



SAR EVALUATION REPORT

**FCC 47 CFR § 2.1093
IEEE Std 1528-2013**

For
Cellular Phone with Bluetooth and WLAN Radios

**FCC ID: BCG-E3088A
Model Name: A1785**

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Revision History

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Table of Contents

1.	Attestation of Test Results	8
2.	Test Specification, Methods and Procedures.....	9
3.	Facilities and Accreditation	10
4.	SAR Measurement System & Test Equipment	11
4.1.	<i>SAR Measurement System.....</i>	<i>11</i>
4.2.	<i>SAR Scan Procedures.....</i>	<i>12</i>
4.3.	<i>Test Equipment.....</i>	<i>14</i>
5.	Measurement Uncertainty.....	18
6.	Device Under Test (DUT) Information	19
6.1.	<i>DUT Description</i>	<i>19</i>
6.2.	<i>Wireless Technologies.....</i>	<i>20</i>
6.3.	<i>Maximum Output Power from Tune-up Procedure</i>	<i>21</i>
6.3.1.	<i>WLAN SISO (P_{Cell_ON})</i>	<i>23</i>
6.3.2.	<i>WLAN MIMO (P_{Cell_ON})</i>	<i>27</i>
6.3.3.	<i>WLAN SISO (P_{Cell_OFF})</i>	<i>31</i>
6.3.4.	<i>WLAN MIMO (P_{Cell_OFF})</i>	<i>35</i>
6.4.	<i>General LTE SAR Test and Reporting Considerations.....</i>	<i>39</i>
6.5.	<i>LTE (TDD) Considerations.....</i>	<i>42</i>
7.	RF Exposure Conditions (Test Configurations)	43
8.	Dielectric Property Measurements & System Check	45
8.1.	<i>Dielectric Property Measurements</i>	<i>45</i>
8.2.	<i>System Check.....</i>	<i>53</i>
9.	Conducted Output Power Measurements.....	57
9.1.	<i>GSM</i>	<i>57</i>
9.2.	<i>W-CDMA</i>	<i>59</i>
9.3.	<i>CDMA.....</i>	<i>65</i>
9.4.	<i>LTE.....</i>	<i>67</i>
9.5.	<i>LTE Rel. 11 Carrier Aggregation.....</i>	<i>92</i>
9.6.	<i>WLAN SISO (P_{Cell_ON})</i>	<i>105</i>
9.7.	<i>WLAN MIMO (P_{Cell_ON})</i>	<i>106</i>
9.8.	<i>WLAN SISO (P_{Cell_OFF})</i>	<i>107</i>
9.9.	<i>WLAN MIMO (P_{Cell_OFF})</i>	<i>108</i>
9.10.	<i>Bluetooth.....</i>	<i>109</i>

10.	Measured and Reported (Scaled) SAR Results	110
10.1.	GSM850	112
10.2.	GSM1900	113
10.3.	W-CDMA Band V	114
10.4.	W-CDMA Band IV	115
10.5.	W-CDMA Band II	116
10.6.	CDMA BC0	117
10.7.	CDMA BC1	118
10.8.	CDMA BC10	119
10.9.	LTE Band 2 (20MHz Bandwidth)	120
10.10.	LTE Band 4 (20MHz Bandwidth)	121
10.11.	LTE Band 5 (10MHz Bandwidth)	123
10.12.	LTE Band 7 (20MHz Bandwidth)	124
10.13.	LTE Band 12 (10MHz Bandwidth)	126
10.14.	LTE Band 13 (10MHz Bandwidth)	127
10.15.	LTE Band 17 (10MHz Bandwidth)	128
10.16.	LTE Band 25 (20MHz Bandwidth)	129
10.17.	LTE Band 26 (10MHz Bandwidth)	131
10.18.	LTE Band 27 (10MHz Bandwidth)	132
10.19.	LTE Band 30 (10MHz Bandwidth)	133
10.20.	LTE Band 41 (20MHz Bandwidth)	134
10.21.	LTE-2CA Band 7 (20MHz + 20MHz BW)	136
10.22.	LTE-2CA Band 41 (20MHz + 20MHz BW)	136
10.23.	Wi-Fi (DTS Band)	137
10.24.	Wi-Fi (U-NII-1 and U-NII-2A Band)	139
10.25.	Wi-Fi (U-NII-2C Band)	141
10.26.	Wi-Fi (U-NII-3 Band)	143
10.27.	Wi-Fi Variant 2 Spot Check	145
10.28.	Bluetooth	147
11.	SAR Measurement Variability	148
12.	Simultaneous Transmission SAR Analysis	149
12.1.	Sum of the SAR for Wi-Fi (Cell Off) & BT(P_{high})	150
12.2.	Sum of the SAR for GSM850 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	151
12.3.	Sum of the SAR for GSM850 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	151
12.4.	Sum of the SAR for GSM1900 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	152
12.5.	Sum of the SAR for GSM1900 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	152
12.6.	Sum of the SAR for W-CDMA V (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	153

12.7.	Sum of the SAR for W-CDMA V (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	153
12.8.	Sum of the SAR for W-CDMA IV (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	154
12.9.	Sum of the SAR for W-CDMA IV (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	154
12.10.	Sum of the SAR for W-CDMA II (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	155
12.11.	Sum of the SAR for W-CDMA II (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	155
12.12.	Sum of the SAR for CDMA BC0 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	156
12.13.	Sum of the SAR for CDMA BC0 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	156
12.14.	Sum of the SAR for CDMA BC1 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	157
12.15.	Sum of the SAR for CDMA BC1 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	157
12.16.	Sum of the SAR for CDMA BC10 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	158
12.17.	Sum of the SAR for CDMA BC10 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	158
12.18.	Sum of the SAR for LTE Band 2 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	159
12.19.	Sum of the SAR for LTE Band 2 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	159
12.20.	Sum of the SAR for LTE Band 4 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	160
12.21.	Sum of the SAR for LTE Band 4 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	160
12.22.	Sum of the SAR for LTE Band 5 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	161
12.23.	Sum of the SAR for LTE Band 5 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	161
12.24.	Sum of the SAR for LTE Band 7 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	162
12.25.	Sum of the SAR for LTE Band 7 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	162
12.26.	Sum of the SAR for LTE Band 12 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	163
12.27.	Sum of the SAR for LTE Band 12 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	163
12.28.	Sum of the SAR for LTE Band 13 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	164
12.29.	Sum of the SAR for LTE Band 13 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	164
12.30.	Sum of the SAR for LTE Band 17 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	165
12.31.	Sum of the SAR for LTE Band 17 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	165
12.32.	Sum of the SAR for LTE Band 25 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	166
12.33.	Sum of the SAR for LTE Band 25 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	166
12.34.	Sum of the SAR for LTE Band 26 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	167
12.35.	Sum of the SAR for LTE Band 26 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	167
12.36.	Sum of the SAR for LTE Band 27 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	168
12.37.	Sum of the SAR for LTE Band 27 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	168
12.38.	Sum of the SAR for LTE Band 30 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	169
12.39.	Sum of the SAR for LTE Band 30 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	169
12.40.	Sum of the SAR for LTE Band 41 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	170
12.41.	Sum of the SAR for LTE Band 41 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	170
12.42.	Sum of the SAR for LTE-2CA Band 7 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	171
12.43.	Sum of the SAR for LTE-2CA Band 7 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	171

12.44.	Sum of the SAR for LTE-2CA Band 41 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low}).....	172
12.45.	Sum of the SAR for LTE-2CA Band 41 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})	172
12.46.	Sum of the SAR for GSM850 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	173
12.47.	Sum of the SAR for GSM850 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	173
12.48.	Sum of the SAR for GSM1900 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	174
12.49.	Sum of the SAR for GSM1900 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	174
12.50.	Sum of the SAR for W-CDMA V (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	175
12.51.	Sum of the SAR for W-CDMA V (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	175
12.52.	Sum of the SAR for W-CDMA IV (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	176
12.53.	Sum of the SAR for W-CDMA IV (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	176
12.54.	Sum of the SAR for W-CDMA II (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	177
12.55.	Sum of the SAR for W-CDMA II (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	177
12.56.	Sum of the SAR for CDMA BC0 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	178
12.57.	Sum of the SAR for CDMA BC0 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	178
12.58.	Sum of the SAR for CDMA BC1 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	179
12.59.	Sum of the SAR for CDMA BC1 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	179
12.60.	Sum of the SAR for CDMA BC10 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	180
12.61.	Sum of the SAR for CDMA BC10 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	180
12.62.	Sum of the SAR for LTE Band 2 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	181
12.63.	Sum of the SAR for LTE Band 2 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	181
12.64.	Sum of the SAR for LTE Band 4 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	182
12.65.	Sum of the SAR for LTE Band 4 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	182
12.66.	Sum of the SAR for LTE Band 5 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	183
12.67.	Sum of the SAR for LTE Band 5 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	183
12.68.	Sum of the SAR for LTE Band 7 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	184
12.69.	Sum of the SAR for LTE Band 7 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	184
12.70.	Sum of the SAR for LTE Band 12 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	185
12.71.	Sum of the SAR for LTE Band 12 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	185
12.72.	Sum of the SAR for LTE Band 13 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	186
12.73.	Sum of the SAR for LTE Band 13 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	186
12.74.	Sum of the SAR for LTE Band 17 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	187
12.75.	Sum of the SAR for LTE Band 17 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	187
12.76.	Sum of the SAR for LTE Band 25 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	188
12.77.	Sum of the SAR for LTE Band 25 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	188
12.78.	Sum of the SAR for LTE Band 26 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	189
12.79.	Sum of the SAR for LTE Band 26 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	189
12.80.	Sum of the SAR for LTE Band 27 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low}).....	190

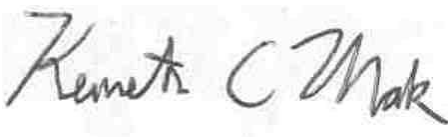
12.81.	Sum of the SAR for LTE Band 27 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	190
12.82.	Sum of the SAR for LTE Band 30 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	191
12.83.	Sum of the SAR for LTE Band 30 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	191
12.84.	Sum of the SAR for LTE Band 41 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	192
12.85.	Sum of the SAR for LTE Band 41 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	192
12.86.	Sum of the SAR for LTE-2CA Band 7 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	193
12.87.	Sum of the SAR for LTE-2CA Band 7 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	193
12.88.	Sum of the SAR for LTE-2CA Band 41 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	194
12.89.	Sum of the SAR for LTE-2CA Band 41 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})	194
Appendixes		195
16U23308-S1V1 SAR_App A Setup Photos (STC_180days)		195
16U23308-S1V3 SAR_App B System Check Plots		195
16U23308-S1V3 SAR_App C Highest Test Plots		195
16U23308-S1V1 SAR_App D Tissue Ingredients		195
16U23308-S1V1 SAR_App E Probe Cal. Certificates		195
16U23308-S1V1 SAR_App F Dipole Cal. Certificates		195

1. Attestation of Test Results

Applicant Name	APPLE, INC.			
FCC ID	BCG-E3088A			
Model Name	A1785			
Applicable Standards	FCC 47 CFR § 2.1093 Published RF exposure KDB procedures IEEE Std 1528-2013			
Exposure Category	SAR Limits (W/Kg)			
	Peak spatial-average(1g of tissue)			
General population / Uncontrolled exposure	1.6			
RF Exposure Conditions	Equipment Class - Highest Reported SAR (W/kg)			
	PCE	DTS	NII	DSS
Head	1.05	1.18	1.19	0.60
Body-worn	1.12	0.91	1.19	0.35
Hotspot/Airplay	1.12	0.91	1.19	N/A
Simultaneous TX	Head	1.33	1.32	1.32
	Body-worn	1.46	1.51	1.51
	Hotspot/Airplay	1.51	1.51	N/A
Date Tested	7/1/2016 to 7/28/2016; Additional LTE CA testing: 8/15/2016 to 8/17/2016; Additional Bluetooth testing: 8/25/2016			
Test Results	Pass			

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government (NIST Handbook 150, Annex A). This report is written to support regulatory compliance of the applicable standards stated above.

Approved & Released By:	Prepared By:
	
Bobby Bayani Senior Engineer UL Verification Services Inc.	Kenneth C. Mak Laboratory Engineer UL Verification Services Inc.

2. Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE STD 1528-2013, the following FCC Published RF exposure [KDB](#) procedures & manufacturer KDB inquiries:

- 248227 D01 802.11 Wi-Fi SAR v02r02
- 447498 D01 General RF Exposure Guidance v06
- 447498 D03 Supplement C Cross-Reference v01
- 648474 D04 Handset SAR v01r03
- 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
- 865664 D02 RF Exposure Reporting v01r02
- 941225 D01 3G SAR Procedures v03r01
- 941225 D05 SAR for LTE Devices v02r05
- 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02
- 941225 D06 Hotspot Mode v02r01

In addition to the above, the following information was used:

- [TCB workshop](#) October, 2014; Page 36, RF Exposure Procedures Update (Overlapping LTE Bands)
- [TCB workshop](#) October, 2014; Page 37, LTE Considerations (LTE Band 41 Test Channels)

Additional Guidance: Manufacturer KDB inquiry.

- Carrier Aggregation – KDB guidance to identify test cases with uplink carrier aggregation enabled in conjunction with FCC PAG Guidance for the test cases mentioned in Sec. 10.
- Detect Mode – KDB guidance related to SAR testing for proprietary detection mode used to determine proximity to head or body and set power accordingly for Wi-Fi and Cellular Transmitters.
- Cellular State Dependent Wi-Fi Power control – KDB guidance related to power control mechanism for Wi-Fi and Bluetooth transmitters based on the operational state of the Wi-Fi and Cellular Transmitters. The Wi-Fi and Bluetooth power configuration are listed as follows:
 - For Wi-Fi
 - P_{Cell_ON} : This will be used when both Cellular and Wi-Fi radios are ON.
 - P_{Cell_OFF} : This will be used when only Wi-Fi radio is ON
 - For Bluetooth
 - Bluetooth P_{high} is used when Wi-Fi antenna is active and Cellular antenna is inactive.
 - Bluetooth P_{low} is used with Wi-Fi and Cellular antenna is active or Wi-Fi antenna inactive and Cellular antenna is active.
 - Bluetooth $P_{standalone}$ is used with Wi-Fi and Cellular antennas are inactive.

The above power configurations for Wi-Fi and Bluetooth are triggered by all of the Cellular Bands with respect to the different Antennas and Exposure Conditions – Head, Body, and Hotspot has been verified and validated by the Manufacturer. Also, all of the UL CA conditions operate correctly with the intended maximum output power levels in simulated normal operating conditions using the Base Station Simulator and has been verified and validated by the Manufacturer.

3. Facilities and Accreditation

The test sites and measurement facilities used to collect data are located at

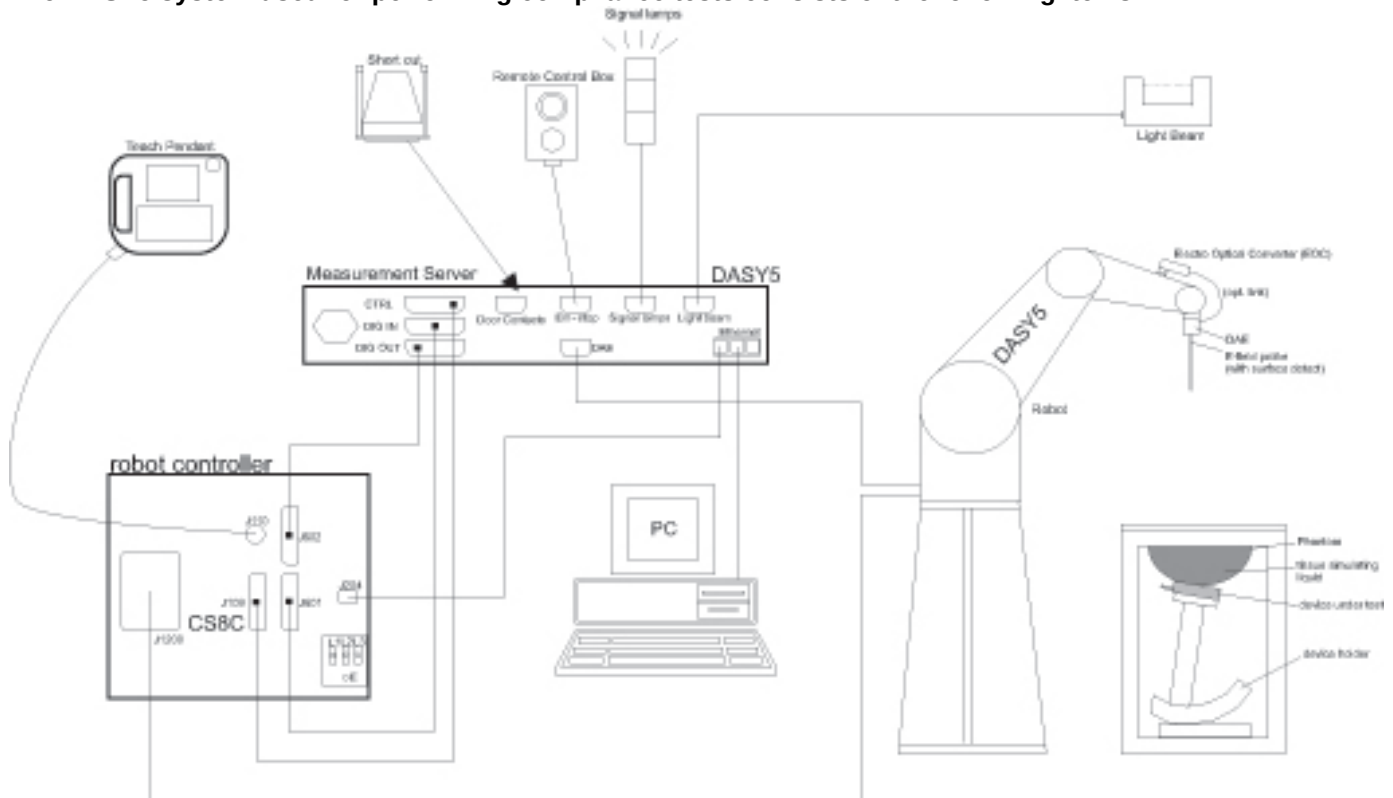
47173 Benicia Street	47266 Benicia Street
SAR Lab A	SAR Lab 1
SAR Lab B	SAR Lab 2
SAR Lab C	SAR Lab 3
SAR Lab D	SAR Lab 4
SAR Lab E	SAR Lab 5
SAR Lab F	
SAR Lab G	
SAR Lab H	

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0.

4. SAR Measurement System & Test Equipment

4.1. SAR Measurement System

The DASY5 system used for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP or Win7 and the DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

4.2. SAR Scan Procedures

Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. The minimum distance of probe sensors to surface is 2.1 mm. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

Step 2: Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum locations even in relatively coarse grids. When an Area Scan has measured all reachable points, it computes the field maximal found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE Standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan). If only one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of Zoom Scans has to be increased accordingly.

Area Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
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 $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

Step 3: Zoom Scan

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The Zoom Scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1 g and 10 g and displays these values next to the job's label.

Zoom Scan Parameters extracted from KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			≤ 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: $\Delta z_{\text{Zoom}}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: 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
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
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.				
* When zoom scan is required and the <u>reported</u> SAR from the <i>area scan based 1-g SAR estimation</i> 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.				

Step 4: Power drift measurement

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as Step 1.

Step 5: Z-Scan (FCC only)

The Z Scan measures points along a vertical straight line. The line runs along the Z-axis of a one-dimensional grid. In order to get a reasonable extrapolation the extrapolated distance should not be larger than the step size in Z-direction.

4.3. Test Equipment

The measuring equipment used to perform the tests documented in this report has been calibrated in accordance with the manufacturers' recommendations, and is traceable to recognized national standards.

Dielectric Property Measurements

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Network Analyzer	Agilent	8753ES	MY40000980	4/27/2017
Dielectric Probe kit	SPEAG	DAK-3.5	1082	9/15/2016
Shorting block	SPEAG	DAK-3.5 Short	SM DAK 200 BA	N/A
Thermometer	Traceable Calibration Control Co.	4242	140562250	8/24/2016
Network Analyzer	Agilent	8753ES	MY40001647 ¹	7/28/2016
Dielectric Probe kit	SPEAG	DAK-3.5	1087	11/10/2016
Shorting block	SPEAG	DAK-3.5 Short	SM DAK 200 BA	11/10/2016
Thermometer	Fisher Scientific	Traceable	140493798	8/4/2016

System Check

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Synthesized Signal Generator	Agilent	N5181A	MY50140610	5/9/2017
Power Meter	Agilent	N1912A	MY50001018	10/19/2016
Power Sensor	Agilent	E9323A	MY53070007	2/27/2017
Power Sensor	Agilent	E9323A	MY53070002	3/22/2017
Amplifier	MITEQ	AMF-4D-00400600-50-30P	1795093	N/A
Directional coupler	Werlatone	C8060-102	2149	N/A
DC Power Supply	AMETEK	XT 15-4	1319A02778	N/A
Synthesized Signal Generator	Agilent	8665B	CCS-167	9/4/2016
Power Meter	HP	437B	3125U11347	8/28/2016
Power Meter	HP	437B	3125U11364	8/10/2016
Power Sensor	HP	8481A	2702A76223	9/3/2016
Power Sensor	HP	8481A	3318A95392	9/16/2016
Amplifier	MITEQ	AMF-4D-00400600-50-30P	1795092	N/A
Directional coupler	Werlatone	C8000-102	2710	N/A
DC Power Supply	BK PRECISION	1611	215-02292	N/A
Signal Generator	Agilent	N5181A	MY50140630	5/9/2017
Power Meter	HP	437B	3125U12345	7/31/2016
Power Sensor	HP	8481A	1926A27048	12/17/2016
Amplifier	MITEQ	AMF-4D-00400600-50-30P	1795092	N/A
Bi-directional coupler	Werlatone, Inc.	C8060-102	2141	N/A
DC Power Supply	HP	6296A	2841A-05955	N/A

Lab Equipment

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
E-Field Probe (SAR Lab A)	SPEAG	EX3DV4	3751	11/18/2016
E-Field Probe (SAR Lab B)	SPEAG	EX3DV4	3991	5/12/2017
E-Field Probe (SAR Lab C)	SPEAG	EX3DV4	3902	5/17/2017
E-Field Probe (SAR Lab D)	SPEAG	EX3DV4	3885	9/18/2016
E-Field Probe (SAR Lab E)	SPEAG	EX3DV4	7335	3/22/2017
E-Field Probe (SAR Lab F)	SPEAG	EX3DV4	3749	1/26/2017
E-Field Probe (SAR Lab G)	SPEAG	EX3DV4	3990	3/22/2017
E-Field Probe (SAR Lab H)	SPEAG	EX3DV4	3989	2/23/2017
E-Field Probe (SAR Lab 1)	SPEAG	EX3DV4	3929	3/22/2017
E-Field Probe (SAR Lab 2)	SPEAG	EX3DV4	3772	2/23/2017
E-Field Probe (SAR Lab 3)	SPEAG	EX3DV4	3901	1/26/2017
E-Field Probe (SAR Lab 4)	SPEAG	EX3DV4	3773	4/19/2017
E-Field Probe (SAR Lab 5)	SPEAG	EX3DV4	3871	8/14/2016
Data Acquisition Electronics (SAR Lab A)	SPEAG	DAE4	1377	9/14/2016
Data Acquisition Electronics (SAR Lab B)	SPEAG	DAE4	1259	1/21/2017
Data Acquisition Electronics (SAR Lab C)	SPEAG	DAE4	500	5/19/2017
Data Acquisition Electronics (SAR Lab D)	SPEAG	DAE4	1433	3/17/2017
Data Acquisition Electronics (SAR Lab E)	SPEAG	DAE4	1472	3/24/2017
Data Acquisition Electronics (SAR Lab F)	SPEAG	DAE4	1352	11/11/2016
Data Acquisition Electronics (SAR Lab G)	SPEAG	DAE4	1359	2/19/2017
Data Acquisition Electronics (SAR Lab H)	SPEAG	DAE4	1357	2/19/2017
Data Acquisition Electronics (SAR Lab 1)	SPEAG	DAE4	1434	4/15/2017
Data Acquisition Electronics (SAR Lab 2)	SPEAG	DAE4	1257	9/16/2016
Data Acquisition Electronics (SAR Lab 3)	SPEAG	DAE4	1360	3/16/2017
Data Acquisition Electronics (SAR Lab 4)	SPEAG	DAE4	1239	4/14/2017
Data Acquisition Electronics (SAR Lab 5)	SPEAG	DAE4	1258	5/10/2017
Thermometer (SAR Lab A)	EXTECH	445703	CCS-249	9/16/2016
Thermometer (SAR Lab B)	EXTECH	445703	CCS-206	3/17/2017
Thermometer (SAR Lab C)	EXTECH	445703	CCS-202	3/17/2017
Thermometer (SAR Lab D)	EXTECH	445703	CCS-201	5/10/2017
Thermometer (SAR Lab E,F,G,H)	EXTECH	445703	CCS-282	1/11/2017
Thermometer (SAR Lab 1)	EXTECH	445703	CCS-205	3/24/2017
Thermometer (SAR Lab 2)	EXTECH	445703	CCS-203	3/24/2017
Thermometer (SAR Lab 3)	EXTECH	445703	CCS-237	6/6/2017
Thermometer (SAR Lab 4)	EXTECH	445703	CCS-238	6/6/2017

Dipoles

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
System Validation Dipole	SPEAG	D750V3	1071	11/12/2016
System Validation Dipole	SPEAG	D835V2	4d142	9/23/2016
System Validation Dipole	SPEAG	D835V2	4d002	11/12/2016
System Validation Dipole	SPEAG	D1750V2	1053	8/11/2016
System Validation Dipole	SPEAG	D1750V2	1077	9/22/2016
System Validation Dipole	SPEAG	D1750V2	1050	4/13/2017
System Validation Dipole	SPEAG	D1900V2	5d043	11/17/2016
System Validation Dipole	SPEAG	D1900V2	5d163	9/21/2016
System Validation Dipole	SPEAG	D1900V2	5d140	4/12/2017
System Validation Dipole	SPEAG	D2300V2	1002	3/18/2017
System Validation Dipole	SPEAG	D2450V2	706	5/10/2017
System Validation Dipole	SPEAG	D2450V2	748	2/22/2017
System Validation Dipole	SPEAG	D2600V2	1006	9/21/2016
System Validation Dipole	SPEAG	D2600V2	1036	3/18/2017
System Validation Dipole	SPEAG	D5GHzV2	1003	2/24/2017
System Validation Dipole	SPEAG	D5GHzV2	1138	9/23/2016
System Validation Dipole	SPEAG	D5GHzV2	1168	11/13/2016

Other

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Power Meter	Agilent	N1912A	MY55196009	5/3/2017
Power Sensor	Agilent	N1921A	MY53020038	3/22/2017
Base Station Simulator	R & S	CMW500	137877	8/10/2016
Base Station Simulator	R & S	CMW500	134855	5/26/2017
Base Station Simulator	R & S	CMW500	135393	3/21/2017
Base Station Simulator	R & S	CMW500	104245	1/28/2017
Base Station Simulator	R & S	CMW500	135390	4/13/2017
Base Station Simulator	R & S	CMW500	124593 ¹	7/14/2016

Notes:

1. Equipment was not used after their calibration due date.

Additional LTE CA testing 8/15/2016 to 8/17/2016:**Dielectric Property Measurements**

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Network Analyzer	Agilent	8753ES	MY40000980	4/27/2017
Dielectric Probe kit	SPEAG	DAK-3.5	1082	9/15/2016
Shorting block	SPEAG	DAK-3.5 Short	SM DAK 200 BA	N/A
Thermometer	Traceable Calibration Control Co.	4242	140562250	8/24/2016

System Check

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Synthesized Signal Generator	Agilent	N5181A	MY50140610	5/9/2017
Power Meter	Agilent	N1912A	MY50001018	10/19/2016
Power Sensor	Agilent	E9323A	MY53070007	2/27/2017
Power Sensor	Agilent	E9323A	MY53070002	3/22/2017
Amplifier	MITEQ	AMF-4D-00400600-50-30P	1795093	N/A
Directional coupler	Werlatone	C8060-102	2149	N/A
DC Power Supply	AMETEK	XT 15-4	1319A02778	N/A
Signal Generator	Agilent	N5181A	MY50140630	5/9/2017
Power Meter	HP	437B	3125U09248	9/3/2016
Power Sensor	Agilent	8481A	3318A92374	9/16/2016
Power Sensor	HP	8481A	1926A27048	12/17/2016
Amplifier	MITEQ	AMF-4D-00400600-50-30P	1795092	N/A
Bi-directional coupler	Werlatone, Inc.	C8060-102	2141	N/A
DC Power Supply	HP	6296A	2841A-05955	N/A

Lab Equipment

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
E-Field Probe (SAR Lab A)	SPEAG	EX3DV4	3751	11/18/2016
E-Field Probe (SAR Lab B)	SPEAG	EX3DV4	3991	5/12/2017
E-Field Probe (SAR Lab C)	SPEAG	EX3DV4	3902	5/17/2017
Data Acquisition Electronics (SAR Lab A)	SPEAG	DAE4	1377	9/14/2016
Data Acquisition Electronics (SAR Lab B)	SPEAG	DAE4	1259	1/21/2017
Data Acquisition Electronics (SAR Lab C)	SPEAG	DAE3	500	5/19/2017
Thermometer (SAR Lab A)	EXTECH	445703	CCS-249	9/16/2016
Thermometer (SAR Lab B)	EXTECH	445703	CCS-206	3/17/2017
Thermometer (SAR Lab C)	EXTECH	445703	CCS-202	3/17/2017

Dipoles

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
System Validation Dipole	SPEAG	D2600V2	1006	9/21/2016

Other

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Base Station Simulator	R & S	CMW500	143093	8/10/2017
Base Station Simulator	R & S	CMW500	118023	8/11/2017
Base Station Simulator	R & S	CMW500	137873	7/8/2017

5. Measurement Uncertainty

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

6. Device Under Test (DUT) Information

6.1. DUT Description

Model A1785 is a mobile phone with multimedia functions (music, application support, and video), Cellular GSM/GPRS/EGPRS/CDMA2000 1x Advanced/EVDO Rev.A /WCDMA/HSPA+/DC-HSDPA/HSUPA, LTE FDD/TDD & Carrier Aggregation / TDSCDMA, VoLTE radio, IEEE 802.11a/b/g/n/ac radio 2x2 MIMO, Bluetooth radio and NFC. The rechargeable battery is not user accessible.

This device has two cellular antennas (UAT and LAT) as well as multiple Wi-Fi/Bluetooth antennas (Chain 0 and Chain 1).

The device is capable of switching between the LAT and UAT based on signal strength.

The antenna switching is implemented with a physical, “break-before-make” switch such that only one antenna can be used for cellular transmission at a time.

There are two vendors of the Wi-Fi/Bluetooth radio modules: Variant 1 and Variant 2 and they have the same mechanical outline, same on board antenna, matching circuit, antenna structure and same specification. Complete SAR evaluation is performed on Variant 1 that has the highest SAR, and then, the test is repeated for the other variant at the highest peak SAR value.

Device Dimension	Overall (Length x Width): 158.2 mm x 77.9 mm Overall Diagonal: 166 mm Display Diagonal: 140 mm
Back Cover	☒ The rechargeable battery is not user accessible.
Battery Options	☒ The rechargeable battery is not user accessible.
Accessory	Headset
Wireless Router (Hotspot)	Wi-Fi Hotspot mode permits the device to share its cellular data connection with other Wi-Fi-enabled devices. ☒ Mobile Hotspot (Wi-Fi 2.4 GHz) ☐ Mobile Hotspot (Wi-Fi 5 GHz)
AirPlay	AirPlay mode enabled devices transfer data directly between each other ☒ AirPlay (Wi-Fi 2.4 GHz) ☒ AirPlay (Wi-Fi 5 GHz)

6.2. Wireless Technologies

Wireless technologies	Frequency bands	Operating mode		Duty Cycle used for SAR testing
GSM	850 1900	Voice (GMSK) GPRS (GMSK) EGPRS (8PSK)	GPRS Multi-Slot Class: ☐ Class 8 - 1 Up, 4 Down ☒ Class 10 - 2 Up, 4 Down ☐ Class 12 - 4 Up, 4 Down ☐ Class 33 - 4 Up, 5 Down	GSM Voice: 12.5% (E)GPRS: 1 Slot: 12.5% 2 Slots: 25%
	Does this device support DTM (Dual Transfer Mode)? ☐ Yes ☒ No			
CDMA (CDMA2000)	BC0 BC1 BC10	1xRTT (Voice & Data) 1xEV-DO Rel. 0 1xEV-DO Rev. A 1xAdvanced		100%
	Does this device support SV-DO (1xRTT-1xEVDO)? ☐ Yes ☒ No			
W-CDMA (UMTS)	Band II Band IV Band V	UMTS Rel. 99 (Voice & Data) HSDPA (Rel. 5) HSUPA (Rel. 6) DC-HSDPA (Rel. 8) HSPA+ (Rel. 7)		100%
LTE	FDD Band 2 FDD Band 4 FDD Band 5 FDD Band 7 FDD Band 12 FDD Band 13 FDD Band 17 FDD Band 25 FDD Band 26 FDD Band 27 FDD Band 30 TDD Band 41	QPSK 16QAM ☒ Rel. 11 Carrier Aggregation (2 Uplinks and 3 Downlinks), UE Category 10		100% (FDD) 63.3% (TDD) This device supports uplink-downlink configuration 0-6. The configuration with the highest duty cycle was used (config. 0 at 63.3%).
	Does this device support SV-LTE (1xRTT-LTE)? ☐ Yes ☒ No			
Wi-Fi	2.4 GHz	802.11b 802.11g 802.11n (HT20)		100%
	5 GHz	802.11a 802.11n (HT20) 802.11n (HT40) 802.11ac (VHT20) 802.11ac (VHT40) 802.11ac (VHT80)		100%
	Does this device support bands 5.60 ~ 5.65 GHz? ☒ Yes ☐ No			
	Does this device support Band gap channel(s)? ☒ Yes ☐ No			
Bluetooth	2.4 GHz	Version 4.2 LE		77.5% (DH5)

Notes:

- The Bluetooth protocol is considered source-based averaging. Bluetooth EDR, GFSK (DH5) was verified to have the highest duty cycle of 77.5% and is considered for SAR testing. Under LE mode, they duty cycle is at 50%.

6.3. Maximum Output Power from Tune-up Procedure

KDB 447498 sec.4.1.(3) at the maximum rated output power and within the tune-up tolerance range specified for the product, but not more than 2 dB lower than the maximum tune-up tolerance limit. The following values include tolerance. The selection between UAT and LAT in application is based on RSSI based antenna selection. The selection between head and body power levels is based on body-detect mechanism as described in the KDB guidance for test cases approved through Manufacturer KDB inquiry – Detect Mode. Hotspot exposure condition is evaluated using body powers.

RF Air interface	Mode	Max. Avg. RF Output Power (dBm)							
		UAT				LAT			
		Head		Body		Head		Body	
		Burst	Frame	Burst	Frame	Burst	Frame	Burst	Frame
GSM850	Voice/GPRS (1 slot)	29.0	20.0	29.0	20.0	33.5	24.5	33.5	24.5
	GPRS 2 slots	28.0	22.0	28.0	22.0	32.5	26.5	32.5	26.5
	EGPRS 1 slot	23.2	14.2	23.2	14.2	29.0	20.0	29.0	20.0
	EGPRS 2 slots	22.2	16.2	22.2	16.2	28.0	22.0	28.0	22.0
GSM1900	Voice/GPRS (1 slot)	24.2	15.2	24.2	15.2	30.5	21.5	28.5	19.5
	GPRS 2 slots	23.2	17.2	23.2	17.2	29.5	23.5	25.5	19.5
	EGPRS 1 slot	21.5	12.5	21.5	12.5	28.0	19.0	27.5	18.5
	EGPRS 2 slots	20.5	14.5	20.5	14.5	27.0	21.0	24.5	18.5

RF Air interface	Mode	Max. Avg. RF Output Power (dBm)			
		UAT		LAT	
		Head	Body	Head	Body
W-CDMA Band V	R99	22.0	22.0	25.0	25.0
	HSDPA	22.0	22.0	25.0	25.0
	HSUPA	22.0	22.0	25.0	25.0
	DC-HSDPA	22.0	22.0	25.0	25.0
	HSPA+	22.0	22.0	25.0	25.0
W-CDMA Band IV	R99	19.3	21.0	25.2	21.5
	HSDPA	19.3	21.0	25.2	21.5
	HSUPA	19.3	21.0	25.2	21.5
	DC-HSDPA	19.3	21.0	25.2	21.5
	HSPA+	19.3	21.0	25.2	21.5
W-CDMA Band II	R99	18.0	20.3	25.2	20.5
	HSDPA	18.0	20.3	25.2	20.5
	HSUPA	18.0	20.3	25.2	20.5
	DC-HSDPA	18.0	20.3	25.2	20.5
	HSPA+	18.0	20.3	25.2	20.5
CDMA BC0	1xRTT	22.0	22.0	25.0	25.0
	1xAdvanced	22.0	22.0	25.0	25.0
	1xEVDO Rel. 0	22.0	22.0	25.0	25.0
	1xEVDO Rev. A	22.0	22.0	25.0	25.0
CDMA BC1	1xRTT	18.0	20.3	25.2	20.5
	1xAdvanced	18.0	20.3	25.2	20.5
	1xEVDO Rel. 0	18.0	20.3	25.2	20.5
	1xEVDO Rev. A	18.0	20.3	25.2	20.5
CDMA BC10	1xRTT	22.0	22.0	25.0	25.0
	1xAdvanced	22.0	22.0	25.0	25.0
	1xEVDO Rel. 0	22.0	22.0	25.0	25.0
	1xEVDO Rev. A	22.0	22.0	25.0	25.0
LTE Band 2	QPSK	18.0	20.3	24.5	20.5
LTE Band 4	QPSK	19.3	20.5	24.5	21.5
LTE Band 5	QPSK	21.5	21.5	24.0	24.0
LTE Band 7	QPSK	15.8	18.8	24.0	16.5
LTE Band 12	QPSK	22.0	22.0	24.5	24.5
LTE Band 13	QPSK	22.0	22.0	24.5	24.5
LTE Band 17	QPSK	22.0	22.0	24.5	24.5
LTE Band 25	QPSK	18.0	20.3	24.5	20.5
LTE Band 26	QPSK	21.5	21.5	24.0	24.0
LTE Band 27	QPSK	21.0	21.0	24.0	24.0
LTE Band 30	QPSK	18.5	19.3	23.0	18.3
LTE Band 41	QPSK	18.5	20.5	22.5	19.5
LTE-2CA Band 7	QPSK	15.8	18.8	23.0	16.5
LTE-2CA Band 41	QPSK	18.0	18.0	22.5	19.5
RF Air interface	Mode	Max. Avg. RF Output Power (dBm)			
Bluetooth P _{high}		13.0			
Bluetooth P _{low}		10.0			
Bluetooth P _{standalone}		16.5			

Notes:

1. LTE QPSK configuration has the highest maximum average output power per 3GPP standard.
2. Bluetooth P_{high} is used when Wi-Fi antenna is active and Cellular antenna is inactive.
3. Bluetooth P_{low} is used with Wi-Fi and Cellular antenna is active or Wi-Fi antenna inactive and Cellular antenna is active.
4. Bluetooth P_{standalone} is used with Wi-Fi and Cellular antennas are inactive.

6.3.1. WLAN SISO (P_{Cell_ON})

P_{Cell_ON}: This will be used when both Cellular and Wi-Fi radios are ON from Manufacturer KDB inquiry – Cellular State Dependent Wi-Fi Power control.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
2.4	802.11b	1 Tx	1	2412	14.0	18.0	17.5	14.5	Yes
			2	2417	14.0	18.0	17.5	14.5	
			3	2422	14.0	19.0	17.5	14.5	
			6	2437	14.0	19.0	17.5	14.5	
			10	2457	14.0	19.0	17.5	14.5	
			11	2462	14.0	18.0	17.5	14.5	
			12	2467	14.0	16.5	16.5	14.5	
			13	2472	12.0	12.0	12.0	12.0	
	802.11g	1 Tx	1	2412	14.0	14.0	14.0	14.0	No
			2	2417	14.0	16.5	16.5	14.5	
			3	2422	14.0	19.0	17.5	14.5	
			6	2437	14.0	19.0	17.5	14.5	
			9	2452	14.0	19.0	17.5	14.5	
			10	2457	14.0	16.0	16.0	14.5	
			11	2462	14.0	14.5	14.5	14.5	
			12	2467	11.5	11.5	11.5	11.5	
	13	2472	2.0	2.0	2.0	2.0			
	802.11n	1 Tx HT20	1	2412	14.0	14.0	14.0	14.0	No
			2	2417	14.0	16.5	16.5	14.5	
			3	2422	14.0	19.0	17.5	14.5	
			6	2437	14.0	19.0	17.5	14.5	
			9	2452	14.0	19.0	17.5	14.5	
			10	2457	14.0	16.0	16.0	14.5	
			11	2462	14.0	14.5	14.5	14.5	
			12	2467	11.5	11.5	11.5	11.5	
	13	2472	2.0	2.0	2.0	2.0			

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.2	802.11a	1 Tx	36	5180	7.0	17.5	15.8	10.5	Yes
			40	5200	7.0	19.5	15.8	10.5	
			44	5220	7.0	20.5	15.8	10.5	
			48	5240	7.0	19.5	15.8	10.5	
	802.11n	1 Tx HT20	36	5180	7.0	17.5	15.8	10.5	No
			40	5200	7.0	19.5	15.8	10.5	
			44	5220	7.0	20.5	15.8	10.5	
			48	5240	7.0	19.5	15.8	10.5	
		1 Tx HT40	38	5190	7.0	15.5	15.5	10.5	Yes
			46	5230	7.0	19.0	15.8	10.5	
	802.11ac	1 Tx VHT20	36	5180	7.0	17.5	15.8	10.5	No
			40	5200	7.0	19.5	15.8	10.5	
			44	5220	7.0	20.5	15.8	10.5	
			48	5240	7.0	19.5	15.8	10.5	
		1 Tx VHT40	38	5190	7.0	15.5	15.5	10.5	No
			46	5230	7.0	19.0	15.8	10.5	
		1 Tx VHT80	42	5210	7.0	15.0	15.0	10.5	Yes

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.3	802.11a	1 Tx	52	5260	6.3	19.5	14.0	9.3	No
			56	5280	6.3	19.5	14.0	9.3	
			60	5300	6.3	19.5	14.0	9.3	
			64	5320	6.3	16.5	14.0	9.3	
	802.11n	1 Tx HT20	52	5260	6.3	19.5	14.0	9.3	No
			56	5280	6.3	19.5	14.0	9.3	
			60	5300	6.3	19.5	14.0	9.3	
			64	5320	6.3	16.5	14.0	9.3	
		1 Tx HT40	54	5270	6.3	19.0	14.0	9.3	No
			62	5310	6.3	13.5	13.5	9.3	
	802.11ac	1 Tx VHT20	52	5260	6.3	19.5	14.0	9.3	No
			56	5280	6.3	19.5	14.0	9.3	
			60	5300	6.3	19.5	14.0	9.3	
			64	5320	6.3	16.5	14.0	9.3	
		1 Tx VHT40	54	5270	6.3	19.0	14.0	9.3	No
			62	5310	6.3	13.5	13.5	9.3	
		1 Tx VHT80	58	5290	6.3	13.5	13.5	9.3	No

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.5	802.11a	1 Tx	100	5500	5.5	15.0	12.5	9.5	No
			104	5520	5.5	18.0	12.5	9.5	
			108	5540	5.5	19.5	12.5	9.5	
			112	5560	5.5	19.5	12.5	9.5	
			116	5580	5.5	19.5	12.5	9.5	
			120	5600	5.5	19.5	12.5	9.5	
			124	5620	5.5	19.5	12.5	9.5	
			128	5640	5.5	19.5	12.5	9.5	
			132	5660	5.5	19.5	12.5	9.5	
			136	5680	5.5	19.5	12.5	9.5	
			140	5700	5.5	15.0	12.5	9.5	
			144	5720	5.5	19.0	12.5	9.5	
	802.11n	1 Tx HT20	100	5500	5.5	15.0	12.5	9.5	No
			104	5520	5.5	18.0	12.5	9.5	
			108	5540	5.5	19.5	12.5	9.5	
			112	5560	5.5	19.5	12.5	9.5	
			116	5580	5.5	19.5	12.5	9.5	
			120	5600	5.5	19.5	12.5	9.5	
			124	5620	5.5	19.5	12.5	9.5	
			128	5640	5.5	19.5	12.5	9.5	
			132	5660	5.5	19.5	12.5	9.5	
			136	5680	5.5	19.5	12.5	9.5	
			140	5700	5.5	15.0	12.5	9.5	
			144	5720	5.5	19.0	12.5	9.5	
		1 Tx HT40	102	5510	5.5	14.0	12.5	9.5	Yes
			110	5550	5.5	19.0	12.5	9.5	
			118	5590	5.5	19.5	12.5	9.5	
			126	5630	5.5	19.0	12.5	9.5	
			134	5670	5.5	16.0	12.5	9.5	
			142	5710	5.5	19.0	12.5	9.5	
	802.11ac	1 Tx VHT20	100	5500	5.5	15.0	12.5	9.5	No
			104	5520	5.5	18.0	12.5	9.5	
			108	5540	5.5	19.5	12.5	9.5	
			112	5560	5.5	19.5	12.5	9.5	
			116	5580	5.5	19.5	12.5	9.5	
			120	5600	5.5	19.5	12.5	9.5	
124			5620	5.5	19.5	12.5	9.5		
128			5640	5.5	19.5	12.5	9.5		
132			5660	5.5	19.5	12.5	9.5		
136			5680	5.5	19.5	12.5	9.5		
140			5700	5.5	15.0	12.5	9.5		
144			5720	5.5	19.0	12.5	9.5		
1 Tx VHT40		102	5510	5.5	14.0	12.5	9.5	No	
		110	5550	5.5	19.0	12.5	9.5		
		118	5590	5.5	19.5	12.5	9.5		
		126	5630	5.5	19.0	12.5	9.5		
		134	5670	5.5	16.0	12.5	9.5		
		142	5710	5.5	19.0	12.5	9.5		
1 Tx VHT80		106	5530	5.5	13.0	12.5	9.5	Yes	
		122	5610	5.5	19.0	12.5	9.5		
		138	5690	5.5	19.0	12.5	9.5		

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.8	802.11a	1 Tx	149	5745	6.5	19.5	12.0	14.3	Yes
			153	5765	6.5	20.5	12.0	14.3	
			157	5785	6.5	20.5	12.0	14.3	
			161	5805	6.5	20.5	12.0	14.3	
			165	5825	6.5	19.5	12.0	14.3	
	802.11n	1 Tx HT20	149	5745	6.5	19.5	12.0	14.3	No
			153	5765	6.5	20.5	12.0	14.3	
			157	5785	6.5	20.5	12.0	14.3	
			161	5805	6.5	20.5	12.0	14.3	
			165	5825	6.5	19.5	12.0	14.3	
		1 Tx HT40	151	5755	6.5	19.0	12.0	14.3	No
			159	5795	6.5	19.0	12.0	14.3	
	802.11ac	1 Tx VHT20	149	5745	6.5	19.5	12.0	14.3	No
			153	5765	6.5	20.5	12.0	14.3	
			157	5785	6.5	20.5	12.0	14.3	
			161	5805	6.5	20.5	12.0	14.3	
			165	5825	6.5	19.5	12.0	14.3	
		1 Tx VHT40	151	5755	6.5	19.0	12.0	14.3	No
			159	5795	6.5	19.0	12.0	14.3	
		1 Tx VHT80	155	5775	6.5	18.0	12.0	14.3	Yes

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

6.3.2. WLAN MIMO (P_{Cell_ON})

P_{Cell_ON}: This will be used when both Cellular and Wi-Fi radios are ON from Manufacturer KDB inquiry – Cellular State Dependent Wi-Fi Power control.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max.Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
2.4	802.11g	2 Tx CDD	1	2412	13.5	13.5	13.5	13.5	Yes
			2	2417	14.0	16.5	16.5	14.5	
			3	2422	14.0	19.0	17.5	14.5	
			6	2437	14.0	19.0	17.5	14.5	
			9	2452	14.0	19.0	17.5	14.5	
			10	2457	14.0	16.0	16.0	14.5	
			11	2462	14.0	14.0	14.0	14.0	
			12	2467	11.0	11.0	11.0	11.0	
			13	2472	2.0	2.0	2.0	2.0	
	802.11n	2 Tx HT20 CDD/STBC/ SDM	1	2412	13.5	13.5	13.5	13.5	No
			2	2417	14.0	16.5	16.5	14.5	
			3	2422	14.0	19.0	17.5	14.5	
			6	2437	14.0	19.0	17.5	14.5	
			9	2452	14.0	19.0	17.5	14.5	
			10	2457	14.0	16.0	16.0	14.5	
			11	2462	14.0	14.0	14.0	14.0	
			12	2467	11.0	11.0	11.0	11.0	
			13	2472	2.0	2.0	2.0	2.0	

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.2	802.11a	2 Tx CDD	36	5180	7.0	17.0	15.8	10.5	No
			40	5200	7.0	18.0	15.8	10.5	
			44	5220	7.0	18.0	15.8	10.5	
			48	5240	7.0	18.0	15.8	10.5	
	802.11n	2 Tx HT20 CDD/STBC/ SDM	36	5180	7.0	17.0	15.8	10.5	No
			40	5200	7.0	18.0	15.8	10.5	
			44	5220	7.0	18.0	15.8	10.5	
			48	5240	7.0	18.0	15.8	10.5	
		2 Tx HT40 CDD/STBC/SDM	38	5190	7.0	13.5	13.5	10.5	Yes
			46	5230	7.0	18.0	15.8	10.5	
	802.11ac	2 Tx VHT20 CDD/STBC/ SDM	36	5180	7.0	17.0	15.8	10.5	No
			40	5200	7.0	18.0	15.8	10.5	
			44	5220	7.0	18.0	15.8	10.5	
			48	5240	7.0	18.0	15.8	10.5	
		2 Tx VHT40 CDD/STBC/SDM	38	5190	7.0	13.5	13.5	10.5	No
			46	5230	7.0	18.0	15.8	10.5	
		2 Tx VHT80 CDD/STBC/SDM	42	5210	7.0	13.0	13.0	10.5	No

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.3	802.11a	2 Tx CDD	52	5260	6.3	18.0	14.0	9.3	No
			56	5280	6.3	18.0	14.0	9.3	
			60	5300	6.3	18.0	14.0	9.3	
			64	5320	6.3	16.5	14.0	9.3	
	802.11n	2 Tx HT20 CDD/STBC/ SDM	52	5260	6.3	18.0	14.0	9.3	No
			56	5280	6.3	18.0	14.0	9.3	
			60	5300	6.3	18.0	14.0	9.3	
			64	5320	6.3	16.5	14.0	9.3	
		2 Tx HT40 CDD/STBC/SDM	54	5270	6.3	18.0	14.0	9.3	No
			62	5310	6.3	13.0	13.0	9.3	
	802.11ac	2 Tx VHT20 CDD/STBC/ SDM	52	5260	6.3	18.0	14.0	9.3	No
			56	5280	6.3	18.0	14.0	9.3	
			60	5300	6.3	18.0	14.0	9.3	
			64	5320	6.3	16.5	14.0	9.3	
		2 Tx VHT40 CDD/STBC/SDM	54	5270	6.3	18.0	14.0	9.3	No
			62	5310	6.3	13.0	13.0	9.3	
		2 Tx VHT80 CDD/STBC/SDM	58	5290	6.3	13.0	13.0	9.3	No

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.5	802.11a	2 Tx CDD	100	5500	5.5	15.0	12.5	9.5	No
			104	5520	5.5	17.0	12.5	9.5	
			108	5540	5.5	18.0	12.5	9.5	
			112	5560	5.5	18.0	12.5	9.5	
			116	5580	5.5	18.0	12.5	9.5	
			120	5600	5.5	18.0	12.5	9.5	
			124	5620	5.5	18.0	12.5	9.5	
			128	5640	5.5	18.0	12.5	9.5	
			132	5660	5.5	18.0	12.5	9.5	
			136	5680	5.5	18.0	12.5	9.5	
			140	5700	5.5	14.0	12.5	9.5	
			144	5720	5.5	18.0	12.5	9.5	
	802.11n	2 Tx HT20 CDD/STBC/ SDM	100	5500	5.5	15.0	12.5	9.5	No
			104	5520	5.5	17.0	12.5	9.5	
			108	5540	5.5	18.0	12.5	9.5	
			112	5560	5.5	18.0	12.5	9.5	
			116	5580	5.5	18.0	12.5	9.5	
			120	5600	5.5	18.0	12.5	9.5	
			124	5620	5.5	18.0	12.5	9.5	
			128	5640	5.5	18.0	12.5	9.5	
			132	5660	5.5	18.0	12.5	9.5	
			136	5680	5.5	18.0	12.5	9.5	
			140	5700	5.5	14.0	12.5	9.5	
			144	5720	5.5	18.0	12.5	9.5	
		2 Tx HT40 CDD/STBC/ SDM	102	5510	5.5	13.0	12.5	9.5	Yes
			110	5550	5.5	18.0	12.5	9.5	
			118	5590	5.5	19.5	12.5	9.5	
			126	5630	5.5	18.0	12.5	9.5	
			134	5670	5.5	14.5	12.5	9.5	
			142	5710	5.5	19.0	12.5	9.5	
	802.11ac	2 Tx VHT20 CDD/STBC/ SDM	100	5500	5.5	15.0	12.5	9.5	No
			104	5520	5.5	17.0	12.5	9.5	
			108	5540	5.5	18.0	12.5	9.5	
			112	5560	5.5	18.0	12.5	9.5	
			116	5580	5.5	18.0	12.5	9.5	
			120	5600	5.5	18.0	12.5	9.5	
124			5620	5.5	18.0	12.5	9.5		
128			5640	5.5	18.0	12.5	9.5		
132			5660	5.5	18.0	12.5	9.5		
136			5680	5.5	18.0	12.5	9.5		
140			5700	5.5	14.0	12.5	9.5		
144			5720	5.5	18.0	12.5	9.5		
2 Tx VHT40 CDD/STBC/ SDM		102	5510	5.5	13.0	12.5	9.5	No	
		110	5550	5.5	18.0	12.5	9.5		
		118	5590	5.5	19.5	12.5	9.5		
		126	5630	5.5	18.0	12.5	9.5		
		134	5670	5.5	14.5	12.5	9.5		
		142	5710	5.5	19.0	12.5	9.5		
2 Tx VHT80 CDD/STBC/ SDM		106	5530	5.5	13.0	12.5	9.5	Yes	
		122	5610	5.5	19.0	12.5	9.5		
		138	5690	5.5	19.0	12.5	9.5		

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.8	802.11a	2 Tx CDD	149	5745	6.5	19.5	12.0	14.3	Yes
			153	5765	6.5	20.5	12.0	14.3	
			157	5785	6.5	20.5	12.0	14.3	
			161	5805	6.5	20.5	12.0	14.3	
			165	5825	6.5	19.5	12.0	14.3	
	802.11n	2 Tx HT20 CDD/STBC/ SDM	149	5745	6.5	19.5	12.0	14.3	No
			153	5765	6.5	20.5	12.0	14.3	
			157	5785	6.5	20.5	12.0	14.3	
			161	5805	6.5	20.5	12.0	14.3	
			165	5825	6.5	19.5	12.0	14.3	
		2 Tx HT40 CDD/STBC/SDM	151	5755	6.5	19.0	12.0	14.3	No
			159	5795	6.5	19.0	12.0	14.3	
	802.11ac	2 Tx VHT20 CDD/STBC/ SDM	149	5745	6.5	19.5	12.0	14.3	No
			153	5765	6.5	20.5	12.0	14.3	
			157	5785	6.5	20.5	12.0	14.3	
			161	5805	6.5	20.5	12.0	14.3	
			165	5825	6.5	19.5	12.0	14.3	
		2 Tx VHT40 CDD/STBC/SDM	151	5755	6.5	19.0	12.0	14.3	No
			159	5795	6.5	19.0	12.0	14.3	
		2 Tx VHT80 CDD/STBC/SDM	155	5775	6.5	16.0	12.0	14.3	Yes

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

6.3.3. WLAN SISO (P_{Cell_OFF})

P_{Cell_OFF}: This will be used when only Wi-Fi radios is ON from Manufacturer KDB inquiry – Cellular State Dependent Wi-Fi Power control.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
2.4	802.11b	1 Tx	1	2412	18.0	18.0	18.0	18.0	Yes
			2	2417	18.0	18.0	18.0	18.0	
			3	2422	19.0	19.0	19.0	19.0	
			6	2437	19.0	19.0	19.0	19.0	
			10	2457	19.0	19.0	19.0	19.0	
			11	2462	18.0	18.0	18.0	18.0	
			12	2467	16.5	16.5	16.5	16.5	
			13	2472	12.0	12.0	12.0	12.0	
	802.11g	1 Tx	1	2412	14.0	14.0	14.0	14.0	No
			2	2417	16.5	16.5	16.5	16.5	
			3	2422	19.0	19.0	19.0	19.0	
			6	2437	19.0	19.0	19.0	19.0	
			9	2452	19.0	19.0	19.0	19.0	
			10	2457	16.0	16.0	16.0	16.0	
			11	2462	14.5	14.5	14.5	14.5	
			12	2467	11.5	11.5	11.5	11.5	
	13	2472	2.0	2.0	2.0	2.0			
	802.11n	1 Tx HT20	1	2412	14.0	14.0	14.0	14.0	No
			2	2417	16.5	16.5	16.5	16.5	
			3	2422	19.0	19.0	19.0	19.0	
			6	2437	19.0	19.0	19.0	19.0	
			9	2452	19.0	19.0	19.0	19.0	
			10	2457	16.0	16.0	16.0	16.0	
			11	2462	14.5	14.5	14.5	14.5	
			12	2467	11.5	11.5	11.5	11.5	
	13	2472	2.0	2.0	2.0	2.0			

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.2	802.11a	1 Tx	36	5180	15.0	17.5	17.5	17.3	Yes
			40	5200	15.0	19.5	19.5	17.3	
			44	5220	15.0	20.5	21.0	17.3	
			48	5240	15.0	19.5	19.5	17.3	
	802.11n	1 Tx HT20	36	5180	15.0	17.5	17.5	17.3	No
			40	5200	15.0	19.5	19.5	17.3	
			44	5220	15.0	20.5	21.0	17.3	
			48	5240	15.0	19.5	19.5	17.3	
		1 Tx HT40	38	5190	15.0	15.5	15.5	15.5	Yes
			46	5230	15.0	19.0	19.0	17.3	
	802.11ac	1 Tx VHT20	36	5180	15.0	17.5	17.5	17.3	No
			40	5200	15.0	19.5	19.5	17.3	
			44	5220	15.0	20.5	21.0	17.3	
			48	5240	15.0	19.5	19.5	17.3	
		1 Tx VHT40	38	5190	15.0	15.5	15.5	15.5	No
			46	5230	15.0	19.0	19.0	17.3	
		1 Tx VHT80	42	5210	15.0	15.0	15.0	15.0	Yes

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.3	802.11a	1 Tx	52	5260	14.0	19.5	19.3	16.0	Yes
			56	5280	14.0	20.5	19.3	16.0	
			60	5300	14.0	19.5	19.3	16.0	
			64	5320	14.0	16.5	16.5	16.0	
	802.11n	1 Tx HT20	52	5260	14.0	19.5	19.3	16.0	No
			56	5280	14.0	20.5	19.3	16.0	
			60	5300	14.0	19.5	19.3	16.0	
			64	5320	14.0	16.5	16.5	16.0	
		1 Tx HT40	54	5270	14.0	19.0	19.0	16.0	No
			62	5310	13.5	13.5	13.5	13.5	
	802.11ac	1 Tx VHT20	52	5260	14.0	19.5	19.3	16.0	No
			56	5280	14.0	20.5	19.3	16.0	
			60	5300	14.0	19.5	19.3	16.0	
			64	5320	14.0	16.5	16.5	16.0	
		1 Tx VHT40	54	5270	14.0	19.0	19.0	16.0	No
			62	5310	13.5	13.5	13.5	13.5	
		1 Tx VHT80	58	5290	13.5	13.5	13.5	13.5	No

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.5	802.11a	1 Tx	100	5500	13.3	15.0	15.0	15.0	Yes
			104	5520	13.3	18.0	17.8	16.3	
			108	5540	13.3	20.5	17.8	16.3	
			112	5560	13.3	20.5	17.8	16.3	
			116	5580	13.3	20.5	17.8	16.3	
			120	5600	13.3	20.5	17.8	16.3	
			124	5620	13.3	20.5	17.8	16.3	
			128	5640	13.3	20.5	17.8	16.3	
			132	5660	13.3	20.5	17.8	16.3	
			136	5680	13.3	19.5	17.8	16.3	
			140	5700	13.3	15.0	15.0	15.0	
			144	5720	13.3	19.0	17.8	16.3	
	802.11n	1 Tx HT20	100	5500	13.3	15.0	15.0	15.0	No
			104	5520	13.3	18.0	17.8	16.3	
			108	5540	13.3	20.5	17.8	16.3	
			112	5560	13.3	20.5	17.8	16.3	
			116	5580	13.3	20.5	17.8	16.3	
			120	5600	13.3	20.5	17.8	16.3	
			124	5620	13.3	20.5	17.8	16.3	
			128	5640	13.3	20.5	17.8	16.3	
			132	5660	13.3	20.5	17.8	16.3	
			136	5680	13.3	19.5	17.8	16.3	
			140	5700	13.3	15.0	15.0	15.0	
			144	5720	13.3	19.0	17.8	16.3	
		1 Tx HT40	102	5510	13.3	14.0	14.0	14.0	No
			110	5550	13.3	19.0	17.8	16.3	
			118	5590	13.3	19.5	17.8	16.3	
			126	5630	13.3	19.0	17.8	16.3	
			134	5670	13.3	16.0	16.0	16.0	
			142	5710	13.3	19.0	17.8	16.3	
	802.11ac	1 Tx VHT20	100	5500	13.3	15.0	15.0	15.0	No
			104	5520	13.3	18.0	17.8	16.3	
			108	5540	13.3	20.5	17.8	16.3	
			112	5560	13.3	20.5	17.8	16.3	
			116	5580	13.3	20.5	17.8	16.3	
			120	5600	13.3	20.5	17.8	16.3	
			124	5620	13.3	20.5	17.8	16.3	
			128	5640	13.3	20.5	17.8	16.3	
			132	5660	13.3	20.5	17.8	16.3	
			136	5680	13.3	19.5	17.8	16.3	
			140	5700	13.3	15.0	15.0	15.0	
			144	5720	13.3	19.0	17.8	16.3	
		1 Tx VHT40	102	5510	13.3	14.0	14.0	14.0	No
			110	5550	13.3	19.0	17.8	16.3	
			118	5590	13.3	19.5	17.8	16.3	
			126	5630	13.3	19.0	17.8	16.3	
			134	5670	13.3	16.0	16.0	16.0	
			142	5710	13.3	19.0	17.8	16.3	
1 Tx VHT80		106	5530	13.0	13.0	13.0	13.0	Yes	
		122	5610	13.3	19.0	17.8	16.3		
		138	5690	13.3	19.0	17.8	16.3		

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.8	802.11a	1 Tx	149	5745	14.3	19.5	17.3	19.5	Yes
			153	5765	14.3	20.5	17.3	20.5	
			157	5785	14.3	20.5	17.3	20.5	
			161	5805	14.3	20.5	17.3	20.5	
			165	5825	14.3	19.5	17.3	19.5	
	802.11n	1 Tx HT20	149	5745	14.3	19.5	17.3	19.5	No
			153	5765	14.3	20.5	17.3	20.5	
			157	5785	14.3	20.5	17.3	20.5	
			161	5805	14.3	20.5	17.3	20.5	
			165	5825	14.3	19.5	17.3	19.5	
		1 Tx HT40	151	5755	14.3	19.0	17.3	19.0	No
			159	5795	14.3	19.0	17.3	19.0	
	802.11ac	1 Tx VHT20	149	5745	14.3	19.5	17.3	19.5	No
			153	5765	14.3	20.5	17.3	20.5	
			157	5785	14.3	20.5	17.3	20.5	
			161	5805	14.3	20.5	17.3	20.5	
			165	5825	14.3	19.5	17.3	19.5	
		1 Tx VHT40	151	5755	14.3	19.0	17.3	19.0	No
			159	5795	14.3	19.0	17.3	19.0	
		1 Tx VHT80	155	5775	14.3	18.0	17.3	18.0	Yes

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

6.3.4. WLAN MIMO (P_{Cell_OFF})

P_{Cell_OFF}: This will be used when only Wi-Fi radios is ON from Manufacturer KDB inquiry – Cellular State Dependent Wi-Fi Power control.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
2.4	802.11g	2 Tx CDD	1	2412	13.5	13.5	13.5	13.5	Yes
			2	2417	16.5	16.5	16.5	16.5	
			3	2422	19.0	19.0	19.0	19.0	
			6	2437	19.0	19.0	19.0	19.0	
			9	2452	19.0	19.0	19.0	19.0	
			10	2457	16.0	16.0	16.0	16.0	
			11	2462	14.0	14.0	14.0	14.0	
			12	2467	11.0	11.0	11.0	11.0	
			13	2472	2.0	2.0	2.0	2.0	
	802.11n	2 Tx HT20 CDD/STBC/ SDM	1	2412	13.5	13.5	13.5	13.5	No
			2	2417	16.5	16.5	16.5	16.5	
			3	2422	19.0	19.0	19.0	19.0	
			6	2437	19.0	19.0	19.0	19.0	
			9	2452	19.0	19.0	19.0	19.0	
			10	2457	16.0	16.0	16.0	16.0	
			11	2462	14.0	14.0	14.0	14.0	
			12	2467	11.0	11.0	11.0	11.0	
			13	2472	2.0	2.0	2.0	2.0	

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.2	802.11a	2 Tx CDD	36	5180	15.0	17.0	17.0	17.0	No
			40	5200	15.0	18.0	18.0	17.3	
			44	5220	15.0	18.0	18.0	17.3	
			48	5240	15.0	18.0	18.0	17.3	
	802.11n	2 Tx HT20 CDD/STBC/ SDM	36	5180	15.0	17.0	17.0	17.0	No
			40	5200	15.0	18.0	18.0	17.3	
			44	5220	15.0	18.0	18.0	17.3	
			48	5240	15.0	18.0	18.0	17.3	
		2 Tx HT40 CDD/STBC/SDM	38	5190	13.5	13.5	13.5	13.5	Yes
			46	5230	15.0	18.0	18.0	17.3	
	802.11ac	2 Tx VHT20 CDD/STBC/ SDM	36	5180	15.0	17.0	17.0	17.0	No
			40	5200	15.0	18.0	18.0	17.3	
			44	5220	15.0	18.0	18.0	17.3	
			48	5240	15.0	18.0	18.0	17.3	
		2 Tx VHT40 CDD/STBC/SDM	38	5190	13.5	13.5	13.5	13.5	No
			46	5230	15.0	18.0	18.0	17.3	
		2 Tx VHT80 CDD/STBC/SDM	42	5210	13.0	13.0	13.0	13.0	No

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.3	802.11a	2 Tx CDD	52	5260	14.0	18.0	18.0	16.0	No
			56	5280	14.0	18.0	18.0	16.0	
			60	5300	14.0	18.0	18.0	16.0	
			64	5320	14.0	16.5	16.5	16.0	
	802.11n	2 Tx HT20 CDD/STBC/ SDM	52	5260	14.0	18.0	18.0	16.0	No
			56	5280	14.0	18.0	18.0	16.0	
			60	5300	14.0	18.0	18.0	16.0	
			64	5320	14.0	16.5	16.5	16.0	
		2 Tx HT40 CDD/STBC/SDM	54	5270	14.0	18.0	18.0	16.0	No
			62	5310	13.0	13.0	13.0	13.0	
	802.11ac	2 Tx VHT20 CDD/STBC/ SDM	52	5260	14.0	18.0	18.0	16.0	No
			56	5280	14.0	18.0	18.0	16.0	
			60	5300	14.0	18.0	18.0	16.0	
			64	5320	14.0	16.5	16.5	16.0	
		2 Tx VHT40 CDD/STBC/SDM	54	5270	14.0	18.0	18.0	16.0	No
			62	5310	13.0	13.0	13.0	13.0	
		2 Tx VHT80 CDD/STBC/SDM	58	5290	13.0	13.0	13.0	13.0	No

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.5	802.11a	2 Tx CDD	100	5500	13.3	15.0	15.0	15.0	No
			104	5520	13.3	17.0	17.0	16.3	
			108	5540	13.3	18.0	17.8	16.3	
			112	5560	13.3	18.0	17.8	16.3	
			116	5580	13.3	18.0	17.8	16.3	
			120	5600	13.3	18.0	17.8	16.3	
			124	5620	13.3	18.0	17.8	16.3	
			128	5640	13.3	18.0	17.8	16.3	
			132	5660	13.3	18.0	17.8	16.3	
			136	5680	13.3	18.0	17.8	16.3	
			140	5700	13.3	14.0	14.0	14.0	
			144	5720	13.3	18.0	17.8	16.3	
	802.11n	2 Tx HT20 CDD/STBC/ SDM	100	5500	13.3	15.0	15.0	15.0	No
			104	5520	13.3	17.0	17.0	16.3	
			108	5540	13.3	18.0	17.8	16.3	
			112	5560	13.3	18.0	17.8	16.3	
			116	5580	13.3	18.0	17.8	16.3	
			120	5600	13.3	18.0	17.8	16.3	
			124	5620	13.3	18.0	17.8	16.3	
			128	5640	13.3	18.0	17.8	16.3	
			132	5660	13.3	18.0	17.8	16.3	
			136	5680	13.3	18.0	17.8	16.3	
			140	5700	13.3	14.0	14.0	14.0	
			144	5720	13.3	18.0	17.8	16.3	
		2 Tx HT40 CDD/STBC/ SDM	102	5510	13.0	13.0	13.0	13.0	Yes
			110	5550	13.3	18.0	17.8	16.3	
			118	5590	13.3	19.5	17.8	16.3	
			126	5630	13.3	18.0	17.8	16.3	
			134	5670	13.3	14.5	14.5	14.5	
			142	5710	13.3	19.0	17.8	16.3	
	802.11ac	2 Tx VHT20 CDD/STBC/ SDM	100	5500	13.3	15.0	15.0	15.0	No
			104	5520	13.3	17.0	17.0	16.3	
			108	5540	13.3	18.0	17.8	16.3	
			112	5560	13.3	18.0	17.8	16.3	
			116	5580	13.3	18.0	17.8	16.3	
			120	5600	13.3	18.0	17.8	16.3	
			124	5620	13.3	18.0	17.8	16.3	
			128	5640	13.3	18.0	17.8	16.3	
			132	5660	13.3	18.0	17.8	16.3	
			136	5680	13.3	18.0	17.8	16.3	
			140	5700	13.3	14.0	14.0	14.0	
			144	5720	13.3	18.0	17.8	16.3	
2 Tx VHT40 CDD/STBC/ SDM		102	5510	13.0	13.0	13.0	13.0	No	
		110	5550	13.3	18.0	17.8	16.3		
		118	5590	13.3	19.5	17.8	16.3		
		126	5630	13.3	18.0	17.8	16.3		
		134	5670	13.3	14.5	14.5	14.5		
		142	5710	13.3	19.0	17.8	16.3		
2 Tx VHT80 CDD/STBC/ SDM		106	5530	13.0	13.0	13.0	13.0	Yes	
		122	5610	13.3	19.0	17.8	16.3		
		138	5690	13.3	19.0	17.8	16.3		

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)				SAR Test (Yes/No)
					HEAD		BODY		
					Chain 0	Chain 1	Chain 0	Chain 1	
5.8	802.11a	2 Tx CDD	149	5745	14.3	19.5	17.3	19.5	Yes
			153	5765	14.3	20.5	17.3	20.5	
			157	5785	14.3	20.5	17.3	20.5	
			161	5805	14.3	20.5	17.3	20.5	
			165	5825	14.3	19.5	17.3	19.5	
	802.11n	2 Tx HT20 CDD/STBC/ SDM	149	5745	14.3	19.5	17.3	19.5	No
			153	5765	14.3	20.5	17.3	20.5	
			157	5785	14.3	20.5	17.3	20.5	
			161	5805	14.3	20.5	17.3	20.5	
			165	5825	14.3	19.5	17.3	19.5	
		2 Tx HT40 CDD/STBC/SDM	151	5755	14.3	19.0	17.3	19.0	No
			159	5795	14.3	19.0	17.3	19.0	
	802.11ac	2 Tx VHT20 CDD/STBC/ SDM	149	5745	14.3	19.5	17.3	19.5	No
			153	5765	14.3	20.5	17.3	20.5	
			157	5785	14.3	20.5	17.3	20.5	
			161	5805	14.3	20.5	17.3	20.5	
			165	5825	14.3	19.5	17.3	19.5	
		2 Tx VHT40 CDD/STBC/SDM	151	5755	14.3	19.0	17.3	19.0	No
			159	5795	14.3	19.0	17.3	19.0	
		2 Tx VHT80 CDD/STBC/SDM	155	5775	14.3	16.0	16.0	16.0	No

Notes:

1. "Yes" = considered for output power measurement and SAR testing. "No" = SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

6.4. General LTE SAR Test and Reporting Considerations

Item	Description						
Frequency range, Channel Bandwidth, Numbers and Frequencies	Band 2	Frequency range: 1850 - 1910 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low	18700/ 1860	18675/ 1857.5	18650/ 1855	18625/ 1852.5	18615/ 1851.5	18607/ 1850.7
	Mid	18900/ 1880	18900/ 1880	18900/ 1880	18900/ 1880	18900/ 1880	18900/ 1880
	High	19100/ 1900	19125/ 1902.5	19150/ 1905	19175/ 1907.5	19185/ 1908.5	19193/ 1909.3
	Band 4	Frequency range: 1710 - 1755 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low	20050/ 1720	20025/ 1717.5	20000/ 1715	19975/ 1712.5	19965/ 1711.5	19957/ 1710.7
	Mid	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5
	High	20300/ 1745	20325/ 1747.5	20350/ 1750	20375/ 1752.5	20385/ 1753.5	20393/ 1754.3
	Band 5	Frequency range: 824 - 849 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low			20450/ 829	20425/ 826.5	20415/ 825.5	20407/ 824.7
	Mid			20525/ 836.5	20525/ 836.5	20525/ 836.5	20525/ 836.5
	High			20600/ 844	20625/ 846.5	20635/ 847.5	20643/ 848.3
	Band 7	Frequency range: 2500 - 2570 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low	20850 2510	20825 2507.5	20800 2505	20775 2502.5		
	Mid	21100 2535	21100 2535	21100 2535	21100 2535		
	High	21350 2560	21375 2562.5	21400 2565	21425 2567.5		
	Band 12	Frequency range: 699 – 716 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low			23060/ 704	23035/ 701.5	23025/ 700.5	23017/ 699.7
	Mid			23095/ 707.5	23095/ 707.5	23095/ 707.5	23095/ 707.5
	High			23130/ 711	23155/ 713.5	23165/ 714.5	23173/ 715.3
	Band 13	Frequency range: 777 - 787 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low				23205/ 779.5		
	Mid			23230/ 782	23230/ 782		
	High				23255/ 784.5		

General LTE SAR Test and Reporting Considerations (Continued)

Frequency range, Channel Bandwidth, Numbers and Frequencies	Band 17	Frequency range: 704 - 716 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low				23755/ 706.5		
	Mid			23790/ 710	23790/ 710		
	High				23825/ 713.5		
	Band 25	Frequency range: 1850 - 1915 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low	26140/ 1860	26115/ 1857.5	26090/ 1855	26065/ 1852.5	26055/ 1851.5	26047/ 1850.7
	Mid	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5
	High	26590/ 1905	26615/ 1907.5	26640/ 1910	26665/ 1912.5	26675/ 1913.5	26683/ 1914.3
	Band 26	Frequency range: 814 - 849 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low			26740/ 819	26715/ 816.5	26705/ 815.5	26697/ 814.7
	Mid			26865/ 831.5	26865/ 831.5	26865/ 831.5	26865/ 831.5
	High			26990/ 844	27015/ 846.5	27025/ 847.5	27033/ 848.3
	Band 27	Frequency range: 814 - 824 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low				27135/ 816.5	27125/ 815.5	27117/ 814.7
	Mid			27160/ 819	27160/ 819	27160/ 819	27160/ 819
	High				27185/ 821.5	27195/ 822.5	27203/ 823.3
	Band 30	Frequency range: 2305 - 2315 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low				27685/ 2307.5		
	Mid			27710/ 2310	27710/ 2310		
	High				27735/ 2312.5		
	Band 41	Frequency range: 2496 - 2690 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low	39750 / 2506.0					
	Low-Mid	40185 / 2549.5					
	Mid	40620 / 2593.0					
	Mid-High	41055 / 2636.5					
	High	41490 / 2680.0					

General LTE SAR Test and Reporting Considerations (Continued)

LTE transmitter and antenna implementation	LTE can transmit from either UAT (Secondary Antenna) or LAT (Primary Antenna). The antenna switching is implemented with a physical, “break-before-make” switch such that only one antenna can be used for LTE transmission at a time.																																						
Maximum power reduction (MPR)	Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3 <table><tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (RB)</th><th rowspan="2">MPR (dB)</th></tr><tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr><tr><td>QPSK</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr><tr><td>16 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 2</td></tr></table> MPR Built-in by design. The manufacturer Target MPR values are always within the 3GPP maximum MPR allowance but may not follow the default MPR values. A-MPR (additional MPR) was disabled during SAR testing.	Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)																																
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz																																	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1																																
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1																																
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2																																
Spectrum plots for RB configurations	A properly configured base station simulator was used for the SAR and power measurements; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.																																						

Notes:

- SAR Testing for LTE was performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

6.5. LTE (TDD) Considerations

According to KDB 941225 D05 SAR for LTE Devices, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

SAR was tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7.

LTE TDD Bands support 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$		
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Calculated Duty Cycle

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-point Periodicity	Subframe Number										Calculated Duty Cycle (%)
		0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	63.33
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10 ms	D	S	U	U	U	D	D	D	D	D	31.67
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.33

Calculated Duty Cycle = Extended cyclic prefix in uplink $\times (T_s) \times \#$ of S + $\#$ of U

Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:

Calculated Duty Cycle = $5120 \times [1/(15000 \times 2048)] \times 2 + 6 \text{ ms} = 63.33\%$

where

$T_s = 1/(15000 \times 2048)$ seconds

Notes:

1. This device supports uplink-downlink configuration 0-6. The configuration with the highest duty cycle was used (config. 0 at 63.3%).

7. RF Exposure Conditions (Test Configurations)

WWAN antennas are located near the upper and lower edge of the device. WLAN antennas are located near the upper left and lower right corners of the device.

Refer to separate filing submission document for the proprietary design details of the antenna-to-antenna and antenna-to-edge(s) distances.

The Body-worn accessory test configurations were tested using a conservative minimum test separation distance of 5 mm.

Upper Antenna

Wireless technologies	RF Exposure Conditions	DUT-to-User Separation	Test Position	Antenna-to-edge/surface	SAR Required	Note
WWAN	Head	0 mm	Left Touch	N/A	Yes	
			Left Tilt (15°)	N/A	Yes	
			Right Touch	N/A	Yes	
			Right Tilt (15°)	N/A	Yes	
	Body	5 mm	Rear	< 25 mm	Yes	2
			Front	< 25 mm	Yes	2
	Hotspot	5 mm	Rear	< 25 mm	Yes	
			Front	< 25 mm	Yes	
			Edge 1 (Top)	< 25 mm	Yes	
			Edge 2 (Right)	< 25 mm	Yes	
			Edge 3 (Bottom)	> 25 mm	No	1
			Edge 4 (Left)	< 25 mm	Yes	
WLAN (Chain 0)	Head	0 mm	Left Touch	N/A	Yes	
			Left Tilt (15°)	N/A	Yes	
			Right Touch	N/A	Yes	
			Right Tilt (15°)	N/A	Yes	
	Body	5 mm	Rear	< 25 mm	Yes	2
			Front	< 25 mm	Yes	2
	Hotspot / Airplay	5 mm	Rear	< 25 mm	Yes	
			Front	< 25 mm	Yes	
			Edge 1 (Top)	< 25 mm	Yes	
			Edge 2 (Right)	< 25 mm	Yes	
			Edge 3 (Bottom)	> 25 mm	No	1
			Edge 4 (Left)	< 25 mm	Yes	

Notes:

- SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot Mode.
- The Body-worn minimum separation distance is 5 mm. To cover both body-worn and hotspot RF exposure conditions testing was performed at a separation distance of 5 mm.

Lower Antenna

Wireless technologies	RF Exposure Conditions	DUT-to-User Separation	Test Position	Antenna-to-edge/surface	SAR Required	Note
WWAN	Head	0 mm	Left Touch	N/A	Yes	
			Left Tilt (15°)	N/A	Yes	
			Right Touch	N/A	Yes	
			Right Tilt (15°)	N/A	Yes	
	Body	5 mm	Rear	< 25 mm	Yes	2
			Front	< 25 mm	Yes	2
	Hotspot	5 mm	Rear	< 25 mm	Yes	
			Front	< 25 mm	Yes	
			Edge 1 (Top)	> 25 mm	No	1
			Edge 2 (Right)	< 25 mm	Yes	
			Edge 3 (Bottom)	< 25 mm	Yes	
			Edge 4 (Left)	< 25 mm	Yes	
WLAN (Chain 1)	Head	0 mm	Left Touch	N/A	Yes	
			Left Tilt (15°)	N/A	Yes	
			Right Touch	N/A	Yes	
			Right Tilt (15°)	N/A	Yes	
	Body	5 mm	Rear	< 25 mm	Yes	2
			Front	< 25 mm	Yes	2
	Hotspot / Airplay	5 mm	Rear	< 25 mm	Yes	
			Front	< 25 mm	Yes	
			Edge 1 (Top)	> 25 mm	No	1
			Edge 2 (Right)	< 25 mm	Yes	
			Edge 3 (Bottom)	< 25 mm	Yes	
			Edge 4 (Left)	< 25 mm	Yes	

Notes:

1. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hotspot Mode.
2. The Body-worn minimum separation distance is 5 mm. To cover both body-worn and hotspot RF exposure conditions testing was performed at a separation distance of 5 mm.

8. Dielectric Property Measurements & System Check

8.1. Dielectric Property Measurements

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within $\pm 2^\circ\text{C}$ of the temperature when the tissue parameters are characterized.

The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 3 – 4 days of use; or earlier if the dielectric parameters can become out of tolerance; for example, when the parameters are marginal at the beginning of the measurement series.

Tissue dielectric parameters were measured at the low, middle and high frequency of each operating frequency range of the test device.

For SAR measurement systems that have implemented the SAR error compensation algorithms documented in IEEE Std 1528-2013, to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters, the tolerance for ϵ_r and σ may be relaxed to $\pm 10\%$. This is limited to frequencies ≤ 3 GHz.

Tissue Dielectric Parameters

FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

Target Frequency (MHz)	Head		Body	
	ϵ_r	σ (S/m)	ϵ_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5000	36.2	4.45	49.3	5.07
5100	36.1	4.55	49.1	5.18
5200	36.0	4.66	49.0	5.30
5300	35.9	4.76	48.9	5.42
5400	35.8	4.86	48.7	5.53
5500	35.6	4.96	48.6	5.65
5600	35.5	5.07	48.5	5.77
5700	35.4	5.17	48.3	5.88
5800	35.3	5.27	48.2	6.00

IEEE Std 1528-2013

Refer to Table 3 within the IEEE Std 1528-2013

Dielectric Property Measurements Results:

SAR Lab	Date	Tissue Type	Band (MHz)	Frequency (MHz)	Relative Permittivity (ϵ_r)			Conductivity (σ)		
					Measured	Target	Delta $\pm 5\%$	Measured	Target	Delta $\pm 5\%$
A	7/13/2016	1750	Body	1750	51.30	53.44	-4.01	1.52	1.49	2.01
				1710	51.43	53.54	-3.95	1.48	1.46	0.92
				1755	51.21	53.43	-4.15	1.55	1.49	3.74
A	7/13/2016	1750	Head	1750	39.66	40.08	-1.06	1.34	1.37	-2.12
				1710	39.78	40.15	-0.91	1.30	1.35	-3.22
				1755	39.54	40.08	-1.34	1.36	1.37	-0.79
A	7/16/2016	1750	Head	1750	41.97	40.08	4.70	1.34	1.37	-2.04
				1710	42.10	40.15	4.87	1.30	1.35	-3.30
				1755	41.94	40.08	4.65	1.35	1.37	-1.81
A	7/16/2016	1750	Body	1750	51.59	53.44	-3.46	1.51	1.49	1.67
				1710	51.71	53.54	-3.42	1.47	1.46	0.31
				1755	51.56	53.43	-3.50	1.52	1.49	1.86
A	7/22/2016	5200	Body	5200	49.55	49.02	1.08	5.27	5.29	-0.39
				5150	49.65	49.09	1.15	5.23	5.24	-0.08
				5350	49.28	48.82	0.95	5.47	5.47	-0.05
A	7/24/2016	1750	Body	1750	54.40	53.44	1.79	1.48	1.49	-0.21
				1710	54.53	53.54	1.84	1.44	1.46	-1.34
				1755	54.40	53.43	1.82	1.49	1.49	-0.02
A	7/26/2016	5600	Body	5600	48.51	48.48	0.07	5.87	5.76	1.89
				5500	48.69	48.61	0.16	5.73	5.64	1.55
				5725	48.32	48.31	0.02	6.04	5.91	2.29
A	7/26/2016	5800	Body	5800	48.22	48.20	0.04	6.16	6.00	2.62
				5700	48.39	48.34	0.10	6.02	5.88	2.37
				5850	48.13	48.20	-0.15	6.22	6.00	3.67
B	7/12/2016	2600	Body	2600	51.29	52.51	-2.32	2.23	2.16	2.97
				2495	51.60	52.64	-1.98	2.10	2.01	4.26
				2690	51.03	52.40	-2.61	2.33	2.29	2.00
B	7/12/2016	2600	Head	2600	37.46	39.01	-3.98	2.03	1.96	3.61
				2495	37.83	39.14	-3.35	1.92	1.85	3.75
				2690	37.17	38.90	-4.44	2.13	2.06	3.38
B	7/16/2016	2600	Head	2600	38.26	39.01	-1.92	2.04	1.96	4.02
				2495	38.66	39.14	-1.23	1.92	1.85	4.02
				2690	37.90	38.90	-2.56	2.13	2.06	3.57
B	7/16/2016	2600	Body	2600	50.39	52.51	-4.04	2.17	2.16	0.56
				2495	50.69	52.64	-3.71	2.05	2.01	1.63
				2690	50.10	52.40	-4.38	2.28	2.29	-0.14
B	7/20/2016	2600	Head	2600	40.00	39.01	2.54	1.95	1.96	-0.42
				2495	40.33	39.14	3.03	1.84	1.85	-0.47
				2690	39.72	38.90	2.12	2.05	2.06	-0.51
B	7/26/2016	5600	Body	5600	49.13	48.48	1.35	5.91	5.76	2.52
				5500	49.35	48.61	1.52	5.77	5.64	2.15
				5725	48.96	48.31	1.35	6.09	5.91	3.03

SAR Lab	Date	Tissue Type	Band (MHz)	Frequency (MHz)	Relative Permittivity (ϵ_r)			Conductivity (σ)		
					Measured	Target	Delta $\pm 5\%$	Measured	Target	Delta $\pm 5\%$
C	7/13/2016	1900	Body	1900	52.47	53.30	-1.56	1.58	1.52	3.82
				1850	52.65	53.30	-1.22	1.54	1.52	1.18
				1920	52.43	53.30	-1.63	1.59	1.52	4.67
C	7/16/2016	1900	Head	1900	39.49	40.00	-1.28	1.43	1.40	2.07
				1850	39.71	40.00	-0.72	1.39	1.40	-0.86
				1920	39.44	40.00	-1.40	1.45	1.40	3.29
C	7/16/2016	1900	Body	1900	55.75	53.30	4.60	1.55	1.52	2.17
				1850	55.93	53.30	4.93	1.51	1.52	-0.72
				1920	55.72	53.30	4.54	1.57	1.52	3.36
C	7/19/2016	1900	Head	1900	41.02	40.00	2.55	1.45	1.40	3.36
				1850	41.22	40.00	3.05	1.40	1.40	-0.21
				1920	40.96	40.00	2.40	1.47	1.40	4.79
C	7/20/2016	1900	Body	1900	52.14	53.30	-2.18	1.51	1.52	-0.46
				1850	52.24	53.30	-1.99	1.47	1.52	-3.29
				1920	52.13	53.30	-2.20	1.53	1.52	0.72
C	7/23/2016	1900	Body	1900	53.90	53.30	1.13	1.52	1.52	0.26
				1850	54.14	53.30	1.58	1.48	1.52	-2.63
				1920	53.52	53.30	0.41	1.57	1.52	2.96
C	7/26/2016	5600	Body	5600	47.49	48.48	-2.04	5.81	5.76	0.83
				5500	47.67	48.61	-1.94	5.66	5.64	0.35
				5725	47.27	48.31	-2.15	5.98	5.91	1.26
C	7/26/2016	5800	Body	5800	47.14	48.20	-2.20	6.08	6.00	1.35
				5700	47.35	48.34	-2.05	5.94	5.88	1.03
				5850	47.03	48.20	-2.43	6.15	6.00	2.57
D	7/12/2016	2600	Head	2600	37.90	39.01	-2.85	1.95	1.96	-0.77
				2495	38.30	39.14	-2.15	1.84	1.85	-0.63
				2690	37.60	38.90	-3.34	2.04	2.06	-0.99
D	7/12/2016	2600	Body	2600	52.82	52.51	0.59	2.19	2.16	1.54
				2495	53.11	52.64	0.89	2.07	2.01	2.72
				2690	52.57	52.40	0.33	2.30	2.29	0.51
D	7/16/2016	2600	Head	2600	38.86	39.01	-0.39	2.00	1.96	1.72
				2495	39.25	39.14	0.27	1.88	1.85	1.86
				2690	38.52	38.90	-0.97	2.09	2.06	1.39
D	7/16/2016	2600	Body	2600	51.73	52.51	-1.49	2.19	2.16	1.12
				2495	52.04	52.64	-1.15	2.06	2.01	2.22
				2690	51.44	52.40	-1.83	2.29	2.29	-0.01
D	7/19/2016	2600	Head	2600	39.43	39.01	1.07	2.03	1.96	3.61
				2495	39.78	39.14	1.63	1.92	1.85	3.70
				2690	39.13	38.90	0.60	2.13	2.06	3.33
D	7/19/2016	2600	Body	2600	52.29	52.51	-0.42	2.21	2.16	2.42
				2495	52.59	52.64	-0.10	2.09	2.01	3.66
				2690	52.02	52.40	-0.72	2.32	2.29	1.25
D	7/23/2016	2600	Head	2600	38.14	39.01	-2.23	2.04	1.96	3.97
				2495	38.50	39.14	-1.64	1.92	1.85	4.08
				2690	37.83	38.90	-2.74	2.14	2.06	3.91
D	7/23/2016	2600	Body	2600	51.14	52.51	-2.61	2.11	2.16	-2.17
				2495	51.41	52.64	-2.34	1.99	2.01	-1.10
				2690	50.91	52.40	-2.84	2.22	2.29	-2.99

SAR Lab	Date	Tissue Type	Band (MHz)	Frequency (MHz)	Relative Permittivity (ϵ_r)			Conductivity (σ)		
					Measured	Target	Delta $\pm$ %	Measured	Target	Delta $\pm$ %
E	7/11/2016	5800	Head	5800	35.75	35.30	1.27	5.16	5.27	-2.16
				5700	35.93	35.42	1.44	5.05	5.16	-2.18
				5850	35.71	35.30	1.16	5.20	5.27	-1.40
E	7/11/2016	5600	Head	5600	36.07	35.53	1.51	4.95	5.06	-2.16
				5500	36.19	35.65	1.52	4.85	4.96	-2.22
				5725	35.88	35.39	1.38	5.07	5.19	-2.28
E	7/14/2016	5800	Head	5800	36.27	35.30	2.75	5.14	5.27	-2.47
				5700	36.42	35.42	2.82	5.04	5.16	-2.30
				5850	36.23	35.30	2.63	5.20	5.27	-1.35
E	7/17/2016	5600	Head	5600	37.03	35.53	4.21	4.99	5.06	-1.76
				5500	37.16	35.65	4.24	4.87	4.96	-1.71
				5725	36.87	35.39	4.18	5.11	5.19	-1.43
E	7/17/2016	5800	Head	5800	36.74	35.30	4.08	5.19	5.27	-1.44
				5700	36.88	35.42	4.12	5.09	5.16	-1.48
				5850	36.68	35.30	3.91	5.24	5.27	-0.53
E	7/21/2016	5600	Head	5600	35.93	35.53	1.11	5.06	5.06	-0.06
				5500	36.10	35.65	1.27	4.95	4.96	-0.18
				5725	35.78	35.39	1.10	5.19	5.19	0.00
E	7/21/2016	5800	Head	5800	35.63	35.30	0.93	5.26	5.27	-0.21
				5700	35.79	35.42	1.05	5.16	5.16	-0.05
				5850	35.57	35.30	0.76	5.32	5.27	0.93
E	7/25/2016	5600	Head	5600	35.90	35.53	1.03	4.86	5.06	-3.96
				5500	36.05	35.65	1.13	4.77	4.96	-3.79
				5725	35.77	35.39	1.07	4.99	5.19	-3.82
E	7/25/2016	5800	Head	5800	35.73	35.30	1.22	5.06	5.27	-3.91
				5700	35.81	35.42	1.10	4.96	5.16	-4.00
				5850	35.64	35.30	0.96	5.11	5.27	-3.02
F	7/25/2016	5600	Body	5600	48.04	48.48	-0.90	5.69	5.76	-1.16
				5500	48.18	48.61	-0.89	5.57	5.64	-1.28
				5725	47.92	48.31	-0.80	5.85	5.91	-1.03
F	7/25/2016	5800	Body	5800	47.78	48.20	-0.87	5.96	6.00	-0.60
				5700	47.98	48.34	-0.75	5.83	5.88	-0.88
				5850	47.78	48.20	-0.87	5.96	6.00	-0.60
G	7/11/2016	5600	Body	5600	48.76	48.48	0.58	5.94	5.76	3.18
				5500	48.93	48.61	0.65	5.81	5.64	2.88
				5725	48.53	48.31	0.46	6.10	5.91	3.31
G	7/11/2016	5800	Body	5800	48.40	48.20	0.41	6.22	6.00	3.63
				5700	48.63	48.34	0.60	6.08	5.88	3.44
				5850	48.34	48.20	0.29	6.28	6.00	4.60
G	7/15/2016	5600	Body	5600	48.29	48.48	-0.39	5.86	5.76	1.63
				5500	48.39	48.61	-0.46	5.72	5.64	1.29
				5725	48.05	48.31	-0.53	6.02	5.91	1.93
G	7/15/2016	5800	Body	5800	47.90	48.20	-0.62	6.14	6.00	2.30
				5700	48.13	48.34	-0.44	6.00	5.88	2.15
				5850	47.81	48.20	-0.81	6.19	6.00	3.13

SAR Lab	Date	Tissue Type	Band (MHz)	Frequency (MHz)	Relative Permittivity (ϵ_r)			Conductivity (σ)		
					Measured	Target	Delta $\pm 5\%$	Measured	Target	Delta $\pm 5\%$
G	7/18/2016	5600	Body	5600	46.96	48.48	-3.13	5.89	5.76	2.29
				5500	47.15	48.61	-3.01	5.75	5.64	1.78
				5725	46.74	48.31	-3.25	6.07	5.91	2.73
G	7/18/2016	5800	Body	5800	46.61	48.20	-3.30	6.17	6.00	2.78
				5700	46.79	48.34	-3.21	6.03	5.88	2.66
				5850	46.55	48.20	-3.42	6.24	6.00	4.03
G	7/22/2016	5600	Body	5600	48.94	48.48	0.95	5.91	5.76	2.55
				5500	49.10	48.61	1.00	5.77	5.64	2.14
				5725	48.74	48.31	0.89	6.08	5.91	2.92
G	7/22/2016	5800	Body	5800	48.65	48.20	0.93	6.18	6.00	2.92
				5700	48.80	48.34	0.95	6.05	5.88	2.95
				5850	48.59	48.20	0.81	6.25	6.00	4.10
G	7/22/2016	5200	Body	5200	47.65	49.02	-2.79	5.46	5.29	3.05
				5150	47.76	49.09	-2.70	5.42	5.24	3.41
				5350	47.35	48.82	-3.00	5.65	5.47	3.35
G	7/25/2016	5600	Body	5600	45.88	48.48	-5.36	6.04	5.76	4.91
				5500	46.04	48.61	-5.29	5.92	5.64	4.88
				5725	45.72	48.31	-5.36	6.22	5.91	5.24
G	7/26/2016	5600	Body	5600	46.76	48.48	-3.54	5.91	5.76	2.62
				5500	46.96	48.61	-3.40	5.78	5.64	2.31
				5725	46.53	48.31	-3.68	6.08	5.91	2.98
G	7/26/2016	5800	Body	5800	46.43	48.20	-3.67	6.19	6.00	3.12
				5700	46.60	48.34	-3.60	6.05	5.88	2.88
				5850	46.34	48.20	-3.86	6.26	6.00	4.32
H	7/11/2016	5200	Body	5200	47.65	49.02	-2.79	5.28	5.29	-0.32
				5150	47.75	49.09	-2.72	5.21	5.24	-0.43
				5350	47.39	48.82	-2.92	5.47	5.47	0.04
H	7/18/2016	5200	Head	5200	36.61	35.99	1.72	4.53	4.65	-2.71
				5150	36.65	36.05	1.67	4.47	4.60	-2.74
				5350	36.53	35.82	1.98	4.70	4.80	-2.28
H	7/22/2016	5200	Head	5200	37.26	35.99	3.53	4.48	4.65	-3.59
				5150	37.32	36.05	3.53	4.44	4.60	-3.56
				5350	37.04	35.82	3.41	4.62	4.80	-3.76
H	7/23/2016	5200	Body	5200	47.66	49.02	-2.77	5.41	5.29	2.12
				5150	47.74	49.09	-2.74	5.34	5.24	1.94
				5350	47.36	48.82	-2.98	5.61	5.47	2.48
H	7/26/2016	5200	Head	5200	37.01	35.99	2.83	4.65	4.65	-0.02
				5150	37.06	36.05	2.81	4.60	4.60	0.05
				5350	36.74	35.82	2.57	4.80	4.80	-0.18

SAR Lab	Date	Tissue Type	Band (MHz)	Frequency (MHz)	Relative Permittivity (ϵ_r)			Conductivity (σ)		
					Measured	Target	Delta $\pm 5\%$	Measured	Target	Delta $\pm 5\%$
1	7/1/2016	835	Head	835	42.42	41.50	2.22	0.94	0.90	4.44
				805	42.86	41.68	2.83	0.90	0.90	0.81
				905	41.79	41.50	0.70	1.01	0.97	3.96
1	7/5/2016	835	Head	835	43.10	41.50	3.86	0.94	0.90	4.90
				805	43.53	41.68	4.44	0.92	0.90	2.53
				905	42.66	41.50	2.80	1.02	0.97	4.99
1	7/5/2016	835	Body	835	53.51	55.20	-3.06	1.01	0.97	3.71
				805	53.78	55.33	-2.81	0.98	0.97	1.36
				905	53.10	55.00	-3.45	1.08	1.05	2.33
1	7/8/2016	835	Body	835	53.13	55.20	-3.75	1.02	0.97	4.85
				805	53.37	55.33	-3.55	0.98	0.97	1.72
				905	52.35	55.00	-4.82	1.09	1.05	3.56
1	7/8/2016	835	Head	835	41.22	41.50	-0.67	0.91	0.90	1.28
				805	41.63	41.68	-0.12	0.89	0.90	-0.94
				905	40.35	41.50	-2.77	0.98	0.97	0.37
1	7/11/2016	835	Head	835	40.46	41.50	-2.51	0.91	0.90	1.20
				805	40.66	41.68	-2.45	0.88	0.90	-1.96
				905	39.50	41.50	-4.82	0.97	0.97	-0.21
1	7/11/2016	835	Body	835	53.04	55.20	-3.91	1.01	0.97	4.54
				805	53.26	55.33	-3.75	0.99	0.97	2.17
				905	52.29	55.00	-4.93	1.08	1.05	2.99
1	7/15/2016	835	Body	835	54.73	55.20	-0.85	1.02	0.97	4.85
				805	54.96	55.33	-0.68	0.99	0.97	2.51
				905	54.19	55.00	-1.47	1.08	1.05	2.80
1	7/15/2016	835	Head	835	41.12	41.50	-0.92	0.92	0.90	2.30
				805	41.48	41.68	-0.48	0.89	0.90	-1.07
				905	40.31	41.50	-2.87	0.98	0.97	0.73
1	7/18/2016	2300	Body	2300	51.80	52.90	-2.09	1.85	1.80	2.30
				2350	51.66	52.84	-2.23	1.90	1.85	2.71
				2400	51.45	52.77	-2.51	1.96	1.90	3.48
1	7/18/2016	2300	Head	2300	37.79	39.47	-4.26	1.71	1.66	2.54
				2350	37.62	39.38	-4.48	1.76	1.71	3.18
				2400	37.38	39.30	-4.88	1.82	1.75	3.85
1	7/19/2016	835	Body	835	53.35	55.20	-3.35	1.02	0.97	4.64
				805	53.58	55.33	-3.17	0.99	0.97	2.02
				905	52.55	55.00	-4.45	1.09	1.05	3.37
1	7/22/2016	2300	Head	2300	38.25	39.47	-3.10	1.66	1.66	-0.16
				2350	38.02	39.38	-3.46	1.71	1.71	0.37
				2400	37.78	39.30	-3.86	1.77	1.75	1.16
1	7/22/2016	2300	Body	2300	51.48	52.90	-2.69	1.83	1.80	1.19
				2350	51.23	52.84	-3.04	1.89	1.85	2.23
				2400	51.01	52.77	-3.34	1.96	1.90	3.21
3	7/14/2016	1900	Head	1900	38.99	40.00	-2.53	1.38	1.40	-1.29
				1850	39.20	40.00	-2.00	1.34	1.40	-4.57
				1920	38.88	40.00	-2.80	1.40	1.40	0.07
3	7/14/2016	1900	Body	1900	51.39	53.30	-3.58	1.50	1.52	-1.25
				1850	51.60	53.30	-3.19	1.45	1.52	-4.74
				1920	51.29	53.30	-3.77	1.52	1.52	-0.26
3	7/17/2016	1900	Head	1900	39.48	40.00	-1.30	1.43	1.40	2.43
				1850	39.71	40.00	-0.72	1.38	1.40	-1.64
				1920	39.40	40.00	-1.50	1.45	1.40	3.79

SAR Lab	Date	Tissue Type	Band (MHz)	Frequency (MHz)	Relative Permittivity (ϵ_r)			Conductivity (σ)		
					Measured	Target	Delta $\pm 5\%$	Measured	Target	Delta $\pm 5\%$
4	7/8/2016	750	Head	750	40.29	41.96	-3.98	0.91	0.89	2.25
				695	41.07	42.24	-2.78	0.86	0.89	-2.69
				790	39.83	41.76	-4.61	0.95	0.90	5.73
4	7/8/2016	750	Body	750	54.32	55.55	-2.21	0.97	0.96	0.46
				695	54.89	55.76	-1.56	0.92	0.96	-4.45
				790	53.91	55.39	-2.68	1.01	0.97	4.33
4	7/11/2016	750	Head	750	39.89	41.96	-4.94	0.91	0.89	2.06
				695	40.65	42.24	-3.77	0.86	0.89	-2.86
				790	39.33	41.76	-5.81	0.95	0.90	5.68
4	7/11/2016	750	Body	750	53.21	55.55	-4.21	0.97	0.96	0.44
				695	53.77	55.76	-3.56	0.91	0.96	-4.78
				790	52.80	55.39	-4.68	1.01	0.97	4.02
4	7/15/2016	1900	Head	1900	38.16	40.00	-4.60	1.44	1.40	3.07
				1850	38.38	40.00	-4.05	1.40	1.40	0.07
				1920	38.06	40.00	-4.85	1.47	1.40	4.71
4	7/15/2016	1900	Body	1900	52.01	53.30	-2.42	1.49	1.52	-2.11
				1850	52.24	53.30	-1.99	1.45	1.52	-4.67
				1920	51.97	53.30	-2.50	1.51	1.52	-0.39
5	7/11/2016	835	Head	835	40.43	41.50	-2.58	0.91	0.90	0.94
				805	40.68	41.68	-2.40	0.87	0.90	-2.70
				905	39.55	41.50	-4.70	0.97	0.97	-0.35
5	7/11/2016	835	Body	835	53.70	55.20	-2.72	1.00	0.97	2.71
				805	53.99	55.33	-2.43	0.97	0.97	-0.20
				905	53.00	55.00	-3.64	1.06	1.05	0.81
5	7/14/2016	835	Head	835	43.03	41.50	3.69	0.93	0.90	3.20
				805	43.37	41.68	4.06	0.90	0.90	0.18
				905	42.32	41.50	1.98	0.99	0.97	2.10
5	7/14/2016	835	Body	835	55.21	55.20	0.02	1.01	0.97	3.92
				805	55.54	55.33	0.37	0.98	0.97	1.31
				905	54.69	55.00	-0.56	1.07	1.05	2.04

Additional LTE CA testing 8/15/2016 to 8/17/2016:

SAR Lab	Date	Tissue Type	Band (MHz)	Frequency (MHz)	Relative Permittivity (ϵ_r)			Conductivity (σ)		
					Measured	Target	Delta $\pm 5\%$	Measured	Target	Delta $\pm 5\%$
A	8/15/2016	2600	Head	2600	38.57	39.01	-1.13	2.03	1.96	3.46
				2495	38.96	39.14	-0.47	1.92	1.85	3.97
				2690	38.17	38.90	-1.87	2.13	2.06	3.28
A	8/15/2016	2600	Body	2600	52.46	52.51	-0.10	2.22	2.16	2.55
				2495	52.66	52.64	0.03	2.09	2.01	3.96
				2690	52.23	52.40	-0.32	2.33	2.29	1.91
B	8/15/2016	2600	Head	2600	38.29	39.01	-1.85	2.01	1.96	2.44
				2495	38.61	39.14	-1.36	1.90	1.85	2.72
				2690	37.99	38.90	-2.33	2.11	2.06	2.31
B	8/15/2016	2600	Body	2600	51.51	52.51	-1.91	2.16	2.16	0.10
				2495	51.74	52.64	-1.72	2.05	2.01	1.73
				2690	51.27	52.40	-2.15	2.27	2.29	-0.80
C	8/15/2016	2600	Head	2600	40.38	39.01	3.51	2.05	1.96	4.37
				2495	40.70	39.14	3.98	1.93	1.85	4.51
				2690	40.04	38.90	2.94	2.16	2.06	4.78
C	8/15/2016	2600	Body	2600	51.82	52.51	-1.32	2.23	2.16	3.29
				2495	52.15	52.64	-0.94	2.11	2.01	4.86
				2690	51.48	52.40	-1.75	2.35	2.29	2.65

Additional Bluetooth testing 8/25/2016:

SAR Lab	Date	Tissue Type	Band (MHz)	Frequency (MHz)	Relative Permittivity (ϵ_r)			Conductivity (σ)		
					Measured	Target	Delta $\pm 5\%$	Measured	Target	Delta $\pm 5\%$
E	8/24/2016	2450	Head	2450	39.69	39.20	1.25	1.78	1.80	-1.00
				2400	39.85	39.30	1.41	1.72	1.75	-1.64
				2480	39.57	39.16	1.04	1.81	1.83	-1.01
F	8/23/2016	2450	Body	2450	51.29	52.70	-2.68	1.92	1.95	-1.44
				2400	51.43	52.77	-2.54	1.86	1.90	-2.00
				2480	51.19	52.66	-2.80	1.96	1.99	-1.71

8.2. System Check

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device. The same SAR probe(s) and tissue-equivalent media combinations used with each specific SAR system for system verification must be used for device testing. When multiple probe calibration points are required to cover substantially large transmission bands, independent system verifications are required for each probe calibration point. A system verification must be performed before each series of SAR measurements using the same probe calibration point and tissue-equivalent medium. Additional system verification should be considered according to the conditions of the tissue-equivalent medium and measured tissue dielectric parameters, typically every three to four days when the liquid parameters are re-measured or sooner when marginal liquid parameters are used at the beginning of a series of measurements.

System Performance Check Measurement Conditions:

- The measurements were performed in the flat section of the TWIN SAM or ELI phantom, shell thickness: 2.0 ± 0.2 mm (bottom plate) filled with Body or Head simulating liquid of the following parameters.
- The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements ≤ 3 GHz and ≥ 10.0 cm for measurements > 3 GHz.
- The DASY system with an E-Field Probe was used for the measurements.
- The dipole was mounted on the small tripod so that the dipole feed point was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10 mm (above 1 GHz) and 15 mm (below 1 GHz) from dipole center to the simulating liquid surface.
- The coarse grid with a grid spacing of 15 mm was aligned with the dipole.
For 5 GHz band - The coarse grid with a grid spacing of 10 mm was aligned with the dipole.
- Special 7x7x7 (below 3 GHz) and/or 8x8x7 (above 3 GHz) fine cube was chosen for the cube.
- Distance between probe sensors and phantom surface was set to 3 mm.
For 5 GHz band - Distance between probe sensors and phantom surface was set to 2.5 mm
- The dipole input power (forward power) was 100 mW.
- The results are normalized to 1 W input power.

System Check Results

The 1-g and 10-g SAR measured with a reference dipole, using the required tissue-equivalent medium at the test frequency, must be within 10% of the manufacturer calibrated dipole SAR target.

SAR Lab	Date	Tissue Type	Dipole Type _Serial #	Dipole Cal. Due Date	Measured Results for 1g SAR				Measured Results for 10g SAR				Plot No.
					Zoom Scan to 100 mW	Normalize to 1 W	Target (Ref. Value)	Delta ±10 %	Zoom Scan to 100 mW	Normalize to 1 W	Target (Ref. Value)	Delta ±10 %	
A	7/13/2016	Body	D1750V2 SN:1077	9/22/2016	3.890	38.90	35.80	8.66	2.030	20.30	19.00	6.84	1, 2
A	7/13/2016	Head	D1750V2 SN:1077	9/22/2016	3.560	35.60	36.90	-3.52	1.870	18.70	19.50	-4.10	
A	7/16/2016	Head	D1750V2 SN:1053	8/11/2016	3.420	34.20	37.10	-7.82	1.800	18.00	19.80	-9.09	3, 4
A	7/16/2016	Body	D1750V2 SN:1053	8/11/2016	3.710	37.10	37.50	-1.07	1.930	19.30	20.30	-4.93	
A	7/22/2016	Body	D5GHzV2 SN:1003 (5.2 GHz)	2/25/2017	7.720	77.20	73.30	5.32	2.150	21.50	20.60	4.37	5, 6
A	7/24/2016	Body	D1750V2 SN:1053	8/11/2016	3.870	38.70	37.50	3.20	2.010	20.10	20.30	-0.99	
A	7/26/2016	Body	D5GHzV2 SN:1003 (5.6 GHz)	2/25/2017	7.740	77.40	79.80	-3.01	2.130	21.30	22.40	-4.91	
A	7/26/2016	Body	D5GHzV2 SN:1003 (5.8 GHz)	2/25/2017	7.800	78.00	75.50	3.31	2.140	21.40	21.00	1.90	
B	7/12/2016	Head	D2600V2 SN:1006	9/21/2016	6.020	60.20	56.90	5.80	2.600	26.00	25.50	1.96	
B	7/12/2016	Body	D2600V2 SN:1006	9/21/2016	5.860	58.60	55.30	5.97	2.510	25.10	24.80	1.21	
B	7/16/2016	Head	D2600V2 SN:1006	9/21/2016	5.730	57.30	56.90	0.70	2.490	24.90	25.50	-2.35	
B	7/16/2016	Body	D2600V2 SN:1006	9/21/2016	5.700	57.00	55.30	3.07	2.420	24.20	24.80	-2.42	
B	7/20/2016	Head	D2600V2 SN:1006	9/21/2016	5.370	53.70	56.90	-5.62	2.320	23.20	25.50	-9.02	
B	7/20/2016	Body	D2600V2 SN:1006	9/21/2016	5.730	57.30	55.30	3.62	2.450	24.50	24.80	-1.21	
B	7/24/2016	Head	D2600V2 SN:1006	9/21/2016	6.030	60.30	56.90	5.98	2.620	26.20	25.50	2.75	7, 8
B	7/24/2016	Body	D2600V2 SN:1006	9/21/2016	5.850	58.50	55.30	5.79	2.500	25.00	24.80	0.81	
B	7/26/2016	Body	D5GHzV2 SN:1138 (5.6 GHz)	9/23/2016	8.810	88.10	81.60	7.97	2.420	24.20	22.80	6.14	9, 10
C	7/13/2016	Body	D1900V2 SN:5d140	4/12/2017	4.080	40.80	39.30	3.82	2.050	20.50	20.80	-1.44	
C	7/16/2016	Head	D1900V2 SN:5d140	4/12/2017	4.090	40.90	38.30	6.79	2.070	20.70	20.00	3.50	
C	7/16/2016	Body	D1900V2 SN:5d140	4/12/2017	3.880	38.80	39.30	-1.27	1.960	19.60	20.80	-5.77	
C	7/19/2016	Head	D1900V2 SN:5d140	4/12/2017	3.570	35.70	38.30	-6.79	1.810	18.10	20.00	-9.50	11, 12
C	7/20/2016	Body	D1900V2 SN:5d140	4/12/2017	4.190	41.90	39.30	6.62	2.110	21.10	20.80	1.44	
C	7/23/2016	Body	D1900V2 SN:5d140	4/12/2017	3.790	37.90	39.30	-3.56	1.930	19.30	20.80	-7.21	
C	7/26/2016	Body	D5GHzV2 SN:1003 (5.6 GHz)	2/25/2017	7.490	74.90	79.80	-6.14	2.080	20.80	22.40	-7.14	13, 14
C	7/26/2016	Body	D5GHzV2 SN:1003 (5.8 GHz)	2/25/2017	7.360	73.60	75.50	-2.52	2.050	20.50	21.00	-2.38	
D	7/12/2016	Head	D2600V2 SN:1036	3/18/2017	5.890	58.90	55.40	6.32	2.570	25.70	24.60	4.47	
D	7/12/2016	Body	D2600V2 SN:1036	3/18/2017	5.680	56.80	53.40	6.37	2.480	24.80	23.80	4.20	
D	7/16/2016	Head	D2600V2 SN:1036	3/18/2017	5.610	56.10	55.40	1.26	2.450	24.50	24.60	-0.41	
D	7/16/2016	Body	D2600V2 SN:1036	3/18/2017	5.610	56.10	53.40	5.06	2.450	24.50	23.80	2.94	
D	7/19/2016	Head	D2600V2 SN:1036	3/18/2017	5.180	51.80	55.40	-6.50	2.260	22.60	24.60	-8.13	
D	7/19/2016	Body	D2600V2 SN:1036	3/18/2017	5.560	55.60	53.40	4.12	2.430	24.30	23.80	2.10	
D	7/23/2016	Head	D2600V2 SN:1036	3/18/2017	5.930	59.30	55.40	7.04	2.590	25.90	24.60	5.28	15, 16
D	7/23/2016	Body	D2600V2 SN:1036	3/18/2017	5.210	52.10	53.40	-2.43	2.270	22.70	23.80	-4.62	
E	7/11/2016	Head	D5GHzV2 SN:1003 (5.8 GHz)	2/25/2017	7.050	70.50	77.10	-8.56	2.000	20.00	21.90	-8.68	
E	7/11/2016	Head	D5GHzV2 SN:1003 (5.6 GHz)	2/25/2017	7.760	77.60	81.70	-5.02	2.200	22.00	23.40	-5.98	
E	7/14/2016	Head	D5GHzV2 SN:1003 (5.8 GHz)	2/25/2017	7.530	75.30	77.10	-2.33	2.130	21.30	21.90	-2.74	
E	7/17/2016	Head	D5GHzV2 SN:1003 (5.6 GHz)	2/25/2017	7.530	75.30	81.70	-7.83	2.130	21.30	23.40	-8.97	
E	7/17/2016	Head	D5GHzV2 SN:1003 (5.8 GHz)	2/25/2017	7.420	74.20	77.10	-3.76	2.100	21.00	21.90	-4.11	
E	7/21/2016	Head	D5GHzV2 SN:1003 (5.6 GHz)	2/25/2017	8.050	80.50	81.70	-1.47	2.280	22.80	23.40	-2.56	
E	7/21/2016	Head	D5GHzV2 SN:1003 (5.8 GHz)	2/25/2017	7.450	74.50	77.10	-3.37	2.110	21.10	21.90	-3.65	
E	7/25/2016	Head	D5GHzV2 SN:1003 (5.6 GHz)	2/25/2017	7.640	76.40	81.70	-6.49	2.170	21.70	23.40	-7.26	
E	7/25/2016	Head	D5GHzV2 SN:1003 (5.8 GHz)	2/25/2017	7.040	70.40	77.10	-8.69	2.000	20.00	21.90	-8.68	17, 18

SAR Lab	Date	Tissue Type	Dipole Type Serial #	Dipole Cal. Due Data	Measured Results for 1g SAR				Measured Results for 10g SAR				Plot No.
					Zoom Scan to 100 mW	Normalize to 1 W	Target (Ref. Value)	Delta ±10 %	Zoom Scan to 100 mW	Normalize to 1 W	Target (Ref. Value)	Delta ±10 %	
F	7/11/2016	Body	D2450V2 SN:748	2/22/2017	4.860	48.60	49.80	-2.41	2.240	22.40	23.20	-3.45	
F	7/15/2016	Head	D2450V2 SN:748	2/22/2017	4.880	48.80	50.90	-4.13	2.200	22.00	23.70	-7.17	
F	7/15/2016	Body	D2450V2 SN:748	2/22/2017	4.870	48.70	49.80	-2.21	2.220	22.20	23.20	-4.31	
F	7/19/2016	Head	D2450V2 SN:748	2/22/2017	5.260	52.60	50.90	3.34	2.380	23.80	23.70	0.42	
F	7/19/2016	Body	D2450V2 SN:748	2/22/2017	5.220	52.20	49.80	4.82	2.390	23.90	23.20	3.02	19,20
F	7/23/2016	Head	D2450V2 SN:748	2/22/2017	4.940	49.40	50.90	-2.95	2.240	22.40	23.70	-5.49	
F	7/23/2016	Body	D2450V2 SN:748	2/22/2017	5.060	50.60	49.80	1.61	2.310	23.10	23.20	-0.43	
F	7/25/2016	Body	D5GHZV2 SN:1168 (5.6 GHz)	11/13/2016	8.120	81.20	82.50	-1.58	2.300	23.00	23.00	0.00	
F	7/26/2016	Body	D5GHZV2 SN:1168 (5.8 GHz)	11/13/2016	7.180	71.80	78.10	-8.07	2.030	20.30	21.60	-6.02	21,22
G	7/11/2016	Body	D5GHZV2 SN:1168 (5.6 GHz)	11/13/2016	8.360	83.60	82.50	1.33	2.320	23.20	23.00	0.87	
G	7/11/2016	Body	D5GHZV2 SN:1168 (5.8 GHz)	11/13/2016	7.200	72.00	78.10	-7.81	2.010	20.10	21.60	-6.94	
G	7/15/2016	Body	D5GHZV2 SN:1168 (5.6 GHz)	11/13/2016	8.350	83.50	82.50	1.21	2.330	23.30	23.00	1.30	
G	7/15/2016	Body	D5GHZV2 SN:1168 (5.8 GHz)	11/13/2016	7.200	72.00	78.10	-7.81	2.010	20.10	21.60	-6.94	
G	7/18/2016	Body	D5GHZV2 SN:1168 (5.6 GHz)	11/13/2016	7.530	75.30	82.50	-8.73	2.090	20.90	23.00	-9.13	
G	7/18/2016	Body	D5GHZV2 SN:1168 (5.8 GHz)	11/13/2016	7.130	71.30	78.10	-8.71	1.980	19.80	21.60	-8.33	23, 24
G	7/22/2016	Body	D5GHZV2 SN:1168 (5.6 GHz)	11/13/2016	8.340	83.40	82.50	1.09	2.320	23.20	23.00	0.87	
G	7/22/2016	Body	D5GHZV2 SN:1168 (5.8 GHz)	11/13/2016	7.390	73.90	78.10	-5.38	2.060	20.60	21.60	-4.63	
G	7/22/2016	Body	D5GHZV2 SN:1168 (5.2 GHz)	11/13/2016	7.360	73.60	75.00	-1.87	2.070	20.70	21.00	-1.43	
G	7/25/2016	Body	D5GHZV2 SN:1168 (5.6 GHz)	11/13/2016	8.690	86.90	82.50	5.33	2.420	24.20	23.00	5.22	
G	7/26/2016	Body	D5GHZV2 SN:1168 (5.8 GHz)	11/13/2016	7.570	75.70	78.10	-3.07	2.120	21.20	21.60	-1.85	
H	7/11/2016	Body	D5GHZV2 SN:1168 (5.2 GHz)	11/13/2016	7.510	75.10	75.00	0.13	2.080	20.80	21.00	-0.95	
H	7/18/2016	Head	D5GHZV2 SN:1168 (5.2 GHz)	11/13/2016	7.200	72.00	78.40	-8.16	2.070	20.70	22.50	-8.00	25, 26
H	7/22/2016	Head	D5GHZV2 SN:1168 (5.2 GHz)	11/13/2016	7.390	73.90	78.40	-5.74	2.140	21.40	22.50	-4.89	
H	7/23/2016	Body	D5GHZV2 SN:1168 (5.2 GHz)	11/13/2016	7.940	79.40	75.00	5.87	2.240	22.40	21.00	6.67	
H	7/26/2016	Head	D5GHZV2 SN:1168 (5.2 GHz)	11/13/2016	8.170	81.70	78.40	4.21	2.370	23.70	22.50	5.33	
1	7/1/2016	Head	D835V2 SN:4d002	11/12/2016	0.958	9.58	9.06	5.74	0.631	6.31	5.90	6.95	27, 28
1	7/5/2016	Head	D835V2 SN:4d142	9/23/2016	0.999	9.99	9.27	7.77	0.659	6.59	6.01	9.65	
1	7/5/2016	Body	D835V2 SN:4d142	9/23/2016	0.990	9.90	9.41	5.21	0.653	6.53	6.18	5.66	
1	7/8/2016	Body	D835V2 SN:4d142	9/23/2016	1.020	10.20	9.41	8.40	0.676	6.76	6.18	9.39	
1	7/8/2016	Head	D835V2 SN:4d142	9/23/2016	0.976	9.76	9.27	5.29	0.647	6.47	6.01	7.65	
1	7/11/2016	Head	D835V2 SN:4d142	9/23/2016	0.997	9.97	9.27	7.55	0.659	6.59	6.01	9.65	
1	7/11/2016	Body	D835V2 SN:4d142	9/23/2016	1.010	10.10	9.41	7.33	0.667	6.67	6.18	7.93	
1	7/15/2016	Body	D835V2 SN:4d142	9/23/2016	0.977	9.77	9.41	3.83	0.647	6.47	6.18	4.69	
1	7/15/2016	Head	D835V2 SN:4d142	9/23/2016	0.969	9.69	9.27	4.53	0.639	6.39	6.01	6.32	
1	7/18/2016	Body	D2300V2 SN:1002	3/18/2017	4.880	48.80	47.50	2.74	2.350	23.50	23.10	1.73	
1	7/18/2016	Head	D2300V2 SN:1002	3/18/2017	5.490	54.90	50.50	8.71	2.550	25.50	24.20	5.37	29, 30
1	7/19/2016	Body	D835V2 SN:4d142	9/23/2016	1.020	10.20	9.41	8.40	0.676	6.76	6.18	9.39	31, 32
1	7/22/2016	Head	D2300V2 SN:1002	3/18/2017	5.210	52.10	50.50	3.17	2.430	24.30	24.20	0.41	
1	7/22/2016	Body	D2300V2 SN:1002	3/18/2017	4.780	47.80	47.50	0.63	2.300	23.00	23.10	-0.43	
3	7/14/2016	Head	D1900V2 SN:5d163	9/21/2016	3.780	37.80	40.10	-5.74	2.010	20.10	21.00	-4.29	33, 34
3	7/14/2016	Body	D1900V2 SN:5d163	9/21/2016	3.830	38.30	39.90	-4.01	1.990	19.90	21.00	-5.24	
3	7/17/2016	Head	D1900V2 SN:5d163	9/21/2016	4.040	40.40	40.10	0.75	2.100	21.00	21.00	0.00	
4	7/8/2016	Head	D750V3 SN:1071	11/12/2016	0.847	8.47	8.21	3.17	0.555	5.55	5.38	3.16	
4	7/8/2016	Body	D750V3 SN:1071	11/12/2016	0.870	8.70	8.74	-0.46	0.581	5.81	5.81	0.00	
4	7/11/2016	Head	D750V3 SN:1071	11/12/2016	0.875	8.75	8.21	6.58	0.574	5.74	5.38	6.69	35, 36

SAR Lab	Date	Tissue Type	Dipole Type _Serial #	Dipole Cal. Due Data	Measured Results for 1g SAR				Measured Results for 10g SAR				Plot No.
					Zoom Scan to 100 mW	Normalize to 1 W	Target (Ref. Value)	Delta ±10 %	Zoom Scan to 100 mW	Normalize to 1 W	Target (Ref. Value)	Delta ±10 %	
4	7/11/2016	Body	D750V3 SN:1071	11/12/2016	0.890	8.90	8.74	1.83	0.594	5.94	5.81	2.24	
4	7/15/2016	Head	D1900V2 SN:5d163	9/21/2016	4.290	42.90	40.10	6.98	2.220	22.20	21.00	5.71	37, 38
4	7/15/2016	Body	D1900V2 SN:5d163	9/21/2016	3.900	39.00	39.90	-2.26	2.080	20.80	21.00	-0.95	
5	7/11/2016	Head	D835V2 SN:4d142	9/23/2016	0.997	9.97	9.27	7.55	0.661	6.61	6.01	9.98	39, 40
5	7/11/2016	Body	D835V2 SN:4d142	9/23/2016	0.953	9.53	9.41	1.28	0.630	6.30	6.18	1.94	
5	7/14/2016	Head	D835V2 SN:4d142	9/23/2016	0.928	9.28	9.27	0.11	0.617	6.17	6.01	2.66	
5	7/14/2016	Body	D835V2 SN:4d142	9/23/2016	0.974	9.74	9.41	3.51	0.644	6.44	6.18	4.21	

Additional LTE CA testing 8/15/2016 to 8/17/2016:

SAR Room	Date	Tissue Type	Dipole Type _Serial #	Dipole Cal. Due Data	Measured Results for 1g SAR				Measured Results for 10g SAR				Plot No.
					Zoom Scan to 100 mW	Normalize to 1 W	Target (Ref. Value)	Delta ±10 %	Zoom Scan to 100 mW	Normalize to 1 W	Target (Ref. Value)	Delta ±10 %	
A	8/15/2016	Head	D2600V2 SN:1006	9/21/2016	5.980	59.80	56.90	5.10	2.600	26.00	25.50	1.96	
A	8/15/2016	Body	D2600V2 SN:1006	9/21/2016	5.880	58.80	55.30	6.33	2.550	25.50	24.80	2.82	41,42
B	8/15/2016	Head	D2600V2 SN:1006	9/21/2016	5.790	57.90	56.90	1.76	2.530	25.30	25.50	-0.78	
B	8/15/2016	Body	D2600V2 SN:1006	9/21/2016	5.820	58.20	55.30	5.24	2.510	25.10	24.80	1.21	43,44
C	8/15/2016	Head	D2600V2 SN:1006	9/21/2016	6.120	61.20	56.90	7.56	2.650	26.50	25.50	3.92	45,46
C	8/15/2016	Body	D2600V2 SN:1006	9/21/2016	5.680	56.80	55.30	2.71	2.470	24.70	24.80	-0.40	

Additional Bluetooth testing 8/25/2016:

SAR Room	Date	Tissue Type	Dipole Type _Serial #	Dipole Cal. Due Data	Measured Results for 1g SAR				Measured Results for 10g SAR				Plot No.
					Zoom Scan to 100 mW	Normalize to 1 W	Target (Ref. Value)	Delta ±10 %	Zoom Scan to 100 mW	Normalize to 1 W	Target (Ref. Value)	Delta ±10 %	
E	8/24/2016	Head	D2450V2 SN:706	5/10/2017	4.930	49.30	50.50	-2.38	2.220	22.20	23.60	-5.93	47,48
F	8/23/2016	Body	D2450V2 SN:748	2/22/2017	5.280	52.80	49.80	6.02	2.390	23.90	23.20	3.02	49,50

9. Conducted Output Power Measurements

9.1. GSM

Per KDB 941225 D01 3G SAR Procedures:

SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

GSM850 Measured Results

GPRS (GMSK) - Coding Scheme: CS1

Band	Ch No.	Freq. (MHz)	UAT				LAT			
			HEAD		BODY		HEAD		BODY	
			1 slot	2 slots	1 slot	2 slots	1 slot	2 slots	1 slot	2 slots
Burst Power (dBm)										
850	128	824.2	29.0	28.0	29.0	28.0	33.5	32.5	33.5	32.5
	190	836.6	29.0	28.0	29.0	28.0	33.5	32.5	33.5	32.5
	251	848.8	29.0	28.0	29.0	28.0	33.5	32.5	33.5	32.5
Frame Power (dBm)										
850	128	824.2	20.0	22.0	20.0	22.0	24.5	26.5	24.5	26.5
	190	836.6	20.0	22.0	20.0	22.0	24.5	26.5	24.5	26.5
	251	848.8	20.0	22.0	20.0	22.0	24.5	26.5	24.5	26.5

EGPRS (8PSK) - Coding Scheme: MCS5

Band	Ch No.	Freq. (MHz)	UAT				LAT			
			HEAD		BODY		HEAD		BODY	
			1 slot	2 slots	1 slot	2 slots	1 slot	2 slots	1 slot	2 slots
Burst Power (dBm)										
850.0	128.0	824.2	23.1	22.0	23.0	22.0	28.8	27.9	28.8	28.0
	190.0	836.6	23.1	22.1	23.2	22.1	28.8	28.0	28.8	27.9
	251.0	848.8	23.1	22.0	23.0	22.1	28.8	27.8	28.9	27.8
Frame Power (dBm)										
850.0	128.0	824.2	14.1	16.0	14.0	16.0	19.8	21.9	19.8	22.0
	190.0	836.6	14.1	16.1	14.2	16.1	19.8	22.0	19.8	21.9
	251.0	848.8	14.1	16.0	14.0	16.1	19.8	21.8	19.9	21.8

Notes:

The worst-case configuration and mode for SAR testing is determined to be as follows:

- GMSK (GPRS) mode with 2 time slots based on the maximum output power from Tune-up Procedure.
- SAR is not required for EGPRS (8PSK) mode because its output power is less than that of GPRS Mode

GSM1900 Measured Results**GPRS (GMSK) - Coding Scheme: CS1**

Band	Ch No.	Freq. (MHz)	UAT				LAT			
			HEAD		BODY		HEAD		BODY	
			1 slot	2 slots	1 slot	2 slots	1 slot	2 slots	1 slot	2 slots
			Burst Power (dBm)				Burst Power (dBm)			
1900.0	512.0	1850.2	24.2	22.7	24.2	23.2	30.5	29.4	28.1	25.2
	661.0	1880.0	24.2	22.7	24.2	23.2	30.5	29.4	28.0	25.0
	810.0	1909.8	24.2	22.7	24.2	23.2	30.5	29.4	28.0	25.1
			Frame Power (dBm)				Frame Power (dBm)			
1900.0	512.0	1850.2	15.2	16.7	15.2	17.2	21.5	23.4	19.1	19.2
	661.0	1880.0	15.2	16.7	15.2	17.2	21.5	23.4	19.0	19.0
	810.0	1909.8	15.2	16.7	15.2	17.2	21.5	23.4	19.0	19.1

EGPRS (8PSK) - Coding Scheme: MCS5

Band	Ch No.	Freq. (MHz)	UAT				LAT			
			HEAD		BODY		HEAD		BODY	
			1 slot	2 slots	1 slot	2 slots	1 slot	2 slots	1 slot	2 slots
			Burst Power (dBm)				Burst Power (dBm)			
1900.0	512.0	1850.2	21.3	20.4	21.4	20.4	27.9	26.9	27.4	24.4
	661.0	1880.0	21.5	20.3	21.5	20.3	27.8	27.0	27.4	24.3
	810.0	1909.8	21.5	20.4	21.5	20.3	27.8	27.0	27.3	24.3
			Frame Power (dBm)				Frame Power (dBm)			
1900.0	512.0	1850.2	12.3	14.4	12.4	14.4	18.9	20.9	18.4	18.4
	661.0	1880.0	12.5	14.3	12.5	14.3	18.8	21.0	18.4	18.3
	810.0	1909.8	12.5	14.4	12.5	14.3	18.8	21.0	18.3	18.3

Notes:

The worst-case configuration and mode for SAR testing is determined to be as follows:

- GMSK (GPRS) mode with 2 time slots based on the maximum output power from Tune-up Procedure.
- SAR is not required for EGPRS (8PSK) mode because its output power is less than that of GPRS Mode

9.2. W-CDMA

Release 99 Setup Procedures used to establish the test signals

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification. The DUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7).

Mode	Subtest	Rel99
WCDMA General Settings	Loopback Mode	Test Mode 2
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	β_c/β_d	8/15

HSDPA Setup Procedures used to establish the test signals

The following 4 Sub-tests were completed according to Release 5 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subtest	1	2	3	4
W-CDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set 1			
	Power Control Algorithm	Algorithm 2			
	β_c	2/15	11/15	15/15	15/15
	β_d	15/15	15/15	8/15	4/15
	Bd (SF)	64			
	β_c/β_d	2/15	11/15	15/8	15/4
	β_{hs}	4/15	24/15	30/15	30/15
HSDPA Specific Settings	MPR (dB)	0	0	0.5	0.5
	D_{ACK}	8			
	D_{NAK}	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback (Table 5.2B.4)	4ms			
	CQI Repetition Factor (Table 5.2B.4)	2			
	$A_{hs}=\beta_{hs}/\beta_c$	30/15			

HSPA (HSDPA & HSUPA) Setup Procedures used to establish the test signals

The following 5 Sub-tests were completed according to Release 6 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

	Mode	HSPA				
	Subtest	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2 kbps RMC				
	HSDPA FRC	H-Set 1				
	HSUPA Test	HSPA				
	Power Control Algorithm	Algorithm 2				Algorithm 1
	β_c	11/15	6/15	15/15	2/15	15/15
	β_d	15/15	15/15	9/15	15/15	0
	β_{ec}	209/225	12/15	30/15	2/15	5/15
	β_c/β_d	11/15	6/15	15/9	2/15	15/1
	β_{hs}	22/15	12/15	30/15	4/15	5/15
	β_{ed}	1309/225	94/75	47/15	56/75	47/15
HSDPA Specific Settings	CM (dB)	1	3	2	3	1
	MPR (dB)	0	2	1	2	0
	DACK	8				0
	DNAK	8				0
	DCQI	8				0
	Ack-Nack repetition factor	3				
	CQI Feedback (Table 5.2B.4)	4ms				
HSUPA Specific Settings	CQI Repetition Factor (Table 5.2B.4)	2				
	$A_{hs} = \beta_{hs}/\beta_c$	30/15				
	E-DPDCCCH	6	8	8	5	7
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	21
	ETFCI (from 34.121 Table C.11.1.3)	75	67	92	71	81
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E-TFCIs	5	5	2	5	1
	Reference E-TFCI	11	11	11	11	67
	Reference E-TFCI PO	4	4	4	4	18
	Reference E-TFCI	67	67	92	67	67
	Reference E-TFCI PO	18	18	18	18	18
	Reference E-TFCI	71	71	71	71	71
	Reference E-TFCI PO	23	23	23	23	23
	Reference E-TFCI	75	75	75	75	75
	Reference E-TFCI PO	26	26	26	26	26
	Reference E-TFCI	81	81	81	81	81
	Reference E-TFCI PO	27	27	27	27	27
	Maximum Channelization Codes	2xSF2				SF4

DC-HSDPA Setup Procedures used to establish the test signals

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS34.108 v9.5.0. A summary of these settings are illustrated below:

Downlink Physical Channels are set as per 3GPP TS34.121-1 v9.0.0 E.5.0

Table E.5.0: Levels for HSDPA connection setup

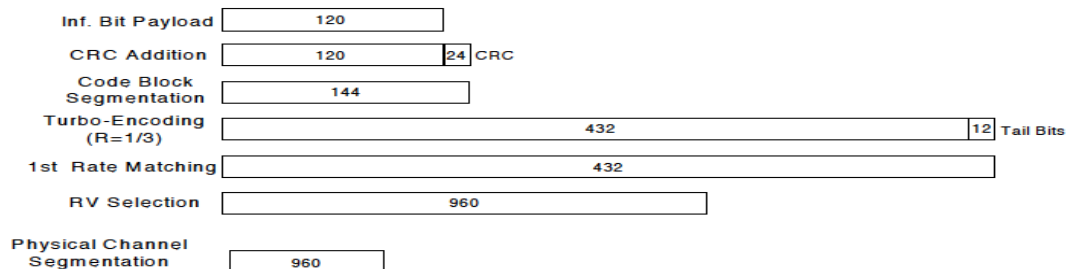
Parameter During Connection setup	Unit	Value
P-CPICH_Ec/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH_Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

Call is set up as per 3GPP TS34.108 v9.5.0 sub clause 7.3.13

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Proces ses	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

**Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)**

The following 4 Sub-tests for HSDPA were completed according to Release 8 procedures in section 5.2 of 3GPP TS34.121. A summary of subtest settings are illustrated below:

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subtest	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set 1			
	Power Control Algorithm	Algorithm2			
	β_c	2/15	11/15	15/15	15/15
	β_d	15/15	15/15	8/15	4/15
	β_d (SF)	64			
	β_c/β_d	2/15	11/15	15/8	15/4
	β_{hs}	4/15	24/15	30/15	30/15
HSDPA Specific Settings	MPR (dB)	0	0	0.5	0.5
	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack Repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	$A_{hs} = \beta_{hs}/\beta_c$	30/15			

HSPA+

Since 16QAM is not used for uplink, the uplink Category and release is same as HSUPA, i.e., Rel. 7 Therefore, the RF conducted power is not measured.

W-CDMA Band V Measured Results

Band	Mode		UL Ch No.	Freq. (MHz)	MPR (dB)	Avg Pwr (dBm)			
						UAT		LAT	
						HEAD	BODY	HEAD	BODY
W-CDMA Band V	Rel 99	RMC, 12.2 kbps	4132	826.4	N/A	22.0	22.0	25.0	25.0
			4183	836.6	N/A	22.0	22.0	25.0	25.0
			4233	846.6	N/A	22.0	22.0	25.0	25.0
	HSDPA	Subtest 1	4132	826.4	0	21.8	21.8	25.0	24.8
			4183	836.6	0	21.9	21.8	24.8	24.8
			4233	846.6	0	21.8	21.9	24.9	25.0
		Subtest 2	4132	826.4	0	22.0	21.9	24.9	24.8
			4183	836.6	0	21.9	21.8	24.8	24.8
			4233	846.6	0	21.9	21.8	24.8	24.9
		Subtest 3	4132	826.4	0.5	21.4	21.4	24.3	24.3
			4183	836.6	0.5	21.4	21.4	24.3	24.5
			4233	846.6	0.5	21.3	21.3	24.5	24.3
		Subtest 4	4132	826.4	0.5	21.4	21.5	24.5	24.4
			4183	836.6	0.5	21.3	21.3	24.4	24.5
			4233	846.6	0.5	21.5	21.5	24.5	24.4
	HSUPA	Subtest 1	4132	826.4	0	21.8	21.9	24.8	24.8
			4183	836.6	0	21.9	21.8	24.8	24.8
			4233	846.6	0	21.9	21.8	24.9	24.9
		Subtest 2	4132	826.4	2	19.9	19.8	22.9	22.9
			4183	836.6	2	19.9	19.9	23.0	23.0
			4233	846.6	2	19.8	19.9	22.8	22.8
		Subtest 3	4132	826.4	1	20.9	20.9	23.8	23.8
			4183	836.6	1	20.9	20.9	23.9	23.8
			4233	846.6	1	20.9	20.8	23.8	23.9
		Subtest 4	4132	826.4	2	20.0	19.9	22.9	22.8
			4183	836.6	2	19.9	19.8	22.9	22.8
			4233	846.6	2	20.0	20.0	22.8	22.9
		Subtest 5	4132	826.4	0	22.0	21.9	24.8	24.8
			4183	836.6	0	21.8	21.9	24.8	25.0
			4233	846.6	0	21.8	21.8	24.8	25.0
	DC-HSDPA	Subtest 1	4132	826.4	0	22.0	22.0	24.9	24.9
			4183	836.6	0	21.9	21.9	24.9	25.0
			4233	846.6	0	22.0	21.8	25.0	24.9
		Subtest 2	4132	826.4	0	21.9	21.9	24.9	24.8
			4183	836.6	0	21.9	21.8	24.8	25.0
			4233	846.6	0	21.8	21.9	24.8	24.9
		Subtest 3	4132	826.4	0.5	21.5	21.3	24.3	24.4
			4183	836.6	0.5	21.5	21.4	24.5	24.5
			4233	846.6	0.5	21.5	21.4	24.4	24.4
		Subtest 4	4132	826.4	0.5	21.5	21.4	24.3	24.3
			4183	836.6	0.5	21.4	21.3	24.4	24.3
			4233	846.6	0.5	21.5	21.5	24.3	24.4

W-CDMA Band IV Measured Results

Band	Mode		UL Ch No.	Freq. (MHz)	MPR (dB)	Avg Pwr (dBm)			
						UAT		LAT	
						HEAD	BODY	HEAD	BODY
W-CDMA Band IV	Rel 99	RMC, 12.2 kbps	1312	1712.4	N/A	19.2	20.8	25.2	21.4
			1413	1732.6	N/A	19.2	20.8	25.2	21.5
			1513	1752.6	N/A	19.2	20.8	25.2	21.5
	HSDPA	Subtest 1	1312	1712.4	0	19.2	20.6	25.0	21.2
			1413	1732.6	0	19.2	20.7	25.1	21.3
			1513	1752.6	0	19.1	20.7	25.0	21.3
		Subtest 2	1312	1712.4	0	19.0	20.7	25.1	21.2
			1413	1732.6	0	19.0	20.6	25.0	21.4
			1513	1752.6	0	19.1	20.7	25.1	21.4
		Subtest 3	1312	1712.4	0.5	18.5	20.3	24.6	20.7
			1413	1732.6	0.5	18.7	20.1	24.6	20.9
			1513	1752.6	0.5	18.5	20.3	24.6	21.0
		Subtest 4	1312	1712.4	0.5	18.6	20.1	24.5	20.7
			1413	1732.6	0.5	18.5	20.1	24.6	21.0
			1513	1752.6	0.5	18.5	20.1	24.7	20.8
	HSUPA	Subtest 1	1312	1712.4	0	19.1	20.6	25.0	21.2
			1413	1732.6	0	19.2	20.8	25.1	21.4
			1513	1752.6	0	19.1	20.6	25.1	21.5
		Subtest 2	1312	1712.4	2	17.0	18.7	23.0	19.4
			1413	1732.6	2	17.1	18.8	23.1	19.4
			1513	1752.6	2	17.0	18.6	23.1	19.4
		Subtest 3	1312	1712.4	1	18.2	19.8	24.2	20.4
			1413	1732.6	1	18.1	19.6	24.2	20.3
			1513	1752.6	1	18.0	19.6	24.2	20.3
		Subtest 4	1312	1712.4	2	17.1	18.7	23.0	19.2
			1413	1732.6	2	17.0	18.6	23.0	19.5
			1513	1752.6	2	17.2	18.7	23.0	19.3
		Subtest 5	1312	1712.4	0	19.0	20.7	25.2	21.2
			1413	1732.6	0	19.0	20.7	25.0	21.5
			1513	1752.6	0	19.2	20.8	25.1	21.3
	DC-HSDPA	Subtest 1	1312	1712.4	0	19.0	20.7	25.0	21.4
			1413	1732.6	0	19.0	20.6	25.0	21.4
			1513	1752.6	0	19.0	20.6	25.0	21.3
		Subtest 2	1312	1712.4	0	19.0	20.7	25.0	21.3
			1413	1732.6	0	19.2	20.7	25.2	21.4
			1513	1752.6	0	19.2	20.7	25.2	21.5
		Subtest 3	1312	1712.4	0.5	18.6	20.1	24.6	20.8
			1413	1732.6	0.5	18.6	20.1	24.7	20.9
			1513	1752.6	0.5	18.7	20.1	24.6	20.9
		Subtest 4	1312	1712.4	0.5	18.7	20.2	24.5	20.8
			1413	1732.6	0.5	18.5	20.2	24.5	21.0
			1513	1752.6	0.5	18.5	20.2	24.6	21.0

W-CDMA Band II Measured Results

Band	Mode		UL Ch No.	Freq. (MHz)	MPR (dB)	Avg Pwr (dBm)			
						UAT		LAT	
						HEAD	BODY	HEAD	BODY
W-CDMA Band II	Rel 99	RMC, 12.2 kbps	9262	1852.4	N/A	17.8	20.0	25.1	20.5
			9400	1880.0	N/A	18.0	19.8	25.0	20.5
			9538	1907.6	N/A	17.9	20.0	25.0	20.5
	HSDPA	Subtest 1	9262	1852.4	0	17.8	19.8	25.0	20.3
			9400	1880.0	0	17.8	19.7	24.8	20.3
			9538	1907.6	0	17.9	20.0	24.9	20.4
		Subtest 2	9262	1852.4	0	17.7	19.9	25.0	20.3
			9400	1880.0	0	17.9	19.8	24.8	20.3
			9538	1907.6	0	17.7	20.0	24.9	20.3
		Subtest 3	9262	1852.4	0.5	17.2	19.4	24.4	19.8
			9400	1880.0	0.5	17.5	19.2	24.5	19.9
			9538	1907.6	0.5	17.2	19.3	24.5	19.8
		Subtest 4	9262	1852.4	0.5	17.3	19.5	24.5	19.8
			9400	1880.0	0.5	17.4	19.3	24.3	19.8
			9538	1907.6	0.5	17.2	19.5	24.3	19.8
	HSUPA	Subtest 1	9262	1852.4	0	17.7	19.8	24.9	20.3
			9400	1880.0	0	17.9	19.6	24.8	20.5
			9538	1907.6	0	17.8	19.9	24.8	20.3
		Subtest 2	9262	1852.4	2	15.7	18.0	23.1	18.3
			9400	1880.0	2	15.8	17.6	22.9	18.4
			9538	1907.6	2	15.8	17.8	22.8	18.5
		Subtest 3	9262	1852.4	1	16.6	18.8	24.0	19.3
			9400	1880.0	1	17.0	18.7	23.8	19.4
			9538	1907.6	1	16.7	19.0	23.9	19.3
		Subtest 4	9262	1852.4	2	15.8	17.9	23.1	18.4
			9400	1880.0	2	15.9	17.6	23.0	18.5
			9538	1907.6	2	15.7	17.9	23.0	18.4
		Subtest 5	9262	1852.4	0	17.6	20.0	25.0	20.3
			9400	1880.0	0	18.0	19.7	24.9	20.5
			9538	1907.6	0	17.8	19.9	24.8	20.3
	DC-HSDPA	Subtest 1	9262	1852.4	0	17.8	19.8	25.0	20.3
			9400	1880.0	0	17.8	19.6	24.8	20.3
			9538	1907.6	0	17.8	20.0	24.9	20.4
		Subtest 2	9262	1852.4	0	17.6	19.9	25.1	20.3
			9400	1880.0	0	17.8	19.7	24.9	20.3
			9538	1907.6	0	17.7	19.8	24.9	20.3
		Subtest 3	9262	1852.4	0.5	17.1	19.4	24.5	19.9
			9400	1880.0	0.5	17.4	19.1	24.3	20.0
			9538	1907.6	0.5	17.4	19.4	24.3	19.9
		Subtest 4	9262	1852.4	0.5	17.3	19.4	24.5	20.0
			9400	1880.0	0.5	17.4	19.2	24.3	19.8
			9538	1907.6	0.5	17.3	19.3	24.4	20.0

9.3. CDMA

1x Advanced Setup Procedures used to establish the test signals

Call box setup procedure

- Protocol Rev > 6 (IS-2000-0)
- System ID: 331; NID: 65535, Reg. Ch. #.:
- Radio Config (RC) > Fwd11,Rvs8
- Service Option (SO) Setup > SO75 (Loopback)
- Traffic Data Rate > Full
- Rvs Power Ctrl > All Up bits (Maximum TxPout)
- Reverse Power Control Mode: 00-200 to 400 bps
- Smart blanking was disabled.

CDMA BC0 Measured Results

Band	Mode		Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
BC 0	1xRTT	RC1 SO55 (Loopback)	1013	824.70	22.0	21.8	24.9	24.8
			384	836.52	21.8	22.0	24.9	24.8
			777	848.31	21.9	21.8	24.8	24.8
		RC3 SO55 (Loopback)	1013	824.70	22.0	21.8	25.0	24.8
			384	836.52	22.0	22.0	25.0	24.9
			777	848.31	22.0	21.9	25.0	24.8
		RC3 SO32 (+F-SCH)	1013	824.70	21.9	22.0	25.0	25.0
			384	836.52	21.9	22.0	25.0	25.0
			777	848.31	21.9	22.0	24.8	25.0
	1xAdvanced	Fwd11/Rvs8 SO75 (Loopback)	1013	824.70	21.9	22.0	24.9	24.9
			384	836.52	21.8	21.9	24.9	24.8
			777	848.31	21.9	21.9	25.0	24.8
	1xEVDO Rel. 0	FTAP Rate: 307.2 kbps(2 slot, QPSK) RTAP Rate: 153.6 kbps	1013	824.70	22.0	21.9	25.0	25.0
			384	836.52	22.0	21.8	25.0	24.8
			777	848.31	22.0	21.8	25.0	24.9
	1xEVDO Rev. A	FETAP: 307.2k, QPSK/ ACK RETAP: 4096	1013	824.70	21.8	21.8	24.8	24.8
			384	836.52	21.9	21.6	24.9	24.7
			777	848.31	21.8	21.7	25.0	24.8

CDMA BC1 Measured Results

Band	Mode		Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
BC 1	1xRTT	RC1 SO55 (Loopback)	25	1851.25	17.8	19.6	24.0	20.4
			600	1880.00	17.8	19.8	24.5	20.3
			1175	1908.75	17.8	19.8	24.5	20.3
		RC3 SO55 (Loopback)	25	1851.25	18.0	19.6	24.2	20.4
			600	1880.00	18.0	19.7	24.7	20.3
			1175	1908.75	18.0	19.8	24.6	20.5
		RC3 SO32 (+F-SCH)	25	1851.25	17.8	19.8	24.1	20.5
			600	1880.00	17.9	19.8	24.5	20.5
			1175	1908.75	18.0	19.8	24.5	20.5
	1xAdvanced	Fwd11/Rvs8 SO75 (Loopback)	25	1851.25	17.8	19.7	24.0	20.4
			600	1880.00	17.9	19.7	24.5	20.3
			1175	1908.75	17.8	19.6	24.5	20.3
	1xEVDO Rel. 0	FTAP Rate: 307.2 kbps(2 slot, QPSK) RTAP Rate: 153.6 kbps	25	1851.25	18.0	19.7	24.1	20.3
			600	1880.00	18.0	19.7	24.1	20.3
			1175	1908.75	18.0	19.7	24.0	20.4
	1xEVDO Rev. A	FETAP: 307.2k, QPSK/ ACK RETAP: 4096	25	1851.25	17.8	19.7	24.0	20.1
			600	1880.00	17.9	19.6	24.0	20.2
			1175	1908.75	17.9	19.5	23.9	20.3

CDMA BC10 Measured Results

Band	Mode		Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
BC 10	1xRTT	RC1 SO55 (Loopback)	476	817.90	21.9	21.9	24.9	24.8
			580	820.50	21.9	21.9	24.8	24.9
			684	823.10	21.8	21.9	24.9	24.9
		RC3 SO55 (Loopback)	476	817.90	22.0	21.8	25.0	24.9
			580	820.50	22.0	21.8	25.0	24.8
			684	823.10	22.0	21.8	25.0	24.9
		RC3 SO32 (+F-SCH)	476	817.90	22.0	22.0	25.0	25.0
			580	820.50	22.0	22.0	24.8	25.0
			684	823.10	21.8	22.0	24.9	25.0
	1xAdvanced	Fwd11/Rvs8 SO75 (Loopback)	476	817.90	22.0	21.8	24.8	24.9
			580	820.50	21.9	22.0	24.9	25.0
			684	823.10	21.8	21.8	24.9	25.0
	1xEVDO Rel. 0	FTAP Rate: 307.2 kbps(2 slot, QPSK) RTAP Rate: 153.6 kbps	476	817.90	22.0	21.8	25.0	24.8
			580	820.50	22.0	22.0	25.0	24.8
			684	823.10	22.0	21.9	25.0	24.8
	1xEVDO Rev. A	FETAP: 307.2k, QPSK/ ACK RETAP: 4096	476	817.90	22.0	21.6	24.9	24.7
			580	820.50	21.8	22.0	24.8	24.6
			684	823.10	21.9	21.8	25.0	24.6

9.4. LTE

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (sub-clause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	NA
NS_03	6.6.2.2.1	2, 4, 10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	See Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10,15,20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	n/a
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 6.2.4-2	Table 6.2.4-2
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4-3	Table 6.2.4-3
NS_11	6.6.2.2.1	23 ¹	1.4, 3, 5, 10	Table 6.2.4-5	Table 6.2.4-5
..					
NS_32	-	-	-	-	-

Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.

LTE Band 2 Average Power (dBm) Measured Results

SAR for LTE Band 2 (Frequency range: 1850 – 1910 MHz) is covered by LTE Band 25 (Frequency range: 1850 – 1915 MHz) due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

LTE Band 4 Average Power (dBm) Measured Results

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						1720 MHz	1732.5 MHz	1745 MHz		1720 MHz	1732.5 MHz	1745 MHz		1720 MHz	1732.5 MHz	1745 MHz		1720 MHz	1732.5 MHz	1745 MHz
LTE Band 4	20	QPSK	1	0	0.0	19.0	19.3	19.1	0.0	20.3	20.3	20.4	0.0	24.3	24.3	24.3	0.0	21.4	21.4	21.4
			1	49	0.0	19.2	19.3	19.1	0.0	20.4	20.4	20.5	0.0	24.5	24.5	24.5	0.0	21.5	21.5	21.5
			1	99	0.0	19.2	19.1	18.9	0.0	20.3	20.3	20.3	0.0	24.3	24.4	24.5	0.0	21.4	21.3	21.5
			50	0	0.0	19.2	19.2	19.1	1.0	19.5	19.4	19.3	1.0	23.3	23.5	23.3	0.0	21.3	21.4	21.4
			50	24	0.0	19.3	19.2	19.2	1.0	19.5	19.5	19.5	1.0	23.5	23.5	23.5	0.0	21.5	21.5	21.5
			50	49	0.0	19.3	19.0	19.0	1.0	19.4	19.4	19.4	1.0	23.4	23.5	23.3	0.0	21.5	21.3	21.5
			100	0	0.0	19.1	19.3	19.2	1.0	19.3	19.5	19.4	1.0	23.3	23.5	23.3	0.0	21.3	21.5	21.3
		16QAM	1	0	0.0	18.9	19.2	19.0	1.0	19.2	19.2	19.3	1.0	23.2	23.3	23.2	0.0	21.4	21.4	21.4
			1	49	0.0	19.1	19.3	19.1	1.0	19.4	19.3	19.4	1.0	23.4	23.4	23.5	0.0	21.5	21.4	21.4
			1	99	0.0	19.2	19.0	18.8	1.0	19.2	19.3	19.2	1.0	23.2	23.3	23.5	0.0	21.4	21.2	21.4
			50	0	0.8	18.4	18.4	18.2	2.0	18.5	18.3	18.3	2.0	22.2	22.5	22.2	0.0	21.3	21.3	21.4
			50	24	0.8	18.4	18.3	18.4	2.0	18.4	18.4	18.4	2.0	22.4	22.4	22.5	0.0	21.5	21.5	21.5
			50	49	0.8	18.4	18.1	18.2	2.0	18.3	18.3	18.4	2.0	22.4	22.5	22.2	0.0	21.4	21.3	21.4
			100	0	0.8	18.3	18.5	18.3	2.0	18.3	18.4	18.3	2.0	22.2	22.4	22.2	0.0	21.2	21.4	21.2
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						1717.5 MHz	1732.5 MHz	1747.5 MHz		1717.5 MHz	1732.5 MHz	1747.5 MHz		1717.5 MHz	1732.5 MHz	1747.5 MHz		1717.5 MHz	1732.5 MHz	1747.5 MHz
LTE Band 4	15	QPSK	1	0	0.0	19.2	19.2	19.1	0.0	20.2	20.3	20.3	0.0	24.3	24.5	24.3	0.0	21.4	21.4	21.4
			1	36	0.0	19.2	19.2	18.9	0.0	20.3	20.2	20.4	0.0	24.4	24.3	24.3	0.0	21.4	21.3	21.4
			1	74	0.0	19.1	19.1	18.9	0.0	20.3	20.2	20.4	0.0	24.3	24.3	24.4	0.0	21.3	21.3	21.3
			36	0	0.0	19.2	19.2	19.1	1.0	19.4	19.3	19.5	1.0	23.4	23.3	23.5	0.0	21.5	21.3	21.4
			36	18	0.0	19.2	19.0	19.2	1.0	19.3	19.4	19.3	1.0	23.5	23.3	23.4	0.0	21.4	21.4	21.4
			36	37	0.0	19.1	19.0	19.0	1.0	19.3	19.3	19.5	1.0	23.4	23.5	23.3	0.0	21.4	21.4	21.5
			75	0	0.0	19.3	19.2	19.2	1.0	19.3	19.3	19.2	1.0	23.5	23.3	23.4	0.0	21.2	21.3	21.3
		16QAM	1	0	0.0	19.1	19.2	19.0	1.0	19.2	19.2	19.2	1.0	23.2	23.5	23.2	0.0	21.4	21.3	21.3
			1	36	0.0	19.1	19.1	18.9	1.0	19.3	19.2	19.4	1.0	23.3	23.3	23.2	0.0	21.4	21.2	21.3
			1	74	0.0	19.0	19.1	18.9	1.0	19.3	19.1	19.3	1.0	23.2	23.3	23.3	0.0	21.3	21.3	21.2
			36	0	0.8	18.4	18.3	18.2	2.0	18.3	18.2	18.4	2.0	22.4	22.2	22.4	0.0	21.4	21.2	21.4
			36	18	0.8	18.4	18.2	18.3	2.0	18.2	18.3	18.2	2.0	22.5	22.2	22.3	0.0	21.4	21.3	21.3
			36	37	0.8	18.3	18.2	18.2	2.0	18.3	18.2	18.4	2.0	22.4	22.4	22.2	0.0	21.4	21.3	21.4
			75	0	0.8	18.5	18.4	18.4	2.0	18.2	18.2	18.1	2.0	22.5	22.2	22.4	0.0	21.1	21.3	21.3
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						1715 MHz	1732.5 MHz	1750 MHz		1715 MHz	1732.5 MHz	1750 MHz		1715 MHz	1732.5 MHz	1750 MHz		1715 MHz	1732.5 MHz	1750 MHz
LTE Band 4	10	QPSK	1	0	0.0	19.1	19.2	19.0	0.0	20.4	20.2	20.5	0.0	24.3	24.3	24.5	0.0	21.3	21.3	21.4
			1	24	0.0	19.1	19.2	19.0	0.0	20.2	20.4	20.5	0.0	24.4	24.4	24.4	0.0	21.3	21.3	21.5
			1	49	0.0	19.1	19.2	19.1	0.0	20.2	20.3	20.5	0.0	24.5	24.5	24.3	0.0	21.3	21.4	21.3
			25	0	0.0	19.2	19.1	19.2	1.0	19.3	19.3	19.3	1.0	23.3	23.3	23.3	0.0	21.3	21.3	21.4
			25	12	0.0	19.1	19.0	19.1	1.0	19.4	19.4	19.3	1.0	23.3	23.5	23.5	0.0	21.4	21.3	21.5
			25	24	0.0	19.2	19.2	19.2	1.0	19.4	19.4	19.3	1.0	23.5	23.3	23.5	0.0	21.3	21.3	21.3
			50	0	0.0	19.0	19.2	19.1	1.0	19.2	19.5	19.1	1.0	23.4	23.4	23.3	0.0	21.3	21.4	21.3
		16QAM	1	0	0.0	19.0	19.2	19.0	1.0	19.3	19.2	19.4	1.0	23.3	23.2	23.4	0.0	21.3	21.2	21.4
			1	24	0.0	19.0	19.2	19.0	1.0	19.2	19.3	19.4	1.0	23.4	23.3	23.3	0.0	21.2	21.2	21.4
			1	49	0.0	19.1	19.1	19.0	1.0	19.1	19.2	19.5	1.0	23.4	23.4	23.3	0.0	21.3	21.3	21.3
			25	0	0.8	18.4	18.3	18.4	2.0	18.2	18.2	18.2	2.0	22.2	22.2	22.2	0.0	21.3	21.2	21.3
			25	12	0.8	18.3	18.2	18.3	2.0	18.3	18.3	18.2	2.0	22.2	22.5	22.4	0.0	21.4	21.2	21.4
			25	24	0.8	18.4	18.3	18.4	2.0	18.3	18.3	18.2	2.0	22.4	22.3	22.5	0.0	21.2	21.2	21.2
			50	0	0.8	18.1	18.4	18.2	2.0	18.2	18.4	18.0	2.0	22.3	22.3	22.3	0.0	21.2	21.3	21.3

LTE Band 4 Average Power (dBm) Measured Results (continued)

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						1712.5 MHz	1732.5 MHz	1752.5 MHz		1712.5 MHz	1732.5 MHz	1752.5 MHz		1712.5 MHz	1732.5 MHz	1752.5 MHz		1712.5 MHz	1732.5 MHz	1752.5 MHz
LTE Band 4	5	QPSK	1	0	0.0	19.1	19.1	19.1	0.0	20.2	20.4	20.5	0.0	24.3	24.4	24.3	0.0	21.5	21.3	21.3
			1	12	0.0	19.2	19.1	19.1	0.0	20.2	20.2	20.3	0.0	24.4	24.4	24.3	0.0	21.3	21.4	21.4
			1	24	0.0	19.1	19.1	19.1	0.0	20.4	20.4	20.4	0.0	24.5	24.5	24.3	0.0	21.3	21.3	21.3
			12	0	0.0	19.3	19.0	19.1	1.0	19.5	19.3	19.4	1.0	23.3	23.5	23.3	0.0	21.5	21.3	21.4
			12	7	0.0	19.3	19.1	19.1	1.0	19.3	19.3	19.3	1.0	23.3	23.4	23.3	0.0	21.3	21.3	21.5
			12	13	0.0	19.2	19.1	19.1	1.0	19.4	19.3	19.3	1.0	23.4	23.3	23.3	0.0	21.3	21.3	21.3
			25	0	0.0	19.2	19.1	19.0	1.0	19.3	19.5	19.5	1.0	23.2	23.4	23.4	0.0	21.3	21.5	21.3
		16QAM	1	0	0.0	19.1	19.0	19.0	1.0	19.1	19.3	19.5	1.0	23.3	23.3	23.2	0.0	21.5	21.2	21.3
			1	12	0.0	19.1	19.1	19.1	1.0	19.2	19.2	19.3	1.0	23.4	23.4	23.2	0.0	21.2	21.3	21.3
			1	24	0.0	19.0	19.1	19.0	1.0	19.4	19.4	19.4	1.0	23.4	23.4	23.2	0.0	21.2	21.2	21.2
			12	0	0.8	18.5	18.2	18.3	2.0	18.4	18.3	18.3	2.0	22.2	22.4	22.2	0.0	21.4	21.2	21.3
			12	7	0.8	18.4	18.3	18.3	2.0	18.3	18.3	18.3	2.0	22.2	22.4	22.2	0.0	21.3	21.2	21.5
			12	13	0.8	18.4	18.3	18.3	2.0	18.3	18.2	18.2	2.0	22.3	22.2	22.2	0.0	21.2	21.3	21.2
			25	0	0.8	18.4	18.3	18.2	2.0	18.2	18.4	18.4	2.0	22.1	22.3	22.3	0.0	21.3	21.5	21.2
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						1711.5 MHz	1732.5 MHz	1753.5 MHz		1711.5 MHz	1732.5 MHz	1753.5 MHz		1711.5 MHz	1732.5 MHz	1753.5 MHz		1711.5 MHz	1732.5 MHz	1753.5 MHz
LTE Band 4	3	QPSK	1	0	0.0	19.2	19.1	19.0	0.0	20.3	20.2	20.4	0.0	24.3	24.4	24.4	0.0	21.4	21.5	21.5
			1	8	0.0	19.1	19.1	19.1	0.0	20.4	20.4	20.3	0.0	24.5	24.3	24.5	0.0	21.5	21.4	21.4
			1	14	0.0	19.1	19.2	19.0	0.0	20.2	20.3	20.4	0.0	24.4	24.5	24.4	0.0	21.3	21.4	21.5
			8	0	0.0	19.1	19.0	19.1	1.0	19.3	19.4	19.4	1.0	23.4	23.4	23.4	0.0	21.4	21.5	21.3
			8	4	0.0	19.1	19.1	19.0	1.0	19.4	19.4	19.3	1.0	23.4	23.4	23.3	0.0	21.3	21.3	21.3
			8	7	0.0	19.3	19.2	19.0	1.0	19.5	19.4	19.3	1.0	23.4	23.4	23.3	0.0	21.3	21.3	21.4
		16QAM	15	0	0.0	19.2	19.2	19.1	1.0	19.2	19.3	19.3	1.0	23.2	23.3	23.4	0.0	21.2	21.4	21.3
			1	0	0.0	19.2	19.0	19.0	1.0	19.2	19.1	19.3	1.0	23.3	23.3	23.3	0.0	21.4	21.5	21.4
			1	8	0.0	19.0	19.1	19.1	1.0	19.3	19.3	19.2	1.0	23.5	23.2	23.5	0.0	21.4	21.4	21.4
			1	14	0.0	19.0	19.1	18.9	1.0	19.2	19.2	19.4	1.0	23.3	23.5	23.3	0.0	21.2	21.3	21.5
			8	0	0.8	18.2	18.2	18.2	2.0	18.2	18.3	18.3	2.0	22.3	22.4	22.4	0.0	21.3	21.4	21.2
			8	4	0.8	18.3	18.3	18.1	2.0	18.4	18.3	18.2	2.0	22.4	22.3	22.3	0.0	21.2	21.2	21.2
			8	7	0.8	18.5	18.4	18.1	2.0	18.5	18.4	18.3	2.0	22.4	22.3	22.3	0.0	21.2	21.2	21.3
			15	0	0.8	18.4	18.4	18.2	2.0	18.2	18.3	18.2	2.0	22.2	22.2	22.4	0.0	21.2	21.4	21.2
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						1710.7 MHz	1732.5 MHz	1754.3 MHz		1710.7 MHz	1732.5 MHz	1754.3 MHz		1710.7 MHz	1732.5 MHz	1754.3 MHz		1710.7 MHz	1732.5 MHz	1754.3 MHz
LTE Band 4	1.4	QPSK	1	0	0.0	19.0	19.1	19.1	0.0	20.2	20.3	20.3	0.0	24.3	24.5	24.4	0.0	21.4	21.4	21.3
			1	3	0.0	19.2	19.2	19.0	0.0	20.2	20.2	20.3	0.0	24.5	24.5	24.4	0.0	21.5	21.3	21.3
			1	5	0.0	19.1	19.3	19.0	0.0	20.3	20.3	20.4	0.0	24.5	24.4	24.4	0.0	21.3	21.4	21.5
			3	0	0.0	19.2	19.1	19.2	0.0	20.3	20.3	20.4	0.0	24.3	24.5	24.3	0.0	21.5	21.3	21.4
			3	1	0.0	19.2	19.2	19.2	0.0	20.5	20.5	20.5	0.0	24.3	24.3	24.5	0.0	21.5	21.4	21.4
			3	3	0.0	19.1	19.0	19.2	0.0	20.5	20.4	20.4	0.0	24.5	24.3	24.3	0.0	21.3	21.3	21.3
		16QAM	6	0	0.0	19.1	19.1	19.1	1.0	19.3	19.5	19.3	1.0	23.3	23.4	23.3	0.0	21.4	21.3	21.2
			1	0	0.0	18.9	19.0	19.0	1.0	19.1	19.3	19.3	1.0	23.2	23.5	23.4	0.0	21.3	21.3	21.2
			1	3	0.0	19.1	19.2	18.9	1.0	19.1	19.1	19.2	1.0	23.5	23.4	23.4	0.0	21.4	21.2	21.2
			1	5	0.0	19.0	19.2	19.0	1.0	19.2	19.2	19.3	1.0	23.5	23.4	23.3	0.0	21.2	21.4	21.4
			3	0	0.0	19.1	19.0	19.1	1.0	19.2	19.3	19.4	1.0	23.3	23.4	23.2	0.0	21.4	21.2	21.3
			3	1	0.0	19.2	19.1	19.1	1.0	19.4	19.5	19.5	1.0	23.3	23.2	23.4	0.0	21.5	21.4	21.3
			3	3	0.0	19.0	18.9	19.2	1.0	19.5	19.4	19.3	1.0	23.4	23.2	23.2	0.0	21.2	21.2	21.2
			6	0	0.8	18.3	18.2	18.3	2.0	18.3	18.5	18.3	2.0	22.2	22.4	22.2	0.0	21.3	21.2	21.1

LTE Band 5 Average Power (dBm) Measured Results

SAR for LTE Band 5 (Frequency range: 824 – 849 MHz) is covered by LTE Band 26 (Frequency range: 814 – 849 MHz) due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

LTE Band 7 Average Power (dBm) Measured Results

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						2510 MHz	2535 MHz	2560 MHz		2510 MHz	2535 MHz	2560 MHz		2510 MHz	2535 MHz	2560 MHz		2510 MHz	2535 MHz	2560 MHz
LTE Band 7	20	QPSK	1	0	0.0	15.5	15.5	15.5	0.0	18.7	18.6	18.7	0.0	23.7	23.7	23.7	0.0	16.4	16.3	16.3
			1	49	0.0	15.7	15.7	15.7	0.0	18.8	18.8	18.8	0.0	23.8	23.8	23.8	0.0	16.5	16.5	16.5
			1	99	0.0	15.6	15.5	15.6	0.0	18.7	18.6	18.8	0.0	23.6	23.6	23.7	0.0	16.3	16.4	16.4
			50	0	0.0	15.7	15.5	15.6	0.0	18.5	18.6	18.6	0.5	22.8	22.8	22.6	0.0	16.3	16.3	16.4
			50	24	0.0	15.7	15.6	15.8	0.0	18.7	18.7	18.7	0.5	22.8	22.8	22.8	0.0	16.5	16.5	16.4
			50	49	0.0	15.7	15.5	15.7	0.0	18.6	18.6	18.6	0.5	22.6	22.6	22.8	0.0	16.5	16.4	16.4
		16QAM	100	0	0.0	15.5	15.6	15.5	0.0	18.6	18.7	18.5	0.5	22.8	22.8	22.7	0.0	16.5	16.5	16.4
			1	0	0.0	15.5	15.4	15.5	0.0	18.6	18.6	18.6	0.5	23.2	23.2	23.1	0.0	16.4	16.2	16.2
			1	49	0.0	15.6	15.7	15.7	0.0	18.7	18.8	18.7	0.5	23.3	23.2	23.2	0.0	16.4	16.4	16.4
			1	99	0.0	15.5	15.4	15.5	0.0	18.6	18.6	18.7	0.5	23.1	23.0	23.2	0.0	16.3	16.3	16.3
			50	0	0.0	15.6	15.4	15.5	0.8	17.7	17.8	17.8	1.5	21.7	21.7	21.5	0.0	16.2	16.2	16.3
			50	24	0.0	15.7	15.5	15.7	0.8	17.9	17.9	17.8	1.5	21.7	21.7	21.7	0.0	16.4	16.5	16.3
			50	49	0.0	15.6	15.4	15.7	0.8	17.8	17.7	17.8	1.5	21.6	21.5	21.7	0.0	16.4	16.3	16.3
			100	0	0.0	15.4	15.5	15.4	0.8	17.7	17.8	17.7	1.5	21.8	21.8	21.6	0.0	16.4	16.4	16.3
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						2507.5 MHz	2535 MHz	2562.5 MHz		2507.5 MHz	2535 MHz	2562.5 MHz		2507.5 MHz	2535 MHz	2562.5 MHz		2507.5 MHz	2535 MHz	2562.5 MHz
LTE Band 7	15	QPSK	1	0	0.0	15.6	15.6	15.5	0.0	18.7	18.8	18.6	0.0	23.6	23.7	23.7	0.0	16.5	16.3	16.5
			1	36	0.0	15.5	15.5	15.6	0.0	18.6	18.6	18.7	0.0	23.8	23.6	23.8	0.0	16.4	16.4	16.3
			1	74	0.0	15.6	15.7	15.6	0.0	18.7	18.6	18.7	0.0	23.7	23.6	23.8	0.0	16.4	16.5	16.4
			36	0	0.0	15.5	15.5	15.7	0.0	18.5	18.6	18.7	0.5	22.7	22.6	22.6	0.0	16.3	16.3	16.2
			36	18	0.0	15.6	15.5	15.6	0.0	18.5	18.5	18.7	0.5	22.7	22.8	22.6	0.0	16.3	16.3	16.3
			36	37	0.0	15.6	15.4	15.8	0.0	18.6	18.6	18.7	0.5	22.6	22.6	22.7	0.0	16.4	16.4	16.3
		16QAM	75	0	0.0	15.2	15.4	15.3	0.0	18.5	18.7	18.6	0.5	22.8	22.6	22.5	0.0	16.2	16.3	16.3
			1	0	0.0	15.5	15.5	15.5	0.0	18.7	18.7	18.5	0.5	23.1	23.1	23.2	0.0	16.4	16.2	16.4
			1	36	0.0	15.4	15.4	15.5	0.0	18.6	18.5	18.6	0.5	23.2	23.0	23.3	0.0	16.3	16.3	16.3
			1	74	0.0	15.6	15.6	15.5	0.0	18.6	18.5	18.7	0.5	23.1	23.0	23.3	0.0	16.4	16.4	16.3
			36	0	0.0	15.4	15.5	15.6	0.8	17.7	17.8	17.8	1.5	21.6	21.6	21.5	0.0	16.2	16.3	16.2
			36	18	0.0	15.5	15.5	15.5	0.8	17.6	17.6	17.9	1.5	21.7	21.8	21.5	0.0	16.3	16.2	16.3
			36	37	0.0	15.5	15.3	15.7	0.8	17.8	17.8	17.8	1.5	21.6	21.5	21.6	0.0	16.3	16.3	16.2
			75	0	0.0	15.2	15.4	15.2	0.8	17.7	17.8	17.8	1.5	21.7	21.6	21.4	0.0	16.1	16.2	16.2
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						2505 MHz	2535 MHz	2565 MHz		2505 MHz	2535 MHz	2565 MHz		2505 MHz	2535 MHz	2565 MHz		2505 MHz	2535 MHz	2565 MHz
LTE Band 7	10	QPSK	1	0	0.0	15.6	15.7	15.5	0.0	18.7	18.8	18.7	0.0	23.6	23.6	23.6	0.0	16.4	16.4	16.4
			1	24	0.0	15.5	15.6	15.5	0.0	18.6	18.6	18.6	0.0	23.7	23.6	23.6	0.0	16.4	16.3	16.3
			1	49	0.0	15.6	15.5	15.7	0.0	18.8	18.7	18.8	0.0	23.7	23.6	23.6	0.0	16.3	16.3	16.4
			25	0	0.0	15.5	15.5	15.7	0.0	18.5	18.5	18.6	0.5	22.8	22.8	22.8	0.0	16.3	16.4	16.2
			25	12	0.0	15.6	15.4	15.7	0.0	18.5	18.7	18.7	0.5	22.8	22.6	22.7	0.0	16.4	16.4	16.2
			25	24	0.0	15.6	15.5	15.8	0.0	18.5	18.6	18.5	0.5	22.8	22.8	22.8	0.0	16.5	16.5	16.4
		16QAM	50	0	0.0	15.4	15.5	15.4	0.0	18.4	18.7	18.3	0.5	22.8	22.7	22.7	0.0	16.2	16.4	16.1
			1	0	0.0	15.6	15.6	15.4	0.0	18.7	18.8	18.7	0.5	23.0	23.0	23.0	0.0	16.3	16.4	16.4
			1	24	0.0	15.4	15.6	15.5	0.0	18.5	18.5	18.5	0.5	23.1	23.1	23.0	0.0	16.3	16.2	16.2
			1	49	0.0	15.5	15.4	15.7	0.0	18.7	18.6	18.7	0.5	23.2	23.0	23.0	0.0	16.2	16.3	16.4
			25	0	0.0	15.4	15.5	15.6	0.8	17.7	17.7	17.7	1.5	21.8	21.7	21.7	0.0	16.3	16.3	16.2
			25	12	0.0	15.5	15.4	15.6	0.8	17.6	17.8	17.9	1.5	21.7	21.5	21.7	0.0	16.3	16.4	16.2
			25	24	0.0	15.5	15.4	15.8	0.8	17.7	17.8	17.7	1.5	21.8	21.7	21.7	0.0	16.5	16.4	16.4
			50	0	0.0	15.3	15.5	15.4	0.8	17.5	17.9	17.5	1.5	21.7	21.6	21.7	0.0	16.2	16.4	16.0

LTE Band 7 Average Power (dBm) Measured Results (continued)

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						2502.5 MHz	2535 MHz	2567.5 MHz		2502.5 MHz	2535 MHz	2567.5 MHz		2502.5 MHz	2535 MHz	2567.5 MHz		2502.5 MHz	2535 MHz	2567.5 MHz
LTE Band 7	5	QPSK	1	0	0	15.5	15.5	15.5	0.0	18.8	18.6	18.6	0.0	23.6	23.7	23.8	0	16.4	16.4	16.3
			1	12	0	15.5	15.5	15.6	0.0	18.6	18.6	18.8	0.0	23.8	23.6	23.7	0	16.3	16.4	16.4
			1	24	0	15.7	15.6	15.7	0.0	18.7	18.7	18.7	0.0	23.6	23.7	23.6	0	16.4	16.3	16.4
			12	0	0	15.6	15.5	15.7	0.0	18.6	18.7	18.7	0.5	22.8	22.6	22.7	0	16.5	16.3	16.4
			12	7	0	15.5	15.5	15.8	0.0	18.6	18.6	18.5	0.5	22.8	22.6	22.6	0	16.4	16.3	16.4
			12	13	0	15.6	15.5	15.7	0.0	18.6	18.7	18.5	0.5	22.6	22.6	22.6	0	16.3	16.5	16.2
			25	0	0	15.3	15.4	15.4	0.0	18.6	18.6	18.3	0.5	22.5	22.6	22.8	0	16.3	16.3	16.2
		16QAM	1	0	0	15.4	15.5	15.5	0.0	18.7	18.5	18.5	0.5	23.0	23.1	23.2	0	16.3	16.3	16.2
			1	12	0	15.4	15.4	15.6	0.0	18.5	18.5	18.7	0.5	23.2	23.0	23.1	0	16.3	16.3	16.4
			1	24	0	15.6	15.5	15.7	0.0	18.7	18.6	18.7	0.5	23.0	23.2	23.1	0	16.4	16.2	16.3
			12	0	0	15.5	15.4	15.6	0.8	17.8	17.8	17.8	1.5	21.7	21.5	21.6	0	16.4	16.2	16.3
			12	7	0	15.4	15.4	15.7	0.8	17.8	17.8	17.6	1.5	21.8	21.5	21.5	0	16.4	16.2	16.4
			12	13	0	15.5	15.4	15.6	0.8	17.8	17.8	17.6	1.5	21.5	21.5	21.6	0	16.2	16.4	16.2
			25	0	0	15.2	15.4	15.4	0.8	17.7	17.8	17.5	1.5	21.4	21.6	21.7	0	16.2	16.2	16.1

LTE Band 12 Average Power (dBm) Measured Results

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						704 MHz	707.5 MHz	711 MHz		704 MHz	707.5 MHz	711 MHz		704 MHz	707.5 MHz	711 MHz		704 MHz	707.5 MHz	711 MHz
LTE Band 12	10	QPSK	1	0	0	21.9	21.8	21.8	0	21.8	21.9	21.9	0	23.8	23.8	23.9	0	23.8	23.7	23.9
			1	24	0	22.0	22.0	22.0	0	22.0	22.0	22.0	0	23.9	23.9	23.9	0	23.9	23.9	23.9
			1	49	0	21.9	22.0	21.9	0	22.0	21.9	21.8	0	23.8	23.8	23.7	0	23.9	23.8	23.7
			25	0	1	21.0	20.8	20.9	1	20.9	20.8	20.8	1	22.9	23.0	23.0	1	23.0	22.9	22.9
			25	12	1	21.0	21.0	21.0	1	21.0	21.0	21.0	1	23.0	23.0	23.0	1	23.0	23.0	23.0
			25	24	1	21.0	20.8	20.9	1	20.8	20.9	20.8	1	22.9	22.8	22.8	1	23.0	22.9	22.8
			50	0	1	20.8	21.0	20.8	1	20.9	21.0	20.9	1	22.8	23.0	23.0	1	22.8	23.0	23.0
		16QAM	1	0	1	20.8	20.7	20.7	1	20.8	20.8	20.8	1	22.7	22.7	22.8	1	22.7	22.6	22.8
			1	24	1	21.0	20.9	21.0	1	21.0	20.9	21.0	1	22.8	22.9	22.8	1	22.8	22.8	22.8
			1	49	1	20.8	20.9	20.9	1	20.9	20.9	20.7	1	22.8	22.7	22.6	1	22.8	22.8	22.7
			25	0	2	19.9	19.7	19.8	2	19.8	19.7	19.7	2	21.8	21.9	21.9	2	22.0	21.8	21.8
			25	12	2	20.0	19.9	20.0	2	20.0	19.9	19.9	2	22.0	22.0	21.9	2	21.9	22.0	21.9
			25	24	2	19.9	19.7	19.9	2	19.8	19.9	19.7	2	21.8	21.7	21.7	2	22.0	21.8	21.7
			50	0	2	19.7	20.0	19.8	2	19.8	20.0	19.8	2	21.7	21.9	21.9	2	21.7	21.9	21.9
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						701.5 MHz	707.5 MHz	713.5 MHz		701.5 MHz	707.5 MHz	713.5 MHz		701.5 MHz	707.5 MHz	713.5 MHz		701.5 MHz	707.5 MHz	713.5 MHz
LTE Band 12	5	QPSK	1	0	0	21.9	21.9	22.0	0	21.8	21.9	21.9	0	23.9	23.9	23.7	0	23.7	23.8	23.7
			1	12	0	21.8	21.8	21.8	0	21.8	22.0	21.9	0	23.8	23.8	23.7	0	23.7	23.7	23.8
			1	24	0	21.8	22.0	22.0	0	22.0	22.0	21.9	0	23.7	23.7	23.8	0	23.8	23.8	23.7
			12	0	1	20.8	21.0	20.9	1	21.0	20.9	20.9	1	22.8	22.9	22.8	1	22.8	22.9	23.0
			12	7	1	20.9	20.8	20.9	1	20.8	20.9	20.8	1	23.0	23.0	22.9	1	22.8	22.8	22.8
			12	13	1	20.9	20.9	20.8	1	20.9	20.9	20.9	1	22.8	22.9	22.9	1	22.9	22.9	22.8
			25	0	1	20.6	20.8	20.7	1	21.0	21.0	20.7	1	22.9	22.8	22.7	1	22.8	22.9	22.7
		16QAM	1	0	1	20.9	20.8	21.0	1	20.7	20.9	20.8	1	22.9	22.8	22.6	1	22.6	22.8	22.6
			1	12	1	20.7	20.7	20.8	1	20.8	20.9	20.9	1	22.7	22.8	22.6	1	22.6	22.6	22.8
			1	24	1	20.7	21.0	20.9	1	20.9	20.9	20.8	1	22.7	22.6	22.8	1	22.7	22.7	22.7
			12	0	2	19.7	20.0	19.9	2	19.9	19.8	19.8	2	21.7	21.8	21.7	2	21.8	21.9	21.9
			12	7	2	19.8	19.8	19.8	2	19.8	19.9	19.8	2	21.9	22.0	21.9	2	21.7	21.8	21.8
			12	13	2	19.8	19.9	19.7	2	19.8	19.8	19.9	2	21.7	21.8	21.8	2	21.8	21.9	21.7
			25	0	2	19.5	19.7	19.7	2	20.0	19.9	19.7	2	21.8	21.8	21.6	2	21.7	21.9	21.6
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						700.5 MHz	707.5 MHz	714.5 MHz		700.5 MHz	707.5 MHz	714.5 MHz		700.5 MHz	707.5 MHz	714.5 MHz		700.5 MHz	707.5 MHz	714.5 MHz
LTE Band 12	3	QPSK	1	0	0	21.8	22.0	21.8	0	22.0	21.8	22.0	0	23.8	23.7	23.8	0	23.8	23.8	23.8
			1	8	0	21.8	22.0	21.8	0	21.9	21.9	21.8	0	23.7	23.8	23.8	0	23.9	23.7	23.9
			1	14	0	21.8	21.8	21.8	0	21.8	21.8	21.8	0	23.8	23.7	23.7	0	23.7	23.7	23.8
			8	0	1	20.9	20.8	21.0	1	20.8	20.8	21.0	1	22.9	22.9	23.0	1	22.9	22.8	23.0
			8	4	1	20.9	21.0	20.9	1	20.8	21.0	21.0	1	22.9	22.9	22.9	1	22.9	23.0	22.8
			8	7	1	20.9	20.9	21.0	1	21.0	20.9	20.9	1	22.8	22.8	22.9	1	22.9	22.9	22.8
			15	0	1	20.6	20.9	20.6	1	20.8	20.8	20.6	1	22.6	22.9	22.8	1	22.7	22.8	22.7
		16QAM	1	0	1	20.7	20.9	20.8	1	21.0	20.7	20.9	1	22.8	22.7	22.8	1	22.7	22.7	22.7
			1	8	1	20.8	20.9	20.7	1	20.8	20.8	20.7	1	22.7	22.7	22.8	1	22.8	22.6	22.9
			1	14	1	20.7	20.7	20.8	1	20.7	20.8	20.7	1	22.8	22.6	22.7	1	22.7	22.7	22.8
			8	0	2	19.8	19.7	19.9	2	19.8	19.7	19.9	2	21.8	21.8	21.9	2	21.9	21.7	21.9
			8	4	2	19.8	19.9	19.9	2	19.7	19.9	19.9	2	21.9	21.8	21.8	2	21.8	21.9	21.7
			8	7	2	19.8	19.8	19.9	2	20.0	19.9	19.8	2	21.8	21.8	21.8	2	21.9	21.8	21.7
			15	0	2	19.5	19.8	19.5	2	19.7	19.8	19.6	2	21.5	21.9	21.7	2	21.6	21.8	21.6

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						699.7 MHz	707.5 MHz	715.3 MHz		699.7 MHz	707.5 MHz	715.3 MHz		699.7 MHz	707.5 MHz	715.3 MHz		699.7 MHz	707.5 MHz	715.3 MHz
LTE Band 12	1.4	QPSK	1	0	0	21.8	22.0	22.0	0	22.0	21.8	21.9	0	23.8	23.7	23.7	0	23.8	23.9	23.9
			1	2	0	22.0	21.9	21.8	0	21.8	21.9	21.8	0	23.8	23.7	23.8	0	23.9	23.7	23.7
			1	5	0	21.9	21.8	21.8	0	21.9	21.9	21.9	0	23.8	23.7	23.8	0	23.7	23.8	23.8
			3	0	0	21.9	21.8	21.8	0	22.0	21.8	21.8	0	23.8	23.8	24.0	0	23.8	23.9	23.9
			3	1	0	21.8	21.9	22.0	0	21.8	21.8	21.9	0	23.9	24.0	23.8	0	24.0	23.9	24.0
			3	2	0	22.0	21.8	21.8	0	21.9	21.8	21.8	0	23.9	23.9	23.9	0	23.8	23.9	24.0
		16QAM	6	0	1	20.9	20.8	20.7	1	20.9	20.8	20.9	1	22.8	22.8	22.8	1	22.7	23.0	22.8
			1	0	1	20.7	20.9	20.9	1	20.9	20.8	20.8	1	22.8	22.7	22.7	1	22.8	22.9	22.9
			1	2	1	20.9	20.8	20.8	1	20.7	20.8	20.8	1	22.7	22.6	22.7	1	22.8	22.6	22.6
			1	5	1	20.8	20.7	20.7	1	20.8	20.9	20.8	1	22.7	22.6	22.7	1	22.6	22.7	22.8
			3	0	1	20.8	20.7	20.7	1	21.0	20.7	20.8	1	22.7	22.8	23.0	1	22.8	22.8	22.9
			3	1	1	20.7	20.8	20.9	1	20.7	20.8	20.9	1	22.8	22.9	22.7	1	22.9	22.8	23.0
			3	2	1	20.9	20.8	20.7	1	20.8	20.7	20.7	1	22.8	22.9	22.9	1	22.8	22.8	23.0
			6	0	2	19.8	19.7	19.6	2	19.8	19.8	19.9	2	21.8	21.8	21.7	2	21.6	21.9	21.7

LTE Band 13 Average Power (dBm) Measured Results

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						782 MHz				782 MHz				782 MHz				782 MHz		
LTE Band 13	10	QPSK	1	0	0	21.8			0	21.8			0	24.4			0	24.2		
			1	24	0	21.9			0	21.9			0	24.4			0	24.4		
			1	49	0	21.7			0	21.7			0	24.4			0	24.4		
			25	0	1	20.8			1	21.0			1	23.2			1	23.3		
			25	12	1	21.0			1	21.0			1	23.4			1	23.4		
			25	24	1	20.9			1	20.9			1	23.3			1	23.2		
			50	0	1	21.0			1	21.0			1	23.4			1	23.4		
		16QAM	1	0	1	20.8			1	20.7			1	23.3			1	23.1		
			1	24	1	20.9			1	20.9			1	23.4			1	23.3		
			1	49	1	20.7			1	20.7			1	23.3			1	23.3		
			25	0	2	19.8			2	20.0			2	22.2			2	22.2		
			25	12	2	19.9			2	20.0			2	22.4			2	22.4		
			25	24	2	19.8			2	19.8			2	22.2			2	22.2		
			50	0	2	19.9			2	19.9			2	22.3			2	22.4		
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						779.5 MHz	782 MHz	784.5 MHz		779.5 MHz	782 MHz	784.5 MHz		779.5 MHz	782 MHz	784.5 MHz		779.5 MHz	782 MHz	784.5 MHz
LTE Band 13	5	QPSK	1	0	0	21.7	21.8	21.7	0	21.8	21.9	21.7	0	24.3	24.2	24.4	0	24.2	24.4	24.2
			1	12	0	21.8	21.9	21.7	0	21.7	21.9	21.7	0	24.2	24.3	24.3	0	24.2	24.4	24.3
			1	24	0	21.8	21.8	21.8	0	21.7	21.7	21.9	0	24.4	24.2	24.4	0	24.2	24.3	24.3
			12	0	1	20.9	21.0	20.9	1	21.0	20.9	20.9	1	23.4	23.4	23.3	1	23.4	23.3	23.3
			12	7	1	21.0	21.0	20.9	1	20.9	21.0	20.9	1	23.3	23.2	23.3	1	23.2	23.2	23.2
			12	13	1	20.9	20.8	20.9	1	20.8	20.9	21.0	1	23.4	23.4	23.4	1	23.2	23.2	23.3
			25	0	1	20.9	20.8	20.8	1	20.8	20.8	20.6	1	23.2	23.4	23.2	1	23.1	23.2	23.2
		16QAM	1	0	1	20.6	20.7	20.6	1	20.7	20.9	20.6	1	23.2	23.1	23.3	1	23.1	23.3	23.1
			1	12	1	20.7	20.8	20.6	1	20.6	20.9	20.6	1	23.2	23.2	23.2	1	23.1	23.3	23.2
			1	24	1	20.7	20.8	20.7	1	20.6	20.7	20.9	1	23.4	23.1	23.4	1	23.2	23.2	23.2
			12	0	2	19.9	19.9	19.9	2	20.0	19.9	19.8	2	22.3	22.3	22.2	2	22.3	22.3	22.2
			12	7	2	19.9	19.9	19.9	2	19.8	19.9	19.8	2	22.2	22.1	22.2	2	22.1	22.2	22.2
			12	13	2	19.8	19.7	19.8	2	19.8	19.9	19.9	2	22.4	22.3	22.3	2	22.1	22.1	22.2
			25	0	2	19.9	19.7	19.8	2	19.7	19.8	19.5	2	22.1	22.3	22.2	2	22.0	22.1	22.1

Note(s):

10 MHz Bandwidths does not support at least three non-overlapping channels in certain channel bandwidths. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing per KDB 941225 D05 SAR for LTE Devices

LTE Band 17 Average Power (dBm) Measured Results

SAR for LTE Band 17 (Frequency range: 704 – 716 MHz) is covered by LTE Band 12 (Frequency range: 699 – 716 MHz) due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

LTE Band 25 Average Power (dBm) Measured Results

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY					
						1860 MHz	1882.5 MHz	1905 MHz		1860 MHz	1882.5 MHz	1905 MHz		1860 MHz	1882.5 MHz	1905 MHz		1860 MHz	1882.5 MHz	1905 MHz			
LTE Band 25	20	QPSK	1	0	0.0	17.9	17.9	18.0	0.0	19.7	19.7	19.8	0.0	24.5	24.0	24.1	0.0	20.2	20.1	20.3			
			1	49	0.0	18.0	17.9	18.0	0.0	19.8	19.8	19.8	0.0	24.5	24.2	24.3	0.0	20.3	20.3	20.5			
			1	99	0.0	17.9	17.7	18.0	0.0	19.6	19.6	19.6	0.0	24.3	24.2	24.1	0.0	20.3	20.2	20.3			
			50	0	0.0	17.9	17.9	18.0	0.8	19.4	19.3	19.4	1.0	23.3	23.3	23.4	0.0	20.2	20.1	20.2			
			50	24	0.0	18.0	18.0	18.0	0.8	19.4	19.4	19.5	1.0	23.4	23.3	23.4	0.0	20.4	20.3	20.4			
			50	49	0.0	17.8	17.9	17.8	0.8	19.2	19.2	19.3	1.0	23.3	23.1	23.2	0.0	20.2	20.2	20.4			
		16QAM	100	0	0.0	17.8	18.0	17.8	0.8	19.3	19.4	19.3	1.0	23.1	23.2	23.0	0.0	20.2	20.2	20.0			
			1	0	0.0	17.8	17.9	17.9	0.8	18.9	18.8	18.9	1.0	23.4	22.9	23.1	0.0	20.1	20.0	20.3			
			1	49	0.0	18.0	17.9	18.0	0.8	19.0	18.9	19.0	1.0	23.4	23.1	23.2	0.0	20.2	20.2	20.4			
			1	99	0.0	17.8	17.6	17.9	0.8	18.8	18.8	18.8	1.0	23.3	23.1	23.0	0.0	20.2	20.2	20.2			
			50	0	0.0	17.9	17.8	17.9	1.8	18.3	18.2	18.4	2.0	22.2	22.2	22.3	0.0	20.2	20.0	20.1			
			50	24	0.0	17.9	17.9	17.9	1.8	18.4	18.3	18.5	2.0	22.3	22.2	22.3	0.0	20.3	20.2	20.3			
			50	49	0.0	17.8	17.8	17.7	1.8	18.1	18.1	18.2	2.0	22.2	22.1	22.2	0.0	20.1	20.1	20.4			
			100	0	0.0	17.8	17.9	17.8	1.8	18.2	18.3	18.2	2.0	22.0	22.1	21.9	0.0	20.2	20.1	19.9			
			Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
									1857.5 MHz	1882.5 MHz	1907.5 MHz		1857.5 MHz	1882.5 MHz	1907.5 MHz		1857.5 MHz	1882.5 MHz	1907.5 MHz		1857.5 MHz	1882.5 MHz	1907.5 MHz
LTE Band 25	15	QPSK	1	0	0.0	17.8	17.8	17.8	0.0	19.6	19.8	19.6	0.0	24.4	24.0	24.3	0.0	20.3	20.2	20.3			
			1	36	0.0	17.9	17.8	17.9	0.0	19.7	19.7	19.6	0.0	24.3	24.1	24.1	0.0	20.1	20.3	20.5			
			1	74	0.0	17.9	17.9	17.8	0.0	19.7	19.7	19.6	0.0	24.5	24.1	24.2	0.0	20.1	20.1	20.4			
			36	0	0.0	17.8	17.9	18.0	0.8	19.2	19.2	19.5	1.0	23.4	23.3	23.2	0.0	20.2	20.1	20.4			
			36	18	0.0	17.9	17.8	18.0	0.8	19.2	19.3	19.4	1.0	23.3	23.3	23.2	0.0	20.4	20.1	20.4			
			36	37	0.0	18.0	17.9	17.8	0.8	19.4	19.3	19.5	1.0	23.2	23.2	23.4	0.0	20.4	20.2	20.3			
		16QAM	75	0	0.0	17.8	17.9	17.9	0.8	19.2	19.4	19.1	1.0	22.9	23.1	22.9	0.0	20.1	20.0	19.9			
			1	0	0.0	17.8	17.7	17.8	0.8	18.8	19.0	18.7	1.0	23.3	22.9	23.2	0.0	20.3	20.2	20.2			
			1	36	0.0	17.9	17.7	17.8	0.8	18.9	18.8	18.7	1.0	23.2	23.0	23.1	0.0	20.0	20.2	20.5			
			1	74	0.0	17.9	17.8	17.7	0.8	18.9	18.9	18.8	1.0	23.4	23.1	23.1	0.0	20.0	20.0	20.4			
			36	0	0.0	17.7	17.8	17.9	1.8	18.2	18.1	18.4	2.0	22.3	22.3	22.1	0.0	20.1	20.0	20.4			
			36	18	0.0	17.9	17.8	18.0	1.8	18.1	18.2	18.4	2.0	22.3	22.3	22.1	0.0	20.4	20.0	20.3			
			36	37	0.0	17.9	17.8	17.8	1.8	18.4	18.2	18.4	2.0	22.1	22.2	22.4	0.0	20.4	20.2	20.2			
			75	0	0.0	17.7	17.8	17.8	1.8	18.1	18.3	18.1	2.0	21.9	22.0	21.8	0.0	20.0	19.9	19.9			
			Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
									1855 MHz	1882.5 MHz	1910 MHz		1855 MHz	1882.5 MHz	1910 MHz		1855 MHz	1882.5 MHz	1910 MHz		1855 MHz	1882.5 MHz	1910 MHz
LTE Band 25	10	QPSK	1	0	0.0	17.9	17.7	17.8	0.0	19.6	19.7	19.8	0.0	24.4	24.1	24.2	0.0	20.2	20.3	20.3			
			1	24	0.0	17.9	17.7	18.0	0.0	19.8	19.6	19.6	0.0	24.5	24.2	24.1	0.0	20.1	20.1	20.4			
			1	49	0.0	17.8	17.9	18.0	0.0	19.6	19.6	19.7	0.0	24.4	24.1	24.2	0.0	20.2	20.1	20.4			
			25	0	0.0	17.8	17.8	17.8	0.8	19.2	19.2	19.3	1.0	23.2	23.1	23.3	0.0	20.2	20.1	20.4			
			25	12	0.0	17.9	17.8	17.8	0.8	19.4	19.4	19.5	1.0	23.2	23.2	23.2	0.0	20.2	20.3	20.3			
			25	24	0.0	17.8	17.8	17.8	0.8	19.2	19.3	19.3	1.0	23.2	23.3	23.3	0.0	20.3	20.1	20.4			
		16QAM	50	0	0.0	17.6	17.8	17.8	0.8	19.1	19.3	19.4	1.0	22.9	23.2	22.9	0.0	20.0	20.1	20.1			
			1	0	0.0	17.8	17.6	17.7	0.8	18.8	18.9	19.0	1.0	23.3	23.1	23.2	0.0	20.2	20.3	20.2			
			1	24	0.0	17.8	17.6	17.9	0.8	19.0	18.8	18.8	1.0	23.5	23.2	23.1	0.0	20.0	20.0	20.4			
			1	49	0.0	17.8	17.8	17.9	0.8	18.8	18.8	18.9	1.0	23.3	23.0	23.2	0.0	20.2	20.0	20.3			
			25	0	0.0	17.7	17.8	17.7	1.8	18.1	18.1	18.2	2.0	22.2	22.1	22.2	0.0	20.2	20.0	20.4			
			25	12	0.0	17.9	17.7	17.7	1.8	18.4	18.3	18.4	2.0	22.2	22.1	22.1	0.0	20.2	20.2	20.2			
			25	24	0.0	17.8	17.7	17.7	1.8	18.1	18.2	18.2	2.0	22.1	22.3	22.3	0.0	20.3	20.0	20.4			
			50	0	0.0	17.5	17.7	17.7	1.8	18.1	18.2	18.3	2.0	21.8	22.2	21.8	0.0	20.0	20.0	20.0			

LTE Band 25 Average Power (dBm) Measured Results (continued)

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						1852.5 MHz	1882.5 MHz	1912.5 MHz		1852.5 MHz	1882.5 MHz	1912.5 MHz		1852.5 MHz	1882.5 MHz	1912.5 MHz		1852.5 MHz	1882.5 MHz	1912.5 MHz
LTE Band 25	5	QPSK	1	0	0.0	18.0	17.8	17.9	0.0	19.7	19.6	19.6	0.0	24.4	24.0	24.3	0.0	20.2	20.2	20.3
			1	12	0.0	17.9	17.7	17.8	0.0	19.6	19.6	19.7	0.0	24.3	24.1	24.2	0.0	20.3	20.1	20.5
			1	24	0.0	17.9	17.8	17.8	0.0	19.6	19.7	19.7	0.0	24.3	24.1	24.2	0.0	20.1	20.1	20.3
			12	0	0.0	17.9	18.0	17.8	0.8	19.3	19.2	19.5	1.0	23.3	23.1	23.4	0.0	20.3	20.1	20.2
			12	7	0.0	17.9	18.0	17.9	0.8	19.3	19.3	19.3	1.0	23.2	23.3	23.2	0.0	20.2	20.2	20.3
			12	13	0.0	17.8	17.9	17.8	0.8	19.2	19.2	19.3	1.0	23.3	23.3	23.4	0.0	20.4	20.2	20.2
			25	0	0.0	17.7	17.9	17.9	0.8	19.3	19.4	19.1	1.0	22.9	23.0	23.2	0.0	19.9	20.1	19.9
		16QAM	1	0	0.0	18.0	17.7	17.9	0.8	18.9	18.8	18.8	1.0	23.3	22.9	23.2	0.0	20.1	20.1	20.3
			1	12	0.0	17.8	17.6	17.8	0.8	18.8	18.8	18.9	1.0	23.3	23.1	23.1	0.0	20.2	20.0	20.5
			1	24	0.0	17.8	17.7	17.7	0.8	18.8	18.9	18.8	1.0	23.3	23.0	23.2	0.0	20.0	20.1	20.2
			12	0	0.0	17.8	18.0	17.7	1.8	18.2	18.1	18.4	2.0	22.2	22.1	22.3	0.0	20.3	20.0	20.1
			12	7	0.0	17.8	17.9	17.8	1.8	18.2	18.2	18.2	2.0	22.2	22.3	22.1	0.0	20.1	20.1	20.2
			12	13	0.0	17.7	17.8	17.7	1.8	18.1	18.1	18.2	2.0	22.3	22.3	22.3	0.0	20.3	20.2	20.1
			25	0	0.0	17.6	17.9	17.8	1.8	18.2	18.4	18.0	2.0	21.8	21.9	22.1	0.0	19.8	20.0	19.8
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						1851.5 MHz	1882.5 MHz	1913.5 MHz		1851.5 MHz	1882.5 MHz	1913.5 MHz		1851.5 MHz	1882.5 MHz	1913.5 MHz		1851.5 MHz	1882.5 MHz	1913.5 MHz
LTE Band 25	3	QPSK	1	0	0.0	17.9	17.7	17.8	0.0	19.6	19.7	19.7	0.0	24.3	24.0	24.1	0.0	20.2	20.2	20.4
			1	8	0.0	17.8	17.9	17.8	0.0	19.6	19.7	19.8	0.0	24.3	24.0	24.2	0.0	20.2	20.3	20.4
			1	14	0.0	17.8	17.9	17.8	0.0	19.7	19.6	19.6	0.0	24.5	24.0	24.3	0.0	20.3	20.2	20.4
			8	0	0.0	18.0	17.8	17.9	0.8	19.4	19.2	19.4	1.0	23.4	23.1	23.3	0.0	20.2	20.2	20.3
			8	4	0.0	18.0	17.9	17.9	0.8	19.3	19.2	19.3	1.0	23.2	23.1	23.3	0.0	20.4	20.1	20.2
			8	7	0.0	17.8	17.8	17.8	0.8	19.3	19.3	19.4	1.0	23.3	23.2	23.4	0.0	20.2	20.3	20.2
			15	0	0.0	18.0	17.9	17.7	0.8	19.1	19.3	19.1	1.0	22.9	23.0	23.0	0.0	20.0	20.0	20.1
		16QAM	1	0	0.0	17.8	17.6	17.7	0.8	18.7	18.8	18.8	1.0	23.2	23.0	23.1	0.0	20.1	20.2	20.3
			1	8	0.0	17.7	17.9	17.7	0.8	18.8	18.9	19.0	1.0	23.3	22.9	23.2	0.0	20.1	20.2	20.3
			1	14	0.0	17.8	17.8	17.8	0.8	18.9	18.8	18.7	1.0	23.5	23.0	23.2	0.0	20.3	20.1	20.3
			8	0	0.0	17.9	17.7	17.8	1.8	18.4	18.1	18.3	2.0	22.3	22.0	22.3	0.0	20.1	20.2	20.2
			8	4	0.0	17.9	17.8	17.8	1.8	18.2	18.1	18.2	2.0	22.2	22.1	22.3	0.0	20.4	20.0	20.1
			8	7	0.0	17.8	17.7	17.7	1.8	18.3	18.2	18.3	2.0	22.2	22.2	22.3	0.0	20.1	20.2	20.1
			15	0	0.0	17.9	17.9	17.6	1.8	18.1	18.2	18.1	2.0	21.8	21.9	21.9	0.0	20.0	19.9	20.1
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						1850.7 MHz	1882.5 MHz	1914.3 MHz		1850.7 MHz	1882.5 MHz	1914.3 MHz		1850.7 MHz	1882.5 MHz	1914.3 MHz		1850.7 MHz	1882.5 MHz	1914.3 MHz
LTE Band 25	1.4	QPSK	1	0	0.0	18.0	17.7	17.8	0.0	19.7	19.6	19.7	0.0	24.4	24.1	24.2	0.0	20.2	20.2	20.5
			1	3	0.0	17.8	17.8	17.9	0.0	19.6	19.7	19.7	0.0	24.3	24.1	24.1	0.0	20.1	20.3	20.3
			1	5	0.0	17.9	17.7	18.0	0.0	19.6	19.6	19.8	0.0	24.3	24.2	24.2	0.0	20.2	20.3	20.4
			3	0	0.0	17.9	17.8	17.9	0.0	20.1	20.1	20.2	0.0	24.2	24.2	24.4	0.0	20.2	20.2	20.2
			3	1	0.0	18.0	17.9	17.9	0.0	20.0	20.1	20.1	0.0	24.2	24.2	24.2	0.0	20.2	20.1	20.2
			3	3	0.0	17.8	17.8	17.9	0.0	19.9	20.1	20.2	0.0	24.2	24.1	24.3	0.0	20.2	20.1	20.3
			6	0	0.0	17.8	17.9	17.8	0.8	19.2	19.2	19.2	1.0	23.0	23.2	23.1	0.0	20.0	20.0	19.9
		16QAM	1	0	0.0	18.0	17.6	17.7	0.8	18.8	18.8	18.9	1.0	23.4	23.0	23.2	0.0	20.1	20.1	20.5
			1	3	0.0	17.8	17.7	17.9	0.8	18.7	18.9	18.8	1.0	23.2	23.0	23.0	0.0	20.0	20.3	20.3
			1	5	0.0	17.9	17.6	17.9	0.8	18.8	18.8	19.0	1.0	23.3	23.1	23.1	0.0	20.1	20.2	20.3
			3	0	0.0	17.8	17.8	17.8	0.8	19.3	19.3	19.4	1.0	23.1	23.1	23.3	0.0	20.1	20.1	20.1
			3	1	0.0	17.9	17.9	17.9	0.8	19.1	19.3	19.3	1.0	23.1	23.1	23.1	0.0	20.1	20.1	20.1
			3	3	0.0	17.7	17.7	17.8	0.8	19.0	19.3	19.4	1.0	23.1	23.0	23.3	0.0	20.2	20.0	20.2
			6	0	0.0	17.7	17.9	17.8	1.8	18.1	18.2	18.1	2.0	21.9	22.2	22.1	0.0	19.9	20.0	19.9

LTE Band 26 (Average Power (dBm) Measured Results

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						819 MHz	831.5 MHz	844 MHz		819 MHz	831.5 MHz	844 MHz		819 MHz	831.5 MHz	844 MHz		819 MHz	831.5 MHz	844 MHz
LTE Band 26	10	QPSK	1	0	0	21.5	21.4	21.5	0	21.4	21.5	21.5	0	24.0	23.8	23.9	0	23.9	23.8	24.0
			1	24	0	21.5	21.5	21.5	0	21.5	21.5	21.5	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			1	49	0	21.3	21.4	21.4	0	21.3	21.3	21.5	0	24.0	23.9	23.8	0	23.8	23.9	23.9
			25	0	1	20.5	20.3	20.3	1	20.3	20.4	20.4	1	23.0	22.9	23.0	1	22.9	22.9	22.9
			25	12	1	20.5	20.5	20.5	1	20.5	20.5	20.5	1	23.0	23.0	23.0	1	23.0	23.0	23.0
			25	24	1	20.3	20.3	20.3	1	20.4	20.3	20.3	1	22.9	23.0	23.0	1	22.9	23.0	22.8
			50	0	1	20.5	20.5	20.5	1	20.5	20.5	20.5	1	22.8	23.0	23.0	1	23.0	23.0	22.9
		16QAM	1	0	1	20.5	20.3	20.4	1	20.3	20.5	20.4	1	23.0	22.8	22.8	1	22.8	22.8	23.0
			1	24	1	20.4	20.4	20.4	1	20.4	20.4	20.5	1	22.9	22.9	23.0	1	22.9	22.9	22.9
			1	49	1	20.2	20.3	20.4	1	20.2	20.3	20.5	1	23.0	22.8	22.7	1	22.7	22.8	22.8
			25	0	2	19.4	19.2	19.2	2	19.3	19.3	19.3	2	21.9	21.8	21.9	2	21.8	21.8	21.9
			25	12	2	19.4	19.4	19.5	2	19.4	19.4	19.5	2	22.0	21.9	21.9	2	21.9	21.9	21.9
			25	24	2	19.3	19.2	19.3	2	19.4	19.2	19.2	2	21.8	21.9	21.9	2	21.8	21.9	21.8
			50	0	2	19.5	19.5	19.5	2	19.4	19.4	19.5	2	21.8	21.9	22.0	2	21.9	22.0	21.8
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						816.5 MHz	831.5 MHz	846.5 MHz		816.5 MHz	831.5 MHz	846.5 MHz		816.5 MHz	831.5 MHz	846.5 MHz		816.5 MHz	831.5 MHz	846.5 MHz
LTE Band 26	5	QPSK	1	0	0	21.3	21.5	21.3	0	21.3	21.5	21.4	0	23.8	23.8	24.0	0	23.8	23.9	23.9
			1	12	0	21.4	21.5	21.3	0	21.4	21.4	21.4	0	23.9	23.9	24.0	0	23.8	23.8	23.9
			1	24	0	21.3	21.3	21.4	0	21.4	21.3	21.3	0	23.8	24.0	23.9	0	23.9	23.8	24.0
			12	0	1	20.4	20.3	20.3	1	20.4	20.3	20.3	1	23.0	22.8	22.9	1	23.0	22.9	22.9
			12	7	1	20.4	20.3	20.5	1	20.4	20.4	20.3	1	23.0	22.8	22.9	1	22.9	22.8	22.9
			12	13	1	20.4	20.4	20.5	1	20.4	20.4	20.4	1	22.9	23.0	22.8	1	22.9	22.8	22.9
			25	0	1	20.2	20.3	20.3	1	20.2	20.3	20.5	1	22.6	22.9	22.8	1	22.7	22.9	22.8
		16QAM	1	0	1	20.3	20.5	20.2	1	20.2	20.4	20.3	1	22.7	22.7	22.9	1	22.7	22.9	22.8
			1	12	1	20.4	20.5	20.3	1	20.3	20.4	20.3	1	22.9	22.9	22.9	1	22.7	22.7	22.8
			1	24	1	20.3	20.3	20.3	1	20.3	20.2	20.3	1	22.7	22.9	22.8	1	22.8	22.8	22.9
			12	0	2	19.3	19.2	19.2	2	19.4	19.2	19.3	2	21.9	21.7	21.8	2	21.9	21.8	21.9
			12	7	2	19.3	19.2	19.4	2	19.3	19.3	19.2	2	21.9	21.7	21.8	2	21.9	21.7	21.8
			12	13	2	19.4	19.4	19.5	2	19.4	19.4	19.4	2	21.9	21.9	21.8	2	21.8	21.8	21.8
			25	0	2	19.1	19.2	19.2	2	19.1	19.3	19.4	2	21.5	21.8	21.7	2	21.7	21.8	21.7
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						815.5 MHz	831.5 MHz	847.5 MHz		815.5 MHz	831.5 MHz	847.5 MHz		815.5 MHz	831.5 MHz	847.5 MHz		815.5 MHz	831.5 MHz	847.5 MHz
LTE Band 26	3	QPSK	1	0	0	21.4	21.5	21.4	0	21.3	21.4	21.3	0	23.9	23.9	23.9	0	24.0	23.9	23.9
			1	8	0	21.3	21.3	21.4	0	21.3	21.5	21.5	0	23.9	24.0	23.9	0	23.8	23.8	23.8
			1	14	0	21.4	21.3	21.4	0	21.4	21.3	21.5	0	23.8	23.8	23.8	0	23.9	23.8	23.8
			8	0	1	20.4	20.3	20.4	1	20.4	20.4	20.4	1	23.0	22.8	22.9	1	22.9	22.9	22.9
			8	4	1	20.3	20.3	20.4	1	20.4	20.4	20.4	1	23.0	23.0	22.8	1	22.8	22.8	22.8
			8	7	1	20.4	20.3	20.3	1	20.5	20.3	20.4	1	22.9	22.8	22.9	1	22.8	22.9	22.9
			15	0	1	20.3	20.5	20.4	1	20.3	20.4	20.4	1	22.8	22.8	22.8	1	22.6	22.9	22.6
		16QAM	1	0	1	20.3	20.4	20.4	1	20.3	20.3	20.3	1	22.8	22.8	22.8	1	23.0	22.8	22.8
			1	8	1	20.2	20.2	20.3	1	20.2	20.4	20.5	1	22.8	23.0	22.9	1	22.8	22.8	22.8
			1	14	1	20.3	20.3	20.4	1	20.3	20.2	20.4	1	22.7	22.7	22.8	1	22.9	22.8	22.8
			8	0	2	19.3	19.3	19.4	2	19.4	19.3	19.3	2	21.9	21.8	21.8	2	21.9	21.8	21.9
			8	4	2	19.3	19.2	19.3	2	19.3	19.3	19.3	2	21.9	21.9	21.7	2	21.8	21.7	21.7
			8	7	2	19.3	19.2	19.2	2	19.4	19.3	19.4	2	21.8	21.7	21.8	2	21.8	21.9	21.8
			15	0	2	19.2	19.5	19.4	2	19.2	19.3	19.4	2	21.7	21.8	21.7	2	21.6	21.9	21.5

LTE Band 26 Average Power (dBm) Measured Results

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						814.7 MHz	831.5 MHz	848.3 MHz		814.7 MHz	831.5 MHz	848.3 MHz		814.7 MHz	831.5 MHz	848.3 MHz		814.7 MHz	831.5 MHz	848.3 MHz
LTE Band 26	1.4	QPSK	1	0	0	21.4	21.4	21.3	0	21.3	21.3	21.3	0	23.9	24.0	23.9	0	23.8	24.0	23.9
			1	3	0	21.4	21.3	21.5	0	21.4	21.3	21.4	0	23.8	23.9	23.8	0	24.0	23.8	23.9
			1	5	0	21.3	21.4	21.5	0	21.3	21.3	21.3	0	23.9	24.0	23.9	0	24.0	23.9	23.8
			3	0	0	21.4	21.3	21.4	0	21.5	21.4	21.4	0	24.0	24.0	23.8	0	23.8	23.9	23.9
			3	1	0	21.3	21.3	21.5	0	21.3	21.3	21.3	0	23.8	23.9	23.8	0	24.0	24.0	23.8
			3	3	0	21.3	21.3	21.4	0	21.3	21.4	21.3	0	23.9	23.9	23.8	0	23.9	23.9	23.9
		16QAM	6	0	1	20.3	20.3	20.2	1	20.3	20.3	20.3	1	22.7	22.8	22.8	1	22.8	22.9	22.8
			1	0	1	20.3	20.3	20.2	1	20.2	20.3	20.3	1	22.9	22.9	22.8	1	22.7	22.9	22.8
			1	3	1	20.3	20.3	20.5	1	20.4	20.2	20.3	1	22.7	22.8	22.7	1	22.9	22.7	22.8
			1	5	1	20.2	20.3	20.4	1	20.2	20.2	20.3	1	22.8	22.9	22.8	1	22.9	22.8	22.8
			3	0	1	20.4	20.2	20.4	1	20.4	20.3	20.3	1	22.9	22.9	22.8	1	22.7	22.8	22.8
			3	1	1	20.2	20.2	20.5	1	20.3	20.2	20.3	1	22.7	22.8	22.7	1	22.9	22.9	22.7
			3	3	1	20.3	20.3	20.4	1	20.2	20.4	20.3	1	22.9	22.8	22.8	1	22.8	22.8	22.8
			6	0	2	19.2	19.2	19.1	2	19.3	19.2	19.3	2	21.7	21.7	21.8	2	21.8	21.8	21.7

LTE Band 27 Average Power (dBm) Measured Results

SAR for LTE Band 27 (Frequency range: 814 – 824 MHz) is covered by LTE Band 26 (Frequency range: 814 – 849 MHz) due to similar frequency range, similar maximum tune-up limit and same channel bandwidth.

LTE Band 30 Average Power (dBm) Measured Results

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
							2310 MHz				2310 MHz				2310 MHz				2310 MHz	
LTE Band 30	10	QPSK	1	0	0.0		17.8		0.0		18.7		0.0		22.8		0.0		18.1	
			1	24	0.0		18.0		0.0		18.8		0.0		23.0		0.0		18.1	
			1	49	0.0		17.9		0.0		18.7		0.0		22.9		0.0		18.0	
			25	0	0.0		17.9		0.8		17.8		0.0		23.0		0.0		18.2	
			25	12	0.0		18.0		0.8		18.0		0.0		23.0		0.0		18.3	
			25	24	0.0		17.8		0.8		17.9		0.0		22.8		0.0		18.1	
			50	0	0.0		18.0		0.8		18.0		0.0		23.0		0.0		18.3	
		16QAM	1	0	0.0		17.7		0.8		17.8		0.0		22.8		0.0		18.0	
			1	24	0.0		18.0		0.8		18.0		0.0		22.9		0.0		18.1	
			1	49	0.0		17.8		0.8		17.9		0.0		22.9		0.0		18.0	
			25	0	1.0		16.9		1.8		16.7		1.0		21.9		0.0		18.2	
			25	12	1.0		16.9		1.8		16.9		1.0		21.9		0.0		18.2	
			25	24	1.0		16.7		1.8		16.8		1.0		21.7		0.0		18.1	
			50	0	1.0		16.9		1.8		16.9		1.0		21.9		0.0		18.2	
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						2307.5 MHz	2310 MHz	2312.5 MHz		2307.5 MHz	2310 MHz	2312.5 MHz		2307.5 MHz	2310 MHz	2312.5 MHz		2307.5 MHz	2310 MHz	2312.5 MHz
LTE Band 30	5	QPSK	1	0	0	17.8	17.8	17.9	0.0	18.8	18.6	18.6	0.0	22.8	22.8	22.9	0	18.0	18.0	17.9
			1	12	0	18.0	18.0	17.8	0.0	18.8	18.8	18.8	0.0	22.9	22.9	22.9	0	18.1	18.0	17.9
			1	24	0	17.8	18.0	18.0	0.0	18.6	18.6	18.7	0.0	23.0	22.8	22.8	0	18.1	17.9	18.1
			12	0	0	17.8	18.0	17.8	0.8	17.9	18.0	17.8	0.0	22.9	22.8	22.9	0	18.2	18.1	18.2
			12	7	0	17.8	18.0	17.9	0.8	17.8	17.9	17.8	0.0	22.9	23.0	23.0	0	18.2	18.2	18.2
			12	13	0	17.9	17.9	17.9	0.8	17.9	18.0	17.8	0.0	22.8	22.9	23.0	0	18.1	18.1	18.3
			25	0	0	17.7	17.9	17.7	0.8	17.7	17.9	17.9	0.0	22.8	22.9	22.7	0	18.2	18.3	18.0
		16QAM	1	0	0	17.8	17.8	17.8	0.8	18.0	17.7	17.8	0.0	22.8	22.7	22.8	0	17.9	18.0	17.8
			1	12	0	17.9	17.9	17.7	0.8	18.0	18.0	18.0	0.0	22.9	22.9	22.9	0	18.0	17.9	17.8
			1	24	0	17.7	17.9	17.9	0.8	17.8	17.8	17.8	0.0	22.9	22.8	22.7	0	18.1	17.8	18.0
			12	0	1	16.7	17.0	16.7	1.8	16.8	17.0	16.8	1.0	21.8	21.7	21.9	0	18.1	18.0	18.1
			12	7	1	16.7	16.9	16.8	1.8	16.8	16.8	16.8	1.0	21.8	22.0	22.0	0	18.2	18.1	18.1
			12	13	1	16.9	16.8	16.9	1.8	16.8	16.9	16.7	1.0	21.7	21.9	21.9	0	18.0	18.0	18.2
			25	0	1	16.6	16.8	16.6	1.8	16.6	16.9	16.8	1.0	21.7	21.9	21.6	0	18.1	18.2	17.9

Note(s):

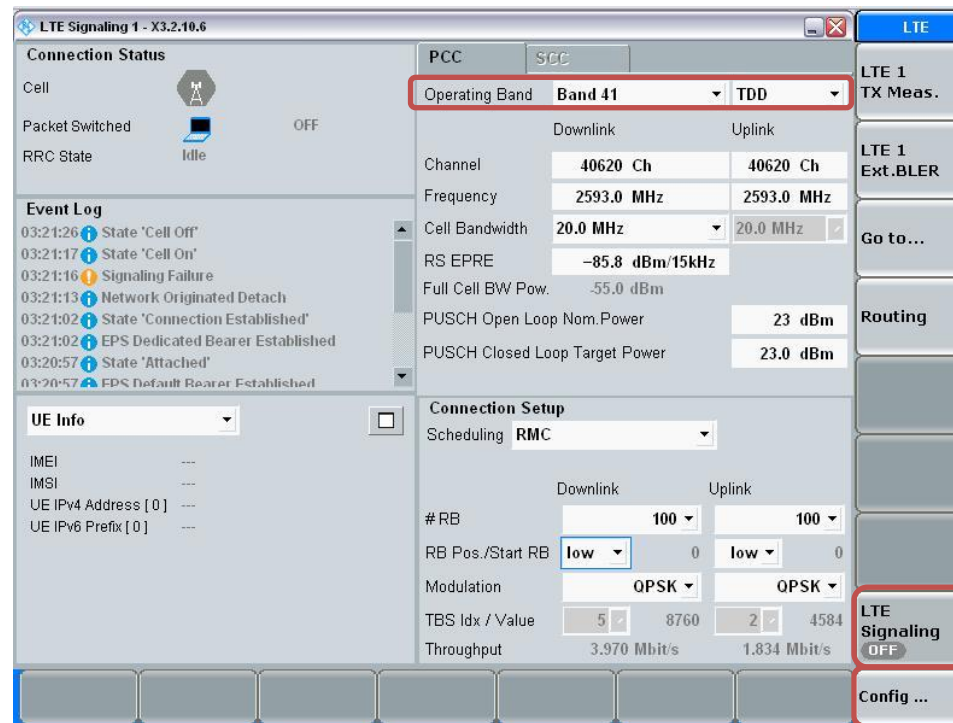
10 MHz Bandwidths does not support at least three non-overlapping channels in certain channel bandwidths. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing per KDB 941225 D05 SAR for LTE Devices

LTE TDD Bands Measured Results

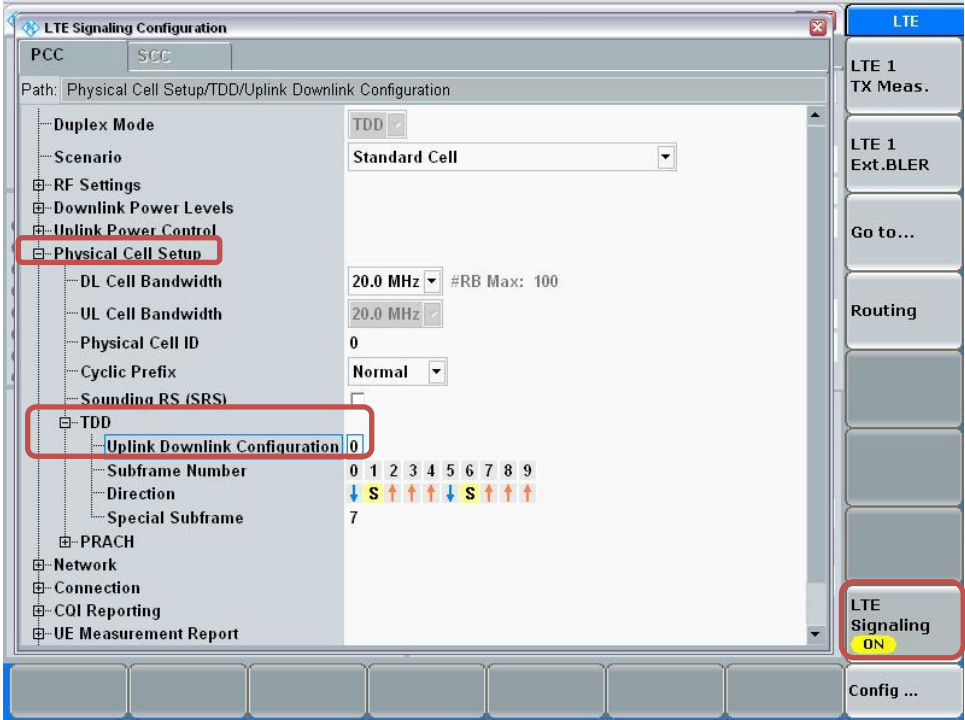
Procedure used to establish SAR test signal for LTE TDD Bands

Set to CMW-500 with following parameters:

- Turn the LTE Signaling off using “ON | OFF” key
- Operating Band: Select Band 41 and TDD
- Go to “Config....”

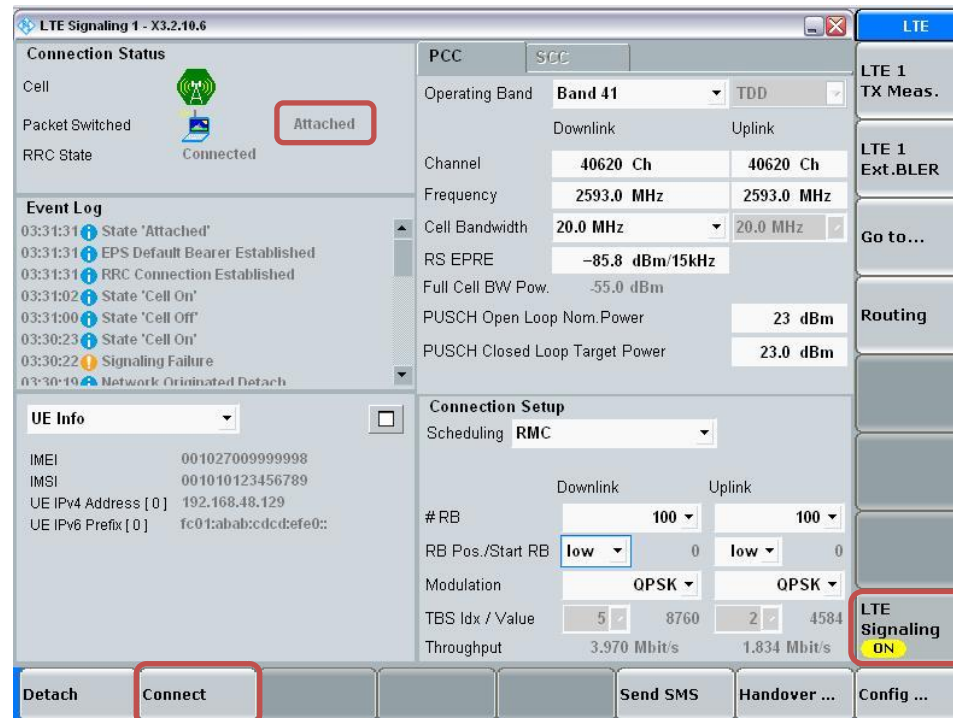


- Go to “Physical Cell Setup”
- Select “TDD” and Set “Uplink Downlink Configuration” to “0”
- Turn the cell on using “ON | OFF” key



Connect to EUT

- Turn the cell on using “ON | OFF” key
- After EUT is Attached
- Select “Connect”

**Max Power Setting**

- Select “LTE 1 TX Meas.”
- Press “RESTART | STOP” Soft key

LTE Signaling 1 - X3.2.10.6

Connection Status

Cell

Packet Switched

RRC State

Connection Established

Connected

Event Log

03:33:07 State 'Connection Established'

03:33:07 EPS Dedicated Bearer Established

03:31:31 State 'Attached'

03:31:31 EPS Default Bearer Established

03:31:31 RRC Connection Established

03:31:02 State 'Cell On'

03:31:00 State 'Cell Off'

03:30:23 State 'Cell On'

UE Info

IMEI 00102700999998

IMSI 001010123456789

UE IPv4 Address [0] 192.168.48.129

UE IPv6 Prefix [0] fc01:abab:cdcd:efe0::

PCC

SCC

Operating Band

Band 41

TDD

Downlink

Channel 40620 Ch

Frequency 2593.0 MHz

Cell Bandwidth 20.0 MHz

RS EPRE -85.8 dBm/15kHz

Full Cell BW Pow. -55.0 dBm

Uplink

Channel 40620 Ch

Frequency 2593.0 MHz

Cell Bandwidth 20.0 MHz

PUSCH Open Loop Nom.Power 23 dBm

PUSCH Closed Loop Target Power 23.0 dBm

Connection Setup

Scheduling RMC

#RB 100

RB Pos./Start RB low 0

Modulation QPSK

TBS Idx / Value 5 8760

Throughput 3.970 Mbit/s

Uplink

#RB 100

RB Pos./Start RB low 0

Modulation QPSK

TBS Idx / Value 2 4584

Throughput 1.834 Mbit/s

LTE

LTE 1 TX Meas.

LTE 1 Ext.BLER

Go to...

Routing

LTE Signaling ON

Detach

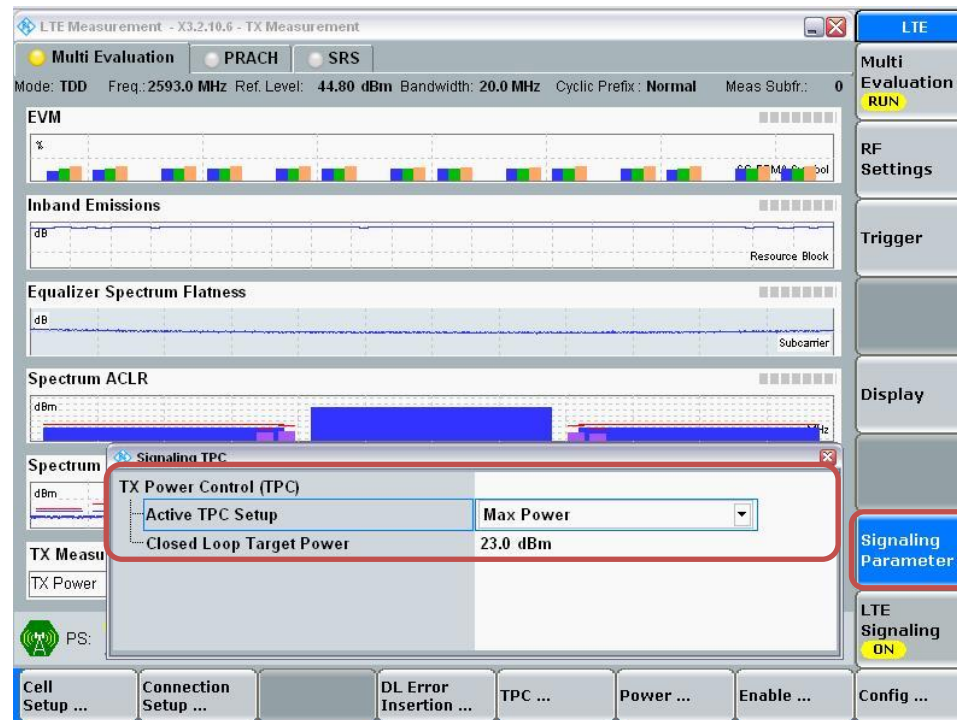
Disconnect

Send SMS

Handover ...

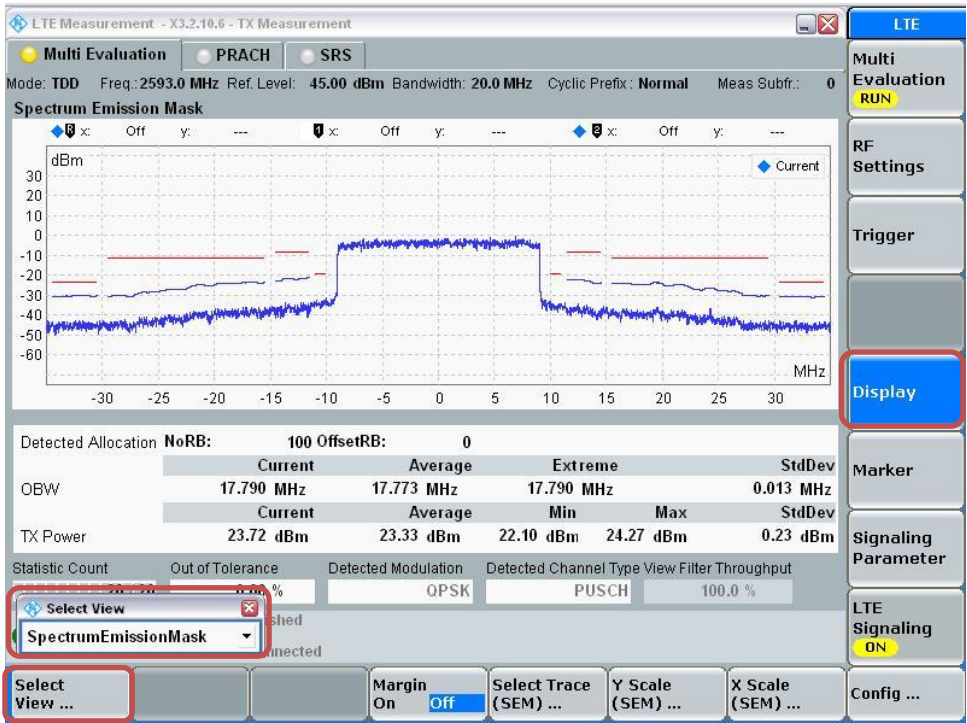
Config ...

- Select “Signaling Parameter”
- Select “TX Power Control (TPC)” > Select “Active TPC Setup” to “Max Power” > Set “Closed Loop Target Power” to “23 dBm”



View TX Power

- Go to “Display”
- Select “Select View...”
- Select “Spectrum Emission Mask”



LTE Band 41 Measured Results

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD					Target MPR	UAT / BODY					Target MPR	LAT / HEAD					Target MPR	LAT / BODY				
						2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz
LTE Band 41	20	QPSK	1	0	0.0	18.3	18.3	18.4	18.4	18.5	0.0	20.2	20.2	20.4	20.2	20.0	0.0	22.5	22.4	22.4	22.2	22.2	0.0	19.2	19.3	19.4	19.3	19.3
			1	49	0.0	18.5	18.5	18.5	18.5	18.5	0.0	20.4	20.4	20.5	20.4	20.1	0.0	22.5	22.4	22.5	22.4	22.3	0.0	19.4	19.4	19.5	19.3	19.4
			1	99	0.0	18.4	18.5	18.3	18.3	18.3	0.0	20.4	20.3	20.3	20.4	20.0	0.0	22.3	22.2	22.4	22.2	22.1	0.0	19.4	19.3	19.3	19.1	19.4
			50	0	0.0	18.5	18.2	18.4	18.3	18.3	1.0	19.3	19.3	19.5	19.5	18.8	0.0	21.2	21.2	21.1	21.0	21.4	0.0	19.2	19.4	19.2	19.2	19.3
			50	24	0.0	18.5	18.4	18.5	18.5	18.5	1.0	19.4	19.4	19.5	19.5	19.0	0.0	21.4	21.4	21.3	21.2	21.4	0.0	19.4	19.4	19.4	19.3	19.4
			50	49	0.0	18.3	18.2	18.3	18.3	18.4	1.0	19.2	19.3	19.4	19.5	18.9	0.0	21.4	21.3	21.3	21.2	21.3	0.0	19.2	19.3	19.4	19.2	19.3
		16QAM	100	0	0.0	18.5	18.3	18.5	18.4	18.5	1.0	19.4	19.3	19.5	19.3	19.3	0.0	21.2	21.1	21.3	21.3	21.2	0.0	19.4	19.2	19.4	19.3	19.2
			1	0	0.0	18.3	18.2	18.4	18.3	18.5	1.0	19.1	19.1	19.4	19.2	18.9	0.0	22.4	22.3	22.3	22.2	22.1	0.0	19.2	19.2	19.3	19.2	19.3
			1	49	0.0	18.5	18.5	18.5	18.4	18.5	1.0	19.3	19.4	19.4	19.3	19.0	0.0	22.5	22.3	22.4	22.3	22.3	0.0	19.3	19.4	19.4	19.3	19.4
			1	99	0.0	18.3	18.4	18.3	18.3	18.2	1.0	19.4	19.3	19.2	19.4	18.9	0.0	22.3	22.1	22.3	22.1	22.0	0.0	19.4	19.3	19.2	19.1	19.4
			50	0	0.0	18.5	18.1	18.3	18.2	18.2	2.0	18.2	18.3	18.4	18.4	17.7	0.5	20.6	20.6	20.5	20.4	20.9	0.0	19.1	19.4	19.1	19.2	19.3
			50	24	0.0	18.4	18.3	18.4	18.5	18.4	2.0	18.3	18.3	18.4	18.5	17.9	0.5	20.9	20.8	20.7	20.6	20.8	0.0	19.3	19.4	19.3	19.2	19.4
			50	49	0.0	18.2	18.2	18.2	18.2	18.3	2.0	18.1	18.2	18.3	18.4	17.8	0.5	20.9	20.7	20.8	20.6	20.8	0.0	19.1	19.2	19.3	19.2	19.2
			100	0	0.0	18.4	18.3	18.4	18.3	18.4	2.0	18.3	18.2	18.4	18.2	18.2	0.5	20.6	20.5	20.8	20.8	20.7	0.0	19.3	19.1	19.3	19.3	19.1
			1	0	0.0	18.4	18.3	18.4	18.3	18.4	0.0	20.2	20.2	20.3	20.2	20.0	0.0	22.4	22.2	22.3	22.3	22.1	0.0	19.4	19.3	19.5	19.2	19.3
			1	36	0.0	18.3	18.4	18.4	18.5	18.4	0.0	20.4	20.2	20.3	20.2	20.0	0.0	22.4	22.3	22.4	22.3	22.2	0.0	19.3	19.2	19.5	19.3	19.2
			1	74	0.0	18.4	18.3	18.4	18.4	18.4	0.0	20.2	20.3	20.5	20.3	20.0	0.0	22.3	22.2	22.3	22.2	22.1	0.0	19.4	19.3	19.4	19.3	19.2
		16QAM	36	0	0.0	18.4	18.3	18.5	18.4	18.3	1.0	19.3	19.2	19.3	19.4	18.8	0.0	21.3	21.4	21.2	21.1	21.3	0.0	19.3	19.4	19.4	19.2	19.4
			36	18	0.0	18.5	18.3	18.3	18.3	18.4	1.0	19.2	19.4	19.4	19.3	19.0	0.0	21.2	21.2	21.2	21.0	21.2	0.0	19.3	19.2	19.2	19.1	19.2
			36	37	0.0	18.4	18.2	18.5	18.3	18.3	1.0	19.3	19.2	19.4	19.5	18.9	0.0	21.3	21.3	21.1	21.0	21.3	0.0	19.2	19.3	19.3	19.1	19.2
			75	0	0.0	18.4	18.3	18.3	18.2	18.4	1.0	19.2	19.2	19.4	19.3	19.1	0.0	21.2	21.1	21.2	21.3	21.2	0.0	19.3	19.1	19.4	19.2	19.1
			1	0	0.0	18.3	18.2	18.3	18.2	18.3	1.0	19.2	19.1	19.2	19.2	18.9	0.0	22.3	22.1	22.3	22.2	22.0	0.0	19.3	19.2	19.4	19.1	19.3
			1	36	0.0	18.2	18.3	18.4	18.5	18.3	1.0	19.3	19.1	19.2	19.2	19.0	0.0	22.3	22.2	22.3	22.2	22.1	0.0	19.2	19.1	19.4	19.2	19.1
			1	74	0.0	18.4	18.3	18.4	18.3	18.4	1.0	19.1	19.2	19.5	19.2	18.9	0.0	22.2	22.1	22.2	22.1	22.1	0.0	19.3	19.2	19.4	19.2	19.1
			36	0	0.0	18.3	18.2	18.4	18.3	18.3	2.0	18.3	18.1	18.2	18.3	17.7	0.5	20.7	20.9	20.7	20.5	20.7	0.0	19.2	19.4	19.3	19.1	19.4
			36	18	0.0	18.4	18.3	18.2	18.2	18.4	2.0	18.1	18.4	18.3	18.2	18.0	0.5	20.6	20.6	20.6	20.4	20.6	0.0	19.2	19.2	19.1	19.0	19.2
			36	37	0.0	18.3	18.1	18.4	18.3	18.2	2.0	18.2	18.1	18.3	18.5	17.8	0.5	20.7	20.7	20.6	20.4	20.8	0.0	19.2	19.2	19.2	19.0	19.2
			75	0	0.0	18.4	18.2	18.2	18.1	18.3	2.0	18.1	18.1	18.3	18.2	18.0	0.5	20.6	20.5	20.7	20.7	20.6	0.0	19.2	19.0	19.3	19.1	19.0
LTE Band 41	10	QPSK	1	0	0.0	18.5	18.3	18.4	18.3	18.5	0.0	20.2	20.3	20.4	20.2	19.9	0.0	22.5	22.3	22.3	22.2	22.2	0.0	19.4	19.2	19.5	19.1	19.2
			1	24	0.0	18.3	18.5	18.5	18.4	18.3	0.0	20.2	20.2	20.5	20.3	20.0	0.0	22.3	22.4	22.4	22.3	22.1	0.0	19.2	19.3	19.5	19.2	19.3
			1	49	0.0	18.5	18.4	18.4	18.4	18.4	0.0	20.3	20.3	20.3	20.3	20.0	0.0	22.4	22.2	22.5	22.2	22.1	0.0	19.3	19.2	19.3	19.2	19.4
			25	0	0.0	18.5	18.2	18.3	18.4	18.3	1.0	19.2	19.3	19.4	19.4	18.8	0.0	21.4	21.2	21.2	21.0	21.3	0.0	19.4	19.4	19.2	19.3	19.2
			25	12	0.0	18.3	18.4	18.3	18.4	18.5	1.0	19.2	19.3	19.4	19.4	18.8	0.0	21.2	21.3	21.1	21.0	21.3	0.0	19.2	19.3	19.3	19.2	19.3
			25	24	0.0	18.4	18.3	18.3	18.4	18.4	1.0	19.4	19.2	19.4	19.4	18.8	0.0	21.4	21.3	21.1	21.1	21.1	0.0	19.3	19.4	19.3	19.1	19.3
		16QAM	50	0	0.0	18.3	18.4	18.3	18.2	18.3	1.0	19.3	19.2	19.3	19.3	19.3	0.0	21.2	21.2	21.1	21.0	21.1	0.0	19.2	19.3	19.3	19.3	19.2
			1	0	0.0	18.4	18.2	18.3	18.2	18.4	1.0	19.1	19.3	19.3	19.1	18.8	0.0	22.5	22.2	22.3	22.1	22.2	0.0	19.3	19.2	19.5	19.1	19.1
			1	24	0.0	18.3	18.4	18.5	18.3	18.2	1.0	19.1	19.1	19.5	19.2	19.0	0.0	22.2	22.3	22.3	22.2	22.1	0.0	19.1	19.2	19.4	19.1	19.2
			1	49	0.0	18.4	18.3	18.4	18.3	18.3	1.0	19.2	19.2	19.2	19.2	19.0	0.0	22.3	22.1	22.4	22.1	22.0	0.0	19.3	19.1	19.2	19.2	19.3
			25	0	0.0	18.4	18.1	18.2	18.3	18.3	2.0	18.1	18.2	18.4	18.4	17.8	0.5	20.8	20.6	20.6	20.4	20.0	0.0	19.3	19.4	19.1	19.3	19.1
			25	12	0.0	18.2	18.3	18.2	18.4	18.5	2.0	18.1	18.2	18.4	18.3	17.7	0.5	20.6	20.8	20.6	20.4	20.7	0.0	19.1	19.2	19.3	19.2	19.3
			25	24	0.0	18.3	18.2	18.2	18.4	18.3	2.0	18.3	18.2	18.3	18.4	17.8	0.5	20.8	20.8	20.5	20.5	20.7	0.0	19.2	19.4	19.2	19.1	19.2
			50	0	0.0	18.3	18.3	18.2	18.2	18.3	2.0	18.2	18.1	18.2	18.3	18.2	0.5	20.6	20.6	20.6	20.4	20.5	0.0	19.1	19.3	19.2	19.3	19.1

LTE Band 41 Measured Results (continued)

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD					Target MPR	UAT / BODY					Target MPR	LAT / HEAD					Target MPR	LAT / BODY				
						2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz
LTE Band 41	5	QPSK	1	0	0.0	18.4	18.3	18.3	18.3	18.3	0.0	20.2	20.3	20.3	20.4	19.9	0.0	22.4	22.2	22.4	22.2	22.3	0.0	19.4	19.3	19.4	19.1	19.2
			1	12	0.0	18.5	18.3	18.5	18.5	18.3	0.0	20.3	20.2	20.3	20.2	19.9	0.0	22.3	22.4	22.4	22.2	22.2	0.0	19.2	19.3	19.5	19.3	19.2
			1	24	0.0	18.3	18.3	18.3	18.3	18.5	0.0	20.2	20.4	20.5	20.2	20.0	0.0	22.3	22.2	22.4	22.2	22.2	0.0	19.3	19.2	19.3	19.1	19.2
			12	0	0.0	18.3	18.3	18.3	18.3	18.4	1.0	19.3	19.2	19.5	19.4	18.8	0.0	21.3	21.3	21.1	21.2	21.4	0.0	19.3	19.4	19.3	19.2	19.3
			12	7	0.0	18.3	18.2	18.4	18.4	18.3	1.0	19.2	19.3	19.3	19.4	18.9	0.0	21.3	21.3	21.3	21.1	21.2	0.0	19.2	19.4	19.4	19.2	19.3
			12	13	0.0	18.3	18.2	18.3	18.3	18.5	1.0	19.3	19.2	19.3	19.5	18.8	0.0	21.2	21.3	21.1	21.1	21.2	0.0	19.3	19.2	19.2	19.3	19.4
			25	0	0.0	18.2	18.3	18.4	18.2	18.3	1.0	19.3	19.2	19.5	19.2	19.1	0.0	21.1	21.2	21.3	21.1	21.1	0.0	19.1	19.3	19.4	19.0	19.1
		16QAM	1	0	0.0	18.3	18.3	18.2	18.3	18.2	1.0	19.1	19.3	19.2	19.4	18.8	0.0	22.3	22.1	22.3	22.1	22.2	0.0	19.3	19.3	19.3	19.1	19.1
			1	12	0.0	18.4	18.2	18.4	18.4	18.2	1.0	19.2	19.2	19.2	19.1	18.9	0.0	22.3	22.4	22.4	22.1	22.1	0.0	19.1	19.3	19.4	19.2	19.2
			1	24	0.0	18.3	18.3	18.3	18.2	18.4	1.0	19.1	19.4	19.5	19.2	18.9	0.0	22.3	22.2	22.3	22.1	22.2	0.0	19.3	19.1	19.2	19.0	19.2
			12	0	0.0	18.2	18.2	18.3	18.2	18.4	2.0	18.2	18.1	18.5	18.3	17.8	0.5	20.7	20.8	20.5	20.7	20.8	0.0	19.2	19.4	19.2	19.1	19.2
			12	7	0.0	18.2	18.1	18.4	18.4	18.2	2.0	18.2	18.2	18.2	18.4	17.8	0.5	20.8	20.8	20.8	20.6	20.6	0.0	19.1	19.3	19.4	19.1	19.3
			12	13	0.0	18.3	18.1	18.2	18.3	18.4	2.0	18.2	18.1	18.3	18.4	17.7	0.5	20.7	20.7	20.5	20.6	20.6	0.0	19.2	19.2	19.2	19.3	19.4
			25	0	0.0	18.1	18.3	18.4	18.1	18.2	2.0	18.2	18.2	18.5	18.1	18.0	0.5	20.5	20.7	20.8	20.5	20.6	0.0	19.0	19.2	19.3	18.9	19.1

9.5. LTE Rel. 11 Carrier Aggregation

LTE Carrier Aggregation Test Signal Set-up Procedure

(Use normal LTE set-up procedure in addition with the following steps)

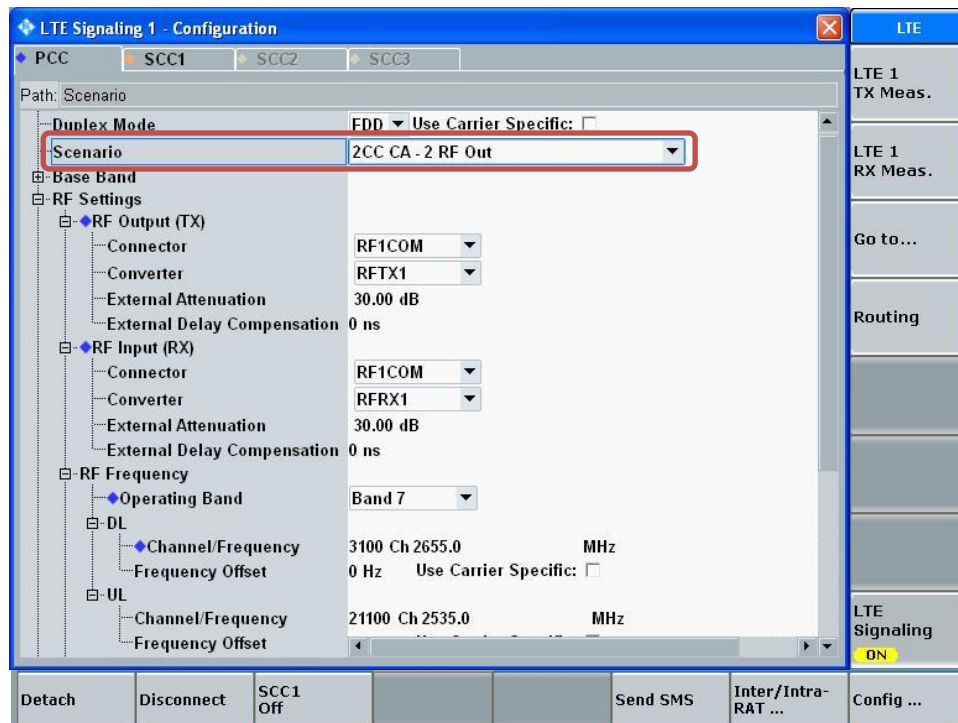
Set to CMW-500 with following parameters:

- PCC tab:
 - Select the testing Operating Band, Channel, Frequency, Cell Bandwidth, Uplink RBs

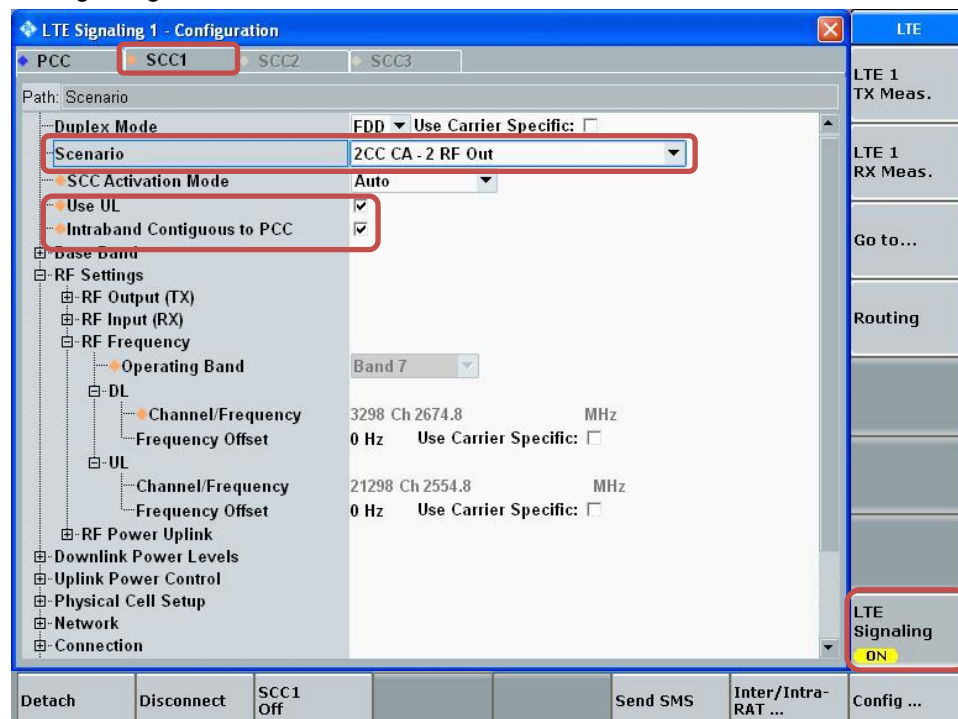
The screenshot shows the 'LTE Signaling 1 - V3.5.40 - Base V 3.5.90' interface. The 'PCC' tab is selected. The 'Connection Status' section shows 'Cell' as 'Connected' and 'RRC State' as 'Connected'. The 'Event Log' shows a series of events including 'Redirection Successful' and 'RRC Connection Established'. The 'UE Info' section displays IMEI, IMSI, and other details. The 'Configuration' section shows 'Operating Band' as 'Band 7', 'Channel' as '2850 Ch', 'Frequency' as '2630.0 MHz', and 'Cell Bandwidth' as '20.0 MHz'. The 'Downlink' and 'Uplink' sections show various power and throughput parameters. The 'Config ...' button is highlighted in the bottom right corner.

- Go to "Config...."

- Go to “Scenario”
- Set to “2CC CA – 2 RF Out”



- Select “SCC1” tab
- Go to “Scenario”
- Set to “2CC CA – 2 RF Out”
- Enable “Use UL”
- Enable “Intraband Contiguous to PCC”
- Select “LTE Signaling” button



- Select “SCC1” tab
 - Select the testing Cell Bandwidth, Uplink RBs

LTE Signaling 1 - V3.5.40 - Base V 3.5.90

Connection Status

Cell: Connection Established

Packet Switched: Connection Established

RRC State: Connected

SCC1 State: MAC Activated

Event Log

02:17:19 Redirection Successful

02:17:18 Tracking Area Update Received

02:17:18 RRC Connection Established

02:17:17 RRC Connection Released

02:17:16 Redirection Start

02:17:12 Redirection Successful

UE Info

IMEI: 359250065123018

IMSI: 001010000150503

Voice Domain Pr...: IMS PS Voice preferred CS Voic

UE's Usage Settl...: Voice centric

Default Bearer: IPv4 address: 192.168.48.129 IPv6 pref: cdcc

Dedicated Bearer: TFT Port Range DL / UL: 5005 - 5008 / 5005 - 5008

SCC1 Configuration

Operating Band: Band 7 FDD

Channel: 3048 Ch 21048 Ch

Frequency: 2649.8 MHz 2529.8 MHz

Cell Bandwidth: 20.0 MHz 20.0 MHz

RS EPRE: -85.8 dBm/15kHz

Full Cell BW Pow.: -55.0 dBm

PUSCH Open Loop Nom. Power: 23 dBm

PUSCH Closed Loop Target Power: 33.0 dBm

Intraband Contiguous to PCC: ☒

PCC <-> SCC1: Swap

PCC -> SCC1: Copy

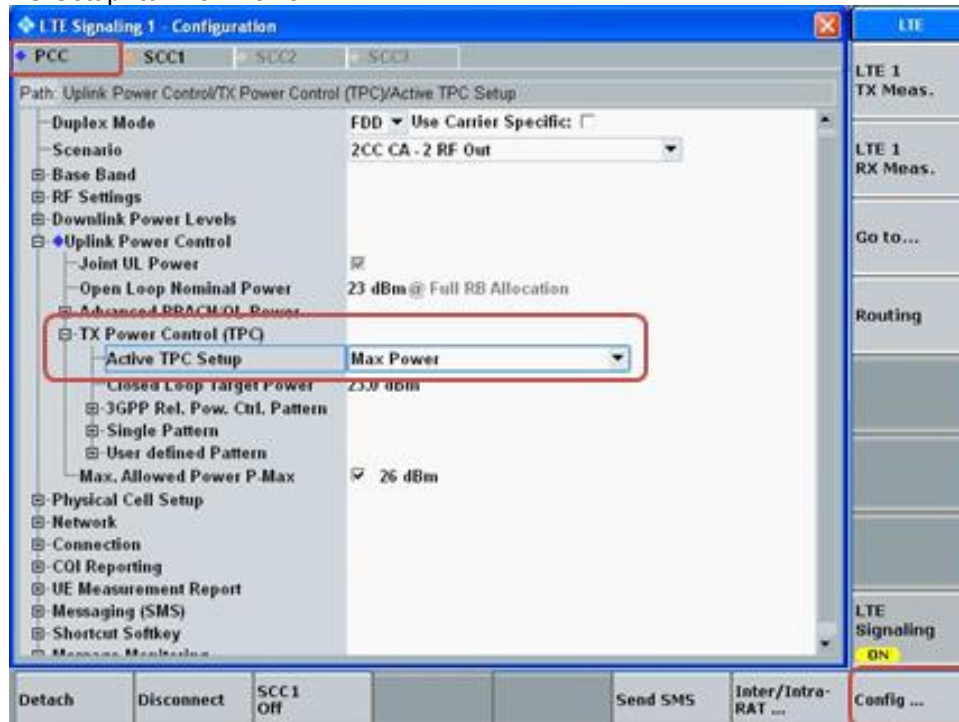
Sched. User def. Channels: ☐ Multicenter UL

	Downlink	Uplink
#RB	100	100
Start RB	0	0
Mod / TBSI	QPSK 5	QPSK 10
Code Rate / TBS	0.320 8760	0.613 17568
Throughput	8.760 Mbit/s	17.568 Mbit/s

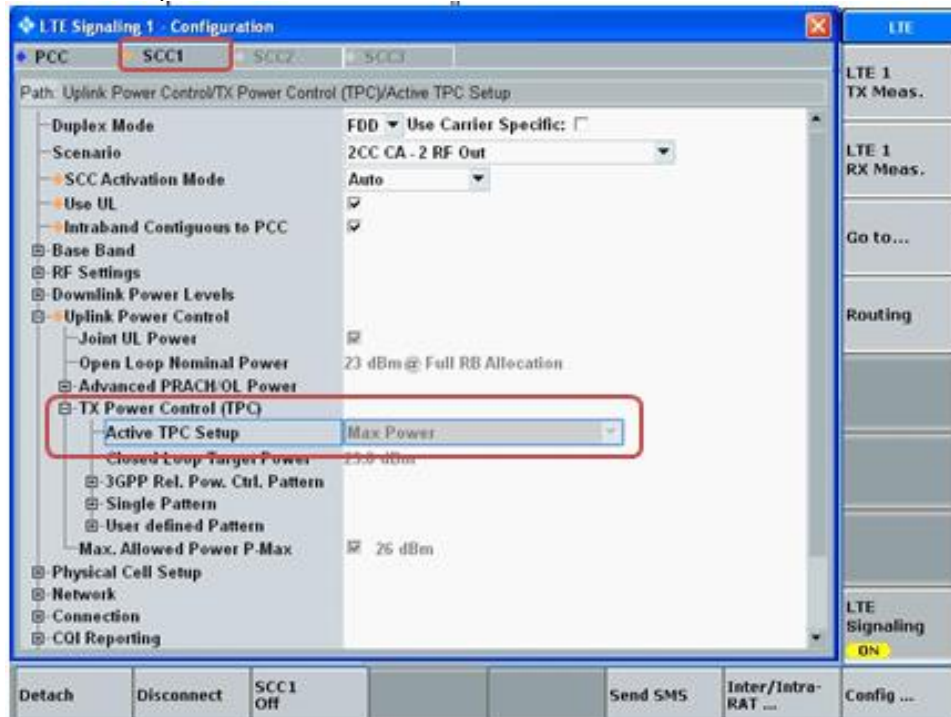
Buttons: Detach, Disconnect, SCC1 Off, Send SMS, Inter/Intra-RAT ..., Config ...

Max Power Setting

- Select “Config ...” button
- Select PCC tab
- Set “Active TPC Setup” to “Max Power”

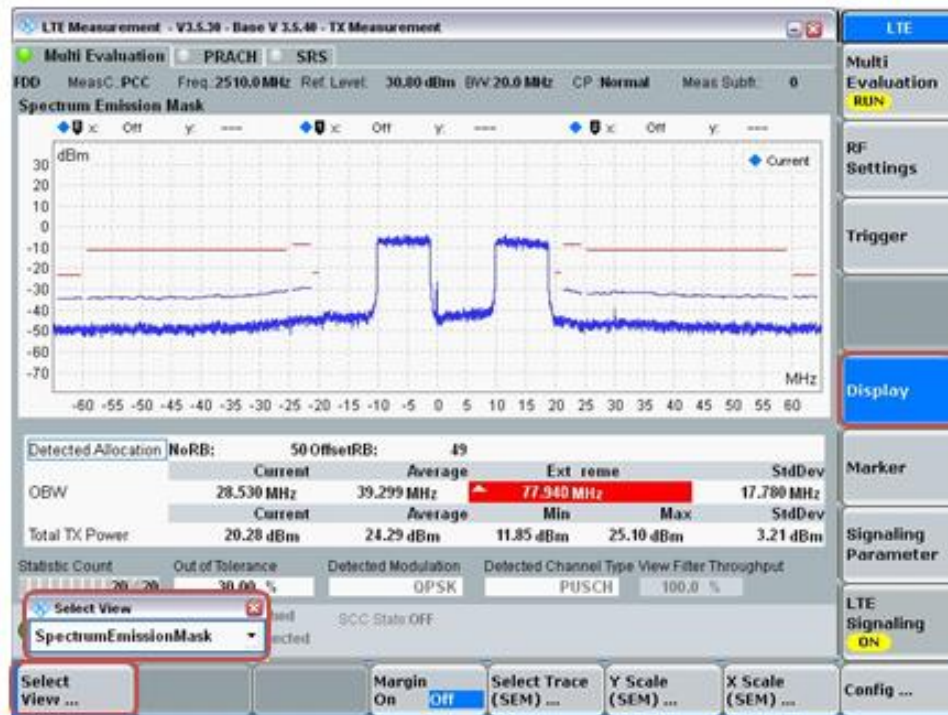


- Select SCC1 tab
- Verify that “Active TPC Setup” is set to “Max Power”



View TX Power

- Go to “Display”
- Select “Select View...”
- Select “Spectrum Emission Mask”



The device supports LTE Advanced Rel-11, UE Category 10 Carrier Aggregation (CA) on downlink for Inter and Intra band. Uplink CA is supported for Intra band only. Supported bands and bandwidths are provided in Tables below.

Inter-Band

E-UTRA CA configuration (BCS)	E-UTRA Band	Bandwidth					
		1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
CA_2A_4A (0) (1) (2)	2	Yes	Yes	Yes	Yes	Yes	Yes
	4			Yes	Yes	Yes	Yes
	2			Yes	Yes		
	4			Yes	Yes		
	2			Yes	Yes	Yes	Yes
	4			Yes	Yes	Yes	Yes
CA_2A_5A (0)	2			Yes	Yes	Yes	Yes
	5			Yes	Yes		
CA_2A_12A (0) (1)	2			Yes	Yes	Yes	Yes
	12			Yes	Yes		
	2			Yes	Yes	Yes	Yes
	12		Yes	Yes	Yes		
CA_2A_12B (0)	2			Yes	Yes	Yes	Yes
	12	See CA_12B (0)					
CA_2A_2A_12A (0)	2	See CA_2A_2A (0)					
	12			Yes	Yes		
CA_2A_13A (0) (1)	2			Yes	Yes	Yes	Yes
	13				Yes		
	2			Yes	Yes		
	13				Yes		
CA_2A_2A_13A (0)	2	See CA_2A_2A (0)					
	13				Yes		
CA_2A_17A (0)	2			Yes	Yes		
	17			Yes	Yes		
CA_2A_29A (0) (1) (2)	2			Yes	Yes		
	29		Yes	Yes	Yes		
	2			Yes	Yes		
	29			Yes	Yes		
	2			Yes	Yes	Yes	Yes
	29			Yes	Yes		
CA_2A_30A (0)	2			Yes	Yes	Yes	Yes
	30			Yes	Yes		
CA_4A_5A (0) (1)	4			Yes	Yes		
	5			Yes	Yes		
	4			Yes	Yes	Yes	Yes
	5			Yes	Yes		
CA_4A_7A (0)	4			Yes	Yes		
	7			Yes	Yes	Yes	Yes
CA_4A_4A_7A (0)	4	See CA_4A_4A (0)					
	7			Yes	Yes		
CA_4A_12A (0) (1) (2) (3) (4)	4	Yes	Yes	Yes	Yes		
	12			Yes	Yes		
	4	Yes	Yes	Yes	Yes	Yes	Yes
	12			Yes	Yes		
	4			Yes	Yes	Yes	Yes
	12		Yes	Yes	Yes		
	4			Yes	Yes		

	12			Yes	Yes		
	4			Yes	Yes	Yes	Yes
	12			Yes	Yes		
CA_4A_4A_12A (0)	4	See CA_4A_4A (0)					
	12			Yes	Yes		
CA_4A_12B (0)	4			Yes	Yes	Yes	Yes
	12	See CA_12B (0)					
CA_4A_13A (0) (1)	4			Yes	Yes	Yes	Yes
	13				Yes		
	4			Yes	Yes		
	13				Yes		
CA_4A_4A_13A (0)	4	See CA_4A_4A (0)					
	13				Yes		
CA_4A_17A (0)	4			Yes	Yes		
	17			Yes	Yes		
CA_4A_29A (0) (1) (2)	4			Yes	Yes		
	29		Yes	Yes	Yes		
	4			Yes	Yes		
	29			Yes	Yes		
	4			Yes	Yes	Yes	Yes
	29			Yes	Yes		
CA_4A_30A (0)	4			Yes	Yes	Yes	Yes
	30			Yes	Yes		
CA_5A_7A (0)	5	Yes	Yes	Yes	Yes		
	7				Yes	Yes	Yes
CA_5A_30A (0)	5			Yes	Yes		
	30			Yes	Yes		
CA_12A_30A (0)	12			Yes	Yes		
	30			Yes	Yes		
CA_25A_26A (0)	25		Yes	Yes	Yes	Yes	Yes
	26		Yes	Yes	Yes	Yes	
CA_29A_30A (0)	29			Yes	Yes		
	30			Yes	Yes		
CA_2A_4A_12A (0)	2			Yes	Yes	Yes	Yes
	4			Yes	Yes	Yes	Yes
	12			Yes	Yes		
CA_2A_4A_13A (0)	2			Yes	Yes	Yes	Yes
	4			Yes	Yes	Yes	Yes
	13				Yes		
CA_2A_5A_30A (0)	2			Yes	Yes	Yes	Yes
	5			Yes	Yes		
	30			Yes	Yes		
CA_2A_12A_30A (0)	2			Yes	Yes	Yes	Yes
	12			Yes	Yes		
	30			Yes	Yes		
CA_2A_29A_30A (0)	2			Yes	Yes	Yes	Yes
	29			Yes	Yes		
	30			Yes	Yes		
CA_4A_5A_30A (0)	4			Yes	Yes	Yes	Yes
	5			Yes	Yes		
	30			Yes	Yes		
CA_4A_12A_30A (0)	4			Yes	Yes	Yes	Yes
	12			Yes	Yes		
	30			Yes	Yes		
CA_4A_29A_30A (0)	4			Yes	Yes	Yes	Yes
	29			Yes	Yes		
	30			Yes	Yes		
CA_2C_12A (0)	2	See CA_2C (0)					
	12			Yes	Yes		
CA_2C_13A (0)	2	See CA_2C (0)					

	13			Yes	Yes		
CA_4C_7A (0)	4	See CA_4C (0)					
	7			Yes	Yes		
CA_4C_12A (0)	4	See CA_4C (0)					
	12			Yes	Yes		
CA_4C_13A (0)	4	See CA_4C (0)					
	13				Yes		

Intra-Band Non-Contiguous

E-UTRA CA configuration (BCS)	Component carriers in order of increasing carrier frequency		
	Carrier 1	Carrier 2	Carrier 3
CA_2A_2A (0)	5, 10, 15, 20	5, 10, 15, 20	
CA_4A_4A (0)	5, 10, 15, 20	5, 10, 15, 20	
CA_7A_7A (0)	5	15	
	10	10, 15	
	15	15, 20	
	20	20	
CA_25A_25A (0) (1)	5, 10	5, 10	
	5, 10, 15, 20	5, 10, 15, 20	
CA_41A_41A (0) (1)	10, 15, 20	10, 15, 20	
	5, 10, 15, 20	5, 10, 15, 20	
CA_41A_41C (0)	5, 10, 15, 20	See CA_41C (1)	
CA_41C_41A (0)	See CA_41C (1)		5, 10, 15, 20

Intra-Band Contiguous

E-UTRA CA configuration (BCS)	Uplink CA Configurations	Component carriers in order of increasing carrier frequency		
		Allowed channel bandwidths [MHz]		
		Carrier 1	Carrier 2	Carrier 3
CA_2C (0)		5	20	
		10	15, 20	
		15	10, 15, 20	
		20	5, 10, 15, 20	
CA_7B (0)		15	5	
CA_7C (0) (1)	CA_7C	15	15	
		20	20	
		10	20	
		15	15, 20	
		20	10, 15, 20	
CA_12B (0)		5	5, 10	
CA_41C (0) (1)	CA_41C	10	20	
		15	15, 20	
		20	10, 15, 20	
		5, 10	20	
		15	15, 20	
		20	5, 10, 15, 20	
CA_41D (0)	CA_41C	10	20	15
		10	15, 20	20
		15	20	10, 15
		15	10, 15, 20	20
		20	15, 20	10
		20	10, 15, 20	15, 20

Carrier Aggregation Power Measurements:**Inter-Band**

DL									UL															
PCC	SCC	TCC	PCC		SCC		TCC		PCC								SCC							
Band	Band	Band	BW	Fr equency	BW	Fr equency	BW	Fr equency	Modulation	RB	Of f set	Fr equency	MPR	Standalone	CA Power	Delta	RB	Of f set	Fr equency	MPR	Standalone	CA Power	Delta	
2	4		1.4	1960	20	2132.5			QPSK	1	3	1880	0	24.4	24.4	0								
2	4		3	1960	20	2132.5			QPSK	1	8	1880	0	24.5	24.4	-0.1								
2	4		5	1960	20	2132.5			QPSK	1	12	1880	0	24.4	24.3	-0.1								
2	4		10	1960	20	2132.5			QPSK	1	24	1880	0	24.4	24.3	-0.1								
2	4		15	1960	20	2132.5			QPSK	1	36	1880	0	24.4	24.3	-0.1								
2	4		20	1960	20	2132.5			QPSK	1	49	1880	0	24.4	24.4	0								
2	5		5	1960	10	881.5			QPSK	1	12	1880	0	24.4	24.3	-0.1								
2	5		10	1960	10	881.5			QPSK	1	24	1880	0	24.4	24.4	0								
2	5		15	1960	10	881.5			QPSK	1	36	1880	0	24.4	24.4	0								
2	5		20	1960	10	881.5			QPSK	1	49	1880	0	24.4	24.3	-0.1								
2	12		5	1960	10	737.5			QPSK	1	12	1880	0	24.5	24.5	0								
2	12		10	1960	10	737.5			QPSK	1	24	1880	0	24.5	24.5	0								
2	12		15	1960	10	737.5			QPSK	1	36	1880	0	24.5	24.5	0								
2	12		20	1960	10	737.5			QPSK	1	49	1880	0	24.5	24.5	0								
2	13		5	1960	10	751			QPSK	1	12	1880	0	24.5	24.4	-0.1								
2	13		10	1960	10	751			QPSK	1	24	1880	0	24.4	24.4	0								
2	13		15	1960	10	751			QPSK	1	36	1880	0	24.4	24.3	-0.1								
2	13		20	1960	10	751			QPSK	1	49	1880	0	24.4	24.4	0								
2	17		5	1960	10	740			QPSK	1	12	1880	0	24.4	24.3	-0.1								
2	17		10	1960	10	740			QPSK	1	24	1880	0	24.4	24.3	-0.1								
2	29		5	1960	10	722.5			QPSK	1	12	1880	0	24.5	24.4	-0.1								
2	29		10	1960	10	722.5			QPSK	1	24	1880	0	24.5	24.4	-0.1								
2	29		15	1960	10	722.5			QPSK	1	36	1880	0	24.5	24.5	0								
2	29		20	1960	10	722.5			QPSK	1	49	1880	0	24.5	24.4	-0.1								
2	30		5	1960	10	2355			QPSK	1	12	1880	0	24.5	24.5	0								
2	30		10	1960	10	2355			QPSK	1	24	1880	0	24.4	24.3	-0.1								
2	30		15	1960	10	2355			QPSK	1	36	1880	0	24.4	24.3	-0.1								
2	30		20	1960	10	2355			QPSK	1	49	1880	0	24.4	24.3	-0.1								
4	2		5	2132.5	20	1960			QPSK	1	12	1732.5	0	24.4	24.3	-0.1								
4	2		10	2132.5	20	1960			QPSK	1	24	1732.5	0	24.5	24.4	-0.1								
4	2		15	2132.5	20	1960			QPSK	1	36	1732.5	0	24.4	24.3	-0.1								
4	2		20	2132.5	20	1960			QPSK	1	49	1732.5	0	24.5	24.5	0								
5	2		5	881.5	20	1960			QPSK	1	12	836.5	0	23.9	23.8	-0.1								
5	2		10	881.5	20	1960			QPSK	1	24	836.5	0	23.9	23.8	-0.1								
7	4		5	2655	10	2132.5			QPSK	1	12	2535	0	23.9	23.8	-0.1								
7	4		10	2655	10	2132.5			QPSK	1	24	2535	0	23.9	23.8	-0.1								
7	4		15	2655	10	2132.5			QPSK	1	36	2535	0	23.9	23.8	-0.1								
7	4		20	2655	10	2132.5			QPSK	1	49	2535	0	23.9	23.8	-0.1								
12	2		3	737.5	20	1960			QPSK	1	8	707.5	0	24.4	24.4	0								
12	2		5	737.5	20	1960			QPSK	1	12	707.5	0	24.4	24.4	0								
12	2		10	737.5	20	1960			QPSK	1	24	707.5	0	24.4	24.3	-0.1								
13	2		10	751	20	1960			QPSK	1	24	782	0	24.5	24.4	-0.1								
17	2		5	740	20	1960			QPSK	1	12	710	0	24.4	24.4	0								
17	2		10	740	20	1960			QPSK	1	24	710	0	24.4	24.4	0								

DL									UL															
PCC	SCC	TCC	PCC		SCC		TCC		PCC								SCC							
Band	Band	Band	BW	Fr equency	BW	Fr equency	BW	Fr equency	Modulation	RB	Off set	Fr equency	MPR	Standalone	CA Power	Delta	RB	Off set	Fr equency	MPR	Standalone	CA Power	Delta	
25	26		3	1962.5	15	876.5			QPSK	1	8	1882.5	0	24.5	24.5	0								
25	26		5	1962.5	15	876.5			QPSK	1	12	1882.5	0	24.4	24.3	-0.1								
25	26		10	1962.5	15	876.5			QPSK	1	24	1882.5	0	24.4	24.3	-0.1								
25	26		15	1962.5	15	876.5			QPSK	1	36	1882.5	0	24.4	24.4	0								
25	26		20	1962.5	15	876.5			QPSK	1	49	1882.5	0	24.5	24.4	-0.1								
26	25		3	876.5	20	1962.5			QPSK	1	8	831.5	0	23.9	23.8	-0.1								
26	25		5	876.5	20	1962.5			QPSK	1	12	831.5	0	23.9	23.9	0								
26	25		10	876.5	20	1962.5			QPSK	1	24	831.5	0	23.9	23.8	-0.1								
26	25		15	876.5	20	1962.5			QPSK	1	36	831.5	0	24.0	23.9	-0.1								
30	2		5	2355	20	1960			QPSK	1	12	2310	0	23.0	22.9	-0.1								
30	2		10	2355	20	1960			QPSK	1	24	2310	0	22.9	22.9	0								
2	4	12	5	1960	20	2132.5	10	737.5	QPSK	1	12	1880	0	24.4	24.3	-0.1								
2	4	12	10	1960	20	2132.5	10	737.5	QPSK	1	24	1880	0	24.4	24.3	-0.1								
2	4	12	15	1960	20	2132.5	10	737.5	QPSK	1	36	1880	0	24.4	24.4	0								
2	4	12	20	1960	20	2132.5	10	737.5	QPSK	1	49	1880	0	24.5	24.4	-0.1								
2	4	13	5	1960	20	2132.5	10	751	QPSK	1	12	1880	0	24.4	24.3	-0.1								
2	4	13	10	1960	20	2132.5	10	751	QPSK	1	24	1880	0	24.4	24.4	0								
2	4	13	15	1960	20	2132.5	10	751	QPSK	1	36	1880	0	24.5	24.5	0								
2	4	13	20	1960	20	2132.5	10	751	QPSK	1	49	1880	0	24.4	24.3	-0.1								
2	5	30	5	1960	10	881.5	10	2355	QPSK	1	12	1880	0	24.4	24.4	0								
2	5	30	10	1960	10	881.5	10	2355	QPSK	1	24	1880	0	24.5	24.4	-0.1								
2	5	30	15	1960	10	881.5	10	2355	QPSK	1	36	1880	0	24.5	24.4	-0.1								
2	5	30	20	1960	10	881.5	10	2355	QPSK	1	49	1880	0	24.4	24.3	-0.1								
2	12	30	5	1960	10	737.5	10	2355	QPSK	1	12	1880	0	24.5	24.4	-0.1								
2	12	30	10	1960	10	737.5	10	2355	QPSK	1	24	1880	0	24.4	24.4	0								
2	12	30	15	1960	10	737.5	10	2355	QPSK	1	36	1880	0	24.4	24.3	-0.1								
2	12	30	20	1960	10	737.5	10	2355	QPSK	1	49	1880	0	24.4	24.3	-0.1								
2	29	30	5	1960	10	722.5	10	2355	QPSK	1	12	1880	0	24.5	24.4	-0.1								
2	29	30	10	1960	10	722.5	10	2355	QPSK	1	24	1880	0	24.4	24.4	0								
2	29	30	15	1960	10	722.5	10	2355	QPSK	1	36	1880	0	24.4	24.3	-0.1								
2	29	30	20	1960	10	722.5	10	2355	QPSK	1	49	1880	0	24.4	24.3	-0.1								
4	2	12	5	2132.5	20	1960	10	737.5	QPSK	1	12	1732.5	0	24.4	24.3	-0.1								
4	2	12	10	2132.5	20	1960	10	737.5	QPSK	1	24	1732.5	0	24.4	24.4	0								
4	2	12	15	2132.5	20	1960	10	737.5	QPSK	1	36	1732.5	0	24.5	24.4	-0.1								
4	2	12	20	2132.5	20	1960	10	737.5	QPSK	1	49	1732.5	0	24.4	24.3	-0.1								
5	2	30	5	881.5	20	1960	10	2355	QPSK	1	12	836.5	0	23.9	23.9	0								
5	2	30	10	881.5	20	1960	10	2355	QPSK	1	24	836.5	0	23.9	23.8	-0.1								
12	2	4	5	737.5	20	1960	20	2132.5	QPSK	1	12	707.5	0	24.4	24.3	-0.1								
12	2	4	10	737.5	20	1960	20	2132.5	QPSK	1	24	707.5	0	24.4	24.4	0								
13	2	4	10	751	20	1960	20	2132.5	QPSK	1	24	782	0	24.5	24.5	0								
30	2	5	5	2355	20	1960	10	881.5	QPSK	1	12	2310	0	23.0	22.9	-0.1								
30	2	5	10	2355	20	1960	10	881.5	QPSK	1	24	2310	0	22.9	22.9	0								

DL									UL															
PCC	SCC	TCC	PCC		SCC		TCC		PCC								SCC							
Band	Band	Band	BW	Fr equency	BW	Fr equency	BW	Fr equency	Modulation	RB	Off set	Frequency	MPR	Standalone	CA Power	Delta	RB	Off set	Frequency	MPR	Standalone	CA Power	Delta	
12A	2A	2A	5	737.5	20	1960	20	1960	QPSK	1	12	707.5	0	24.4	24.4	0								
12A	2A	2A	10	737.5	20	1960	20	1960	QPSK	1	24	707.5	0	24.4	24.3	-0.1								
12B	2A	12B	5	737.5	20	1960	10	737.5	QPSK	1	12	707.5	0	24.4	24.4	0								
12B	2A	12B	10	737.5	20	1960	5	737.5	QPSK	1	24	707.5	0	24.5	24.4	-0.1								
13A	2A	2A	10	751	20	1960	20	1960	QPSK	1	24	782	0	24.4	24.4	0								
2A	12B	12B	5	1960	5	737.5	10	737.5	QPSK	1	12	1880	0	24.4	24.4	0								
2A	12B	12B	10	1960	5	737.5	10	737.5	QPSK	1	24	1880	0	24.5	24.4	-0.1								
2A	12B	12B	15	1960	5	737.5	10	737.5	QPSK	1	36	1880	0	24.4	24.3	-0.1								
2A	12B	12B	20	1960	5	737.5	10	737.5	QPSK	1	49	1880	0	24.4	24.3	-0.1								
2C	2C	12A	5	1960	20	1960	10	737.5	QPSK	1	12	1880	0	24.4	24.4	0								
2C	2C	12A	10	1960	20	1960	10	737.5	QPSK	1	24	1880	0	24.4	24.4	0								
2C	2C	12A	15	1960	20	1960	10	737.5	QPSK	1	36	1880	0	24.5	24.5	0								
2C	2C	12A	20	1960	20	1960	10	737.5	QPSK	1	49	1880	0	24.5	24.4	-0.1								
4A	12B	12B	5	2132.5	5	737.5	10	737.5	QPSK	1	12	1732.5	0	24.4	24.4	0								
4A	12B	12B	10	2132.5	5	737.5	10	737.5	QPSK	1	24	1732.5	0	24.4	24.3	-0.1								
4A	12B	12B	15	2132.5	5	737.5	10	737.5	QPSK	1	36	1732.5	0	24.5	24.4	-0.1								
4A	12B	12B	20	2132.5	5	737.5	10	737.5	QPSK	1	49	1732.5	0	24.4	24.3	-0.1								
4C	4C	12A	5	2132.5	20	2132.5	10	737.5	QPSK	1	12	1732.5	0	24.4	24.3	-0.1								
4C	4C	12A	10	2132.5	20	2132.5	10	737.5	QPSK	1	24	1732.5	0	24.4	24.4	0								
4C	4C	12A	15	2132.5	20	2132.5	10	737.5	QPSK	1	36	1732.5	0	24.4	24.3	-0.1								
4C	4C	12A	20	2132.5	20	2132.5	10	737.5	QPSK	1	49	1732.5	0	24.5	24.5	0								
7A	4A	4A	5	2655	20	2132.5	20	2132.5	QPSK	1	12	2535	0	23.9	23.9	0								
7A	4A	4A	10	2655	20	2132.5	20	2132.5	QPSK	1	24	2535	0	23.9	23.9	0								

Power measurements were performed on the highest maximum output power from Tune-up Procedure on LAT antenna, Head power table on QPSK modulation following the Manufacturer KDB inquiry - Carrier Aggregation. Uplink output power for UL CA is the total power measured across the PCC and SCC.

The standalone power measurement is the power for the primary or secondary carriers in the non-CA mode (i.e. single carrier power) measured with an average power meter. The values are slightly different between PCC and SCC. The UL CA mode power measurements are made using the same wideband average power meter and represent the total power across both carriers. Some of the measured values are the same for PCC and SCC. In all cases the CA total power is less than the single carrier (non-CA mode) case.

Intra-Band Non-Contiguous

DL									UL															
PCC	SCC	TCC	PCC		SCC		TCC		PCC								SCC							
Band	Band	Band	BW	Fr equency	BW	Fr equency	BW	Fr equency	Modulation	RB	Off set	Fr equency	MPR	Standalone	CA Power	Delta	RB	Off set	Fr equency	MPR	Standalone	CA Power	Delta	
2	2		5	1932.5	20	1980			QPSK	1	12	1852.5	0	24.5	24.4	-0.1								
2	2		10	1935	20	1980			QPSK	1	24	1855	0	24.5	24.5	0								
2	2		15	1937.5	20	1980			QPSK	1	36	1857.5	0	24.5	24.5	0								
2	2		20	1940	20	1980			QPSK	1	49	1860	0	24.5	24.4	-0.1								
4	4		5	2112.5	20	2145			QPSK	1	12	1712.5	0	24.5	24.4	-0.1								
4	4		10	2115	20	2145			QPSK	1	24	1715	0	24.5	24.4	-0.1								
4	4		15	2117.5	20	2145			QPSK	1	36	1717.5	0	24.4	24.3	-0.1								
4	4		20	2120	20	2145			QPSK	1	49	1720	0	24.4	24.3	-0.1								
7	7		5	2622.5	15	2682.5			QPSK	1	12	2502.5	0	23.9	23.9	0								
7	7		10	2625	10	2685			QPSK	1	24	2505	0	24.0	24.0	0								
7	7		10	2625	15	2682.5			QPSK	1	24	2505	0	23.9	23.8	-0.1								
7	7		15	2627.5	15	2682.5			QPSK	1	36	2507.5	0	24.0	24.0	0								
7	7		15	2627.5	20	2680			QPSK	1	36	2507.5	0	23.9	23.9	0								
7	7		20	2630	20	2680			QPSK	1	49	2510	0	24.0	24.0	0								
25	25		5	1932.5	20	1985			QPSK	1	12	1852.5	0	24.4	24.3	-0.1								
25	25		10	1935	20	1985			QPSK	1	24	1855	0	24.4	24.3	-0.1								
25	25		15	1937.5	20	1985			QPSK	1	36	1857.5	0	24.4	24.3	-0.1								
25	25		20	1940	20	1985			QPSK	1	49	1860	0	24.4	24.3	-0.1								
41	41		5	2498.5	20	2680			QPSK	1	12	2498.5	0	22.4	22.3	-0.1								
41	41		10	2501	20	2680			QPSK	1	24	2501	0	22.4	22.3	-0.1								
41	41		15	2503.5	20	2680			QPSK	1	36	2503.5	0	22.5	22.4	-0.1								
41	41		20	2506	20	2680			QPSK	1	49	2506	0	22.5	22.5	0								
41A	41C	41C	5	2498.5	20	2593	20	2680	QPSK	1	12	2498.5	0	22.4	22.4	0								
41A	41C	41C	10	2501	20	2593	20	2680	QPSK	1	24	2501	0	22.4	22.4	0								
41A	41C	41C	15	2503.5	20	2593	20	2680	QPSK	1	36	2503.5	0	22.4	22.3	-0.1								
41A	41C	41C	20	2506	20	2593	20	2680	QPSK	1	49	2506	0	22.4	22.4	0								
41C	41C	41A	5	2498.5	20	2593	20	2680	QPSK	1	12	2498.5	0	22.4	22.3	-0.1								
41C	41C	41A	10	2501	20	2593	20	2680	QPSK	1	24	2501	0	22.5	22.5	0								
41C	41C	41A	15	2503.5	20	2593	20	2680	QPSK	1	36	2503.5	0	22.4	22.3	-0.1								
41C	41C	41A	20	2506	20	2593	20	2680	QPSK	1	49	2506	0	22.4	22.3	-0.1								

Intra-Band Contiguous

DL									UL															
PCC	SCC	TCC	PCC		SCC		TCC		PCC								SCC							
Band	Band	Band	BW	Frequency	BW	Frequency	BW	Frequency	Modulation	RB	Offset	Frequency	MPR	Standalone	CA Power	Delta	RB	Offset	Frequency	MPR	Standalone	CA Power	Delta	
2C	2C		5	1960	20	1972.5			QPSK	1	12	1880	0	24.4	24.3	-0.1								
2C	2C		10	1960	20	1975			QPSK	1	24	1880	0	24.4	24.4	0								
2C	2C		15	1960	20	1977.5			QPSK	1	36	1880	0	24.4	24.3	-0.1								
2C	2C		20	1960	20	1980			QPSK	1	49	1880	0	24.4	24.3	-0.1								
7B	7B		5	2655	15	2665			QPSK	1	12	2535	0	23.9	23.9	0								
7B	7B		15	2655	5	2665			QPSK	1	36	2535	0	23.9	23.8	-0.1								
7C	7C		10	2655	20	2670			QPSK	1	24	2535	0	24.0	23.9	-0.1								
7C	7C		15	2655	20	2672.5			QPSK	1	36	2535	0	23.9	23.8	-0.1								
7C	7C		20	2655	20	2675			QPSK	1	49	2535	0	24.0	23.9	-0.1								
12B	12B		5	737.5	5	742.5			QPSK	1	12	707.5	0	24.4	24.3	-0.1								
12B	12B		5	737.5	10	745			QPSK	1	12	707.5	0	24.5	24.4	-0.1								
12B	12B		10	737.5	5	745			QPSK	1	24	707.5	0	24.4	24.4	0								
41C	41C		5	2593	20	2605.5			QPSK	1	12	2593	0	22.4	22.3	-0.1								
41C	41C		10	2593	20	2608			QPSK	1	24	2593	0	22.4	22.4	0								
41C	41C		15	2593	20	2610.5			QPSK	1	36	2593	0	22.4	22.3	-0.1								
41C	41C		20	2593	20	2613			QPSK	1	49	2593	0	22.4	22.3	-0.1								
7C	7C		10	2655	20	2670			QPSK	1	24	2535	0	23.9	22.8	-1.1	1	49	2550	0	24.0	23.0	-1	
7C	7C		15	2655	20	2672.5			QPSK	1	36	2535	0	23.9	22.8	-1.1	1	49	2552.5	0	23.9	22.9	-1	
7C	7C		20	2655	20	2675			QPSK	1	49	2535	0	24.0	22.8	-1.2	1	49	2555	0	23.9	23.0	-0.9	
41C	41C		5	2593	20	2605.5			QPSK	1	12	2593	0	22.4	22.4	0	1	49	2605.5	0	22.5	22.5	0	
41C	41C		10	2593	20	2608			QPSK	1	24	2593	0	22.4	22.4	0	1	49	2608	0	22.5	22.4	-0.1	
41C	41C		15	2593	20	2610.5			QPSK	1	36	2593	0	22.5	22.4	-0.1	1	49	2610.5	0	22.4	22.4	0	
41C	41C		20	2593	20	2613			QPSK	1	49	2593	0	22.5	22.4	-0.1	1	49	2613	0	22.4	22.3	-0.1	
41D	41D	41D	10	2593	20	2608	20	2628	QPSK	1	24	2593	0	22.4	22.4	0								
41D	41D	41D	15	2593	20	2610.5	20	2630.5	QPSK	1	36	2593	0	22.4	22.4	0								
41D	41D	41D	20	2593	20	2613	20	2633	QPSK	1	49	2593	0	22.4	22.4	0								

UL CA test cases selected based on FCC PAG Guidance and Manufacturer KDB inquiry - Carrier Aggregation: PCC was determined and selected closest to the worst case SAR configuration from standalone reported SAR result. SCC was determined and selected closest to the next highest worst case SAR configuration from standalone SAR result. Channels utilized allows both selections to have contiguous CA were measured for output power. Uplink output power for UL CA is the total power measured across the PCC and SCC.:

LTE-2CA Band 7

Antenna	RF Exposure Conditions	Mode	PCC					SCC					Power (dBm)	
			Bandwidth (MHz)	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Bandwidth (MHz)	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Tune-up limit	Meas.
UAT	Head	QPSK	20	21350	2560.0	1	49	20	21152	2540.2	50	24	15.8	15.8
LAT	Body & Hotspot	QPSK	20	20850	2510.0	50	24	20	21048	2529.8	50	24	16.5	16.5

LTE-2CA Band 41

Antenna	RF Exposure Conditions	Mode	PCC					SCC					Power (dBm)	
			Bandwidth (MHz)	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Bandwidth (MHz)	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Tune-up limit	Meas.
UAT	Head	QPSK	20	40185	2549.5	50	24	20	40383	2569.3	1	49	18.0	18.0
LAT	Body & Hotspot	QPSK	20	40185	2549.5	50	24	20	40383	2569.3	1	49	19.5	19.5

9.6. WLAN SISO (P_{Cell_ON})

For 2.4 & 5GHz band, there are two use cases:

- P_{Cell_ON}: This will be used when both Cellular and Wi-Fi radios are ON.
- P_{Cell_OFF}: This will be used when only Wi-Fi radio is ON

Measured Results

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Pow er (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
2.4	802.11b	1 Tx	1	2412	14.0	18.0	17.5	14.5
			2	2417	14.0	18.0	17.5	14.5
			3	2422	14.0	19.0	17.5	14.5
			6	2437	14.0	19.0	17.5	14.5
			11	2462	14.0	18.0	17.5	14.5
			12	2467	14.0	16.5	16.5	14.5
			13	2472	12.0	12.0	12.0	12.0
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Pow er (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.2	802.11a	1 Tx	40	5200	Not required	19.5	Not required	Not required
			44	5220		20.4		
			48	5240		19.5		
	802.11n	1 Tx HT40	38	5190	Not required	Not required	15.5	Not required
			46	5230			15.7	
	802.11ac	1 Tx VHT80	42	5210	7.0	Not required	Not required	10.5
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Pow er (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.5	802.11n	1 Tx HT40	110	5550	Not required	19.0	Not required	Not required
			118	5590		19.5		
			142	5710		19.0		
	802.11ac	1 Tx VHT80	106	5530	5.5	Not required	12.5	9.5
			122	5610	5.5		12.5	9.5
			138	5690	5.5		12.5	9.5
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Pow er (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.8	802.11a	1 Tx	153	5765	Not required	19.5	Not required	Not required
			157	5785		19.5		
			161	5805		19.5		
	802.11ac	1 Tx VHT80	155	5775	6.5	Not required	12.0	14.3

Note(s):

1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.

9.7. WLAN MIMO (P_{Cell_ON})

For 2.4 & 5GHz band, there are two use cases:

- P_{Cell_ON}: This will be used when both Cellular and Wi-Fi radios are ON.
- P_{Cell_OFF}: This will be used when only Wi-Fi radio is ON

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
2.4	802.11g	2 Tx CDD	1	2412	13.5	13.5	13.5	13.5
			2	2417	14.0	16.5	16.5	14.5
			3	2422	14.0	18.0	17.5	14.5
			6	2437	14.0	18.0	17.5	14.5
			9	2452	14.0	18.0	17.5	14.5
			10	2457	14.0	16.0	16.0	14.5
			11	2462	14.0	14.0	14.0	14.0
			12	2467	11.0	11.0	11.0	11.0
			13	2472	2.0	2.0	2.0	2.0
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.2	802.11n	2 Tx HT40 CDD/STBC/SDM	38	5190	7.0	13.5	13.5	10.5
			46	5230	7.0	18.0	15.8	10.5
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.5	802.11n	2 Tx HT40 CDD/STBC/SDM	110	5550	5.4	18.0	Not required	
			118	5590	5.4	19.5		
			142	5710	5.4	19.0		
	802.11ac	2 Tx VHT80 CDD/STBC/SDM	106	5530	Not required		12.4	9.5
			122	5610			12.4	9.5
			138	5690			12.4	9.5
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.8	802.11a	2 Tx CDD	153	5765	6.5	19.7	Not required	
			157	5785	6.5	19.7		
			161	5805	6.5	19.7		
	802.11ac	2 Tx VHT80 CDD/STBC/SDM	155	5775	Not required		12.0	14.1

Note(s):

- The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.

9.8. WLAN SISO (P_{Cell_OFF})

For 2.4 & 5GHz band, there are two use cases:

- P_{Cell_ON}: This will be used when both Cellular and Wi-Fi radios are ON.
- P_{Cell_OFF}: This will be used when only Wi-Fi radio is ON

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Pow er (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
2.4	802.11b	1 Tx	1	2412	18.0	18.0	18.0	18.0
			2	2417	18.0	18.0	18.0	18.0
			3	2422	19.0	19.0	19.0	19.0
			6	2437	19.0	19.0	19.0	19.0
			10	2457	19.0	19.0	19.0	19.0
			11	2462	18.0	18.0	18.0	18.0
			12	2467	16.5	16.5	16.5	16.5
			13	2472	12.0	12.0	12.0	12.0
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Pow er (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.2	802.11a	1 Tx	40	5200	Not required	Not required	19.5	Not required
			44	5220			20.9	
			48	5240			19.5	
	802.11n	1 Tx HT40	38	5190	Not required	Not required	Not required	15.5
			46	5230			Not required	17.3
	802.11ac	1 Tx VHT80	42	5210	15.0	Not required	Not required	Not required
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Pow er (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.3	802.11a	1 Tx	52	5260	Not required	19.5	Not required	Not required
			56	5280		19.5		
			60	5300		19.5		
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Pow er (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.5	802.11a	1 Tx	108	5540	Not required	20.2	Not required	Not required
			120	5600		20.2		
			132	5660		20.2		
	802.11ac	1 Tx VHT80	106	5530	13.0	Not required	13.0	13.0
			122	5610	13.2		17.7	16.3
			138	5690	12.8		17.7	16.3
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Pow er (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.8	802.11a	1 Tx	153	5765	Not required	19.5	Not required	20.0
			157	5785		19.5		19.8
			161	5805		19.5		19.8
	802.11ac	1 Tx VHT80	155	5775	14.3	Not required	17.3	Not required

Note(s):

1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.

9.9. WLAN MIMO (P_{Cell_OFF})

For 2.4 & 5GHz band, there are two use cases:

- P_{Cell_ON} : This will be used when both Cellular and Wi-Fi radios are ON.
- P_{Cell_OFF} : This will be used when only Wi-Fi radio is ON

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
2.4	802.11g	2 Tx CDD	1	2412	13.5	13.5	13.5	13.5
			2	2417	16.5	16.5	16.5	16.5
			3	2422	19.0	19.0	19.0	19.0
			6	2437	19.0	19.0	19.0	19.0
			9	2452	19.0	19.0	19.0	19.0
			10	2457	16.0	16.0	16.0	16.0
			11	2462	14.0	14.0	14.0	14.0
			12	2467	11.0	11.0	11.0	11.0
			13	2472	2.0	2.0	2.0	2.0
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.2	802.11n	2 Tx HT40 CDD/STBC/SDM	38	5190	13.4	13.5	13.5	13.5
			46	5230	14.9	18.0	18.0	17.2
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.5	802.11n	2 Tx HT40 CDD/STBC/SDM	110	5550	13.1	18.0	Not required	
			118	5590	13.2	19.5		
			142	5710	13.2	19.0		
	802.11ac	2 Tx VHT80 CDD/STBC/SDM	106	5530	Not required		13.0	13.0
			122	5610			17.8	16.2
			138	5690			17.8	16.3
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Max. Avg. RF Output Power (dBm)			
					HEAD		BODY	
					Chain 0	Chain 1	Chain 0	Chain 1
5.8	802.11a	2 Tx CDD	153	5765	14.3	19.4	17.3	19.5
			157	5785	14.3	19.6	17.3	19.5
			161	5805	14.3	19.4	17.3	19.5

Note(s):

1. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.

9.10. Bluetooth

P_{High}

Band (GHz)	Mode	Ch #	Freq. (MHz)	Avg Pwr (dBm)
2.4	V3.0 + EDR, GFSK	0	2402	12.5
		39	2441	12.5
		78	2480	12.5

P_{Low}

Band (GHz)	Mode	Ch #	Freq. (MHz)	Avg Pwr (dBm)
2.4	V3.0 + EDR, GFSK	0	2402	10.0
		39	2441	10.0
		78	2480	10.0

$P_{Standalone}$

Band (GHz)	Mode	Ch #	Freq. (MHz)	Avg Pwr (dBm)
2.4	V3.0 + EDR, GFSK	0	2402	16.5
		39	2441	16.5
		78	2480	16.5

Notes:

1. Bluetooth P_{high} is used when Wi-Fi antenna is active and Cellular antenna is inactive.
2. Bluetooth P_{low} is used with Wi-Fi and Cellular antenna is active or Wi-Fi antenna inactive and Cellular antenna is active.
3. Bluetooth $P_{standalone}$ is used with Wi-Fi and Cellular antennas are inactive.

10. Measured and Reported (Scaled) SAR Results

SAR Test Reduction criteria are as follows:

KDB 447498 D01 General RF Exposure Guidance:

Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

- ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
- ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
- ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

KDB 648474 D04 Handset SAR:

With headset attached, when the reported SAR for body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

KDB 648474 D04 Handset SAR (Phablet Only):

This device qualifies as a phablet (display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm as applicable), and phablet procedures have been applied. Extremity SAR (10g SAR) at 5mm for hot spot mode is not required as the 1g SAR values at 10mm are all less than 1.2W/Kg.

KDB 941225 D01 SAR test for 3G devices:

When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode

KDB 941225 D05 SAR for LTE Devices:

SAR test reduction is applied using the following criteria:

- Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel.
- When the reported SAR is > 0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.
- Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are > 0.8 W/kg. Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation < 1.45 W/kg.
- Testing for 16-QAM modulation is not required because the reported SAR for QPSK is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of QPSK.
- Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.

KDB 248227 D01 SAR meas for 802.11:

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; these are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the initial test position(s) by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The initial test position(s) is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the reported SAR for the initial test position is:

- ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
- > 0.4 W/kg, SAR is repeated using the same wireless mode test configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions are tested.
 - For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
 - When it is unclear, all equivalent conditions must be tested.
- For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, measure the SAR for these positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required test channels are considered.
 - The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.
- When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.
- When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

To determine the initial test position, Area Scans were performed to determine the position with the *Maximum Value of SAR (measured)*. The position that produced the highest *Maximum Value of SAR* is considered the worst case position; thus used as the initial test position.

Additional Guidance: Manufacturer KDB inquiry mentioned in Sec. 2 was used to apply published KDB guidance to proprietary power control implemented in this device.

10.1. GSM850**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head (VoIP)	GPRS 2 Slots	0	Left Touch	190	836.6	28.0	28.0	0.237	0.237	0.137	0.137	
			Left Tilt	190	836.6	28.0	28.0	0.253	0.253	0.125	0.125	
			Right Touch	190	836.6	28.0	28.0	0.284	0.284	0.163	0.163	
			Right Tilt	190	836.6	28.0	28.0	0.234	0.234	0.120	0.120	
Body-worn(VoIP) & Hotspot	GPRS 2 Slots	5	Rear	190	836.6	28.0	28.0	0.189	0.189	0.103	0.103	
Front			190	836.6	28.0	28.0	0.205	0.205	0.113	0.113		
Hotspot			Edge 1	190	836.6	28.0	28.0	0.176	0.176	0.082	0.082	
			Edge 2	190	836.6	28.0	28.0	0.094	0.094	0.062	0.062	
			Edge 4	190	836.6	28.0	28.0	0.027	0.027	0.017	0.017	

LAT

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head (VoIP)	GPRS 2 Slots	0	Left Touch	190	836.6	32.5	32.5	0.399	0.399	0.305	0.305	1
			Left Tilt	190	836.6	32.5	32.5	0.261	0.261	0.207	0.207	
			Right Touch	190	836.6	32.5	32.5	0.318	0.318	0.249	0.249	
			Right Tilt	190	836.6	32.5	32.5	0.241	0.241	0.194	0.194	
Body-worn(VoIP) & Hotspot	GPRS 2 Slots	5	Rear	128	824.2	32.5	32.5	0.806	0.806	0.477	0.477	
				190	836.6	32.5	32.5	0.912	0.912	0.539	0.539	
				251	848.8	32.5	32.5	0.994	0.994	0.571	0.571	
			Front	128	824.2	32.5	32.5	0.939	0.939	0.527	0.527	
				190	836.6	32.5	32.5	1.120	1.120	0.625	0.625	2
				251	848.8	32.5	32.5	1.110	1.110	0.608	0.608	
Hotspot		Edge 2	190	836.6	32.5	32.5	0.401	0.401	0.266	0.266		
		Edge 3	190	836.6	32.5	32.5	0.681	0.681	0.320	0.320		
		Edge 4	128	824.2	32.5	32.5	0.948	0.948	0.630	0.630		
			190	836.6	32.5	32.5	1.030	1.030	0.684	0.684		
			251	848.8	32.5	32.5	0.994	0.994	0.656	0.656		

10.2. GSM1900**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.		
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled			
Head VoIP	GPRS 2 Slots	0	Left Touch	661	1880.0	23.2	22.7	0.093	0.104	0.045	0.050			
			Left Tilt	661	1880.0	23.2	22.7	0.118	0.132	0.055	0.062			
			Right Touch	661	1880.0	23.2	22.7	0.348	0.390	0.175	0.196			
			Right Tilt	661	1880.0	23.2	22.7	0.340	0.381	0.152	0.171			
Body-worn(VoIP) & Hotspot	GPRS 2 Slots	5	Rear	661	1880.0	23.2	23.2	0.118	0.118	0.057	0.057			
Front			661	1880.0	23.2	23.2	0.496	0.496	0.226	0.226				
Hotspot			Edge 1	661	1880.0	23.2	23.2	0.123	0.123	0.049	0.049			
			Edge 2	661	1880.0	23.2	23.2	0.007	0.007	0.003	0.003			
			Edge 4	661	1880.0	23.2	23.2	0.094	0.094	0.052	0.052			

LAT

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head VoIP	GPRS 2 Slots	0	Left Touch	661	1880.0	29.5	29.4	0.241	0.247	0.160	0.164	3
			Left Tilt	661	1880.0	29.5	29.4	0.145	0.148	0.091	0.093	
			Right Touch	661	1880.0	29.5	29.4	0.476	0.487	0.300	0.307	
			Right Tilt	661	1880.0	29.5	29.4	0.148	0.151	0.089	0.091	
Body-worn(VoIP) & Hotspot	GPRS 2 Slots	5	Rear	512	1850.2	25.5	25.2	0.727	0.779	0.418	0.448	
				661	1880.0	25.5	25.0	0.770	0.864	0.442	0.496	
				810	1909.8	25.5	25.1	0.729	0.799	0.420	0.461	
			Front	512	1850.2	25.5	25.2	1.020	1.093	0.570	0.611	
				661	1880.0	25.5	25.0	0.962	1.079	0.539	0.605	
				810	1909.8	25.5	25.1	1.010	1.107	0.572	0.627	
Hotspot			Edge 2	661	1880.0	25.5	25.0	0.705	0.791	0.399	0.448	
			Edge 3	512	1850.2	25.5	25.2	0.710	0.761	0.348	0.373	
				661	1880.0	25.5	25.0	0.750	0.842	0.367	0.412	
				810	1909.8	25.5	25.1	0.763	0.837	0.372	0.408	
Edge 4	661	1880.0	25.5	25.0	0.075	0.084	0.041	0.046				

10.3. W-CDMA Band V**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	Rel 99 RMC	0	Left Touch	4183	836.6	22.0	22.0	0.657	0.657	0.392	0.392	5
			Left Tilt	4183	836.6	22.0	22.0	0.532	0.532	0.261	0.261	
			Right Touch	4183	836.6	22.0	22.0	0.733	0.733	0.465	0.465	
			Right Tilt	4183	836.6	22.0	22.0	0.448	0.448	0.256	0.256	
Body-worn & Hotspot	Rel 99 RMC	5	Rear	4183	836.6	22.0	22.0	0.334	0.334	0.207	0.207	
			Front	4183	836.6	22.0	22.0	0.358	0.358	0.228	0.228	
Hotspot	Rel 99 RMC	5	Edge 1	4183	836.6	22.0	22.0	0.141	0.141	0.066	0.066	
			Edge 2	4183	836.6	22.0	22.0	0.259	0.259	0.172	0.172	
			Edge 4	4183	836.6	22.0	22.0	0.147	0.147	0.097	0.097	

LAT

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	Rel 99 RMC	0	Left Touch	4183	836.6	25.0	25.0	0.408	0.408	0.311	0.311	
			Left Tilt	4183	836.6	25.0	25.0	0.176	0.176	0.140	0.140	
			Right Touch	4183	836.6	25.0	25.0	0.327	0.327	0.255	0.255	
			Right Tilt	4183	836.6	25.0	25.0	0.173	0.173	0.139	0.139	
Body-worn & Hotspot	Rel 99 RMC	5	Rear	4183	836.6	25.0	25.0	0.662	0.662	0.387	0.387	
			Front	4132	826.4	25.0	25.0	0.947	0.947	0.516	0.516	
				4183	836.6	25.0	25.0	1.040	1.040	0.572	0.572	
				4233	846.6	25.0	25.0	1.110	1.110	0.603	0.603	
Hotspot	Rel 99 RMC	5	Edge 2	4183	836.6	25.0	25.0	0.231	0.231	0.152	0.152	
			Edge 3	4183	836.6	25.0	25.0	0.676	0.676	0.312	0.312	
			Edge 4	4183	836.6	25.0	25.0	0.735	0.735	0.482	0.482	

10.4. W-CDMA Band IV**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	Rel 99 RMC	0	Left Touch	1413	1732.6	19.3	19.2	0.554	0.567	0.292	0.299	7
			Left Tilt	1413	1732.6	19.3	19.2	0.572	0.585	0.295	0.302	
			Right Touch	1312	1712.4	19.3	19.2	0.945	0.967	0.506	0.518	
				1413	1732.6	19.3	19.2	1.010	1.034	0.546	0.559	
				1513	1752.6	19.3	19.2	0.996	1.019	0.549	0.562	
			Right Tilt	1312	1712.4	19.3	19.2	0.863	0.883	0.431	0.441	
				1413	1732.6	19.3	19.2	0.952	0.974	0.475	0.486	
				1513	1752.6	19.3	19.2	0.894	0.915	0.452	0.463	
Body-worn & Hotspot	Rel 99 RMC	5	Rear	1413	1732.6	21.0	20.8	0.376	0.394	0.219	0.229	
			Front	1413	1732.6	21.0	20.8	0.542	0.568	0.283	0.296	
Hotspot	Rel 99 RMC	5	Edge 1	1312	1712.4	21.0	20.8	0.697	0.730	0.339	0.355	
				1413	1732.6	21.0	20.8	0.833	0.872	0.393	0.412	
				1513	1752.6	21.0	20.8	0.649	0.680	0.321	0.336	
			Edge 2	1413	1732.6	21.0	20.8	0.025	0.027	0.014	0.015	
			Edge 4	1413	1732.6	21.0	20.8	0.402	0.421	0.224	0.235	
				1413	1732.6	21.0	20.8	0.402	0.421	0.224	0.235	

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RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	Rel 99 RMC	0	Left Touch	1413	1732.6	25.2	25.2	0.274	0.274	0.188	0.188	
			Left Tilt	1413	1732.6	25.2	25.2	0.204	0.204	0.119	0.119	
			Right Touch	1413	1732.6	25.2	25.2	0.774	0.774	0.480	0.480	
			Right Tilt	1413	1732.6	25.2	25.2	0.169	0.169	0.107	0.107	
Body-worn & Hotspot	Rel 99 RMC	5	Rear	1312	1712.4	21.5	21.4	0.842	0.862	0.474	0.485	8
				1413	1732.6	21.5	21.5	0.829	0.829	0.465	0.465	
				1513	1752.6	21.5	21.5	0.807	0.807	0.452	0.452	
			Front	1312	1712.4	21.5	21.4	0.866	0.886	0.482	0.493	
				1413	1732.6	21.5	21.5	0.856	0.856	0.474	0.474	
				1513	1752.6	21.5	21.5	0.850	0.850	0.469	0.469	
Hotspot	Rel 99 RMC	5	Edge 2	1413	1732.6	21.5	21.5	0.678	0.678	0.380	0.380	9
			Edge 3	1312	1712.4	21.5	21.4	0.972	0.995	0.475	0.486	
				1413	1732.6	21.5	21.5	0.969	0.969	0.472	0.472	
				1513	1752.6	21.5	21.5	0.964	0.964	0.469	0.469	
			Edge 4	1413	1732.6	21.5	21.5	0.090	0.090	0.051	0.051	
				1413	1732.6	21.5	21.5	0.090	0.090	0.051	0.051	

10.5. W-CDMA Band II**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	Rel 99 RMC	0	Left Touch	9400	1880.0	18.0	18.0	0.420	0.420	0.226	0.226	10
			Left Tilt	9400	1880.0	18.0	18.0	0.421	0.421	0.216	0.216	
			Right Touch	9262	1852.4	18.0	17.8	0.877	0.918	0.493	0.516	
				9400	1880.0	18.0	18.0	0.907	0.907	0.507	0.507	
				9538	1907.6	18.0	17.9	0.877	0.897	0.485	0.496	
			Right Tilt	9400	1880.0	18.0	18.0	0.717	0.717	0.365	0.365	
Body-worn & Hotspot	Rel 99 RMC	5	Rear	9400	1880.0	20.3	19.8	0.501	0.562	0.271	0.304	
			Front	9262	1852.4	20.3	20.0	0.879	0.931	0.451	0.478	
				9400	1880.0	20.3	19.8	0.813	0.912	0.420	0.471	
				9538	1907.6	20.3	20.0	0.804	0.852	0.420	0.445	
Hotspot	Rel 99 RMC	5	Edge 1	9400	1880.0	20.3	19.8	0.429	0.481	0.218	0.245	
			Edge 2	9400	1880.0	20.3	19.8	0.044	0.049	0.024	0.027	
			Edge 4	9400	1880.0	20.3	19.8	0.404	0.453	0.222	0.249	

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RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	Rel 99 RMC	0	Left Touch	9400	1880.0	25.2	25.0	0.370	0.387	0.252	0.264	
			Left Tilt	9400	1880.0	25.2	25.0	0.224	0.235	0.139	0.146	
			Right Touch	9262	1852.4	25.2	25.1	0.775	0.793	0.502	0.514	
				9400	1880.0	25.2	25.0	0.854	0.894	0.545	0.571	
				9538	1907.6	25.2	25.0	0.872	0.913	0.556	0.582	
			Right Tilt	9400	1880.0	25.2	25.0	0.231	0.242	0.141	0.148	
Body-worn & Hotspot	Rel 99 RMC	5	Rear	9262	1852.4	20.5	20.5	0.791	0.791	0.437	0.437	
				9400	1880.0	20.5	20.5	0.811	0.811	0.448	0.448	
				9538	1907.6	20.5	20.5	0.849	0.849	0.465	0.465	
			Front	9262	1852.4	20.5	20.5	0.947	0.947	0.507	0.507	
				9400	1880.0	20.5	20.5	0.804	0.804	0.437	0.437	
				9538	1907.6	20.5	20.5	0.977	0.977	0.526	0.526	11
Hotspot	Rel 99 RMC	5	Edge 2	9400	1880.0	20.5	20.5	0.634	0.634	0.348	0.348	
			Edge 3	9400	1880.0	20.5	20.5	0.705	0.705	0.333	0.333	
			Edge 4	9400	1880.0	20.5	20.5	0.075	0.075	0.041	0.041	

10.6. CDMA BC0**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	1xRTT (RC3 SO55)	0	Left Touch	384	836.5	22.0	22.0	0.646	0.646	0.482	0.482	
			Left Tilt	384	836.5	22.0	22.0	0.602	0.602	0.283	0.283	
			Right Touch	384	836.5	22.0	22.0	0.673	0.673	0.437	0.437	
			Right Tilt	384	836.5	22.0	22.0	0.437	0.437	0.247	0.247	
	1xEVDO (Rel. 0)	0	Left Touch	384	836.5	22.0	22.0	0.645	0.645	0.460	0.460	
			Left Tilt	384	836.5	22.0	22.0	0.612	0.612	0.285	0.285	
			Right Touch	384	836.5	22.0	22.0	0.735	0.735	0.482	0.482	12
			Right Tilt	384	836.5	22.0	22.0	0.486	0.486	0.271	0.271	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	384	836.5	22.0	22.0	0.335	0.335	0.206	0.206	
			Front	384	836.5	22.0	22.0	0.378	0.378	0.239	0.239	
Hotspot	1xRTT (RC3 SO32)	5	Edge 1	384	836.5	22.0	22.0	0.155	0.155	0.073	0.073	
			Edge 2	384	836.5	22.0	22.0	0.323	0.323	0.214	0.214	
			Edge 4	384	836.5	22.0	22.0	0.160	0.160	0.105	0.105	

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RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	1xRTT (RC3 SO55)	0	Left Touch	384	836.5	25.0	25.0	0.542	0.542	0.414	0.414	
			Left Tilt	384	836.5	25.0	25.0	0.226	0.226	0.180	0.180	
			Right Touch	384	836.5	25.0	25.0	0.394	0.394	0.306	0.306	
			Right Tilt	384	836.5	25.0	25.0	0.221	0.221	0.178	0.178	
	1xEVDO (Rel. 0)	0	Left Touch	384	836.5	25.0	25.0	0.372	0.372	0.284	0.284	
			Left Tilt	384	836.5	25.0	25.0	0.180	0.180	0.142	0.142	
			Right Touch	384	836.5	25.0	25.0	0.270	0.270	0.214	0.214	
			Right Tilt	384	836.5	25.0	25.0	0.181	0.181	0.142	0.142	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	1013	824.7	25.0	25.0	0.793	0.793	0.462	0.462	
				384	836.5	25.0	25.0	0.932	0.932	0.534	0.534	
				777	848.3	25.0	25.0	0.795	0.795	0.453	0.453	
			Front	1013	824.7	25.0	25.0	0.957	0.957	0.550	0.550	
				384	836.5	25.0	25.0	1.100	1.100	0.621	0.621	13
				777	848.3	25.0	25.0	0.879	0.879	0.498	0.498	
Hotspot	1xRTT (RC3 SO32)	5	Edge 2	384	836.5	25.0	25.0	0.421	0.421	0.277	0.277	
				1013	824.7	25.0	25.0	0.876	0.876	0.407	0.407	
			Edge 3	384	836.5	25.0	25.0	0.998	0.998	0.459	0.459	
				777	848.3	25.0	25.0	0.910	0.910	0.406	0.406	
				1013	824.7	25.0	25.0	0.959	0.959	0.635	0.635	
			Edge 4	384	836.5	25.0	25.0	1.030	1.030	0.680	0.680	
				777	848.3	25.0	25.0	0.856	0.856	0.563	0.563	

10.7. CDMA BC1**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	1xRTT (RC3 SO55)	0	Left Touch	600	1880.0	18.0	18.0	0.473	0.473	0.255	0.255	
			Left Tilt	600	1880.0	18.0	18.0	0.412	0.412	0.212	0.212	
			Right Touch	25	1851.3	18.0	18.0	0.966	0.966	0.523	0.523	
				600	1880.0	18.0	18.0	0.970	0.970	0.529	0.529	
				1175	1908.8	18.0	18.0	0.961	0.961	0.521	0.521	
			Right Tilt	600	1880.0	18.0	18.0	0.686	0.686	0.353	0.353	
	1xEVDO (Rel. 0)	0	Left Touch	600	1880.0	18.0	18.0	0.384	0.384	0.203	0.203	
			Left Tilt	600	1880.0	18.0	18.0	0.338	0.338	0.174	0.174	
			Right Touch	600	1880.0	18.0	18.0	0.717	0.717	0.405	0.405	
			Right Tilt	600	1880.0	18.0	18.0	0.583	0.583	0.286	0.286	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	600	1880.0	20.3	19.8	0.648	0.719	0.348	0.386	
			Front	25	1851.3	20.3	19.8	0.789	0.875	0.416	0.461	
				600	1880.0	20.3	19.8	0.802	0.890	0.423	0.469	
				1175	1908.8	20.3	19.8	0.793	0.880	0.411	0.456	
Hotspot	1xRTT (RC3 SO32)	5	Edge 1	600	1880.0	20.3	19.8	0.558	0.619	0.285	0.316	
			Edge 2	600	1880.0	20.3	19.8	0.054	0.060	0.029	0.032	
			Edge 4	600	1880.0	20.3	19.8	0.514	0.570	0.278	0.308	

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RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	1xRTT (RC3 SO55)	0	Left Touch	600	1880.0	25.2	24.7	0.336	0.377	0.226	0.254	
			Left Tilt	600	1880.0	25.2	24.7	0.203	0.228	0.125	0.140	
			Right Touch	25	1851.3	25.2	24.2	0.537	0.676	0.346	0.436	
				600	1880.0	25.2	24.7	0.718	0.806	0.456	0.512	
				1175	1908.8	25.2	24.6	0.863	0.991	0.544	0.625	14
			Right Tilt	600	1880.0	25.2	24.7	0.193	0.217	0.120	0.135	
	1xEVDO (Rel. 0)	0	Left Touch	600	1880.0	25.2	24.1	0.316	0.407	0.212	0.273	
			Left Tilt	600	1880.0	25.2	24.1	0.230	0.296	0.139	0.179	
			Right Touch	25	1851.3	25.2	24.1	0.573	0.738	0.370	0.477	
				600	1880.0	25.2	24.1	0.643	0.828	0.408	0.526	
				1175	1908.8	25.2	24.0	0.692	0.912	0.437	0.576	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	600	1880.0	25.2	24.1	0.209	0.269	0.129	0.166	
				25	1851.3	20.5	20.5	0.782	0.782	0.442	0.442	
				600	1880.0	20.5	20.5	0.876	0.876	0.492	0.492	
			Front	1175	1908.8	20.5	20.5	0.923	0.923	0.515	0.515	
				25	1851.3	20.5	20.5	1.000	1.000	0.558	0.558	
				600	1880.0	20.5	20.5	1.090	1.090	0.608	0.608	
Hotspot	1xRTT (RC3 SO32)	5		1175	1908.8	20.5	20.5	1.110	1.110	0.616	0.616	15
			Edge 2	600	1880.0	20.5	20.5	0.777	0.777	0.435	0.435	
			Edge 3	600	1880.0	20.5	20.5	0.734	0.734	0.357	0.357	
			Edge 4	600	1880.0	20.5	20.5	0.085	0.085	0.046	0.046	

10.8. CDMA BC10**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	1xRTT (RC3 SO55)	0	Left Touch	580	820.5	22.0	22.0	0.653	0.653	0.416	0.416	16
			Left Tilt	580	820.5	22.0	22.0	0.485	0.485	0.243	0.243	
			Right Touch	580	820.5	22.0	22.0	0.762	0.762	0.487	0.487	
			Right Tilt	580	820.5	22.0	22.0	0.445	0.445	0.254	0.254	
	1xEVDO (Rel. 0)	0	Left Touch	580	820.5	22.0	22.0	0.649	0.649	0.404	0.404	
			Left Tilt	580	820.5	22.0	22.0	0.451	0.451	0.220	0.220	
			Right Touch	580	820.5	22.0	22.0	0.689	0.689	0.448	0.448	
			Right Tilt	580	820.5	22.0	22.0	0.401	0.401	0.227	0.227	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	580	820.5	22.0	22.0	0.277	0.277	0.177	0.177	
			Front	580	820.5	22.0	22.0	0.336	0.336	0.216	0.216	
Hotspot	1xRTT (RC3 SO32)	5	Edge 1	580	820.5	22.0	22.0	0.100	0.100	0.046	0.046	
			Edge 2	580	820.5	22.0	22.0	0.284	0.284	0.188	0.188	
			Edge 4	580	820.5	22.0	22.0	0.161	0.161	0.105	0.105	

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RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
						Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	1xRTT (RC3 SO55)	0	Left Touch	580	820.5	25.0	25.0	0.434	0.434	0.331	0.331	
			Left Tilt	580	820.5	25.0	25.0	0.200	0.200	0.160	0.160	
			Right Touch	580	820.5	25.0	25.0	0.331	0.331	0.262	0.262	
			Right Tilt	580	820.5	25.0	25.0	0.170	0.170	0.137	0.137	
	1xEVDO (Rel. 0)	0	Left Touch	580	820.5	25.0	25.0	0.288	0.288	0.223	0.223	
			Left Tilt	580	820.5	25.0	25.0	0.115	0.115	0.093	0.093	
			Right Touch	580	820.5	25.0	25.0	0.214	0.214	0.167	0.167	
			Right Tilt	580	820.5	25.0	25.0	0.104	0.104	0.083	0.083	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	580	820.5	25.0	25.0	0.716	0.716	0.405	0.405	
			Front	476	817.9	25.0	25.0	0.838	0.838	0.488	0.488	
				580	820.5	25.0	25.0	0.960	0.960	0.552	0.552	
				684	823.1	25.0	25.0	0.637	0.637	0.369	0.369	
Hotspot	1xRTT (RC3 SO32)	5	Edge 2	580	820.5	25.0	25.0	0.312	0.312	0.206	0.206	
			Edge 3	580	820.5	25.0	25.0	0.612	0.612	0.290	0.290	
			Edge 4	476	817.9	25.0	25.0	0.718	0.718	0.477	0.477	
				580	820.5	25.0	25.0	0.802	0.802	0.534	0.534	
				684	823.1	25.0	25.0	0.561	0.561	0.373	0.373	

10.9. LTE Band 2 (20MHz Bandwidth)

SAR for LTE Band 2 (Frequency range: 1850 – 1910 MHz) is covered by LTE Band 25 (Frequency range: 1850 – 1915 MHz) due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

10.10. LTE Band 4 (20MHz Bandwidth)**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	20175	1732.5	1	49	19.3	19.3	0.533	0.533	0.283	0.283	
						50	24	19.3	19.2	0.521	0.527	0.277	0.280	
			Left Tilt	20175	1732.5	1	49	19.3	19.3	0.566	0.566	0.293	0.293	
						50	24	19.3	19.2	0.555	0.561	0.288	0.291	
			Right Touch	20050	1720.0	1	49	19.3	19.2	0.891	0.901	0.472	0.477	
						50	24	19.3	19.3	0.889	0.889	0.460	0.460	
				20175	1732.5	1	49	19.3	19.3	0.922	0.922	0.492	0.492	
						50	24	19.3	19.2	0.926	0.937	0.495	0.501	
						100	0	19.3	19.3	0.911	0.911	0.476	0.476	
				20300	1745.0	1	49	19.3	19.1	0.914	0.946	0.493	0.510	18
						50	24	19.3	19.2	0.909	0.920	0.471	0.476	
			Right Tilt	20050	1720.0	1	49	19.3	19.2	0.852	0.862	0.412	0.417	
						50	24	19.3	19.3	0.822	0.822	0.405	0.405	
				20175	1732.5	1	49	19.3	19.3	0.856	0.856	0.417	0.417	
						50	24	19.3	19.2	0.814	0.823	0.409	0.414	
						100	0	19.3	19.3	0.879	0.879	0.429	0.429	
				20300	1745.0	1	49	19.3	19.1	0.805	0.833	0.405	0.419	
						50	24	19.3	19.2	0.845	0.855	0.421	0.426	
Body-worn & Hotspot	QPSK	5	Rear	20175	1732.5	1	49	20.5	20.4	0.313	0.320	0.176	0.180	
						50	24	19.5	19.5	0.192	0.192	0.110	0.110	
			Front	20175	1732.5	1	49	20.5	20.4	0.580	0.594	0.290	0.297	
						50	24	19.5	19.5	0.348	0.348	0.178	0.178	
Hotspot	QPSK	5	Edge 1	20175	1732.5	1	49	20.5	20.4	0.456	0.467	0.215	0.220	
						50	24	19.5	19.5	0.407	0.407	0.189	0.189	
			Edge 2	20175	1732.5	1	49	20.5	20.4	0.011	0.011	0.005	0.005	
						50	24	19.5	19.5	0.016	0.016	0.008	0.008	
			Edge 4	20175	1732.5	1	49	20.5	20.4	0.317	0.324	0.175	0.179	
						50	24	19.5	19.5	0.277	0.277	0.151	0.151	

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RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	20175	1732.5	1	49	24.5	24.5	0.284	0.284	0.195	0.195	
						50	24	23.5	23.5	0.233	0.233	0.160	0.160	
			Left Tilt	20175	1732.5	1	49	24.5	24.5	0.253	0.253	0.146	0.146	
						50	24	23.5	23.5	0.208	0.208	0.120	0.120	
			Right Touch	20175	1732.5	1	49	24.5	24.5	0.459	0.459	0.300	0.300	
						50	24	23.5	23.5	0.391	0.391	0.257	0.257	
			Right Tilt	20175	1732.5	1	49	24.5	24.5	0.173	0.173	0.107	0.107	
						50	24	23.5	23.5	0.167	0.167	0.102	0.102	
Body-worn & Hotspot	QPSK	5	Rear	20175	1732.5	1	49	21.5	21.5	0.515	0.515	0.298	0.298	
						50	24	21.5	21.5	0.530	0.530	0.307	0.307	
			Front	20050	1720.0	1	49	21.5	21.5	0.853	0.853	0.475	0.475	
						50	24	21.5	21.5	0.886	0.886	0.491	0.491	
				20175	1732.5	1	49	21.5	21.5	0.899	0.899	0.497	0.497	
						50	24	21.5	21.5	0.845	0.845	0.469	0.469	
						100	0	21.5	21.5	0.891	0.891	0.493	0.493	19
				20300	1745.0	1	49	21.5	21.5	0.832	0.832	0.461	0.461	
						50	24	21.5	21.5	0.840	0.840	0.464	0.464	
Hotspot	QPSK	5	Edge 2	20175	1732.5	1	49	21.5	21.5	0.653	0.653	0.363	0.363	
						50	24	21.5	21.5	0.670	0.670	0.372	0.372	
			Edge 3	20050	1720.0	1	49	21.5	21.5	0.992	0.992	0.483	0.483	
						50	24	21.5	21.5	1.010	1.010	0.492	0.492	
				20175	1732.5	1	49	21.5	21.5	0.976	0.976	0.474	0.474	
						50	24	21.5	21.5	1.000	1.000	0.486	0.486	
						100	0	21.5	21.5	1.040	1.040	0.502	0.502	
				20300	1745.0	1	49	21.5	21.5	1.020	1.020	0.499	0.499	
						50	24	21.5	21.5	1.060	1.060	0.515	0.515	20
			Edge 4	20175	1732.5	1	49	21.5	21.5	0.084	0.084	0.048	0.048	
						50	24	21.5	21.5	0.088	0.088	0.050	0.050	

10.11. LTE Band 5 (10MHz Bandwidth)

SAR for LTE Band 5 (Frequency range: 824 – 849 MHz) is covered by LTE Band 26 (Frequency range: 814 – 849 MHz) due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

10.12. LTE Band 7 (20MHz Bandwidth)**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	21100	2535.0	1	49	15.8	15.7	0.340	0.348	0.167	0.171	
						50	24	15.8	15.6	0.376	0.394	0.168	0.176	
			Left Tilt	21100	2535.0	1	49	15.8	15.7	0.364	0.372	0.169	0.173	
						50	24	15.8	15.6	0.369	0.386	0.177	0.185	
			Right Touch	20850	2510.0	1	49	15.8	15.7	0.734	0.751	0.301	0.308	
						50	24	15.8	15.7	0.716	0.733	0.296	0.303	
				21100	2535.0	1	49	15.8	15.7	0.846	0.866	0.334	0.342	
						50	24	15.8	15.6	0.922	0.965	0.364	0.381	
						100	0	15.8	15.6	0.739	0.774	0.294	0.308	
				21350	2560.0	1	49	15.8	15.7	1.030	1.054	0.403	0.412	21
						50	24	15.8	15.8	0.784	0.784	0.312	0.312	
			Right Tilt	20850	2510.0	1	49	15.8	15.7	0.569	0.582	0.214	0.219	
						50	24	15.8	15.7	0.572	0.585	0.216	0.221	
				21100	2535.0	1	49	15.8	15.7	0.838	0.858	0.305	0.312	
						50	24	15.8	15.6	0.852	0.892	0.311	0.326	
						100	0	15.8	15.6	0.778	0.815	0.278	0.291	
				21350	2560.0	1	49	15.8	15.7	0.771	0.789	0.284	0.291	
						50	24	15.8	15.8	0.780	0.780	0.288	0.288	
Body-worn & Hotspot	QPSK	5	Rear	21100	2535.0	1	49	18.8	18.8	0.567	0.567	0.226	0.226	
						50	24	18.8	18.7	0.583	0.597	0.231	0.236	
			Front	21100	2535.0	1	49	18.8	18.8	0.697	0.697	0.308	0.308	
						50	24	18.8	18.7	0.709	0.726	0.314	0.321	
Hotspot	QPSK	5	Edge 1	21100	2535.0	1	49	18.8	18.8	0.227	0.227	0.081	0.081	
						50	24	18.8	18.7	0.241	0.247	0.082	0.084	
			Edge 2	21100	2535.0	1	49	18.8	18.8	0.434	0.434	0.190	0.190	
						50	24	18.8	18.7	0.446	0.456	0.194	0.199	
			Edge 4	21100	2535.0	1	49	18.8	18.8	0.621	0.621	0.282	0.282	
						50	24	18.8	18.7	0.632	0.647	0.286	0.293	

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RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	21100	2535.0	1	49	24.0	23.8	0.379	0.397	0.209	0.219	
						50	24	23.5	22.8	0.311	0.366	0.171	0.201	
			Left Tilt	21100	2535.0	1	49	24.0	23.8	0.089	0.093	0.047	0.049	
						50	24	23.5	22.8	0.070	0.082	0.037	0.043	
			Right Touch	21100	2535.0	1	49	24.0	23.8	0.248	0.260	0.139	0.146	
						50	24	23.5	22.8	0.194	0.228	0.108	0.127	
			Right Tilt	21100	2535.0	1	49	24.0	23.8	0.133	0.139	0.073	0.076	
						50	24	23.5	22.8	0.113	0.133	0.059	0.069	
Body-worn & Hotspot	QPSK	5	Rear	21100	2535.0	1	49	16.5	16.5	0.482	0.482	0.186	0.186	
						50	24	16.5	16.5	0.479	0.479	0.186	0.186	
			Front	20850	2510.0	1	49	16.5	16.5	0.887	0.887	0.328	0.328	
						50	24	16.5	16.5	0.914	0.914	0.339	0.339	22
				21100	2535.0	1	49	16.5	16.5	0.889	0.889	0.329	0.329	
						50	24	16.5	16.5	0.896	0.896	0.331	0.331	
						100	0	16.5	16.5	0.824	0.824	0.308	0.308	
						1	49	16.5	16.5	0.852	0.852	0.318	0.318	
				21350	2560.0	50	24	16.5	16.5	0.894	0.894	0.333	0.333	
						1	49	16.5	16.5	0.852	0.852	0.318	0.318	
Hotspot	QPSK	5	Edge 2	21100	2535.0	1	49	16.5	16.5	0.013	0.013	0.006	0.006	
						50	24	16.5	16.5	0.013	0.013	0.005	0.005	
			Edge 3	21100	2535.0	1	49	16.5	16.5	0.551	0.551	0.176	0.176	
						50	24	16.5	16.5	0.480	0.480	0.154	0.154	
			Edge 4	21100	2535.0	1	49	16.5	16.5	0.380	0.380	0.166	0.166	
						50	24	16.5	16.5	0.368	0.368	0.159	0.159	

10.13. LTE Band 12 (10MHz Bandwidth)**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	23095	707.5	1	24	22.0	22.0	0.412	0.412	0.286	0.286	23
						25	12	21.0	21.0	0.345	0.345	0.241	0.241	
			Left Tilt	23095	707.5	1	24	22.0	22.0	0.412	0.412	0.231	0.231	
						25	12	21.0	21.0	0.350	0.350	0.196	0.196	
			Right Touch	23095	707.5	1	24	22.0	22.0	0.518	0.518	0.333	0.333	
						25	12	21.0	21.0	0.439	0.439	0.283	0.283	
			Right Tilt	23095	707.5	1	24	22.0	22.0	0.376	0.376	0.218	0.218	
						25	12	21.0	21.0	0.316	0.316	0.183	0.183	
			Rear	23095	707.5	1	24	22.0	22.0	0.201	0.201	0.133	0.133	
						25	12	21.0	21.0	0.171	0.171	0.114	0.114	
Body-worn & Hotspot	QPSK	5	Front	23095	707.5	1	24	22.0	22.0	0.216	0.216	0.147	0.147	
						25	12	21.0	21.0	0.182	0.182	0.123	0.123	
			Edge 1	23095	707.5	1	24	22.0	22.0	0.079	0.079	0.039	0.039	
						25	12	21.0	21.0	0.071	0.071	0.035	0.035	
			Edge 2	23095	707.5	1	24	22.0	22.0	0.315	0.315	0.212	0.212	
						25	12	21.0	21.0	0.265	0.265	0.179	0.179	
			Edge 4	23095	707.5	1	24	22.0	22.0	0.413	0.413	0.198	0.198	
						25	12	21.0	21.0	0.396	0.396	0.190	0.190	

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RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	23095	707.5	1	24.0	24.5	23.9	0.216	0.248	0.168	0.193	
						25	12.0	23.5	23.0	0.206	0.231	0.161	0.181	
			Left Tilt	23095	707.5	1	24.0	24.5	23.9	0.059	0.068	0.046	0.053	
						25	12.0	23.5	23.0	0.056	0.063	0.044	0.049	
			Right Touch	23095	707.5	1	24.0	24.5	23.9	0.178	0.204	0.139	0.160	
						25	12.0	23.5	23.0	0.163	0.183	0.127	0.142	
			Right Tilt	23095	707.5	1	24.0	24.5	23.9	0.067	0.077	0.052	0.060	
						25	12.0	23.5	23.0	0.068	0.076	0.052	0.058	
			Rear	23095	707.5	1	24.0	24.5	23.9	0.541	0.621	0.310	0.356	
						25	12.0	23.5	23.0	0.519	0.582	0.297	0.333	
Body-worn & Hotspot	QPSK	5	Front	23095	707.5	1	24.0	24.5	23.9	0.735	0.844	0.402	0.462	24
						25	12.0	23.5	23.0	0.695	0.780	0.385	0.432	
			Edge 2	23095	707.5	1	24.0	24.5	23.9	0.243	0.279	0.164	0.188	
						25	12.0	23.5	23.0	0.228	0.256	0.154	0.173	
			Edge 3	23095	707.5	1	24.0	24.5	23.9	0.413	0.474	0.198	0.227	
						25	12.0	23.5	23.0	0.396	0.444	0.190	0.213	
			Edge 4	23095	707.5	1	24.0	24.5	23.9	0.570	0.654	0.387	0.444	
						25	12.0	23.5	23.0	0.541	0.607	0.367	0.412	

10.14. LTE Band 13 (10MHz Bandwidth)**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	23230	782.0	1	24	22.0	21.9	0.403	0.412	0.249	0.255	25
						25	12	21.0	21.0	0.331	0.331	0.204	0.204	
			Left Tilt	23230	782.0	1	24	22.0	21.9	0.372	0.381	0.195	0.200	
						25	12	21.0	21.0	0.299	0.299	0.156	0.156	
			Right Touch	23230	782.0	1	24	22.0	21.9	0.478	0.489	0.289	0.296	
						25	12	21.0	21.0	0.385	0.385	0.233	0.233	
			Right Tilt	23230	782.0	1	24	22.0	21.9	0.351	0.359	0.185	0.189	
						25	12	21.0	21.0	0.284	0.284	0.149	0.149	
Body-worn & Hotspot	QPSK	5	Rear	23230	782.0	1	24	22.0	21.9	0.289	0.296	0.171	0.175	
						25	12	21.0	21.0	0.230	0.230	0.137	0.137	
			Front	23230	782.0	1	24	22.0	21.9	0.290	0.297	0.174	0.178	
						25	12	21.0	21.0	0.230	0.230	0.138	0.138	
Hotspot	QPSK	5	Edge 1	23230	782.0	1	24	22.0	21.9	0.228	0.233	0.107	0.109	
						25	12	21.0	21.0	0.180	0.180	0.084	0.084	
			Edge 2	23230	782.0	1	24	22.0	21.9	0.308	0.315	0.205	0.210	
						25	12	21.0	21.0	0.248	0.248	0.165	0.165	
			Edge 4	23230	782.0	1	24	22.0	21.9	0.145	0.148	0.096	0.098	
						25	12	21.0	21.0	0.116	0.116	0.077	0.077	

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RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	23230	782.0	1	24	24.5	24.4	0.310	0.317	0.235	0.240	
						25	12	23.5	23.4	0.268	0.274	0.204	0.209	
			Left Tilt	23230	782.0	1	24	24.5	24.4	0.159	0.163	0.125	0.128	
						25	12	23.5	23.4	0.147	0.150	0.117	0.120	
			Right Touch	23230	782.0	1	24	24.5	24.4	0.239	0.245	0.186	0.190	
						25	12	23.5	23.4	0.214	0.219	0.166	0.170	
			Right Tilt	23230	782.0	1	24	24.5	24.4	0.137	0.140	0.109	0.112	
						25	12	23.5	23.4	0.111	0.114	0.089	0.091	
Body-worn & Hotspot	QPSK	5	Rear	23230	782.0	1	24	24.5	24.4	0.683	0.699	0.385	0.394	
						25	12	23.5	23.4	0.609	0.623	0.342	0.350	
			Front	23230	782.0	1	24	24.5	24.4	0.758	0.776	0.419	0.429	
						25	12	23.5	23.4	0.681	0.697	0.371	0.380	
Hotspot	QPSK	5	Edge 2	23230	782.0	1	24	24.5	24.4	0.249	0.255	0.164	0.168	
						25	12	23.5	23.4	0.233	0.238	0.152	0.156	
			Edge 3	23230	782.0	1	24	24.5	24.4	0.621	0.635	0.287	0.294	
						25	12	23.5	23.4	0.592	0.606	0.271	0.277	
			Edge 4	23230	782.0	1	24	24.5	24.4	0.666	0.682	0.440	0.450	
						25	12	23.5	23.4	0.615	0.629	0.405	0.414	

10.15. LTE Band 17 (10MHz Bandwidth)

SAR for LTE Band 17 (Frequency range: 704 – 716 MHz) is covered by LTE Band 12 (Frequency range: 699 – 716 MHz) due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

10.16. LTE Band 25 (20MHz Bandwidth)**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	26365	1882.5	1	49	18.0	17.9	0.440	0.450	0.237	0.243	
						50	24	18.0	18.0	0.444	0.444	0.239	0.239	
			Left Tilt	26365	1882.5	1	49	18.0	17.9	0.416	0.426	0.213	0.218	
						50	24	18.0	18.0	0.421	0.421	0.215	0.215	
			Right Touch	26140	1860.0	1	49	18.0	18.0	0.902	0.902	0.496	0.496	
						50	24	18.0	18.0	0.915	0.915	0.501	0.501	27
				26365	1882.5	1	49	18.0	17.9	0.865	0.885	0.481	0.492	
						50	24	18.0	18.0	0.883	0.883	0.497	0.497	
						100	0	18.0	18.0	0.882	0.882	0.490	0.490	
				26590	1905.0	1	49	18.0	18.0	0.859	0.859	0.484	0.484	
						50	24	18.0	18.0	0.876	0.876	0.491	0.491	
			Right Tilt	26140	1860.0	1	49	18.0	17.9	0.704	0.720	0.358	0.366	
						50	24	18.0	18.0	0.714	0.714	0.363	0.363	
Body-worn & Hotspot	QPSK	5	Rear	26140	1882.5	1	49	20.3	19.8	0.481	0.540	0.256	0.287	
						50	24	19.5	19.4	0.401	0.410	0.214	0.219	
			Front	26140	1860.0	1	49	20.3	19.8	0.801	0.899	0.410	0.460	
				26365	1882.5	1	49	20.3	19.8	0.791	0.888	0.411	0.461	
						50	24	19.5	19.4	0.634	0.649	0.333	0.341	
				26590	1905.0	1	49	20.3	19.8	0.837	0.928	0.439	0.487	
Hotspot	QPSK	5	Edge 1	26365	1882.5	1	49	20.3	19.8	0.387	0.434	0.199	0.223	
						50	24	19.5	19.4	0.330	0.338	0.169	0.173	
			Edge 2	26365	1882.5	1	49	20.3	19.8	0.032	0.036	0.018	0.020	
						50	24	19.5	19.4	0.033	0.034	0.018	0.018	
			Edge 4	26365	1882.5	1	49	20.3	19.8	0.426	0.478	0.234	0.263	
						50	24	19.5	19.4	0.384	0.393	0.210	0.215	

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RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.			
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled				
Head	QPSK	0	Left Touch	26365	1882.5	1	49	24.5	24.2	0.278	0.298	0.182	0.195				
						50	24	23.5	23.3	0.248	0.260	0.164	0.172				
			Left Tilt	26365	1882.5	1	49	24.5	24.2	0.168	0.180	0.100	0.107				
						50	24	23.5	23.3	0.152	0.159	0.090	0.094				
			Right Touch	26365	1882.5	1	49	24.5	24.2	0.741	0.794	0.435	0.466				
						50	24	23.5	23.3	0.676	0.708	0.395	0.414				
			Right Tilt	26365	1882.5	1	49	24.5	24.2	0.165	0.177	0.100	0.107				
						50	24	23.5	23.3	0.152	0.159	0.092	0.096				
			Body-worn & Hotspot	QPSK	5	Rear	26365	1882.5	1	49	20.5	20.3	0.711	0.745	0.400	0.419	
									50	24	20.5	20.3	0.721	0.755	0.406	0.425	
						Front	26140	1860.0	1	49	20.5	20.3	0.942	0.986	0.510	0.534	
									50	24	20.5	20.4	0.952	0.974	0.514	0.526	
26365	1882.5	1					49	20.5	20.3	0.927	0.971	0.504	0.528				
		50					24	20.5	20.3	0.985	1.031	0.533	0.558				
		100					0	20.5	20.2	0.963	1.032	0.540	0.579				
26590	1905.0	1					49	20.5	20.5	1.010	1.010	0.550	0.550				
		50					24	20.5	20.4	1.020	1.044	0.552	0.565	28			
Hotspot	QPSK	5				Edge 2	26365	1882.5	1	49	20.5	20.3	0.675	0.707	0.361	0.378	
									50	24	20.5	20.3	0.694	0.727	0.373	0.391	
			Edge 3	26365	1882.5	1	49	20.5	20.3	0.687	0.719	0.327	0.342				
						50	24	20.5	20.3	0.614	0.643	0.288	0.302				
			Edge 4	26365	1882.5	1	49	20.5	20.3	0.086	0.090	0.047	0.049				
						50	24	20.5	20.3	0.089	0.093	0.048	0.051				

10.17. LTE Band 26 (10MHz Bandwidth)**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	26865	831.5	1	24	21.5	21.5	0.532	0.532	0.337	0.337	29
						25	12	20.5	20.5	0.420	0.420	0.263	0.263	
			Left Tilt	26865	831.5	1	24	21.5	21.5	0.371	0.371	0.185	0.185	
						25	12	20.5	20.5	0.295	0.295	0.147	0.147	
			Right Touch	26865	831.5	1	24	21.5	21.5	0.580	0.580	0.375	0.375	
						25	12	20.5	20.5	0.459	0.459	0.300	0.300	
			Right Tilt	26865	831.5	1	24	21.5	21.5	0.394	0.394	0.216	0.216	
						25	12	20.5	20.5	0.316	0.316	0.172	0.172	
			Rear	26865	831.5	1	24	21.5	21.5	0.238	0.238	0.151	0.151	
						25	12	20.5	20.5	0.191	0.191	0.121	0.121	
Body-worn & Hotspot	QPSK	5	Front	26865	831.5	1	24	21.5	21.5	0.267	0.267	0.171	0.171	
						25	12	20.5	20.5	0.215	0.215	0.137	0.137	
			Edge 1	26865	831.5	1	24	21.5	21.5	0.108	0.108	0.051	0.051	
						25	12	20.5	20.5	0.085	0.085	0.040	0.040	
			Edge 2	26865	831.5	1	24	21.5	21.5	0.229	0.229	0.151	0.151	
						25	12	20.5	20.5	0.183	0.183	0.121	0.121	
Hotspot	QPSK	5	Edge 4	26865	831.5	1	24	21.5	21.5	0.126	0.126	0.082	0.082	
						25	12	20.5	20.5	0.100	0.100	0.065	0.065	

LAT

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	26865	831.5	1	24	24.0	24.0	0.300	0.300	0.230	0.230	
						25	12	23.0	23.0	0.234	0.234	0.180	0.180	
			Left Tilt	26865	831.5	1	24	24.0	24.0	0.153	0.153	0.122	0.122	
						25	12	23.0	23.0	0.122	0.122	0.096	0.096	
			Right Touch	26865	831.5	1	24	24.0	24.0	0.233	0.233	0.180	0.180	
						25	12	23.0	23.0	0.185	0.185	0.144	0.144	
			Right Tilt	26865	831.5	1	24	24.0	24.0	0.140	0.140	0.110	0.110	
						25	12	23.0	23.0	0.116	0.116	0.090	0.090	
			Rear	26865	831.5	1	24	24.0	24.0	0.544	0.544	0.304	0.304	
						25	12	23.0	23.0	0.449	0.449	0.251	0.251	
Body-worn & Hotspot	QPSK	5	Front	26865	831.5	1	24	24.0	24.0	0.678	0.678	0.380	0.380	30
						25	12	23.0	23.0	0.550	0.550	0.307	0.307	
			Edge 2	26865	831.5	1	24	24.0	24.0	0.207	0.207	0.136	0.136	
						25	12	23.0	23.0	0.166	0.166	0.109	0.109	
			Edge 3	26865	831.5	1	24	24.0	24.0	0.605	0.605	0.275	0.275	
						25	12	23.0	23.0	0.487	0.487	0.220	0.220	
Hotspot	QPSK	5	Edge 4	26865	831.5	1	24	24.0	24.0	0.565	0.565	0.373	0.373	
						25	12	23.0	23.0	0.457	0.457	0.301	0.301	

10.18. LTE Band 27 (10MHz Bandwidth)

SAR for LTE Band 27 (Frequency range: 814 – 824 MHz) is covered by LTE Band 26 (Frequency range: 814 – 849 MHz) due to similar frequency range, similar maximum tune-up limit and same channel bandwidth.

10.19. LTE Band 30 (10MHz Bandwidth)**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	27710	2310.0	1	24	18.5	18.0	0.608	0.682	0.281	0.315	31
						25	12	18.5	18.0	0.498	0.559	0.228	0.256	
			Left Tilt	27710	2310.0	1	24	18.5	18.0	0.507	0.569	0.233	0.261	
						25	12	18.5	18.0	0.408	0.458	0.187	0.210	
			Right Touch	27710	2310.0	1	24	18.5	18.0	0.791	0.888	0.368	0.413	
						25	12	18.5	18.0	0.651	0.730	0.302	0.339	
			Right Tilt	27710	2310.0	1	24	18.5	18.0	0.638	0.716	0.295	0.331	
						25	12	18.5	18.0	0.520	0.583	0.239	0.268	
			Rear	27710	2310.0	1	24	19.3	18.8	0.537	0.603	0.252	0.283	
						25	12	18.5	18.0	0.412	0.462	0.193	0.217	
Body-worn & Hotspot	QPSK	5	Front	27710	2310.0	1	24	19.3	18.8	0.816	0.916	0.358	0.402	
						25	12	18.5	18.0	0.674	0.756	0.295	0.331	
			Edge 1	27710	2310.0	1	24	19.3	18.8	0.384	0.431	0.156	0.175	
						25	12	18.5	18.0	0.260	0.292	0.107	0.120	
Hotspot	QPSK	5	Edge 2	27710	2310.0	1	24	19.3	18.8	0.217	0.243	0.110	0.123	
						25	12	18.5	18.0	0.171	0.192	0.087	0.098	
			Edge 4	27710	2310.0	1	24	19.3	18.8	0.161	0.181	0.077	0.086	
						25	12	18.5	18.0	0.146	0.164	0.068	0.076	
			Edge 2	27710	2310.0	1	24	19.3	18.8	0.217	0.243	0.110	0.123	
						25	12	18.5	18.0	0.171	0.192	0.087	0.098	

LAT

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	27710	2310.0	1	24	23.0	23.0	0.149	0.149	0.087	0.087	
						25	12	23.0	23.0	0.140	0.140	0.080	0.080	
			Left Tilt	27710	2310.0	1	24	23.0	23.0	0.152	0.152	0.076	0.076	
						25	12	23.0	23.0	0.117	0.117	0.058	0.058	
			Right Touch	27710	2310.0	1	24	23.0	23.0	0.220	0.220	0.129	0.129	
						25	12	23.0	23.0	0.169	0.169	0.099	0.099	
			Right Tilt	27710	2310.0	1	24	23.0	23.0	0.137	0.137	0.073	0.073	
						25	12	23.0	23.0	0.114	0.114	0.060	0.060	
			Rear	27710	2310.0	1	24	18.3	18.1	0.608	0.637	0.247	0.259	
						25	12	18.3	18.3	0.615	0.615	0.249	0.249	
Body-worn & Hotspot	QPSK	5	Front	27710	2310.0	1	24	18.3	18.1	1.060	1.110	0.427	0.447	32
						25	12	18.3	18.3	1.090	1.090	0.438	0.438	
			Edge 2	27710	2310.0	1	24	18.3	18.1	0.299	0.313	0.147	0.154	
						25	12	18.3	18.3	0.305	0.305	0.150	0.150	
Hotspot	QPSK	5	Edge 3	27710	2310.0	1	24	18.3	18.1	0.650	0.681	0.234	0.245	
						25	12	18.3	18.3	0.651	0.651	0.235	0.235	
			Edge 4	27710	2310.0	1	24	18.3	18.1	0.154	0.161	0.080	0.084	
						25	12	18.3	18.3	0.157	0.157	0.081	0.081	
			Edge 2	27710	2310.0	1	24	18.3	18.1	0.299	0.313	0.147	0.154	
						25	12	18.3	18.3	0.305	0.305	0.150	0.150	

10.20. LTE Band 41 (20MHz Bandwidth)

UAT

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	40620	2593.0	1	49	18.5	18.5	0.623	0.623	0.253	0.253	
						50	24	18.5	18.5	0.628	0.628	0.255	0.255	
			Left Tilt	40620	2593.0	1	49	18.5	18.5	0.474	0.474	0.196	0.196	
						50	24	18.5	18.5	0.469	0.469	0.193	0.193	
			Right Touch	39750	2506.0	1	49	18.5	18.5	0.627	0.627	0.266	0.266	
						50	24	18.5	18.5	0.565	0.565	0.239	0.239	
				40185	2549.5	1	49	18.5	18.5	0.881	0.881	0.353	0.353	
						50	24	18.5	18.4	0.891	0.912	0.356	0.364	33
				40620	2593.0	1	49	18.5	18.5	0.820	0.820	0.339	0.339	
						50	24	18.5	18.5	0.812	0.812	0.337	0.337	
						100	0	18.5	18.5	0.816	0.816	0.339	0.339	
				41055	2636.5	1	49	18.5	18.5	0.629	0.629	0.269	0.269	
						50	24	18.5	18.5	0.633	0.633	0.272	0.272	
				41490	2680.0	1	49	18.5	18.5	0.521	0.521	0.231	0.231	
						50	24	18.5	18.5	0.519	0.519	0.229	0.229	
			Right Tilt	40620	2593.0	1	49	18.5	18.5	0.650	0.650	0.276	0.276	
						50	24	18.5	18.5	0.645	0.645	0.275	0.275	
Body-worn & Hotspot	QPSK	5	Rear	39750	2506.0	1	49	20.5	20.4	0.312	0.319	0.143	0.146	
				40185	2549.5	1	49	20.5	20.4	0.852	0.872	0.329	0.337	
				40620	2593.0	1	49	20.5	20.5	0.950	0.950	0.345	0.345	
						50	24	19.5	19.5	0.725	0.725	0.260	0.260	
				41055	2636.5	1	49	20.5	20.4	0.676	0.692	0.234	0.239	
				41490	2680.0	1	49	20.5	20.1	0.637	0.698	0.215	0.236	
			Front	40620	2593.0	1	49	20.5	20.5	0.669	0.669	0.299	0.299	
						50	24	19.5	19.5	0.648	0.648	0.283	0.283	
Hotspot	QPSK	5	Edge 1	40620	2593.0	1	49	20.5	20.5	0.290	0.290	0.104	0.104	
						50	24	19.5	19.5	0.213	0.213	0.073	0.073	
			Edge 2	40620	2593.0	1	49	20.5	20.5	0.314	0.314	0.135	0.135	
						50	24	19.5	19.5	0.266	0.266	0.111	0.111	
			Edge 4	40620	2593.0	1	49	20.5	20.5	0.236	0.236	0.104	0.104	
						50	24	19.5	19.5	0.207	0.207	0.090	0.090	

LAT

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Left Touch	40620	2593.0	1	49	22.5	22.5	0.273	0.273	0.146	0.146	
						50	24	22.5	21.3	0.180	0.237	0.095	0.125	
			Left Tilt	40620	2593.0	1	49	22.5	22.5	0.076	0.076	0.035	0.035	
						50	24	22.5	21.3	0.048	0.063	0.019	0.025	
			Right Touch	40620	2593.0	1	49	22.5	22.5	0.147	0.147	0.080	0.080	
						50	24	22.5	21.3	0.093	0.123	0.048	0.063	
Body-worn & Hotspot	QPSK	5	Rear	40620	2593.0	1	49	19.5	19.5	0.756	0.756	0.315	0.315	
						50	24	19.5	19.4	0.718	0.735	0.273	0.279	
			Front	39750	2506.0	1	49	19.5	19.4	1.010	1.034	0.371	0.380	
						50	24	19.5	19.4	1.040	1.064	0.384	0.393	
				40185	2549.5	1	49	19.5	19.4	1.050	1.074	0.388	0.397	
						50	24	19.5	19.4	1.060	1.085	0.393	0.402	34
				40620	2593.0	1	49	19.5	19.5	0.918	0.918	0.346	0.346	
						50	24	19.5	19.4	0.931	0.953	0.350	0.358	
						100	0	19.5	19.4	0.941	0.963	0.355	0.363	
				41055	2636.5	1	49	19.5	19.3	0.709	0.742	0.279	0.292	
						50	24	19.5	19.3	0.692	0.725	0.275	0.288	
				41490	2680.0	1	49	19.5	19.4	0.527	0.539	0.220	0.225	
						50	24	19.5	19.4	0.533	0.545	0.222	0.227	
Hotspot	QPSK	5	Edge 2	40620	2593.0	1	49	19.5	19.5	0.122	0.122	0.057	0.057	
						50	24	19.5	19.4	0.058	0.059	0.027	0.028	
			Edge 3	39750	2506.0	1	49	19.5	19.4	0.537	0.550	0.175	0.179	
				40185	2549.5	1	49	19.5	19.4	0.568	0.581	0.182	0.186	
				40620	2593.0	1	49	19.5	19.5	0.818	0.818	0.247	0.247	
						50	24	19.5	19.4	0.665	0.680	0.207	0.212	
				41055	2636.5	1	49	19.5	19.3	0.378	0.396	0.125	0.131	
				41490	2680.0	1	49	19.5	19.4	0.196	0.201	0.070	0.072	
			Edge 4	40620	2593.0	1	49	19.5	19.5	0.516	0.516	0.219	0.219	
						50	24	19.5	19.4	0.522	0.534	0.221	0.226	

10.21. LTE-2CA Band 7 (20MHz + 20MHz BW)**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	PCC				SCC				Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
				Ch #.	Freq. (MHz)	RB Allocation	RB offset	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Right Touch	21350	2560.0	1	49	21152	2540.2	50	24	15.8	15.8	0.934	0.934	0.373	0.373	35

LAT

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	PCC				SCC				Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
				Ch #.	Freq. (MHz)	RB Allocation	RB offset	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Body & Hotspot	QPSK	5	Front	20850	2510.0	50	24	21048	2529.8	50	24	16.5	16.5	0.744	0.744	0.288	0.288	

Notes:

From FCC PAG Guidance and Manufacturer KDB inquiry - Carrier Aggregation: PCC was determined and selected closest to the worst case SAR configuration from standalone reported SAR result. SCC was determined and selected closest to the next highest worst case SAR configuration from standalone SAR result. Channels utilized allows both selections to have contiguous CA. Output power was measured and verified for these test cases.

10.22. LTE-2CA Band 41 (20MHz + 20MHz BW)**UAT**

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	PCC				SCC				Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
				Ch #.	Freq. (MHz)	RB Allocation	RB offset	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Head	QPSK	0	Right Touch	40185	2549.5	50	24	40383	2569.3	1	49	18.0	18.0	0.789	0.789	0.300	0.300	

LAT

RF Exposure Conditions	Mode	Dist. (mm)	Test Position	PCC				SCC				Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
				Ch #.	Freq. (MHz)	RB Allocation	RB offset	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
Body & Hotspot	QPSK	5	Front	40185	2549.5	50	24	40383	2569.3	1	49	19.5	19.5	0.874	0.874	0.334	0.334	36

Notes:

From FCC PAG Guidance and Manufacturer KDB inquiry - Carrier Aggregation: PCC was determined and selected closest to the worst case SAR configuration from standalone reported SAR result. SCC was determined and selected closest to the next highest worst case SAR configuration from standalone SAR result. Channels utilized allows both selections to have contiguous CA. Output power was measured and verified for these test cases.

10.23. Wi-Fi (DTS Band)

Cell On

Band	RF Exposure Condition	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots	
								Chain 0		Chain 1			Chain 0				Chain 1					
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured		Scaled		Measured		Scaled			
													1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g		
2.4 GHz	Head	802.11b 20MHz	0	1 Tx	Left Touch	6	2437	14.0	14.0			0.225										
					Left Tilt	6	2437	14.0	14.0			0.214										
					Right Touch	6	2437	14.0	14.0			0.332	0.276	0.129	0.276	0.129						
					Right Tilt	6	2437	14.0	14.0			0.239										
					Left Touch	6	2437			19.0	19.0	0.075										
					Left Tilt	6	2437			19.0	19.0	0.037										
					Right Touch	6	2437			19.0	19.0	0.130					0.114	0.059	0.114	0.059		
					Right Tilt	6	2437			19.0	19.0	0.024										
		802.11g 20MHz	0	2 Tx	Left Touch	6	2437	14.0	14.0	19.0	18.0	0.167										
					Left Tilt	6	2437	14.0	14.0	19.0	18.0	0.211										
					Right Touch	6	2437	14.0	14.0	19.0	18.0	0.385	0.274	0.136	0.274	0.136	0.095	0.050	0.120	0.063		
					Right Tilt	6	2437	14.0	14.0	19.0	18.0	0.358										
	Body-worn & Hotspot & Airplay	802.11b 20MHz	5	1 Tx	Rear	6	2437	17.5	17.5			0.533										
					Front	6	2437	17.5	17.5			0.366	0.322	0.150	0.322	0.150						
					Edge 1	6	2437	17.5	17.5			0.149										
					Edge 2	6	2437	17.5	17.5			0.203										
					Edge 4	6	2437	17.5	17.5			0.421										
					Rear	6	2437			14.5	14.5	0.118										
					Front	6	2437			14.5	14.5	0.237					0.193	0.081	0.193	0.081		
					Edge 2	6	2437			14.5	14.5	0.122										
					Edge 3	6	2437			14.5	14.5	0.064										
					Edge 4	6	2437			14.5	14.5	0.023										
		802.11g 20MHz	5	2 Tx	Rear	6	2437	17.5	17.5	14.5	14.5	0.472										
					Front	6	2437	17.5	17.5	14.5	14.5	0.463	0.337	0.146	0.337	0.146	0.100	0.053	0.100	0.053		
					Edge 1	6	2437	17.5	17.5	14.5	14.5	0.202										
					Edge 2	6	2437	17.5	17.5	14.5	14.5	0.230										
					Edge 3	6	2437	17.5	17.5	14.5	14.5	0.095										
					Edge 4	6	2437	17.5	17.5	14.5	14.5	0.268										

Notes:

For SAR results with "-", there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Cell Off

Band	RF Exposure Condition	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots
								Chain 0		Chain 1			Chain 0				Chain 1				
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured		Scaled		Measured		Scaled		
												1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g		
2.4 GHz	Head	802.11b 20MHz	0	1 Tx	Left Touch	6	2437	19.0	19.0			0.662									
					Left Tilt	6	2437	19.0	19.0			0.689									
					Right Touch	6	2437	19.0	19.0			1.340	0.946	0.445	0.946	0.445					
						10	2457	19.0	19.0				1.180	0.572	1.180	0.572					37
					Right Tilt	6	2437	19.0	19.0			0.912	0.607	0.292	0.607	0.292					
					Left Touch	6	2437			19.0	19.0	0.075									
					Left Tilt	6	2437			19.0	19.0	0.037									
					Right Touch	6	2437			19.0	19.0	0.130					0.114	0.059	0.114	0.059	
					Right Tilt	6	2437			19.0	19.0	0.024									
		802.11g 20MHz	0	2 Tx	Left Touch	6	2437	19.0	19.0	19.0	19.0	0.760									
					Left Tilt	6	2437	19.0	19.0	19.0	19.0	0.703									
					Right Touch	6	2437	19.0	19.0	19.0	19.0	1.310	0.994	0.467	0.994	0.467	-	-	-	-	
						9	2452	19.0	19.0	19.0	19.0		0.940	0.444	0.940	0.444	-	-	-	-	
					Right Tilt	6	2437	19.0	19.0	19.0	19.0	0.949	0.679	0.329	0.679	0.329	-	-	-	-	
	Body-worn & Airplay	802.11b 20MHz	5	1 Tx	Rear	6	2437	19.0	19.0			0.726	0.516	0.236	0.516	0.236					
					Front	6	2437	19.0	19.0			0.790	0.567	0.262	0.567	0.262					
					Edge 1	6	2437	19.0	19.0			0.219									
					Edge 2	6	2437	19.0	19.0			0.329									
					Edge 4	6	2437	19.0	19.0			0.316									
					Rear	6	2437			19.0	19.0	0.459					0.325	0.161	0.325	0.161	
					Front	6	2437			19.0	19.0	1.070					0.906	0.355	0.906	0.355	38
						10	2457			19.0	19.0						0.661	0.270	0.661	0.270	
					Edge 2	6	2437			19.0	19.0	0.409									
					Edge 3	6	2437			19.0	19.0	0.197									
					Edge 4	6	2437			19.0	19.0	0.040									
		802.11g 20MHz	5	2 Tx	Rear	6	2437	19.0	19.0	19.0	19.0	0.926	0.512	0.221	0.512	0.221	0.276	0.142	0.276	0.142	
					Front	6	2437	19.0	19.0	19.0	19.0	1.270	0.570	0.255	0.570	0.255	0.857	0.355	0.857	0.355	
						9	2452	19.0	19.0	19.0	19.0		0.598	0.272	0.598	0.272	0.603	0.249	0.603	0.249	
					Edge 1	6	2437	19.0	19.0	19.0	19.0	0.277									
					Edge 2	6	2437	19.0	19.0	19.0	19.0	0.699									
					Edge 3	6	2437	19.0	19.0	19.0	19.0	0.190									
					Edge 4	6	2437	19.0	19.0	19.0	19.0	0.518									

Notes:

For SAR results with “-“, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

10.24. Wi-Fi (U-NII-1 and U-NII-2A Band)**Cell On**

Band	RF Exposure Condition	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots
								Chain 0		Chain 1			Chain 0				Chain 1				
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured		Scaled		Measured		Scaled		
													1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g	
5.2 GHz	Head	802.11ac VHT80	0	1 Tx	Left Touch	42	5210	7.0	7.0			0.124									
					Left Tilt	42	5210	7.0	7.0			0.122									
					Right Touch	42	5210	7.0	7.0			0.211	0.118	0.037	0.118	0.037					
					Right Tilt	42	5210	7.0	7.0			0.126									
5.2 GHz		802.11a	0	1 Tx	Left Touch	44	5220			20.5	20.4	0.174									
					Left Tilt	44	5220			20.5	20.4	0.085									
					Right Touch	44	5220			20.5	20.4	0.491					0.193	0.082	0.197	0.084	
					Right Tilt	44	5220			20.5	20.4	0.110									
5.2 GHz		802.11n HT40	0	2 Tx	Left Touch	46	5230	7.0	7.0	18.0	18.0	0.151									
					Left Tilt	46	5230	7.0	7.0	18.0	18.0	0.113									
					Right Touch	46	5230	7.0	7.0	18.0	18.0	0.209	0.132	0.041	0.132	0.041	0.125	0.052	0.125	0.052	
					Right Tilt	46	5230	7.0	7.0	18.0	18.0	0.164									
5.2 GHz	Body-worn & Airplay	802.11n HT40	5	1 Tx	Rear	46	5230	15.8	15.7			0.931									
					Front	46	5230	15.8	15.7			0.512	0.355	0.120	0.363	0.123					
					Edge 1	46	5230	15.8	15.7			0.523									
					Edge 2	46	5230	15.8	15.7			0.044									
					Edge 4	46	5230	15.8	15.7			0.575									
5.2 GHz		802.11ac VHT80	5	1 Tx	Rear	42	5210			10.5	10.5	0.113									
					Front	42	5210			10.5	10.5	0.635					0.208	0.051	0.208	0.051	
					Edge 2	42	5210			10.5	10.5	0.063									
					Edge 3	42	5210			10.5	10.5	0.073									
					Edge 4	42	5210			10.5	10.5	0.019									
5.2 GHz		802.11n HT40	5	2 Tx	Rear	46	5230	15.8	15.8	10.5	10.5	0.674									
					Front	46	5230	15.8	15.8	10.5	10.5	0.485	0.305	0.115	0.305	0.115	0.034	0.011	0.034	0.011	
					Edge 1	46	5230	15.8	15.8	10.5	10.5	0.506									
					Edge 2	46	5230	15.8	15.8	10.5	10.5	0.039									
					Edge 3	46	5230	15.8	15.8	10.5	10.5	0.046									

Notes:

For SAR results with "-", there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Cell Off

Band	RF Exposure Condition	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots
								Chain 0		Chain 1			Chain 0				Chain 1				
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured		Scaled		Measured		Scaled		
													1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g	
5.2 GHz	Head	802.11ac VHT80	0	1 Tx	Left Touch	42	5210	15.0	15.0			1.230									39
					Left Tilt	42	5210	15.0	15.0			1.030									
					Right Touch	42	5210	15.0	15.0			1.840	1.040	0.332	1.040	0.332					
					Right Tilt	42	5210	15.0	15.0			1.400	0.718	0.251	0.718	0.251					
5.3 GHz		802.11n HT40	0	1 Tx	Left Touch	56	5280			20.5	19.5	0.174									
					Left Tilt	56	5280			20.5	19.5	0.085									
					Right Touch	56	5280			20.5	19.5	0.491					0.193	0.082	0.243	0.103	
					Right Tilt	56	5280			20.5	19.5	0.110									
5.2 GHz		802.11n HT40	0	2 Tx	Left Touch	46	5230	15.0	14.9	18.0	18.0	0.905									
					Left Tilt	46	5230	15.0	14.9	18.0	18.0	0.752									
					Right Touch	38	5190	13.5	13.4	13.5	13.5		0.473	0.131	0.484	0.134	-	-	-	-	
						46	5230	15.0	14.9	18.0	18.0	1.630	0.942	0.295	0.964	0.302	0.151	0.065	0.151	0.065	
	Right Tilt				46	5230	15.0	14.9	18.0	18.0	1.190	0.532	0.181	0.544	0.185	-	-	-	-		
5.2 GHz	Body-worn & Airplay	802.11a	5	1 Tx	Rear	44	5220	21.0	20.9			3.130	1.130	0.370	1.156	0.379					40
						48	5240	19.5	19.5				0.989	0.311	0.989	0.311					
					Front	44	5220	21.0	20.9			1.490	0.785	0.263	0.803	0.269					
						48	5240	19.5	19.5			1.390	0.762	0.281	0.762	0.281					
					Edge 1	44	5220	21.0	20.9			1.900	0.868	0.251	0.888	0.257					
						48	5240	19.5	19.5				0.652	0.210	0.652	0.210					
					Edge 2	44	5220	21.0	20.9			0.244	0.119	0.036	0.122	0.037					
						48	5240	19.5	19.5												
		802.11n HT40	5	1 Tx	Edge 4	44	5220	21.0	20.9			1.350	0.832	0.295	0.851	0.302					
						48	5240	19.5	19.5				0.522	0.176	0.522	0.176					
Rear					46	5230			17.3	17.3	0.258										
					38	5190			15.5	15.5	1.250					0.815	0.196	0.815	0.196		
Front					46	5230			17.3	17.3						1.060	0.256	1.060	0.256		
					46	5230			17.3	17.3	0.209										
Edge 2					46	5230			17.3	17.3	0.321					0.126	0.050	0.126	0.050		
Edge 3					46	5230			17.3	17.3	0.083										
802.11n HT40		5	2 Tx	Rear	46	5230	18.0	18.0	17.3	17.2	1.070	0.535	0.198	0.535	0.198	0.101	0.032	0.103	0.032		
					38	5190	13.5	13.5	13.5	13.5		0.097	0.029	0.097	0.029	0.393	0.086	0.393	0.086		
				Front	46	5230	18.0	18.0	17.3	17.2	2.600	1.070	0.256	1.070	0.256	0.956	0.292	0.978	0.299		
					46	5230	18.0	18.0	17.3	17.2	0.776										
				Edge 1	46	5230	18.0	18.0	17.3	17.2	0.776										
				Edge 2	46	5230	18.0	18.0	17.3	17.2	0.282										
				Edge 3	46	5230	18.0	18.0	17.3	17.2	0.224										
				Edge 4	46	5230	18.0	18.0	17.3	17.2	0.884										

Notes:

For SAR results with “-”, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

10.25. Wi-Fi (U-NII-2C Band)

Cell On

Band	RF Exposure Condition	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots
								Chain 0		Chain 1			Chain 0				Chain 1				
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured		Scaled		Measured		Scaled		
													1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g	
5.6 GHz	Head	802.11ac VHT80	0	1 Tx	Left Touch	138	5690	5.5	5.5			0.174									
					Left Tilt	138	5690	5.5	5.5			0.153									
					Right Touch	138	5690	5.5	5.5			0.251	0.142	0.042	0.142	0.042					
					Right Tilt	138	5690	5.5	5.5			0.180									
		802.11n HT40	0	1 Tx	Left Touch	118	5590			19.5	19.5	0.229									
					Left Tilt	118	5590			19.5	19.5	0.119									
					Right Touch	118	5590			19.5	19.5	0.302					0.182	0.091	0.182	0.091	
					Right Tilt	118	5590			19.5	19.5	0.143									
		802.11n HT40	0	2 Tx	Left Touch	118	5590	5.5	5.4	19.5	19.5	0.166									
					Left Tilt	118	5590	5.5	5.4	19.5	19.5	0.162									
					Right Touch	118	5590	5.5	5.4	19.5	19.5	0.282	0.115	0.047	0.118	0.048	0.171	0.084	0.171	0.084	
					Right Tilt	118	5590	5.5	5.4	19.5	19.5	0.016									
5.6 GHz	Body-worn & Airplay	802.11ac VHT80	5	1 Tx	Rear	138	5690	12.5	12.5			0.555									
					Front	138	5690	12.5	12.5			0.438	0.335	0.108	0.335	0.108					
					Edge 1	138	5690	12.5	12.5			0.652									
					Edge 2	138	5690	12.5	12.5			0.123									
					Edge 4	138	5690	12.5	12.5			0.515									
		802.11ac VHT80	5	1 Tx	Rear	106	5530			9.5	9.5	0.096									
					Front	106	5530			9.5	9.5	0.373					0.191	0.046	0.191	0.046	
					Edge 2	106	5530			9.5	9.5	0.109									
					Edge 3	106	5530			9.5	9.5	0.068									
					Edge 4	106	5530			9.5	9.5	0.003									
		802.11ac VHT80	5	2 Tx	Rear	138	5690	12.5	12.4	9.5	9.5	0.631									
					Front	138	5690	12.5	12.4	9.5	9.5	0.332	0.316	0.076	0.323	0.078	0.130	0.033	0.130	0.033	
					Edge 1	138	5690	12.5	12.4	9.5	9.5	0.179									
					Edge 2	138	5690	12.5	12.4	9.5	9.5	0.067									
					Edge 3	138	5690	12.5	12.4	9.5	9.5	0.030									
					Edge 4	138	5690	12.5	12.4	9.5	9.5	0.397									

Notes:

For SAR results with “-”, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Cell Off

Band	RF Exposure Condition	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots
								Chain 0		Chain 1			Chain 0				Chain 1				
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured		Scaled		Measured		Scaled		
													1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g	
5.6 GHz	Head	802.11ac VHT80	0	1 Tx	Left Touch	122	5610	13.3	13.2				0.822	0.317	0.841	0.324					
						138	5690	13.3	12.8			1.530	0.859	0.338	0.964	0.379					
					Left Tilt	122	5610	13.3	13.2				0.724	0.284	0.741	0.291					
						138	5690	13.3	12.8			1.370	0.867	0.309	0.973	0.347					
					Right Touch	122	5610	13.3	13.2				0.888	0.313	0.909	0.320					
						138	5690	13.3	12.8			0.944	0.944	0.309	1.059	0.347					
		Right Tilt	122	5610	13.3	13.2				0.663	0.218	0.678	0.223								
			138	5690	13.3	12.8			1.450	0.801	0.261	0.899	0.293								
		802.11a	0	1 Tx	Left Touch	132	5660			20.5	20.2	0.354									
					Left Tilt	132	5660			20.5	20.2	0.236									
					Right Touch	132	5660			20.5	20.2	0.435					0.224	0.105	0.240	0.113	
					Right Tilt	132	5660			20.5	20.2	0.217									
		802.11n HT40 CDD	0	2 Tx	Left Touch	118	5590	13.3	13.2	19.5	19.5	0.740									
					Left Tilt	118	5590	13.3	13.2	19.5	19.5	1.470	0.526	0.215	0.538	0.220	-	-	-	-	
					Right Touch	118	5590	13.3	13.2	19.5	19.5	2.300	1.160	0.363	1.187	0.371	-	-	-	-	41
						142	5710	13.3	13.2	19.0	19.0		0.887	0.272	0.908	0.278	-	-	-	-	
					Right Tilt	118	5590	13.3	13.2	19.5	19.5	0.760									
5.6 GHz	Body-worn & Airplay	802.11ac VHT80	5	1 Tx	Rear	138	5690	17.8	17.7			1.210	0.522	0.168	0.534	0.172					
					Front	122	5610	17.8	17.7			2.610	1.100	0.363	1.126	0.371					
						138	5690	17.8	17.7			2.100	1.090	0.365	1.115	0.374					
					Edge 1	138	5690	17.8	17.7			1.170									
					Edge 2	138	5690	17.8	17.7			0.134									
					Edge 4	138	5690	17.8	17.7			0.993									
		802.11ac VHT80	5	1 Tx	Rear	138	5690			16.3	16.3	1.110									
					Front	122	5610			16.3	16.3	2.500					1.170	0.342	1.170	0.342	42
						138	5690			16.3	16.3	3.240					1.160	0.338	1.160	0.338	
					Edge 2	138	5690			16.3	16.3	1.080									
					Edge 3	138	5690			16.3	16.3	1.200					0.630	0.213	0.630	0.213	
					Edge 4	138	5690			16.3	16.3	0.051									
		802.11ac VHT80	5	2 Tx	Rear	122	5610	17.8	17.8	16.3	16.2		0.685	0.372	0.685	0.372	0.102	0.031	0.104	0.032	
						138	5690	17.8	17.8	16.3	16.3	1.300	1.150	0.380	1.150	0.380	0.092	0.026	0.092	0.026	
					Front	122	5610	17.8	17.8	16.3	16.2		0.947	0.334	0.947	0.334	1.010	0.282	1.034	0.289	
						138	5690	17.8	17.8	16.3	16.3	1.730	1.090	0.360	1.090	0.360	1.000	0.286	1.000	0.286	
					Edge 1	122	5610	17.8	17.8	16.3	16.2		0.943	0.326	0.943	0.326					
						138	5690	17.8	17.8	16.3	16.3	1.980	0.965	0.332	0.965	0.332					
					Edge 2	138	5690	17.8	17.8	16.3	16.3	0.359									
						138	5690	17.8	17.8	16.3	16.3	0.203									
					Edge 3	138	5690	17.8	17.8	16.3	16.3										
						138	5690	17.8	17.8	16.3	16.3	1.450									

Notes:

For SAR results with “-“, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

10.26. Wi-Fi (U-NII-3 Band)

Cell On

Band	RF Exposure Condition	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots		
								Chain 0		Chain 1			Chain 0				Chain 1						
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured		Scaled		Measured		Scaled				
												1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g				
5.8 GHz	Head	802.11ac VHT80	0	1 Tx	Left Touch	155	5775	6.5	6.5			0.254											
					Left Tilt	155	5775	6.5	6.5			0.411	0.189	0.072	0.189	0.072							
					Right Touch	155	5775	6.5	6.5			0.239											
					Right Tilt	155	5775	6.5	6.5			0.289											
		802.11a	0	1 Tx	Left Touch	157	5785			20.5	19.5	0.062											
					Left Tilt	157	5785			20.5	19.5	0.082											
					Right Touch	157	5785			20.5	19.5	0.197					0.107	0.038	0.135	0.048			
					Right Tilt	157	5785			20.5	19.5	0.083											
		802.11a CDD	0	2 Tx	Left Touch	157	5785	6.5	6.5	20.5	19.7	0.178											
					Left Tilt	157	5785	6.5	6.5	20.5	19.7	0.275	0.143	0.042	0.143	0.042	-	-	-	-			
					Right Touch	157	5785	6.5	6.5	20.5	19.7	0.204											
					Right Tilt	157	5785	6.5	6.5	20.5	19.7	0.238											
5.8 GHz	Body-worn & Airplay	802.11ac VHT80	5	1 Tx	Rear	155	5775	12.0	12.0			0.717	0.325	0.109	0.325	0.109							
					Front	155	5775	12.0	12.0			0.437											
					Edge 1	155	5775	12.0	12.0			0.479											
					Edge 2	155	5775	12.0	12.0			0.064											
					Edge 4	155	5775	12.0	12.0			0.325											
		802.11ac VHT80	5	1 Tx	Rear	155	5775			14.3	14.3	0.242											
					Front	155	5775			14.3	14.3	0.368					0.179	0.046	0.179	0.046			
					Edge 2	155	5775			14.3	14.3	0.096											
					Edge 3	155	5775			14.3	14.3	0.186											
					Edge 4	155	5775			14.3	14.3	0.015											
		802.11n HT40 CDD	5	2 Tx	Rear	159	5795	12.0	12.0	14.3	14.1	0.988	0.327	0.110	0.327	0.110	0.108	0.033	0.113	0.035			
					Front	159	5795	12.0	12.0	14.3	14.1	0.411											
					Edge 1	159	5795	12.0	12.0	14.3	14.1	0.484											
					Edge 2	159	5795	12.0	12.0	14.3	14.1	0.120											
					Edge 3	159	5795	12.0	12.0	14.3	14.1	0.195											
					Edge 4	159	5795	12.0	12.0	14.3	14.1	0.346											

Notes:

For SAR results with “-”, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Cell Off

Band	RF Exposure Condition	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots
								Chain 0		Chain 1			Chain 0				Chain 1				
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured		Scaled		Measured		Scaled		
													1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g	
5.8 GHz	Head	802.11ac VHT80	0	1 Tx	Left Touch	155	5775	14.3	14.3			1.720	0.934	0.377	0.934	0.377					
					Left Tilt	155	5775	14.3	14.3			1.700	0.926	0.377	0.926	0.377					
					Right Touch	155	5775	14.3	14.3			2.080	1.050	0.345	1.050	0.345					
					Right Tilt	155	5775	14.3	14.3			2.390	1.110	0.357	1.110	0.357					
		802.11ac VHT80	0	1 Tx	Left Touch	157	5785			20.5	19.5	0.062									
					Left Tilt	157	5785			20.5	19.5	0.082									
					Right Touch	157	5785			20.5	19.5	0.197					0.107	0.038	0.135	0.048	
					Right Tilt	157	5785			20.5	19.5	0.083									
		802.11n HT40	0	2 Tx	Left Touch	153	5765	14.3	14.3	20.5	19.4		0.912	0.356	0.912	0.356	-	-	-	-	
						157	5785	14.3	14.3	20.5	19.6	1.690	0.925	0.356	0.925	0.356	-	-	-	-	
						161	5805	14.3	14.3	20.5	19.4		0.82	0.268	0.824	0.268	-	-	-	-	
					Left Tilt	153	5765	14.3	14.3	20.5	19.4		1.150	0.404	1.150	0.404	-	-	-	-	43
						157	5785	14.3	14.3	20.5	19.6	1.990	1.020	0.359	1.020	0.359	-	-	-	-	
						161	5805	14.3	14.3	20.5	19.4		0.942	0.316	0.942	0.316	-	-	-	-	
					Right Touch	153	5765	14.3	14.3	20.5	19.4		0.905	0.319	0.905	0.319	-	-	-	-	
						157	5785	14.3	14.3	20.5	19.6	2.030	0.961	0.322	0.961	0.322	-	-	-	-	
						161	5805	14.3	14.3	20.5	19.4		0.863	0.261	0.863	0.261	-	-	-	-	
					Right Tilt	153	5765	14.3	14.3	20.5	19.4		1.020	0.346	1.020	0.346	-	-	-	-	
						157	5785	14.3	14.3	20.5	19.6	2.410	1.050	0.327	1.050	0.327	-	-	-	-	
						161	5805	14.3	14.3	20.5	19.4		0.994	0.296	0.994	0.296	-	-	-	-	
5.8 GHz	Body-worn & Airplay	802.11ac VHT80	5	1 Tx	Rear	155	5775	17.3	17.3			2.500	1.09	0.377	1.090	0.377					
					Front	155	5775	17.3	17.3			1.780	0.497	0.158	0.497	0.158					
					Edge 1	155	5775	17.3	17.3			1.700									
					Edge 2	155	5775	17.3	17.3			0.295									
					Edge 4	155	5775	17.3	17.3			1.240									
		802.11a	5	1 Tx	Rear	153	5765			20.5	20.0	0.978					0.537	0.176	0.603	0.197	
					Front	153	5765			20.5	20.0	1.460					1.060	0.262	1.189	0.294	
						157	5785			20.5	19.8					0.816	0.210	0.959	0.247		
					Edge 2	153	5765			20.5	20.0	0.479									
					Edge 3	153	5765			20.5	20.0	0.569									
					Edge 4	153	5765			20.5	20.0	0.066									
		802.11a CDD	5	2 Tx	Rear	153	5765	17.3	17.3	20.5	19.5		1.080	0.373	1.080	0.373	0.228	0.082	0.287	0.103	
						157	5785	17.3	17.3	20.5	19.5	2.440	1.140	0.387	1.140	0.387	0.284	0.095	0.358	0.120	
					Front	157	5785	17.3	17.3	20.5	19.5	1.350	0.655	0.231	0.655	0.231	0.508	0.147	0.640	0.185	
					Edge 1	157	5785	17.3	17.3	20.5	19.5	1.340									
					Edge 2	157	5785	17.3	17.3	20.5	19.5	0.652									
Edge 3	157				5785	17.3	17.3	20.5	19.5	0.784											
Edge 4	157				5785	17.3	17.3	20.5	19.5	1.080											

Notes:

For SAR results with “-”, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

10.27. Wi-Fi Variant 2 Spot Check

Wi-Fi (DTS Band)

Vendor	Band	RF Exposure Conditions	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				SAR (W/kg)							
									Chain 0		Chain 1		Chain 0				Chain 1			
									Tune-up Limit	Measured	Tune-up Limit	Measured	Measured		Scaled		Measured		Scaled	
													1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g
Variant 1 Highest Report SAR	2.4 GHz	Head	802.11b	0	1Tx	Right Touch	10	2457	19.0	19.0			1.180	0.572	1.180	0.572				
		Body-worn & Airplay	802.11b	5	1Tx	Front	6	2437			19.0	19.0					0.906	0.355	0.906	0.355
Variant 2 Spot Check	2.4 GHz	Head	802.11b	0	1Tx	Right Touch	10	2457	19.0	19.0			1.090	0.514	1.090	0.514				
		Body-worn & Airplay	802.11b	5	1Tx	Front	6	2437			19.0	19.0					0.872	0.343	0.872	0.343

Notes:

For SAR results with “-”, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Wi-Fi (U-NII-1 and U-NII-2A Band)

Vendor	Band	RF Exposure Conditions	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				SAR (W/kg)							
									Chain 0		Chain 1		Chain 0				Chain 1			
									Tune-up Limit	Measured	Tune-up Limit	Measured	Measured		Scaled		Measured		Scaled	
													1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g
Variant 1 Highest Report SAR	5.2 & 5.3 GHz	Head	802.11ac VHT80	0	1 Tx	Right Touch	42	5210	15.0	15.0			1.040	0.332	1.040	0.332				
		Body-worn & Airplay	802.11a	5	1 Tx	Rear	44	5220	21.0	20.9			1.130	0.370	1.156	0.379				
Variant 2 Spot Check	5.2 & 5.3 GHz	Head	802.11ac VHT80	0	1 Tx	Right Touch	42	5210	15.0	15.0			1.010	0.354	1.010	0.354				
		Body-worn & Airplay	802.11a	5	1 Tx	Rear	44	5220	21.0	20.5			0.988	0.331	1.109	0.371				

Notes:

For SAR results with “-”, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Wi-Fi (U-NII-2C Band)

Vendor	Band	RF Exposure Conditions	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				SAR (W/kg)							
									Chain 0		Chain 1		Chain 0				Chain 1			
									Tune-up Limit	Measured	Tune-up Limit	Measured	Measured		Scaled		Measured		Scaled	
													1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g
Variant 1 Highest Report SAR	5.6 GHz	Head	802.11n HT40 CDD	0	2 Tx	Right Touch	118	5590	13.3	13.2	19.5	19.5	1.160	0.363	1.187	0.371	-	-	-	-
		Body-worn & Airplay	802.11ac VHT80	5	1 Tx	Front	122	5610			16.3	16.3					1.170	0.342	1.170	0.342
Variant 2 Spot Check	5.6 GHz	Head	802.11n HT40 CDD	0	2 Tx	Right Touch	118	5590	13.3	12.7	19.5	19.5	0.910	0.324	1.045	0.372	-	-	-	-
		Body-worn & Airplay	802.11ac VHT80	5	1 Tx	Front	122	5610			16.3	16.3					1.070	0.278	1.070	0.278

Notes:

For SAR results with “-”, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Wi-Fi (U-NII-3 Band)

Vendor	Band	RF Exposure Conditions	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				SAR (W/kg)							
									Chain 0		Chain 1		Chain 0				Chain 1			
									Tune-up Limit	Measured	Tune-up Limit	Measured	Measured		Scaled		Measured		Scaled	
													1-g	10-g	1-g	10-g	1-g	10-g	1-g	10-g
Variant 1 Highest Report SAR	5.8 GHz	Head	802.11a	0	2 Tx	Right Touch	153	5765	14.3	14.3	20.5	19.4	1.150	0.404	1.150	0.404	-	-	-	-
		Body-worn & Airplay	802.11a	5	1 Tx	Front	153	5765			20.5	20.0					1.060	0.262	1.189	0.294
Variant 2 Spot Check	5.8 GHz	Head	802.11a	0	2 Tx	Right Touch	153	5765	14.3	13.9	20.5	19.5	1.020	0.347	1.118	0.380	-	-	-	-
		Body-worn & Airplay	802.11a	5	1 Tx	Front	153	5765			20.5	20.0					0.922	0.262	1.035	0.294

Notes:

For SAR results with “-”, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

10.28. Bluetooth

P_{high}

Frequency Band	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
2.4 GHz	Head	GFSK	0	Left Touch	39	2441.0	13.0	12.5	0.118	0.132	0.047	0.053	
				Left Tilt	39	2441.0	13.0	12.5	0.134	0.150	0.056	0.063	
				Right Touch	39	2441.0	13.0	12.5	0.211	0.237	0.101	0.113	45
				Right Tilt	39	2441.0	13.0	12.5	0.179	0.201	0.089	0.100	
	Body-worn	GFSK	5	Rear	39	2441.0	13.0	12.5	0.112	0.126	0.048	0.054	
				Front	39	2441.0	13.0	12.5	0.112	0.126	0.049	0.055	46

P_{low}

Frequency Band	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
2.4 GHz	Head	GFSK	0	Left Touch	39	2441.0	10.0	10.0	0.069	0.069	0.027	0.027	
				Left Tilt	39	2441.0	10.0	10.0	0.060	0.060	0.025	0.025	
				Right Touch	39	2441.0	10.0	10.0	0.070	0.070	0.033	0.033	
				Right Tilt	39	2441.0	10.0	10.0	0.083	0.083	0.037	0.037	
	Body-worn	GFSK	5	Rear	39	2441.0	10.0	10.0	0.056	0.056	0.023	0.023	
				Front	39	2441.0	10.0	10.0	0.028	0.028	0.014	0.014	

$P_{\text{standalone}}$

Frequency Band	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled	
2.4 GHz	Head	GFSK	0	Left Touch	39	2441.0	16.5	16.5	0.513	0.513	0.186	0.186	
				Left Tilt	39	2441.0	16.5	16.5	0.598	0.598	0.204	0.204	47
				Right Touch	39	2441.0	16.5	16.5	0.418	0.418	0.163	0.163	
				Right Tilt	39	2441.0	16.5	16.5	0.344	0.344	0.143	0.143	
	Body-worn	GFSK	5	Rear	39	2441.0	16.5	16.5	0.285	0.285	0.110	0.110	
				Front	39	2441.0	16.5	16.5	0.354	0.354	0.142	0.142	48

11. SAR Measurement Variability

In accordance with published RF Exposure KDB 865664 D01 SAR measurement 100 MHz to 6 GHz. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.8 or 2 W/kg (1-g or 10-g respectively); steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.8 or 2 W/kg (1-g or 10-g respectively), repeat that measurement once.
- 3) Perform a second repeated measurement only if the **ratio of largest to smallest SAR** for the original and first repeated measurements is > 1.20 or 3 (1-g or 10-g respectively) or when the original or repeated measurement is ≥ 1.45 or 3.6 W/kg ($\sim 10\%$ from the 1-g or 10-g respective SAR limit).
- 4) Perform a third repeated measurement only if the original, first, or second repeated measurement is ≥ 1.5 or 3.75 W/kg (1-g or 10-g respectively) and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 or 3 (1-g or 10-g respectively).

Frequency Band (MHz)	Air Interface	RF Exposure Conditions	Test Position	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	First Repeated		Second Repeated		Third Repeated
						Measured SAR (W/kg)	Largest to Smallest SAR Ratio	Measured SAR (W/kg)	Largest to Smallest SAR Ratio	Measured SAR (W/kg)
700	LTE Band 12	Body & Hotspot	Front	No	0.735	N/A	N/A	N/A	N/A	N/A
	LTE Band 13	Body & Hotspot	Front	No	0.758	N/A	N/A	N/A	N/A	N/A
850	GSM 850	Body & Hotspot	Front	Yes	1.120	1.080	1.04	N/A	N/A	
	CDMA BC0	Body & Hotspot	Front	No	1.100	N/A	N/A			
	CDMA BC10	Body & Hotspot	Front	No	0.960	N/A	N/A			
	WCDMA Band V	Body & Hotspot	Front	No	1.110	N/A	N/A			
	LTE Band 26	Body & Hotspot	Front	No	0.678	N/A	N/A	N/A	N/A	N/A
1900	GSM 1900	Body & Hotspot	Front	No	1.020	N/A	N/A			
	CDMA BC1	Body & Hotspot	Front	Yes	1.110	1.060	1.05	N/A	N/A	
	WCDMA Band II	Body & Hotspot	Front	No	0.977	N/A	N/A			
	LTE Band 25	Body & Hotspot	Front	No	1.020	N/A	N/A			
1700	LTE Band 4	Hotspot	Edge 3	Yes	1.060	1.020	1.04	N/A	N/A	
	WCDMA Band IV	Head	Right Touch	No	1.010	N/A	N/A			
2300	LTE Band 30	Body & Hotspot	Front	Yes	1.110	1.070	1.04	N/A	N/A	
2400	Wi-Fi 802.11b/g/n	Head	Right Touch	Yes	1.180	1.060	1.11	N/A	N/A	
	BT	Head	Left Tilt	No	0.598	N/A	N/A	N/A	N/A	N/A
2600	LTE Band 7	Head	Right Touch	No	1.030	N/A	N/A			
	LTE Band 41	Body & Hotspot	Front	Yes	1.060	0.965	1.10	N/A	N/A	
5200	Wi-Fi 802.11a/n/ac	Body & Hotspot	Rear	Yes	1.130	0.988	1.14	N/A	N/A	
5500	Wi-Fi 802.11a/n/ac	Body & Hotspot	Front	Yes	1.170	1.08	1.08	N/A	N/A	
5800	Wi-Fi 802.11a/n/ac	Head	Left Tilt	Yes	1.150	1.01	1.14	N/A	N/A	

Note(s):

Second Repeated Measurement is not required since the ratio of the largest to smallest SAR for the original and first repeated measurement is not > 1.20 or 3 (1-g or 10-g respectively).

12. Simultaneous Transmission SAR Analysis

KDB 447498 D01 General RF Exposure Guidance introduces a new formula for calculating the SAR to Peak Location Ratio (SPLSR) between pairs of simultaneously transmitting antennas:

$$SPLSR = (SAR_1 + SAR_2)^{1.5} / Ri$$

Where:

SAR₁ is the highest measured or estimated SAR for the first of a pair of simultaneous transmitting antennas, in a specific test operating mode and exposure condition

SAR₂ is the highest measured or estimated SAR for the second of a pair of simultaneous transmitting antennas, in the same test operating mode and exposure condition as the first

Ri is the separation distance between the pair of simultaneous transmitting antennas. When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location, based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of $[(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2]$

In order for a pair of simultaneous transmitting antennas with the sum of 1-g SAR > 1.6 W/kg to qualify for exemption from Simultaneous Transmission SAR measurements, it has to satisfy the condition of:

$$(SAR_1 + SAR_2)^{1.5} / Ri < 0.04$$

Simultaneous Transmission Condition

RF Exposure Condition	Item	Capable Transmit Configurations			
Head Body Worn Accessory Hotspots Airplay	1	WWAN OFF	+ (Chain 1) Wi-Fi 2.4 GHz SISO	+ Bluetooth (P _{high})	
	2		+ (Chain 0) Wi-Fi 5 GHz SISO	+ Bluetooth (P _{high})	
	3		+ (Chain 1) Wi-Fi 5 GHz SISO	+ Bluetooth (P _{high})	
	4		+ Wi-Fi 5 GHz MIMO	+ Bluetooth (P _{high})	
	5	WWAN ON	+ (Chain 0) Wi-Fi 2.4 GHz SISO		
	6		+ (Chain 1) Wi-Fi 2.4 GHz SISO		
	7		+ Wi-Fi 2.4 GHz MIMO		
	8		+ Bluetooth (P _{low})		
	9		+ (Chain 1) Wi-Fi 2.4 GHz SISO	+ Bluetooth (P _{low})	
	10		+ (Chain 0) Wi-Fi 5 GHz SISO		
	11		+ (Chain 1) Wi-Fi 5 GHz SISO		
	12		+ Wi-Fi 5 GHz MIMO		
	13		+ (Chain 0) Wi-Fi 5 GHz SISO	+ Bluetooth (P _{low})	
	14		+ (Chain 1) Wi-Fi 5 GHz SISO	+ Bluetooth (P _{low})	
	15		+ Wi-Fi 5 GHz MIMO	+ Bluetooth (P _{low})	
Notes:					
1. (Chain 0) Wi-Fi 2.4GHz Radio cannot transmit simultaneously w with Bluetooth Radio.					

12.1. Sum of the SAR for Wi-Fi (Cell Off) & BT(P_{high})

RF Exposure Conditions	Test Position	① Wi-Fi 2.4GHz Chain 1	② Wi-Fi 5GHz Chain 0	③ Wi-Fi 5GHz Chain 1	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{high})	① + ⑤		② + ⑤		③ + ⑤		④ + ⑤	
							Σ 1-g SAR (mW/kg)	SPLSR (Yes/No)	Σ 1-g SAR (mW/kg)	SPLSR (Yes/No)	Σ 1-g SAR (mW/kg)	SPLSR (Yes/No)	Σ 1-g SAR (mW/kg)	SPLSR (Yes/No)
Head	Left Touch	0.114	0.934	0.243	0.925	0.132	0.246	No	1066	No	0.375	No	1057	No
	Left Tilt	0.114	0.926	0.243	1.150	0.150	0.264	No	1076	No	0.393	No	1300	No
	Right Touch	0.114	1.059	0.243	1.187	0.237	0.351	No	1296	No	0.480	No	1424	No
	Right Tilt	0.114	1.110	0.243	1.050	0.201	0.315	No	1311	No	0.444	No	1251	No
Body-worn Accessory & Hotspot	Rear	0.325	1.156	0.603	1.150	0.126	0.451	No	1282	No	0.729	No	1276	No
	Front	0.906	1.126	1.170	1.090	0.126	1.032	No	1252	No	1.296	No	1216	No

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.2. Sum of the SAR for GSM850 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	①	②	③	④	⑤	①+②		①+③		①+④		①+⑤		①+③+⑤	
		WWAN	Wi-Fi 2.4GHz (Chain 0)	Wi-Fi 2.4GHz (Chain 1)	Wi-Fi 2.4GHz (MIMO)	Bluetooth (P _{low})	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.237	0.276	0.114	0.274	0.069	0.513	No	0.351	No	0.511	No	0.306	No	0.420	No
	Left Tilt	0.253	0.276	0.114	0.274	0.060	0.529	No	0.367	No	0.527	No	0.313	No	0.427	No
	Right Touch	0.284	0.276	0.114	0.274	0.070	0.560	No	0.398	No	0.558	No	0.354	No	0.468	No
	Right Tilt	0.234	0.276	0.114	0.274	0.083	0.510	No	0.348	No	0.508	No	0.317	No	0.431	No
Body-worn & Hotspot & Airplay	Rear	0.189	0.322	0.193	0.337	0.056	0.511	No	0.382	No	0.526	No	0.245	No	0.438	No
	Front	0.205	0.322	0.193	0.337	0.028	0.527	No	0.398	No	0.542	No	0.233	No	0.426	No
Hotspot & Airplay	Edge 1	0.176	0.322	0.193	0.337		0.498	No	0.369	No	0.513	No				
	Edge 2	0.094	0.322	0.193	0.337		0.416	No	0.287	No	0.431	No				
	Edge 4	0.027	0.322	0.193	0.337		0.349	No	0.220	No	0.364	No				

12.3. Sum of the SAR for GSM850 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	①	②	③	④	⑤	①+②		①+③		①+④		①+⑤		①+③+⑤	
		WWAN	Wi-Fi 2.4GHz (Chain 0)	Wi-Fi 2.4GHz (Chain 1)	Wi-Fi 2.4GHz (MIMO)	Bluetooth (P _{low})	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.399	0.276	0.114	0.274	0.069	0.675	No	0.513	No	0.673	No	0.468	No	0.582	No
	Left Tilt	0.261	0.276	0.114	0.274	0.060	0.537	No	0.375	No	0.535	No	0.321	No	0.435	No
	Right Touch	0.318	0.276	0.114	0.274	0.070	0.594	No	0.432	No	0.592	No	0.388	No	0.502	No
	Right Tilt	0.241	0.276	0.114	0.274	0.083	0.517	No	0.355	No	0.515	No	0.324	No	0.438	No
Body-worn & Hotspot & Airplay	Rear	0.994	0.322	0.193	0.337	0.056	1316	No	1187	No	1331	No	1050	No	1243	No
	Front	1120	0.322	0.193	0.337	0.028	1442	No	1313	No	1457	No	1148	No	1341	No
Hotspot & Airplay	Edge 2	0.401	0.322	0.193	0.337		0.723	No	0.594	No	0.738	No				
	Edge 3	0.681	0.322	0.193	0.337		1003	No	0.874	No	1018	No				
	Edge 4	1030	0.322	0.193	0.337		1352	No	1223	No	1367	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.4. Sum of the SAR for GSM1900 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.104	0.276	0.114	0.274	0.069	0.380	No	0.218	No	0.378	No	0.173	No	0.287	No
	Left Tilt	0.132	0.276	0.114	0.274	0.060	0.408	No	0.246	No	0.406	No	0.192	No	0.306	No
	Right Touch	0.390	0.276	0.114	0.274	0.070	0.666	No	0.504	No	0.664	No	0.460	No	0.574	No
	Right Tilt	0.381	0.276	0.114	0.274	0.083	0.657	No	0.495	No	0.655	No	0.464	No	0.578	No
Body-worn & Hotspot & Airplay	Rear	0.118	0.322	0.193	0.337	0.056	0.440	No	0.311	No	0.455	No	0.174	No	0.367	No
	Front	0.496	0.322	0.193	0.337	0.028	0.818	No	0.689	No	0.833	No	0.524	No	0.717	No
Hotspot & Airplay	Edge 1	0.123	0.322	0.193	0.337		0.445	No	0.316	No	0.460	No				
	Edge 2	0.007	0.322	0.193	0.337		0.329	No	0.200	No	0.344	No				
	Edge 4	0.094	0.322	0.193	0.337		0.416	No	0.287	No	0.431	No				

12.5. Sum of the SAR for GSM1900 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.247	0.276	0.114	0.274	0.069	0.523	No	0.361	No	0.521	No	0.316	No	0.430	No
	Left Tilt	0.148	0.276	0.114	0.274	0.060	0.424	No	0.262	No	0.422	No	0.208	No	0.322	No
	Right Touch	0.487	0.276	0.114	0.274	0.070	0.763	No	0.601	No	0.761	No	0.557	No	0.671	No
	Right Tilt	0.151	0.276	0.114	0.274	0.083	0.427	No	0.265	No	0.425	No	0.234	No	0.348	No
Body-worn & Hotspot & Airplay	Rear	0.864	0.322	0.193	0.337	0.056	1186	No	1057	No	1201	No	0.920	No	1113	No
	Front	1.107	0.322	0.193	0.337	0.028	1429	No	1300	No	1444	No	1.135	No	1328	No
Hotspot & Airplay	Edge 2	0.791	0.322	0.193	0.337		1113	No	0.984	No	1128	No				
	Edge 3	0.842	0.322	0.193	0.337		1164	No	1035	No	1179	No				
	Edge 4	0.084	0.322	0.193	0.337		0.406	No	0.277	No	0.421	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.6. Sum of the SAR for W-CDMA V (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.657	0.276	0.114	0.274	0.069	0.933	No	0.771	No	0.931	No	0.726	No	0.840	No
	Left Tilt	0.532	0.276	0.114	0.274	0.060	0.808	No	0.646	No	0.806	No	0.592	No	0.706	No
	Right Touch	0.733	0.276	0.114	0.274	0.070	1009	No	0.847	No	1007	No	0.803	No	0.917	No
	Right Tilt	0.448	0.276	0.114	0.274	0.083	0.724	No	0.562	No	0.722	No	0.531	No	0.645	No
Body-worn & Hotspot & Airplay	Rear	0.334	0.322	0.193	0.337	0.056	0.656	No	0.527	No	0.671	No	0.390	No	0.583	No
	Front	0.358	0.322	0.193	0.337	0.028	0.680	No	0.551	No	0.695	No	0.386	No	0.579	No
Hotspot & Airplay	Edge 1	0.141	0.322	0.193	0.337		0.463	No	0.334	No	0.478	No				
	Edge 2	0.259	0.322	0.193	0.337		0.581	No	0.452	No	0.596	No				
	Edge 4	0.147	0.322	0.193	0.337		0.469	No	0.340	No	0.484	No				

12.7. Sum of the SAR for W-CDMA V (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.408	0.276	0.114	0.274	0.069	0.684	No	0.522	No	0.682	No	0.477	No	0.591	No
	Left Tilt	0.176	0.276	0.114	0.274	0.060	0.452	No	0.290	No	0.450	No	0.236	No	0.350	No
	Right Touch	0.327	0.276	0.114	0.274	0.070	0.603	No	0.441	No	0.601	No	0.397	No	0.511	No
	Right Tilt	0.173	0.276	0.114	0.274	0.083	0.449	No	0.287	No	0.447	No	0.256	No	0.370	No
Body-worn & Hotspot & Airplay	Rear	0.662	0.322	0.193	0.337	0.056	0.984	No	0.855	No	0.999	No	0.718	No	0.911	No
	Front	1.110	0.322	0.193	0.337	0.028	1432	No	1303	No	1447	No	1138	No	1331	No
Hotspot & Airplay	Edge 2	0.231	0.322	0.193	0.337		0.553	No	0.424	No	0.568	No				
	Edge 3	0.676	0.322	0.193	0.337		0.998	No	0.869	No	1013	No				
	Edge 4	0.735	0.322	0.193	0.337		1057	No	0.928	No	1072	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.8. Sum of the SAR for W-CDMA IV (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.567	0.276	0.114	0.274	0.069	0.843	No	0.681	No	0.841	No	0.636	No	0.750	No
	Left Tilt	0.585	0.276	0.114	0.274	0.060	0.861	No	0.699	No	0.859	No	0.645	No	0.759	No
	Right Touch	1034	0.276	0.114	0.274	0.070	1310	No	1148	No	1308	No	1104	No	1218	No
	Right Tilt	0.974	0.276	0.114	0.274	0.083	1250	No	1088	No	1248	No	1057	No	1171	No
Body-worn & Hotspot & Airplay	Rear	0.394	0.322	0.193	0.337	0.056	0.716	No	0.587	No	0.731	No	0.450	No	0.643	No
	Front	0.568	0.322	0.193	0.337	0.028	0.890	No	0.761	No	0.905	No	0.596	No	0.789	No
Hotspot & Airplay	Edge 1	0.872	0.322	0.193	0.337		1194	No	1065	No	1209	No				
	Edge 2	0.027	0.322	0.193	0.337		0.349	No	0.220	No	0.364	No				
	Edge 4	0.421	0.322	0.193	0.337		0.743	No	0.614	No	0.758	No				

12.9. Sum of the SAR for W-CDMA IV (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.274	0.276	0.114	0.274	0.069	0.550	No	0.388	No	0.548	No	0.343	No	0.457	No
	Left Tilt	0.204	0.276	0.114	0.274	0.060	0.480	No	0.318	No	0.478	No	0.264	No	0.378	No
	Right Touch	0.774	0.276	0.114	0.274	0.070	1050	No	0.888	No	1048	No	0.844	No	0.958	No
	Right Tilt	0.169	0.276	0.114	0.274	0.083	0.445	No	0.283	No	0.443	No	0.252	No	0.366	No
Body-worn & Hotspot & Airplay	Rear	0.862	0.322	0.193	0.337	0.056	1184	No	1055	No	1199	No	0.918	No	1.111	No
	Front	0.886	0.322	0.193	0.337	0.028	1208	No	1079	No	1223	No	0.914	No	1.107	No
Hotspot & Airplay	Edge 2	0.678	0.322	0.193	0.337		1000	No	0.871	No	1015	No				
	Edge 3	0.995	0.322	0.193	0.337		1317	No	1188	No	1332	No				
	Edge 4	0.090	0.322	0.193	0.337		0.412	No	0.283	No	0.427	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.10. Sum of the SAR for W-CDMA II (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.420	0.276	0.114	0.274	0.069	0.696	No	0.534	No	0.694	No	0.489	No	0.603	No
	Left Tilt	0.421	0.276	0.114	0.274	0.060	0.697	No	0.535	No	0.695	No	0.481	No	0.595	No
	Right Touch	0.918	0.276	0.114	0.274	0.070	1.194	No	1.032	No	1.192	No	0.988	No	1.102	No
	Right Tilt	0.717	0.276	0.114	0.274	0.083	0.993	No	0.831	No	0.991	No	0.800	No	0.914	No
Body-worn & Hotspot & Airplay	Rear	0.562	0.322	0.193	0.337	0.056	0.884	No	0.755	No	0.899	No	0.618	No	0.811	No
	Front	0.931	0.322	0.193	0.337	0.028	1.253	No	1.124	No	1.268	No	0.959	No	1.152	No
Hotspot & Airplay	Edge 1	0.481	0.322	0.193	0.337		0.803	No	0.674	No	0.818	No				
	Edge 2	0.049	0.322	0.193	0.337		0.371	No	0.242	No	0.386	No				
	Edge 4	0.453	0.322	0.193	0.337		0.775	No	0.646	No	0.790	No				

12.11. Sum of the SAR for W-CDMA II (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.387	0.276	0.114	0.274	0.069	0.663	No	0.501	No	0.661	No	0.456	No	0.570	No
	Left Tilt	0.235	0.276	0.114	0.274	0.060	0.511	No	0.349	No	0.509	No	0.295	No	0.409	No
	Right Touch	0.913	0.276	0.114	0.274	0.070	1.189	No	1.027	No	1.187	No	0.983	No	1.097	No
	Right Tilt	0.242	0.276	0.114	0.274	0.083	0.518	No	0.356	No	0.516	No	0.325	No	0.439	No
Body-worn & Hotspot & Airplay	Rear	0.849	0.322	0.193	0.337	0.056	1.171	No	1.042	No	1.186	No	0.905	No	1.098	No
	Front	0.977	0.322	0.193	0.337	0.028	1.299	No	1.170	No	1.314	No	1.005	No	1.198	No
Hotspot & Airplay	Edge 2	0.634	0.322	0.193	0.337		0.956	No	0.827	No	0.971	No				
	Edge 3	0.705	0.322	0.193	0.337		1.027	No	0.898	No	1.042	No				
	Edge 4	0.075	0.322	0.193	0.337		0.397	No	0.268	No	0.412	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.12. Sum of the SAR for CDMA BC0 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.646	0.276	0.114	0.274	0.069	0.922	No	0.760	No	0.920	No	0.715	No	0.829	No
	Left Tilt	0.612	0.276	0.114	0.274	0.060	0.888	No	0.726	No	0.886	No	0.672	No	0.786	No
	Right Touch	0.735	0.276	0.114	0.274	0.070	1.011	No	0.849	No	1.009	No	0.805	No	0.919	No
	Right Tilt	0.486	0.276	0.114	0.274	0.083	0.762	No	0.600	No	0.760	No	0.569	No	0.683	No
Body-worn & Hotspot & Airplay	Rear	0.335	0.322	0.193	0.337	0.056	0.657	No	0.528	No	0.672	No	0.391	No	0.584	No
	Front	0.378	0.322	0.193	0.337	0.028	0.700	No	0.571	No	0.715	No	0.406	No	0.599	No
Hotspot & Airplay	Edge 1	0.155	0.322	0.193	0.337		0.477	No	0.348	No	0.492	No				
	Edge 2	0.323	0.322	0.193	0.337		0.645	No	0.516	No	0.660	No				
	Edge 4	0.160	0.322	0.193	0.337		0.482	No	0.353	No	0.497	No				

12.13. Sum of the SAR for CDMA BC0 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.542	0.276	0.114	0.274	0.069	0.818	No	0.656	No	0.816	No	0.611	No	0.725	No
	Left Tilt	0.226	0.276	0.114	0.274	0.060	0.502	No	0.340	No	0.500	No	0.286	No	0.400	No
	Right Touch	0.394	0.276	0.114	0.274	0.070	0.670	No	0.508	No	0.668	No	0.464	No	0.578	No
	Right Tilt	0.221	0.276	0.114	0.274	0.083	0.497	No	0.335	No	0.495	No	0.304	No	0.418	No
Body-worn & Hotspot & Airplay	Rear	0.932	0.322	0.193	0.337	0.056	1.254	No	1.125	No	1.269	No	0.988	No	1.181	No
	Front	1.100	0.322	0.193	0.337	0.028	1.422	No	1.293	No	1.437	No	1.128	No	1.321	No
Hotspot & Airplay	Edge 2	0.421	0.322	0.193	0.337		0.743	No	0.614	No	0.758	No				
	Edge 3	0.998	0.322	0.193	0.337		1.320	No	1.191	No	1.335	No				
	Edge 4	1.030	0.322	0.193	0.337		1.352	No	1.223	No	1.367	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.14. Sum of the SAR for CDMA BC1 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.473	0.276	0.114	0.274	0.069	0.749	No	0.587	No	0.747	No	0.542	No	0.656	No
	Left Tilt	0.412	0.276	0.114	0.274	0.060	0.688	No	0.526	No	0.686	No	0.472	No	0.586	No
	Right Touch	0.970	0.276	0.114	0.274	0.070	1246	No	1084	No	1244	No	1040	No	1154	No
	Right Tilt	0.686	0.276	0.114	0.274	0.083	0.962	No	0.800	No	0.960	No	0.769	No	0.883	No
Body-worn & Hotspot & Airplay	Rear	0.719	0.322	0.193	0.337	0.056	1041	No	0.912	No	1056	No	0.775	No	0.968	No
	Front	0.890	0.322	0.193	0.337	0.028	1212	No	1083	No	1227	No	0.918	No	1.111	No
Hotspot & Airplay	Edge 1	0.619	0.322	0.193	0.337		0.941	No	0.812	No	0.956	No				
	Edge 2	0.060	0.322	0.193	0.337		0.382	No	0.253	No	0.397	No				
	Edge 4	0.570	0.322	0.193	0.337		0.892	No	0.763	No	0.907	No				

12.15. Sum of the SAR for CDMA BC1 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.407	0.276	0.114	0.274	0.069	0.683	No	0.521	No	0.681	No	0.476	No	0.590	No
	Left Tilt	0.296	0.276	0.114	0.274	0.060	0.572	No	0.410	No	0.570	No	0.356	No	0.470	No
	Right Touch	0.991	0.276	0.114	0.274	0.070	1267	No	1105	No	1265	No	1061	No	1175	No
	Right Tilt	0.269	0.276	0.114	0.274	0.083	0.545	No	0.383	No	0.543	No	0.352	No	0.466	No
Body-worn & Hotspot & Airplay	Rear	0.923	0.322	0.193	0.337	0.056	1245	No	1116	No	1260	No	0.979	No	1.172	No
	Front	1.110	0.322	0.193	0.337	0.028	1432	No	1303	No	1447	No	1.138	No	1.331	No
Hotspot & Airplay	Edge 2	0.777	0.322	0.193	0.337		1099	No	0.970	No	1.114	No				
	Edge 3	0.734	0.322	0.193	0.337		1056	No	0.927	No	1071	No				
	Edge 4	0.085	0.322	0.193	0.337		0.407	No	0.278	No	0.422	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.16. Sum of the SAR for CDMA BC10 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.653	0.276	0.114	0.274	0.069	0.929	No	0.767	No	0.927	No	0.722	No	0.836	No
	Left Tilt	0.485	0.276	0.114	0.274	0.060	0.761	No	0.599	No	0.759	No	0.545	No	0.659	No
	Right Touch	0.762	0.276	0.114	0.274	0.070	1038	No	0.876	No	1036	No	0.832	No	0.946	No
	Right Tilt	0.445	0.276	0.114	0.274	0.083	0.721	No	0.559	No	0.719	No	0.528	No	0.642	No
Body-worn & Hotspot & Airplay	Rear	0.277	0.322	0.193	0.337	0.056	0.599	No	0.470	No	0.614	No	0.333	No	0.526	No
	Front	0.336	0.322	0.193	0.337	0.028	0.658	No	0.529	No	0.673	No	0.364	No	0.557	No
Hotspot & Airplay	Edge 1	0.100	0.322	0.193	0.337		0.422	No	0.293	No	0.437	No				
	Edge 2	0.284	0.322	0.193	0.337		0.606	No	0.477	No	0.621	No				
	Edge 4	0.161	0.322	0.193	0.337		0.483	No	0.354	No	0.498	No				

12.17. Sum of the SAR for CDMA BC10 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.434	0.276	0.114	0.274	0.069	0.710	No	0.548	No	0.708	No	0.503	No	0.617	No
	Left Tilt	0.200	0.276	0.114	0.274	0.060	0.476	No	0.314	No	0.474	No	0.260	No	0.374	No
	Right Touch	0.331	0.276	0.114	0.274	0.070	0.607	No	0.445	No	0.605	No	0.401	No	0.515	No
	Right Tilt	0.170	0.276	0.114	0.274	0.083	0.446	No	0.284	No	0.444	No	0.253	No	0.367	No
Body-worn & Hotspot & Airplay	Rear	0.716	0.322	0.193	0.337	0.056	1038	No	0.909	No	1053	No	0.772	No	0.965	No
	Front	0.960	0.322	0.193	0.337	0.028	1282	No	1153	No	1297	No	0.988	No	1181	No
Hotspot & Airplay	Edge 2	0.312	0.322	0.193	0.337		0.634	No	0.505	No	0.649	No				
	Edge 3	0.612	0.322	0.193	0.337		0.934	No	0.805	No	0.949	No				
	Edge 4	0.802	0.322	0.193	0.337		1124	No	0.995	No	1139	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.18. Sum of the SAR for LTE Band 2 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

Covered by LTE Band 25 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.19. Sum of the SAR for LTE Band 2 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

Covered by LTE Band 25 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.20. Sum of the SAR for LTE Band 4 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.533	0.276	0.114	0.274	0.069	0.809	No	0.647	No	0.807	No	0.602	No	0.716	No
	Left Tilt	0.566	0.276	0.114	0.274	0.060	0.842	No	0.680	No	0.840	No	0.626	No	0.740	No
	Right Touch	0.946	0.276	0.114	0.274	0.070	1222	No	1060	No	1220	No	1016	No	1130	No
	Right Tilt	0.879	0.276	0.114	0.274	0.083	1155	No	0.993	No	1153	No	0.962	No	1076	No
Body-worn & Hotspot & Airplay	Rear	0.320	0.322	0.193	0.337	0.056	0.642	No	0.513	No	0.657	No	0.376	No	0.569	No
	Front	0.594	0.322	0.193	0.337	0.028	0.916	No	0.787	No	0.931	No	0.622	No	0.815	No
Hotspot & Airplay	Edge 1	0.467	0.322	0.193	0.337		0.789	No	0.660	No	0.804	No				
	Edge 2	0.016	0.322	0.193	0.337		0.338	No	0.209	No	0.353	No				
	Edge 4	0.324	0.322	0.193	0.337		0.646	No	0.517	No	0.661	No				

12.21. Sum of the SAR for LTE Band 4 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.284	0.276	0.114	0.274	0.069	0.560	No	0.398	No	0.558	No	0.353	No	0.467	No
	Left Tilt	0.253	0.276	0.114	0.274	0.060	0.529	No	0.367	No	0.527	No	0.313	No	0.427	No
	Right Touch	0.459	0.276	0.114	0.274	0.070	0.735	No	0.573	No	0.733	No	0.529	No	0.643	No
	Right Tilt	0.173	0.276	0.114	0.274	0.083	0.449	No	0.287	No	0.447	No	0.256	No	0.370	No
Body-worn & Hotspot & Airplay	Rear	0.515	0.322	0.193	0.337	0.056	0.837	No	0.708	No	0.852	No	0.571	No	0.764	No
	Front	0.899	0.322	0.193	0.337	0.028	1221	No	1092	No	1236	No	0.927	No	1120	No
Hotspot & Airplay	Edge 2	0.670	0.322	0.193	0.337		0.992	No	0.863	No	1007	No				
	Edge 3	1060	0.322	0.193	0.337		1382	No	1253	No	1397	No				
	Edge 4	0.088	0.322	0.193	0.337		0.410	No	0.281	No	0.425	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.22. Sum of the SAR for LTE Band 5 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

Covered by LTE Band 26 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.23. Sum of the SAR for LTE Band 5 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

Covered by LTE Band 26 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.24. Sum of the SAR for LTE Band 7 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.394	0.276	0.114	0.274	0.069	0.670	No	0.508	No	0.668	No	0.463	No	0.577	No
	Left Tilt	0.386	0.276	0.114	0.274	0.060	0.662	No	0.500	No	0.660	No	0.446	No	0.560	No
	Right Touch	1054	0.276	0.114	0.274	0.070	1330	No	1168	No	1328	No	1124	No	1238	No
	Right Tilt	0.892	0.276	0.114	0.274	0.083	1168	No	1006	No	1166	No	0.975	No	1089	No
Body-worn & Hotspot & Airplay	Rear	0.597	0.322	0.193	0.337	0.056	0.919	No	0.790	No	0.934	No	0.653	No	0.846	No
	Front	0.726	0.322	0.193	0.337	0.028	1048	No	0.919	No	1063	No	0.754	No	0.947	No
Hotspot & Airplay	Edge 1	0.247	0.322	0.193	0.337		0.569	No	0.440	No	0.584	No				
	Edge 2	0.456	0.322	0.193	0.337		0.778	No	0.649	No	0.793	No				
	Edge 4	0.647	0.322	0.193	0.337		0.969	No	0.840	No	0.984	No				

12.25. Sum of the SAR for LTE Band 7 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.397	0.276	0.114	0.274	0.069	0.673	No	0.511	No	0.671	No	0.466	No	0.580	No
	Left Tilt	0.093	0.276	0.114	0.274	0.060	0.369	No	0.207	No	0.367	No	0.153	No	0.267	No
	Right Touch	0.260	0.276	0.114	0.274	0.070	0.536	No	0.374	No	0.534	No	0.330	No	0.444	No
	Right Tilt	0.139	0.276	0.114	0.274	0.083	0.415	No	0.253	No	0.413	No	0.222	No	0.336	No
Body-worn & Hotspot & Airplay	Rear	0.482	0.322	0.193	0.337	0.056	0.804	No	0.675	No	0.819	No	0.538	No	0.731	No
	Front	0.914	0.322	0.193	0.337	0.028	1236	No	1107	No	1251	No	0.942	No	1135	No
Hotspot & Airplay	Edge 2	0.013	0.322	0.193	0.337		0.335	No	0.206	No	0.350	No				
	Edge 3	0.551	0.322	0.193	0.337		0.873	No	0.744	No	0.888	No				
	Edge 4	0.380	0.322	0.193	0.337		0.702	No	0.573	No	0.717	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.26. Sum of the SAR for LTE Band 12 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.412	0.276	0.114	0.274	0.069	0.688	No	0.526	No	0.686	No	0.481	No	0.595	No
	Left Tilt	0.412	0.276	0.114	0.274	0.060	0.688	No	0.526	No	0.686	No	0.472	No	0.586	No
	Right Touch	0.518	0.276	0.114	0.274	0.070	0.794	No	0.632	No	0.792	No	0.588	No	0.702	No
	Right Tilt	0.376	0.276	0.114	0.274	0.083	0.652	No	0.490	No	0.650	No	0.459	No	0.573	No
Body-worn & Hotspot & Airplay	Rear	0.201	0.322	0.193	0.337	0.056	0.523	No	0.394	No	0.538	No	0.257	No	0.450	No
	Front	0.216	0.322	0.193	0.337	0.028	0.538	No	0.409	No	0.553	No	0.244	No	0.437	No
Hotspot & Airplay	Edge 1	0.079	0.322	0.193	0.337		0.401	No	0.272	No	0.416	No				
	Edge 2	0.315	0.322	0.193	0.337		0.637	No	0.508	No	0.652	No				
	Edge 4	0.413	0.322	0.193	0.337		0.735	No	0.606	No	0.750	No				

12.27. Sum of the SAR for LTE Band 12 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.248	0.276	0.114	0.274	0.069	0.524	No	0.362	No	0.522	No	0.317	No	0.431	No
	Left Tilt	0.068	0.276	0.114	0.274	0.060	0.344	No	0.182	No	0.342	No	0.128	No	0.242	No
	Right Touch	0.204	0.276	0.114	0.274	0.070	0.480	No	0.318	No	0.478	No	0.274	No	0.388	No
	Right Tilt	0.077	0.276	0.114	0.274	0.083	0.353	No	0.191	No	0.351	No	0.160	No	0.274	No
Body-worn & Hotspot & Airplay	Rear	0.621	0.322	0.193	0.337	0.056	0.943	No	0.814	No	0.958	No	0.677	No	0.870	No
	Front	0.844	0.322	0.193	0.337	0.028	1.166	No	1.037	No	1.181	No	0.872	No	1.065	No
Hotspot & Airplay	Edge 2	0.279	0.322	0.193	0.337		0.601	No	0.472	No	0.616	No				
	Edge 3	0.474	0.322	0.193	0.337		0.796	No	0.667	No	0.811	No				
	Edge 4	0.654	0.322	0.193	0.337		0.976	No	0.847	No	0.991	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.28. Sum of the SAR for LTE Band 13 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.412	0.276	0.114	0.274	0.069	0.688	No	0.526	No	0.686	No	0.481	No	0.595	No
	Left Tilt	0.381	0.276	0.114	0.274	0.060	0.657	No	0.495	No	0.655	No	0.441	No	0.555	No
	Right Touch	0.489	0.276	0.114	0.274	0.070	0.765	No	0.603	No	0.763	No	0.559	No	0.673	No
	Right Tilt	0.359	0.276	0.114	0.274	0.083	0.635	No	0.473	No	0.633	No	0.442	No	0.556	No
Body-worn & Hotspot & Airplay	Rear	0.296	0.322	0.193	0.337	0.056	0.618	No	0.489	No	0.633	No	0.352	No	0.545	No
	Front	0.297	0.322	0.193	0.337	0.028	0.619	No	0.490	No	0.634	No	0.325	No	0.518	No
Hotspot & Airplay	Edge 1	0.233	0.322	0.193	0.337		0.555	No	0.426	No	0.570	No				
	Edge 2	0.315	0.322	0.193	0.337		0.637	No	0.508	No	0.652	No				
	Edge 4	0.148	0.322	0.193	0.337		0.470	No	0.341	No	0.485	No				

12.29. Sum of the SAR for LTE Band 13 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.317	0.276	0.114	0.274	0.069	0.593	No	0.431	No	0.591	No	0.386	No	0.500	No
	Left Tilt	0.163	0.276	0.114	0.274	0.060	0.439	No	0.277	No	0.437	No	0.223	No	0.337	No
	Right Touch	0.245	0.276	0.114	0.274	0.070	0.521	No	0.359	No	0.519	No	0.315	No	0.429	No
	Right Tilt	0.140	0.276	0.114	0.274	0.083	0.416	No	0.254	No	0.414	No	0.223	No	0.337	No
Body-worn & Hotspot & Airplay	Rear	0.699	0.322	0.193	0.337	0.056	1021	No	0.892	No	1036	No	0.755	No	0.948	No
	Front	0.776	0.322	0.193	0.337	0.028	1098	No	0.969	No	1113	No	0.804	No	0.997	No
Hotspot & Airplay	Edge 2	0.255	0.322	0.193	0.337		0.577	No	0.448	No	0.592	No				
	Edge 3	0.635	0.322	0.193	0.337		0.957	No	0.828	No	0.972	No				
	Edge 4	0.682	0.322	0.193	0.337		1004	No	0.875	No	1019	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.30. Sum of the SAR for LTE Band 17 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

Covered by LTE Band 12 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.31. Sum of the SAR for LTE Band 17 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

Covered by LTE Band 12 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.32. Sum of the SAR for LTE Band 25 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.450	0.276	0.114	0.274	0.069	0.726	No	0.564	No	0.724	No	0.519	No	0.633	No
	Left Tilt	0.426	0.276	0.114	0.274	0.060	0.702	No	0.540	No	0.700	No	0.486	No	0.600	No
	Right Touch	0.915	0.276	0.114	0.274	0.070	1.191	No	1.029	No	1.189	No	0.985	No	1.099	No
	Right Tilt	0.720	0.276	0.114	0.274	0.083	0.996	No	0.834	No	0.994	No	0.803	No	0.917	No
Body-worn & Hotspot & Airplay	Rear	0.540	0.322	0.193	0.337	0.056	0.862	No	0.733	No	0.877	No	0.596	No	0.789	No
	Front	0.928	0.322	0.193	0.337	0.028	1.250	No	1.121	No	1.265	No	0.956	No	1.149	No
Hotspot & Airplay	Edge 1	0.434	0.322	0.193	0.337		0.756	No	0.627	No	0.771	No				
	Edge 2	0.036	0.322	0.193	0.337		0.358	No	0.229	No	0.373	No				
	Edge 4	0.478	0.322	0.193	0.337		0.800	No	0.671	No	0.815	No				

12.33. Sum of the SAR for LTE Band 25 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.298	0.276	0.114	0.274	0.069	0.574	No	0.412	No	0.572	No	0.367	No	0.481	No
	Left Tilt	0.180	0.276	0.114	0.274	0.060	0.456	No	0.294	No	0.454	No	0.240	No	0.354	No
	Right Touch	0.794	0.276	0.114	0.274	0.070	1.070	No	0.908	No	1.068	No	0.864	No	0.978	No
	Right Tilt	0.177	0.276	0.114	0.274	0.083	0.453	No	0.291	No	0.451	No	0.260	No	0.374	No
Body-worn & Hotspot & Airplay	Rear	0.755	0.322	0.193	0.337	0.056	1.077	No	0.948	No	1.092	No	0.811	No	1.004	No
	Front	1.044	0.322	0.193	0.337	0.028	1.366	No	1.237	No	1.381	No	1.072	No	1.265	No
Hotspot & Airplay	Edge 2	0.727	0.322	0.193	0.337		1.049	No	0.920	No	1.064	No				
	Edge 3	0.719	0.322	0.193	0.337		1.041	No	0.912	No	1.056	No				
	Edge 4	0.093	0.322	0.193	0.337		0.415	No	0.286	No	0.430	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.34. Sum of the SAR for LTE Band 26 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.532	0.276	0.114	0.274	0.069	0.808	No	0.646	No	0.806	No	0.601	No	0.715	No
	Left Tilt	0.371	0.276	0.114	0.274	0.060	0.647	No	0.485	No	0.645	No	0.431	No	0.545	No
	Right Touch	0.580	0.276	0.114	0.274	0.070	0.856	No	0.694	No	0.854	No	0.650	No	0.764	No
	Right Tilt	0.394	0.276	0.114	0.274	0.083	0.670	No	0.508	No	0.668	No	0.477	No	0.591	No
Body-worn & Hotspot & Airplay	Rear	0.238	0.322	0.193	0.337	0.056	0.560	No	0.431	No	0.575	No	0.294	No	0.487	No
	Front	0.267	0.322	0.193	0.337	0.028	0.589	No	0.460	No	0.604	No	0.295	No	0.488	No
Hotspot & Airplay	Edge 1	0.108	0.322	0.193	0.337		0.430	No	0.301	No	0.445	No				
	Edge 2	0.229	0.322	0.193	0.337		0.551	No	0.422	No	0.566	No				
	Edge 4	0.126	0.322	0.193	0.337		0.448	No	0.319	No	0.463	No				

12.35. Sum of the SAR for LTE Band 26 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.300	0.276	0.114	0.274	0.069	0.576	No	0.414	No	0.574	No	0.369	No	0.483	No
	Left Tilt	0.153	0.276	0.114	0.274	0.060	0.429	No	0.267	No	0.427	No	0.213	No	0.327	No
	Right Touch	0.233	0.276	0.114	0.274	0.070	0.509	No	0.347	No	0.507	No	0.303	No	0.417	No
	Right Tilt	0.140	0.276	0.114	0.274	0.083	0.416	No	0.254	No	0.414	No	0.223	No	0.337	No
Body-worn & Hotspot & Airplay	Rear	0.544	0.322	0.193	0.337	0.056	0.866	No	0.737	No	0.881	No	0.600	No	0.793	No
	Front	0.678	0.322	0.193	0.337	0.028	1.000	No	0.871	No	1.015	No	0.706	No	0.899	No
Hotspot & Airplay	Edge 2	0.207	0.322	0.193	0.337		0.529	No	0.400	No	0.544	No				
	Edge 3	0.605	0.322	0.193	0.337		0.927	No	0.798	No	0.942	No				
	Edge 4	0.565	0.322	0.193	0.337		0.887	No	0.758	No	0.902	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.36. Sum of the SAR for LTE Band 27 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

Covered by LTE Band 26 due to similar frequency range, similar maximum tune-up limit and same channel bandwidth.

12.37. Sum of the SAR for LTE Band 27 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

Covered by LTE Band 26 due to similar frequency range, similar maximum tune-up limit and same channel bandwidth.

12.38. Sum of the SAR for LTE Band 30 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.682	0.276	0.114	0.274	0.069	0.958	No	0.796	No	0.956	No	0.751	No	0.865	No
	Left Tilt	0.569	0.276	0.114	0.274	0.060	0.845	No	0.683	No	0.843	No	0.629	No	0.743	No
	Right Touch	0.888	0.276	0.114	0.274	0.070	1.164	No	1.002	No	1.162	No	0.958	No	1.072	No
	Right Tilt	0.716	0.276	0.114	0.274	0.083	0.992	No	0.830	No	0.990	No	0.799	No	0.913	No
Body-worn & Hotspot & Airplay	Rear	0.603	0.322	0.193	0.337	0.056	0.925	No	0.796	No	0.940	No	0.659	No	0.852	No
	Front	0.916	0.322	0.193	0.337	0.028	1.238	No	1.109	No	1.253	No	0.944	No	1.137	No
Hotspot & Airplay	Edge 1	0.431	0.322	0.193	0.337		0.753	No	0.624	No	0.768	No				
	Edge 2	0.243	0.322	0.193	0.337		0.565	No	0.436	No	0.580	No				
	Edge 4	0.181	0.322	0.193	0.337		0.503	No	0.374	No	0.518	No				

12.39. Sum of the SAR for LTE Band 30 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.149	0.276	0.114	0.274	0.069	0.425	No	0.263	No	0.423	No	0.218	No	0.332	No
	Left Tilt	0.152	0.276	0.114	0.274	0.060	0.428	No	0.266	No	0.426	No	0.212	No	0.326	No
	Right Touch	0.220	0.276	0.114	0.274	0.070	0.496	No	0.334	No	0.494	No	0.290	No	0.404	No
	Right Tilt	0.137	0.276	0.114	0.274	0.083	0.413	No	0.251	No	0.411	No	0.220	No	0.334	No
Body-worn & Hotspot & Airplay	Rear	0.637	0.322	0.193	0.337	0.056	0.959	No	0.830	No	0.974	No	0.693	No	0.886	No
	Front	1.110	0.322	0.193	0.337	0.028	1.432	No	1.303	No	1.447	No	1.138	No	1.331	No
Hotspot & Airplay	Edge 2	0.313	0.322	0.193	0.337		0.635	No	0.506	No	0.650	No				
	Edge 3	0.681	0.322	0.193	0.337		1.003	No	0.874	No	1.018	No				
	Edge 4	0.161	0.322	0.193	0.337		0.483	No	0.354	No	0.498	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.40. Sum of the SAR for LTE Band 41 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.628	0.276	0.114	0.274	0.069	0.904	No	0.742	No	0.902	No	0.697	No	0.811	No
	Left Tilt	0.474	0.276	0.114	0.274	0.060	0.750	No	0.588	No	0.748	No	0.534	No	0.648	No
	Right Touch	0.912	0.276	0.114	0.274	0.070	1.188	No	1.026	No	1.186	No	0.982	No	1.096	No
	Right Tilt	0.650	0.276	0.114	0.274	0.083	0.926	No	0.764	No	0.924	No	0.733	No	0.847	No
Body-worn & Hotspot & Airplay	Rear	0.950	0.322	0.193	0.337	0.056	1.272	No	1.143	No	1.287	No	1.006	No	1.199	No
	Front	0.669	0.322	0.193	0.337	0.028	0.991	No	0.862	No	1.006	No	0.697	No	0.890	No
Hotspot & Airplay	Edge 1	0.290	0.322	0.193	0.337		0.612	No	0.483	No	0.627	No				
	Edge 2	0.314	0.322	0.193	0.337		0.636	No	0.507	No	0.651	No				
	Edge 4	0.236	0.322	0.193	0.337		0.558	No	0.429	No	0.573	No				

12.41. Sum of the SAR for LTE Band 41 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+⑤		①+③+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.273	0.276	0.114	0.274	0.069	0.549	No	0.387	No	0.547	No	0.342	No	0.456	No
	Left Tilt	0.076	0.276	0.114	0.274	0.060	0.352	No	0.190	No	0.350	No	0.136	No	0.250	No
	Right Touch	0.147	0.276	0.114	0.274	0.070	0.423	No	0.261	No	0.421	No	0.217	No	0.331	No
	Right Tilt	0.082	0.276	0.114	0.274	0.083	0.358	No	0.196	No	0.356	No	0.165	No	0.279	No
Body-worn & Hotspot & Airplay	Rear	0.756	0.322	0.193	0.337	0.056	1.078	No	0.949	No	1.093	No	0.812	No	1.005	No
	Front	1.085	0.322	0.193	0.337	0.028	1.407	No	1.278	No	1.422	No	1.113	No	1.306	No
Hotspot & Airplay	Edge 2	0.122	0.322	0.193	0.337		0.444	No	0.315	No	0.459	No				
	Edge 3	0.818	0.322	0.193	0.337		1.140	No	1.011	No	1.155	No				
	Edge 4	0.534	0.322	0.193	0.337		0.856	No	0.727	No	0.871	No				

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.42. Sum of the SAR for LTE-2CA Band 7 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Right Touch	0.934	0.276	0.114	0.274	0.070	1.004	No	0.346	No	0.184	No	0.344	No	1.118	No

12.43. Sum of the SAR for LTE-2CA Band 7 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Body-worn Accessory & Hotspot	Front	0.744	0.322	0.193	0.337	0.028	0.772	No	0.350	No	0.221	No	0.365	No	0.965	No

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.44. Sum of the SAR for LTE-2CA Band 41 (UAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Right Touch	0.789	0.276	0.114	0.274	0.070	0.859	No	0.346	No	0.184	No	0.344	No	0.973	No

12.45. Sum of the SAR for LTE-2CA Band 41 (LAT) & Wi-Fi DTS (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (Chain 0)	③ Wi-Fi 2.4GHz (Chain 1)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P _{low})	① + ②		① + ③		① + ④		① + ⑤		① + ③ + ⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Body-worn Accessory & Hotspot	Front	0.874	0.322	0.193	0.337	0.028	0.902	No	0.350	No	0.221	No	0.365	No	1.095	No

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.46. Sum of the SAR for GSM850 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.237	0.189	0.197	0.171	0.069	0.426	No	0.434	No	0.408	No	0.495	No	0.503	No	0.477	No
	Left Tilt	0.253	0.189	0.197	0.171	0.060	0.442	No	0.450	No	0.424	No	0.502	No	0.510	No	0.484	No
	Right Touch	0.284	0.189	0.197	0.171	0.070	0.473	No	0.481	No	0.455	No	0.543	No	0.551	No	0.525	No
	Right Tilt	0.234	0.189	0.197	0.171	0.083	0.423	No	0.431	No	0.405	No	0.506	No	0.514	No	0.488	No
Body-worn Accessory & Airplay	Rear	0.189	0.363	0.208	0.327	0.056	0.552	No	0.397	No	0.516	No	0.608	No	0.453	No	0.572	No
	Front	0.205	0.363	0.208	0.323	0.028	0.568	No	0.413	No	0.528	No	0.596	No	0.441	No	0.556	No
Airplay	Edge 1	0.176	0.363	0.208	0.327		0.539	No	0.384	No	0.503	No						
	Edge 2	0.094	0.363	0.208	0.327		0.457	No	0.302	No	0.421	No						
	Edge 4	0.027	0.363	0.208	0.327		0.390	No	0.235	No	0.354	No						

12.47. Sum of the SAR for GSM850 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.399	0.189	0.197	0.171	0.069	0.588	No	0.596	No	0.570	No	0.657	No	0.665	No	0.639	No
	Left Tilt	0.261	0.189	0.197	0.171	0.060	0.450	No	0.458	No	0.432	No	0.510	No	0.518	No	0.492	No
	Right Touch	0.318	0.189	0.197	0.171	0.070	0.507	No	0.515	No	0.489	No	0.577	No	0.585	No	0.559	No
	Right Tilt	0.241	0.189	0.197	0.171	0.083	0.430	No	0.438	No	0.412	No	0.513	No	0.521	No	0.495	No
Body-worn Accessory & Airplay	Rear	0.994	0.363	0.208	0.327	0.056	1357	No	1202	No	1321	No	1413	No	1258	No	1377	No
	Front	1.120	0.363	0.208	0.323	0.028	1483	No	1328	No	1443	No	1511	No	1356	No	1471	No
Airplay	Edge 2	0.401	0.363	0.208	0.327		0.764	No	0.609	No	0.728	No						
	Edge 3	0.681	0.363	0.208	0.327		1044	No	0.889	No	1008	No						
	Edge 4	1030	0.363	0.208	0.327		1393	No	1238	No	1357	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.48. Sum of the SAR for GSM1900 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.104	0.189	0.197	0.171	0.069	0.293	No	0.301	No	0.275	No	0.362	No	0.370	No	0.344	No
	Left Tilt	0.132	0.189	0.197	0.171	0.060	0.321	No	0.329	No	0.303	No	0.381	No	0.389	No	0.363	No
	Right Touch	0.390	0.189	0.197	0.171	0.070	0.579	No	0.587	No	0.561	No	0.649	No	0.657	No	0.631	No
	Right Tilt	0.381	0.189	0.197	0.171	0.083	0.570	No	0.578	No	0.552	No	0.653	No	0.661	No	0.635	No
Body-worn Accessory & Airplay	Rear	0.118	0.363	0.208	0.327	0.056	0.481	No	0.326	No	0.445	No	0.537	No	0.382	No	0.501	No
	Front	0.496	0.363	0.208	0.323	0.028	0.859	No	0.704	No	0.819	No	0.887	No	0.732	No	0.847	No
Airplay	Edge 1	0.123	0.363	0.208	0.327		0.486	No	0.331	No	0.450	No						
	Edge 2	0.007	0.363	0.208	0.327		0.370	No	0.215	No	0.334	No						
	Edge 4	0.094	0.363	0.208	0.327		0.457	No	0.302	No	0.421	No						

12.49. Sum of the SAR for GSM1900 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.247	0.189	0.197	0.171	0.069	0.436	No	0.444	No	0.418	No	0.505	No	0.513	No	0.487	No
	Left Tilt	0.148	0.189	0.197	0.171	0.060	0.337	No	0.345	No	0.319	No	0.397	No	0.405	No	0.379	No
	Right Touch	0.487	0.189	0.197	0.171	0.070	0.676	No	0.684	No	0.658	No	0.746	No	0.754	No	0.728	No
	Right Tilt	0.151	0.189	0.197	0.171	0.083	0.340	No	0.348	No	0.322	No	0.423	No	0.431	No	0.405	No
Body-worn Accessory & Airplay	Rear	0.864	0.363	0.208	0.327	0.056	1227	No	1072	No	1191	No	1283	No	1128	No	1247	No
	Front	1.107	0.363	0.208	0.323	0.028	1470	No	1315	No	1430	No	1498	No	1343	No	1458	No
Airplay	Edge 2	0.791	0.363	0.208	0.327		1154	No	0.999	No	1118	No						
	Edge 3	0.842	0.363	0.208	0.327		1205	No	1050	No	1169	No						
	Edge 4	0.084	0.363	0.208	0.327		0.447	No	0.292	No	0.411	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.50. Sum of the SAR for W-CDMA V (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.657	0.189	0.197	0.171	0.069	0.846	No	0.854	No	0.828	No	0.915	No	0.923	No	0.897	No
	Left Tilt	0.532	0.189	0.197	0.171	0.060	0.721	No	0.729	No	0.703	No	0.781	No	0.789	No	0.763	No
	Right Touch	0.733	0.189	0.197	0.171	0.070	0.922	No	0.930	No	0.904	No	0.992	No	1000	No	0.974	No
	Right Tilt	0.448	0.189	0.197	0.171	0.083	0.637	No	0.645	No	0.619	No	0.720	No	0.728	No	0.702	No
Body-worn Accessory & Airplay	Rear	0.334	0.363	0.208	0.327	0.056	0.697	No	0.542	No	0.661	No	0.753	No	0.598	No	0.717	No
	Front	0.358	0.363	0.208	0.323	0.028	0.721	No	0.566	No	0.681	No	0.749	No	0.594	No	0.709	No
Airplay	Edge 1	0.141	0.363	0.208	0.327		0.504	No	0.349	No	0.468	No						
	Edge 2	0.259	0.363	0.208	0.327		0.622	No	0.467	No	0.586	No						
	Edge 4	0.147	0.363	0.208	0.327		0.510	No	0.355	No	0.474	No						

12.51. Sum of the SAR for W-CDMA V (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.408	0.189	0.197	0.171	0.069	0.597	No	0.605	No	0.579	No	0.666	No	0.674	No	0.648	No
	Left Tilt	0.176	0.189	0.197	0.171	0.060	0.365	No	0.373	No	0.347	No	0.425	No	0.433	No	0.407	No
	Right Touch	0.327	0.189	0.197	0.171	0.070	0.516	No	0.524	No	0.498	No	0.586	No	0.594	No	0.568	No
	Right Tilt	0.173	0.189	0.197	0.171	0.083	0.362	No	0.370	No	0.344	No	0.445	No	0.453	No	0.427	No
Body-worn Accessory & Airplay	Rear	0.662	0.363	0.208	0.327	0.056	1025	No	0.870	No	0.989	No	1081	No	0.926	No	1045	No
	Front	1.110	0.363	0.208	0.323	0.028	1473	No	1318	No	1433	No	1501	No	1346	No	1461	No
Airplay	Edge 2	0.231	0.363	0.208	0.327		0.594	No	0.439	No	0.558	No						
	Edge 3	0.676	0.363	0.208	0.327		1039	No	0.884	No	1003	No						
	Edge 4	0.735	0.363	0.208	0.327		1098	No	0.943	No	1062	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.52. Sum of the SAR for W-CDMA IV (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.567	0.189	0.197	0.171	0.069	0.756	No	0.764	No	0.738	No	0.825	No	0.833	No	0.807	No
	Left Tilt	0.585	0.189	0.197	0.171	0.060	0.774	No	0.782	No	0.756	No	0.834	No	0.842	No	0.816	No
	Right Touch	1034	0.189	0.197	0.171	0.070	1223	No	1231	No	1205	No	1293	No	1301	No	1275	No
	Right Tilt	0.974	0.189	0.197	0.171	0.083	1163	No	1171	No	1145	No	1246	No	1254	No	1228	No
Body-worn Accessory & Airplay	Rear	0.394	0.363	0.208	0.327	0.056	0.757	No	0.602	No	0.721	No	0.813	No	0.658	No	0.777	No
	Front	0.568	0.363	0.208	0.323	0.028	0.931	No	0.776	No	0.891	No	0.959	No	0.804	No	0.919	No
Airplay	Edge 1	0.872	0.363	0.208	0.327		1235	No	1080	No	1199	No						
	Edge 2	0.027	0.363	0.208	0.327		0.390	No	0.235	No	0.354	No						
	Edge 4	0.421	0.363	0.208	0.327		0.784	No	0.629	No	0.748	No						

12.53. Sum of the SAR for W-CDMA IV (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.274	0.189	0.197	0.171	0.069	0.463	No	0.471	No	0.445	No	0.532	No	0.540	No	0.514	No
	Left Tilt	0.204	0.189	0.197	0.171	0.060	0.393	No	0.401	No	0.375	No	0.453	No	0.461	No	0.435	No
	Right Touch	0.774	0.189	0.197	0.171	0.070	0.963	No	0.971	No	0.945	No	1033	No	1041	No	1015	No
	Right Tilt	0.169	0.189	0.197	0.171	0.083	0.358	No	0.366	No	0.340	No	0.441	No	0.449	No	0.423	No
Body-worn Accessory & Airplay	Rear	0.862	0.363	0.208	0.327	0.056	1225	No	1070	No	1189	No	1281	No	1126	No	1245	No
	Front	0.886	0.363	0.208	0.323	0.028	1249	No	1094	No	1209	No	1277	No	1122	No	1237	No
Airplay	Edge 2	0.678	0.363	0.208	0.327		1041	No	0.886	No	1005	No						
	Edge 3	0.995	0.363	0.208	0.327		1358	No	1203	No	1322	No						
	Edge 4	0.090	0.363	0.208	0.327		0.453	No	0.298	No	0.417	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.54. Sum of the SAR for W-CDMA II (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.420	0.189	0.197	0.171	0.069	0.609	No	0.617	No	0.591	No	0.678	No	0.686	No	0.660	No
	Left Tilt	0.421	0.189	0.197	0.171	0.060	0.610	No	0.618	No	0.592	No	0.670	No	0.678	No	0.652	No
	Right Touch	0.918	0.189	0.197	0.171	0.070	1.107	No	1.115	No	1.089	No	1.177	No	1.185	No	1.159	No
	Right Tilt	0.717	0.189	0.197	0.171	0.083	0.906	No	0.914	No	0.888	No	0.989	No	0.997	No	0.971	No
Body-worn Accessory & Airplay	Rear	0.562	0.363	0.208	0.327	0.056	0.925	No	0.770	No	0.889	No	0.981	No	0.826	No	0.945	No
	Front	0.931	0.363	0.208	0.323	0.028	1.294	No	1.139	No	1.254	No	1.322	No	1.167	No	1.282	No
Airplay	Edge 1	0.481	0.363	0.208	0.327		0.844	No	0.689	No	0.808	No						
	Edge 2	0.049	0.363	0.208	0.327		0.412	No	0.257	No	0.376	No						
	Edge 4	0.453	0.363	0.208	0.327		0.816	No	0.661	No	0.780	No						

12.55. Sum of the SAR for W-CDMA II (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.387	0.189	0.197	0.171	0.069	0.576	No	0.584	No	0.558	No	0.645	No	0.653	No	0.627	No
	Left Tilt	0.235	0.189	0.197	0.171	0.060	0.424	No	0.432	No	0.406	No	0.484	No	0.492	No	0.466	No
	Right Touch	0.913	0.189	0.197	0.171	0.070	1.102	No	1.110	No	1.084	No	1.172	No	1.180	No	1.154	No
	Right Tilt	0.242	0.189	0.197	0.171	0.083	0.431	No	0.439	No	0.413	No	0.514	No	0.522	No	0.496	No
Body-worn Accessory & Airplay	Rear	0.849	0.363	0.208	0.327	0.056	1.212	No	1.057	No	1.176	No	1.268	No	1.113	No	1.232	No
	Front	0.977	0.363	0.208	0.323	0.028	1.340	No	1.185	No	1.300	No	1.368	No	1.213	No	1.328	No
Airplay	Edge 2	0.634	0.363	0.208	0.327		0.997	No	0.842	No	0.961	No						
	Edge 3	0.705	0.363	0.208	0.327		1.068	No	0.913	No	1.032	No						
	Edge 4	0.075	0.363	0.208	0.327		0.438	No	0.283	No	0.402	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.56. Sum of the SAR for CDMA BC0 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.646	0.189	0.197	0.171	0.069	0.835	No	0.843	No	0.817	No	0.904	No	0.912	No	0.886	No
	Left Tilt	0.612	0.189	0.197	0.171	0.060	0.801	No	0.809	No	0.783	No	0.861	No	0.869	No	0.843	No
	Right Touch	0.735	0.189	0.197	0.171	0.070	0.924	No	0.932	No	0.906	No	0.994	No	1002	No	0.976	No
	Right Tilt	0.486	0.189	0.197	0.171	0.083	0.675	No	0.683	No	0.657	No	0.758	No	0.766	No	0.740	No
Body-worn Accessory & Airplay	Rear	0.335	0.363	0.208	0.327	0.056	0.698	No	0.543	No	0.662	No	0.754	No	0.599	No	0.718	No
	Front	0.378	0.363	0.208	0.323	0.028	0.741	No	0.586	No	0.701	No	0.769	No	0.614	No	0.729	No
Airplay	Edge 1	0.155	0.363	0.208	0.327		0.518	No	0.363	No	0.482	No						
	Edge 2	0.323	0.363	0.208	0.327		0.686	No	0.531	No	0.650	No						
	Edge 4	0.160	0.363	0.208	0.327		0.523	No	0.368	No	0.487	No						

12.57. Sum of the SAR for CDMA BC0 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.542	0.189	0.197	0.171	0.069	0.731	No	0.739	No	0.713	No	0.800	No	0.808	No	0.782	No
	Left Tilt	0.226	0.189	0.197	0.171	0.060	0.415	No	0.423	No	0.397	No	0.475	No	0.483	No	0.457	No
	Right Touch	0.394	0.189	0.197	0.171	0.070	0.583	No	0.591	No	0.565	No	0.653	No	0.661	No	0.635	No
	Right Tilt	0.221	0.189	0.197	0.171	0.083	0.410	No	0.418	No	0.392	No	0.493	No	0.501	No	0.475	No
Body-worn Accessory & Airplay	Rear	0.932	0.363	0.208	0.327	0.056	1295	No	1140	No	1259	No	1351	No	1196	No	1315	No
	Front	1100	0.363	0.208	0.323	0.028	1463	No	1308	No	1423	No	1491	No	1336	No	1451	No
Airplay	Edge 2	0.421	0.363	0.208	0.327		0.784	No	0.629	No	0.748	No						
	Edge 3	0.998	0.363	0.208	0.327		1361	No	1206	No	1325	No						
	Edge 4	1030	0.363	0.208	0.327		1393	No	1238	No	1357	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.58. Sum of the SAR for CDMA BC1 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.473	0.189	0.197	0.171	0.069	0.662	No	0.670	No	0.644	No	0.731	No	0.739	No	0.713	No
	Left Tilt	0.412	0.189	0.197	0.171	0.060	0.601	No	0.609	No	0.583	No	0.661	No	0.669	No	0.643	No
	Right Touch	0.970	0.189	0.197	0.171	0.070	1.159	No	1.167	No	1.141	No	1.229	No	1.237	No	1.211	No
	Right Tilt	0.686	0.189	0.197	0.171	0.083	0.875	No	0.883	No	0.857	No	0.958	No	0.966	No	0.940	No
Body-worn Accessory & Airplay	Rear	0.719	0.363	0.208	0.327	0.056	1.082	No	0.927	No	1.046	No	1.138	No	0.983	No	1.102	No
	Front	0.890	0.363	0.208	0.323	0.028	1.253	No	1.098	No	1.213	No	1.281	No	1.126	No	1.241	No
Airplay	Edge 1	0.619	0.363	0.208	0.327		0.982	No	0.827	No	0.946	No						
	Edge 2	0.060	0.363	0.208	0.327		0.423	No	0.268	No	0.387	No						
	Edge 4	0.570	0.363	0.208	0.327		0.933	No	0.778	No	0.897	No						

12.59. Sum of the SAR for CDMA BC1 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.407	0.189	0.197	0.171	0.069	0.596	No	0.604	No	0.578	No	0.665	No	0.673	No	0.647	No
	Left Tilt	0.296	0.189	0.197	0.171	0.060	0.485	No	0.493	No	0.467	No	0.545	No	0.553	No	0.527	No
	Right Touch	0.991	0.189	0.197	0.171	0.070	1.180	No	1.188	No	1.162	No	1.250	No	1.258	No	1.232	No
	Right Tilt	0.269	0.189	0.197	0.171	0.083	0.458	No	0.466	No	0.440	No	0.541	No	0.549	No	0.523	No
Body-worn Accessory & Airplay	Rear	0.923	0.363	0.208	0.327	0.056	1.286	No	1.131	No	1.250	No	1.342	No	1.187	No	1.306	No
	Front	1.110	0.363	0.208	0.323	0.028	1.473	No	1.318	No	1.433	No	1.501	No	1.346	No	1.461	No
Airplay	Edge 2	0.777	0.363	0.208	0.327		1.140	No	0.985	No	1.104	No						
	Edge 3	0.734	0.363	0.208	0.327		1.097	No	0.942	No	1.061	No						
	Edge 4	0.085	0.363	0.208	0.327		0.448	No	0.293	No	0.412	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.60. Sum of the SAR for CDMA BC10 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.653	0.189	0.197	0.171	0.069	0.842	No	0.850	No	0.824	No	0.911	No	0.919	No	0.893	No
	Left Tilt	0.485	0.189	0.197	0.171	0.060	0.674	No	0.682	No	0.656	No	0.734	No	0.742	No	0.716	No
	Right Touch	0.762	0.189	0.197	0.171	0.070	0.951	No	0.959	No	0.933	No	1021	No	1029	No	1003	No
	Right Tilt	0.445	0.189	0.197	0.171	0.083	0.634	No	0.642	No	0.616	No	0.717	No	0.725	No	0.699	No
Body-worn Accessory & Airplay	Rear	0.277	0.363	0.208	0.327	0.056	0.640	No	0.485	No	0.604	No	0.696	No	0.541	No	0.660	No
	Front	0.336	0.363	0.208	0.323	0.028	0.699	No	0.544	No	0.659	No	0.727	No	0.572	No	0.687	No
Airplay	Edge 1	0.100	0.363	0.208	0.327		0.463	No	0.308	No	0.427	No						
	Edge 2	0.284	0.363	0.208	0.327		0.647	No	0.492	No	0.611	No						
	Edge 4	0.161	0.363	0.208	0.327		0.524	No	0.369	No	0.488	No						

12.61. Sum of the SAR for CDMA BC10 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.434	0.189	0.197	0.171	0.069	0.623	No	0.631	No	0.605	No	0.692	No	0.700	No	0.674	No
	Left Tilt	0.200	0.189	0.197	0.171	0.060	0.389	No	0.397	No	0.371	No	0.449	No	0.457	No	0.431	No
	Right Touch	0.331	0.189	0.197	0.171	0.070	0.520	No	0.528	No	0.502	No	0.590	No	0.598	No	0.572	No
	Right Tilt	0.170	0.189	0.197	0.171	0.083	0.359	No	0.367	No	0.341	No	0.442	No	0.450	No	0.424	No
Body-worn Accessory & Airplay	Rear	0.716	0.363	0.208	0.327	0.056	1079	No	0.924	No	1043	No	1135	No	0.980	No	1099	No
	Front	0.960	0.363	0.208	0.323	0.028	1323	No	1168	No	1283	No	1351	No	1196	No	1311	No
Airplay	Edge 2	0.312	0.363	0.208	0.327		0.675	No	0.520	No	0.639	No						
	Edge 3	0.612	0.363	0.208	0.327		0.975	No	0.820	No	0.939	No						
	Edge 4	0.802	0.363	0.208	0.327		1165	No	1010	No	1129	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.62. Sum of the SAR for LTE Band 2 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

Covered by LTE Band 25 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.63. Sum of the SAR for LTE Band 2 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

Covered by LTE Band 25 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.64. Sum of the SAR for LTE Band 4 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.533	0.189	0.197	0.171	0.069	0.722	No	0.730	No	0.704	No	0.791	No	0.799	No	0.773	No
	Left Tilt	0.566	0.189	0.197	0.171	0.060	0.755	No	0.763	No	0.737	No	0.815	No	0.823	No	0.797	No
	Right Touch	0.946	0.189	0.197	0.171	0.070	1.135	No	1.143	No	1.117	No	1.205	No	1.213	No	1.187	No
	Right Tilt	0.879	0.189	0.197	0.171	0.083	1.068	No	1.076	No	1.050	No	1.151	No	1.159	No	1.133	No
Body-worn Accessory & Airplay	Rear	0.320	0.363	0.208	0.327	0.056	0.683	No	0.528	No	0.647	No	0.739	No	0.584	No	0.703	No
	Front	0.594	0.363	0.208	0.323	0.028	0.957	No	0.802	No	0.917	No	0.985	No	0.830	No	0.945	No
Airplay	Edge 1	0.467	0.363	0.208	0.327		0.830	No	0.675	No	0.794	No						
	Edge 2	0.016	0.363	0.208	0.327		0.379	No	0.224	No	0.343	No						
	Edge 4	0.324	0.363	0.208	0.327		0.687	No	0.532	No	0.651	No						

12.65. Sum of the SAR for LTE Band 4 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.284	0.189	0.197	0.171	0.069	0.473	No	0.481	No	0.455	No	0.542	No	0.550	No	0.524	No
	Left Tilt	0.253	0.189	0.197	0.171	0.060	0.442	No	0.450	No	0.424	No	0.502	No	0.510	No	0.484	No
	Right Touch	0.459	0.189	0.197	0.171	0.070	0.648	No	0.656	No	0.630	No	0.718	No	0.726	No	0.700	No
	Right Tilt	0.173	0.189	0.197	0.171	0.083	0.362	No	0.370	No	0.344	No	0.445	No	0.453	No	0.427	No
Body-worn Accessory & Airplay	Rear	0.515	0.363	0.208	0.327	0.056	0.878	No	0.723	No	0.842	No	0.934	No	0.779	No	0.898	No
	Front	0.899	0.363	0.208	0.323	0.028	1.262	No	1.107	No	1.222	No	1.290	No	1.135	No	1.250	No
Airplay	Edge 2	0.670	0.363	0.208	0.327		1.033	No	0.878	No	0.997	No						
	Edge 3	1.060	0.363	0.208	0.327		1.423	No	1.268	No	1.387	No						
	Edge 4	0.088	0.363	0.208	0.327		0.451	No	0.296	No	0.415	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.66. Sum of the SAR for LTE Band 5 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

Covered by LTE Band 26 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.67. Sum of the SAR for LTE Band 5 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

Covered by LTE Band 26 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.68. Sum of the SAR for LTE Band 7 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.394	0.189	0.197	0.171	0.069	0.583	No	0.591	No	0.565	No	0.652	No	0.660	No	0.634	No
	Left Tilt	0.386	0.189	0.197	0.171	0.060	0.575	No	0.583	No	0.557	No	0.635	No	0.643	No	0.617	No
	Right Touch	1054	0.189	0.197	0.171	0.070	1243	No	1251	No	1225	No	1313	No	1321	No	1295	No
	Right Tilt	0.892	0.189	0.197	0.171	0.083	1081	No	1089	No	1063	No	1164	No	1172	No	1146	No
Body-worn Accessory & Airplay	Rear	0.597	0.363	0.208	0.327	0.056	0.960	No	0.805	No	0.924	No	1016	No	0.861	No	0.980	No
	Front	0.726	0.363	0.208	0.323	0.028	1089	No	0.934	No	1049	No	1117	No	0.962	No	1077	No
Airplay	Edge 1	0.247	0.363	0.208	0.327		0.610	No	0.455	No	0.574	No						
	Edge 2	0.456	0.363	0.208	0.327		0.819	No	0.664	No	0.783	No						
	Edge 4	0.647	0.363	0.208	0.327		1010	No	0.855	No	0.974	No						

12.69. Sum of the SAR for LTE Band 7 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.397	0.189	0.197	0.171	0.069	0.586	No	0.594	No	0.568	No	0.655	No	0.663	No	0.637	No
	Left Tilt	0.093	0.189	0.197	0.171	0.060	0.282	No	0.290	No	0.264	No	0.342	No	0.350	No	0.324	No
	Right Touch	0.260	0.189	0.197	0.171	0.070	0.449	No	0.457	No	0.431	No	0.519	No	0.527	No	0.501	No
	Right Tilt	0.139	0.189	0.197	0.171	0.083	0.328	No	0.336	No	0.310	No	0.411	No	0.419	No	0.393	No
Body-worn Accessory & Airplay	Rear	0.482	0.363	0.208	0.327	0.056	0.845	No	0.690	No	0.809	No	0.901	No	0.746	No	0.865	No
	Front	0.914	0.363	0.208	0.323	0.028	1277	No	1122	No	1237	No	1305	No	1150	No	1265	No
Airplay	Edge 2	0.013	0.363	0.208	0.327		0.376	No	0.221	No	0.340	No						
	Edge 3	0.551	0.363	0.208	0.327		0.914	No	0.759	No	0.878	No						
	Edge 4	0.380	0.363	0.208	0.327		0.743	No	0.588	No	0.707	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.70. Sum of the SAR for LTE Band 12 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.412	0.189	0.197	0.171	0.069	0.601	No	0.609	No	0.583	No	0.670	No	0.678	No	0.652	No
	Left Tilt	0.412	0.189	0.197	0.171	0.060	0.601	No	0.609	No	0.583	No	0.661	No	0.669	No	0.643	No
	Right Touch	0.518	0.189	0.197	0.171	0.070	0.707	No	0.715	No	0.689	No	0.777	No	0.785	No	0.759	No
	Right Tilt	0.376	0.189	0.197	0.171	0.083	0.565	No	0.573	No	0.547	No	0.648	No	0.656	No	0.630	No
Body-worn Accessory & Airplay	Rear	0.201	0.363	0.208	0.327	0.056	0.564	No	0.409	No	0.528	No	0.620	No	0.465	No	0.584	No
	Front	0.216	0.363	0.208	0.323	0.028	0.579	No	0.424	No	0.539	No	0.607	No	0.452	No	0.567	No
Airplay	Edge 1	0.079	0.363	0.208	0.327		0.442	No	0.287	No	0.406	No						
	Edge 2	0.315	0.363	0.208	0.327		0.678	No	0.523	No	0.642	No						
	Edge 4	0.413	0.363	0.208	0.327		0.776	No	0.621	No	0.740	No						

12.71. Sum of the SAR for LTE Band 12 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.248	0.189	0.197	0.171	0.069	0.437	No	0.445	No	0.419	No	0.506	No	0.514	No	0.488	No
	Left Tilt	0.068	0.189	0.197	0.171	0.060	0.257	No	0.265	No	0.239	No	0.317	No	0.325	No	0.299	No
	Right Touch	0.204	0.189	0.197	0.171	0.070	0.393	No	0.401	No	0.375	No	0.463	No	0.471	No	0.445	No
	Right Tilt	0.077	0.189	0.197	0.171	0.083	0.266	No	0.274	No	0.248	No	0.349	No	0.357	No	0.331	No
Body-worn Accessory & Airplay	Rear	0.621	0.363	0.208	0.327	0.056	0.984	No	0.829	No	0.948	No	1040	No	0.885	No	1004	No
	Front	0.844	0.363	0.208	0.323	0.028	1207	No	1052	No	1167	No	1235	No	1080	No	1195	No
Airplay	Edge 2	0.279	0.363	0.208	0.327		0.642	No	0.487	No	0.606	No						
	Edge 3	0.474	0.363	0.208	0.327		0.837	No	0.682	No	0.801	No						
	Edge 4	0.654	0.363	0.208	0.327		1017	No	0.862	No	0.981	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.72. Sum of the SAR for LTE Band 13 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.412	0.189	0.197	0.171	0.069	0.601	No	0.609	No	0.583	No	0.670	No	0.678	No	0.652	No
	Left Tilt	0.381	0.189	0.197	0.171	0.060	0.570	No	0.578	No	0.552	No	0.630	No	0.638	No	0.612	No
	Right Touch	0.489	0.189	0.197	0.171	0.070	0.678	No	0.686	No	0.660	No	0.748	No	0.756	No	0.730	No
	Right Tilt	0.359	0.189	0.197	0.171	0.083	0.548	No	0.556	No	0.530	No	0.631	No	0.639	No	0.613	No
Body-worn Accessory & Airplay	Rear	0.296	0.363	0.208	0.327	0.056	0.659	No	0.504	No	0.623	No	0.715	No	0.560	No	0.679	No
	Front	0.297	0.363	0.208	0.323	0.028	0.660	No	0.505	No	0.620	No	0.688	No	0.533	No	0.648	No
Airplay	Edge 1	0.233	0.363	0.208	0.327		0.596	No	0.441	No	0.560	No						
	Edge 2	0.315	0.363	0.208	0.327		0.678	No	0.523	No	0.642	No						
	Edge 4	0.148	0.363	0.208	0.327		0.511	No	0.356	No	0.475	No						

12.73. Sum of the SAR for LTE Band 13 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.317	0.189	0.197	0.171	0.069	0.506	No	0.514	No	0.488	No	0.575	No	0.583	No	0.557	No
	Left Tilt	0.163	0.189	0.197	0.171	0.060	0.352	No	0.360	No	0.334	No	0.412	No	0.420	No	0.394	No
	Right Touch	0.245	0.189	0.197	0.171	0.070	0.434	No	0.442	No	0.416	No	0.504	No	0.512	No	0.486	No
	Right Tilt	0.140	0.189	0.197	0.171	0.083	0.329	No	0.337	No	0.311	No	0.412	No	0.420	No	0.394	No
Body-worn Accessory & Airplay	Rear	0.699	0.363	0.208	0.327	0.056	1.062	No	0.907	No	1.026	No	1.118	No	0.963	No	1.082	No
	Front	0.776	0.363	0.208	0.323	0.028	1.139	No	0.984	No	1.099	No	1.167	No	1.012	No	1.127	No
Airplay	Edge 2	0.255	0.363	0.208	0.327		0.618	No	0.463	No	0.582	No						
	Edge 3	0.635	0.363	0.208	0.327		0.998	No	0.843	No	0.962	No						
	Edge 4	0.682	0.363	0.208	0.327		1.045	No	0.890	No	1.009	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.74. Sum of the SAR for LTE Band 17 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

Covered by LTE Band 12 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.75. Sum of the SAR for LTE Band 17 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

Covered by LTE Band 12 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

12.76. Sum of the SAR for LTE Band 25 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.450	0.189	0.197	0.171	0.069	0.639	No	0.647	No	0.621	No	0.708	No	0.716	No	0.690	No
	Left Tilt	0.426	0.189	0.197	0.171	0.060	0.615	No	0.623	No	0.597	No	0.675	No	0.683	No	0.657	No
	Right Touch	0.915	0.189	0.197	0.171	0.070	1.104	No	1.112	No	1.086	No	1.174	No	1.182	No	1.156	No
	Right Tilt	0.720	0.189	0.197	0.171	0.083	0.909	No	0.917	No	0.891	No	0.992	No	1.000	No	0.974	No
Body-worn Accessory & Airplay	Rear	0.540	0.363	0.208	0.327	0.056	0.903	No	0.748	No	0.867	No	0.959	No	0.804	No	0.923	No
	Front	0.928	0.363	0.208	0.323	0.028	1.291	No	1.136	No	1.251	No	1.319	No	1.164	No	1.279	No
Airplay	Edge 1	0.434	0.363	0.208	0.327		0.797	No	0.642	No	0.761	No						
	Edge 2	0.036	0.363	0.208	0.327		0.399	No	0.244	No	0.363	No						
	Edge 4	0.478	0.363	0.208	0.327		0.841	No	0.686	No	0.805	No						

12.77. Sum of the SAR for LTE Band 25 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.298	0.189	0.197	0.171	0.069	0.487	No	0.495	No	0.469	No	0.556	No	0.564	No	0.538	No
	Left Tilt	0.180	0.189	0.197	0.171	0.060	0.369	No	0.377	No	0.351	No	0.429	No	0.437	No	0.411	No
	Right Touch	0.794	0.189	0.197	0.171	0.070	0.983	No	0.991	No	0.965	No	1.053	No	1.061	No	1.035	No
	Right Tilt	0.177	0.189	0.197	0.171	0.083	0.366	No	0.374	No	0.348	No	0.449	No	0.457	No	0.431	No
Body-worn Accessory & Airplay	Rear	0.755	0.363	0.208	0.327	0.056	1.118	No	0.963	No	1.082	No	1.174	No	1.019	No	1.138	No
	Front	1.044	0.363	0.208	0.323	0.028	1.407	No	1.252	No	1.367	No	1.435	No	1.280	No	1.395	No
Airplay	Edge 2	0.727	0.363	0.208	0.327		1.090	No	0.935	No	1.054	No						
	Edge 3	0.719	0.363	0.208	0.327		1.082	No	0.927	No	1.046	No						
	Edge 4	0.093	0.363	0.208	0.327		0.456	No	0.301	No	0.420	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.78. Sum of the SAR for LTE Band 26 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.532	0.189	0.197	0.171	0.069	0.721	No	0.729	No	0.703	No	0.790	No	0.798	No	0.772	No
	Left Tilt	0.371	0.189	0.197	0.171	0.060	0.560	No	0.568	No	0.542	No	0.620	No	0.628	No	0.602	No
	Right Touch	0.580	0.189	0.197	0.171	0.070	0.769	No	0.777	No	0.751	No	0.839	No	0.847	No	0.821	No
	Right Tilt	0.394	0.189	0.197	0.171	0.083	0.583	No	0.591	No	0.565	No	0.666	No	0.674	No	0.648	No
Body-worn Accessory & Airplay	Rear	0.238	0.363	0.208	0.327	0.056	0.601	No	0.446	No	0.565	No	0.657	No	0.502	No	0.621	No
	Front	0.267	0.363	0.208	0.323	0.028	0.630	No	0.475	No	0.590	No	0.658	No	0.503	No	0.618	No
Airplay	Edge 1	0.108	0.363	0.208	0.327		0.471	No	0.316	No	0.435	No						
	Edge 2	0.229	0.363	0.208	0.327		0.592	No	0.437	No	0.556	No						
	Edge 4	0.126	0.363	0.208	0.327		0.489	No	0.334	No	0.453	No						

12.79. Sum of the SAR for LTE Band 26 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.300	0.189	0.197	0.171	0.069	0.489	No	0.497	No	0.471	No	0.558	No	0.566	No	0.540	No
	Left Tilt	0.153	0.189	0.197	0.171	0.060	0.342	No	0.350	No	0.324	No	0.402	No	0.410	No	0.384	No
	Right Touch	0.233	0.189	0.197	0.171	0.070	0.422	No	0.430	No	0.404	No	0.492	No	0.500	No	0.474	No
	Right Tilt	0.140	0.189	0.197	0.171	0.083	0.329	No	0.337	No	0.311	No	0.412	No	0.420	No	0.394	No
Body-worn Accessory & Airplay	Rear	0.544	0.363	0.208	0.327	0.056	0.907	No	0.752	No	0.871	No	0.963	No	0.808	No	0.927	No
	Front	0.678	0.363	0.208	0.323	0.028	1.041	No	0.886	No	1.001	No	1.069	No	0.914	No	1.029	No
Airplay	Edge 2	0.207	0.363	0.208	0.327		0.570	No	0.415	No	0.534	No						
	Edge 3	0.605	0.363	0.208	0.327		0.968	No	0.813	No	0.932	No						
	Edge 4	0.565	0.363	0.208	0.327		0.928	No	0.773	No	0.892	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.80. Sum of the SAR for LTE Band 27 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

Covered by LTE Band 26 due to similar frequency range, similar maximum tune-up limit and same channel bandwidth.

12.81. Sum of the SAR for LTE Band 27 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

Covered by LTE Band 26 due to similar frequency range, similar maximum tune-up limit and same channel bandwidth.

12.82. Sum of the SAR for LTE Band 30 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.682	0.189	0.197	0.171	0.069	0.871	No	0.879	No	0.853	No	0.940	No	0.948	No	0.922	No
	Left Tilt	0.569	0.189	0.197	0.171	0.060	0.758	No	0.766	No	0.740	No	0.818	No	0.826	No	0.800	No
	Right Touch	0.888	0.189	0.197	0.171	0.070	1077	No	1085	No	1059	No	1147	No	1155	No	1129	No
	Right Tilt	0.716	0.189	0.197	0.171	0.083	0.905	No	0.913	No	0.887	No	0.988	No	0.996	No	0.970	No
Body-worn Accessory & Airplay	Rear	0.603	0.363	0.208	0.327	0.056	0.966	No	0.811	No	0.930	No	1022	No	0.867	No	0.986	No
	Front	0.916	0.363	0.208	0.323	0.028	1279	No	1124	No	1239	No	1307	No	1152	No	1267	No
Airplay	Edge 1	0.431	0.363	0.208	0.327		0.794	No	0.639	No	0.758	No						
	Edge 2	0.243	0.363	0.208	0.327		0.606	No	0.451	No	0.570	No						
	Edge 4	0.181	0.363	0.208	0.327		0.544	No	0.389	No	0.508	No						

12.83. Sum of the SAR for LTE Band 30 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.149	0.189	0.197	0.171	0.069	0.338	No	0.346	No	0.320	No	0.407	No	0.415	No	0.389	No
	Left Tilt	0.152	0.189	0.197	0.171	0.060	0.341	No	0.349	No	0.323	No	0.401	No	0.409	No	0.383	No
	Right Touch	0.220	0.189	0.197	0.171	0.070	0.409	No	0.417	No	0.391	No	0.479	No	0.487	No	0.461	No
	Right Tilt	0.137	0.189	0.197	0.171	0.083	0.326	No	0.334	No	0.308	No	0.409	No	0.417	No	0.391	No
Body-worn Accessory & Airplay	Rear	0.637	0.363	0.208	0.327	0.056	1000	No	0.845	No	0.964	No	1056	No	0.901	No	1020	No
	Front	1.110	0.363	0.208	0.323	0.028	1473	No	1318	No	1433	No	1501	No	1346	No	1461	No
Airplay	Edge 2	0.313	0.363	0.208	0.327		0.676	No	0.521	No	0.640	No						
	Edge 3	0.681	0.363	0.208	0.327		1044	No	0.889	No	1008	No						
	Edge 4	0.161	0.363	0.208	0.327		0.524	No	0.369	No	0.488	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.84. Sum of the SAR for LTE Band 41 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.628	0.189	0.197	0.171	0.069	0.817	No	0.825	No	0.799	No	0.886	No	0.894	No	0.868	No
	Left Tilt	0.474	0.189	0.197	0.171	0.060	0.663	No	0.671	No	0.645	No	0.723	No	0.731	No	0.705	No
	Right Touch	0.912	0.189	0.197	0.171	0.070	1.101	No	1.109	No	1.083	No	1.171	No	1.179	No	1.153	No
	Right Tilt	0.650	0.189	0.197	0.171	0.083	0.839	No	0.847	No	0.821	No	0.922	No	0.930	No	0.904	No
Body-worn Accessory & Airplay	Rear	0.950	0.363	0.208	0.327	0.056	1.313	No	1.158	No	1.277	No	1.369	No	1.214	No	1.333	No
	Front	0.669	0.363	0.208	0.323	0.028	1.032	No	0.877	No	0.992	No	1.060	No	0.905	No	1.020	No
Airplay	Edge 1	0.290	0.363	0.208	0.327		0.653	No	0.498	No	0.617	No						
	Edge 2	0.314	0.363	0.208	0.327		0.677	No	0.522	No	0.641	No						
	Edge 4	0.236	0.363	0.208	0.327		0.599	No	0.444	No	0.563	No						

12.85. Sum of the SAR for LTE Band 41 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.273	0.189	0.197	0.171	0.069	0.462	No	0.470	No	0.444	No	0.531	No	0.539	No	0.513	No
	Left Tilt	0.076	0.189	0.197	0.171	0.060	0.265	No	0.273	No	0.247	No	0.325	No	0.333	No	0.307	No
	Right Touch	0.147	0.189	0.197	0.171	0.070	0.336	No	0.344	No	0.318	No	0.406	No	0.414	No	0.388	No
	Right Tilt	0.082	0.189	0.197	0.171	0.083	0.271	No	0.279	No	0.253	No	0.354	No	0.362	No	0.336	No
Body-worn Accessory & Airplay	Rear	0.756	0.363	0.208	0.327	0.056	1.119	No	0.964	No	1.083	No	1.175	No	1.020	No	1.139	No
	Front	1.085	0.363	0.208	0.323	0.028	1.448	No	1.293	No	1.408	No	1.476	No	1.321	No	1.436	No
Airplay	Edge 2	0.122	0.363	0.208	0.327		0.485	No	0.330	No	0.449	No						
	Edge 3	0.818	0.363	0.208	0.327		1.181	No	1.026	No	1.145	No						
	Edge 4	0.534	0.363	0.208	0.327		0.897	No	0.742	No	0.861	No						

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.86. Sum of the SAR for LTE-2CA Band 7 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Right Touch	0.934	0.189	0.197	0.171	0.070	1004	No	0.259	No	0.267	No	0.241	No	1201	No	1175	No

12.87. Sum of the SAR for LTE-2CA Band 7 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Body-worn Accessory & Hotspot	Front	0.744	0.363	0.208	0.323	0.028	0.772	No	0.391	No	0.236	No	0.351	No	0.980	No	1095	No

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

12.88. Sum of the SAR for LTE-2CA Band 41 (UAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Right Touch	0.789	0.189	0.197	0.171	0.070	0.859	No	0.259	No	0.267	No	0.241	No	1056	No	1030	No

12.89. Sum of the SAR for LTE-2CA Band 41 (LAT) & Wi-Fi UNII (Cell On) & BT(P_{low})

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (Chain 0)	③ Wi-Fi 5GHz (Chain 1)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P _{low})	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)	Σ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Body-worn Accessory & Hotspot	Front	0.874	0.363	0.208	0.323	0.028	0.902	No	0.391	No	0.236	No	0.351	No	1110	No	1225	No

Conclusion:

Simultaneous transmission SAR measurement (Volume Scan) is not required because the either sum of the 1-g SAR is < 1.6 W/kg or the SPLSR is < 0.04 for all circumstances that require SPLSR calculation.

Appendixes

Refer to separated files for the following appendixes.

16U23308-S1V1 SAR_App A Setup Photos (STC_180days)

16U23308-S1V3 SAR_App B System Check Plots

16U23308-S1V3 SAR_App C Highest Test Plots

16U23308-S1V1 SAR_App D Tissue Ingredients

16U23308-S1V1 SAR_App E Probe Cal. Certificates

16U23308-S1V1 SAR_App F Dipole Cal. Certificates

END OF REPORT