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TEST REPORT

Report Number: 101488929LEX-004

Project Number: G101488929

Evaluation of Model Number: R12 Series Tablet

FCCID: Q3QHSWEM7355

ICID: 4578A-SWEM7355

Tested to the SAR Criteria in

FCC Part §2.1093

Industry Canada RSS-102 Issue 4

For

Motion Computing

Test Performed by:

Intertek
731 Enterprise Drive
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Test Authorized by:

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1.0 DOCUMENT HISTORY

Revision/ Project Number	Writer Initials	Date	Change
1.0 /G101488929	CD	6/15/2014	Original document

2.0 INTRODUCTION

At the request of Motion Computing, the R12 Series Tablet was evaluated for SAR in accordance with the requirements for FCC Part 2.1093 and RSS-102. Testing was performed in accordance with IEEE Std 1528, IEC62209-2, and the Office of Engineering and Technology KDB 447498. Testing was performed at the Intertek facility in Lexington, Kentucky.

For the evaluation, the dosimetric assessment system DASY52 was used. The total uncertainty for the evaluation of the spatial peak SAR values averaged over a cube of 1g tissue mass had been assessed for this system to be $\pm 21.4\%$.

The R12 Series Tablet was tested at the maximum output power measured by Intertek. Maximum output power measurements are tabulated under 9.0 Tabular Test Results.

The maximum spatial peak SAR value for the sample device averaged over 1g was found to be:

Technology	Band	UL Frequency Range (MHz)	Channel	Frequency (MHz)	Conducted Output Power (dBm)	Reported SAR _{1g} – Body Mode (W/kg)	Limit (W/kg)
LTE	B2	1850-1910	18700	1860	18.52	1.32	1.6
	B4	1710-1755	20175	1732.5	21.89	1.05	1.6
	B5	824-849	20525	836.5	21.49	1.05	1.6
	B13	777-787	23230	782	21.51	1.25	1.6
	B17	704-716	23790	710	21.29	1.27	1.6
	B25	1850-1915	26365	1882.5	22.14	1.08	1.6
WCDMA/ HSDPA/ HSUPA/ HSPA+	B2	1850-1910	9262	1852.4	18.93	1.26	1.6
	B4	1710-1755	1312	1712.4	22.97	1.56	1.6
	B5	824-849	4183	836.6	22.60	1.06	1.6
CDMA/EVDO	BC0	824-849	384	836.52	21.22	1.11	1.6
	BC1	1850-1910	600	1880	24.50	1.53	1.6
	BC10 ¹	816.0-823.975	560	820	23.80	1.38	1.6
GSM (GSMK)	GSM850	824-849	251	848	31.6	1.44	1.6
	GSM1900	1850-1910	810	1909.8	25.50	1.32	1.6

Table 1: Maximum Measured SAR

Based on the worst-case data presented above, the R12 Series Tablet was found to be **compliant** with the 1.6 mW/g requirement for general population / uncontrolled exposure.

Modifications made to test sample

Intertek implemented no modifications.

¹ Only BC10 Subclasses 2 and 3 frequencies are supported by hardware and firmware.

3.0 TEST SITE DESCRIPTION

The SAR test site located at 731 Enterprise Drive, Lexington KY 40510 is comprised of the SPEAG model DASY 5.2 automated near-field scanning system, which is a package, optimized for dosimetric evaluation of mobile radios [3]. This system is installed in an ambient-free shielded chamber. The ambient temperature is controlled to $22.0 \pm 2^{\circ}\text{C}$. During the SAR evaluations, the RF ambient conditions are monitored continuously for signals that might interfere with the test results. The tissue simulating liquid is also stored in this area in order to keep it at the same constant ambient temperature as the room.

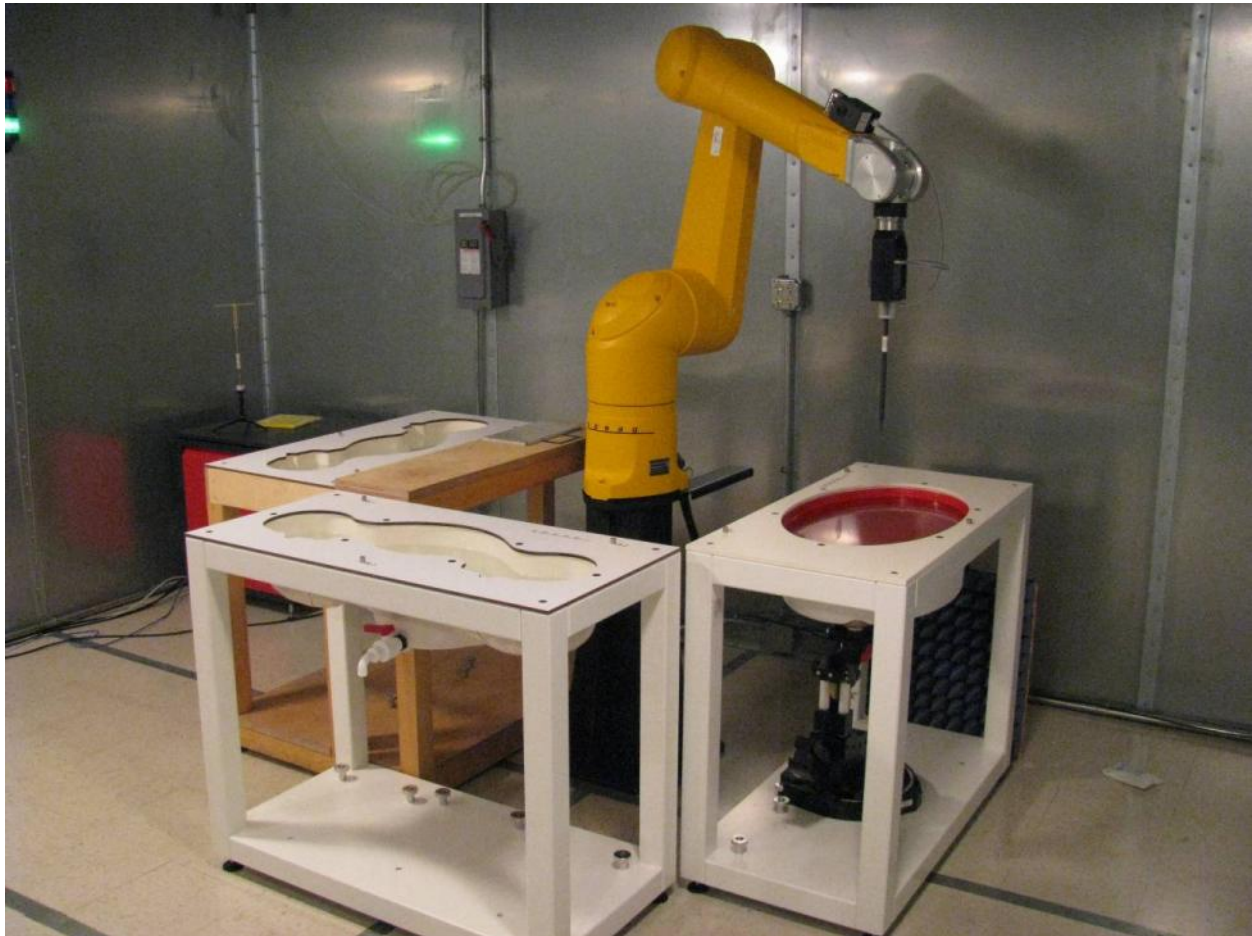


Figure 1: Intertek SAR Test Site

Measurement Equipment

The following major equipment/components were used for the SAR evaluation:

Description	Serial Number	Manufacture	Model	Cal. Date	Cal. Due	Eq. Used
SAR Probe	3516	Speag	EXDV3	12/13/13	12/13/14	<input checked="" type="checkbox"/>
System Verification Dipole	1042	Speag	D750V3	9/16/13	9/16/14	<input checked="" type="checkbox"/>
System Verification Dipole	4d122	Speag	D835V2	9/17/13	9/17/14	<input checked="" type="checkbox"/>
System Verification Dipole	13	Speag	D900V2	12/13/13	12/13/14	<input type="checkbox"/>
System Verification Dipole	224	Speag	D1800V2	12/9/13	12/9/14	<input checked="" type="checkbox"/>
System Verification Dipole	3661	Speag	D1900V2	9/17/13	9/17/14	<input checked="" type="checkbox"/>
DAE	3269	Speag	DAE4	9/13/13	9/13/14	<input checked="" type="checkbox"/>
Vector Signal Generator	257708	Rohde & Schwarz	SMBV100A	12/9/13	11/9/14	<input checked="" type="checkbox"/>
Network Analyzer	US391739 83	Agilent	8753ES	3/17/14	3/17/15	<input checked="" type="checkbox"/>
Power Meter	8650456	Gigatronics	8651	10/14/13	10/14/14	<input checked="" type="checkbox"/>
Power Sensor	1832668	Gigatronics	80601A	10/15/13	10/14/14	<input checked="" type="checkbox"/>
USB Power Sensor	100705	Rohde & Schwarz	NRP-Z51	9/10/13	9/10/14	<input checked="" type="checkbox"/>
Spectrum Analyzer	3099	Rohde & Schwarz	FSP7	9/11/13	9/11/14	<input checked="" type="checkbox"/>
Base Station Simulator	119981	Rohde & Schwarz	CMU200	1/8/14	1/8/15	<input checked="" type="checkbox"/>
Base Station Simulator	1065295	Rohde & Schwarz	CMW500	8/30/13	8/30/14	<input checked="" type="checkbox"/>
Dielectric Probe Kit	1111	Speag	DAK-3.5	NCR	NCR	<input checked="" type="checkbox"/>
Caliber	0048183	Mitutoyo	CD-12" CP	10/4/13	10/4/15	<input checked="" type="checkbox"/>
Gauge Block Set	1301517	Mitutoyo	516-960-26	TOU	TOU	<input checked="" type="checkbox"/>
ELI5 Phantom	1144	Speag	QDOVA002A A	NCR	NCR	<input checked="" type="checkbox"/>
6-axis robot	F11/5H1Y A/A/01	Staubli	RX-90	NCR	NCR	<input checked="" type="checkbox"/>

Table 2: Test Equipment Used for SAR Evaluation

Measurement Uncertainty

The Table below includes the uncertainty budget suggested by the IEEE Std 1528-2003 and determined by SPEAG for the DASY5 measurement System.

Error Description	Uncertainty Value	Prob. Dist.	Div.	c_i (1g)	c_i (10g)	Std.Unc. (1g)	Std.Unc. (10g)	(v_i) v_{eff}
Measurement System								
Probe Calibration	±5.5%	N	1	1	1	±5.5%	±5.5%	∞
Axial Isotropy	±4.7%	R	√3	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	√3	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effect	±1.0%	R	√3	1	1	±0.6%	±0.6%	∞
Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	√3	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	√3	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	√3	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	√3	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	√3	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.4%	R	√3	1	1	±0.2%	±0.2%	∞
Probe Positioning	±2.9%	R	√3	1	1	±1.7%	±1.7%	∞
Max. SAR Eval.	±1.0%	R	√3	1	1	±0.6%	±0.6%	∞
Test sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	√3	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	√3	1	1	±2.3%	±2.3%	∞
Liquid Conductivity (target)	±5.0%	R	√3	0.64	0.43	±1.8%	±1.2%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.64	0.43	±1.6%	±1.1%	∞
Liquid Permittivity (target)	±5.0%	R	√3	0.6	0.49	±1.7%	±1.4%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.6	0.49	±1.5%	±1.2%	∞
Combined Standard Uncertainty						±10.7%	±10.5%	387
Expanded STD Uncertainty						±21.4%	±21.0%	

Table 3: Measurement Uncertainty Analysis for DASY5 Test System

Notes.

1. Worst Case uncertainty budget for DASY5 assessed according to IEEE 1528-2003. The budget is valid for the frequency range 300 MHz – 3 GHz and represents a worst-case analysis. For specific tests and configurations, the uncertainty could be considerably smaller.

Error Description	Uncertainty Value	Prob. Dist.	Div.	c_i (1g)	c_i (10g)	Std.Unc. (1g)	Std.Unc. (10g)	(v_i) v_{eff}
Measurement System								
Probe Calibration	±6.55%	N	1	1	1	±6.55%	±6.55%	∞
Axial Isotropy	±4.7%	R	√3	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	√3	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effect	±2.0%	R	√3	1	1	±1.2%	±1.2%	∞
Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	√3	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	√3	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	√3	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	√3	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	√3	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.8%	R	√3	1	1	±0.5%	±0.5%	∞
Probe Positioning	±9.9%	R	√3	1	1	±5.7%	±5.7%	∞
Max. SAR Eval.	±4.0%	R	√3	1	1	±2.3%	±2.3%	∞
Test sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	√3	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	√3	1	1	±2.3%	±2.3%	∞
Liquid Conductivity (target)	±5.0%	R	√3	0.64	0.43	±1.8%	±1.2%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.64	0.43	±1.6%	±1.1%	∞
Liquid Permittivity (target)	±5.0%	R	√3	0.6	0.49	±1.7%	±1.4%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.6	0.49	±1.5%	±1.2%	∞
Combined Standard Uncertainty						±12.8%	±12.8%	330
Expanded STD Uncertainty						±25.6%	±25.2%	

Table 4: Measurement Uncertainty Analysis for DASY5 Test System

Notes:

Worst Case uncertainty budget for DASY5 assessed according to IEEE 1528-2003. The budget is valid for the frequency range 3 GHz – 6 GHz and represents a worst-case analysis. Probe calibration error reflects uncertainty of the EX3D probe. For specific tests and configurations, the uncertainty could be considerably smaller.

4.0 JOB DESCRIPTION

At the request of Motion Computing, the R12 Series Tablet was evaluated to the requirements defined in KDB 447498 and 616217. Motion Computing has implemented the Motion 4G module (FCCID Q3QHSWEM7355) into their R12 Series Tablet tablet PC. The tablet also contains the Intel 7260 WLAN module (FCCID – PD97260G).

Test sample	
Manufacturer	Motion Computing
Tablet Model Number	R12 Series Tablet
Cell Module Model	EM7355
Serial Number	Test Sample 1
Receive Date	4/22/2014
Device Received Condition	Production
Device Category	Portable
RF Exposure Category	General Population/Uncontrolled Environment
Antenna Type	Internal
Test sample Accessories	
Battery Pack	Standard Li Polymer Battery
Contact Information	
Contact Name	John Nagy
Phone Number	(512) 637-1143
Email Address	jnagy@motioncomputing.com

Table 5: Product Information

Technology	Band	UL Frequency Range (MHz)	DL Frequency Range (MHz)	Nominal Output Power (\pm Tolerance)	Duty Cycle
LTE	B2	1850-1910	1930-1990	23dBm (\pm 1dB)	1:1
	B4	1710-1755	2110-2155	23dBm (\pm 1dB)	1:1
	B5	824-849	869-894	23dBm (\pm 1dB)	1:1
	B13	777-787	746-756	23dBm (\pm 1dB)	1:1
	B17	704-716	734-746	23dBm (\pm 1dB)	1:1
	B25	1850-1915	1930-1995	23dBm (\pm 1dB)	1:1
WCDMA R99/ HSDPA R7/ HSUPA R6	B2	1850-1910	1930-1990	23dBm (\pm 1dB)	1:1
	B4	1710-1755	2110-2155	23dBm (\pm 1dB)	1:1
	B5	824-849	869-894	23dBm (\pm 1dB)	1:1
CDMA/EVDO	BC0	824-849	869-894	23dBm (+.05/-1dB)	1:1
	BC1	1850-1910	1930-1990	23dBm (+.05/-1dB)	1:1
	BC10 ²	816.0-823.975	861.0-868.975	23dBm (+.05/-1dB)	1:1
GSM (GSMK) – Multislot Class 10	GSM850	824-849	869-894	32dBm (\pm 1dB)	2:8
	GSM1900	1850-1910	1930-1990	29dBm (\pm 1dB)	2:8
EDGE (8PSK) – Multislot Class 12	GSM850	824-849	869-894	27dBm (\pm 1dB)	4:8
	GSM1900	1850-1910	1930-1990	26dBm (\pm 1dB)	4:8

Table 6: Band Support and Maximum Output Power Details for Cellular Module

	GSM	WCDMA	CDMA2000	LTE	WiFi 2.4 GHz	WiFi 5 GHz	BT
Modes	<input checked="" type="checkbox"/> GPRS (GSMK) Class 10	<input checked="" type="checkbox"/> HSDPA R7	<input checked="" type="checkbox"/> 1xRTT	<input checked="" type="checkbox"/> QPSK	<input checked="" type="checkbox"/> 802.11b	<input checked="" type="checkbox"/> 802.11a	<input checked="" type="checkbox"/> V4.0
	<input checked="" type="checkbox"/> EGPRS (8PSK) Class 12	<input checked="" type="checkbox"/> HSUPA R6	<input checked="" type="checkbox"/> EVDO Rel 0	<input checked="" type="checkbox"/> 16QAM	<input checked="" type="checkbox"/> 802.11g	<input checked="" type="checkbox"/> 802.11n HT20	
		<input checked="" type="checkbox"/> HSPA +	<input checked="" type="checkbox"/> EVDO Rev A		<input checked="" type="checkbox"/> 802.11n HT20	<input checked="" type="checkbox"/> 802.11n HT40	
		<input type="checkbox"/> DC-HSDPA R8	<input type="checkbox"/> 1xAdvanced		<input checked="" type="checkbox"/> 802.11n HT40	<input checked="" type="checkbox"/> 802.11AC	

Table 7: Wireless Technologies Supported by Module

² Only BC10 Subclasses 2 and 3 frequencies are supported by hardware and firmware.

Test Sample Details:

Photographs of the test sample and its accessories are shown in Figure 2 through Figure 3.



Figure 2: Front of Test Sample



Figure 3: Back of Test Sample

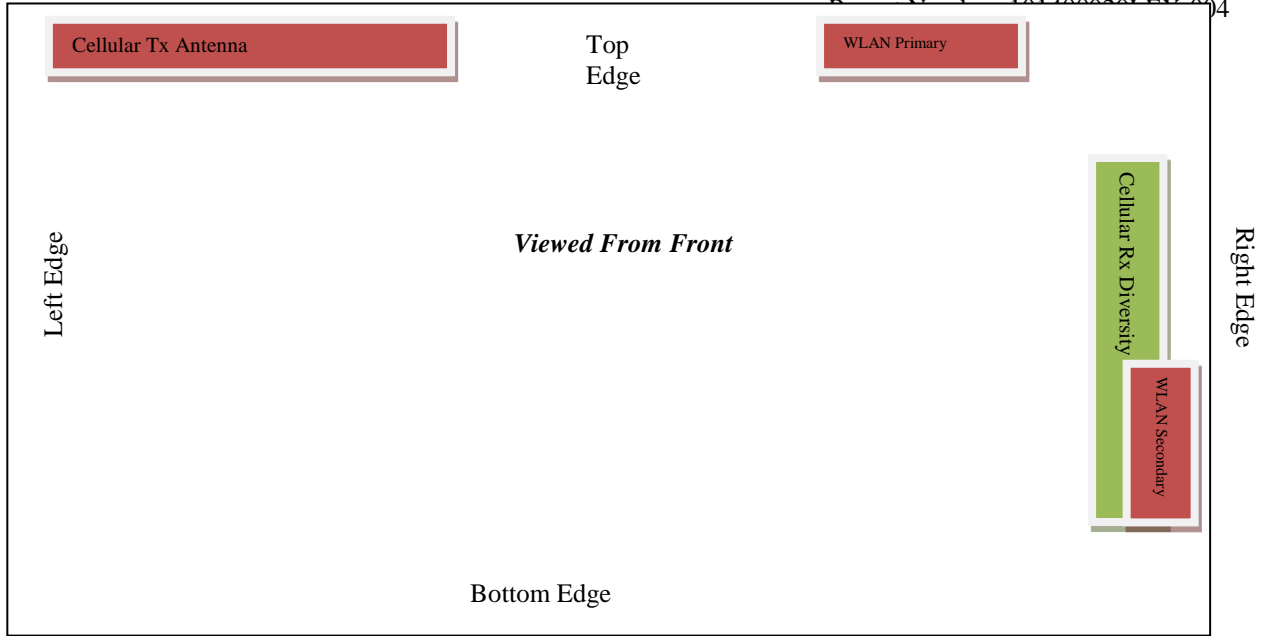


Figure 4: Approximate Antenna Locations When Viewed from Front of Tablet³

	Separation Distances (mm)		
	Cellular Tx Antenna	WLAN Primary	WLAN Secondary
Cellular Tx Ant.			
WLAN Primary	106.9		
WLAN Secondary	226.2	136.5	
Top Edge	5.5	8.1	120.8
Left Edge	40.65	232.75	308.35
Right Edge	202.95	75.05	8.05
Bottom Edge	190.75	190.75	34.75

Table 8: Antenna Separation Distances

Surface/Location	Distance (mm)
Back Surface	2.3

Table 9: Separation Distance Introduced by Edge Bumpers⁴

³ The operational description exhibit contains details on antenna location and spacing.

⁴ The bumper spacing was measured with a production sample by placing the sample on a flat surface and measuring the distance with gauge blocks. The only protrusions were on the backside of the tablet. All other edges matted against the phantom during testing without additional spacing.

Proximity Sensor Details

Proximity sensors are used in the R12 Series Tablet to ensure RF exposure when the cellular antenna is positioned close to the user's body. The device implements 2 proximity sensors to provide coverage areas on each edge and backside surrounding the transmitting cellular antenna. The design provides a single stage power-back off when the sensor is triggered. The amount of power reduction is static but is different for each transmit band as summarized in Table 10. Power reduction is not applied to the WLAN transmitter located in the tablet.

The proximity sensor triggering distances and angles were determined according to KDB 616217. The tablet had software that displayed the triggering state of power reduction. The sensors can also be disabled through special development software. This software is not available to the end user and is only used for development. The tablet was placed under the phantom and moved toward the phantom in the step sequence described in KDB 616217 until the proximity sensor triggering distance was determined. The sequence was repeated with the tablet placed against the phantom to determine the distance where the proximity sensor is no longer triggered. The most conservative distance determined minus 1mm was used as the test distance for the SAR scans. This process performed on the backside, top edge and the surface with the tablet tilted at 57 deg as shown in the photos. The tilted angle was evaluated since it is the angle which produces the closest distance from the cellular antenna to the phantom. A diagram and technical information is contained in the operational description exhibit showing this separation distance. The process was performed for all bands with the phantom filled with the respective fluid. The triggering distance for the right side edge surface nearest the antenna was not determined since the SAR scans were performed with the proximity sensors disabled at full power. See Figure 5 through Figure 7 for the triggering distance test results.

The influence of the tablet tilt angles to proximity sensor triggering investigated, as described in KDB 616217, by positioning the tablet edge that contains the transmitting antenna perpendicular to the flat phantom and rotating the edge $\pm 45^\circ$ from the vertical at 0° . During this process, the tablets proximity sensors remained triggered. The test was performed at the distance triggering distance performed above. The sensors were verified to remain triggered for both all bands.

The device used multiple proximity sensors that are co-located with the antenna to provide sensor coverage area around the transmitting antenna. The measured peak SAR values fall within the sensor coverage area.

Band	Target Power Reduction (dB)
CDMA Cell BC0	3.0
CDMA Cell BC10	3.0
CDMA PCS BC1	5.5
GSM 850 – GMSK – 1 Slot	2.0
GSM 850 – GMSK – 2 Slot	5.0
GSM 850 – 8PSK – 2 Slot	3.0
GSM 1900 – GMSK – 1 Slot	2.0
GSM 1900 – GMSK – 2 Slot	4.0
GSM 1900 – 8PSK – 1 Slot	3.0
GSM 1900 – 8PSK – 2 Slot	4.0
UMTS – Band 2	4.0
UMTS – Band 4	4.5
LTE – Band 2	4.5
LTE – Band 4	6.8
LTE – Band 25	5.0

Table 10: Target Power Reduction

Tablet Surface	Trigger Distance (mm)		
	Cell Band/700 MHz Band	AWS Band	PCS Band
Back Side	6	6	6
Bottom Edge	10	10	10
Tilted Edge	12	12	12
Side Edge (nearest WWAN Antenna)	Tested full power against phantom with 0mm spacing.		

Table 11: Proximity Sensor Trigger Distance Summary

Distance (mm)	Output Power (dBm)	
	Approaching	Retracting
0	16.2	16.2
1	16.2	16.2
2	16.2	16.2
3	16.2	16.2
4	16.2	16.2
5	16.2	16.2
6	16.2	16.2
7	23	16.2
8	23	16.2
9	23	16.2
10	23	16.2
11	23	16.2
12	23	16.2
13	23	16.2
14	23	16.2
15	23	16.2
16	23	16.2
17	23	16.2
18	23	16.2
19	23	16.2
20	23	16.2
21	23	16.2
22	23	16.2
23	23	16.2
24	23	23
25	23	23
26	23	23
27	23	23
28	23	23
29	23	23
30	23	23
31	23	23
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37	23	23
38	23	23
39	23	23
40	23	23

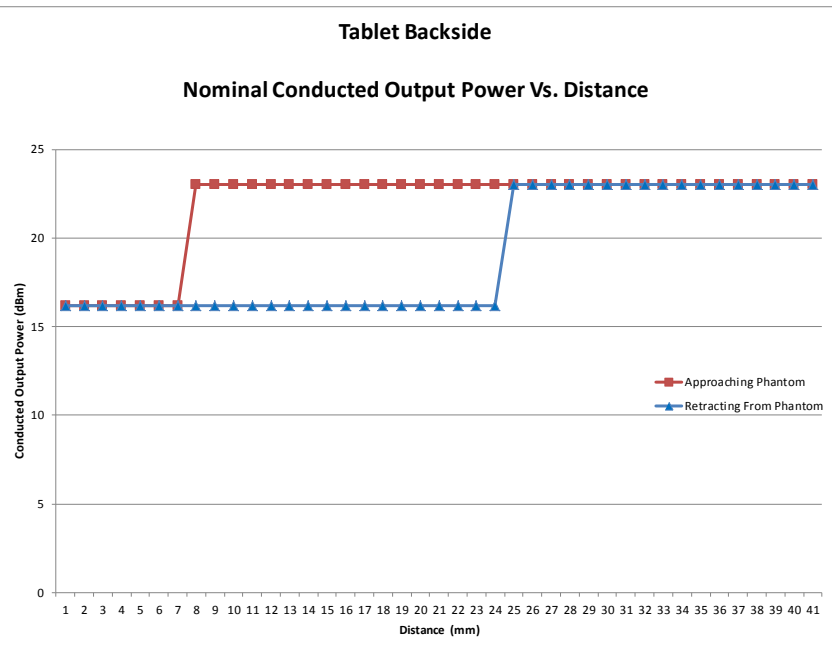


Figure 5: Nominal Output Power vs Trigger Distance – Tablet Backside

Distance (mm)	Output Power (dBm)	
	Approaching	Retracting
0	16.2	16.2
1	16.2	16.2
2	16.2	16.2
3	16.2	16.2
4	16.2	16.2
5	16.2	16.2
6	16.2	16.2
7	16.2	16.2
8	16.2	16.2
9	16.2	16.2
10	16.2	16.2
11	23	16.2
12	23	16.2
13	23	16.2
14	23	16.2
15	23	16.2
16	23	16.2
17	23	16.2
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39	23	23
40	23	23

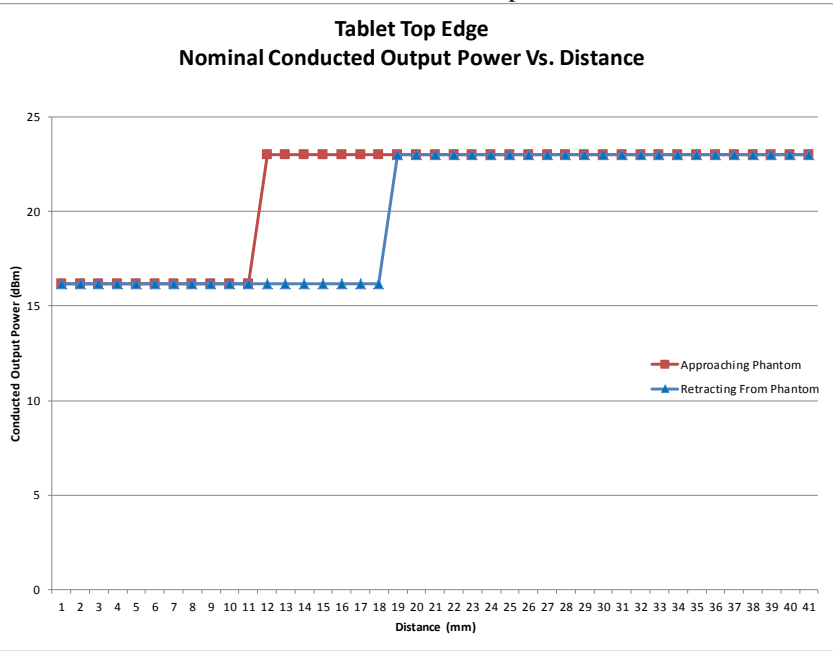


Figure 6: Nominal Output Power vs Trigger Distance – Tablet Top Edge

Distance (mm)	Output Power (dBm)	
	Approaching	Retracting
0	16.2	16.2
1	16.2	16.2
2	16.2	16.2
3	16.2	16.2
4	16.2	16.2
5	16.2	16.2
6	16.2	16.2
7	16.2	16.2
8	16.2	16.2
9	16.2	16.2
10	16.2	16.2
11	16.2	16.2
12	16.2	16.2
13	23	16.2
14	23	16.2
15	23	16.2
16	23	16.2
17	23	16.2
18	23	16.2
19	23	16.2
20	23	16.2
21	23	23
22	23	23
23	23	23
24	23	23
25	23	23
26	23	23
27	23	23
28	23	23
29	23	23
30	23	23
31	23	23
32	23	23
33	23	23
34	23	23
35	23	23
36	23	23
37	23	23
38	23	23
39	23	23
40	23	23

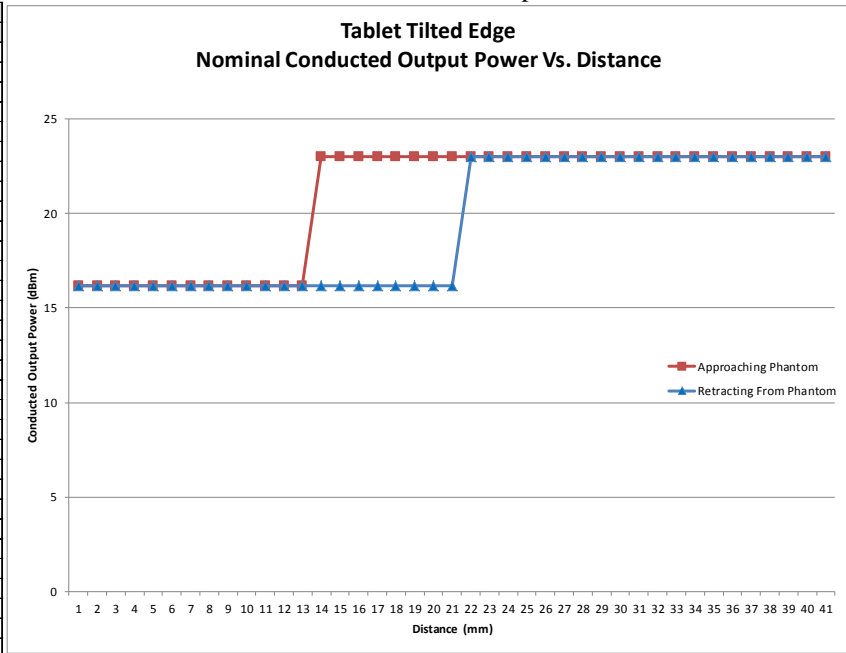


Figure 7: Nominal Output Power vs Trigger Distance – Tablet Tilted Edge

Angle from Phantom to EUT (deg)	Proximity Sensor Status
0	Triggered
5	Triggered
10	Triggered
15	Triggered
20	Triggered
25	Triggered
30	Triggered
35	Triggered
40	Triggered
45	Triggered
50	Triggered
55	Triggered
60	Triggered
65	Triggered
70	Triggered
75	Triggered
80	Triggered
85	Triggered
90	Triggered

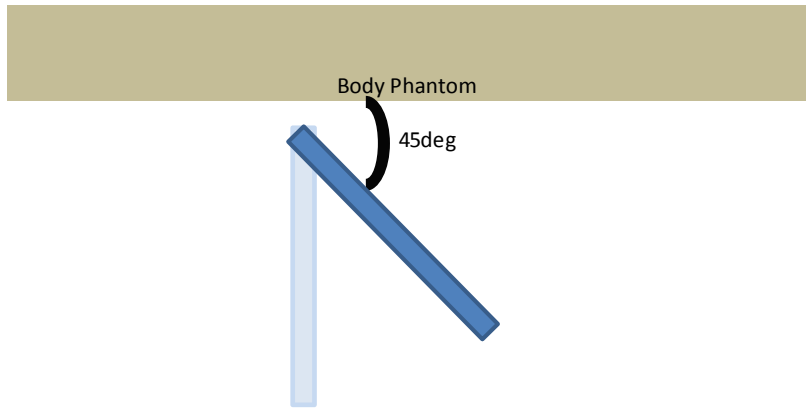


Figure 8: Tablet Tilt Angle Influence on Proximity Sensor Triggering – Tablet Backside

Angle from Phantom to EUT (deg)	Proximity Sensor Status
-45	Triggered
-40	Triggered
-35	Triggered
-30	Triggered
-25	Triggered
-20	Triggered
-15	Triggered
-10	Triggered
-5	Triggered
0	Triggered
5	Triggered
10	Triggered
15	Triggered
20	Triggered
25	Triggered
30	Triggered
35	Triggered
40	Triggered
45	Triggered

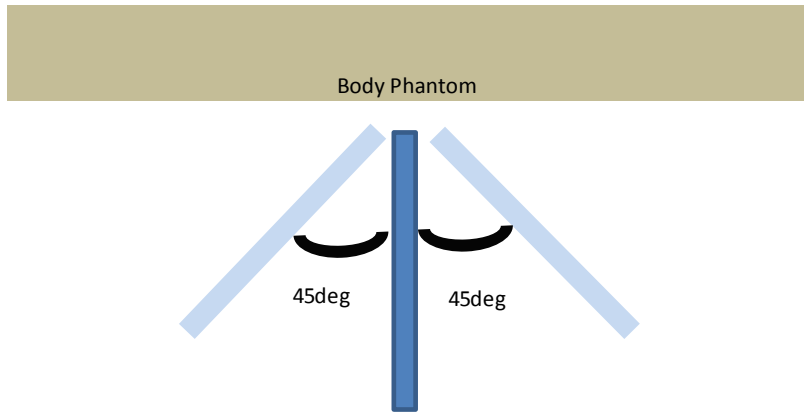


Figure 12: Tablet Tilt Angle Influence on Proximity Sensor Triggering – Tablet Bottom Edge

5.0 SYSTEM VERIFICATION

System Validation

Prior to the assessment, the system was verified to be within $\pm 10\%$ of the specifications by using the system validation kit. The system validation procedure tests the system against reference SAR values and the performance of probe, readout electronics and software. The test setup utilizes a phantom and reference dipole. The results from the system verifications with a dipole are shown in Figure 1

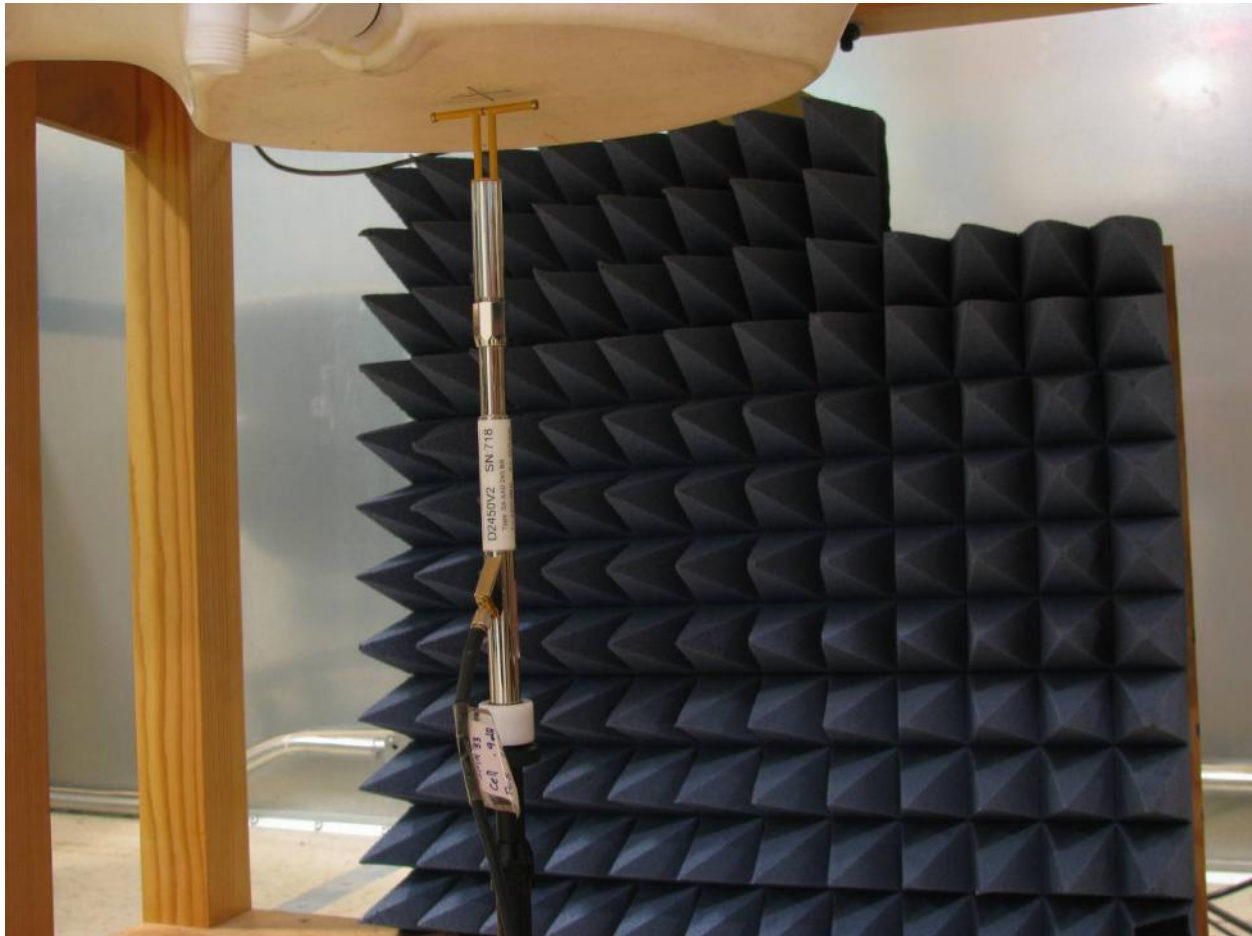


Figure 9: System Verification Setup

Reference Dipole Validation												
Ambient Temp (°C)	Fluid Temp (°C)	Frequency (MHz)	Dipole	Fluid Type	Dipole Power Input	Cal. Lab SAR (1g)	Cal. Lab SAR (10g)	Measured SAR (1g)	Measured SAR (10g)	% Error SAR (1g)	% Error SAR (10g)	Date
21.8	22	1900	D1900V2	MSL1900	1W	40.9	21.6	41.3	21.4	0.98	0.93	4/21/2014
23.1	22.3	1900	D1900V2	MSL1900	1W	40.9	21.6	42.5	22.1	3.91	2.31	4/22/2014
23.2	22.1	1900	D1900V2	MSL1900	1W	40.9	21.6	43.4	22.6	6.11	4.63	4/23/2014
23.0	22.1	1900	D1900V2	MSL1900	1W	40.9	21.6	41.2	21.5	0.73	0.46	4/24/2014
22.9	22.9	1900	D1900V2	MSL1900	1W	40.9	21.6	42.1	22	2.93	1.85	4/28/2014
23.1	22.5	1800	D1800V2	MSL1800	1W	38.4	20.3	39.9	21	3.91	3.45	4/29/2014
22.9	22	835	D835V2	MSL835	1W	9.58	6.33	9.99	6.57	4.28	3.79	4/30/2014
22.7	22.5	835	D835V2	MSL835	1W	9.58	6.33	9.37	6.15	2.19	2.84	4/30/2014
22.9	22.9	1900	D1900V2	MSL1900	1W	40.9	21.6	41.8	21.7	2.20	0.46	5/2/2014
23.2	22.4	1900	D1900V2	MSL1900	1W	40.9	21.6	41.9	21.8	2.44	0.93	5/5/2014
23.2	22.1	750	D750V3	MSL750	1W	8.61	5.68	9.12	6.08	5.92	7.04	5/5/2014
22.8	22.1	835	D835V2	MSL835	1W	9.58	6.33	9.56	6.31	0.21	0.32	5/9/2014
22.1	21.6	1900	D1900V2	MSL1900	1W	40.9	21.6	42	21.9	2.69	1.39	5/5/2014
22.9	22.3	1900	D1900V2	MSL1900	1W	40.9	21.6	40.4	21.1	1.22	2.31	5/5/2014
22.2	22.3	1800	D1800V2	MSL1800	1W	38.4	20.3	41.7	21.9	8.59	7.88	5/16/2014
22.5	21.5	835	D835V2	MSL835	1W	9.58	6.33	9.63	6.36	0.52	0.47	5/19/2014
22.2	22.3	1800	D1800V2	MSL1800	1W	38.4	20.3	41	21.5	6.77	5.91	5/29/2014
22.8	23.1	1900	D1900V2	MSL1900	1W	40.9	21.6	41.6	21.7	1.71	0.46	6/2/2014
22.4	23.1	1900	D1900V2	MSL1900	1W	40.9	21.6	38.8	21.6	5.13	0.00	6/5/2014

Table 13: Dipole Validation

Tissue Simulating Liquid Description and Validation

The dielectric parameters were verified to be within 5% of the target values prior to assessment. The dielectric parameters (ϵ_r, σ) are shown in following tables. A recipe for the tissue simulating fluid used is shown in Table 34.

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	51.83	14.96	1.54	2.76	1.23	4/21/2014
	1880	53.3	1.52	51.7	15.1	1.58	3.00	3.83	4/21/2014
	1910	53.3	1.52	51.6	15.2	1.55	3.19	1.97	4/21/2014

Table 14: 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	52.96	15.09	1.55	0.64	2.17	4/22/2014
	1880	53.3	1.52	52.85	15.19	1.59	0.84	4.54	4/22/2014
	1910	53.3	1.52	52.76	15.27	1.59	1.01	4.61	4/22/2014

Table 15: 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	52.88	14.97	1.54	0.79	1.38	4/23/2014
	1880	53.3	1.52	52.74	15.03	1.57	1.05	3.42	4/23/2014
	1910	53.3	1.52	52.64	15.13	1.59	1.24	4.61	4/23/2014

Table 16 : 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	53.73	14.74	1.48	0.81	2.89	4/24/2014
	1880	53.3	1.52	53.52	14.91	1.53	0.41	0.92	4/24/2014
	1910	53.3	1.52	53.3	15.11	1.59	0.00	4.61	4/24/2014

Table 17: 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	51.66	14.768	1.52	3.08	0.07	4/25/2014
	1880	53.3	1.52	51.54	14.82	1.55	3.30	1.91	4/25/2014
	1910	53.3	1.52	51.45	14.91	1.58	3.47	4.16	4/25/2014

Table 18: 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	52.24	14.61	1.50	1.99	1.14	4/28/14
	1880	53.3	1.52	52.19	14.67	1.53	2.08	0.88	4/28/14
	1910	53.3	1.52	52.14	14.72	1.56	2.18	2.83	4/28/14

Table 19: 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1800	1710	53.53	1.46	51.71	15.07	1.43	3.40	1.87	4/29/2014
	1730	53.5	1.48	51.65	15.14	1.46	3.46	1.61	4/29/2014
	1755	53.42	1.49	51.55	15.2	1.48	3.50	0.47	4/29/2014
	1800	53.3	1.52	51.33	15.34	1.54	3.70	0.99	4/29/2014

Table 20: 1800 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL835	824	55.2	0.97	54.28	21.81	1.00	1.67	3.00	4/30/2014
	836	55.2	0.97	54.2	21.68	1.01	1.81	3.88	4/30/2014
	850	55.2	0.98	54.08	21.73	1.03	2.03	4.78	4/30/2014

Table 21: 835 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	52.27	14.77	1.52	1.93	0.06	5/2/2014
	1880	53.3	1.52	52.2	14.91	1.56	2.06	2.53	5/2/2014
	1910	53.3	1.52	52.08	15	1.59	2.29	4.79	5/2/2014

Table 22: 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	51.98	14.7	1.51	2.48	0.53	5/5/2014
	1880	53.3	1.52	51.9	14.8	1.55	2.63	1.77	5/5/2014
	1910	53.3	1.52	51.82	14.89	1.58	2.78	4.02	5/5/2014

Table 23: 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL750	700	55.73	0.959	56.3	23.4	0.91	1.02	5.04	5/5/2014
	750	55.53	0.963	55.84	22.91	0.96	0.56	0.80	5/5/2014
	800	55.34	0.967	55.36	22.57	1.00	0.04	3.81	5/5/2014

Table 24: 750 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL835	824	55.2	0.97	54.73	20.97	0.96	0.85	0.96	5/8/2014
	836	55.2	0.97	54.66	20.92	0.97	0.98	0.24	5/8/2014
	850	55.2	0.98	54.58	20.85	0.99	1.12	0.54	5/8/2014

Table 25: 835 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL835	815	55.27	0.97	54.89	21.29	0.96	0.68	0.54	5/9/2014
	824	55.2	0.97	54.77	21.20	0.97	0.78	0.12	5/9/2014
	836	55.2	0.97	54.69	21.12	0.98	0.92	1.21	5/9/2014
	850	55.2	0.98	54.64	21.07	1.00	1.02	1.58	5/9/2014

Table 26: 835 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	52	14.82	1.52	2.44	0.28	5/12/2014
	1880	53.3	1.52	51.95	14.9	1.56	2.53	2.46	5/12/2014
	1910	53.3	1.52	51.92	15.03	1.60	2.59	5.00	5/12/2014

Table 27: 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	51.64	14.5	1.49	3.11	1.88	5/14/2014
	1880	53.3	1.52	51.61	14.6	1.53	3.17	0.39	5/14/2014
	1910	53.3	1.52	51.63	14.68	1.56	3.13	2.56	5/14/2014

Table 28: 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1800	1710	53.53	1.46	51.58	15.17	1.44	3.64	1.22	5/16/2014
	1730	53.5	1.48	51.51	15.26	1.47	3.72	0.83	5/16/2014
	1755	53.42	1.49	51.3	15.28	1.49	3.97	0.06	5/16/2014
	1800	53.3	1.52	51.2	15.29	1.53	3.94	0.66	5/16/2014

Table 29: 1800 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL835	815	55.27	0.97	54.19	21.13	0.96	1.95	1.30	5/19/2014
	824	55.2	0.97	54.11	21.07	0.97	1.97	0.49	5/19/2014
	836	55.2	0.97	54.01	21.01	0.98	2.16	0.67	5/19/2014
	850	55.2	0.98	53.85	20.97	0.99	2.45	1.12	5/19/2014

Table 30: 835 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL835	815	55.27	0.97	53.70	21.32	0.97	2.84	0.41	5/27/2014
	824	55.2	0.97	53.62	21.23	0.97	2.86	0.26	5/27/2014
	836	55.2	0.97	53.52	21.21	0.99	3.04	1.63	5/27/2014
	850	55.2	0.98	53.43	21.15	1.00	3.21	1.99	5/27/2014

Table 31: 835 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1800	1710	53.53	1.46	51.11	14.99	1.43	4.52	2.39	5/28/2014
	1730	53.5	1.48	51.05	15.04	1.45	4.58	2.26	5/28/2014
	1755	53.42	1.49	50.96	15.03	1.47	4.61	1.58	5/28/2014
	1800	53.3	1.52	50.75	15.03	1.50	4.78	1.05	5/28/2014

Table 32: 1800 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	51.41	14.59	1.50	3.55	1.28	6/2/2014
	1880	53.3	1.52	51.31	14.66	1.53	3.73	0.81	6/2/2014
	1910	53.3	1.52	51.23	14.73	1.56	3.88	2.90	6/2/2014

Table 33: 1900 MHz MSL Fluid Validation

Measured Tissue Properties									
Tissue Type	Frequency Measure (MHz)	Permittivity Target	Conductivity Target	Permittivity Measure	Complex Permittivity	Conductivity Measure	Dielectric % Deviation	Conductivity % Deviation	Date
MSL1900	1850	53.3	1.52	51.12	14.59	1.50	4.09	1.28	6/5/2014
	1880	53.3	1.52	51.03	14.65	1.53	4.26	0.74	6/5/2014
	1910	53.3	1.52	50.96	14.73	1.56	4.39	2.90	6/5/2014

Table 34: 1900 MHz MSL Fluid Validation

TYPICAL COMPOSITION OF INGREDIENTS FOR LIQUID TISSUE PHANTOMS, Supplement C Edition 01-01 to OET Bulletin 65 Edition 97-01, Page 36. (450MHz to 2450 MHz data only)												
Ingredient (% by weight)	f (MHz)											
	450		835		915		1900		2450		5500	
	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Tissue Type												
Water	38.56	51.16	41.45	52.4	41.05	56	54.9	70.45	62.7	68.64	65.53	78.67
Salt (NaCl)	3.95	1.49	1.45	1.4	1.35	0.76	0.18	0.36	0.5	0	0	0
Sugar	56.32	46.78	56	45	56.5	41.76	0	0	0	0	0	0
HEC	0.98	0.52	1	1	1	1.21	0	0	0	0	0	0
Bactericide	0.19	0.05	0.1	0.1	0.1	0.27	0	0	0	0	0	0
Triton X-100	0	0	0	0	0	0	0	0	36.8	0	17.235	10.665
DGBE	0	0	0	0	0	0	44.92	29.18	0	31.37	0	0
DGHE	0	0	0	0	0	0	0	0	0	0	17.235	10.665
Dielectric Constant	43.42	58	42.54	56.1	42	56.8	39.9	53.3	39.8	52.7		
Conductivity (S/m)	0.85	0.83	0.91	0.95	1	1.07	1.42	1.52	1.88	1.95		

Table 35: Tissue Simulating Fluid Recipe

Tissue Simulating Liquid for 5GHz, MBBL3500-5800V5 Manufactured by SPEAG (proprietary mixture)

Ingredients	(% by weight)
Water	78
Mineral oil	11
Emulsifiers	9
Additives and Salt	2

6.0 EVALUATION PROCEDURES

Prior to any testing, the appropriate fluid was used to fill the phantom to a depth of $15 \text{ cm} \pm 0.2 \text{ cm}$. The fluid parameters were verified and the dipole validation was performed as described in the previous sections.

Test Positions:

The Device was positioned against the SAM and flat phantom using the exact procedure described in KDB 447498 and 616217.

Reference Power Measurement:

The measurement probe was positioned at a fixed location above the reference point. A power measurement was made with the probe above this reference position so it could be used for assessing the power drift later in the test procedure.

Area Scan:

A coarse area scan was performed in order to find the approximate location of the peak SAR value. This scan was performed with the measurement probe at a constant height in the simulating fluid. A two dimensional spline interpolation algorithm was then used to determine the peaks and gradients within the scanned area. The area scan resolution conformed to the requirements of KDB 865664 as shown in Table 36.

Zoom Scan:

A zoom scan was performed around the approximate location of the peak SAR as determined from the area scan. On the basis of this data set, the spatial peak SAR value was evaluated with the following procedure. The zoom scan resolution conformed to the requirements of KDB 865664 as shown in Table 36.

		≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location		30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx _{Area} , Δy _{Area}		≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx _{Zoom} , Δy _{Zoom}		≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: Δz _{Zoom} (n)	≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid Δz _{Zoom} (1): between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
	Δz _{Zoom} (n>1): between subsequent points	≤ 1.5 · Δz _{Zoom} (n-1)	
Minimum zoom scan volume	x, y, z	≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
<p>Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.</p> <p>* When zoom scan is required and the <u>reported</u> SAR from the <u>area scan based 1-g SAR estimation</u> procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</p>			

Table 36: SAR Area and Zoom Scan Resolutions

Interpolation, Extrapolation and Detection of Maxima:

The probe is calibrated at the center of the dipole sensors which is located 1 to 2.7 mm away from the probe tip. During measurements, the probe stops shortly above the phantom surface, depending on the probe and the surface detecting system. Both distances are included as parameters in the probe configuration file. The software always knows exactly how far away the measured point is from the surface. As the probe cannot directly measure at the surface, the values between the deepest measured point and the surface must be extrapolated.

In DASY5, the choice of the coordinate system defining the location of the measurement points has no influence on the uncertainty of the interpolation, Maxima Search and extrapolation routines. The interpolation, extrapolation and maximum search routines are all based on the modified Quadratic Shepard's method.

Thereby, the interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation. The DASY5 routines construct a once-continuously differentiable function that interpolates the measurement values as follows:

- For each measurement point a trivariate (3-D) / bivariate (2-D) quadratic is computed. It interpolates the measurement values at the data point and forms a least-square fit to neighboring measurement values.
- The spatial location of the quadratic with respect to the measurement values is attenuated by an inverse distance weighting. This is performed since the calculated quadratic will fit measurement values at nearby points more accurate than at points located further away.
- After the quadratics are calculated for at all measurement points, the interpolating function is calculated as a weighted average of the quadratics.

There are two control parameters that govern the behavior of the interpolation method. One specifies the number of measurement points to be used in computing the least-square fits for the local quadratics. These measurement points are the ones nearest the input point for which the quadratic is being computed. The second parameter specifies the number of measurement points that will be used in calculating the weights for the quadratics to produce the final function. The input data points used there are the ones nearest the point at which the interpolation is desired. Appropriate defaults are chosen for each of the control parameters.

The trivariate quadratics that have been previously computed for the 3-D interpolation and whose input data are at the closest distance from the phantom surface, are used in order to extrapolate the fields to the surface of the phantom.

In order to determine all the field maxima in 2-D (Area Scan) and 3-D (Zoom Scan), the measurement grid is refined by a default factor of 10 and the interpolation function is used to evaluate all field values between corresponding measurement points. Subsequently, a linear search is applied to find all the candidate maxima. In a last step, non-physical maxima are removed and only those maxima which are within 2 dB of the global maximum value are retained.

Averaging and Determination of Spatial Peak SAR

The interpolated data is used to average the SAR over the 1g and 10g cubes by spatially discretizing the entire measured volume. The resolution of this spatial grid used to calculate the averaged SAR is 1mm or about 42875 interpolated points. The resulting volumes are defined as cubical volumes containing the appropriate tissue parameters that are centered at the location. The location is defined as the center of the incremental volume.

The spatial-peak SAR must be evaluated in cubical volumes containing a mass that is within 5% of the required mass. The cubical volume centered at each location, as defined above, should be expanded in all directions until the desired value for the mass is reached, with no surface boundaries of the averaging volume extending beyond the outermost surface of the considered region. In addition, the cubical volume should not consist of more than 10% of air. If these conditions are not satisfied then the center of the averaging volume is moved to the next location. Otherwise, the exact size of the final sampling cube is found using an inverse polynomial approximation algorithm, leading to results with improved accuracy. If one boundary of the averaging volume reaches the boundary of the measured volume during its expansion, it will not be evaluated at all. Reference is kept of all locations used and those not used for averaging the SAR. All average SAR values are finally assigned to the centered location in each valid averaging volume.

All locations included in an averaging volume are marked to indicate that they have been used at least once. If a location has been marked as used, but has never been assigned to the center of a cube, the highest averaged SAR value of all other cubical volumes which have used this location for averaging is assigned to this location. Only those locations that are not part of any valid averaging volume should be marked as unused. For the case of an unused location, a new averaging volume must be constructed which will have the unused location centered at one surface of the cube. The remaining five surfaces are expanded evenly in all directions until the required mass is enclosed, regardless of the amount of included air. Of the six possible cubes with one surface centered on the unused location, the smallest cube is used, which still contains the required mass.

If the final cube containing the highest averaged SAR touches the surface of the measured volume, an appropriate warning is issued within the post processing engine.

Power Drift Measurement:

The probe was positioned at precisely the same reference point and the reference power measurement was repeated. The difference between the initial reference power and the final one is referred to as the power drift. The power drift measurement was used to assess the output power stability of the test sample throughout the SAR scan.

RF Ambient Activity:

During the entire SAR evaluation, the RF ambient activity was monitored using a spectrum analyzer with an antenna connected to it. The spectrum analyzer was tuned to the frequency of measurement and with one trace set to max hold mode. In this way, it was possible to determine if at any point during the SAR measurement there was an interfering ambient signal. If an ambient signal was detected, then the SAR measurement was repeated.

7.0 TEST CONFIGURATION

For the purpose of this evaluation, the R12 Series Tablet was considered to be a device that could be operated when held against the body. All SAR scans were performed with a freshly charged battery installed.

The test channels and operating modes were selected using a base station simulator. The test positions were performed as described in KDB 616217. In addition to testing the edges and backside of the device, the device was tested when positioned with a 57 degree tilt as shown in the photographs. This position was tested because it provided the closest distance from the antenna to the phantom surface as shown in measurements provided in the Operational Exhibit. The test positions for device tested with the proximity sensor active are shown in Figure 10, Figure 12 and Figure 14. Figure 14: Device Positioning for SAR Scans – Top Edge Tilted 57 deg with no Spacing. The device was also tested with the proximity sensors disabled at full output power with at the proximity sensor triggering distance determined previously (minus 1mm). This test setup is shown in Figure 11, Figure 13, Figure 15, and Figure 16.



Figure 10: Device Positioning for SAR Scans – Back Against Phantom with No Spacing



Figure 11: Device Positioning for SAR Scans - Back Against Phantom with 5mm Spacing

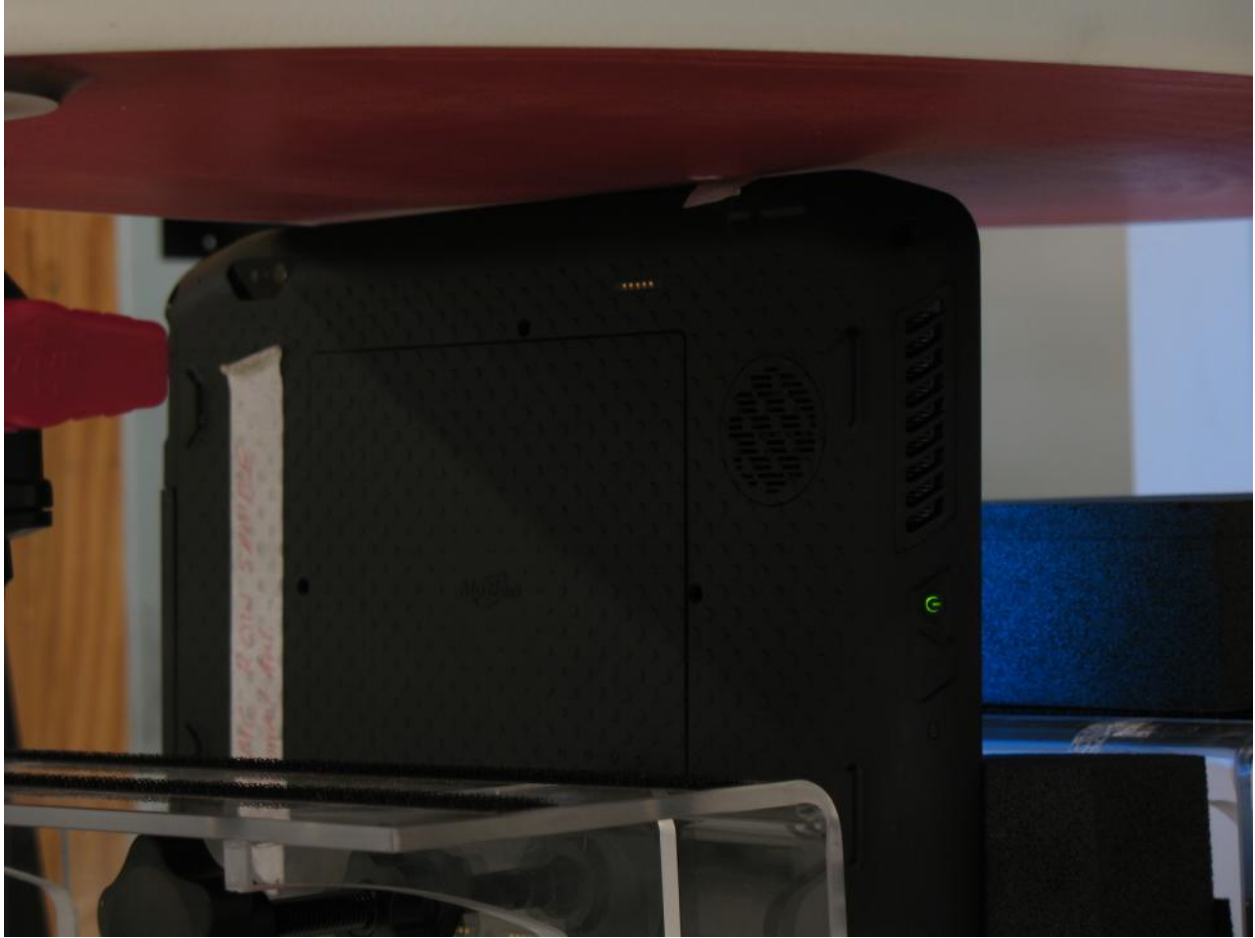


Figure 12: Device Positioning for SAR Scans – Top Edge with no Spacing



Figure 13: Device Positioning for SAR Scans – Top Edge with 9mm Spacing



Figure 14: Device Positioning for SAR Scans – Top Edge Tilted 57 deg with no Spacing



Figure 15: Device Positioning for SAR Scans – Top Edge Tilted 57 deg with 11mm Spacing



Figure 16: Device Positioning for SAR Scans – Left Edge Nearest WWAN Antennas with no Spacing

8.0 CRITERIA

The following FCC limits as defined in FCC Part §2.1093 for SAR apply to portable devices operating in the General Population/Uncontrolled Exposure environment:

Exposure (General Population/Uncontrolled Exposure environment)	SAR (W/kg)
Average over the whole body	0.08
Spatial Peak (1g)	1.60
Spatial Peak for hands, wrists, feet and ankles (10g)	4.00

9.0 TABULAR TEST RESULTS

The results on the following page(s) were obtained when the device was transmitting at maximum output power. Detailed measurement data and plots, which reveal information about the location of the maximum SAR with respect to the device, are referenced under APPENDIX A – SAR Plots.

Conducted Power Measurements

The conducted power measurements for the cellular module in the R12 Series Tablet were performed in accordance with KDB 941225. A base station simulator was used to place the cellular module into a call and transmit at maximum power in the modes shown below. The values shown below have been corrected to account for cable loss. In LTE mode, A-MPR was disabled for conducted measurements as well as SAR measurements. MPR values are permanently implemented in the modules firmware.

CDMA

Band	Channel	Frequency (MHz)	RC1/SO55	RC3/SO55	RC3/SO32 (+F-SCH)	RC3/SO32 (+SCH)	1xEvDO Rev. 0 (RTAP)	1xEvDO Rev. A (RETAP)
BC0	1013	824.7	23.83	23.9	24.22	24.04	24.15	23.97
	384	836.52	23.96	23.99	24.08	24.02	24.01	23.88
	777	848.31	23.91	23.96	24.16	24	24.08	23.86
BC1	25	1851.25	24.7	24.68	24.77	24.75	24.5	24.04
	600	1880	24.64	24.67	24.65	24.64	24.51	24.15
	1175	1908.75	24.69	24.8	24.8	24.77	24.54	24.06
BC10	450	817.25	23.85	23.87	23.93	23.91	23.94	23.92
	560	820	23.9	23.89	24.1	24.03	24.03	24.05
	670	822.75	24.02	24.05	24.09	24.06	23.78	23.68

Table 37: CDMA Conducted Output Power - Proximity Sensor Disabled

WCDMA-UMTS

Mode	3GPP Subtest	Band V (800MHz) Channel Power (dBm)			Band IV (1700MHz) Channel Power (dBm)			Band II (1900MHz) Channel Power (dBm)			MPR
		4132	4182	4223	1312	1427	1513	9262	9400	9538	
Rel 99	1	22.54	22.6	22.5	22.97	23.04	22.89	23.09	23.05	23.16	-
Rel 7 HSDPA	1	22.07	22.14	21.01	22.5	22.42	22.59	22.59	22.6	22.64	0
	2	21.75	21.85	21.7	22.15	22.15	22.05	22.18	22.2	22.24	0
	3	21.62	21.67	21.58	21.9	21.91	21.88	22.13	22.08	22.11	0.5
	4	21.59	21.66	21.58	22	22	22.01	22.11	22.13	22.15	0.5
Rel 6 HSPA	1	21.64	21.7	21.52	21.92	21.87	21.84	21.14	21.22	21.26	0
	2	21.69	21.5	21.7	21.94	21.93	21.87	22.11	22.1	22.06	2
	3	22.07	22.15	22.1	22.33	22.53	22.48	22.53	22.64	22.6	1
	4	22.08	22.02	22.05	22.4	22.37	22.43	22.59	22.55	22.59	2
	5	22.07	22.21	21.97	22.38	22.53	22.44	22.54	22.53	22.58	0

Table 38: WCDMA-UMTS Conducted Output Power - Proximity Sensor Disabled

GSM

Burst Average Power

Band	Channel	Frequency (MHz)	GSM	GPRS - 1 Tx Slot	GPRS - 2 Tx Slots	GPRS - 3 Tx Slots	GPRS - 4 Tx Slots	EDGE - 1 Tx Slot	EDGE - 2 Tx Slots	EDGE - 3 Tx Slots	EDGE - 4 Tx Slots
GSM 850	128	824.2		32	31.8			26.4	26.1	26	25.7
	190	836.6		32	31.7			26.4	26.2	26	25.7
	251	848.8		31.9	31.6			26.3	26.2	26	25.8
GSM 1900	512	1850.2		29.8	29.6			25.7	25.6	25.2	25.1
	661	1880		29.8	29.6			25.7	25.6	25.3	25
	810	1909.8		29.9	29.7			25.7	25.5	25.2	25

Table 39: GSM Conducted Output Power - Proximity Sensor Disabled

Frame Average Power

Band	Channel	Frequency (MHz)	GSM	GPRS - 1 Tx Slot	GPRS - 2 Tx Slots	GPRS - 3 Tx Slots	GPRS - 4 Tx Slots	EDGE - 1 Tx Slot	EDGE - 2 Tx Slots	EDGE - 3 Tx Slots	EDGE - 4 Tx Slots
GSM 850	128	824.2		22.97	25.78			17.37	20.08	21.74	22.69
	190	836.6		22.97	25.68			17.37	20.18	21.74	22.69
	251	848.8		22.87	25.58			17.27	20.18	21.74	22.79
GSM 1900	512	1850.2		20.77	23.58			16.67	19.58	20.94	22.09
	661	1880		20.77	23.58			16.67	19.58	21.04	21.99
	810	1909.8		20.87	23.68			16.67	19.48	20.94	21.99

Table 40: GSM Conducted Output Power - Proximity Sensor Disabled

Channel Bandwidth = 1.4 MHz

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
1.4MHz	18607	1850.7	QPSK	1	0	23.2	0	0
				1	2	23.36	0	0
				1	5	23.42	0	0
				3	0	23.29	0	0
				3	1	23.37	0	0
				3	2	23.42	0	0
			16QAM	6	0	22.32	1	0-1
				1	0	22.55	1	0-1
				1	2	22.69	1	0-1
				1	5	22.79	1	0-1
				3	0	22.43	1	0-1
				3	1	22.47	1	0-1
	18900	1800	QPSK	3	2	22.5	1	0-1
				6	0	21.19	2	0-2
				1	0	23.27	0	0
				1	2	23.37	0	0
				1	5	23.36	0	0
				3	0	23.2	0	0
			16QAM	3	1	23.35	0	0
				3	2	23.38	0	0
				6	0	22.29	1	0-1
				1	0	22.34	1	0-1
				1	2	22.48	1	0-1
				1	5	22.53	1	0-1
	19193	1909.3	QPSK	3	0	22.6	1	0-1
				3	1	22.75	1	0-1
				3	2	22.77	1	0-1
				6	0	21.45	2	0-2
				1	0	23.32	0	0
				1	2	23.48	0	0
16QAM			1	5	23.58	0	0	
			3	0	23.35	0	0	
			3	1	23.44	0	0	
			3	2	23.51	0	0	
			6	0	22.55	1	0-1	
			1	0	22.41	1	0-1	
16QAM	1	2	22.58	1	0-1			
	1	5	22.74	1	0-1			
	3	0	22.62	1	0-1			
	3	1	22.6	1	0-1			
	3	2	22.69	1	0-1			
	6	0	21.67	2	0-2			

Table 41: LTE Band 2 Conducted Output Power [1.4 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
3MHz	18615	1851.5	QPSK	1	0	23.02	0	0
				1	7	23.42	0	0
				1	14	23.74	0	0
				8	0	22.17	1	0-1
				8	4	22.49	1	0-1
				8	7	22.65	1	0-1
			16QAM	15	0	22.4	1	0-1
				1	0	22.32	1	0-1
				1	7	22.41	1	0-1
				1	14	22.74	1	0-1
				8	0	21.26	2	0-2
				8	4	21.59	2	0-2
	18900	1880	QPSK	8	7	21.75	2	0-2
				8	7	22.65	1	0-1
				15	0	21.44	2	0-2
				1	0	22.96	0	0
				1	7	23.31	0	0
				1	14	23.34	0	0
				8	0	22.17	1	0-1
				8	4	22.12	1	0-1
				8	7	22.12	1	0-1
			16QAM	15	0	22.15	1	0-1
				1	0	22.33	1	0-1
				1	7	22.64	1	0-1
				1	14	22.71	1	0-1
				8	0	21.21	2	0-2
				8	4	21.28	2	0-2
				8	7	21.4	2	0-2
				15	0	21.18	2	0-2
				19185	1908.5	QPSK	1	0
1	7	23.36	0				0	
1	14	23.68	0				0	
8	0	22.12	1				0-1	
8	4	22.45	1				0-1	
8	7	22.63	1				0-1	
15	0	22.36	1				0-1	
16QAM	1	0	22.02				1	0-1
	1	7	22.48				1	0-1
	1	14	22.83			1	0-1	
	8	0	21.13			2	0-2	
	8	4	21.55			2	0-2	
	8	7	21.47			2	0-2	
	15	0	21.39			2	0-2	

Table 42: LTE Band 2 Conducted Output Power [3 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	18625	1852.5	QPSK	1	0	22.68	0	0
				1	12	23.22	0	0
				1	24	23.22	0	0
				12	0	22.03	1	0-1
				12	6	22.19	1	0-1
				12	13	22.27	1	0-1
				25	0	22.17	1	0-1
			16QAM	1	0	21.82	1	0-1
				1	12	22.26	1	0-1
				1	24	22.35	1	0-1
				12	0	21.02	2	0-2
				12	6	21.18	2	0-2
				12	13	21.25	2	0-2
				25	0	21.34	2	0-2
	18900	1880	QPSK	1	0	22.9	0	0
				1	12	23.27	0	0
				1	24	23.38	0	0
				12	0	21.98	1	0-1
				12	6	22.16	1	0-1
				12	13	22.25	1	0-1
				25	0	22.05	1	0-1
			16QAM	1	0	22.21	1	0-1
				1	12	22.62	1	0-1
				1	24	22.92	1	0-1
				12	0	21.04	2	0-2
				12	6	21.12	2	0-2
				12	13	21.32	2	0-2
25				0	21.13	2	0-2	
19175	1907.5	QPSK	1	0	22.46	0	0	
			1	12	23.2	0	0	
			1	24	23.75	0	0	
			12	0	21.81	1	0-1	
			12	6	22.25	1	0-1	
			12	13	22.62	1	0-1	
			25	0	22.22	1	0-1	
		16QAM	1	0	21.48	1	0-1	
			1	12	22.28	1	0-1	
			1	24	22.94	1	0-1	
			12	0	20.8	2	0-2	
			12	6	21.21	2	0-2	
			12	13	21.72	2	0-2	
			25	0	21.39	2	0-2	

Table 43: LTE Band 2 Conducted Output Power [5 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	18650	1855	QPSK	1	0	23.17	0	0
				1	24	23.14	0	0
				1	49	23.2	0	0
				25	0	22.06	1	0-1
				25	12	22	1	0-1
				25	24	22.07	1	0-1
			16QAM	50	0	21.98	1	0-1
				1	0	21.63	1	0-1
				1	24	21.8	1	0-1
				1	49	21.85	1	0-1
				25	0	21.06	2	0-2
				25	12	20.9	2	0-2
	18900	1880	QPSK	25	24	21.06	2	0-2
				25	24	21.06	2	0-2
				50	0	20.83	2	0-2
				1	0	22.8	0	0
				1	24	23.08	0	0
				1	49	23.67	0	0
			16QAM	25	0	21.5	1	0-1
				25	12	21.76	1	0-1
				25	24	22.21	1	0-1
				50	0	21.95	1	0-1
				1	0	21.7	1	0-1
				1	24	21.8	1	0-1
	19150	1905	QPSK	1	49	22.77	1	0-1
				25	0	20.49	2	0-2
				25	12	20.75	2	0-2
				25	24	21.22	2	0-2
				50	0	20.82	2	0-2
				1	0	22.57	0	0
16QAM			1	24	22.64	0	0	
			1	49	22.85	0	0	
			25	0	21.3	1	0-1	
			25	12	21.74	1	0-1	
			25	24	22.6	1	0-1	
			50	0	22.01	1	0-1	
16QAM	1	0	21.19	1	0-1			
	1	24	21.58	1	0-1			
	1	49	21.89	1	0-1			
	25	0	20.36	2	0-2			
	25	12	20.74	2	0-2			
	25	24	21.62	2	0-2			
				50	0	21.02	2	0-2

Table 44: LTE Band 2 Conducted Output Power [10 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
15MHz	18675	1857.5	QPSK	1	0	23.06	0	0
				1	37	23.12	0	0
				1	74	21.72	0	0
				36	0	22.12	1	0-1
				36	16	22.09	1	0-1
				36	35	21.67	1	0-1
				75	0	21.89	1	0-1
			16QAM	1	0	22.53	1	0-1
				1	37	22.63	1	0-1
				1	74	21.52	1	0-1
				36	0	21.08	2	0-2
				36	16	21.06	2	0-2
				36	35	20.63	2	0-2
				75	0	20.85	2	0-2
	18900	1880	QPSK	1	0	21.96	0	0
				1	37	22.82	0	0
				1	74	23.48	0	0
				36	0	21.46	1	0-1
				36	16	21.74	1	0-1
				36	35	22.24	1	0-1
				75	0	21.86	1	0-1
			16QAM	1	0	20.91	1	0-1
				1	37	21.8	1	0-1
				1	74	22.74	1	0-1
				36	0	20.33	2	0-2
				36	16	20.71	2	0-2
				36	35	21.22	2	0-2
				75	0	20.94	2	0-2
	19125	1902.5	QPSK	1	0	22.96	0	0
				1	37	22.57	0	0
1				74	23.2	0	0	
36				0	21.43	1	0-1	
36				16	21.58	1	0-1	
36				35	22.4	1	0-1	
75				0	21.89	1	0-1	
16QAM			1	0	21.86	1	0-1	
			1	37	21.48	1	0-1	
			1	74	22.13	1	0-1	
			36	0	20.44	2	0-2	
			36	16	20.59	2	0-2	
			36	35	21.4	2	0-2	
			75	0	21	2	0-2	

Table 45: LTE Band 2 Conducted Output Power [15 Mhz]

BW	Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
20MHz	18700	1860	QPSK	1	0	23.15	0	0
				1	49	22.9	0	0
				1	99	23.2	0	0
				50	0	22.37	1	0-1
				50	24	21.93	1	0-1
				50	49	21.4	1	0-1
			16QAM	100	0	21.97	1	0-1
				1	0	22.84	1	0-1
				1	49	22.39	1	0-1
				1	99	21.94	1	0-1
				50	0	21.48	2	0-2
				50	24	20.89	2	0-2
	18900	1880	QPSK	50	49	20.5	2	0-2
				100	0	21.01	2	0-2
				1	0	21.93	0	0
				1	49	22.77	0	0
				1	99	22.91	0	0
				50	0	21.24	1	0-1
			16QAM	50	24	21.8	1	0-1
				50	49	22.12	1	0-1
				100	0	21.87	1	0-1
				1	0	21.15	1	0-1
				1	49	22.24	1	0-1
				1	99	22.77	1	0-1
	19100	1900	QPSK	50	0	20.25	2	0-2
				50	24	20.69	2	0-2
				50	49	21.33	2	0-2
				100	0	20.84	2	0-2
				1	0	23.66	0	0
				1	49	22.97	0	0
16QAM			1	99	23.87	0	0	
			50	0	21.85	1	0-1	
			50	24	21.31	1	0-1	
			50	49	21.95	1	0-1	
			100	0	21.95	1	0-1	
			1	0	23.19	1	0-1	
16QAM	1	49	21.51	1	0-1			
	1	99	23.59	1	0-1			
	50	0	20.87	2	0-2			
	50	24	20.3	2	0-2			
	50	49	20.95	2	0-2			
	100	0	20.91	2	0-2			

Table 46: LTE Band 2 Conducted Output Power [20 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
1.4MHz	19957	1710.7	QPSK	1	0	23.38	0	0
				1	2	23.33	0	0
				1	5	23.31	0	0
				3	0	23.37	0	0
				3	1	23.3	0	0
				3	2	23.31	0	0
			16QAM	6	0	22.04	1	0-1
				1	0	22.7	1	0-1
				1	2	22.68	1	0-1
				1	5	22.66	1	0-1
				3	0	22.59	1	0-1
				3	1	22.49	1	0-1
	20175	1732.5	QPSK	3	2	22.49	1	0-1
				6	0	20.95	2	0-2
				1	0	23.22	0	0
				1	2	23.33	0	0
				1	5	23.2	0	0
				3	0	23.33	0	0
			16QAM	3	1	23.32	0	0
				3	2	23.3	0	0
				6	0	22.21	1	0-1
				1	0	22.32	1	0-1
				1	2	22.41	1	0-1
				1	5	22.3	1	0-1
	20393	1754.3	QPSK	3	0	22.62	1	0-1
				3	1	22.62	1	0-1
				3	2	22.58	1	0-1
				6	0	21.36	2	0-2
				1	0	23.45	0	0
				1	2	23.64	0	0
16QAM			1	5	23.5	0	0	
			3	0	23.53	0	0	
			3	1	23.52	0	0	
			3	2	23.52	0	0	
			6	0	22.26	1	0-1	
			1	0	22.49	1	0-1	
16QAM	1	2	22.5	1	0-1			
	1	5	22.49	1	0-1			
	3	0	23.02	1	0-1			
	3	1	23.04	1	0-1			
	3	2	23.03	1	0-1			
	6	0	21.38	2	0-2			

Table 47: LTE Band 4 Conducted Output Power [1.4 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
3MHz	19965	1711.5	QPSK	1	0	21.88	0	0
				1	7	21.97	0	0
				1	14	21.96	0	0
				8	0	22.05	1	0-1
				8	4	22.08	1	0-1
				8	7	22.06	1	0-1
			16QAM	15	0	22.06	1	0-1
				1	0	22.01	1	0-1
				1	7	22.08	1	0-1
				1	14	22.07	1	0-1
				8	0	22.07	2	0-2
				8	4	22.1	2	0-2
				8	7	22.09	2	0-2
				15	0	22.08	2	0-2
				20175	1732.5	QPSK	1	0
	1	7	23.26				0	0
	1	14	23.32				0	0
	8	0	22.15				1	0-1
	8	4	22.18				1	0-1
	8	7	22.11				1	0-1
	16QAM	15	0			22.06	1	0-1
		1	0			22.11	1	0-1
		1	7			22.17	1	0-1
		1	14			22.08	1	0-1
		8	0			22.1	2	0-2
		8	4			22.09	2	0-2
		8	7			22.11	2	0-2
		15	0			21.18	2	0-2
		20385				QPSK	1	0
	1			7	22.08		0	0
1	14			21.91	0		0	
8	0			22.22	1		0-1	
8	4			22.1	1		0-1	
8	7			22.12	1		0-1	
16QAM	15			0	22.15	1	0-1	
	1			0	22.01	1	0-1	
	1			7	21.96	1	0-1	
	1			14	21.93	1	0-1	
	8			0	22.17	2	0-2	
	8			4	22.07	2	0-2	
	8			7	22.15	2	0-2	
	15			0	21.21	2	0-2	

Table 48: LTE Band 4 Conducted Output Power [3 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	19975	1712.5	QPSK	1	0	23.34	0	0
				1	12	23.14	0	0
				1	24	23.28	0	0
				12	0	21.97	1	0-1
				12	6	22.1	1	0-1
				12	13	22.09	1	0-1
			16QAM	25	0	21.99	1	0-1
				1	0	22.58	1	0-1
				1	12	22.48	1	0-1
				1	24	22.69	1	0-1
				12	0	20.95	2	0-2
				12	6	21.02	2	0-2
	20175	1732.5	QPSK	12	13	21.02	2	0-2
				25	0	21	2	0-2
				1	0	23.12	0	0
				1	12	23.11	0	0
				1	24	23.14	0	0
				12	0	22.02	1	0-1
			16QAM	12	6	22.12	1	0-1
				12	13	22.01	1	0-1
				25	0	22.06	1	0-1
				1	0	22.19	1	0-1
				1	12	22.2	1	0-1
				1	24	22.27	1	0-1
	20375	1752.5	QPSK	12	0	20.96	2	0-2
				12	6	21.07	2	0-2
				12	13	20.99	2	0-2
				25	0	21.14	2	0-2
				1	0	23.75	0	0
				1	12	23.54	0	0
16QAM			1	24	23.89	0	0	
			12	0	21.96	1	0-1	
			12	6	21.81	1	0-1	
			12	13	22.1	1	0-1	
			25	0	22.05	1	0-1	
			1	0	23.01	1	0-1	
16QAM	1	12	23.08	1	0-1			
	1	24	23.31	1	0-1			
	12	0	20.97	2	0-2			
	12	6	20.79	2	0-2			
	12	13	21.13	2	0-2			
	25	0	20.94	2	0-2			

Table 49: LTE Band 4 Conducted Output Power [5 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	20000	1715	QPSK	1	0	23.24	0	0
				1	24	22.8	0	0
				1	49	23.21	0	0
				25	0	21.85	1	0-1
				25	12	21.73	1	0-1
				25	24	21.89	1	0-1
			16QAM	50	0	21.86	1	0-1
				1	0	22.22	1	0-1
				1	24	21.74	1	0-1
				1	49	22.17	1	0-1
				25	0	20.84	2	0-2
				25	12	20.72	2	0-2
	20175	1732.5	QPSK	25	24	20.84	2	0-2
				50	0	20.75	2	0-2
				1	0	23.43	0	0
				1	24	23	0	0
				1	49	23.52	0	0
				25	0	21.96	1	0-1
			16QAM	25	12	21.68	1	0-1
				25	24	21.88	1	0-1
				50	0	21.9	1	0-1
				1	0	22.5	1	0-1
				1	24	21.95	1	0-1
				1	49	22.49	1	0-1
	20350	1750	QPSK	25	0	20.98	2	0-2
				25	12	20.72	2	0-2
				25	24	20.92	2	0-2
				50	0	20.89	2	0-2
				1	0	23.92	0	0
				1	24	23.4	0	0
16QAM			1	49	24.32	0	0	
			25	0	21.91	1	0-1	
			25	12	22.05	1	0-1	
			25	24	23.13	1	0-1	
			50	0	21.91	1	0-1	
			1	0	23.44	1	0-1	
16QAM	1	24	22.79	1	0-1			
	1	49	23.77	1	0-1			
	25	0	20.94	2	0-2			
	25	12	21.08	2	0-2			
	25	24	21.25	2	0-2			
	50	0	20.93	2	0-2			

Table 50: LTE Band 4 Conducted Output Power [10 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
15MHz	20025	1717.5	QPSK	1	0	22.98	0	0
				1	37	22.9	0	0
				1	74	23.25	0	0
				36	0	21.67	1	0-1
				36	16	21.66	1	0-1
				36	35	21.8	1	0-1
			16QAM	75	0	21.73	1	0-1
				1	0	22.81	1	0-1
				1	37	22.22	1	0-1
				1	74	22.65	1	0-1
				36	0	20.69	2	0-2
				36	16	20.7	2	0-2
	20175	1732.5	QPSK	36	35	20.85	2	0-2
				75	0	20.8	2	0-2
				1	0	23.43	0	0
				1	37	23.05	0	0
				1	74	23.55	0	0
				36	0	21.9	1	0-1
			16QAM	36	16	21.7	1	0-1
				36	35	21.81	1	0-1
				75	0	21.84	1	0-1
				1	0	22.39	1	0-1
				1	37	21.94	1	0-1
				1	74	22.55	1	0-1
	20325	1747.5	QPSK	36	0	20.86	2	0-2
				36	16	20.7	2	0-2
				36	35	20.79	2	0-2
				75	0	20.84	2	0-2
				1	0	23.85	0	0
				1	37	23.4	0	0
16QAM			1	74	23.9	0	0	
			36	0	21.65	1	0-1	
			36	16	21.86	1	0-1	
			36	35	21.96	1	0-1	
			75	0	21.89	1	0-1	
			1	0	22.5	1	0-1	
16QAM	1	37	22.41	1	0-1			
	1	74	22.9	1	0-1			
	36	0	20.56	2	0-2			
	36	16	20.79	2	0-2			
	36	35	20.97	2	0-2			
	75	0	20.88	2	0-2			

Table 51: LTE Band 2 Conducted Output Power [15 Mhz]

BW	Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
20MHz	20050		QPSK	1	0			0
				1	49			0
				1	99			0
				50	0			0-1
				50	24			0-1
				50	49			0-1
			16QAM	100	0			0-1
				1	0			0-1
				1	49			0-1
				1	99			0-1
				50	0			0-2
				50	24			0-2
	20175	1732.5	QPSK	50	49			0-2
				50	0			0-2
				100	0			0-2
				1	0	23.56	0	0
				1	49	23.01	0	0
				1	99	23.45	0	0
			16QAM	50	0	21.9	1	0-1
				50	24	21.96	1	0-1
				50	49	21.83	1	0-1
				100	0	21.89	1	0-1
				1	0	23.15	1	0-1
				1	49	22.62	1	0-1
			16QAM	1	99	23.1	1	0-1
				50	0	20.97	2	0-2
				50	24	20.77	2	0-2
				50	49	20.84	2	0-2
				100	0	20.98	2	0-2
				20300		QPSK	1	0
1	49						0	
1	99						0	
50	0						0-1	
50	24						0-1	
50	49						0-1	
16QAM	100	0					0-1	
	1	0					0-1	
	1	49					0-1	
	1	99					0-1	
	50	0					0-2	
	50	24					0-2	
50	49			0-2				
100	0			0-2				

Table 52: LTE Band 4 Conducted Output Power [20 Mhz]⁵

⁵ LTE Band 4 at 20MHz bandwidth does not support three non-overlapping channels. Per KDB 941225 D05, when a device supports overlapping channel assignments in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
1.4MHz	20407	824.7	QPSK	1	0	22.72	0	0
				1	2	22.69	0	0
				1	5	22.67	0	0
				3	0	22.63	1	0
				3	1	22.61	1	0
				3	2	22.61	1	0
			16QAM	6	0	21.68	1	0-1
				1	0	21.69	1	0-1
				1	2	21.8	1	0-1
				1	5	21.74	1	0-1
				3	0	21.82	2	0-1
				3	1	21.88	2	0-1
	20525	836.5	QPSK	3	2	21.86	2	0-1
				3	0	20.78	2	0-2
				6	0	20.78	2	0-2
				1	0	22.67	0	0
				1	2	22.64	0	0
				1	5	22.54	0	0
			16QAM	3	0	22.69	0	0
				3	1	22.66	0	0
				3	2	22.64	0	0
				6	0	21.66	0	0-1
				1	0	21.72	1	0-1
				1	2	21.7	1	0-1
	20643	848.3	QPSK	1	5	21.61	1	0-1
				3	0	21.91	2	0-1
				3	1	21.72	2	0-1
				3	2	21.72	2	0-1
				6	0	20.8	2	0-2
				1	0	22.63	0	0
16QAM			1	2	22.68	0	0	
			1	5	22.55	0	0	
			3	0	22.64	1	0	
			3	1	22.67	1	0	
			3	2	22.67	1	0	
			6	0	21.41	1	0-1	
16QAM	1	0	22.07	1	0-1			
	1	2	22.1	1	0-1			
	1	5	21.95	1	0-1			
	3	0	21.86	2	0-1			
	3	1	21.95	2	0-1			
	3	2	21.95	2	0-1			
6	0	20.33	2	0-2				

Table 53: LTE Band 5 Conducted Output Power [1.4 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
3MHz	20415	825.5	QPSK	1	0	21.56	0	0
				1	7	21.48	0	0
				1	14	21.45	0	0
				8	0	21.58	1	0-1
				8	4	21.57	1	0-1
				8	7	21.58	1	0-1
			16QAM	15	0	21.56	1	0-1
				1	0	21.54	1	0-1
				1	7	21.51	1	0-1
				1	14	21.52	1	0-1
				8	0	21.61	2	0-2
				8	4	21.6	2	0-2
	20525	836.5	QPSK	8	7	21.59	2	0-2
				8	0	21.59	2	0-2
				15	0	21.59	2	0-2
				1	0	22.67	0	0
				1	7	22.66	0	0
				1	14	22.42	0	0
			16QAM	8	0	21.61	1	0-1
				8	4	21.6	1	0-1
				8	7	21.37	1	0-1
				15	0	21.5	1	0-1
				1	0	21.38	1	0-1
				1	7	21.55	1	0-1
	20635	847.5	QPSK	1	14	21.49	1	0-1
				8	0	21.42	2	0-2
				8	4	21.42	2	0-2
				8	7	21.49	2	0-2
				15	0	20.51	2	0-2
				1	0	21.42	0	0
			16QAM	1	7	21.31	0	0
				1	14	22.26	0	0
				8	0	21.41	1	0-1
				8	4	21.41	1	0-1
				8	7	21.25	1	0-1
				15	0	21.4	1	0-1
1	0	21.42	1	0-1				
1	7	21.39	1	0-1				
1	14	21.41	1	0-1				
8	0	21.41	2	0-2				
8	4	21.4	2	0-2				
8	7	21.41	2	0-2				
15	0	21.43	2	0-2				

Table 54: LTE Band 5 Conducted Output Power [3 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	20425	826.5	QPSK	1	0	22.55	0	0
				1	12	22.79	0	0
				1	24	22.69	0	0
				12	0	21.49	1	0-1
				12	6	21.73	1	0-1
				12	13	21.58	1	0-1
			16QAM	25	0	21.6	1	0-1
				1	0	21.74	1	0-1
				1	12	22.05	1	0-1
				1	24	21.94	1	0-1
				12	0	20.49	2	0-2
				12	6	20.74	2	0-2
	20525	836.5	QPSK	12	13	20.59	2	0-2
				12	13	20.59	2	0-2
				25	0	20.59	2	0-2
				1	0	22.56	0	0
				1	12	22.63	0	0
				1	24	22.34	0	0
			16QAM	12	0	21.61	1	0-1
				12	6	21.58	1	0-1
				12	13	21.34	1	0-1
				25	0	21.53	1	0-1
				1	0	21.34	1	0-1
				1	12	21.33	1	0-1
	20625	846.5	QPSK	1	24	21.45	1	0-1
				12	0	21.45	2	0-2
				12	6	21.34	2	0-2
				12	13	21.45	2	0-2
				25	0	21.46	2	0-2
				1	0	22.31	0	0
16QAM			1	12	22.78	0	0	
			1	24	22.28	0	0	
			12	0	21.3	1	0-1	
			12	6	21.47	1	0-1	
			12	13	21.39	1	0-1	
			25	0	21.49	1	0-1	
16QAM	1	0	22.03	1	0-1			
	1	12	22.43	1	0-1			
	1	24	22	1	0-1			
	12	0	20.29	2	0-2			
	12	6	20.47	2	0-2			
	12	13	20.39	2	0-2			
				25	0	20.37	2	0-2

Table 55: LTE Band 5 Conducted Output Power [5 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	20450		QPSK	1	0			0
				1	24			0
				1	49			0
				25	0			0-1
				25	12			0-1
				25	24			0-1
			16QAM	50	0			0-1
				1	0			0-1
				1	24			0-1
				1	49			0-1
				25	0			0-2
				25	12			0-2
	20525	836.5	QPSK	1	0	22.57	0	0
				1	24	22.43	0	0
				1	49	22.61	0	0
				25	0	21.49	1	0-1
				25	12	21.36	1	0-1
				25	24	21.31	1	0-1
			16QAM	50	0	21.43	1	0-1
				1	0	21.53	1	0-1
				1	24	21.37	1	0-1
				1	49	21.61	1	0-1
				25	0	20.47	2	0-2
				25	12	20.35	2	0-2
	20600		QPSK	25	24	20.24	2	0-2
				25	0	20.4	2	0-2
				1	0			0
				1	24			0
				1	49			0
				25	0			0-1
16QAM			25	12			0-1	
			25	24			0-1	
			50	0			0-1	
			1	0			0-1	
			1	24			0-1	
			1	49			0-1	
					0-2			
					0-2			
					0-2			
					0-2			

Table 56: LTE Band 5 Conducted Output Power [10 Mhz]⁶

⁶ LTE Band 5 at 10MHz bandwidth does not support three non-overlapping channels. Per KDB 941225 D05, when a device supports overlapping channel assignments in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	23205	782	QPSK	1	0			0
				1	12			0
				1	24			0
				12	0			0-1
				12	6			0-1
				12	13			0-1
			16QAM	25	0			0-1
				1	0			0-1
				1	12			0-1
				1	24			0-1
				12	0			0-2
				12	6			0-2
	23230	782	QPSK	12	13			0-2
				25	0			0-2
				1	0	23.38	0	0
				1	12	22.58	0	0
				1	24	22.5	0	0
				12	0	22.03	1	0-1
			16QAM	12	6	21.68	1	0-1
				12	13	21.63	1	0-1
				25	0	21.66	1	0-1
				1	0	22.5	1	0-1
				1	12	21.69	1	0-1
				1	24	21.16	1	0-1
	23255	782	QPSK	12	0	21.06	2	0-2
				12	6	20.71	2	0-2
				12	13	20.68	2	0-2
				25	0	20.76	2	0-2
				1	0			0
				1	12			0
			16QAM	1	24			0
				12	0			0-1
				12	6			0-1
				12	13			0-1
				25	0			0-1
				1	0			0-1
16QAM	1	12			0-1			
	1	24			0-1			
	12	0			0-2			
	12	6			0-2			
	12	13			0-2			
	25	0			0-2			

Table 57: LTE Band 13 Conducted Output Power [5 Mhz]⁷

⁷ LTE Band 4 at 5MHz bandwidth does not support three non-overlapping channels. Per KDB 941225 D05, when a device supports overlapping channel assignments in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	23230	782	QPSK	1	0	22.88	0	0
				1	24	22.36	0	0
				1	49	22.13	0	0
				25	0	22.02	1	0-1
				25	12	21.6	1	0-1
				25	24	20.91	1	0-1
			16QAM	50	0	21.51	1	0-1
				1	0	21.8	1	0-1
				1	24	21.29	1	0-1
				1	49	21.01	1	0-1
				25	0	21.02	2	0-2
				25	12	20.61	2	0-2
				25	24	20.1	2	0-2
				50	0	20.44	2	0-2

Table 58: LTE Band 13 Conducted Output Power [10 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	23755		QPSK	1	0			0
				1	12			0
				1	24			0
				12	0			0-1
				12	6			0-1
				12	13			0-1
				25	0			0-1
			16QAM	1	0			0-1
				1	12			0-1
				1	24			0-1
				12	0			0-2
				12	6			0-2
				12	13			0-2
				25	0			0-2
	23790	710	QPSK	1	0	22.56	0	0
				1	12	22.41	0	0
				1	24	22.97	0	0
				12	0	21.29	1	0-1
				12	6	21.31	1	0-1
				12	13	21.76	1	0-1
				25	0	21.44	1	0-1
			16QAM	1	0	21.62	1	0-1
				1	12	21.99	1	0-1
				1	24	22.1	1	0-1
				12	0	20.27	2	0-2
				12	6	20.27	2	0-2
				12	13	20.73	2	0-2
				25	0	20.49	2	0-2
	23825		QPSK	1	0			0
				1	12			0
1				24			0	
12				0			0-1	
12				6			0-1	
12				13			0-1	
25				0			0-1	
16QAM			1	0			0-1	
			1	12			0-1	
			1	24			0-1	
			12	0			0-2	
			12	6			0-2	
			12	13			0-2	
			25	0			0-2	

Table 59: LTE Band 17 Conducted Output Power [5 Mhz]⁸

⁸ LTE Band 17 at 5MHz bandwidth does not support three non-overlapping channels. Per KDB 941225 D05, when a device supports overlapping channel assignments in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	23780		QPSK	1	0			0
				1	24			0
				1	49			0
				25	0			0-1
				25	12			0-1
				25	24			0-1
			16QAM	50	0			0-1
				1	0			0-1
				1	24			0-1
				1	49			0-1
				25	0			0-2
				25	12			0-2
				25	24			0-2
				50	0			0-2
	23790	710	QPSK	1	0	22.87	0	0
				1	24	22.45	0	0
				1	49	23.35	0	0
				25	0	21.36	1	0-1
				25	12	21.1	1	0-1
				25	24	21.6	1	0-1
			16QAM	50	0	21.29	1	0-1
				1	0	22.02	1	0-1
				1	24	21.17	1	0-1
				1	49	22.1	1	0-1
				25	0	20.4	2	0-2
				25	12	20.12	2	0-2
				25	24	20.6	2	0-2
				50	0	20.32	2	0-2
	23800		QPSK	1	0			0
				1	24			0
1				49			0	
25				0			0-1	
25				12			0-1	
25				24			0-1	
16QAM			50	0			0-1	
			1	0			0-1	
			1	24			0-1	
			1	49			0-1	
			25	0			0-2	
			25	12			0-2	
			25	24			0-2	
			50	0			0-2	

Table 60: LTE Band 17 Conducted Output Power [10 Mhz]⁹

⁹ LTE Band 17 at 10MHz bandwidth does not support three non-overlapping channels. Per KDB 941225 D05, when a device supports overlapping channel assignments in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
1.4	26047	1850.7	QPSK	1	0	23.02	0	0
				1	2	23.19	0	0
				1	5	23.07	0	0
				3	0	23.13	0	0
				3	1	23.18	0	0
				3	2	23.14	0	0
			6	0	22.15	1	0-1	
			16QAM	1	0	22.39	1	0-1
				1	2	22.44	1	0-1
				1	5	22.45	1	0-1
				3	0	22.22	1	0-1
				3	1	22.27	1	0-1
	3	2		22.31	1	0-1		
	6	0	21	2	0-2			
	26365	1882.5	QPSK	1	0	22.98	0	0
				1	2	23.09	0	0
				1	5	23.12	0	0
				3	0	23.05	0	0
				3	1	23.08	0	0
				3	2	23.09	0	0
			6	0	22.06	1	0-1	
			16QAM	1	0	21.91	1	0-1
				1	2	22.07	1	0-1
				1	5	22.14	1	0-1
				3	0	22.1	1	0-1
				3	1	22.15	1	0-1
	3	2		22.18	1	0-1		
	6	0	21.15	2	0-2			
	26683	1914.3	QPSK	1	0	23.17	0	0
				1	2	23.01	0	0
1				5	22.55	0	0	
3				0	23.14	0	0	
3				1	23.11	0	0	
3				2	22.97	0	0	
6			0	22.24	1	0-1		
16QAM			1	0	22.31	1	0-1	
			1	2	22.09	1	0-1	
			1	5	21.64	1	0-1	
			3	0	22.37	1	0-1	
			3	1	22.29	1	0-1	
	3	2	22.08	1	0-1			
6	0	21.34	2	0-2				

Table 61: LTE Band 25 Conducted Output Power [1.4 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
3MHz	26055	1851.5	QPSK	1	0	22.84	0	0
				1	7	22.97	0	0
				1	14	23.07	0	0
				8	0	21.89	1	0-1
				8	4	21.93	1	0-1
				8	7	22.01	1	0-1
			16QAM	15	0	21.94	1	0-1
				1	0	21.93	1	0-1
				1	7	21.93	1	0-1
				1	14	21.94	1	0-1
				8	0	22.04	2	0-2
				8	4	21.94	2	0-2
	26365	1882.5	QPSK	8	7	21.95	2	0-2
				8	7	21.95	2	0-2
				15	0	20.99	2	0-2
				1	0	22.74	0	0
				1	7	22.98	0	0
				1	14	23.17	0	0
			16QAM	8	0	21.97	1	0-1
				8	4	22.05	1	0-1
				8	7	22.02	1	0-1
				15	0	22	1	0-1
				1	0	22	1	0-1
				1	7	21.93	1	0-1
	26675	1913.5	QPSK	1	14	21.89	1	0-1
				8	0	22	2	0-2
				8	4	21.99	2	0-2
				8	7	21.97	2	0-2
				15	0	21.06	2	0-2
				1	0	23.46	0	0
16QAM			1	7	22.97	0	0	
			1	14	22.8	0	0	
			8	0	22.48	1	0-1	
			8	4	21.99	1	0-1	
			8	7	21.58	1	0-1	
			15	0	22.07	1	0-1	
				1	0	22.3	1	0-1
				1	7	22.23	1	0-1
				1	14	21.3	1	0-1
				8	0	21.54	2	0-2
				8	4	21.11	2	0-2
				8	7	20.67	2	0-2
				15	0	21.15	2	0-2

Table 62: LTE Band 25 Conducted Output Power [3 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	26065	1852.5	QPSK	1	0	22.47	0	0
				1	12	22.73	0	0
				1	24	22.75	0	0
				12	0	21.74	1	0-1
				12	6	21.89	1	0-1
				12	13	22.02	1	0-1
			16QAM	25	0	21.87	1	0-1
				1	0	21.48	1	0-1
				1	12	21.84	1	0-1
				1	24	21.9	1	0-1
				12	0	20.62	2	0-2
				12	6	20.89	2	0-2
	26365	1882.5	QPSK	12	13	21.08	2	0-2
				12	13	21.08	2	0-2
				25	0	20.88	2	0-2
				1	0	22.5	0	0
				1	12	22.86	0	0
				1	24	23.15	0	0
			16QAM	12	0	21.71	1	0-1
				12	6	21.88	1	0-1
				12	13	22.11	1	0-1
				25	0	21.9	1	0-1
				1	0	21.8	1	0-1
				1	12	22.11	1	0-1
	26665	1912.5	QPSK	1	24	22.46	1	0-1
				12	0	20.76	2	0-2
				12	6	20.87	2	0-2
				12	13	21.11	2	0-2
				25	0	20.9	2	0-2
				1	0	23.39	0	0
16QAM			1	12	23.15	0	0	
			1	24	21.51	0	0	
			12	0	22.64	1	0-1	
			12	6	22.29	1	0-1	
			12	13	21.39	1	0-1	
			25	0	22.09	1	0-1	
16QAM	1	0	23.03	1	0-1			
	1	12	22.82	1	0-1			
	1	24	21.36	1	0-1			
	12	0	21.67	2	0-2			
	12	6	21.24	2	0-2			
	12	13	20.37	2	0-2			
				25	0	20.98	2	0-2

Table 63: LTE Band 25 Conducted Output Power [5 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	26090	1855	QPSK	1	0	22.6	0	0
				1	24	22.65	0	0
				1	49	22.62	0	0
				25	0	21.7	1	0-1
				25	12	21.74	1	0-1
				25	24	21.78	1	0-1
			16QAM	50	0	21.69	1	0-1
				1	0	21.9	1	0-1
				1	24	21.99	1	0-1
				1	49	21.92	1	0-1
				25	0	20.76	2	0-2
				25	12	20.8	2	0-2
	26365	1882.5	QPSK	25	24	20.78	2	0-2
				50	0	20.7	2	0-2
				1	0	22.32	0	0
				1	24	22.44	0	0
				1	49	23.17	0	0
				25	0	21.39	1	0-1
			16QAM	25	12	21.62	1	0-1
				25	24	22.01	1	0-1
				50	0	21.71	1	0-1
				1	0	21.3	1	0-1
				1	24	21.37	1	0-1
				1	49	22.2	1	0-1
	26640	1910	QPSK	25	0	20.35	2	0-2
				25	12	20.58	2	0-2
				25	24	21.08	2	0-2
				50	0	20.74	2	0-2
				1	0	22.35	0	0
				1	24	23.04	0	0
16QAM			1	49	22.1	0	0	
			25	0	22.03	1	0-1	
			25	12	22.27	1	0-1	
			25	24	21.98	1	0-1	
			50	0	21.96	1	0-1	
			1	0	21.28	1	0-1	
16QAM	1	24	22.02	1	0-1			
	1	49	21.1	1	0-1			
	25	0	21.01	2	0-2			
	25	12	21.25	2	0-2			
	25	24	20.9	2	0-2			
	50	0	20.96	2	0-2			

Table 64: LTE Band 25 Conducted Output Power [10 Mhz]

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
15MHz	26115	1857.5	QPSK	1	0	22.74	0	0
				1	37	22.79	0	0
				1	74	21.98	0	0
				36	0	22.01	1	0-1
				36	16	21.86	1	0-1
				36	35	21.53	1	0-1
				75	0	21.68	1	0-1
			16QAM	1	0	21.77	1	0-1
				1	37	21.86	1	0-1
				1	74	20.9	1	0-1
				36	0	21.11	2	0-2
				36	16	20.95	2	0-2
				36	35	20.55	2	0-2
				75	0	20.65	2	0-2
	26365	1882.5	QPSK	1	0	22.15	0	0
				1	37	22.65	0	0
				1	74	23.09	0	0
				36	0	21.26	1	0-1
				36	16	21.68	1	0-1
				36	35	22.1	1	0-1
				75	0	21.75	1	0-1
			16QAM	1	0	21.19	1	0-1
				1	37	21.58	1	0-1
				1	74	22.16	1	0-1
				36	0	20.21	2	0-2
				36	16	20.67	2	0-2
				36	35	21.12	2	0-2
75				0	20.74	2	0-2	
26615	1907.5	QPSK	1	0	22.1	0	0	
			1	37	23.09	0	0	
			1	74	22.14	0	0	
			36	0	21.18	1	0-1	
			36	16	22.23	1	0-1	
			36	35	22.49	1	0-1	
			75	0	21.94	1	0-1	
		16QAM	1	0	21.6	1	0-1	
			1	37	22.5	1	0-1	
			1	74	21.82	1	0-1	
			36	0	20.22	2	0-2	
			36	16	21.26	2	0-2	
			36	35	21.52	2	0-2	
			75	0	21.01	2	0-2	

Table 65: LTE Band 25 Conducted Output Power [15 Mhz]

BW	Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
20MHz	26140	1860	QPSK	1	0	23.14	0	0
				1	49	22.73	0	0
				1	99	22.3	0	0
				50	0	22.35	1	0-1
				50	24	21.71	1	0-1
				50	49	21.05	1	0-1
			16QAM	100	0	21.81	1	0-1
				1	0	22.59	1	0-1
				1	49	22.2	1	0-1
				1	99	21.03	1	0-1
				50	0	21.34	2	0-2
				50	24	20.69	2	0-2
	26365	1882.5	QPSK	50	49	20.04	2	0-2
				100	0	20.75	2	0-2
				1	0	21.92	0	0
				1	49	22.67	0	0
				1	99	22.86	0	0
				50	0	21.14	1	0-1
			16QAM	50	24	21.75	1	0-1
				50	49	22.14	1	0-1
				100	0	21.82	1	0-1
				1	0	21.3	1	0-1
				1	49	22.2	1	0-1
				1	99	22.37	1	0-1
	26590	1905	QPSK	50	0	20.11	2	0-2
				50	24	20.83	2	0-2
				50	49	21.12	2	0-2
				100	0	20.83	2	0-2
				1	0	22.6	0	0
				1	49	22.6	0	0
16QAM			1	99	22.46	0	0	
			50	0	21.8	1	0-1	
			50	24	21.93	1	0-1	
			50	49	22.69	1	0-1	
			100	0	21.92	1	0-1	
			1	0	21.93	1	0-1	
16QAM	1	49	21.97	1	0-1			
	1	99	21.79	1	0-1			
	50	0	20	2	0-2			
	50	24	20.87	2	0-2			
	50	49	21.66	2	0-2			
	100	0	20.93	2	0-2			

Table 66: LTE Band 25 Conducted Output Power [20 Mhz]

CDMA

Band	Channel	Frequency (MHz)	RC1/SO55	RC3/SO55	RC3/SO32 (+F-SCH)	RC3/SO32 (+SCH)	1xEVDO Rev. 0 (RTAP)	1xEVDO Rev. A (RETAP)
BC0	1013	824.7	21.1	21	21.22	21.19	21.16	21.15
	384	836.52	21.1	21.1	21.15	21.1	21.08	21.03
	777	848.31	21	20.9	21.07	21.05	21.03	21.02
BC1	25	1851.25	19.2	19.2	19.2	19.2	19.15	19.08
	600	1880	18.7	18.7	18.7	18.7	18.66	18.61
	1175	1908.75	19.06	19.1	19.2	19.2	19.13	19.1
BC10	450	817.25	20.89	20.93	20.97	20.96	20.87	20.63
	560	820	20.97	20.87	21.02	20.99	20.78	20.71
	670	822.75	20.98	21.02	21.1	21.1	20.97	20.89

Table 67: CDMA Conducted Output Power - Proximity Sensor Enabled

WCDMA-UMTS

Mode	3GPP Subtest	Band V (800MHz) Channel Power (dBm)			Band IV (1700MHz) Channel Power (dBm)			Band II (1900MHz) Channel Power (dBm)			MPR
		4132	4182	4223	1312	1427	1513	9262	9400	9538	
Rel 99	1	22.54	22.6	22.5	18.55	18.45	18.33	18.93	19.06	19.11	-
Rel 7 HSDPA	1	22.07	22.14	21.01	18.58	18.51	18.48	18.9	19.01	19.07	0
	2	21.75	21.85	21.7	17.74	17.62	17.58	18.18	18.12	18.18	0
	3	21.62	21.67	21.58	17.61	17.52	17.41	16.19	16.14	16.16	0.5
	4	21.59	21.66	21.58	17.56	17.42	17.45	17.69	18.02	17.98	0.5
Rel 6 HSUPA	1	21.64	21.7	21.52	17.58	17.48	17.39	17.99	18.01	18.09	0
	2	21.69	21.5	21.7	17.59	17.51	17.42	18.01	18	18.02	2
	3	22.07	22.15	22.1	18	17.96	17.94	18.36	18.52	18.64	1
	4	22.08	22.02	22.05	18.01	17.94	18	18.51	18.54	18.5	2
	5	22.07	22.21	21.97	17.99	17.96	17.94	18.48	18.51	18.65	0

Table 68: WCDMA-UMTS Conducted Output Power - Proximity Sensor Enabled

GSM

Burst Average Power

Band	Channel	Frequency (MHz)	GPRS - 1 Tx Slot	GPRS - 2 Tx Slots	EDGE - 1 Tx Slot	EDGE - 2 Tx Slots	EDGE - 3 Tx Slots	EDGE - 4 Tx Slots
GSM 850	128	824.2	30.6	28.1	26.4	26.1	26	23.6
	190	836.6	30.5	28.2	26.4	26.2	26	23.7
	251	848.8	30.5	28.2	26.3	26.2	26	23.6
GSM 1900	512	1850.2	28.1	25.6	25.7	25.6	23.2	22
	661	1880	28.2	25.7	25.7	25.6	23.1	21.9
	810	1909.8	28.3	25.5	25.7	25.5	23.3	21.9

Table 69: GSM Conducted Output Power - Proximity Sensor Enabled

Frame Average Power

Band	Channel	Frequency (MHz)	GPRS - 1 Tx Slot	GPRS - 2 Tx Slots	EDGE - 1 Tx Slot	EDGE - 2 Tx Slots	EDGE - 3 Tx Slots	EDGE - 4 Tx Slots
GSM 850	128	824.2	21.57	22.08	17.37	20.08	21.74	20.59
	190	836.6	21.47	22.18	17.37	20.18	21.74	20.69
	251	848.8	21.47	22.18	17.27	20.18	21.74	20.59
GSM 1900	512	1850.2	19.07	19.58	16.67	19.58	18.94	18.99
	661	1880	19.17	19.68	16.67	19.58	18.84	18.89
	810	1909.8	19.27	19.48	16.67	19.48	19.04	18.89

Table 70: GSM Conducted Output Power - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)	
1.4MHz	18607	1850.7	QPSK	1	0	18.40	0	0	
				1	2	18.62	0	0	
				1	5	18.77	0	0	
				3	0	18.59	0	0	
				3	1	18.62	0	0	
				3	2	18.65	0	0	
			16QAM	6	0	18.67	0	0	0-1
				1	0	18.47	0	0	0-1
				1	2	18.64	0	0	0-1
				1	5	18.78	0	0	0-1
				3	0	18.80	0	0	0-1
				3	1	18.90	0	0	0-1
	18900	1800	QPSK	3	2	18.85	0	0-1	
				6	0	18.85	0	0-2	
				1	0	18.51	0	0	
				1	2	18.61	0	0	
				1	5	18.73	0	0	
				3	0	18.54	0	0	
			16QAM	3	1	18.6	0	0	
				3	2	18.65	0	0	
				6	0	18.61	0	0	0-1
				1	0	18.60	0	0	0-1
				1	2	18.56	0	0	0-1
				1	5	18.78	0	0	0-1
	19193	1909.3	QPSK	3	0	18.46	0	0-1	
				3	1	18.52	0	0-1	
				3	2	18.56	0	0-1	
				6	0	18.60	0	0-2	
				1	0	18.68	0	0	
				1	2	18.87	0	0	
16QAM			1	5	19.02	0	0		
			3	0	18.79	0	0		
			3	1	18.87	0	0		
			3	2	18.94	0	0		
			6	0	18.86	0	0	0-1	
			1	0	18.92	0	0	0-1	
16QAM	1	2	19.1	0	0	0-1			
	1	5	19.32	0	0	0-1			
	3	0	18.84	0	0	0-1			
	3	1	18.89	0	0	0-1			
	3	2	19.01	0	0	0-1			
	6	0	18.75	0	0	0-2			

Table 71: LTE Band 2 Conducted Output Power [1.4 Mhz]- Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
3MHz	18615	1851.5	QPSK	1	0	18.24	0	0
				1	7	18.75	0	0
				1	14	18.89	0	0
				8	0	18.52	0	0-1
				8	4	18.7	0	0-1
				8	7	18.81	0	0-1
			16QAM	15	0	18.62	0	0-1
				1	0	18.53	0	0-1
				1	7	18.82	0	0-1
				1	14	19.04	0	0-1
				8	0	18.38	0	0-2
				8	4	18.60	0	0-2
	18900	1880	QPSK	8	7	18.68	0	0-2
				8	7	18.68	0	0-2
				15	0	18.52	0	0-2
				1	0	18.3	0	0
				1	7	18.64	0	0
				1	14	18.68	0	0
				8	0	18.53	0	0-1
				8	4	18.61	0	0-1
				8	7	18.69	0	0-1
			16QAM	15	0	18.56	0	0-1
				1	0	18.27	0	0-1
				1	7	18.57	0	0-1
				1	14	18.63	0	0-1
				8	0	18.4	0	0-2
				8	4	18.48	0	0-2
				8	7	18.60	0	0-2
				15	0	18.43	0	0-2
				19185	1908.5	QPSK	1	0
1	7	18.79	0				0	
1	14	19.37	0				0	
8	0	18.62	0				0-1	
8	4	18.93	0				0-1	
8	7	19.11	0				0-1	
16QAM	15	0	18.83			0	0-1	
	1	0	18.13			0	0-1	
	1	7	18.7			0	0-1	
	1	14	19.16			0	0-1	
	8	0	18.57			0	0-2	
	8	4	18.96			0	0-2	
	8	7	19.13			0	0-2	
	15	0	18.78			0	0-2	

Table 72: LTE Band 2 Conducted Output Power [3 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	18625	1852.5	QPSK	1	0	18.13	0	0
				1	12	18.61	0	0
				1	24	18.70	0	0
				12	0	18.43	0	0-1
				12	6	18.60	0	0-1
				12	13	18.77	0	0-1
			16QAM	25	0	18.65	0	0-1
				1	0	18.65	0	0-1
				1	12	19.14	0	0-1
				1	24	19.16	0	0-1
				12	0	18.26	0	0-2
				12	6	18.27	0	0-2
	18900	1880	QPSK	12	13	18.59	0	0-2
				25	0	18.41	0	0-2
				1	0	18.18	0	0
				1	12	18.62	0	0
				1	24	18.81	0	0
				12	0	18.35	0	0-1
			16QAM	12	6	18.56	0	0-1
				12	13	18.69	0	0-1
				25	0	18.57	0	0-1
				1	0	18.14	0	0-1
				1	12	18.55	0	0-1
				1	24	18.84	0	0-1
	19175	1907.5	QPSK	12	0	18.24	0	0-2
				12	6	18.25	0	0-2
				12	13	18.62	0	0-2
				25	0	18.52	0	0-2
				1	0	17.86	0	0
				1	12	18.71	0	0
16QAM			1	24	19.49	0	0	
			12	0	18.3	0	0-1	
			12	6	18.73	0	0-1	
			12	13	19.14	0	0-1	
			25	0	18.78	0	0-1	
			1	0	18.12	0	0-1	
16QAM	1	12	18.85	0	0-1			
	1	24	19.73	0	0-1			
	12	0	18.32	0	0-2			
	12	6	18.62	0	0-2			
	12	13	19.12	0	0-2			
	25	0	18.78	0	0-2			

Table 73: LTE Band 2 Conducted Output Power [5 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	18650	1855	QPSK	1	0	17.93	0	0
				1	24	18.66	0	0
				1	49	18.09	0	0
				25	0	18.59	0	0-1
				25	12	18.63	0	0-1
				25	24	18.49	0	0-1
			16QAM	50	0	18.42	0	0-1
				1	0	18.24	0	0-1
				1	24	18.93	0	0-1
				1	49	18.33	0	0-1
				25	0	18.50	0	0-2
				25	12	18.59	0	0-2
	18900	1880	QPSK	25	24	18.41	0	0-2
				50	0	18.33	0	0-2
				1	0	18.1	0	0
				1	24	18.38	0	0
				1	49	19.06	0	0
				25	0	18.01	0	0-1
			16QAM	25	12	18.45	0	0-1
				25	24	18.75	0	0-1
				50	0	18.43	0	0-1
				1	0	18.05	0	0-1
				1	24	18.37	0	0-1
				1	49	18.95	0	0-1
	19150	1905	QPSK	25	0	17.98	0	0-2
				25	12	18.41	0	0-2
				25	24	18.8	0	0-2
				50	0	18.40	0	0-2
				1	0	17.89	0	0
				1	24	18.16	0	0
16QAM			1	49	19.01	0	0	
			25	0	18.07	0	0-1	
			25	12	18.41	0	0-1	
			25	24	19.07	0	0-1	
			50	0	18.56	0	0-1	
			1	0	17.5	0	0-1	
16QAM	1	24	18.1	0	0-1			
	1	49	18.99	0	0-1			
	25	0	18.00	0	0-2			
	25	12	18.37	0	0-2			
	25	24	18.89	0	0-2			
	50	0	18.57	0	0-2			

Table 74: LTE Band 2 Conducted Output Power [10 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
15MHz	18675	1857.5	QPSK	1	0	18.40	0	0
				1	37	18.98	0	0
				1	74	17.99	0	0
				36	0	18.91	0	0-1
				36	16	18.83	0	0-1
				36	35	18.39	0	0-1
			75	0	18.57	0	0-1	
			16QAM	1	0	18.62	0	0-1
				1	37	19.11	0	0-1
				1	74	18.2	0	0-1
				36	0	18.73	0	0-2
				36	16	18.77	0	0-2
	36	35		18.27	0	0-2		
	75	0	18.36	0	0-2			
	18900	1880	QPSK	1	0	18.12	0	0
				1	37	18.42	0	0
				1	74	19.14	0	0
				36	0	17.96	0	0-1
				36	16	18.44	0	0-1
				36	35	18.83	0	0-1
			75	0	18.44	0	0-1	
			16QAM	1	0	17.82	0	0-1
				1	37	18.26	0	0-1
				1	74	18.88	0	0-1
				36	0	17.86	0	0-2
				36	16	18.3	0	0-2
	36	35		18.72	0	0-2		
	75	0	18.33	0	0-2			
	19125	1902.5	QPSK	1	0	18.77	0	0
				1	37	18.6	0	0
1				74	19.65	0	0	
36				0	18.34	0	0-1	
36				16	18.29	0	0-1	
36				35	18.73	0	0-1	
75			0	18.58	0	0-1		
16QAM			1	0	18.72	0	0-1	
			1	37	18.63	0	0-1	
			1	74	19.38	0	0-1	
			36	0	18.09	0	0-2	
			36	16	18.15	0	0-2	
	36	35	18.77	0	0-2			
75	0	18.48	0	0-2				

Table 75: LTE Band 2 Conducted Output Power [15 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)			
20MHz	18700	1860	QPSK	1	0	18.8	0	0			
				1	49	18.76	0	0			
				1	99	17.9	0	0			
				50	0	19.1	0	0-1			
				50	24	18.71	0	0-1			
				50	49	18.2	0	0-1			
			16QAM	100	0	18.52	0	0-1			
				1	0	19.08	0	0-1			
				1	49	19.06	0	0-1			
				1	99	18.12	0	0-1			
				50	0	18.86	0	0-2			
				50	24	18.58	0	0-2			
	18900	1880	QPSK	50	49	18.1	0	0-2			
				100	0	18.33	0	0-2			
				1	0	18.4	0	0			
				1	49	18.53	0	0			
				1	99	19.35	0	0			
				50	0	17.96	0	0-1			
				50	24	18.43	0	0-1			
				50	49	18.91	0	0-1			
				100	0	18.46	0	0-1			
			16QAM	1	0	18.61	0	0-1			
				1	49	18.91	0	0-1			
				1	99	19.59	0	0-1			
				50	0	17.86	0	0-2			
				50	24	18.37	0	0-2			
				50	49	18.87	0	0-2			
				100	0	18.43	0	0-2			
				19100	1900	QPSK	1	0	19.6	0	0
							1	49	18.6	0	0
1	99	19.63	0				0				
50	0	18.59	0				0-1				
50	24	18.02	0				0-1				
50	49	18.32	0				0-1				
16QAM	100	0	18.5			0	0-1				
	1	0	19.57			0	0-1				
	1	49	18.29			0	0-1				
19100	1900	16QAM	1	99	19.77	0	0-1				
			50	0	18.31	0	0-2				
			50	24	18.00	0	0-2				
		50	49	18.44	0	0-2					
		100	0	18.36	0	0-2					

Table 76: LTE Band 2 Conducted Output Power [20 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)	
1.4MHz	19957	1710.7	QPSK	1	0	16.61	0	0	
				1	2	16.59	0	0	
				1	5	16.53	0	0	
				3	0	16.64	0	0	
				3	1	16.54	0	0	
				3	2	16.56	0	0	
			16QAM	6	0	16.57	0	0	0-1
				1	0	16.59	0	0	0-1
				1	2	16.56	0	0	0-1
				1	5	16.52	0	0	0-1
				3	0	16.49	0	0	0-1
				3	1	16.42	0	0	0-1
	20175	1732.5	QPSK	3	2	16.42	0	0-1	
				3	0	16.11	0	0-2	
				6	0	16.11	0	0-2	
				1	0	17.02	0	0	
				1	2	17.12	0	0	
				1	5	16.88	0	0	
			16QAM	3	0	17.19	0	0	
				3	1	17.16	0	0	
				3	2	17.07	0	0	
				6	0	17.07	0	0	0-1
				1	0	16.64	0	0	0-1
				1	2	16.7	0	0	0-1
	20393	1754.3	QPSK	1	5	16.51	0	0-1	
				3	0	16.9	0	0-1	
				3	1	16.9	0	0-1	
				3	2	16.79	0	0-1	
				6	0	16.83	0	0-2	
				1	0	16.55	0	0	
16QAM			1	2	16.64	0	0		
			1	5	16.61	0	0		
			3	0	16.6	0	0		
			3	1	16.63	0	0		
			3	2	16.65	0	0		
			6	0	16.65	0	0	0-1	
16QAM	1	0	16.53	0	0	0-1			
	1	2	16.62	0	0	0-1			
	1	5	16.58	0	0	0-1			
	3	0	16.5	0	0	0-1			
	3	1	16.53	0	0	0-1			
	3	2	16.54	0	0	0-1			
6	0	16.73	0	0	0-2				

Table 77: LTE Band 4 Conducted Output Power [1.4 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
3MHz	19965	1711.5	QPSK	1	0	16.44	0	0
				1	7	16.36	0	0
				1	14	16.33	0	0
				8	0	16.44	0	0-1
				8	4	16.46	0	0-1
				8	7	16.42	0	0-1
			16QAM	15	0	16.49	0	0-1
				1	0	16.08	0	0-1
				1	7	15.98	0	0-1
				1	14	15.93	0	0-1
				8	0	16.18	0	0-2
				8	4	16.19	0	0-2
				8	7	16.15	0	0-2
				15	0	16.16	0	0-2
				20175	1732.5	QPSK	1	0
	1	7	17.07				0	0
	1	14	16.51				0	0
	8	0	17.15				0	0-1
	8	4	17.05				0	0-1
	8	7	17.00				0	0-1
	16QAM	15	0			17.04	0	0-1
		1	0			16.98	0	0-1
		1	7			16.98	0	0-1
		1	14			16.95	0	0-1
		8	0			16.83	0	0-2
		8	4			16.74	0	0-2
		8	7			16.70	0	0-2
		15	0			16.66	0	0-2
		20385	1753.5			QPSK	1	0
	1			7	16.55		0	0
1	14			16.36	0		0	
8	0			16.47	0		0-1	
8	4			16.61	0		0-1	
8	7			16.58	0		0-1	
16QAM	15			0	16.53	0	0-1	
	1			0	16.29	0	0-1	
	1			7	16.41	0	0-1	
	1			14	16.43	0	0-1	
	8			0	16.28	0	0-2	
	8			4	16.42	0	0-2	
	8			7	16.39	0	0-2	
	15			0	16.25	0	0-2	

Table 78: LTE Band 4 Conducted Output Power [3 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)		
5MHz	19975	1712.5	QPSK	1	0	16.04	0	0		
				1	12	16.34	0	0		
				1	24	16.44	0	0		
				12	0	16.43	0	0-1		
				12	6	16.42	0	0-1		
				12	13	16.39	0	0-1		
			16QAM	25	0	16.41	0	0-1		
				1	0	16.98	0	0-1		
				1	12	16.83	0	0-1		
				1	24	16.91	0	0-1		
				12	0	16.10	0	0-2		
				12	6	16.09	0	0-2		
	20175	1732.5	QPSK	12	13	16.05	0	0-2		
				25	0	15.97	0	0-2		
				1	0	17.07	0	0		
				1	12	16.93	0	0		
				1	24	16.44	0	0		
				12	0	17.05	0	0-1		
			16QAM	12	6	17.11	0	0-1		
				12	13	16.53	0	0-1		
				25	0	17.07	0	0-1		
				1	0	16.78	0	0-1		
				1	12	16.60	0	0-1		
				1	24	16.54	0	0-1		
			20375	1752.5	QPSK	12	0	16.63	0	0-2
						12	6	16.70	0	0-2
						12	13	16.59	0	0-2
						25	0	16.76	0	0-2
						1	0	16.21	0	0
						1	12	16.55	0	0
16QAM	1	24			16.41	0	0			
	12	0			16.44	0	0-1			
	12	6			16.43	0	0-1			
	12	13			16.53	0	0-1			
	25	0			16.49	0	0-1			
	1	0			16.34	0	0-1			
			16QAM	1	12	16.65	0	0-1		
				1	24	16.60	0	0-1		
				12	0	16.34	0	0-2		
			QPSK	12	6	16.41	0	0-2		
				12	13	16.45	0	0-2		
				25	0	16.31	0	0-2		

Table 79: LTE Band 4 Conducted Output Power [5 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	20000	1715	QPSK	1	0	16.05	0	0
				1	24	16.55	0	0
				1	49	16.72	0	0
				25	0	16.6	0	0-1
				25	12	16.53	0	0-1
				25	24	16.61	0	0-1
			16QAM	50	0	16.62	0	0-1
				1	0	16.45	0	0-1
				1	24	16.53	0	0-1
				1	49	16.65	0	0-1
				25	0	16.24	0	0-2
				25	12	16.19	0	0-2
	20175	1732.5	QPSK	25	24	16.26	0	0-2
				50	0	16.27	0	0-2
				1	0	16.88	0	0
				1	24	17.21	0	0
				1	49	16.54	0	0
				25	0	17.31	0	0-1
			16QAM	25	12	17.18	0	0-1
				25	24	16.64	0	0-1
				50	0	16.72	0	0-1
				1	0	16.88	0	0-1
				1	24	16.72	0	0-1
				1	49	16.28	0	0-1
	20350	1750	QPSK	25	0	16.91	0	0-2
				25	12	16.77	0	0-2
				25	24	16.73	0	0-2
				50	0	16.75	0	0-2
				1	0	16.09	0	0
				1	24	16.37	0	0
16QAM			1	49	16.32	0	0	
			25	0	16.29	0	0-1	
			25	12	16.44	0	0-1	
			25	24	16.25	0	0-1	
			50	0	16.31	0	0-1	
			1	0	15.85	0	0-1	
16QAM	1	24	16.10	0	0-1			
	1	49	16.12	0	0-1			
	25	0	16.05	0	0-2			
	25	12	16.23	0	0-2			
	25	24	16.24	0	0-2			
	50	0	16.07	0	0-2			

Table 80: LTE Band 4 Conducted Output Power [10 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
15MHz	20025	1717.5	QPSK	1	0	16.03	0	0
				1	37	16.6	0	0
				1	74	16.91	0	0
				36	0	16.56	0	0-1
				36	16	16.59	0	0-1
				36	35	16.76	0	0-1
				75	0	16.68	0	0-1
			16QAM	1	0	16.38	0	0-1
				1	37	16.75	0	0-1
				1	74	17.05	0	0-1
				36	0	16.14	0	0-2
				36	16	16.23	0	0-2
				36	35	16.38	0	0-2
				75	0	16.29	0	0-2
	20175	1732.5	QPSK	1	0	16.72	0	0
				1	37	16.84	0	0
				1	74	16.13	0	0
				36	0	17.13	0	0-1
				36	16	17.08	0	0-1
				36	35	16.5	0	0-1
				75	0	16.52	0	0-1
			16QAM	1	0	16.73	0	0-1
				1	37	16.72	0	0-1
				1	74	15.89	0	0-1
				36	0	16.66	0	0-2
				36	16	16.61	0	0-2
				36	35	16.49	0	0-2
75				0	16.55	0	0-2	
20325	1747.5	QPSK	1	0	16.44	0	0	
			1	37	16.22	0	0	
			1	74	16.27	0	0	
			36	0	16.16	0	0-1	
			36	16	16.21	0	0-1	
			36	35	16.21	0	0-1	
			75	0	16.23	0	0-1	
		16QAM	1	0	16.50	0	0-1	
			1	37	16.29	0	0-1	
			1	74	16.41	0	0-1	
			36	0	15.94	0	0-2	
			36	16	16.02	0	0-2	
			36	35	16.06	0	0-2	
			75	0	16.02	0	0-2	

Table 81: LTE Band 4 Conducted Output Power [15 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
20MHz	20050		QPSK	1	0			0
				1	49			0
				1	99			0
				50	0			0-1
				50	24			0-1
				50	49			0-1
				100	0			0-1
			16QAM	1	0			0-1
				1	49			0-1
				1	99			0-1
				50	0			0-2
				50	24			0-2
				50	49			0-2
				100	0			0-2
	20175	1732.5	QPSK	1	0	17.45	0	0
				1	49	17.37	0	0
				1	99	16.48	0	0
				50	0	17.25	0	0-1
				50	24	17.26	0	0-1
				50	49	16.58	0	0-1
				100	0	17.08	0	0-1
			16QAM	1	0	17.37	0	0-1
				1	49	17.21	0	0-1
				1	99	16.51	0	0-1
				50	0	16.76	0	0-2
				50	24	16.73	0	0-2
				50	49	16.29	0	0-2
				100	0	16.63	0	0-2
	20300		QPSK	1	0			0
				1	49			0
1				99			0	
50				0			0-1	
50				24			0-1	
50				49			0-1	
100				0			0-1	
16QAM			1	0			0-1	
			1	49			0-1	
			1	99			0-1	
			50	0			0-2	
			50	24			0-2	
			50	49			0-2	
			100	0			0-2	

Table 82: LTE Band 4 Conducted Output Power [20 Mhz] - Proximity Sensor Enabled¹⁰

¹⁰ LTE Band 4 at 20MHz bandwidth does not support three non-overlapping channels. Per KDB 941225 D05, when a device supports overlapping channel assignments in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
1.4MHz	20407	824.7	QPSK	1	0	22.72	0	0
				1	2	22.69	0	0
				1	5	22.67	0	0
				3	0	22.63	1	0
				3	1	22.61	1	0
				3	2	22.61	1	0
			16QAM	6	0	21.68	1	0-1
				1	0	21.69	1	0-1
				1	2	21.8	1	0-1
				1	5	21.74	1	0-1
				3	0	21.82	2	0-1
				3	1	21.88	2	0-1
	20525	836.5	QPSK	3	2	21.86	2	0-1
				6	0	20.78	2	0-2
				1	0	22.67	0	0
				1	2	22.64	0	0
				1	5	22.54	0	0
				3	0	22.69	0	0
			16QAM	3	1	22.66	0	0
				3	2	22.64	0	0
				6	0	21.66	0	0-1
				1	0	21.72	1	0-1
				1	2	21.7	1	0-1
				1	5	21.61	1	0-1
	20643	848.3	QPSK	3	0	21.91	2	0-1
				3	1	21.72	2	0-1
				3	2	21.72	2	0-1
				6	0	20.8	2	0-2
				1	0	22.63	0	0
				1	2	22.68	0	0
16QAM			1	5	22.55	0	0	
			3	0	22.64	1	0	
			3	1	22.67	1	0	
			3	2	22.67	1	0	
			6	0	21.41	1	0-1	
			1	0	22.07	1	0-1	
16QAM	1	2	22.1	1	0-1			
	1	5	21.95	1	0-1			
	3	0	21.86	2	0-1			
	3	1	21.95	2	0-1			
	3	2	21.95	2	0-1			
	6	0	20.33	2	0-2			

Table 83: LTE Band 5 Conducted Output Power [1.4 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
3MHz	20415	825.5	QPSK	1	0	21.56	0	0
				1	7	21.48	0	0
				1	14	21.45	0	0
				8	0	21.58	1	0-1
				8	4	21.57	1	0-1
				8	7	21.58	1	0-1
			16QAM	15	0	21.56	1	0-1
				1	0	21.54	1	0-1
				1	7	21.51	1	0-1
				1	14	21.52	1	0-1
				8	0	21.61	2	0-2
				8	4	21.6	2	0-2
	20525	836.5	QPSK	8	7	21.59	2	0-2
				8	0	21.59	2	0-2
				15	0	21.59	2	0-2
				1	0	22.67	0	0
				1	7	22.66	0	0
				1	14	22.42	0	0
			16QAM	8	0	21.61	1	0-1
				8	4	21.6	1	0-1
				8	7	21.37	1	0-1
				15	0	21.5	1	0-1
				1	0	21.38	1	0-1
				1	7	21.55	1	0-1
	20635	847.5	QPSK	1	14	21.49	1	0-1
				8	0	21.42	2	0-2
				8	4	21.42	2	0-2
				8	7	21.49	2	0-2
				15	0	20.51	2	0-2
				1	0	21.42	0	0
16QAM			1	7	21.31	0	0	
			1	14	22.26	0	0	
			8	0	21.41	1	0-1	
			8	4	21.41	1	0-1	
			8	7	21.25	1	0-1	
			15	0	21.4	1	0-1	
				1	0	21.42	1	0-1
				1	7	21.39	1	0-1
				1	14	21.41	1	0-1
				8	0	21.41	2	0-2
				8	4	21.4	2	0-2
				8	7	21.41	2	0-2
				15	0	21.43	2	0-2

Table 84: LTE Band 5 Conducted Output Power [3 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	20425	826.5	QPSK	1	0	22.55	0	0
				1	12	22.79	0	0
				1	24	22.69	0	0
				12	0	21.49	1	0-1
				12	6	21.73	1	0-1
				12	13	21.58	1	0-1
			16QAM	25	0	21.6	1	0-1
				1	0	21.74	1	0-1
				1	12	22.05	1	0-1
				1	24	21.94	1	0-1
				12	0	20.49	2	0-2
				12	6	20.74	2	0-2
	20525	836.5	QPSK	12	13	20.59	2	0-2
				25	0	20.59	2	0-2
				1	0	22.56	0	0
				1	12	22.63	0	0
				1	24	22.34	0	0
				12	0	21.61	1	0-1
			16QAM	12	6	21.58	1	0-1
				12	13	21.34	1	0-1
				25	0	21.53	1	0-1
				1	0	21.34	1	0-1
				1	12	21.33	1	0-1
				1	24	21.45	1	0-1
	20625	846.5	QPSK	12	0	21.45	2	0-2
				12	6	21.34	2	0-2
				12	13	21.45	2	0-2
				25	0	21.46	2	0-2
				1	0	22.31	0	0
				1	12	22.78	0	0
16QAM			1	24	22.28	0	0	
			12	0	21.3	1	0-1	
			12	6	21.47	1	0-1	
			12	13	21.39	1	0-1	
			25	0	21.49	1	0-1	
			1	0	22.03	1	0-1	
16QAM	1	12	22.43	1	0-1			
	1	24	22	1	0-1			
	12	0	20.29	2	0-2			
	12	6	20.47	2	0-2			
	12	13	20.39	2	0-2			
	25	0	20.37	2	0-2			

Table 85: LTE Band 5 Conducted Output Power [5 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	20450		QPSK	1	0			0
				1	24			0
				1	49			0
				25	0			0-1
				25	12			0-1
				25	24			0-1
			16QAM	50	0			0-1
				1	0			0-1
				1	24			0-1
				1	49			0-1
				25	0			0-2
				25	12			0-2
				25	24			0-2
				50	0			0-2
	20525	836.5	QPSK	1	0	22.57	0	0
				1	24	22.43	0	0
				1	49	22.61	0	0
				25	0	21.49	1	0-1
				25	12	21.36	1	0-1
				25	24	21.31	1	0-1
			16QAM	50	0	21.43	1	0-1
				1	0	21.53	1	0-1
				1	24	21.37	1	0-1
				1	49	21.61	1	0-1
				25	0	20.47	2	0-2
				25	12	20.35	2	0-2
				25	24	20.24	2	0-2
				50	0	20.4	2	0-2
	20600		QPSK	1	0			0
				1	24			0
1				49			0	
25				0			0-1	
25				12			0-1	
25				24			0-1	
16QAM			50	0			0-1	
			1	0			0-1	
			1	24			0-1	
			1	49			0-1	
			25	0			0-2	
			25	12			0-2	
			25	24			0-2	
			50	0			0-2	

Table 86: LTE Band 5 Conducted Output Power [10 Mhz] - Proximity Sensor Enabled¹¹

¹¹ LTE Band 5 at 10MHz bandwidth does not support three non-overlapping channels. Per KDB 941225 D05, when a device supports overlapping channel assignments in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	23205		QPSK	1	0			0
				1	12			0
				1	24			0
				12	0			0-1
				12	6			0-1
				12	13			0-1
				25	0			0-1
			16QAM	1	0			0-1
				1	12			0-1
				1	24			0-1
				12	0			0-2
				12	6			0-2
				12	13			0-2
				25	0			0-2
	23230	782	QPSK	1	0	23.38	0	0
				1	12	22.58	0	0
				1	24	22.5	0	0
				12	0	22.03	1	0-1
				12	6	21.68	1	0-1
				12	13	21.63	1	0-1
				25	0	21.66	1	0-1
			16QAM	1	0	22.5	1	0-1
				1	12	21.69	1	0-1
				1	24	21.16	1	0-1
				12	0	21.06	2	0-2
				12	6	20.71	2	0-2
				12	13	20.68	2	0-2
				25	0	20.76	2	0-2
	23255		QPSK	1	0			0
				1	12			0
				1	24			0
				12	0			0-1
				12	6			0-1
				12	13			0-1
				25	0			0-1
			16QAM	1	0			0-1
1				12			0-1	
1				24			0-1	
12				0			0-2	
12				6			0-2	
12				13			0-2	
25				0			0-2	

Table 87: LTE Band 13 Conducted Output Power [5 Mhz] - Proximity Sensor Enabled¹²

¹² LTE Band 13 at 5MHz bandwidth does not support three non-overlapping channels. Per KDB 941225 D05, when a device supports overlapping channel assignments in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	23230	782	QPSK	1	0	22.88	0	0
				1	24	22.36	0	0
				1	49	22.13	0	0
				25	0	22.02	1	0-1
				25	12	21.6	1	0-1
				25	24	20.91	1	0-1
				50	0	21.51	1	0-1
			16QAM	1	0	21.8	1	0-1
				1	24	21.29	1	0-1
				1	49	21.01	1	0-1
				25	0	21.02	2	0-2
				25	12	20.61	2	0-2
				25	24	20.1	2	0-2
				50	0	20.44	2	0-2

Table 88: LTE Band 13 Conducted Output Power [10 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	23755		QPSK	1	0			0
				1	12			0
				1	24			0
				12	0			0-1
				12	6			0-1
				12	13			0-1
				25	0			0-1
			16QAM	1	0			0-1
				1	12			0-1
				1	24			0-1
				12	0			0-2
				12	6			0-2
				12	13			0-2
				25	0			0-2
	23790	710	QPSK	1	0	22.56	0	0
				1	12	22.41	0	0
				1	24	22.97	0	0
				12	0	21.29	1	0-1
				12	6	21.31	1	0-1
				12	13	21.76	1	0-1
				25	0	21.44	1	0-1
			16QAM	1	0	21.62	1	0-1
				1	12	21.99	1	0-1
				1	24	22.1	1	0-1
				12	0	20.27	2	0-2
				12	6	20.27	2	0-2
				12	13	20.73	2	0-2
				25	0	20.49	2	0-2
	23825		QPSK	1	0			0
				1	12			0
1				24			0	
12				0			0-1	
12				6			0-1	
12				13			0-1	
25				0			0-1	
16QAM			1	0			0-1	
			1	12			0-1	
			1	24			0-1	
			12	0			0-2	
			12	6			0-2	
			12	13			0-2	
			25	0			0-2	

Table 89: LTE Band 17 Conducted Output Power [5 Mhz] - Proximity Sensor Enabled ¹³

¹³ LTE Band 17 at 5MHz bandwidth does not support three non-overlapping channels. Per KDB 941225 D05, when a device supports overlapping channel assignments in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	23780		QPSK	1	0			0
				1	24			0
				1	49			0
				25	0			0-1
				25	12			0-1
				25	24			0-1
			16QAM	50	0			0-1
				1	0			0-1
				1	24			0-1
				1	49			0-1
				25	0			0-2
				25	12			0-2
				25	24			0-2
				50	0			0-2
	23790	710	QPSK	1	0	22.87	0	0
				1	24	22.45	0	0
				1	49	23.35	0	0
				25	0	21.36	1	0-1
				25	12	21.1	1	0-1
				25	24	21.6	1	0-1
			16QAM	50	0	21.29	1	0-1
				1	0	22.02	1	0-1
				1	24	21.17	1	0-1
				1	49	22.1	1	0-1
				25	0	20.4	2	0-2
				25	12	20.12	2	0-2
				25	24	20.6	2	0-2
				50	0	20.32	2	0-2
	23800		QPSK	1	0			0
				1	24			0
1				49			0	
25				0			0-1	
25				12			0-1	
25				24			0-1	
16QAM			50	0			0-1	
			1	0			0-1	
			1	24			0-1	
			1	49			0-1	
			25	0			0-2	
			25	12			0-2	
			25	24			0-2	
			50	0			0-2	

Table 90: LTE Band 17 Conducted Output Power [10 Mhz] - Proximity Sensor Enabled¹⁴

¹⁴ LTE Band 17 at 10MHz bandwidth does not support three non-overlapping channels. Per KDB 941225 D05, when a device supports overlapping channel assignments in a channel bandwidth configuration, the mid channel of the group of overlapping channels should be selected for testing.

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
1.4	26047	1850.7	QPSK	1	0	18.08	0	0
				1	2	18.11	0	0
				1	5	18.12	0	0
				3	0	18.04	0	0
				3	1	18.10	0	0
				3	2	18.17	0	0
			6	0	18.13	0	0-1	
			16QAM	1	0	18.15	0	0-1
				1	2	18.20	0	0-1
				1	5	18.19	0	0-1
				3	0	18.14	0	0-1
				3	1	18.20	0	0-1
	3	2		18.26	0	0-1		
	6	0	18.32	0	0-2			
	26365	1882.5	QPSK	1	0	17.83	0	0
				1	2	18.01	0	0
				1	5	18.06	0	0
				3	0	17.92	0	0
				3	1	17.96	0	0
				3	2	18.02	0	0
			6	0	17.98	0	0-1	
			16QAM	1	0	18.15	0	0-1
				1	2	18.32	0	0-1
				1	5	18.39	0	0-1
				3	0	18.10	0	0-1
				3	1	18.15	0	0-1
	3	2		18.19	0	0-1		
6	0	17.86	0	0-2				
26683	1914.3	QPSK	1	0	18.44	0	0	
			1	2	18.13	0	0	
			1	5	17.59	0	0	
			3	0	18.33	0	0	
			3	1	18.2	0	0	
			3	2	17.94	0	0	
		6	0	18.13	0	0-1		
		16QAM	1	0	18.44	0	0-1	
			1	2	18.18	0	0-1	
			1	5	17.60	0	0-1	
			3	0	18.51	0	0-1	
			3	1	18.40	0	0-1	
3	2		18.10	0	0-1			
6	0	18.26	0	0-2				

Table 91: LTE Band 25 Conducted Output Power [1.4 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
3MHz	26055	1851.5	QPSK	1	0	17.89	0	0
				1	7	18.06	0	0
				1	14	18.22	0	0
				8	0	17.98	0	0-1
				8	4	17.96	0	0-1
				8	7	18.09	0	0-1
			16QAM	15	0	17.94	0	0-1
				1	0	18.19	0	0-1
				1	7	18.41	0	0-1
				1	14	18.59	0	0-1
				8	0	18.11	0	0-2
				8	4	18.18	0	0-2
	26365	1882.5	QPSK	8	7	18.22	0	0-2
				8	0	18.1	0	0-2
				15	0	18.1	0	0-2
				1	0	17.76	0	0
				1	7	17.98	0	0
				1	14	18.18	0	0
			16QAM	8	0	17.9	0	0-1
				8	4	18.06	0	0-1
				8	7	18.03	0	0-1
				15	0	17.97	0	0-1
				1	0	17.82	0	0-1
				1	7	18.05	0	0-1
	26675	1913.5	QPSK	1	14	18.26	0	0-1
				8	0	17.92	0	0-2
				8	4	18.04	0	0-2
				8	7	18.04	0	0-2
				15	0	17.91	0	0-2
				1	0	18.5	0	0
16QAM			1	7	18.12	0	0	
			1	14	16.74	0	0	
			8	0	18.5	0	0-1	
			8	4	18.02	0	0-1	
			8	7	17.49	0	0-1	
			15	0	18.04	0	0-1	
16QAM	1	0	18.20	0	0-1			
	1	7	18.00	0	0-1			
	1	14	16.65	0	0-1			
	8	0	18.51	0	0-2			
	8	4	18.00	0	0-2			
	8	7	17.56	0	0-2			
				15	0	18.01	0	0-2

Table 92: LTE Band 25 Conducted Output Power [3 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
5MHz	26065	1852.5	QPSK	1	0	17.55	0	0
				1	12	18.00	0	0
				1	24	18.09	0	0
				12	0	17.81	0	0-1
				12	6	17.92	0	0-1
				12	13	18.14	0	0-1
			16QAM	25	0	17.93	0	0-1
				1	0	17.64	0	0-1
				1	12	18.05	0	0-1
				1	24	18.20	0	0-1
				12	0	17.85	0	0-2
				12	6	17.95	0	0-2
	26365	1882.5	QPSK	12	13	18.09	0	0-2
				12	13	18.10	0	0-1
				25	0	18.04	0	0-2
				1	0	17.67	0	0
				1	12	17.87	0	0
				1	24	18.28	0	0
			16QAM	12	0	17.76	0	0-1
				12	6	17.92	0	0-1
				12	13	18.10	0	0-1
				25	0	17.94	0	0-1
				1	0	17.94	0	0-1
				1	12	18.15	0	0-1
	26665	1912.5	QPSK	1	24	18.60	0	0-1
				12	0	17.80	0	0-2
				12	6	17.79	0	0-2
				12	13	18.17	0	0-2
				25	0	17.95	0	0-2
				1	0	18.20	0	0
16QAM			1	12	18.38	0	0	
			1	24	17.42	0	0	
			12	0	18.52	0	0-1	
			12	6	18.34	0	0-1	
			12	13	17.58	0	0-1	
			25	0	18.01	0	0-1	
16QAM	1	0	18.40	0	0-1			
	1	12	18.65	0	0-1			
	1	24	17.42	0	0-1			
	12	0	18.50	0	0-2			
	12	6	18.33	0	0-2			
	12	13	17.58	0	0-2			
				25	0	17.88	0	0-2

Table 93: LTE Band 25 Conducted Output Power [5 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
10MHz	26090	1855	QPSK	1	0	17.36	0	0
				1	24	17.98	0	0
				1	49	17.6	0	0
				25	0	17.81	0	0-1
				25	12	18.01	0	0-1
				25	24	17.93	0	0-1
			16QAM	50	0	17.78	0	0-1
				1	0	17.36	0	0-1
				1	24	17.89	0	0-1
				1	49	17.35	0	0-1
				25	0	17.80	0	0-2
				25	12	17.99	0	0-2
	26365	1882.5	QPSK	25	24	17.80	0	0-2
				50	0	17.78	0	0-2
				1	0	17.32	0	0
				1	24	17.73	0	0
				1	49	18.37	0	0
				25	0	17.49	0	0-1
			16QAM	25	12	17.83	0	0-1
				25	24	18.18	0	0-1
				50	0	17.86	0	0-1
				1	0	17.63	0	0-1
				1	24	18.04	0	0-1
				1	49	18.65	0	0-1
	26640	1910	QPSK	25	0	17.54	0	0-2
				25	12	17.82	0	0-2
				25	24	18.18	0	0-2
				50	0	17.87	0	0-2
				1	0	17.32	0	0
				1	24	18.1	0	0
16QAM			1	49	17.12	0	0	
			25	0	17.89	0	0-1	
			25	12	18.29	0	0-1	
			25	24	18.28	0	0-1	
			50	0	18.09	0	0-1	
			1	0	17.21	0	0-1	
16QAM	1	24	18.16	0	0-1			
	1	49	17.23	0	0-1			
	25	0	17.92	0	0-2			
	25	12	18.34	0	0-2			
	25	24	18.29	0	0-2			
	50	0	18.10	0	0-2			

Table 94: LTE Band 25 Conducted Output Power [10 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
15MHz	26115	1857.5	QPSK	1	0	17.75	0	0
				1	37	18.13	0	0
				1	74	17.12	0	0
				36	0	18.05	0	0-1
				36	16	18.02	0	0-1
				36	35	17.67	0	0-1
			16QAM	75	0	17.78	0	0-1
				1	0	17.68	0	0-1
				1	37	17.99	0	0-1
				1	74	17.05	0	0-1
				36	0	18.06	0	0-2
				36	16	17.98	0	0-2
	26365	1882.5	QPSK	36	35	17.56	0	0-2
				75	0	17.72	0	0-2
				1	0	17.52	0	0
				1	37	17.81	0	0
				1	74	18.50	0	0
				36	0	17.37	0	0-1
			16QAM	36	16	17.77	0	0-1
				36	35	18.27	0	0-1
				75	0	17.89	0	0-1
				1	0	17.58	0	0-1
				1	37	18.14	0	0-1
				1	74	18.50	0	0-1
	26615	1907.5	QPSK	36	0	17.42	0	0-1
				36	16	18.09	0	0-1
				36	35	18.65	0	0-1
				75	0	18.05	0	0-1
				1	0	17.10	0	0
				1	37	18.06	0	0
16QAM			1	74	17.42	0	0	
			1	0	17.21	0	0-1	
			1	37	18.35	0	0-1	
			1	74	17.71	0	0-1	
			36	0	17.05	0	0-2	
			36	16	18.01	0	0-2	
			36	35	18.57	0	0-2	
			75	0	18.00	0	0-2	

Table 95: LTE Band 25 Conducted Output Power [15 Mhz] - Proximity Sensor Enabled

BW	Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Max. Avg. Power (dBm)	Target MPR (dB)	MPR Allowed by 3GPP (dB)
20MHz	26140	1860	QPSK	1	0	18.38	0	0
				1	49	18.18	0	0
				1	99	17.4	0	0
				50	0	18.46	0	0-1
				50	24	18.01	0	0-1
				50	49	17.45	0	0-1
			16QAM	100	0	17.87	0	0-1
				1	0	18.4	0	0-1
				1	49	18.4	0	0-1
				1	99	17.33	0	0-1
				50	0	18.47	0	0-2
				50	24	17.91	0	0-2
	26365	1882.5	QPSK	50	49	17.3	0	0-2
				100	0	17.88	0	0-2
				1	0	17.41	0	0
				1	49	17.69	0	0
				1	99	18.32	0	0
				50	0	17.43	0	0-1
			16QAM	50	24	17.86	0	0-1
				50	49	18.35	0	0-1
				100	0	17.92	0	0-1
				1	0	17.14	0	0-1
				1	49	18.22	0	0-1
				1	99	18.3	0	0-1
	26590	1905	QPSK	50	0	17.28	0	0-2
				50	24	17.88	0	0-2
				50	49	18.31	0	0-2
				100	0	17.91	0	0-2
				1	0	17.95	0	0
				1	49	17.7	0	0
16QAM			1	99	18.39	0	0	
			50	0	17.75	0	0-1	
			50	24	17.85	0	0-1	
			50	49	18.73	0	0-1	
			100	0	18.1	0	0-1	
			1	0	18.1	0	0-1	
16QAM	1	49	18.02	0	0-1			
	1	99	18.3	0	0-1			
	50	0	17.3	0	0-2			
	50	24	17.78	0	0-2			
	50	49	18.71	0	0-2			
	100	0	18.05	0	0-2			

Table 96: LTE Band 25 Conducted Output Power [20 Mhz] - Proximity Sensor Enabled

Standalone SAR Test Exclusions

The following formulas from KDB 447498 section 4.3 were used to exclude certain edge configurations from testing based on output power and distance from the closest part of the antenna to the tablet edge as described in KDB 616217 section 4.3 for determination of exclusion with the tablet edges. A separation distance of 5mm was used for the backside of the tablet as described in KDB 447498.

Standalone SAR testing was not performed on the WLAN transmitter since the module was approved for portable use in tablet hosts. The antenna implementation complies with the antenna spacing requirements.

WLAN and Bluetooth Transmitters

Edges ≤ 50 mm

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f_{\text{(GHz)}}}] \leq 3.0$$

Edges > 50mm

$$[(\text{Power allowed at numeric threshold for 50mm}) + (\text{test separation distance} - 50\text{mm}) * 10] \text{ mW}$$

Antenna	Back Side	Top Edge	Bottom Edge	Right Edge	Left Edge
Cellular Tx	Measured	Measured	Measured	Exempted	Exempted
WLAN 2.4 GHz – Primary	Module SAR	Module SAR	Exempted	Exempted	Exempted
WLAN 5 GHz – Primary	Module SAR	Module SAR	Exempted	Exempted	Exempted
Bluetooth	Exempted	Exempted	Exempted	Exempted	Exempted
WLAN 2.4 GHz – Auxiliary	Module SAR	Exempted	Exempted	Module SAR	Exempted
WLAN 5 GHz – Auxiliary	Module SAR	Exempted	Exempted	Module SAR	Exempted

Table 97: Tablet Edges Evaluated for SAR

Stand Alone Body Mode SAR Test Results

The device was evaluated according to the specific requirements found in FCC KDB 447498[9] and 616217[8]. The WWAN module was configured in accordance to FCC KDB 941225. The worst case 1-g SAR value was less than the 1.6mW/g limit.

Exclusions:

- The CDMA mode selected for testing was 1xRTT (RC3/SO32) since it produced the highest output power. Other modes were not evaluated since they were < 0.25dB higher than the results measured in 1XRTT mode.
- The device was tested in GPRS modes with 2-slots active as it resulted in the highest average power.
- The device was evaluated in WCDMA Rel99 mode only. SAR measurements were not required in HSDPA or HSUPA modes since the output power was not more than a ¼ dB higher than Rel99 mode.
- For LTE modes, SAR testing was not required for in the higher order modulations or lower bandwidths since the output power was not more than ¼ dB higher than that found with QPSK modulation in the largest bandwidth and the largest reported SAR value was less than 1.45 W/kg.
- Testing was performed with the proximity sensors active at reduced power with 0mm of separation to the phantom. Testing was repeated with the proximity sensor disabled (using special development firmware) at the proximity sensor triggering distances shown in section 4.0. To compensate for manufacture variance 1mm was subtracted from this distance to provide a more conservative test distance.
- Testing on the right side (edge nearest WWAN antenna) was performed at full power with the proximity sensors disabled and placed against the phantom with 0mm of separation.
- The measured SAR values were scaled based on the tune-up tolerance for the module. The scaled SAR values are shown in the tables below as “Reported SAR”.

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
GSM 1900	512	1850.20	GPRS - 2 Slot	Back	5	0.01	0.92	1.01	29.60	30.00	
				Top Edge	9	/	/	0.00	29.60	30.00	
				Side	0	/	/	0.00	29.60	30.00	
				Tilted 57 deg	11	-0.01	0.80	0.88	29.60	30.00	
GSM 1900	661	1880.00	GPRS - 2 Slot	Back	5	-0.10	0.93	1.02	29.60	30.00	
				Top Edge	9	-0.30	0.71	0.78	29.60	30.00	
				Side	0	-0.09	0.24	0.26	29.60	30.00	
				Tilted 57 deg	11	-0.03	0.85	0.94	29.60	30.00	
GSM 1900	810	1909.80	GPRS - 2 Slot	Back	5	-0.10	0.97	1.04	29.70	30.00	Plot 1
				Top Edge	9	/	/	0.00	29.70	30.00	
				Side	0	/	/	0.00	29.70	30.00	
				Tilted 57 deg	11	0.06	0.93	0.99	29.70	30.00	

1g SAR Limit = 1.6W/kg

Table 98: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
UMTS Band 2	9262	1852.40	Rel 99 RMC	Back	5	0.13	1.01	1.25	23.09	24.00	Plot 2
				Top Edge	9	-0.01	0.74	0.91	23.09	24.00	
				Side	0			0.00	23.09	24.00	
				Tilted 57 deg	11	0.00	0.87	1.07	23.09	24.00	
UMTS Band 2	9400	1880.00	Rel 99 RMC	Back	5	0.12	0.93	1.16	23.05	24.00	
				Top Edge	9	-0.06	0.79	0.98	23.05	24.00	
				Side	0		0.18	0.22	23.05	24.00	
				Tilted 57 deg	11	0.04	0.87	1.08	23.05	24.00	
UMTS Band 2	9538	1907.60	Rel 99 RMC	Back	5	0.05	0.90	1.09	23.16	24.00	
				Top Edge	9	0.08	0.77	0.94	23.16	24.00	
				Side	0			0.00	23.16	24.00	
				Tilted 57 deg	11	0.09	0.82	1.00	23.16	24.00	

1g SAR Limit = 1.6W/kg

Table 99: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
CDMA BC1	25	1851.25	EVDO Rev 0	Back	5	0.01	1.42	1.42	24.50	24.50	
				Top Edge	9	0.11	1.25	1.25	24.50	24.50	
				Side	0			0.00	24.50	24.50	
				Tilted 57 deg	11	-0.04	0.31	0.31	24.50	24.50	
CDMA BC1	600	1880.00	EVDO Rev 0	Back	5	0.02	1.53	1.53	24.50	24.50	Plot 3
				Top Edge	9	0.08	1.21	1.21	24.50	24.50	
				Side	0	0.01	0.31	0.31	24.50	24.50	
				Tilted 57 deg	11	-0.03	1.20	1.20	24.50	24.50	
CDMA BC1	1175	1909.92	EVDO Rev 0	Back	5	0.12	1.35	1.35	24.50	24.50	
				Top Edge	9	0.01	1.25	1.25	24.50	24.50	
				Side	0			0.00	24.50	24.50	
				Tilted 57 deg	11	0.05	0.31	0.31	24.50	24.50	

1g SAR Limit = 1.6W/kg

Table 100: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 2	18700	1860.00	20MHz BW, 1RB, Offset=99	Back	5	0.10	0.83	1.00	23.20	24.00	
				Top Edge	9	-0.01	0.65	0.78	23.20	24.00	
				Side	0			0.00	23.20	24.00	
				Tilted 57 deg	11			0.00	23.20	24.00	
LTE Band 2	18900	1880.00	20MHz BW, 1RB, Offset=99	Back	5	0.09	0.87	1.12	22.91	24.00	Plot 4
				Top Edge	9	-0.07	0.75	0.97	22.91	24.00	
				Side	0	0.14	0.15	0.19	22.91	24.00	
				Tilted 57 deg	11	0.08	0.50	0.64	22.91	24.00	
LTE Band 2	19100	1900.00	20MHz BW, 1RB, Offset=99	Back	5	0.03	0.54	0.56	23.87	24.00	
				Top Edge	9	-0.03	0.56	0.57	23.87	24.00	
				Side	0			0.00	23.87	24.00	
				Tilted 57 deg	11			0.00	23.87	24.00	

Table 101: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 2	18700	1860.00	20MHz BW, 50RB, Offset=0	Back	5	0.01	0.78	0.90	22.37	23.00	
				Top Edge	9			0.00	22.37	23.00	
				Side	0			0.00	22.37	23.00	
				Tilted 57 deg	11			0.00	22.37	23.00	
LTE Band 2	18900	1880.00	20MHz BW, 50RB, Offset=99	Back	5	-0.03	0.76	0.93	22.12	23.00	
				Top Edge	9	0.07	0.58	0.71	22.12	23.00	
				Side	0	-0.06	0.17	0.20	22.12	23.00	
				Tilted 57 deg	11	0.02	0.63	0.77	22.12	23.00	
LTE Band 2	19100	1900.00	20MHz BW, 50RB, Offset=99	Back	5	0.05	0.78	0.99	21.95	23.00	Plot 5
				Top Edge	9			0.00	21.95	23.00	
				Side	0			0.00	21.95	23.00	
				Tilted 57 deg	11			0.00	21.95	23.00	

1g SAR Limit = 1.6W/kg

Table 102: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 2	18700	1860.00	20MHz BW, 100RB, Offset=0	Back	5	0.05	0.56	0.70	21.97	23.00	
				Top Edge	9	-0.17	0.63	0.79	21.97	23.00	Plot 6
				Side	0	0.04	0.18	0.22	21.97	23.00	
				Tilted 57 deg	11	-0.03	0.16	0.20	21.97	23.00	
LTE Band 2	18900	1880.00	20MHz BW, 100RB, Offset=0	Back	5	0.05	0.56	0.91	20.84	23.00	
				Top Edge	9	-0.17	0.63	1.03	20.84	23.00	
				Side	0	0.04	0.18	0.29	20.84	23.00	
				Tilted 57 deg	11	-0.03	0.16	0.26	20.84	23.00	
LTE Band 2	19100	1900.00	20MHz BW, 100RB, Offset=0	Back	5			0.00	20.91	23.00	
				Top Edge	9			0.00	20.91	23.00	
				Side	0			0.00	20.91	23.00	
				Tilted 57 deg	11			0.00	20.91	23.00	

Table 103: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 25	26140	1860.00	20MHz BW, 1RB, Offset=0	Back	5	0.05	0.71	0.86	23.14	24.00	
				Top Edge	9			0.00	23.14	24.00	
				Side	0			0.00	23.14	24.00	
				Tilted 57 deg	11			0.00	23.14	24.00	
LTE Band 25	26365	1882.50	20MHz BW, 1RB, Offset=99	Back	5	0.02	0.75	0.98	22.86	24.00	
				Top Edge	9	0.01	0.59	0.77	22.86	24.00	
				Side	0	0.01	0.18	0.24	22.86	24.00	
				Tilted 57 deg	11	0.06	0.60	0.78	22.86	24.00	
LTE Band 25	26590	1905.00	20MHz BW, 1RB, Offset=0	Back	5	0.03	0.73	1.01	22.60	24.00	Plot 7
				Top Edge	9			0.00	22.60	24.00	
				Side	0			0.00	22.60	24.00	
				Tilted 57 deg	11			0.00	22.60	24.00	

1g SAR Limit = 1.6W/kg

Table 104: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 25	26140	1860.00	20MHz BW, 50RB, Offset=0	Back	5	0.02	0.75	0.87	22.35	23.00	
				Top Edge	9			0.00	22.35	23.00	
				Side	0			0.00	22.35	23.00	
				Tilted 57 deg	11			0.00	22.35	23.00	
LTE Band 25	26365	1882.50	20MHz BW, 50RB, Offset=49	Back	5	0.06	0.89	1.08	22.14	23.00	Plot 8
				Top Edge	9	0.01	0.53	0.65	22.14	23.00	
				Side	0	0.01	0.20	0.24	22.14	23.00	
				Tilted 57 deg	11	0.05	0.55	0.67	22.14	23.00	
LTE Band 25	26590	1905.00	20MHz BW, 50RB, Offset=49	Back	5	-0.04	0.72	0.77	22.69	23.00	
				Top Edge	9			0.00	22.69	23.00	
				Side	0			0.00	22.69	23.00	
				Tilted 57 deg	11			0.00	22.69	23.00	
1g SAR Limit = 1.6W/kg											

Table 105: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 25	26590	1905.00	20MHz BW, 100RB, Offset=0	Back	5	0.16	0.75	0.96	21.92	23.00	Plot 9
				Top Edge	9	-0.05	0.53	0.68	21.92	23.00	
				Side	0	-0.21	0.18	0.23	21.92	23.00	
				Tilted 57 deg	11	0.17	0.50	0.64	21.92	23.00	
1g SAR Limit = 1.6W/kg											

Table 106: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1800MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 4	20175	1732.50	20MHz BW, 1RB, Offset=0	Back	5	-0.05	0.90	1.00	23.56	24.00	Plot 10
				Top Edge	9	0.01	0.82	0.91	23.56	24.00	
				Side	0	-0.04	0.11	0.12	23.56	24.00	
				Tilted 57 deg	11	0.04	0.84	0.92	23.56	24.00	
1g SAR Limit = 1.6W/kg											

Table 107: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1800MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 4	20175	1732.50	20MHz BW, 50RB, Offset=24	Back	5	-0.03	0.86	1.09	21.96	23.00	Plot 11
				Top Edge	9	-0.05	0.79	1.00	21.96	23.00	
				Side	0	0.22	0.11	0.14	21.96	23.00	
				Tilted 57 deg	11	0.07	0.80	1.02	21.96	23.00	
1g SAR Limit = 1.6W/kg											

Table 108: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1800MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 4	20175	1732.50	20MHz BW, 100RB, Offset=0	Back	5	-0.03	0.87	1.12	21.89	23.00	Plot 12
				Top Edge	9	-0.12	0.80	1.03	21.89	23.00	
				Side	0	-0.03	0.12	0.15	21.89	23.00	
				Tilted 57 deg	11	0.01	0.81	1.05	21.89	23.00	
1g SAR Limit = 1.6W/kg											

Table 109: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1800MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
UMTS Band 4	1312	1712.40	Rel 99 RMC	Back	5	0.03	1.23	1.56	22.97	24.00	Plot 13
				Top Edge	9	0.05	0.85	1.08	22.97	24.00	
				Side	0			0.00	22.97	24.00	
				Tilted 57 deg	11	0.02	0.91	1.15	22.97	24.00	
UMTS Band 4	1427	1735.40	Rel 99 RMC	Back	5	0.12	1.19	1.48	23.04	24.00	
				Top Edge	9	-0.06	0.81	1.01	23.04	24.00	
				Side	0	0.07	0.09	0.11	23.04	24.00	
				Tilted 57 deg	11	-0.05	0.84	1.04	23.04	24.00	
UMTS Band 4	1513	1752.60	Rel 99 RMC	Back	5	0.12	1.16	1.50	22.89	24.00	
				Top Edge	9	0.03	0.75	0.97	22.89	24.00	
				Side	0			0.00	22.89	24.00	
				Tilted 57 deg	11	0.06	0.79	1.01	22.89	24.00	

Table 110: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
CDMA BC0	1013	824.70	EVDO	Back	5	0.05	1.01	1.01	24.50	24.50	
				Top Edge	9			0.00	24.50	24.50	
				Side	0			0.00	24.50	24.50	
				Tilted 57 deg	11			0.00	24.50	24.50	
CDMA BC0	384	836.52	EVDO	Back	5	-0.17	1.06	1.06	24.50	24.50	Plot 14
				Top Edge	9	-0.03	0.52	0.52	24.50	24.50	
				Side	0	0.19	0.13	0.13	24.50	24.50	
				Tilted 57 deg	11	0.12	0.63	0.63	24.50	24.50	
CDMA BC0	777	848.31	EVDO	Back	5	0.02	1.06	1.06	24.50	24.50	Plot 15
				Top Edge	9			0.00	24.50	24.50	
				Side	0			0.00	24.50	24.50	
				Tilted 57 deg	11			0.00	24.50	24.50	
1g SAR Limit = 1.6W/kg											

Table 111: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
GSM 850	128	824.20	GPRS - 2 Slot	Back	5	-0.16	1.05	1.38	31.80	33.00	
				Top Edge	9	-0.01	0.55	0.72	31.80	33.00	
				Side	0			0.00	31.80	33.00	
				Tilted 57 deg	11	-0.02	0.72	0.95	31.80	33.00	
GSM 850	190	836.60	GPRS - 2 Slot	Back	5	-0.08	1.01	1.36	31.70	33.00	
				Top Edge	9	0.15	0.68	0.91	31.70	33.00	
				Side	0	0.20	0.16	0.22	31.70	33.00	
				Tilted 57 deg	11	0.07	0.73	0.98	31.70	33.00	
GSM 850	251	848.80	GPRS - 2 Slot	Back	5	-0.02	1.04	1.44	31.60	33.00	Plot 16
				Top Edge	9	0.01	0.66	0.91	31.60	33.00	
				Side	0			0.00	31.60	33.00	
				Tilted 57 deg	11	-0.02	0.77	1.07	31.60	33.00	

Table 112: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
UMTS Band V	4132	826.40	Rel 99 RMC	Back	5	-0.01	0.74	1.04	22.51	24.00	
				Top Edge	9			0.00	22.51	24.00	
				Side	0			0.00	22.51	24.00	
				Tilted 57 deg	11			0.00	22.51	24.00	
UMTS Band V	4183	836.60	Rel 99 RMC	Back	5	0.13	0.77	1.06	22.60	24.00	Plot 17
				Top Edge	9	0.07	0.29	0.40	22.60	24.00	
				Side	0	0.15	0.09	0.12	22.60	24.00	
				Tilted 57 deg	11	0.08	0.43	0.59	22.60	24.00	
UMTS Band V	4233	846.60	Rel 99 RMC	Back	5	-0.10	0.75	1.06	22.50	24.00	Plot 18
				Top Edge	9			0.00	22.50	24.00	
				Side	0			0.00	22.50	24.00	
				Tilted 57 deg	11			0.00	22.50	24.00	

1g SAR Limit = 1.6W/kg

Table 113: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band V	20525	836.50	10MHz BW, 1RB, Offset=49	Back	5	-0.03	0.55	0.76	22.61	24.00	Plot 19
				Top Edge	9	-0.12	0.25	0.35	22.61	24.00	
				Side	0	0.01	0.07	0.09	22.61	24.00	
				Tilted 57 deg	11	0.01	0.52	0.72	22.61	24.00	

1g SAR Limit = 1.6W/kg

Table 114: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band V	20525	836.50	10MHz BW, 25RB, Offset=0	Back	5	-0.01	0.59	0.83	21.49	23.00	Plot 20
				Top Edge	9	0.00	0.27	0.38	21.49	23.00	
				Side	0	-0.05	0.06	0.08	21.49	23.00	
				Tilted 57 deg	11	0.01	0.39	0.55	21.49	23.00	

1g SAR Limit = 1.6W/kg

Table 115: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band V	20525	836.50	10MHz BW, 50RB, Offset=0	Back	5	0.02	0.58	0.83	21.43	23.00	Plot 21
				Top Edge	9	0.01	0.27	0.39	21.43	23.00	
				Side	0	0.20	0.07	0.10	21.43	23.00	
				Tilted 57 deg	11	0.05	0.33	0.47	21.43	23.00	

1g SAR Limit = 1.6W/kg

Table 116: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 750MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 13	232230	782.00	10MHz BW, 1RB, Offset=0	Back	5	-0.02	0.50	0.64	22.88	24.00	Plot 22
				Top Edge	9	-0.07	0.24	0.31	22.88	24.00	
				Side	0	0.08	0.06	0.08	22.88	24.00	
				Tilted 57 deg	11	0.01	0.27	0.35	22.88	24.00	
1g SAR Limit = 1.6W/kg											

Table 117: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 750MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 13	232230	782.00	10MHz BW, 50RB, Offset=0	Back	5	-0.04	0.46	0.65	21.51	23.00	Plot 24
				Top Edge	9	-0.09	0.28	0.40	21.51	23.00	
				Side	0	-0.09	0.06	0.09	21.51	23.00	
				Tilted 57 deg	11	-0.04	0.30	0.42	21.51	23.00	
1g SAR Limit = 1.6W/kg											

Table 118: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 750MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 17	23790	710.00	10MHz BW, 1RB, Offset=49	Back	5	-0.06	0.32	0.37	23.35	24.00	Plot 25
				Top Edge	9	0.01	0.10	0.12	23.35	24.00	
				Side	0	0.11	0.04	0.05	23.35	24.00	
				Tilted 57 deg	11	0.08	0.18	0.21	23.35	24.00	
1g SAR Limit = 1.6W/kg											

Table 119: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 750MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 17	23790	710.00	10MHz BW, 25RB, Offset=24	Back	5	-0.01	0.33	0.45	21.60	23.00	Plot 26
				Top Edge	9	-0.01	0.10	0.14	21.60	23.00	
				Side	0	0.17	0.04	0.06	21.60	23.00	
				Tilted 57 deg	11	-0.02	0.19	0.26	21.60	23.00	
1g SAR Limit = 1.6W/kg											

Table 120: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 750MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 17	23790	710.00	10MHz BW, 50RB, Offset=0	Back	5	0.04	0.33	0.49	21.29	23.00	Plot 27
				Top Edge	9	0.01	0.12	0.17	21.29	23.00	
				Side	0	0.08	0.04	0.06	21.29	23.00	
				Tilted 57 deg	11	0.03	0.19	0.28	21.29	23.00	
1g SAR Limit = 1.6W/kg											

Table 121: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
CDMA BC10	450	817.50	EVDO	Back	5	0.01	1.15	1.35	23.80	24.50	
				Top Edge	9			0.00	23.80	24.50	
				Side	0			0.00	23.80	24.50	
				Tilted 57 deg	11			0.00	23.80	24.50	
CDMA BC10	560	820.00	EVDO	Back	5	-0.02	1.16	1.38	23.75	24.50	Plot 28
				Top Edge	9	-0.10	0.45	0.53	23.75	24.50	
				Side	0	-0.04	0.07	0.09	23.75	24.50	
				Tilted 57 deg	11	-0.06	0.49	0.58	23.75	24.50	
CDMA BC10	670	822.75	EVDO	Back	5	-0.22	0.97	1.14	23.81	24.50	
				Top Edge	9			0.00	23.81	24.50	
				Side	0			0.00	23.81	24.50	
				Tilted 57 deg	11			0.00	23.81	24.50	

1g SAR Limit = 1.6W/kg

Table 122: Body Mode SAR Results – Proximity Sensor Disabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
GSM 1900	512	1850.20	GPRS - 2 Slot	Back	0	0.13	0.64	0.71	25.60	26.00	
				Top Edge	0	0.01	0.79	0.87	25.60	26.00	
				Tilted 57 deg	0	0.05	1.05	1.15	25.60	26.00	
GSM 1900	661	1880.00	GPRS - 2 Slot	Back	0	0.07	0.76	0.81	25.70	26.00	
				Top Edge	0	0.13	0.77	0.83	25.70	26.00	
				Tilted 57 deg	0	0.02	1.12	1.20	25.70	26.00	
GSM 1900	810	1909.80	GPRS - 2 Slot	Back	0	0.15	0.75	0.84	25.50	26.00	
				Top Edge	0	0.14	0.82	0.91	25.50	26.00	
				Tilted 57 deg	0	0.12	1.18	1.32	25.50	26.00	29

1g SAR Limit = 1.6W/kg

Table 123: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
UMTS Band 2	9262	1852.40	Rel 99 RMC	Back	0			0.00	18.93	20.00	
				Top Edge	0	0.10	0.69	0.88	18.93	20.00	
				Tilted 57 deg	0	0.18	0.98	1.26	18.93	20.00	
UMTS Band 2	9400	1880.00	Rel 99 RMC	Back	0	0.07	0.58	0.72	19.06	20.00	
				Top Edge	0	0.09	0.65	0.81	19.06	20.00	
				Tilted 57 deg	0	0.10	0.95	1.18	19.06	20.00	30
UMTS Band 2	9538	1907.60	Rel 99 RMC	Back	0			0.00	19.11	20.00	
				Top Edge	0	0.08	0.66	0.81	19.11	20.00	
				Tilted 57 deg	0	0.03	0.92	1.12	19.11	20.00	

1g SAR Limit = 1.6W/kg

Table 124: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
CDMA BC1	25	1851.25	EVDO Rev 0	Back	0	0.08	0.87	0.87	18.50	18.50	
				Top Edge	0	0.01	0.90	0.90	18.50	18.50	
				Tilted 57 deg	0	0.13	1.32	1.32	18.50	18.50	31
CDMA BC1	600	1880.00	EVDO Rev 0	Back	0	0.12	0.76	0.76	18.50	18.50	
				Top Edge	0	-0.08	0.83	0.83	18.50	18.50	
				Tilted 57 deg	0	-0.09	1.14	1.14	18.50	18.50	
CDMA BC1	1175	1909.92	EVDO Rev 0	Back	0	0.15	0.84	0.84	18.50	18.50	
				Top Edge	0	0.00	0.96	0.96	18.50	18.50	
				Tilted 57 deg	0	0.11	1.27	1.27	18.50	18.50	
1g SAR Limit = 1.6W/kg											

Table 125: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 2	18700	1860.00	20MHz BW, 1RB, Offset=0	Back	0	0.12	0.67	0.79	18.80	19.50	
				Top Edge	0	0.01	0.75	0.88	18.80	19.50	
				Tilted 57 deg	0	0.07	1.04	1.22	18.80	19.50	32
LTE Band 2	18900	1880.00	20MHz BW, 1RB, Offset=99	Back	0	0.14	0.65	0.68	19.35	19.50	
				Top Edge	0	0.02	0.74	0.76	19.35	19.50	
				Tilted 57 deg	0	0.08	1.00	1.03	19.35	19.50	
LTE Band 2	19100	1900.00	20MHz BW, 1RB, Offset=99	Back	0	0.10	0.63	0.63	19.50	19.50	
				Top Edge	0	0.13	0.68	0.68	19.50	19.50	
				Tilted 57 deg	0	0.09	1.00	1.00	19.50	19.50	
1g SAR Limit = 1.6W/kg											

Table 126: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 2	18700	1860.00	20MHz BW, 50RB, Offset=0	Back	0	0.09	0.66	0.73	19.10	19.50	
				Top Edge	0	0.05	0.76	0.83	19.10	19.50	
				Tilted 57 deg	0	0.12	1.05	1.15	19.10	19.50	
LTE Band 2	18900	1880.00	20MHz BW, 50RB, Offset=49	Back	0	0.18	0.65	0.74	18.91	19.50	
				Top Edge	0	0.05	0.72	0.83	18.91	19.50	
				Tilted 57 deg	0	0.09	1.01	1.16	18.91	19.50	
LTE Band 2	19100	1900.00	20MHz BW, 50RB, Offset=0	Back	0	0.16	0.70	0.86	18.59	19.50	
				Top Edge	0	0.07	0.73	0.91	18.59	19.50	
				Tilted 57 deg	0	0.14	1.00	1.23	18.59	19.50	33
1g SAR Limit = 1.6W/kg											

Table 127: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 2	18700	1860.00	20MHz BW, 100RB, Offset=0	Back	0	0.07	0.66	0.83	18.52	19.50	
				Top Edge	0	0.06	0.76	0.95	18.52	19.50	
				Tilted 57 deg	0	0.18	1.05	1.32	18.52	19.50	34
1g SAR Limit = 1.6W/kg											

Table 128: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 25	26140	1860.00	20MHz BW, 1RB, Offset=0	Back	0			0.00	18.38	19.00	
				Top Edge	0	0.09	0.71	0.82	18.38	19.00	
				Tilted 57 deg	0	0.10	0.88	1.02	18.38	19.00	
LTE Band 25	26365	1882.50	20MHz BW, 1RB, Offset=99	Back	0	0.15	0.62	0.72	18.32	19.00	
				Top Edge	0	0.12	0.71	0.83	18.32	19.00	
				Tilted 57 deg	0	0.01	0.88	1.03	18.32	19.00	35
LTE Band 25	26590	1905.00	20MHz BW, 1RB, Offset=99	Back	0			0.00	18.39	19.00	
				Top Edge	0	0.15	0.69	0.80	18.39	19.00	
				Tilted 57 deg	0	0.03	0.86	0.99	18.39	19.00	

1g SAR Limit = 1.6W/kg

Table 129: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 25	26140	1860.00	20MHz BW, 50RB, Offset=0	Back	0			0.00	18.46	19.00	
				Top Edge	0			0.00	18.46	19.00	
				Tilted 57 deg	0	0.03	0.90	1.02	18.46	19.00	36
LTE Band 25	26365	1882.50	20MHz BW, 50RB, Offset=49	Back	0	0.17	0.53	0.62	18.35	19.00	
				Top Edge	0	0.03	0.62	0.72	18.35	19.00	
				Tilted 57 deg	0	-0.02	0.88	1.02	18.35	19.00	37
LTE Band 25	26590	1905.00	20MHz BW, 50RB, Offset=49	Back	0			0.00	18.73	19.00	
				Top Edge	0			0.00	18.73	19.00	
				Tilted 57 deg	0	-0.03	0.87	0.92	18.73	19.00	

1g SAR Limit = 1.6W/kg

Table 130: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 25	26590	1905.00	20MHz BW, 100RB, Offset=0	Back	0	0.06	0.54	0.66	18.10	19.00	
				Top Edge	0	-0.02	0.57	0.70	18.10	19.00	
				Tilted 57 deg	0	0.07	0.91	1.12	18.10	19.00	38

1g SAR Limit = 1.6W/kg

Table 131: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 4	20175	1732.50	20MHz BW, 1RB, Offset=0	Back	0	0.10	0.58	0.62	17.45	17.70	
				Top Edge	0	0.05	0.70	0.74	17.45	17.70	
				Tilted 57 deg	0	0.05	0.91	0.96	17.45	17.70	39

1g SAR Limit = 1.6W/kg

Table 132: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1900MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 4	20175	1732.50	20MHz BW, 50RB, Offset=0	Back	0	0.07	0.59	0.65	17.25	17.70	
				Top Edge	0	0.04	0.70	0.78	17.25	17.70	
				Tilted 57 deg	0	0.16	0.90	1.00	17.25	17.70	40

1g SAR Limit = 1.6W/kg

Table 133: Body Mode SAR Results – Proximity Sensor Enabled

Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 4	20175	1732.50	20MHz BW, 100RB, Offset=0	Back	0	-0.02	0.63	0.72	17.08	17.70	
				Top Edge	0	-0.03	0.71	0.81	17.08	17.70	
				Tilted 57 deg	0	0.09	0.90	1.03	17.08	17.70	41
1g SAR Limit = 1.6W/kg											

Table 134: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 1800MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
UMTS Band 4	1312	1712.40	Rel 99 RMC	Back	0	-0.01	0.67	0.83	18.55	19.50	
				Top Edge	0	0.10	0.80	0.99	18.55	19.50	
				Tilted 57 deg	0	0.15	0.95	1.18	18.55	19.50	42
UMTS Band 4	1427	1735.40	Rel 99 RMC	Back	0	0.09	0.66	0.85	18.45	19.50	
				Top Edge	0	0.00	0.76	0.97	18.45	19.50	
				Tilted 57 deg	0	-0.04	0.92	1.17	18.45	19.50	
UMTS Band 4	1513	1752.60	Rel 99 RMC	Back	0	0.05	0.63	0.83	18.33	19.50	
				Top Edge	0	0.08	0.71	0.93	18.33	19.50	
				Tilted 57 deg	0	0.05	0.86	1.13	18.33	19.50	
1g SAR Limit = 1.6W/kg											

Table 135: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
CDMA BC0	1013	824.70	EVDO	Back	0	-0.02	0.82	0.88	21.22	21.50	
				Top Edge	0		0.77	0.82	21.22	21.50	
				Tilted 57 deg	0	-0.07	1.02	1.11	21.15	21.50	43
CDMA BC0	384	836.52	EVDO	Back	0	-0.14	1.02	1.11	21.15	21.50	
				Top Edge	0	-0.12	0.58	0.63	21.15	21.50	
				Tilted 57 deg	0	0.04	0.79	0.86	21.15	21.50	
CDMA BC0	777	848.31	EVDO	Back	0	0.13	0.86	0.95	21.07	21.50	
				Top Edge	0		0.82	0.90	21.07	21.50	
				Tilted 57 deg	0	-0.08	0.82	0.90	21.07	21.50	
1g SAR Limit = 1.6W/kg											

Table 136: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
CDMA BC10	450	817.50	EVDO	Back	0	-0.04	0.77	0.87	20.97	21.50	
				Top Edge	0		0.79	0.88	20.97	21.50	
				Tilted 57 deg	0		0.48	0.54	21.02	21.50	44
CDMA BC10	560	820.00	EVDO	Back	0	-0.01	0.79	0.88	21.02	21.50	
				Top Edge	0	-0.03	0.48	0.54	21.02	21.50	
				Tilted 57 deg	0	-0.02	0.64	0.71	21.02	21.50	
CDMA BC10	670	822.75	EVDO	Back	0	0.02	0.81	0.88	21.10	21.50	45
				Top Edge	0		0.81	0.88	21.10	21.50	
				Tilted 57 deg	0		0.81	0.88	21.10	21.50	
1g SAR Limit = 1.6W/kg											

Table 137: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
GSM 850	128	824.20	GPRS - 2 Slot	Back	0	-0.15	0.81	0.99	28.10	29.00	46
				Top Edge	0			0.00	28.10	29.00	
				Tilted 57 deg	0	0.11	0.59	0.72	28.10	29.00	
GSM 850	190	836.60	GPRS - 2 Slot	Back	0	0.00	0.87	1.04	28.20	29.00	
				Top Edge	0	0.08	0.42	0.50	28.20	29.00	
				Tilted 57 deg	0	0.06	0.58	0.70	28.20	29.00	
GSM 850	251	848.80	GPRS - 2 Slot	Back	0	0.01	0.78	0.93	28.20	29.00	
				Top Edge	0			0.00	28.20	29.00	
				Tilted 57 deg	0	0.03	0.60	0.72	28.20	29.00	
1g SAR Limit = 1.6W/kg											

Table 138: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
UMTS Band V	4132	826.40	Rel 99 RMC	Back	0			0.00	22.51	24.00	
				Top Edge	0			0.00	22.51	24.00	
				Tilted 57 deg	0			0.00	22.51	24.00	
UMTS Band V	4183	836.60	Rel 99 RMC	Back	0	0.05	0.52	0.71	22.60	24.00	47
				Top Edge	0	0.08	0.34	0.47	22.60	24.00	
				Tilted 57 deg	0	0.06	0.44	0.60	22.60	24.00	
UMTS Band V	4233	846.60	Rel 99 RMC	Back	0			0.00	22.50	24.00	
				Top Edge	0			0.00	22.50	24.00	
				Tilted 57 deg	0			0.00	22.50	24.00	
1g SAR Limit = 1.6W/kg											

Table 139: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band V	20525	836.50	10MHz BW, 1RB, Offset=49	Back	0	-0.13	0.72	0.99	22.61	24.00	48
				Top Edge	0	-0.02	0.48	0.66	22.61	24.00	
				Tilted 57 deg	0	0.11	0.68	0.93	22.61	24.00	
1g SAR Limit = 1.6W/kg											

Table 140: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band V	20525	836.50	10MHz BW, 25RB, Offset=0	Back	0	-0.12	0.72	1.02	21.49	23.00	49
				Top Edge	0	0.01	0.48	0.68	21.49	23.00	
				Tilted 57 deg	0	-0.04	0.68	0.96	21.49	23.00	
1g SAR Limit = 1.6W/kg											

Table 141: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Results Using 835MHz MSL											
Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band V	20525	836.50	10MHz BW, 50RB, Offset=0	Back	0	-0.01	0.73	1.05	21.43	23.00	50
				Top Edge	0	0.01	0.49	0.70	21.43	23.00	
				Tilted 57 deg	0	-0.22	0.68	0.97	21.43	23.00	
1g SAR Limit = 1.6W/kg											

Table 142: Body Mode SAR Results – Proximity Sensor Enabled

Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 13	232230	782.00	10MHz BW, 1RB, Offset=0	Back	0	-0.03	0.85	1.10	22.88	24.00	
				Top Edge	0	-0.03	0.85	1.10	22.88	24.00	
				Tilted 57 deg	0	0.07	0.87	1.13	22.88	24.00	51
1g SAR Limit = 1.6W/kg											

Table 143: Body Mode SAR Results – Proximity Sensor Enabled

Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 13	232230	782.00	10MHz BW, 25RB, Offset=0	Back	0	-0.05	0.89	1.11	22.02	23.00	
				Top Edge	0	0.01	0.63	0.79	22.02	23.00	
				Tilted 57 deg	0	0.03	0.91	1.13	22.02	23.00	52
1g SAR Limit = 1.6W/kg											

Table 144: Body Mode SAR Results – Proximity Sensor Enabled

Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 13	232230	782.00	10MHz BW, 50RB, Offset=0	Back	0	0.02	0.89	1.25	21.51	23.00	
				Top Edge	0	-0.09	0.63	0.89	21.51	23.00	
				Tilted 57 deg	0	0.14	0.91	1.28	21.51	23.00	53
1g SAR Limit = 1.6W/kg											

Table 145: Body Mode SAR Results – Proximity Sensor Enabled

Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 17	23790	710.00	10MHz BW, 1RB, Offset=49	Back	0	0.00	0.58	0.68	23.35	24.00	
				Top Edge	0	-0.04	0.41	0.47	23.35	24.00	
				Tilted 57 deg	0	0.06+	0.79	0.92	23.35	24.00	54

Table 146: Body Mode SAR Results – Proximity Sensor Enabled

Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 17	23790	710.00	10MHz BW, 25RB, Offset=24	Back	0	0.04	0.60	0.83	21.60	23.00	
				Top Edge	0	0.02	0.41	0.57	21.60	23.00	
				Tilted 57 deg	0	0.07	0.85	1.17	21.60	23.00	55
1g SAR Limit = 1.6W/kg											

Table 147: Body Mode SAR Results – Proximity Sensor Enabled

Band	Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Power Drift (dB)	Measured SAR 1g (W/kg)	Reported SAR 1g (W/kg)	Measured Conducted Output Power (dBm)	Maximum Conducted Output Power (dBm)	Plot #
LTE Band 17	23790	710.00	10MHz BW, 50RB, Offset=0	Back	0	0.04	0.57	0.84	21.29	23.00	
				Top Edge	0	-0.14	0.41	0.61	21.29	23.00	
				Tilted 57 deg	0	-0.02	0.86	1.27	21.29	23.00	56
1g SAR Limit = 1.6W/kg											

Table 148: Body Mode SAR Results – Proximity Sensor Enabled

Body Mode SAR Variability Using 1900MHz MSL									
Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Original Measured SAR 1g (W/kg)	1st Repeated Measured SAR 1g (W/kg)	2nd Reported SAR 1g (W/kg)	Ratio Of 1st Repeated Scan	Ratio Of 2nd Repeated Scan
9262	1852.40	LTE Band II	Back Side	5mm	1.53	1.56	1.59	0.98	0.98

Body Mode SAR Results Using 1800MHz MSL								
Channel	Frequency (MHz)	Band	Position	Separation Distance (mm)	Original Measured SAR 1g (W/kg)	1st Repeated Measured SAR 1g (W/kg)	2nd Reported SAR 1g (W/kg)	Ratio
1312	1712.40	UMTS Band 4	Back	5	1.56	1.56	1.57	1.00

Body Mode SAR Variability Using 750MHz MSL									
Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Original Measured SAR 1g (W/kg)	1st Repeated Measured SAR 1g (W/kg)	2nd Reported SAR 1g (W/kg)	Ratio Of 1st Repeated Scan	Ratio Of 2nd Repeated Scan
232230	782.00	LTE Band 13	Tilted Edge	0mm	1.28	1.22	NA	1.05	NA

Body Mode SAR Variability Using 835MHz MSL									
Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Original Measured SAR 1g (W/kg)	1st Repeated Measured SAR 1g (W/kg)	2nd Reported SAR 1g (W/kg)	Ratio Of 1st Repeated Scan	Ratio Of 2nd Repeated Scan
190	836.60	GPRS-2 Slot	Back	0mm	1.17	1.17	NA	1.00	NA

Body Mode SAR Results Using 1800MHz MSL								
Channel	Frequency (MHz)	Band	Position	Separation Distance (mm)	Original Measured SAR 1g (W/kg)	1st Repeated Measured SAR 1g (W/kg)	2nd Reported SAR 1g (W/kg)	Ratio
1312	1712.40	UMTS Band 4	Tilted Edge	0	1.20	1.23	NA	0.98

Body Mode SAR Variability Using 1900MHz MSL									
Channel	Frequency (MHz)	Mode	Position	Separation Distance (mm)	Original Measured SAR 1g (W/kg)	1st Repeated Measured SAR 1g (W/kg)	2nd Reported SAR 1g (W/kg)	Ratio Of 1st Repeated Scan	Ratio Of 2nd Repeated Scan
1175	1909.92	CDMA	Tilted Edge	0	1.43	1.52	1.50	0.94	0.95

Table 149: Repeatability Measurements

Simultaneous Transmission Test Results

The WWAN transmitter can operate simultaneously with the 2.4GHz and 5GHz WLAN transmitters as well as the Bluetooth transmitter. The Bluetooth transmitter shares the WLAN primary antenna and cannot transmit simultaneously with the WLAN.

Per KDB 447498, edges that are more than 50mm away from the phantom are estimated at 0.4 W/kg. The WLAN measured values were taken to be the worst case results for each band of the module SAR value documented under the FCCID for the WLAN module.

The estimated 1-g SAR values were calculated by the following formula from KDB 447498:

Distances ≤ 50 mm

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f_{(\text{GHz})}} / 7.5]$$

For Distances > 50mm – Estimated 1g SAR = 0.4W/kg.

Simultaneous SAR measurements were excluded if the sum of the individual transmitters that can transmit simultaneously was less than the SAR limit of 1.6W/kg or the SAR to peak location separation ratio (SPLSR) was less than 0.04.

The SPLSR is calculated as follows:

$$\text{SPLSR} = ((\text{SAR}_1 + \text{SAR}_2)^{1.5}) / R_i \text{ where } R_i \text{ is the separation distance between the peak SAR locations.}$$

Per KDB 447498 the distance for antenna pairs where the 1g SAR value was estimated is taken to be the antenna feed point or the geometric center of the antenna whichever is more conservative. The distances found in the tables below are the antenna separation distances based on the closest points of the antenna when projected onto the phantom since some antenna pairs are located different edges. This provides an overly estimated SPPLSR which is more conservative. The simultaneous SAR exclusion calculations are found in the tables below for the various exposure conditions, technologies and transmitting antenna pairs.

Antenna	Technology	Band	Frequency (MHz)	Output Power		Separation Distances (mm)					Estimated 1g SAR (W/kg)				
				(dBm)	(mW)	Back Side	Top Edge	Left Edge	Right Edge	Bottom Edge	Back Side	Top Edge	Left Edge	Right Edge	Bottom Edge
Cellular	CDMA	BC0	849	24.5	281.8	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	CDMA	BC10	823.975	24.5	281.8	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	CDMA	BC1	1910	24.5	281.8	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	GPRS - 2-Slot	GSM850	849	27	501.2	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	GPRS - 2-Slot	GSM1900	1910	23	199.5	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	UMTS	B5	849	24	251.2	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	UMTS	B4	1755	24	251.2	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	UMTS	B2	1910	24	251.2	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	LTE	17	716	24	251.2	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	LTE	13	787	24	251.2	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	LTE	5	849	24	251.2	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	LTE	4	1755	24	251.2	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	LTE	2	1910	24	251.2	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
Cellular	LTE	25	1915	24	251.2	5	5	41	203	191	Measured	Measured	Measured	0.4	0.4
WiFi Main	802.11	2.4 GHz	2462	16.5	44.7	8	8.1	233	75	191	Measured	Measured	Measured	0.4	0.4
WiFi Main	802.11	5.2 GHz	5240	16.5	44.7	8	8.1	233	75	191	Measured	Measured	0.4	0.4	0.4
WiFi Main	802.11	5.3 GHz	5320	16.5	44.7	8	8.1	233	75	191	Measured	Measured	0.4	0.4	0.4
WiFi Main	802.11	5.6 GHz	5700	16.5	44.7	8	8.1	233	75	191	Measured	Measured	0.4	0.4	0.4
WiFi Main	802.11	5.8 GHz	5825	16.5	44.7	8	8.1	233	75	191	Measured	Measured	0.4	0.4	0.4
WiFi Aux	802.11	2.4 GHz	2462	16.5	44.7	8	120.8	308	8	35	Measured	0.4	0.4	Measured	0.3
WiFi Aux	802.11	5.2 GHz	5240	16.5	44.7	8	120.8	308	8	35	Measured	0.4	0.4	Measured	0.4
WiFi Aux	802.11	5.3 GHz	5320	16.5	44.7	8	120.8	308	8	35	Measured	0.4	0.4	Measured	0.4
WiFi Aux	802.11	5.6 GHz	5700	16.5	44.7	8	120.8	308	8	35	Measured	0.4	0.4	Measured	0.4
WiFi Aux	802.11	5.8 GHz	5825	16.5	44.7	8	120.8	308	8	35	Measured	0.4	0.4	Measured	0.4
WiFi Main	Bluetooth	2.4 GHz	2480	8	6.3	8	8.1	233	75	191	0.2	0.2	0.4	0.4	0.4

Table 150: Estimated 1g SAR Values for Exempted Stand Alone Transmission Configurations

Exposure Condition	Test Position	Antenna Pair		Standalone 1g SAR (W/kg)		Σ Standalone 1g SAR (W/kg)	Peak SAR Separation Distance (mm)	SPLSR
		Transmitter "a"	Transmitter "b"	a	b			
				a+b				
Body	Back	LTE B13	WLAN 2.4GHz Primary	0.67	0.6	1.27	106.9	NA
	Back	LTE B13	WLAN 2.4 GHz Aux	0.67	0.6	1.27	202.95	NA
	Back	LTE B13	WLAN 5 GHz Primary	0.67	0.8	1.47	106.9	NA
	Back	LTE B13	WLAN 5 GHz Aux	0.67	0.8	1.47	202.95	NA
	Back	LTE B13	Bluetooth	0.67	0.2	0.87	106.9	NA
	Back	LTE B17	WLAN 2.4GHz Primary	0.49	0.6	1.09	106.9	NA
	Back	LTE B17	WLAN 2.4 GHz Aux	0.49	0.6	1.09	202.95	NA
	Back	LTE B17	WLAN 5 GHz Primary	0.49	0.8	1.29	106.9	NA
	Back	LTE B17	WLAN 5 GHz Aux	0.49	0.8	1.29	202.95	NA
	Back	LTE B17	Bluetooth	0.49	0.2	0.69	106.9	NA
	Back	LTE B5	WLAN 2.4GHz Primary	0.83	0.6	1.43	106.9	NA
	Back	LTE B5	WLAN 2.4 GHz Aux	0.83	0.6	1.43	202.95	NA
	Back	LTE B5	WLAN 5 GHz Primary	0.83	0.8	1.63	106.9	0.02
	Back	LTE B5	WLAN 5 GHz Aux	0.83	0.8	1.63	202.95	0.01
	Back	LTE B5	Bluetooth	0.83	0.2	1.03	106.9	NA
	Back	LTE B4	WLAN 2.4GHz Primary	1.12	0.6	1.72	106.9	0.02
	Back	LTE B4	WLAN 2.4 GHz Aux	1.12	0.6	1.72	202.95	0.01
	Back	LTE B4	WLAN 5 GHz Primary	1.12	0.8	1.92	106.9	0.02
	Back	LTE B4	WLAN 5 GHz Aux	1.12	0.8	1.92	202.95	0.01
	Back	LTE B4	Bluetooth	1.12	0.2	1.32	106.9	NA
	Back	LTE B2	WLAN 2.4GHz Primary	1.12	0.6	1.72	106.9	0.02
	Back	LTE B2	WLAN 2.4 GHz Aux	1.12	0.6	1.72	202.95	0.01
	Back	LTE B2	WLAN 5 GHz Primary	1.12	0.8	1.92	106.9	0.02
	Back	LTE B2	WLAN 5 GHz Aux	1.12	0.8	1.92	202.95	0.01
	Back	LTE B2	Bluetooth	1.12	0.2	1.32	106.9	NA
	Back	LTE B25	WLAN 2.4GHz Primary	1.08	0.6	1.68	106.9	0.02
	Back	LTE B25	WLAN 2.4 GHz Aux	1.08	0.6	1.68	202.95	0.01
	Back	LTE B25	WLAN 5 GHz Primary	1.08	0.8	1.88	106.9	0.02
	Back	LTE B25	WLAN 5 GHz Aux	1.08	0.8	1.88	202.95	0.01
	Back	LTE B25	Bluetooth	1.08	0.2	1.28	106.9	NA
	Back	UMTS B5	WLAN 2.4GHz Primary	1.06	0.6	1.66	106.9	0.02
	Back	UMTS B5	WLAN 2.4 GHz Aux	1.06	0.6	1.66	202.95	0.01
	Back	UMTS B5	WLAN 5 GHz Primary	1.06	0.8	1.86	106.9	0.02
	Back	UMTS B5	WLAN 5 GHz Aux	1.06	0.8	1.86	202.95	0.01
	Back	UMTS B5	Bluetooth	1.06	0.2	1.26	106.9	NA
	Back	UMTS B4	WLAN 2.4GHz Primary	1.56	0.6	2.16	106.9	0.03
	Back	UMTS B4	WLAN 2.4 GHz Aux	1.56	0.6	2.16	202.95	0.02
	Back	UMTS B4	WLAN 5 GHz Primary	1.56	0.8	2.36	106.9	0.03
	Back	UMTS B4	WLAN 5 GHz Aux	1.56	0.8	2.36	202.95	0.02
	Back	UMTS B4	Bluetooth	1.56	0.2	1.76	106.9	0.02
	Back	UMTS B2	WLAN 2.4GHz Primary	1.25	0.6	1.85	106.9	0.02
	Back	UMTS B2	WLAN 2.4 GHz Aux	1.25	0.6	1.85	202.95	0.01
	Back	UMTS B2	WLAN 5 GHz Primary	1.25	0.8	2.05	106.9	0.03
	Back	UMTS B2	WLAN 5 GHz Aux	1.25	0.8	2.05	202.95	0.01
	Back	UMTS B2	Bluetooth	1.25	0.2	1.45	106.9	NA
	Back	GSM850	WLAN 2.4GHz Primary	1.44	0.6	2.04	106.9	0.03
	Back	GSM850	WLAN 2.4 GHz Aux	1.44	0.6	2.04	202.95	0.01
	Back	GSM850	WLAN 5 GHz Primary	1.44	0.8	2.24	106.9	0.03
	Back	GSM850	WLAN 5 GHz Aux	1.44	0.8	2.24	202.95	0.02
	Back	GSM850	Bluetooth	1.44	0.2	1.64	106.9	0.02
Back	GSM1900	WLAN 2.4GHz Primary	1.04	0.6	1.64	106.9	0.02	
Back	GSM1900	WLAN 2.4 GHz Aux	1.04	0.6	1.64	202.95	0.01	
Back	GSM1900	WLAN 5 GHz Primary	1.04	0.8	1.84	106.9	0.02	
Back	GSM1900	WLAN 5 GHz Aux	1.04	0.8	1.84	202.95	0.01	
Back	GSM1900	Bluetooth	1.04	0.2	1.24	106.9	NA	
Back	CDMA BC0	WLAN 2.4GHz Primary	1.06	0.6	1.66	106.9	0.02	
Back	CDMA BC0	WLAN 2.4 GHz Aux	1.06	0.6	1.66	202.95	0.01	
Back	CDMA BC0	WLAN 5 GHz Primary	1.06	0.8	1.86	106.9	0.02	
Back	CDMA BC0	WLAN 5 GHz Aux	1.06	0.8	1.86	202.95	0.01	
Back	CDMA BC0	Bluetooth	1.06	0.2	1.26	106.9	NA	
Back	CDMA BC10	WLAN 2.4GHz Primary	1.38	0.6	1.98	106.9	0.03	
Back	CDMA BC10	WLAN 2.4 GHz Aux	1.38	0.6	1.98	202.95	0.01	
Back	CDMA BC10	WLAN 5 GHz Primary	1.38	0.8	2.18	106.9	0.03	
Back	CDMA BC10	WLAN 5 GHz Aux	1.38	0.8	2.18	202.95	0.02	
Back	CDMA BC10	Bluetooth	1.38	0.2	1.58	106.9	NA	
Back	CDMA BC1	WLAN 2.4GHz Primary	1.53	0.6	2.13	106.9	0.03	
Back	CDMA BC1	WLAN 2.4 GHz Aux	1.53	0.6	2.13	202.95	0.02	
Back	CDMA BC1	WLAN 5 GHz Primary	1.53	0.8	2.33	106.9	0.03	
Back	CDMA BC1	WLAN 5 GHz Aux	1.53	0.8	2.33	202.95	0.02	
Back	CDMA BC1	Bluetooth	1.53	0.2	1.73	106.9	0.02	

Table 151: Simultaneous SAR Results for Tablet Backside at Proximity Sensor Trigger Distance

Exposure Condition	Test Position	Antenna Pair		Standalone 1g SAR (W/kg)		Σ Standalone 1g SAR (W/kg)	Peak SAR Separation Distance (mm)	SPLSR
		Transmitter "a"	Transmitter "b"	a	b			
				a+b				
Body	Top Edge	LTE B13	WLAN 2.4GHz Primary	0.4	0.6	1	106.9	NA
	Top Edge	LTE B13	WLAN 2.4 GHz Aux	0.4	0.6	1	106.9	NA
	Top Edge	LTE B13	WLAN 5 GHz Primary	0.4	0.8	1.2	106.9	NA
	Top Edge	LTE B13	WLAN 5 GHz Aux	0.4	0.8	1.2	106.9	NA
	Top Edge	LTE B13	Bluetooth	0.4	0.2	0.6	106.9	NA
	Top Edge	LTE B17	WLAN 2.4GHz Primary	0.17	0.6	0.77	106.9	NA
	Top Edge	LTE B17	WLAN 2.4 GHz Aux	0.17	0.6	0.77	106.9	NA
	Top Edge	LTE B17	WLAN 5 GHz Primary	0.17	0.8	0.97	106.9	NA
	Top Edge	LTE B17	WLAN 5 GHz Aux	0.17	0.8	0.97	106.9	NA
	Top Edge	LTE B17	Bluetooth	0.17	0.2	0.37	106.9	NA
	Top Edge	LTE B5	WLAN 2.4GHz Primary	0.39	0.6	0.99	106.9	NA
	Top Edge	LTE B5	WLAN 2.4 GHz Aux	0.39	0.6	0.99	106.9	NA
	Top Edge	LTE B5	WLAN 5 GHz Primary	0.39	0.8	1.19	106.9	NA
	Top Edge	LTE B5	WLAN 5 GHz Aux	0.39	0.8	1.19	106.9	NA
	Top Edge	LTE B5	Bluetooth	0.39	0.2	0.59	106.9	NA
	Top Edge	LTE B4	WLAN 2.4GHz Primary	1.03	0.6	1.63	106.9	0.02
	Top Edge	LTE B4	WLAN 2.4 GHz Aux	1.03	0.6	1.63	106.9	0.02
	Top Edge	LTE B4	WLAN 5 GHz Primary	1.03	0.8	1.83	106.9	0.02
	Top Edge	LTE B4	WLAN 5 GHz Aux	1.03	0.8	1.83	106.9	0.02
	Top Edge	LTE B4	Bluetooth	1.03	0.2	1.23	106.9	NA
	Top Edge	LTE B2	WLAN 2.4GHz Primary	0.98	0.6	1.58	106.9	NA
	Top Edge	LTE B2	WLAN 2.4 GHz Aux	0.98	0.6	1.58	106.9	NA
	Top Edge	LTE B2	WLAN 5 GHz Primary	0.98	0.8	1.78	106.9	0.02
	Top Edge	LTE B2	WLAN 5 GHz Aux	0.98	0.8	1.78	106.9	0.02
	Top Edge	LTE B2	Bluetooth	0.98	0.2	1.18	106.9	NA
	Top Edge	LTE B25	WLAN 2.4GHz Primary	0.77	0.6	1.37	106.9	NA
	Top Edge	LTE B25	WLAN 2.4 GHz Aux	0.77	0.6	1.37	106.9	NA
	Top Edge	LTE B25	WLAN 5 GHz Primary	0.77	0.8	1.57	106.9	NA
	Top Edge	LTE B25	WLAN 5 GHz Aux	0.77	0.8	1.57	106.9	NA
	Top Edge	LTE B25	Bluetooth	0.77	0.2	0.97	106.9	NA
	Top Edge	UMTS B5	WLAN 2.4GHz Primary	0.4	0.6	1	106.9	NA
	Top Edge	UMTS B5	WLAN 2.4 GHz Aux	0.4	0.6	1	106.9	NA
	Top Edge	UMTS B5	WLAN 5 GHz Primary	0.4	0.8	1.2	106.9	NA
	Top Edge	UMTS B5	WLAN 5 GHz Aux	0.4	0.8	1.2	106.9	NA
	Top Edge	UMTS B5	Bluetooth	0.4	0.2	0.6	106.9	NA
	Top Edge	UMTS B4	WLAN 2.4GHz Primary	1.08	0.6	1.68	106.9	0.02
	Top Edge	UMTS B4	WLAN 2.4 GHz Aux	1.08	0.6	1.68	106.9	0.02
	Top Edge	UMTS B4	WLAN 5 GHz Primary	1.08	0.8	1.88	106.9	0.02
	Top Edge	UMTS B4	WLAN 5 GHz Aux	1.08	0.8	1.88	106.9	0.02
	Top Edge	UMTS B4	Bluetooth	1.08	0.2	1.28	106.9	NA
	Top Edge	UMTS B2	WLAN 2.4GHz Primary	0.98	0.6	1.58	106.9	NA
	Top Edge	UMTS B2	WLAN 2.4 GHz Aux	0.98	0.6	1.58	106.9	NA
	Top Edge	UMTS B2	WLAN 5 GHz Primary	0.98	0.8	1.78	106.9	0.02
	Top Edge	UMTS B2	WLAN 5 GHz Aux	0.98	0.8	1.78	106.9	0.02
	Top Edge	UMTS B2	Bluetooth	0.98	0.2	1.18	106.9	NA
	Top Edge	GSM850	WLAN 2.4GHz Primary	0.91	0.6	1.51	106.9	NA
	Top Edge	GSM850	WLAN 2.4 GHz Aux	0.91	0.6	1.51	106.9	NA
	Top Edge	GSM850	WLAN 5 GHz Primary	0.91	0.8	1.71	106.9	0.02
	Top Edge	GSM850	WLAN 5 GHz Aux	0.91	0.8	1.71	106.9	0.02
	Top Edge	GSM850	Bluetooth	0.91	0.2	1.11	106.9	NA
	Top Edge	GSM1900	WLAN 2.4GHz Primary	0.78	0.6	1.38	106.9	NA
	Top Edge	GSM1900	WLAN 2.4 GHz Aux	0.78	0.6	1.38	106.9	NA
	Top Edge	GSM1900	WLAN 5 GHz Primary	0.78	0.8	1.58	106.9	NA
	Top Edge	GSM1900	WLAN 5 GHz Aux	0.78	0.8	1.58	106.9	NA
	Top Edge	GSM1900	Bluetooth	0.78	0.2	0.98	106.9	NA
	Top Edge	CDMA BC0	WLAN 2.4GHz Primary	0.52	0.6	1.12	106.9	NA
	Top Edge	CDMA BC0	WLAN 2.4 GHz Aux	0.52	0.6	1.12	106.9	NA
	Top Edge	CDMA BC0	WLAN 5 GHz Primary	0.52	0.8	1.32	106.9	NA
	Top Edge	CDMA BC0	WLAN 5 GHz Aux	0.52	0.8	1.32	106.9	NA
	Top Edge	CDMA BC0	Bluetooth	0.52	0.2	0.72	106.9	NA
Top Edge	CDMA BC10	WLAN 2.4GHz Primary	0.53	0.6	1.13	106.9	NA	
Top Edge	CDMA BC10	WLAN 2.4 GHz Aux	0.53	0.6	1.13	106.9	NA	
Top Edge	CDMA BC10	WLAN 5 GHz Primary	0.53	0.8	1.33	106.9	NA	
Top Edge	CDMA BC10	WLAN 5 GHz Aux	0.53	0.8	1.33	106.9	NA	
Top Edge	CDMA BC10	Bluetooth	0.53	0.2	0.73	106.9	NA	
Top Edge	CDMA BC1	WLAN 2.4GHz Primary	1.25	0.6	1.85	106.9	0.02	
Top Edge	CDMA BC1	WLAN 2.4 GHz Aux	1.25	0.6	1.85	106.9	0.02	
Top Edge	CDMA BC1	WLAN 5 GHz Primary	1.25	0.8	2.05	106.9	0.03	
Top Edge	CDMA BC1	WLAN 5 GHz Aux	1.25	0.8	2.05	106.9	0.03	
Top Edge	CDMA BC1	Bluetooth	1.25	0.2	1.45	106.9	NA	

Table 152: Simultaneous SAR Results for Tablet Top Edge at Proximity Sensor Trigger Distance

Exposure Condition	Test Position	Antenna Pair		Standalone 1g SAR (W/kg)		∑ Standalone 1g SAR (W/kg)	Peak SAR Separation Distance (mm)	SPLSR
		Transmitter "a"	Transmitter "b"	a	b	a+b		
Body	Tilted Edge	LTE B13	WLAN 2.4GHz Primary	0.42	0.6	1.02	106.9	NA
	Tilted Edge	LTE B13	WLAN 2.4 GHz Aux	0.42	0.6	1.02	106.9	NA
	Tilted Edge	LTE B13	WLAN 5 GHz Primary	0.42	0.8	1.22	106.9	NA
	Tilted Edge	LTE B13	WLAN 5 GHz Aux	0.42	0.8	1.22	106.9	NA
	Tilted Edge	LTE B13	Bluetooth	0.42	0.2	0.62	106.9	NA
	Tilted Edge	LTE B17	WLAN 2.4GHz Primary	0.28	0.6	0.88	106.9	NA
	Tilted Edge	LTE B17	WLAN 2.4 GHz Aux	0.28	0.6	0.88	106.9	NA
	Tilted Edge	LTE B17	WLAN 5 GHz Primary	0.28	0.8	1.08	106.9	NA
	Tilted Edge	LTE B17	WLAN 5 GHz Aux	0.28	0.8	1.08	106.9	NA
	Tilted Edge	LTE B17	Bluetooth	0.28	0.2	0.48	106.9	NA
	Tilted Edge	LTE B5	WLAN 2.4GHz Primary	0.72	0.6	1.32	106.9	NA
	Tilted Edge	LTE B5	WLAN 2.4 GHz Aux	0.72	0.6	1.32	106.9	NA
	Tilted Edge	LTE B5	WLAN 5 GHz Primary	0.72	0.8	1.52	106.9	NA
	Tilted Edge	LTE B5	WLAN 5 GHz Aux	0.72	0.8	1.52	106.9	NA
	Tilted Edge	LTE B5	Bluetooth	0.72	0.2	0.92	106.9	NA
	Tilted Edge	LTE B4	WLAN 2.4GHz Primary	1.05	0.6	1.65	106.9	0.02
	Tilted Edge	LTE B4	WLAN 2.4 GHz Aux	1.05	0.6	1.65	106.9	0.02
	Tilted Edge	LTE B4	WLAN 5 GHz Primary	1.05	0.8	1.85	106.9	0.02
	Tilted Edge	LTE B4	WLAN 5 GHz Aux	1.05	0.8	1.85	106.9	0.02
	Tilted Edge	LTE B4	Bluetooth	1.05	0.2	1.25	106.9	NA
	Tilted Edge	LTE B2	WLAN 2.4GHz Primary	0.77	0.6	1.37	106.9	NA
	Tilted Edge	LTE B2	WLAN 2.4 GHz Aux	0.77	0.6	1.37	106.9	NA
	Tilted Edge	LTE B2	WLAN 5 GHz Primary	0.77	0.8	1.57	106.9	NA
	Tilted Edge	LTE B2	WLAN 5 GHz Aux	0.77	0.8	1.57	106.9	NA
	Tilted Edge	LTE B2	Bluetooth	0.77	0.2	0.97	106.9	NA
	Tilted Edge	LTE B25	WLAN 2.4GHz Primary	0.78	0.6	1.38	106.9	NA
	Tilted Edge	LTE B25	WLAN 2.4 GHz Aux	0.78	0.6	1.38	106.9	NA
	Tilted Edge	LTE B25	WLAN 5 GHz Primary	0.78	0.8	1.58	106.9	NA
	Tilted Edge	LTE B25	WLAN 5 GHz Aux	0.78	0.8	1.58	106.9	NA
	Tilted Edge	LTE B25	Bluetooth	0.78	0.2	0.98	106.9	NA
	Tilted Edge	UMTS B5	WLAN 2.4GHz Primary	1.06	0.6	1.66	106.9	0.02
	Tilted Edge	UMTS B5	WLAN 2.4 GHz Aux	1.06	0.6	1.66	106.9	0.02
	Tilted Edge	UMTS B5	WLAN 5 GHz Primary	1.06	0.8	1.86	106.9	0.02
	Tilted Edge	UMTS B5	WLAN 5 GHz Aux	1.06	0.8	1.86	106.9	0.02
	Tilted Edge	UMTS B5	Bluetooth	1.06	0.2	1.26	106.9	NA
	Tilted Edge	UMTS B4	WLAN 2.4GHz Primary	1.15	0.6	1.75	106.9	0.02
	Tilted Edge	UMTS B4	WLAN 2.4 GHz Aux	1.15	0.6	1.75	106.9	0.02
	Tilted Edge	UMTS B4	WLAN 5 GHz Primary	1.15	0.8	1.95	106.9	0.03
	Tilted Edge	UMTS B4	WLAN 5 GHz Aux	1.15	0.8	1.95	106.9	0.03
	Tilted Edge	UMTS B4	Bluetooth	1.15	0.2	1.35	106.9	NA
	Tilted Edge	UMTS B2	WLAN 2.4GHz Primary	1.08	0.6	1.68	106.9	0.02
	Tilted Edge	UMTS B2	WLAN 2.4 GHz Aux	1.08	0.6	1.68	106.9	0.02
	Tilted Edge	UMTS B2	WLAN 5 GHz Primary	1.08	0.8	1.88	106.9	0.02
	Tilted Edge	UMTS B2	WLAN 5 GHz Aux	1.08	0.8	1.88	106.9	0.02
	Tilted Edge	UMTS B2	Bluetooth	1.08	0.2	1.28	106.9	NA
	Tilted Edge	GSM850	WLAN 2.4GHz Primary	1.07	0.6	1.67	106.9	0.02
	Tilted Edge	GSM850	WLAN 2.4 GHz Aux	1.07	0.6	1.67	106.9	0.02
	Tilted Edge	GSM850	WLAN 5 GHz Primary	1.07	0.8	1.87	106.9	0.02
	Tilted Edge	GSM850	WLAN 5 GHz Aux	1.07	0.8	1.87	106.9	0.02
	Tilted Edge	GSM850	Bluetooth	1.07	0.2	1.27	106.9	NA
	Tilted Edge	GSM1900	WLAN 2.4GHz Primary	0.99	0.6	1.59	106.9	NA
	Tilted Edge	GSM1900	WLAN 2.4 GHz Aux	0.99	0.6	1.59	106.9	NA
	Tilted Edge	GSM1900	WLAN 5 GHz Primary	0.99	0.8	1.79	106.9	0.02
	Tilted Edge	GSM1900	WLAN 5 GHz Aux	0.99	0.8	1.79	106.9	0.02
	Tilted Edge	GSM1900	Bluetooth	0.99	0.2	1.19	106.9	NA
	Tilted Edge	CDMA BC0	WLAN 2.4GHz Primary	0.63	0.6	1.23	106.9	NA
Tilted Edge	CDMA BC0	WLAN 2.4 GHz Aux	0.63	0.6	1.23	106.9	NA	
Tilted Edge	CDMA BC0	WLAN 5 GHz Primary	0.63	0.8	1.43	106.9	NA	
Tilted Edge	CDMA BC0	WLAN 5 GHz Aux	0.63	0.8	1.43	106.9	NA	
Tilted Edge	CDMA BC0	Bluetooth	0.63	0.2	0.83	106.9	NA	
Tilted Edge	CDMA BC10	WLAN 2.4GHz Primary	0.58	0.6	1.18	106.9	NA	
Tilted Edge	CDMA BC10	WLAN 2.4 GHz Aux	0.58	0.6	1.18	106.9	NA	
Tilted Edge	CDMA BC10	WLAN 5 GHz Primary	0.58	0.8	1.38	106.9	NA	
Tilted Edge	CDMA BC10	WLAN 5 GHz Aux	0.58	0.8	1.38	106.9	NA	
Tilted Edge	CDMA BC10	Bluetooth	0.58	0.2	0.78	106.9	NA	
Tilted Edge	CDMA BC1	WLAN 2.4GHz Primary	1.2	0.6	1.8	106.9	0.02	
Tilted Edge	CDMA BC1	WLAN 2.4 GHz Aux	1.2	0.6	1.8	106.9	0.02	
Tilted Edge	CDMA BC1	WLAN 5 GHz Primary	1.2	0.8	2	106.9	0.03	
Tilted Edge	CDMA BC1	WLAN 5 GHz Aux	1.2	0.8	2	106.9	0.03	
Tilted Edge	CDMA BC1	Bluetooth	1.2	0.2	1.4	106.9	NA	

Table 153: Simultaneous SAR Results for Tablet Tilted Edge at Proximity Sensor Trigger Distance

Exposure Condition	Test Position	Antenna Pair		Standalone 1g SAR (W/kg)		Σ Standalone 1g SAR (W/kg)	Peak SAR Separation Distance (mm)	SPLSR
		Transmitter "a"	Transmitter "b"	a	b			
						a+b		
Body	Back	LTE B13	WLAN 2.4GHz Primary	1.25	0.6	1.85	106.9	0.02
	Back	LTE B13	WLAN 2.4 GHz Aux	1.25	0.6	1.85	202.95	0.01
	Back	LTE B13	WLAN 5 GHz Primary	1.25	0.8	2.05	106.9	0.03
	Back	LTE B13	WLAN 5 GHz Aux	1.25	0.8	2.05	202.95	0.01
	Back	LTE B13	Bluetooth	1.25	0.2	1.45	106.9	NA
	Back	LTE B17	WLAN 2.4GHz Primary	0.84	0.6	1.44	106.9	NA
	Back	LTE B17	WLAN 2.4 GHz Aux	0.84	0.6	1.44	202.95	NA
	Back	LTE B17	WLAN 5 GHz Primary	0.84	0.8	1.64	106.9	0.02
	Back	LTE B17	WLAN 5 GHz Aux	0.84	0.8	1.64	202.95	0.01
	Back	LTE B17	Bluetooth	0.84	0.2	1.04	106.9	NA
	Back	LTE B5	WLAN 2.4GHz Primary	1.05	0.6	1.65	106.9	0.02
	Back	LTE B5	WLAN 2.4 GHz Aux	1.05	0.6	1.65	202.95	0.01
	Back	LTE B5	WLAN 5 GHz Primary	1.05	0.8	1.85	106.9	0.02
	Back	LTE B5	WLAN 5 GHz Aux	1.05	0.8	1.85	202.95	0.01
	Back	LTE B5	Bluetooth	1.05	0.2	1.25	106.9	NA
	Back	LTE B4	WLAN 2.4GHz Primary	0.72	0.6	1.32	106.9	NA
	Back	LTE B4	WLAN 2.4 GHz Aux	0.72	0.6	1.32	202.95	NA
	Back	LTE B4	WLAN 5 GHz Primary	0.72	0.8	1.52	106.9	NA
	Back	LTE B4	WLAN 5 GHz Aux	0.72	0.8	1.52	202.95	NA
	Back	LTE B4	Bluetooth	0.72	0.2	0.92	106.9	NA
	Back	LTE B2	WLAN 2.4GHz Primary	0.86	0.6	1.46	106.9	NA
	Back	LTE B2	WLAN 2.4 GHz Aux	0.86	0.6	1.46	202.95	NA
	Back	LTE B2	WLAN 5 GHz Primary	0.86	0.8	1.66	106.9	0.02
	Back	LTE B2	WLAN 5 GHz Aux	0.86	0.8	1.66	202.95	0.01
	Back	LTE B2	Bluetooth	0.86	0.2	1.06	106.9	NA
	Back	LTE B25	WLAN 2.4GHz Primary	0.72	0.6	1.32	106.9	NA
	Back	LTE B25	WLAN 2.4 GHz Aux	0.72	0.6	1.32	202.95	NA
	Back	LTE B25	WLAN 5 GHz Primary	0.72	0.8	1.52	106.9	NA
	Back	LTE B25	WLAN 5 GHz Aux	0.72	0.8	1.52	202.95	NA
	Back	LTE B25	Bluetooth	0.72	0.2	0.92	106.9	NA
	Back	UMTS B5	WLAN 2.4GHz Primary	0.71	0.6	1.31	106.9	NA
	Back	UMTS B5	WLAN 2.4 GHz Aux	0.71	0.6	1.31	202.95	NA
	Back	UMTS B5	WLAN 5 GHz Primary	0.71	0.8	1.51	106.9	NA
	Back	UMTS B5	WLAN 5 GHz Aux	0.71	0.8	1.51	202.95	NA
	Back	UMTS B5	Bluetooth	0.71	0.2	0.91	106.9	NA
	Back	UMTS B4	WLAN 2.4GHz Primary	0.85	0.6	1.45	106.9	NA
	Back	UMTS B4	WLAN 2.4 GHz Aux	0.85	0.6	1.45	202.95	NA
	Back	UMTS B4	WLAN 5 GHz Primary	0.85	0.8	1.65	106.9	0.02
	Back	UMTS B4	WLAN 5 GHz Aux	0.85	0.8	1.65	202.95	0.01
	Back	UMTS B4	Bluetooth	0.85	0.2	1.05	106.9	NA
	Back	UMTS B2	WLAN 2.4GHz Primary	0.72	0.6	1.32	106.9	NA
	Back	UMTS B2	WLAN 2.4 GHz Aux	0.72	0.6	1.32	202.95	NA
	Back	UMTS B2	WLAN 5 GHz Primary	0.72	0.8	1.52	106.9	NA
	Back	UMTS B2	WLAN 5 GHz Aux	0.72	0.8	1.52	202.95	NA
	Back	UMTS B2	Bluetooth	0.72	0.2	0.92	106.9	NA
	Back	GSM850	WLAN 2.4GHz Primary	1.04	0.6	1.64	106.9	0.02
	Back	GSM850	WLAN 2.4 GHz Aux	1.04	0.6	1.64	202.95	0.01
	Back	GSM850	WLAN 5 GHz Primary	1.04	0.8	1.84	106.9	0.02
	Back	GSM850	WLAN 5 GHz Aux	1.04	0.8	1.84	202.95	0.01
	Back	GSM850	Bluetooth	1.04	0.2	1.24	106.9	NA
Back	GSM1900	WLAN 2.4GHz Primary	0.84	0.6	1.44	106.9	NA	
Back	GSM1900	WLAN 2.4 GHz Aux	0.84	0.6	1.44	202.95	NA	
Back	GSM1900	WLAN 5 GHz Primary	0.84	0.8	1.64	106.9	0.02	
Back	GSM1900	WLAN 5 GHz Aux	0.84	0.8	1.64	202.95	0.01	
Back	GSM1900	Bluetooth	0.84	0.2	1.04	106.9	NA	
Back	CDMA BC0	WLAN 2.4GHz Primary	1.11	0.6	1.71	106.9	0.02	
Back	CDMA BC0	WLAN 2.4 GHz Aux	1.11	0.6	1.71	202.95	0.01	
Back	CDMA BC0	WLAN 5 GHz Primary	1.11	0.8	1.91	106.9	0.02	
Back	CDMA BC0	WLAN 5 GHz Aux	1.11	0.8	1.91	202.95	0.01	
Back	CDMA BC0	Bluetooth	1.11	0.2	1.31	106.9	NA	
Back	CDMA BC10	WLAN 2.4GHz Primary	0.88	0.6	1.48	106.9	NA	
Back	CDMA BC10	WLAN 2.4 GHz Aux	0.88	0.6	1.48	202.95	NA	
Back	CDMA BC10	WLAN 5 GHz Primary	0.88	0.8	1.68	106.9	0.02	
Back	CDMA BC10	WLAN 5 GHz Aux	0.88	0.8	1.68	202.95	0.01	
Back	CDMA BC10	Bluetooth	0.88	0.2	1.08	106.9	NA	
Back	CDMA BC1	WLAN 2.4GHz Primary	0.87	0.6	1.47	106.9	NA	
Back	CDMA BC1	WLAN 2.4 GHz Aux	0.87	0.6	1.47	202.95	NA	
Back	CDMA BC1	WLAN 5 GHz Primary	0.87	0.8	1.67	106.9	0.02	
Back	CDMA BC1	WLAN 5 GHz Aux	0.87	0.8	1.67	202.95	0.01	
Back	CDMA BC1	Bluetooth	0.87	0.2	1.07	106.9	NA	

Table 154: Simultaneous SAR Results for Tablet Backside at 0mm Distance

Exposure Condition	Test Position	Antenna Pair		Standalone 1g SAR (W/kg)		Σ Standalone 1g SAR (W/kg)	Peak SAR Separation Distance (mm)	SPLSR
		Transmitter "a"	Transmitter "b"	a	b			
						a+b		
Body	Top Edge	LTE B13	WLAN 2.4GHz Primary	1.1	0.6	1.7	106.9	0.02
	Top Edge	LTE B13	WLAN 2.4 GHz Aux	1.1	0.6	1.7	106.9	0.02
	Top Edge	LTE B13	WLAN 5 GHz Primary	1.1	0.8	1.9	106.9	0.02
	Top Edge	LTE B13	WLAN 5 GHz Aux	1.1	0.8	1.9	106.9	0.02
	Top Edge	LTE B13	Bluetooth	1.1	0.2	1.3	106.9	NA
	Top Edge	LTE B17	WLAN 2.4GHz Primary	0.61	0.6	1.21	106.9	NA
	Top Edge	LTE B17	WLAN 2.4 GHz Aux	0.61	0.6	1.21	106.9	NA
	Top Edge	LTE B17	WLAN 5 GHz Primary	0.61	0.8	1.41	106.9	NA
	Top Edge	LTE B17	WLAN 5 GHz Aux	0.61	0.8	1.41	106.9	NA
	Top Edge	LTE B17	Bluetooth	0.61	0.2	0.81	106.9	NA
	Top Edge	LTE B5	WLAN 2.4GHz Primary	0.7	0.6	1.3	106.9	NA
	Top Edge	LTE B5	WLAN 2.4 GHz Aux	0.7	0.6	1.3	106.9	NA
	Top Edge	LTE B5	WLAN 5 GHz Primary	0.7	0.8	1.5	106.9	NA
	Top Edge	LTE B5	WLAN 5 GHz Aux	0.7	0.8	1.5	106.9	NA
	Top Edge	LTE B5	Bluetooth	0.7	0.2	0.9	106.9	NA
	Top Edge	LTE B4	WLAN 2.4GHz Primary	0.81	0.6	1.41	106.9	NA
	Top Edge	LTE B4	WLAN 2.4 GHz Aux	0.81	0.6	1.41	106.9	NA
	Top Edge	LTE B4	WLAN 5 GHz Primary	0.81	0.8	1.61	106.9	0.02
	Top Edge	LTE B4	WLAN 5 GHz Aux	0.81	0.8	1.61	106.9	0.02
	Top Edge	LTE B4	Bluetooth	0.81	0.2	1.01	106.9	NA
	Top Edge	LTE B2	WLAN 2.4GHz Primary	0.95	0.6	1.55	106.9	NA
	Top Edge	LTE B2	WLAN 2.4 GHz Aux	0.95	0.6	1.55	106.9	NA
	Top Edge	LTE B2	WLAN 5 GHz Primary	0.95	0.8	1.75	106.9	0.02
	Top Edge	LTE B2	WLAN 5 GHz Aux	0.95	0.8	1.75	106.9	0.02
	Top Edge	LTE B2	Bluetooth	0.95	0.2	1.15	106.9	NA
	Top Edge	LTE B25	WLAN 2.4GHz Primary	0.83	0.6	1.43	106.9	NA
	Top Edge	LTE B25	WLAN 2.4 GHz Aux	0.83	0.6	1.43	106.9	NA
	Top Edge	LTE B25	WLAN 5 GHz Primary	0.83	0.8	1.63	106.9	0.02
	Top Edge	LTE B25	WLAN 5 GHz Aux	0.83	0.8	1.63	106.9	0.02
	Top Edge	LTE B25	Bluetooth	0.83	0.2	1.03	106.9	NA
	Top Edge	UMTS B5	WLAN 2.4GHz Primary	0.47	0.6	1.07	106.9	NA
	Top Edge	UMTS B5	WLAN 2.4 GHz Aux	0.47	0.6	1.07	106.9	NA
	Top Edge	UMTS B5	WLAN 5 GHz Primary	0.47	0.8	1.27	106.9	NA
	Top Edge	UMTS B5	WLAN 5 GHz Aux	0.47	0.8	1.27	106.9	NA
	Top Edge	UMTS B5	Bluetooth	0.47	0.2	0.67	106.9	NA
	Top Edge	UMTS B4	WLAN 2.4GHz Primary	0.99	0.6	1.59	106.9	NA
	Top Edge	UMTS B4	WLAN 2.4 GHz Aux	0.99	0.6	1.59	106.9	NA
	Top Edge	UMTS B4	WLAN 5 GHz Primary	0.99	0.8	1.79	106.9	0.02
	Top Edge	UMTS B4	WLAN 5 GHz Aux	0.99	0.8	1.79	106.9	0.02
	Top Edge	UMTS B4	Bluetooth	0.99	0.2	1.19	106.9	NA
	Top Edge	UMTS B2	WLAN 2.4GHz Primary	0.88	0.6	1.48	106.9	NA
	Top Edge	UMTS B2	WLAN 2.4 GHz Aux	0.88	0.6	1.48	106.9	NA
	Top Edge	UMTS B2	WLAN 5 GHz Primary	0.88	0.8	1.68	106.9	0.02
	Top Edge	UMTS B2	WLAN 5 GHz Aux	0.88	0.8	1.68	106.9	0.02
	Top Edge	UMTS B2	Bluetooth	0.88	0.2	1.08	106.9	NA
	Top Edge	GSM850	WLAN 2.4GHz Primary	0.5	0.6	1.1	106.9	NA
	Top Edge	GSM850	WLAN 2.4 GHz Aux	0.5	0.6	1.1	106.9	NA
	Top Edge	GSM850	WLAN 5 GHz Primary	0.5	0.8	1.3	106.9	NA
	Top Edge	GSM850	WLAN 5 GHz Aux	0.5	0.8	1.3	106.9	NA
	Top Edge	GSM850	Bluetooth	0.5	0.2	0.7	106.9	NA
	Top Edge	GSM1900	WLAN 2.4GHz Primary	0.91	0.6	1.51	106.9	NA
	Top Edge	GSM1900	WLAN 2.4 GHz Aux	0.91	0.6	1.51	106.9	NA
	Top Edge	GSM1900	WLAN 5 GHz Primary	0.91	0.8	1.71	106.9	0.02
	Top Edge	GSM1900	WLAN 5 GHz Aux	0.91	0.8	1.71	106.9	0.02
	Top Edge	GSM1900	Bluetooth	0.91	0.2	1.11	106.9	NA
	Top Edge	CDMA BC0	WLAN 2.4GHz Primary	0.63	0.6	1.23	106.9	NA
	Top Edge	CDMA BC0	WLAN 2.4 GHz Aux	0.63	0.6	1.23	106.9	NA
	Top Edge	CDMA BC0	WLAN 5 GHz Primary	0.63	0.8	1.43	106.9	NA
	Top Edge	CDMA BC0	WLAN 5 GHz Aux	0.63	0.8	1.43	106.9	NA
	Top Edge	CDMA BC0	Bluetooth	0.63	0.2	0.83	106.9	NA
	Top Edge	CDMA BC10	WLAN 2.4GHz Primary	0.54	0.6	1.14	106.9	NA
	Top Edge	CDMA BC10	WLAN 2.4 GHz Aux	0.54	0.6	1.14	106.9	NA
	Top Edge	CDMA BC10	WLAN 5 GHz Primary	0.54	0.8	1.34	106.9	NA
	Top Edge	CDMA BC10	WLAN 5 GHz Aux	0.54	0.8	1.34	106.9	NA
	Top Edge	CDMA BC10	Bluetooth	0.54	0.2	0.74	106.9	NA
	Top Edge	CDMA BC1	WLAN 2.4GHz Primary	0.96	0.6	1.56	106.9	NA
	Top Edge	CDMA BC1	WLAN 2.4 GHz Aux	0.96	0.6	1.56	106.9	NA
	Top Edge	CDMA BC1	WLAN 5 GHz Primary	0.96	0.8	1.76	106.9	0.02
	Top Edge	CDMA BC1	WLAN 5 GHz Aux	0.96	0.8	1.76	106.9	0.02
	Top Edge	CDMA BC1	Bluetooth	0.96	0.2	1.16	106.9	NA

Table 155: Simultaneous SAR Results for Tablet Top Edge at 0mm Distance

Exposure Condition	Test Position	Antenna Pair		Standalone 1g SAR (W/kg)		Σ Standalone 1g SAR (W/kg)	Peak SAR Separation Distance (mm)	SPLSR
		Transmitter "a"	Transmitter "b"	a	b			
						a+b		
Body	Tilted Edge	LTE B13	WLAN 2.4GHz Primary	1.28	0.6	1.88	106.9	0.02
	Tilted Edge	LTE B13	WLAN 2.4 GHz Aux	1.28	0.6	1.88	106.9	0.02
	Tilted Edge	LTE B13	WLAN 5 GHz Primary	1.28	0.8	2.08	106.9	0.03
	Tilted Edge	LTE B13	WLAN 5 GHz Aux	1.28	0.8	2.08	106.9	0.03
	Tilted Edge	LTE B13	Bluetooth	1.28	0.2	1.48	106.9	NA
	Tilted Edge	LTE B17	WLAN 2.4GHz Primary	1.27	0.6	1.87	106.9	0.02
	Tilted Edge	LTE B17	WLAN 2.4 GHz Aux	1.27	0.6	1.87	106.9	0.02
	Tilted Edge	LTE B17	WLAN 5 GHz Primary	1.27	0.8	2.07	106.9	0.03
	Tilted Edge	LTE B17	WLAN 5 GHz Aux	1.27	0.8	2.07	106.9	0.03
	Tilted Edge	LTE B17	Bluetooth	1.27	0.2	1.47	106.9	NA
	Tilted Edge	LTE B5	WLAN 2.4GHz Primary	0.97	0.6	1.57	106.9	NA
	Tilted Edge	LTE B5	WLAN 2.4 GHz Aux	0.97	0.6	1.57	106.9	NA
	Tilted Edge	LTE B5	WLAN 5 GHz Primary	0.97	0.8	1.77	106.9	0.02
	Tilted Edge	LTE B5	WLAN 5 GHz Aux	0.97	0.8	1.77	106.9	0.02
	Tilted Edge	LTE B5	Bluetooth	0.97	0.2	1.17	106.9	NA
	Tilted Edge	LTE B4	WLAN 2.4GHz Primary	1.03	0.6	1.63	106.9	0.02
	Tilted Edge	LTE B4	WLAN 2.4 GHz Aux	1.03	0.6	1.63	106.9	0.02
	Tilted Edge	LTE B4	WLAN 5 GHz Primary	1.03	0.8	1.83	106.9	0.02
	Tilted Edge	LTE B4	WLAN 5 GHz Aux	1.03	0.8	1.83	106.9	0.02
	Tilted Edge	LTE B4	Bluetooth	1.03	0.2	1.23	106.9	NA
	Tilted Edge	LTE B2	WLAN 2.4GHz Primary	1.32	0.6	1.92	106.9	0.02
	Tilted Edge	LTE B2	WLAN 2.4 GHz Aux	1.32	0.6	1.92	106.9	0.02
	Tilted Edge	LTE B2	WLAN 5 GHz Primary	1.32	0.8	2.12	106.9	0.03
	Tilted Edge	LTE B2	WLAN 5 GHz Aux	1.32	0.8	2.12	106.9	0.03
	Tilted Edge	LTE B2	Bluetooth	1.32	0.2	1.52	106.9	NA
	Tilted Edge	LTE B25	WLAN 2.4GHz Primary	1.12	0.6	1.72	106.9	0.02
	Tilted Edge	LTE B25	WLAN 2.4 GHz Aux	1.12	0.6	1.72	106.9	0.02
	Tilted Edge	LTE B25	WLAN 5 GHz Primary	1.12	0.8	1.92	106.9	0.02
	Tilted Edge	LTE B25	WLAN 5 GHz Aux	1.12	0.8	1.92	106.9	0.02
	Tilted Edge	LTE B25	Bluetooth	1.12	0.2	1.32	106.9	NA
	Tilted Edge	UMTS B5	WLAN 2.4GHz Primary	0.6	0.6	1.2	106.9	NA
	Tilted Edge	UMTS B5	WLAN 2.4 GHz Aux	0.6	0.6	1.2	106.9	NA
	Tilted Edge	UMTS B5	WLAN 5 GHz Primary	0.6	0.8	1.4	106.9	NA
	Tilted Edge	UMTS B5	WLAN 5 GHz Aux	0.6	0.8	1.4	106.9	NA
	Tilted Edge	UMTS B5	Bluetooth	0.6	0.2	0.8	106.9	NA
	Tilted Edge	UMTS B4	WLAN 2.4GHz Primary	1.18	0.6	1.78	106.9	0.02
	Tilted Edge	UMTS B4	WLAN 2.4 GHz Aux	1.18	0.6	1.78	106.9	0.02
	Tilted Edge	UMTS B4	WLAN 5 GHz Primary	1.18	0.8	1.98	106.9	0.03
	Tilted Edge	UMTS B4	WLAN 5 GHz Aux	1.18	0.8	1.98	106.9	0.03
	Tilted Edge	UMTS B4	Bluetooth	1.18	0.2	1.38	106.9	NA
	Tilted Edge	UMTS B2	WLAN 2.4GHz Primary	1.26	0.6	1.86	106.9	0.02
	Tilted Edge	UMTS B2	WLAN 2.4 GHz Aux	1.26	0.6	1.86	106.9	0.02
	Tilted Edge	UMTS B2	WLAN 5 GHz Primary	1.26	0.8	2.06	106.9	0.03
	Tilted Edge	UMTS B2	WLAN 5 GHz Aux	1.26	0.8	2.06	106.9	0.03
	Tilted Edge	UMTS B2	Bluetooth	1.26	0.2	1.46	106.9	NA
	Tilted Edge	GSM850	WLAN 2.4GHz Primary	0.72	0.6	1.32	106.9	NA
	Tilted Edge	GSM850	WLAN 2.4 GHz Aux	0.72	0.6	1.32	106.9	NA
	Tilted Edge	GSM850	WLAN 5 GHz Primary	0.72	0.8	1.52	106.9	NA
	Tilted Edge	GSM850	WLAN 5 GHz Aux	0.72	0.8	1.52	106.9	NA
	Tilted Edge	GSM850	Bluetooth	0.72	0.2	0.92	106.9	NA
	Tilted Edge	GSM1900	WLAN 2.4GHz Primary	1.32	0.6	1.92	106.9	0.02
	Tilted Edge	GSM1900	WLAN 2.4 GHz Aux	1.32	0.6	1.92	106.9	0.02
	Tilted Edge	GSM1900	WLAN 5 GHz Primary	1.32	0.8	2.12	106.9	0.03
	Tilted Edge	GSM1900	WLAN 5 GHz Aux	1.32	0.8	2.12	106.9	0.03
	Tilted Edge	GSM1900	Bluetooth	1.32	0.2	1.52	106.9	NA
	Tilted Edge	CDMA BC0	WLAN 2.4GHz Primary	0.9	0.6	1.5	106.9	NA
	Tilted Edge	CDMA BC0	WLAN 2.4 GHz Aux	0.9	0.6	1.5	106.9	NA
	Tilted Edge	CDMA BC0	WLAN 5 GHz Primary	0.9	0.8	1.7	106.9	0.02
	Tilted Edge	CDMA BC0	WLAN 5 GHz Aux	0.9	0.8	1.7	106.9	0.02
	Tilted Edge	CDMA BC0	Bluetooth	0.9	0.2	1.1	106.9	NA
Tilted Edge	CDMA BC10	WLAN 2.4GHz Primary	0.71	0.6	1.31	106.9	NA	
Tilted Edge	CDMA BC10	WLAN 2.4 GHz Aux	0.71	0.6	1.31	106.9	NA	
Tilted Edge	CDMA BC10	WLAN 5 GHz Primary	0.71	0.8	1.51	106.9	NA	
Tilted Edge	CDMA BC10	WLAN 5 GHz Aux	0.71	0.8	1.51	106.9	NA	
Tilted Edge	CDMA BC10	Bluetooth	0.71	0.2	0.91	106.9	NA	
Tilted Edge	CDMA BC1	WLAN 2.4GHz Primary	1.32	0.6	1.92	106.9	0.02	
Tilted Edge	CDMA BC1	WLAN 2.4 GHz Aux	1.32	0.6	1.92	106.9	0.02	
Tilted Edge	CDMA BC1	WLAN 5 GHz Primary	1.32	0.8	2.12	106.9	0.03	
Tilted Edge	CDMA BC1	WLAN 5 GHz Aux	1.32	0.8	2.12	106.9	0.03	
Tilted Edge	CDMA BC1	Bluetooth	1.32	0.2	1.52	106.9	NA	

Table 156: Simultaneous SAR Results for Tablet Tilted Edge at 0mm Distance

Exposure Condition	Test Position	Antenna Pair		Standalone 1g SAR (W/kg)		∑ Standalone 1g SAR (W/kg)	Peak SAR Separation Distance (mm)	SPLSR
		Transmitter "a"	Transmitter "b"	a	b	a+b		
Body	Left Edge	LTE B13	WLAN 2.4GHz Primary	0.09	0.4	0.49	-	NA
	Left Edge	LTE B13	WLAN 2.4 GHz Aux	0.09	0.4	0.49	-	NA
	Left Edge	LTE B13	WLAN 5 GHz Primary	0.09	0.4	0.49	-	NA
	Left Edge	LTE B13	WLAN 5 GHz Aux	0.09	0.4	0.49	-	NA
	Left Edge	LTE B13	Bluetooth	0.09	0.4	0.49	-	NA
	Left Edge	LTE B17	WLAN 2.4GHz Primary	0.06	0.4	0.46	-	NA
	Left Edge	LTE B17	WLAN 2.4 GHz Aux	0.06	0.4	0.46	-	NA
	Left Edge	LTE B17	WLAN 5 GHz Primary	0.06	0.4	0.46	-	NA
	Left Edge	LTE B17	WLAN 5 GHz Aux	0.06	0.4	0.46	-	NA
	Left Edge	LTE B17	Bluetooth	0.06	0.4	0.46	-	NA
	Left Edge	LTE B5	WLAN 2.4GHz Primary	0.1	0.4	0.5	-	NA
	Left Edge	LTE B5	WLAN 2.4 GHz Aux	0.1	0.4	0.5	-	NA
	Left Edge	LTE B5	WLAN 5 GHz Primary	0.1	0.4	0.5	-	NA
	Left Edge	LTE B5	WLAN 5 GHz Aux	0.1	0.4	0.5	-	NA
	Left Edge	LTE B5	Bluetooth	0.1	0.4	0.5	-	NA
	Left Edge	LTE B4	WLAN 2.4GHz Primary	0.15	0.4	0.55	-	NA
	Left Edge	LTE B4	WLAN 2.4 GHz Aux	0.15	0.4	0.55	-	NA
	Left Edge	LTE B4	WLAN 5 GHz Primary	0.15	0.4	0.55	-	NA
	Left Edge	LTE B4	WLAN 5 GHz Aux	0.15	0.4	0.55	-	NA
	Left Edge	LTE B4	Bluetooth	0.15	0.4	0.55	-	NA
	Left Edge	LTE B2	WLAN 2.4GHz Primary	0.29	0.4	0.69	-	NA
	Left Edge	LTE B2	WLAN 2.4 GHz Aux	0.29	0.4	0.69	-	NA
	Left Edge	LTE B2	WLAN 5 GHz Primary	0.29	0.4	0.69	-	NA
	Left Edge	LTE B2	WLAN 5 GHz Aux	0.29	0.4	0.69	-	NA
	Left Edge	LTE B2	Bluetooth	0.29	0.4	0.69	-	NA
	Left Edge	LTE B25	WLAN 2.4GHz Primary	0.24	0.4	0.64	-	NA
	Left Edge	LTE B25	WLAN 2.4 GHz Aux	0.24	0.4	0.64	-	NA
	Left Edge	LTE B25	WLAN 5 GHz Primary	0.24	0.4	0.64	-	NA
	Left Edge	LTE B25	WLAN 5 GHz Aux	0.24	0.4	0.64	-	NA
	Left Edge	LTE B25	Bluetooth	0.24	0.4	0.64	-	NA
	Left Edge	UMTS B5	WLAN 2.4GHz Primary	0.12	0.4	0.52	-	NA
	Left Edge	UMTS B5	WLAN 2.4 GHz Aux	0.12	0.4	0.52	-	NA
	Left Edge	UMTS B5	WLAN 5 GHz Primary	0.12	0.4	0.52	-	NA
	Left Edge	UMTS B5	WLAN 5 GHz Aux	0.12	0.4	0.52	-	NA
	Left Edge	UMTS B5	Bluetooth	0.12	0.4	0.52	-	NA
	Left Edge	UMTS B4	WLAN 2.4GHz Primary	0.11	0.4	0.51	-	NA
	Left Edge	UMTS B4	WLAN 2.4 GHz Aux	0.11	0.4	0.51	-	NA
	Left Edge	UMTS B4	WLAN 5 GHz Primary	0.11	0.4	0.51	-	NA
	Left Edge	UMTS B4	WLAN 5 GHz Aux	0.11	0.4	0.51	-	NA
	Left Edge	UMTS B4	Bluetooth	0.11	0.4	0.51	-	NA
	Left Edge	UMTS B2	WLAN 2.4GHz Primary	0.22	0.4	0.62	-	NA
	Left Edge	UMTS B2	WLAN 2.4 GHz Aux	0.22	0.4	0.62	-	NA
	Left Edge	UMTS B2	WLAN 5 GHz Primary	0.22	0.4	0.62	-	NA
	Left Edge	UMTS B2	WLAN 5 GHz Aux	0.22	0.4	0.62	-	NA
	Left Edge	UMTS B2	Bluetooth	0.22	0.4	0.62	-	NA
	Left Edge	GSM850	WLAN 2.4GHz Primary	0.22	0.4	0.62	-	NA
	Left Edge	GSM850	WLAN 2.4 GHz Aux	0.22	0.4	0.62	-	NA
	Left Edge	GSM850	WLAN 5 GHz Primary	0.22	0.4	0.62	-	NA
	Left Edge	GSM850	WLAN 5 GHz Aux	0.22	0.4	0.62	-	NA
	Left Edge	GSM850	Bluetooth	0.22	0.4	0.62	-	NA
	Left Edge	GSM1900	WLAN 2.4GHz Primary	0.26	0.4	0.66	-	NA
	Left Edge	GSM1900	WLAN 2.4 GHz Aux	0.26	0.4	0.66	-	NA
	Left Edge	GSM1900	WLAN 5 GHz Primary	0.26	0.4	0.66	-	NA
	Left Edge	GSM1900	WLAN 5 GHz Aux	0.26	0.4	0.66	-	NA
	Left Edge	GSM1900	Bluetooth	0.26	0.4	0.66	-	NA
	Left Edge	CDMA BC0	WLAN 2.4GHz Primary	0.13	0.4	0.53	-	NA
	Left Edge	CDMA BC0	WLAN 2.4 GHz Aux	0.13	0.4	0.53	-	NA
	Left Edge	CDMA BC0	WLAN 5 GHz Primary	0.13	0.4	0.53	-	NA
	Left Edge	CDMA BC0	WLAN 5 GHz Aux	0.13	0.4	0.53	-	NA
	Left Edge	CDMA BC0	Bluetooth	0.13	0.4	0.53	-	NA
Left Edge	CDMA BC10	WLAN 2.4GHz Primary	0.09	0.4	0.49	-	NA	
Left Edge	CDMA BC10	WLAN 2.4 GHz Aux	0.09	0.4	0.49	-	NA	
Left Edge	CDMA BC10	WLAN 5 GHz Primary	0.09	0.4	0.49	-	NA	
Left Edge	CDMA BC10	WLAN 5 GHz Aux	0.09	0.4	0.49	-	NA	
Left Edge	CDMA BC10	Bluetooth	0.09	0.4	0.49	-	NA	
Left Edge	CDMA BC1	WLAN 2.4GHz Primary	0.31	0.4	0.71	-	NA	
Left Edge	CDMA BC1	WLAN 2.4 GHz Aux	0.31	0.4	0.71	-	NA	
Left Edge	CDMA BC1	WLAN 5 GHz Primary	0.31	0.4	0.71	-	NA	
Left Edge	CDMA BC1	WLAN 5 GHz Aux	0.31	0.4	0.71	-	NA	
Left Edge	CDMA BC1	Bluetooth	0.31	0.4	0.71	-	NA	

Table 157: Simultaneous SAR Results for Tablet Left Edge at 0mm Distance

Exposure Condition	Test Position	Antenna Pair		Standalone 1g SAR (W/kg)		∑ Standalone 1g SAR (W/kg)	Peak SAR Separation Distance (mm)	SPLSR
		Transmitter "a"	Transmitter "b"	a	b	a+b		
Body	Right Edge	LTE B13	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B13	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B13	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B13	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B13	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	LTE B17	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B17	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B17	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B17	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B17	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	LTE B5	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B5	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B5	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B5	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B5	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	LTE B4	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B4	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B4	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B4	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B4	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	LTE B2	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B2	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B2	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B2	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B2	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	LTE B25	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B25	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B25	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	LTE B25	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	LTE B25	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	UMTS B5	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	UMTS B5	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	UMTS B5	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	UMTS B5	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	UMTS B5	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	UMTS B4	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	UMTS B4	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	UMTS B4	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	UMTS B4	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	UMTS B4	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	UMTS B2	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	UMTS B2	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	UMTS B2	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	UMTS B2	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	UMTS B2	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	GSM850	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	GSM850	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	GSM850	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	GSM850	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	GSM850	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	GSM1900	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	GSM1900	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	GSM1900	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	GSM1900	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	GSM1900	Bluetooth	0.4	0.4	0.8	-	NA
	Right Edge	CDMA BC0	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA
	Right Edge	CDMA BC0	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	CDMA BC0	WLAN 5 GHz Primary	0.4	0.6	1	-	NA
	Right Edge	CDMA BC0	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA
	Right Edge	CDMA BC0	Bluetooth	0.4	0.4	0.8	-	NA
Right Edge	CDMA BC10	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA	
Right Edge	CDMA BC10	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA	
Right Edge	CDMA BC10	WLAN 5 GHz Primary	0.4	0.6	1	-	NA	
Right Edge	CDMA BC10	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA	
Right Edge	CDMA BC10	Bluetooth	0.4	0.4	0.8	-	NA	
Right Edge	CDMA BC1	WLAN 2.4GHz Primary	0.4	0.6	1	-	NA	
Right Edge	CDMA BC1	WLAN 2.4 GHz Aux	0.4	0.8	1.2	-	NA	
Right Edge	CDMA BC1	WLAN 5 GHz Primary	0.4	0.6	1	-	NA	
Right Edge	CDMA BC1	WLAN 5 GHz Aux	0.4	0.8	1.2	-	NA	
Right Edge	CDMA BC1	Bluetooth	0.4	0.4	0.8	-	NA	

Table 158: Simultaneous SAR Results for Tablet Right Edge at 0mm Distance

10.0 REFERENCES

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11.0 APPENDIX A – SAR PLOTS

Provided in a separate Exhibit.

12.0 APPENDIX B – SYSTEM VERIFICATION PLOTS

Provided in a separate Exhibit.

13.0 APPENDIX C – SYSTEM VALIDATION SUMMARY

Per FCC KDB 865664, a tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters have been included in the summary table below. The validation was performed with reference dipoles using the required tissue equivalent media for system validation according to KDB 865664. Each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point. All measurements were performed using probes calibrated for CW signals. Modulations in the table above represent test configurations for which the SAR system has been validated. The SAR system was also validated with modulated signals per KDB 865664.

Frequency (MHz)	Date	Probe (SN#)	Probe (Model #)	Probe Calibration Point		Dielectric Properties		CW Validation			Modulation Validation		
				Frequency (MHz)	Fluid Type	ϵ_r	σ	Sensitivity	Probe Linearity	Probe Isotropy	Mod. Type	Duty Factor	PAR
750	4/1/2014	3516	EX3DV3	750	Head	55.72	0.97	Pass	Pass	Pass			
835	4/1/2014	3516	EX3DV3	835	Body	54.1	1.01	Pass	Pass	Pass	GMSK	Pass	N/A
1800	4/3/2014	3516	EX3DV3	1800	Body	51.4	1.53	Pass	Pass	Pass	GMSK	Pass	N/A
1900	4/3/2014	3516	EX3DV3	1900	Body	51.3	1.55	Pass	Pass	Pass	GMSK	Pass	N/A

Table 159: SAR System Validation Summary