24.41	0	-0.07	1:1	0.130	1.285	0.167	
707.50	23095	Mid	Left	Cheek	LTE Band 12	A+B	108	1792M	10	QPSK	25	0	24.5	23.44	1	0.00	1:1	0.097	1.276	0.124	
707.50	23095	Mid	Left	Tilt	LTE Band 12	A+B	108	1792M	10	QPSK	1	25	25.5	24.41	0	-0.02	1:1	0.076	1.285	0.098	
707.50	23095	Mid	Left	Tilt	LTE Band 12	A+B	108	1792M	10	QPSK	25	0	24.5	23.44	1	-0.05	1:1	0.056	1.276	0.071	
707.50	23095	Mid	Right	Cheek	LTE Band 12	A	58	1792M	10	QPSK	1	25	25.5	24.41	0	0.07	1:1	0.096	1.285	0.123	
707.50	23095	Mid	Right	Cheek	LTE Band 12	A	58	1792M	10	QPSK	25	0	24.5	23.44	1	0.03	1:1	0.072	1.276	0.092	
707.50	23095	Mid	Right	Tilt	LTE Band 12	A	13	1792M	10	QPSK	1	25	25.5	24.41	0	0.04	1:1	0.050	1.285	0.064	
707.50	23095	Mid	Right	Tilt	LTE Band 12	A	13	1792M	10	QPSK	25	0	24.5	23.44	1	-0.01	1:1	0.037	1.276	0.047	
707.50	23095	Mid	Left	Cheek	LTE Band 12	A	46	1792M	10	QPSK	1	25	25.5	24.41	0	-0.01	1:1	0.087	1.285	0.112	
707.50	23095	Mid	Left	Cheek	LTE Band 12	A	46	1792M	10	QPSK	25	0	24.5	23.44	1	0.01	1:1	0.065	1.276	0.083	
707.50	23095	Mid	Left	Tilt	LTE Band 12	A	58	1792M	10	QPSK	1	25	25.5	24.41	0	-0.02	1:1	0.050	1.285	0.064	
707.50	23095	Mid	Left	Tilt	LTE Band 12	A	58	1792M	10	QPSK	25	0	24.5	23.44	1	-0.05	1:1	0.037	1.276	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 11-8
LTE Band 13 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
782.00	23230	Mid	Right	Cheek	LTE Band 13	A+B	108	1792M	10	QPSK	1	25	25.5	24.90	0	0.10	1:1	0.167	1.148	0.192	A8
782.00	23230	Mid	Right	Cheek	LTE Band 13	A+B	108	1792M	10	QPSK	25	12	24.5	23.72	1	-0.09	1:1	0.129	1.197	0.154	
782.00	23230	Mid	Right	Tilt	LTE Band 13	A+B	108	1792M	10	QPSK	1	25	25.5	24.90	0	0.03	1:1	0.091	1.148	0.104	
782.00	23230	Mid	Right	Tilt	LTE Band 13	A+B	108	1792M	10	QPSK	25	12	24.5	23.72	1	-0.05	1:1	0.071	1.197	0.085	
782.00	23230	Mid	Left	Cheek	LTE Band 13	A+B	108	1792M	10	QPSK	1	25	25.5	24.90	0	-0.19	1:1	0.139	1.148	0.160	
782.00	23230	Mid	Left	Cheek	LTE Band 13	A+B	108	1792M	10	QPSK	25	12	24.5	23.72	1	-0.02	1:1	0.108	1.197	0.129	
782.00	23230	Mid	Left	Tilt	LTE Band 13	A+B	108	1792M	10	QPSK	1	25	25.5	24.90	0	0.16	1:1	0.073	1.148	0.084	
782.00	23230	Mid	Left	Tilt	LTE Band 13	A+B	18	1792M	10	QPSK	25	12	24.5	23.72	1	-0.03	1:1	0.054	1.197	0.065	
782.00	23230	Mid	Right	Cheek	LTE Band 13	A	9	1792M	10	QPSK	1	25	25.5	24.90	0	0.07	1:1	0.152	1.148	0.174	
782.00	23230	Mid	Right	Cheek	LTE Band 13	A	9	1792M	10	QPSK	25	12	24.5	23.72	1	-0.04	1:1	0.118	1.197	0.141	
782.00	23230	Mid	Right	Tilt	LTE Band 13	A	9	1792M	10	QPSK	1	25	25.5	24.90	0	0.11	1:1	0.085	1.148	0.098	
782.00	23230	Mid	Right	Tilt	LTE Band 13	A	9	1792M	10	QPSK	25	12	24.5	23.72	1	-0.02	1:1	0.066	1.197	0.079	
782.00	23230	Mid	Left	Cheek	LTE Band 13	A	9	1792M	10	QPSK	1	25	25.5	24.90	0	0.01	1:1	0.130	1.148	0.149	
782.00	23230	Mid	Left	Cheek	LTE Band 13	A	9	1792M	10	QPSK	25	12	24.5	23.72	1	0.01	1:1	0.099	1.197	0.119	
782.00	23230	Mid	Left	Tilt	LTE Band 13	A	18	1792M	10	QPSK	1	25	25.5	24.90	0	-0.05	1:1	0.063	1.148	0.072	
782.00	23230	Mid	Left	Tilt	LTE Band 13	A	18	1792M	10	QPSK	25	12	24.5	23.72	1	-0.07	1:1	0.048	1.197	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 11-9
LTE Band 14 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
793.00	23330	Mid	Right	Cheek	LTE Band 14	A+B	108	1792M	10	QPSK	1	25	25.5	24.71	0	0.00	1:1	0.187	1.199	0.224	A9
793.00	23330	Mid	Right	Cheek	LTE Band 14	A+B	108	1792M	10	QPSK	25	12	24.5	23.68	1	-0.01	1:1	0.146	1.208	0.176	
793.00	23330	Mid	Right	Tilt	LTE Band 14	A+B	108	1792M	10	QPSK	1	25	25.5	24.71	0	-0.05	1:1	0.089	1.199	0.107	
793.00	23330	Mid	Right	Tilt	LTE Band 14	A+B	108	1792M	10	QPSK	25	12	24.5	23.68	1	0.02	1:1	0.068	1.208	0.082	
793.00	23330	Mid	Left	Cheek	LTE Band 14	A+B	108	1792M	10	QPSK	1	25	25.5	24.71	0	-0.12	1:1	0.140	1.199	0.168	
793.00	23330	Mid	Left	Cheek	LTE Band 14	A+B	108	1792M	10	QPSK	25	12	24.5	23.68	1	-0.10	1:1	0.107	1.208	0.129	
793.00	23330	Mid	Left	Tilt	LTE Band 14	A+B	108	1792M	10	QPSK	1	25	25.5	24.71	0	0.01	1:1	0.067	1.199	0.080	
793.00	23330	Mid	Left	Tilt	LTE Band 14	A+B	108	1792M	10	QPSK	25	12	24.5	23.68	1	0.04	1:1	0.052	1.208	0.063	
793.00	23330	Mid	Right	Cheek	LTE Band 14	A	9	1792M	10	QPSK	1	25	25.5	24.71	0	0.19	1:1	0.151	1.199	0.181	
793.00	23330	Mid	Right	Cheek	LTE Band 14	A	9	1792M	10	QPSK	25	12	24.5	23.68	1	-0.01	1:1	0.117	1.208	0.141	
793.00	23330	Mid	Right	Tilt	LTE Band 14	A	9	1792M	10	QPSK	1	25	25.5	24.71	0	-0.12	1:1	0.069	1.199	0.083	
793.00	23330	Mid	Right	Tilt	LTE Band 14	A	9	1792M	10	QPSK	25	12	24.5	23.68	1	0.04	1:1	0.053	1.208	0.064	
793.00	23330	Mid	Left	Cheek	LTE Band 14	A	9	1792M	10	QPSK	1	25	25.5	24.71	0	0.07	1:1	0.107	1.199	0.128	
793.00	23330	Mid	Left	Cheek	LTE Band 14	A	9	1792M	10	QPSK	25	12	24.5	23.68	1	-0.03	1:1	0.081	1.208	0.098	
793.00	23330	Mid	Left	Tilt	LTE Band 14	A	9	1792M	10	QPSK	1	25	25.5	24.71	0	0.01	1:1	0.054	1.199	0.065	
793.00	23330	Mid	Left	Tilt	LTE Band 14	A	9	1792M	10	QPSK	25	12	24.5	23.68	1	-0.03	1:1	0.041	1.208	0.050	
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 26 (Cell) Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
831.50	26865	Mid	Right	Cheek	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	1	36	25.5	24.02	0	0.08	1:1	0.123	1.406	0.173	A10
831.50	26865	Mid	Right	Cheek	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	36	37	24.5	23.02	1	0.00	1:1	0.096	1.406	0.135	
831.50	26865	Mid	Right	Tilt	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	1	36	25.5	24.02	0	-0.02	1:1	0.049	1.406	0.069	
831.50	26865	Mid	Right	Tilt	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	36	37	24.5	23.02	1	-0.08	1:1	0.039	1.406	0.055	
831.50	26865	Mid	Left	Cheek	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	1	36	25.5	24.02	0	-0.06	1:1	0.087	1.406	0.122	
831.50	26865	Mid	Left	Cheek	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	36	37	24.5	23.02	1	-0.05	1:1	0.066	1.406	0.093	
831.50	26865	Mid	Left	Tilt	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	1	36	25.5	24.02	0	0.01	1:1	0.066	1.406	0.093	
831.50	26865	Mid	Left	Tilt	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	36	37	24.5	23.02	1	-0.01	1:1	0.051	1.406	0.072	
831.50	26865	Mid	Right	Cheek	LTE Band 26 (Cell)	A	9	1792M	15	QPSK	1	36	25.5	24.02	0	0.00	1:1	0.097	1.406	0.136	
831.50	26865	Mid	Right	Cheek	LTE Band 26 (Cell)	A	9	1792M	15	QPSK	36	37	24.5	23.02	1	-0.02	1:1	0.073	1.406	0.103	
831.50	26865	Mid	Right	Tilt	LTE Band 26 (Cell)	A	9	1792M	15	QPSK	1	36	25.5	24.02	0	0.03	1:1	0.039	1.406	0.055	
831.50	26865	Mid	Right	Tilt	LTE Band 26 (Cell)	A	9	1792M	15	QPSK	36	37	24.5	23.02	1	0.06	1:1	0.031	1.406	0.044	
831.50	26865	Mid	Left	Cheek	LTE Band 26 (Cell)	A	9	1792M	15	QPSK	1	36	25.5	24.02	0	-0.04	1:1	0.072	1.406	0.101	
831.50	26865	Mid	Left	Cheek	LTE Band 26 (Cell)	A	9	1792M	15	QPSK	36	37	24.5	23.02	1	0.01	1:1	0.054	1.406	0.076	
831.50	26865	Mid	Left	Tilt	LTE Band 26 (Cell)	A	9	1792M	15	QPSK	1	36	25.5	24.02	0	0.13	1:1	0.054	1.406	0.076	
831.50	26865	Mid	Left	Tilt	LTE Band 26 (Cell)	A	9	1792M	15	QPSK	36	37	24.5	23.02	1	0.03	1:1	0.042	1.406	0.059	
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 5 (Cell) Head SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Test Position	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																				
1 CC Uplink	N/A	836.50	20525	Mid	Right	Cheek	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	0.04	1:1	0.136	1.294	0.176	A11
1 CC Uplink	N/A	836.50	20525	Mid	Right	Cheek	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	49	25.5	24.31	0	-0.09	1:1	0.131	1.315	0.172	
1 CC Uplink	N/A	836.50	20525	Mid	Right	Cheek	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	0.02	1:1	0.104	1.309	0.136	
2 CC Uplink	PCC	836.50	20525	Mid	Right	Cheek	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	49	25.5	24.39	0	-0.05	1:1	0.132	1.291	0.170	
	SCC	843.70	20597								5		1	0									
1 CC Uplink	N/A	836.50	20525	Mid	Right	Tilt	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	0.11	1:1	0.050	1.294	0.065	
1 CC Uplink	N/A	836.50	20525	Mid	Right	Tilt	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	0.00	1:1	0.036	1.309	0.047	
1 CC Uplink	N/A	836.50	20525	Mid	Left	Cheek	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	-0.10	1:1	0.112	1.294	0.145	
1 CC Uplink	N/A	836.50	20525	Mid	Left	Cheek	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	-0.04	1:1	0.078	1.309	0.102	
1 CC Uplink	N/A	836.50	20525	Mid	Left	Tilt	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	0.14	1:1	0.062	1.294	0.080	
1 CC Uplink	N/A	836.50	20525	Mid	Left	Tilt	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	-0.12	1:1	0.044	1.309	0.058	
1 CC Uplink	N/A	836.50	20525	Mid	Right	Cheek	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	25	25.5	24.38	0	0.06	1:1	0.121	1.294	0.157	
1 CC Uplink	N/A	836.50	20525	Mid	Right	Cheek	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	49	25.5	24.31	0	-0.02	1:1	0.121	1.315	0.159	
1 CC Uplink	N/A	836.50	20525	Mid	Right	Cheek	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	25	25	24.5	23.33	1	-0.01	1:1	0.091	1.309	0.119	
2 CC Uplink	PCC	836.50	20525	Mid	Right	Cheek	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	49	25.5	24.39	0	-0.13	1:1	0.120	1.291	0.155	
	SCC	843.70	20597								5		1	0									
1 CC Uplink	N/A	836.50	20525	Mid	Right	Tilt	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	25	25.5	24.38	0	-0.04	1:1	0.041	1.294	0.053	
1 CC Uplink	N/A	836.50	20525	Mid	Right	Tilt	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	25	25	24.5	23.33	1	0.05	1:1	0.031	1.309	0.041	
1 CC Uplink	N/A	836.50	20525	Mid	Left	Cheek	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	25	25.5	24.38	0	0.06	1:1	0.095	1.294	0.123	
1 CC Uplink	N/A	836.50	20525	Mid	Left	Cheek	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	25	25	24.5	23.33	1	0.00	1:1	0.068	1.309	0.089	
1 CC Uplink	N/A	836.50	20525	Mid	Left	Tilt	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	25	25.5	24.38	0	-0.01	1:1	0.050	1.294	0.065	
1 CC Uplink	N/A	836.50	20525	Mid	Left	Tilt	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	25	25	24.5	23.33	1	0.08	1:1	0.039	1.309	0.051	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Head 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-12
LTE Band 66 (AWS) Head SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Test Position	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	1770.00	132572	High	Right	Cheek	LTE Band 66 (AWS)	B	0975M	20	QPSK	1	0	25.0	24.25	0	0.07	1:1	0.103	1.189	0.122	
1 CC Uplink	N/A	1770.00	132572	High	Right	Cheek	LTE Band 66 (AWS)	B	0975M	20	QPSK	1	99	25.0	24.40	0	0.12	1:1	0.103	1.148	0.118	
1 CC Uplink	N/A	1770.00	132572	High	Right	Cheek	LTE Band 66 (AWS)	B	0975M	20	QPSK	50	0	24.0	23.47	1	0.09	1:1	0.072	1.130	0.081	
1 CC Uplink	N/A	1775.00	132622	High	Right	Cheek	LTE Band 66 (AWS)	B	0975M	10	QPSK	1	0	25.0	24.21	0	-0.03	1:1	0.115	1.199	0.138	
2 CC Uplink CA_66C	PCC	1770.00	132572	High	Right	Cheek	LTE Band 66 (AWS)	B	0975M	20	QPSK	1	0	25.0	24.42	0	0.01	1:1	0.106	1.143	0.121	
	SCC	1750.20	132374										99									
2 CC Uplink CA_66B	PCC	1775.00	132622	High	Right	Cheek	LTE Band 66 (AWS)	B	0975M	10	QPSK	1	0	25.0	24.38	0	0.10	1:1	0.122	1.153	0.141	
	SCC	1765.10	132523										49									
1 CC Uplink	N/A	1770.00	132572	High	Right	Tilt	LTE Band 66 (AWS)	B	0975M	20	QPSK	1	99	25.0	24.40	0	0.07	1:1	0.045	1.148	0.052	
1 CC Uplink	N/A	1770.00	132572	High	Right	Tilt	LTE Band 66 (AWS)	B	0975M	20	QPSK	50	0	24.0	23.47	1	0.06	1:1	0.035	1.130	0.040	
1 CC Uplink	N/A	1770.00	132572	High	Left	Cheek	LTE Band 66 (AWS)	B	0975M	20	QPSK	1	99	25.0	24.40	0	-0.15	1:1	0.033	1.148	0.038	
1 CC Uplink	N/A	1770.00	132572	High	Left	Cheek	LTE Band 66 (AWS)	B	0975M	20	QPSK	50	0	24.0	23.47	1	0.01	1:1	0.028	1.130	0.032	
1 CC Uplink	N/A	1770.00	132572	High	Left	Tilt	LTE Band 66 (AWS)	B	0975M	20	QPSK	1	99	25.0	24.40	0	0.02	1:1	0.032	1.148	0.037	
1 CC Uplink	N/A	1770.00	132572	High	Left	Tilt	LTE Band 66 (AWS)	B	0975M	20	QPSK	50	0	24.0	23.47	1	0.20	1:1	0.028	1.130	0.032	
1 CC Uplink	N/A	1720.00	132072	Low	Right	Cheek	LTE Band 66 (AWS)	F	3691M	20	QPSK	1	50	22.0	21.64	0	0.00	1:1	0.581	1.086	0.631	
1 CC Uplink	N/A	1720.00	132072	Low	Right	Cheek	LTE Band 66 (AWS)	F	3691M	20	QPSK	50	25	22.0	21.61	0	0.01	1:1	0.580	1.094	0.635	
1 CC Uplink	N/A	1720.00	132072	Low	Right	Tilt	LTE Band 66 (AWS)	F	3691M	20	QPSK	1	50	22.0	21.64	0	0.00	1:1	0.704	1.086	0.765	
1 CC Uplink	N/A	1720.00	132072	Low	Right	Tilt	LTE Band 66 (AWS)	F	3691M	20	QPSK	50	25	22.0	21.61	0	0.00	1:1	0.704	1.094	0.770	
1 CC Uplink	N/A	1720.00	132072	Low	Left	Cheek	LTE Band 66 (AWS)	F	3691M	20	QPSK	1	50	22.0	21.64	0	0.03	1:1	0.462	1.086	0.502	
1 CC Uplink	N/A	1720.00	132072	Low	Left	Cheek	LTE Band 66 (AWS)	F	3691M	20	QPSK	50	25	22.0	21.61	0	0.00	1:1	0.458	1.094	0.501	
1 CC Uplink	N/A	1720.00	132072	Low	Left	Tilt	LTE Band 66 (AWS)	F	3691M	20	QPSK	1	50	22.0	21.64	0	0.02	1:1	0.715	1.086	0.776	A12
1 CC Uplink	N/A	1720.00	132072	Low	Left	Tilt	LTE Band 66 (AWS)	F	3691M	20	QPSK	50	25	22.0	21.61	0	0.03	1:1	0.713	1.094	0.780	
1 CC Uplink	N/A	1745.00	132322	Mid	Left	Tilt	LTE Band 66 (AWS)	F	3691M	20	QPSK	50	25	22.0	21.42	0	-0.02	1:1	0.695	1.143	0.794	
1 CC Uplink	N/A	1770.00	132572	High	Left	Tilt	LTE Band 66 (AWS)	F	3691M	20	QPSK	50	25	22.0	21.57	0	0.02	1:1	0.633	1.104	0.699	

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

Table 11-13
LTE Band 25 (PCS) Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																			
1882.50	26365	Mid	Right	Cheek	LTE Band 25 (PCS)	B	1317M	20	QPSK	1	50	25.0	24.26	0	0.09	1:1	0.065	1.186	0.077	
1882.50	26365	Mid	Right	Cheek	LTE Band 25 (PCS)	B	1317M	20	QPSK	50	0	24.0	22.98	1	0.05	1:1	0.056	1.265	0.071	
1882.50	26365	Mid	Right	Tilt	LTE Band 25 (PCS)	B	1317M	20	QPSK	1	50	25.0	24.26	0	-0.10	1:1	0.049	1.186	0.058	
1882.50	26365	Mid	Right	Tilt	LTE Band 25 (PCS)	B	1317M	20	QPSK	50	0	24.0	22.98	1	0.13	1:1	0.044	1.265	0.056	
1882.50	26365	Mid	Left	Cheek	LTE Band 25 (PCS)	B	1317M	20	QPSK	1	50	25.0	24.26	0	0.09	1:1	0.082	1.186	0.097	
1882.50	26365	Mid	Left	Cheek	LTE Band 25 (PCS)	B	1317M	20	QPSK	50	0	24.0	22.98	1	-0.01	1:1	0.065	1.265	0.082	
1882.50	26365	Mid	Left	Tilt	LTE Band 25 (PCS)	B	1317M	20	QPSK	1	50	25.0	24.26	0	-0.18	1:1	0.050	1.186	0.059	
1882.50	26365	Mid	Left	Tilt	LTE Band 25 (PCS)	B	1317M	20	QPSK	50	0	24.0	22.98	1	-0.02	1:1	0.036	1.265	0.046	
1860.00	26140	Low	Right	Cheek	LTE Band 25 (PCS)	F	1808M	20	QPSK	1	50	22.5	22.19	0	0.00	1:1	0.375	1.074	0.403	
1860.00	26140	Low	Right	Cheek	LTE Band 25 (PCS)	F	1808M	20	QPSK	50	25	22.5	22.10	0	-0.01	1:1	0.385	1.096	0.422	
1860.00	26140	Low	Right	Tilt	LTE Band 25 (PCS)	F	1808M	20	QPSK	1	50	22.5	22.19	0	-0.01	1:1	0.382	1.074	0.410	
1860.00	26140	Low	Right	Tilt	LTE Band 25 (PCS)	F	1808M	20	QPSK	50	25	22.5	22.10	0	-0.02	1:1	0.389	1.096	0.426	
1860.00	26140	Low	Left	Cheek	LTE Band 25 (PCS)	F	1808M	20	QPSK	1	50	22.5	22.19	0	-0.04	1:1	0.320	1.074	0.344	
1860.00	26140	Low	Left	Cheek	LTE Band 25 (PCS)	F	1808M	20	QPSK	50	25	22.5	22.10	0	0.02	1:1	0.327	1.096	0.358	
1860.00	26140	Low	Left	Tilt	LTE Band 25 (PCS)	F	1808M	20	QPSK	1	50	22.5	22.19	0	0.04	1:1	0.389	1.074	0.418	
1860.00	26140	Low	Left	Tilt	LTE Band 25 (PCS)	F	1808M	20	QPSK	50	25	22.5	22.10	0	0.00	1:1	0.393	1.096	0.431	A13

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

Table 11-14
LTE Band 30 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
2310.00	27710	Mid	Right	Cheek	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	0.02	1:1	0.048	1.161	0.056	
2310.00	27710	Mid	Right	Cheek	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.10	1:1	0.046	1.172	0.054	
2310.00	27710	Mid	Right	Tilt	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	0.04	1:1	0.021	1.161	0.024	
2310.00	27710	Mid	Right	Tilt	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.06	1:1	0.019	1.172	0.022	
2310.00	27710	Mid	Left	Cheek	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	0.01	1:1	0.033	1.161	0.038	
2310.00	27710	Mid	Left	Cheek	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	-0.15	1:1	0.031	1.172	0.036	
2310.00	27710	Mid	Left	Tilt	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	0.07	1:1	0.029	1.161	0.034	
2310.00	27710	Mid	Left	Tilt	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.01	1:1	0.026	1.172	0.030	
2310.00	27710	Mid	Right	Cheek	LTE Band 30	F	1787M	10	QPSK	1	25	24.0	22.97	0	-0.04	1:1	0.284	1.268	0.360	
2310.00	27710	Mid	Right	Cheek	LTE Band 30	F	1787M	10	QPSK	25	12	23.0	21.87	1	-0.01	1:1	0.226	1.297	0.293	
2310.00	27710	Mid	Right	Tilt	LTE Band 30	F	1787M	10	QPSK	1	25	24.0	22.97	0	0.07	1:1	0.302	1.268	0.383	
2310.00	27710	Mid	Right	Tilt	LTE Band 30	F	1787M	10	QPSK	25	12	23.0	21.87	1	0.06	1:1	0.213	1.297	0.276	
2310.00	27710	Mid	Left	Cheek	LTE Band 30	F	1787M	10	QPSK	1	25	24.0	22.97	0	-0.07	1:1	0.308	1.268	0.391	
2310.00	27710	Mid	Left	Cheek	LTE Band 30	F	1787M	10	QPSK	25	12	23.0	21.87	1	0.07	1:1	0.242	1.297	0.314	
2310.00	27710	Mid	Left	Tilt	LTE Band 30	F	1787M	10	QPSK	1	25	24.0	22.97	0	0.04	1:1	0.441	1.268	0.559	A14
2310.00	27710	Mid	Left	Tilt	LTE Band 30	F	1787M	10	QPSK	25	12	23.0	21.87	1	0.04	1:1	0.337	1.297	0.437	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Head 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-15
LTE Band 7 Head SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Test Position	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
2535.00	21100	Mid	Right	Cheek	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	-0.10	1:1	0.027	1.153	0.031	
2535.00	21100	Mid	Right	Cheek	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	0.06	1:1	0.023	1.153	0.027	
2535.00	21100	Mid	Right	Tilt	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	0.09	1:1	0.016	1.153	0.018	
2535.00	21100	Mid	Right	Tilt	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	0.08	1:1	0.015	1.153	0.017	
2535.00	21100	Mid	Left	Cheek	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	-0.17	1:1	0.037	1.153	0.043	
2535.00	21100	Mid	Left	Cheek	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	0.01	1:1	0.025	1.153	0.029	
2535.00	21100	Mid	Left	Tilt	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	0.08	1:1	0.016	1.153	0.018	
2535.00	21100	Mid	Left	Tilt	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	0.04	1:1	0.015	1.153	0.017	
2535.00	21100	Mid	Right	Cheek	LTE Band 7	F	3601M	20	QPSK	1	0	25.0	24.52	0	-0.06	1:1	0.423	1.117	0.472	
2535.00	21100	Mid	Right	Cheek	LTE Band 7	F	3601M	20	QPSK	50	25	24.0	23.51	1	0.03	1:1	0.338	1.119	0.378	
2510.00	20850	Low	Right	Tilt	LTE Band 7	F	3601M	20	QPSK	1	50	25.0	24.32	0	0.11	1:1	0.581	1.170	0.680	
2535.00	21100	Mid	Right	Tilt	LTE Band 7	F	3601M	20	QPSK	1	0	25.0	24.52	0	-0.02	1:1	0.675	1.117	0.754	A15
2560.00	21350	High	Right	Tilt	LTE Band 7	F	3601M	20	QPSK	1	50	25.0	24.51	0	-0.06	1:1	0.658	1.119	0.736	
2535.00	21100	Mid	Right	Tilt	LTE Band 7	F	3601M	20	QPSK	50	25	24.0	23.51	1	-0.03	1:1	0.438	1.119	0.490	
2535.00	21100	Mid	Left	Cheek	LTE Band 7	F	3601M	20	QPSK	1	0	25.0	24.52	0	0.02	1:1	0.403	1.117	0.450	
2535.00	21100	Mid	Left	Cheek	LTE Band 7	F	3601M	20	QPSK	50	25	24.0	23.51	1	0.01	1:1	0.320	1.119	0.358	
2535.00	21100	Mid	Left	Tilt	LTE Band 7	F	3601M	20	QPSK	1	0	25.0	24.52	0	0.06	1:1	0.581	1.117	0.649	
2535.00	21100	Mid	Left	Tilt	LTE Band 7	F	3601M	20	QPSK	50	25	24.0	23.51	1	0.04	1:1	0.452	1.119	0.506	
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 41 Head SAR

MEASUREMENT RESULTS																							
# CC Uplink, Power Class	Component Carrier	FREQUENCY			Side	Test Position	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	Right	Cheek	LTE Band 41	B	1815M	20	QPSK	1	50	23.0	22.55	0	-0.11	1:1.58	0.015	1.109	0.017	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	Right	Cheek	LTE Band 41	B	1815M	20	QPSK	50	50	23.0	22.54	0	0.05	1:1.58	0.017	1.112	0.019	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	Right	Tilt	LTE Band 41	B	1815M	20	QPSK	1	50	23.0	22.55	0	0.06	1:1.58	0.006	1.109	0.007	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	Right	Tilt	LTE Band 41	B	1815M	20	QPSK	50	50	23.0	22.54	0	0.06	1:1.58	0.003	1.112	0.003	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	Left	Cheek	LTE Band 41	B	1815M	20	QPSK	1	50	23.0	22.55	0	0.03	1:1.58	0.017	1.109	0.019	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	Left	Cheek	LTE Band 41	B	1815M	20	QPSK	50	0	23.0	22.25	0	0.04	1:1.58	0.019	1.189	0.023	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	Left	Cheek	LTE Band 41	B	1815M	20	QPSK	50	50	23.0	22.54	0	0.20	1:1.58	0.018	1.112	0.020	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	Left	Cheek	LTE Band 41	B	1815M	20	QPSK	50	0	24.6	24.05	0	0.20	1:2.31	0.021	1.135	0.024	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	Left	Cheek	LTE Band 41	B	1815M	20	QPSK	50	50	24.6	24.32	0	0.20	1:2.31	0.018	1.067	0.019	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	Left	Cheek	LTE Band 41	B	1815M	20	QPSK	50	0	23.0	22.31	0	0.03	1:1.58	0.019	1.172	0.022	
	SCC	2660.20	41292										50									
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	Left	Cheek	LTE Band 41	B	1815M	20	QPSK	50	0	24.6	24.13	0	-0.04	1:2.31	0.020	1.114	0.022	
	SCC	2660.20	41292										0									
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	Left	Tilt	LTE Band 41	B	1815M	20	QPSK	1	50	23.0	22.55	0	0.04	1:1.58	0.005	1.109	0.006	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	Left	Tilt	LTE Band 41	B	1815M	20	QPSK	50	50	23.0	22.54	0	0.20	1:1.58	0.001	1.112	0.001	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	Right	Cheek	LTE Band 41	F	3596M	20	QPSK	1	99	25.0	24.53	0	-0.03	1:1.58	0.240	1.114	0.267	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	Right	Cheek	LTE Band 41	F	3596M	20	QPSK	50	50	24.0	23.43	1	-0.01	1:1.58	0.188	1.140	0.214	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	Right	Tilt	LTE Band 41	F	3596M	20	QPSK	1	99	25.0	24.53	0	-0.16	1:1.58	0.342	1.114	0.381	A16
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	Right	Tilt	LTE Band 41	F	3596M	20	QPSK	50	50	24.0	23.43	1	0.02	1:1.58	0.263	1.140	0.300	
1 CC Uplink - Power Class 2	N/A	2549.50	40185	Low-Mid	Right	Tilt	LTE Band 41	F	3596M	20	QPSK	1	99	26.7	26.16	0	0.00	1:2.31	0.317	1.132	0.359	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	Left	Cheek	LTE Band 41	F	3596M	20	QPSK	1	99	25.0	24.53	0	-0.06	1:1.58	0.236	1.114	0.263	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	Left	Cheek	LTE Band 41	F	3596M	20	QPSK	50	50	24.0	23.43	1	-0.07	1:1.58	0.189	1.140	0.215	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	Left	Tilt	LTE Band 41	F	3596M	20	QPSK	1	99	25.0	24.53	0	-0.02	1:1.58	0.335	1.114	0.373	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	Left	Tilt	LTE Band 41	F	3596M	20	QPSK	50	50	24.0	23.43	1	0.05	1:1.58	0.261	1.140	0.298	

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

Table 11-17
LTE Band 48 Head SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Test Position	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	3646.70	56207	Mid-High	Right	Cheek	LTE Band 48	F	1803M	20	QPSK	1	50	22.0	21.35	0	0.01	1:1.58	0.239	1.161	0.277	
1 CC Uplink	N/A	3646.70	56207	Mid-High	Right	Cheek	LTE Band 48	F	1803M	20	QPSK	50	25	22.0	21.37	0	0.02	1:1.58	0.237	1.156	0.274	
1 CC Uplink	N/A	3646.70	56207	Mid-High	Right	Tilt	LTE Band 48	F	1803M	20	QPSK	1	50	22.0	21.35	0	0.04	1:1.58	0.297	1.161	0.345	A17
1 CC Uplink	N/A	3646.70	56207	Mid-High	Right	Tilt	LTE Band 48	F	1803M	20	QPSK	1	99	22.0	21.30	0	0.02	1:1.58	0.285	1.175	0.335	
1 CC Uplink	N/A	3646.70	56207	Mid-High	Right	Tilt	LTE Band 48	F	1803M	20	QPSK	50	25	22.0	21.37	0	0.16	1:1.58	0.294	1.156	0.340	
2 CC Uplink	PCC	3646.70	56207	Mid-High	Right	Tilt	LTE Band 48	F	1803M	20	QPSK	1	99	22.0	21.07	0	0.00	1:1.58	0.277	1.239	0.343	
	SCC	3666.50	56405										0									
1 CC Uplink	N/A	3646.70	56207	Mid-High	Left	Cheek	LTE Band 48	F	1803M	20	QPSK	1	50	22.0	21.35	0	0.19	1:1.58	0.212	1.161	0.246	
1 CC Uplink	N/A	3646.70	56207	Mid-High	Left	Cheek	LTE Band 48	F	1803M	20	QPSK	50	25	22.0	21.37	0	0.03	1:1.58	0.213	1.156	0.246	
1 CC Uplink	N/A	3646.70	56207	Mid-High	Left	Tilt	LTE Band 48	F	1803M	20	QPSK	1	50	22.0	21.35	0	-0.05	1:1.58	0.258	1.161	0.300	
1 CC Uplink	N/A	3646.70	56207	Mid-High	Left	Tilt	LTE Band 48	F	1803M	20	QPSK	50	25	22.0	21.37	0	0.16	1:1.58	0.261	1.156	0.302	

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

Table 11-18
NR Band n71 Head SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Test Position	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
680.50	136100	Mid	Right	Cheek	NR Band n71	A+B	117	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.01	1:1	0.147	1.294	0.190	A18
680.50	136100	Mid	Right	Cheek	NR Band n71	A+B	117	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	-0.01	1:1	0.126	1.291	0.163	
680.50	136100	Mid	Right	Cheek	NR Band n71	A+B	117	2719M	20	CP-OFDM	QPSK	1	1	24.0	22.75	1.5	-0.03	1:1	0.106	1.334	0.141	
680.50	136100	Mid	Right	Tilt	NR Band n71	A+B	117	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.00	1:1	0.073	1.294	0.094	
680.50	136100	Mid	Right	Tilt	NR Band n71	A+B	117	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.08	1:1	0.056	1.291	0.072	
680.50	136100	Mid	Left	Cheek	NR Band n71	A+B	45	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.06	1:1	0.117	1.294	0.151	
680.50	136100	Mid	Left	Cheek	NR Band n71	A+B	45	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.03	1:1	0.107	1.291	0.138	
680.50	136100	Mid	Left	Tilt	NR Band n71	A+B	45	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.02	1:1	0.062	1.294	0.080	
680.50	136100	Mid	Left	Tilt	NR Band n71	A+B	45	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.06	1:1	0.054	1.291	0.070	
680.50	136100	Mid	Right	Cheek	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.03	1:1	0.084	1.294	0.109	
680.50	136100	Mid	Right	Cheek	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.16	1:1	0.072	1.291	0.093	
680.50	136100	Mid	Right	Cheek	NR Band n71	A	49	3594M	20	CP-OFDM	QPSK	1	1	24.0	22.75	1.5	-0.04	1:1	0.056	1.334	0.075	
680.50	136100	Mid	Right	Tilt	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.10	1:1	0.034	1.294	0.044	
680.50	136100	Mid	Right	Tilt	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.05	1:1	0.030	1.291	0.039	
680.50	136100	Mid	Left	Cheek	NR Band n71	A	121	3594M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.03	1:1	0.063	1.294	0.082	
680.50	136100	Mid	Left	Cheek	NR Band n71	A	121	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	-0.01	1:1	0.062	1.291	0.080	
680.50	136100	Mid	Left	Tilt	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.05	1:1	0.030	1.294	0.039	
680.50	136100	Mid	Left	Tilt	NR Band n71	A	121	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.08	1:1	0.029	1.291	0.037	
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
NR Band n12 Head SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Test Position	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
707.50	141500	Mid	Right	Cheek	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.01	1:1	0.149	1.213	0.181	
707.50	141500	Mid	Right	Cheek	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.00	1:1	0.150	1.180	0.177	A19
707.50	141500	Mid	Right	Cheek	NR Band n12	A+B	36	2719M	15	CP-OFDM	QPSK	1	1	24.0	23.30	1.5	0.00	1:1	0.101	1.175	0.119	
707.50	141500	Mid	Right	Tilt	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.00	1:1	0.080	1.213	0.097	
707.50	141500	Mid	Right	Tilt	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.04	1:1	0.072	1.180	0.085	
707.50	141500	Mid	Left	Cheek	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.02	1:1	0.118	1.213	0.143	
707.50	141500	Mid	Left	Cheek	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.06	1:1	0.121	1.180	0.143	
707.50	141500	Mid	Left	Tilt	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.13	1:1	0.054	1.213	0.066	
707.50	141500	Mid	Left	Tilt	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.08	1:1	0.061	1.180	0.072	
707.50	141500	Mid	Right	Cheek	NR Band n12	A	54	3594M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.04	1:1	0.061	1.213	0.074	
707.50	141500	Mid	Right	Cheek	NR Band n12	A	54	3594M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.01	1:1	0.081	1.180	0.096	
707.50	141500	Mid	Right	Cheek	NR Band n12	A	54	3594M	15	CP-OFDM	QPSK	1	1	24.0	23.30	1.5	-0.05	1:1	0.056	1.175	0.066	
707.50	141500	Mid	Right	Tilt	NR Band n12	A	54	3594M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.05	1:1	0.038	1.213	0.046	
707.50	141500	Mid	Right	Tilt	NR Band n12	A	54	3594M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.08	1:1	0.037	1.180	0.044	
707.50	141500	Mid	Left	Cheek	NR Band n12	A	10	3594M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.12	1:1	0.051	1.213	0.062	
707.50	141500	Mid	Left	Cheek	NR Band n12	A	10	3594M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.04	1:1	0.021	1.180	0.025	
707.50	141500	Mid	Left	Tilt	NR Band n12	A	10	3594M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.01	1:1	0.006	1.213	0.007	
707.50	141500	Mid	Left	Tilt	NR Band n12	A	10	3594M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.14	1:1	0.010	1.180	0.012	
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
NR Band n5 Head SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Test Position	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
836.50	167300	Mid	Right	Cheek	NR Band n5 (Cell)	A+B	108	3591M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.16	1:1	0.150	1.268	0.190	A20
836.50	167300	Mid	Right	Cheek	NR Band n5 (Cell)	A+B	108	3591M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.03	1:1	0.138	1.211	0.167	
836.50	167300	Mid	Right	Cheek	NR Band n5 (Cell)	A+B	108	3591M	20	CP-OFDM	QPSK	1	1	24.0	23.05	1.5	-0.03	1:1	0.096	1.245	0.120	
836.50	167300	Mid	Right	Tilt	NR Band n5 (Cell)	A+B	108	3591M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.21	1:1	0.054	1.268	0.068	
836.50	167300	Mid	Right	Tilt	NR Band n5 (Cell)	A+B	108	3591M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.01	1:1	0.052	1.211	0.063	
836.50	167300	Mid	Left	Cheek	NR Band n5 (Cell)	A+B	108	3591M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.06	1:1	0.105	1.268	0.133	
836.50	167300	Mid	Left	Cheek	NR Band n5 (Cell)	A+B	108	3591M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.18	1:1	0.102	1.211	0.124	
836.50	167300	Mid	Left	Tilt	NR Band n5 (Cell)	A+B	108	3591M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.06	1:1	0.042	1.268	0.053	
836.50	167300	Mid	Left	Tilt	NR Band n5 (Cell)	A+B	108	3591M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.06	1:1	0.045	1.211	0.054	
836.50	167300	Mid	Right	Cheek	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.16	1:1	0.109	1.268	0.138	
836.50	167300	Mid	Right	Cheek	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.03	1:1	0.106	1.211	0.128	
836.50	167300	Mid	Right	Cheek	NR Band n5 (Cell)	A	9	3594M	20	CP-OFDM	QPSK	1	1	24.0	23.05	1.5	-0.03	1:1	0.073	1.245	0.091	
836.50	167300	Mid	Right	Tilt	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.02	1:1	0.044	1.268	0.056	
836.50	167300	Mid	Right	Tilt	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.08	1:1	0.045	1.211	0.054	
836.50	167300	Mid	Left	Cheek	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.01	1:1	0.066	1.268	0.084	
836.50	167300	Mid	Left	Cheek	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.02	1:1	0.066	1.211	0.080	
836.50	167300	Mid	Left	Tilt	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.08	1:1	0.044	1.268	0.056	
836.50	167300	Mid	Left	Tilt	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.04	1:1	0.044	1.211	0.053	
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 11-21
NR Band n66 Head SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Test Position	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1745.00	349000	Mid	Right	Cheek	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.08	1:1	0.037	1.268	0.047	
1745.00	349000	Mid	Right	Cheek	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	0.09	1:1	0.039	1.285	0.050	
1745.00	349000	Mid	Right	Cheek	NR Band n66 (AWS)	B	1772M	40	CP-OFDM	QPSK	1	1	23.0	21.70	1.5	0.15	1:1	0.026	1.349	0.035	
1745.00	349000	Mid	Right	Tilt	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.03	1:1	0.027	1.268	0.034	
1745.00	349000	Mid	Right	Tilt	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	-0.05	1:1	0.029	1.285	0.037	
1745.00	349000	Mid	Left	Cheek	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.03	1:1	0.020	1.268	0.025	
1745.00	349000	Mid	Left	Cheek	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	0.19	1:1	0.022	1.285	0.028	
1745.00	349000	Mid	Left	Tilt	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.05	1:1	0.019	1.268	0.024	
1745.00	349000	Mid	Left	Tilt	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	0.07	1:1	0.022	1.285	0.028	
1745.00	349000	Mid	Right	Cheek	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	1	108	22.0	21.85	0	-0.05	1:1	0.548	1.035	0.567	
1745.00	349000	Mid	Right	Cheek	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	108	54	22.0	21.94	0	-0.01	1:1	0.533	1.014	0.540	
1745.00	349000	Mid	Right	Tilt	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	1	108	22.0	21.85	0	-0.06	1:1	0.692	1.035	0.716	
1745.00	349000	Mid	Right	Tilt	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	108	54	22.0	21.94	0	0.00	1:1	0.672	1.014	0.681	
1745.00	349000	Mid	Left	Cheek	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	1	108	22.0	21.85	0	-0.07	1:1	0.422	1.035	0.437	
1745.00	349000	Mid	Left	Cheek	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	108	54	22.0	21.94	0	-0.03	1:1	0.445	1.014	0.451	
1745.00	349000	Mid	Left	Tilt	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	1	108	22.0	21.85	0	-0.02	1:1	0.706	1.035	0.731	A21
1745.00	349000	Mid	Left	Tilt	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	108	54	22.0	21.94	0	-0.04	1:1	0.698	1.014	0.708	
1745.00	349000	Mid	Left	Tilt	NR Band n66 (AWS)	F	3591M	40	CP-OFDM	QPSK	1	1	22.0	21.82	0	-0.06	1:1	0.695	1.042	0.724	
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 n25 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1882.50	376500	Mid	Right	Cheek	NR Band n25 (PCS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	-0.06	1:1	0.051	1.361	0.069	
1882.50	376500	Mid	Right	Cheek	NR Band n25 (PCS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.06	1:1	0.053	1.403	0.074	
1882.50	376500	Mid	Right	Tilt	NR Band n25 (PCS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	0.03	1:1	0.080	1.361	0.109	
1882.50	376500	Mid	Right	Tilt	NR Band n25 (PCS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.13	1:1	0.081	1.403	0.114	
1882.50	376500	Mid	Left	Cheek	NR Band n25 (PCS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	-0.12	1:1	0.081	1.361	0.110	
1882.50	376500	Mid	Left	Cheek	NR Band n25 (PCS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.06	1:1	0.081	1.403	0.114	
1882.50	376500	Mid	Left	Cheek	NR Band n25 (PCS)	B	1772M	40	CP-OFDM	QPSK	1	1	23.0	21.49	1.5	0.07	1:1	0.066	1.416	0.093	
1882.50	376500	Mid	Left	Tilt	NR Band n25 (PCS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	0.05	1:1	0.035	1.361	0.048	
1882.50	376500	Mid	Left	Tilt	NR Band n25 (PCS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.07	1:1	0.037	1.403	0.052	
1882.50	376500	Mid	Right	Cheek	NR Band n25 (PCS)	F	1808M	40	DFT-S-OFDM	QPSK	1	108	22.5	22.28	0	-0.05	1:1	0.386	1.052	0.406	
1882.50	376500	Mid	Right	Cheek	NR Band n25 (PCS)	F	1808M	40	DFT-S-OFDM	QPSK	108	54	22.5	22.24	0	-0.07	1:1	0.379	1.062	0.402	
1882.50	376500	Mid	Right	Tilt	NR Band n25 (PCS)	F	1808M	40	DFT-S-OFDM	QPSK	1	108	22.5	22.28	0	0.00	1:1	0.366	1.052	0.385	
1882.50	376500	Mid	Right	Tilt	NR Band n25 (PCS)	F	1808M	40	DFT-S-OFDM	QPSK	108	54	22.5	22.24	0	0.00	1:1	0.361	1.062	0.383	
1882.50	376500	Mid	Left	Cheek	NR Band n25 (PCS)	F	1808M	40	DFT-S-OFDM	QPSK	1	108	22.5	22.28	0	0.04	1:1	0.328	1.052	0.345	
1882.50	376500	Mid	Left	Cheek	NR Band n25 (PCS)	F	1808M	40	DFT-S-OFDM	QPSK	108	54	22.5	22.24	0	-0.04	1:1	0.336	1.062	0.357	
1882.50	376500	Mid	Left	Tilt	NR Band n25 (PCS)	F	1808M	40	DFT-S-OFDM	QPSK	1	108	22.5	22.28	0	0.03	1:1	0.394	1.052	0.414	A22
1882.50	376500	Mid	Left	Tilt	NR Band n25 (PCS)	F	1808M	40	DFT-S-OFDM	QPSK	108	54	22.5	22.24	0	0.01	1:1	0.388	1.062	0.412	
1882.50	376500	Mid	Left	Tilt	NR Band n25 (PCS)	F	1808M	40	CP-OFDM	QPSK	1	1	22.5	22.06	0	-0.05	1:1	0.394	1.107	0.436	
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 n30 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2310.00	462000	Mid	Right	Cheek	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.13	1:1	0.037	1.216	0.045	
2310.00	462000	Mid	Right	Cheek	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.06	1:1	0.038	1.169	0.044	
2310.00	462000	Mid	Right	Cheek	NR Band n30	B	1793M	10	CP-OFDM	QPSK	1	1	22.5	21.19	0	0.03	1:1	0.011	1.352	0.015	
2310.00	462000	Mid	Right	Tilt	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	-0.02	1:1	0.005	1.216	0.006	
2310.00	462000	Mid	Right	Tilt	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.06	1:1	0.020	1.169	0.023	
2310.00	462000	Mid	Left	Cheek	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.05	1:1	0.025	1.216	0.030	
2310.00	462000	Mid	Left	Cheek	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.04	1:1	0.026	1.169	0.030	
2310.00	462000	Mid	Left	Tilt	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.04	1:1	0.015	1.216	0.018	
2310.00	462000	Mid	Left	Tilt	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.07	1:1	0.018	1.169	0.021	
2310.00	462000	Mid	Right	Cheek	NR Band n30	F	1793M	10	DFT-S-OFDM	QPSK	1	26	23.5	22.03	0	-0.03	1:1	0.244	1.403	0.342	
2310.00	462000	Mid	Right	Cheek	NR Band n30	F	1793M	10	DFT-S-OFDM	QPSK	25	14	23.5	22.11	0	-0.04	1:1	0.275	1.377	0.379	
2310.00	462000	Mid	Right	Tilt	NR Band n30	F	1793M	10	DFT-S-OFDM	QPSK	1	26	23.5	22.03	0	0.11	1:1	0.361	1.403	0.506	
2310.00	462000	Mid	Right	Tilt	NR Band n30	F	1793M	10	DFT-S-OFDM	QPSK	25	14	23.5	22.11	0	0.01	1:1	0.368	1.377	0.507	A23
2310.00	462000	Mid	Right	Tilt	NR Band n30	F	1793M	10	CP-OFDM	QPSK	1	1	22.0	20.60	1.5	-0.05	1:1	0.256	1.380	0.353	
2310.00	462000	Mid	Left	Cheek	NR Band n30	F	1793M	10	DFT-S-OFDM	QPSK	1	26	23.5	22.03	0	0.04	1:1	0.243	1.403	0.341	
2310.00	462000	Mid	Left	Cheek	NR Band n30	F	1793M	10	DFT-S-OFDM	QPSK	25	14	23.5	22.11	0	-0.04	1:1	0.246	1.377	0.339	
2310.00	462000	Mid	Left	Tilt	NR Band n30	F	1793M	10	DFT-S-OFDM	QPSK	1	26	23.5	22.03	0	-0.01	1:1	0.302	1.403	0.424	
2310.00	462000	Mid	Left	Tilt	NR Band n30	F	1793M	10	DFT-S-OFDM	QPSK	25	14	23.5	22.11	0	0.01	1:1	0.308	1.377	0.424	
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 11-24
NR Band n7 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2535.00	507000	Mid	Right	Cheek	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	0.07	1:1	0.024	1.225	0.029	
2535.00	507000	Mid	Right	Cheek	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	0.02	1:1	0.025	1.274	0.032	
2535.00	507000	Mid	Right	Tilt	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	-0.07	1:1	0.026	1.225	0.032	
2535.00	507000	Mid	Right	Tilt	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	0.09	1:1	0.028	1.274	0.036	
2535.00	507000	Mid	Left	Cheek	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	0.07	1:1	0.048	1.225	0.059	
2535.00	507000	Mid	Left	Cheek	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	0.16	1:1	0.045	1.274	0.057	
2535.00	507000	Mid	Left	Cheek	NR Band n7	B	1779M	40	CP-OFDM	QPSK	1	1	22.5	21.53	0	0.03	1:1	0.036	1.250	0.045	
2535.00	507000	Mid	Left	Tilt	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	0.20	1:1	0.021	1.225	0.026	
2535.00	507000	Mid	Left	Tilt	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	0.13	1:1	0.023	1.274	0.029	
2535.00	507000	Mid	Right	Cheek	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	1	214	24.0	23.28	0	0.07	1:1	0.263	1.180	0.310	
2535.00	507000	Mid	Right	Cheek	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	108	54	24.0	23.16	0	0.05	1:1	0.298	1.213	0.361	
2535.00	507000	Mid	Right	Tilt	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	1	214	24.0	23.28	0	-0.05	1:1	0.466	1.180	0.550	
2535.00	507000	Mid	Right	Tilt	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	108	54	24.0	23.16	0	0.03	1:1	0.401	1.213	0.486	
2535.00	507000	Mid	Left	Cheek	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	1	214	24.0	23.28	0	0.04	1:1	0.237	1.180	0.280	
2535.00	507000	Mid	Left	Cheek	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	108	54	24.0	23.16	0	0.06	1:1	0.340	1.213	0.412	
2535.00	507000	Mid	Left	Tilt	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	1	214	24.0	23.28	0	-0.05	1:1	0.490	1.180	0.578	
2535.00	507000	Mid	Left	Tilt	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	108	54	24.0	23.16	0	0.02	1:1	0.506	1.213	0.614	A24
2535.00	507000	Mid	Left	Tilt	NR Band n7	F	1779M	40	CP-OFDM	QPSK	1	1	22.5	21.71	1.5	-0.02	1:1	0.236	1.199	0.283	
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 n41 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2592.99	518598	Mid	Right	Cheek	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	-0.12	1:1	0.055	1.253	0.069	
2592.99	518598	Mid	Right	Cheek	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	-0.08	1:1	0.051	1.288	0.066	
2592.99	518598	Mid	Right	Tilt	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	-0.06	1:1	0.096	1.253	0.120	
2592.99	518598	Mid	Right	Tilt	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	0.02	1:1	0.089	1.288	0.115	
2592.99	518598	Mid	Left	Cheek	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	-0.02	1:1	0.126	1.253	0.158	
2592.99	518598	Mid	Left	Cheek	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	0.04	1:1	0.115	1.288	0.148	
2592.99	518598	Mid	Left	Tilt	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	0.06	1:1	0.159	1.253	0.199	A25
2592.99	518598	Mid	Left	Tilt	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	-0.06	1:1	0.144	1.288	0.185	
2592.99	518598	Mid	Left	Tilt	NR Band n41	F	1779M	100	CP-OFDM	QPSK	1	1	19.0	17.86	0	-0.04	1:1	0.152	1.300	0.198	
2592.99	518598	Mid	Right	Cheek	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.05	1:1	0.007	1.205	0.008	
2592.99	518598	Mid	Right	Tilt	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.02	1:1	0.008	1.205	0.010	
2592.99	518598	Mid	Left	Cheek	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	-0.21	1:1	0.001	1.205	0.001	
2592.99	518598	Mid	Left	Tilt	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.20	1:1	0.000	1.205	0.000	
2592.99	518598	Mid	Right	Cheek	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.20	1:1	0.007	1.276	0.009	
2592.99	518598	Mid	Right	Tilt	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	-0.15	1:1	0.009	1.276	0.011	
2592.99	518598	Mid	Left	Cheek	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	-0.03	1:1	0.013	1.276	0.017	
2592.99	518598	Mid	Left	Tilt	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.20	1:1	0.019	1.276	0.024	
2592.99	518598	Mid	Right	Cheek	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	0.05	1:1	0.000	1.268	0.000	
2592.99	518598	Mid	Right	Tilt	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	0.06	1:1	0.002	1.268	0.003	
2592.99	518598	Mid	Left	Cheek	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	0.01	1:1	0.000	1.268	0.000	
2592.99	518598	Mid	Left	Tilt	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	0.20	1:1	0.004	1.268	0.005	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-26
NR Band n48 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3624.99	641666	Mid	Right	Cheek	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	-0.01	1:1	0.221	1.074	0.237	
3624.99	641666	Mid	Right	Cheek	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	-0.13	1:1	0.212	1.112	0.236	
3624.99	641666	Mid	Right	Tilt	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	-0.19	1:1	0.312	1.074	0.335	
3624.99	641666	Mid	Right	Tilt	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	-0.20	1:1	0.299	1.112	0.332	
3624.99	641666	Mid	Right	Tilt	NR Band n48	F	1790M	40	CP-OFDM	QPSK	1	1	18.5	17.75	0	-0.15	1:1	0.342	1.189	**0.407**	A26
3624.99	641666	Mid	Left	Cheek	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	0.01	1:1	0.174	1.074	0.187	
3624.99	641666	Mid	Left	Cheek	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	0.04	1:1	0.165	1.112	0.183	
3624.99	641666	Mid	Left	Tilt	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	0.02	1:1	0.228	1.074	0.245	
3624.99	641666	Mid	Left	Tilt	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	-0.02	1:1	0.221	1.112	0.246	
3624.99	641666	Low-Mid	Right	Cheek	NR Band n48	E	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.16	1:1	0.052	1.462	0.076	
3624.99	641666	Low-Mid	Right	Tilt	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.05	1:1	0.053	1.462	0.077	
3624.99	641666	Low-Mid	Left	Cheek	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	-0.02	1:1	0.152	1.462	0.222	
3624.99	641666	Low-Mid	Left	Tilt	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.05	1:1	0.111	1.462	0.162	
3624.99	641666	Mid	Right	Cheek	NR Band n48	G	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	0.18	1:1	0.029	1.081	0.031	
3624.99	641666	Mid	Right	Tilt	NR Band n48	G	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	0.03	1:1	0.039	1.081	0.042	
3624.99	641666	Mid	Left	Cheek	NR Band n48	G	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	-0.20	1:1	0.052	1.081	0.056	
3624.99	641666	Mid	Left	Tilt	NR Band n48	G	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	0.08	1:1	0.065	1.081	0.070	
3624.99	641666	Low-Mid	Right	Cheek	NR Band n48	D	1829M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.05	1:1	0.000	1.064	0.000	
3624.99	641666	Low-Mid	Right	Tilt	NR Band n48	D	1829M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.04	1:1	0.000	1.064	0.000	
3624.99	641666	Low-Mid	Left	Cheek	NR Band n48	D	1790M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.09	1:1	0.000	1.064	0.000	
3624.99	641666	Low-Mid	Left	Tilt	NR Band n48	D	1790M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.07	1:1	0.000	1.064	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Head 1.6 W/kg (mW/g) averaged over 1 gram											

Table 11-27
NR Band n77 Head SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Test Position	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3500.01	633334	Mid	Right	Cheek	NR Band n77 DoD	F	1790M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.03	1:1	0.248	1.197	0.297	
3500.01	633334	Mid	Right	Cheek	NR Band n77 DoD	F	1790M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	0.05	1:1	0.233	1.239	0.289	
3500.01	633334	Mid	Right	Tilt	NR Band n77 DoD	F	1790M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.02	1:1	0.332	1.197	0.397	
3500.01	633334	Mid	Right	Tilt	NR Band n77 DoD	F	1790M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	0.00	1:1	0.317	1.239	0.393	
3500.01	633334	Mid	Right	Tilt	NR Band n77 DoD	F	1790M	100	CP-OFDM	QPSK	1	1	19.0	17.94	0	0.07	1:1	0.267	1.276	0.341	
3500.01	633334	Mid	Left	Cheek	NR Band n77 DoD	F	1790M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.04	1:1	0.194	1.197	0.232	
3500.01	633334	Mid	Left	Cheek	NR Band n77 DoD	F	1790M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	-0.07	1:1	0.173	1.239	0.214	
3500.01	633334	Mid	Left	Tilt	NR Band n77 DoD	F	1790M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.01	1:1	0.308	1.197	0.369	
3500.01	633334	Mid	Left	Tilt	NR Band n77 DoD	F	1790M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	0.01	1:1	0.282	1.239	0.349	
3500.01	633334	Mid	Right	Cheek	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	-0.03	1:1	0.317	1.167	0.370	
3500.01	633334	Mid	Right	Cheek	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.03	1:1	0.301	1.199	0.361	
3500.01	633334	Mid	Right	Tilt	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	-0.03	1:1	0.317	1.167	0.370	
3500.01	633334	Mid	Right	Tilt	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.07	1:1	0.287	1.199	0.344	
3500.01	633334	Mid	Left	Cheek	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.01	1:1	0.759	1.167	0.886	
3500.01	633334	Mid	Left	Cheek	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.10	1:1	0.779	1.199	0.934	
3500.01	633334	Mid	Left	Cheek	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	270	0	19.5	18.70	0	-0.03	1:1	0.796	1.202	**0.957**	A27
3500.01	633334	Mid	Left	Cheek	NR Band n77 DoD	E	3591M	100	CP-OFDM	QPSK	1	1	19.5	18.36	0	-0.01	1:1	0.738	1.300	**0.959**	
3500.01	633334	Mid	Left	Tilt	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.01	1:1	0.765	1.167	0.893	
3500.01	633334	Mid	Left	Tilt	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.01	1:1	0.719	1.199	0.862	
3500.01	633334	Mid	Left	Tilt	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	270	0	19.5	18.70	0	-0.02	1:1	0.733	1.202	0.881	
3500.01	633334	Mid	Right	Cheek	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	-0.06	1:1	0.028	1.312	0.037	
3500.01	633334	Mid	Right	Tilt	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.05	1:1	0.029	1.312	0.038	
3500.01	633334	Mid	Left	Cheek	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.03	1:1	0.031	1.312	0.041	
3500.01	633334	Mid	Left	Tilt	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	-0.05	1:1	0.041	1.312	0.054	
3500.01	633334	Mid	Right	Cheek	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	0.09	1:1	0.003	1.268	0.004	
3500.01	633334	Mid	Right	Tilt	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	0.02	1:1	0.003	1.268	0.004	
3500.01	633334	Mid	Left	Cheek	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	0.04	1:1	0.000	1.268	0.000	
3500.01	633334	Mid	Left	Tilt	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	0.07	1:1	0.000	1.268	0.000	
3750.00	650000	Low	Right	Cheek	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.15	1:1	0.189	1.148	0.217	
3750.00	650000	Low	Right	Cheek	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.18	1:1	0.181	1.151	0.208	
3750.00	650000	Low	Right	Tilt	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.07	1:1	0.307	1.148	0.352	
3750.00	650000	Low	Right	Tilt	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.02	1:1	0.332	1.151	0.382	A28
3750.00	650000	Low	Right	Tilt	NR Band n77	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	18.38	0	0.04	1:1	0.294	1.153	0.339	
3750.00	650000	Low	Left	Cheek	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	-0.07	1:1	0.142	1.148	0.163	
3750.00	650000	Low	Left	Cheek	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.09	1:1	0.150	1.151	0.173	
3750.00	650000	Low	Left	Tilt	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.14	1:1	0.183	1.148	0.210	
3750.00	650000	Low	Left	Tilt	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.13	1:1	0.197	1.151	0.227	
3930.00	662000	High	Right	Cheek	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	-0.14	1:1	0.188	1.042	0.196	
3930.00	662000	High	Right	Cheek	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	-0.08	1:1	0.189	1.052	0.199	
3930.00	662000	High	Right	Tilt	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	0.00	1:1	0.216	1.042	0.225	
3930.00	662000	High	Right	Tilt	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	-0.03	1:1	0.211	1.052	0.222	
3930.00	662000	High	Left	Cheek	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	0.05	1:1	0.260	1.042	0.271	
3930.00	662000	High	Left	Cheek	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	-0.09	1:1	0.247	1.052	0.260	
3930.00	662000	High	Left	Cheek	NR Band n77	E	3591M	100	CP-OFDM	QPSK	1	1	19.5	18.86	0	0.04	1:1	0.216	1.159	0.250	
3930.00	662000	High	Left	Tilt	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	-0.12	1:1	0.245	1.042	0.255	
3930.00	662000	High	Left	Tilt	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	0.07	1:1	0.246	1.052	0.259	
3930.00	662000	High	Right	Cheek	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.04	1:1	0.025	1.253	0.031	
3930.00	662000	High	Right	Tilt	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.03	1:1	0.039	1.253	0.049	
3930.00	662000	High	Left	Cheek	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.21	1:1	0.033	1.253	0.041	
3930.00	662000	High	Left	Tilt	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.04	1:1	0.050	1.253	0.063	
3750.00	650000	Low	Right	Cheek	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.07	1:1	0.000	1.230	0.000	
3750.00	650000	Low	Right	Tilt	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.06	1:1	0.000	1.230	0.000	
3750.00	650000	Low	Left	Cheek	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.20	1:1	0.000	1.230	0.000	
3750.00	650000	Low	Left	Tilt	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.20	1:1	0.000	1.230	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Head 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-28
DTS Head SISO SAR

MEASUREMENT RESULTS																			
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	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	Right	Cheek	802.11b	DSSS	2	0417M	22	1	13.0	12.85	0.08	98.85	0.004	0.003	1.035	1.012	**0.003**	
2437	6	Right	Tilt	802.11b	DSSS	2	0417M	22	1	13.0	12.85	0.03	98.85	0.001	0.001	1.035	1.012	0.001	
2437	6	Left	Cheek	802.11b	DSSS	2	0417M	22	1	13.0	12.85	0.09	98.85	0.005	0.003	1.035	1.012	**0.003**	
2437	6	Left	Tilt	802.11b	DSSS	2	0417M	22	1	13.0	12.85	0.03	98.85	0.001	0.000	1.035	1.012	0.000	

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

Table 11-29
DTS Head MIMO SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	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	Right	Cheek	802.11n	OFDM	MIMO	0417M	20	13	13.0	12.49	13.0	12.89	-0.02	97.70	0.429	0.317	1.125	1.024	0.365	A29
2412	1	Right	Tilt	802.11n	OFDM	MIMO	0417M	20	13	13.0	12.49	13.0	12.89	-0.01	97.70	0.396	0.282	1.125	1.024	0.325	
2412	1	Left	Cheek	802.11n	OFDM	MIMO	0417M	20	13	13.0	12.49	13.0	12.89	0.02	97.70	0.195	0.151	1.125	1.024	0.174	
2412	1	Left	Tilt	802.11n	OFDM	MIMO	0417M	20	13	13.0	12.49	13.0	12.89	0.00	97.70	0.272	0.207	1.125	1.024	0.238	

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

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.

Table 11-30
NII MIMO Head SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	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	Right	Cheek	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.74	12.0	11.21	-0.05	92.82	0.207	0.130	1.199	1.077	0.168	
5290	58	Right	Tilt	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.74	12.0	11.21	-0.08	92.82	0.240	0.134	1.199	1.077	0.173	
5290	58	Left	Cheek	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.74	12.0	11.21	0.02	92.82	0.094	0.057	1.199	1.077	0.074	
5290	58	Left	Tilt	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.74	12.0	11.21	0.05	92.82	0.083	0.056	1.199	1.077	0.072	
5690	138	Right	Cheek	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.57	12.0	11.28	0.06	92.82	0.281	0.185	1.180	1.077	0.235	
5690	138	Right	Tilt	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.57	12.0	11.28	0.01	92.82	0.283	0.166	1.180	1.077	0.211	
5690	138	Left	Cheek	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.57	12.0	11.28	0.03	92.82	0.138	0.105	1.180	1.077	0.133	
5690	138	Left	Tilt	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.57	12.0	11.28	-0.09	92.82	0.151	0.110	1.180	1.077	0.140	
5775	155	Right	Cheek	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.73	12.0	10.84	0.03	92.82	0.194	0.116	1.306	1.077	0.163	
5775	155	Right	Tilt	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.73	12.0	10.84	0.02	92.82	0.291	0.172	1.306	1.077	0.242	
5775	155	Left	Cheek	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.73	12.0	10.84	0.19	92.82	0.129	0.094	1.306	1.077	0.132	
5775	155	Left	Tilt	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.73	12.0	10.84	0.20	92.82	0.156	0.128	1.306	1.077	0.180	
5855	171	Right	Cheek	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.90	12.0	10.74	-0.08	92.82	0.227	0.141	1.337	1.077	0.203	
5855	171	Right	Tilt	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.90	12.0	10.74	-0.17	92.82	0.345	0.218	1.337	1.077	**0.314**	A30
5855	171	Left	Cheek	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.90	12.0	10.74	0.03	92.82	0.123	0.090	1.337	1.077	0.130	
5855	171	Left	Tilt	802.11ac	OFDM	MIMO	0417M	80	58.5	12.0	11.90	12.0	10.74	-0.05	92.82	0.168	0.124	1.337	1.077	0.179	

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

Note: To achieve the 15.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 12.0 dBm.

Table 11-31
DSS Head SISO SAR

MEASUREMENT RESULTS																	
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2441	39	Right	Cheek	Bluetooth	FHSS	1	0417M	1	11.5	11.14	-0.03	76.80	0.216	1.086	1.302	**0.305**	A31
2441	39	Right	Tilt	Bluetooth	FHSS	1	0417M	1	11.5	11.14	0.01	76.80	0.196	1.086	1.302	0.277	
2441	39	Left	Cheek	Bluetooth	FHSS	1	0417M	1	11.5	11.14	-0.05	76.80	0.106	1.086	1.302	0.150	
2441	39	Left	Tilt	Bluetooth	FHSS	1	0417M	1	11.5	11.14	-0.01	76.80	0.145	1.086	1.302	0.205	
2441	39	Right	Cheek	Bluetooth	FHSS	2	0417M	1	9.5	9.10	0.07	76.80	0.000	1.096	1.302	0.000	
2441	39	Right	Tilt	Bluetooth	FHSS	2	0417M	1	9.5	9.10	0.04	76.80	0.000	1.096	1.302	0.000	
2441	39	Left	Cheek	Bluetooth	FHSS	2	0417M	1	9.5	9.10	0.08	76.80	0.000	1.096	1.302	0.000	
2441	39	Left	Tilt	Bluetooth	FHSS	2	0417M	1	9.5	9.10	0.07	76.80	0.000	1.096	1.302	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**									**Head** **1.6 W/kg (mW/g)** averaged over 1 gram								

11.2 Standalone Body-Worn SAR Data

Table 11-32
GSM Body-Worn SAR Data

MEASUREMENT RESULTS																	
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	(W/kg)	(W/kg)	
836.60	190	back	15 mm	GSM 850	GSM	A+B	1798M	33.0	31.82	0.04	1:1	0.084	1.312	0.110	0.053	0.070	
836.60	190	back	15 mm	GSM 850	GSM	A	1798M	33.0	31.82	0.04	1:1	0.087	1.312	0.114	0.056	0.073	A32
1850.20	512	back	15 mm	GSM 1900	GSM	B	1328M	30.5	29.18	-0.04	1:1	0.183	1.355	0.248	0.102	0.138	A33
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-33
UMTS Body-Worn SAR Data

MEASUREMENT RESULTS																
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Tune State	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
826.40	4132	back	15 mm	UMTS 850	RMC	A+B	108	1798M	25.5	24.52	-0.01	1:1	0.135	1.253	0.169	
826.40	4132	back	15 mm	UMTS 850	RMC	A	9	1798M	25.5	24.52	-0.01	1:1	0.137	1.253	0.172	A34
1712.40	1312	back	15 mm	UMTS 1750	RMC	B	N/A	1331M	25.0	23.73	-0.05	1:1	0.410	1.340	0.549	A35
1880.00	9400	back	15 mm	UMTS 1900	RMC	B	N/A	1328M	25.0	24.12	-0.01	1:1	0.365	1.225	0.447	A36
ANSI / 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 Body-Worn SAR

MEASUREMENT RESULTS																								
# CC Uplink, Power Class	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																				
1 CC Uplink	N/A	680.50	133297	Mid	back	15 mm	LTE Band 71	A+B	9	1798M	20	QPSK	1	0	25.5	24.33	0	-0.05	1:1	0.167	1.309	0.219	A37
1 CC Uplink	N/A	680.50	133297	Mid	back	15 mm	LTE Band 71	A+B	9	1798M	20	QPSK	50	0	24.5	23.26	1	0.03	1:1	0.127	1.330	0.169	
1 CC Uplink	N/A	680.50	133297	Mid	back	15 mm	LTE Band 71	A	49	1798M	20	QPSK	1	0	25.5	24.33	0	0.06	1:1	0.092	1.309	0.120	
1 CC Uplink	N/A	680.50	133297	Mid	back	15 mm	LTE Band 71	A	49	1798M	20	QPSK	50	0	24.5	23.26	1	0.00	1:1	0.075	1.330	0.100	
1 CC Uplink	N/A	707.50	23095	Mid	back	15 mm	LTE Band 12	A+B	36	1798M	10	QPSK	1	25	25.5	24.41	0	-0.01	1:1	0.183	1.285	0.235	A38
1 CC Uplink	N/A	707.50	23095	Mid	back	15 mm	LTE Band 12	A+B	36	1798M	10	QPSK	25	0	24.5	23.44	1	-0.01	1:1	0.142	1.276	0.181	
1 CC Uplink	N/A	707.50	23095	Mid	back	15 mm	LTE Band 12	A	10	1798M	10	QPSK	1	25	25.5	24.41	0	0.04	1:1	0.102	1.285	0.131	
1 CC Uplink	N/A	707.50	23095	Mid	back	15 mm	LTE Band 12	A	10	1798M	10	QPSK	25	0	24.5	23.44	1	-0.01	1:1	0.082	1.276	0.105	
1 CC Uplink	N/A	782.00	23230	Mid	back	15 mm	LTE Band 13	A+B	1	1798M	10	QPSK	1	25	25.5	24.90	0	-0.15	1:1	0.171	1.148	0.196	A39
1 CC Uplink	N/A	782.00	23230	Mid	back	15 mm	LTE Band 13	A+B	1	1798M	10	QPSK	25	12	24.5	23.72	1	0.00	1:1	0.129	1.197	0.154	
1 CC Uplink	N/A	782.00	23230	Mid	back	15 mm	LTE Band 13	A	9	1798M	10	QPSK	1	25	25.5	24.90	0	0.03	1:1	0.160	1.148	0.184	
1 CC Uplink	N/A	782.00	23230	Mid	back	15 mm	LTE Band 13	A	9	1798M	10	QPSK	25	12	24.5	23.72	1	0.02	1:1	0.120	1.197	0.144	
1 CC Uplink	N/A	793.00	23330	Mid	back	15 mm	LTE Band 14	A+B	108	1798M	10	QPSK	1	25	25.5	24.71	0	0.07	1:1	0.153	1.199	0.183	A40
1 CC Uplink	N/A	793.00	23330	Mid	back	15 mm	LTE Band 14	A+B	108	1798M	10	QPSK	25	12	24.5	23.68	1	0.03	1:1	0.122	1.208	0.147	
1 CC Uplink	N/A	793.00	23330	Mid	back	15 mm	LTE Band 14	A	9	1798M	10	QPSK	1	25	25.5	24.71	0	0.09	1:1	0.137	1.199	0.164	
1 CC Uplink	N/A	793.00	23330	Mid	back	15 mm	LTE Band 14	A	9	1798M	10	QPSK	25	12	24.5	23.68	1	0.00	1:1	0.111	1.208	0.134	
1 CC Uplink	N/A	831.50	26865	Mid	back	15 mm	LTE Band 26 (Cell)	A+B	108	1798M	15	QPSK	1	36	25.5	24.02	0	-0.05	1:1	0.123	1.406	0.173	A41
1 CC Uplink	N/A	831.50	26865	Mid	back	15 mm	LTE Band 26 (Cell)	A+B	108	1798M	15	QPSK	36	37	24.5	23.02	1	0.01	1:1	0.096	1.406	0.135	
1 CC Uplink	N/A	831.50	26865	Mid	back	15 mm	LTE Band 26 (Cell)	A	9	1798M	15	QPSK	1	36	25.5	24.02	0	-0.03	1:1	0.116	1.406	0.163	
1 CC Uplink	N/A	831.50	26865	Mid	back	15 mm	LTE Band 26 (Cell)	A	9	1798M	15	QPSK	36	37	24.5	23.02	1	0.04	1:1	0.095	1.406	0.134	
1 CC Uplink	N/A	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	-0.10	1:1	0.152	1.294	0.197	
1 CC Uplink	N/A	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	49	25.5	24.31	0	-0.12	1:1	0.147	1.315	0.193	
1 CC Uplink	N/A	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	-0.03	1:1	0.117	1.309	0.153	
2 CC Uplink	PCC	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	49	25.5	24.39	0	0.01	1:1	0.144	1.291	0.186	
	SCC	843.70	20597								5		1	0									
1 CC Uplink	N/A	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A	63	1785M	10	QPSK	1	25	25.5	24.38	0	0.06	1:1	0.146	1.294	0.189	
1 CC Uplink	N/A	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	49	25.5	24.31	0	-0.10	1:1	0.152	1.315	0.200	
1 CC Uplink	N/A	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A	63	1785M	10	QPSK	25	25	24.5	23.33	1	0.02	1:1	0.116	1.309	0.152	
2 CC Uplink	PCC	836.50	20525	Mid	back	15 mm	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	49	25.5	24.39	0	0.01	1:1	0.153	1.291	0.198	A42
	SCC	843.70	20597								5		1	0									

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 11-35
LTE Body-Worn SAR

MEASUREMENT RESULTS																							
# CC Uplink, Power Class	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	0	25.0	24.25	0	-0.01	1:1	0.410	1.189	0.487	
1 CC Uplink	N/A	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	0.12	1:1	0.393	1.148	0.451	
1 CC Uplink	N/A	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	0.04	1:1	0.324	1.130	0.366	
1 CC Uplink	N/A	1775.00	132622	High	back	15 mm	LTE Band 66 (AWS)	B	1795M	10	QPSK	1	0	25.0	24.21	0	0.01	1:1	0.409	1.199	0.490	
2 CC Uplink CA_66C	PCC	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	0	25.0	24.42	0	0.02	1:1	0.446	1.143	0.510	
	SCC	1750.20	132374										99									
2 CC Uplink CA_66B	PCC	1775.00	132622	High	back	15 mm	LTE Band 66 (AWS)	B	1795M	10	QPSK	1	0	25.0	24.38	0	-0.01	1:1	0.446	1.153	0.514	A43
	SCC	1765.10	132523										49									
1 CC Uplink	N/A	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	0.04	1:1	0.150	1.094	0.164	
1 CC Uplink	N/A	1770.00	132572	High	back	15 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	0.01	1:1	0.143	1.109	0.159	
1 CC Uplink	N/A	1882.50	26365	Mid	back	15 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	50	25.0	24.26	0	-0.02	1:1	0.318	1.186	0.377	A44
1 CC Uplink	N/A	1882.50	26365	Mid	back	15 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	0	24.0	22.98	1	-0.05	1:1	0.247	1.265	0.312	
1 CC Uplink	N/A	1860.00	26140	Low	back	15 mm	LTE Band 25 (PCS)	F	1787M	20	QPSK	1	0	20.5	20.05	0	-0.03	1:1	0.119	1.109	0.132	
1 CC Uplink	N/A	1860.00	26140	Low	back	15 mm	LTE Band 25 (PCS)	F	1787M	20	QPSK	50	0	20.5	19.96	0	0.03	1:1	0.110	1.132	0.125	
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	B	1328M	10	QPSK	1	0	22.5	21.85	0	0.02	1:1	0.372	1.161	0.432	
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	B	1328M	10	QPSK	25	12	22.5	21.81	0	-0.04	1:1	0.380	1.172	0.445	A45
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	F	1796M	10	QPSK	1	0	20.5	19.93	0	0.04	1:1	0.065	1.140	0.074	
1 CC Uplink	N/A	2310.00	27710	Mid	back	15 mm	LTE Band 30	F	1796M	10	QPSK	25	0	20.5	19.88	0	-0.04	1:1	0.062	1.153	0.071	
1 CC Uplink	N/A	2535.00	21100	Mid	back	15 mm	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	-0.03	1:1	0.216	1.153	0.249	A46
1 CC Uplink	N/A	2535.00	21100	Mid	back	15 mm	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	0.00	1:1	0.214	1.153	0.247	
1 CC Uplink	N/A	2560.00	21350	High	back	15 mm	LTE Band 7	F	1796M	20	QPSK	1	99	19.0	18.30	0	0.02	1:1	0.042	1.175	0.049	
1 CC Uplink	N/A	2560.00	21350	High	back	15 mm	LTE Band 7	F	1796M	20	QPSK	50	25	19.0	18.07	0	0.00	1:1	0.046	1.239	0.057	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	back	15 mm	LTE Band 41	B	1815M	20	QPSK	1	50	23.0	22.55	0	0.01	1:1.58	0.221	1.109	0.245	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	back	15 mm	LTE Band 41	B	1815M	20	QPSK	50	0	23.0	22.25	0	-0.07	1:1.58	0.207	1.189	0.246	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	back	15 mm	LTE Band 41	B	1815M	20	QPSK	50	50	23.0	22.54	0	0.03	1:1.58	0.220	1.112	0.245	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	back	15 mm	LTE Band 41	B	1815M	20	QPSK	50	0	24.6	24.05	0	0.01	1:2.31	0.214	1.135	0.243	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	back	15 mm	LTE Band 41	B	1815M	20	QPSK	50	50	24.6	24.32	0	0.04	1:2.31	0.224	1.067	0.239	A47
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	back	15 mm	LTE Band 41	B	1815M	20	QPSK	50	0	23.0	22.31	0	0.04	1:1.58	0.214	1.172	0.251	
	SCC	2660.20	41292										50									
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	back	15 mm	LTE Band 41	B	1815M	20	QPSK	50	0	24.6	24.13	0	0.01	1:2.31	0.219	1.114	0.244	
	SCC	2660.20	41292										50									
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	back	15 mm	LTE Band 41	F	1796M	20	QPSK	1	50	21.0	20.38	0	-0.15	1:1.58	0.052	1.153	0.060	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	back	15 mm	LTE Band 41	F	1796M	20	QPSK	50	0	21.0	20.37	0	-0.11	1:1.58	0.054	1.156	0.062	
1 CC Uplink - Power Class 2	N/A	2549.50	40185	Low-Mid	back	15 mm	LTE Band 41	F	1796M	20	QPSK	50	0	22.6	22.15	0	-0.08	1:2.31	0.053	1.109	0.059	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	15 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	-0.05	1:1.58	0.073	1.156	0.084	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	15 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	-0.12	1:1.58	0.076	1.146	0.087	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	15 mm	LTE Band 48	F	1803M	20	QPSK	50	50	20.5	19.77	0	0.04	1:1.58	0.076	1.183	0.090	A48
2 CC Uplink	PCC	3646.70	56207	Mid-High	back	15 mm	LTE Band 48	F	1803M	20	QPSK	50	50	20.5	19.51	0	0.08	1:1.58	0.075	1.256	0.094	
	SCC	3666.50	56405										0									

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

Table 11-36
NR Body-Worn SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
680.50	136100	Mid	back	15 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.03	1:1	0.173	1.294	0.224	A49
680.50	136100	Mid	back	15 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.06	1:1	0.157	1.291	0.203	
680.50	136100	Mid	back	15 mm	NR Band n71	A+B	9	2719M	20	CP-OFDM	QPSK	1	1	24.0	22.75	1.5	-0.02	1:1	0.120	1.334	0.160	
680.50	136100	Mid	back	15 mm	NR Band n71	A	48	3594M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.02	1:1	0.102	1.294	0.132	
680.50	136100	Mid	back	15 mm	NR Band n71	A	48	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	-0.01	1:1	0.109	1.291	0.141	
680.50	136100	Mid	back	15 mm	NR Band n71	A	48	3594M	20	CP-OFDM	QPSK	1	1	24.0	22.75	1.5	0.02	1:1	0.042	1.334	0.056	
707.50	141500	Mid	back	15 mm	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.16	1:1	0.221	1.213	0.268	A50
707.50	141500	Mid	back	15 mm	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.08	1:1	0.218	1.180	0.257	
707.50	141500	Mid	back	15 mm	NR Band n12	A+B	36	2719M	15	CP-OFDM	QPSK	1	1	24.0	23.30	1.5	0.00	1:1	0.159	1.175	0.187	
707.50	141500	Mid	back	15 mm	NR Band n12	A	45	3594M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.01	1:1	0.097	1.213	0.118	
707.50	141500	Mid	back	15 mm	NR Band n12	A	45	3594M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.01	1:1	0.117	1.180	0.138	
707.50	141500	Mid	back	15 mm	NR Band n12	A	45	3594M	15	CP-OFDM	QPSK	1	1	24.0	23.30	1.5	-0.06	1:1	0.071	1.175	0.083	
836.50	167300	Mid	back	15 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.01	1:1	0.137	1.268	0.174	
836.50	167300	Mid	back	15 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.00	1:1	0.129	1.211	0.156	
836.50	167300	Mid	back	15 mm	NR Band n5 (Cell)	A+B	108	1788M	20	CP-OFDM	QPSK	1	1	24.0	23.05	1.5	-0.01	1:1	0.099	1.245	0.123	
836.50	167300	Mid	back	15 mm	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.04	1:1	0.145	1.268	0.184	A51
836.50	167300	Mid	back	15 mm	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.02	1:1	0.144	1.211	0.174	
836.50	167300	Mid	back	15 mm	NR Band n5 (Cell)	A	9	3594M	20	CP-OFDM	QPSK	1	1	24.0	23.05	1.5	-0.07	1:1	0.096	1.245	0.120	
1745.00	349000	Mid	back	15 mm	NR Band n66 (AWS)	B	N/A	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.02	1:1	0.409	1.268	0.519	
1745.00	349000	Mid	back	15 mm	NR Band n66 (AWS)	B	N/A	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	-0.01	1:1	0.412	1.285	0.529	A52
1745.00	349000	Mid	back	15 mm	NR Band n66 (AWS)	B	N/A	1772M	40	CP-OFDM	QPSK	1	1	23.0	21.70	1.5	0.00	1:1	0.324	1.349	0.437	
1745.00	349000	Mid	back	15 mm	NR Band n66 (AWS)	F	N/A	1823M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	0.07	1:1	0.109	1.268	0.138	
1745.00	349000	Mid	back	15 mm	NR Band n66 (AWS)	F	N/A	1823M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	0.04	1:1	0.117	1.274	0.149	
1745.00	349000	Mid	back	15 mm	NR Band n66 (AWS)	F	N/A	1823M	40	CP-OFDM	QPSK	1	1	20.5	19.35	0	-0.07	1:1	0.102	1.303	0.133	
1882.50	376500	Mid	back	15 mm	NR Band n25 (PCS)	B	N/A	1793M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	0.07	1:1	0.444	1.361	0.604	
1882.50	376500	Mid	back	15 mm	NR Band n25 (PCS)	B	N/A	1793M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.03	1:1	0.448	1.403	0.629	A53
1882.50	376500	Mid	back	15 mm	NR Band n25 (PCS)	B	N/A	1793M	40	CP-OFDM	QPSK	1	1	23.0	21.49	1.5	-0.01	1:1	0.309	1.416	0.438	
1882.50	376500	Mid	back	15 mm	NR Band n25 (PCS)	F	N/A	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	-0.02	1:1	0.075	1.205	0.090	
1882.50	376500	Mid	back	15 mm	NR Band n25 (PCS)	F	N/A	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	-0.01	1:1	0.074	1.213	0.090	
1882.50	376500	Mid	back	15 mm	NR Band n25 (PCS)	F	N/A	1787M	40	CP-OFDM	QPSK	1	1	20.5	19.54	0	0.06	1:1	0.069	1.247	0.086	
2310.00	462000	Mid	back	15 mm	NR Band n30	B	N/A	1794M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	-0.02	1:1	0.304	1.216	0.370	
2310.00	462000	Mid	back	15 mm	NR Band n30	B	N/A	1794M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.01	1:1	0.310	1.169	0.362	A54
2310.00	462000	Mid	back	15 mm	NR Band n30	B	N/A	1794M	10	CP-OFDM	QPSK	1	1	22.5	21.19	0	0.01	1:1	0.281	1.352	0.380	
2310.00	462000	Mid	back	15 mm	NR Band n30	F	N/A	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	-0.07	1:1	0.063	1.245	0.078	
2310.00	462000	Mid	back	15 mm	NR Band n30	F	N/A	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	-0.07	1:1	0.064	1.262	0.081	
2310.00	462000	Mid	back	15 mm	NR Band n30	F	N/A	1794M	10	CP-OFDM	QPSK	1	1	20.5	19.65	0	-0.01	1:1	0.057	1.216	0.069	
2535.00	507000	Mid	back	15 mm	NR Band n7	B	N/A	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	-0.01	1:1	0.325	1.225	0.398	
2535.00	507000	Mid	back	15 mm	NR Band n7	B	N/A	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	-0.02	1:1	0.338	1.274	0.431	
2535.00	507000	Mid	back	15 mm	NR Band n7	B	N/A	1779M	40	CP-OFDM	QPSK	1	1	22.5	21.53	0	0.02	1:1	0.345	1.250	0.431	A55
2535.00	507000	Mid	back	15 mm	NR Band n7	F	N/A	1779M	40	DFT-S-OFDM	QPSK	1	214	19.0	17.96	0	0.00	1:1	0.051	1.271	0.065	
2535.00	507000	Mid	back	15 mm	NR Band n7	F	N/A	1779M	40	DFT-S-OFDM	QPSK	108	108	19.0	17.81	0	-0.03	1:1	0.058	1.315	0.076	
2535.00	507000	Mid	back	15 mm	NR Band n7	F	N/A	1779M	40	CP-OFDM	QPSK	1	1	19.0	17.84	0	-0.03	1:1	0.063	1.306	0.082	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-37
NR Band 41 Body-Worn SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot ***
MHz	Ch.																	(W/kg)		(W/kg)	
2592.99	518598	Mid	back	15 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	-0.05	1:1	0.056	1.253	0.070	
2592.99	518598	Mid	back	15 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	0.01	1:1	0.043	1.288	0.055	
2592.99	518598	Mid	back	15 mm	NR Band n41	F	1779M	100	CP-OFDM	QPSK	1	1	19.0	17.86	0	0.01	1:1	0.056	1.300	0.073	
2592.99	518598	Mid	back	15 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.00	1:1	0.106	1.205	0.128	A56
2592.99	518598	Mid	back	15 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.09	1:1	0.010	1.276	0.013	
2592.99	518598	Mid	back	15 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	0.06	1:1	0.002	1.268	0.003	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-38
NR Band 48 Body-Worn SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3624.99	641666	Mid	back	15 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	-0.05	1:1	0.083	1.074	0.089	
3624.99	641666	Mid	back	15 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	0.04	1:1	0.080	1.112	0.089	
3624.99	641666	Mid	back	15 mm	NR Band n48	F	1790M	40	CP-OFDM	QPSK	1	1	18.5	17.75	0	-0.02	1:1	0.095	1.189	**0.113**	A57
3624.99	641666	Mid	back	15 mm	NR Band n48	E	1829M	40	CW/SRS	N/A	NA	NA	16.0	14.35	N/A	0.04	1:1	0.010	1.462	0.015	
3624.99	641666	Mid	back	15 mm	NR Band n48	G	1829M	40	CW/SRS	N/A	NA	NA	16.0	15.66	N/A	0.05	1:1	0.038	1.081	0.041	
3624.99	641666	Mid	back	15 mm	NR Band n48	D	1829M	40	CW/SRS	N/A	NA	NA	13.0	12.73	N/A	0.04	1:1	0.036	1.064	0.038	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram											

Table 11-39
NR Band 77 Body-Worn SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot "
MHz	Ch.																	(W/kg)		(W/kg)	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.02	1:1	0.088	1.197	0.105	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	-0.04	1:1	0.086	1.239	0.107	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	17.94	0	0.12	1:1	0.090	1.276	0.115	A58
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.03	1:1	0.067	1.167	0.078	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	0.18	1:1	0.068	1.199	0.082	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	E	3591M	100	CP-OFDM	QPSK	1	1	19.5	18.36	0	-0.09	1:1	0.065	1.300	0.085	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	NA	NA	16.0	14.82	N/A	0.02	1:1	0.013	1.312	0.017	
3500.01	633334	Mid	back	15 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	NA	NA	16.0	14.97	N/A	0.03	1:1	0.043	1.268	0.055	
3750.00	650000	Low	back	15 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	-0.19	1:1	0.100	1.148	0.115	
3750.00	650000	Low	back	15 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.06	1:1	0.105	1.151	0.121	A59
3750.00	650000	Low	back	15 mm	NR Band n77	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	18.38	0	0.02	1:1	0.098	1.153	0.113	
3930.00	662000	High	back	15 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	-0.13	1:1	0.074	1.042	0.077	
3930.00	662000	High	back	15 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	-0.16	1:1	0.073	1.052	0.077	
3930.00	662000	High	back	15 mm	NR Band n77	E	3591M	100	CP-OFDM	QPSK	1	1	19.5	18.86	0	0.02	1:1	0.055	1.159	0.064	
3930.00	662000	High	back	15 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	NA	NA	16.0	15.02	N/A	0.02	1:1	0.065	1.253	0.081	
3750.00	650000	Low	back	15 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	NA	NA	16.0	15.10	N/A	0.01	1:1	0.032	1.230	0.039	
ANSI / 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
DTS SISO Body-Worn SAR

MEASUREMENT RESULTS																		
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	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	back	15 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	0.12	98.85	0.016	0.013	1.138	1.012	**0.015**	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-41
DTS MIMO Body-Worn SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	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	back	15 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	0.13	98.85	0.036	0.028	1.002	1.012	0.032	A60
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 22.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 19.0 dBm.

Table 11-42
NII MIMO Body-Worn SAR

MEASUREMENT RESULTS																					
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	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)	
5300	60	back	15 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	0.07	97.92	0.022	0.015	1.069	1.021	0.016	
5500	100	back	15 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	0.09	97.92	0.018	0.006	1.035	1.021	0.006	
5825	165	back	15 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.05	97.92	0.027	0.015	1.012	1.021	0.016	
5845	169	back	15 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.02	97.92	0.046	0.019	1.028	1.021	0.022	A61
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										Body 1.6 W/kg (mW/g) averaged over 1 gram											

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

Table 11-43
DSS SISO Body-Worn SAR

MEASUREMENT RESULTS																
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2441	39	back	15 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	0.13	76.80	0.024	1.184	1.302	0.037	A62
2441	39	back	15 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	0.05	76.80	0.005	1.043	1.302	0.007	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram								

11.3 Standalone Hotspot SAR Data

Table 11-44
GPRS Hotspot SAR Data

MEASUREMENT RESULTS																
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	# of Time Slots	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
836.60	190	back	10 mm	GSM 850	GPRS	A+B	1798M	3	30.5	29.20	-0.01	1:2.76	0.281	1.349	0.379	A63
836.60	190	front	10 mm	GSM 850	GPRS	A+B	1798M	3	30.5	29.20	0.00	1:2.76	0.074	1.349	0.100	
836.60	190	bottom	10 mm	GSM 850	GPRS	A+B	1798M	3	30.5	29.20	0.00	1:2.76	0.047	1.349	0.063	
836.60	190	right	10 mm	GSM 850	GPRS	A+B	1798M	3	30.5	29.20	0.01	1:2.76	0.172	1.349	0.232	
836.60	190	left	10 mm	GSM 850	GPRS	A+B	1798M	3	30.5	29.20	0.12	1:2.76	0.074	1.349	0.100	
836.60	190	back	10 mm	GSM 850	GPRS	A	1798M	3	30.5	29.20	0.00	1:2.76	0.271	1.349	0.366	
836.60	190	front	10 mm	GSM 850	GPRS	A	1798M	3	30.5	29.20	-0.06	1:2.76	0.070	1.349	0.094	
836.60	190	bottom	10 mm	GSM 850	GPRS	A	1798M	3	30.5	29.20	0.03	1:2.76	0.058	1.349	0.078	
836.60	190	right	10 mm	GSM 850	GPRS	A	1798M	3	30.5	29.20	0.00	1:2.76	0.152	1.349	0.205	
1850.20	512	back	10 mm	GSM 1900	GPRS	B	1328M	4	21.0	20.00	-0.05	1:2.076	0.126	1.259	0.159	
1850.20	512	front	10 mm	GSM 1900	GPRS	B	1328M	4	21.0	20.00	-0.05	1:2.076	0.050	1.259	0.063	
1850.20	512	bottom	10 mm	GSM 1900	GPRS	B	1328M	4	21.0	20.00	0.04	1:2.076	0.225	1.259	0.283	A64
1850.20	512	right	10 mm	GSM 1900	GPRS	B	1328M	4	21.0	20.00	0.01	1:2.076	0.024	1.259	0.030	
1850.20	512	left	10 mm	GSM 1900	GPRS	B	1328M	4	21.0	20.00	0.04	1:2.076	0.045	1.259	0.057	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-45
UMTS Hotspot SAR Data

MEASUREMENT RESULTS																
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Tune State	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
826.40	4132	back	10 mm	UMTS 850	RMC	A+B	108	1798M	25.5	24.52	-0.01	1:1	0.275	1.253	0.345	
826.40	4132	front	10 mm	UMTS 850	RMC	A+B	108	1798M	25.5	24.52	-0.04	1:1	0.081	1.253	0.101	
826.40	4132	bottom	10 mm	UMTS 850	RMC	A+B	38	1798M	25.5	24.52	0.00	1:1	0.050	1.253	0.063	
826.40	4132	right	10 mm	UMTS 850	RMC	A+B	73	1798M	25.5	24.52	0.00	1:1	0.177	1.253	0.222	
826.40	4132	left	10 mm	UMTS 850	RMC	A+B	108	1798M	25.5	24.52	-0.02	1:1	0.075	1.253	0.094	
826.40	4132	back	10 mm	UMTS 850	RMC	A	9	1798M	25.5	24.52	0.02	1:1	0.283	1.253	0.355	A65
826.40	4132	front	10 mm	UMTS 850	RMC	A	0	1798M	25.5	24.52	0.06	1:1	0.075	1.253	0.094	
826.40	4132	bottom	10 mm	UMTS 850	RMC	A	36	1798M	25.5	24.52	0.00	1:1	0.075	1.253	0.094	
826.40	4132	right	10 mm	UMTS 850	RMC	A	0	1798M	25.5	24.52	0.00	1:1	0.195	1.253	0.244	
1752.60	1513	back	10 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	-0.01	1:1	0.202	1.180	0.238	
1752.60	1513	front	10 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	-0.05	1:1	0.076	1.180	0.090	
1752.60	1513	bottom	10 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	-0.02	1:1	0.335	1.180	0.395	A66
1752.60	1513	right	10 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	0.01	1:1	0.056	1.180	0.066	
1752.60	1513	left	10 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	0.09	1:1	0.025	1.180	0.030	
1852.40	9262	back	10 mm	UMTS 1900	RMC	B	N/A	1328M	19.0	18.43	0.05	1:1	0.234	1.140	0.267	
1852.40	9262	front	10 mm	UMTS 1900	RMC	B	N/A	1328M	19.0	18.43	0.11	1:1	0.079	1.140	0.090	
1852.40	9262	bottom	10 mm	UMTS 1900	RMC	B	N/A	1328M	19.0	18.43	0.00	1:1	0.305	1.140	0.348	A67
1852.40	9262	right	10 mm	UMTS 1900	RMC	B	N/A	1328M	19.0	18.43	0.00	1:1	0.059	1.140	0.067	
1852.40	9262	left	10 mm	UMTS 1900	RMC	B	N/A	1328M	19.0	18.43	-0.08	1:1	0.034	1.140	0.039	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-46
LTE Band 71 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
680.50	133297	Mid	back	10 mm	LTE Band 71	A+B	9	1798M	20	QPSK	1	0	25.5	24.33	0	1:1	0.239	1.309	0.313	A68
680.50	133297	Mid	back	10 mm	LTE Band 71	A+B	9	1798M	20	QPSK	50	0	24.5	23.26	1	1:1	0.192	1.330	0.255	
680.50	133297	Mid	front	10 mm	LTE Band 71	A+B	9	1798M	20	QPSK	1	0	25.5	24.33	0	1:1	0.112	1.309	0.147	
680.50	133297	Mid	front	10 mm	LTE Band 71	A+B	9	1798M	20	QPSK	50	0	24.5	23.26	1	1:1	0.098	1.330	0.130	
680.50	133297	Mid	bottom	10 mm	LTE Band 71	A+B	117	1798M	20	QPSK	1	0	25.5	24.33	0	1:1	0.103	1.309	0.135	
680.50	133297	Mid	bottom	10 mm	LTE Band 71	A+B	117	1798M	20	QPSK	50	0	24.5	23.26	1	1:1	0.077	1.330	0.102	
680.50	133297	Mid	right	10 mm	LTE Band 71	A+B	9	1798M	20	QPSK	1	0	25.5	24.33	0	1:1	0.234	1.309	0.306	
680.50	133297	Mid	right	10 mm	LTE Band 71	A+B	9	1798M	20	QPSK	50	0	24.5	23.26	1	1:1	0.177	1.330	0.235	
680.50	133297	Mid	left	10 mm	LTE Band 71	A+B	45	1798M	20	QPSK	1	0	25.5	24.33	0	1:1	0.104	1.309	0.136	
680.50	133297	Mid	left	10 mm	LTE Band 71	A+B	45	1798M	20	QPSK	50	0	24.5	23.26	1	1:1	0.091	1.330	0.121	
680.50	133297	Mid	back	10 mm	LTE Band 71	A	49	1798M	20	QPSK	1	0	25.5	24.33	0	1:1	0.158	1.309	0.207	
680.50	133297	Mid	back	10 mm	LTE Band 71	A	49	1798M	20	QPSK	50	0	24.5	23.26	1	1:1	0.130	1.330	0.173	
680.50	133297	Mid	front	10 mm	LTE Band 71	A	49	1798M	20	QPSK	1	0	25.5	24.33	0	1:1	0.059	1.309	0.077	
680.50	133297	Mid	front	10 mm	LTE Band 71	A	49	1798M	20	QPSK	50	0	24.5	23.26	1	1:1	0.050	1.330	0.067	
680.50	133297	Mid	bottom	10 mm	LTE Band 71	A	49	1798M	20	QPSK	1	0	25.5	24.33	0	1:1	0.040	1.309	0.052	
680.50	133297	Mid	bottom	10 mm	LTE Band 71	A	49	1798M	20	QPSK	50	0	24.5	23.26	1	1:1	0.032	1.330	0.043	
680.50	133297	Mid	right	10 mm	LTE Band 71	A	48	1798M	20	QPSK	1	0	25.5	24.33	0	1:1	0.136	1.309	0.178	
680.50	133297	Mid	right	10 mm	LTE Band 71	A	48	1798M	20	QPSK	50	0	24.5	23.26	1	1:1	0.116	1.330	0.154	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																	Body 1.6 W/kg (mW/g) averaged over 1 gram			

Table 11-47
LTE Band 12 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
707.50	23095	Mid	back	10 mm	LTE Band 12	A+B	0	1798M	10	QPSK	1	25	25.5	24.41	0	-0.01	1:1	0.228	1.285	0.293	
707.50	23095	Mid	back	10 mm	LTE Band 12	A+B	0	1798M	10	QPSK	25	0	24.5	23.44	1	0.01	1:1	0.173	1.276	0.221	
707.50	23095	Mid	front	10 mm	LTE Band 12	A+B	108	1798M	10	QPSK	1	25	25.5	24.41	0	0.04	1:1	0.133	1.285	0.171	
707.50	23095	Mid	front	10 mm	LTE Band 12	A+B	108	1798M	10	QPSK	25	0	24.5	23.44	1	0.02	1:1	0.100	1.276	0.128	
707.50	23095	Mid	bottom	10 mm	LTE Band 12	A+B	36	1798M	10	QPSK	1	25	25.5	24.41	0	0.05	1:1	0.067	1.285	0.086	
707.50	23095	Mid	bottom	10 mm	LTE Band 12	A+B	36	1798M	10	QPSK	25	0	24.5	23.44	1	0.03	1:1	0.049	1.276	0.063	
707.50	23095	Mid	right	10 mm	LTE Band 12	A+B	37	1798M	10	QPSK	1	25	25.5	24.41	0	0.05	1:1	0.263	1.285	0.338	A69
707.50	23095	Mid	right	10 mm	LTE Band 12	A+B	37	1798M	10	QPSK	25	0	24.5	23.44	1	0.02	1:1	0.200	1.276	0.255	
707.50	23095	Mid	left	10 mm	LTE Band 12	A+B	37	1798M	10	QPSK	1	25	25.5	24.41	0	-0.02	1:1	0.145	1.285	0.186	
707.50	23095	Mid	left	10 mm	LTE Band 12	A+B	37	1798M	10	QPSK	25	0	24.5	23.44	1	0.01	1:1	0.109	1.276	0.139	
707.50	23095	Mid	back	10 mm	LTE Band 12	A	10	1798M	10	QPSK	1	25	25.5	24.41	0	0.08	1:1	0.193	1.285	0.248	
707.50	23095	Mid	back	10 mm	LTE Band 12	A	10	1798M	10	QPSK	25	0	24.5	23.44	1	0.00	1:1	0.140	1.276	0.179	
707.50	23095	Mid	front	10 mm	LTE Band 12	A	10	1798M	10	QPSK	1	25	25.5	24.41	0	0.10	1:1	0.073	1.285	0.094	
707.50	23095	Mid	front	10 mm	LTE Band 12	A	10	1798M	10	QPSK	25	0	24.5	23.44	1	-0.05	1:1	0.057	1.276	0.073	
707.50	23095	Mid	bottom	10 mm	LTE Band 12	A	45	1798M	10	QPSK	1	25	25.5	24.41	0	0.05	1:1	0.051	1.285	0.066	
707.50	23095	Mid	bottom	10 mm	LTE Band 12	A	45	1798M	10	QPSK	25	0	24.5	23.44	1	0.05	1:1	0.037	1.276	0.047	
707.50	23095	Mid	right	10 mm	LTE Band 12	A	10	1798M	10	QPSK	1	25	25.5	24.41	0	0.01	1:1	0.186	1.285	0.239	
707.50	23095	Mid	right	10 mm	LTE Band 12	A	10	1798M	10	QPSK	25	0	24.5	23.44	1	0.00	1:1	0.147	1.276	0.188	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																					Body 1.6 W/kg (mW/g) averaged over 1 gram

Table 11-48
LTE Band 13 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
782.00	23230	Mid	back	10 mm	LTE Band 13	A+B	1	1798M	10	QPSK	1	25	25.5	24.90	0	0.13	1:1	0.263	1.148	0.302	
782.00	23230	Mid	back	10 mm	LTE Band 13	A+B	1	1798M	10	QPSK	25	12	24.5	23.72	1	0.00	1:1	0.201	1.197	0.241	
782.00	23230	Mid	front	10 mm	LTE Band 13	A+B	1	1798M	10	QPSK	1	25	25.5	24.90	0	-0.11	1:1	0.142	1.148	0.163	
782.00	23230	Mid	front	10 mm	LTE Band 13	A+B	1	1798M	10	QPSK	25	12	24.5	23.72	1	-0.01	1:1	0.108	1.197	0.129	
782.00	23230	Mid	bottom	10 mm	LTE Band 13	A+B	109	1798M	10	QPSK	1	25	25.5	24.90	0	-0.07	1:1	0.055	1.148	0.063	
782.00	23230	Mid	bottom	10 mm	LTE Band 13	A+B	109	1798M	10	QPSK	25	12	24.5	23.72	1	0.07	1:1	0.043	1.197	0.051	
782.00	23230	Mid	right	10 mm	LTE Band 13	A+B	109	1798M	10	QPSK	1	25	25.5	24.90	0	0.12	1:1	0.259	1.148	0.297	
782.00	23230	Mid	right	10 mm	LTE Band 13	A+B	109	1798M	10	QPSK	25	12	24.5	23.72	1	0.00	1:1	0.200	1.197	0.239	
782.00	23230	Mid	left	10 mm	LTE Band 13	A+B	109	1798M	10	QPSK	1	25	25.5	24.90	0	0.01	1:1	0.129	1.148	0.148	
782.00	23230	Mid	left	10 mm	LTE Band 13	A+B	109	1798M	10	QPSK	25	12	24.5	23.72	1	0.03	1:1	0.097	1.197	0.116	
782.00	23230	Mid	back	10 mm	LTE Band 13	A	9	1798M	10	QPSK	1	25	25.5	24.90	0	0.10	1:1	0.268	1.148	0.308	
782.00	23230	Mid	back	10 mm	LTE Band 13	A	9	1798M	10	QPSK	25	12	24.5	23.72	1	0.00	1:1	0.206	1.197	0.247	
782.00	23230	Mid	front	10 mm	LTE Band 13	A	9	1798M	10	QPSK	1	25	25.5	24.90	0	-0.09	1:1	0.123	1.148	0.141	
782.00	23230	Mid	front	10 mm	LTE Band 13	A	9	1798M	10	QPSK	25	12	24.5	23.72	1	-0.02	1:1	0.094	1.197	0.113	
782.00	23230	Mid	bottom	10 mm	LTE Band 13	A	9	1798M	10	QPSK	1	25	25.5	24.90	0	-0.08	1:1	0.107	1.148	0.123	
782.00	23230	Mid	bottom	10 mm	LTE Band 13	A	9	1798M	10	QPSK	25	12	24.5	23.72	1	0.01	1:1	0.081	1.197	0.097	
782.00	23230	Mid	right	10 mm	LTE Band 13	A	9	1798M	10	QPSK	1	25	25.5	24.90	0	-0.10	1:1	0.298	1.148	0.342	A70
782.00	23230	Mid	right	10 mm	LTE Band 13	A	9	1798M	10	QPSK	25	12	24.5	23.72	1	0.00	1:1	0.230	1.197	0.275	
ANSI / 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 14 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	SAR (10g)	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	(W/kg)	(W/kg)	
793.00	23330	Mid	back	10 mm	LTE Band 14	A+B	108	1798M	10	QPSK	1	25	25.5	24.71	0	0.09	1:1	0.262	1.199	0.314	0.152	0.182	
793.00	23330	Mid	back	10 mm	LTE Band 14	A+B	108	1798M	10	QPSK	25	12	24.5	23.68	1	0.00	1:1	0.206	1.208	0.249	0.119	0.144	
793.00	23330	Mid	front	10 mm	LTE Band 14	A+B	109	1798M	10	QPSK	1	25	25.5	24.71	0	-0.03	1:1	0.116	1.199	0.139	0.089	0.107	
793.00	23330	Mid	front	10 mm	LTE Band 14	A+B	109	1798M	10	QPSK	25	12	24.5	23.68	1	0.01	1:1	0.092	1.208	0.111	0.071	0.086	
793.00	23330	Mid	bottom	10 mm	LTE Band 14	A+B	109	1798M	10	QPSK	1	25	25.5	24.71	0	-0.03	1:1	0.062	1.199	0.074	0.040	0.048	
793.00	23330	Mid	bottom	10 mm	LTE Band 14	A+B	109	1798M	10	QPSK	25	12	24.5	23.68	1	0.00	1:1	0.045	1.208	0.054	0.029	0.035	
793.00	23330	Mid	right	10 mm	LTE Band 14	A+B	109	1798M	10	QPSK	1	25	25.5	24.71	0	-0.06	1:1	0.223	1.199	0.267	0.153	0.183	
793.00	23330	Mid	right	10 mm	LTE Band 14	A+B	109	1798M	10	QPSK	25	12	24.5	23.68	1	0.01	1:1	0.178	1.208	0.215	0.122	0.147	
793.00	23330	Mid	left	10 mm	LTE Band 14	A+B	109	1798M	10	QPSK	1	25	25.5	24.71	0	0.09	1:1	0.088	1.199	0.106	0.061	0.073	
793.00	23330	Mid	left	10 mm	LTE Band 14	A+B	109	1798M	10	QPSK	25	12	24.5	23.68	1	0.03	1:1	0.072	1.208	0.087	0.050	0.060	
793.00	23330	Mid	back	10 mm	LTE Band 14	A	9	1798M	10	QPSK	1	25	25.5	24.71	0	-0.09	1:1	0.268	1.199	0.321	0.155	0.186	A71
793.00	23330	Mid	back	10 mm	LTE Band 14	A	9	1798M	10	QPSK	25	12	24.5	23.68	1	0.00	1:1	0.209	1.208	0.252	0.121	0.146	
793.00	23330	Mid	front	10 mm	LTE Band 14	A	9	1798M	10	QPSK	1	25	25.5	24.71	0	0.12	1:1	0.108	1.199	0.129	0.084	0.101	
793.00	23330	Mid	front	10 mm	LTE Band 14	A	9	1798M	10	QPSK	25	12	24.5	23.68	1	-0.01	1:1	0.088	1.208	0.106	0.068	0.082	
793.00	23330	Mid	bottom	10 mm	LTE Band 14	A	9	1798M	10	QPSK	1	25	25.5	24.71	0	-0.01	1:1	0.101	1.199	0.121	0.063	0.076	
793.00	23330	Mid	bottom	10 mm	LTE Band 14	A	9	1798M	10	QPSK	25	12	24.5	23.68	1	-0.01	1:1	0.079	1.208	0.095	0.049	0.059	
793.00	23330	Mid	right	10 mm	LTE Band 14	A	0	1798M	10	QPSK	1	25	25.5	24.71	0	-0.12	1:1	0.224	1.199	0.269	0.155	0.186	
793.00	23330	Mid	right	10 mm	LTE Band 14	A	0	1798M	10	QPSK	25	12	24.5	23.68	1	-0.03	1:1	0.176	1.208	0.213	0.122	0.147	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram									

Table 11-50
LTE Band 26 (Cell) Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
831.50	26865	Mid	back	10 mm	LTE Band 26 (Cell)	A+B	108	1798M	15	QPSK	1	36	25.5	24.02	0	-0.01	1:1	0.243	1.406	0.342	A72
831.50	26865	Mid	back	10 mm	LTE Band 26 (Cell)	A+B	108	1798M	15	QPSK	36	37	24.5	23.02	1	-0.02	1:1	0.198	1.406	0.278	
831.50	26865	Mid	front	10 mm	LTE Band 26 (Cell)	A+B	108	1798M	15	QPSK	1	36	25.5	24.02	0	0.04	1:1	0.100	1.406	0.141	
831.50	26865	Mid	front	10 mm	LTE Band 26 (Cell)	A+B	108	1798M	15	QPSK	36	37	24.5	23.02	1	0.03	1:1	0.072	1.406	0.101	
831.50	26865	Mid	bottom	10 mm	LTE Band 26 (Cell)	A+B	108	1798M	15	QPSK	1	36	25.5	24.02	0	-0.02	1:1	0.057	1.406	0.080	
831.50	26865	Mid	bottom	10 mm	LTE Band 26 (Cell)	A+B	108	1798M	15	QPSK	36	37	24.5	23.02	1	0.01	1:1	0.042	1.406	0.059	
831.50	26865	Mid	right	10 mm	LTE Band 26 (Cell)	A+B	109	1798M	15	QPSK	1	36	25.5	24.02	0	-0.01	1:1	0.219	1.406	0.308	
831.50	26865	Mid	right	10 mm	LTE Band 26 (Cell)	A+B	109	1798M	15	QPSK	36	37	24.5	23.02	1	-0.05	1:1	0.156	1.406	0.219	
831.50	26865	Mid	left	10 mm	LTE Band 26 (Cell)	A+B	108	1798M	15	QPSK	1	36	25.5	24.02	0	0.06	1:1	0.103	1.406	0.145	
831.50	26865	Mid	left	10 mm	LTE Band 26 (Cell)	A+B	108	1798M	15	QPSK	36	37	24.5	23.02	1	-0.01	1:1	0.072	1.406	0.101	
831.50	26865	Mid	back	10 mm	LTE Band 26 (Cell)	A	9	1798M	15	QPSK	1	36	25.5	24.02	0	-0.02	1:1	0.235	1.406	0.330	
831.50	26865	Mid	back	10 mm	LTE Band 26 (Cell)	A	9	1798M	15	QPSK	36	37	24.5	23.02	1	-0.02	1:1	0.189	1.406	0.266	
831.50	26865	Mid	front	10 mm	LTE Band 26 (Cell)	A	0	1798M	15	QPSK	1	36	25.5	24.02	0	0.05	1:1	0.083	1.406	0.117	
831.50	26865	Mid	front	10 mm	LTE Band 26 (Cell)	A	0	1798M	15	QPSK	36	37	24.5	23.02	1	-0.05	1:1	0.059	1.406	0.083	
831.50	26865	Mid	bottom	10 mm	LTE Band 26 (Cell)	A	36	1798M	15	QPSK	1	36	25.5	24.02	0	0.00	1:1	0.076	1.406	0.107	
831.50	26865	Mid	bottom	10 mm	LTE Band 26 (Cell)	A	36	1798M	15	QPSK	36	37	24.5	23.02	1	-0.03	1:1	0.057	1.406	0.080	
831.50	26865	Mid	right	10 mm	LTE Band 26 (Cell)	A	9	1798M	15	QPSK	1	36	25.5	24.02	0	-0.09	1:1	0.233	1.406	0.328	
831.50	26865	Mid	right	10 mm	LTE Band 26 (Cell)	A	9	1798M	15	QPSK	36	37	24.5	23.02	1	0.01	1:1	0.165	1.406	0.232	

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

Table 11-51
LTE Band 5 (Cell) Hotspot SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																	(W/kg)		(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	-0.13	1:1	0.312	1.294	0.404	A73
1 CC Uplink	N/A	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	49	25.5	24.31	0	0.09	1:1	0.291	1.315	0.383	
1 CC Uplink	N/A	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	0.01	1:1	0.238	1.309	0.312	
2 CC Uplink	PCC	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	49	25.5	24.39	0	-0.08	1:1	0.295	1.291	0.381	
	SCC	843.70	20597								5		1	0									
1 CC Uplink	N/A	836.50	20525	Mid	front	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	0.16	1:1	0.129	1.294	0.167	
1 CC Uplink	N/A	836.50	20525	Mid	front	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	0.03	1:1	0.094	1.309	0.123	
1 CC Uplink	N/A	836.50	20525	Mid	bottom	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	0.07	1:1	0.070	1.294	0.091	
1 CC Uplink	N/A	836.50	20525	Mid	bottom	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	-0.04	1:1	0.051	1.309	0.067	
1 CC Uplink	N/A	836.50	20525	Mid	right	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	0.16	1:1	0.277	1.294	0.358	
1 CC Uplink	N/A	836.50	20525	Mid	right	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	-0.07	1:1	0.213	1.309	0.279	
1 CC Uplink	N/A	836.50	20525	Mid	left	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	-0.19	1:1	0.110	1.294	0.142	
1 CC Uplink	N/A	836.50	20525	Mid	left	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	0.01	1:1	0.082	1.309	0.107	
1 CC Uplink	N/A	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	25	25.5	24.38	0	-0.10	1:1	0.291	1.294	0.377	
1 CC Uplink	N/A	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	49	25.5	24.31	0	0.09	1:1	0.289	1.315	0.380	
1 CC Uplink	N/A	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	25	25	24.5	23.33	1	-0.01	1:1	0.221	1.309	0.289	
2 CC Uplink	PCC	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	49	25.5	24.39	0	-0.03	1:1	0.293	1.291	0.378	
	SCC	843.70	20597								5		1	0									
1 CC Uplink	N/A	836.50	20525	Mid	front	10 mm	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	25	25.5	24.38	0	-0.09	1:1	0.095	1.294	0.123	
1 CC Uplink	N/A	836.50	20525	Mid	front	10 mm	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	25	25	24.5	23.33	1	0.00	1:1	0.070	1.309	0.092	
1 CC Uplink	N/A	836.50	20525	Mid	bottom	10 mm	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	1	25	25.5	24.38	0	0.02	1:1	0.100	1.294	0.129	
1 CC Uplink	N/A	836.50	20525	Mid	bottom	10 mm	LTE Band 5 (Cell)	A	9	1785M	10	QPSK	25	25	24.5	23.33	1	0.03	1:1	0.074	1.309	0.097	
1 CC Uplink	N/A	836.50	20525	Mid	right	10 mm	LTE Band 5 (Cell)	A	18	1785M	10	QPSK	1	25	25.5	24.38	0	0.01	1:1	0.199	1.294	0.258	
1 CC Uplink	N/A	836.50	20525	Mid	right	10 mm	LTE Band 5 (Cell)	A	18	1785M	10	QPSK	25	25	24.5	23.33	1	-0.03	1:1	0.146	1.309	0.191	

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

Table 11-52
LTE Band 66 (AWS) Hotspot SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	1770.00	132572	High	back	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	-0.11	1:1	0.241	1.120	0.270	
1 CC Uplink	N/A	1770.00	132572	High	back	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	0.02	1:1	0.227	1.138	0.258	
1 CC Uplink	N/A	1770.00	132572	High	front	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	-0.06	1:1	0.089	1.120	0.100	
1 CC Uplink	N/A	1770.00	132572	High	front	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	0.01	1:1	0.084	1.138	0.096	
1 CC Uplink	N/A	1770.00	132572	High	bottom	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	-0.06	1:1	0.465	1.120	0.521	
1 CC Uplink	N/A	1770.00	132572	High	bottom	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	19.0	18.30	0	-0.01	1:1	0.466	1.175	0.548	
1 CC Uplink	N/A	1770.00	132572	High	bottom	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	0.01	1:1	0.475	1.138	0.541	
1 CC Uplink	N/A	1775.00	132622	High	bottom	10 mm	LTE Band 66 (AWS)	B	1795M	10	QPSK	25	0	19.0	18.48	0	0.02	1:1	0.471	1.128	0.531	
2 CC Uplink CA_66C	PCC	1770.00	132572	High	bottom	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	19.0	18.24	0	-0.01	1:1	0.450	1.191	0.536	
	SCC	1750.20	132374										50									
2 CC Uplink CA_66B	PCC	1775.00	132622	High	bottom	10 mm	LTE Band 66 (AWS)	B	1795M	10	QPSK	25	0	19.0	18.19	0	-0.01	1:1	0.457	1.205	0.551	
	SCC	1765.10	132523										25									
1 CC Uplink	N/A	1770.00	132572	High	right	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	0.03	1:1	0.063	1.120	0.071	
1 CC Uplink	N/A	1770.00	132572	High	right	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	0.06	1:1	0.061	1.138	0.069	
1 CC Uplink	N/A	1770.00	132572	High	left	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	-0.08	1:1	0.026	1.120	0.029	
1 CC Uplink	N/A	1770.00	132572	High	left	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	0.00	1:1	0.023	1.138	0.026	
1 CC Uplink	N/A	1770.00	132572	High	back	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	-0.04	1:1	0.324	1.094	0.354	
1 CC Uplink	N/A	1770.00	132572	High	back	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	0.02	1:1	0.315	1.109	0.349	
1 CC Uplink	N/A	1770.00	132572	High	front	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	-0.01	1:1	0.098	1.094	0.107	
1 CC Uplink	N/A	1770.00	132572	High	front	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	0.03	1:1	0.096	1.109	0.106	
1 CC Uplink	N/A	1720.00	132072	Low	top	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	50	20.5	19.96	0	0.03	1:1	0.557	1.132	0.631	
1 CC Uplink	N/A	1745.00	132322	Mid	top	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	50	20.5	19.98	0	0.00	1:1	0.583	1.127	0.657	A74
1 CC Uplink	N/A	1770.00	132572	High	top	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	-0.05	1:1	0.528	1.094	0.578	
1 CC Uplink	N/A	1770.00	132572	High	top	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	0.01	1:1	0.492	1.109	0.546	
1 CC Uplink	N/A	1770.00	132572	High	left	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	-0.14	1:1	0.094	1.094	0.103	
1 CC Uplink	N/A	1770.00	132572	High	left	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	0.01	1:1	0.090	1.109	0.100	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-53
LTE Band 25 (PCS) Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1905.00	26590	High	back	10 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	0	19.0	18.15	0	0.01	1:1	0.177	1.216	0.215	
1905.00	26590	High	back	10 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	50	19.0	18.11	0	0.03	1:1	0.168	1.227	0.206	
1905.00	26590	High	front	10 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	0	19.0	18.15	0	0.01	1:1	0.098	1.216	0.119	
1905.00	26590	High	front	10 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	50	19.0	18.11	0	-0.07	1:1	0.090	1.227	0.110	
1905.00	26590	High	bottom	10 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	0	19.0	18.15	0	0.01	1:1	0.369	1.216	0.449	
1905.00	26590	High	bottom	10 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	50	19.0	18.11	0	0.01	1:1	0.339	1.227	0.416	
1905.00	26590	High	right	10 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	0	19.0	18.15	0	0.06	1:1	0.052	1.216	0.063	
1905.00	26590	High	right	10 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	50	19.0	18.11	0	0.03	1:1	0.053	1.227	0.065	
1905.00	26590	High	left	10 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	0	19.0	18.15	0	0.05	1:1	0.033	1.216	0.040	
1905.00	26590	High	left	10 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	50	19.0	18.11	0	-0.06	1:1	0.035	1.227	0.043	
1860.00	26140	Low	back	10 mm	LTE Band 25 (PCS)	F	1787M	20	QPSK	1	0	20.5	20.05	0	-0.03	1:1	0.179	1.109	0.199	
1860.00	26140	Low	back	10 mm	LTE Band 25 (PCS)	F	1787M	20	QPSK	50	0	20.5	19.96	0	-0.01	1:1	0.172	1.132	0.195	
1860.00	26140	Low	front	10 mm	LTE Band 25 (PCS)	F	1787M	20	QPSK	1	0	20.5	20.05	0	-0.05	1:1	0.069	1.109	0.077	
1860.00	26140	Low	front	10 mm	LTE Band 25 (PCS)	F	1787M	20	QPSK	50	0	20.5	19.96	0	-0.04	1:1	0.064	1.132	0.072	
1860.00	26140	Low	top	10 mm	LTE Band 25 (PCS)	F	1787M	20	QPSK	1	0	20.5	20.05	0	-0.01	1:1	0.432	1.109	0.479	A75
1860.00	26140	Low	top	10 mm	LTE Band 25 (PCS)	F	1787M	20	QPSK	50	0	20.5	19.96	0	-0.02	1:1	0.421	1.132	0.477	
1860.00	26140	Low	left	10 mm	LTE Band 25 (PCS)	F	1787M	20	QPSK	1	0	20.5	20.05	0	0.09	1:1	0.059	1.109	0.065	
1860.00	26140	Low	left	10 mm	LTE Band 25 (PCS)	F	1787M	20	QPSK	50	0	20.5	19.96	0	0.00	1:1	0.060	1.132	0.068	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-54
LTE Band 30 Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
2310.00	27710	Mid	back	10 mm	LTE Band 30	B	1328M	10	QPSK	1	0	17.0	16.41	0	0.07	1:1	0.200	1.146	0.229	
2310.00	27710	Mid	back	10 mm	LTE Band 30	B	1328M	10	QPSK	25	0	17.0	16.29	0	-0.01	1:1	0.202	1.178	0.238	
2310.00	27710	Mid	front	10 mm	LTE Band 30	B	1328M	10	QPSK	1	0	17.0	16.41	0	0.06	1:1	0.053	1.146	0.061	
2310.00	27710	Mid	front	10 mm	LTE Band 30	B	1328M	10	QPSK	25	0	17.0	16.29	0	-0.11	1:1	0.055	1.178	0.065	
2310.00	27710	Mid	bottom	10 mm	LTE Band 30	B	1328M	10	QPSK	1	0	17.0	16.41	0	-0.01	1:1	0.316	1.146	0.362	A76
2310.00	27710	Mid	bottom	10 mm	LTE Band 30	B	1328M	10	QPSK	25	0	17.0	16.29	0	-0.01	1:1	0.315	1.178	0.371	
2310.00	27710	Mid	right	10 mm	LTE Band 30	B	1328M	10	QPSK	1	0	17.0	16.41	0	0.02	1:1	0.032	1.146	0.037	
2310.00	27710	Mid	right	10 mm	LTE Band 30	B	1328M	10	QPSK	25	0	17.0	16.29	0	0.08	1:1	0.033	1.178	0.039	
2310.00	27710	Mid	left	10 mm	LTE Band 30	B	1328M	10	QPSK	1	0	17.0	16.41	0	0.16	1:1	0.021	1.146	0.024	
2310.00	27710	Mid	left	10 mm	LTE Band 30	B	1328M	10	QPSK	25	0	17.0	16.29	0	-0.12	1:1	0.020	1.178	0.024	
2310.00	27710	Mid	back	10 mm	LTE Band 30	F	1796M	10	QPSK	1	0	20.5	19.93	0	-0.02	1:1	0.150	1.140	0.171	
2310.00	27710	Mid	back	10 mm	LTE Band 30	F	1796M	10	QPSK	25	0	20.5	19.88	0	-0.03	1:1	0.153	1.153	0.176	
2310.00	27710	Mid	front	10 mm	LTE Band 30	F	1796M	10	QPSK	1	0	20.5	19.93	0	0.05	1:1	0.051	1.140	0.058	
2310.00	27710	Mid	front	10 mm	LTE Band 30	F	1796M	10	QPSK	25	0	20.5	19.88	0	0.06	1:1	0.050	1.153	0.058	
2310.00	27710	Mid	top	10 mm	LTE Band 30	F	1796M	10	QPSK	1	0	20.5	19.93	0	-0.03	1:1	0.283	1.140	0.323	
2310.00	27710	Mid	top	10 mm	LTE Band 30	F	1796M	10	QPSK	25	0	20.5	19.88	0	-0.05	1:1	0.274	1.153	0.316	
2310.00	27710	Mid	left	10 mm	LTE Band 30	F	1796M	10	QPSK	1	0	20.5	19.93	0	-0.14	1:1	0.058	1.140	0.066	
2310.00	27710	Mid	left	10 mm	LTE Band 30	F	1796M	10	QPSK	25	0	20.5	19.88	0	0.00	1:1	0.056	1.153	0.065	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-55
LTE Band 7 Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
2560.00	21350	High	back	10 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	-0.07	1:1	0.218	1.135	0.247	
2560.00	21350	High	back	10 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	-0.03	1:1	0.212	1.146	0.243	
2560.00	21350	High	front	10 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	-0.15	1:1	0.083	1.135	0.094	
2560.00	21350	High	front	10 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	-0.01	1:1	0.076	1.146	0.087	
2560.00	21350	High	bottom	10 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	-0.06	1:1	0.460	1.135	0.522	A77
2560.00	21350	High	bottom	10 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	-0.04	1:1	0.441	1.146	0.505	
2560.00	21350	High	right	10 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	-0.05	1:1	0.048	1.135	0.054	
2560.00	21350	High	right	10 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	0.08	1:1	0.045	1.146	0.052	
2560.00	21350	High	left	10 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	-0.01	1:1	0.027	1.135	0.031	
2560.00	21350	High	left	10 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	0.08	1:1	0.024	1.146	0.028	
2560.00	21350	High	back	10 mm	LTE Band 7	F	1796M	20	QPSK	1	99	19.0	18.30	0	-0.17	1:1	0.075	1.175	0.088	
2560.00	21350	High	back	10 mm	LTE Band 7	F	1796M	20	QPSK	50	25	19.0	18.07	0	-0.05	1:1	0.081	1.239	0.100	
2560.00	21350	High	front	10 mm	LTE Band 7	F	1796M	20	QPSK	1	99	19.0	18.30	0	0.06	1:1	0.041	1.175	0.048	
2560.00	21350	High	front	10 mm	LTE Band 7	F	1796M	20	QPSK	50	25	19.0	18.07	0	0.06	1:1	0.043	1.239	0.053	
2560.00	21350	High	top	10 mm	LTE Band 7	F	1796M	20	QPSK	1	99	19.0	18.30	0	0.01	1:1	0.157	1.175	0.184	
2560.00	21350	High	top	10 mm	LTE Band 7	F	1796M	20	QPSK	50	25	19.0	18.07	0	-0.09	1:1	0.161	1.239	0.199	
2560.00	21350	High	left	10 mm	LTE Band 7	F	1796M	20	QPSK	1	99	19.0	18.30	0	0.02	1:1	0.039	1.175	0.046	
2560.00	21350	High	left	10 mm	LTE Band 7	F	1796M	20	QPSK	50	25	19.0	18.07	0	0.02	1:1	0.041	1.239	0.051	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-56
LTE Band 41 Hotspot SAR

MEASUREMENT RESULTS																							
# CC Uplink, Power Class	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	10 mm	LTE Band 41	B	1815M	20	QPSK	1	50	19.0	17.91	0	-0.02	1:1.58	0.173	1.285	0.222	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	10 mm	LTE Band 41	B	1815M	20	QPSK	50	25	19.0	18.03	0	-0.01	1:1.58	0.172	1.250	0.215	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	front	10 mm	LTE Band 41	B	1815M	20	QPSK	1	50	19.0	17.91	0	-0.05	1:1.58	0.053	1.285	0.068	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	front	10 mm	LTE Band 41	B	1815M	20	QPSK	50	25	19.0	18.03	0	0.06	1:1.58	0.054	1.250	0.068	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1815M	20	QPSK	1	50	19.0	17.91	0	-0.03	1:1.58	0.310	1.285	0.398	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1815M	20	QPSK	1	99	19.0	17.66	0	0.07	1:1.58	0.346	1.361	0.471	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1815M	20	QPSK	50	25	19.0	18.03	0	-0.02	1:1.58	0.304	1.250	0.380	
1 CC Uplink - Power Class 2	N/A	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1815M	20	QPSK	1	50	20.6	19.94	0	0.07	1:2.31	0.346	1.164	0.403	
1 CC Uplink - Power Class 2	N/A	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1815M	20	QPSK	1	99	20.6	19.75	0	0.01	1:2.31	0.346	1.216	0.421	
2 CC Uplink - Power Class 3	PCC	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1815M	20	QPSK	1	99	19.0	17.83	0	-0.03	1:1.58	0.360	1.309	0.471	A78
	SCC	2612.80	40818										0									
2 CC Uplink - Power Class 2	PCC	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1815M	20	QPSK	1	99	20.6	19.67	0	0.00	1:2.31	0.356	1.239	0.441	
	SCC	2612.80	40818										0									
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	right	10 mm	LTE Band 41	B	1815M	20	QPSK	1	50	19.0	17.91	0	-0.03	1:1.58	0.020	1.285	0.026	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	right	10 mm	LTE Band 41	B	1815M	20	QPSK	50	25	19.0	18.03	0	0.01	1:1.58	0.019	1.250	0.024	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	left	10 mm	LTE Band 41	B	1815M	20	QPSK	1	50	19.0	17.91	0	0.10	1:1.58	0.021	1.285	0.027	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	left	10 mm	LTE Band 41	B	1815M	20	QPSK	50	25	19.0	18.03	0	0.01	1:1.58	0.020	1.250	0.025	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	back	10 mm	LTE Band 41	F	1796M	20	QPSK	1	50	21.0	20.38	0	-0.14	1:1.58	0.092	1.153	0.106	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	back	10 mm	LTE Band 41	F	1796M	20	QPSK	50	0	21.0	20.37	0	-0.09	1:1.58	0.094	1.156	0.109	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	front	10 mm	LTE Band 41	F	1796M	20	QPSK	1	50	21.0	20.38	0	-0.06	1:1.58	0.034	1.153	0.039	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	front	10 mm	LTE Band 41	F	1796M	20	QPSK	50	0	21.0	20.37	0	0.10	1:1.58	0.030	1.156	0.035	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	top	10 mm	LTE Band 41	F	1796M	20	QPSK	1	50	21.0	20.38	0	-0.07	1:1.58	0.176	1.153	0.203	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	top	10 mm	LTE Band 41	F	1796M	20	QPSK	50	0	21.0	20.37	0	-0.08	1:1.58	0.175	1.156	0.202	
1 CC Uplink - Power Class 2	N/A	2549.50	40185	Low-Mid	top	10 mm	LTE Band 41	F	1796M	20	QPSK	1	50	22.6	22.10	0	-0.07	1:2.31	0.177	1.122	0.199	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	left	10 mm	LTE Band 41	F	1796M	20	QPSK	1	50	21.0	20.38	0	0.08	1:1.58	0.048	1.153	0.055	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	left	10 mm	LTE Band 41	F	1796M	20	QPSK	50	0	21.0	20.37	0	-0.06	1:1.58	0.044	1.156	0.051	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-57
LTE Band 48 Hotspot SAR

MEASUREMENT RESULTS																						
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	10 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	-0.05	1:1.58	0.122	1.156	0.141	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	10 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	-0.13	1:1.58	0.121	1.146	0.139	
1 CC Uplink	N/A	3646.70	56207	Mid-High	front	10 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	0.03	1:1.58	0.047	1.156	0.054	
1 CC Uplink	N/A	3646.70	56207	Mid-High	front	10 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	0.06	1:1.58	0.045	1.146	0.052	
1 CC Uplink	N/A	3646.70	56207	Mid-High	top	10 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	-0.03	1:1.58	0.219	1.156	0.253	A79
1 CC Uplink	N/A	3646.70	56207	Mid-High	top	10 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	-0.01	1:1.58	0.210	1.146	0.241	
2 CC Uplink	PCC	3646.70	56207	Mid-High	top	10 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.65	0	-0.04	1:1.58	0.209	1.216	0.254	
	SCC	3626.90	56009										99									
1 CC Uplink	N/A	3646.70	56207	Mid-High	left	10 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	-0.10	1:1.58	0.056	1.156	0.065	
1 CC Uplink	N/A	3646.70	56207	Mid-High	left	10 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	0.03	1:1.58	0.049	1.146	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 11-58
NR Band n71 Hotspot SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
680.50	136100	Mid	back	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.01	1:1	0.293	1.294	0.379	A80
680.50	136100	Mid	back	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.00	1:1	0.290	1.291	0.374	
680.50	136100	Mid	back	10 mm	NR Band n71	A+B	9	2719M	20	CP-OFDM	QPSK	1	1	24.0	22.75	1.5	-0.03	1:1	0.175	1.334	0.233	
680.50	136100	Mid	front	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.00	1:1	0.126	1.294	0.163	
680.50	136100	Mid	front	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.00	1:1	0.127	1.291	0.164	
680.50	136100	Mid	bottom	10 mm	NR Band n71	A+B	18	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.03	1:1	0.097	1.294	0.126	
680.50	136100	Mid	bottom	10 mm	NR Band n71	A+B	18	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.04	1:1	0.099	1.291	0.128	
680.50	136100	Mid	right	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.00	1:1	0.266	1.294	0.344	
680.50	136100	Mid	right	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.01	1:1	0.232	1.291	0.300	
680.50	136100	Mid	left	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.01	1:1	0.139	1.294	0.180	
680.50	136100	Mid	left	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	-0.01	1:1	0.110	1.291	0.142	
680.50	136100	Mid	back	10 mm	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.03	1:1	0.172	1.294	0.223	
680.50	136100	Mid	back	10 mm	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	-0.01	1:1	0.181	1.291	0.234	
680.50	136100	Mid	back	10 mm	NR Band n71	A	49	3594M	20	CP-OFDM	QPSK	1	1	24.0	22.75	1.5	0.01	1:1	0.110	1.334	0.147	
680.50	136100	Mid	front	10 mm	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.06	1:1	0.057	1.294	0.074	
680.50	136100	Mid	front	10 mm	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.05	1:1	0.068	1.291	0.088	
680.50	136100	Mid	bottom	10 mm	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.01	1:1	0.044	1.294	0.057	
680.50	136100	Mid	bottom	10 mm	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.02	1:1	0.046	1.291	0.059	
680.50	136100	Mid	right	10 mm	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.02	1:1	0.148	1.294	0.192	
680.50	136100	Mid	right	10 mm	NR Band n71	A	49	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	-0.01	1:1	0.173	1.291	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							

Table 11-59
NR Band n12 Hotspot SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
707.50	141500	Mid	back	10 mm	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.02	1:1	0.282	1.213	0.342	
707.50	141500	Mid	back	10 mm	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.03	1:1	0.315	1.180	0.372	
707.50	141500	Mid	front	10 mm	NR Band n12	A+B	108	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.02	1:1	0.155	1.213	0.188	
707.50	141500	Mid	front	10 mm	NR Band n12	A+B	108	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.01	1:1	0.171	1.180	0.202	
707.50	141500	Mid	bottom	10 mm	NR Band n12	A+B	108	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.01	1:1	0.082	1.213	0.099	
707.50	141500	Mid	bottom	10 mm	NR Band n12	A+B	108	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.04	1:1	0.091	1.180	0.107	
707.50	141500	Mid	right	10 mm	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.06	1:1	0.338	1.213	0.410	A81
707.50	141500	Mid	right	10 mm	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.01	1:1	0.309	1.180	0.365	
707.50	141500	Mid	right	10 mm	NR Band n12	A+B	36	2719M	15	CP-OFDM	QPSK	1	1	24.0	23.30	1.5	-0.03	1:1	0.225	1.175	0.264	
707.50	141500	Mid	left	10 mm	NR Band n12	A+B	108	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.01	1:1	0.174	1.213	0.211	
707.50	141500	Mid	left	10 mm	NR Band n12	A+B	108	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.01	1:1	0.196	1.180	0.231	
707.50	141500	Mid	back	10 mm	NR Band n12	A	10	3594M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.02	1:1	0.160	1.213	0.194	
707.50	141500	Mid	back	10 mm	NR Band n12	A	10	3594M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.11	1:1	0.176	1.180	0.208	
707.50	141500	Mid	front	10 mm	NR Band n12	A	45	3594M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.11	1:1	0.053	1.213	0.064	
707.50	141500	Mid	front	10 mm	NR Band n12	A	45	3594M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.04	1:1	0.079	1.180	0.093	
707.50	141500	Mid	bottom	10 mm	NR Band n12	A	94	3594M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.04	1:1	0.062	1.213	0.075	
707.50	141500	Mid	bottom	10 mm	NR Band n12	A	94	3594M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.00	1:1	0.068	1.180	0.080	
707.50	141500	Mid	right	10 mm	NR Band n12	A	58	3594M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.11	1:1	0.160	1.213	0.194	
707.50	141500	Mid	right	10 mm	NR Band n12	A	58	3594M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.01	1:1	0.195	1.180	0.230	
707.50	141500	Mid	right	10 mm	NR Band n12	A	58	3594M	15	CP-OFDM	QPSK	1	1	24.0	23.30	1.5	0.03	1:1	0.139	1.175	0.163	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-60
NR Band n5 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
836.50	167300	Mid	back	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.06	1:1	0.237	1.268	0.301	
836.50	167300	Mid	back	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.01	1:1	0.238	1.211	0.288	
836.50	167300	Mid	front	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.00	1:1	0.106	1.268	0.134	
836.50	167300	Mid	front	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.00	1:1	0.109	1.211	0.132	
836.50	167300	Mid	bottom	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.03	1:1	0.064	1.268	0.081	
836.50	167300	Mid	bottom	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.02	1:1	0.067	1.211	0.081	
836.50	167300	Mid	right	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.05	1:1	0.242	1.268	0.307	
836.50	167300	Mid	right	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.02	1:1	0.241	1.211	0.292	
836.50	167300	Mid	right	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	CP-OFDM	QPSK	1	1	24.0	23.05	1.5	0.00	1:1	0.183	1.245	0.228	
836.50	167300	Mid	left	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.01	1:1	0.105	1.268	0.133	
836.50	167300	Mid	left	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.00	1:1	0.109	1.211	0.132	
836.50	167300	Mid	back	10 mm	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.01	1:1	0.289	1.268	0.366	
836.50	167300	Mid	back	10 mm	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.01	1:1	0.289	1.211	0.350	
836.50	167300	Mid	front	10 mm	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.01	1:1	0.080	1.268	0.101	
836.50	167300	Mid	front	10 mm	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.01	1:1	0.082	1.211	0.099	
836.50	167300	Mid	bottom	10 mm	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.03	1:1	0.178	1.268	0.226	
836.50	167300	Mid	bottom	10 mm	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.01	1:1	0.176	1.211	0.213	
836.50	167300	Mid	right	10 mm	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.08	1:1	0.394	1.268	0.500	A82
836.50	167300	Mid	right	10 mm	NR Band n5 (Cell)	A	9	3594M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.03	1:1	0.394	1.211	0.477	
836.50	167300	Mid	right	10 mm	NR Band n5 (Cell)	A	9	3594M	20	CP-OFDM	QPSK	1	1	24.0	23.05	1.5	-0.04	1:1	0.285	1.245	0.355	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-61
NR Band n66 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1745.00	349000	Mid	back	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	0.00	1:1	0.230	1.119	0.257	
1745.00	349000	Mid	back	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	-0.01	1:1	0.224	1.148	0.257	
1745.00	349000	Mid	front	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	-0.04	1:1	0.094	1.119	0.105	
1745.00	349000	Mid	front	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	-0.09	1:1	0.089	1.148	0.102	
1745.00	349000	Mid	bottom	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	0.00	1:1	0.349	1.119	0.391	
1745.00	349000	Mid	bottom	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	0.07	1:1	0.340	1.148	0.390	
1745.00	349000	Mid	bottom	10 mm	NR Band n66 (AWS)	B	1772M	40	CP-OFDM	QPSK	1	1	19.0	18.29	0	-0.01	1:1	0.433	1.178	0.510	
1745.00	349000	Mid	right	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	-0.09	1:1	0.079	1.119	0.088	
1745.00	349000	Mid	right	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	0.07	1:1	0.074	1.148	0.085	
1745.00	349000	Mid	left	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	0.20	1:1	0.027	1.119	0.030	
1745.00	349000	Mid	left	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	0.01	1:1	0.027	1.148	0.031	
1745.00	349000	Mid	back	10 mm	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	0.04	1:1	0.220	1.268	0.279	
1745.00	349000	Mid	back	10 mm	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	0.04	1:1	0.238	1.274	0.303	
1745.00	349000	Mid	front	10 mm	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	-0.03	1:1	0.091	1.268	0.115	
1745.00	349000	Mid	front	10 mm	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	-0.01	1:1	0.095	1.274	0.121	
1745.00	349000	Mid	top	10 mm	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	-0.05	1:1	0.567	1.268	0.719	
1745.00	349000	Mid	top	10 mm	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	0.00	1:1	0.538	1.274	0.685	
1745.00	349000	Mid	top	10 mm	NR Band n66 (AWS)	F	3591M	40	CP-OFDM	QPSK	1	1	20.5	19.35	0	-0.10	1:1	0.646	1.303	0.842	A83
1745.00	349000	Mid	left	10 mm	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	-0.02	1:1	0.085	1.268	0.108	
1745.00	349000	Mid	left	10 mm	NR Band n66 (AWS)	F	3591M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	0.06	1:1	0.086	1.274	0.110	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															Body 1.6 W/kg (mW/g) averaged over 1 gram						

Table 11-62
NR Band n25 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1882.50	376500	Mid	back	10 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	0.03	1:1	0.183	1.403	0.257	
1882.50	376500	Mid	back	10 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	-0.04	1:1	0.179	1.416	0.253	
1882.50	376500	Mid	front	10 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	0.01	1:1	0.115	1.403	0.161	
1882.50	376500	Mid	front	10 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	-0.03	1:1	0.108	1.416	0.153	
1882.50	376500	Mid	bottom	10 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	-0.08	1:1	0.411	1.403	0.577	
1882.50	376500	Mid	bottom	10 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	0.01	1:1	0.387	1.416	0.548	
1882.50	376500	Mid	bottom	10 mm	NR Band n25 (PCS)	B	1793M	40	CP-OFDM	QPSK	1	1	19.0	17.29	0	0.03	1:1	0.352	1.483	0.522	
1882.50	376500	Mid	right	10 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	0.07	1:1	0.080	1.403	0.112	
1882.50	376500	Mid	right	10 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	0.05	1:1	0.082	1.416	0.116	
1882.50	376500	Mid	left	10 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	-0.03	1:1	0.040	1.403	0.056	
1882.50	376500	Mid	left	10 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	-0.11	1:1	0.040	1.416	0.057	
1882.50	376500	Mid	back	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	-0.01	1:1	0.171	1.205	0.206	
1882.50	376500	Mid	back	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	-0.01	1:1	0.173	1.213	0.210	
1882.50	376500	Mid	front	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	0.00	1:1	0.065	1.205	0.078	
1882.50	376500	Mid	front	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	-0.06	1:1	0.064	1.213	0.078	
1882.50	376500	Mid	top	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	-0.03	1:1	0.515	1.205	0.621	A84
1882.50	376500	Mid	top	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	0.02	1:1	0.496	1.213	0.602	
1882.50	376500	Mid	top	10 mm	NR Band n25 (PCS)	F	1787M	40	CP-OFDM	QPSK	1	1	20.5	19.54	0	0.00	1:1	0.507	1.247	0.632	
1882.50	376500	Mid	left	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	0.01	1:1	0.074	1.205	0.089	
1882.50	376500	Mid	left	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	-0.05	1:1	0.068	1.213	0.082	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-63
NR Band n30 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2310.00	462000	Mid	back	10 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	0.00	1:1	0.167	1.074	0.179	
2310.00	462000	Mid	back	10 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	-0.01	1:1	0.172	1.074	0.185	
2310.00	462000	Mid	front	10 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	0.16	1:1	0.037	1.074	0.040	
2310.00	462000	Mid	front	10 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	0.07	1:1	0.040	1.074	0.043	
2310.00	462000	Mid	bottom	10 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	-0.07	1:1	0.297	1.074	0.319	
2310.00	462000	Mid	bottom	10 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	0.00	1:1	0.306	1.074	0.329	A85
2310.00	462000	Mid	bottom	10 mm	NR Band n30	B	1794M	10	CP-OFDM	QPSK	1	1	17.0	16.66	0	0.02	1:1	0.291	1.081	0.315	
2310.00	462000	Mid	right	10 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	0.04	1:1	0.029	1.074	0.031	
2310.00	462000	Mid	right	10 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	-0.01	1:1	0.033	1.074	0.035	
2310.00	462000	Mid	left	10 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	0.09	1:1	0.016	1.074	0.017	
2310.00	462000	Mid	left	10 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	-0.04	1:1	0.017	1.074	0.018	
2310.00	462000	Mid	back	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	-0.07	1:1	0.114	1.245	0.142	
2310.00	462000	Mid	back	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	0.09	1:1	0.118	1.262	0.149	
2310.00	462000	Mid	front	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	-0.06	1:1	0.053	1.245	0.066	
2310.00	462000	Mid	front	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	-0.05	1:1	0.056	1.262	0.071	
2310.00	462000	Mid	top	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	-0.05	1:1	0.269	1.245	0.335	
2310.00	462000	Mid	top	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	-0.08	1:1	0.278	1.262	0.351	
2310.00	462000	Mid	top	10 mm	NR Band n30	F	1794M	10	CP-OFDM	QPSK	1	1	20.5	19.65	0	0.00	1:1	0.265	1.216	0.322	
2310.00	462000	Mid	left	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	0.15	1:1	0.069	1.245	0.086	
2310.00	462000	Mid	left	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	0.09	1:1	0.072	1.262	0.091	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-64
NR Band n7 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2535.00	507000	Mid	back	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	-0.02	1:1	0.206	1.236	0.255	
2535.00	507000	Mid	back	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	0.00	1:1	0.216	1.262	0.273	
2535.00	507000	Mid	front	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	0.08	1:1	0.097	1.236	0.120	
2535.00	507000	Mid	front	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	0.01	1:1	0.100	1.262	0.126	
2535.00	507000	Mid	bottom	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	-0.01	1:1	0.505	1.236	0.624	
2535.00	507000	Mid	bottom	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	-0.02	1:1	0.513	1.262	0.647	A86
2535.00	507000	Mid	bottom	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	216	0	18.0	16.98	0	0.01	1:1	0.498	1.265	0.630	
2535.00	507000	Mid	bottom	10 mm	NR Band n7	B	1779M	40	CP-OFDM	QPSK	1	1	18.0	17.13	0	0.02	1:1	0.503	1.222	0.615	
2535.00	507000	Mid	right	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	-0.08	1:1	0.062	1.236	0.077	
2535.00	507000	Mid	right	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	0.03	1:1	0.069	1.262	0.087	
2535.00	507000	Mid	left	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	0.08	1:1	0.026	1.236	0.032	
2535.00	507000	Mid	left	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	0.04	1:1	0.028	1.262	0.035	
2535.00	507000	Mid	back	10 mm	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	1	214	19.0	17.96	0	0.00	1:1	0.092	1.271	0.117	
2535.00	507000	Mid	back	10 mm	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	108	108	19.0	17.81	0	0.01	1:1	0.105	1.315	0.138	
2535.00	507000	Mid	front	10 mm	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	1	214	19.0	17.96	0	-0.02	1:1	0.037	1.271	0.047	
2535.00	507000	Mid	front	10 mm	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	108	108	19.0	17.81	0	-0.03	1:1	0.038	1.315	0.050	
2535.00	507000	Mid	top	10 mm	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	1	214	19.0	17.96	0	-0.03	1:1	0.176	1.271	0.224	
2535.00	507000	Mid	top	10 mm	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	108	108	19.0	17.81	0	-0.04	1:1	0.204	1.315	0.268	
2535.00	507000	Mid	top	10 mm	NR Band n7	F	1779M	40	CP-OFDM	QPSK	1	1	19.0	17.84	0	-0.01	1:1	0.238	1.306	0.311	
2535.00	507000	Mid	left	10 mm	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	1	214	19.0	17.96	0	-0.08	1:1	0.045	1.271	0.057	
2535.00	507000	Mid	left	10 mm	NR Band n7	F	1779M	40	DFT-S-OFDM	QPSK	108	108	19.0	17.81	0	-0.12	1:1	0.051	1.315	0.067	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-65
NR Band n41 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2592.99	518598	Mid	back	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	0.00	1:1	0.121	1.253	0.152	
2592.99	518598	Mid	back	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	0.02	1:1	0.093	1.288	0.120	
2592.99	518598	Mid	front	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	0.03	1:1	0.047	1.253	0.059	
2592.99	518598	Mid	front	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	-0.05	1:1	0.042	1.288	0.054	
2592.99	518598	Mid	top	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	-0.06	1:1	0.205	1.253	0.257	
2592.99	518598	Mid	top	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	0.01	1:1	0.167	1.288	0.215	
2592.99	518598	Mid	top	10 mm	NR Band n41	F	1779M	100	CP-OFDM	QPSK	1	1	19.0	17.86	0	0.00	1:1	0.204	1.300	0.265	
2592.99	518598	Mid	left	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	0.00	1:1	0.049	1.253	0.061	
2592.99	518598	Mid	left	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	-0.08	1:1	0.036	1.288	0.046	
2592.99	518598	Mid	back	10 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	-0.05	1:1	0.216	1.205	0.260	
2592.99	518598	Mid	front	10 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	-0.12	1:1	0.089	1.205	0.107	
2592.99	518598	Mid	bottom	10 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	-0.06	1:1	0.383	1.205	0.462	A87
2592.99	518598	Mid	right	10 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.03	1:1	0.051	1.205	0.061	
2592.99	518598	Mid	left	10 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.05	1:1	0.013	1.205	0.016	
2592.99	518598	Mid	back	10 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.02	1:1	0.025	1.276	0.032	
2592.99	518598	Mid	front	10 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.04	1:1	0.002	1.276	0.003	
2592.99	518598	Mid	top	10 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.00	1:1	0.027	1.276	0.034	
2592.99	518598	Mid	right	10 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.09	1:1	0.000	1.276	0.000	
2592.99	518598	Mid	back	10 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	0.20	1:1	0.013	1.268	0.016	
2592.99	518598	Mid	front	10 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	0.01	1:1	0.002	1.268	0.003	
2592.99	518598	Mid	bottom	10 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	-0.09	1:1	0.011	1.268	0.014	
2592.99	518598	Mid	left	10 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	0.03	1:1	0.000	1.268	0.000	
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Table 11-66
NR Band n48 Hotspot SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3624.99	641666	Mid	back	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	-0.01	1:1	0.160	1.074	0.172	
3624.99	641666	Mid	back	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	0.04	1:1	0.154	1.112	0.171	
3624.99	641666	Mid	front	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	0.03	1:1	0.063	1.074	0.068	
3624.99	641666	Mid	front	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	0.17	1:1	0.060	1.112	0.067	
3624.99	641666	Mid	top	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	0.01	1:1	0.316	1.074	0.339	
3624.99	641666	Mid	top	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	0.02	1:1	0.306	1.112	0.340	
3624.99	641666	Mid	top	10 mm	NR Band n48	F	1790M	40	CP-OFDM	QPSK	1	1	18.5	17.75	0	-0.08	1:1	0.360	1.189	**0.428**	A88
3624.99	641666	Mid	left	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	-0.04	1:1	0.104	1.074	0.112	
3624.99	641666	Mid	left	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	0.11	1:1	0.102	1.112	0.113	
3624.99	641666	Mid	back	10 mm	NR Band n48	E	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.07	1:1	0.024	1.462	0.035	
3624.99	641666	Mid	front	10 mm	NR Band n48	E	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.18	1:1	0.010	1.462	0.015	
3624.99	641666	Mid	top	10 mm	NR Band n48	E	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.05	1:1	0.036	1.462	0.053	
3624.99	641666	Mid	right	10 mm	NR Band n48	E	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.06	1:1	0.029	1.462	0.042	
3624.99	641666	Mid	back	10 mm	NR Band n48	G	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	0.01	1:1	0.082	1.081	0.089	
3624.99	641666	Mid	front	10 mm	NR Band n48	G	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	0.03	1:1	0.006	1.081	0.006	
3624.99	641666	Mid	top	10 mm	NR Band n48	G	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	-0.08	1:1	0.081	1.081	0.088	
3624.99	641666	Mid	right	10 mm	NR Band n48	G	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	0.03	1:1	0.019	1.081	0.021	
3624.99	641666	Mid	left	10 mm	NR Band n48	G	1829M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	0.00	1:1	0.002	1.081	0.002	
3624.99	641666	Mid	back	10 mm	NR Band n48	D	1829M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	-0.15	1:1	0.078	1.064	0.083	
3624.99	641666	Mid	front	10 mm	NR Band n48	D	1829M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.06	1:1	0.007	1.064	0.007	
3624.99	641666	Mid	bottom	10 mm	NR Band n48	D	1829M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	-0.01	1:1	0.069	1.064	0.073	
3624.99	641666	Mid	left	10 mm	NR Band n48	D	1829M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.10	1:1	0.009	1.064	0.010	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-67
NR Band n77 Hotspot SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.00	1:1	0.189	1.197	0.226	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	0.04	1:1	0.188	1.239	0.233	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	-0.14	1:1	0.058	1.197	0.069	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	0.08	1:1	0.060	1.239	0.074	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.00	1:1	0.276	1.197	0.330	A89
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	-0.02	1:1	0.269	1.239	0.333	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	17.94	0	0.04	1:1	0.272	1.276	0.347	
3500.01	633334	Mid	left	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	-0.16	1:1	0.081	1.197	0.097	
3500.01	633334	Mid	left	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	0.06	1:1	0.078	1.239	0.097	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	-0.12	1:1	0.146	1.167	0.170	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	0.05	1:1	0.150	1.199	0.180	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.02	1:1	0.088	1.167	0.103	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.01	1:1	0.089	1.199	0.107	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.00	1:1	0.254	1.167	0.296	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	0.02	1:1	0.251	1.199	0.301	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	E	3591M	100	CP-OFDM	QPSK	1	1	19.5	18.36	0	0.06	1:1	0.239	1.300	0.311	
3500.01	633334	Mid	right	10 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.06	1:1	0.197	1.167	0.230	
3500.01	633334	Mid	right	10 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.02	1:1	0.190	1.199	0.228	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.20	1:1	0.031	1.312	0.041	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.07	1:1	0.002	1.312	0.003	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	-0.17	1:1	0.066	1.312	0.087	
3500.01	633334	Mid	right	10 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.06	1:1	0.008	1.312	0.010	
3500.01	633334	Mid	left	10 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.02	1:1	0.000	1.312	0.000	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	-0.04	1:1	0.082	1.268	0.104	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	0.01	1:1	0.005	1.268	0.006	
3500.01	633334	Mid	bottom	10 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	0.02	1:1	0.102	1.268	0.129	
3500.01	633334	Mid	left	10 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	0.07	1:1	0.000	1.268	0.000	
3750.00	650000	Low	back	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.00	1:1	0.187	1.148	0.215	
3750.00	650000	Low	back	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	-0.05	1:1	0.201	1.151	0.231	
3750.00	650000	Low	front	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.03	1:1	0.063	1.148	0.072	
3750.00	650000	Low	front	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.06	1:1	0.066	1.151	0.076	
3750.00	650000	Low	top	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	-0.11	1:1	0.296	1.148	0.340	
3750.00	650000	Low	top	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	-0.17	1:1	0.308	1.151	0.355	
3750.00	650000	Low	top	10 mm	NR Band n77	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	18.38	0	-0.17	1:1	0.349	1.153	0.402	
3750.00	650000	Low	left	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.04	1:1	0.067	1.148	0.077	
3750.00	650000	Low	left	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.03	1:1	0.060	1.151	0.069	
3930.00	662000	High	back	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	0.04	1:1	0.135	1.042	0.141	
3930.00	662000	High	back	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	-0.06	1:1	0.132	1.052	0.139	
3930.00	662000	High	front	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	0.12	1:1	0.051	1.042	0.053	
3930.00	662000	High	front	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	0.01	1:1	0.050	1.052	0.053	
3750.00	650000	Low	top	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	271	19.5	18.83	0	0.02	1:1	0.487	1.167	0.568	
3930.00	662000	High	top	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	-0.01	1:1	0.381	1.042	0.397	
3750.00	650000	Low	top	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	138	19.5	18.82	0	0.04	1:1	0.525	1.169	0.614	A90
3930.00	662000	High	top	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	0.00	1:1	0.371	1.052	0.390	
3930.00	662000	High	top	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	270	0	19.5	19.20	0	0.03	1:1	0.313	1.072	0.336	
3930.00	662000	High	top	10 mm	NR Band n77	E	3591M	100	CP-OFDM	QPSK	1	1	19.5	18.86	0	0.04	1:1	0.311	1.159	0.360	
3930.00	662000	High	right	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	0.03	1:1	0.191	1.042	0.199	
3930.00	662000	High	right	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	0.00	1:1	0.194	1.052	0.204	
3930.00	662000	High	back	10 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.02	1:1	0.124	1.253	0.155	
3930.00	662000	High	front	10 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.01	1:1	0.004	1.253	0.005	
3930.00	662000	High	top	10 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.11	1:1	0.220	1.253	0.276	
3930.00	662000	High	right	10 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.17	1:1	0.055	1.253	0.069	
3930.00	662000	High	left	10 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.16	1:1	0.000	1.253	0.000	
3750.00	650000	Low	back	10 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.04	1:1	0.060	1.230	0.074	
3750.00	650000	Low	front	10 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.20	1:1	0.003	1.230	0.004	
3750.00	650000	Low	bottom	10 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.01	1:1	0.072	1.230	0.089	
3750.00	650000	Low	left	10 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.20	1:1	0.002	1.230	0.002	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-68
DTS SISO WLAN Hotspot SAR

MEASUREMENT RESULTS																			
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	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	back	10 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	-0.05	98.85	0.029	0.023	1.138	1.012	0.026	
2462	11	front	10 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	0.02	98.85	0.100	0.075	1.138	1.012	0.086	
2462	11	bottom	10 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	-0.01	98.85	0.161	0.121	1.138	1.012	**0.139**	
2462	11	left	10 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	-0.01	98.85	0.051	0.039	1.138	1.012	0.045	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**											**Body** **1.6 W/kg (mW/g)** averaged over 1 gram								

Table 11-69
DTS MIMO WLAN Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	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	back	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	-0.09	98.85	0.056	0.045	1.002	1.012	0.052	
2412	1	front	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	-0.02	98.85	0.313	0.247	1.002	1.012	0.286	
2412	1	top	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	-0.07	98.85	0.399	0.300	1.002	1.012	0.348	A91
2412	1	bottom	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	-0.13	98.85	0.141	0.102	1.002	1.012	0.118	
2412	1	left	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	-0.02	98.85	0.130	0.102	1.002	1.012	0.118	
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 22.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 19.0 dBm

Table 11-70
NII MIMO WLAN Hotspot SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	Duty Cycle (%)	Peak SAR of Area Scan	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.															W/kg	(W/kg)			(W/kg)	
5825	165	back	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.02	97.92	0.057	0.044	1.012	1.021	0.047	
5825	165	front	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	-0.13	97.92	0.156	0.098	1.012	1.021	0.105	
5825	165	top	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.13	97.92	0.210	0.151	1.012	1.021	**0.162**	A92
5825	165	bottom	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	-0.15	97.92	0.129	0.073	1.012	1.021	0.078	
5825	165	left	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.09	97.92	0.061	0.033	1.012	1.021	0.035	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**												**Body** **1.6 W/kg (mW/g)** averaged over 1 gram								

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

Table 11-71
DSS Hotspot SAR

MEASUREMENT RESULTS																	
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2441	39	back	10 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	0.04	76.80	0.038	1.184	1.302	0.059	
2441	39	front	10 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	-0.07	76.80	0.159	1.184	1.302	0.245	
2441	39	top	10 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	-0.02	76.80	0.184	1.184	1.302	**0.284**	A93
2441	39	left	10 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	0.02	76.80	0.058	1.184	1.302	0.089	
2441	39	back	10 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	0.03	76.80	0.006	1.043	1.302	0.008	
2441	39	front	10 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	-0.10	76.80	0.024	1.043	1.302	0.033	
2441	39	bottom	10 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	0.04	76.80	0.053	1.043	1.302	0.072	
2441	39	left	10 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	0.02	76.80	0.011	1.043	1.302	0.015	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**										**Body** **1.6 W/kg (mW/g)** averaged over 1 gram							

11.4 Standalone Phablet SAR Data

Table 11-72
GSM 1900 Phablet SAR Data

MEASUREMENT RESULTS															
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	# of Time Slots	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
1850.20	512	back	12 mm	GSM 1900	GPRS	B	1328M	3	27.5	26.05	-0.02	1:2.76	0.185	1.396	0.258	
1850.20	512	front	0 mm	GSM 1900	GPRS	B	1328M	3	27.5	26.05	-0.05	1:2.76	0.427	1.396	0.596	
1850.20	512	bottom	14 mm	GSM 1900	GPRS	B	1328M	3	27.5	26.05	-0.04	1:2.76	0.204	1.396	0.285	
1850.20	512	right	0 mm	GSM 1900	GPRS	B	1328M	3	27.5	26.05	-0.04	1:2.76	0.245	1.396	0.342	
1850.20	512	left	0 mm	GSM 1900	GPRS	B	1328M	3	27.5	26.05	-0.08	1:2.76	0.082	1.396	0.114	
1850.20	512	back	0 mm	GSM 1900	GPRS	B	1328M	4	21.0	20.00	0.08	1:2.076	0.632	1.259	0.796	
1850.20	512	bottom	0 mm	GSM 1900	GPRS	B	1328M	4	21.0	20.00	0.04	1:2.076	0.639	1.259	0.805	A94
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Phablet 4.0 W/kg (mW/g) averaged over 10 grams									

Table 11-73
UMTS Phablet SAR Data

MEASUREMENT RESULTS															
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.											(W/kg)		(W/kg)	
1712.40	1312	back	12 mm	UMTS 1750	RMC	B	1331M	25.0	23.73	-0.08	1:1	0.425	1.340	0.570	
1712.40	1312	front	0 mm	UMTS 1750	RMC	B	1331M	25.0	23.73	0.16	1:1	0.981	1.340	1.315	
1712.40	1312	bottom	14 mm	UMTS 1750	RMC	B	1331M	25.0	23.73	0.00	1:1	0.480	1.340	0.643	
1712.40	1312	right	0 mm	UMTS 1750	RMC	B	1331M	25.0	23.73	0.05	1:1	0.729	1.340	0.977	
1712.40	1312	left	0 mm	UMTS 1750	RMC	B	1331M	25.0	23.73	0.01	1:1	0.184	1.340	0.247	
1752.60	1513	back	0 mm	UMTS 1750	RMC	B	1331M	19.0	18.28	0.17	1:1	0.837	1.180	0.988	
1752.60	1513	bottom	0 mm	UMTS 1750	RMC	B	1331M	19.0	18.28	0.03	1:1	1.130	1.180	1.333	A95
1880.00	9400	back	12 mm	UMTS 1900	RMC	B	1328M	25.0	24.12	0.01	1:1	0.336	1.225	0.412	
1880.00	9400	front	0 mm	UMTS 1900	RMC	B	1328M	25.0	24.12	0.04	1:1	0.916	1.225	1.122	
1880.00	9400	bottom	14 mm	UMTS 1900	RMC	B	1328M	25.0	24.12	-0.02	1:1	0.453	1.225	0.555	
1880.00	9400	right	0 mm	UMTS 1900	RMC	B	1328M	25.0	24.12	0.02	1:1	0.551	1.225	0.675	
1880.00	9400	left	0 mm	UMTS 1900	RMC	B	1328M	25.0	24.12	-0.06	1:1	0.162	1.225	0.198	
1852.40	9262	back	0 mm	UMTS 1900	RMC	B	1328M	19.0	18.43	0.03	1:1	0.787	1.140	0.897	
1852.40	9262	bottom	0 mm	UMTS 1900	RMC	B	1328M	19.0	18.43	0.00	1:1	1.070	1.140	1.220	A96
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Phablet 4.0 W/kg (mW/g) averaged over 10 grams								

Table 11-74
LTE Band 66 (AWS) Phablet SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g) (W/kg)	Scaling Factor	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	1770.00	132572	High	back	12 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	-0.06	1:1	0.304	1.148	0.349	
1 CC Uplink	N/A	1770.00	132572	High	back	12 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	-0.01	1:1	0.247	1.130	0.279	
1 CC Uplink	N/A	1770.00	132572	High	front	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	0.04	1:1	0.927	1.148	1.064	
1 CC Uplink	N/A	1770.00	132572	High	front	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	0.01	1:1	0.753	1.130	0.851	
1 CC Uplink	N/A	1770.00	132572	High	bottom	14 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	-0.07	1:1	0.365	1.148	0.419	
1 CC Uplink	N/A	1770.00	132572	High	bottom	14 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	0.01	1:1	0.321	1.130	0.363	
1 CC Uplink	N/A	1770.00	132572	High	right	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	0.05	1:1	0.736	1.148	0.845	
1 CC Uplink	N/A	1770.00	132572	High	right	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	0.02	1:1	0.571	1.130	0.645	
1 CC Uplink	N/A	1770.00	132572	High	left	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	0.07	1:1	0.155	1.148	0.178	
1 CC Uplink	N/A	1770.00	132572	High	left	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	0.01	1:1	0.124	1.130	0.140	
1 CC Uplink	N/A	1770.00	132572	High	back	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	0.10	1:1	1.260	1.120	1.411	
1 CC Uplink	N/A	1770.00	132572	High	back	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	-0.01	1:1	1.270	1.138	1.445	
1 CC Uplink	N/A	1770.00	132572	High	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	0.01	1:1	1.480	1.120	1.658	
1 CC Uplink	N/A	1720.00	132072	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.27	0	-0.02	1:1	1.430	1.184	1.693	
1 CC Uplink	N/A	1720.00	132072	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	50	19.0	18.18	0	0.02	1:1	1.360	1.206	1.640	
1 CC Uplink	N/A	1745.00	132322	Mid	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.28	0	0.00	1:1	1.260	1.180	1.487	
1 CC Uplink	N/A	1770.00	132572	High	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	0.02	1:1	1.060	1.138	1.206	
1 CC Uplink	N/A	1715.00	132022	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	10	QPSK	25	25	19.0	18.30	0	0.01	1:1	1.420	1.174	1.667	
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	50	19.0	18.24	0	0.00	1:1	1.310	1.191	1.560	
	SCC	1739.80	132270										0									
2 CC Uplink CA_66B	PCC	1715.00	132022	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	10	QPSK	25	25	19.0	18.31	0	-0.01	1:1	1.390	1.172	1.629	
	SCC	1724.90	132121										0									
1 CC Uplink	N/A	1770.00	132572	High	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	-0.03	1:1	1.470	1.094	1.608	
1 CC Uplink	N/A	1720.00	132072	Low	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	19.87	0	0.01	1:1	1.630	1.156	1.884	A97
1 CC Uplink	N/A	1745.00	132322	Mid	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	19.77	0	0.00	1:1	1.570	1.183	1.857	
1 CC Uplink	N/A	1770.00	132572	High	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	-0.05	1:1	1.500	1.109	1.664	

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 11-75
LTE Band 25 (PCS) Phablet SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g) (W/kg)	Scaling Factor	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																			
1882.50	26365	Mid	back	12 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	50	25.0	24.26	0	-0.02	1:1	0.312	1.186	0.370	
1882.50	26365	Mid	back	12 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	0	24.0	22.98	1	0.00	1:1	0.244	1.265	0.309	
1882.50	26365	Mid	front	0 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	50	25.0	24.26	0	-0.01	1:1	0.967	1.186	1.147	
1882.50	26365	Mid	front	0 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	0	24.0	22.98	1	0.00	1:1	0.730	1.265	0.923	
1882.50	26365	Mid	bottom	14 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	50	25.0	24.26	0	-0.04	1:1	0.414	1.186	0.491	
1882.50	26365	Mid	bottom	14 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	0	24.0	22.98	1	-0.02	1:1	0.326	1.265	0.412	
1882.50	26365	Mid	right	0 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	50	25.0	24.26	0	0.02	1:1	0.528	1.186	0.626	
1882.50	26365	Mid	right	0 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	0	24.0	22.98	1	0.01	1:1	0.405	1.265	0.512	
1882.50	26365	Mid	left	0 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	50	25.0	24.26	0	-0.11	1:1	0.165	1.186	0.196	
1882.50	26365	Mid	left	0 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	0	24.0	22.98	1	-0.04	1:1	0.135	1.265	0.171	
1905.00	26590	High	back	0 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	0	19.0	18.15	0	-0.09	1:1	0.846	1.216	1.029	
1905.00	26590	High	back	0 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	50	19.0	18.11	0	0.00	1:1	0.885	1.227	1.086	
1905.00	26590	High	bottom	0 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	1	0	19.0	18.15	0	0.01	1:1	1.010	1.216	1.228	
1905.00	26590	High	bottom	0 mm	LTE Band 25 (PCS)	B	1328M	20	QPSK	50	50	19.0	18.11	0	-0.02	1:1	1.080	1.227	1.325	
1860.00	26140	Low	top	0 mm	LTE Band 25 (PCS)	F	3596M	20	QPSK	1	0	20.5	20.05	0	-0.03	1:1	1.370	1.109	1.519	
1860.00	26140	Low	top	0 mm	LTE Band 25 (PCS)	F	3596M	20	QPSK	50	0	20.5	19.96	0	0.01	1:1	1.380	1.132	1.562	
1882.50	26365	Mid	top	0 mm	LTE Band 25 (PCS)	F	3596M	20	QPSK	50	0	20.5	19.61	0	0.01	1:1	1.490	1.227	1.828	
1905.00	26590	High	top	0 mm	LTE Band 25 (PCS)	F	3596M	20	QPSK	50	25	20.5	19.52	0	-0.02	1:1	1.670	1.253	2.093	A98
1860.00	26140	Low	top	0 mm	LTE Band 25 (PCS)	F	3596M	20	QPSK	100	0	20.5	19.76	0	0.00	1:1	1.390	1.186	1.649	

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
LTE Band 30 Phablet SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
2310.00	27710	Mid	back	12 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	-0.02	1:1	0.261	1.161	0.303	
2310.00	27710	Mid	back	12 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	-0.06	1:1	0.260	1.172	0.305	
2310.00	27710	Mid	front	0 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	0.01	1:1	0.409	1.161	0.475	
2310.00	27710	Mid	front	0 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.00	1:1	0.436	1.172	0.511	
2310.00	27710	Mid	bottom	14 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	0.01	1:1	0.324	1.161	0.376	
2310.00	27710	Mid	bottom	14 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	-0.01	1:1	0.324	1.172	0.380	
2310.00	27710	Mid	right	0 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	-0.01	1:1	0.385	1.161	0.447	
2310.00	27710	Mid	right	0 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.04	1:1	0.398	1.172	0.466	
2310.00	27710	Mid	left	0 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	-0.02	1:1	0.199	1.161	0.231	
2310.00	27710	Mid	left	0 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.01	1:1	0.198	1.172	0.232	
2310.00	27710	Mid	back	0 mm	LTE Band 30	B	1820M	10	QPSK	1	0	17.0	16.41	0	0.03	1:1	0.635	1.146	0.728	
2310.00	27710	Mid	back	0 mm	LTE Band 30	B	1820M	10	QPSK	25	0	17.0	16.29	0	0.03	1:1	0.636	1.178	0.749	
2310.00	27710	Mid	bottom	0 mm	LTE Band 30	B	1820M	10	QPSK	1	0	17.0	16.41	0	0.01	1:1	0.993	1.146	1.138	A99
2310.00	27710	Mid	bottom	0 mm	LTE Band 30	B	1820M	10	QPSK	25	0	17.0	16.29	0	-0.01	1:1	0.976	1.178	1.150	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population												Phablet 4.0 W/kg (mW/g) averaged over 10 grams								

Table 11-77
LTE Band 7 Phablet SAR

MEASUREMENT RESULTS																			
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.														(W/kg)		(W/kg)	
2535.00	21100	Mid	back	12 mm	LTE Band 7	B	20	QPSK	1	50	22.5	21.88	0	1:1	0.251	1.153	0.289	
2535.00	21100	Mid	back	12 mm	LTE Band 7	B	20	QPSK	50	50	22.5	21.88	0	1:1	0.248	1.153	0.286	
2535.00	21100	Mid	front	0 mm	LTE Band 7	B	20	QPSK	1	50	22.5	21.88	0	1:1	0.494	1.153	0.570	
2535.00	21100	Mid	front	0 mm	LTE Band 7	B	20	QPSK	50	50	22.5	21.88	0	1:1	0.492	1.153	0.567	
2535.00	21100	Mid	bottom	14 mm	LTE Band 7	B	20	QPSK	1	50	22.5	21.88	0	1:1	0.337	1.153	0.389	
2535.00	21100	Mid	bottom	14 mm	LTE Band 7	B	20	QPSK	50	50	22.5	21.88	0	1:1	0.337	1.153	0.389	
2535.00	21100	Mid	right	0 mm	LTE Band 7	B	20	QPSK	1	50	22.5	21.88	0	1:1	0.293	1.153	0.338	
2535.00	21100	Mid	right	0 mm	LTE Band 7	B	20	QPSK	50	50	22.5	21.88	0	1:1	0.288	1.153	0.332	
2535.00	21100	Mid	left	0 mm	LTE Band 7	B	20	QPSK	1	50	22.5	21.88	0	1:1	0.191	1.153	0.220	
2535.00	21100	Mid	left	0 mm	LTE Band 7	B	20	QPSK	50	50	22.5	21.88	0	1:1	0.196	1.153	0.226	
2560.00	21350	High	back	0 mm	LTE Band 7	B	20	QPSK	1	0	18.0	17.45	0	1:1	0.926	1.135	1.051	
2560.00	21350	High	back	0 mm	LTE Band 7	B	20	QPSK	50	50	18.0	17.41	0	1:1	0.880	1.146	1.008	
2510.00	20850	Low	bottom	0 mm	LTE Band 7	B	20	QPSK	1	99	18.0	17.24	0	1:1	1.820	1.191	2.168	
2535.00	21100	Mid	bottom	0 mm	LTE Band 7	B	20	QPSK	1	50	18.0	17.22	0	1:1	1.850	1.197	2.214	A100
2560.00	21350	High	bottom	0 mm	LTE Band 7	B	20	QPSK	1	0	18.0	17.45	0	1:1	1.780	1.135	2.020	
2560.00	21350	High	bottom	0 mm	LTE Band 7	B	20	QPSK	50	50	18.0	17.41	0	1:1	1.730	1.146	1.983	
2560.00	21350	High	bottom	0 mm	LTE Band 7	B	20	QPSK	100	0	18.0	17.23	0	1:1	1.680	1.194	2.006	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											Phablet 4.0 W/kg (mW/g) averaged over 10 grams							

Table 11-78
LTE Band 41 Phablet SAR

MEASUREMENT RESULTS																						
# CC Uplink, Power Class	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	back	12 mm	LTE Band 41	B	1815M	20	QPSK	1	50	23.0	22.55	0	-0.01	1:1.58	0.149	1.109	0.165	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	back	12 mm	LTE Band 41	B	1815M	20	QPSK	50	50	23.0	22.54	0	0.01	1:1.58	0.147	1.112	0.163	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	front	0 mm	LTE Band 41	B	1815M	20	QPSK	1	50	23.0	22.55	0	-0.12	1:1.58	0.396	1.109	0.439	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	front	0 mm	LTE Band 41	B	1815M	20	QPSK	50	50	23.0	22.54	0	-0.09	1:1.58	0.382	1.112	0.425	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	14 mm	LTE Band 41	B	1815M	20	QPSK	1	50	23.0	22.55	0	-0.02	1:1.58	0.266	1.109	0.295	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	14 mm	LTE Band 41	B	1815M	20	QPSK	50	50	23.0	22.54	0	-0.02	1:1.58	0.267	1.112	0.297	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	right	0 mm	LTE Band 41	B	1815M	20	QPSK	1	50	23.0	22.55	0	-0.07	1:1.58	0.318	1.109	0.353	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	right	0 mm	LTE Band 41	B	1815M	20	QPSK	50	50	23.0	22.54	0	-0.08	1:1.58	0.307	1.112	0.341	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	left	0 mm	LTE Band 41	B	1815M	20	QPSK	1	50	23.0	22.55	0	-0.05	1:1.58	0.113	1.109	0.125	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	left	0 mm	LTE Band 41	B	1815M	20	QPSK	50	50	23.0	22.54	0	-0.03	1:1.58	0.111	1.112	0.123	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	0 mm	LTE Band 41	B	1815M	20	QPSK	1	50	19.0	17.91	0	-0.03	1:1.58	0.700	1.285	0.900	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	0 mm	LTE Band 41	B	1815M	20	QPSK	50	25	19.0	18.03	0	0.08	1:1.58	0.690	1.250	0.863	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	0	19.0	17.69	0	0.05	1:1.58	1.200	1.352	1.622	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	99	19.0	17.82	0	0.00	1:1.58	1.270	1.312	1.666	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.91	0	0.00	1:1.58	1.430	1.285	1.838	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.82	0	0.00	1:1.58	1.450	1.312	1.902	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	0	19.0	17.67	0	-0.06	1:1.58	1.330	1.358	1.806	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.86	0	-0.03	1:1.58	1.530	1.300	1.989	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	17.73	0	-0.01	1:1.58	1.240	1.340	1.662	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	17.74	0	0.00	1:1.58	1.360	1.337	1.818	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	18.03	0	-0.07	1:1.58	1.460	1.250	1.825	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	17.79	0	0.00	1:1.58	1.430	1.321	1.889	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	17.92	0	-0.01	1:1.58	1.490	1.282	1.910	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	100	0	19.0	17.86	0	-0.01	1:1.58	1.450	1.300	1.885	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	0	20.6	19.57	0	0.00	1:2.31	1.340	1.268	1.699	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	20.6	19.74	0	0.03	1:2.31	1.550	1.219	1.889	A101
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	0	19.0	18.01	0	0.05	1:1.58	1.490	1.256	1.871	
	SCC	2660.20	41292					B					99									
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	0	20.6	19.78	0	0.00	1:2.31	1.440	1.208	1.740	
	SCC	2660.20	41292					B					99									

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 11-79
NR Band n66 Phablet SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1745.00	349000	Mid	back	12 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.05	1:1	0.372	1.268	0.472	
1745.00	349000	Mid	back	12 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	0.02	1:1	0.380	1.285	0.488	
1745.00	349000	Mid	front	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.01	1:1	0.824	1.268	1.045	
1745.00	349000	Mid	front	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	0.02	1:1	0.853	1.285	1.096	
1745.00	349000	Mid	bottom	14 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	-0.01	1:1	0.398	1.268	0.505	
1745.00	349000	Mid	bottom	14 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	-0.01	1:1	0.407	1.285	0.523	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	-0.02	1:1	0.668	1.268	0.847	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	-0.04	1:1	0.690	1.285	0.887	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.01	1:1	0.110	1.268	0.139	
1745.00	349000	Mid	left	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	0.01	1:1	0.121	1.285	0.155	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	-0.01	1:1	1.100	1.119	1.231	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	0.00	1:1	1.120	1.148	1.286	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	0.00	1:1	1.160	1.119	1.298	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	0.00	1:1	1.110	1.148	1.274	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	B	1772M	40	CP-OFDM	QPSK	1	1	19.0	18.29	0	0.02	1:1	1.370	1.178	1.614	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	0.01	1:1	1.630	1.268	2.067	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	0.20	1:1	1.740	1.274	2.217	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	216	0	20.5	19.37	0	0.02	1:1	1.800	1.297	2.335	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	F	1823M	40	CP-OFDM	QPSK	1	1	20.5	19.35	0	0.05	1:1	1.880	1.303	2.450	A102
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Phablet 4.0 W/kg (mW/g) averaged over 10 grams												

Table 11-80
NR Band n25 Phablet SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1882.50	376500	Mid	back	12 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	-0.05	1:1	0.302	1.361	0.411	
1882.50	376500	Mid	back	12 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.03	1:1	0.301	1.403	0.422	
1882.50	376500	Mid	front	0 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	0.00	1:1	1.170	1.361	1.592	
1882.50	376500	Mid	front	0 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.04	1:1	1.180	1.403	1.656	
1882.50	376500	Mid	front	0 mm	NR Band n25 (PCS)	B	1793M	40	CP-OFDM	QPSK	1	1	23.0	21.49	1.5	-0.04	1:1	0.647	1.416	0.916	
1882.50	376500	Mid	bottom	14 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	0.03	1:1	0.487	1.361	0.663	
1882.50	376500	Mid	bottom	14 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.00	1:1	0.506	1.403	0.710	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	0.03	1:1	0.616	1.361	0.838	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.02	1:1	0.644	1.403	0.904	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	0.02	1:1	0.222	1.361	0.302	
1882.50	376500	Mid	left	0 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.06	1:1	0.238	1.403	0.334	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	0.05	1:1	0.745	1.403	1.045	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	0.04	1:1	0.750	1.416	1.062	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	-0.05	1:1	1.170	1.403	1.642	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	B	1793M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	-0.02	1:1	1.160	1.416	1.643	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	F	3601M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	-0.04	1:1	1.740	1.205	2.097	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	F	3601M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	0.01	1:1	1.770	1.213	2.147	A103
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	F	3601M	40	DFT-S-OFDM	QPSK	216	0	20.5	19.58	0	0.04	1:1	1.740	1.236	2.151	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	F	3601M	40	CP-OFDM	QPSK	1	1	20.5	19.54	0	0.00	1:1	1.590	1.247	1.983	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Phablet 4.0 W/kg (mW/g) averaged over 10 grams												

Table 11-81
NR Band n30 Phablet SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2310.00	462000	Mid	back	12 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	-0.02	1:1	0.252	1.216	0.306	
2310.00	462000	Mid	back	12 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.02	1:1	0.262	1.169	0.306	
2310.00	462000	Mid	front	0 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.01	1:1	0.299	1.216	0.364	
2310.00	462000	Mid	front	0 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.00	1:1	0.308	1.169	0.360	
2310.00	462000	Mid	bottom	14 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.00	1:1	0.331	1.216	0.402	
2310.00	462000	Mid	bottom	14 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.02	1:1	0.341	1.169	0.399	
2310.00	462000	Mid	right	0 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	-0.12	1:1	0.360	1.216	0.438	
2310.00	462000	Mid	right	0 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	-0.03	1:1	0.366	1.169	0.428	
2310.00	462000	Mid	left	0 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	-0.06	1:1	0.183	1.216	0.223	
2310.00	462000	Mid	left	0 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.06	1:1	0.191	1.169	0.223	
2310.00	462000	Mid	back	0 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	0.02	1:1	0.516	1.074	0.554	
2310.00	462000	Mid	back	0 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	0.04	1:1	0.538	1.074	0.578	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	0.01	1:1	0.989	1.074	1.062	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	B	1794M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	0.00	1:1	1.020	1.074	1.095	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	B	1794M	10	CP-OFDM	QPSK	1	1	17.0	16.66	0	0.01	1:1	1.020	1.081	1.103	A104
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Phablet 4.0 W/kg (mW/g) averaged over 10 grams												

Table 11-82
NR Band n7 Phablet SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2535.00	507000	Mid	back	12 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	-0.02	1:1	0.205	1.225	0.251	
2535.00	507000	Mid	back	12 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	-0.03	1:1	0.220	1.274	0.280	
2535.00	507000	Mid	front	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	-0.04	1:1	0.439	1.225	0.538	
2535.00	507000	Mid	front	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	-0.02	1:1	0.470	1.274	0.599	
2535.00	507000	Mid	bottom	14 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	-0.07	1:1	0.406	1.225	0.497	
2535.00	507000	Mid	bottom	14 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	-0.09	1:1	0.398	1.274	0.507	
2535.00	507000	Mid	right	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	-0.01	1:1	0.426	1.225	0.522	
2535.00	507000	Mid	right	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	0.00	1:1	0.477	1.274	0.608	
2535.00	507000	Mid	left	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	0.08	1:1	0.169	1.225	0.207	
2535.00	507000	Mid	left	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	-0.04	1:1	0.170	1.274	0.217	
2535.00	507000	Mid	back	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	-0.08	1:1	0.956	1.236	1.182	
2535.00	507000	Mid	back	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	-0.01	1:1	0.977	1.262	1.233	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	0.01	1:1	1.990	1.236	2.460	A105
2535.00	507000	Mid	bottom	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	-0.07	1:1	1.990	1.262	**2.511**	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	216	0	18.0	16.98	0	-0.05	1:1	1.880	1.265	2.378	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	B	1779M	40	CP-OFDM	QPSK	1	1	18.0	17.13	0	-0.03	1:1	1.810	1.222	2.212	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Phablet 4.0 W/kg (mW/g) averaged over 10 grams												

Table 11-83
NR Band n41 Phablet SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2592.99	518598	Mid	top	0 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	0.05	1:1	1.670	1.253	2.093	A106
2592.99	518598	Mid	top	0 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	0.01	1:1	1.510	1.288	1.945	
2592.99	518598	Mid	top	0 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	270	0	19.0	17.88	0	0.02	1:1	1.530	1.294	1.980	
2592.99	518598	Mid	top	0 mm	NR Band n41	F	1779M	100	CP-OFDM	QPSK	1	1	19.0	17.86	0	0.00	1:1	1.630	1.300	2.119	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Phablet 4.0 W/kg (mW/g) averaged over 10 grams												

Table 11-84
NR Band n48 Phablet SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3570.00	638000	Low	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	104	18.5	17.95	0	0.06	1:1	1.860	1.135	2.111	
3624.99	641666	Mid	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	-0.01	1:1	1.490	1.074	1.600	
3679.98	645332	High	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.83	0	-0.02	1:1	1.610	1.167	1.879	
3570.00	638000	Low	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	56	18.5	17.70	0	0.05	1:1	1.880	1.202	2.260	A107
3624.99	641666	Mid	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	0.00	1:1	1.460	1.112	1.624	
3679.98	645332	High	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	0	18.5	17.67	0	0.02	1:1	1.660	1.211	2.010	
3624.99	641666	Mid	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	100	0	18.5	18.02	0	0.01	1:1	1.500	1.117	1.676	
3624.99	641666	Mid	top	0 mm	NR Band n48	F	1790M	40	CP-OFDM	QPSK	1	1	18.5	17.75	0	0.00	1:1	1.690	1.189	2.009	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Phablet 4.0 W/kg (mW/g) averaged over 10 grams												

Table 11-85
NR Band n77 Phablet SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	-0.03	1:1	0.730	1.197	0.874	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	-0.03	1:1	0.699	1.239	0.866	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.00	1:1	1.600	1.197	1.915	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	-0.04	1:1	1.650	1.239	2.044	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	270	0	19.0	18.06	0	0.04	1:1	1.730	1.242	2.149	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	17.94	0	0.01	1:1	1.890	1.276	2.412	A108
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	-0.01	1:1	1.460	1.167	1.704	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	E	3591M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.02	1:1	1.440	1.199	1.727	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	E	3591M	100	CP-OFDM	QPSK	1	1	19.5	18.36	0	-0.02	1:1	1.400	1.300	1.820	
3750.00	650000	Low	back	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.00	1:1	0.821	1.148	0.943	
3750.00	650000	Low	back	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.06	1:1	0.820	1.151	0.944	
3750.00	650000	Low	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	-0.02	1:1	1.680	1.148	1.929	
3930.00	662000	High	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	137	19.0	18.39	0	-0.01	1:1	1.880	1.151	2.164	A109
3750.00	650000	Low	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	-0.03	1:1	1.750	1.151	2.014	
3930.00	662000	High	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.29	0	0.00	1:1	1.830	1.178	2.156	
3750.00	650000	Low	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	270	0	19.0	18.37	0	0.02	1:1	1.870	1.156	2.162	
3750.00	650000	Low	top	0 mm	NR Band n77	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	18.38	0	0.02	1:1	1.630	1.153	1.879	
3930.00	662000	High	top	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	-0.11	1:1	0.773	1.042	0.805	
3930.00	662000	High	top	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	-0.02	1:1	0.753	1.052	0.792	
3930.00	662000	High	top	0 mm	NR Band n77	E	3591M	100	CP-OFDM	QPSK	1	1	19.5	18.86	0	0.04	1:1	0.671	1.159	0.778	
3930.00	662000	High	back	0 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.00	1:1	0.283	1.253	0.355	
3750.00	650000	Low	top	0 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.74	N/A	-0.10	1:1	0.566	1.337	0.757	
3930.00	662000	High	top	0 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.02	1:1	1.100	1.253	1.378	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									Phablet 4 W/kg (mW/g) averaged over 10 grams												

Table 11-86
WLAN MIMO Phablet SAR

MEASUREMENT RESULTS																					
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	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	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.06	97.92	0.224	0.044	1.069	1.021	0.048	
5300	60	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	0.00	97.92	3.410	0.599	1.069	1.021	0.658	
5300	60	top	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.01	97.92	5.330	0.833	1.069	1.021	0.915	
5300	60	bottom	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.03	97.92	6.450	0.590	1.069	1.021	0.648	
5300	60	left	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	0.11	97.92	0.350	0.070	1.069	1.021	0.077	
5500	100	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	0.04	97.92	0.194	0.042	1.035	1.021	0.044	
5500	100	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	-0.02	97.92	5.250	0.763	1.035	1.021	0.806	
5500	100	top	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	0.02	97.92	7.700	1.200	1.035	1.021	1.268	
5500	100	bottom	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	0.02	97.92	3.420	0.388	1.035	1.021	0.410	
5500	100	left	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	-0.05	97.92	0.485	0.090	1.035	1.021	0.095	
5845	169	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	-0.12	97.92	0.450	0.072	1.028	1.021	0.083	
5845	169	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.05	97.92	0.449	0.805	1.028	1.021	0.925	
5845	169	top	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.01	97.92	10.400	1.340	1.028	1.021	1.539	A110
5865	173	top	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.65	18.0	17.60	-0.06	97.92	6.630	1.060	1.084	1.021	1.186	
5885	177	top	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.43	18.0	17.38	0.03	97.92	7.000	1.100	1.140	1.021	1.295	
5845	169	bottom	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.01	97.92	8.530	1.110	1.028	1.021	1.275	
5845	169	left	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	-0.06	97.92	0.526	0.069	1.028	1.021	0.079	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population																Phablet 4.0 W/kg (mW/g) averaged over 10 grams					

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

Table 11-87
NFC Phablet SAR

MEASUREMENT RESULTS									
FREQUENCY	Side	Test Position	Mode	Type	Antenna Config.	Device Serial Number	Power Drift	SAR (10g)	Plot #
MHz								(W/kg)	
13.56	back	0 mm	NFC	B	NFC	1929M	-0.07	**0.009**	A111
13.56	front	0 mm	NFC	B	NFC	1929M	0.05	0.000	
13.56	right	0 mm	NFC	B	NFC	1929M	0.06	0.000	
13.56	left	0 mm	NFC	B	NFC	1929M	0.04	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population							Phablet 4.0 W/kg (mW/g) averaged over 10 grams		

11.5 Standalone UMPC Body SAR Data

Table 11-88
GPRS UMPC Body SAR Data

MEASUREMENT RESULTS															
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	# of Time Slots	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
836.60	190	back	10 mm	GSM 850	GPRS	A+B	1792M	3	30.5	29.20	-0.01	1:2.76	0.325	1.349	0.438	
836.60	190	front	10 mm	GSM 850	GPRS	A+B	1792M	3	30.5	29.20	-0.07	1:2.76	0.378	1.349	0.510	A112
836.60	190	bottom	10 mm	GSM 850	GPRS	A+B	1792M	3	30.5	29.20	-0.02	1:2.76	0.255	1.349	0.344	
836.60	190	right	10 mm	GSM 850	GPRS	A+B	1792M	3	30.5	29.20	-0.03	1:2.76	0.254	1.349	0.343	
1850.20	512	back	14 mm	GSM 1900	GPRS	B	1317M	3	27.5	26.05	-0.09	1:2.76	0.265	1.396	0.370	
1850.20	512	front	12 mm	GSM 1900	GPRS	B	1317M	3	27.5	26.05	-0.17	1:2.76	0.256	1.396	0.357	
1850.20	512	bottom	18 mm	GSM 1900	GPRS	B	1317M	3	27.5	26.05	-0.10	1:2.76	0.191	1.396	0.267	
1850.20	512	right	10 mm	GSM 1900	GPRS	B	1317M	3	27.5	26.05	0.18	1:2.76	0.197	1.396	0.275	
1850.20	512	back	10 mm	GSM 1900	GPRS	B	1317M	4	21.0	20.00	0.00	1:2.076	0.146	1.259	0.184	
1850.20	512	front	10 mm	GSM 1900	GPRS	B	1317M	4	21.0	20.00	-0.01	1:2.076	0.102	1.259	0.128	
1850.20	512	bottom	10 mm	GSM 1900	GPRS	B	1317M	4	21.0	20.00	-0.03	1:2.076	0.275	1.259	0.346	A113
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-89
UMTS UMPC Body SAR Data

MEASUREMENT RESULTS																
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Tune State	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
826.40	4132	back	10 mm	UMTS 850	RMC	A+B	38	1792M	25.5	24.52	-0.02	1:1	0.289	1.253	0.362	
826.40	4132	front	10 mm	UMTS 850	RMC	A+B	0	1792M	25.5	24.52	0.00	1:1	0.315	1.253	0.395	A114
826.40	4132	bottom	10 mm	UMTS 850	RMC	A+B	108	1792M	25.5	24.52	0.00	1:1	0.266	1.253	0.333	
826.40	4132	right	10 mm	UMTS 850	RMC	A+B	108	1792M	25.5	24.52	-0.01	1:1	0.256	1.253	0.321	
1712.40	1312	back	14 mm	UMTS 1750	RMC	B	N/A	1331M	25.0	23.73	-0.10	1:1	0.412	1.340	0.552	A115
1712.40	1312	front	12 mm	UMTS 1750	RMC	B	N/A	1331M	25.0	23.73	-0.01	1:1	0.321	1.340	0.430	
1712.40	1312	bottom	18 mm	UMTS 1750	RMC	B	N/A	1331M	25.0	23.73	-0.06	1:1	0.298	1.340	0.399	
1712.40	1312	right	10 mm	UMTS 1750	RMC	B	N/A	1331M	25.0	23.73	-0.07	1:1	0.350	1.340	0.469	
1752.60	1513	back	10 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	0.04	1:1	0.214	1.180	0.253	
1752.60	1513	front	10 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	0.03	1:1	0.114	1.180	0.135	
1752.60	1513	bottom	10 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	0.00	1:1	0.262	1.180	0.309	
1880.00	9400	back	14 mm	UMTS 1900	RMC	B	N/A	1787M	25.0	24.12	0.02	1:1	0.447	1.225	0.548	
1880.00	9400	front	12 mm	UMTS 1900	RMC	B	N/A	1787M	25.0	24.12	0.03	1:1	0.463	1.225	0.567	A116
1880.00	9400	bottom	18 mm	UMTS 1900	RMC	B	N/A	1787M	25.0	24.12	0.03	1:1	0.364	1.225	0.446	
1880.00	9400	right	10 mm	UMTS 1900	RMC	B	N/A	1787M	25.0	24.12	0.08	1:1	0.167	1.225	0.205	
1852.40	9262	back	10 mm	UMTS 1900	RMC	B	N/A	1787M	19.0	18.43	0.02	1:1	0.191	1.140	0.218	
1852.40	9262	front	10 mm	UMTS 1900	RMC	B	N/A	1787M	19.0	18.43	-0.01	1:1	0.138	1.140	0.157	
1852.40	9262	bottom	10 mm	UMTS 1900	RMC	B	N/A	1787M	19.0	18.43	0.01	1:1	0.304	1.140	0.347	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-90
LTE Band 71 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
680.50	133297	Mid	back	10 mm	LTE Band 71	A+B	45	1798M	20	QPSK	1	0	25.5	24.33	0	-0.01	1:1	0.401	1.309	0.525	A117
680.50	133297	Mid	back	10 mm	LTE Band 71	A+B	45	1798M	20	QPSK	50	0	24.5	23.26	1	0.01	1:1	0.309	1.330	0.411	
680.50	133297	Mid	front	10 mm	LTE Band 71	A+B	9	1798M	20	QPSK	1	0	25.5	24.33	0	-0.01	1:1	0.249	1.309	0.326	
680.50	133297	Mid	front	10 mm	LTE Band 71	A+B	9	1798M	20	QPSK	50	0	24.5	23.26	1	-0.01	1:1	0.192	1.330	0.255	
680.50	133297	Mid	bottom	10 mm	LTE Band 71	A+B	9	1798M	20	QPSK	1	0	25.5	24.33	0	-0.04	1:1	0.141	1.309	0.185	
680.50	133297	Mid	bottom	10 mm	LTE Band 71	A+B	9	1798M	20	QPSK	50	0	24.5	23.26	1	-0.01	1:1	0.112	1.330	0.149	
680.50	133297	Mid	right	10 mm	LTE Band 71	A+B	45	1798M	20	QPSK	1	0	25.5	24.33	0	0.01	1:1	0.160	1.309	0.209	
680.50	133297	Mid	right	10 mm	LTE Band 71	A+B	45	1798M	20	QPSK	50	0	24.5	23.26	1	0.01	1:1	0.134	1.330	0.178	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-91
LTE Band 12 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
707.50	23095	Mid	back	10 mm	LTE Band 12	A+B	0	1798M	10	QPSK	1	25	25.5	24.41	0	0.00	1:1	0.349	1.285	0.448	A118
707.50	23095	Mid	back	10 mm	LTE Band 12	A+B	0	1798M	10	QPSK	25	0	24.5	23.44	1	0.04	1:1	0.268	1.276	0.342	
707.50	23095	Mid	front	10 mm	LTE Band 12	A+B	36	1798M	10	QPSK	1	25	25.5	24.41	0	-0.01	1:1	0.249	1.285	0.320	
707.50	23095	Mid	front	10 mm	LTE Band 12	A+B	36	1798M	10	QPSK	25	0	24.5	23.44	1	0.01	1:1	0.192	1.276	0.245	
707.50	23095	Mid	bottom	10 mm	LTE Band 12	A+B	36	1798M	10	QPSK	1	25	25.5	24.41	0	0.00	1:1	0.186	1.285	0.239	
707.50	23095	Mid	bottom	10 mm	LTE Band 12	A+B	36	1798M	10	QPSK	25	0	24.5	23.44	1	0.00	1:1	0.144	1.276	0.184	
707.50	23095	Mid	right	10 mm	LTE Band 12	A+B	0	1798M	10	QPSK	1	25	25.5	24.41	0	-0.10	1:1	0.177	1.285	0.227	
707.50	23095	Mid	right	10 mm	LTE Band 12	A+B	0	1798M	10	QPSK	25	0	24.5	23.44	1	0.00	1:1	0.144	1.276	0.184	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-92
LTE Band 13 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
782.00	23230	Mid	back	10 mm	LTE Band 13	A+B	0	1798M	10	QPSK	1	25	25.5	24.90	0	0.12	1:1	0.428	1.148	0.491	A119
782.00	23230	Mid	back	10 mm	LTE Band 13	A+B	0	1798M	10	QPSK	25	12	24.5	23.72	1	-0.01	1:1	0.336	1.197	0.402	
782.00	23230	Mid	front	10 mm	LTE Band 13	A+B	0	1798M	10	QPSK	1	25	25.5	24.90	0	-0.01	1:1	0.316	1.148	0.363	
782.00	23230	Mid	front	10 mm	LTE Band 13	A+B	0	1798M	10	QPSK	25	12	24.5	23.72	1	0.01	1:1	0.239	1.197	0.286	
782.00	23230	Mid	bottom	10 mm	LTE Band 13	A+B	108	1798M	10	QPSK	1	25	25.5	24.90	0	0.11	1:1	0.133	1.148	0.153	
782.00	23230	Mid	bottom	10 mm	LTE Band 13	A+B	108	1798M	10	QPSK	25	12	24.5	23.72	1	0.02	1:1	0.101	1.197	0.121	
782.00	23230	Mid	right	10 mm	LTE Band 13	A+B	0	1798M	10	QPSK	1	25	25.5	24.90	0	0.08	1:1	0.268	1.148	0.308	
782.00	23230	Mid	right	10 mm	LTE Band 13	A+B	0	1798M	10	QPSK	25	12	24.5	23.72	1	-0.03	1:1	0.208	1.197	0.249	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-93
LTE Band 14 UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
793.00	23330	Mid	back	10 mm	LTE Band 14	A+B	0	1798M	10	QPSK	1	25	25.5	24.71	0	-0.07	1:1	0.376	1.199	0.451	A120
793.00	23330	Mid	back	10 mm	LTE Band 14	A+B	0	1798M	10	QPSK	25	12	24.5	23.68	1	-0.04	1:1	0.301	1.208	0.364	
793.00	23330	Mid	front	10 mm	LTE Band 14	A+B	0	1798M	10	QPSK	1	25	25.5	24.71	0	-0.08	1:1	0.257	1.199	0.308	
793.00	23330	Mid	front	10 mm	LTE Band 14	A+B	0	1798M	10	QPSK	25	12	24.5	23.68	1	0.01	1:1	0.206	1.208	0.249	
793.00	23330	Mid	bottom	10 mm	LTE Band 14	A+B	0	1798M	10	QPSK	1	25	25.5	24.71	0	0.01	1:1	0.124	1.199	0.149	
793.00	23330	Mid	bottom	10 mm	LTE Band 14	A+B	0	1798M	10	QPSK	25	12	24.5	23.68	1	0.00	1:1	0.099	1.208	0.120	
793.00	23330	Mid	right	10 mm	LTE Band 14	A+B	0	1798M	10	QPSK	1	25	25.5	24.71	0	0.13	1:1	0.207	1.199	0.248	
793.00	23330	Mid	right	10 mm	LTE Band 14	A+B	0	1798M	10	QPSK	25	12	24.5	23.68	1	0.00	1:1	0.166	1.208	0.201	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-94
LTE Band 26 (Cell) UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
831.50	26865	Mid	back	10 mm	LTE Band 26 (Cell)	A+B	36	1792M	15	QPSK	1	36	25.5	24.02	0	0.00	1:1	0.381	1.406	0.536	A121
831.50	26865	Mid	back	10 mm	LTE Band 26 (Cell)	A+B	36	1792M	15	QPSK	36	37	24.5	23.02	1	0.00	1:1	0.307	1.406	0.432	
831.50	26865	Mid	front	10 mm	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	1	36	25.5	24.02	0	-0.05	1:1	0.281	1.406	0.395	
831.50	26865	Mid	front	10 mm	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	36	37	24.5	23.02	1	0.02	1:1	0.219	1.406	0.308	
831.50	26865	Mid	bottom	10 mm	LTE Band 26 (Cell)	A+B	73	1792M	15	QPSK	1	36	25.5	24.02	0	-0.09	1:1	0.217	1.406	0.305	
831.50	26865	Mid	bottom	10 mm	LTE Band 26 (Cell)	A+B	73	1792M	15	QPSK	36	37	24.5	23.02	1	0.00	1:1	0.166	1.406	0.233	
831.50	26865	Mid	right	10 mm	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	1	36	25.5	24.02	0	0.07	1:1	0.177	1.406	0.249	
831.50	26865	Mid	right	10 mm	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	36	37	24.5	23.02	1	-0.05	1:1	0.148	1.406	0.208	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-95
LTE Band 5 (Cell) UMPC Body SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																	(W/kg)		(W/kg)	
1 CC Uplink	N/A	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	0.05	1:1	0.360	1.294	0.466	A122
1 CC Uplink	N/A	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	49	25.5	24.31	0	-0.16	1:1	0.358	1.315	0.471	
1 CC Uplink	N/A	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	0.00	1:1	0.273	1.309	0.357	
2 CC Uplink	PCC	836.50	20525	Mid	back	10 mm	LTE Band 5 (Cell)	A+B	2	1785M	10	QPSK	1	49	25.5	24.39	0	0.06	1:1	0.354	1.291	0.457	
	SCC	843.70	20597								5		1	0									
1 CC Uplink	N/A	836.50	20525	Mid	front	10 mm	LTE Band 5 (Cell)	A+B	0	1785M	10	QPSK	1	25	25.5	24.38	0	0.11	1:1	0.336	1.294	0.435	
1 CC Uplink	N/A	836.50	20525	Mid	front	10 mm	LTE Band 5 (Cell)	A+B	0	1785M	10	QPSK	25	25	24.5	23.33	1	-0.01	1:1	0.263	1.309	0.344	
1 CC Uplink	N/A	836.50	20525	Mid	bottom	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	0.07	1:1	0.252	1.294	0.326	
1 CC Uplink	N/A	836.50	20525	Mid	bottom	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	-0.03	1:1	0.194	1.309	0.254	
1 CC Uplink	N/A	836.50	20525	Mid	right	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	0.08	1:1	0.204	1.294	0.264	
1 CC Uplink	N/A	836.50	20525	Mid	right	10 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	0.00	1:1	0.161	1.309	0.211	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population															UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-96
LTE Band 66 (AWS) UMPC Body SAR

MEASUREMENT RESULTS																						
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	1770.00	132572	High	back	14 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	0.00	1:1	0.344	1.148	0.395	
1 CC Uplink	N/A	1770.00	132572	High	back	14 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	-0.01	1:1	0.266	1.130	0.301	
1 CC Uplink	N/A	1770.00	132572	High	front	12 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	-0.08	1:1	0.353	1.148	0.405	
1 CC Uplink	N/A	1770.00	132572	High	front	12 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	0.01	1:1	0.285	1.130	0.322	
1 CC Uplink	N/A	1770.00	132572	High	bottom	18 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	0	25.0	24.25	0	-0.14	1:1	0.322	1.189	0.383	
1 CC Uplink	N/A	1770.00	132572	High	bottom	18 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	-0.05	1:1	0.365	1.148	0.419	
1 CC Uplink	N/A	1770.00	132572	High	bottom	18 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	-0.02	1:1	0.273	1.130	0.308	
1 CC Uplink	N/A	1775.00	132622	High	bottom	18 mm	LTE Band 66 (AWS)	B	1795M	10	QPSK	1	0	25.0	24.21	0	-0.05	1:1	0.333	1.199	0.399	
2 CC Uplink CA_66C	PCC	1770.00	132572	High	bottom	18 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	0	25.0	24.42	0	0.03	1:1	0.333	1.143	0.381	
	SCC	1750.20	132374										99									
2 CC Uplink CA_66B	PCC	1775.00	132622	High	bottom	18 mm	LTE Band 66 (AWS)	B	1795M	10	QPSK	1	0	25.0	24.38	0	0.03	1:1	0.346	1.153	0.399	
	SCC	1765.10	132523										49									
1 CC Uplink	N/A	1770.00	132572	High	right	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	0.03	1:1	0.294	1.148	0.338	
1 CC Uplink	N/A	1770.00	132572	High	right	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	0.02	1:1	0.241	1.130	0.272	
1 CC Uplink	N/A	1770.00	132572	High	back	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	0.00	1:1	0.232	1.120	0.260	
1 CC Uplink	N/A	1770.00	132572	High	back	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	0.01	1:1	0.231	1.138	0.263	
1 CC Uplink	N/A	1770.00	132572	High	front	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	0.02	1:1	0.143	1.120	0.160	
1 CC Uplink	N/A	1770.00	132572	High	front	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	-0.11	1:1	0.145	1.138	0.165	
1 CC Uplink	N/A	1770.00	132572	High	bottom	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	-0.01	1:1	0.352	1.120	0.394	
1 CC Uplink	N/A	1770.00	132572	High	bottom	10 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	0.00	1:1	0.345	1.138	0.393	
1 CC Uplink	N/A	1770.00	132572	High	back	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	-0.04	1:1	0.297	1.094	0.325	
1 CC Uplink	N/A	1770.00	132572	High	back	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	-0.03	1:1	0.294	1.109	0.326	
1 CC Uplink	N/A	1770.00	132572	High	front	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	-0.03	1:1	0.208	1.094	0.228	
1 CC Uplink	N/A	1770.00	132572	High	front	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	0.01	1:1	0.208	1.109	0.231	
1 CC Uplink	N/A	1770.00	132572	High	top	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	0.04	1:1	0.410	1.094	0.449	
1 CC Uplink	N/A	1770.00	132572	High	top	10 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	-0.01	1:1	0.422	1.109	0.468	A123

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

Table 11-97
LTE Band 25 (PCS) UMPC Body SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1882.50	26365	Mid	back	14 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	50	25.0	24.26	0	-0.02	1:1	0.411	1.186	0.487	
1882.50	26365	Mid	back	14 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	0	24.0	22.98	1	0.00	1:1	0.317	1.265	0.401	
1882.50	26365	Mid	front	12 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	50	25.0	24.26	0	0.06	1:1	0.435	1.186	0.516	A124
1882.50	26365	Mid	front	12 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	0	24.0	22.98	1	0.01	1:1	0.326	1.265	0.412	
1882.50	26365	Mid	bottom	18 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	50	25.0	24.26	0	0.04	1:1	0.357	1.186	0.423	
1882.50	26365	Mid	bottom	18 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	0	24.0	22.98	1	0.02	1:1	0.268	1.265	0.339	
1882.50	26365	Mid	right	10 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	50	25.0	24.26	0	-0.01	1:1	0.357	1.186	0.423	
1882.50	26365	Mid	right	10 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	0	24.0	22.98	1	-0.04	1:1	0.278	1.265	0.352	
1905.00	26590	High	back	10 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	0	19.0	18.15	0	0.02	1:1	0.187	1.216	0.227	
1905.00	26590	High	back	10 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	50	19.0	18.11	0	-0.01	1:1	0.210	1.227	0.258	
1905.00	26590	High	front	10 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	0	19.0	18.15	0	-0.03	1:1	0.177	1.216	0.215	
1905.00	26590	High	front	10 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	50	19.0	18.11	0	0.00	1:1	0.195	1.227	0.239	
1905.00	26590	High	bottom	10 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	0	19.0	18.15	0	0.04	1:1	0.384	1.216	0.467	
1905.00	26590	High	bottom	10 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	50	19.0	18.11	0	0.06	1:1	0.428	1.227	0.525	

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

Table 11-98
LTE Band 30 UMPC Body SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
2310.00	27710	Mid	back	14 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	-0.02	1:1	0.472	1.161	0.548	
2310.00	27710	Mid	back	14 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.00	1:1	0.466	1.172	0.546	
2310.00	27710	Mid	front	12 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	0.00	1:1	0.433	1.161	0.503	
2310.00	27710	Mid	front	12 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.02	1:1	0.431	1.172	0.505	
2310.00	27710	Mid	bottom	18 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	0.01	1:1	0.496	1.161	0.576	
2310.00	27710	Mid	bottom	18 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.00	1:1	0.505	1.172	0.592	A125
2310.00	27710	Mid	right	10 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	-0.01	1:1	0.182	1.161	0.211	
2310.00	27710	Mid	right	10 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.03	1:1	0.192	1.172	0.225	
2310.00	27710	Mid	back	10 mm	LTE Band 30	B	1820M	10	QPSK	1	0	17.0	16.41	0	-0.01	1:1	0.228	1.146	0.261	
2310.00	27710	Mid	back	10 mm	LTE Band 30	B	1820M	10	QPSK	25	0	17.0	16.29	0	-0.03	1:1	0.225	1.178	0.265	
2310.00	27710	Mid	front	10 mm	LTE Band 30	B	1820M	10	QPSK	1	0	17.0	16.41	0	0.00	1:1	0.172	1.146	0.197	
2310.00	27710	Mid	front	10 mm	LTE Band 30	B	1820M	10	QPSK	25	0	17.0	16.29	0	0.00	1:1	0.169	1.178	0.199	
2310.00	27710	Mid	bottom	10 mm	LTE Band 30	B	1820M	10	QPSK	1	0	17.0	16.41	0	0.03	1:1	0.410	1.146	0.470	
2310.00	27710	Mid	bottom	10 mm	LTE Band 30	B	1820M	10	QPSK	25	0	17.0	16.29	0	0.01	1:1	0.410	1.178	0.483	

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

Table 11-99
LTE Band 7 UMPC Body SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.															(W/kg)		(W/kg)	
2535.00	21100	Mid	back	14 mm	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	1:1	0.622	1.153	0.717	
2535.00	21100	Mid	back	14 mm	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	1:1	0.595	1.153	0.686	
2510.00	20850	Low	front	12 mm	LTE Band 7	B	1713M	20	QPSK	1	99	22.5	21.74	0	1:1	0.587	1.191	0.699	
2535.00	21100	Mid	front	12 mm	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	1:1	0.630	1.153	0.726	
2560.00	21350	High	front	12 mm	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.84	0	1:1	0.633	1.164	0.737	A126
2535.00	21100	Mid	front	12 mm	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	1:1	0.614	1.153	0.708	
2535.00	21100	Mid	bottom	18 mm	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	1:1	0.573	1.153	0.661	
2535.00	21100	Mid	bottom	18 mm	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	1:1	0.562	1.153	0.648	
2535.00	21100	Mid	right	10 mm	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	1:1	0.137	1.153	0.158	
2535.00	21100	Mid	right	10 mm	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	1:1	0.135	1.153	0.156	
2560.00	21350	High	back	10 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	1:1	0.439	1.135	0.498	
2560.00	21350	High	back	10 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	1:1	0.430	1.146	0.493	
2560.00	21350	High	front	10 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	1:1	0.236	1.135	0.268	
2560.00	21350	High	front	10 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	1:1	0.224	1.146	0.257	
2510.00	20850	Low	bottom	10 mm	LTE Band 7	B	1713M	20	QPSK	1	99	18.0	17.24	0	1:1	0.579	1.191	0.690	
2535.00	21100	Mid	bottom	10 mm	LTE Band 7	B	1713M	20	QPSK	1	50	18.0	17.22	0	1:1	0.551	1.197	0.660	
2560.00	21350	High	bottom	10 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	1:1	0.591	1.135	0.671	
2560.00	21350	High	bottom	10 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	1:1	0.571	1.146	0.654	

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

Table 11-100
LTE Band 41 UMPC Body SAR

MEASUREMENT RESULTS																								
# CC Uplink, Power Class	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	back	14 mm	LTE Band 41	B	1713M	20	QPSK	1	50	23.0	22.55	0	-0.01	1:1.58	0.354	1.109	0.393	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	back	14 mm	LTE Band 41	B	1713M	20	QPSK	50	50	23.0	22.54	0	-0.03	1:1.58	0.342	1.112	0.380	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	front	12 mm	LTE Band 41	B	1713M	20	QPSK	1	50	23.0	22.55	0	0.01	1:1.58	0.370	1.109	0.410	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	front	12 mm	LTE Band 41	B	1713M	20	QPSK	50	50	23.0	22.54	0	0.00	1:1.58	0.363	1.112	0.404	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	18 mm	LTE Band 41	B	1713M	20	QPSK	1	50	23.0	22.55	0	-0.10	1:1.58	0.409	1.109	0.454	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	18 mm	LTE Band 41	B	1713M	20	QPSK	50	50	23.0	22.54	0	-0.04	1:1.58	0.403	1.112	0.448	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	right	10 mm	LTE Band 41	B	1713M	20	QPSK	1	50	23.0	22.55	0	-0.12	1:1.58	0.138	1.109	0.153	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	right	10 mm	LTE Band 41	B	1713M	20	QPSK	50	50	23.0	22.54	0	-0.10	1:1.58	0.146	1.112	0.162	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	10 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.91	0	-0.04	1:1.58	0.312	1.285	0.401	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	10 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	18.03	0	-0.09	1:1.58	0.307	1.250	0.384	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	front	10 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.91	0	0.03	1:1.58	0.241	1.285	0.310	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	front	10 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	18.03	0	-0.04	1:1.58	0.241	1.250	0.301	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.91	0	-0.04	1:1.58	0.421	1.285	0.541	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1713M	20	QPSK	1	99	19.0	17.66	0	-0.01	1:1.58	0.394	1.361	0.536	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	18.03	0	-0.02	1:1.58	0.417	1.250	0.521	
1 CC Uplink - Power Class 2	N/A	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1713M	20	QPSK	1	50	20.6	19.94	0	-0.04	1:2.31	0.432	1.164	0.503	A127
1 CC Uplink - Power Class 2	N/A	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1713M	20	QPSK	1	99	20.6	19.75	0	0.02	1:2.31	0.401	1.216	0.488	
2 CC Uplink - Power Class 3	PCC	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1713M	20	QPSK	1	99	19.0	17.83	0	-0.02	1:1.58	0.406	1.309	0.531	
	SCC	2612.80	40818										0									
2 CC Uplink - Power Class 2	PCC	2593.00	40620	Mid	bottom	10 mm	LTE Band 41	B	1713M	20	QPSK	1	99	20.6	19.67	0	-0.02	1:2.31	0.402	1.239	0.498	
	SCC	2612.80	40818										0									

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

Table 11-101
LTE Band 48 UMPC Body SAR

MEASUREMENT RESULTS																						
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	10 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	-0.02	1:1.58	0.249	1.156	0.288	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	10 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	-0.01	1:1.58	0.247	1.146	0.283	
1 CC Uplink	N/A	3646.70	56207	Mid-High	front	10 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	-0.06	1:1.58	0.147	1.156	0.170	
1 CC Uplink	N/A	3646.70	56207	Mid-High	front	10 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	0.01	1:1.58	0.145	1.146	0.166	
1 CC Uplink	N/A	3646.70	56207	Mid-High	top	10 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	-0.02	1:1.58	0.449	1.156	0.519	A128
1 CC Uplink	N/A	3646.70	56207	Mid-High	top	10 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	-0.04	1:1.58	0.438	1.146	0.502	
2 CC Uplink	PCC	3646.70	56207	Mid-High	top	10 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.65	0	-0.01	1:1.58	0.448	1.216	0.545	
	SCC	3626.90	56009										99									

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

Table 11-102
NR Band n71 UMPC Body SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g) (W/kg)	Scaling Factor	Reported SAR (1g) (W/kg)	Plot #
MHz	Ch.																					
680.50	136100	Mid	back	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.03	1:1	0.318	1.294	0.411	A129
680.50	136100	Mid	back	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	-0.01	1:1	0.315	1.291	0.407	
680.50	136100	Mid	back	10 mm	NR Band n71	A+B	9	2719M	20	CP-OFDM	QPSK	1	1	24.0	22.75	1.5	0.01	1:1	0.248	1.334	0.331	
680.50	136100	Mid	front	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.02	1:1	0.315	1.294	0.408	
680.50	136100	Mid	front	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	-0.01	1:1	0.308	1.291	0.398	
680.50	136100	Mid	bottom	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.06	1:1	0.181	1.294	0.234	
680.50	136100	Mid	bottom	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	-0.02	1:1	0.158	1.291	0.204	
680.50	136100	Mid	right	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.01	1:1	0.243	1.294	0.314	
680.50	136100	Mid	right	10 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.00	1:1	0.242	1.291	0.312	

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

Table 11-103
NR Band n12 UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
707.50	141500	Mid	back	10 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.02	1:1	0.357	1.213	0.433	
707.50	141500	Mid	back	10 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.01	1:1	0.388	1.180	0.458	A130
707.50	141500	Mid	back	10 mm	NR Band n12	A+B	0	2719M	15	CP-OFDM	QPSK	1	1	24.0	23.30	1.5	0.00	1:1	0.259	1.175	0.304	
707.50	141500	Mid	front	10 mm	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.01	1:1	0.276	1.213	0.335	
707.50	141500	Mid	front	10 mm	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.01	1:1	0.308	1.180	0.363	
707.50	141500	Mid	bottom	10 mm	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.01	1:1	0.197	1.213	0.239	
707.50	141500	Mid	bottom	10 mm	NR Band n12	A+B	36	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.01	1:1	0.158	1.180	0.186	
707.50	141500	Mid	right	10 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.05	1:1	0.183	1.213	0.222	
707.50	141500	Mid	right	10 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.01	1:1	0.170	1.180	0.201	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-104
NR Band n5 UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
836.50	167300	Mid	back	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.04	1:1	0.419	1.268	0.531	
836.50	167300	Mid	back	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.03	1:1	0.434	1.211	0.526	A131
836.50	167300	Mid	back	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	CP-OFDM	QPSK	1	1	24.0	23.05	1.5	0.03	1:1	0.294	1.245	0.366	
836.50	167300	Mid	front	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.01	1:1	0.283	1.268	0.359	
836.50	167300	Mid	front	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.02	1:1	0.292	1.211	0.354	
836.50	167300	Mid	bottom	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.03	1:1	0.254	1.268	0.322	
836.50	167300	Mid	bottom	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.06	1:1	0.257	1.211	0.311	
836.50	167300	Mid	right	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.02	1:1	0.230	1.268	0.292	
836.50	167300	Mid	right	10 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.01	1:1	0.236	1.211	0.286	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-105
NR Band n66 UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1745.00	349000	Mid	back	14 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.01	1:1	0.345	1.268	0.437	
1745.00	349000	Mid	back	14 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	-0.01	1:1	0.358	1.285	0.460	
1745.00	349000	Mid	back	14 mm	NR Band n66 (AWS)	B	1772M	40	CP-OFDM	QPSK	1	1	23.0	21.70	1.5	0.04	1:1	0.268	1.349	0.362	
1745.00	349000	Mid	front	12 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.01	1:1	0.332	1.268	0.421	
1745.00	349000	Mid	front	12 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	-0.05	1:1	0.337	1.285	0.433	
1745.00	349000	Mid	bottom	18 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.00	1:1	0.343	1.268	0.435	
1745.00	349000	Mid	bottom	18 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	-0.01	1:1	0.340	1.285	0.437	
1745.00	349000	Mid	right	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.01	1:1	0.304	1.268	0.385	
1745.00	349000	Mid	right	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	0.00	1:1	0.314	1.285	0.403	
1745.00	349000	Mid	back	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	0.05	1:1	0.227	1.119	0.254	
1745.00	349000	Mid	back	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	0.04	1:1	0.237	1.148	0.272	
1745.00	349000	Mid	front	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	-0.02	1:1	0.127	1.119	0.142	
1745.00	349000	Mid	front	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	-0.02	1:1	0.126	1.148	0.145	
1745.00	349000	Mid	bottom	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	-0.04	1:1	0.306	1.119	0.342	
1745.00	349000	Mid	bottom	10 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	0.01	1:1	0.300	1.148	0.344	
1745.00	349000	Mid	back	10 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	-0.01	1:1	0.345	1.268	0.437	
1745.00	349000	Mid	back	10 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	0.01	1:1	0.357	1.274	0.455	
1745.00	349000	Mid	front	10 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	-0.04	1:1	0.210	1.268	0.266	
1745.00	349000	Mid	front	10 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	-0.01	1:1	0.222	1.274	0.283	
1745.00	349000	Mid	top	10 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	0.03	1:1	0.380	1.268	0.482	
1745.00	349000	Mid	top	10 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	-0.02	1:1	0.405	1.274	0.516	A132
1745.00	349000	Mid	top	10 mm	NR Band n66 (AWS)	F	1823M	40	CP-OFDM	QPSK	1	1	20.5	19.35	0	0.01	1:1	0.361	1.303	0.470	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-106
NR Band n25 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
1882.50	376500	Mid	back	14 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	-0.02	1:1	0.490	1.361	0.667	
1882.50	376500	Mid	back	14 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.04	1:1	0.533	1.403	0.748	
1882.50	376500	Mid	back	14 mm	NR Band n25 (PCS)	B	1787M	40	CP-OFDM	QPSK	1	1	23.0	21.49	1.5	-0.01	1:1	0.363	1.416	0.514	
1882.50	376500	Mid	front	12 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	-0.04	1:1	0.463	1.361	0.630	
1882.50	376500	Mid	front	12 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.01	1:1	0.467	1.403	0.655	
1882.50	376500	Mid	bottom	18 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	0.06	1:1	0.393	1.361	0.535	
1882.50	376500	Mid	bottom	18 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	-0.01	1:1	0.413	1.403	0.579	
1882.50	376500	Mid	right	10 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	0.01	1:1	0.193	1.361	0.263	
1882.50	376500	Mid	right	10 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.09	1:1	0.195	1.403	0.274	
1882.50	376500	Mid	back	10 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	0.01	1:1	0.269	1.403	0.377	
1882.50	376500	Mid	back	10 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	-0.01	1:1	0.275	1.416	0.389	
1882.50	376500	Mid	front	10 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	-0.03	1:1	0.172	1.403	0.241	
1882.50	376500	Mid	front	10 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	0.01	1:1	0.174	1.416	0.246	
1882.50	376500	Mid	bottom	10 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	-0.13	1:1	0.353	1.403	0.495	
1882.50	376500	Mid	bottom	10 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	-0.01	1:1	0.362	1.416	0.513	
1882.50	376500	Mid	back	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	-0.05	1:1	0.120	1.205	0.145	
1882.50	376500	Mid	back	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	-0.03	1:1	0.124	1.213	0.150	
1882.50	376500	Mid	front	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	-0.01	1:1	0.202	1.205	0.243	
1882.50	376500	Mid	front	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	-0.02	1:1	0.197	1.213	0.239	
1882.50	376500	Mid	top	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	-0.02	1:1	0.610	1.205	0.735	
1882.50	376500	Mid	top	10 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	0.01	1:1	0.621	1.213	0.753	A133
1882.50	376500	Mid	top	10 mm	NR Band n25 (PCS)	F	1787M	40	CP-OFDM	QPSK	1	1	20.5	19.54	0	-0.14	1:1	0.597	1.247	0.744	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-107
NR Band n30 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2310.00	462000	Mid	back	14 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.00	1:1	0.273	1.216	0.332	
2310.00	462000	Mid	back	14 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.02	1:1	0.425	1.169	0.497	
2310.00	462000	Mid	front	12 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.04	1:1	0.358	1.216	0.435	
2310.00	462000	Mid	front	12 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.04	1:1	0.363	1.169	0.424	
2310.00	462000	Mid	bottom	18 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.12	1:1	0.319	1.216	0.388	
2310.00	462000	Mid	bottom	18 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.15	1:1	0.506	1.169	0.592	A134
2310.00	462000	Mid	bottom	18 mm	NR Band n30	B	1793M	10	CP-OFDM	QPSK	1	1	22.5	21.19	0	0.20	1:1	0.204	1.352	0.276	
2310.00	462000	Mid	right	10 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	-0.07	1:1	0.137	1.216	0.167	
2310.00	462000	Mid	right	10 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.06	1:1	0.210	1.169	0.245	
2310.00	462000	Mid	back	10 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	0.04	1:1	0.214	1.074	0.230	
2310.00	462000	Mid	back	10 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	0.00	1:1	0.221	1.074	0.237	
2310.00	462000	Mid	front	10 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	-0.05	1:1	0.191	1.074	0.205	
2310.00	462000	Mid	front	10 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	-0.06	1:1	0.198	1.074	0.213	
2310.00	462000	Mid	bottom	10 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	0.05	1:1	0.348	1.074	0.374	
2310.00	462000	Mid	bottom	10 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	0.03	1:1	0.353	1.074	0.379	
2310.00	462000	Mid	back	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	0.05	1:1	0.151	1.245	0.188	
2310.00	462000	Mid	back	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	0.04	1:1	0.158	1.262	0.199	
2310.00	462000	Mid	front	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	0.03	1:1	0.138	1.245	0.172	
2310.00	462000	Mid	front	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	-0.01	1:1	0.144	1.262	0.182	
2310.00	462000	Mid	top	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	0.02	1:1	0.459	1.245	0.571	
2310.00	462000	Mid	top	10 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	-0.01	1:1	0.478	1.262	0.603	
2310.00	462000	Mid	top	10 mm	NR Band n30	F	1794M	10	CP-OFDM	QPSK	1	1	20.5	19.65	0	0.01	1:1	0.485	1.216	0.590	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-108
NR Band n7 UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2535.00	507000	Mid	back	14 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	-0.02	1:1	0.731	1.225	0.895	
2535.00	507000	Mid	back	14 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	-0.03	1:1	0.716	1.274	0.912	
2535.00	507000	Mid	back	14 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	216	0	22.5	21.44	0	0.01	1:1	0.720	1.276	**0.919**	
2535.00	507000	Mid	front	12 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	0.01	1:1	0.742	1.225	0.909	A135
2535.00	507000	Mid	front	12 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	-0.01	1:1	0.701	1.274	0.893	
2535.00	507000	Mid	front	12 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	216	0	22.5	21.44	0	-0.01	1:1	0.721	1.276	**0.920**	
2535.00	507000	Mid	front	12 mm	NR Band n7	B	1779M	40	CP-OFDM	QPSK	1	1	22.5	21.53	0	0.00	1:1	0.656	1.250	0.820	
2535.00	507000	Mid	bottom	18 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	0.00	1:1	0.626	1.225	0.767	
2535.00	507000	Mid	bottom	18 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	0.02	1:1	0.613	1.274	0.781	
2535.00	507000	Mid	bottom	18 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	216	0	22.5	21.44	0	0.01	1:1	0.628	1.276	0.801	
2535.00	507000	Mid	right	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	0.16	1:1	0.223	1.225	0.273	
2535.00	507000	Mid	right	10 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	-0.01	1:1	0.305	1.274	0.389	
2535.00	507000	Mid	back	10 mm	NR Band n7	B	3596M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	0.02	1:1	0.256	1.236	0.316	
2535.00	507000	Mid	back	10 mm	NR Band n7	B	3596M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	0.01	1:1	0.257	1.262	0.324	
2535.00	507000	Mid	front	10 mm	NR Band n7	B	3596M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	-0.01	1:1	0.162	1.236	0.200	
2535.00	507000	Mid	front	10 mm	NR Band n7	B	3596M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	-0.03	1:1	0.166	1.262	0.209	
2535.00	507000	Mid	bottom	10 mm	NR Band n7	B	3596M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	0.00	1:1	0.408	1.236	0.504	
2535.00	507000	Mid	bottom	10 mm	NR Band n7	B	3596M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	-0.02	1:1	0.424	1.262	0.535	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-109
NR Band n41 UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2592.99	518598	Mid	back	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	-0.06	1:1	0.194	1.253	0.243	
2592.99	518598	Mid	back	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	0.00	1:1	0.150	1.288	0.193	
2592.99	518598	Mid	front	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	0.05	1:1	0.123	1.253	0.154	
2592.99	518598	Mid	front	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	0.04	1:1	0.111	1.288	0.143	
2592.99	518598	Mid	top	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	-0.01	1:1	0.290	1.253	0.363	
2592.99	518598	Mid	top	10 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	0.00	1:1	0.211	1.288	0.272	
2592.99	518598	Mid	top	10 mm	NR Band n41	F	1779M	100	CP-OFDM	QPSK	1	1	19.0	17.86	0	0.01	1:1	0.270	1.300	0.351	
2592.99	518598	Mid	back	10 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.04	1:1	0.248	1.205	0.299	
2592.99	518598	Mid	front	10 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.06	1:1	0.207	1.205	0.249	
2592.99	518598	Mid	bottom	10 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.04	1:1	0.473	1.205	0.570	A136
2592.99	518598	Mid	right	10 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.01	1:1	0.041	1.205	0.049	
2592.99	518598	Mid	back	10 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.11	1:1	0.032	1.276	0.041	
2592.99	518598	Mid	front	10 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.07	1:1	0.029	1.276	0.037	
2592.99	518598	Mid	top	10 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.02	1:1	0.027	1.276	0.034	
2592.99	518598	Mid	right	10 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	-0.09	1:1	0.035	1.276	0.045	
2592.99	518598	Mid	back	10 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	-0.15	1:1	0.008	1.268	0.010	
2592.99	518598	Mid	front	10 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	-0.13	1:1	0.019	1.268	0.024	
2592.99	518598	Mid	bottom	10 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	0.01	1:1	0.013	1.268	0.016	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Table 11-110
NR Band n48 UMPC Body SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3624.99	641666	Mid	back	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	0.02	1:1	0.289	1.074	0.310	
3624.99	641666	Mid	back	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	0.02	1:1	0.285	1.112	0.317	
3624.99	641666	Mid	front	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	0.05	1:1	0.153	1.074	0.164	
3624.99	641666	Mid	front	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	-0.05	1:1	0.148	1.112	0.165	
3570.00	638000	Low	top	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	104	18.5	17.95	0	-0.02	1:1	0.554	1.135	0.629	
3624.99	641666	Mid	top	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	0.01	1:1	0.511	1.074	0.549	
3679.98	645332	High	top	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.83	0	0.05	1:1	0.576	1.167	0.672	A137
3570.00	638000	Low	top	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	56	18.5	17.70	0	-0.03	1:1	0.562	1.202	0.676	
3624.99	641666	Mid	top	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	-0.02	1:1	0.474	1.112	0.527	
3679.98	645332	High	top	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	0	18.5	17.67	0	-0.01	1:1	0.566	1.211	**0.685**	
3624.99	641666	Mid	top	10 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	100	0	18.5	18.02	0	-0.03	1:1	0.484	1.117	0.541	
3624.99	641666	Mid	top	10 mm	NR Band n48	F	1790M	40	CP-OFDM	QPSK	1	1	18.5	17.75	0	-0.03	1:1	0.516	1.189	0.614	
3624.99	641666	Mid	back	10 mm	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.05	1:1	0.048	1.462	0.070	
3624.99	641666	Mid	front	10 mm	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	-0.09	1:1	0.038	1.462	0.056	
3624.99	641666	Mid	top	10 mm	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	-0.06	1:1	0.065	1.462	0.095	
3624.99	641666	Mid	right	10 mm	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.15	1:1	0.057	1.462	0.083	
3624.99	641666	Mid	back	10 mm	NR Band n48	G	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	-0.09	1:1	0.112	1.081	0.121	
3624.99	641666	Mid	front	10 mm	NR Band n48	G	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	-0.15	1:1	0.050	1.081	0.054	
3624.99	641666	Mid	top	10 mm	NR Band n48	G	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	-0.09	1:1	0.113	1.081	0.122	
3624.99	641666	Mid	right	10 mm	NR Band n48	G	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	0.19	1:1	0.030	1.081	0.032	
3624.99	641666	Mid	back	10 mm	NR Band n48	D	1790M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.01	1:1	0.074	1.064	0.079	
3624.99	641666	Mid	front	10 mm	NR Band n48	D	1790M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.04	1:1	0.037	1.064	0.039	
3624.99	641666	Mid	bottom	10 mm	NR Band n48	D	1790M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.04	1:1	0.084	1.064	0.089	

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

Table 11-111
NR Band n77 UMPC Body SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (1g)	Scaling Factor	Reported SAR (1g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.00	1:1	0.251	1.197	0.300	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	-0.01	1:1	0.229	1.239	0.284	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	-0.06	1:1	0.162	1.197	0.194	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	0.12	1:1	0.157	1.239	0.195	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.01	1:1	0.428	1.197	0.512	A138
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	0.03	1:1	0.398	1.239	0.493	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	17.94	0	-0.05	1:1	0.380	1.276	0.485	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	-0.05	1:1	0.152	1.167	0.177	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.04	1:1	0.151	1.199	0.181	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.20	1:1	0.195	1.167	0.228	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.02	1:1	0.215	1.199	0.258	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	-0.01	1:1	0.359	1.167	0.419	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.01	1:1	0.358	1.199	0.429	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	270	0	19.5	18.70	0	0.02	1:1	0.362	1.202	0.435	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	E	0596M	100	CP-OFDM	QPSK	1	1	19.5	18.36	0	-0.02	1:1	0.359	1.300	0.467	
3500.01	633334	Mid	right	10 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.00	1:1	0.261	1.167	0.305	
3500.01	633334	Mid	right	10 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	0.04	1:1	0.260	1.199	0.312	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.07	1:1	0.088	1.312	0.115	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.07	1:1	0.048	1.312	0.063	
3500.01	633334	Mid	top	10 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.04	1:1	0.132	1.312	0.173	
3500.01	633334	Mid	right	10 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.09	1:1	0.036	1.312	0.047	
3500.01	633334	Mid	back	10 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	-0.19	1:1	0.067	1.268	0.085	
3500.01	633334	Mid	front	10 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	0.05	1:1	0.057	1.268	0.072	
3500.01	633334	Mid	bottom	10 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	0.11	1:1	0.131	1.268	0.166	
3750.00	650000	Low	back	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.12	1:1	0.277	1.148	0.318	
3750.00	650000	Low	back	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.04	1:1	0.271	1.151	0.312	
3750.00	650000	Low	front	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.19	1:1	0.186	1.148	0.214	
3750.00	650000	Low	front	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.10	1:1	0.194	1.151	0.223	
3750.00	650000	Low	top	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.01	1:1	0.472	1.148	0.542	
3930.00	662000	High	top	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	137	19.0	18.39	0	0.02	1:1	0.556	1.151	0.640	A139
3750.00	650000	Low	top	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.00	1:1	0.485	1.151	0.558	
3930.00	662000	High	top	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.29	0	-0.03	1:1	0.517	1.178	0.609	
3750.00	650000	Low	top	10 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	270	0	19.0	18.37	0	0.02	1:1	0.493	1.156	0.570	
3750.00	650000	Low	top	10 mm	NR Band n77	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	18.38	0	-0.08	1:1	0.461	1.153	0.532	
3930.00	662000	High	back	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	0.02	1:1	0.227	1.042	0.237	
3930.00	662000	High	back	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	0.03	1:1	0.223	1.052	0.235	
3930.00	662000	High	front	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	-0.05	1:1	0.156	1.042	0.163	
3930.00	662000	High	front	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	0.02	1:1	0.149	1.052	0.157	
3750.00	650000	Low	top	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	271	19.5	18.83	0	0.01	1:1	0.498	1.167	0.581	
3930.00	662000	High	top	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	0.03	1:1	0.455	1.042	0.474	
3750.00	650000	Low	top	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	138	19.5	18.82	0	0.06	1:1	0.497	1.169	0.581	
3930.00	662000	High	top	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	-0.02	1:1	0.448	1.052	0.471	
3930.00	662000	High	top	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	270	0	19.5	19.20	0	-0.01	1:1	0.371	1.072	0.398	
3930.00	662000	High	top	10 mm	NR Band n77	E	3591M	100	CP-OFDM	QPSK	1	1	19.5	18.86	0	0.07	1:1	0.378	1.159	0.438	
3930.00	662000	High	right	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	1	137	19.5	19.32	0	0.06	1:1	0.132	1.042	0.138	
3930.00	662000	High	right	10 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	QPSK	135	69	19.5	19.28	0	-0.04	1:1	0.126	1.052	0.133	
3930.00	662000	High	back	10 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	-0.08	1:1	0.154	1.253	0.193	
3930.00	662000	High	front	10 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.04	1:1	0.079	1.253	0.099	
3750.00	650000	Low	top	10 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.74	N/A	0.10	1:1	0.168	1.337	0.225	
3930.00	662000	High	top	10 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	-0.04	1:1	0.378	1.253	0.474	
3930.00	662000	High	right	10 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.11	1:1	0.051	1.253	0.064	
3750.00	650000	Low	back	10 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.06	1:1	0.086	1.230	0.106	
3750.00	650000	Low	front	10 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	-0.14	1:1	0.058	1.230	0.071	
3750.00	650000	Low	bottom	10 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	-0.16	1:1	0.111	1.230	0.137	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-112
DTS SISO WLAN UMPC Body SAR

MEASUREMENT RESULTS																		
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2462	11	back	10 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	0.14	98.85	0.126	1.138	1.012	0.145	
2462	11	front	10 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	-0.02	98.85	0.158	1.138	1.012	0.182	
2462	11	bottom	10 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	0.03	98.85	0.239	1.138	1.012	**0.275**	

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

Table 11-113
DTS MIMO WLAN UMPC Body SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	Duty Cycle (%)	Peak Number	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)			(W/kg)	
2412	1	back	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	0.00	98.85	1	0.220	1.002	1.012	0.255	
2412	1	back	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	0.17	98.85	2	0.168	1.002	1.012	0.195	
2412	1	front	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	0.00	98.85	1	0.208	1.002	1.012	0.241	
2412	1	front	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	-0.01	98.85	2	0.191	1.002	1.012	0.222	
2412	1	top	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	0.01	98.85	-	0.303	1.002	1.012	0.351	A140
2412	1	bottom	10 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	0.00	98.85	-	0.240	1.002	1.012	0.278	

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

Note: To achieve the 22.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 19.0 dBm. Peak number 1 and 2 correspond to the top and bottom of DUT respectively.

Table 11-114
NII MIMO WLAN UMPC Body SAR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	Duty Cycle (%)	Peak Number	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)			(W/kg)	
5300	60	back	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	0.08	97.92	1	0.089	1.069	1.021	0.098	
5300	60	back	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.05	97.92	2	0.083	1.069	1.021	0.091	
5300	60	front	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	0.03	97.92	1	0.085	1.069	1.021	0.093	
5300	60	front	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.17	97.92	2	0.094	1.069	1.021	0.103	
5300	60	top	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.08	97.92	-	0.211	1.069	1.021	0.232	
5300	60	bottom	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.02	97.92	-	0.203	1.069	1.021	0.223	
5500	100	back	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	-0.19	97.92	1	0.089	1.035	1.021	0.094	
5500	100	back	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	0.19	97.92	2	0.066	1.035	1.021	0.070	
5500	100	front	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	-0.13	97.92	1	0.103	1.035	1.021	0.109	
5500	100	front	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	0.00	97.92	2	0.077	1.035	1.021	0.081	
5500	100	top	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	-0.06	97.92	-	0.249	1.035	1.021	**0.263**	A141
5500	100	bottom	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	0.03	97.92	-	0.140	1.035	1.021	0.148	
5825	165	back	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.05	97.92	1	0.079	1.012	1.021	0.085	
5825	165	back	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.03	97.92	2	0.123	1.012	1.021	0.132	
5825	165	front	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	-0.08	97.92	1	0.104	1.012	1.021	0.112	
5825	165	front	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.15	97.92	2	0.135	1.012	1.021	0.145	
5825	165	top	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.04	97.92	-	0.214	1.012	1.021	0.230	
5825	165	bottom	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.01	97.92	-	0.122	1.012	1.021	0.131	
5845	169	back	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	-0.02	97.92	1	0.066	1.028	1.021	0.076	
5845	169	back	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.09	97.92	2	0.098	1.028	1.021	0.113	
5845	169	front	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.04	97.92	1	0.095	1.028	1.021	0.109	
5845	169	front	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	-0.03	97.92	2	0.124	1.028	1.021	0.142	
5845	169	top	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.03	97.92	-	0.195	1.028	1.021	0.224	
5845	169	bottom	10 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	-0.04	97.92	-	0.113	1.028	1.021	0.130	

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

Note: To achieve the 21.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18.0 dBm. Peak number 1 and 2 correspond to the top and bottom of DUT respectively.

Table 11-115
DTS UMPC Body SISO SAR during Conditions with 5/6 GHz WLAN and/or 5G NR

MEASUREMENT RESULTS																		
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle (%)	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2462	11	back	10 mm	802.11b	DSSS	2	0417M	22	1	15.0	14.88	0.04	98.85	0.063	1.028	1.012	0.066	
2462	11	front	10 mm	802.11b	DSSS	2	0417M	22	1	15.0	14.88	0.00	98.85	0.072	1.028	1.012	0.075	
2462	11	bottom	10 mm	802.11b	DSSS	2	0417M	22	1	15.0	14.88	-0.16	98.85	0.084	1.028	1.012	0.087	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram							

Note: 2.4 GHz Antenna 2 was additionally evaluated at the maximum allowed output power during simultaneous operations with 5/6 GHz WLAN, or 5G NR. 5/6 GHz WIFI or 5G NR was not transmitting during the above evaluations.

Table 11-116
DTS UMPC Body MIMO SAR during Conditions with 5/6 GHz WLAN and/or 5G NR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	Duty Cycle (%)	Peak Number	SAR (1g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.																(W/kg)			(W/kg)	
2437	6	back	10 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	-0.03	97.70	1	0.073	1.084	1.024	0.082	
2437	6	back	10 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	0.04	97.70	2	0.042	1.084	1.024	0.047	
2437	6	front	10 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	-0.05	97.70	1	0.061	1.084	1.024	0.068	
2437	6	front	10 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	0.14	97.70	2	0.047	1.084	1.024	0.053	
2437	6	top	10 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	0.01	97.70	-	0.108	1.084	1.024	0.121	
2437	6	bottom	10 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	-0.04	97.70	-	0.103	1.084	1.024	0.115	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram									

Note: 2.4 GHz MIMO was additionally evaluated at the maximum allowed output power during simultaneous operations with 5/6 GHz WLAN, or 5G NR. 5/6 GHz WIFI or 5G NR was not transmitting during the above evaluations. To achieve the 18.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 15.0 dBm. Peak number 1 and 2 correspond to the top and bottom of DUT respectively.

Table 11-117
DSS UMPC Body SAR

MEASUREMENT RESULTS																	
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2441	39	back	10 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	0.03	76.80	0.151	1.184	1.302	0.233	
2441	39	front	10 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	0.02	76.80	0.127	1.184	1.302	0.196	
2441	39	top	10 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	0.01	76.80	0.234	1.184	1.302	**0.361**	A142
2441	39	back	10 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	0.06	76.80	0.143	1.043	1.302	0.194	
2441	39	front	10 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	-0.05	76.80	0.043	1.043	1.302	0.058	
2441	39	bottom	10 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	0.05	76.80	0.086	1.043	1.302	0.117	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram							

Table 11-118
DSS UMPC Body SAR during Conditions with 5/6 GHz WLAN and/or 5G NR

MEASUREMENT RESULTS																
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle (%)	SAR (1g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (1g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2441	39	back	10 mm	Bluetooth	FHSS	1	0417M	1	15.0	14.80	0.10	76.80	0.067	1.047	1.302	0.091	
2441	39	front	10 mm	Bluetooth	FHSS	1	0417M	1	15.0	14.80	0.07	76.80	0.072	1.047	1.302	0.098	
2441	39	top	10 mm	Bluetooth	FHSS	1	0417M	1	15.0	14.80	0.06	76.80	0.082	1.047	1.302	0.112	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									UMPC Body 1.6 W/kg (mW/g) averaged over 1 gram								

Note: 2.4 GHz Bluetooth Antenna 1 was additionally evaluated at the maximum allowed output power during simultaneous operations with 5/6 GHz WLAN, or 5G NR. 5/6 GHz WIFI or 5G NR was not transmitting during the above evaluations.

11.6 Standalone UMPC Extremity SAR Data

Table 11-119
GPRS UMPC Extremity SAR Data

MEASUREMENT RESULTS																
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	# of Time Slots	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
836.60	190	back	0 mm	GSM 850	GPRS	A+B	1792M	3	30.5	29.20	-0.06	1:2.76	1.060	1.349	1.430	
836.60	190	front	0 mm	GSM 850	GPRS	A+B	1792M	3	30.5	29.20	0.01	1:2.76	1.050	1.349	1.416	
836.60	190	bottom	0 mm	GSM 850	GPRS	A+B	1792M	3	30.5	29.20	-0.03	1:2.76	1.140	1.349	1.538	
824.20	128	right	0 mm	GSM 850	GPRS	A+B	1792M	3	30.5	28.97	-0.03	1:2.76	0.856	1.422	1.217	
836.60	190	right	0 mm	GSM 850	GPRS	A+B	1792M	3	30.5	29.20	-0.03	1:2.76	1.340	1.349	1.808	A143
848.80	251	right	0 mm	GSM 850	GPRS	A+B	1792M	3	30.5	28.95	-0.04	1:2.76	1.140	1.429	1.629	
1850.20	512	back	14 mm	GSM 1900	GPRS	B	1317M	3	27.5	26.05	-0.09	1:2.76	0.150	1.396	0.209	
1850.20	512	front	12 mm	GSM 1900	GPRS	B	1317M	3	27.5	26.05	-0.17	1:2.76	0.142	1.396	0.198	
1850.20	512	bottom	18 mm	GSM 1900	GPRS	B	1317M	3	27.5	26.05	-0.10	1:2.76	0.112	1.396	0.156	
1850.20	512	right	0 mm	GSM 1900	GPRS	B	1317M	3	27.5	26.05	0.00	1:2.76	0.354	1.396	0.494	
1850.20	512	back	0 mm	GSM 1900	GPRS	B	1317M	4	21.0	20.00	0.00	1:2.076	0.568	1.259	0.715	
1850.20	512	front	0 mm	GSM 1900	GPRS	B	1317M	4	21.0	20.00	0.02	1:2.076	0.415	1.259	0.522	
1850.20	512	bottom	0 mm	GSM 1900	GPRS	B	1317M	4	21.0	20.00	-0.01	1:2.076	1.060	1.259	1.335	A144
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams							

Table 11-120
UMTS UMPC Extremity SAR Data

MEASUREMENT RESULTS																
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Tune State	Device Serial Number	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)		(W/kg)	
826.40	4132	back	0 mm	UMTS 850	RMC	A+B	38	1792M	25.5	24.52	0.01	1:1	0.864	1.253	1.083	
826.40	4132	front	0 mm	UMTS 850	RMC	A+B	108	1792M	25.5	24.52	-0.03	1:1	0.774	1.253	0.970	
826.40	4132	bottom	0 mm	UMTS 850	RMC	A+B	108	1792M	25.5	24.52	-0.01	1:1	0.880	1.253	1.103	
826.40	4132	right	0 mm	UMTS 850	RMC	A+B	108	1792M	25.5	24.52	-0.01	1:1	0.990	1.253	1.240	A145
1712.40	1312	back	14 mm	UMTS 1750	RMC	B	N/A	1331M	25.0	23.73	-0.10	1:1	0.248	1.340	0.332	
1712.40	1312	front	12 mm	UMTS 1750	RMC	B	N/A	1331M	25.0	23.73	-0.01	1:1	0.204	1.340	0.273	
1712.40	1312	bottom	18 mm	UMTS 1750	RMC	B	N/A	1331M	25.0	23.73	-0.06	1:1	0.172	1.340	0.230	
1712.40	1312	right	0 mm	UMTS 1750	RMC	B	N/A	1331M	25.0	23.73	0.08	1:1	1.010	1.340	1.353	
1752.60	1513	back	0 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	0.03	1:1	0.958	1.180	1.130	
1752.60	1513	front	0 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	0.03	1:1	0.599	1.180	0.707	
1712.40	1312	bottom	0 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.25	0.01	1:1	1.630	1.189	1.938	
1732.40	1412	bottom	0 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.16	0.02	1:1	1.660	1.213	2.014	A146
1752.60	1513	bottom	0 mm	UMTS 1750	RMC	B	N/A	1331M	19.0	18.28	-0.01	1:1	1.530	1.180	1.805	
1880.00	9400	back	14 mm	UMTS 1900	RMC	B	N/A	1787M	25.0	24.12	0.02	1:1	0.256	1.225	0.314	
1880.00	9400	front	12 mm	UMTS 1900	RMC	B	N/A	1787M	25.0	24.12	0.03	1:1	0.258	1.225	0.316	
1880.00	9400	bottom	18 mm	UMTS 1900	RMC	B	N/A	1787M	25.0	24.12	0.03	1:1	0.210	1.225	0.257	
1880.00	9400	right	0 mm	UMTS 1900	RMC	B	N/A	1787M	25.0	24.12	0.01	1:1	0.623	1.225	0.763	
1852.40	9262	back	0 mm	UMTS 1900	RMC	B	N/A	1787M	19.0	18.43	0.02	1:1	0.864	1.140	0.985	
1852.40	9262	front	0 mm	UMTS 1900	RMC	B	N/A	1787M	19.0	18.43	0.01	1:1	0.650	1.140	0.741	
1852.40	9262	bottom	0 mm	UMTS 1900	RMC	B	N/A	1787M	19.0	18.43	0.02	1:1	1.660	1.140	1.892	
1880.00	9400	bottom	0 mm	UMTS 1900	RMC	B	N/A	1787M	19.0	18.29	0.03	1:1	1.760	1.178	2.073	
1907.60	9538	bottom	0 mm	UMTS 1900	RMC	B	N/A	1787M	19.0	18.36	0.03	1:1	2.100	1.159	2.434	A147
1907.60	9538	bottom	0 mm	UMTS 1900	RMC	B	N/A	1787M	19.0	18.36	0.03	1:1	1.910	1.159	2.214	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams						

Note: Blue entry represents variability measurement.

Table 11-121
LTE Band 71 UMPC Extremity SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
680.50	133297	Mid	back	0 mm	LTE Band 71	A+B	9	1798M	20	QPSK	1	0	25.5	24.33	0	0.02	1:1	0.848	1.309	1.110	A148
680.50	133297	Mid	back	0 mm	LTE Band 71	A+B	9	1798M	20	QPSK	50	0	24.5	23.26	1	0.00	1:1	0.632	1.330	0.841	
680.50	133297	Mid	front	0 mm	LTE Band 71	A+B	117	1798M	20	QPSK	1	0	25.5	24.33	0	0.01	1:1	0.675	1.309	0.884	
680.50	133297	Mid	front	0 mm	LTE Band 71	A+B	117	1798M	20	QPSK	50	0	24.5	23.26	1	0.02	1:1	0.513	1.330	0.682	
680.50	133297	Mid	bottom	0 mm	LTE Band 71	A+B	9	1798M	20	QPSK	1	0	25.5	24.33	0	-0.03	1:1	0.491	1.309	0.643	
680.50	133297	Mid	bottom	0 mm	LTE Band 71	A+B	9	1798M	20	QPSK	50	0	24.5	23.26	1	-0.01	1:1	0.390	1.330	0.519	
680.50	133297	Mid	right	0 mm	LTE Band 71	A+B	108	1798M	20	QPSK	1	0	25.5	24.33	0	0.01	1:1	0.765	1.309	1.001	
680.50	133297	Mid	right	0 mm	LTE Band 71	A+B	108	1798M	20	QPSK	50	0	24.5	23.26	1	-0.01	1:1	0.585	1.330	0.778	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams											

Table 11-122
LTE Band 12 UMPC Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
707.50	23095	Mid	back	0 mm	LTE Band 12	A+B	0	1798M	10	QPSK	1	25	25.5	24.41	0	0.00	1:1	0.868	1.285	1.115	
707.50	23095	Mid	back	0 mm	LTE Band 12	A+B	0	1798M	10	QPSK	25	0	24.5	23.44	1	-0.01	1:1	0.663	1.276	0.846	
707.50	23095	Mid	front	0 mm	LTE Band 12	A+B	0	1798M	10	QPSK	1	25	25.5	24.41	0	-0.03	1:1	0.605	1.285	0.777	
707.50	23095	Mid	front	0 mm	LTE Band 12	A+B	0	1798M	10	QPSK	25	0	24.5	23.44	1	0.00	1:1	0.455	1.276	0.581	
707.50	23095	Mid	bottom	0 mm	LTE Band 12	A+B	36	1798M	10	QPSK	1	25	25.5	24.41	0	-0.06	1:1	0.866	1.285	1.113	
707.50	23095	Mid	bottom	0 mm	LTE Band 12	A+B	36	1798M	10	QPSK	25	0	24.5	23.44	1	0.02	1:1	0.650	1.276	0.829	
707.50	23095	Mid	right	0 mm	LTE Band 12	A+B	36	1798M	10	QPSK	1	25	25.5	24.41	0	-0.04	1:1	0.927	1.285	1.191	A149
707.50	23095	Mid	right	0 mm	LTE Band 12	A+B	36	1798M	10	QPSK	25	0	24.5	23.44	1	0.04	1:1	0.709	1.276	0.905	

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

Table 11-123
LTE Band 13 UMPC Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
782.00	23230	Mid	back	0 mm	LTE Band 13	A+B	108	1798M	10	QPSK	1	25	25.5	24.90	0	-0.08	1:1	0.807	1.148	0.926	
782.00	23230	Mid	back	0 mm	LTE Band 13	A+B	108	1798M	10	QPSK	25	12	24.5	23.72	1	-0.03	1:1	0.629	1.197	0.753	
782.00	23230	Mid	front	0 mm	LTE Band 13	A+B	108	1798M	10	QPSK	1	25	25.5	24.90	0	-0.11	1:1	0.839	1.148	0.963	
782.00	23230	Mid	front	0 mm	LTE Band 13	A+B	108	1798M	10	QPSK	25	12	24.5	23.72	1	0.02	1:1	0.631	1.197	0.755	
782.00	23230	Mid	bottom	0 mm	LTE Band 13	A+B	108	1798M	10	QPSK	1	25	25.5	24.90	0	0.09	1:1	0.417	1.148	0.479	
782.00	23230	Mid	bottom	0 mm	LTE Band 13	A+B	108	1798M	10	QPSK	25	12	24.5	23.72	1	0.02	1:1	0.312	1.197	0.373	
782.00	23230	Mid	right	0 mm	LTE Band 13	A+B	108	1798M	10	QPSK	1	25	25.5	24.90	0	0.10	1:1	0.866	1.148	0.994	A150
782.00	23230	Mid	right	0 mm	LTE Band 13	A+B	108	1798M	10	QPSK	25	12	24.5	23.72	1	0.00	1:1	0.674	1.197	0.807	

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

Table 11-124
LTE Band 14 UMPC Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
793.00	23330	Mid	back	0 mm	LTE Band 14	A+B	108	1798M	10	QPSK	1	25	25.5	24.71	0	-0.01	1:1	0.745	1.199	0.893	
793.00	23330	Mid	back	0 mm	LTE Band 14	A+B	108	1798M	10	QPSK	25	12	24.5	23.68	1	-0.01	1:1	0.585	1.208	0.707	
793.00	23330	Mid	front	0 mm	LTE Band 14	A+B	0	1798M	10	QPSK	1	25	25.5	24.71	0	0.06	1:1	0.715	1.199	0.857	
793.00	23330	Mid	front	0 mm	LTE Band 14	A+B	0	1798M	10	QPSK	25	12	24.5	23.68	1	0.00	1:1	0.581	1.208	0.702	
793.00	23330	Mid	bottom	0 mm	LTE Band 14	A+B	108	1798M	10	QPSK	1	25	25.5	24.71	0	0.07	1:1	0.426	1.199	0.511	
793.00	23330	Mid	bottom	0 mm	LTE Band 14	A+B	108	1798M	10	QPSK	25	12	24.5	23.68	1	0.02	1:1	0.335	1.208	0.405	
793.00	23330	Mid	right	0 mm	LTE Band 14	A+B	108	1798M	10	QPSK	1	25	25.5	24.71	0	-0.09	1:1	0.862	1.199	1.034	A151
793.00	23330	Mid	right	0 mm	LTE Band 14	A+B	108	1798M	10	QPSK	25	12	24.5	23.68	1	0.00	1:1	0.684	1.208	0.826	

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

Table 11-125
LTE Band 26 (Cell) UMPC Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
831.50	26865	Mid	back	0 mm	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	1	36	25.5	24.02	0	0.00	1:1	1.170	1.406	1.645	A152
831.50	26865	Mid	back	0 mm	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	36	37	24.5	23.02	1	0.10	1:1	0.946	1.406	1.330	
831.50	26865	Mid	front	0 mm	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	1	36	25.5	24.02	0	-0.06	1:1	0.777	1.406	1.092	
831.50	26865	Mid	front	0 mm	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	36	37	24.5	23.02	1	0.01	1:1	0.605	1.406	0.851	
831.50	26865	Mid	bottom	0 mm	LTE Band 26 (Cell)	A+B	37	1792M	15	QPSK	1	36	25.5	24.02	0	-0.06	1:1	0.728	1.406	1.024	
831.50	26865	Mid	bottom	0 mm	LTE Band 26 (Cell)	A+B	37	1792M	15	QPSK	36	37	24.5	23.02	1	-0.04	1:1	0.575	1.406	0.808	
831.50	26865	Mid	right	0 mm	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	1	36	25.5	24.02	0	-0.04	1:1	0.888	1.406	1.249	
831.50	26865	Mid	right	0 mm	LTE Band 26 (Cell)	A+B	108	1792M	15	QPSK	36	37	24.5	23.02	1	0.00	1:1	0.700	1.406	0.984	

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

Table 11-126
LTE Band 5 (Cell) UMPC Extremity SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Tune State	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g) (W/kg)	Scaling Factor	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																				
1 CC Uplink	N/A	836.50	20525	Mid	back	0 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	-0.12	1:1	0.972	1.294	1.258	
1 CC Uplink	N/A	836.50	20525	Mid	back	0 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	0.02	1:1	0.754	1.309	0.987	
1 CC Uplink	N/A	836.50	20525	Mid	front	0 mm	LTE Band 5 (Cell)	A+B	38	1785M	10	QPSK	1	25	25.5	24.38	0	-0.11	1:1	0.847	1.294	1.096	
1 CC Uplink	N/A	836.50	20525	Mid	front	0 mm	LTE Band 5 (Cell)	A+B	38	1785M	10	QPSK	25	25	24.5	23.33	1	0.01	1:1	0.644	1.309	0.843	
1 CC Uplink	N/A	836.50	20525	Mid	bottom	0 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	0.01	1:1	0.789	1.294	1.021	
1 CC Uplink	N/A	836.50	20525	Mid	bottom	0 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	0.01	1:1	0.618	1.309	0.809	
1 CC Uplink	N/A	836.50	20525	Mid	right	0 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	25	25.5	24.38	0	-0.14	1:1	1.010	1.294	1.307	A153
1 CC Uplink	N/A	836.50	20525	Mid	right	0 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	49	25.5	24.31	0	0.13	1:1	0.996	1.315	1.310	
1 CC Uplink	N/A	836.50	20525	Mid	right	0 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	25	25	24.5	23.33	1	-0.01	1:1	0.778	1.309	1.018	
2 CC Uplink	PCC	836.50	20525	Mid	right	0 mm	LTE Band 5 (Cell)	A+B	108	1785M	10	QPSK	1	49	25.5	24.39	0	0.06	1:1	1.000	1.291	1.291	
	SCC	843.70	20597								5		1	0									

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

Table 11-127
LTE Band 66 (AWS) UMPC Extremity SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g) (W/kg)	Scaling Factor	Reported SAR (10g) (W/kg)	Plot #
		MHz	Ch.																			
1 CC Uplink	N/A	1770.00	132572	High	back	14 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	0.00	1:1	0.203	1.148	0.233	
1 CC Uplink	N/A	1770.00	132572	High	back	14 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	-0.01	1:1	0.157	1.130	0.177	
1 CC Uplink	N/A	1770.00	132572	High	front	12 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	-0.08	1:1	0.200	1.148	0.230	
1 CC Uplink	N/A	1770.00	132572	High	front	12 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	0.01	1:1	0.171	1.130	0.193	
1 CC Uplink	N/A	1770.00	132572	High	bottom	18 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	-0.05	1:1	0.208	1.148	0.239	
1 CC Uplink	N/A	1770.00	132572	High	bottom	18 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	-0.02	1:1	0.156	1.130	0.176	
1 CC Uplink	N/A	1770.00	132572	High	right	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	25.0	24.40	0	-0.02	1:1	0.866	1.148	0.994	
1 CC Uplink	N/A	1770.00	132572	High	right	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	0	24.0	23.47	1	0.02	1:1	0.677	1.130	0.765	
1 CC Uplink	N/A	1770.00	132572	High	back	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	0.00	1:1	1.320	1.120	1.478	
1 CC Uplink	N/A	1770.00	132572	High	back	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	-0.01	1:1	1.320	1.138	1.502	
1 CC Uplink	N/A	1770.00	132572	High	front	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	0.02	1:1	0.841	1.120	0.942	
1 CC Uplink	N/A	1770.00	132572	High	front	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	0.01	1:1	0.811	1.138	0.923	
1 CC Uplink	N/A	1720.00	132072	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.24	0	-0.01	1:1	1.770	1.190	2.106	
1 CC Uplink	N/A	1720.00	132072	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	19.0	17.98	0	0.02	1:1	1.690	1.266	2.140	
1 CC Uplink	N/A	1745.00	132322	Mid	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.12	0	0.05	1:1	1.700	1.225	2.083	
1 CC Uplink	N/A	1770.00	132572	High	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	50	19.0	18.51	0	0.01	1:1	1.650	1.120	1.848	
1 CC Uplink	N/A	1720.00	132072	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.27	0	-0.06	1:1	1.680	1.184	1.989	
1 CC Uplink	N/A	1745.00	132322	Mid	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.28	0	-0.02	1:1	1.610	1.180	1.900	
1 CC Uplink	N/A	1770.00	132572	High	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	50	25	19.0	18.44	0	0.03	1:1	1.860	1.138	2.117	
1 CC Uplink	N/A	1770.00	132572	High	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	100	0	19.0	18.37	0	-0.01	1:1	1.600	1.157	1.851	
1 CC Uplink	N/A	1715.00	132022	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	10	QPSK	1	49	19.0	18.06	0	0.02	1:1	1.700	1.242	2.111	
2 CC Uplink CA_66C	PCC	1720.00	132072	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	20	QPSK	1	99	19.0	18.20	0	0.01	1:1	1.710	1.202	2.055	
	SCC	1739.80	132270										0									
2 CC Uplink CA_66B	PCC	1715.00	132022	Low	bottom	0 mm	LTE Band 66 (AWS)	B	1795M	10	QPSK	1	49	19.0	18.22	0	0.01	1:1	1.680	1.197	2.011	
	SCC	1724.90	132121										0									
1 CC Uplink	N/A	1770.00	132572	High	back	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	0.01	1:1	0.796	1.094	0.871	
1 CC Uplink	N/A	1770.00	132572	High	back	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	-0.05	1:1	0.781	1.109	0.866	
1 CC Uplink	N/A	1770.00	132572	High	front	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	0.01	1:1	1.060	1.094	1.160	
1 CC Uplink	N/A	1770.00	132572	High	front	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	-0.03	1:1	1.040	1.109	1.153	
1 CC Uplink	N/A	1720.00	132072	Low	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	50	20.5	19.96	0	0.01	1:1	1.910	1.132	2.162	
1 CC Uplink	N/A	1745.00	132322	Mid	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	50	20.5	19.98	0	-0.02	1:1	1.970	1.127	2.220	A154
1 CC Uplink	N/A	1770.00	132572	High	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	1	0	20.5	20.11	0	-0.01	1:1	1.920	1.094	2.100	
1 CC Uplink	N/A	1720.00	132072	Low	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	19.87	0	0.05	1:1	1.930	1.156	2.231	
1 CC Uplink	N/A	1745.00	132322	Mid	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	19.77	0	0.01	1:1	1.940	1.183	2.295	
1 CC Uplink	N/A	1770.00	132572	High	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	50	25	20.5	20.05	0	0.00	1:1	1.890	1.109	2.096	
1 CC Uplink	N/A	1770.00	132572	High	top	0 mm	LTE Band 66 (AWS)	F	1808M	20	QPSK	100	0	20.5	19.90	0	0.01	1:1	1.890	1.148	2.170	

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

Table 11-128
LTE Band 25 (PCS) UMPC Extremity SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
1882.50	26365	Mid	back	14 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	50	25.0	24.26	0	-0.02	1:1	0.235	1.186	0.279	
1882.50	26365	Mid	back	14 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	0	24.0	22.98	1	0.00	1:1	0.181	1.265	0.229	
1882.50	26365	Mid	front	12 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	50	25.0	24.26	0	0.06	1:1	0.244	1.186	0.289	
1882.50	26365	Mid	front	12 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	0	24.0	22.98	1	0.01	1:1	0.182	1.265	0.230	
1882.50	26365	Mid	bottom	18 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	50	25.0	24.26	0	0.04	1:1	0.207	1.186	0.246	
1882.50	26365	Mid	bottom	18 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	0	24.0	22.98	1	0.02	1:1	0.156	1.265	0.197	
1882.50	26365	Mid	right	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	50	25.0	24.26	0	0.01	1:1	0.665	1.186	0.789	
1882.50	26365	Mid	right	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	0	24.0	22.98	1	-0.04	1:1	0.533	1.265	0.674	
1905.00	26590	High	back	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	0	19.0	18.15	0	0.00	1:1	0.922	1.216	1.121	
1905.00	26590	High	back	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	50	19.0	18.11	0	-0.02	1:1	0.984	1.227	1.207	
1905.00	26590	High	front	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	0	19.0	18.15	0	0.06	1:1	0.690	1.216	0.839	
1905.00	26590	High	front	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	50	19.0	18.11	0	0.00	1:1	0.727	1.227	0.892	
1860.00	26140	Low	bottom	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	0	19.0	17.93	0	-0.01	1:1	1.570	1.279	2.008	
1882.50	26365	Mid	bottom	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	0	19.0	18.11	0	-0.03	1:1	1.630	1.227	2.000	
1905.00	26590	High	bottom	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	1	0	19.0	18.15	0	0.00	1:1	1.770	1.216	2.152	
1860.00	26140	Low	bottom	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	50	19.0	18.05	0	0.00	1:1	1.540	1.245	1.917	
1882.50	26365	Mid	bottom	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	50	19.0	18.10	0	0.02	1:1	1.690	1.230	2.079	
1905.00	26590	High	bottom	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	50	50	19.0	18.11	0	0.02	1:1	1.880	1.227	2.307	A155
1905.00	26590	High	bottom	0 mm	LTE Band 25 (PCS)	B	1787M	20	QPSK	100	0	19.0	17.93	0	0.03	1:1	1.790	1.279	2.289	

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

Table 11-129
LTE Band 30 UMPC Extremity SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
2310.00	27710	Mid	back	14 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	-0.02	1:1	0.250	1.161	0.290	
2310.00	27710	Mid	back	14 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.00	1:1	0.247	1.172	0.289	
2310.00	27710	Mid	front	12 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	0.00	1:1	0.225	1.161	0.261	
2310.00	27710	Mid	front	12 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.02	1:1	0.224	1.172	0.263	
2310.00	27710	Mid	bottom	18 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	0.01	1:1	0.270	1.161	0.313	
2310.00	27710	Mid	bottom	18 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.00	1:1	0.275	1.172	0.322	
2310.00	27710	Mid	right	0 mm	LTE Band 30	B	1820M	10	QPSK	1	0	22.5	21.85	0	-0.01	1:1	0.439	1.161	0.510	
2310.00	27710	Mid	right	0 mm	LTE Band 30	B	1820M	10	QPSK	25	12	22.5	21.81	0	0.02	1:1	0.444	1.172	0.520	
2310.00	27710	Mid	back	0 mm	LTE Band 30	B	1820M	10	QPSK	1	0	17.0	16.41	0	0.00	1:1	0.768	1.146	0.880	
2310.00	27710	Mid	back	0 mm	LTE Band 30	B	1820M	10	QPSK	25	0	17.0	16.29	0	-0.02	1:1	0.769	1.178	0.906	
2310.00	27710	Mid	front	0 mm	LTE Band 30	B	1820M	10	QPSK	1	0	17.0	16.41	0	-0.03	1:1	0.639	1.146	0.732	
2310.00	27710	Mid	front	0 mm	LTE Band 30	B	1820M	10	QPSK	25	0	17.0	16.29	0	0.00	1:1	0.629	1.178	0.741	
2310.00	27710	Mid	bottom	0 mm	LTE Band 30	B	1820M	10	QPSK	1	0	17.0	16.41	0	-0.01	1:1	1.390	1.146	1.593	A156
2310.00	27710	Mid	bottom	0 mm	LTE Band 30	B	1820M	10	QPSK	25	0	17.0	16.29	0	0.00	1:1	1.380	1.178	1.626	

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

Table 11-130
LTE Band 7 UMPC Extremity SAR

MEASUREMENT RESULTS																				
FREQUENCY			Side	Spacing	Mode	Antenna Config.	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)		(W/kg)	
2535.00	21100	Mid	back	14 mm	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	-0.04	1:1	0.310	1.153	0.357	
2535.00	21100	Mid	back	14 mm	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	0.02	1:1	0.297	1.153	0.342	
2535.00	21100	Mid	front	12 mm	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	-0.03	1:1	0.303	1.153	0.349	
2535.00	21100	Mid	front	12 mm	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	0.02	1:1	0.295	1.153	0.340	
2535.00	21100	Mid	bottom	18 mm	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	0.04	1:1	0.296	1.153	0.341	
2535.00	21100	Mid	bottom	18 mm	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	-0.03	1:1	0.290	1.153	0.334	
2535.00	21100	Mid	right	0 mm	LTE Band 7	B	1713M	20	QPSK	1	50	22.5	21.88	0	-0.09	1:1	0.338	1.153	0.390	
2535.00	21100	Mid	right	0 mm	LTE Band 7	B	1713M	20	QPSK	50	50	22.5	21.88	0	0.01	1:1	0.335	1.153	0.386	
2560.00	21350	High	back	0 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	0.01	1:1	1.130	1.135	1.283	
2560.00	21350	High	back	0 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	-0.04	1:1	1.090	1.146	1.249	
2560.00	21350	High	front	0 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	-0.04	1:1	0.999	1.135	1.134	
2560.00	21350	High	front	0 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	-0.01	1:1	0.964	1.146	1.105	
2510.00	20850	Low	bottom	0 mm	LTE Band 7	B	1713M	20	QPSK	1	99	18.0	17.24	0	-0.04	1:1	1.970	1.191	2.346	
2535.00	21100	Mid	bottom	0 mm	LTE Band 7	B	1713M	20	QPSK	1	50	18.0	17.22	0	-0.02	1:1	2.070	1.197	2.478	
2560.00	21350	High	bottom	0 mm	LTE Band 7	B	1713M	20	QPSK	1	0	18.0	17.45	0	-0.07	1:1	2.250	1.135	2.554	A157
2510.00	20850	Low	bottom	0 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.18	0	-0.01	1:1	1.980	1.208	2.392	
2535.00	21100	Mid	bottom	0 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.40	0	0.01	1:1	2.030	1.148	2.330	
2560.00	21350	High	bottom	0 mm	LTE Band 7	B	1713M	20	QPSK	50	50	18.0	17.41	0	-0.02	1:1	2.130	1.146	2.441	
2560.00	21350	High	bottom	0 mm	LTE Band 7	B	1713M	20	QPSK	100	0	18.0	17.23	0	-0.01	1:1	2.050	1.194	2.448	

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

Table 11-131
LTE Band 41 UMPC Extremity SAR

MEASUREMENT RESULTS																							
# CC Uplink, Power Class	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	back	14 mm	LTE Band 41	B	1713M	20	QPSK	1	50	23.0	22.55	0	-0.01	1:1.58	0.172	1.109	0.191	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	back	14 mm	LTE Band 41	B	1713M	20	QPSK	50	50	23.0	22.54	0	-0.03	1:1.58	0.167	1.112	0.186	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	front	12 mm	LTE Band 41	B	1713M	20	QPSK	1	50	23.0	22.55	0	0.01	1:1.58	0.172	1.109	0.191	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	front	12 mm	LTE Band 41	B	1713M	20	QPSK	50	50	23.0	22.54	0	0.00	1:1.58	0.168	1.112	0.187	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	18 mm	LTE Band 41	B	1713M	20	QPSK	1	50	23.0	22.55	0	-0.10	1:1.58	0.204	1.109	0.226	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	18 mm	LTE Band 41	B	1713M	20	QPSK	50	50	23.0	22.54	0	-0.04	1:1.58	0.201	1.112	0.224	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	right	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	23.0	22.55	0	-0.03	1:1.58	0.297	1.109	0.329	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	right	0 mm	LTE Band 41	B	1713M	20	QPSK	50	50	23.0	22.54	0	0.03	1:1.58	0.292	1.112	0.325	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.91	0	-0.06	1:1.58	0.749	1.285	0.962	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	back	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	18.03	0	0.03	1:1.58	0.748	1.250	0.935	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	front	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.91	0	-0.01	1:1.58	0.746	1.285	0.959	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	front	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	18.03	0	-0.01	1:1.58	0.739	1.250	0.924	
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	0	19.0	17.69	0	-0.06	1:1.58	1.470	1.352	1.987	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	99	19.0	17.82	0	0.06	1:1.58	1.530	1.312	2.007	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.91	0	0.02	1:1.58	1.770	1.285	2.274	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.82	0	0.06	1:1.58	1.740	1.312	2.283	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	0	19.0	17.67	0	0.02	1:1.58	1.690	1.358	2.295	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	19.0	17.86	0	0.06	1:1.58	1.850	1.300	2.405	A158
1 CC Uplink - Power Class 3	N/A	2506.00	39750	Low	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	17.73	0	0.05	1:1.58	1.460	1.340	1.956	
1 CC Uplink - Power Class 3	N/A	2549.50	40185	Low-Mid	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	17.74	0	0.00	1:1.58	1.530	1.337	2.046	
1 CC Uplink - Power Class 3	N/A	2593.00	40620	Mid	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	18.03	0	-0.07	1:1.58	1.750	1.250	2.188	
1 CC Uplink - Power Class 3	N/A	2636.50	41055	Mid-High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	17.79	0	-0.05	1:1.58	1.710	1.321	2.259	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	50	25	19.0	17.92	0	-0.04	1:1.58	1.790	1.282	2.295	
1 CC Uplink - Power Class 3	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	100	0	19.0	17.86	0	-0.01	1:1.58	1.760	1.300	2.288	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	0	20.6	19.57	0	-0.03	1:2.31	1.620	1.268	2.054	
1 CC Uplink - Power Class 2	N/A	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	50	20.6	19.74	0	-0.01	1:2.31	1.790	1.219	2.182	
2 CC Uplink - Power Class 3	PCC	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	0	19.0	18.01	0	-0.01	1:1.58	1.820	1.256	2.286	
	SCC	2660.20	41292					B					99									
2 CC Uplink - Power Class 2	PCC	2680.00	41490	High	bottom	0 mm	LTE Band 41	B	1713M	20	QPSK	1	0	20.6	19.78	0	0.02	1:2.31	1.740	1.208	2.102	
	SCC	2660.20	41292					B					99									

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

Table 11-132
LTE Band 48 UMPC Extremity SAR

MEASUREMENT RESULTS																							
# CC Uplink	Component Carrier	FREQUENCY			Side	Spacing	Mode	Antenna Config.	Serial Number	Bandwidth [MHz]	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
		MHz	Ch.																(W/kg)		(W/kg)	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	0 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	0.05	1:1.58	0.453	1.156	0.524	
1 CC Uplink	N/A	3646.70	56207	Mid-High	back	0 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	0.01	1:1.58	0.445	1.146	0.510	
1 CC Uplink	N/A	3646.70	56207	Mid-High	front	0 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	-0.09	1:1.58	0.710	1.156	0.821	
1 CC Uplink	N/A	3646.70	56207	Mid-High	front	0 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	-0.03	1:1.58	0.690	1.146	0.791	
1 CC Uplink	N/A	3560.00	55340	Low	top	0 mm	LTE Band 48	F	1803M	20	QPSK	1	99	20.5	19.51	0	0.00	1:1.58	1.410	1.256	1.771	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	top	0 mm	LTE Band 48	F	1803M	20	QPSK	1	99	20.5	19.81	0	0.02	1:1.58	1.450	1.172	1.699	
1 CC Uplink	N/A	3646.70	56207	Mid-High	top	0 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.87	0	-0.04	1:1.58	1.370	1.156	1.584	
1 CC Uplink	N/A	3690.00	56640	High	top	0 mm	LTE Band 48	F	1803M	20	QPSK	1	0	20.5	19.54	0	-0.05	1:1.58	1.200	1.247	1.496	
1 CC Uplink	N/A	3560.00	55340	Low	top	0 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.45	0	-0.01	1:1.58	1.490	1.274	1.898	A159
1 CC Uplink	N/A	3560.00	55340	Low	top	0 mm	LTE Band 48	F	1803M	20	QPSK	50	50	20.5	19.42	0	-0.04	1:1.58	1.460	1.282	1.872	
1 CC Uplink	N/A	3603.30	55773	Low-Mid	top	0 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.82	0	0.01	1:1.58	1.480	1.169	1.730	
1 CC Uplink	N/A	3646.70	56207	Mid-High	top	0 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.91	0	-0.05	1:1.58	1.320	1.146	1.513	
1 CC Uplink	N/A	3690.00	56640	High	top	0 mm	LTE Band 48	F	1803M	20	QPSK	50	25	20.5	19.58	0	-0.05	1:1.58	1.180	1.236	1.458	
1 CC Uplink	N/A	3646.70	56207	Mid-High	top	0 mm	LTE Band 48	F	1803M	20	QPSK	100	0	20.5	19.80	0	0.09	1:1.58	1.330	1.175	1.563	
2 CC Uplink	PCC	3560.00	55340	Low	top	0 mm	LTE Band 48	F	1803M	20	QPSK	50	50	20.5	19.39	0	0.01	1:1.58	1.480	1.291	1.911	
	SCC	3579.80	55538										0									

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

Table 11-133
NR Band n71 UMPC Extremity SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
680.50	136100	Mid	back	0 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.00	1:1	0.812	1.294	1.051	
680.50	136100	Mid	back	0 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.00	1:1	0.757	1.291	0.977	
680.50	136100	Mid	front	0 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	0.00	1:1	0.710	1.294	0.919	
680.50	136100	Mid	front	0 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.01	1:1	0.684	1.291	0.883	
680.50	136100	Mid	bottom	0 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.10	1:1	0.532	1.294	0.688	
680.50	136100	Mid	bottom	0 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.01	1:1	0.453	1.291	0.585	
680.50	136100	Mid	right	0 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	1	1	25.5	24.38	0	-0.01	1:1	1.080	1.294	1.398	A160
680.50	136100	Mid	right	0 mm	NR Band n71	A+B	9	2719M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.39	0	0.01	1:1	1.020	1.291	1.317	
680.50	136100	Mid	right	0 mm	NR Band n71	A+B	9	2719M	20	CP-OFDM	QPSK	1	1	24.0	22.75	1.5	-0.06	1:1	0.745	1.334	0.994	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams													

Table 11-134
NR Band n12 UMPC Extremity SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
707.50	141500	Mid	back	0 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.01	1:1	0.847	1.213	1.027	
707.50	141500	Mid	back	0 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	-0.01	1:1	0.938	1.180	1.107	
707.50	141500	Mid	front	0 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	-0.02	1:1	0.760	1.213	0.922	
707.50	141500	Mid	front	0 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.01	1:1	0.826	1.180	0.975	
707.50	141500	Mid	bottom	0 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.00	1:1	0.961	1.213	1.166	
707.50	141500	Mid	bottom	0 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.01	1:1	1.060	1.180	1.251	
707.50	141500	Mid	right	0 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	1	1	25.5	24.66	0	0.05	1:1	1.140	1.213	1.383	
707.50	141500	Mid	right	0 mm	NR Band n12	A+B	0	2719M	15	DFT-S-OFDM	QPSK	36	22	25.5	24.78	0	0.04	1:1	1.270	1.180	1.499	A161
707.50	141500	Mid	right	0 mm	NR Band n12	A+B	0	2719M	15	CP-OFDM	QPSK	1	1	24.0	23.30	1.5	0.02	1:1	0.533	1.175	0.626	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams													

Table 11-135
NR Band n5 UMPC Extremity SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Tune State	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																		(W/kg)		(W/kg)	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	A+B	36	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.01	1:1	1.010	1.268	1.281	
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	A+B	36	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.01	1:1	1.060	1.211	1.284	A162
836.50	167300	Mid	back	0 mm	NR Band n5 (Cell)	A+B	36	1788M	20	CP-OFDM	QPSK	1	1	24.0	23.05	1.5	0.00	1:1	0.736	1.245	0.916	
836.50	167300	Mid	front	0 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.01	1:1	0.816	1.268	1.035	
836.50	167300	Mid	front	0 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	0.09	1:1	0.872	1.211	1.056	
836.50	167300	Mid	bottom	0 mm	NR Band n5 (Cell)	A+B	36	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	0.14	1:1	0.725	1.268	0.919	
836.50	167300	Mid	bottom	0 mm	NR Band n5 (Cell)	A+B	36	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.01	1:1	0.744	1.211	0.901	
836.50	167300	Mid	right	0 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	1	53	25.5	24.47	0	-0.01	1:1	0.793	1.268	1.006	
836.50	167300	Mid	right	0 mm	NR Band n5 (Cell)	A+B	108	1788M	20	DFT-S-OFDM	QPSK	50	28	25.5	24.67	0	-0.02	1:1	0.871	1.211	1.055	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams													

Table 11-136
NR Band n66 UMPC Extremity SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g) (W/kg)	Scaling Factor	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																				
1745.00	349000	Mid	back	14 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.01	1:1	0.210	1.268	0.266	
1745.00	349000	Mid	back	14 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	-0.01	1:1	0.216	1.285	0.278	
1745.00	349000	Mid	front	12 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.01	1:1	0.211	1.268	0.268	
1745.00	349000	Mid	front	12 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	-0.05	1:1	0.214	1.285	0.275	
1745.00	349000	Mid	bottom	18 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	0.00	1:1	0.198	1.268	0.251	
1745.00	349000	Mid	bottom	18 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	-0.01	1:1	0.195	1.285	0.251	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.47	0	-0.03	1:1	0.853	1.268	1.082	
1745.00	349000	Mid	right	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.41	0	0.09	1:1	0.875	1.285	1.124	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	-0.03	1:1	0.903	1.119	1.010	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	-0.12	1:1	0.943	1.148	1.083	
1745.00	349000	Mid	front	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	0.20	1:1	0.671	1.119	0.751	
1745.00	349000	Mid	front	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	0.00	1:1	0.658	1.148	0.755	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	1	108	19.0	18.51	0	0.01	1:1	1.620	1.119	1.813	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	B	1772M	40	DFT-S-OFDM	QPSK	108	108	19.0	18.40	0	-0.01	1:1	1.650	1.148	1.894	
1745.00	349000	Mid	bottom	0 mm	NR Band n66 (AWS)	B	1772M	40	CP-OFDM	QPSK	1	1	19.0	18.29	0	0.10	1:1	1.710	1.178	2.014	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	-0.03	1:1	0.950	1.268	1.205	
1745.00	349000	Mid	back	0 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	-0.04	1:1	0.999	1.274	1.273	
1745.00	349000	Mid	front	0 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	-0.02	1:1	0.895	1.268	1.135	
1745.00	349000	Mid	front	0 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	0.01	1:1	1.010	1.274	1.287	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.47	0	-0.02	1:1	1.850	1.268	2.346	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.45	0	0.00	1:1	1.950	1.274	2.484	A163
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	F	1823M	40	DFT-S-OFDM	QPSK	216	0	20.5	19.37	0	-0.01	1:1	1.940	1.297	2.516	
1745.00	349000	Mid	top	0 mm	NR Band n66 (AWS)	F	1823M	40	CP-OFDM	QPSK	1	1	20.5	19.35	0	0.03	1:1	1.940	1.303	2.528	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams								

Table 11-137
NR Band n25 UMPC Extremity SAR

MEASUREMENT RESULTS																							
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g) (W/kg)	Scaling Factor	Reported SAR (10g) (W/kg)	Plot #
MHz	Ch.																				
1882.50	376500	Mid	back	14 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	-0.02	1:1	0.278	1.361	0.378	
1882.50	376500	Mid	back	14 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.04	1:1	0.301	1.403	0.422	
1882.50	376500	Mid	front	12 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	-0.04	1:1	0.259	1.361	0.352	
1882.50	376500	Mid	front	12 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	0.01	1:1	0.262	1.403	0.368	
1882.50	376500	Mid	bottom	18 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	0.06	1:1	0.229	1.361	0.312	
1882.50	376500	Mid	bottom	18 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	-0.01	1:1	0.240	1.403	0.337	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	24.5	23.16	0	-0.01	1:1	0.589	1.361	0.802	
1882.50	376500	Mid	right	0 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	54	24.5	23.03	0	-0.02	1:1	0.585	1.403	0.821	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	-0.07	1:1	0.861	1.403	1.208	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	-0.03	1:1	0.885	1.416	1.253	
1882.50	376500	Mid	front	0 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	0.01	1:1	0.640	1.403	0.898	
1882.50	376500	Mid	front	0 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	0.01	1:1	0.652	1.416	0.923	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	1	108	19.0	17.53	0	0.02	1:1	1.670	1.403	2.343	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	108	0	19.0	17.49	0	0.01	1:1	1.750	1.416	2.478	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	B	1787M	40	DFT-S-OFDM	QPSK	216	0	19.0	17.43	0	0.01	1:1	1.820	1.435	2.612	
1882.50	376500	Mid	bottom	0 mm	NR Band n25 (PCS)	B	1787M	40	CP-OFDM	QPSK	1	1	19.0	17.29	0	0.04	1:1	1.770	1.483	2.625	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	0.05	1:1	0.678	1.205	0.817	
1882.50	376500	Mid	back	0 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	-0.01	1:1	0.679	1.213	0.824	
1882.50	376500	Mid	front	0 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	-0.01	1:1	0.912	1.205	1.099	
1882.50	376500	Mid	front	0 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	0.01	1:1	0.915	1.213	1.110	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	1	108	20.5	19.69	0	0.12	1:1	1.860	1.205	2.241	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	108	108	20.5	19.66	0	0.00	1:1	1.830	1.213	2.220	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	F	1787M	40	DFT-S-OFDM	QPSK	216	0	20.5	19.58	0	-0.01	1:1	1.890	1.236	2.336	
1882.50	376500	Mid	top	0 mm	NR Band n25 (PCS)	F	1787M	40	CP-OFDM	QPSK	1	1	20.5	19.54	0	0.02	1:1	1.920	1.247	2.394	A164
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population													UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams								

Table 11-138
NR Band n30 UMPC Extremity SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2310.00	462000	Mid	back	14 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.00	1:1	0.146	1.216	0.178	
2310.00	462000	Mid	back	14 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.02	1:1	0.227	1.169	0.265	
2310.00	462000	Mid	front	12 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.04	1:1	0.188	1.216	0.229	
2310.00	462000	Mid	front	12 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.04	1:1	0.190	1.169	0.222	
2310.00	462000	Mid	bottom	18 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.12	1:1	0.176	1.216	0.214	
2310.00	462000	Mid	bottom	18 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.15	1:1	0.279	1.169	0.326	
2310.00	462000	Mid	right	0 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	1	22.5	21.65	0	0.00	1:1	0.461	1.216	0.561	
2310.00	462000	Mid	right	0 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	22.5	21.82	0	0.02	1:1	0.472	1.169	0.552	
2310.00	462000	Mid	back	0 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	-0.05	1:1	0.706	1.074	0.758	
2310.00	462000	Mid	back	0 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	0.00	1:1	0.723	1.074	0.777	
2310.00	462000	Mid	front	0 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	-0.02	1:1	0.547	1.074	0.587	
2310.00	462000	Mid	front	0 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	-0.01	1:1	0.558	1.074	0.599	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	1	26	17.0	16.69	0	0.02	1:1	1.260	1.074	1.353	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	B	1793M	10	DFT-S-OFDM	QPSK	25	14	17.0	16.69	0	0.06	1:1	1.310	1.074	1.407	
2310.00	462000	Mid	bottom	0 mm	NR Band n30	B	1793M	10	CP-OFDM	QPSK	1	1	17.0	16.66	0	0.02	1:1	1.310	1.081	1.416	
2310.00	462000	Mid	back	0 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	-0.05	1:1	0.452	1.245	0.563	
2310.00	462000	Mid	back	0 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	0.00	1:1	0.465	1.262	0.587	
2310.00	462000	Mid	front	0 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	0.00	1:1	0.784	1.245	0.976	
2310.00	462000	Mid	front	0 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	0.02	1:1	0.776	1.262	0.979	
2310.00	462000	Mid	top	0 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	1	1	20.5	19.55	0	0.00	1:1	1.740	1.245	2.166	
2310.00	462000	Mid	top	0 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	25	0	20.5	19.49	0	0.00	1:1	1.810	1.262	2.284	
2310.00	462000	Mid	top	0 mm	NR Band n30	F	1794M	10	DFT-S-OFDM	QPSK	50	0	20.5	19.46	0	0.02	1:1	1.830	1.271	2.326	A165
2310.00	462000	Mid	top	0 mm	NR Band n30	F	1794M	10	CP-OFDM	QPSK	1	1	20.5	19.65	0	0.03	1:1	1.820	1.216	2.213	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams													

Table 11-139
NR Band n7 UMPC Extremity SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2535.00	507000	Mid	back	14 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	-0.02	1:1	0.359	1.225	0.440	
2535.00	507000	Mid	back	14 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	-0.03	1:1	0.354	1.274	0.451	
2535.00	507000	Mid	back	14 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	216	0	22.5	21.44	0	0.01	1:1	0.355	1.276	0.453	
2535.00	507000	Mid	front	12 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	0.01	1:1	0.352	1.225	0.431	
2535.00	507000	Mid	front	12 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	-0.01	1:1	0.335	1.274	0.427	
2535.00	507000	Mid	front	12 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	216	0	22.5	21.44	0	-0.01	1:1	0.343	1.276	0.438	
2535.00	507000	Mid	bottom	18 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	0.00	1:1	0.326	1.225	0.399	
2535.00	507000	Mid	bottom	18 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	0.02	1:1	0.320	1.274	0.408	
2535.00	507000	Mid	bottom	18 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	216	0	22.5	21.44	0	0.01	1:1	0.328	1.276	0.419	
2535.00	507000	Mid	right	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	1	214	22.5	21.62	0	-0.02	1:1	0.450	1.225	0.551	
2535.00	507000	Mid	right	0 mm	NR Band n7	B	1779M	40	DFT-S-OFDM	QPSK	108	0	22.5	21.45	0	0.01	1:1	0.447	1.274	0.569	
2535.00	507000	Mid	back	0 mm	NR Band n7	B	2719M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	-0.04	1:1	1.110	1.236	1.372	
2535.00	507000	Mid	back	0 mm	NR Band n7	B	2719M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	-0.02	1:1	1.120	1.262	1.413	
2535.00	507000	Mid	front	0 mm	NR Band n7	B	2719M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	0.00	1:1	0.726	1.236	0.897	
2535.00	507000	Mid	front	0 mm	NR Band n7	B	2719M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	0.00	1:1	0.752	1.262	0.949	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	B	3596M	40	DFT-S-OFDM	QPSK	1	214	18.0	17.08	0	-0.01	1:1	1.970	1.236	2.435	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	B	3596M	40	DFT-S-OFDM	QPSK	108	108	18.0	16.99	0	0.00	1:1	2.080	1.262	2.625	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	B	3596M	40	DFT-S-OFDM	QPSK	216	0	18.0	16.98	0	0.01	1:1	2.150	1.265	2.720	
2535.00	507000	Mid	bottom	0 mm	NR Band n7	B	3596M	40	CP-OFDM	QPSK	1	1	18.0	17.13	0	0.00	1:1	2.310	1.222	**2.823**	A166
2535.00	507000	Mid	bottom	0 mm	NR Band n7	B	3596M	40	CP-OFDM	QPSK	1	1	18.0	17.13	0	0.03	1:1	2.200	1.222	2.688	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population									UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams													

Note: Blue entry represents variability measurement.

Table 11-140
NR Band n41 UMPC Extremity SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
2592.99	518598	Mid	back	0 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	-0.06	1:1	0.330	1.253	0.413	
2592.99	518598	Mid	back	0 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	-0.01	1:1	0.282	1.288	0.363	
2592.99	518598	Mid	front	0 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	-0.01	1:1	0.510	1.253	0.639	
2592.99	518598	Mid	front	0 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	-0.08	1:1	0.446	1.288	0.574	
2592.99	518598	Mid	top	0 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.02	0	-0.01	1:1	1.240	1.253	1.554	
2592.99	518598	Mid	top	0 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	135	69	19.0	17.90	0	-0.03	1:1	1.120	1.288	1.443	
2592.99	518598	Mid	top	0 mm	NR Band n41	F	1779M	100	DFT-S-OFDM	QPSK	270	0	19.0	17.88	0	-0.04	1:1	1.170	1.294	1.514	
2592.99	518598	Mid	top	0 mm	NR Band n41	F	1779M	100	CP-OFDM	QPSK	1	1	19.0	17.86	0	-0.03	1:1	1.160	1.300	1.508	
2592.99	518598	Mid	back	0 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.03	1:1	1.070	1.205	1.289	
2592.99	518598	Mid	front	0 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.01	1:1	0.800	1.205	0.964	
2592.99	518598	Mid	bottom	0 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	-0.05	1:1	1.940	1.205	2.338	A167
2592.99	518598	Mid	right	0 mm	NR Band n41	B	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	15.19	N/A	0.20	1:1	0.097	1.205	0.117	
2592.99	518598	Mid	back	0 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	-0.01	1:1	0.099	1.276	0.126	
2592.99	518598	Mid	front	0 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	-0.04	1:1	0.171	1.276	0.218	
2592.99	518598	Mid	top	0 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.03	1:1	0.230	1.276	0.293	
2592.99	518598	Mid	right	0 mm	NR Band n41	E	1779M	100	CW/SRS	N/A	N/A	N/A	16.0	14.94	N/A	0.03	1:1	0.152	1.276	0.194	
2592.99	518598	Mid	back	0 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	-0.02	1:1	0.078	1.268	0.099	
2592.99	518598	Mid	front	0 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	-0.04	1:1	0.021	1.268	0.027	
2592.99	518598	Mid	bottom	0 mm	NR Band n41	C	1779M	100	CW/SRS	N/A	N/A	N/A	12.0	10.97	N/A	-0.05	1:1	0.055	1.268	0.070	

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

Table 11-141
NR Band n48 UMPC Extremity SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3624.99	641666	Mid	back	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	0.03	1:1	0.449	1.074	0.482	
3624.99	641666	Mid	back	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	0.02	1:1	0.437	1.112	0.486	
3624.99	641666	Mid	front	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	-0.02	1:1	0.626	1.074	0.672	
3624.99	641666	Mid	front	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	-0.02	1:1	0.599	1.112	0.666	
3570.00	638000	Low	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	104	18.5	17.95	0	-0.01	1:1	2.300	1.135	2.611	A168
3624.99	641666	Mid	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	53	18.5	18.19	0	0.01	1:1	1.790	1.074	1.922	
3679.98	645332	High	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	1	18.5	17.83	0	0.10	1:1	2.000	1.167	2.334	
3570.00	638000	Low	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	56	18.5	17.70	0	-0.01	1:1	2.260	1.202	**2.717**	
3624.99	641666	Mid	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	28	18.5	18.04	0	0.02	1:1	1.750	1.112	1.946	
3679.98	645332	High	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	50	0	18.5	17.67	0	-0.02	1:1	2.010	1.211	2.434	
3624.99	641666	Mid	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	100	0	18.5	18.02	0	0.02	1:1	1.800	1.117	2.011	
3624.99	641666	Mid	top	0 mm	NR Band n48	F	1790M	40	CP-OFDM	QPSK	1	1	18.5	17.75	0	-0.03	1:1	2.020	1.189	2.402	
3624.99	641666	Mid	back	0 mm	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	-0.02	1:1	0.073	1.462	0.107	
3624.99	641666	Mid	front	0 mm	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.00	1:1	0.252	1.462	0.368	
3624.99	641666	Mid	top	0 mm	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	-0.05	1:1	0.220	1.462	0.322	
3624.99	641666	Mid	right	0 mm	NR Band n48	E	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	14.35	N/A	0.00	1:1	0.145	1.462	0.212	
3624.99	641666	Mid	back	0 mm	NR Band n48	G	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	-0.09	1:1	0.133	1.081	0.144	
3624.99	641666	Mid	front	0 mm	NR Band n48	G	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	0.11	1:1	0.161	1.081	0.174	
3624.99	641666	Mid	top	0 mm	NR Band n48	G	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	0.06	1:1	0.451	1.081	0.488	
3624.99	641666	Mid	right	0 mm	NR Band n48	G	1790M	40	CW/SRS	N/A	N/A	N/A	16.0	15.66	N/A	-0.02	1:1	0.095	1.081	0.103	
3624.99	641666	Mid	back	0 mm	NR Band n48	D	1790M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.02	1:1	0.334	1.064	0.355	
3624.99	641666	Mid	front	0 mm	NR Band n48	D	1790M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	-0.06	1:1	0.180	1.064	0.192	
3624.99	641666	Mid	bottom	0 mm	NR Band n48	D	1790M	40	CW/SRS	N/A	N/A	N/A	13.0	12.73	N/A	0.03	1:1	0.216	1.064	0.230	
3570.00	638000	Low	top	0 mm	NR Band n48	F	1790M	40	DFT-S-OFDM	QPSK	1	104	18.5	17.95	0	-0.03	1:1	2.250	1.135	2.554	
3624.99	641666	Mid	top	0 mm	NR Band n48	F	1790M	40	CP-OFDM	QPSK	1	1	18.5	17.75	0	0.03	1:1	1.910	1.189	2.271	

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

Note: Blue entry represents variability measurement.

Table 11-142
NR Band n77 UMPC Extremity SAR

MEASUREMENT RESULTS																						
FREQUENCY			Side	Spacing	Mode	Antenna Config	Serial Number	Bandwidth [MHz]	Waveform	Modulation	RB Size	RB Offset	Maximum Allowed Power [dBm]	Conducted Power [dBm]	MPR [dB]	Power Drift [dB]	Duty Cycle	SAR (10g)	Scaling Factor	Reported SAR (10g)	Plot #
MHz	Ch.																	(W/kg)		(W/kg)	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.01	1:1	0.427	1.197	0.511	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	0.00	1:1	0.423	1.239	0.524	
3500.01	633334	Mid	front	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	-0.03	1:1	0.862	1.197	1.032	
3500.01	633334	Mid	front	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	-0.02	1:1	0.855	1.239	1.059	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	1	271	19.0	18.22	0	0.01	1:1	1.660	1.197	1.987	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	135	138	19.0	18.07	0	0.01	1:1	1.690	1.239	2.094	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	F	1829M	100	DFT-S-OFDM	QPSK	270	0	19.0	18.06	0	0.03	1:1	1.800	1.242	2.236	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	17.94	0	-0.03	1:1	1.960	1.276	2.501	A169
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.02	1:1	0.485	1.167	0.566	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.05	1:1	0.490	1.199	0.588	
3500.01	633334	Mid	front	0 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.20	1:1	0.815	1.167	0.951	
3500.01	633334	Mid	front	0 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	0.20	1:1	0.828	1.199	0.993	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.00	1:1	1.260	1.167	1.470	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.01	1:1	1.240	1.199	1.487	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	270	0	19.5	18.70	0	0.00	1:1	1.230	1.202	1.478	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	E	0596M	100	CP-OFDM	QPSK	1	1	19.5	18.36	0	0.01	1:1	1.260	1.300	1.638	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	1	1	19.5	18.83	0	0.07	1:1	0.966	1.167	1.127	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD	E	0596M	100	DFT-S-OFDM	QPSK	135	0	19.5	18.71	0	-0.01	1:1	0.976	1.199	1.170	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	-0.01	1:1	0.171	1.312	0.224	
3500.01	633334	Mid	front	0 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	-0.02	1:1	0.130	1.312	0.171	
3500.01	633334	Mid	top	0 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	-0.03	1:1	0.426	1.312	0.559	
3500.01	633334	Mid	right	0 mm	NR Band n77 DoD	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.82	N/A	0.01	1:1	0.117	1.312	0.154	
3500.01	633334	Mid	back	0 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	-0.10	1:1	0.121	1.268	0.153	
3500.01	633334	Mid	front	0 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	-0.01	1:1	0.184	1.268	0.233	
3500.01	633334	Mid	bottom	0 mm	NR Band n77 DoD	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.97	N/A	0.00	1:1	0.271	1.268	0.344	
3750.00	650000	Low	back	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.00	1:1	0.474	1.148	0.544	
3750.00	650000	Low	back	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	-0.06	1:1	0.486	1.151	0.559	
3750.00	650000	Low	front	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.06	1:1	1.000	1.148	1.148	
3930.00	662000	High	front	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	137	19.0	18.39	0	-0.02	1:1	1.110	1.151	1.278	
3750.00	650000	Low	front	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.03	1:1	0.935	1.151	1.076	
3930.00	662000	High	front	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.29	0	0.06	1:1	0.991	1.178	1.167	
3750.00	650000	Low	front	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	270	0	19.0	18.37	0	0.02	1:1	1.060	1.156	1.225	
3750.00	650000	Low	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	1	19.0	18.40	0	0.02	1:1	1.780	1.148	2.043	
3930.00	662000	High	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	137	19.0	18.39	0	0.03	1:1	2.010	1.151	2.314	A170
3750.00	650000	Low	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.39	0	0.00	1:1	1.830	1.151	2.106	
3930.00	662000	High	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	135	0	19.0	18.29	0	0.01	1:1	1.930	1.178	2.274	
3750.00	650000	Low	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	270	0	19.0	18.37	0	0.00	1:1	1.940	1.156	2.243	
3750.00	650000	Low	top	0 mm	NR Band n77	F	1829M	100	CP-OFDM	QPSK	1	1	19.0	18.38	0	-0.03	1:1	1.820	1.153	2.098	
3930.00	662000	High	back	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	1	137	19.5	19.32	0	-0.08	1:1	0.367	1.042	0.382	
3930.00	662000	High	back	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	135	69	19.5	19.28	0	0.05	1:1	0.376	1.052	0.396	
3930.00	662000	High	front	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	1	137	19.5	19.32	0	0.01	1:1	0.525	1.042	0.547	
3930.00	662000	High	front	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	135	69	19.5	19.28	0	0.08	1:1	0.527	1.052	0.554	
3750.00	650000	Low	top	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	1	271	19.5	18.83	0	0.00	1:1	1.270	1.167	1.482	
3930.00	662000	High	top	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	1	137	19.5	19.32	0	0.02	1:1	1.020	1.042	1.063	
3750.00	650000	Low	top	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	135	138	19.5	18.82	0	0.03	1:1	1.300	1.169	1.520	
3930.00	662000	High	top	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	135	69	19.5	19.28	0	-0.03	1:1	1.160	1.052	1.220	
3930.00	662000	High	top	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	270	0	19.5	19.20	0	-0.02	1:1	0.984	1.072	1.055	
3930.00	662000	High	top	0 mm	NR Band n77	E	3591M	100	CP-OFDM	N/A	1	1	19.5	18.86	0	0.01	1:1	1.030	1.159	1.194	
3930.00	662000	High	right	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	1	137	19.5	19.32	0	-0.02	1:1	0.321	1.042	0.334	
3930.00	662000	High	right	0 mm	NR Band n77	E	3591M	100	DFT-S-OFDM	N/A	135	69	19.5	19.28	0	0.01	1:1	0.320	1.052	0.337	
3930.00	662000	High	back	0 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	-0.01	1:1	0.202	1.253	0.253	
3930.00	662000	High	front	0 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.01	1:1	0.244	1.253	0.306	
3750.00	650000	Low	top	0 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	14.74	N/A	-0.04	1:1	0.582	1.337	0.778	
3930.00	662000	High	top	0 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	0.00	1:1	0.862	1.253	1.080	
3930.00	662000	High	right	0 mm	NR Band n77	G	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.02	N/A	-0.05	1:1	0.115	1.253	0.144	
3750.00	650000	Low	back	0 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.03	1:1	0.640	1.230	0.787	
3750.00	650000	Low	front	0 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	-0.02	1:1	0.245	1.230	0.301	
3750.00	650000	Low	bottom	0 mm	NR Band n77	D	1829M	100	CW/SRS	N/A	N/A	N/A	16.0	15.10	N/A	0.08	1:1	0.297	1.230	0.365	
3930.00	662000	High	top	0 mm	NR Band n77	F	1829M	100	DFT-S-OFDM	QPSK	1	137	19.0	18.39	0	0.03	1:1	2.000	1.151	2.302	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population														UMPC Extremity 4 W/kg (mW/g) averaged over 10 grams							

Note: Blue entry represents variability measurement.

Table 11-143
DTS SISO WLAN UMPC Extremity SAR

MEASUREMENT RESULTS																		
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle (%)	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2462	11	back	0 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	0.04	98.85	0.762	1.138	1.012	0.878	
2462	11	front	0 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	-0.05	98.85	0.474	1.138	1.012	0.546	
2462	11	bottom	0 mm	802.11b	DSSS	2	0417M	22	1	19.0	18.44	0.00	98.85	0.900	1.138	1.012	**1.036**	

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

Table 11-144
DTS MIMO WLAN UMPC Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	Duty Cycle (%)	Peak Number	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)			(W/kg)	
2412	1	back	0 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	0.01	98.85	1	0.800	1.002	1.012	0.928	
2412	1	back	0 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	-0.01	98.85	2	0.749	1.002	1.012	0.869	
2412	1	front	0 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	-0.02	98.85	1	0.866	1.002	1.012	1.004	
2412	1	front	0 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	-0.01	98.85	2	0.633	1.002	1.012	0.734	
2412	1	top	0 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	0.01	98.85	-	1.090	1.002	1.012	1.264	A171
2412	1	bottom	0 mm	802.11b	DSSS	MIMO	0417M	22	1	19.0	18.99	19.0	18.41	-0.01	98.85	-	0.788	1.002	1.012	0.914	

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

Note: To achieve the 22.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 19.0 dBm. Peak number 1 and 2 correspond to the top and bottom of DUT respectively.

Table 11-145
NII MIMO WLAN UMPC Extremity SAR

MEASUREMENT RESULTS																					
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	Duty Cycle (%)	Peak Number	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)			(W/kg)	
5300	60	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.01	97.92	1	0.276	1.069	1.021	0.303	
5300	60	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	0.01	97.92	2	0.433	1.069	1.021	0.476	
5300	60	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.02	97.92	1	0.449	1.069	1.021	0.493	
5300	60	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.01	97.92	2	0.472	1.069	1.021	0.519	
5300	60	top	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.07	97.92	-	0.981	1.069	1.021	1.078	
5300	60	bottom	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.71	18.0	17.68	-0.07	97.92	-	0.489	1.069	1.021	0.537	
5500	100	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	-0.04	97.92	1	0.342	1.035	1.021	0.361	
5500	100	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	-0.08	97.92	2	0.472	1.035	1.021	0.499	
5500	100	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	0.00	97.92	1	0.518	1.035	1.021	0.547	
5500	100	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	0.20	97.92	2	0.371	1.035	1.021	0.392	
5500	100	top	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	-0.07	97.92	-	1.160	1.035	1.021	1.226	
5500	100	bottom	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.85	18.0	17.99	0.02	97.92	-	0.424	1.035	1.021	0.448	
5825	165	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.09	97.92	1	0.352	1.012	1.021	0.378	
5825	165	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.01	97.92	2	1.110	1.012	1.021	1.192	
5825	165	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	-0.05	97.92	1	0.627	1.012	1.021	0.673	
5825	165	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.09	97.92	2	0.906	1.012	1.021	0.973	
5825	165	top	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.01	97.92	-	1.160	1.012	1.021	**1.246**	A172
5825	165	bottom	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.95	18.0	17.78	0.03	97.92	-	0.932	1.012	1.021	1.001	
5845	169	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.07	97.92	1	0.377	1.028	1.021	0.433	
5845	169	back	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.01	97.92	2	1.040	1.028	1.021	1.195	
5845	169	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	-0.01	97.92	1	0.579	1.028	1.021	0.665	
5845	169	front	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.05	97.92	2	0.757	1.028	1.021	0.870	
5845	169	top	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.03	97.92	-	1.060	1.028	1.021	1.218	
5845	169	bottom	0 mm	802.11n	OFDM	MIMO	0374M	20	13	18.0	17.88	18.0	17.49	0.04	97.92	-	0.877	1.028	1.021	1.007	

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

Note: To achieve the 21.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 18.0 dBm. Peak number 1 and 2 correspond to the top and bottom of DUT respectively.

Table 11-146
DTS UMPC Extremity SISO SAR during Conditions with 5/6 GHz WLAN and/or 5G NR

MEASUREMENT RESULTS																		
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift [dB]	Duty Cycle (%)	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.													(W/kg)			(W/kg)	
2462	11	back	0 mm	802.11b	DSSS	2	3594M	22	1	15.0	14.88	0.02	98.85	0.208	1.028	1.012	0.216	
2462	11	front	0 mm	802.11b	DSSS	2	3594M	22	1	15.0	14.88	-0.01	98.85	0.200	1.028	1.012	0.208	
2462	11	bottom	0 mm	802.11b	DSSS	2	3594M	22	1	15.0	14.88	-0.01	98.85	0.206	1.028	1.012	0.214	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams							

Note: 2.4 GHz Antenna 2 was additionally evaluated at the maximum allowed output power during simultaneous operations with 5/6 GHz WLAN, or 5G NR. 5/6 GHz WIFI or 5G NR was not transmitting during the above evaluations.

Table 11-147
DTS UMPC Extremity MIMO SAR during Conditions with 5/6 GHz WLAN and/or 5G NR

MEASUREMENT RESULTS																				
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	Duty Cycle (%)	Peak Number	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)			(W/kg)	
2437	6	back	0 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	0.02	97.70	1	0.359	1.084	1.024	0.401	
2437	6	back	0 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	0.05	97.70	2	0.324	1.084	1.024	0.362	
2437	6	front	0 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	0.06	97.70	1	0.292	1.084	1.024	0.326	
2437	6	front	0 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	0.01	97.70	2	0.222	1.084	1.024	0.248	
2437	6	top	0 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	0.04	97.70	-	0.383	1.084	1.024	0.428	
2437	6	bottom	0 mm	802.11n	OFDM	MIMO	0417M	20	13	15.0	14.65	15.0	14.62	-0.01	97.70	-	0.356	1.084	1.024	0.398	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population											UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams										

Note: 2.4 GHz MIMO was additionally evaluated at the maximum allowed output power during simultaneous operations with 5/6 GHz WLAN, or 5G NR. 5/6 GHz WIFI or 5G NR was not transmitting during the above evaluations. To achieve the 18.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 15.0 dBm. Peak number 1 and 2 correspond to the top and bottom of DUT respectively.

Table 11-148
WLAN MIMO UMPC Extremity SAR during Conditions with 2.4 GHz WLAN SAR and/or 5G NR

MEASUREMENT RESULTS																					
FREQUENCY		Side	Spacing	Mode	Service	Antenna Config.	Device Serial Number	Bandwidth [MHz]	Data Rate (Mbps)	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]	Duty Cycle (%)	Peak Number	SAR (10g)	Scaling Factor (Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.																(W/kg)			(W/kg)	
5290	58	back	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.53	15.0	14.05	0.20	92.82	1	0.125	1.114	1.077	0.168	
5290	58	back	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.53	15.0	14.05	0.05	92.82	2	0.225	1.114	1.077	0.302	
5290	58	front	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.53	15.0	14.05	0.20	92.82	1	0.152	1.114	1.077	0.204	
5290	58	front	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.53	15.0	14.05	0.20	92.82	2	0.190	1.114	1.077	0.255	
5290	58	top	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.53	15.0	14.05	0.03	92.82	-	0.326	1.114	1.077	0.437	
5290	58	bottom	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.53	15.0	14.05	-0.02	92.82	-	0.202	1.114	1.077	0.271	
5530	106	back	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.91	15.0	14.19	-0.15	92.82	1	0.179	1.021	1.077	0.232	
5530	106	back	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.91	15.0	14.19	0.03	92.82	2	0.194	1.021	1.077	0.252	
5530	106	front	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.91	15.0	14.19	-0.16	92.82	1	0.178	1.021	1.077	0.231	
5530	106	front	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.91	15.0	14.19	0.06	92.82	2	0.088	1.021	1.077	0.114	
5530	106	top	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.91	15.0	14.19	-0.02	92.82	-	0.432	1.021	1.077	0.561	
5530	106	bottom	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.91	15.0	14.19	0.11	92.82	-	0.168	1.021	1.077	0.218	
5775	155	back	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.61	15.0	14.47	-0.03	92.82	1	0.131	1.094	1.077	0.159	
5775	155	back	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.61	15.0	14.47	0.01	92.82	2	0.301	1.094	1.077	0.366	
5775	155	front	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.61	15.0	14.47	-0.02	92.82	1	0.206	1.094	1.077	0.251	
5775	155	front	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.61	15.0	14.47	-0.07	92.82	2	0.313	1.094	1.077	0.381	
5775	155	top	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.61	15.0	14.47	0.04	92.82	-	0.464	1.094	1.077	0.565	
5775	155	bottom	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.61	15.0	14.47	-0.01	92.82	-	0.294	1.094	1.077	0.358	
5855	171	back	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.49	15.0	14.16	-0.02	92.82	1	0.092	1.125	1.077	0.120	
5855	171	back	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.49	15.0	14.16	-0.06	92.82	2	0.199	1.125	1.077	0.260	
5855	171	front	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.49	15.0	14.16	0.00	92.82	1	0.126	1.125	1.077	0.165	
5855	171	front	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.49	15.0	14.16	0.04	92.82	2	0.192	1.125	1.077	0.251	
5855	171	top	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.49	15.0	14.16	-0.04	92.82	-	0.478	1.125	1.077	0.624	
5855	171	bottom	0 mm	802.11ac	OFDM	MIMO	0374M	80	58.5	15.0	14.49	15.0	14.16	-0.03	92.82	-	0.409	1.125	1.077	0.534	

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

Note: 5 GHz MIMO was additionally evaluated at the maximum allowed output power during simultaneous operations with 2.4 GHz WLAN and/or 5G FR1 NR. 2.4 GHz WLAN and/or 5G FR1 NR was not transmitting during the above evaluations. To achieve the 18.0 dBm maximum allowed MIMO power shown in the documentation, each antenna transmits at a maximum allowed power of 15.0 dBm. Peak number 1 and 2 correspond to the top and bottom of DUT respectively.

Table 11-149
DSS UMPC Extremity SAR

MEASUREMENT RESULTS																
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift	Duty Cycle	SAR (10g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2441	39	back	0 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	-0.01	76.80	0.594	1.184	1.302	0.916	
2441	39	front	0 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	-0.03	76.80	0.564	1.184	1.302	0.869	
2441	39	top	0 mm	Bluetooth	FHSS	1	0417M	1	19.5	18.77	0.00	76.80	0.909	1.184	1.302	**1.401**	A173
2441	39	back	0 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	0.01	76.80	0.248	1.043	1.302	0.337	
2441	39	front	0 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	0.00	76.80	0.188	1.043	1.302	0.255	
2441	39	bottom	0 mm	Bluetooth	FHSS	2	0417M	1	16.0	15.82	-0.02	76.80	0.299	1.043	1.302	0.406	

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

Table 11-150
DSS UMPC Extremity SAR during Conditions with 5/6 GHz WLAN and/or 5G NR

MEASUREMENT RESULTS																
FREQUENCY		Side	Test Position	Mode	Service	Antenna Config.	Device Serial Number	Data Rate (Mbps)	Maximum Allowed Power [dBm]	Conducted Power [dBm]	Power Drift	Duty Cycle	SAR (10g)	Scaling Factor (Cond Power)	Scaling Factor (Duty Cycle)	Reported SAR (10g)	Plot #
MHz	Ch.												(W/kg)			(W/kg)	
2441	39	back	0 mm	Bluetooth	FHSS	1	3594M	1	15.0	14.80	0.01	76.80	0.204	1.047	1.302	0.278	
2441	39	front	0 mm	Bluetooth	FHSS	1	3594M	1	15.0	14.80	0.04	76.80	0.209	1.047	1.302	0.285	
2441	39	top	0 mm	Bluetooth	FHSS	1	3594M	1	15.0	14.80	0.02	76.80	0.280	1.047	1.302	0.382	
2441	39	back	0 mm	Bluetooth	FHSS	2	3594M	1	13.0	12.72	0.00	76.80	0.081	1.067	1.302	0.113	
2441	39	front	0 mm	Bluetooth	FHSS	2	3594M	1	13.0	12.72	-0.02	76.80	0.077	1.067	1.302	0.107	
2441	39	bottom	0 mm	Bluetooth	FHSS	2	3594M	1	13.0	12.72	0.02	76.80	0.082	1.067	1.302	0.114	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population										UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams							

Note: 2.4 GHz Bluetooth was additionally evaluated at the maximum allowed output power during simultaneous operations with 5/6 GHz WLAN, or 5G NR. 5/6 GHz WIFI or 5G NR was not transmitting during the above evaluations.

Table 11-151
NFC UMPC Extremity SAR

MEASUREMENT RESULTS									
FREQUENCY	Side	Test Position	Mode	Type	Antenna Config.	Device Serial Number	Power Drift	SAR (10g)	Plot #
MHz								(W/kg)	
13.56	back	0 mm	NFC	B	NFC	1929M	-0.05	**0.010**	A174
13.56	front	0 mm	NFC	B	NFC	1929M	0.03	0.000	
13.56	right	0 mm	NFC	B	NFC	1929M	0.04	0.000	
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population					UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams				

11.7 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 12 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" when it is in closed configuration 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 13 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 1g thresholds for the equivalent test cases.
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).
15. Per FCC KDB Publication 941225 D07v01r02, this device is considered a "UMPC mini-tablet" when it is in open configuration. UMPC body 1g SAR tests are required on all surfaces and edges $\leq$ 25 mm from a transmitting antenna. Therefore, to address hand exposure, UMPC extremity 10g SAR tests are required at a test separation distance of 0 mm for all measured 1g SAR (at 10 mm) configurations.

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 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).

UMTS Notes:

1. UMTS mode was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01v03r01. AMR and HSPA SAR was not required per the 3G Test Reduction Procedure in KDB Publication 941225 D01v03r01.
2. Per FCC KDB Publication 447498 D01v06, if the reported (scaled) SAR measured at the highest output power channel for each test configuration is ≤ 0.8 W/kg for 1g evaluations then testing at the other channels is not required for such test configuration(s).

LTE Notes:

1. LTE test configurations are determined according to SAR Evaluation Considerations for LTE Devices in FCC KDB Publication 941225 D05v02r04. The general test procedures used for testing can be found in Section 8.5.4.
2. MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.
3. A-MPR was disabled for all SAR tests by setting NS=01 and MCC=001 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).
4. Per FCC KDB Publication 447498 D01v06, when the reported 1g SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for LTE B41/48, testing at the other channels was required for such test configurations.
5. TDD LTE was tested per the guidance provided in FCC KDB Publication 941225 D05v02r04. Testing was performed using UL-DL configuration 0 with 6 UL subframes and 2 S subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4, the duty factor for special subframe configuration 6 using extended cyclic prefix is 0.633.
6. Per KDB Publication 941225 D05Av01r02, SAR for downlink only LTE CA operations was not needed since the maximum average output power in LTE CA mode was not >0.25 dB higher than the maximum output power when downlink carrier aggregation was inactive.
7. This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per FCC Guidance, all SAR tests were performed using Power Class 3. SAR with power class 2 at the available duty factor was additionally performed for the power class 3 configuration with the highest SAR configuration for each exposure conditions. Please see Section 13 for linearity results.
8. For LTE Band 5, LTE Band 66, LTE Band 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 supports SA and NSA mode. In EN-DC mode, NR operates with the LTE Bands shown in the NR FR1 checklist acting as anchor bands. Per FCC guidance, SAR tests for NR Bands and LTE Anchors Bands were performed separately due to limitations in SAR probe calibration factors.

2. Due to test setup limitations, SAR testing for NR TDD 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, NR modulations and RB Sizes/Offsets were selected for testing such that configurations with the highest output power were evaluated for SAR tests.
6. Per FCC KDB Publication 447498 D01v06, when the reported NR Band n77 C-Band SAR measured at the highest output power channel in a given a test configuration was > 0.4 W/kg for 1g evaluations and > 1 W/kg for 10g evaluation, testing at the other channels was required for such test configurations.
7. Per FCC KDB Publication 447498 D01v06, when the reported NR Band n41/48 SAR measured at the highest output power channel in a given a test configuration was > 0.6 W/kg for 1g evaluations and > 1.5 W/kg for 10g evaluation, testing at the other channels was required for such test configurations.
8. SRS was tested with CW signal per Qualcomm guidance in 80-w2112-4.
9. For final implementation, NR Band n41, n48 and n77 slot configuration is synchronized using maximum duty cycle of 100%. SAR testing was performed using FTM mode with a 100% duty cycle applied to match final duty cycle.

WLAN Notes:

1. For held-to-ear, hotspot, phablet, and UMPC mini-tablet 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 8.6.5 for more information.
3. Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02 for 5 GHz WIFI 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 8.6.6 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 Multi-TX and Antenna SAR Considerations Appendix for complete analysis.
5. When the maximum reported 1g averaged SAR is ≤0.8 W/kg, SAR testing on additional channels was not required. Otherwise, SAR for the next highest output power channel was required until the reported SAR result was ≤ 1.20 W/kg for 1g evaluations or all test channels were measured.
6. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated EMC test reports.
7. When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

Bluetooth Notes

1. Bluetooth SAR was measured with the device connected to a call box with hopping disabled with DH5 operation and Tx Tests test mode type. Per October 2016 TCB Workshop Notes, the reported SAR was scaled to the 100% transmission duty factor to determine compliance. See Section 9 for the time domain plot and calculation for the duty factor of the device.

2. Head and Hotspot Bluetooth SAR were evaluated for BT BDR tethering applications.

12 SAR MEASUREMENT VARIABILITY

12.1 Measurement Variability

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

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

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

Table 12-1
UMPC Extremity SAR Measurement Variability Results

UMPC EXTREMTIY VARIABILITY RESULTS														
Band	FREQUENCY		Mode	Service	Side	Spacing	Antenna Config	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)	
1900	1907.60	9538	UMTS 1900	RMC	bottom	0 mm	B	2.100	1.910	1.10	N/A	N/A	N/A	N/A
2600	2535.00	507000	NR Band n7, 40 MHz Bandwidth	CP-OFDM, QPSK, 1 RB, 1 RB Offset	bottom	0 mm	B	2.310	2.200	1.05	N/A	N/A	N/A	N/A
3500	3570.00	638000	NR Band n48, 40 MHz Bandwidth	DFT-S-OFDM, QPSK, 1 RB, 104 RB Offset	top	0 mm	F	2.300	2.250	1.02	N/A	N/A	N/A	N/A
3700	3624.99	641666	NR Band n48, 40 MHz Bandwidth	CP-OFDM, QPSK, 1 RB, 1 RB Offset	top	0 mm	F	2.020	1.910	1.06	N/A	N/A	N/A	N/A
3900	3930.00	662000	NR Band n77, 100 MHz Bandwidth	DFT-S-OFDM, QPSK, 1 RB, 137 RB Offset	top	0 mm	F	2.010	2.000	1.01	N/A	N/A	N/A	N/A
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population								UMPC Extremity 4.0 W/kg (mW/g) averaged over 10 grams						

12.2 Measurement Uncertainty

The measured SAR was <1.5 W/kg for 1g and <3.75 W/kg for 10g for all frequency bands. Therefore, per KDB Publication 865664 D01v01r04, the extended measurement uncertainty analysis per IEEE 1528-2013 was not required.

13 ADDITIONAL TESTING PER FCC GUIDANCE

13.1 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. 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 144 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 measured 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 144 states.

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

Table 13-1
UMTS Supplemental Head SAR Data

Supplemental Head SAR Data			
UMTS B5 Ant A		UMTS B5 Ant A + Ant B	
RMC		RMC	
Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	826.40	Frequency (MHz)	826.40
Channel	4132	Channel	4132
Measured 1g SAR (W/kg)	0.114	Measured 1g SAR (W/kg)	0.156
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 9)	0.121	Auto-tune (State 108)	0.170
Default (State 9)	0.117	Default (State 108)	0.158
State 7	0.017	State 8	0.002
State 9	0.117	State 40	0.034
State 39	0.074	State 72	0.061
State 71	0.010	State 104	0.012
State 103	0.070	State 108	0.157
State 135	0.113	State 136	0.029

Table 13-2
LTE Supplemental Head SAR Data

Supplemental Head SAR Data											
LTE B71 Ant A		LTE B71 Ant A + Ant B		LTE B12 Ant A		LTE B12 Ant A + Ant B		LTE B13 Ant A		LTE B13 Ant A + Ant B	
QPSK, 20 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset	
Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	680.50	Frequency (MHz)	680.50	Frequency (MHz)	707.50	Frequency (MHz)	707.50	Frequency (MHz)	782.00	Frequency (MHz)	782.00
Channel	133297	Channel	133297	Channel	23095	Channel	23095	Channel	23230	Channel	23230
Measured 1g SAR (W/kg)	0.064	Measured 1g SAR (W/kg)	0.113	Measured 1g SAR (W/kg)	0.096	Measured 1g SAR (W/kg)	0.160	Measured 1g SAR (W/kg)	0.152	Measured 1g SAR (W/kg)	0.167
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 49)	0.067	Auto-tune (State 9)	0.118	Auto-tune (State 58)	0.102	Auto-tune (State 1)	0.169	Auto-tune (State 9)	0.164	Auto-tune (State 108)	0.175
Default (State 40)	0.038	Default (State 9)	0.115	Default (State 45)	0.090	Default (State 1)	0.164	Default (State 18)	0.173	Default (State 108)	0.176
State 9	0.039	State 9	0.115	State 11	0.101	State 1	0.164	State 9	0.177	State 14	0.085
State 41	0.032	State 10	0.111	State 43	0.013	State 12	0.126	State 13	0.143	State 46	0.110
State 49	0.061	State 42	0.013	State 58	0.104	State 44	0.016	State 45	0.172	State 78	0.063
State 73	0.045	State 74	0.060	State 75	0.057	State 76	0.128	State 77	0.054	State 108	0.176
State 105	0.001	State 106	0.004	State 107	0.002	State 108	0.161	State 109	0.090	State 110	0.165
State 137	0.023	State 138	0.068	State 139	0.055	State 140	0.027	State 141	0.057	State 142	0.002

Supplemental Head SAR Data											
LTE B14 Ant A		LTE B14 Ant A + Ant B		LTE B26 Ant A		LTE B26 Ant A + Ant B		LTE B5 Ant A		LTE B5 Ant A + Ant B	
QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 15 MHz Bandwidth, 1 RB, 36 RB Offset		QPSK, 15 MHz Bandwidth, 1 RB, 36 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset	
Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	793.00	Frequency (MHz)	793.00	Frequency (MHz)	831.50	Frequency (MHz)	831.50	Frequency (MHz)	836.50	Frequency (MHz)	836.50
Channel	23330	Channel	23330	Channel	26865	Channel	26865	Channel	20525	Channel	20525
Measured 1g SAR (W/kg)	0.151	Measured 1g SAR (W/kg)	0.187	Measured 1g SAR (W/kg)	0.097	Measured 1g SAR (W/kg)	0.123	Measured 1g SAR (W/kg)	0.121	Measured 1g SAR (W/kg)	0.136
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 9)	0.162	Auto-tune (State 108)	0.199	Auto-tune (State 9)	0.104	Auto-tune (State 108)	0.134	Auto-tune (State 9)	0.131	Auto-tune (State 108)	0.147
Default (State 18)	0.155	Default (State 108)	0.203	Default (State 9)	0.107	Default (State 108)	0.129	Default (State 9)	0.139	Default (State 108)	0.138
State 0	0.126	State 9	0.121	State 9	0.107	State 12	0.077	State 9	0.139	State 16	0.015
State 9	0.151	State 42	0.075	State 11	0.094	State 46	0.085	State 15	0.040	State 48	0.080
State 40	0.075	State 72	0.190	State 43	0.011	State 77	0.065	State 47	0.109	State 80	0.007
State 71	0.017	State 105	0.014	State 75	0.057	State 107	0.001	State 79	0.011	State 108	0.138
State 101	0.125	State 108	0.203	State 106	0.012	State 108	0.129	State 111	0.065	State 112	0.085
State 132	0.037	State 134	0.004	State 135	0.103	State 136	0.050	State 143	0.008	State 139	0.036

Table 13-3
NR Supplemental Head SAR Data

Supplemental Head SAR Data												
NR Band n71 Ant A		NR Band n71 Ant A + Ant B		NR Band n12 Ant A		NR Band n12 Ant A + Ant B		NR Band n5 Ant A		NR Band n5 Ant A + Ant B	
DFT-s-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 1 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 1 RB Offset		DFT-s-OFDM QPSK, 15 MHz Bandwidth, 36 RB, 22 RB Offset		DFT-s-OFDM QPSK, 15 MHz Bandwidth, 36 RB, 22 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 53 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 53 RB Offset	
Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek	Test Position	Right Cheek
Frequency (MHz)	680.50	Frequency (MHz)	680.50	Frequency (MHz)	707.50	Frequency (MHz)	707.50	Frequency (MHz)	836.50	Frequency (MHz)	836.50
Channel	136100	Channel	136100	Channel	141500	Channel	141500	Channel	167300	Channel	167300
Measured 1g SAR (W/kg)	0.084	Measured 1g SAR (W/kg)	0.147	Measured 1g SAR (W/kg)	0.081	Measured 1g SAR (W/kg)	0.150	Measured 1g SAR (W/kg)	0.109	Measured 1g SAR (W/kg)	0.150
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)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 49)	0.083	Auto-tune (State 117)	0.156	Auto-tune (State 54)	0.087	Auto-tune (State 36)	0.158	Auto-tune (State 9)	0.112	Auto-tune (State 108)	0.157
Default (State 40)	0.037	Default (State 9)	0.144	Default (State 45)	0.089	Default (State 1)	0.151	Default (State 9)	0.119	Default (State 108)	0.154
State 17	0.012	State 50	0.059	State 19	0.091	State 20	0.127	State 9	0.119	State 22	0.082
State 49	0.082	State 82	0.114	State 51	0.019	State 36	0.159	State 21	0.086	State 54	0.116
State 66	0.034	State 114	0.008	State 54	0.085	State 52	0.005	State 53	0.008	State 86	0.049
State 81	0.059	State 117	0.140	State 83	0.089	State 84	0.121	State 85	0.063	State 108	0.154
State 113	0.025	State 119	0.098	State 109	0.013	State 102	0.066	State 95	0.046	State 118	0.100
State 129	0.075	State 137	0.094	State 115	0.002	State 116	0.002	State 117	0.110	State 138	0.052

Table 13-4
UMTS Supplemental Body SAR Data

Supplemental Body SAR Data			
UMTS B5 Ant A Closed		UMTS B5 Ant A + Ant B Open	
RMC		RMC	
Test Position	Back	Test Position	Front
Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	826.40	Frequency (MHz)	826.40
Channel	4132	Channel	4132
Measured 1g SAR (W/kg)	0.283	Measured 1g SAR (W/kg)	0.315
Average Value of Time Sweep (W/kg)		Average Value of Time Sweep (W/kg)	
Auto-tune (State 9)	0.304	Auto-tune (State 0)	0.345
Default (State 9)	0.305	Default (State 36)	0.334
State 9	0.305	State 0	0.323
State 23	0.195	State 24	0.070
State 55	0.270	State 56	0.194
State 73	0.214	State 63	0.124
State 87	0.083	State 88	0.029
State 119	0.23	State 120	0.198

Table 13-5
LTE Supplemental Body SAR Data

Supplemental Body SAR Data												
LTE B71 Ant A Closed		LTE B71 Ant A + Ant B Open		LTE B12 Ant A Closed		LTE B12 Ant A + Ant B Open		LTE B13 Ant A Closed		LTE B13 Ant A + Ant B Open	
QPSK, 20 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 20 MHz Bandwidth, 1 RB, 0 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset	
Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Right	Test Position	Back
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	680.50	Frequency (MHz)	680.50	Frequency (MHz)	707.50	Frequency (MHz)	707.50	Frequency (MHz)	782.00	Frequency (MHz)	782.00
Channel	133297	Channel	133297	Channel	23095	Channel	23095	Channel	23230	Channel	23230
Measured 1g SAR (W/kg)	0.158	Measured 1g SAR (W/kg)	0.401	Measured 1g SAR (W/kg)	0.193	Measured 1g SAR (W/kg)	0.349	Measured 1g SAR (W/kg)	0.298	Measured 1g SAR (W/kg)	0.428
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 49)	0.180	Auto-tune (State 45)	0.414	Auto-tune (State 10)	0.229	Auto-tune (State 0)	0.357	Auto-tune (State 9)	0.291	Auto-tune (State 0)	0.455
Default (State 40)	0.107	Default (State 9)	0.405	Default (State 45)	0.207	Default (State 0)	0.367	Default (State 18)	0.287	Default (State 0)	0.475
State 25	0.034	State 26	0.031	State 10	0.220	State 24	0.151	State 9	0.292	State 7	0.101
State 49	0.183	State 44	0.015	State 27	0.118	State 28	0.246	State 14	0.204	State 30	0.272
State 53	0.026	State 45	0.414	State 34	0.029	State 60	0.140	State 29	0.256	State 62	0.044
State 57	0.163	State 58	0.294	State 59	0.203	State 92	0.337	State 61	0.061	State 94	0.317
State 89	0.024	State 90	0.397	State 91	0.219	State 124	0.07	State 93	0.228	State 109	0.378
State 121	0.182	State 122	0.185	State 123	0.128	State 133	0.063	State 125	0.033	State 126	0.421

Supplemental Body SAR Data											
LTE B14 Ant A Closed		LTE B14 Ant A + Ant B Open		LTE B26 Ant A Closed		LTE B26 Ant A + Ant B Open		LTE B5 Ant A Closed		LTE B5 Ant A + Ant B Open	
QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 15 MHz Bandwidth, 1 RB, 36 RB Offset		QPSK, 15 MHz Bandwidth, 1 RB, 36 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset		QPSK, 10 MHz Bandwidth, 1 RB, 25 RB Offset	
Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Back	Test Position	Back
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	793.00	Frequency (MHz)	793.00	Frequency (MHz)	831.50	Frequency (MHz)	831.50	Frequency (MHz)	836.50	Frequency (MHz)	836.50
Channel	23330	Channel	23330	Channel	26865	Channel	26865	Channel	20525	Channel	20525
Measured 1g SAR (W/kg)	0.268	Measured 1g SAR (W/kg)	0.376	Measured 1g SAR (W/kg)	0.235	Measured 1g SAR (W/kg)	0.381	Measured 1g SAR (W/kg)	0.291	Measured 1g SAR (W/kg)	0.360
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 9)	0.285	Auto-tune (State 0)	0.407	Auto-tune (State 9)	0.265	Auto-tune (State 36)	0.408	Auto-tune (State 9)	0.299	Auto-tune (State 108)	0.392
Default (State 18)	0.281	Default (State 0)	0.440	Default (State 9)	0.259	Default (State 36)	0.441	Default (State 9)	0.298	Default (State 36)	0.437
State 9	0.284	State 0	0.440	State 9	0.259	State 21	0.243	State 3	0.210	State 0	0.430
State 15	0.109	State 18	0.383	State 19	0.241	State 36	0.441	State 9	0.298	State 32	0.123
State 36	0.229	State 30	0.287	State 55	0.229	State 58	0.219	State 31	0.221	State 64	0.186
State 50	0.167	State 51	0.144	State 85	0.163	State 86	0.177	State 63	0.252	State 96	0.08
State 81	0.27	State 84	0.333	State 112	0.123	State 115	0.08	State 95	0.136	State 108	0.427
State 108	0.206	State 111	0.278	State 142	0.036	State 143	0.008	State 127	0.23	State 128	0.293

Table 13-6
NR Supplemental Body SAR Data

Supplemental Body SAR Data											
NR Band n71 Ant A Closed		NR Band n71 Ant A + Ant B Open		NR Band n12 Ant A Closed		NR Band n12 Ant A + Ant B Open		NR Band n5 Ant A Closed		NR Band n5 Ant A + Ant B Open	
DFT-s-OFDM QPSK, 20 MHz Bandwidth, 50 RB, 28 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 1 RB Offset		DFT-s-OFDM QPSK, 15 MHz Bandwidth, 36 RB, 22 RB Offset		DFT-s-OFDM QPSK, 15 MHz Bandwidth, 36 RB, 22 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 1 RB, 53 RB Offset		DFT-s-OFDM QPSK, 20 MHz Bandwidth, 50 RB, 28 RB Offset	
Test Position	Back	Test Position	Back	Test Position	Right	Test Position	Back	Test Position	Right	Test Position	Back
Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm	Spacing	10 mm
Frequency (MHz)	680.50	Frequency (MHz)	680.50	Frequency (MHz)	707.50	Frequency (MHz)	707.50	Frequency (MHz)	836.50	Frequency (MHz)	836.50
Channel	136100	Channel	136100	Channel	141500	Channel	141500	Channel	167300	Channel	167300
Measured 1g SAR (W/kg)	0.181	Measured 1g SAR (W/kg)	0.318	Measured 1g SAR (W/kg)	0.195	Measured 1g SAR (W/kg)	0.388	Measured 1g SAR (W/kg)	0.394	Measured 1g SAR (W/kg)	0.434
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 49)	0.205	Auto-tune (State 9)	0.376	Auto-tune (State 58)	0.200	Auto-tune (State 0)	0.413	Auto-tune (State 9)	0.433	Auto-tune (State 108)	0.486
Default (State 40)	0.092	Default (State 9)	0.353	Default (State 45)	0.228	Default (State 0)	0.439	Default (State 9)	0.422	Default (State 36)	0.455
State 1	0.138	State 2	0.248	State 3	0.133	State 0	0.439	State 5	0.193	State 6	0.256
State 33	0.028	State 9	0.353	State 35	0.015	State 4	0.289	State 9	0.422	State 38	0.439
State 49	0.204	State 34	0.017	State 58	0.214	State 36	0.423	State 37	0.305	State 70	0.030
State 65	0.126	State 66	0.143	State 67	0.172	State 68	0.197	State 69	0.121	State 102	0.154
State 97	0.047	State 98	0.017	State 99	0.127	State 100	0.310	State 101	0.340	State 108	0.458
State 129	0.197	State 130	0.21	State 131	0.173	State 132	0.138	State 133	0.056	State 134	0.023

13.2 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 13-7
LTE Band 41 Head Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	23.00	24.60
Measured Output Power (dBm)	22.25	24.05
Measured SAR (W/kg)	0.019	0.021
Measured Power (mW)	167.88	254.10
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	106.27	110.02
% deviation from expected linearity		6.75%

Figure 13-1
LTE Band 41 Head Linearity (Antenna B)

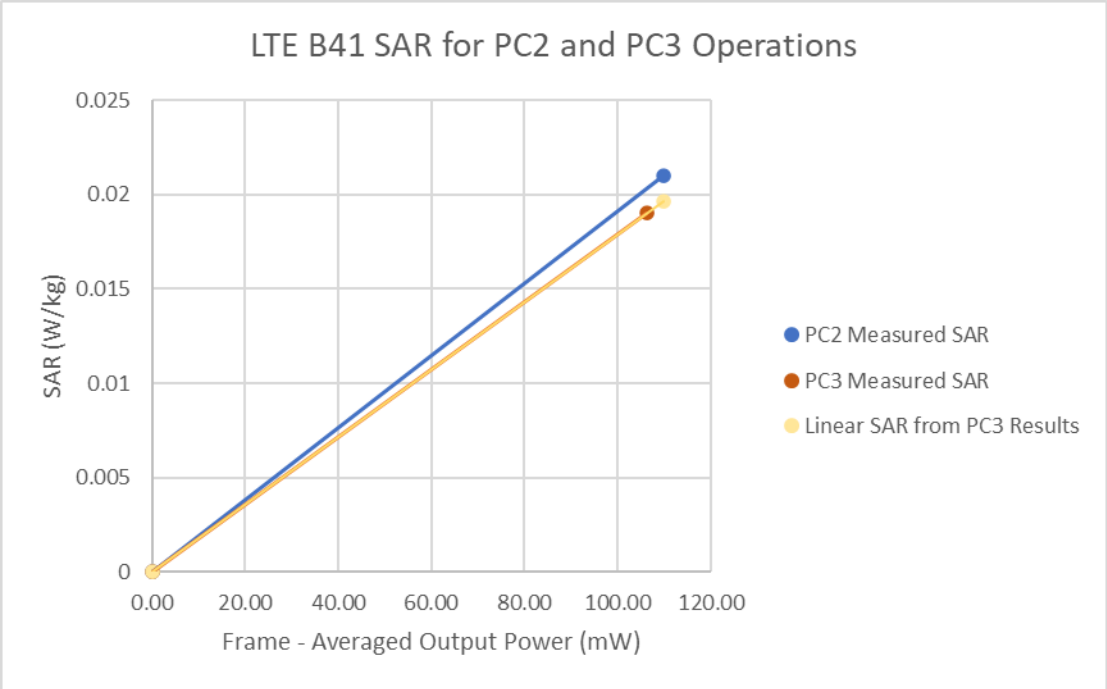


Table 13-8
LTE Band 41 ULCA Head Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	23.0	24.6
Measured Output Power (dBm)	22.31	24.13
Measured SAR (W/kg)	0.019	0.020
Measured Power (mW)	170.22	258.82
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	107.75	112.07
% deviation from expected linearity		1.20%

Figure 13-2
LTE Band 41 ULCA Head Linearity (Antenna B)

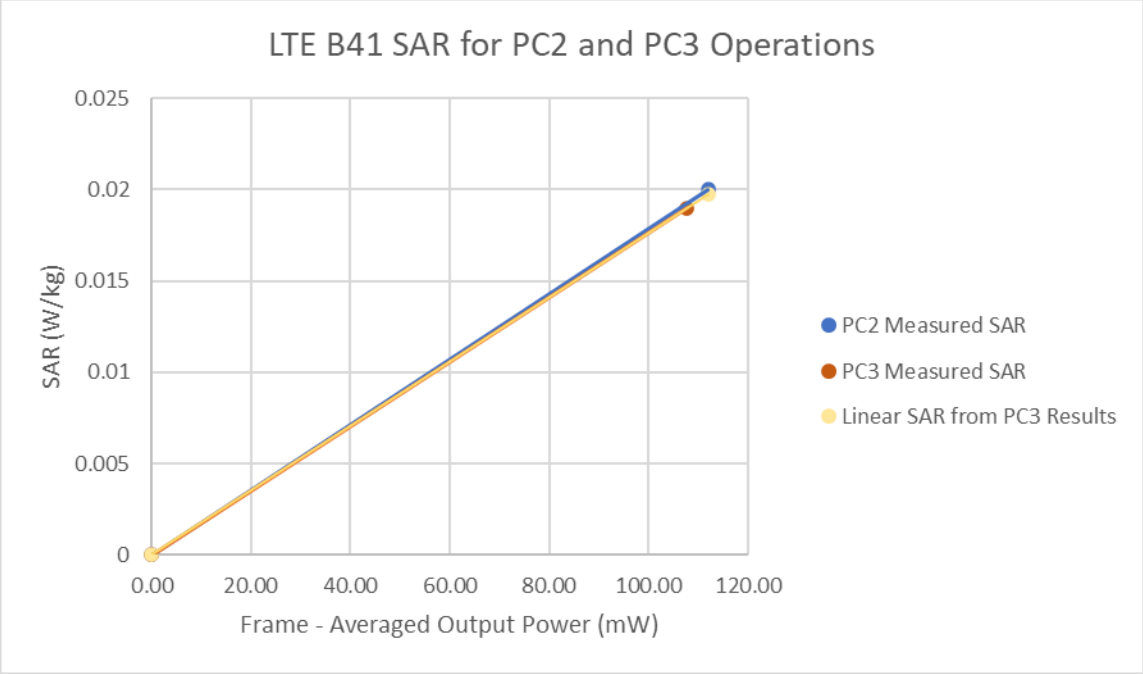


Table 13-9
LTE Band 41 Body-Worn Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	23.0	24.6
Measured Output Power (dBm)	22.54	24.32
Measured SAR (W/kg)	0.220	0.224
Measured Power (mW)	179.47	270.40
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	113.61	117.08
% deviation from expected linearity		-1.20%

Figure 13-3
LTE Band 41 Body-Worn Linearity (Antenna B)

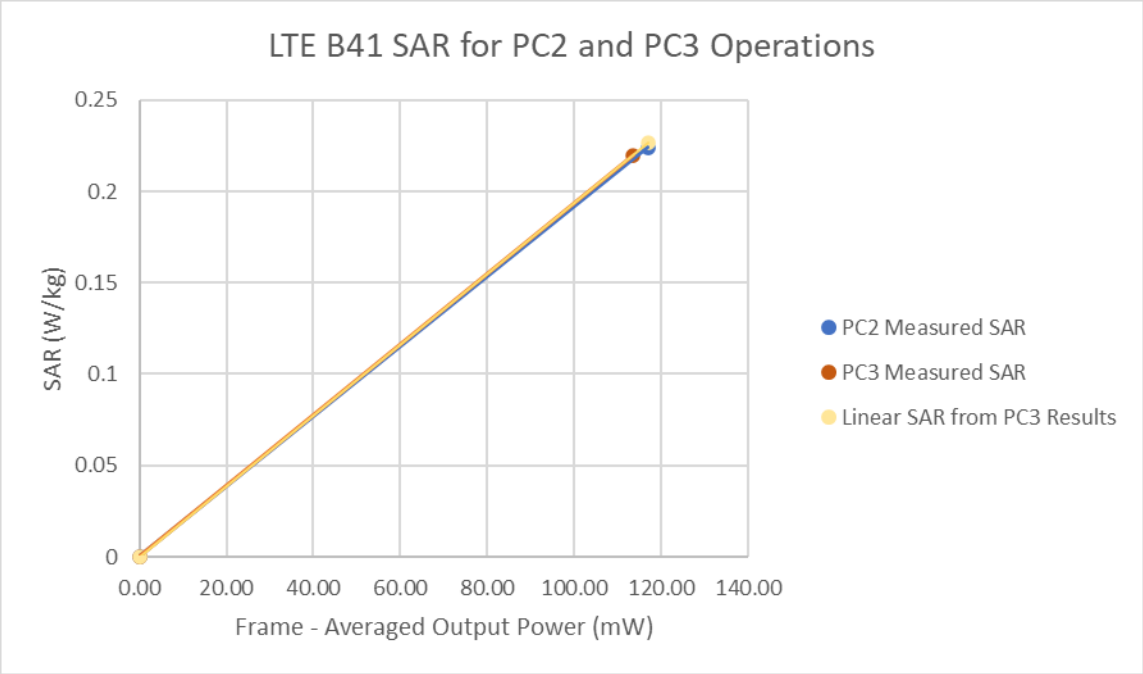


Table 13-10
LTE Band 41 ULCA Body-Worn Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	23.0	24.6
Measured Output Power (dBm)	22.31	24.13
Measured SAR (W/kg)	0.214	0.219
Measured Power (mW)	170.22	258.82
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	107.75	112.07
% deviation from expected linearity		-1.61%

Figure 13-4
LTE Band 41 ULCA Body-Worn Linearity (Antenna B)

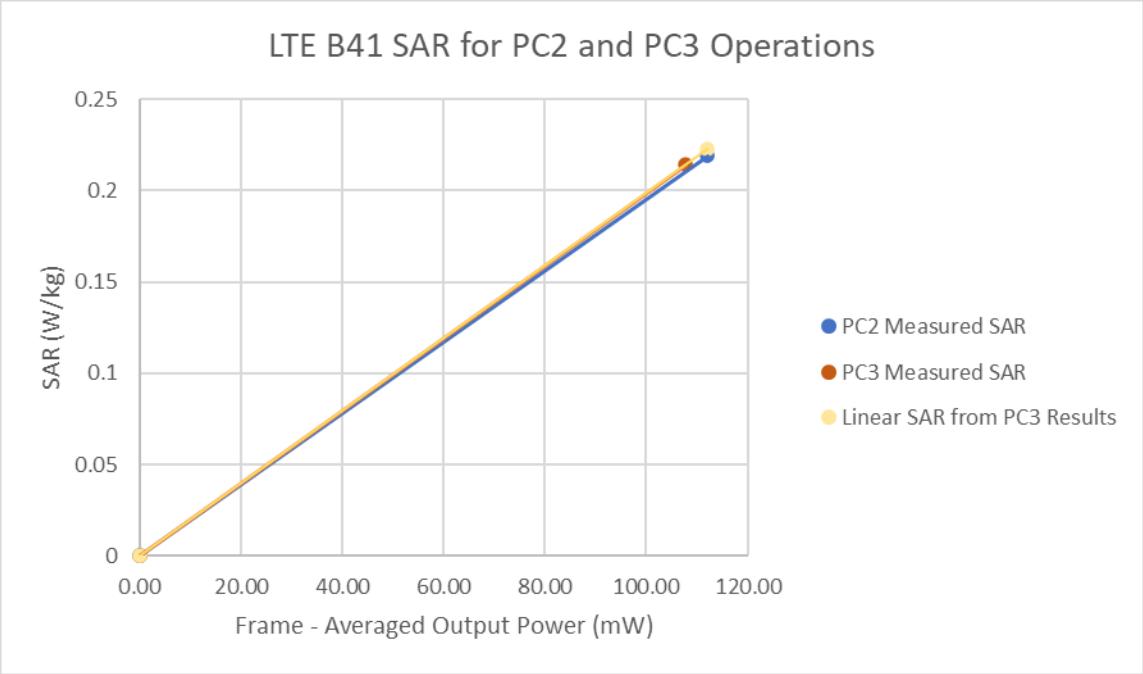


Table 13-11
LTE Band 41 Hotspot Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	19.00	20.60
Measured Output Power (dBm)	17.66	19.75
Measured SAR (W/kg)	0.346	0.346
Measured Power (mW)	58.34	94.41
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	36.93	40.88
% deviation from expected linearity		-9.65%

Figure 13-5
LTE Band 41 Hotspot Linearity (Antenna B)

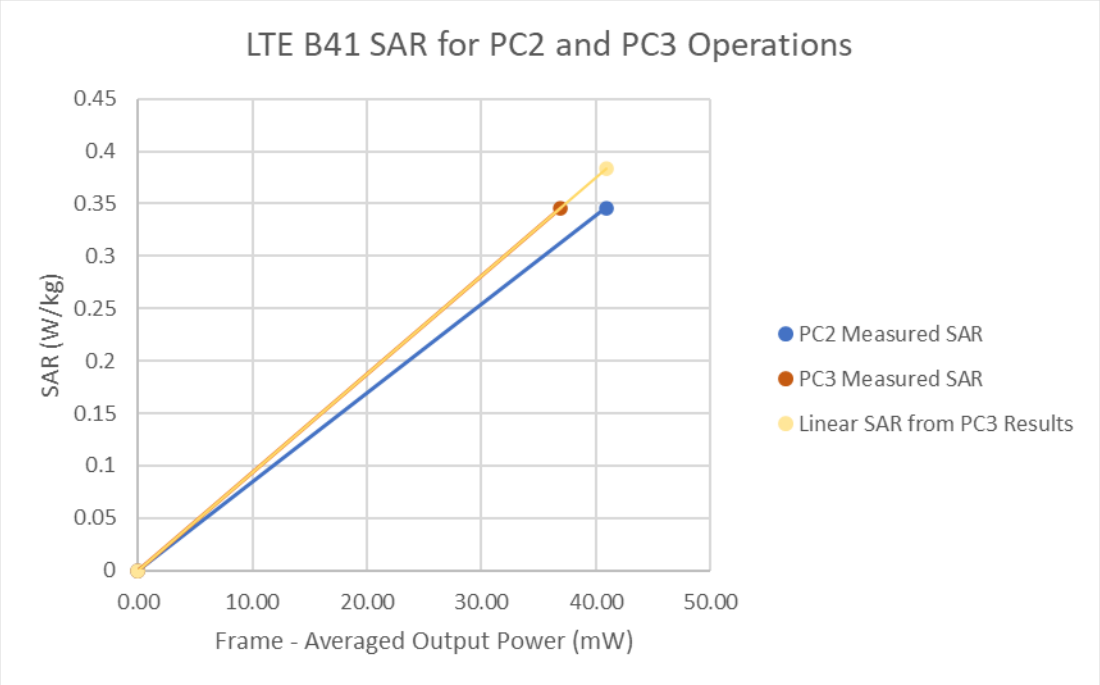


Table 13-12
LTE Band 41 ULCA Hotspot Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	19.0	20.6
Measured Output Power (dBm)	17.83	19.67
Measured SAR (W/kg)	0.360	0.356
Measured Power (mW)	60.67	92.68
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	38.41	40.13
% deviation from expected linearity		-5.36%

Figure 13-6
LTE Band 41 ULCA Hotspot Linearity (Antenna B)

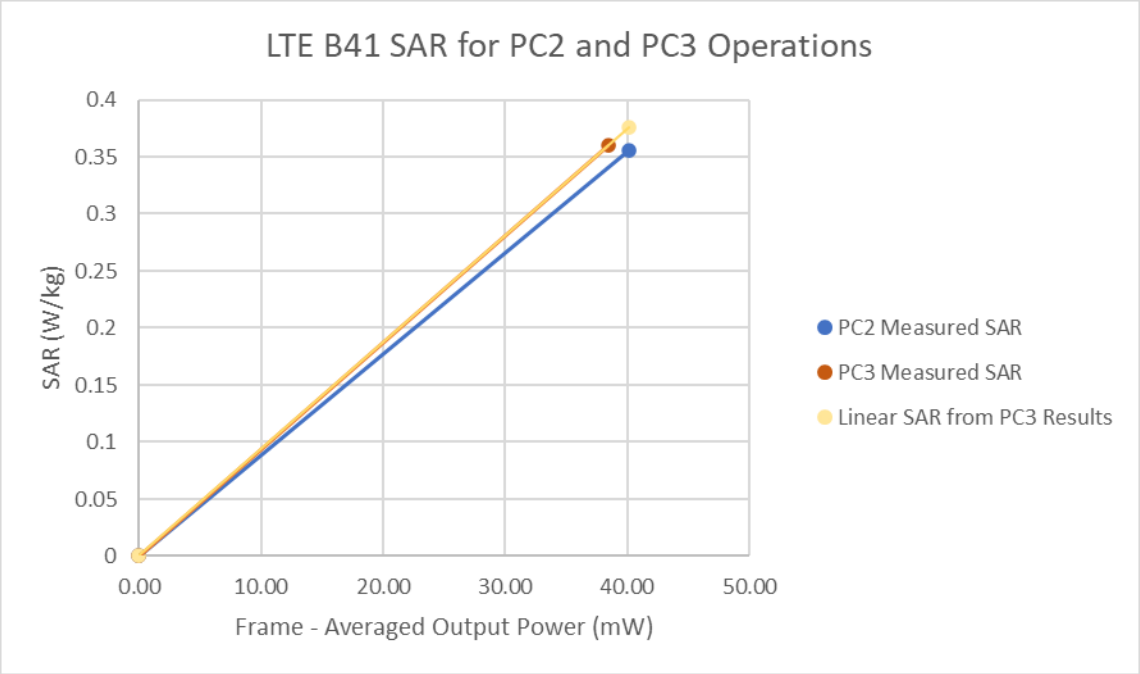


Table 13-13
LTE Band 41 Phablet Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	19.00	20.60
Measured Output Power (dBm)	17.67	19.57
Measured SAR (W/kg)	1.330	1.340
Measured Power (mW)	58.48	90.57
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	37.02	39.22
% deviation from expected linearity		-4.90%

Figure 13-7
LTE Band 41 Phablet Linearity (Antenna B)

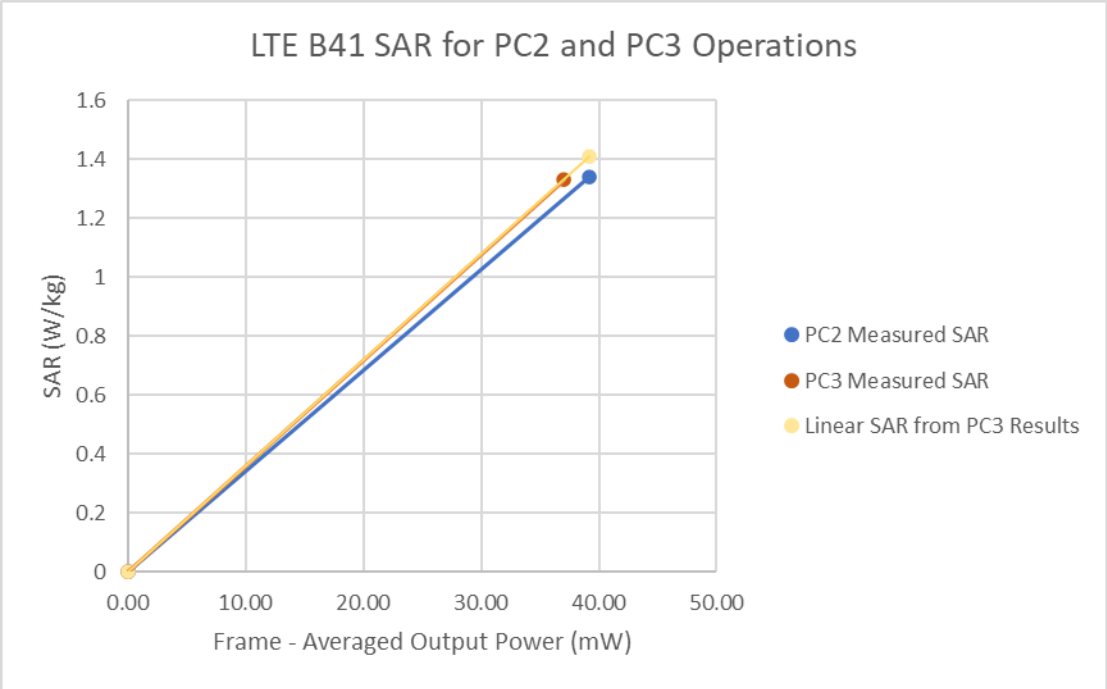


Table 13-14
LTE Band 41 ULCA Phablet Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	19.0	20.6
Measured Output Power (dBm)	18.01	19.78
Measured SAR (W/kg)	1.490	1.440
Measured Power (mW)	63.24	95.06
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	40.03	41.16
% deviation from expected linearity		-6.01%

Figure 13-8
LTE Band 41 ULCA Phablet Linearity (Antenna B)

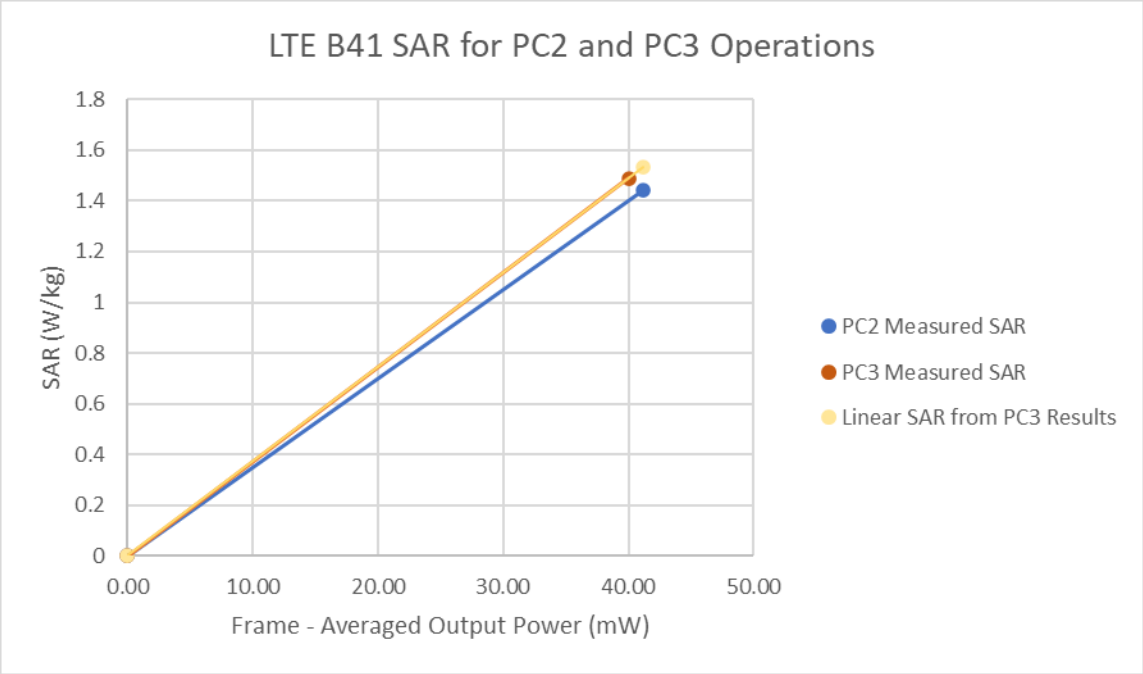


Table 13-15
LTE Band 41 UMPC Body Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	19.00	20.60
Measured Output Power (dBm)	17.66	19.75
Measured SAR (W/kg)	0.394	0.401
Measured Power (mW)	58.34	94.41
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	36.93	40.88
% deviation from expected linearity		-8.05%

Figure 13-9
LTE Band 41 UMPC Body Linearity (Antenna B)

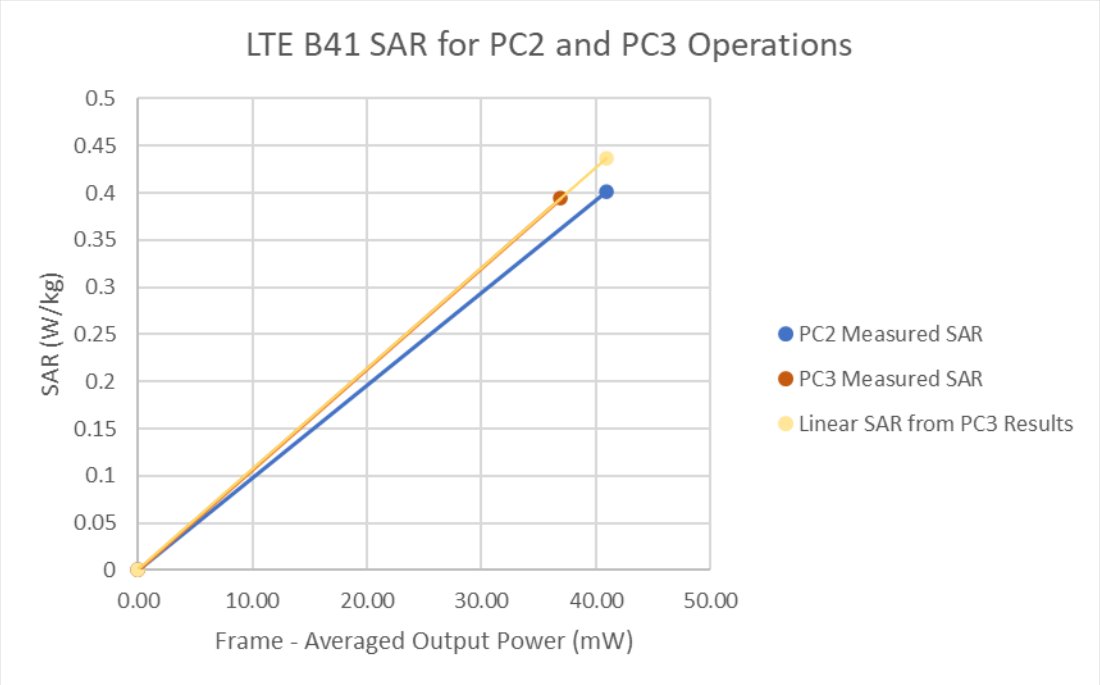


Table 13-16
LTE Band 41 ULCA UMPC Body Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	19.0	20.6
Measured Output Power (dBm)	17.83	19.67
Measured SAR (W/kg)	0.406	0.402
Measured Power (mW)	60.67	92.68
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	38.41	40.13
% deviation from expected linearity		-5.24%

Figure 13-10
LTE Band 41 ULCA UMPC Body Linearity (Antenna B)

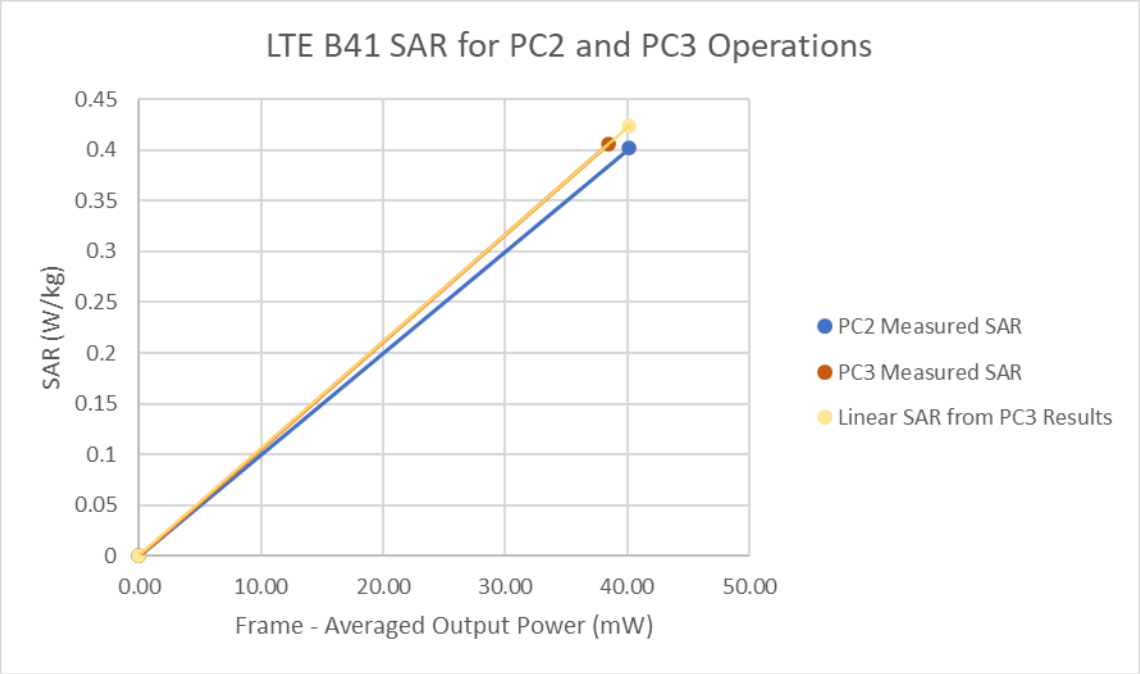


Table 13-17
LTE Band 41 UMPC Extremity Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	19.00	20.60
Measured Output Power (dBm)	17.67	19.57
Measured SAR (W/kg)	1.690	1.620
Measured Power (mW)	58.48	90.57
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	37.02	39.22
% deviation from expected linearity		-9.52%

Figure 13-11
LTE Band 41 UMPC Extremity Linearity (Antenna B)

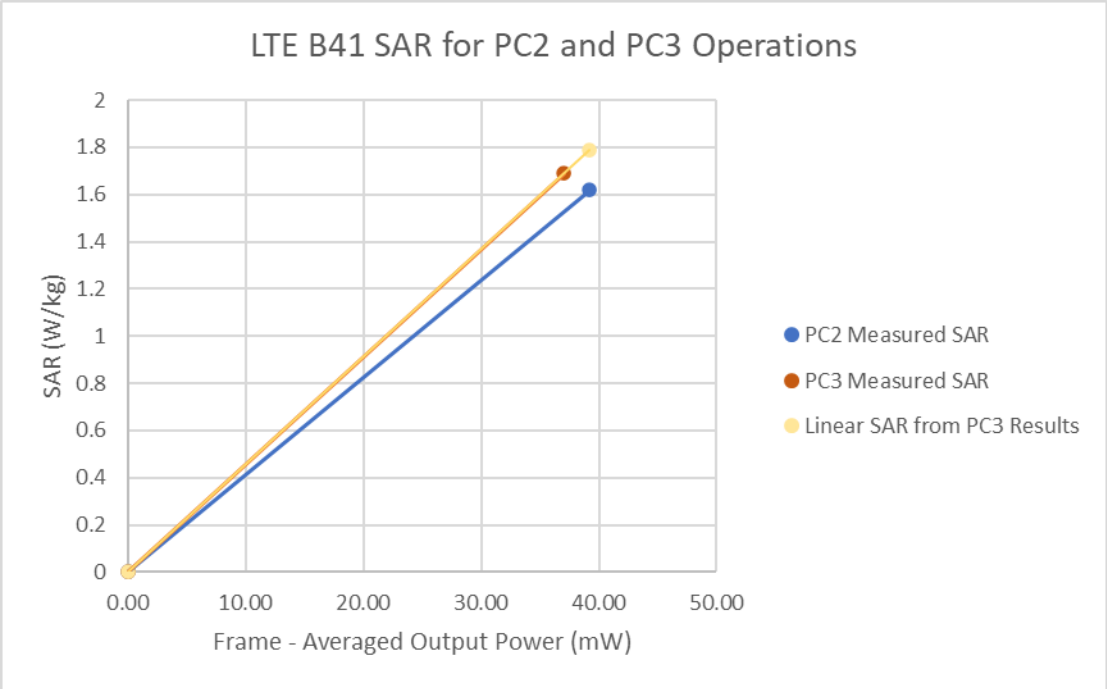


Table 13-18
LTE Band 41 ULCA UMPC Extremity Linearity Data (Antenna B)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	19.0	20.6
Measured Output Power (dBm)	18.01	19.78
Measured SAR (W/kg)	1.820	1.740
Measured Power (mW)	63.24	95.06
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	40.03	41.16
% deviation from expected linearity		-7.02%

Figure 13-12
LTE Band 41 ULCA UMPC Extremity Linearity (Antenna B)

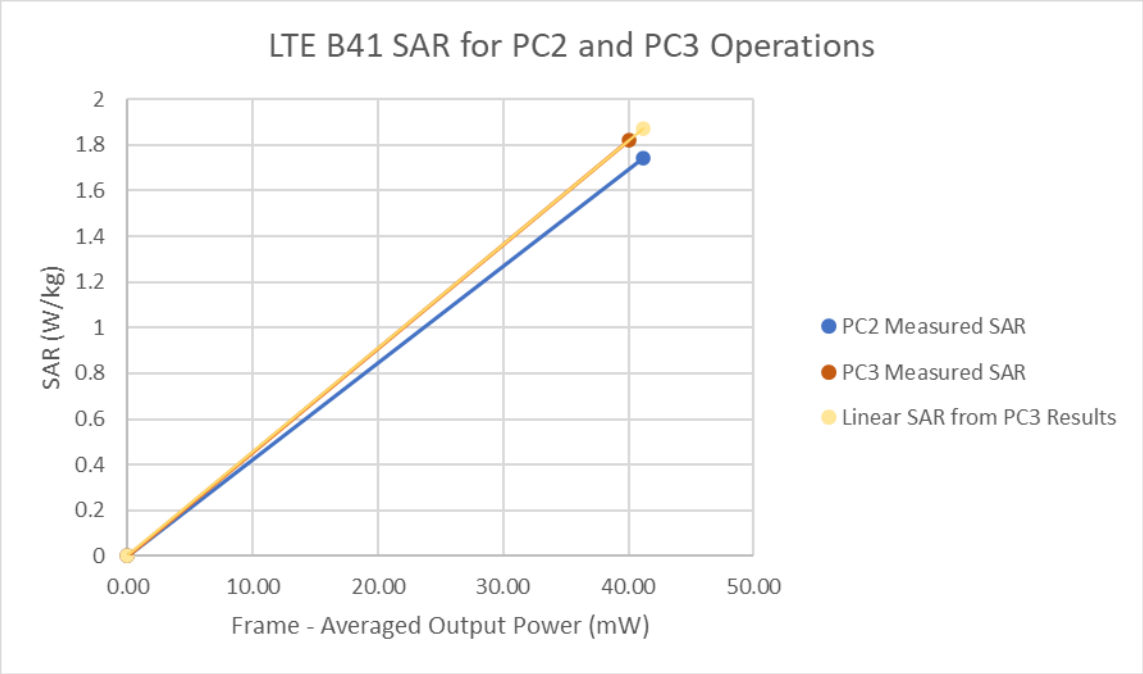


Table 13-19
LTE Band 41 Head Linearity Data (Antenna F)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	25.0	26.7
Measured Output Power (dBm)	24.53	26.16
Measured SAR (W/kg)	0.342	0.317
Measured Power (mW)	283.79	413.05
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	179.64	178.85
% deviation from expected linearity		-6.90%

Figure 13-13
LTE Band 41 Head Linearity (Antenna F)

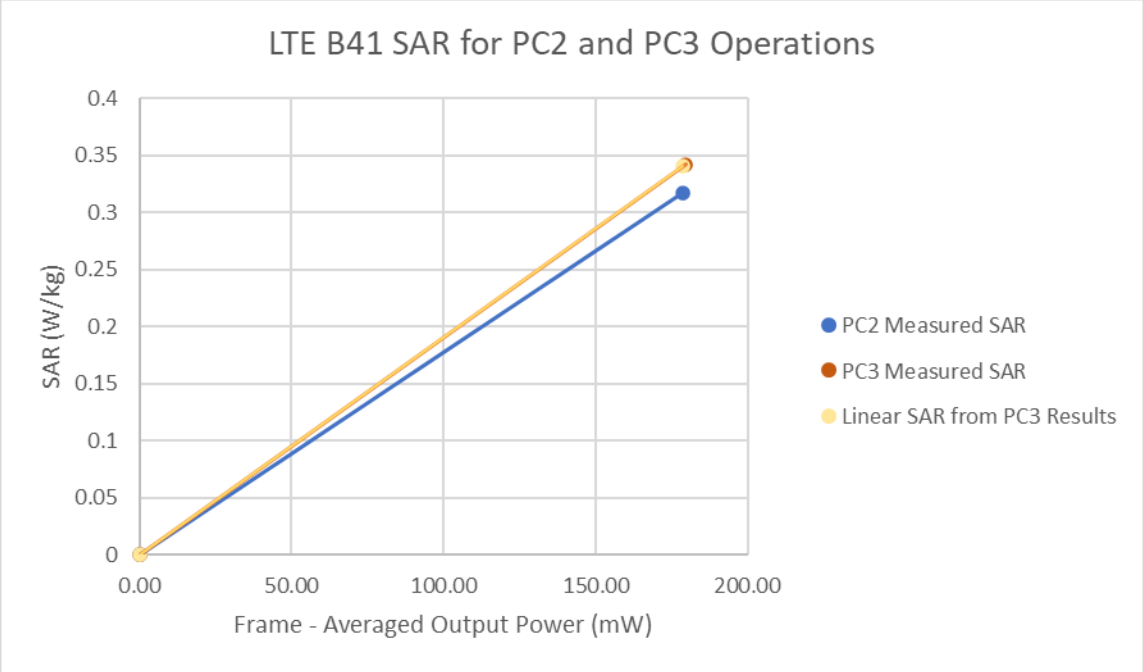


Table 13-20
LTE Band 41 Body-Worn Linearity Data (Antenna F)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	21.0	22.6
Measured Output Power (dBm)	20.37	22.15
Measured SAR (W/kg)	0.054	0.053
Measured Power (mW)	108.89	164.06
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	68.93	71.04
% deviation from expected linearity		-4.76%

Figure 13-14
LTE Band 41 Body-Worn Linearity (Antenna F)

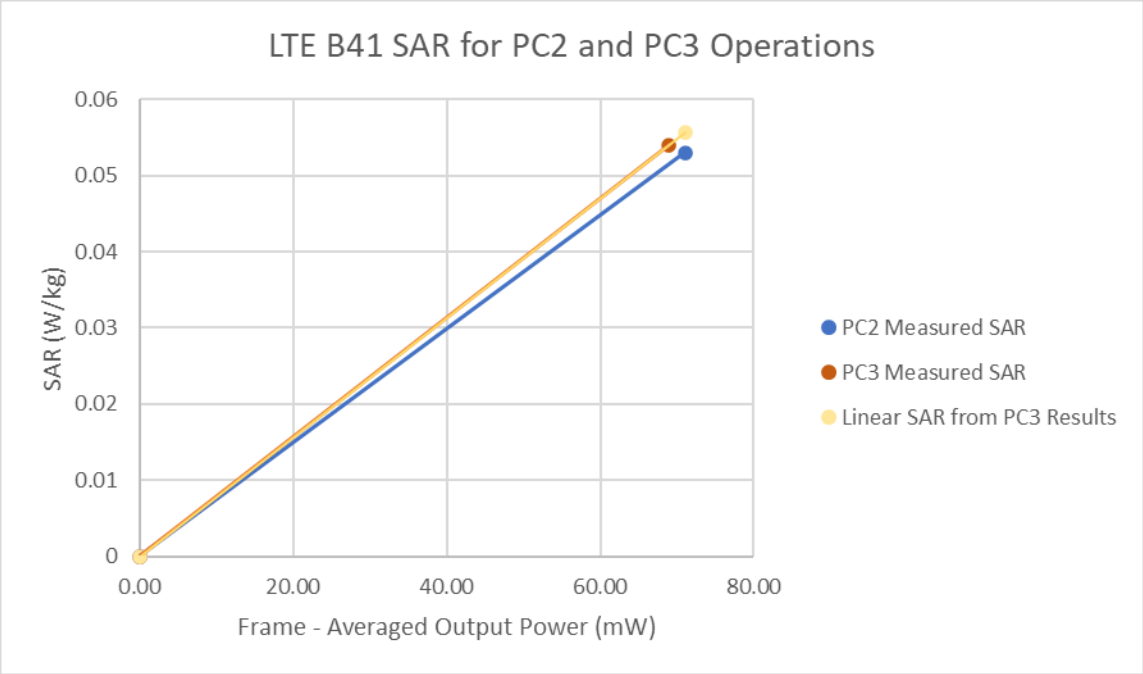
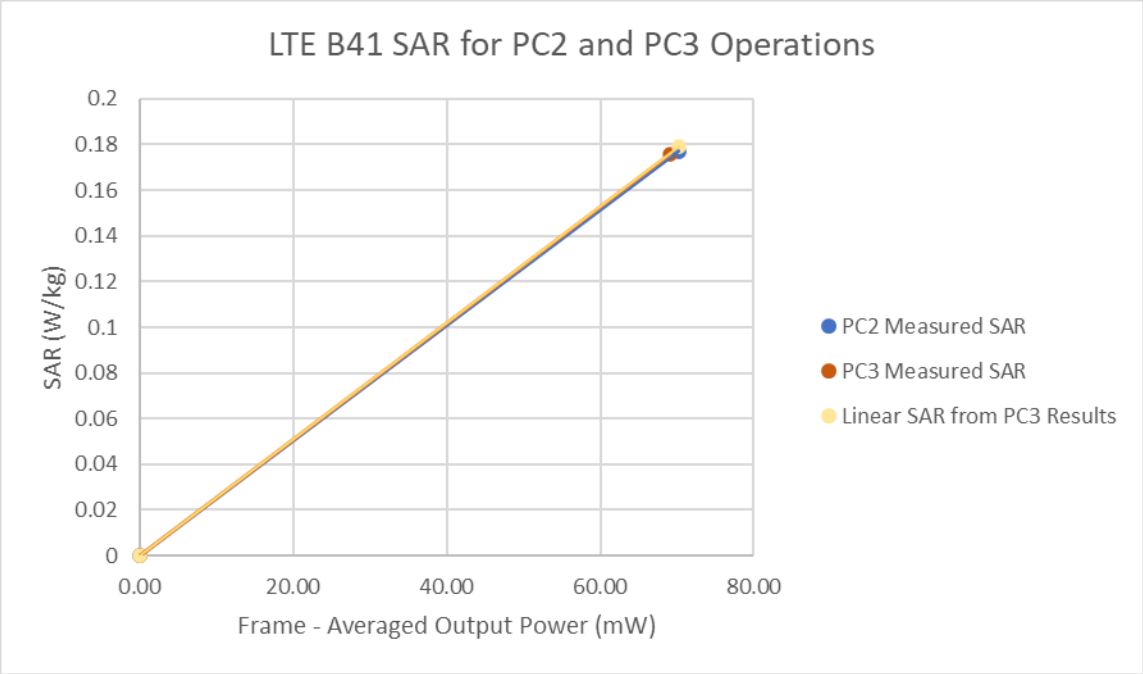


Table 13-21
LTE Band 41 Hotspot Linearity Data (Antenna F)

	LTE Band 41 PC3	LTE Band 41 PC2
Maximum Allowed Output Power (dBm)	21.0	22.6
Measured Output Power (dBm)	20.38	22.10
Measured SAR (W/kg)	0.176	0.177
Measured Power (mW)	109.14	162.18
Duty Cycle	63.3%	43.3%
Frame Averaged Output Power (mW)	69.09	70.22
% deviation from expected linearity		-1.06%

Figure 13-15
LTE Band 41 Hotspot Linearity (Antenna F)



14 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	E4404B	Spectrum Analyzer	N/A	N/A	N/A	MY45113242
Agilent	E4438C	ESG Vector Signal Generator	5/10/2022	Annual	5/10/2023	MY42082659
Agilent	E4438C	ESG Vector Signal Generator	2/14/2022	Annual	2/14/2023	MY42082385
Agilent	N5182A	MXG Vector Signal Generator	6/21/2021	Annual	6/21/2022	MY47420603
Agilent	N5182A	MXG Vector Signal Generator	7/6/2021	Annual	7/6/2022	MY48180366
Agilent	8753ES	S-Parameter Vector Network Analyzer	2/11/2022	Annual	2/11/2023	MY40003841
Agilent	8753ES	S-Parameter Vector Network Analyzer	12/17/2021	Annual	12/17/2022	MY40000670
Agilent	E5515C	Wireless Communications Test Set	5/12/2022	Annual	5/12/2023	GB43304278
Agilent	E5515C	Wireless Communications Test Set	5/6/2021	Annual	5/6/2022	GB44400860
Agilent	N4010A	Wireless Connectivity Test Set	N/A	N/A	N/A	GB46170464
Amplifier Research	1S1G6	Amplifier	CBT	N/A	CBT	433974
Amplifier Research	1S1G6	Amplifier	9/15/2021	Annual	9/15/2022	433971
Anritsu	ML2496A	Power Meter	4/21/2021	Annual	4/21/2022	1351001
Anritsu	ML2496A	Power Meter	3/31/2022	Annual	3/31/2023	1138001
Anritsu	MA2411B	Pulse Power Sensor	4/29/2022	Annual	4/29/2023	1207470
Anritsu	MA2411B	Pulse Power Sensor	9/21/2021	Annual	9/21/2022	1339008
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	5/24/2022	Annual	5/24/2023	6201144418
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	3/31/2022	Annual	3/31/2023	6201664756
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	9/26/2021	Annual	9/26/2022	6201524637
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	8/10/2021	Annual	8/10/2022	6262150000
Anritsu	MT8000A	Radio Communication Test Station	8/2/2021	Annual	8/2/2022	6272337438
Anritsu	MT8000A	Radio Communication Test Station	8/2/2021	Annual	8/2/2022	6272337436
Anritsu	MT8000A	Radio Communication Test Station	8/2/2021	Annual	8/2/2022	6272337437
Anritsu	MA24106A	USB Power Sensor	6/1/2022	Annual	6/1/2023	1349514
Anritsu	MA24106A	USB Power Sensor	7/7/2021	Annual	7/7/2022	1244512
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670623
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670633
Control Company	4353	Long Stem Thermometer	10/28/2020	Biennial	10/28/2022	200670635
Control Company	4040	Therm./ Clock/ Humidity Monitor	1/11/2022	Biennial	1/11/2023	160574418
Control Company	4040	Therm./ Clock/ Humidity Monitor	3/12/2021	Biennial	3/12/2023	210202100
Mitutoyo	500-196-30	CD-6"ASX 6Inch Digital Caliper	2/16/2022	Triennial	2/16/2025	A20238413
Keysight Technologies	N6705B	DC Power Analyzer	5/5/2021	Triennial	5/5/2024	MY53004059
Keysight Technologies	N9020A	MXA Signal Analyzer	4/14/2022	Annual	4/14/2023	MY48010233
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	7/6/2021	Annual	7/6/2022	31634
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	ZUDC10-83-5+	Directional Coupler	CBT	N/A	CBT	2050
Mini-Circuits	ZUDC10-83-5+	Directional Coupler	9/15/2021	Annual	9/15/2022	2111
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Seekonk	TSF-100	Torque Wrench	7/8/2021	Annual	7/8/2022	47639-29
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/18/2022	Annual	4/18/2023	128633
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	3/29/2022	Annual	3/29/2023	171075
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/8/2022	Annual	4/8/2023	162125
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	4/7/2022	Annual	4/7/2023	167283
SPEAG	DAK-3.5	Dielectric Assessment Kit	1/6/2022	Annual	1/6/2023	1278
SPEAG	DAK-3.5	Dielectric Assessment Kit	10/20/2021	Annual	10/20/2022	1091
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	8/18/2021	Annual	8/18/2022	1041
SPEAG	DAKS-3.5	Portable Dielectric Assessment Kit	7/15/2021	Annual	7/15/2022	1039
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1379
SPEAG	CLA13	13 MHz SAR Dipole	9/16/2021	Annual	9/16/2022	1002
SPEAG	D750V3	750 MHz SAR Dipole	2/14/2022	Annual	2/14/2023	1046
SPEAG	D750V3	750 MHz SAR Dipole	3/14/2022	Annual	3/14/2023	1054
SPEAG	D750V3	750 MHz SAR Dipole	5/11/2021	Annual	5/11/2022	1034
SPEAG	D750V3	750 MHz SAR Dipole	10/19/2021	Annual	10/19/2022	1161
SPEAG	D835V2	835 MHz SAR Dipole	5/11/2021	Annual	5/11/2022	4d180
SPEAG	D835V2	835 MHz SAR Dipole	4/14/2022	Annual	4/14/2023	4d119
SPEAG	D835V2	835 MHz SAR Dipole	3/14/2022	Annual	3/14/2023	4d047
SPEAG	D835V2	835 MHz SAR Dipole	10/19/2021	Annual	10/19/2022	4d133
SPEAG	D1765V2	1750 MHz SAR Dipole	5/14/2021	Biennial	5/14/2023	1008
SPEAG	D1900V2	1900 MHz SAR Dipole	10/22/2021	Annual	10/22/2022	5d080
SPEAG	D1900V2	1900 MHz SAR Dipole	9/21/2021	Annual	9/21/2022	5d149
SPEAG	D3900V2	3900 MHz SAR Dipole	6/10/2021	Annual	6/10/2022	1073
SPEAG	D2300V2	2300 MHz SAR Dipole	8/18/2021	Annual	8/18/2022	1073
SPEAG	D2300V2	2300 MHz SAR Dipole	6/3/2021	Annual	6/3/2022	1116
SPEAG	D2450V2	2450 MHz SAR Dipole	8/18/2021	Annual	8/18/2022	719
SPEAG	D2450V2	2450 MHz SAR Dipole	9/20/2020	Biennial	9/20/2022	797
SPEAG	D2450V2	2450 MHz SAR Dipole	11/25/2021	Annual	11/25/2022	981
SPEAG	D2600V2	2600 MHz SAR Dipole	6/14/2019	Triennial	6/14/2022	1064
SPEAG	D2600V2	2600 MHz SAR Dipole	11/12/2019	Triennial	11/12/2022	1071
SPEAG	D2600V2	2600 MHz SAR Dipole	4/14/2021	Biennial	4/14/2023	1004
SPEAG	D3500V2	3500 MHz SAR Dipole	1/19/2021	Biennial	1/19/2023	1059
SPEAG	D3500V2	3500 MHz SAR Dipole	1/21/2020	Triennial	1/21/2023	1097
SPEAG	D3700V2	3700 MHz SAR Dipole	1/21/2020	Triennial	1/21/2023	1067
SPEAG	D3700V2	3700 MHz SAR Dipole	1/19/2021	Biennial	1/19/2023	1018
SPEAG	D3900V2	3900 MHz SAR Dipole	10/9/2020	Biennial	10/9/2022	1056
SPEAG	D3900V2	3900 MHz SAR Dipole	6/10/2021	Annual	6/10/2022	1073
SPEAG	D5GHzV2	5 GHz SAR Dipole	1/10/2022	Annual	1/10/2023	1057
SPEAG	D5GHzV2	5 GHz SAR Dipole	9/15/2021	Annual	9/15/2022	1191
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/21/2022	Annual	2/21/2023	1645
SPEAG	DAE4	Dasy Data Acquisition Electronics	8/3/2021	Annual	8/3/2022	1681
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/11/2021	Annual	5/11/2022	728
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/16/2022	Annual	3/16/2023	1272
SPEAG	DAE4	Dasy Data Acquisition Electronics	7/13/2021	Annual	7/13/2022	1583
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/14/2022	Annual	1/14/2023	1558
SPEAG	DAE4	Dasy Data Acquisition Electronics	11/11/2021	Annual	11/11/2022	1466
SPEAG	DAE4	Dasy Data Acquisition Electronics	8/16/2021	Annual	8/16/2022	1450
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/10/2022	Annual	5/10/2023	1678
SPEAG	DAE4	Dasy Data Acquisition Electronics	12/8/2021	Annual	12/8/2022	859
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/21/2021	Annual	6/21/2022	1676
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/15/2021	Annual	6/15/2022	1334
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/22/2022	Annual	2/22/2023	665
SPEAG	DAE4	Dasy Data Acquisition Electronics	8/4/2021	Annual	8/4/2022	1680
SPEAG	DAE4	Dasy Data Acquisition Electronics	11/10/2021	Annual	11/10/2022	1323
SPEAG	EX3DV4	SAR Probe	8/5/2021	Annual	8/5/2022	7670
SPEAG	EX3DV4	SAR Probe	5/18/2021	Annual	5/18/2022	3914
SPEAG	EX3DV4	SAR Probe	3/21/2022	Annual	3/21/2023	7527
SPEAG	EX3DV4	SAR Probe	7/20/2021	Annual	7/20/2022	7410
SPEAG	EX3DV4	SAR Probe	1/19/2022	Annual	1/19/2023	7570
SPEAG	EX3DV4	SAR Probe	11/15/2021	Annual	11/15/2022	7565
SPEAG	EX3DV4	SAR Probe	2/24/2022	Annual	2/24/2023	7640
SPEAG	EX3DV4	SAR Probe	6/28/2021	Annual	6/28/2022	7661
SPEAG	EX3DV4	SAR Probe	5/18/2022	Annual	5/18/2023	7660
SPEAG	EX3DV4	SAR Probe	1/10/2022	Annual	1/10/2023	7571
SPEAG	EX3DV4	SAR Probe	7/20/2021	Annual	7/20/2022	7406
SPEAG	EX3DV4	SAR Probe	6/21/2021	Annual	6/21/2022	7409
SPEAG	EX3DV4	SAR Probe	2/22/2022	Annual	2/22/2023	7417
SPEAG	EX3DV4	SAR Probe	9/20/2021	Annual	9/20/2022	7552
SPEAG	EX3DV4	SAR Probe	11/16/2021	Annual	11/16/2022	7538

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

15 MEASUREMENT UNCERTAINTIES

a	b	c	d	e= f(d,k)	f	g	h = c x f/e	i = c x g/e	k
Uncertainty Component	IEEE 1528 Sec.	Tol. (± %)	Prob. Dist.	Div.	c_i 1gm	c_i 10 gms	1gm u_i (± %)	10gms u_i (± %)	v_i
Measurement System									
Probe Calibration	E.2.1	7	N	1	1	1	7.0	7.0	∞
Axial Isotropy	E.2.2	0.25	N	1	0.7	0.7	0.2	0.2	∞
Hemishperical Isotropy	E.2.2	1.3	N	1	0.7	0.7	0.9	0.9	∞
Boundary Effect	E.2.3	2	R	1.732	1	1	1.2	1.2	∞
Linearity	E.2.4	0.3	N	1	1	1	0.3	0.3	∞
System Detection Limits	E.2.4	0.25	R	1.732	1	1	0.1	0.1	∞
Modulation Response	E.2.5	4.8	R	1.732	1	1	2.8	2.8	∞
Readout Electronics	E.2.6	0.3	N	1	1	1	0.3	0.3	∞
Response Time	E.2.7	0.8	R	1.732	1	1	0.5	0.5	∞
Integration Time	E.2.8	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Conditions - Noise	E.6.1	3	R	1.732	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	3	R	1.732	1	1	1.7	1.7	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.8	R	1.732	1	1	0.5	0.5	∞
Probe Positioning w/ respect to Phantom	E.6.3	6.7	R	1.732	1	1	3.9	3.9	∞
Extrapolation, Interpolation & Integration algorithms for Max. SAR Evaluation	E.5	4	R	1.732	1	1	2.3	2.3	∞
Test Sample Related									
Test Sample Positioning	E.4.2	3.12	N	1	1	1	3.1	3.1	35
Device Holder Uncertainty	E.4.1	1.67	N	1	1	1	1.7	1.7	5
Output Power Variation - SAR drift measurement	E.2.9	5	R	1.732	1	1	2.9	2.9	∞
SAR Scaling	E.6.5	0	R	1.732	1	1	0.0	0.0	∞
Phantom & Tissue Parameters									
Phantom Uncertainty (Shape & Thickness tolerances)	E.3.1	7.6	R	1.73	1.0	1.0	4.4	4.4	∞
Liquid Conductivity - measurement uncertainty	E.3.3	4.3	N	1	0.78	0.71	3.3	3.0	76
Liquid Permittivity - measurement uncertainty	E.3.3	4.2	N	1	0.23	0.26	1.0	1.1	75
Liquid Conductivity - Temperature Uncertainty	E.3.4	3.4	R	1.732	0.78	0.71	1.5	1.4	∞
Liquid Permittivity - Temperature Unceritainty	E.3.4	0.6	R	1.732	0.23	0.26	0.1	0.1	∞
Liquid Conductivity - deviation from target values	E.3.2	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Permittivity - deviation from target values	E.3.2	5.0	R	1.73	0.60	0.49	1.7	1.4	∞
Combined Standard Uncertainty (k=1)			RSS				12.2	12.0	191
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				24.4	24.0	

The above measurement uncertainties are according to IEEE Std. 1528-2013

16 CONCLUSION

16.1 Measurement Conclusion

The SAR evaluation indicates that the EUT complies with the RF radiation exposure limits of the FCC and Innovation, Science, and Economic Development Canada, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables. [3]

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