



**SAR EVALUATION REPORT**

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

*For*  
**Cellular Phone with Bluetooth and WLAN Radios**

**FCC ID: BCG-E2944A  
Model Name: A1634, A1687, A1690, A1699**

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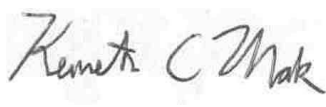
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# 1. Attestation of Test Results

Applicant Name		APPLE, INC.			
FCC ID		BCG-E2944A			
Model Name		A1634, A1687, A1690, A1699			
Applicable Standards		FCC 47 CFR § 2.1093 Published RF exposure KDB procedures IEEE Std 1528-2013			
<b>SAR Limits (W/Kg)</b>					
Exposure Category		Peak spatial-average(1g of tissue)			
General population / Uncontrolled exposure		1.6			
<b>The Highest Reported SAR (W/kg)</b>					
<b>RF Exposure Conditions</b>		<b>Equipment Class</b>			
		<b>Licensed</b>	<b>DTS</b>	<b>U-NII</b>	<b>DSS (BT)</b>
Head		1.120	0.999	0.906	0.367
Body-worn		1.140	0.881	1.140	0.348
Hotspot		1.140	0.881	1.140	N/A
Simultaneous TX		1.560	1.530	1.560	1.560
Simultaneous TX	Head	1.532	1.517	1.532	1.532
	Body-worn	1.560	1.530	1.560	1.560
	Hotspot	1.560	1.530	1.560	1.560
Date Tested		7/9/2015 to 7/19/2015; 7/27/2015 to 7/28/2015			
Test Results		Pass			
<p>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.</p> <p><b>Note:</b> 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.</p>					
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:

- 248227 D01 802.11 Wi-Fi SAR v02r01
- 447498 D01 General RF Exposure Guidance v05r02
- 447498 D03 Supplement C Cross-Reference v01
- 648474 D04 Handset SAR v01r02
- 690783 D01 SAR Listings on Grants v01r03
- 865664 D01 SAR measurement 100 MHz to 6 GHz v01r03
- 865664 D02 RF Exposure Reporting v01r01
- 941225 D01 3G SAR Procedures v03
- 941225 D05 SAR for LTE Devices v02r03
- 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r01
- 941225 D06 Hotspot Mode v02

## 3. Facilities and Accreditation

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

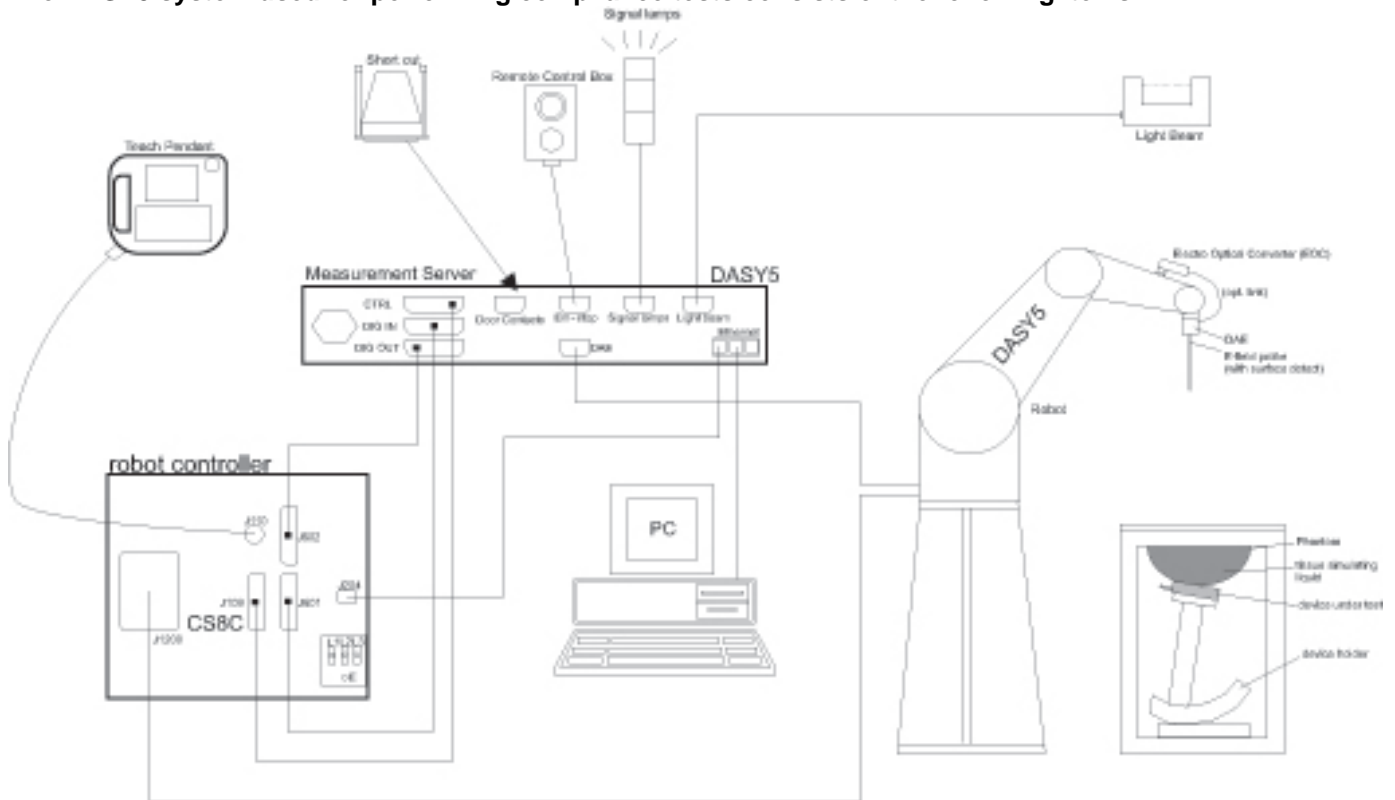
47173 Benicia Street	47266 Benicia Street
SAR Lab A	SAR Lab 1
SAR Lab B	SAR Lab 2
SAR Lab C	SAR Lab 3
SAR Lab D	SAR Lab 4
SAR Lab E	SAR Lab 5
SAR Lab F	
SAR Lab G	
SAR Lab H	

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

	$\leq 3$ GHz	$> 3$ GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	$5 \pm 1$ 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: $\Delta x_{Area}$ , $\Delta y_{Area}$	$\leq 2$ GHz: $\leq 15$ mm 2 – 3 GHz: $\leq 12$ mm	3 – 4 GHz: $\leq 12$ mm 4 – 6 GHz: $\leq 10$ 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

		$\leq 3$ GHz	$> 3$ GHz	
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$		$\leq 2$ GHz: $\leq 8$ mm 2 – 3 GHz: $\leq 5$ mm *	3 – 4 GHz: $\leq 5$ mm* 4 – 6 GHz: $\leq 4$ mm*	
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$	$\leq 5$ mm	3 – 4 GHz: $\leq 4$ mm 4 – 5 GHz: $\leq 3$ mm 5 – 6 GHz: $\leq 2$ mm	
	graded grid	$\Delta z_{\text{Zoom}}(1)$ : between 1 <sup>st</sup> two points closest to phantom surface	$\leq 4$ mm	3 – 4 GHz: $\leq 3$ mm 4 – 5 GHz: $\leq 2.5$ mm 5 – 6 GHz: $\leq 2$ 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	$\geq 30$ mm	3 – 4 GHz: $\geq 28$ mm 4 – 5 GHz: $\geq 25$ mm 5 – 6 GHz: $\geq 22$ mm	
Note: $\delta$ 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 <i>reported</i> SAR from the area scan based <i>1-g SAR estimation</i> procedures of KDB 447498 is $\leq 1.4$ W/kg, $\leq 8$ mm, $\leq 7$ mm and $\leq 5$ 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	MY40001647	7/17/2015
Dielectric Probe kit	SPEAG	DAK-3.5	1087	11/11/2015
Shorting block	SPEAG	DAK-3.5 Short	SM DAK 200 BA	N/A
Thermometer	Traceable Calibration Control Co.	4242	122529162	10/8/2015
Network Analyzer	Agilent	E753ES	MY40000980	4/17/2016
Dielectric Probe kit	SPEAG	DAK-3.5	1082	9/16/2015
Shorting block	SPEAG	DAK-3.5 Short	SM DAK 200 BA	N/A
Thermometer	Control Company	Traceable	122529163	10/8/2015

#### System Check

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Synthesized Signal Generator	HP	8665B	1000622	5/8/2016
Power Meter	Agilent	N1912A	MY50001018	9/3/2015
Power Sensor	Agilent	E9323A	US40411556	8/27/2015
Power Sensor	Agilent	E9323A	MY53070007	3/2/2016
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	HP	8665B	3744A01155	3/18/2016
Power Meter	HP	437B	3125U11364	8/27/2015
Power Meter	HP	437B	3125U12345	8/15/2015
Power Sensor	HP	8481A	1926A27048	8/15/2015
Power Sensor	HP	8481A	2702A76223	9/17/2015
Amplifier	MITEQ	AMF-4D-00400600-50-30P	1795092	N/A
Directional coupler	Werlatone	C8060-102	2141	N/A
DC Power Supply	BK PRECISION	1611	215-02292	N/A
E-Field Probe (SAR Lab A)	SPEAG	EX3DV4	3901	1/27/2016
E-Field Probe (SAR Lab B)	SPEAG	EX3DV4	3751	11/14/2015
E-Field Probe (SAR Lab C)	SPEAG	EX3DV4	3885	9/15/2015
E-Field Probe (SAR Lab E)	SPEAG	EX3DV4	3772	2/23/2016
E-Field Probe (SAR Lab F)	SPEAG	EX3DV4	7356	4/22/2016
E-Field Probe (SAR Lab F)	SPEAG	EX3DV4	3929	4/22/2016
E-Field Probe (SAR Lab G)	SPEAG	EX3DV4	3686	2/23/2016
E-Field Probe (SAR Lab G)	SPEAG	EX3DV4	3991	5/19/2016
E-Field Probe (SAR Lab H)	SPEAG	EX3DV4	7335	3/13/2016
Data Acquisition Electronics (SAR Lab A)	SPEAG	DAE4	1357	2/20/2016
Data Acquisition Electronics (SAR Lab B)	SPEAG	DAE4	1360	3/12/2016
Data Acquisition Electronics (SAR Lab C)	SPEAG	DAE3	427	1/14/2016
Data Acquisition Electronics (SAR Lab E)	SPEAG	DAE4	1257	9/29/2015
Data Acquisition Electronics (SAR Lab F)	SPEAG	DAE4	1359	2/18/2016
Data Acquisition Electronics (SAR Lab G)	SPEAG	DAE4	1433	3/12/2016
Data Acquisition Electronics (SAR Lab H)	SPEAG	DAE4	1472	3/5/2016
System Validation Dipole	SPEAG	D750V3	1019	3/11/2016
System Validation Dipole	SPEAG	D750V3	1024	5/12/2016
System Validation Dipole	SPEAG	D835V2	4d002	11/13/2015
System Validation Dipole	SPEAG	D1750V2	1050	4/15/2016
System Validation Dipole	SPEAG	D1750V2	1077	9/11/2015
System Validation Dipole	SPEAG	D1900V2	5d043	11/7/2015
System Validation Dipole	SPEAG	D2300V2	1002	3/13/2016
System Validation Dipole	SPEAG	D2450V2	899	3/13/2016
System Validation Dipole	SPEAG	D2600V2	1006	9/10/2015
System Validation Dipole	SPEAG	D5GHzV2	1138	9/18/2015

**Other**

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Power Meter	Agilent	N1912A	MY53040016	3/26/2016
Power Meter	Agilent	N1912A	MY53040015	2/27/2016
Power Sensor	Agilent	N1921A	MY52270022	12/12/2015
Power Sensor	Agilent	N1921A	MY52260001	10/11/2015
Base Station Simulator	R & S	CMU200	106301	11/7/2015
Base Station Simulator	R & S	CMW500	112269	4/6/2016
Base Station Simulator	R & S	CMW500	112268	4/2/2016
Base Station Simulator	R & S	CMW500	137877	7/28/2015
Base Station Simulator	R & S	CMW500	104245	1/14/2016
Base Station Simulator	R & S	CMW500	134854	4/28/2016
Base Station Simulator	R & S	CMW500	135390	4/6/2016
Base Station Simulator	R & S	CMW500	134853	6/30/2016
Base Station Simulator	R & S	CMW500	124594	10/15/2015

## 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, 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

The device is the next generation iPhone.

For operational and marketing reasons, there will be four models: A1634, A1687, A1690, and A1699.

All models are mobile phones 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 / TD-SCDMA, VoLTE radio, IEEE 802.11a/b/g/n/ac radio 2x2 MIMO, Bluetooth radio and NFC. The rechargeable battery is not user accessible.

All models have identical PCB layout, design and functionality except A1634 has Tx and Rx filter for Band 30.

Model A1634 was set as the primary model for testing.

This device has two antennas. The Primary Cellular Antenna (LAT) is located on the bottom edge of the device and the Secondary Cellular Antenna (UAT) is located on the top edge of the device.

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): 158.1 mm x 77.8 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. <input checked="" type="checkbox"/> Mobile Hotspot (Wi-Fi 2.4 GHz) <input type="checkbox"/> Mobile Hotspot (Wi-Fi 5 GHz)
AirPlay	AirPlay mode enabled devices transfer data directly between each other <input checked="" type="checkbox"/> AirPlay (Wi-Fi 2.4 GHz) <input checked="" type="checkbox"/> 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: <input type="checkbox"/> Class 8 - 1 Up, 4 Down <input checked="" type="checkbox"/> Class 10 - 2 Up, 4 Down <input type="checkbox"/> Class 12 - 4 Up, 4 Down <input type="checkbox"/> Class 33 - 4 Up, 5 Down
	Does this device support DTM (Dual Transfer Mode)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
CDMA (CDMA2000)	BC0 BC1 BC10 BC15	1xRTT (Voice & Data) 1xEV-DO Rel. 0 1xEV-DO Rev. A 1xAdvanced	100%
	Does this device support SV-DO (1xRTT-1xEVDO)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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%
	Does this device support SV-LTE (1xRTT-LTE)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
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 <input type="checkbox"/> Rel. 10 Does not support Carrier Aggregation (CA) <input checked="" type="checkbox"/> Rel. 10 Carrier Aggregation (1 Uplink and 2 Downlinks) <input type="checkbox"/> Rel. 11 Carrier Aggregation (2 Uplink and 2 Downlinks)	100% (FDD) 63.3% (TDD)
	Does this device support SV-LTE (1xRTT-LTE)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Does this device support Band gap channel(s)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Bluetooth	2.4 GHz	Version 4.2 LE	77.5% (DH5)

### 6.3. Maximum Output Power

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

RF Air interface	Mode	Maximum Output Power (dBm)			
		UAT		LAT	
		Head	Body	Head	Body
GSM850	Voice	31.5	31.5	33.5	33.5
	GPRS 1 slot	31.5	31.5	33.5	33.5
	GPRS 2 slots	30.5	30.5	32.5	32.5
	EGPRS 1 slot	27.0	27.0	29.0	29.0
	EGPRS 2 slots	27.0	27.0	29.0	29.0
GSM1900	Voice	26.5	27.2	30.5	28.2
	GPRS 1 slot	26.5	27.2	30.5	28.2
	GPRS 2 slots	23.5	24.2	29.5	25.2
	EGPRS 1 slot	25.0	25.0	28.0	28.0
	EGPRS 2 slots	23.5	24.2	28.0	25.2
W-CDMA Band V	R99	23.0	23.0	25.0	25.0
	HSDPA	23.0	23.0	25.0	25.0
	HSUPA	23.0	23.0	25.0	25.0
	DC-HSDPA	23.0	23.0	25.0	25.0
	HSPA+	23.0	23.0	25.0	25.0
W-CDMA Band IV	R99	18.8	20.0	25.0	20.3
	HSDPA	18.8	20.0	25.0	20.3
	HSUPA	18.8	20.0	25.0	20.3
	DC-HSDPA	18.8	20.0	25.0	20.3
	HSPA+	18.8	20.0	25.0	20.3
W-CDMA Band II	R99	16.5	18.3	25.0	19.3
	HSDPA	16.5	18.3	25.0	19.3
	HSUPA	16.5	18.3	25.0	19.3
	DC-HSDPA	16.5	18.3	25.0	19.3
	HSPA+	16.5	18.3	25.0	19.3
CDMA BC0	1xRTT	23.0	23.0	25.0	25.0
	1xAdvanced	23.0	23.0	25.0	25.0
	1xEVDO Rel. 0	23.0	23.0	25.0	25.0
	1xEVDO Rev. A	23.0	23.0	25.0	25.0
CDMA BC1	1xRTT	16.5	18.3	25.0	19.3
	1xAdvanced	16.5	18.3	25.0	19.3
	1xEVDO Rel. 0	16.5	18.3	25.0	19.3
	1xEVDO Rev. A	16.5	18.3	25.0	19.3
CDMA BC10	1xRTT	23.0	23.0	25.0	25.0
	1xAdvanced	23.0	23.0	25.0	25.0
	1xEVDO Rel. 0	23.0	23.0	25.0	25.0
	1xEVDO Rev. A	23.0	23.0	25.0	25.0
CDMA BC15	1xRTT	18.8	20.0	25.0	20.3
	1xAdvanced	18.8	20.0	25.0	20.3
	1xEVDO Rel. 0	18.8	20.0	25.0	20.3
	1xEVDO Rev. A	18.8	20.0	25.0	20.3

RF Air interface	Mode	Maximum Output Power (dBm)			
		UAT		LAT	
		Head	Body	Head	Body
LTE Band 2	QPSK	16.5	18.3	24.0	19.3
LTE Band 4	QPSK	18.8	20.0	24.0	20.3
LTE Band 5	QPSK	22.0	22.0	24.0	24.0
LTE Band 7	QPSK	16.8	19.8	22.5	18.8
LTE Band 12	QPSK	22.4	22.4	24.0	24.0
LTE Band 13	QPSK	22.4	22.4	24.0	24.0
LTE Band 17	QPSK	22.4	22.4	24.0	24.0
LTE Band 25	QPSK	16.5	18.3	24.0	19.3
LTE Band 26	QPSK	22.0	22.0	24.0	24.0
LTE Band 27	QPSK	22.0	22.0	24.0	24.0
LTE Band 30	QPSK	17.7	20.3	23.0	20.5
LTE Band 41	QPSK	18.0	21.5	22.5	21.0
RF Air interface	Mode	Maximum Output Power (dBm)			
		$P_{Low}$		$P_{Max}$	
Bluetooth		10.5		15.0	

**6.3.1. WLAN (P<sub>Cell\_ON</sub>)**

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)	
					UAT		LAT			
					HEAD	BODY	HEAD	BODY		
2.4	802.11b	1 Tx	1	2412	14.0	15.5	17.0	12.5	Yes	
			2	2417	14.0	15.5	18.0	12.5		
			6	2437	14.0	15.5	18.0	12.5		
			9	2452	14.0	15.5	18.0	12.5		
			10	2457	14.0	15.5	17.5	12.5		
			12	2467	14.0	15.5	17.5	12.5		
	802.11g	1 Tx	1	2412	14.0	14.0	14.0	12.5	No	
			2	2417	14.0	15.5	16.0	12.5		
			3	2422	14.0	15.5	18.0	12.5		
			6	2437	14.0	15.5	18.0	12.5		
			9	2452	14.0	15.5	18.0	12.5		
			10	2457	14.0	15.5	16.0	12.5		
			11	2462	14.0	14.0	14.0	12.5		
		12	2467	11.5	11.5	11.5	11.5			
		13	2472	2.0	2.0	2.0	2.0			
		802.11g	2 Tx CDD	1	2412	13.0		13.0		Yes
				2	2417	14.0		15.5		
				3	2422	14.0		18.0		
				6	2437	14.0		18.0		
	9			2452	14.0		18.0			
	10			2457	14.0		16.0			
	11			2462	14.0		14.0			
	12			2467	11.0		11.0			
	13			2472	2.0		2.0			
	802.11g			2 Tx CDD	1	2412		13.0		
		2	2417			15.5		12.5		
		3	2422			15.5		12.5		
6		2437			15.5		12.5			
9		2452			15.5		12.5			
10		2457			15.5		12.5			
11		2462			14.0		12.5			
12	2467		11.0		11.0					
13	2472		2.0		2.0					

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)	
					UAT		LAT			
					HEAD	BODY	HEAD	BODY		
2.4	802.11n	1 Tx HT20	1	2412	14.0	14.0	14.0	12.5	No	
			2	2417	14.0	15.5	16.0	12.5		
			3	2422	14.0	15.5	18.0	12.5		
			6	2437	14.0	15.5	18.0	12.5		
			9	2452	14.0	15.5	18.0	12.5		
			10	2457	14.0	15.5	16.0	12.5		
			11	2462	14.0	14.0	14.0	12.5		
			12	2467	11.5	11.5	11.5	11.5		
			13	2472	2.0	2.0	2.0	2.0		
		2 Tx HT20 CDD/STBC/SDM	1	2412	13.0		13.0		No	
			2	2417	14.0		15.5			
			3	2422	14.0		18.0			
			6	2437	14.0		18.0			
			9	2452	14.0		18.0			
			10	2457	14.0		16.0			
			11	2462	14.0		14.0			
			12	2467	11.0		11.0			
			13	2472	2.0		2.0			
			1	2412		13.0		12.5		No
			2	2417		15.5		12.5		
			3	2422		15.5		12.5		
			6	2437		15.5		12.5		
		9	2452		15.5		12.5			
		10	2457		15.5		12.5			
		11	2462		14.0		12.5			
		12	2467		11.0		11.0			
13	2472		2.0		2.0					

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)	
					UAT		LAT			
					HEAD	BODY	HEAD	BODY		
5.2	802.11a	1 Tx	36	5180	11.0	15.5	17.0	9.0	No	
			40	5200	11.0	15.5	18.5	9.0		
			44	5220	11.0	15.5	18.5	9.0		
			48	5240	11.0	15.5	18.5	9.0		
		2 Tx CDD	36	5180	11.0		16.5		No	
			40	5200	11.0		17.0			
			44	5220	11.0		17.0			
			48	5240	11.0		17.0			
		802.11n	1 Tx HT20	36	5180	11.0	15.5	17.0	9.0	No
				40	5200	11.0	15.5	18.5	9.0	
				44	5220	11.0	15.5	18.5	9.0	
				48	5240	11.0	15.5	18.5	9.0	
	1 Tx HT40		38	5190	11.0	13.5	13.5	9.0	Yes	
			46	5230	11.0	15.5	18.0	9.0		
	2 Tx HT20 CDD/STBC/SDM		36	5180	11.0		16.5		No	
			40	5200	11.0		17.0			
		44	5220	11.0		17.0				
		48	5240	11.0		17.0				
	2 Tx HT40 CDD/STBC/SDM	36	5180		15.5		9.0	No		
		40	5200		15.5		9.0			
		44	5220		15.5		9.0			
		48	5240		15.5		9.0			
	802.11ac	1 Tx VHT20	36	5180	11.0	15.5	17.0	9.0	No	
			40	5200	11.0	15.5	18.5	9.0		
			44	5220	11.0	15.5	18.5	9.0		
			48	5240	11.0	15.5	18.5	9.0		
	1 Tx VHT40	38	5190	11.0	13.5	13.5	9.0	No		
		46	5230	11.0	15.5	18.0	9.0			
	802.11ac	1 Tx VHT80	42	5210	11.0	13.5	13.5	9.0	Yes	
		2 Tx VHT20 CDD/STBC/SDM	36	5180	11.0		16.5		No	
			40	5200	11.0		17.0			
			44	5220	11.0		17.0			
			48	5240	11.0		17.0			
		2 Tx VHT40 CDD/STBC/SDM	36	5180		15.5		9.0	No	
			40	5200		15.5		9.0		
44			5220		15.5		9.0			
48			5240		15.5		9.0			
2 Tx VHT80 CDD/STBC/SDM	38	5190	11.0		13.5		No			
	46	5230	11.0		18.0					
	38	5190		13.5		9.0				
	46	5230		15.5		9.0				
2 Tx VHT80 CDD/STBC/SDM	42	5210	11.0		12.0		No			
	42	5210		12.0		9.0				

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)
					UAT		LAT		
					HEAD	BODY	HEAD	BODY	
5.3	802.11a	1 Tx	52	5260	11.0	15.0	18.5	6.5	Yes
			56	5280	11.0	15.0	18.5	6.5	
			60	5300	11.0	15.0	18.5	6.5	
			64	5320	11.0	15.0	16.5	6.5	
		2 Tx CDD	52	5260	11.0		17.0		No
			56	5280	11.0		17.0		
			60	5300	11.0		17.0		
			64	5320	11.0		16.5		
	802.11n	1 Tx HT20	52	5260	11.0	15.0	18.5	6.5	No
			56	5280	11.0	15.0	18.5	6.5	
			60	5300	11.0	15.0	18.5	6.5	
			64	5320	11.0	15.0	16.5	6.5	
		1 Tx HT40	54	5270	11.0	15.0	18.0	6.5	No
			62	5310	11.0	14.5	14.5	6.5	
		2 Tx HT20 CDD/STBC/SDM	52	5260	11.0		17.0		No
			56	5280	11.0		17.0		
	60		5300	11.0		17.0			
	64		5320	11.0		16.5			
	2 Tx HT40 CDD/STBC/SDM	52	5260		15.0		6.5	No	
		56	5280		15.0		6.5		
		60	5300		15.0		6.5		
		64	5320		15.0		6.5		
	2 Tx HT40 CDD/STBC/SDM	54	5270	11.0		18.0		Yes	
		62	5310	11.0		14.0			
		54	5270		15.0		6.5	No	
		62	5310		14.0		6.5		
	802.11ac	1 Tx VHT20	52	5260	11.0	15.0	18.5	6.5	No
			56	5280	11.0	15.0	18.5	6.5	
			60	5300	11.0	15.0	18.5	6.5	
			64	5320	11.0	15.0	16.5	6.5	
		1 Tx VHT40	54	5270	11.0	15.0	18.0	6.5	No
			62	5310	11.0	14.5	14.5	6.5	
		1 Tx VHT80	58	5290	11.0	14.0	14.0	6.5	Yes
		2 Tx VHT20 CDD/STBC/SDM	52	5260	11.0		17.0		No
			56	5280	11.0		17.0		
			60	5300	11.0		17.0		
			64	5320	11.0		16.5		
		2 Tx VHT20 CDD/STBC/SDM	52	5260		15.0		6.5	No
			56	5280		15.0		6.5	
			60	5300		15.0		6.5	
64			5320		15.0		6.5		
2 Tx VHT40 CDD/STBC/SDM		54	5270	11.0		18.0		No	
		62	5310	11.0		14.0			
		54	5270		15.0		6.5	No	
		62	5310		14.0		6.5		
2 Tx VHT80 CDD/STBC/SDM		58	5290	11.0		14.0		No	
	58	5290		14.0		6.5	No		

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)		
					UAT		LAT				
					HEAD	BODY	HEAD	BODY			
5.5	802.11a	1 Tx	100	5500	11.0	16.0	16.5	6.5	Yes		
			104	5520	11.0	16.0	18.5	6.5			
			108	5540	11.0	16.0	18.5	6.5			
			112	5560	11.0	16.0	18.5	6.5			
			116	5580	11.0	16.0	18.5	6.5			
			120	5600	11.0	16.0	18.5	6.5			
			124	5620	11.0	16.0	18.5	6.5			
			128	5640	11.0	16.0	18.5	6.5			
			132	5660	11.0	16.0	18.5	6.5			
			136	5680	11.0	16.0	18.5	6.5			
			140	5700	11.0	15.0	15.0	6.5			
		144	5720	11.0	16.0	18.5	6.5				
		2 Tx CDD	100	5500	11.0		16.0		No		
			104	5520	11.0		17.0				
			108	5540	11.0		17.0				
			112	5560	11.0		17.0				
			116	5580	11.0		17.0				
			120	5600	11.0		17.0				
			124	5620	11.0		17.0				
			128	5640	11.0		17.0				
			132	5660	11.0		17.0				
			136	5680	11.0		17.0				
			140	5700	11.0		13.5				
			144	5720	11.0		17.0				
				100	5500		16.0			6.5	No
				104	5520		16.0			6.5	
	108		5540		16.0		6.5				
	112	5560		16.0		6.5					
	116	5580		16.0		6.5					
	120	5600		16.0		6.5					
	124	5620		16.0		6.5					
	128	5640		16.0		6.5					
	132	5660		16.0		6.5					
	136	5680		16.0		6.5					
	140	5700		13.5		6.5					
	144	5720		16.0		6.5					



Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)
					UAT		LAT		
					HEAD	BODY	HEAD	BODY	
5.5	802.11n	1 Tx HT20	100	5500	11.0	16.0	16.5	6.5	No
			104	5520	11.0	16.0	18.5	6.5	
			108	5540	11.0	16.0	18.5	6.5	
			112	5560	11.0	16.0	18.5	6.5	
			116	5580	11.0	16.0	18.5	6.5	
			120	5600	11.0	16.0	18.5	6.5	
			124	5620	11.0	16.0	18.5	6.5	
			128	5640	11.0	16.0	18.5	6.5	
			132	5660	11.0	16.0	18.5	6.5	
			136	5680	11.0	16.0	18.5	6.5	
			140	5700	11.0	15.0	15.0	6.5	
		144	5720	11.0	16.0	18.5	6.5		
		1 Tx HT40	102	5510	11.0	14.5	14.5	6.5	No
			110	5550	11.0	16.0	18.0	6.5	
			118	5590	11.0	16.0	18.0	6.5	
			126	5630	11.0	16.0	18.0	6.5	
			134	5670	11.0	16.0	16.0	6.5	
			142	5710	11.0	16.0	18.0	6.5	
		2 Tx HT20 CDD/STBC/SDM	100	5500	11.0		16.0		No
			104	5520	11.0		17.0		
			108	5540	11.0		17.0		
			112	5560	11.0		17.0		
			116	5580	11.0		17.0		
			120	5600	11.0		17.0		
			124	5620	11.0		17.0		
			128	5640	11.0		17.0		
			132	5660	11.0		17.0		
			136	5680	11.0		17.0		
			140	5700	11.0		13.5		
		144	5720	11.0		17.0			
		2 Tx HT20 CDD/STBC/SDM	100	5500		16.0		6.5	No
			104	5520		16.0		6.5	
			108	5540		16.0		6.5	
			112	5560		16.0		6.5	
			116	5580		16.0		6.5	
			120	5600		16.0		6.5	
			124	5620		16.0		6.5	
			128	5640		16.0		6.5	
			132	5660		16.0		6.5	
			136	5680		16.0		6.5	
			140	5700		13.5		6.5	
		144	5720		16.0		6.5		
2 Tx HT40 CDD/STBC/SDM	102	5510	11.0		14.0		No		
	110	5550	11.0		18.0				
	118	5590	11.0		18.0				
	126	5630	11.0		18.0				
	134	5670	11.0		15.0				
	142	5710	11.0		18.0				
2 Tx HT40 CDD/STBC/SDM	102	5510		14.0		6.5	No		
	110	5550		16.0		6.5			
	118	5590		16.0		6.5			
	126	5630		16.0		6.5			
	134	5670		15.0		6.5			
	142	5710		16.0		6.5			

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)
					UAT		LAT		
					HEAD	BODY	HEAD	BODY	
5.5	802.11ac	1 Tx VHT20	100	5500	11.0	16.0	16.5	6.5	No
			104	5520	11.0	16.0	18.5	6.5	
			108	5540	11.0	16.0	18.5	6.5	
			112	5560	11.0	16.0	18.5	6.5	
			116	5580	11.0	16.0	18.5	6.5	
			120	5600	11.0	16.0	18.5	6.5	
			124	5620	11.0	16.0	18.5	6.5	
			128	5640	11.0	16.0	18.5	6.5	
			132	5660	11.0	16.0	18.5	6.5	
			136	5680	11.0	16.0	18.5	6.5	
			140	5700	11.0	15.0	15.0	6.5	
		144	5720	11.0	16.0	18.5	6.5		
		1 Tx VHT40	102	5510	11.0	14.5	14.5	6.5	No
			110	5550	11.0	16.0	18.0	6.5	
			118	5590	11.0	16.0	18.0	6.5	
			126	5630	11.0	16.0	18.0	6.5	
			134	5670	11.0	16.0	16.0	6.5	
		1 Tx VHT80	142	5710	11.0	16.0	18.0	6.5	Yes
			106	5530	11.0	13.0	13.0	6.5	
			122	5610	11.0	16.0	18.0	6.5	
					138	5690	11.0	16.0	18.0

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)	
					UAT		LAT			
					HEAD	BODY	HEAD	BODY		
5.5	802.11ac	2 Tx VHT20 CDD/STBC/SDM	100	5500	11.0		16.0		No	
			104	5520	11.0		17.0			
			108	5540	11.0		17.0			
			112	5560	11.0		17.0			
			116	5580	11.0		17.0			
			120	5600	11.0		17.0			
			124	5620	11.0		17.0			
			128	5640	11.0		17.0			
			132	5660	11.0		17.0			
			136	5680	11.0		17.0			
			140	5700	11.0		13.5			
			144	5720	11.0		17.0			
			100	5500		16.0		6.5		No
			104	5520		16.0		6.5		
		108	5540		16.0		6.5			
		112	5560		16.0		6.5			
		116	5580		16.0		6.5			
		120	5600		16.0		6.5			
		124	5620		16.0		6.5			
		128	5640		16.0		6.5			
		132	5660		16.0		6.5			
		136	5680		16.0		6.5			
		140	5700		13.5		6.5			
		144	5720		16.0		6.5			
		102	5510	11.0		14.0		No		
		110	5550	11.0		18.0				
		118	5590	11.0		18.0				
		126	5630	11.0		18.0				
		134	5670	11.0		15.0				
		142	5710	11.0		18.0				
102	5510		14.0		6.5	No				
110	5550		16.0		6.5					
118	5590		16.0		6.5					
126	5630		16.0		6.5					
134	5670		15.0		6.5					
142	5710		16.0		6.5					
106	5530	11.0		12.0		Yes				
122	5610	11.0		18.0						
138	5690	11.0		18.0						
106	5530		12.0		6.5	Yes				
122	5610		16.0		6.5					
138	5690		16.0		6.5					

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)	
					UAT		LAT			
					HEAD	BODY	HEAD	BODY		
5.8	802.11a	1 Tx	149	5745	12.0	14.0	16.0	10.5	No	
			153	5765	12.0	14.0	18.0	10.5		
			157	5785	12.0	14.0	18.0	10.5		
			161	5805	12.0	14.0	18.0	10.5		
			165	5825	12.0	14.0	17.5	10.5		
		2 Tx CDD	149	5745	12.0		15.0		Yes	
			153	5765	12.0		18.0			
			157	5785	12.0		18.0			
			161	5805	12.0		18.0			
			165	5825	12.0		16.0			
	2 Tx CDD	149	5745		14.0		10.5	No		
		153	5765		14.0		10.5			
		157	5785		14.0		10.5			
		161	5805		14.0		10.5			
		165	5825		14.0		10.5			
	802.11n	1 Tx HT20	149	5745	12.0	14.0	16.0	10.5	No	
			153	5765	12.0	14.0	18.0	10.5		
			157	5785	12.0	14.0	18.0	10.5		
			161	5805	12.0	14.0	18.0	10.5		
			165	5825	12.0	14.0	17.5	10.5		
		1 Tx HT40	151	5755	12.0	14.0	14.5	10.5	Yes	
			159	5795	12.0	14.0	18.0	10.5		
		2 Tx HT20 CDD/STBC/SDM	2 Tx HT20	149	5745	12.0		15.0		No
				153	5765	12.0		18.0		
				157	5785	12.0		18.0		
				161	5805	12.0		18.0		
				165	5825	12.0		16.0		
			2 Tx HT20 CDD/STBC/SDM	149	5745		14.0		10.5	No
153				5765		14.0		10.5		
157				5785		14.0		10.5		
161				5805		14.0		10.5		
165				5825		14.0		10.5		
2 Tx HT40 CDD/STBC/SDM		2 Tx HT40	151	5755	12.0		13.0		No	
	159		5795	12.0		17.0				
	2 Tx HT40 CDD/STBC/SDM	151	5755		13.0		10.5	Yes		
		159	5795		14.0		10.5			

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)
					UAT		LAT		
					HEAD	BODY	HEAD	BODY	
5.8	802.11ac	1 Tx VHT20	149	5745	12.0	14.0	16.0	10.5	No
			153	5765	12.0	14.0	18.0	10.5	
			157	5785	12.0	14.0	18.0	10.5	
			161	5805	12.0	14.0	18.0	10.5	
			165	5825	12.0	14.0	17.5	10.5	
		1 Tx VHT40	151	5755	12.0	14.0	14.5	10.5	No
			159	5795	12.0	14.0	18.0	10.5	
		1 Tx VHT80	155	5775	12.0	14.0	14.5	10.5	Yes
		2 Tx HT20 CDD/STBC/SDM	149	5745	12.0		15.0		No
			153	5765	12.0		18.0		
			157	5785	12.0		18.0		
			161	5805	12.0		18.0		
			165	5825	12.0		16.0		
		2 Tx HT40 CDD/STBC/SDM	149	5745		14.0		10.5	No
			153	5765		14.0		10.5	
			157	5785		14.0		10.5	
			161	5805		14.0		10.5	
			165	5825		14.0		10.5	
		2 Tx HT40 CDD/STBC/SDM	151	5755	12.0		13.0		No
			159	5795	12.0		17.0		
2 Tx VHT80 CDD/STBC/SDM	151	5755		13.0		10.5	No		
	159	5795		14.0		10.5			
2 Tx VHT80 CDD/STBC/SDM	155	5775	12.0		13.5		No		
	155	5775		13.5		10.5			

**6.3.2. WLAN (P<sub>Cell\_OFF</sub>)**

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)				
					UAT		LAT						
					HEAD	BODY	HEAD	BODY					
2.4	802.11b	1 Tx	1	2412	17.0	17.0	17.0	17.0	Yes				
			2	2417	18.0	18.5	18.0	18.0					
			6	2437	18.0	18.5	18.0	18.0					
			9	2452	18.0	18.5	18.0	18.0					
			10	2457	17.5	17.5	17.5	17.5					
			12	2467	17.5	17.5	17.5	17.5					
			13	2472	15.5	15.5	15.5	15.5					
	802.11g	1 Tx	1 Tx	1	2412	14.0	14.0	14.0	14.0	No			
				2	2417	16.0	16.0	16.0	16.0				
				3	2422	18.0	18.5	18.0	18.0				
				6	2437	18.0	18.5	18.0	18.0				
				9	2452	18.0	18.5	18.0	18.0				
				10	2457	16.0	16.0	16.0	16.0				
				11	2462	14.0	14.0	14.0	14.0				
		12	2467	11.5	11.5	11.5	11.5						
		13	2472	2.0	2.0	2.0	2.0						
		2 Tx CDD	2 Tx CDD	2 Tx CDD	1	2412	13.0		13.0		Yes		
					2	2417	15.5		15.5				
					3	2422	18.0		18.0				
					6	2437	18.0		18.0				
					9	2452	18.0		18.0				
					10	2457	16.0		16.0				
					11	2462	14.0		14.0				
					12	2467	11.0		11.0				
					13	2472	2.0		2.0				
					2 Tx CDD	2 Tx CDD	2 Tx CDD	1	2412			13.0	
2	2417								15.5			15.5	
3	2422								18.5			18.0	
6	2437		18.5					18.0					
9	2452		18.5					18.0					
10	2457		16.0					16.0					
11	2462		14.0					14.0					
12	2467		11.0		11.0								
13	2472		2.0		2.0								

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)
					UAT		LAT		
					HEAD	BODY	HEAD	BODY	
2.4	802.11n	1 Tx HT20	1	2412	14.0	14.0	14.0	14.0	No
			2	2417	16.0	16.0	16.0	16.0	
			3	2422	18.0	18.5	18.0	18.0	
			6	2437	18.0	18.5	18.0	18.0	
			9	2452	18.0	18.5	18.0	18.0	
			10	2457	16.0	16.0	16.0	16.0	
			11	2462	14.0	14.0	14.0	14.0	
			12	2467	11.5	11.5	11.5	11.5	
			13	2472	2.0	2.0	2.0	2.0	
		2 Tx HT20 CDD/STBC/SDM	1	2412	13.0		13.0		No
			2	2417	15.5		15.5		
			3	2422	18.0		18.0		
			6	2437	18.0		18.0		
			9	2452	18.0		18.0		
			10	2457	16.0		16.0		
			11	2462	14.0		14.0		
			12	2467	11.0		11.0		
			13	2472	2.0		2.0		
		2 Tx HT20 CDD/STBC/SDM	1	2412		13.0		13.0	No
			2	2417		15.5		15.5	
			3	2422		18.5		18.0	
			6	2437		18.5		18.0	
			9	2452		18.5		18.0	
			10	2457		16.0		16.0	
			11	2462		14.0		14.0	
			12	2467		11.0		11.0	
			13	2472		2.0		2.0	

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)	
					UAT		LAT			
					HEAD	BODY	HEAD	BODY		
5.2	802.11a	1 Tx	36	5180	15.0	17.0	17.0	15.5	No	
			40	5200	15.0	18.0	18.5	15.5		
			44	5220	15.0	18.0	18.5	15.5		
			48	5240	15.0	18.0	18.5	15.5		
		2 Tx CDD	36	5180	15.0		16.5		No	
			40	5200	15.0		17.0			
			44	5220	15.0		17.0			
			48	5240	15.0		17.0			
		802.11n	1 Tx HT20	36	5180	15.0	17.0	17.0	15.5	No
				40	5200	15.0	18.0	18.5	15.5	
				44	5220	15.0	18.0	18.5	15.5	
				48	5240	15.0	18.0	18.5	15.5	
	1 Tx HT40		38	5190	13.5	13.5	13.5	13.5	Yes	
			46	5230	15.0	17.5	18.0	15.5		
	2 Tx HT20 CDD/STBC/SDM		36	5180	15.0		16.5		No	
			40	5200	15.0		17.0			
			44	5220	15.0		17.0			
			48	5240	15.0		17.0			
	2 Tx HT40 CDD/STBC/SDM		36	5180		16.5		15.5	No	
			40	5200		17.0		15.5		
		44	5220		17.0		15.5			
		48	5240		17.0		15.5			
	2 Tx VHT20 CDD/STBC/SDM	38	5190	13.5		13.5		No		
		46	5230	15.0		18.0				
		38	5190		13.5		13.5			
		46	5230		17.5		15.5			
	802.11ac	1 Tx VHT20	36	5180	15.0	17.0	17.0	15.5	No	
			40	5200	15.0	18.0	18.5	15.5		
			44	5220	15.0	18.0	18.5	15.5		
			48	5240	15.0	18.0	18.5	15.5		
		1 Tx VHT40	38	5190	13.5	13.5	13.5	13.5	No	
			46	5230	15.0	17.5	18.0	15.5		
		1 Tx VHT80	42	5210	13.5	13.5	13.5	13.5	No	
		2 Tx VHT20 CDD/STBC/SDM	36	5180	15.0		16.5		No	
			40	5200	15.0		17.0			
			44	5220	15.0		17.0			
48			5240	15.0		17.0				
2 Tx VHT40 CDD/STBC/SDM		36	5180		16.5		15.5	No		
		40	5200		17.0		15.5			
		44	5220		17.0		15.5			
		48	5240		17.0		15.5			
2 Tx VHT80 CDD/STBC/SDM		38	5190	13.5		13.5		No		
		46	5230	15.0		18.0				
		38	5190		13.5		13.5			
		46	5230		17.5		15.5			
2 Tx VHT80 CDD/STBC/SDM		42	5210	12.0		12.0		No		
		42	5210		12.0		12.0			



Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)
					UAT		LAT		
					HEAD	BODY	HEAD	BODY	
5.3	802.11a	1 Tx	52	5260	15.0	18.0	18.5	13.5	Yes
			56	5280	15.0	18.0	18.5	13.5	
			60	5300	15.0	18.0	18.5	13.5	
			64	5320	15.0	16.5	16.5	13.5	
		2 Tx CDD	52	5260	15.0		17.0		No
			56	5280	15.0		17.0		
			60	5300	15.0		17.0		
			64	5320	15.0		16.5		
			52	5260		17.0		13.5	No
			56	5280		17.0		13.5	
			60	5300		17.0		13.5	
			64	5320		16.5		13.5	
	802.11n	1 Tx HT20	52	5260	15.0	18.0	18.5	13.5	No
			56	5280	15.0	18.0	18.5	13.5	
			60	5300	15.0	18.0	18.5	13.5	
			64	5320	15.0	16.5	16.5	13.5	
		1 Tx HT40	54	5270	15.0	17.5	18.0	13.5	Yes
			62	5310	14.5	14.5	14.5	13.5	
		2 Tx HT20 CDD/STBC/SDM	52	5260	15.0		17.0		No
			56	5280	15.0		17.0		
			60	5300	15.0		17.0		
			64	5320	15.0		16.5		
			52	5260		17.0		13.5	No
			56	5280		17.0		13.5	
			60	5300		17.0		13.5	
			64	5320		16.5		13.5	
		2 Tx HT40 CDD/STBC/SDM	54	5270	15.0		18.0		Yes
			62	5310	14.0		14.0		
	54		5270		17.5		13.5	Yes	
	62		5310		14.0		13.5		
	802.11ac	1 Tx VHT20	52	5260	15.0	18.0	18.5	13.5	No
			56	5280	15.0	18.0	18.5	13.5	
60			5300	15.0	18.0	18.5	13.5		
64			5320	15.0	16.5	16.5	13.5		
1 Tx VHT40		54	5270	15.0	17.5	18.0	13.5	No	
		62	5310	14.5	14.5	14.5	13.5		
1 Tx VHT80		58	5290	14.0	14.0	14.0	13.5	No	
2 Tx VHT20 CDD/STBC/SDM		52	5260	15.0		17.0		No	
		56	5280	15.0		17.0			
		60	5300	15.0		17.0			
		64	5320	15.0		16.5			
		52	5260		17.0		13.5	No	
		56	5280		17.0		13.5		
		60	5300		17.0		13.5		
		64	5320		16.5		13.5		
2 Tx VHT40 CDD/STBC/SDM		54	5270	15.0		18.0		No	
		62	5310	14.0		14.0			
		54	5270		17.5		13.5	No	
		62	5310		14.0		13.5		
2 Tx VHT80 CDD/STBC/SDM		58	5290	14.0		14.0		No	
	58	5290		14.0		13.5	No		

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)		
					UAT		LAT				
					HEAD	BODY	HEAD	BODY			
5.5	802.11a	1 Tx	100	5500	15.0	16.5	16.5	13.5	Yes		
			104	5520	15.0	18.0	18.5	13.5			
			108	5540	15.0	18.0	18.5	13.5			
			112	5560	15.0	18.0	18.5	13.5			
			116	5580	15.0	18.0	18.5	13.5			
			120	5600	15.0	18.0	18.5	13.5			
			124	5620	15.0	18.0	18.5	13.5			
			128	5640	15.0	18.0	18.5	13.5			
			132	5660	15.0	18.0	18.5	13.5			
			136	5680	15.0	18.0	18.5	13.5			
			140	5700	15.0	15.0	15.0	13.5			
			144	5720	15.0	18.0	18.5	13.5			
			2 Tx CDD	100	5500	15.0		16.0			No
				104	5520	15.0		17.0			
		108		5540	15.0		17.0				
		112		5560	15.0		17.0				
		116		5580	15.0		17.0				
		120		5600	15.0		17.0				
		124		5620	15.0		17.0				
		128		5640	15.0		17.0				
		132		5660	15.0		17.0				
		136		5680	15.0		17.0				
		140		5700	13.5		13.5				
		144		5720	15.0		17.0				
		2 Tx CDD		100	5500		16.0		13.5	No	
				104	5520		17.0		13.5		
			108	5540		17.0		13.5			
			112	5560		17.0		13.5			
116	5580			17.0		13.5					
120	5600			17.0		13.5					
124	5620			17.0		13.5					
128	5640			17.0		13.5					
132	5660			17.0		13.5					
136	5680			17.0		13.5					
140	5700			13.5		13.5					
144	5720			17.0		13.5					

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)
					UAT		LAT		
					HEAD	BODY	HEAD	BODY	
5.5	802.11n	1 Tx HT20	100	5500	15.0	16.5	16.5	13.5	No
			104	5520	15.0	18.0	18.5	13.5	
			108	5540	15.0	18.0	18.5	13.5	
			112	5560	15.0	18.0	18.5	13.5	
			116	5580	15.0	18.0	18.5	13.5	
			120	5600	15.0	18.0	18.5	13.5	
			124	5620	15.0	18.0	18.5	13.5	
			128	5640	15.0	18.0	18.5	13.5	
			132	5660	15.0	18.0	18.5	13.5	
			136	5680	15.0	18.0	18.5	13.5	
		140	5700	15.0	15.0	15.0	13.5		
		144	5720	15.0	18.0	18.5	13.5		
		1 Tx HT40	102	5510	14.5	14.5	14.5	13.5	No
			110	5550	15.0	17.5	18.0	13.5	
			118	5590	15.0	17.5	18.0	13.5	
			126	5630	15.0	17.5	18.0	13.5	
			134	5670	15.0	16.0	16.0	13.5	
		2 Tx HT20 CDD/STBC/SDM	100	5500	15.0		16.0		No
			104	5520	15.0		17.0		
			108	5540	15.0		17.0		
			112	5560	15.0		17.0		
			116	5580	15.0		17.0		
			120	5600	15.0		17.0		
			124	5620	15.0		17.0		
			128	5640	15.0		17.0		
			132	5660	15.0		17.0		
			136	5680	15.0		17.0		
		140	5700	13.5		13.5			
		144	5720	15.0		17.0			
		2 Tx HT20 CDD/STBC/SDM	100	5500		16.0		13.5	No
			104	5520		17.0		13.5	
			108	5540		17.0		13.5	
			112	5560		17.0		13.5	
			116	5580		17.0		13.5	
			120	5600		17.0		13.5	
			124	5620		17.0		13.5	
			128	5640		17.0		13.5	
			132	5660		17.0		13.5	
			136	5680		17.0		13.5	
		140	5700		13.5		13.5		
		144	5720		17.0		13.5		
		2 Tx HT40 CDD/STBC/SDM	102	5510	14.0		14.0		No
110	5550		15.0		18.0				
118	5590		15.0		18.0				
126	5630		15.0		18.0				
134	5670		15.0		15.0				
2 Tx HT40 CDD/STBC/SDM	102	5510		14.0		13.5	No		
	110	5550		17.5		13.5			
	118	5590		17.5		13.5			
	126	5630		17.5		13.5			
	134	5670		15.0		13.5			
142	5710		17.5		13.5				

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)
					UAT		LAT		
					HEAD	BODY	HEAD	BODY	
5.5	802.11ac	1 Tx VHT20	100	5500	15.0	16.5	16.5	13.5	No
			104	5520	15.0	18.0	18.5	13.5	
			108	5540	15.0	18.0	18.5	13.5	
			112	5560	15.0	18.0	18.5	13.5	
			116	5580	15.0	18.0	18.5	13.5	
			120	5600	15.0	18.0	18.5	13.5	
			124	5620	15.0	18.0	18.5	13.5	
			128	5640	15.0	18.0	18.5	13.5	
			132	5660	15.0	18.0	18.5	13.5	
			136	5680	15.0	18.0	18.5	13.5	
			140	5700	15.0	15.0	15.0	13.5	
		144	5720	15.0	18.0	18.5	13.5		
		1 Tx VHT40	102	5510	14.5	14.5	14.5	13.5	No
			110	5550	15.0	17.5	18.0	13.5	
			118	5590	15.0	17.5	18.0	13.5	
			126	5630	15.0	17.5	18.0	13.5	
			134	5670	15.0	16.0	16.0	13.5	
		1 Tx VHT80	106	5530	13.0	13.0	13.0	13.0	Yes
			122	5610	15.0	17.5	18.0	13.5	
			138	5690	15.0	17.5	18.0	13.5	

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)	
					UAT		LAT			
					HEAD	BODY	HEAD	BODY		
5.5	802.11ac	2 Tx HT20 CDD/STBC/SDM	100	5500	15.0		16.0		No	
			104	5520	15.0		17.0			
			108	5540	15.0		17.0			
			112	5560	15.0		17.0			
			116	5580	15.0		17.0			
			120	5600	15.0		17.0			
			124	5620	15.0		17.0			
			128	5640	15.0		17.0			
			132	5660	15.0		17.0			
			136	5680	15.0		17.0			
			140	5700	13.5		13.5			
			144	5720	15.0		17.0			
			100	5500		16.0		13.5		No
			104	5520		17.0		13.5		
		108	5540		17.0		13.5			
		112	5560		17.0		13.5			
		116	5580		17.0		13.5			
		120	5600		17.0		13.5			
		124	5620		17.0		13.5			
		128	5640		17.0		13.5			
		132	5660		17.0		13.5			
		136	5680		17.0		13.5			
		140	5700		13.5		13.5			
		144	5720		17.0		13.5			
		102	5510		14.0		14.0	No		
		110	5550		15.0		18.0			
		118	5590		15.0		18.0			
		126	5630		15.0		18.0			
		134	5670		15.0		15.0			
		142	5710		15.0		18.0			
102	5510			14.0		13.5	No			
110	5550			17.5		13.5				
118	5590			17.5		13.5				
126	5630			17.5		13.5				
134	5670			15.0		13.5				
142	5710			17.5		13.5				
106	5530			12.0		12.0	Yes			
122	5610			15.0		18.0				
138	5690			15.0		18.0				
106	5530				12.0		12.0	Yes		
122	5610				17.5		13.5			
138	5690				17.5		13.5			

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)	
					UAT		LAT			
					HEAD	BODY	HEAD	BODY		
5.8	802.11a	1 Tx	149	5745	16.0	16.0	16.0	16.0	Yes	
			153	5765	16.0	18.0	18.0	17.0		
			157	5785	16.0	18.0	18.0	17.0		
			161	5805	16.0	18.0	18.0	17.0		
			165	5825	16.0	17.5	17.5	17.0		
		2 Tx CDD	149	5745	15.0		15.0		Yes	
			153	5765	16.0		18.0			
			157	5785	16.0		18.0			
			161	5805	16.0		18.0			
			165	5825	16.0		16.0			
	802.11n	1 Tx HT20	149	5745	16.0	16.0	16.0	16.0	No	
			153	5765	16.0	18.0	18.0	17.0		
			157	5785	16.0	18.0	18.0	17.0		
			161	5805	16.0	18.0	18.0	17.0		
			165	5825	16.0	17.5	17.5	17.0		
		1 Tx HT40	151	5755	14.5	14.5	14.5	14.5	Yes	
			159	5795	16.0	17.5	18.0	17.0		
		2 Tx HT20 CDD/STBC/SDM	149	5745	15.0		15.0		No	
			153	5765	16.0		18.0			
			157	5785	16.0		18.0			
			161	5805	16.0		18.0			
			2 Tx HT40 CDD/STBC/SDM	149	5745		15.0		15.0	No
				153	5765		18.0		17.0	
				157	5785		18.0		17.0	
161	5805				18.0		17.0			
2 Tx HT40 CDD/STBC/SDM	151	5755	13.0		13.0		No			
	159	5795	16.0		17.0					
	151	5755		13.0		13.0	No			
	159	5795		17.0		17.0				

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Maximum Output Power (dBm)				SAR Test (Yes/No)
					UAT		LAT		
					HEAD	BODY	HEAD	BODY	
5.8	802.11ac	1 Tx VHT20	149	5745	16.0	16.0	16.0	16.0	No
			153	5765	16.0	18.0	18.0	17.0	
			157	5785	16.0	18.0	18.0	17.0	
			161	5805	16.0	18.0	18.0	17.0	
			165	5825	16.0	17.5	17.5	17.0	
		1 Tx VHT40	151	5755	14.5	14.5	14.5	14.5	No
			159	5795	16.0	17.5	18.0	17.0	
		1 Tx VHT80	155	5775	14.5	14.5	14.5	14.5	No
		2 Tx HT20 CDD/STBC/SDM	149	5745	15.0		15.0		No
			153	5765	16.0		18.0		
			157	5785	16.0		18.0		
			161	5805	16.0		18.0		
			165	5825	16.0		16.0		
		2 Tx HT40 CDD/STBC/SDM	149	5745		15.0		15.0	No
			153	5765		18.0		17.0	
			157	5785		18.0		17.0	
			161	5805		18.0		17.0	
			165	5825		16.0		16.0	
		2 Tx VHT80 CDD/STBC/SDM	151	5755	13.0		13.0		No
			159	5795	16.0		17.0		
151	5755			13.0		13.0	No		
159	5795			17.0		17.0			
2 Tx VHT80 CDD/STBC/SDM	155	5775	13.5		13.5		No		
	155	5775		13.5		13.5	No		

### 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			23780/ 709	23755/ 706.5		
Mid			23790/ 710	23790/ 710			
High			23800/ 711	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 - 824 MHz						
	Channel Bandwidth						
	20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz	
	Low			26715/ 816.5	26705/ 815.5	26697/ 814.7	
Mid			26740/ 819	26740/ 819	26740/ 819		
High			26765/ 821.5	26775/ 822.5	26783/ 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	27675/ 2306.5	27667/ 2305.7	
Mid			27710/ 2310	27710/ 2310	27710/ 2310		
High			27735/ 2312.5	27745/ 2313.5	27753/ 2314.3		

Frequency range, Channel Bandwidth, Numbers and Frequencies	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	39725/ 2503.5	39700/ 2501	39675/ 2498.5																																							
	Low-Mid	40185/ 2549.5	40173/ 2548.3	40160/ 2547.0	40148/ 2545.8																																							
	Mid	40620/ 2593.0	40620/ 2593.0	40620/ 2593.0	40620/ 2593.0																																							
	High	41490/ 2680.0	41515/ 2682.5	41540/ 2685.0	41565/ 2687.5																																							
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)	<p align="center"><b>Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3</b></p> <table border="1"> <thead> <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> </thead> <tbody> <tr> <td>QPSK</td> <td>&gt; 5</td> <td>&gt; 4</td> <td>&gt; 8</td> <td>&gt; 12</td> <td>&gt; 16</td> <td>&gt; 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>&gt; 5</td> <td>&gt; 4</td> <td>&gt; 8</td> <td>&gt; 12</td> <td>&gt; 16</td> <td>&gt; 18</td> <td>≤ 2</td> </tr> </tbody> </table> <p>MPR Built-in by design A-MPR (additional MPR) was disabled during SAR testing</p>						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.																																											

### 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 Band 41 supports 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	$26336 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$			$20480 \cdot T_s$		
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 x ( $T_s$ ) x # 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

## 6.6. Antenna Dimensions and Separation Distances

Refer to separate filing document.

## 7. RF Exposure Conditions (Test Configurations)

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	N/A	Yes	2
			Front	N/A	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	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	N/A	Yes	2
			Front	N/A	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 Hot Spot SAR.
- 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	N/A	Yes	2
			Front	N/A	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	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	N/A	Yes	2
			Front	N/A	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:**

- SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hot Spot SAR.
- 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.

#### Tissue Dielectric Parameters

FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

Target Frequency (MHz)	Head		Body	
	$\epsilon_r$	$\sigma$ (S/m)	$\epsilon_r$	$\sigma$ (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 A**

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
7/9/2015	Head 750	e'	40.1600	Relative Permittivity ( $\epsilon_r$ ):	40.16	41.96	-4.29	5
		e"	21.3800	Conductivity ( $\sigma$ ):	0.89	0.89	-0.17	5
	Head 700	e'	40.9100	Relative Permittivity ( $\epsilon_r$ ):	40.91	42.22	-3.10	5
		e"	21.7400	Conductivity ( $\sigma$ ):	0.85	0.89	-4.84	5
	Head 790	e'	39.6900	Relative Permittivity ( $\epsilon_r$ ):	39.69	41.76	-4.95	5
		e"	21.3100	Conductivity ( $\sigma$ ):	0.94	0.90	4.45	5
7/9/2015	Body 750	e'	53.6000	Relative Permittivity ( $\epsilon_r$ ):	53.60	55.55	-3.50	5
		e"	23.4700	Conductivity ( $\sigma$ ):	0.98	0.96	1.63	5
	Body 700	e'	53.8700	Relative Permittivity ( $\epsilon_r$ ):	53.87	55.74	-3.35	5
		e"	24.1100	Conductivity ( $\sigma$ ):	0.94	0.96	-2.17	5
	Body 790	e'	52.9800	Relative Permittivity ( $\epsilon_r$ ):	52.98	55.39	-4.35	5
		e"	23.0400	Conductivity ( $\sigma$ ):	1.01	0.97	4.75	5
7/13/2015	Head 750	e'	40.6300	Relative Permittivity ( $\epsilon_r$ ):	40.63	41.96	-3.17	5
		e"	21.4000	Conductivity ( $\sigma$ ):	0.89	0.89	-0.07	5
	Head 700	e'	41.4600	Relative Permittivity ( $\epsilon_r$ ):	41.46	42.22	-1.80	5
		e"	21.7300	Conductivity ( $\sigma$ ):	0.85	0.89	-4.89	5
	Head 790	e'	40.2200	Relative Permittivity ( $\epsilon_r$ ):	40.22	41.76	-3.68	5
		e"	21.3500	Conductivity ( $\sigma$ ):	0.94	0.90	4.65	5
7/13/2015	Body 750	e'	53.7200	Relative Permittivity ( $\epsilon_r$ ):	53.72	55.55	-3.29	5
		e"	23.4100	Conductivity ( $\sigma$ ):	0.98	0.96	1.37	5
	Body 700	e'	54.2800	Relative Permittivity ( $\epsilon_r$ ):	54.28	55.74	-2.62	5
		e"	23.6500	Conductivity ( $\sigma$ ):	0.92	0.96	-4.04	5
	Body 790	e'	53.1400	Relative Permittivity ( $\epsilon_r$ ):	53.14	55.39	-4.07	5
		e"	23.0000	Conductivity ( $\sigma$ ):	1.01	0.97	4.57	5
7/15/2015	Head 2300	e'	38.7300	Relative Permittivity ( $\epsilon_r$ ):	38.73	39.47	-1.88	5
		e"	13.6300	Conductivity ( $\sigma$ ):	1.74	1.66	4.77	5
	Head 2310	e'	38.6900	Relative Permittivity ( $\epsilon_r$ ):	38.69	39.45	-1.94	5
		e"	13.6500	Conductivity ( $\sigma$ ):	1.75	1.67	4.83	5
	Head 2320	e'	38.6600	Relative Permittivity ( $\epsilon_r$ ):	38.66	39.44	-1.97	5
		e"	13.6600	Conductivity ( $\sigma$ ):	1.76	1.68	4.81	5
7/15/2015	Body 2300	e'	52.7400	Relative Permittivity ( $\epsilon_r$ ):	52.74	52.90	-0.31	5
		e"	14.7300	Conductivity ( $\sigma$ ):	1.88	1.80	4.45	5
	Body 2310	e'	52.7200	Relative Permittivity ( $\epsilon_r$ ):	52.72	52.89	-0.32	5
		e"	14.7700	Conductivity ( $\sigma$ ):	1.90	1.81	4.64	5
	Body 2320	e'	52.6900	Relative Permittivity ( $\epsilon_r$ ):	52.69	52.88	-0.36	5
		e"	14.7600	Conductivity ( $\sigma$ ):	1.90	1.82	4.48	5
7/17/2015	Body 5180	e'	48.6800	Relative Permittivity ( $\epsilon_r$ ):	48.68	49.05	-0.75	5
		e"	18.7300	Conductivity ( $\sigma$ ):	5.39	5.27	2.34	5
	Body 5200	e'	48.5900	Relative Permittivity ( $\epsilon_r$ ):	48.59	49.02	-0.88	5
		e"	18.7100	Conductivity ( $\sigma$ ):	5.41	5.29	2.17	5
	Body 5600	e'	47.7600	Relative Permittivity ( $\epsilon_r$ ):	47.76	48.48	-1.48	5
		e"	19.1500	Conductivity ( $\sigma$ ):	5.96	5.76	3.50	5
	Body 5800	e'	47.3000	Relative Permittivity ( $\epsilon_r$ ):	47.30	48.20	-1.87	5
		e"	19.2800	Conductivity ( $\sigma$ ):	6.22	6.00	3.63	5
	Body 5825	e'	47.2700	Relative Permittivity ( $\epsilon_r$ ):	47.27	48.20	-1.93	5
		e"	19.2600	Conductivity ( $\sigma$ ):	6.24	6.00	3.97	5

**SAR Lab A continued**

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
7/27/2015	Head 750	e'	40.4600	Relative Permittivity ( $\epsilon_r$ ):	40.46	41.96	-3.58	5
		e"	21.5000	Conductivity ( $\sigma$ ):	0.90	0.89	0.39	5
	Head 700	e'	41.1400	Relative Permittivity ( $\epsilon_r$ ):	41.14	42.22	-2.55	5
		e"	21.9000	Conductivity ( $\sigma$ ):	0.85	0.89	-4.14	5
	Head 790	e'	39.9400	Relative Permittivity ( $\epsilon_r$ ):	39.94	41.76	-4.35	5
		e"	21.2300	Conductivity ( $\sigma$ ):	0.93	0.90	4.06	5
7/27/2015	Body 750	e'	53.5600	Relative Permittivity ( $\epsilon_r$ ):	53.56	55.55	-3.58	5
		e"	23.2600	Conductivity ( $\sigma$ ):	0.97	0.96	0.72	5
	Body 700	e'	54.1200	Relative Permittivity ( $\epsilon_r$ ):	54.12	55.74	-2.90	5
		e"	23.7100	Conductivity ( $\sigma$ ):	0.92	0.96	-3.79	5
	Body 790	e'	53.1100	Relative Permittivity ( $\epsilon_r$ ):	53.11	55.39	-4.12	5
		e"	22.9600	Conductivity ( $\sigma$ ):	1.01	0.97	4.39	5
7/27/2015	Head 1750	e'	38.3800	Relative Permittivity ( $\epsilon_r$ ):	38.38	40.08	-4.25	5
		e"	14.0000	Conductivity ( $\sigma$ ):	1.36	1.37	-0.49	5
	Head 1710	e'	38.5800	Relative Permittivity ( $\epsilon_r$ ):	38.58	40.15	-3.90	5
		e"	13.8900	Conductivity ( $\sigma$ ):	1.32	1.35	-1.91	5
	Head 1755	e'	38.3600	Relative Permittivity ( $\epsilon_r$ ):	38.36	40.08	-4.28	5
		e"	14.0200	Conductivity ( $\sigma$ ):	1.37	1.37	-0.27	5



**SAR Lab B**

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
7/13/2015	Head 2450	e'	38.5500	Relative Permittivity ( $\epsilon_r$ ):	38.55	39.20	-1.66	5
		e"	13.4300	Conductivity ( $\sigma$ ):	1.83	1.80	1.64	5
	Head 2410	e'	38.6800	Relative Permittivity ( $\epsilon_r$ ):	38.68	39.28	-1.53	5
		e"	13.3500	Conductivity ( $\sigma$ ):	1.79	1.76	1.62	5
	Head 2475	e'	38.4500	Relative Permittivity ( $\epsilon_r$ ):	38.45	39.17	-1.83	5
		e"	13.4500	Conductivity ( $\sigma$ ):	1.85	1.83	1.31	5
7/13/2015	Body 2450	e'	52.8300	Relative Permittivity ( $\epsilon_r$ ):	52.83	52.70	0.25	5
		e"	14.1600	Conductivity ( $\sigma$ ):	1.93	1.95	-1.08	5
	Body 2410	e'	52.9400	Relative Permittivity ( $\epsilon_r$ ):	52.94	52.76	0.34	5
		e"	14.1500	Conductivity ( $\sigma$ ):	1.90	1.91	-0.59	5
	Body 2475	e'	52.7600	Relative Permittivity ( $\epsilon_r$ ):	52.76	52.67	0.17	5
		e"	14.1900	Conductivity ( $\sigma$ ):	1.95	1.99	-1.63	5
7/15/2015	Body 835	e'	52.6400	Relative Permittivity ( $\epsilon_r$ ):	52.64	55.20	-4.64	5
		e"	21.9300	Conductivity ( $\sigma$ ):	1.02	0.97	4.97	5
	Body 820	e'	52.7600	Relative Permittivity ( $\epsilon_r$ ):	52.76	55.28	-4.55	5
		e"	21.9800	Conductivity ( $\sigma$ ):	1.00	0.97	3.48	5
	Body 850	e'	52.4500	Relative Permittivity ( $\epsilon_r$ ):	52.45	55.16	-4.91	5
		e"	21.9000	Conductivity ( $\sigma$ ):	1.04	0.99	4.85	5
7/16/2015	Head 2450	e'	38.6900	Relative Permittivity ( $\epsilon_r$ ):	38.69	39.20	-1.30	5
		e"	13.6900	Conductivity ( $\sigma$ ):	1.86	1.80	3.61	5
	Head 2410	e'	38.8300	Relative Permittivity ( $\epsilon_r$ ):	38.83	39.28	-1.14	5
		e"	13.6000	Conductivity ( $\sigma$ ):	1.82	1.76	3.52	5
	Head 2475	e'	38.6100	Relative Permittivity ( $\epsilon_r$ ):	38.61	39.17	-1.43	5
		e"	13.7300	Conductivity ( $\sigma$ ):	1.89	1.83	3.42	5
7/16/2015	Body 2450	e'	52.6800	Relative Permittivity ( $\epsilon_r$ ):	52.68	52.70	-0.04	5
		e"	14.4300	Conductivity ( $\sigma$ ):	1.97	1.95	0.81	5
	Body 2410	e'	52.7600	Relative Permittivity ( $\epsilon_r$ ):	52.76	52.76	0.00	5
		e"	14.3200	Conductivity ( $\sigma$ ):	1.92	1.91	0.60	5
	Body 2475	e'	52.6600	Relative Permittivity ( $\epsilon_r$ ):	52.66	52.67	-0.02	5
		e"	14.4400	Conductivity ( $\sigma$ ):	1.99	1.99	0.10	5
7/27/2015	Head 1900	e'	39.6600	Relative Permittivity ( $\epsilon_r$ ):	39.66	40.00	-0.85	5
		e"	13.6900	Conductivity ( $\sigma$ ):	1.45	1.40	3.31	5
	Head 1850	e'	39.9100	Relative Permittivity ( $\epsilon_r$ ):	39.91	40.00	-0.23	5
		e"	13.5400	Conductivity ( $\sigma$ ):	1.39	1.40	-0.51	5
	Head 1910	e'	39.6400	Relative Permittivity ( $\epsilon_r$ ):	39.64	40.00	-0.90	5
		e"	13.6600	Conductivity ( $\sigma$ ):	1.45	1.40	3.62	5

**SAR Lab C**

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
7/8/2015	Head 1750	e'	38.6800	Relative Permittivity ( $\epsilon_r$ ):	38.68	40.08	-3.50	5
		e"	14.4300	Conductivity ( $\sigma$ ):	1.40	1.37	2.57	5
	Head 1710	e'	38.8900	Relative Permittivity ( $\epsilon_r$ ):	38.89	40.15	-3.13	5
		e"	14.3800	Conductivity ( $\sigma$ ):	1.37	1.35	1.55	5
	Head 1755	e'	38.6500	Relative Permittivity ( $\epsilon_r$ ):	38.65	40.08	-3.56	5
		e"	14.4300	Conductivity ( $\sigma$ ):	1.41	1.37	2.65	5
7/13/2015	Head 1750	e'	40.9000	Relative Permittivity ( $\epsilon_r$ ):	40.90	40.08	2.03	5
		e"	14.5000	Conductivity ( $\sigma$ ):	1.41	1.37	3.06	5
	Head 1710	e'	41.0200	Relative Permittivity ( $\epsilon_r$ ):	41.02	40.15	2.18	5
		e"	14.3600	Conductivity ( $\sigma$ ):	1.37	1.35	1.41	5
	Head 1755	e'	40.8900	Relative Permittivity ( $\epsilon_r$ ):	40.89	40.08	2.03	5
		e"	14.5200	Conductivity ( $\sigma$ ):	1.42	1.37	3.29	5
7/13/2015	Body 1750	e'	52.5100	Relative Permittivity ( $\epsilon_r$ ):	52.51	53.44	-1.74	5
		e"	15.6300	Conductivity ( $\sigma$ ):	1.52	1.49	2.34	5
	Body 1710	e'	52.6400	Relative Permittivity ( $\epsilon_r$ ):	52.64	53.54	-1.69	5
		e"	15.5000	Conductivity ( $\sigma$ ):	1.47	1.46	0.84	5
	Body 1755	e'	52.4800	Relative Permittivity ( $\epsilon_r$ ):	52.48	53.43	-1.77	5
		e"	15.6300	Conductivity ( $\sigma$ ):	1.53	1.49	2.42	5
7/14/2015	Head 835	e'	42.0800	Relative Permittivity ( $\epsilon_r$ ):	42.08	41.50	1.40	5
		e"	19.7700	Conductivity ( $\sigma$ ):	0.92	0.90	1.99	5
	Head 820	e'	42.2800	Relative Permittivity ( $\epsilon_r$ ):	42.28	41.60	1.63	5
		e"	19.8300	Conductivity ( $\sigma$ ):	0.90	0.90	0.63	5
	Head 850	e'	41.9000	Relative Permittivity ( $\epsilon_r$ ):	41.90	41.50	0.96	5
		e"	19.7200	Conductivity ( $\sigma$ ):	0.93	0.92	1.86	5
7/17/2015	Body 1900	e'	52.0200	Relative Permittivity ( $\epsilon_r$ ):	52.02	53.30	-2.40	5
		e"	14.5600	Conductivity ( $\sigma$ ):	1.54	1.52	1.20	5
	Body 1850	e'	52.1900	Relative Permittivity ( $\epsilon_r$ ):	52.19	53.30	-2.08	5
		e"	14.6200	Conductivity ( $\sigma$ ):	1.50	1.52	-1.06	5
	Body 1910	e'	52.0000	Relative Permittivity ( $\epsilon_r$ ):	52.00	53.30	-2.44	5
		e"	14.5700	Conductivity ( $\sigma$ ):	1.55	1.52	1.80	5
7/27/2015	Head 835	e'	40.8700	Relative Permittivity ( $\epsilon_r$ ):	40.87	41.50	-1.52	5
		e"	19.6900	Conductivity ( $\sigma$ ):	0.91	0.90	1.58	5
	Head 820	e'	41.0700	Relative Permittivity ( $\epsilon_r$ ):	41.07	41.60	-1.28	5
		e"	19.9000	Conductivity ( $\sigma$ ):	0.91	0.90	0.99	5
	Head 850	e'	40.8600	Relative Permittivity ( $\epsilon_r$ ):	40.86	41.50	-1.54	5
		e"	19.6700	Conductivity ( $\sigma$ ):	0.93	0.92	1.60	5
7/27/2015	Body 835	e'	54.7700	Relative Permittivity ( $\epsilon_r$ ):	54.77	55.20	-0.78	5
		e"	21.8900	Conductivity ( $\sigma$ ):	1.02	0.97	4.78	5
	Body 820	e'	54.8600	Relative Permittivity ( $\epsilon_r$ ):	54.86	55.28	-0.75	5
		e"	22.0500	Conductivity ( $\sigma$ ):	1.01	0.97	3.81	5
	Body 850	e'	54.7500	Relative Permittivity ( $\epsilon_r$ ):	54.75	55.16	-0.74	5
		e"	21.7100	Conductivity ( $\sigma$ ):	1.03	0.99	3.94	5

**SAR Lab E**

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
7/8/2015	Head 2600	e'	38.7700	Relative Permittivity ( $\epsilon_r$ ):	38.77	39.01	-0.62	5
		e"	13.9700	Conductivity ( $\sigma$ ):	2.02	1.96	2.93	5
	Head 2500	e'	39.1100	Relative Permittivity ( $\epsilon_r$ ):	39.11	39.14	-0.07	5
		e"	13.7700	Conductivity ( $\sigma$ ):	1.91	1.85	3.24	5
	Head 2700	e'	38.4500	Relative Permittivity ( $\epsilon_r$ ):	38.45	38.88	-1.12	5
		e"	14.1500	Conductivity ( $\sigma$ ):	2.12	2.07	2.61	5
7/8/2015	Body 2600	e'	51.1300	Relative Permittivity ( $\epsilon_r$ ):	51.13	52.51	-2.63	5
		e"	15.2500	Conductivity ( $\sigma$ ):	2.20	2.16	2.03	5
	Body 2500	e'	51.4300	Relative Permittivity ( $\epsilon_r$ ):	51.43	52.64	-2.29	5
		e"	15.0500	Conductivity ( $\sigma$ ):	2.09	2.02	3.55	5
	Body 2700	e'	50.8200	Relative Permittivity ( $\epsilon_r$ ):	50.82	52.38	-2.99	5
		e"	15.4300	Conductivity ( $\sigma$ ):	2.32	2.30	0.66	5
7/13/2015	Body 2600	e'	51.8300	Relative Permittivity ( $\epsilon_r$ ):	51.83	52.51	-1.30	5
		e"	15.2300	Conductivity ( $\sigma$ ):	2.20	2.16	1.90	5
	Body 2500	e'	52.1000	Relative Permittivity ( $\epsilon_r$ ):	52.10	52.64	-1.02	5
		e"	15.0400	Conductivity ( $\sigma$ ):	2.09	2.02	3.49	5
	Body 2700	e'	51.5400	Relative Permittivity ( $\epsilon_r$ ):	51.54	52.38	-1.61	5
		e"	15.4700	Conductivity ( $\sigma$ ):	2.32	2.30	0.92	5
7/13/2015	Head 2600	e'	39.0700	Relative Permittivity ( $\epsilon_r$ ):	39.07	39.01	0.15	5
		e"	14.0100	Conductivity ( $\sigma$ ):	2.03	1.96	3.22	5
	Head 2500	e'	39.4200	Relative Permittivity ( $\epsilon_r$ ):	39.42	39.14	0.72	5
		e"	13.8100	Conductivity ( $\sigma$ ):	1.92	1.85	3.54	5
	Head 2700	e'	38.7200	Relative Permittivity ( $\epsilon_r$ ):	38.72	38.88	-0.42	5
		e"	14.2300	Conductivity ( $\sigma$ ):	2.14	2.07	3.19	5
7/16/2015	Body 2600	e'	50.7000	Relative Permittivity ( $\epsilon_r$ ):	50.70	52.51	-3.45	5
		e"	14.7600	Conductivity ( $\sigma$ ):	2.13	2.16	-1.25	5
	Body 2500	e'	50.9900	Relative Permittivity ( $\epsilon_r$ ):	50.99	52.64	-3.13	5
		e"	14.5300	Conductivity ( $\sigma$ ):	2.02	2.02	-0.02	5
	Body 2700	e'	50.4200	Relative Permittivity ( $\epsilon_r$ ):	50.42	52.38	-3.75	5
		e"	14.8900	Conductivity ( $\sigma$ ):	2.24	2.30	-2.87	5
7/16/2015	Body 835	e'	54.6900	Relative Permittivity ( $\epsilon_r$ ):	54.69	55.20	-0.92	5
		e"	21.9000	Conductivity ( $\sigma$ ):	1.02	0.97	4.82	5
	Body 820	e'	54.8200	Relative Permittivity ( $\epsilon_r$ ):	54.82	55.28	-0.83	5
		e"	21.8700	Conductivity ( $\sigma$ ):	1.00	0.97	2.96	5
	Body 850	e'	54.5900	Relative Permittivity ( $\epsilon_r$ ):	54.59	55.16	-1.03	5
		e"	21.8400	Conductivity ( $\sigma$ ):	1.03	0.99	4.57	5
7/27/2015	Head 2600	e'	40.2400	Relative Permittivity ( $\epsilon_r$ ):	40.24	39.01	3.15	5
		e"	14.1800	Conductivity ( $\sigma$ ):	2.05	1.96	4.48	5
	Head 2500	e'	40.6000	Relative Permittivity ( $\epsilon_r$ ):	40.60	39.14	3.74	5
		e"	13.9500	Conductivity ( $\sigma$ ):	1.94	1.85	4.59	5
	Head 2700	e'	39.9200	Relative Permittivity ( $\epsilon_r$ ):	39.92	38.88	2.66	5
		e"	14.3800	Conductivity ( $\sigma$ ):	2.16	2.07	4.28	5

**SAR Lab F**

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)		
7/13/2015	Head 5180	e'	36.7900	Relative Permittivity ( $\epsilon_r$ ):	36.79	36.01	2.16	5	
		e"	15.5500	Conductivity ( $\sigma$ ):	4.48	4.63	-3.28	5	
	Head 5200	e'	36.7500	Relative Permittivity ( $\epsilon_r$ ):	36.75	35.99	2.11	5	
		e"	15.5300	Conductivity ( $\sigma$ ):	4.49	4.65	-3.46	5	
	Head 5600	e'	36.2200	Relative Permittivity ( $\epsilon_r$ ):	36.22	35.53	1.93	5	
		e"	15.8800	Conductivity ( $\sigma$ ):	4.94	5.06	-2.28	5	
	Head 5800	e'	36.0800	Relative Permittivity ( $\epsilon_r$ ):	36.08	35.30	2.21	5	
		e"	16.0000	Conductivity ( $\sigma$ ):	5.16	5.27	-2.09	5	
	Head 5825	e'	36.0800	Relative Permittivity ( $\epsilon_r$ ):	36.08	35.30	2.21	5	
		e"	16.0000	Conductivity ( $\sigma$ ):	5.18	5.27	-1.67	5	
	7/16/2015	Head 5180	e'	36.5200	Relative Permittivity ( $\epsilon_r$ ):	36.52	36.01	1.41	5
			e"	15.7400	Conductivity ( $\sigma$ ):	4.53	4.63	-2.10	5
Head 5200		e'	36.4900	Relative Permittivity ( $\epsilon_r$ ):	36.49	35.99	1.39	5	
		e"	15.7500	Conductivity ( $\sigma$ ):	4.55	4.65	-2.09	5	
Head 5600		e'	35.9600	Relative Permittivity ( $\epsilon_r$ ):	35.96	35.53	1.20	5	
		e"	15.9400	Conductivity ( $\sigma$ ):	4.96	5.06	-1.91	5	
Head 5800		e'	35.7100	Relative Permittivity ( $\epsilon_r$ ):	35.71	35.30	1.16	5	
		e"	16.0200	Conductivity ( $\sigma$ ):	5.17	5.27	-1.97	5	
Head 5825		e'	35.6900	Relative Permittivity ( $\epsilon_r$ ):	35.69	35.30	1.10	5	
		e"	16.0400	Conductivity ( $\sigma$ ):	5.20	5.27	-1.42	5	
7/17/2015		Body 5180	e'	47.6200	Relative Permittivity ( $\epsilon_r$ ):	47.62	49.05	-2.91	5
			e"	18.3800	Conductivity ( $\sigma$ ):	5.29	5.27	0.43	5
	Body 5200	e'	47.5200	Relative Permittivity ( $\epsilon_r$ ):	47.52	49.02	-3.06	5	
		e"	18.3700	Conductivity ( $\sigma$ ):	5.31	5.29	0.32	5	
	Body 5600	e'	46.9500	Relative Permittivity ( $\epsilon_r$ ):	46.95	48.48	-3.15	5	
		e"	18.7300	Conductivity ( $\sigma$ ):	5.83	5.76	1.23	5	
	Body 5800	e'	46.7900	Relative Permittivity ( $\epsilon_r$ ):	46.79	48.20	-2.93	5	
		e"	18.9100	Conductivity ( $\sigma$ ):	6.10	6.00	1.64	5	
	Body 5825	e'	46.7800	Relative Permittivity ( $\epsilon_r$ ):	46.78	48.20	-2.95	5	
		e"	18.9100	Conductivity ( $\sigma$ ):	6.12	6.00	2.08	5	

**SAR Lab G**

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)		
7/9/2015	Head 1750	e'	39.9000	Relative Permittivity ( $\epsilon_r$ ):	39.90	40.08	-0.46	5	
		e"	13.7000	Conductivity ( $\sigma$ ):	1.33	1.37	-2.62	5	
	Head 1710	e'	39.9600	Relative Permittivity ( $\epsilon_r$ ):	39.96	40.15	-0.46	5	
		e"	13.6200	Conductivity ( $\sigma$ ):	1.30	1.35	-3.82	5	
	Head 1755	e'	39.9000	Relative Permittivity ( $\epsilon_r$ ):	39.90	40.08	-0.44	5	
		e"	13.7100	Conductivity ( $\sigma$ ):	1.34	1.37	-2.47	5	
7/9/2015	Body 1750	e'	52.2300	Relative Permittivity ( $\epsilon_r$ ):	52.23	53.44	-2.27	5	
		e"	15.2100	Conductivity ( $\sigma$ ):	1.48	1.49	-0.41	5	
	Body 1710	e'	52.2800	Relative Permittivity ( $\epsilon_r$ ):	52.28	53.54	-2.36	5	
		e"	15.1500	Conductivity ( $\sigma$ ):	1.44	1.46	-1.44	5	
	Body 1755	e'	52.2300	Relative Permittivity ( $\epsilon_r$ ):	52.23	53.43	-2.24	5	
		e"	15.2000	Conductivity ( $\sigma$ ):	1.48	1.49	-0.40	5	
7/9/2015	Body 5180	e'	49.0300	Relative Permittivity ( $\epsilon_r$ ):	49.03	49.05	-0.03	5	
		e"	18.4800	Conductivity ( $\sigma$ ):	5.32	5.27	0.97	5	
	Body 5200	e'	49.0300	Relative Permittivity ( $\epsilon_r$ ):	49.03	49.02	0.02	5	
		e"	18.5200	Conductivity ( $\sigma$ ):	5.35	5.29	1.14	5	
	Body 5600	e'	48.5600	Relative Permittivity ( $\epsilon_r$ ):	48.56	48.48	0.17	5	
		e"	18.8400	Conductivity ( $\sigma$ ):	5.87	5.76	1.83	5	
	Body 5800	e'	48.2900	Relative Permittivity ( $\epsilon_r$ ):	48.29	48.20	0.19	5	
		e"	19.0100	Conductivity ( $\sigma$ ):	6.13	6.00	2.18	5	
	Body 5825	e'	48.2900	Relative Permittivity ( $\epsilon_r$ ):	48.29	48.20	0.19	5	
		e"	19.0500	Conductivity ( $\sigma$ ):	6.17	6.00	2.83	5	
	7/13/2015	Body 1750	e'	52.7500	Relative Permittivity ( $\epsilon_r$ ):	52.75	53.44	-1.29	5
			e"	15.4400	Conductivity ( $\sigma$ ):	1.50	1.49	1.09	5
Body 1710		e'	52.8100	Relative Permittivity ( $\epsilon_r$ ):	52.81	53.54	-1.37	5	
		e"	15.3600	Conductivity ( $\sigma$ ):	1.46	1.46	-0.07	5	
Body 1755		e'	52.7400	Relative Permittivity ( $\epsilon_r$ ):	52.74	53.43	-1.29	5	
		e"	15.4400	Conductivity ( $\sigma$ ):	1.51	1.49	1.17	5	
7/14/2015	Body 5180	e'	49.2600	Relative Permittivity ( $\epsilon_r$ ):	49.26	49.05	0.43	5	
		e"	18.5900	Conductivity ( $\sigma$ ):	5.35	5.27	1.57	5	
	Body 5200	e'	49.1500	Relative Permittivity ( $\epsilon_r$ ):	49.15	49.02	0.27	5	
		e"	18.6200	Conductivity ( $\sigma$ ):	5.38	5.29	1.68	5	
	Body 5600	e'	48.5800	Relative Permittivity ( $\epsilon_r$ ):	48.58	48.48	0.21	5	
		e"	18.8000	Conductivity ( $\sigma$ ):	5.85	5.76	1.61	5	
	Body 5800	e'	48.3100	Relative Permittivity ( $\epsilon_r$ ):	48.31	48.20	0.23	5	
		e"	18.8800	Conductivity ( $\sigma$ ):	6.09	6.00	1.48	5	
	Body 5825	e'	48.2600	Relative Permittivity ( $\epsilon_r$ ):	48.26	48.20	0.12	5	
		e"	18.9200	Conductivity ( $\sigma$ ):	6.13	6.00	2.13	5	
	7/17/2015	Body 5180	e'	48.2200	Relative Permittivity ( $\epsilon_r$ ):	48.22	49.05	-1.69	5
			e"	18.0500	Conductivity ( $\sigma$ ):	5.20	5.27	-1.38	5
Body 5200		e'	48.1400	Relative Permittivity ( $\epsilon_r$ ):	48.14	49.02	-1.79	5	
		e"	18.0500	Conductivity ( $\sigma$ ):	5.22	5.29	-1.43	5	
Body 5600		e'	47.5200	Relative Permittivity ( $\epsilon_r$ ):	47.52	48.48	-1.98	5	
		e"	18.4800	Conductivity ( $\sigma$ ):	5.75	5.76	-0.12	5	
Body 5800		e'	47.2300	Relative Permittivity ( $\epsilon_r$ ):	47.23	48.20	-2.01	5	
		e"	18.6600	Conductivity ( $\sigma$ ):	6.02	6.00	0.30	5	
Body 5825		e'	47.1800	Relative Permittivity ( $\epsilon_r$ ):	47.18	48.20	-2.12	5	
		e"	18.6800	Conductivity ( $\sigma$ ):	6.05	6.00	0.84	5	
7/27/2015		Head 1750	e'	38.3800	Relative Permittivity ( $\epsilon_r$ ):	38.38	40.08	-4.25	5
			e"	14.0000	Conductivity ( $\sigma$ ):	1.36	1.37	-0.49	5
	Head 1710	e'	38.5800	Relative Permittivity ( $\epsilon_r$ ):	38.58	40.15	-3.90	5	
		e"	13.8900	Conductivity ( $\sigma$ ):	1.32	1.35	-1.91	5	
	Head 1755	e'	38.3600	Relative Permittivity ( $\epsilon_r$ ):	38.36	40.08	-4.28	5	
		e"	14.0200	Conductivity ( $\sigma$ ):	1.37	1.37	-0.27	5	

**SAR Lab H**

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
7/9/2015	Head 1900	e'	39.4100	Relative Permittivity ( $\epsilon_r$ ):	39.41	40.00	-1.48	5
		e"	13.4100	Conductivity ( $\sigma$ ):	1.42	1.40	1.19	5
	Head 1850	e'	39.5900	Relative Permittivity ( $\epsilon_r$ ):	39.59	40.00	-1.02	5
		e"	13.3400	Conductivity ( $\sigma$ ):	1.37	1.40	-1.98	5
	Head 1910	e'	39.3600	Relative Permittivity ( $\epsilon_r$ ):	39.36	40.00	-1.60	5
		e"	13.4300	Conductivity ( $\sigma$ ):	1.43	1.40	1.88	5
7/11/2015	Body 1900	e'	52.5300	Relative Permittivity ( $\epsilon_r$ ):	52.53	53.30	-1.44	5
		e"	14.6900	Conductivity ( $\sigma$ ):	1.55	1.52	2.10	5
	Body 1850	e'	52.7100	Relative Permittivity ( $\epsilon_r$ ):	52.71	53.30	-1.11	5
		e"	14.5300	Conductivity ( $\sigma$ ):	1.49	1.52	-1.67	5
	Body 1910	e'	52.4900	Relative Permittivity ( $\epsilon_r$ ):	52.49	53.30	-1.52	5
		e"	14.7100	Conductivity ( $\sigma$ ):	1.56	1.52	2.78	5
7/13/2015	Head 1900	e'	40.0200	Relative Permittivity ( $\epsilon_r$ ):	40.02	40.00	0.05	5
		e"	13.4900	Conductivity ( $\sigma$ ):	1.43	1.40	1.80	5
	Head 1850	e'	40.1100	Relative Permittivity ( $\epsilon_r$ ):	40.11	40.00	0.27	5
		e"	13.4400	Conductivity ( $\sigma$ ):	1.38	1.40	-1.25	5
	Head 1910	e'	39.9800	Relative Permittivity ( $\epsilon_r$ ):	39.98	40.00	-0.05	5
		e"	13.4700	Conductivity ( $\sigma$ ):	1.43	1.40	2.18	5
7/13/2015	Body 1900	e'	53.1700	Relative Permittivity ( $\epsilon_r$ ):	53.17	53.30	-0.24	5
		e"	14.2700	Conductivity ( $\sigma$ ):	1.51	1.52	-0.82	5
	Body 1850	e'	53.2500	Relative Permittivity ( $\epsilon_r$ ):	53.25	53.30	-0.09	5
		e"	14.1600	Conductivity ( $\sigma$ ):	1.46	1.52	-4.17	5
	Body 1910	e'	53.1200	Relative Permittivity ( $\epsilon_r$ ):	53.12	53.30	-0.34	5
		e"	14.3000	Conductivity ( $\sigma$ ):	1.52	1.52	-0.09	5
7/16/2015	Head 1900	e'	40.5500	Relative Permittivity ( $\epsilon_r$ ):	40.55	40.00	1.37	5
		e"	13.6700	Conductivity ( $\sigma$ ):	1.44	1.40	3.16	5
	Head 1850	e'	40.7500	Relative Permittivity ( $\epsilon_r$ ):	40.75	40.00	1.88	5
		e"	13.5900	Conductivity ( $\sigma$ ):	1.40	1.40	-0.15	5
	Head 1910	e'	40.5000	Relative Permittivity ( $\epsilon_r$ ):	40.50	40.00	1.25	5
		e"	13.6800	Conductivity ( $\sigma$ ):	1.45	1.40	3.77	5
7/16/2015	Body 1900	e'	52.2300	Relative Permittivity ( $\epsilon_r$ ):	52.23	53.30	-2.01	5
		e"	14.8000	Conductivity ( $\sigma$ ):	1.56	1.52	2.87	5
	Body 1850	e'	52.4600	Relative Permittivity ( $\epsilon_r$ ):	52.46	53.30	-1.58	5
		e"	14.6600	Conductivity ( $\sigma$ ):	1.51	1.52	-0.79	5
	Body 1910	e'	52.1700	Relative Permittivity ( $\epsilon_r$ ):	52.17	53.30	-2.12	5
		e"	14.8300	Conductivity ( $\sigma$ ):	1.57	1.52	3.62	5

## 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  $\pm$ 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  $\geq$  15.0 cm for SAR measurements  $\leq$  3 GHz and  $\geq$  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.

**Reference Target SAR Values**

The reference SAR values can be obtained from the calibration certificate of system validation dipoles

System Dipole	Serial No.	Cal. Date	Freq. (MHz)	Target SAR Values (W/kg)		
				1g/10g	Head	Body
D750V3	1019	3/11/2015	750	1g	8.44	8.53
				10g	5.50	5.68
D750V3	1024	5/12/2015	750	1g	8.10	8.41
				10g	5.33	5.60
D835V2	4d002	11/13/2014	835	1g	9.23	9.33
				10g	5.99	6.12
D1750V2	1050	4/15/2015	1750	1g	36.4	37.0
				10g	19.3	19.9
D1750V2	1077	9/11/2014	1750	1g	36.5	36.9
				10g	19.4	19.8
D1900V2	5d043	11/7/2014	1900	1g	40.6	40.0
				10g	21.1	21.3
D2300V2	1002	3/13/2015	2300	1g	47.7	49.1
				10g	23.0	23.7
D2450V2	899	3/13/2015	2450	1g	51.6	48.8
				10g	23.9	22.7
D2600V2	1006	9/10/2014	2600	1g	58.6	56.3
				10g	26.1	25.1
D5GHzV2	1138	9/18/2014	5200	1g	81.4	75.4
				10g	23.3	21.0
			5600	1g	85.1	81.9
				10g	24.2	22.6
			5800	1g	80.6	75.2
				10g	23.0	20.8



**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 A**

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta $\pm 10\%$	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
7/9/2015	D750V3	1019	Head	1g	0.826	8.26	8.44	-2.13	1,2
				10g	0.544	5.44	5.50	-1.09	
7/9/2015	D750V3	1019	Body	1g	0.855	8.55	8.53	0.23	
				10g	0.569	5.69	5.68	0.18	
7/13/2015	D750V3	1019	Head	1g	0.829	8.29	8.44	-1.78	
				10g	0.544	5.44	5.50	-1.09	
7/13/2015	D750V3	1019	Body	1g	0.863	8.63	8.53	1.17	
				10g	0.577	5.77	5.68	1.58	
7/15/2015	D2300V2	1002	Head	1g	4.90	49.0	47.7	2.73	3,4
				10g	2.31	23.1	23.0	0.43	
7/15/2015	D2300V2	1002	Body	1g	4.99	49.9	49.1	1.63	
				10g	2.36	23.6	23.7	-0.42	
7/17/2015	D5GHzV2 (5.2GHz)	1138	Body	1g	8.00	80.0	75.4	6.10	5,6
				10g	2.24	22.4	21.0	6.67	
7/27/2015	D750V3	1024	Head	1g	0.837	8.37	8.10	3.33	7,8
				10g	0.550	5.50	5.33	3.19	
7/27/2015	D750V3	1024	Body	1g	0.821	8.21	8.41	-2.38	
				10g	0.545	5.45	5.60	-2.68	
7/27/2015	D1750V2	1077	Head	1g	3.71	37.1	36.5	1.64	9,10
				10g	1.97	19.7	19.4	1.55	

**SAR Lab B**

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta $\pm 10\%$	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
7/13/2015	D2450V2	899	Head	1g	4.89	48.9	51.6	-5.23	
				10g	2.26	22.6	23.9	-5.44	
7/13/2015	D2450V2	899	Body	1g	5.03	50.3	48.8	3.07	
				10g	2.34	23.4	22.7	3.08	
7/15/2015	D835V2	4d002	Body	1g	0.979	9.79	9.33	4.93	11,12
				10g	0.647	6.47	6.12	5.72	
7/16/2015	D2450V2	899	Head	1g	5.13	51.3	51.6	-0.58	
				10g	2.36	23.6	23.9	-1.26	
7/16/2015	D2450V2	899	Body	1g	5.21	52.1	48.8	6.76	13,14
				10g	2.41	24.1	22.7	6.17	
7/27/2015	D1900V2	5d043	Head	1g	4.08	40.8	40.6	0.49	15,16
				10g	2.10	21.0	21.1	-0.47	

**SAR Lab C**

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta $\pm 10\%$	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
7/8/2015	D1750V2	1050	Head	1g	3.69	36.9	36.4	1.37	
				10g	1.94	19.4	19.3	0.52	
7/13/2015	D1750V2	1050	Head	1g	3.57	35.7	36.4	-1.92	
				10g	1.86	18.6	19.3	-3.63	
7/13/2015	D1750V2	1050	Body	1g	3.79	37.9	37.0	2.43	17,18
				10g	2.00	20.0	19.9	0.50	
7/14/2015	D835V2	4d002	Head	1g	0.947	9.47	9.23	2.60	
				10g	0.620	6.20	5.99	3.51	
7/17/2015	D1900V2	5d043	Body	1g	3.98	39.8	40.0	-0.50	19,20
				10g	2.06	20.6	21.3	-3.29	
7/27/2015	D835V2	4d002	Head	1g	0.971	9.71	9.23	5.20	21,22
				10g	0.639	6.39	5.99	6.68	
7/27/2015	D835V2	4d002	Body	1g	0.963	9.63	9.33	3.22	
				10g	0.638	6.38	6.12	4.25	

**SAR Lab E**

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta $\pm 10\%$	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
7/8/2015	D2600V2	1006	Head	1g	6.13	61.3	58.6	4.61	
				10g	2.72	27.2	26.1	4.21	
7/8/2015	D2600V2	1006	Body	1g	5.97	59.7	56.3	6.04	23,24
				10g	2.63	26.3	25.1	4.78	
7/13/2015	D2600V2	1006	Head	1g	5.92	59.2	58.6	1.02	
				10g	2.63	26.3	26.1	0.77	
7/13/2015	D2600V2	1006	Body	1g	5.83	58.3	56.3	3.55	
				10g	2.57	25.7	25.1	2.39	
7/16/2015	D2600V2	1006	Body	1g	5.61	56.1	56.3	-0.36	
				10g	2.47	24.7	25.1	-1.59	
7/16/2015	D835V2	4d002	Body	1g	0.913	9.13	9.33	-2.14	25,26
				10g	0.602	6.02	6.12	-1.63	
7/27/2015	D2600V2	1006	Head	1g	6.17	61.7	58.6	5.29	
				10g	2.75	27.5	26.1	5.36	

**SAR Lab F**

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta $\pm 10\%$	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
7/13/2015	D5GHzV2 (5.2GHz)	1138	Head	1g	8.46	84.6	81.4	3.93	
				10g	2.41	24.1	23.3	3.43	
7/13/2015	D5GHzV2 (5.6GHz)	1138	Head	1g	8.46	84.6	85.1	-0.59	
				10g	2.39	23.9	24.2	-1.24	
7/13/2015	D5GHzV2 (5.8GHz)	1138	Head	1g	7.85	78.5	80.6	-2.61	
				10g	2.22	22.2	23.0	-3.48	
7/16/2015	D5GHzV2 (5.2GHz)	1138	Head	1g	8.14	81.4	81.4	0.00	
				10g	2.34	23.4	23.3	0.43	
7/16/2015	D5GHzV2 (5.6GHz)	1138	Head	1g	7.92	79.2	85.1	-6.93	27,28
				10g	2.24	22.4	24.2	-7.44	
7/16/2015	D5GHzV2 (5.8GHz)	1138	Head	1g	8.00	80.0	80.6	-0.74	
				10g	2.26	22.6	23.0	-1.74	
7/17/2015	D5GHzV2 (5.8GHz)	1138	Body	1g	7.03	70.3	75.2	-6.52	
				10g	1.98	19.8	20.8	-4.81	

**SAR Lab G**

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta $\pm 10\%$	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
7/9/2015	D1750V2	1050	Head	1g	3.49	34.9	36.4	-4.12	
				10g	1.86	18.6	19.3	-3.63	
7/9/2015	D1750V2	1050	Body	1g	3.74	37.4	37.0	1.08	
				10g	2.00	20.0	19.9	0.50	
7/9/2015	D5GHzV2 (5.6GHz)	1138	Body	1g	8.68	86.8	81.9	5.98	
				10g	2.38	23.8	22.6	5.31	
7/13/2015	D1750V2	1050	Body	1g	3.79	37.9	37.0	2.43	
				10g	2.03	20.3	19.9	2.01	
7/14/2015	D5GHzV2 (5.6GHz)	1138	Body	1g	8.39	83.9	81.9	2.44	
				10g	2.32	23.2	22.6	2.65	
7/17/2015	D5GHzV2 (5.6GHz)	1138	Body	1g	7.64	76.4	81.9	-6.72	29,30
				10g	2.12	21.2	22.6	-6.19	
7/18/2015	D5GHzV2 (5.2GHz)	1138	Body	1g	7.33	73.3	75.4	-2.79	
				10g	2.03	20.3	21.0	-3.33	
7/18/2015	D5GHzV2 (5.8GHz)	1138	Body	1g	7.20	72.0	75.2	-4.26	
				10g	1.98	19.8	20.8	-4.81	
7/28/2015	D1750V2	1050	Head	1g	3.47	34.7	36.4	-4.67	31,32
				10g	1.86	18.6	19.3	-3.63	

**SAR Lab H**

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
7/9/2015	D1900V2	5d043	Head	1g	3.80	38.0	40.6	-6.40	
				10g	1.97	19.7	21.1	-6.64	
7/11/2015	D1900V2	5d043	Body	1g	3.73	37.3	40.0	-6.75	33,34
				10g	1.96	19.6	21.3	-7.98	
7/13/2015	D1900V2	5d043	Head	1g	3.80	38.0	40.6	-6.40	
				10g	1.96	19.6	21.1	-7.11	
7/13/2015	D1900V2	5d043	Body	1g	3.88	38.8	40.0	-3.00	
				10g	2.03	20.3	21.3	-4.69	
7/16/2015	D1900V2	5d043	Head	1g	3.88	38.8	40.6	-4.43	
				10g	2.00	20.0	21.1	-5.21	
7/16/2015	D1900V2	5d043	Body	1g	4.05	40.5	40.0	1.25	
				10g	2.12	21.2	21.3	-0.47	

## 9. Conducted Output Power Measurements

The proprietary logic is used to determine when head/body power table is used.

### 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

##### GSM (GMSK) - Voice Mode

Band	Ch No.	Freq. (MHz)	Avg Power (dBm)			
			UAT		LAT	
			HEAD	BODY	HEAD	BODY
850	128	824.2	31.5	31.5	33.5	33.5
	190	836.6	31.5	31.5	33.5	33.5
	251	848.8	31.5	31.5	33.5	33.5

##### 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	31.5	<b>30.5</b>	31.5	<b>30.5</b>	33.5	<b>32.5</b>	33.5	<b>32.5</b>
	190	836.6	31.5	<b>30.5</b>	31.5	<b>30.5</b>	33.5	<b>32.5</b>	33.5	<b>32.5</b>
	251	848.8	31.5	<b>30.5</b>	31.5	<b>30.5</b>	33.5	<b>32.5</b>	33.5	<b>32.5</b>
Frame Power (dBm)										
850	128	824.2	22.5	24.5	22.5	24.5	24.5	26.5	24.5	26.5
	190	836.6	22.5	24.5	22.5	24.5	24.5	26.5	24.5	26.5
	251	848.8	22.5	24.5	22.5	24.5	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	26.9	27.0	26.9	27.0	28.9	29.0	28.9	29.0
	190.0	836.6	27.0	27.0	27.0	27.0	29.0	29.0	29.0	29.0
	251.0	848.8	27.0	27.0	27.0	27.0	29.0	29.0	29.0	29.0
Frame Power (dBm)										
850.0	128.0	824.2	17.9	21.0	17.9	21.0	19.9	23.0	19.9	23.0
	190.0	836.6	18.0	21.0	18.0	21.0	20.0	23.0	20.0	23.0
	251.0	848.8	18.0	21.0	18.0	21.0	20.0	23.0	20.0	23.0

#### Notes:

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

- Head & Body-worn: GMSK Voice Mode
- Hotspot/Head VoIP mode: GMSK (GPRS) mode with 2 time slots based on the output power measurements above.
- SAR is not required for EGPRS (8PSK) mode because its output power is less than that of GPRS Mode

**GSM1900 Measured Results**

**GSM (GMSK) - Voice Mode**

Band	Ch No.	Freq. (MHz)	Avg Power (dBm)			
			UAT		LAT	
			HEAD	BODY	HEAD	BODY
1900	512	1850.2	26.5	27.2	30.5	28.2
	661	1880.0	26.5	27.2	30.5	28.2
	810	1909.8	26.5	27.2	30.5	28.2

**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	26.5	<b>23.5</b>	27.2	<b>24.2</b>	30.5	<b>29.0</b>	28.2	<b>25.2</b>
	661.0	1880.0	26.5	<b>23.5</b>	27.2	<b>24.2</b>	30.5	<b>29.0</b>	28.2	<b>25.2</b>
	810.0	1909.8	26.5	<b>23.5</b>	27.2	<b>24.2</b>	30.5	<b>29.0</b>	28.2	<b>25.2</b>
			Frame Power (dBm)				Frame Power (dBm)			
1900.0	512.0	1850.2	17.5	17.5	18.2	18.2	21.5	23.0	19.2	19.2
	661.0	1880.0	17.5	17.5	18.2	18.2	21.5	23.0	19.2	19.2
	810.0	1909.8	17.5	17.5	18.2	18.2	21.5	23.0	19.2	19.2

**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	25.0	23.5	25.0	24.1	28.0	28.0	28.0	25.2
	661.0	1880.0	25.0	23.4	23.5	24.2	28.0	28.0	28.0	25.2
	810.0	1909.8	25.0	23.4	23.5	24.1	28.0	28.0	28.0	25.2
			Frame Power (dBm)				Frame Power (dBm)			
1900.0	512.0	1850.2	16.0	17.5	16.0	18.1	19.0	22.0	19.0	19.2
	661.0	1880.0	16.0	17.4	14.5	18.2	19.0	22.0	19.0	19.2
	810.0	1909.8	16.0	17.4	14.5	18.1	19.0	22.0	19.0	19.2

**Notes:**

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

- Head & Body-worn: GMSK Voice Mode
- Hotspot/Head VoIP mode: GMSK (GPRS) mode with 2 time slots based on the output power measurements above.
- 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
	$\beta_c/\beta_d$	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	Subtest	HSDPA	HSDPA	HSDPA	HSDPA
		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			
	$\beta_c$	2/15	11/15	15/15	15/15
	$\beta_d$	15/15	15/15	8/15	4/15
	Bd (SF)	64			
	$\beta_c/\beta_d$	2/15	12/15	15/8	15/4
	$\beta_{hs}$	4/15	24/15	30/15	30/15
MPR (dB)	0	0	0.5	0.5	
HSDPA Specific Settings	$D_{ACK}$	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
	$\beta_c$	11/15	6/15	15/15	2/15	15/15
	$\beta_d$	15/15	15/15	9/15	15/15	0
	$\beta_{ec}$	209/225	12/15	30/15	2/15	5/15
	$\beta_c/\beta_d$	11/15	6/15	15/9	2/15	15/1
	$\beta_{hs}$	22/15	12/15	30/15	4/15	5/15
	$\beta_{ed}$	1309/225	94/75	47/15	56/75	47/15
CM (dB)	1	3	2	3	1	
MPR (dB)	0	2	1	2	0	
HSDPA Specific Settings	DACK	8				0
	DNAK	8				0
	DCQI	8				0
	Ack-Nack repetition factor	3				
	CQI Feedback (Table 5.2B.4)	4ms				
	CQI Repetition Factor (Table 5.2B.4)	2				
A <sub>hs</sub> = $\beta_{hs}/\beta_c$	30/15					
HSUPA Specific Settings	E-DPDCCH	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 Channelisation 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**

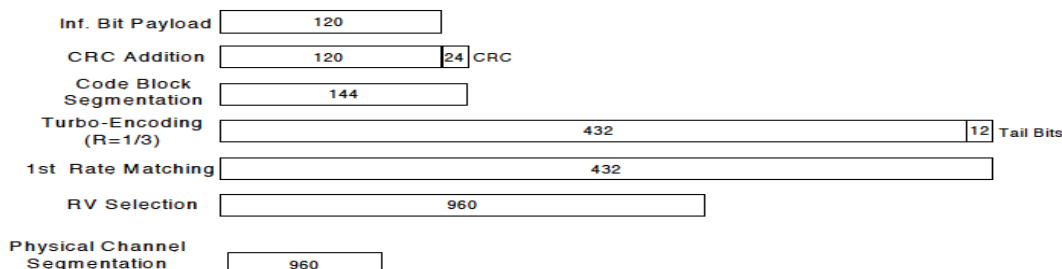
Parameter During Connection setup	Unit	Value
P-CPICH_Ec/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH_Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

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			
	$\beta_c$	2/15	11/15	15/15	15/15
	$\beta_d$	15/15	15/15	8/15	4/15
	$\beta_d$ (SF)	64			
	$\beta_c/\beta_d$	2/15	11/15	15/8	15/4
	$\beta_{hs}$	4/15	24/15	30/15	30/15
MPR (dB)	0	0	0.5	0.5	
HSDPA Specific Settings	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack Repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	A <sub>hs</sub> = $\beta_{hs}/\beta_c$	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	23.0	23.0	25.0	25.0
			4183	836.6	N/A	23.0	23.0	25.0	25.0
			4233	846.6	N/A	23.0	23.0	25.0	25.0
	HSDPA	Subtest 1	4132	826.4	0	22.9	22.9	24.9	24.9
			4183	836.6	0	23.0	23.0	25.0	25.0
			4233	846.6	0	23.0	23.0	24.9	24.9
		Subtest 2	4132	826.4	0	22.9	22.9	24.9	24.9
			4183	836.6	0	23.0	23.0	25.0	25.0
			4233	846.6	0	23.0	23.0	24.9	24.9
		Subtest 3	4132	826.4	0.5	22.5	22.5	24.4	24.4
			4183	836.6	0.5	22.4	22.4	24.5	24.5
			4233	846.6	0.5	22.4	22.4	24.5	24.5
		Subtest 4	4132	826.4	0.5	22.4	22.4	24.4	24.4
			4183	836.6	0.5	22.5	22.5	24.5	24.5
			4233	846.6	0.5	22.4	22.4	24.5	24.5
	HSUPA	Subtest 1	4132	826.4	0	22.9	22.9	24.9	24.9
			4183	836.6	0	22.9	22.9	25.0	25.0
			4233	846.6	0	23.0	23.0	25.0	25.0
		Subtest 2	4132	826.4	2	20.9	20.9	22.9	22.9
			4183	836.6	2	21.0	21.0	23.0	23.0
			4233	846.6	2	21.0	21.0	23.0	23.0
		Subtest 3	4132	826.4	1	21.9	21.9	24.0	24.0
			4183	836.6	1	21.9	21.9	23.9	23.9
			4233	846.6	1	21.9	21.9	23.9	23.9
		Subtest 4	4132	826.4	2	20.9	20.9	22.9	22.9
			4183	836.6	2	21.0	21.0	23.0	23.0
			4233	846.6	2	21.0	21.0	23.0	23.0
		Subtest 5	4132	826.4	0	22.8	22.8	24.9	24.9
			4183	836.6	0	22.9	22.9	25.0	25.0
			4233	846.6	0	22.9	22.9	25.0	25.0
	DC-HSDPA	Subtest 1	4132	826.4	0	22.9	22.9	24.9	24.9
			4183	836.6	0	22.9	22.9	25.0	25.0
			4233	846.6	0	22.8	22.8	25.0	25.0
		Subtest 2	4132	826.4	0	22.9	22.9	24.9	24.9
			4183	836.6	0	22.9	22.9	25.0	25.0
			4233	846.6	0	22.9	22.9	24.9	24.9
Subtest 3		4132	826.4	0.5	22.3	22.3	24.4	24.4	
		4183	836.6	0.5	22.4	22.4	24.5	24.5	
		4233	846.6	0.5	22.4	22.4	24.4	24.4	
Subtest 4		4132	826.4	0.5	22.3	22.3	24.4	24.4	
		4183	836.6	0.5	22.4	22.4	24.4	24.4	
		4233	846.6	0.5	22.4	22.4	24.3	24.3	

**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	18.8	20.0	25.0	20.3
			1413	1732.6	N/A	18.8	20.0	25.0	20.3
			1513	1752.6	N/A	18.8	20.0	25.0	20.3
	HSDPA	Subtest 1	1312	1712.4	0	18.7	19.9	24.9	20.2
			1413	1732.6	0	18.8	19.9	25.0	20.2
			1513	1752.6	0	18.7	20.0	24.9	20.2
		Subtest 2	1312	1712.4	0	18.7	19.9	24.9	20.2
			1413	1732.6	0	18.8	19.9	25.0	20.3
			1513	1752.6	0	18.7	20.0	24.9	20.2
		Subtest 3	1312	1712.4	0.5	18.3	19.5	24.5	19.8
			1413	1732.6	0.5	18.2	19.4	24.4	19.7
			1513	1752.6	0.5	18.2	19.5	24.4	19.7
		Subtest 4	1312	1712.4	0.5	18.3	19.5	24.4	19.8
			1413	1732.6	0.5	18.3	19.4	24.4	19.8
			1513	1752.6	0.5	18.2	19.4	24.4	19.7
	HSUPA	Subtest 1	1312	1712.4	0	18.7	19.9	24.9	20.2
			1413	1732.6	0	18.8	19.9	25.0	20.3
			1513	1752.6	0	18.7	20.0	24.9	20.2
		Subtest 2	1312	1712.4	2	16.8	17.9	22.9	18.3
			1413	1732.6	2	16.7	17.9	22.9	18.3
			1513	1752.6	2	16.7	18.0	22.9	18.2
		Subtest 3	1312	1712.4	1	17.8	18.9	23.9	19.2
			1413	1732.6	1	17.7	18.9	23.9	19.2
			1513	1752.6	1	17.7	18.9	24.0	19.3
		Subtest 4	1312	1712.4	2	16.8	17.9	22.8	18.3
			1413	1732.6	2	16.7	17.9	22.9	18.2
			1513	1752.6	2	16.7	17.9	22.9	18.2
		Subtest 5	1312	1712.4	0	18.7	19.9	24.9	20.2
			1413	1732.6	0	18.8	19.9	24.9	20.2
			1513	1752.6	0	18.7	19.8	24.9	20.2
	DC-HSDPA	Subtest 1	1312	1712.4	0	18.7	19.9	24.9	20.2
			1413	1732.6	0	18.8	19.9	25.0	20.3
			1513	1752.6	0	18.7	20.0	24.9	20.2
		Subtest 2	1312	1712.4	0	18.7	19.8	24.9	20.2
			1413	1732.6	0	18.7	19.9	24.9	20.3
			1513	1752.6	0	18.7	20.0	24.9	20.2
Subtest 3		1312	1712.4	0.5	18.3	19.5	24.5	19.8	
		1413	1732.6	0.5	18.2	19.4	24.4	19.7	
		1513	1752.6	0.5	18.2	19.5	24.5	19.8	
Subtest 4		1312	1712.4	0.5	18.2	19.4	24.4	19.7	
		1413	1732.6	0.5	18.2	19.4	24.4	19.8	
		1513	1752.6	0.5	18.2	19.4	24.4	19.7	

**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	16.5	18.3	25.0	19.3
			9400	1880.0	N/A	16.5	18.3	25.0	19.3
			9538	1907.6	N/A	16.5	18.3	25.0	19.3
	HSDPA	Subtest 1	9262	1852.4	0	16.5	18.3	24.9	19.2
			9400	1880.0	0	16.4	18.2	24.9	19.3
			9538	1907.6	0	16.5	18.3	25.0	19.3
		Subtest 2	9262	1852.4	0	16.4	18.2	25.0	19.3
			9400	1880.0	0	16.4	18.2	25.0	19.3
			9538	1907.6	0	16.5	18.3	25.0	19.3
		Subtest 3	9262	1852.4	0.5	16.0	17.8	24.5	18.8
			9400	1880.0	0.5	15.9	17.8	24.4	18.8
			9538	1907.6	0.5	16.0	17.7	24.4	18.7
		Subtest 4	9262	1852.4	0.5	15.9	17.7	24.4	18.8
			9400	1880.0	0.5	15.9	17.8	24.5	18.7
			9538	1907.6	0.5	16.0	17.8	24.4	18.7
	HSUPA	Subtest 1	9262	1852.4	0	16.5	18.2	25.0	19.2
			9400	1880.0	0	16.5	18.3	25.0	19.3
			9538	1907.6	0	16.4	18.2	25.0	19.2
		Subtest 2	9262	1852.4	2	14.4	16.2	22.9	17.2
			9400	1880.0	2	14.5	16.3	22.9	17.2
			9538	1907.6	2	14.4	16.3	23.0	17.3
		Subtest 3	9262	1852.4	1	15.5	17.3	23.9	18.2
			9400	1880.0	1	15.4	17.2	23.9	18.3
			9538	1907.6	1	15.4	17.2	24.0	18.3
		Subtest 4	9262	1852.4	2	14.5	16.2	22.9	17.2
			9400	1880.0	2	14.5	16.3	23.0	17.3
			9538	1907.6	2	14.4	16.2	22.9	17.3
		Subtest 5	9262	1852.4	0	16.4	18.2	24.9	19.2
			9400	1880.0	0	16.4	18.2	25.0	19.3
			9538	1907.6	0	16.4	18.3	24.9	19.2
	DC-HSDPA	Subtest 1	9262	1852.4	0	16.5	18.3	24.9	19.2
			9400	1880.0	0	16.4	18.2	24.9	19.3
			9538	1907.6	0	16.5	18.3	25.0	19.3
		Subtest 2	9262	1852.4	0	16.4	18.2	25.0	19.3
			9400	1880.0	0	16.4	18.2	25.0	19.3
			9538	1907.6	0	16.5	18.3	25.0	19.3
		Subtest 3	9262	1852.4	0.5	16.0	17.8	24.5	18.8
			9400	1880.0	0.5	15.9	17.8	24.4	18.8
			9538	1907.6	0.5	16.0	17.7	24.4	18.7
		Subtest 4	9262	1852.4	0.5	15.9	17.7	24.4	18.8
			9400	1880.0	0.5	15.9	17.8	24.5	18.7
			9538	1907.6	0.5	16.0	17.8	24.4	18.7

### 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	23.0	23.0	25.0	25.0
			384	836.52	23.0	23.0	25.0	25.0
			777	848.31	23.0	23.0	25.0	25.0
		RC3 SO55 (Loopback)	1013	824.70	22.9	22.9	25.0	25.0
			384	836.52	23.0	23.0	24.9	24.9
			777	848.31	23.0	23.0	24.9	24.9
		RC3 SO32 (+F-SCH)	1013	824.70	23.0	23.0	25.0	25.0
			384	836.52	23.0	23.0	25.0	25.0
			777	848.31	23.0	23.0	25.0	25.0
	1xAdvanced	Fwd11/Rvs8 SO75 (Loopback)	1013	824.70	22.9	22.9	24.9	24.9
			384	836.52	23.0	23.0	24.9	24.9
			777	848.31	22.9	22.9	24.9	24.9
	1xEVDO Rel. 0	FTAP Rate: 307.2 kbps(2 slot, QPSK) RTAP Rate: 153.6 kbps	1013	824.70	23.0	23.0	25.0	25.0
			384	836.52	23.0	23.0	25.0	25.0
			777	848.31	23.0	23.0	25.0	25.0
	1xEVDO Rev. A	FETAP: 307.2k, QPSK/ ACK RETAP: 4096	1013	824.70	22.9	22.9	24.9	24.9
			384	836.52	22.8	22.8	25.0	25.0
			777	848.31	23.0	23.0	24.9	24.9

**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	16.4	18.3	25.0	19.3
			600	1880.00	16.4	18.3	25.0	19.3
			1175	1908.75	16.4	18.3	25.0	19.3
		RC3 SO55 (Loopback)	25	1851.25	16.5	18.2	24.9	19.2
			600	1880.00	16.5	18.3	24.8	19.2
			1175	1908.75	16.4	18.2	25.0	19.3
		RC3 SO32 (+F-SCH)	25	1851.25	16.4	18.3	25.0	19.3
			600	1880.00	16.5	18.3	25.0	19.3
			1175	1908.75	16.4	18.3	25.0	19.3
	1xAdvanced	Fwd11/Rvs8 SO75 (Loopback)	25	1851.25	16.4	18.3	24.9	19.3
			600	1880.00	16.4	18.2	25.0	19.3
			1175	1908.75	16.5	18.2	24.9	19.2
	1xEVDO Rel. 0	FTAP Rate: 307.2 kbps(2 slot, QPSK) RTAP Rate: 153.6 kbps	25	1851.25	16.5	18.3	25.0	19.3
			600	1880.00	16.4	18.3	25.0	19.3
			1175	1908.75	16.4	18.3	25.0	19.3
	1xEVDO Rev. A	FETAP: 307.2k, QPSK/ ACK RETAP: 4096	25	1851.25	16.5	18.2	24.9	19.2
			600	1880.00	16.5	18.2	24.9	19.3
			1175	1908.75	16.4	18.1	24.9	19.2

**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	23.0	23.0	25.0	25.0
			580	820.50	23.0	23.0	25.0	25.0
			684	823.10	23.0	23.0	25.0	25.0
		RC3 SO55 (Loopback)	476	817.90	23.0	23.0	24.9	24.9
			580	820.50	22.8	22.8	24.8	24.8
			684	823.10	22.8	22.8	24.9	24.9
		RC3 SO32 (+F-SCH)	476	817.90	23.0	23.0	25.0	25.0
			580	820.50	23.0	23.0	25.0	25.0
			684	823.10	23.0	23.0	25.0	25.0
	1xAdvanced	Fwd11/Rvs8 SO75 (Loopback)	476	817.90	22.9	22.9	25.0	25.0
			580	820.50	22.8	22.8	24.9	24.9
			684	823.10	22.8	22.8	24.9	24.9
	1xEVDO Rel. 0	FTAP Rate: 307.2 kbps(2 slot, QPSK) RTAP Rate: 153.6 kbps	476	817.90	23.0	23.0	25.0	25.0
			580	820.50	23.0	23.0	25.0	25.0
			684	823.10	23.0	23.0	25.0	25.0
	1xEVDO Rev. A	FETAP: 307.2k, QPSK/ ACK RETAP: 4096	476	817.90	22.9	22.9	24.9	24.9
			580	820.50	22.9	22.9	25.0	25.0
			684	823.10	22.9	22.9	25.0	25.0

**CDMA BC15 Measured Results**

Band	Mode		Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
BC 15	1xRTT	RC1 SO55 (Loopback)	25	1711.25	18.8	20.0	25.0	20.3
			450	1732.50	18.8	20.0	25.0	20.3
			875	1753.75	18.8	20.0	25.0	20.3
		RC3 SO55 (Loopback)	25	1711.25	18.8	20.0	24.9	20.3
			450	1732.50	18.7	20.0	25.0	20.2
			875	1753.75	18.6	19.9	24.9	20.2
		RC3 SO32 (+F-SCH)	25	1711.25	18.8	20.0	25.0	20.3
			450	1732.50	18.8	20.0	25.0	20.3
			875	1753.75	18.8	20.0	25.0	20.3
	1xAdvanced	Fwd11/Rvs8 SO75 (Loopback)	25	1711.25	18.8	20.0	24.9	20.2
			450	1732.50	18.7	19.9	24.9	20.3
			875	1753.75	18.8	19.8	24.9	20.2
	1xEVDO Rel. 0	FTAP Rate: 307.2 kbps(2 slot, QPSK) RTAP Rate: 153.6 kbps	25	1711.25	18.8	20.0	25.0	20.3
			450	1732.50	18.8	20.0	25.0	20.3
			875	1753.75	18.8	20.0	25.0	20.3
	1xEVDO Rev. A	FETAP: 307.2k, QPSK/ ACK RETAP: 4096	25	1711.25	18.6	20.0	24.9	20.2
			450	1732.50	18.7	19.9	25.0	20.3
			875	1753.75	18.7	19.9	24.9	20.2

## 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 Signalling 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	13	10	Table 6.2.4-2	Table 6.2.4-2
	6.6.3.3.2				
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
				> 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 <sup>1</sup>	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**

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	1880 MHz	1900 MHz		1860 MHz	1880 MHz	1900 MHz		1860 MHz	1880 MHz	1900 MHz		1860 MHz	1880 MHz	1900 MHz			
LTE Band 2	20	QPSK	1	0	0	16.5	16.4	16.4	0	18.2	18.2	18.2	0	23.8	23.9	23.9	0	19.2	19.2	19.1			
			1	49	0	16.5	16.5	16.5	0	18.3	18.3	18.3	0	24.0	24.0	24.0	0	19.3	19.3	19.3			
			1	99	0	16.4	16.5	16.5	0	18.1	18.2	18.2	0	23.9	23.9	23.9	0	19.3	19.2	19.3			
			50	0	1	15.4	15.4	15.4	1	17.3	17.3	17.2	1	22.9	23.0	22.9	1	18.2	18.3	18.2			
			50	24	1	15.5	15.5	15.5	1	17.3	17.3	17.3	1	23.0	23.0	23.0	1	18.3	18.3	18.3			
			50	49	1	15.4	15.4	15.5	1	17.2	17.3	17.2	1	23.0	22.9	22.9	1	18.3	18.2	18.2			
		16QAM	100	0	1	15.5	15.5	15.5	1	17.3	17.3	17.3	1	23.0	23.0	23.0	1	18.3	18.3	18.3			
			1	0	1	15.4	15.5	15.4	1	17.2	17.2	17.2	1	22.8	22.9	22.9	1	18.2	18.2	18.2			
			1	49	1	15.4	15.4	15.5	1	17.3	17.2	17.2	1	23.0	22.9	23.0	1	18.2	18.3	18.2			
			1	99	1	15.5	15.5	15.5	1	17.3	17.3	17.3	1	23.0	23.0	23.0	1	18.3	18.3	18.3			
			50	0	2	14.5	14.5	14.4	2	16.2	16.2	16.2	2	22.0	22.0	21.8	2	17.2	17.2	17.2			
			50	24	2	14.3	14.5	14.4	2	16.1	16.2	16.2	2	21.9	21.9	21.9	2	17.2	17.3	17.2			
			50	49	2	14.4	14.4	14.4	2	16.2	16.2	16.2	2	21.9	21.9	21.9	2	17.3	17.3	17.2			
			100	0	2	14.4	14.5	14.5	2	16.2	16.2	16.3	2	21.9	21.9	21.9	2	17.3	17.2	17.3			
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY					
						1857.5 MHz	1880 MHz	1902.5 MHz							1857.5 MHz	1880 MHz	1902.5 MHz						
LTE Band 2	15	QPSK	1	0	0	16.4	16.4	16.4	0	18.3	18.2	18.1	0	23.9	23.9	23.9	0	19.2	19.2	19.3			
			1	36	0	16.4	16.5	16.4	0	18.1	18.3	18.2	0	23.9	23.9	24.0	0	19.2	19.2	19.1			
			1	74	0	16.4	16.4	16.5	0	18.2	18.1	18.2	0	23.9	23.9	23.8	0	19.1	19.2	19.2			
			36	0	1	15.4	15.4	15.5	1	17.3	17.2	17.2	1	23.0	22.9	22.9	1	18.2	18.2	18.2			
			36	18	1	15.4	15.6	15.4	1	17.2	17.2	17.3	1	23.0	22.9	22.9	1	18.3	18.2	18.2			
			36	37	1	15.4	15.4	15.4	1	17.3	17.2	17.3	1	23.0	23.0	22.9	1	18.2	18.2	18.2			
		16QAM	75	0	1	15.5	15.4	15.4	1	17.2	17.3	17.2	1	22.9	22.8	22.9	1	18.2	18.2	18.2			
			1	0	1	15.5	15.4	15.5	1	17.2	17.4	17.2	1	22.9	22.9	23.0	1	18.3	18.3	18.3			
			1	36	1	15.5	15.4	15.4	1	17.3	17.2	17.2	1	22.9	22.9	22.8	1	18.3	18.2	18.3			
			1	74	1	15.5	15.5	15.5	1	17.2	17.3	17.2	1	22.9	22.9	22.9	1	18.3	18.2	18.3			
			36	0	2	14.4	14.4	14.4	2	16.3	16.2	16.4	2	22.0	21.9	22.0	2	17.2	17.2	17.2			
			36	18	2	14.5	14.5	14.5	2	16.1	16.2	16.2	2	21.9	22.0	21.9	2	17.3	17.3	17.2			
			36	37	2	14.4	14.4	14.4	2	16.3	16.2	16.2	2	21.9	21.9	22.0	2	17.3	17.3	17.3			
			75	0	2	14.5	14.5	14.4	2	16.2	16.2	16.3	2	21.9	22.0	22.0	2	17.2	17.3	17.3			
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY					
						1855 MHz	1880 MHz	1905 MHz							1855 MHz	1880 MHz	1905 MHz						
LTE Band 2	10	QPSK	1	0	0	16.3	16.4	16.4	0	18.2	18.2	18.3	0	23.9	23.9	23.9	0	19.2	19.2	19.2			
			1	24	0	16.5	16.4	16.4	0	18.3	18.2	18.2	0	23.9	24.0	23.9	0	19.2	19.1	19.2			
			1	49	0	16.4	16.4	16.4	0	18.1	18.2	18.2	0	23.9	23.9	23.9	0	19.3	19.3	19.2			
			25	0	1	15.5	15.3	15.4	1	17.2	17.2	17.3	1	22.8	22.9	22.9	1	18.2	18.2	18.2			
			25	12	1	15.4	15.5	15.4	1	17.2	17.2	17.1	1	22.9	22.9	22.8	1	18.2	18.3	18.3			
			25	24	1	15.4	15.3	15.5	1	17.2	17.2	17.2	1	23.0	22.9	23.0	1	18.2	18.2	18.3			
		16QAM	50	0	1	15.4	15.4	15.5	1	17.2	17.2	17.1	1	22.9	22.8	22.9	1	18.3	18.2	18.2			
			1	0	1	15.5	15.5	15.5	1	17.2	17.3	17.2	1	22.9	22.9	22.8	1	18.3	18.1	18.2			
			1	24	1	15.5	15.5	15.4	1	17.2	17.3	17.2	1	23.0	22.9	23.0	1	18.3	18.3	18.2			
			1	49	1	15.4	15.4	15.4	1	17.3	17.3	17.3	1	22.9	22.9	22.9	1	18.3	18.2	18.3			
			25	0	2	14.4	14.4	14.4	2	16.2	16.2	16.2	2	22.0	22.0	21.9	2	17.2	17.2	17.3			
			25	12	2	14.3	14.5	14.4	2	16.3	16.2	16.2	2	21.9	21.9	22.0	2	17.2	17.2	17.2			
			25	24	2	14.4	14.4	14.5	2	16.2	16.2	16.3	2	21.9	21.9	21.8	2	17.3	17.2	17.2			
			50	0	2	14.5	14.4	14.4	2	16.3	16.3	16.3	2	21.9	22.0	21.9	2	17.3	17.2	17.2			

**LTE Band 2 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	1880 MHz	1907.5 MHz		1852.5 MHz	1880 MHz	1907.5 MHz		1852.5 MHz	1880 MHz	1907.5 MHz		1852.5 MHz	1880 MHz	1907.5 MHz
LTE Band 2	5	QPSK	1	0	0	16.4	16.4	16.5	0	18.2	18.2	18.2	0	23.9	23.9	23.9	0	19.2	19.3	19.2
			1	12	0	16.4	16.5	16.4	0	18.1	18.2	18.3	0	23.8	24.0	23.9	0	19.2	19.2	19.3
			1	24	0	16.5	16.4	16.5	0	18.3	18.2	18.1	0	24.0	23.9	23.9	0	19.3	19.3	19.2
			12	0	1	15.5	15.5	15.5	1	17.3	17.1	17.1	1	22.8	22.9	23.0	1	18.2	18.3	18.2
			12	7	1	15.5	15.5	15.4	1	17.3	17.2	17.2	1	22.8	22.9	22.9	1	18.2	18.3	18.3
			12	13	1	15.5	15.4	15.4	1	17.3	17.2	17.3	1	23.0	22.9	22.9	1	18.2	18.2	18.2
		25	0	1	15.4	15.5	15.5	1	17.2	17.2	17.2	1	22.9	23.0	22.9	1	18.3	18.2	18.1	
		16QAM	1	0	1	15.5	15.5	15.5	1	17.3	17.2	17.2	1	22.9	22.9	22.9	1	18.2	18.3	18.2
			1	12	1	15.4	15.3	15.4	1	17.2	17.3	17.3	1	22.9	23.0	23.0	1	18.3	18.1	18.3
			1	24	1	15.4	15.3	15.4	1	17.2	17.3	17.2	1	22.9	22.9	22.9	1	18.2	18.1	18.2
			12	0	2	14.5	14.5	14.5	2	16.3	16.3	16.2	2	21.9	22.0	21.9	2	17.2	17.2	17.3
			12	7	2	14.4	14.4	14.4	2	16.2	16.3	16.2	2	21.9	22.0	21.9	2	17.1	17.2	17.3
			12	13	2	14.4	14.5	14.4	2	16.2	16.1	16.2	2	22.0	21.9	21.9	2	17.2	17.2	17.2
			25	0	2	14.4	14.5	14.4	2	16.2	16.3	16.2	2	21.9	22.0	21.9	2	17.2	17.2	17.3
25	0		2	14.4	14.5	14.4	2	16.2	16.3	16.2	2	21.9	22.0	21.9	2	17.2	17.2	17.3		
LTE Band 2	3	QPSK	1	0	0	16.4	16.5	16.4	0	18.2	18.3	18.2	0	23.9	23.9	23.9	0	19.2	19.2	19.2
			1	8	0	16.5	16.5	16.5	0	18.2	18.2	18.3	0	23.9	23.9	24.0	0	19.3	19.2	19.2
			1	14	0	16.4	16.4	16.5	0	18.2	18.1	18.2	0	23.9	23.9	23.9	0	19.2	19.2	19.2
			8	0	1	15.4	15.4	15.4	1	17.2	17.3	17.3	1	22.9	22.9	23.0	1	18.2	18.2	18.2
			8	4	1	15.4	15.4	15.4	1	17.2	17.3	17.3	1	22.9	23.1	22.9	1	18.2	18.1	18.2
			8	7	1	15.4	15.5	15.4	1	17.3	17.3	17.2	1	22.9	23.0	23.0	1	18.3	18.2	18.3
		15	0	1	15.4	15.4	15.4	1	17.3	17.3	17.3	1	23.0	22.8	22.9	1	18.1	18.1	18.2	
		16QAM	1	0	1	15.5	15.5	15.5	1	17.2	17.1	17.3	1	22.9	22.9	22.9	1	18.3	18.2	18.3
			1	8	1	15.5	15.4	15.4	1	17.2	17.2	17.2	1	23.0	22.9	22.9	1	18.2	18.3	18.3
			1	14	1	15.5	15.5	15.5	1	17.2	17.2	17.3	1	23.0	22.9	23.0	1	18.2	18.3	18.3
			8	0	2	14.4	14.4	14.5	2	16.2	16.3	16.3	2	22.0	21.9	21.9	2	17.2	17.3	17.2
			8	4	2	14.5	14.4	14.4	2	16.2	16.2	16.2	2	22.0	21.9	21.9	2	17.2	17.3	17.2
			8	7	2	14.4	14.5	14.4	2	16.2	16.1	16.3	2	21.9	21.9	21.9	2	17.2	17.3	17.2
			15	0	2	14.5	14.3	14.4	2	16.2	16.2	16.1	2	22.0	21.9	21.9	2	17.2	17.3	17.2
15	0		2	14.5	14.3	14.4	2	16.2	16.2	16.1	2	22.0	21.9	21.9	2	17.2	17.3	17.2		
LTE Band 2	1.4	QPSK	1	0	0	16.4	16.4	16.4	0	18.2	18.3	18.3	0	24.0	23.9	24.0	0	19.2	19.2	19.2
			1	3	0	16.4	16.5	16.3	0	18.3	18.2	18.2	0	24.0	23.9	23.9	0	19.2	19.2	19.2
			1	5	0	16.3	16.5	16.5	0	18.2	18.2	18.2	0	23.9	24.0	23.9	0	19.3	19.3	19.2
			3	0	0	16.4	16.5	16.4	0	18.3	18.1	18.2	0	23.9	24.0	23.9	0	19.3	19.2	19.3
			3	1	0	16.3	16.5	16.3	0	18.2	18.3	18.2	0	23.9	24.0	23.9	0	19.1	19.2	19.2
			3	3	0	16.5	16.5	16.4	0	18.2	18.2	18.2	0	24.0	23.9	23.9	0	19.3	19.2	19.3
		6	0	1	15.4	15.5	15.4	1	17.1	17.2	17.2	1	23.0	23.0	22.9	1	18.2	18.2	18.2	
		16QAM	1	0	1	15.4	15.5	15.4	1	17.2	17.3	17.2	1	23.0	22.8	22.9	1	18.2	18.3	18.3
			1	3	1	15.4	15.3	15.5	1	17.2	17.3	17.2	1	22.9	23.0	23.0	1	18.2	18.2	18.2
			1	5	1	15.4	15.4	15.5	1	17.3	17.3	17.3	1	23.0	23.0	23.0	1	18.2	18.2	18.2
			3	0	1	15.4	15.5	15.4	1	17.2	17.2	17.3	1	23.0	22.9	22.9	1	18.2	18.3	18.2
			3	1	1	15.5	15.5	15.4	1	17.1	17.2	17.2	1	22.9	22.8	22.9	1	18.2	18.2	18.2
			3	3	1	15.4	15.4	15.5	1	17.2	17.2	17.2	1	23.0	22.9	22.9	1	18.3	18.3	18.2
			6	0	2	14.5	14.5	14.4	2	16.3	16.2	16.3	2	21.9	21.8	21.9	2	17.2	17.2	17.3
6	0		2	14.5	14.5	14.4	2	16.3	16.2	16.3	2	21.9	21.8	21.9	2	17.2	17.2	17.3		

**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	18.7	18.7	18.7	0	19.9	19.9	19.9	0	24.0	23.9	23.9	0	20.2	20.3	20.3
			1	49	0	18.8	18.8	18.8	0	20.0	20.0	20.0	0	24.0	24.0	24.0	0	20.3	20.3	20.3
			1	99	0	18.8	18.7	18.7	0	19.8	20.0	19.9	0	24.0	24.0	23.9	0	20.2	20.2	20.3
			50	0	1	17.7	17.7	17.7	1	19.0	18.9	18.9	1	22.9	22.9	22.9	1	19.2	19.2	19.2
			50	24	1	17.8	17.8	17.8	1	19.0	19.0	19.0	1	23.0	23.0	23.0	1	19.3	19.3	19.3
			50	49	1	17.8	17.8	17.7	1	18.9	19.0	18.9	1	22.9	23.0	22.8	1	19.2	19.2	19.2
		16QAM	100	0	1	17.8	17.8	17.8	1	19.0	19.0	19.0	1	23.0	23.0	23.0	1	19.3	19.3	19.3
			1	0	1	17.7	17.8	17.7	1	18.9	19.0	18.9	1	22.9	22.9	23.0	1	19.2	19.2	19.3
			1	49	1	17.7	17.8	17.7	1	18.9	18.9	18.8	1	22.8	22.9	22.9	1	19.3	19.2	19.2
			1	99	1	17.7	17.7	17.7	1	18.9	18.9	19.0	1	22.9	22.9	23.0	1	19.2	19.1	19.3
			50	0	2	16.7	16.7	16.8	2	18.0	17.9	17.9	2	21.9	21.9	22.0	2	18.3	18.2	18.2
			50	24	2	16.8	16.8	16.7	2	17.9	17.9	17.9	2	21.9	21.9	21.9	2	18.2	18.3	18.2
			50	49	2	16.7	16.7	16.7	2	17.9	17.9	17.9	2	21.9	21.9	21.9	2	18.2	18.1	18.2
			100	0	2	16.8	16.7	16.7	2	17.9	18.0	18.0	2	21.9	21.9	21.9	2	18.2	18.2	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		
						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	18.8	18.8	18.7	0	19.9	19.9	20.0	0	23.9	23.9	23.9	0	20.3	20.2	20.2
			1	36	0	18.7	18.8	18.7	0	19.9	20.0	19.9	0	23.8	24.0	24.0	0	20.2	20.3	20.3
			1	74	0	18.7	18.7	18.8	0	19.9	20.0	19.9	0	23.9	24.0	24.0	0	20.2	20.3	20.2
			36	0	1	17.7	17.8	17.7	1	19.0	18.9	18.9	1	23.0	23.0	22.9	1	19.2	19.3	19.2
			36	18	1	17.8	17.8	17.8	1	18.9	18.9	19.0	1	22.9	23.0	23.0	1	19.2	19.2	19.3
			36	37	1	17.6	17.7	17.8	1	18.9	18.9	19.0	1	23.0	22.9	22.9	1	19.2	19.2	19.2
		16QAM	75	0	1	17.8	17.7	17.8	1	19.0	19.0	18.9	1	22.9	22.9	22.9	1	19.2	19.3	19.3
			1	0	1	17.7	17.7	17.8	1	18.9	19.0	19.0	1	22.9	22.9	22.9	1	19.1	19.2	19.2
			1	36	1	17.8	17.7	17.7	1	18.9	18.9	18.9	1	22.9	22.9	22.9	1	19.2	19.3	19.3
			1	74	1	17.8	17.7	17.8	1	18.9	18.9	19.0	1	22.9	23.0	22.9	1	19.1	19.2	19.2
			36	0	2	16.7	16.7	16.7	2	17.9	18.0	17.9	2	21.9	21.9	21.9	2	18.2	18.2	18.1
			36	18	2	16.7	16.8	16.7	2	17.9	17.8	17.9	2	21.9	22.0	21.9	2	18.2	18.1	18.3
			36	37	2	16.8	16.7	16.8	2	18.0	18.0	17.9	2	21.9	21.9	21.9	2	18.2	18.3	18.2
			75	0	2	16.7	16.7	16.7	2	18.0	17.9	17.9	2	21.9	21.9	21.9	2	18.2	18.1	18.3

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	18.7	18.7	18.7	0	19.9	20.0	19.9	0	24.0	23.8	23.9	0	20.3	20.2	20.1
			1	24	0	18.8	18.8	18.8	0	20.0	20.0	20.0	0	23.9	23.9	24.0	0	20.3	20.3	20.2
			1	49	0	18.7	18.7	18.7	0	20.0	20.0	19.9	0	23.9	23.9	24.0	0	20.2	20.2	20.2
			25	0	1	17.8	17.7	17.7	1	18.9	19.0	19.0	1	22.9	23.0	22.9	1	19.2	19.3	19.3
			25	12	1	17.8	17.8	17.7	1	18.9	18.9	19.0	1	22.9	22.9	23.0	1	19.2	19.2	19.2
			25	24	1	17.7	17.7	17.8	1	19.0	18.9	19.0	1	22.9	22.9	22.9	1	19.2	19.2	19.2
		16QAM	50	0	1	17.7	17.8	17.8	1	19.0	18.9	19.0	1	22.8	22.9	22.9	1	19.1	19.2	19.3
			1	0	1	17.8	17.7	17.8	1	18.9	18.9	19.0	1	22.9	23.0	22.9	1	19.3	19.2	19.2
			1	24	1	17.8	17.6	17.7	1	18.9	18.9	18.9	1	23.0	22.9	22.8	1	19.3	19.2	19.2
			1	49	1	17.7	17.7	17.7	1	18.9	18.9	19.0	1	22.9	22.8	22.9	1	19.2	19.2	19.2
			25	0	2	16.6	16.7	16.7	2	17.8	18.0	18.0	2	21.9	21.9	21.9	2	18.2	18.3	18.2
			25	12	2	16.7	16.8	16.7	2	18.0	17.9	17.9	2	22.0	21.8	21.9	2	18.3	18.2	18.2
			25	24	2	16.8	16.8	16.7	2	17.9	18.0	18.0	2	21.9	22.0	21.9	2	18.2	18.1	18.2
			50	0	2	16.6	16.7	16.8	2	17.9	18.0	17.9	2	22.0	21.8	21.9	2	18.2	18.2	18.2

**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	18.7	18.7	18.8	0	20.0	19.9	20.0	0	24.0	24.0	24.0	0	20.2	20.2	20.2
			1	12	0	18.7	18.8	18.8	0	19.9	20.0	19.9	0	23.9	24.0	24.0	0	20.2	20.2	20.3
			1	24	0	18.7	18.7	18.7	0	19.9	19.9	19.8	0	24.0	24.0	23.9	0	20.3	20.2	20.2
			12	0	1	17.8	17.8	17.7	1	18.9	19.0	18.9	1	23.0	22.9	22.9	1	19.3	19.3	19.2
			12	7	1	17.7	17.7	17.8	1	18.9	18.9	19.0	1	22.9	22.9	22.8	1	19.3	19.2	19.2
			12	13	1	17.7	17.7	17.8	1	18.9	19.0	18.9	1	22.9	22.9	22.9	1	19.2	19.3	19.2
		16QAM	25	0	1	17.8	17.7	17.7	1	19.0	18.9	18.9	1	22.9	23.0	23.0	1	19.3	19.2	19.2
			1	0	1	17.8	17.7	17.6	1	18.9	18.9	19.0	1	22.9	23.0	22.9	1	19.3	19.2	19.1
			1	12	1	17.7	17.7	17.8	1	18.9	19.0	19.0	1	23.0	22.8	22.9	1	19.2	19.2	19.2
			1	24	1	17.7	17.7	17.6	1	19.0	19.0	18.9	1	22.9	22.9	22.8	1	19.1	19.2	19.3
			12	0	2	16.8	16.7	16.8	2	17.9	17.9	17.9	2	22.0	21.9	21.9	2	18.3	18.2	18.2
			12	7	2	16.7	16.7	16.7	2	17.9	17.9	17.9	2	21.9	21.9	22.0	2	18.3	18.3	18.3
			12	13	2	16.7	16.7	16.8	2	17.9	17.8	17.9	2	21.8	21.9	22.0	2	18.2	18.1	18.2
			25	0	2	16.7	16.8	16.7	2	17.9	17.8	17.9	2	21.9	21.8	21.9	2	18.3	18.3	18.2
LTE Band 4	3	QPSK	1	0	0	18.8	18.7	18.7	0	20.0	20.0	20.0	0	23.8	23.9	23.8	0	20.2	20.2	20.2
			1	8	0	18.7	18.8	18.7	0	20.0	20.0	20.0	0	23.9	23.8	24.0	0	20.2	20.2	20.3
			1	14	0	18.7	18.7	18.8	0	19.9	20.0	19.9	0	23.9	23.9	24.0	0	20.2	20.2	20.3
			8	0	1	17.7	17.8	17.7	1	18.9	19.0	18.9	1	23.0	22.9	22.9	1	19.2	19.2	19.2
			8	4	1	17.8	17.8	17.7	1	18.9	19.0	18.9	1	22.9	23.0	22.9	1	19.2	19.3	19.2
			8	7	1	17.8	17.7	17.7	1	18.9	18.9	19.0	1	22.9	23.0	23.0	1	19.3	19.3	19.2
		16QAM	15	0	1	17.7	17.7	17.7	1	19.0	18.9	19.0	1	22.9	22.9	22.9	1	19.1	19.2	19.3
			1	0	1	17.7	17.7	17.7	1	19.0	18.9	18.9	1	22.9	22.9	23.0	1	19.2	19.2	19.2
			1	8	1	17.8	17.7	17.7	1	18.9	18.9	18.9	1	23.0	22.9	23.0	1	19.3	19.2	19.3
			1	14	1	17.7	17.7	17.6	1	18.9	19.0	19.0	1	22.9	22.9	22.9	1	19.2	19.3	19.3
			8	0	2	16.7	16.7	16.8	2	17.9	17.8	17.9	2	21.9	21.9	22.0	2	18.2	18.2	18.3
			8	4	2	16.7	16.7	16.7	2	17.9	17.9	17.9	2	21.9	21.8	22.0	2	18.2	18.3	18.2
			8	7	2	16.8	16.7	16.7	2	18.0	17.9	18.0	2	21.9	21.9	21.9	2	18.2	18.3	18.2
			15	0	2	16.7	16.7	16.8	2	17.9	18.0	18.0	2	22.0	22.0	21.9	2	18.2	18.2	18.1
LTE Band 4	1.4	QPSK	1	0	0	18.8	18.7	18.7	0	20.0	19.9	20.0	0	23.9	23.9	23.8	0	20.1	20.2	20.2
			1	3	0	18.8	18.7	18.8	0	20.0	20.0	19.9	0	23.9	23.9	23.9	0	20.2	20.3	20.3
			1	5	0	18.8	18.7	18.7	0	20.0	20.0	20.0	0	23.9	23.9	24.0	0	20.3	20.2	20.2
			3	0	0	18.7	18.7	18.7	0	19.9	19.9	19.9	0	24.0	24.0	24.0	0	20.2	20.2	20.3
			3	1	0	18.8	18.8	18.7	0	19.8	19.8	19.9	0	23.9	24.0	23.9	0	20.3	20.2	20.3
			3	3	0	18.7	18.6	18.7	0	19.8	20.0	19.9	0	24.0	23.9	24.0	0	20.1	20.3	20.3
		16QAM	6	0	1	17.7	17.7	17.6	1	18.9	19.0	18.9	1	22.9	22.9	23.0	1	19.2	19.3	19.2
			1	0	1	17.7	17.7	17.8	1	18.9	18.9	18.9	1	23.0	22.9	22.9	1	19.2	19.1	19.3
			1	3	1	17.8	17.8	17.8	1	18.9	18.8	19.0	1	22.9	22.9	22.9	1	19.2	19.2	19.3
			1	5	1	17.7	17.8	17.7	1	19.0	19.0	18.9	1	22.9	22.9	22.9	1	19.3	19.2	19.2
			3	0	1	17.6	17.7	17.7	1	19.0	19.0	19.0	1	22.9	22.9	22.9	1	19.2	19.3	19.3
			3	1	1	17.7	17.7	17.7	1	19.0	18.9	18.9	1	23.0	22.9	23.0	1	19.2	19.2	19.2
			3	3	1	17.7	17.8	17.8	1	18.9	18.9	18.9	1	22.9	22.9	23.0	1	19.2	19.2	19.3
			6	0	2	16.6	16.7	16.7	2	17.9	17.9	18.0	2	22.0	22.0	22.0	2	18.2	18.2	18.2

**LTE Band 5 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		
						829 MHz	836.5 MHz	844 MHz		829 MHz	836.5 MHz	844 MHz		829 MHz	836.5 MHz	844 MHz		829 MHz	836.5 MHz	844 MHz
LTE Band 5	10	QPSK	1	0	0	22.0	22.0	22.0	0	22.0	22.0	22.0	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			1	24	0	22.0	22.0	22.0	0	22.0	22.0	22.0	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			1	49	0	22.0	22.0	22.0	0	22.0	22.0	22.0	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			25	0	1	21.0	21.0	21.0	1	21.0	21.0	21.0	1	22.9	23.0	23.0	1	22.9	23.0	23.0
			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	20.9	21.0	21.0	1	20.9	21.0	21.0	1	23.0	23.0	23.0	1	23.0	23.0	23.0
		16QAM	50	0	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
			1	0	1	21.0	21.1	21.0	1	21.0	21.1	21.0	1	23.1	23.0	23.0	1	23.1	23.0	23.0
			1	24	1	21.0	21.0	21.0	1	21.0	21.0	21.0	1	22.9	23.0	23.0	1	22.9	23.0	23.0
			1	49	1	21.0	21.0	21.0	1	21.0	21.0	21.0	1	22.9	23.0	23.1	1	23.0	23.0	23.1
			25	0	2	20.0	20.1	20.0	2	20.0	20.1	20.0	2	22.0	22.0	22.0	2	22.0	22.0	22.0
			25	12	2	19.9	20.0	20.1	2	19.9	20.0	20.1	2	22.0	22.0	22.2	2	22.0	22.0	22.2
			25	24	2	20.0	20.1	20.0	2	20.0	20.1	20.0	2	22.0	22.1	22.0	2	22.0	22.1	22.0
			50	0	2	20.0	20.0	20.0	2	20.0	20.0	20.0	2	22.2	22.0	22.0	2	22.2	22.0	22.0
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						826.5 MHz	836.5 MHz	846.5 MHz							826.5 MHz	836.5 MHz	846.5 MHz			
LTE Band 5	5	QPSK	1	0	0	22.0	21.9	21.9	0	22.0	21.9	21.9	0	24.0	24.0	23.9	0	24.0	24.0	23.9
			1	12	0	22.0	22.0	21.9	0	22.0	22.0	21.9	0	24.0	24.0	23.9	0	24.0	24.0	23.9
			1	24	0	21.9	22.0	22.0	0	21.9	22.0	22.0	0	23.9	24.0	23.9	0	23.9	24.0	23.9
			12	0	1	21.0	21.0	20.9	1	21.0	21.0	20.9	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			12	7	1	20.9	20.9	20.9	1	20.9	20.9	20.9	1	23.0	23.0	23.0	1	23.0	23.0	23.0
			12	13	1	20.9	20.9	21.0	1	20.9	20.9	21.0	1	23.0	22.9	22.9	1	23.0	22.9	22.9
		16QAM	25	0	1	20.9	20.9	20.8	1	20.9	20.9	20.8	1	22.8	23.0	22.8	1	22.8	23.0	22.8
			1	0	1	21.0	20.9	20.9	1	21.0	20.9	20.9	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			1	12	1	20.9	20.9	20.9	1	20.9	20.9	20.9	1	23.0	23.0	23.0	1	23.0	23.0	23.0
			1	24	1	20.9	20.9	20.9	1	20.9	20.9	20.9	1	22.9	22.9	23.0	1	22.9	22.9	23.0
			12	0	2	19.9	20.0	19.8	2	19.9	20.0	19.8	2	22.0	22.0	22.0	2	22.0	22.0	22.0
			12	7	2	20.0	19.9	19.9	2	20.0	19.9	19.9	2	22.0	21.9	21.9	2	22.0	21.9	21.9
			12	13	2	19.9	19.9	20.0	2	19.9	19.9	20.0	2	22.0	21.9	21.8	2	22.0	21.9	21.8
			25	0	2	20.0	19.9	20.0	2	20.0	19.9	20.0	2	21.9	21.9	21.9	2	21.9	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		
						825.5 MHz	836.5 MHz	847.5 MHz							825.5 MHz	836.5 MHz	847.5 MHz			
LTE Band 5	3	QPSK	1	0	0	21.9	21.9	21.9	0	21.9	21.9	21.9	0	23.9	24.0	23.9	0	23.9	24.0	23.9
			1	8	0	22.0	22.0	22.0	0	22.0	22.0	22.0	0	23.9	24.0	23.8	0	23.9	24.0	23.8
			1	14	0	21.9	21.9	22.0	0	21.9	21.9	22.0	0	23.9	24.0	24.0	0	23.9	24.0	24.0
			8	0	1	20.9	21.0	20.9	1	20.9	21.0	20.9	1	23.0	22.9	22.9	1	23.0	22.9	22.9
			8	4	1	21.0	20.9	21.0	1	21.0	20.9	21.0	1	22.9	22.9	23.0	1	22.9	22.9	23.0
			8	7	1	21.0	21.0	20.9	1	21.0	21.0	20.9	1	23.0	23.0	23.0	1	23.0	23.0	23.0
		16QAM	15	0	1	20.8	20.9	20.9	1	20.8	20.9	20.9	1	23.0	22.9	23.0	1	23.0	22.9	23.0
			1	0	1	20.9	20.9	21.0	1	20.9	20.9	21.0	1	23.0	23.0	22.9	1	23.0	23.0	22.9
			1	8	1	20.9	21.0	20.9	1	20.9	21.0	20.9	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			1	14	1	20.9	21.0	20.9	1	20.9	21.0	20.9	1	23.0	22.9	22.9	1	23.0	22.9	22.9
			8	0	2	20.0	19.9	19.9	2	20.0	19.9	19.9	2	22.0	21.9	21.8	2	22.0	21.9	21.8
			8	4	2	20.0	19.9	20.0	2	20.0	19.9	20.0	2	22.0	22.0	21.9	2	22.0	22.0	21.9
			8	7	2	19.9	19.9	19.9	2	19.9	19.9	19.9	2	21.9	22.0	21.9	2	21.9	22.0	21.9
			15	0	2	19.9	19.9	20.0	2	19.9	19.9	20.0	2	21.9	21.9	22.0	2	21.9	21.9	22.0

**LTE Band 5 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		
						824.7 MHz	836.5 MHz	848.3 MHz		824.7 MHz	836.5 MHz	848.3 MHz		824.7 MHz	836.5 MHz	848.3 MHz		824.7 MHz	836.5 MHz	848.3 MHz
LTE Band 5	1.4	QPSK	1	0	0	22.0	21.9	21.9	0	22.0	21.9	21.9	0	24.0	23.9	23.9	0	24.0	23.9	23.9
			1	2	0	21.9	22.0	22.0	0	21.9	22.0	22.0	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			1	5	0	21.9	22.0	22.0	0	21.9	22.0	22.0	0	23.9	24.0	24.0	0	23.9	24.0	24.0
			3	0	0	21.9	21.9	21.9	0	21.9	21.9	21.9	0	24.0	24.0	23.9	0	24.0	24.0	23.9
			3	1	0	22.0	21.9	22.0	0	22.0	21.9	22.0	0	23.9	23.9	23.9	0	23.9	23.9	23.9
			3	2	0	21.9	21.9	22.0	0	21.9	21.9	22.0	0	24.0	24.0	24.0	0	24.0	24.0	24.0
		16QAM	6	0	1	21.0	20.9	20.9	1	21.0	20.9	20.9	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			1	0	1	21.0	21.0	21.0	1	21.0	21.0	21.0	1	23.0	23.0	22.9	1	23.0	23.0	22.9
			1	2	1	20.9	20.9	20.9	1	20.9	20.9	20.9	1	23.0	22.9	22.9	1	23.0	22.9	22.9
			1	5	1	20.8	20.9	21.0	1	20.8	20.9	21.0	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			3	0	1	21.0	20.9	20.9	1	21.0	20.9	20.9	1	23.0	23.0	23.0	1	23.0	23.0	23.0
			3	1	1	20.9	20.9	20.8	1	20.9	20.9	20.8	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			3	2	1	21.0	20.9	20.9	1	21.0	20.9	20.9	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			6	0	2	19.9	20.0	19.9	2	19.9	20.0	19.9	2	21.9	21.9	21.9	2	21.9	21.9	21.9

**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	16.8	16.8	16.8	0	19.8	19.8	19.8	0	22.5	22.5	22.5	0	18.8	18.8	18.8
			1	49	0	16.8	16.8	16.8	0	19.8	19.8	19.8	0	22.5	22.5	22.5	0	18.8	18.8	18.8
			1	99	0	16.8	16.8	16.8	0	19.8	19.9	19.8	0	22.5	22.5	22.5	0	18.8	18.8	18.8
			50	0	1	15.8	15.8	15.8	1	18.8	18.8	18.7	1	21.5	21.5	21.5	1	17.8	17.8	17.8
			50	24	1	15.8	15.8	15.8	1	18.8	18.8	18.8	1	21.5	21.5	21.5	1	17.8	17.8	17.8
			50	49	1	15.7	15.8	15.8	1	18.8	18.8	18.8	1	21.5	21.5	21.5	1	17.8	17.7	17.8
		100	0	1	15.8	15.8	15.8	1	18.8	18.8	18.8	1	21.5	21.5	21.5	1	17.8	17.8	17.8	
		16QAM	1	0	1	15.8	15.9	15.8	1	18.8	18.8	18.9	1	21.5	21.5	21.5	1	17.8	17.8	17.8
			1	49	1	15.7	15.8	15.8	1	18.8	18.9	18.8	1	21.5	21.4	21.5	1	17.8	17.8	17.7
			1	99	1	15.8	15.8	15.8	1	18.8	18.7	18.8	1	21.5	21.5	21.5	1	17.8	17.8	17.8
			50	0	2	14.8	14.9	14.8	2	17.9	17.8	17.8	2	20.6	20.5	20.4	2	16.8	16.8	16.9
			50	24	2	14.8	14.8	14.8	2	17.8	17.8	17.8	2	20.5	20.6	20.5	2	16.7	16.8	16.8
			50	49	2	14.8	14.8	14.9	2	17.7	17.8	17.9	2	20.5	20.5	20.5	2	16.8	16.8	16.8
			100	0	2	14.8	14.7	14.8	2	17.8	17.8	17.8	2	20.5	20.5	20.5	2	16.9	16.8	16.8
100	0		2	14.8	14.7	14.8	2	17.8	17.8	17.8	2	20.5	20.5	20.5	2	16.9	16.8	16.8		
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						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	16.7	16.8	16.7	0	19.7	19.6	19.8	0	22.4	22.4	22.4	0	18.6	18.7	18.7
			1	36	0	16.7	16.7	16.7	0	19.7	19.8	19.8	0	22.4	22.3	22.4	0	18.8	18.8	18.7
			1	74	0	16.7	16.7	16.7	0	19.7	19.7	19.8	0	22.4	22.4	22.3	0	18.7	18.7	18.7
			36	0	1	15.7	15.7	15.7	1	18.7	18.7	18.6	1	21.5	21.4	21.5	1	17.7	17.7	17.7
			36	18	1	15.7	15.7	15.7	1	18.8	18.8	18.7	1	21.4	21.4	21.5	1	17.7	17.7	17.7
			36	37	1	15.8	15.7	15.8	1	18.7	18.8	18.7	1	21.5	21.4	21.4	1	17.8	17.7	17.7
		75	0	1	15.7	15.7	15.7	1	18.8	18.8	18.8	1	21.4	21.4	21.5	1	17.8	17.7	17.7	
		16QAM	1	0	1	15.7	15.8	15.7	1	18.8	18.7	18.7	1	21.4	21.4	21.5	1	17.7	17.8	17.7
			1	36	1	15.8	15.7	15.6	1	18.8	18.7	18.7	1	21.5	21.4	21.4	1	17.7	17.7	17.8
			1	74	1	15.7	15.8	15.8	1	18.7	18.8	18.7	1	21.5	21.4	21.4	1	17.8	17.8	17.7
			36	0	2	14.7	14.7	14.8	2	17.7	17.7	17.7	2	20.4	20.5	20.3	2	16.8	16.7	16.8
			36	18	2	14.7	14.7	14.7	2	17.8	17.8	17.7	2	20.5	20.4	20.5	2	16.7	16.7	16.8
			36	37	2	14.7	14.7	14.7	2	17.8	17.8	17.7	2	20.5	20.4	20.5	2	16.7	16.7	16.8
			75	0	2	14.7	14.7	14.8	2	17.7	17.8	17.7	2	20.4	20.5	20.4	2	16.7	16.8	16.7
75	0		2	14.7	14.7	14.8	2	17.7	17.8	17.7	2	20.4	20.5	20.4	2	16.7	16.8	16.7		
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						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	16.7	16.7	16.7	0	19.6	19.8	19.8	0	22.3	22.3	22.4	0	18.8	18.8	18.7
			1	24	0	16.8	16.8	16.6	0	19.7	19.8	19.7	0	22.4	22.5	22.5	0	18.8	18.7	18.8
			1	49	0	16.8	16.8	16.7	0	19.7	19.7	19.8	0	22.5	22.4	22.4	0	18.7	18.7	18.7
			25	0	1	15.8	15.6	15.8	1	18.7	18.7	18.7	1	21.4	21.4	21.5	1	17.8	17.7	17.7
			25	12	1	15.8	15.7	15.7	1	18.7	18.8	18.8	1	21.4	21.4	21.5	1	17.7	18.8	17.7
			25	24	1	15.7	15.7	15.8	1	18.7	18.7	18.7	1	21.4	21.5	21.5	1	18.8	17.6	17.7
		50	0	1	15.7	15.8	15.8	1	18.8	18.8	18.7	1	21.5	21.4	21.4	1	17.7	17.7	17.8	
		16QAM	1	0	1	15.7	15.7	15.7	1	18.7	18.7	18.7	1	21.5	21.4	21.4	1	17.8	17.7	17.7
			1	24	1	15.7	15.7	15.7	1	18.7	18.7	18.7	1	21.5	21.4	21.4	1	17.7	17.7	17.8
			1	49	1	15.8	15.7	15.7	1	18.8	18.8	18.7	1	21.4	21.5	21.5	1	17.7	17.8	17.7
			25	0	2	14.7	14.7	14.7	2	17.7	17.8	17.7	2	20.5	20.5	20.4	2	16.7	16.7	16.7
			25	12	2	14.8	14.7	14.7	2	17.7	17.8	17.7	2	20.4	20.3	20.4	2	16.8	16.7	16.7
			25	24	2	14.7	14.7	14.7	2	17.7	17.7	17.7	2	20.4	20.4	20.5	2	16.8	16.8	16.7
			50	0	2	14.7	14.7	14.8	2	17.6	17.8	17.8	2	20.4	20.5	20.5	2	16.7	16.8	16.8
50	0		2	14.7	14.7	14.8	2	17.6	17.8	17.8	2	20.4	20.5	20.5	2	16.7	16.8	16.8		

**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	16.7	16.7	16.7	0	19.7	19.7	19.7	0	22.3	22.5	22.4	0	18.7	18.7	18.7
			1	12	0	16.7	16.8	16.8	0	19.8	19.7	19.7	0	22.5	22.5	22.5	0	18.8	18.8	18.8
			1	24	0	16.7	16.7	16.7	0	19.7	19.7	19.7	0	22.4	22.5	22.5	0	18.8	18.8	18.7
			12	0	1	15.7	15.8	15.7	1	18.7	18.7	18.8	1	21.4	21.5	21.5	1	17.8	17.7	17.7
			12	7	1	15.8	15.7	15.8	1	18.8	18.7	18.7	1	21.4	21.5	21.4	1	17.7	17.7	17.8
			12	13	1	15.7	15.8	15.7	1	18.8	18.8	18.7	1	21.5	21.4	21.5	1	17.8	17.7	17.7
			25	0	1	15.7	15.6	15.7	1	18.7	18.7	18.7	1	21.5	21.4	21.3	1	17.7	17.7	17.7
		16QAM	1	0	1	15.7	15.7	15.6	1	18.6	18.8	18.6	1	21.5	21.5	21.5	1	17.8	17.7	17.8
			1	12	1	15.7	15.7	15.7	1	18.8	18.7	18.7	1	21.5	21.5	21.4	1	17.7	17.8	17.7
			1	24	1	15.7	15.7	15.7	1	18.7	18.7	18.7	1	21.5	21.5	21.5	1	17.8	17.7	17.8
			12	0	2	14.7	14.8	14.8	2	17.7	17.7	17.8	2	20.4	20.5	20.4	2	16.8	16.7	16.7
			12	7	2	14.7	14.7	14.7	2	17.7	17.7	17.8	2	20.4	20.4	20.4	2	16.7	16.7	16.8
			12	13	2	14.7	14.7	14.8	2	17.6	17.7	17.7	2	20.4	20.3	20.4	2	16.8	16.7	16.7
			25	0	2	14.7	14.7	14.7	2	17.8	17.8	17.7	2	20.5	20.4	20.5	2	16.8	16.7	16.7



**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	22.4	22.4	22.4	0	22.4	22.4	22.4	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			1	24	0	22.4	22.4	22.4	0	22.4	22.4	22.4	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			1	49	0	22.4	22.4	22.4	0	22.4	22.4	22.4	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			25	0	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			25	12	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	23.0	23.0	23.0	1	23.0	23.0	23.0
			25	24	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	23.0	23.0	23.0	1	23.0	23.0	23.0
		16QAM	50	0	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	23.0	23.0	23.0	1	23.0	23.0	23.0
			1	0	1	21.4	21.4	21.3	1	21.4	21.4	21.3	1	23.0	22.9	23.0	1	23.0	22.9	23.0
			1	24	1	21.4	21.5	21.4	1	21.4	21.5	21.4	1	23.1	23.0	23.2	1	23.1	23.0	23.2
			1	49	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	23.0	23.0	23.1	1	23.0	23.0	23.1
			25	0	2	20.4	20.3	20.4	2	20.4	20.3	20.4	2	22.0	22.1	22.0	2	22.0	22.1	22.0
			25	12	2	20.4	20.4	20.4	2	20.4	20.4	20.4	2	21.9	22.0	22.1	2	21.9	22.0	22.1
			25	24	2	20.4	20.4	20.5	2	20.4	20.4	20.5	2	22.0	22.1	22.0	2	22.0	22.1	22.0
			50	0	2	20.4	20.4	20.4	2	20.4	20.4	20.4	2	22.0	22.0	22.0	2	22.0	22.0	22.0
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				
LTE Band 12	5	QPSK	1	0	0	22.3	22.4	22.3	0	22.3	22.4	22.3	0	23.9	24.0	24.0	0	23.9	24.0	24.0
			1	12	0	22.4	22.4	22.4	0	22.4	22.4	22.4	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			1	24	0	22.3	22.3	22.3	0	22.3	22.3	22.3	0	24.0	24.0	23.9	0	24.0	24.0	23.9
			12	0	1	21.3	21.4	21.3	1	21.3	21.4	21.3	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			12	7	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			12	13	1	21.3	21.4	21.3	1	21.3	21.4	21.3	1	22.8	22.9	22.9	1	22.8	22.9	22.9
		16QAM	25	0	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	23.0	22.9	22.9	1	23.0	22.9	22.9
			1	0	1	21.3	21.3	21.4	1	21.3	21.3	21.4	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			1	12	1	21.4	21.4	21.3	1	21.4	21.4	21.3	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			1	24	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			12	0	2	20.3	20.3	20.4	2	20.3	20.3	20.4	2	21.9	21.9	21.9	2	21.9	21.9	21.9
			12	7	2	20.4	20.4	20.3	2	20.4	20.4	20.3	2	22.0	21.9	22.0	2	22.0	21.9	22.0
			12	13	2	20.4	20.3	20.2	2	20.4	20.3	20.2	2	21.9	21.9	21.9	2	21.9	21.9	21.9
			25	0	2	20.2	20.3	20.4	2	20.2	20.3	20.4	2	21.9	21.9	21.9	2	21.9	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		
						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	22.3	22.3	22.3	0	22.3	22.3	22.3	0	23.9	24.0	23.9	0	23.9	24.0	23.9
			1	8	0	22.4	22.4	22.2	0	22.4	22.4	22.2	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			1	14	0	22.4	22.3	22.3	0	22.4	22.3	22.3	0	23.9	23.9	23.9	0	23.9	23.9	23.9
			8	0	1	21.4	21.3	21.3	1	21.4	21.3	21.3	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			8	4	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	23.0	22.9	23.0	1	23.0	22.9	23.0
			8	7	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	22.9	23.0	22.9	1	22.9	23.0	22.9
		16QAM	15	0	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	22.8	23.0	23.0	1	22.8	23.0	23.0
			1	0	1	21.4	21.4	21.3	1	21.4	21.4	21.3	1	23.0	22.9	22.9	1	23.0	22.9	22.9
			1	8	1	21.3	21.4	21.3	1	21.3	21.4	21.3	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			1	14	1	21.3	21.3	21.4	1	21.3	21.3	21.4	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			8	0	2	20.3	20.3	20.3	2	20.3	20.3	20.3	2	21.9	21.8	21.9	2	21.9	21.8	21.9
			8	4	2	20.4	20.4	20.4	2	20.4	20.4	20.4	2	21.8	21.9	21.9	2	21.8	21.9	21.9
			8	7	2	20.3	20.2	20.3	2	20.3	20.2	20.3	2	22.0	21.9	21.9	2	22.0	21.9	21.9
			15	0	2	20.4	20.4	20.3	2	20.4	20.4	20.3	2	21.9	21.9	21.9	2	21.9	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		
						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	22.4	22.2	22.3	0	22.4	22.2	22.3	0	23.9	23.9	23.9	0	23.9	23.9	23.9
			1	2	0	22.3	22.4	22.3	0	22.3	22.4	22.3	0	23.9	24.0	24.0	0	23.9	24.0	24.0
			1	5	0	22.3	22.4	22.3	0	22.3	22.4	22.3	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			3	0	0	22.4	22.2	22.4	0	22.4	22.2	22.4	0	24.0	23.9	23.9	0	24.0	23.9	23.9
			3	1	0	22.3	22.4	22.3	0	22.3	22.4	22.3	0	24.0	23.9	24.0	0	24.0	23.9	24.0
			3	2	0	22.3	22.3	22.4	0	22.3	22.3	22.4	0	23.9	23.9	24.0	0	23.9	23.9	24.0
		6	0	1	21.3	21.4	21.3	1	21.3	21.4	21.3	1	22.9	22.9	23.0	1	22.9	22.9	23.0	
		1	0	1	21.4	21.2	21.3	1	21.4	21.2	21.3	1	22.9	23.0	23.0	1	22.9	23.0	23.0	
		1	2	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	23.0	23.0	22.9	1	23.0	23.0	22.9	
		1	5	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	22.9	22.9	23.0	1	22.9	22.9	23.0	
		3	0	1	21.4	21.3	21.3	1	21.4	21.3	21.3	1	22.9	23.0	22.9	1	22.9	23.0	22.9	
		3	1	1	21.4	21.4	21.3	1	21.4	21.4	21.3	1	22.9	22.9	23.0	1	22.9	22.9	23.0	
		3	2	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	23.0	22.9	23.0	1	23.0	22.9	23.0	
		6	0	2	20.2	20.3	20.4	2	20.2	20.3	20.4	2	21.9	22.0	21.9	2	21.9	22.0	21.9	

**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						
LTE Band 13	10	QPSK	1	0	0	22.4			0	22.4			0	24.0			0	24.0		
			1	24	0	22.4			0	22.4			0	24.0			0	24.0		
			1	49	0	22.4			0	22.4			0	24.0			0	24.0		
			25	0	1	21.4			1	21.4			1	23.0			1	23.0		
			25	12	1	21.4			1	21.4			1	23.0			1	23.0		
			25	24	1	21.4			1	21.4			1	23.0			1	23.0		
		16QAM	50	0	1	21.4			1	21.4			1	23.0			1	23.0		
			1	0	1	21.4			1	21.4			1	23.0			1	23.0		
			1	24	1	21.3			1	21.3			1	22.9			1	22.9		
			1	49	1	21.4			1	21.4			1	23.0			1	23.0		
			25	0	2	20.4			2	20.4			2	22.0			2	22.0		
			25	12	2	20.4			2	20.4			2	22.1			2	22.1		
			25	24	2	20.3			2	20.3			2	22.0			2	22.0		
			50	0	2	20.3			2	20.4			2	22.1			2	22.1		

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						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	22.4	22.3	22.3	0	22.4	22.3	22.3	0	23.9	24.0	24.0	0	23.9	24.0	24.0
			1	12	0	22.3	22.4	22.4	0	22.3	22.4	22.4	0	23.9	24.0	23.9	0	23.9	24.0	23.9
			1	24	0	22.3	22.3	22.2	0	22.3	22.3	22.2	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			12	0	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	23.0	22.9	22.9	1	23.0	22.9	22.9
			12	7	1	21.4	21.3	21.4	1	21.4	21.3	21.4	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			12	13	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	23.0	23.0	23.0	1	23.0	23.0	23.0
		16QAM	25	0	1	21.4	21.3	21.4	1	21.4	21.3	21.4	1	22.9	22.8	22.9	1	22.9	22.8	22.9
			1	0	1	21.3	21.3	21.2	1	21.3	21.3	21.2	1	23.0	22.9	22.9	1	23.0	22.9	22.9
			1	12	1	21.2	21.4	21.3	1	21.2	21.4	21.3	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			1	24	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	22.9	22.9	23.0	1	22.9	22.9	23.0
			12	0	2	20.4	20.4	20.3	2	20.4	20.4	20.3	2	21.9	21.9	21.9	2	21.9	21.9	21.9
			12	7	2	20.3	20.3	20.3	2	20.3	20.3	20.3	2	21.9	21.9	21.8	2	21.9	21.9	21.8
			12	13	2	20.3	20.4	20.3	2	20.3	20.4	20.3	2	22.0	22.0	21.9	2	22.0	22.0	21.9
			25	0	2	20.3	20.4	20.3	2	20.3	20.4	20.3	2	22.0	21.9	21.9	2	22.0	21.9	21.9

**Note(s):**

10/5 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**

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						709 MHz	710 MHz	711 MHz		709 MHz	710 MHz	711 MHz		709 MHz	710 MHz	711 MHz		709 MHz	710 MHz	711 MHz
LTE Band 17	10	QPSK	1	0	0	22.4	22.4	22.4	0	22.4	22.4	22.4	0	24.0	24.0	23.9	0	24.0	24.0	23.9
			1	24	0	22.4	22.4	22.4	0	22.4	22.4	22.4	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			1	49	0	22.4	22.4	22.4	0	22.4	22.4	22.4	0	23.9	23.9	24.0	0	23.9	23.9	24.0
			25	0	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			25	12	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	23.0	23.0	23.0	1	23.0	23.0	23.0
			25	24	1	21.4	21.4	21.3	1	21.4	21.4	21.3	1	23.0	23.0	23.0	1	23.0	23.0	23.0
		50	0	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	23.0	23.0	23.0	1	23.0	23.0	23.0	
		16QAM	1	0	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			1	24	1	21.4	21.4	21.4	1	21.4	21.4	21.4	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			1	49	1	21.4	21.3	21.4	1	21.4	21.3	21.4	1	23.0	22.9	22.9	1	23.0	22.9	22.9
			25	0	2	20.4	20.4	20.4	2	20.4	20.4	20.4	2	21.9	22.0	22.0	2	21.9	22.0	22.0
			25	12	2	20.4	20.4	20.4	2	20.4	20.4	20.4	2	22.0	22.0	21.9	2	22.0	22.0	21.9
			25	24	2	20.3	20.4	20.3	2	20.3	20.4	20.3	2	22.0	22.0	21.9	2	22.0	22.0	21.9
			50	0	2	20.4	20.5	20.4	2	20.4	20.5	20.4	2	21.9	22.0	21.9	2	21.9	22.0	21.9
50	24		2	20.4	20.5	20.4	2	20.4	20.5	20.4	2	21.9	22.0	21.9	2	21.9	22.0	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		
						706.5 MHz	710 MHz	713.5 MHz		706.5 MHz	710 MHz	713.5 MHz		706.5 MHz	710 MHz	713.5 MHz		706.5 MHz	710 MHz	713.5 MHz
LTE Band 17	5	QPSK	1	0	0	22.4	22.4	22.3	0	22.4	22.4	22.3	0	23.9	24.0	24.0	0	23.9	24.0	24.0
			1	12	0	22.4	22.4	22.4	0	22.4	22.4	22.4	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			1	24	0	22.3	22.4	22.3	0	22.3	22.4	22.3	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			12	0	1	21.4	21.3	21.4	1	21.4	21.3	21.4	1	23.0	22.9	22.9	1	23.0	22.9	22.9
			12	7	1	21.4	21.4	21.3	1	21.4	21.4	21.3	1	22.9	22.9	23.0	1	22.9	22.9	23.0
			12	13	1	21.3	21.4	21.4	1	21.3	21.4	21.4	1	23.0	23.0	22.9	1	23.0	23.0	22.9
		25	0	1	21.4	21.3	21.4	1	21.4	21.3	21.4	1	22.9	23.0	22.8	1	22.9	23.0	22.8	
		16QAM	1	0	1	21.3	21.3	21.3	1	21.3	21.3	21.3	1	22.9	22.9	22.8	1	22.9	22.9	22.8
			1	12	1	21.3	21.4	21.2	1	21.3	21.4	21.2	1	22.9	23.0	23.0	1	22.9	23.0	23.0
			1	24	1	21.3	21.4	21.4	1	21.3	21.4	21.4	1	23.0	22.9	23.0	1	23.0	22.9	23.0
			12	0	2	20.3	20.3	20.3	2	20.3	20.3	20.3	2	22.0	22.0	21.9	2	22.0	22.0	21.9
			12	7	2	20.3	20.4	20.3	2	20.3	20.4	20.3	2	21.9	21.9	22.0	2	21.9	21.9	22.0
			12	13	2	20.3	20.4	20.2	2	20.3	20.4	20.2	2	22.0	22.0	21.9	2	22.0	22.0	21.9
			25	0	2	20.3	20.3	20.4	2	20.3	20.3	20.4	2	21.9	21.9	21.8	2	21.9	21.9	21.8
25	24		2	20.3	20.3	20.4	2	20.3	20.3	20.4	2	21.9	21.9	21.8	2	21.9	21.9	21.8		

**Note(s):**

10/5 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 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							
LTE Band 25	20	QPSK	1	0	0	16.4	16.4	16.4	0	18.3	18.3	18.1	0	23.9	23.9	23.9	0	19.3	19.3	19.3			
			1	49	0	16.5	16.5	16.5	0	18.3	18.3	18.3	0	24.0	24.0	24.0	0	19.3	19.3	19.3			
			1	99	0	16.4	16.5	16.5	0	18.3	18.2	18.2	0	24.0	24.0	24.0	0	19.2	19.2	19.3			
			50	0	1	15.5	15.5	15.4	1	17.2	17.1	17.3	1	23.0	23.0	22.9	1	18.3	18.2	18.2			
			50	24	1	15.5	15.5	15.5	1	17.3	17.3	17.3	1	23.0	23.0	23.0	1	18.3	18.3	18.3			
			50	49	1	15.4	15.5	15.4	1	17.2	17.3	17.2	1	23.0	23.0	23.0	1	18.3	18.2	18.1			
		100	0	1	15.5	15.5	15.5	1	17.3	17.3	17.3	1	23.0	23.0	23.0	1	18.3	18.3	18.3				
		16QAM	1	0	1	15.4	15.5	15.5	1	17.3	17.2	17.2	1	23.0	22.9	22.9	1	18.2	18.2	18.2			
			1	49	1	15.4	15.4	15.4	1	17.2	17.1	17.3	1	23.0	23.0	23.0	1	18.3	18.2	18.2			
			1	99	1	15.4	15.4	15.4	1	17.2	17.2	17.2	1	22.9	22.9	22.8	1	18.3	18.1	18.2			
			50	0	2	14.5	14.5	14.5	2	16.3	16.2	16.2	2	21.9	21.9	22.0	2	17.3	17.2	17.3			
			50	24	2	14.4	14.4	14.5	2	16.3	16.2	16.2	2	22.0	21.9	21.9	2	17.2	17.2	17.2			
			50	49	2	14.4	14.5	14.5	2	16.3	16.3	16.2	2	21.9	21.9	22.0	2	17.3	17.2	17.2			
			100	0	2	14.3	14.4	14.5	2	16.2	16.2	16.3	2	22.0	22.0	21.9	2	17.2	17.3	17.3			
100	0		2	14.3	14.4	14.5	2	16.2	16.2	16.3	2	22.0	22.0	21.9	2	17.2	17.3	17.3					
LTE Band 25	15	QPSK	1	0	0	16.4	16.4	16.5	0	18.2	18.3	18.2	0	24.0	23.9	24.0	0	19.3	19.3	19.3			
			1	36	0	16.5	16.5	16.5	0	18.2	18.2	18.2	0	24.0	23.9	23.9	0	19.2	19.3	19.1			
			1	74	0	16.5	16.4	16.4	0	18.1	18.2	18.3	0	24.0	23.9	23.9	0	19.3	19.3	19.2			
			36	0	1	15.5	15.4	15.4	1	17.2	17.2	17.3	1	22.9	23.0	23.0	1	18.2	18.2	18.2			
			36	18	1	15.3	15.5	15.5	1	17.2	17.3	17.2	1	22.9	22.9	22.9	1	18.3	18.2	18.3			
			36	37	1	15.5	15.3	15.3	1	17.3	17.2	17.3	1	23.0	22.9	22.9	1	18.2	18.3	18.2			
			75	0	1	15.4	15.4	15.4	1	17.2	17.3	17.2	1	23.0	22.9	22.9	1	18.2	18.3	18.1			
			75	0	1	15.5	15.5	15.4	1	17.3	17.1	17.3	1	22.9	23.0	22.9	1	18.2	18.2	18.2			
		16QAM	1	0	1	15.4	15.5	15.5	1	17.3	17.2	17.2	1	22.9	22.9	22.9	1	18.2	18.2	18.3			
			1	36	1	15.4	15.4	15.4	1	17.2	17.2	17.2	1	22.9	23.0	22.9	1	18.3	18.3	18.3			
			36	0	2	14.4	14.4	14.4	2	16.2	16.2	16.2	2	22.0	22.0	22.0	2	17.2	17.3	17.3			
			36	18	2	14.5	14.4	14.5	2	16.2	16.3	16.2	2	22.0	22.0	21.9	2	17.2	17.2	17.3			
			36	37	2	14.4	14.4	14.4	2	16.2	16.2	16.2	2	22.0	21.9	21.9	2	17.2	17.2	17.2			
			75	0	2	14.3	14.4	14.4	2	16.3	16.3	16.3	2	21.9	21.9	21.9	2	17.2	17.2	17.2			
			LTE Band 25	10	QPSK	1	0	0	16.4	16.4	16.4	0	18.3	18.2	18.2	0	23.9	23.9	23.9	0	19.2	19.3	19.2
						1	24	0	16.3	16.5	16.5	0	18.3	18.2	18.2	0	23.9	23.8	23.9	0	19.2	19.2	19.2
						1	49	0	16.4	16.4	16.4	0	18.2	18.1	18.3	0	24.0	24.0	23.9	0	19.1	19.2	19.1
						25	0	1	15.4	15.4	15.5	1	17.1	17.2	17.2	1	22.9	22.9	23.0	1	18.2	18.2	18.2
						25	12	1	15.4	15.4	15.4	1	17.2	17.3	17.2	1	22.9	22.9	22.9	1	18.2	18.3	18.2
						25	24	1	15.5	15.5	15.4	1	17.3	17.2	17.2	1	22.9	23.0	23.0	1	18.3	18.1	18.3
16QAM	50	0			1	15.4	15.3	15.5	1	17.2	17.2	17.3	1	22.9	22.9	22.9	1	18.2	18.3	18.2			
	1	0			1	15.5	15.5	15.4	1	17.2	17.3	17.2	1	22.9	22.9	22.9	1	18.2	18.3	18.3			
	1	24			1	15.4	15.4	15.4	1	17.2	17.2	17.2	1	23.0	22.9	22.9	1	18.2	18.2	18.2			
	1	49			1	15.5	15.3	15.5	1	17.2	17.2	17.3	1	23.0	23.0	23.0	1	18.2	18.2	18.2			
	25	0			2	14.5	14.3	14.4	2	16.2	16.2	16.3	2	21.9	21.9	22.0	2	17.2	17.2	17.3			
	25	12			2	14.4	14.4	14.5	2	16.3	16.3	16.2	2	21.9	22.0	21.9	2	17.2	17.3	17.3			
25	24	2	14.5	14.3	14.4	2	16.2	16.2	16.1	2	22.0	21.9	21.9	2	17.2	17.2	17.2						
50	0	2	14.4	14.4	14.4	2	16.2	16.2	16.2	2	22.0	22.0	22.0	2	17.3	17.2	17.2						

**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	16.3	16.4	16.4	0	18.1	18.2	18.2	0	24.0	23.9	24.0	0	19.1	19.2	19.2
			1	12	0	16.5	16.5	16.5	0	18.3	18.3	18.2	0	23.9	23.9	24.0	0	19.2	19.2	19.3
			1	24	0	16.4	16.4	16.5	0	18.2	18.3	18.3	0	23.9	24.0	24.0	0	19.2	19.2	19.2
			12	0	1	15.4	15.4	15.4	1	17.2	17.2	17.2	1	22.9	22.8	22.9	1	18.2	18.2	18.2
			12	7	1	15.4	15.5	15.4	1	17.3	17.2	17.2	1	22.9	22.9	23.0	1	18.2	18.3	18.2
			12	13	1	15.4	15.5	15.4	1	17.2	17.2	17.2	1	22.9	22.8	23.0	1	18.2	18.2	18.2
			25	0	1	15.4	15.5	15.4	1	17.2	17.2	17.3	1	22.8	23.0	22.9	1	18.3	18.2	18.3
		16QAM	1	0	1	15.4	15.5	15.5	1	17.2	17.2	17.2	1	22.9	23.0	23.0	1	18.2	18.2	18.3
			1	12	1	15.4	15.4	15.3	1	17.2	17.3	17.2	1	22.9	22.9	22.9	1	18.2	18.2	18.2
			1	24	1	15.5	15.4	15.4	1	17.3	17.1	17.2	1	22.9	22.9	23.0	1	18.2	18.2	18.2
			12	0	2	14.4	14.4	14.5	2	16.2	16.2	16.2	2	21.9	21.9	21.9	2	17.2	17.3	17.3
			12	7	2	14.5	14.4	14.5	2	16.2	16.3	16.3	2	21.9	21.9	21.9	2	17.3	17.2	17.3
			12	13	2	14.4	14.4	14.4	2	16.2	16.2	16.2	2	22.0	22.0	21.9	2	17.2	17.3	17.2
			25	0	2	14.4	14.5	14.5	2	16.3	16.2	16.2	2	21.9	21.9	22.0	2	17.3	17.2	17.2
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						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	16.4	16.4	16.4	0	18.2	18.2	18.3	0	23.8	23.9	24.0	0	19.3	19.1	19.3
			1	8	0	16.4	16.5	16.4	0	18.3	18.3	18.3	0	23.9	23.9	23.9	0	19.2	19.3	19.2
			1	14	0	16.4	16.5	16.4	0	18.1	18.2	18.2	0	24.0	23.9	24.0	0	19.1	19.2	19.3
			8	0	1	15.4	15.4	15.5	1	17.3	17.2	17.3	1	23.0	22.9	22.9	1	18.3	18.2	18.2
			8	4	1	15.4	15.4	15.5	1	17.2	17.2	17.3	1	22.9	23.0	22.9	1	18.3	18.3	18.2
			8	7	1	15.4	15.5	15.4	1	17.3	17.2	17.3	1	22.9	23.0	23.0	1	18.2	18.2	18.2
			15	0	1	15.4	15.5	15.5	1	17.2	17.3	17.2	1	22.9	22.9	22.9	1	18.2	18.2	18.1
		16QAM	1	0	1	15.4	15.4	15.5	1	17.2	17.3	17.2	1	22.9	23.0	22.9	1	18.2	18.2	18.2
			1	8	1	15.4	15.4	15.5	1	17.2	17.2	17.1	1	22.9	22.9	22.9	1	18.3	18.3	18.3
			1	14	1	15.4	15.5	15.4	1	17.1	17.3	17.2	1	23.0	22.9	22.9	1	18.2	18.2	18.2
			8	0	2	14.5	14.4	14.5	2	16.2	16.1	16.2	2	22.0	21.9	21.9	2	17.3	17.2	17.2
			8	4	2	14.5	14.3	14.4	2	16.3	16.2	16.3	2	21.9	22.0	22.0	2	17.2	17.2	17.2
			8	7	2	14.4	14.4	14.4	2	16.2	16.3	16.2	2	21.8	21.9	21.9	2	17.2	17.2	17.2
			15	0	2	14.4	14.5	14.4	2	16.2	16.2	16.3	2	21.9	21.9	21.9	2	17.2	17.3	17.2
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						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	16.4	16.5	16.5	0	18.3	18.3	18.2	0	24.0	23.9	23.9	0	19.2	19.1	19.2
			1	3	0	16.5	16.4	16.5	0	18.3	18.2	18.2	0	23.9	24.0	23.9	0	19.2	19.2	19.2
			1	5	0	16.4	16.4	16.4	0	18.3	18.2	18.3	0	24.0	24.0	24.0	0	19.3	19.2	19.3
			3	0	0	16.5	16.5	16.4	0	18.2	18.2	18.3	0	24.0	23.9	23.9	0	19.2	19.3	19.2
			3	1	0	16.5	16.4	16.5	0	18.2	18.2	18.2	0	24.0	24.0	23.9	0	19.2	19.3	19.2
			3	3	0	16.4	16.5	16.4	0	18.2	18.2	18.2	0	23.9	24.0	23.9	0	19.3	19.2	19.3
			6	0	1	15.4	15.5	15.4	1	17.3	17.3	17.3	1	22.9	22.9	23.0	1	18.3	18.3	18.2
		16QAM	1	0	1	15.5	15.4	15.5	1	17.3	17.2	17.3	1	22.9	23.0	23.0	1	18.2	18.3	18.3
			1	3	1	15.5	15.4	15.4	1	17.2	17.3	17.2	1	22.9	22.9	22.9	1	18.2	18.2	18.2
			1	5	1	15.4	15.4	15.5	1	17.3	17.2	17.2	1	22.9	22.9	22.9	1	18.3	18.2	18.2
			3	0	1	15.4	15.4	15.4	1	17.2	17.3	17.2	1	23.0	23.0	22.9	1	18.3	18.1	18.2
			3	1	1	15.5	15.4	15.5	1	17.3	17.2	17.2	1	23.0	22.9	22.9	1	18.2	18.1	18.2
			3	3	1	15.5	15.4	15.4	1	17.2	17.3	17.2	1	22.9	23.0	22.9	1	18.2	18.2	18.3
			6	0	2	14.4	14.4	14.4	2	16.2	16.2	16.2	2	21.9	21.9	21.9	2	17.2	17.2	17.3

**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				819 MHz				819 MHz									
LTE Band 26	10	QPSK	1	0	0		21.9		0		21.9		0		23.9		0		23.9				
			1	24	0		22.0		0		22.0		0		24.0		0		24.0				
			1	49	0		22.0		0		22.0		0		24.0		0		24.0				
			25	0	1		20.9		1		20.9		1		23.0		1		23.0				
			25	12	1		21.0		1		21.0		1		23.0		1		23.0				
			25	24	1		21.0		1		21.0		1		22.9		1		22.9				
		16QAM	50	0	1		21.0		1		21.0		1		23.0		1		23.0				
			1	0	1		21.0		1		21.0		1		23.0		1		23.0				
			1	24	1		20.9		1		20.9		1		22.9		1		22.9				
			1	49	1		21.0		1		21.0		1		22.9		1		22.9				
			25	0	2		20.0		2		20.0		2		21.9		2		21.9				
			25	12	2		20.0		2		20.0		2		21.9		2		21.9				
			25	24	2		19.9		2		19.9		2		22.0		2		22.0				
			50	0	2		19.8		2		19.8		2		21.9		2		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					
						816.5 MHz	819 MHz	821.5 MHz		816.5 MHz	819 MHz	821.5 MHz		816.5 MHz	819 MHz	821.5 MHz		816.5 MHz	819 MHz	821.5 MHz			
LTE Band 26	5	QPSK	1	0	0	21.9	21.9	21.9	0	21.9	21.9	21.9	0	23.9	24.0	23.9	0	23.9	24.0	23.9			
			1	12	0	21.9	22.0	21.9	0	21.9	22.0	21.9	0	23.9	24.0	23.9	0	23.9	24.0	23.9			
			1	24	0	21.9	21.9	22.0	0	21.9	21.9	22.0	0	23.8	24.0	23.9	0	23.8	24.0	23.9			
			12	0	1	20.9	20.9	20.9	1	20.9	20.9	20.9	1	23.0	22.9	23.0	1	23.0	22.9	23.0			
			12	7	1	20.9	20.9	21.0	1	20.9	20.9	21.0	1	22.9	23.0	23.0	1	22.9	23.0	23.0			
			12	13	1	21.0	21.0	21.0	1	21.0	21.0	21.0	1	22.8	22.9	22.9	1	22.8	22.9	22.9			
		16QAM	25	0	1	20.9	20.9	20.9	1	20.9	20.9	20.9	1	22.9	22.9	22.9	1	22.9	22.9	22.9			
			1	0	1	20.9	21.0	21.0	1	20.9	21.0	21.0	1	22.9	23.0	22.9	1	22.9	23.0	22.9			
			1	12	1	21.0	20.9	20.9	1	21.0	20.9	20.9	1	23.0	22.9	22.9	1	23.0	22.9	22.9			
			1	24	1	20.9	20.9	20.9	1	20.9	20.9	20.9	1	23.0	22.9	22.9	1	23.0	22.9	22.9			
			12	0	2	19.9	20.0	19.9	2	19.9	20.0	19.9	2	21.9	21.8	21.9	2	21.9	21.8	21.9			
			12	7	2	19.9	20.0	19.9	2	19.9	20.0	19.9	2	21.9	21.9	21.9	2	21.9	21.9	21.9			
			12	13	2	19.9	19.9	19.9	2	19.9	19.9	19.9	2	22.0	21.8	21.9	2	22.0	21.8	21.9			
			25	0	2	19.9	20.0	19.9	2	19.9	20.0	19.9	2	22.0	22.0	21.9	2	22.0	22.0	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		
									815.5 MHz	819 MHz	822.5 MHz		815.5 MHz	819 MHz	822.5 MHz		815.5 MHz	819 MHz	822.5 MHz		815.5 MHz	819 MHz	822.5 MHz
			LTE Band 26	3	QPSK	1	0	0	22.0	22.0	21.9	0	22.0	22.0	21.9	0	24.0	23.9	24.0	0	24.0	23.9	24.0
						1	8	0	22.0	22.0	22.0	0	22.0	22.0	22.0	0	24.0	24.0	23.9	0	24.0	24.0	23.9
1	14	0				21.8	21.9	21.9	0	21.8	21.9	21.9	0	23.9	24.0	24.0	0	23.9	24.0	24.0			
8	0	1				20.9	20.9	21.0	1	20.9	20.9	21.0	1	23.0	22.9	23.0	1	23.0	22.9	23.0			
8	4	1				21.0	20.9	21.0	1	21.0	20.9	21.0	1	22.9	23.0	22.9	1	22.9	23.0	22.9			
8	7	1				20.9	21.0	20.9	1	20.9	21.0	20.9	1	22.8	23.0	22.9	1	22.8	23.0	22.9			
16QAM	15	0			1	20.9	20.9	21.0	1	20.9	20.9	21.0	1	23.0	22.8	22.9	1	23.0	22.8	22.9			
	1	0			1	21.0	20.9	21.0	1	21.0	20.9	21.0	1	22.9	23.0	22.9	1	22.9	23.0	22.9			
	1	8			1	20.9	21.0	20.9	1	20.9	21.0	20.9	1	22.9	22.8	22.8	1	22.9	22.8	22.8			
	1	14			1	21.0	21.0	20.9	1	21.0	21.0	20.9	1	22.9	22.9	23.0	1	22.9	22.9	23.0			
	8	0			2	19.9	19.9	19.9	2	19.9	19.9	19.9	2	21.9	21.9	21.9	2	21.9	21.9	21.9			
	8	4			2	20.0	19.9	19.9	2	20.0	19.9	19.9	2	22.0	21.9	21.8	2	22.0	21.9	21.8			
	8	7			2	20.0	19.9	19.9	2	20.0	19.9	19.9	2	21.8	22.0	22.0	2	21.8	22.0	22.0			
	15	0			2	19.9	20.0	19.9	2	19.9	20.0	19.9	2	21.9	21.9	21.9	2	21.9	21.9	21.9			

**LTE Band 26 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		
						814.7 MHz	819 MHz	823.3 MHz		814.7 MHz	819 MHz	823.3 MHz		814.7 MHz	819 MHz	823.3 MHz		814.7 MHz	819 MHz	823.3 MHz
LTE Band 26	1.4	QPSK	1	0	0	21.9	21.9	22.0	0	21.9	21.9	22.0	0	24.0	23.9	24.0	0	24.0	23.9	24.0
			1	2	0	21.9	22.0	22.0	0	21.9	22.0	22.0	0	23.9	23.9	23.9	0	23.9	23.9	23.9
			1	5	0	21.9	22.0	21.9	0	21.9	22.0	21.9	0	24.0	24.0	24.0	0	24.0	24.0	24.0
			3	0	0	21.8	22.0	21.9	0	21.8	22.0	21.9	0	23.9	23.9	24.0	0	23.9	23.9	24.0
			3	1	0	21.9	21.9	22.0	0	21.9	21.9	22.0	0	24.0	24.0	23.9	0	24.0	24.0	23.9
			3	2	0	21.9	22.0	21.9	0	21.9	22.0	21.9	0	24.0	23.9	24.0	0	24.0	23.9	24.0
		16QAM	6	0	1	21.0	20.9	21.0	1	21.0	20.9	21.0	1	22.9	23.0	22.9	1	22.9	23.0	22.9
			1	0	1	21.0	21.0	20.9	1	21.0	21.0	20.9	1	23.0	23.0	22.9	1	23.0	23.0	22.9
			1	2	1	20.9	20.9	20.9	1	20.9	20.9	20.9	1	22.9	22.9	23.0	1	22.9	22.9	23.0
			1	5	1	21.0	21.0	21.0	1	21.0	21.0	21.0	1	23.0	23.0	22.9	1	23.0	23.0	22.9
			3	0	1	20.9	21.0	20.9	1	20.9	21.0	20.9	1	23.0	23.0	22.9	1	23.0	23.0	22.9
			3	1	1	20.8	20.9	20.9	1	20.8	20.9	20.9	1	22.8	22.9	23.0	1	22.8	22.9	23.0
			3	2	1	20.9	21.0	21.0	1	20.9	21.0	21.0	1	22.9	22.9	22.9	1	22.9	22.9	22.9
			6	0	2	19.9	20.0	19.9	2	19.9	20.0	19.9	2	21.9	21.9	22.0	2	21.9	21.9	22.0



**LTE Band 27 Average Power (dBm) Measured Results**

SAR for LTE Band 27 is covered by LTE Band 26 due to similar frequency range, same 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						
LTE Band 30	10	QPSK	1	0	0		17.6		0		20.2	0		23.0	0		20.5			
			1	24	0		17.7		0		20.3	0		23.0	0		20.5			
			1	49	0		17.7		0		20.2	0		23.0	0		20.5			
			25	0	1		16.5		1		19.2	1		22.0	1		19.5			
			25	12	1		16.7		1		19.3	1		22.0	1		19.5			
			25	24	1		16.6		1		19.2	1		21.9	1		19.4			
		16QAM	50	0	1		16.7		1		19.3	1		22.0	1		19.5			
			1	0	1		16.6		1		19.2	1		22.0	1		19.4			
			1	24	1		16.6		1		19.2	1		21.9	1		19.4			
			1	49	1		16.6		1		19.2	1		21.9	1		19.4			
			25	0	2		15.6		2		18.2	2		20.9	2		18.4			
			25	12	2		15.6		2		18.2	2		21.0	2		18.4			
			25	24	2		15.7		2		18.1	2		20.9	2		18.4			
			50	0	2		15.6		2		18.2	2		20.9	2		18.4			

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						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	17.6	17.7	17.6	0	20.1	20.2	20.1	0	23.0	22.9	22.9	0	20.4	20.4	20.3
			1	12	0	17.6	17.7	17.6	0	20.2	20.2	20.1	0	23.0	23.0	22.9	0	20.4	20.5	20.4
			1	24	0	17.6	17.6	17.7	0	20.2	20.2	20.2	0	23.0	22.9	22.9	0	20.4	20.4	20.4
			12	0	1	16.7	16.5	16.6	1	19.2	19.2	19.2	1	22.0	21.9	21.9	1	19.4	19.4	19.5
			12	7	1	16.6	16.6	16.6	1	19.1	19.2	19.1	1	22.0	21.9	22.0	1	19.4	19.5	19.4
			12	13	1	16.6	16.7	16.6	1	19.2	19.1	19.1	1	21.9	21.9	21.9	1	19.4	19.4	19.4
		16QAM	25	0	1	16.6	16.7	16.7	1	19.2	19.2	19.3	1	21.9	22.0	22.0	1	19.4	19.4	19.4
			1	0	1	16.6	16.6	16.6	1	19.2	19.1	19.1	1	22.0	21.9	22.0	1	19.5	19.5	19.4
			1	12	1	16.6	16.7	16.6	1	19.1	19.2	19.1	1	22.0	21.9	22.0	1	19.4	19.5	19.4
			1	24	1	16.6	16.5	16.6	1	19.1	19.1	19.2	1	21.9	22.0	21.9	1	19.5	19.4	19.4
			12	0	2	15.7	15.6	15.7	2	18.1	18.1	18.1	2	20.9	21.0	20.9	2	18.4	18.5	18.5
			12	7	2	15.6	15.7	15.6	2	18.1	18.2	18.2	2	20.8	20.9	21.0	2	18.5	18.4	18.5
			12	13	2	15.6	15.6	15.7	2	18.2	18.2	18.2	2	20.9	20.9	21.0	2	18.4	18.4	18.4
			25	0	2	15.6	15.6	15.7	2	18.1	18.2	18.2	2	21.0	21.0	20.8	2	18.4	18.5	18.4

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						2306.5 MHz	2310 MHz	2313.5 MHz		2306.5 MHz	2310 MHz	2313.5 MHz		2306.5 MHz	2310 MHz	2313.5 MHz				
LTE Band 30	3	QPSK	1	0	0	17.6	17.6	17.6	0	20.2	20.1	20.1	0	23.0	22.9	22.9	0	20.4	20.5	20.4
			1	8	0	17.7	17.5	17.6	0	20.1	20.2	20.2	0	23.0	22.9	23.0	0	20.4	20.5	20.4
			1	14	0	17.6	17.6	17.7	0	20.2	20.2	20.1	0	22.9	22.8	22.9	0	20.4	20.4	20.5
			8	0	1	16.7	16.5	16.7	1	19.2	19.1	19.1	1	22.0	21.8	22.0	1	19.4	19.5	19.4
			8	4	1	16.6	16.6	16.6	1	19.2	19.1	19.1	1	22.0	21.9	21.9	1	19.4	19.4	19.4
			8	7	1	16.6	16.6	16.6	1	19.2	19.1	19.2	1	21.9	22.0	21.9	1	19.5	19.4	19.4
		16QAM	15	0	1	16.6	16.7	16.6	1	19.1	19.1	19.2	1	21.9	21.9	21.9	1	19.5	19.4	19.4
			1	0	1	16.6	16.7	16.7	1	19.2	19.1	19.1	1	21.9	21.9	21.9	1	19.4	19.4	19.4
			1	8	1	16.6	16.6	16.6	1	19.2	19.2	19.1	1	22.0	21.9	22.0	1	19.5	19.4	19.5
			1	14	1	16.6	16.6	16.6	1	19.2	19.2	19.2	1	21.9	21.9	22.0	1	19.4	19.4	19.5
			8	0	2	15.6	15.7	15.6	2	18.2	18.2	18.1	2	20.9	21.0	21.0	2	18.5	18.4	18.4
			8	4	2	15.6	15.7	15.7	2	18.2	18.1	18.1	2	21.0	20.9	20.9	2	18.4	18.5	18.4
			8	7	2	15.7	15.7	15.6	2	18.1	18.1	18.2	2	20.9	20.9	20.9	2	18.4	18.5	18.4
			15	0	2	15.6	15.6	15.7	2	18.1	18.2	18.2	2	20.9	21.0	21.0	2	18.4	18.4	18.4

**LTE Band 30 Average Power (dBm) Measured Results (continued)**

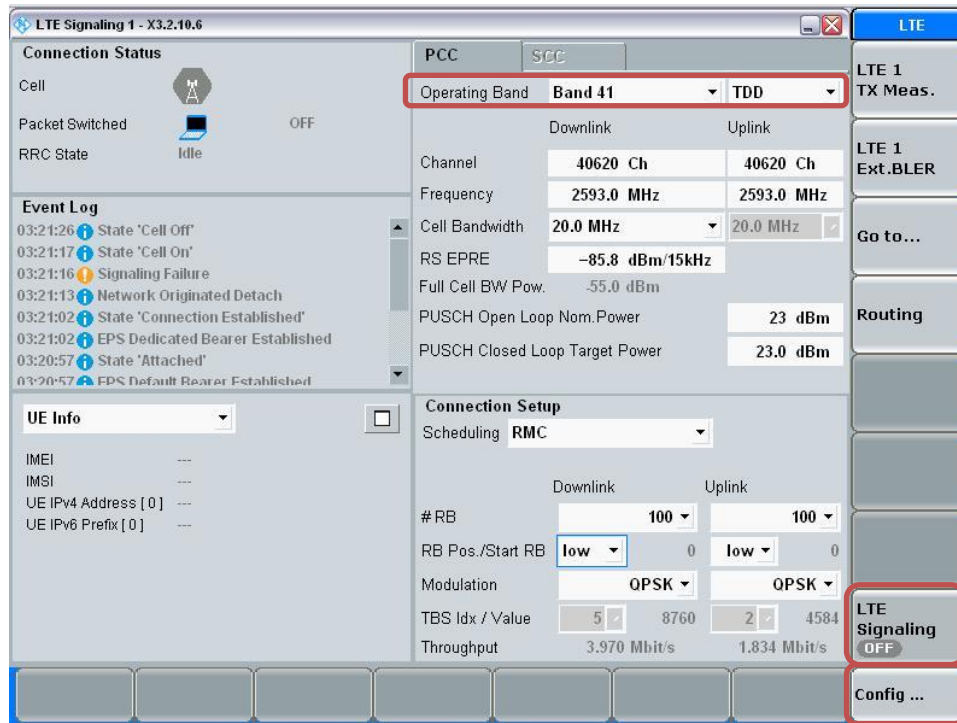
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD			Target MPR	UAT / BODY			Target MPR	LAT / HEAD			Target MPR	LAT / BODY		
						2305.7 MHz	2310 MHz	2314.3 MHz		2305.7 MHz	2310 MHz	2314.3 MHz		2305.7 MHz	2310 MHz	2314.3 MHz		2305.7 MHz	2310 MHz	2314.3 MHz
LTE Band 30	1.4	QPSK	1	0	0	17.6	17.6	17.6	0	20.1	20.1	20.2	0	23.0	23.0	23.0	0	20.4	20.4	20.5
			1	2	0	17.6	17.7	17.6	0	20.2	20.2	20.2	0	22.9	23.0	22.9	0	20.5	20.5	20.4
			1	5	0	17.5	17.6	17.7	0	20.2	20.1	20.2	0	22.9	22.8	22.9	0	20.5	20.4	20.5
			3	0	0	17.6	17.7	17.6	0	20.1	20.1	20.2	0	22.9	23.0	22.9	0	20.4	20.4	20.4
			3	1	0	17.6	17.7	17.7	0	20.2	20.2	20.1	0	22.9	22.9	22.9	0	20.3	20.4	20.5
			3	2	0	17.7	17.6	17.6	0	20.2	20.1	20.2	0	22.9	22.9	22.9	0	20.5	20.5	20.4
		16QAM	6	0	1	16.7	16.7	16.6	1	19.2	19.2	19.2	1	21.9	21.8	21.9	1	19.4	19.4	19.4
			1	0	1	16.6	16.6	16.6	1	19.2	19.1	19.2	1	21.9	22.0	21.8	1	19.5	19.4	19.4
			1	2	1	16.7	16.5	16.6	1	19.1	19.1	19.1	1	21.8	22.0	21.9	1	19.5	19.5	19.4
			1	5	1	16.7	16.6	16.5	1	19.2	19.2	19.2	1	22.0	21.9	21.9	1	19.5	19.4	19.5
			3	0	1	16.6	16.7	16.5	1	19.2	19.2	19.1	1	21.8	22.0	22.0	1	19.4	19.4	19.3
			3	1	1	16.6	16.6	16.5	1	19.2	19.2	19.1	1	21.8	21.9	21.9	1	19.4	19.5	19.4
			3	2	1	16.6	16.7	16.6	1	19.2	19.1	19.1	1	22.0	21.9	21.9	1	19.4	19.4	19.4
			6	0	2	15.7	15.6	15.6	2	18.2	18.1	18.2	2	21.0	21.0	20.8	2	18.4	18.3	18.4

**LTE Band 41 Average Power (dBm) Measured Results**

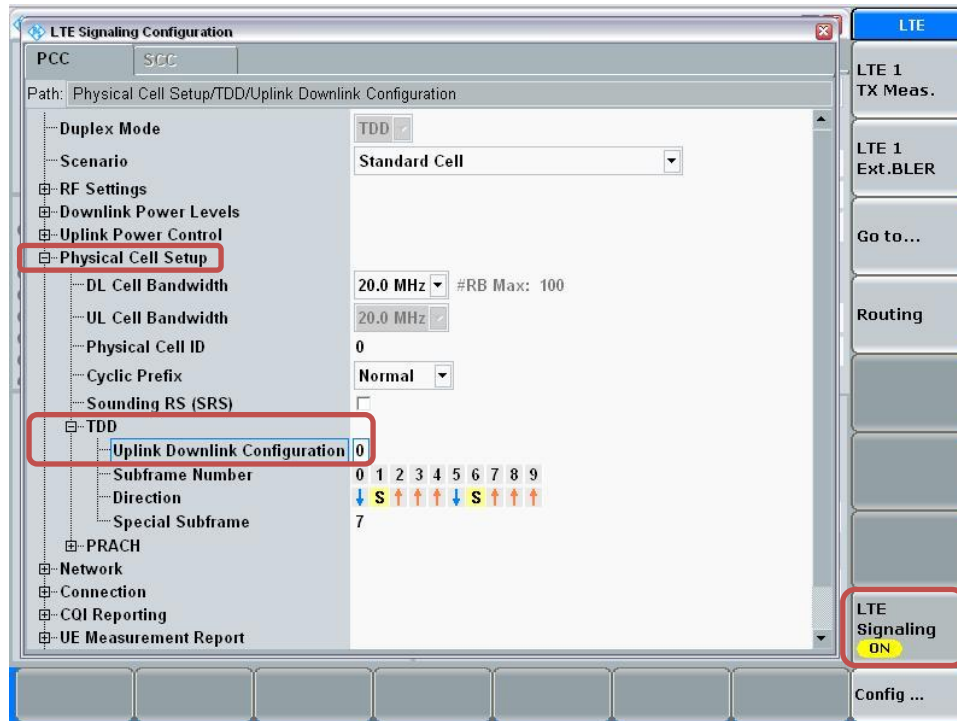
**Procedure used to establish SAR test signal for LTE TDD Band 41**

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...”

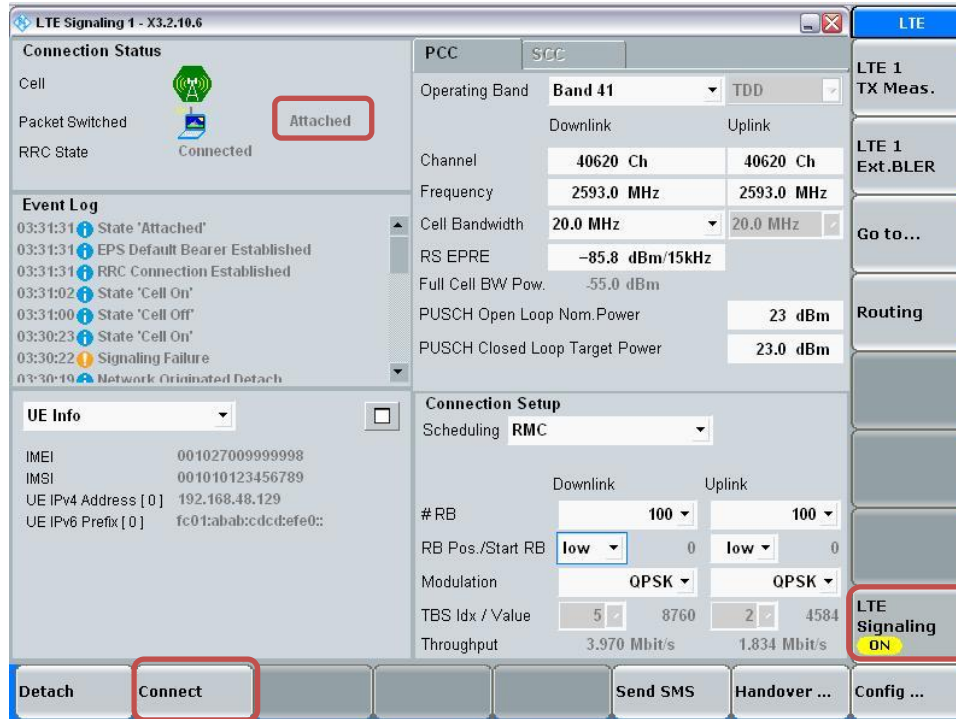


- Go to “Physical Cell Setup”
- Select “TDD” and Set “Uplink Downlink Configuration” to “0”
- Turn the cell on using “ON | OFF” key



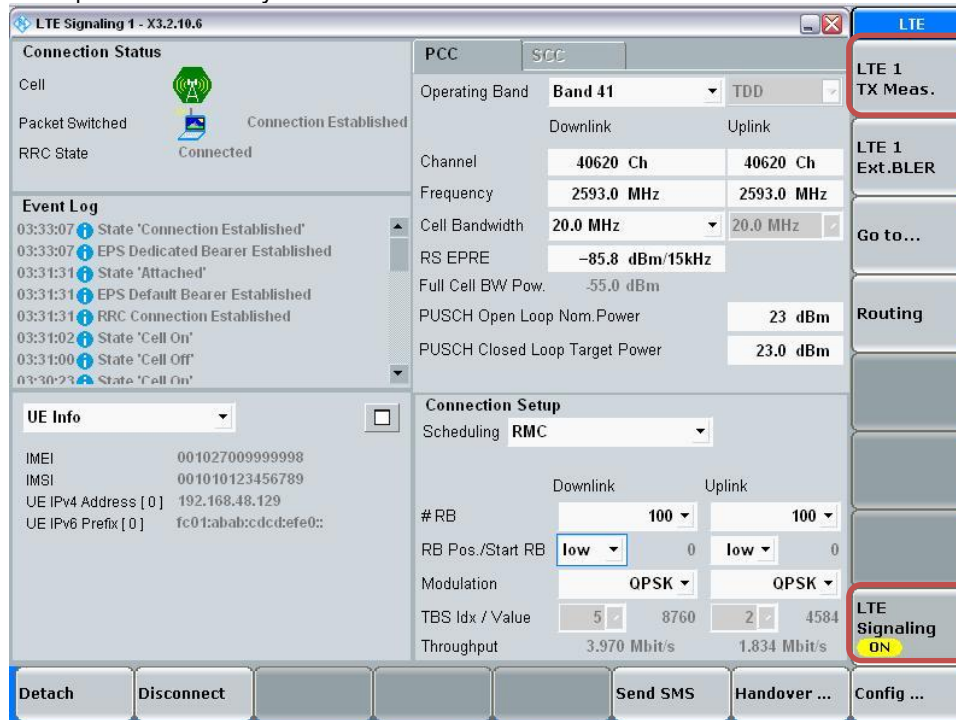
**Connect to EUT**

- 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



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

The screenshot displays the 'LTE Measurement - X3.2.10.6 - TX Measurement' window. The main interface includes several measurement plots: EVM, Inband Emissions, Equalizer Spectrum Flatness, Spectrum ACLR, and Spectrum. A 'Signaling TPC' dialog box is open, showing the following settings:

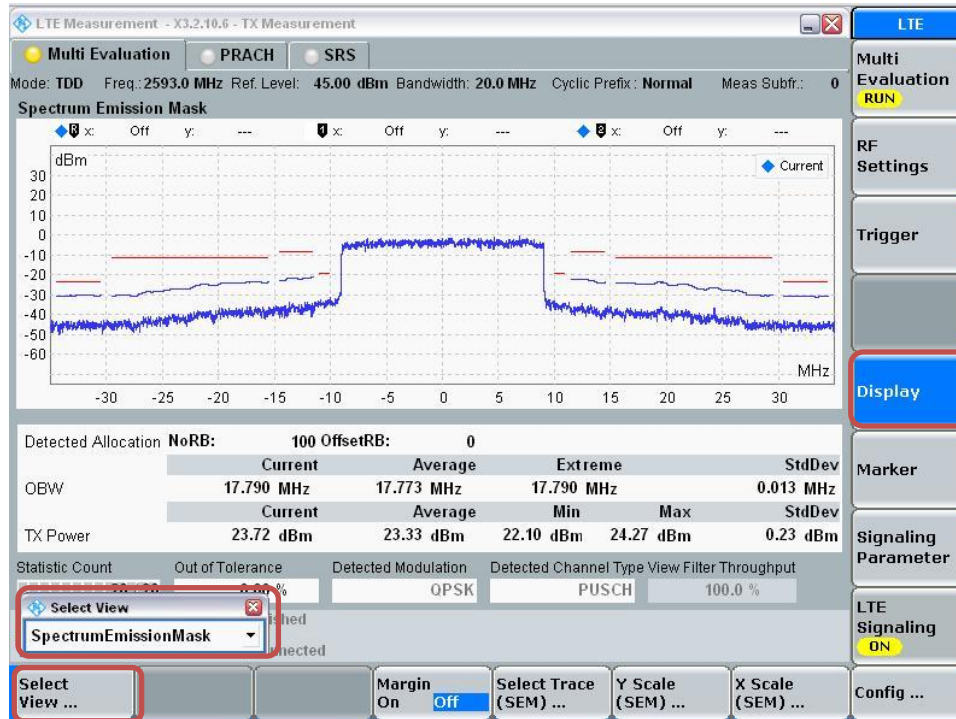
TX Power Control (TPC)	
Active TPC Setup	Max Power
Closed Loop Target Power	23.0 dBm

The 'Signaling Parameter' button on the right-hand side of the interface is highlighted with a red box. The 'Multi Evaluation' button is labeled 'RUN', and the 'LTE Signaling' button is labeled 'ON'. The bottom of the window features a toolbar with buttons for 'Cell Setup ...', 'Connection Setup ...', 'DL Error Insertion ...', 'TPC ...', 'Power ...', 'Enable ...', and 'Config ...'.



**View TX Power**

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



**LTE Band 41 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				
						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	18.0	17.9	17.9	17.9	17.9	0	21.3	21.5	21.4	21.5	21.4	0	22.4	22.5	22.4	22.4	22.4	0	20.9	20.9	20.9	20.9	21.0
			1	49	0	18.0	18.0	18.0	18.0	18.0	0	21.5	21.5	21.5	21.5	21.5	0	22.5	22.5	22.5	22.5	22.5	0	21.0	21.0	21.0	21.0	21.0
			1	99	0	17.9	17.9	17.9	17.9	17.9	0	21.4	21.4	21.4	21.5	21.4	0	22.4	22.4	22.5	22.4	22.4	0	20.9	20.9	21.0	21.0	20.9
			50	0	1	16.9	16.9	17.0	16.9	16.9	1	20.4	20.4	20.4	20.4	20.4	1	21.4	21.5	21.4	21.4	21.5	1	20.0	19.9	20.0	19.9	20.0
			50	24	1	17.0	17.0	17.0	17.0	17.0	1	20.5	20.5	20.5	20.5	20.5	1	21.5	21.5	21.5	21.5	21.5	1	20.0	20.0	20.0	20.0	20.0
			50	49	1	17.0	17.0	16.9	16.9	16.9	1	20.5	20.5	20.4	20.5	20.4	1	21.4	21.5	21.5	21.5	21.4	1	19.9	20.0	20.0	19.9	19.9
			100	0	1	17.0	17.0	17.0	17.0	17.0	1	20.5	20.5	20.5	20.5	20.5	1	21.5	21.5	21.5	21.5	21.5	1	20.0	20.0	20.0	20.0	20.0
			1	0	1	16.9	16.9	16.9	16.9	16.9	1	20.3	20.4	20.4	20.4	20.5	1	21.4	21.4	21.4	21.4	21.4	1	20.0	19.9	20.0	19.8	19.9
		16QAM	1	49	1	17.0	16.9	16.9	17.0	16.9	1	20.4	20.5	20.5	20.4	20.4	1	21.4	21.3	21.4	21.4	21.4	1	19.9	20.0	20.0	19.9	20.0
			1	99	1	16.9	16.8	16.9	16.9	16.9	1	20.4	20.4	20.4	20.5	20.4	1	21.4	21.5	21.4	21.4	21.5	1	19.9	19.9	19.9	19.9	19.9
			50	0	2	15.9	15.9	15.9	15.9	15.9	2	19.4	19.4	19.5	19.4	19.5	2	20.5	20.4	20.4	20.3	20.3	2	18.9	18.9	18.9	18.9	18.9
			50	24	2	15.8	15.9	16.0	16.0	15.9	2	19.3	19.3	19.4	19.4	19.4	2	20.5	20.5	20.4	20.3	20.4	2	19.0	18.9	18.9	18.9	18.9
			50	49	2	16.0	15.9	15.9	15.9	15.9	2	19.4	19.5	19.5	19.5	19.5	2	20.4	20.4	20.5	20.4	20.5	2	18.9	19.0	18.9	18.9	18.9
			100	0	2	16.0	15.8	15.9	15.9	16.0	2	19.4	19.5	19.5	19.3	19.4	2	20.4	20.4	20.4	20.5	20.4	2	19.0	18.9	19.0	18.9	19.0

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD					Target MPR	UAT / BODY					Target MPR	LAT / HEAD					Target MPR	LAT / BODY				
						2503.5 MHz	2548.3 MHz	2593 MHz	2637.8 MHz	2682.5 MHz		2503.5 MHz	2548.3 MHz	2593 MHz	2637.8 MHz	2682.5 MHz		2503.5 MHz	2548.3 MHz	2593 MHz	2637.8 MHz	2682.5 MHz		2503.5 MHz	2548.3 MHz	2593 MHz	2637.8 MHz	2682.5 MHz
LTE Band 41	15	QPSK	1	0	0	18.0	18.0	17.9	18.0	17.9	0	21.5	21.5	21.5	21.5	21.3	0	22.4	22.4	22.5	22.4	22.4	0	20.9	20.9	21.0	20.9	20.8
			1	36	0	17.9	18.0	17.9	18.0	17.9	0	21.3	21.4	21.4	21.5	21.4	0	22.4	22.4	22.4	22.4	22.5	0	21.0	21.0	21.0	20.9	20.9
			1	74	0	18.0	18.0	17.9	17.9	17.9	0	21.4	21.4	21.4	21.3	21.3	0	22.4	22.5	22.4	22.4	22.4	0	20.9	21.0	20.9	20.9	20.9
			36	0	1	16.9	16.9	16.9	16.9	16.9	1	20.5	20.5	20.5	20.5	20.5	1	21.5	21.5	21.4	21.4	21.4	1	19.9	19.8	20.0	19.9	20.0
			36	18	1	16.9	16.9	16.9	16.9	16.9	1	20.5	20.4	20.4	20.5	20.5	1	21.4	21.5	21.3	21.4	21.4	1	20.0	19.8	19.9	19.9	19.9
			36	37	1	16.9	17.0	17.0	16.9	16.8	1	20.4	20.4	20.5	20.4	20.5	1	21.4	21.4	21.5	21.5	21.4	1	19.9	19.9	19.9	20.0	19.8
			75	0	1	16.9	16.9	16.9	17.0	16.9	1	20.4	20.5	20.4	20.5	20.5	1	21.4	21.4	21.4	21.4	21.3	1	20.0	19.9	20.0	20.0	19.9
			1	0	1	16.9	17.0	16.9	16.9	16.9	1	20.5	20.4	20.3	20.4	20.4	1	21.5	21.4	21.4	21.4	21.5	1	19.9	20.0	20.0	19.9	19.8
		16QAM	1	36	1	16.9	16.9	17.0	16.9	16.9	1	20.4	20.5	20.4	20.5	20.4	1	21.5	21.4	21.4	21.4	21.5	1	20.0	20.0	20.0	19.8	19.9
			1	74	1	16.9	17.0	16.9	16.9	16.9	1	20.5	20.5	20.4	20.4	20.5	1	21.4	21.5	21.4	21.4	21.4	1	20.0	19.9	19.9	20.0	19.8
			36	0	2	16.0	16.0	15.9	15.9	15.9	2	19.4	19.5	19.4	19.4	19.4	2	20.4	20.4	20.4	20.4	20.5	2	19.0	18.9	18.9	19.0	18.9
			36	18	2	16.0	15.9	15.9	16.0	15.9	2	19.5	19.4	19.5	19.5	19.4	2	20.4	20.4	20.3	20.4	20.4	2	18.9	18.9	18.9	18.9	19.0
			36	37	2	16.0	15.9	15.9	15.9	15.9	2	19.4	19.3	19.5	19.3	19.4	2	20.4	20.4	20.4	20.4	20.4	2	19.0	18.9	18.9	19.0	18.9
			75	0	2	15.9	15.8	15.9	15.9	16.0	2	19.4	19.4	19.4	19.5	19.4	2	20.5	20.5	20.5	20.4	20.4	2	18.9	18.9	19.0	19.0	18.9

Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD					Target MPR	UAT / BODY					Target MPR	LAT / HEAD					Target MPR	LAT / BODY				
						2501 MHz	2547 MHz	2593 MHz	2639 MHz	2685 MHz		2501 MHz	2547 MHz	2593 MHz	2639 MHz	2685 MHz		2501 MHz	2547 MHz	2593 MHz	2639 MHz	2685 MHz		2501 MHz	2547 MHz	2593 MHz	2639 MHz	2685 MHz
LTE Band 41	10	QPSK	1	0	0	18.0	18.0	17.9	17.9	17.9	0	21.4	21.5	21.3	21.5	21.4	0	22.5	22.4	22.4	22.4	22.4	0	20.9	20.9	21.0	20.9	20.9
			1	24	0	17.9	17.9	17.9	18.0	18.0	0	21.4	21.5	21.4	21.4	21.5	0	22.4	22.5	22.4	22.4	22.4	0	21.0	21.0	20.8	20.8	20.9
			1	49	0	17.9	17.9	17.9	18.0	17.9	0	21.5	21.5	21.4	21.4	21.5	0	22.4	22.4	22.5	22.4	22.5	0	20.9	20.9	20.9	21.0	20.9
			25	0	1	17.0	16.9	17.0	16.9	16.9	1	20.3	20.4	20.4	20.4	20.3	1	21.4	21.4	21.4	21.4	21.4	1	20.0	19.9	20.0	19.9	19.9
			25	12	1	16.9	17.0	16.9	16.9	16.9	1	20.4	20.4	20.4	20.5	20.4	1	21.4	21.5	21.4	21.4	21.4	1	19.9	19.9	19.9	20.0	20.0
			25	24	1	16.9	17.0	16.9	16.9	17.0	1	20.4	20.4	20.4	20.4	20.4	1	21.4	21.5	21.4	21.5	21.4	1	19.9	19.8	19.9	19.9	19.9
			50	0	1	16.9	16.8	16.8	16.9	16.9	1	20.4	20.4	20.4	20.5	20.4	1	21.4	21.4	21.3	21.5	21.4	1	19.9	19.9	19.9	19.9	19.8
			1	0	1	16.9	16.9	17.0	16.9	17.0	1	20.3	20.4	20.4	20.5	20.4	1	21.4	21.5	21.4	21.4	21.4	1	20.0	19.9	20.0	20.0	20.0
		16QAM	1	24	1	16.9	17.0	16.9	16.8	17.0	1	20.4	20.4	20.4	20.5	20.4	1	21.5	21.5	21.4	21.4	21.5	1	19.9	19.9	19.9	19.8	19.9
			1	49	1	16.9	16.9	17.0	16.8	16.9	1	20.4	20.4	20.5	20.4	20.4	1	21.4	21.5	21.4	21.4	21.4	1	19.9	19.9	19.9	19.9	19.9
			25	0	2	16.0	15.9	16.0	16.0	15.9	2	19.5	19.5	19.4	19.3	19.4	2	20.4	20.5	20.4	20.4	20.4	2	18.9	18.9	18.9	18.9	18.9
			25	12	2	16.0	16.0	15.9	16.0	16.0	2	19.5	19.4	19.4	19.4	19.4	2	20.4	20.4	20.3	20.4	20.5	2	19.0	18.9	18.9	19.0	19.0
			25	24	2	15.9	15.9	15.9	16.0	15.9	2	19.4	19.4	19.4	19.4	19.4	2	20.4	20.5	20.5	20.5	20.4	2	18.9	18.9	18.9	18.9	19.0
			50	0	2	15.9	15.9	16.0	15.9	15.9	2	19.4	19.4	19.4	19.4	19.4	2	20.3	20.4	20.5	20.5	20.5	2	18.8	18.9	19.0	18.9	18.9

**LTE Band 41 Average Power (dBm) Measured Results (continued)**

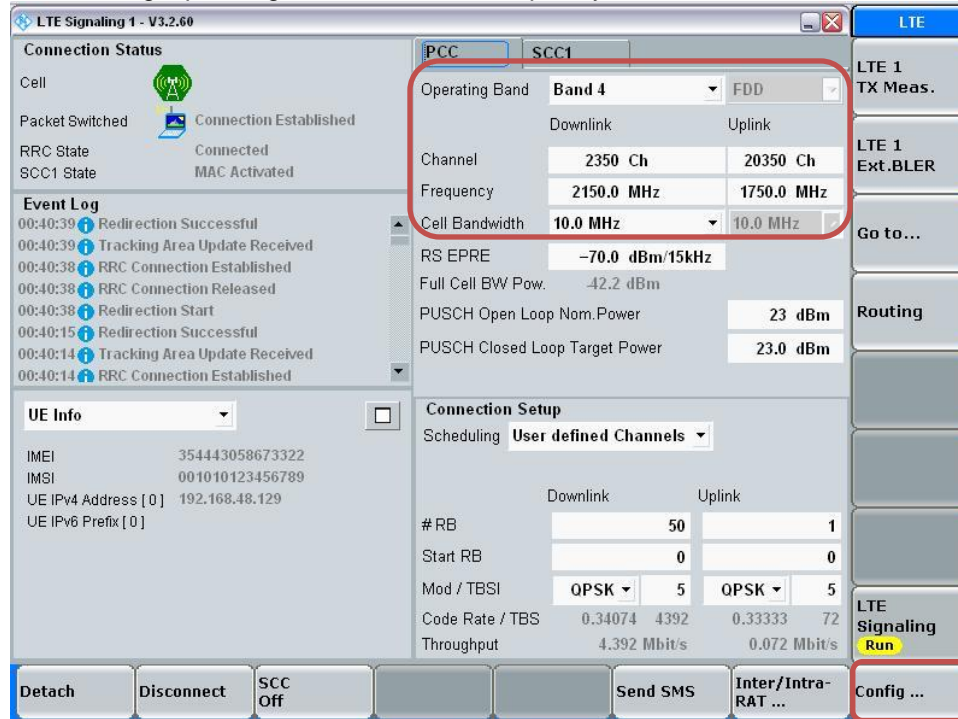
Band	BW (MHz)	Mode	RB Allocation	RB offset	Target MPR	UAT / HEAD					Target MPR	UAT / BODY					Target MPR	LAT / HEAD					Target MPR	LAT / BODY				
						2498.5 MHz	2545.8 MHz	2593 MHz	2640.3 MHz	2687.5 MHz		2498.5 MHz	2545.8 MHz	2593 MHz	2640.3 MHz	2687.5 MHz		2498.5 MHz	2545.8 MHz	2593 MHz	2640.3 MHz	2687.5 MHz		2498.5 MHz	2545.8 MHz	2593 MHz	2640.3 MHz	2687.5 MHz
LTE Band 41	5	QPSK	1	0	0	18.0	17.9	17.9	17.9	18.0	0	21.5	21.4	21.4	21.4	21.5	0	22.5	22.4	22.4	22.4	22.4	0	20.9	20.8	20.9	20.9	20.9
			1	12	0	17.9	18.0	17.9	18.0	17.9	0	21.4	21.4	21.4	21.4	21.3	0	22.4	22.5	22.4	22.4	22.4	0	20.9	20.9	20.9	20.9	21.0
			1	24	0	17.9	18.0	17.9	17.9	18.0	0	21.4	21.4	21.5	21.5	21.4	0	22.4	22.5	22.4	22.4	22.4	0	20.8	20.9	20.9	20.8	20.9
			12	0	1	17.0	17.0	16.9	17.0	16.9	1	20.4	20.4	20.4	20.5	20.4	1	21.4	21.4	21.4	21.5	21.4	1	19.9	20.0	19.9	19.9	19.9
			12	7	1	17.0	16.9	17.0	17.0	17.0	1	20.4	20.4	20.5	20.5	20.4	1	21.4	21.4	21.4	21.5	21.4	1	19.9	20.0	19.9	20.0	19.9
			12	13	1	16.9	16.9	17.0	16.9	16.9	1	20.4	20.4	20.5	20.4	20.4	1	21.5	21.4	21.5	21.5	21.4	1	19.9	19.9	19.9	20.0	19.9
		25	0	1	16.9	16.9	16.9	16.9	16.9	1	20.4	20.4	20.4	20.5	20.5	1	21.4	21.4	21.4	21.5	21.4	1	19.9	19.9	20.0	19.8	19.9	
		1	0	1	16.9	17.0	16.9	16.9	17.0	1	20.4	20.4	20.4	20.4	20.5	1	21.3	21.5	21.4	21.4	21.5	1	20.0	19.9	19.9	20.0	20.0	
		1	12	1	16.9	17.0	17.0	16.9	16.9	1	20.4	20.5	20.5	20.4	20.3	1	21.5	21.4	21.4	21.5	21.4	1	20.0	19.8	19.9	19.8	20.0	
		1	24	1	17.0	17.0	16.8	16.9	17.0	1	20.4	20.5	20.4	20.5	20.4	1	21.4	21.3	21.4	21.5	21.5	1	19.9	19.9	20.0	20.0	20.0	
		12	0	2	15.9	15.9	15.9	15.9	15.9	2	19.4	19.5	19.4	19.5	19.4	2	20.4	20.4	20.4	20.4	20.4	2	18.9	19.0	19.0	18.9	18.9	
		12	7	2	15.9	16.0	15.9	15.9	16.0	2	19.5	19.4	19.5	19.4	19.5	2	20.5	20.5	20.4	20.4	20.5	2	18.9	19.0	19.0	19.0	19.0	
		12	13	2	16.0	15.9	15.8	15.8	15.9	2	19.5	19.5	19.4	19.4	19.5	2	20.4	20.5	20.4	20.4	20.4	2	19.0	18.9	19.0	19.0	18.9	
		25	0	2	15.9	15.9	16.0	15.9	16.0	2	19.3	19.5	19.5	19.4	19.3	2	20.4	20.4	20.3	20.3	20.4	2	18.9	18.9	19.0	18.9	18.9	

### 9.5. LTE Rel. 10 Carrier Aggregation

**LTE Carrier Aggregation Test Signal Set-up Procedure**  
 (Use normal LTE set-up procedure in addition with the following steps)

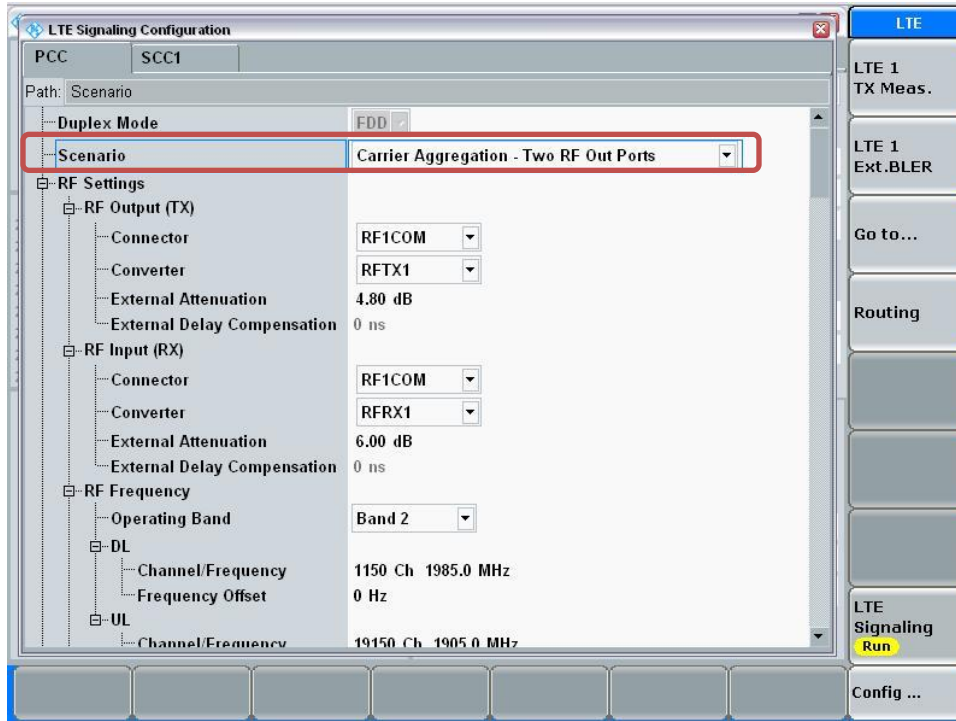
Set to CMW-500 with following parameters:

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

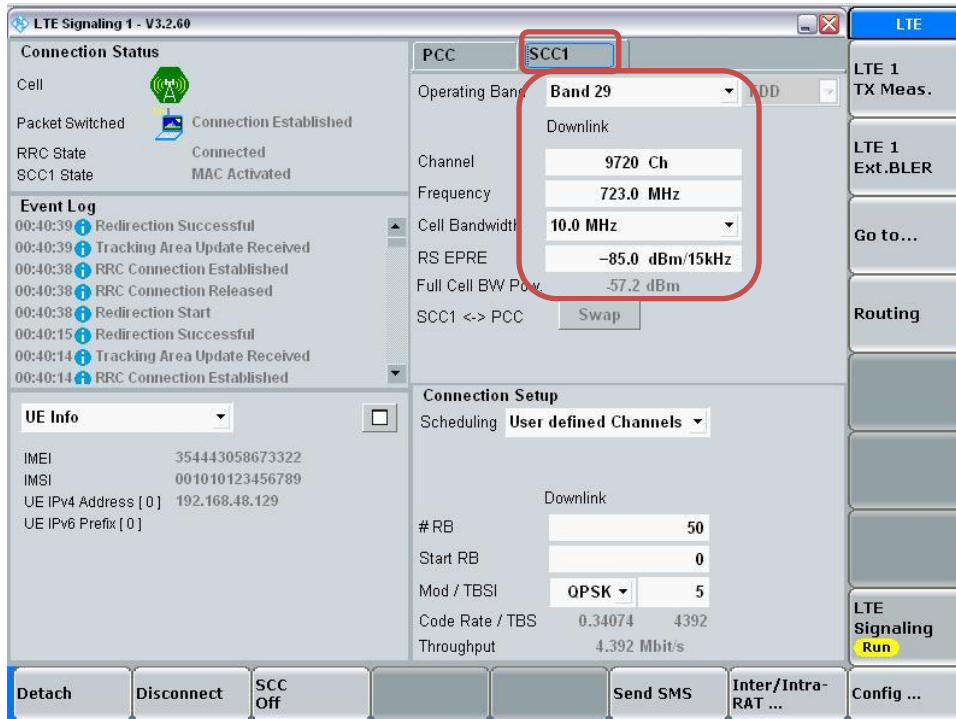


- Go to “Config...”

- Go to “Scenario”
- Select “Carrier Aggregation” and Set to “Carrier Aggregation – Two RF Out Ports”
- Select “LTE Signaling” button

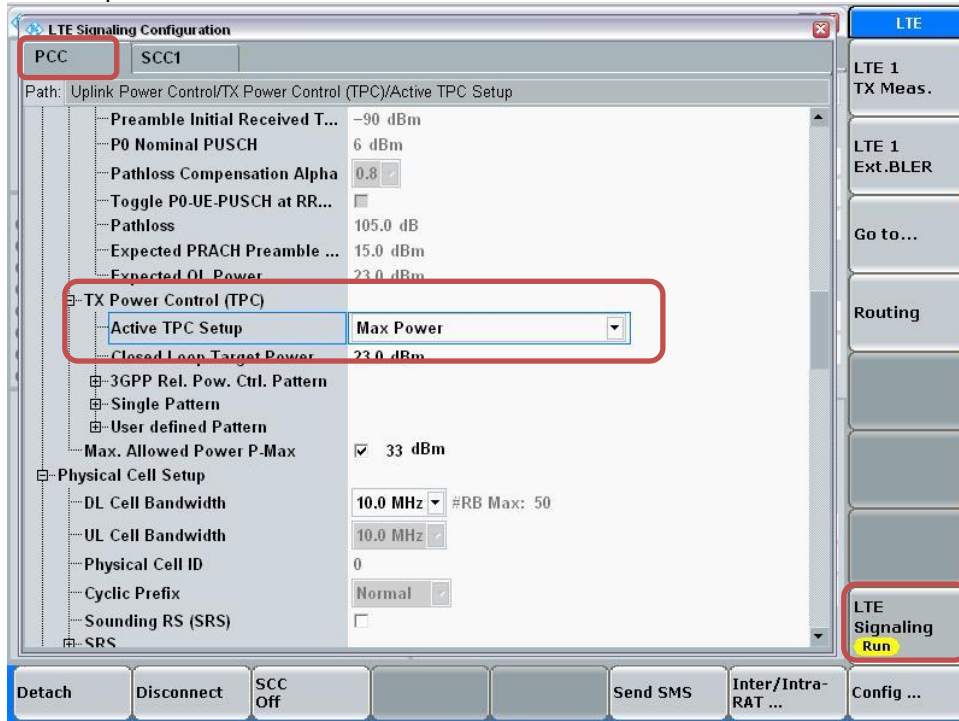


- Select “SCC1” tab
  - Select the testing Operating Band, Channel, Frequency, Cell Bandwidth

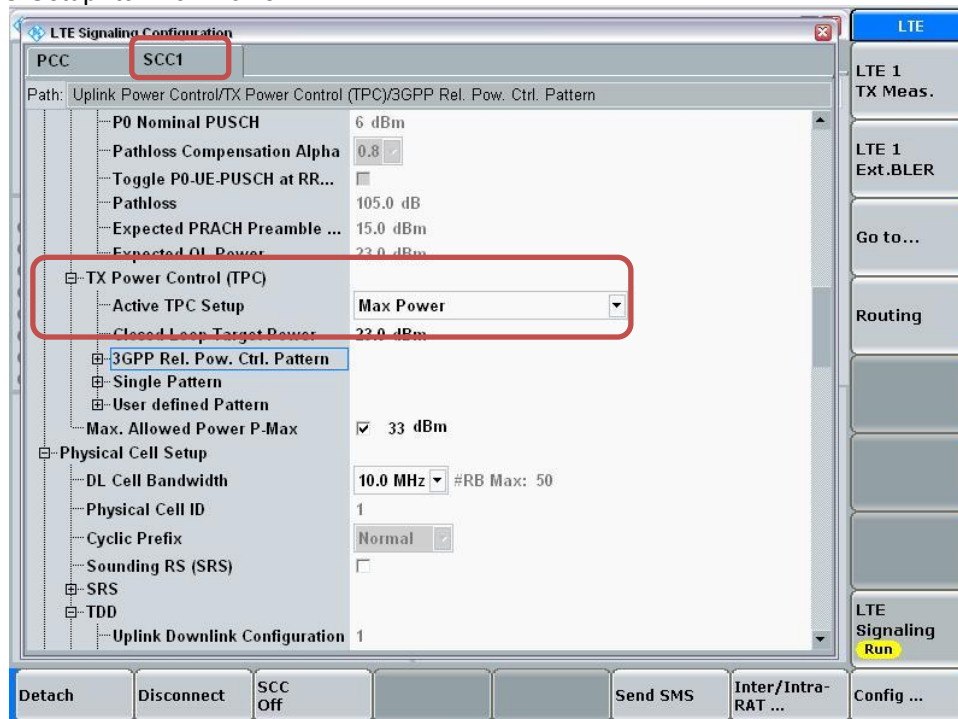


### Max Power Setting

- Select "LTE Signaling" button
- Select PCC tab
- Set "Active TPC Setup" to "Max Power"



- Select SCC1 tab
- Set "Active TPC Setup" to "Max Power"



**View TX Power**

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



The device supports LTE Advanced Rel-10, Cat 6 and Carrier Aggregation (CA) on downlink only for Inter and Intra band. Uplink CA is not supported. Supported bands and bandwidths are provided in Tables 1 and 2.

**Table 1**

Inter-Band E-UTRA Carrier Aggregation Configurations							
Configuration	Bands	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz
CA_2A-4A(0)	2	Yes	Yes	Yes	Yes	Yes	Yes
	4			Yes	Yes	Yes	Yes
CA_2A-5A(0)	2			Yes	Yes	Yes	Yes
	5			Yes	Yes		
CA_2A-12A(1)	2			Yes	Yes	Yes	Yes
	12		Yes	Yes	Yes		
CA_2A-13A(0)	2			Yes	Yes	Yes	Yes
	13				Yes		
CA_2A-17A(0)	2			Yes	Yes		
	17			Yes	Yes		
CA_2A-29A(0)	2			Yes	Yes		
	29		Yes	Yes	Yes		
CA_2A-29A(1)	2			Yes	Yes		
	29			Yes	Yes		
CA_2A-29A(2)	2			Yes	Yes	Yes	Yes
	29			Yes	Yes		
CA_4A-5A(1)	4			Yes	Yes	Yes	Yes
	5			Yes	Yes		
CA_4A-7A(0)	4			Yes	Yes		
	7			Yes	Yes	Yes	Yes
CA_4A-12A(1)	4	Yes	Yes	Yes	Yes	Yes	Yes
	12			Yes	Yes		
CA_4A-13A(0)	4			Yes	Yes	Yes	Yes
	13				Yes		
CA_4A-17A(0)	4			Yes	Yes		
	17			Yes	Yes		
CA_4A-29A(0)	4			Yes	Yes		
	29		Yes	Yes	Yes		
CA_12A-30A(0)	12			Yes	Yes		
	30			Yes	Yes		

Table 6 provides the results for the combinations selected for measurement from Table 1. For all PCCs, UL power measurements were made for all supported DL bandwidths on the channel/RB combination resulting in the highest output power. For Band 2, UL power measurements were made for all PCC/SCC combinations. For the remaining PCC bands, UL power measurements were made for only one PCC/SCC combination. The exception is PCC Band 5. The FCC requested measurements for the Band 5/4 PCC/SCC combination.



For each LTE band, the maximum UL output power is capped in the cellular power table for all channel/bandwidth/RB combinations, which are set in accordance with 3GPP protocols. All the power variations from manufacturing tolerances are accounted for in the tune-up procedures and SAR testing is done at the resulting maximum power level. Therefore, per KDB Publication 941225 D05A, Footnote 2, the maximum UL power with CA active is measured using the highest maximum output power configuration for uplink with downlink carrier aggregation inactive measured among the channel bandwidth, modulation and RB combinations in each frequency band.

**Table 2**

<b>Intra-Band Non-Contiguous E-UTRA CA configurations</b>	<b>Channel bandwidths for carrier [MHz]</b>	<b>Channel bandwidths for carrier [MHz]</b>
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(1)	5, 10, 15, 20	5, 10, 15, 20
<b>Intra-Band Contiguous E-UTRA CA configurations</b>	<b>Channel bandwidths for carrier [MHz]</b>	<b>Channel bandwidths for carrier [MHz]</b>
CA_7C(0)	10	20
	15	15, 20
	20	10, 15, 20
CA_41C(1)	5, 10	20
	15	15, 20
	20	5, 10, 15, 20

For intra-band CA, UL power measurements were made for each PCC/SCC combination with the widest bandwidth at the highest power level.

The high, middle, and low channels and frequencies for all inter-band and non-contiguous intra-band LTE Bands are provided in Table 3. Contiguous intra-band channels are provided in Tables 4 and 5.

**Table 3**

LTE Band 2	DL Channel / Frequency						UL Channel / Frequency					
Bandwidth	Low		Mid		High		Low		Mid		High	
20	1940	700	1960	900	1980	1099	1860	18700	1880	18900	1900	19099
15	1937.5	675	1960	900	1982.5	1124	1857.5	18675	1880	18900	1902.5	19124
10	1935	650	1960	900	1985	1149	1855	18650	1880	18900	1905	19149
5	1932.5	625	1960	900	1987.5	1174	1852.5	18625	1880	18900	1907.5	19174
3	1931.5	615	1960	900	1988.5	1184	1851.5	18615	1880	18900	1908.5	19184
1.4	1930.7	607	1960	900	1989.3	1192	1850.7	18607	1880	18900	1909.3	19192
LTE Band 4	DL Channel / Frequency						UL Channel / Frequency					
Bandwidth	Low		Mid		High		Low		Mid		High	
20	2120	2050	2132.5	2175	2145	2299	1720	20050	1732.5	20175	1745	20299
15	2117.5	2025	2132.5	2175	2147.5	2324	1717.5	20025	1732.5	20175	1747.5	20324
10	2115	2000	2132.5	2175	2150	2349	1715	20000	1732.5	20175	1750	20349
5	2112.5	1975	2132.5	2175	2152.5	2374	1712.5	19975	1732.5	20175	1752.5	20374
3	2111.5	1965	2132.5	2175	2153.5	2384	1711.5	19965	1732.5	20175	1753.5	20384
1.4	2110.7	1957	2132.5	2175	2154.3	2392	1710.7	19957	1732.5	20175	1754.3	20392
LTE Band 5	DL Channel / Frequency						UL Channel / Frequency					
Bandwidth	Low		Mid		High		Low		Mid		High	
10	874	2450	881.5	2525	889	2599	829	20450	836.5	20525	844	20599
5	871.5	2425	881.5	2525	891.5	2624	826.5	20425	836.5	20525	846.5	20624
3	870.5	2415	881.5	2525	892.5	2634	825.5	20415	836.5	20525	847.5	20634
	869.7	2407	881.5	2525	893.3	2642	824.7	20407	836.5	20525	848.3	20642
LTE Band 7	DL Channel / Frequency						UL Channel / Frequency					
Bandwidth	Low		Mid		High		Low		Mid		High	
20	2630	2850	2655	3100	2680	3349	2510	20850	2535	21100	2560	21349
15	2627.5	2825	2655	3100	2682.5	3374	2507.5	20825	2535	21100	2562.5	21374
10	2625	2800	2655	3100	2685	3399	2505	20800	2535	21100	2565	21399
5	2622.5	2775	2655	3100	2687.5	3424	2502.5	20775	2535	21100	2567.5	21424

LTE Band 12	DL Channel / Frequency						UL Channel / Frequency					
Bandwidth	Low		Mid		High		Low		Mid		High	
10	734	5060	737.5	5095	741	5129	704	23060	707.5	23095	711	23129
5	731.5	5035	737.5	5095	743.5	5154	701.5	23035	707.5	23095	713.5	23154
3	730.5	5025	737.5	5095	744.5	5164	700.5	23025	707.5	23095	714.5	23164
1.4	729.7	5017	737.5	5095	745.3	5172	699.7	23017	707.5	23095	715.3	23172
LTE Band 13	DL Channel / Frequency						UL Channel / Frequency					
Bandwidth	Low		Mid		High		Low		Mid		High	
10	751	5230	751	5230	751	5230	782	23230	782	23230	782	23230
5	748.5	5205	751	5230	753.5	5254	779.5	23205	782	23230	784.5	23254
LTE Band 17	DL Channel / Frequency						UL Channel / Frequency					
Bandwidth	Low		Mid		High		Low		Mid		High	
10	739	5780	740	5790	741	5799	709	23780	710	23790	711	23799
5	736.5	5755	740	5790	743.5	5824	706.5	23755	710	23790	713.5	23824
LTE Band 30	DL Channel / Frequency						UL Channel / Frequency					
Bandwidth	Low		Mid		High		Low		Mid		High	
10	2355	9820	2355	9820	2355	9820	2310	27710	2310	27710	2310	27710
5	2352.5	9795	2355	9820	2357.5	9844	2307.5	27685	2310	27710	2312.5	27734
LTE Band 41 (FCC)	DL & UL Channel / Frequency											
Bandwidth	Low		Low-Mid		Mid		Mid-High		High			
20	2506	39750	2549.5	40185	2593	40620	2636.5	41055	2680	41490		
15	2503.5	39725	2548.3	40173	2593	40620	2547.8	41068	2682.5	41515		
10	2501	39700	2547.0	40160	2593	40620	2639	41080	2685	41540		
5	2498.5	39675	2545.8	40148	2593	40620	2640.3	41093	2687.5	41565		

Table 4

Band 41 Contiguous Channel and Frequency Combinations										
PCC Bandwidth	5					10				
	Low	Low-Mid	Mid	Mid-High	High	Low	Low-Mid	Mid	Mid-High	High
PCC Frequency	2498.5	2545.8	2593	2640.3	2687.5	2501	2547	2593	2639	2685
SCC Bandwidth	20	20	20	20	20	20	20	20	20	20
SCC Frequency	2512.75		2610.25		2673.25	2515.5		2610.25		2670.5
SCC Frequency								2575.75		

PCC Bandwidth	15									
	Low		Low-Mid		Mid		Mid-High		High	
PCC Frequency	2503.5		2548.3		2593		2547.8		2682.5	
SCC Bandwidth	15	20	15	20	15	20	15	20	15	20
SCC Frequency	2518.5	2520.75			2608	2610.25			2667.75	2665
SCC Frequency					2578	2575.5				

PCC Bandwidth	20											
	Low				Low-Mid				Mid			
PCC Frequency	2506				2549.5				2593			
SCC Bandwidth	5	10	15	20	5	10	15	20	5	10	15	20
SCC Frequency	2510	2520.5	2523.25	2526					2610.25	2607.5	2610.25	2613
SCC Frequency									2575.75	2578.5	2575.75	2573

PCC Bandwidth	20							
	Mid-High				High			
PCC Frequency	2636.5				2680			
SCC Bandwidth	5	10	15	20	5	10	15	20
SCC Frequency					2675.75	2665.5	2662.75	2660
SCC Frequency								

**Table 5**

<b>Band 7 Contiguous Channel and Frequency Combinations</b>									
<b>PCC Bandwidth</b>	<b>10</b>			<b>15</b>					
	<b>Low</b>	<b>Mid</b>	<b>High</b>	<b>Low</b>		<b>Mid</b>		<b>High</b>	
<b>PCC Frequency</b>	2625	2655	2685	2627.5		2655		2682.5	
SCC Bandwidth	20	20	20	15	20	15	20	15	20
SCC Frequency	2639.5	2672.25	2670.5	2642.5	2644.75	2670	2672.25	2667.75	2665
SCC Frequency		2637.75				2640	2637.75		
<b>PCC Bandwidth</b>	<b>20</b>								
	<b>Low</b>			<b>Mid</b>			<b>High</b>		
<b>PCC Frequency</b>	2630			2655			2680		
SCC Bandwidth	10	15	20	10	15	20	10	15	20
SCC Frequency	2644.5	2647.25	2650	2669.5	2672.25	2675	2665.5	2662.75	2660
SCC Frequency				2641	2645	2635			

Measurement results are provided in Table 6. Based upon the measurement results, uplink power is not affected by downlink CA and additional SAR measurements are not required.

Table 6

PCC Band	SCC Band	PCC BW	PCC DL Freq. MHz	SCC BW	SCC DL Freq. MHz	UL RBs	UL RB Start	UL Freq. MHz	Mod.	UL Power Standalone dBm	UL Power CA dBm	Delta dB
2	4	1.4	1930.7	20	2120	1	3	1850.7	QPSK	24.0	24.0	0
2	4	1.4	1960	20		1	3	1880	QPSK	23.9		
2	4	1.4	1989.3	20		1	3	1909.3	QPSK	23.9		
2	4	3	1931.5	20		1	8	1851.5	QPSK	23.9		
2	4	3	1960	20		1	8	1880	QPSK	23.9		
2	4	3	1988.5	20	2145	1	8	1908.5	QPSK	24.0	24.0	0
2	4	5	1932.5	20		1	12	1852.5	QPSK	23.8		
2	4	5	1960	20	2132.5	1	12	1880	QPSK	24.0	23.9	-0.1
2	4	5	1987.5	20		1	12	1907.5	QPSK	23.9		
2	4	10	1935	20		1	24	1855	QPSK	23.9		
2	4	10	1960	20	2132.5	1	24	1880	QPSK	24.0	24.0	0
2	4	10	1985	20		1	24	1905	QPSK	23.9		
2	4	15	1937.5	20		1	36	1857.5	QPSK	23.9		
2	4	15	1960	20		1	36	1880	QPSK	23.9		
2	4	15	1982.5	20	2145	1	36	1902.5	QPSK	24.0	24.0	0
2	4	20	1940	20		1	49	1860	QPSK	24.0		
2	4	20	1960	20	2132.5	1	49	1880	QPSK	24.0	24.0	0
2	4	20	1980	20		1	49	1900	QPSK	24.0		
2	5	5	1932.5	10		1	12	1852.5	QPSK	23.8		
2	5	5	1960	10	881.5	1	12	1880	QPSK	24.0	23.9	-0.1
2	5	5	1987.5	10		1	12	1907.5	QPSK	23.9		
2	5	10	1935	10		1	24	1855	QPSK	23.9		

2	5	10	1960	10	881.5	1	24	1880	QPSK	24.0	24.0	0
2	5	10	1985	10		1	24	1905	QPSK	23.9		
2	5	15	1937.5	10		1	36	1857.5	QPSK	23.9		
2	5	15	1960	10		1	36	1880	QPSK	23.9		
2	5	15	1982.5	10	889	1	36	1902.5	QPSK	24.0	23.9	-0.1
2	5	20	1940	10		1	49	1860	QPSK	24.0		
2	5	20	1960	10	881.5	1	49	1880	QPSK	24.0	24.0	0
2	5	20	1980	10		1	49	1900	QPSK	24.0		
2	12	10	1935	10		1	24	1855	QPSK	23.9		
2	12	10	1960	10	737.5	1	24	1880	QPSK	24.0	24.0	0
2	12	10	1985	10		1	24	1905	QPSK	23.9		
2	12	15	1937.5	10		1	36	1857.5	QPSK	23.9		
2	12	15	1960	10		1	36	1880	QPSK	23.9		
2	12	15	1982.5	10	741	1	36	1902.5	QPSK	24.0	24.0	0
2	12	20	1940	10		1	49	1860	QPSK	24.0		
2	12	20	1960	10	737.5	1	49	1880	QPSK	24.0	24.0	0
2	12	20	1980	10		1	49	1900	QPSK	24.0		
2	17	5	1932.5	10		1	12	1852.5	QPSK	23.8		
2	17	5	1960	10	740	1	12	1880	QPSK	24.0	24.0	0
2	17	5	1987.5	10		1	12	1907.5	QPSK	23.9		
2	17	10	1935	10		1	24	1855	QPSK	23.9		
2	17	10	1960	10	740	1	24	1880	QPSK	24.0	23.9	-0.1
2	17	10	1985	10		1	24	1905	QPSK	23.9		
2	29	5	1932.5	10		1	12	1852.5	QPSK	23.8		
2	29	5	1960	10	722.5	1	12	1880	QPSK	24.0	23.9	-0.1
2	29	5	1987.5	10		1	12	1907.5	QPSK	23.9		
2	29	10	1935	10		1	24	1855	QPSK	23.9		
2	29	10	1960	10	722.5	1	24	1880	QPSK	24.0	23.9	-0.1

2	29	10	1985	10		1	24	1905	QPSK	23.9		
2	29	15	1937.5	10		1	36	1857.5	QPSK	23.9		
2	29	15	1960	10		1	36	1880	QPSK	23.9		
2	29	15	1982.5	10	723	1	36	1902.5	QPSK	24.0	24.0	0
2	29	20	1940	10		1	49	1860	QPSK	24.0		
2	29	20	1960	10	722.5	1	49	1880	QPSK	24.0	23.9	-0.1
2	29	20	1980	10		1	49	1900	QPSK	24.0		
4	2	5	2112.5	20		1	12	1712.5	QPSK	23.9		
4	2	5	2132.5	20	1960	1	12	1715	QPSK	24.0	24.0	0
4	2	5	2152.5	20		1	12	1732.5	QPSK	24.0		
4	2	10	2115	20		1	24	1715	QPSK	23.9		
4	2	10	2132.5	20		1	24	1732.5	QPSK	23.9		
4	2	10	2150	20	1980	1	24	1750	QPSK	24.0	24.0	0
4	2	15	2117.5	20		1	36	1717.5	QPSK	23.8		
4	2	15	2132.5	20	1960	1	36	1732.5	QPSK	24.0	23.9	-0.1
4	2	15	2147.5	20		1	36	1747.5	QPSK	24.0		
4	2	20	2120	20		1	49	1720	QPSK	24.0		
4	2	20	2132.5	20	1960	1	49	1732.5	QPSK	24.0	24.0	0
4	2	20	2145	20		1	49	1745	QPSK	24.0		
5	2	5	871.5	20		1	12	826.5	QPSK	24.0		
5	2	5	881.5	20	1960	1	12	836.5	QPSK	24.0	24.0	0
5	2	5	891.5	20		1	12	846.5	QPSK	23.9		
5	2	10	874	20		1	24	829	QPSK	24.0		
5	2	10	881.5	20	1960	1	24	836.5	QPSK	24.0	23.9	-0.1
5	2	10	889	20		1	24	844	QPSK	24.0		
5	4	5	871.5	20		1	12	826.5	QPSK	24.0		
5	4	5	881.5	20	2132.5	1	12	836.5	QPSK	24.0	24.0	0
5	4	5	891.5	20		1	12	846.5	QPSK	23.9		



5	4	10	874	20		1	24	829	QPSK	24.0		
5	4	10	881.5	20	2132.5	1	24	836.5	QPSK	24.0	24.0	0
5	4	10	889	20		1	24	844	QPSK	24.0		
7	4	5	2622.5	10		1	12	2502.5	QPSK	22.5		
7	4	5	2655	10	2132.5	1	12	2535	QPSK	22.5	22.5	0
7	4	5	2687.5	10		1	12	2567.5	QPSK	22.5		
7	4	10	2625	10		1	24	2505	QPSK	22.4		
7	4	10	2655	10	2132.5	1	24	2535	QPSK	22.5	22.5	0
7	4	10	2685	10		1	24	2565	QPSK	22.5		
7	4	15	2627.5	10	2175	1	36	2507.5	QPSK	22.4	22.4	0
7	4	15	2655	10		1	36	2535	QPSK	22.3		
7	4	15	2682.5	10		1	36	2562.5	QPSK	22.4		
7	4	20	2630	10		1	49	2510	QPSK	22.5		
7	4	20	2655	10	2132.5	1	49	2534	QPSK	22.5	22.5	0
7	4	20	2680	10		1	49	2540	QPSK	22.5		
12	2	3	730.5	20		1	8	700.5	QPSK	24.0		
12	2	3	737.5	20	1960	1	8	707.5	QPSK	24.0	24.0	0
12	2	3	744.5	20		1	8	714.5	QPSK	24.0		
12	2	5	731.5	20		1	12	701.5	QPSK	24.0		
12	2	5	737.5	20	1960	1	12	707.5	QPSK	24.0	24.0	0
12	2	5	743.5	20		1	12	713.5	QPSK	24.0		
12	2	10	734	20		1	24	704	QPSK	24.0		
12	2	10	737.5	20	1960	1	24	707.5	QPSK	24.0	24.0	0
12	2	10	741	20		1	24	711	QPSK	24.0		
13	2	10	751	20	1960	1	24	782	QPSK	24.0	23.9	-0.1
17	2	5	736.5	10		1	12	709	QPSK	24.0		
17	2	5	740	10	1960	1	12	710	QPSK	24.0	24.0	0
17	2	5	743.5	10		1	12	711	QPSK	24.0		

17	2	10	739	10		1	24	709	QPSK	24.0		
17	2	10	740	10	1960	1	24	710	QPSK	24.0	24.0	0
17	2	10	741	10		1	24	711	QPSK	24.0		
30	12	5	2352.5	10		1	12	2307.5	QPSK	23.0		
30	12	5	2355	10	737.5	1	12	2310	QPSK	23.0	23.0	0
30	12	5	2357.5	10		1	12	2312.5	QPSK	22.9		
30	12	10	2355	10	737.5	1	24	2310	QPSK	23.0	23.0	0
2	2	20	1940	20		1	49	1860	QPSK	24.0		
2	2	20	1960	20	1960	1	49	1880	QPSK	24.0	24.0	0
2	2	20	1980	20		1	49	1900	QPSK	24.0		
4	4	20	2120	20		1	49	1720	QPSK	24.0		
4	4	20	2132.5	20	2132.5	1	49	1732.5	QPSK	24.0	23.9	-0.1
4	4	20	2145	20		1	49	1745	QPSK	24.0		
7	7	20	2630	20		1	49	2510	QPSK	22.5		
7	7	20	2655	20	2655	1	49	2534	QPSK	22.5	22.5	0
7	7	20	2680	20		1	49	2540	QPSK	22.5		
25	25	20	1940	20		1	49	1940	QPSK	24.0		
25	25	20	1962.5	20	1960	1	49	1962.5	QPSK	24.0	23.9	-0.1
25	25	20	1985	20		1	49	1985	QPSK	24.0		
41	41	20	2506	20		1	49	2506	QPSK	22.5		
41	41	20	2549.5	20		1	49	2549.5	QPSK	22.5		
41	41	20	2593	20	2593	1	49	2593	QPSK	22.5	22.5	0
41	41	20	2636.5	20		1	49	2636.5	QPSK	22.5		
41	41	20	2680	20		1	49	2680	QPSK	22.5		

### 9.6. Wi-Fi 2.4GHz (DTS Band)

For 2.4 GHz band, there are two use cases:

- P<sub>Cell\_ON</sub>: This will be used when both Cellular and Wi-Fi radios are ON.
- P<sub>Cell\_OFF</sub>: This will be used when only Wi-Fi radio is ON

#### 9.6.1. P<sub>Cell\_ON</sub>

##### Measured Results

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Average Power (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
2.4	802.11b	1 Tx	1	2412	14.0	15.5	17.0	12.5
			2	2417	14.0	15.5	18.0	12.5
			6	2437	14.0	15.5	18.0	12.5
			9	2452	14.0	15.5	18.0	12.5
			10	2457	14.0	15.5	17.5	12.5
			12	2467	14.0	15.5	17.5	12.5
			13	2472	14.0	15.5	15.5	12.5
	802.11g	2 Tx CDD	1	2412	13.0		13.0	
			2	2417	14.0		15.5	
			3	2422	14.0		18.0	
			6	2437	14.0		18.0	
			9	2452	14.0		18.0	
			10	2457	14.0		16.0	
			11	2462	14.0		14.0	
			12	2467	11.0		11.0	
			13	2472	2.0		2.0	
			1	2412		13.0		12.5
			2	2417		15.5		12.5
			3	2422		15.5		12.5
			6	2437		15.5		12.5
			9	2452		15.5		12.5
			10	2457		15.5		12.5
			11	2462		14.0		12.5
			12	2467		11.0		11.0
			13	2472		2.0		2.0

**9.6.2. P<sub>Cell\_OFF</sub>**

**Measured Results**

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Average Power (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
2.4	802.11b	1 Tx	1	2412	17.0	17.0	17.0	17.0
			2	2417	18.0	18.5	18.0	18.0
			6	2437	18.0	18.5	18.0	18.0
			9	2452	18.0	18.5	18.0	18.0
			10	2457	17.5	17.5	17.5	17.5
			12	2467	17.5	17.5	17.5	17.5
			13	2472	15.5	15.5	15.5	15.5
	802.11g	2 Tx CDD	1	2412	13.0		13.0	
			2	2417	15.5		15.5	
			3	2422	18.0		18.0	
			6	2437	18.0		18.0	
			9	2452	18.0		18.0	
			10	2457	16.0		16.0	
			11	2462	14.0		14.0	
			12	2467	11.0		11.0	
			13	2472	2.0		2.0	
			1	2412		13.0		13.0
			2	2417		15.5		15.5
			3	2422		18.5		18.0
			6	2437		18.5		18.0
			9	2452		18.5		18.0
			10	2457		16.0		16.0
			11	2462		14.0		14.0
			12	2467		11.0		11.0
			13	2472		2.0		2.0

### 9.7. Wi-Fi 5GHz (U-NII Bands)

For 5 GHz band, there are two use cases:

- P<sub>Cell\_ON</sub>: This will be used when both Cellular and Wi-Fi radios are ON.
- P<sub>Cell\_OFF</sub>: This will be used when only Wi-Fi radio is ON

#### 9.7.1. P<sub>Cell\_ON</sub>

##### Measured Results

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Average Power (dBm)								
					UAT		LAT						
					HEAD	BODY	HEAD	BODY					
5.2	802.11n	1 Tx HT40	38	5190	Not Required	13.5	Not Required	Not Required					
			46	5230		15.5							
		2 Tx HT40 CDD	38	5190		13.5		9.0					
			46	5230		15.5		9.0					
	802.11ac	1 Tx VHT80	42	5210	Not Required	Not Required	Not Required	9.0					
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Average Power (dBm)								
					UAT		LAT						
					HEAD	BODY	HEAD	BODY					
5.3	802.11a	1 Tx	52	5260	Not Required	Not Required	18.5	Not Required					
			56	5280			18.5						
			60	5300			18.5						
			64	5320			16.5						
	802.11n	2 Tx HT40 CDD	54	5270	11.0		18.0						
			62	5310	11.0		14.0						
	802.11ac	1 Tx VHT80	58	5290	10.5	Not Required	Not Required	Not Required					
	Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Average Power (dBm)							
						UAT		LAT					
						HEAD	BODY	HEAD	BODY				
5.5	802.11a	1 Tx	100	5500	Not Required	Not Required	16.5	Not Required					
			104	5520			18.5						
			108	5540			18.5						
			112	5560			18.5						
			116	5580			18.5						
			120	5600			18.5						
			124	5620			18.5						
			128	5640			18.5						
			132	5660			18.5						
			136	5680			18.5						
			140	5700			15.0						
			144	5720			18.5						
			802.11ac	1 Tx VHT80			106		5530	10.8	13.0	Not Required	6.5
							122		5610	10.8	16.0		6.5
	138	5690			10.8	16.0	6.5						
	2 Tx VHT80 CDD	106		5530	10.8		12.0						
		122		5610	10.8		18.0						
		138		5690	10.8		18.0						
				106	5530		12.0	6.5					
				122	5610		16.0	6.5					
			138	5690		16.0	6.5						

**Measured Results (continued)**

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Average Power (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
5.8	802.11a	2 Tx CDD	149	5745	12.0		15.0	
			153	5765	12.0		18.0	
			157	5785	12.0		18.0	
			161	5805	12.0		18.0	
			165	5825	12.0		16.0	
	802.11n	1 Tx HT40	151	5755	Not Required	Not Required	14.5	Not Required
			159	5795			18.0	
		2 Tx HT40 CDD	151	5755		13.0		10.5
			159	5795		14.0		10.5
	802.11ac	1 Tx VHT80	155	5775	11.5	14.0	Not Required	10.5

**9.7.2. P<sub>Cell\_OFF</sub>**

**Measured Results**

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Average Power (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
5.2	802.11n	1 Tx HT40	38	5190	Not Required	Not Required	Not Required	13.5
			46	5230				15.5
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Average Power (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
5.3	802.11a	1 Tx	52	5260	Not Required	18.0	18.5	Not Required
			56	5280		18.0	18.5	
			60	5300		18.0	18.5	
			64	5320		16.5	16.5	
	802.11n	1 Tx HT40	54	5270	14.5	Not Required	Not Required	Not Required
			62	5310	14.4			
		2 Tx HT40 CDD	54	5270	15.0		18.0	
			62	5310	14.0		14.0	
			54	5270		17.5		13.5
			62	5310		14.0		13.5
Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Average Power (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
5.5	802.11a	1 Tx	100	5500	Not Required	16.5	16.5	Not Required
			104	5520		18.0	18.5	
			108	5540		17.8	18.5	
			112	5560		17.8	18.5	
			116	5580		17.8	18.5	
			120	5600		17.9	18.5	
			124	5620		17.9	18.5	
			128	5640		17.9	18.5	
			132	5660		17.9	18.5	
			136	5680		17.8	18.5	
			140	5700		15.0	15.0	
			144	5720		17.9	18.5	
	802.11ac	1 Tx VHT80	106	5530	13.0	Not Required	Not Required	13.0
			122	5610	14.5			13.5
			138	5690	14.5			13.5
		2 Tx VHT80 CDD	106	5530	12.0		12.0	
			122	5610	14.5		18.0	
			138	5690	14.5		18.0	
			106	5530		12.0		12.0
			122	5610		17.5		13.5
			138	5690		17.5		13.5

**Measured Results (continued)**

Band (GHz)	Mode	No. of Transmitters	Ch #	Freq. (MHz)	Average Power (dBm)			
					UAT		LAT	
					HEAD	BODY	HEAD	BODY
5.8	802.11a	1 Tx	149	5745	Not Required	16.0	Not Required	Not Required
			153	5765		18.0		
			157	5785		18.0		
			161	5805		18.0		
			165	5825		17.5		
		2 Tx CDD	149	5745	15.0		15.0	
			153	5765	16.0		18.0	
			157	5785	16.0		18.0	
			161	5805	16.0		18.0	
			165	5825	16.0		16.0	
	802.11n	1 Tx HT40	149	5745		15.0		15.0
			153	5765		18.0		17.0
			157	5785		18.0		17.0
			161	5805		18.0		17.0
			165	5825		16.0		16.0
			151	5755	14.5	Not Required	14.5	14.5
			159	5795	16.0		18.0	17.0



**9.8. Bluetooth** $P_{Low}$ 

Band (GHz)	Mode	Ch #	Freq. (MHz)	Avg Pwr (dBm)
2.4	V3.0 + EDR, GFSK	0	2402	10.5
		39	2441	10.5
		78	2480	10.4

 $P_{Max}$ 

Band (GHz)	Mode	Ch #	Freq. (MHz)	Avg Pwr (dBm)
2.4	V3.0 + EDR, GFSK	0	2402	14.9
		39	2441	15.0
		78	2480	14.7

## 10. Measured and Reported (Scaled) SAR Results

Model A1634 was set as the primary model for testing.

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:

- $\leq 0.8$  W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$  MHz
- $\leq 0.6$  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
- $\leq 0.4$  W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is  $\geq 200$  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 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  $\leq 1.2$  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 v02r01:

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:

- $\leq 0.4$  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 closest/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the reported SAR is  $\leq 0.8$  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  $\leq 1.2$  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  $\leq 1.2$  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  $\leq 1.2$  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.

### 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	Voice	0	Left Touch	190	836.6	31.5	31.5	0.384	0.384	0.255	0.255	
			Left Tilt	190	836.6	31.5	31.5	0.326	0.326	0.167	0.167	
			Right Touch	190	836.6	31.5	31.5	0.426	0.426	0.254	0.254	
			Right Tilt	190	836.6	31.5	31.5	0.279	0.279	0.151	0.151	
Head VoIP	GPRS 2 Slots	0	Left Touch	190	836.6	30.5	30.5	0.670	0.670	0.493	0.493	
			Left Tilt	190	836.6	30.5	30.5	0.562	0.562	0.282	0.282	
			Right Touch	128	824.2	30.5	30.5	0.750	0.750	0.446	0.446	
				190	836.6	30.5	30.5	0.882	0.882	0.525	0.525	1
				251	848.8	30.5	30.5	0.863	0.863	0.509	0.509	
			Right Tilt	190	836.6	30.5	30.5	0.544	0.544	0.292	0.292	
Body-worn	Voice	5	Rear	190	836.6	31.5	31.5	0.258	0.258	0.159	0.159	
			Front	190	836.6	31.5	31.5	0.276	0.276	0.167	0.167	
Body-worn(VoIP) & Hotspot	GPRS 2 Slots	5	Rear	190	836.6	30.5	30.5	0.490	0.490	0.301	0.301	
Front			190	836.6	30.5	30.5	0.487	0.487	0.295	0.295		
Hotspot			Edge 1	190	836.6	30.5	30.5	0.328	0.328	0.150	0.150	
			Edge 2	190	836.6	30.5	30.5	0.335	0.335	0.220	0.220	
			Edge 4	190	836.6	30.5	30.5	0.133	0.133	0.087	0.087	

#### 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	Voice	0	Left Touch	190	836.6	33.5	33.5	0.288	0.288	0.221	0.221	
			Left Tilt	190	836.6	33.5	33.5	0.148	0.148	0.115	0.115	
			Right Touch	190	836.6	33.5	33.5	0.250	0.250	0.196	0.196	
			Right Tilt	190	836.6	33.5	33.5	0.147	0.147	0.115	0.115	
Head VoIP	GPRS 2 Slots	0	Left Touch	128	824.2	32.5	32.5	0.719	0.719	0.550	0.550	
				190	836.6	32.5	32.5	0.846	0.846	0.647	0.647	
				251	848.8	32.5	32.5	0.818	0.818	0.623	0.623	
			Left Tilt	190	836.6	32.5	32.5	0.383	0.383	0.299	0.299	
			Right Touch	190	836.6	32.5	32.5	0.622	0.622	0.488	0.488	
			Right Tilt	190	836.6	32.5	32.5	0.433	0.433	0.338	0.338	
Body-worn	Voice	5	Rear	190	836.6	33.5	33.5	0.596	0.596	0.340	0.340	
			Front	190	836.6	33.5	33.5	0.739	0.739	0.409	0.409	
Body-worn(VoIP) & Hotspot	GPRS 2 Slots	5	Rear	128	824.2	32.5	32.5	0.732	0.732	0.430	0.430	
190				836.6	32.5	32.5	0.978	0.978	0.561	0.561	2	
251				848.8	32.5	32.5	0.962	0.962	0.551	0.551		
Front			190	836.6	32.5	32.5	0.712	0.712	0.388	0.388		
Hotspot			Edge 2	190	836.6	32.5	32.5	0.286	0.286	0.186	0.186	
			Edge 3	190	836.6	32.5	32.5	0.619	0.619	0.290	0.290	
	Edge 4	190	836.6	32.5	32.5	0.665	0.665	0.436	0.436			

**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	Voice	0	Left Touch	661	1880.0	26.5	26.5	0.392	0.392	0.201	0.201		
			Left Tilt	661	1880.0	26.5	26.5	0.390	0.390	0.197	0.197		
			Right Touch	512	1850.2	26.5	26.5	0.818	0.818	0.410	0.410		
				661	1880.0	26.5	26.5	0.967	0.967	0.474	0.474	3	
			Right Tilt	810	1909.8	26.5	26.5	0.864	0.864	0.434	0.434		
				512	1850.2	26.5	26.5	0.774	0.774	0.349	0.349		
				661	1880.0	26.5	26.5	0.802	0.802	0.356	0.356		
810	1909.8	26.5	26.5	0.760	0.760	0.331	0.331						
Head VoIP	GPRS 2 Slots	0	Left Touch	661	1880.0	23.5	23.5	0.385	0.385	0.201	0.201		
			Left Tilt	661	1880.0	23.5	23.5	0.400	0.400	0.201	0.201		
			Right Touch	512	1850.2	23.5	23.5	0.854	0.854	0.428	0.428		
				661	1880.0	23.5	23.5	0.900	0.900	0.432	0.432		
			Right Tilt	810	1909.8	23.5	23.5	0.907	0.907	0.454	0.454		
				512	1850.2	23.5	23.5	0.748	0.748	0.343	0.343		
				661	1880.0	23.5	23.5	0.944	0.944	0.427	0.427		
810	1909.8	23.5	23.5	0.792	0.792	0.350	0.350						
Body-worn	Voice	5	Rear	512	1850.2	27.2	27.2	0.989	0.989	0.457	0.457		
				661	1880.0	27.2	27.2	0.995	0.995	0.465	0.465		
				810	1909.8	27.2	27.2	0.930	0.930	0.454	0.454		
			Front	512	1850.2	27.2	27.2	0.957	0.957	0.450	0.450		
				661	1880.0	27.2	27.2	0.964	0.964	0.450	0.450		
				810	1909.8	27.2	27.2	0.947	0.947	0.437	0.437		
Body-worn(VoIP) & Hotspot	GPRS 2 Slots	5	Rear	512	1850.2	24.2	24.2	0.864	0.864	0.426	0.426		
				661	1880.0	24.2	24.2	0.845	0.845	0.417	0.417		
				810	1909.8	24.2	24.2	0.802	0.802	0.394	0.394		
			Front	512	1850.2	24.2	24.2	0.836	0.836	0.411	0.411		
				661	1880.0	24.2	24.2	0.850	0.850	0.409	0.409		
				810	1909.8	24.2	24.2	0.848	0.848	0.397	0.397		
			Hotspot	Edge 1	661	1880.0	24.2	24.2	0.485	0.485	0.226	0.226	
				Edge 2	661	1880.0	24.2	24.2	0.045	0.045	0.026	0.026	
				Edge 4	661	1880.0	24.2	24.2	0.346	0.346	0.197	0.197	

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	Voice	0	Left Touch	661	1880.0	30.5	30.5	0.218	0.218	0.146	0.146	
			Left Tilt	661	1880.0	30.5	30.5	0.151	0.151	0.091	0.091	
			Right Touch	661	1880.0	30.5	30.5	0.474	0.474	0.299	0.299	
			Right Tilt	661	1880.0	30.5	30.5	0.148	0.148	0.088	0.088	
Head VoIP	GPRS 2 Slots	0	Left Touch	661	1880.0	29.5	29.0	0.290	0.325	0.192	0.215	
			Left Tilt	661	1880.0	29.5	29.0	0.219	0.246	0.130	0.146	
			Right Touch	661	1880.0	29.5	29.0	0.657	0.737	0.416	0.467	
			Right Tilt	661	1880.0	29.5	29.0	0.153	0.172	0.092	0.103	
Body-worn	Voice	5	Rear	512	1850.2	28.2	28.2	0.827	0.827	0.410	0.410	
				661	1880.0	28.2	28.2	1.040	1.040	0.515	0.515	
				810	1909.8	28.2	28.2	1.100	1.100	0.549	0.549	
			Front	512	1850.2	28.2	28.2	0.994	0.994	0.489	0.489	
				661	1880.0	28.2	28.2	1.010	1.010	0.497	0.497	
			810	1909.8	28.2	28.2	1.130	1.130	0.551	0.551	4	
Body-worn(VoIP) & Hotspot	GPRS 2 Slots	5	Rear	512	1850.2	25.2	25.2	0.801	0.801	0.397	0.397	
				661	1880.0	25.2	25.2	1.020	1.020	0.501	0.501	
				810	1909.8	25.2	25.2	1.080	1.080	0.529	0.529	
			Front	512	1850.2	25.2	25.2	0.763	0.763	0.385	0.385	
				661	1880.0	25.2	25.2	0.943	0.943	0.470	0.470	
				810	1909.8	25.2	25.2	1.000	1.000	0.478	0.478	
Hotspot			Edge 2	661	1880.0	25.2	25.2	0.418	0.418	0.231	0.231	
			Edge 3	661	1880.0	25.2	25.2	0.520	0.520	0.233	0.233	
			Edge 4	661	1880.0	25.2	25.2	0.070	0.070	0.037	0.037	

### 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	23.0	23.0	0.405	0.405	0.278	0.278	
			Left Tilt	4183	836.6	23.0	23.0	0.322	0.322	0.163	0.163	
			Right Touch	4183	836.6	23.0	23.0	0.581	0.581	0.350	0.350	5
			Right Tilt	4183	836.6	23.0	23.0	0.354	0.354	0.192	0.192	
Body-worn & Hotspot	Rel 99 RMC	5	Rear	4183	836.6	23.0	23.0	0.260	0.260	0.160	0.160	
			Front	4183	836.6	23.0	23.0	0.283	0.283	0.177	0.177	
Hotspot	Rel 99 RMC	5	Edge 1	4183	836.6	23.0	23.0	0.150	0.150	0.070	0.070	
			Edge 2	4183	836.6	23.0	23.0	0.219	0.219	0.145	0.145	
			Edge 4	4183	836.6	23.0	23.0	0.091	0.091	0.060	0.060	

#### 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	0.390	0.390	0.299	0.299	
			Left Tilt	4183	836.6	25.0	25.0	0.189	0.189	0.148	0.148	
			Right Touch	4183	836.6	25.0	25.0	0.325	0.325	0.256	0.256	
			Right Tilt	4183	836.6	25.0	25.0	0.179	0.179	0.141	0.141	
Body-worn & Hotspot	Rel 99 RMC	5	Rear	4183	836.6	25.0	25.0	0.620	0.620	0.371	0.371	
			Front	4132	826.4	25.0	25.0	0.643	0.643	0.372	0.372	
				4183	836.6	25.0	25.0	0.800	0.800	0.458	0.458	
				4233	846.6	25.0	25.0	0.952	0.952	0.542	0.542	6
Hotspot	Rel 99 RMC	5	Edge 2	4183	836.6	25.0	25.0	0.381	0.381	0.251	0.251	
			Edge 3	4183	836.6	25.0	25.0	0.653	0.653	0.309	0.309	
			Edge 4	4132	826.4	25.0	25.0	0.639	0.639	0.422	0.422	
				4183	836.6	25.0	25.0	0.868	0.868	0.569	0.569	
				4233	846.6	25.0	25.0	0.879	0.879	0.576	0.576	

### 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	18.8	18.8	0.378	0.378	0.225	0.225	
			Left Tilt	1413	1732.6	18.8	18.8	0.344	0.344	0.195	0.195	
			Right Touch	1312	1712.4	18.8	18.8	0.881	0.881	0.474	0.474	
				1413	1732.6	18.8	18.8	0.965	0.965	0.519	0.519	
			1513	1752.6	18.8	18.8	0.993	0.993	0.532	0.532	7	
Right Tilt	1413	1732.6	18.8	18.8	0.792	0.792	0.394	0.394				
Body-worn & Hotspot	Rel 99 RMC	5	Rear	1312	1712.4	20.0	20.0	0.860	0.860	0.410	0.410	
				1413	1732.6	20.0	20.0	0.937	0.937	0.445	0.445	
				1513	1752.6	20.0	20.0	0.971	0.971	0.460	0.460	
			Front	1312	1712.4	20.0	20.0	0.790	0.790	0.409	0.409	
				1413	1732.6	20.0	20.0	0.841	0.841	0.436	0.436	
				1513	1752.6	20.0	20.0	0.936	0.936	0.482	0.482	
Hotspot	Rel 99 RMC	5	Edge 1	1413	1732.6	20.0	20.0	0.568	0.568	0.295	0.295	
			Edge 2	1413	1732.6	20.0	20.0	0.021	0.021	0.012	0.012	
			Edge 4	1413	1732.6	20.0	20.0	0.558	0.558	0.318	0.318	

#### 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	1413	1732.6	25.0	25.0	0.386	0.386	0.258	0.258	
			Left Tilt	1413	1732.6	25.0	25.0	0.302	0.302	0.180	0.180	
			Right Touch	1413	1732.6	25.0	25.0	0.778	0.778	0.503	0.503	
			Right Tilt	1413	1732.6	25.0	25.0	0.313	0.313	0.189	0.189	
Body-worn & Hotspot	Rel 99 RMC	5	Rear	1312	1712.4	20.3	20.3	1.030	1.030	0.521	0.521	
				1413	1732.6	20.3	20.3	1.090	1.090	0.554	0.554	
				1513	1752.6	20.3	20.3	1.120	1.120	0.562	0.562	
			Front	1312	1712.4	20.3	20.3	1.020	1.020	0.534	0.534	
				1413	1732.6	20.3	20.3	1.130	1.130	0.588	0.588	8
1513	1752.6	20.3	20.3	1.100	1.100	0.564	0.564					
Hotspot	Rel 99 RMC	5	Edge 2	1413	1732.6	20.3	20.3	0.714	0.714	0.411	0.411	
			Edge 3	1312	1712.4	20.3	20.3	0.939	0.939	0.473	0.473	
				1413	1732.6	20.3	20.3	0.977	0.977	0.487	0.487	
				1513	1752.6	20.3	20.3	0.980	0.980	0.482	0.482	
			Edge 4	1413	1732.6	20.3	20.3	0.052	0.052	0.028	0.028	



### 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	16.5	16.5	0.332	0.332	0.172	0.172	
			Left Tilt	9400	1880.0	16.5	16.5	0.338	0.338	0.169	0.169	
			Right Touch	9262	1852.4	16.5	16.5	0.904	0.904	0.456	0.456	
				9400	1880.0	16.5	16.5	0.825	0.825	0.407	0.407	
			9538	1907.6	16.5	16.5	0.734	0.734	0.351	0.351		
Right Tilt	9400	1880.0	16.5	16.5	0.763	0.763	0.348	0.348				
Body-worn & Hotspot	Rel 99 RMC	5	Rear	9262	1852.4	18.3	18.3	0.996	0.996	0.466	0.466	
				9400	1880.0	18.3	18.3	0.942	0.942	0.461	0.461	
				9538	1907.6	18.3	18.3	0.802	0.802	0.391	0.391	
			Front	9400	1880.0	18.3	18.3	0.663	0.663	0.316	0.316	
Hotspot	Rel 99 RMC	5	Edge 1	9400	1880.0	18.3	18.3	0.544	0.544	0.247	0.247	
			Edge 2	9400	1880.0	18.3	18.3	0.068	0.068	0.037	0.037	
			Edge 4	9400	1880.0	18.3	18.3	0.400	0.400	0.226	0.226	

#### 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	9400	1880.0	25.0	25.0	0.645	0.645	0.425	0.425	
			Left Tilt	9400	1880.0	25.0	25.0	0.430	0.430	0.260	0.260	
			Right Touch	9262	1852.4	25.0	25.0	0.983	0.983	0.622	0.622	
				9400	1880.0	25.0	25.0	1.060	1.060	0.663	0.663	
			9538	1907.6	25.0	25.0	1.120	1.120	0.698	0.698	9	
Right Tilt	9400	1880.0	25.0	25.0	0.483	0.483	0.280	0.280				
Body-worn & Hotspot	Rel 99 RMC	5	Rear	9262	1852.4	19.3	19.3	1.000	1.000	0.500	0.500	
				9400	1880.0	19.3	19.3	1.130	1.130	0.561	0.561	10
				9538	1907.6	19.3	19.3	1.130	1.130	0.558	0.558	
			Front	9262	1852.4	19.3	19.3	0.906	0.906	0.449	0.449	
				9400	1880.0	19.3	19.3	1.020	1.020	0.499	0.499	
9538	1907.6	19.3	19.3	1.090	1.090	0.529	0.529					
Hotspot	Rel 99 RMC	5	Edge 2	9400	1880.0	19.3	19.3	0.563	0.563	0.310	0.310	
			Edge 3	9400	1880.0	19.3	19.3	0.712	0.712	0.307	0.307	
			Edge 4	9400	1880.0	19.3	19.3	0.059	0.059	0.032	0.032	

**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	23.0	23.0	0.408	0.408	0.273	0.273	
			Left Tilt	384	836.5	23.0	23.0	0.390	0.390	0.196	0.196	
			Right Touch	384	836.5	23.0	23.0	0.549	0.549	0.329	0.329	11
			Right Tilt	384	836.5	23.0	23.0	0.329	0.329	0.177	0.177	
	1xEVDO (Rel. 0)	0	Left Touch	384	836.5	23.0	23.0	0.370	0.370	0.249	0.249	
			Left Tilt	384	836.5	23.0	23.0	0.336	0.336	0.171	0.171	
			Right Touch	384	836.5	23.0	23.0	0.499	0.499	0.298	0.298	
			Right Tilt	384	836.5	23.0	23.0	0.288	0.288	0.157	0.157	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	384	836.5	23.0	23.0	0.288	0.288	0.176	0.176	
			Front	384	836.5	23.0	23.0	0.298	0.298	0.186	0.186	
Hotspot	1xRTT (RC3 SO32)	5	Edge 1	384	836.5	23.0	23.0	0.168	0.168	0.078	0.078	
			Edge 2	384	836.5	23.0	23.0	0.255	0.255	0.167	0.167	
			Edge 4	384	836.5	23.0	23.0	0.115	0.115	0.076	0.076	

## 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	1xRTT (RC3 SO55)	0	Left Touch	384	836.5	25.0	25.0	0.335	0.335	0.257	0.257	
			Left Tilt	384	836.5	25.0	25.0	0.130	0.130	0.103	0.103	
			Right Touch	384	836.5	25.0	25.0	0.285	0.285	0.224	0.224	
			Right Tilt	384	836.5	25.0	25.0	0.133	0.133	0.104	0.104	
	1xEVDO (Rel. 0)	0	Left Touch	384	836.5	25.0	25.0	0.306	0.306	0.237	0.237	
			Left Tilt	384	836.5	25.0	25.0	0.124	0.124	0.098	0.098	
			Right Touch	384	836.5	25.0	25.0	0.257	0.257	0.206	0.206	
			Right Tilt	384	836.5	25.0	25.0	0.126	0.126	0.100	0.100	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	384	836.5	25.0	25.0	0.569	0.569	0.336	0.336	
			Front	384	836.5	25.0	25.0	0.650	0.650	0.379	0.379	12
Hotspot	1xRTT (RC3 SO32)	5	Edge 2	384	836.5	25.0	25.0	0.248	0.248	0.164	0.164	
			Edge 3	384	836.5	25.0	25.0	0.458	0.458	0.220	0.220	
			Edge 4	384	836.5	25.0	25.0	0.629	0.629	0.414	0.414	

### 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	16.5	16.5	0.357	0.357	0.178	0.178		
			Left Tilt	600	1880.0	16.5	16.5	0.314	0.314	0.158	0.158		
			Right Touch	25	1851.3	16.5	16.5	0.935	0.935	0.477	0.477		
				600	1880.0	16.5	16.5	0.871	0.871	0.430	0.430		
				1175	1908.8	16.5	16.5	0.782	0.782	0.376	0.376		
			Right Tilt	25	1851.3	16.5	16.5	0.843	0.843	0.397	0.397		
	600	1880.0		16.5	16.5	0.802	0.802	0.372	0.372				
	1175	1908.8		16.5	16.5	0.747	0.747	0.332	0.332				
	1xEVDO (Rel. 0)	0	Left Touch	600	1880.0	16.5	16.5	0.354	0.354	0.179	0.179		
			Left Tilt	600	1880.0	16.5	16.5	0.308	0.308	0.155	0.155		
			Right Touch	600	1880.0	16.5	16.5	0.749	0.749	0.374	0.374		
			Right Tilt	600	1880.0	16.5	16.5	0.712	0.712	0.333	0.333		
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	25	1851.3	18.3	18.3	0.922	0.922	0.448	0.448		
				600	1880.0	18.3	18.3	0.879	0.879	0.427	0.427		
				1175	1908.8	18.3	18.3	0.754	0.754	0.365	0.365		
Hotspot	1xRTT (RC3 SO32)	5	Front	600	1880.0	18.3	18.3	0.527	0.527	0.262	0.262		
				Edge 1	600	1880.0	18.3	18.3	0.436	0.436	0.212	0.212	
				Edge 2	600	1880.0	18.3	18.3	0.054	0.054	0.030	0.030	
				Edge 4	600	1880.0	18.3	18.3	0.449	0.449	0.249	0.249	

#### 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	1xRTT (RC3 SO55)	0	Left Touch	600	1880.0	25.0	25.0	0.629	0.629	0.418	0.418	
			Left Tilt	600	1880.0	25.0	25.0	0.510	0.510	0.309	0.309	
			Right Touch	25	1851.3	25.0	25.0	0.863	0.863	0.548	0.548	
				600	1880.0	25.0	25.0	0.963	0.963	0.607	0.607	13
				1175	1908.8	25.0	25.0	0.971	0.971	0.606	0.606	
			Right Tilt	600	1880.0	25.0	25.0	0.449	0.449	0.256	0.256	
	1xEVDO (Rel. 0)	0	Left Touch	600	1880.0	25.0	25.0	0.581	0.581	0.386	0.386	
			Left Tilt	600	1880.0	25.0	25.0	0.480	0.480	0.293	0.293	
			Right Touch	25	1851.3	25.0	25.0	0.787	0.787	0.497	0.497	
				600	1880.0	25.0	25.0	0.888	0.888	0.555	0.555	
				1175	1908.8	25.0	25.0	0.895	0.895	0.555	0.555	
			Right Tilt	600	1880.0	25.0	25.0	0.390	0.390	0.227	0.227	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	25	1851.3	19.3	19.3	1.000	1.000	0.504	0.504	
				600	1880.0	19.3	19.3	0.936	0.936	0.471	0.471	
				1175	1908.8	19.3	19.3	1.010	1.010	0.510	0.510	14
			Front	25	1851.3	19.3	19.3	0.909	0.909	0.454	0.454	
				600	1880.0	19.3	19.3	0.885	0.885	0.440	0.440	
				1175	1908.8	19.3	19.3	0.940	0.940	0.468	0.468	
Hotspot	1xRTT (RC3 SO32)	5	Edge 2	600	1880.0	19.3	19.3	0.663	0.663	0.356	0.356	
				25	1851.3	19.3	19.3	0.702	0.702	0.312	0.312	
			Edge 3	600	1880.0	19.3	19.3	0.863	0.863	0.372	0.372	
				1175	1908.8	19.3	19.3	0.979	0.979	0.417	0.417	
				600	1880.0	19.3	19.3	0.068	0.068	0.037	0.037	
			Edge 4	600	1880.0	19.3	19.3	0.068	0.068	0.037	0.037	

### 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	23.0	23.0	0.339	0.339	0.238	0.238	15
			Left Tilt	580	820.5	23.0	23.0	0.213	0.213	0.122	0.122	
			Right Touch	580	820.5	23.0	23.0	0.494	0.494	0.295	0.295	
			Right Tilt	580	820.5	23.0	23.0	0.308	0.308	0.161	0.161	
	1xEVDO (Rel. 0)	0	Left Touch	580	820.5	23.0	23.0	0.329	0.329	0.228	0.228	
			Left Tilt	580	820.5	23.0	23.0	0.171	0.171	0.100	0.100	
			Right Touch	580	820.5	23.0	23.0	0.493	0.493	0.295	0.295	
			Right Tilt	580	820.5	23.0	23.0	0.256	0.256	0.137	0.137	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	580	820.5	23.0	23.0	0.191	0.191	0.116	0.116	
			Front	580	820.5	23.0	23.0	0.228	0.228	0.139	0.139	
Hotspot	1xRTT (RC3 SO32)	5	Edge 1	580	820.5	23.0	23.0	0.092	0.092	0.042	0.042	
			Edge 2	580	820.5	23.0	23.0	0.190	0.190	0.125	0.125	
			Edge 4	580	820.5	23.0	23.0	0.097	0.097	0.065	0.065	

#### 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	1xRTT (RC3 SO55)	0	Left Touch	580	820.5	25.0	25.0	0.251	0.251	0.191	0.191	
			Left Tilt	580	820.5	25.0	25.0	0.097	0.097	0.076	0.076	
			Right Touch	580	820.5	25.0	25.0	0.204	0.204	0.160	0.160	
			Right Tilt	580	820.5	25.0	25.0	0.099	0.099	0.076	0.076	
	1xEVDO (Rel. 0)	0	Left Touch	580	820.5	25.0	25.0	0.211	0.211	0.164	0.164	
			Left Tilt	580	820.5	25.0	25.0	0.097	0.097	0.076	0.076	
			Right Touch	580	820.5	25.0	25.0	0.181	0.181	0.145	0.145	
			Right Tilt	580	820.5	25.0	25.0	0.100	0.100	0.077	0.077	
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	580	820.5	25.0	25.0	0.495	0.495	0.325	0.325	
			Front	580	820.5	25.0	25.0	0.610	0.610	0.357	0.357	
Hotspot	1xRTT (RC3 SO32)	5	Edge 2	580	820.5	25.0	25.0	0.300	0.300	0.198	0.198	
			Edge 3	580	820.5	25.0	25.0	0.347	0.347	0.167	0.167	
			Edge 4	580	820.5	25.0	25.0	0.610	0.610	0.404	0.404	

### 10.9. CDMA BC15

#### 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	450	1732.5	18.8	18.8	0.303	0.303	0.169	0.169	18
			Left Tilt	450	1732.5	18.8	18.8	0.293	0.293	0.159	0.159	
			Right Touch	25	1711.3	18.8	18.8	0.841	0.841	0.460	0.460	
				450	1732.5	18.8	18.8	0.910	0.910	0.497	0.497	
			875	1753.8	18.8	18.8	0.973	0.973	0.519	0.519		
	Right Tilt	450	1732.5	18.8	18.8	0.774	0.774	0.383	0.383			
	1xEVDO (Rel. 0)	0	Left Touch	450	1732.5	18.8	18.8	0.285	0.285	0.176	0.176	
			Left Tilt	450	1732.5	18.8	18.8	0.270	0.270	0.147	0.147	
			Right Touch	25	1711.3	18.8	18.8	0.802	0.802	0.428	0.428	
				450	1732.5	18.8	18.8	0.862	0.862	0.462	0.462	
875			1753.8	18.8	18.8	0.893	0.893	0.472	0.472			
Right Tilt	450	1732.5	18.8	18.8	0.685	0.685	0.335	0.335				
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	25	1711.3	20.0	20.0	0.890	0.890	0.425	0.425	
				450	1732.5	20.0	20.0	0.924	0.924	0.440	0.440	
				875	1753.8	20.0	20.0	0.938	0.938	0.448	0.448	
			Front	450	1732.5	20.0	20.0	0.668	0.668	0.346	0.346	
Hotspot	1xRTT (RC3 SO32)	5	Edge 1	450	1732.5	20.0	20.0	0.521	0.521	0.272	0.272	
			Edge 2	450	1732.5	20.0	20.0	0.017	0.017	0.008	0.008	
			Edge 4	450	1732.5	20.0	20.0	0.513	0.513	0.294	0.294	

#### 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	1xRTT (RC3 SO55)	0	Left Touch	450	1732.5	25.0	25.0	0.503	0.503	0.337	0.337	
			Left Tilt	450	1732.5	25.0	25.0	0.345	0.345	0.204	0.204	
			Right Touch	25	1711.3	25.0	25.0	0.806	0.806	0.525	0.525	
				450	1732.5	25.0	25.0	0.883	0.883	0.571	0.571	
			875	1753.8	25.0	25.0	0.931	0.931	0.599	0.599		
	Right Tilt	450	1732.5	25.0	25.0	0.303	0.303	0.187	0.187			
	1xEVDO (Rel. 0)	0	Left Touch	450	1732.5	25.0	25.0	0.457	0.457	0.307	0.307	
			Left Tilt	450	1732.5	25.0	25.0	0.322	0.322	0.195	0.195	
			Right Touch	25	1711.3	25.0	25.0	0.778	0.778	0.507	0.507	
				450	1732.5	25.0	25.0	0.839	0.839	0.546	0.546	
875			1753.8	25.0	25.0	0.847	0.847	0.548	0.548			
Right Tilt	450	1732.5	25.0	25.0	0.291	0.291	0.183	0.183				
Body-worn & Hotspot	1xRTT (RC3 SO32)	5	Rear	25	1711.3	20.3	20.3	1.060	1.060	0.536	0.536	
				450	1732.5	20.3	20.3	1.130	1.130	0.578	0.578	
				875	1753.8	20.3	20.3	1.140	1.140	0.582	0.582	
			Front	25	1711.3	20.3	20.3	1.060	1.060	0.546	0.546	
				450	1732.5	20.3	20.3	1.110	1.110	0.568	0.568	
875	1753.8	20.3	20.3	1.140	1.140	0.580	0.580					
Hotspot	1xRTT (RC3 SO32)	5	Edge 2	450	1732.5	20.3	20.3	0.683	0.683	0.394	0.394	
			Edge 3	25	1711.3	20.3	20.3	0.967	0.967	0.487	0.487	
				450	1732.5	20.3	20.3	0.986	0.986	0.496	0.496	
			875	1753.8	20.3	20.3	1.010	1.010	0.498	0.498		
Edge 4	450	1732.5	20.3	20.3	0.049	0.049	0.026	0.026				

### 10.10. LTE Band 2 (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	18900	1880.0	1	49	16.5	16.5	0.466	0.466	0.244	0.244			
						50	24	15.5	15.5	0.281	0.281	0.149	0.149			
			Left Tilt	18900	1880.0	1	49	16.5	16.5	0.458	0.458	0.230	0.230			
						50	24	15.5	15.5	0.285	0.285	0.145	0.145			
			Right Touch	18700	1860.0	1	49	16.5	16.5	0.848	0.848	0.439	0.439	20		
				18900	1880.0	1	49	16.5	16.5	0.992	0.992	0.508	0.508			
						50	24	15.5	15.5	0.763	0.763	0.376	0.376			
			Right Tilt	19100	1900.0	1	49	16.5	16.5	0.957	0.957	0.482	0.482			
				18700	1860.0	1	49	16.5	16.5	0.882	0.882	0.422	0.422			
						18900	1880.0	1	49	16.5	16.5	0.932	0.932		0.442	0.442
								50	24	15.5	15.5	0.655	0.655	0.301	0.301	
								19100	1900.0	1	49	16.5	16.5	0.883	0.883	0.419
Body-worn & Hotspot	QPSK	5	Rear	18700	1860.0	1	49	18.3	18.3	0.908	0.908	0.433	0.433			
				18900	1880.0	1	49	18.3	18.3	0.926	0.926	0.442	0.442			
						50	24	17.3	17.3	0.676	0.676	0.332	0.332			
			19100	1900.0	1	49	18.3	18.3	0.835	0.835	0.400	0.400				
			Front	18700	1860.0	1	49	18.3	18.3	0.842	0.842	0.416	0.416			
				18900	1880.0	1	49	18.3	18.3	0.861	0.861	0.422	0.422			
						50	24	17.3	17.3	0.739	0.739	0.359	0.359			
			19100	1900.0	1	49	18.3	18.3	0.772	0.772	0.376	0.376				
			Hotspot	QPSK	5	Edge 1	18900	1880.0	1	49	18.3	18.3	0.694	0.694	0.323	0.323
50	24	17.3							17.3	0.471	0.471	0.220	0.220			
Edge 2	18900	1880.0				1	49	18.3	18.3	0.084	0.084	0.046	0.046			
						50	24	17.3	17.3	0.069	0.069	0.037	0.037			
Edge 4	18900	1880.0				1	49	18.3	18.3	0.470	0.470	0.265	0.265			
						50	24	17.3	17.3	0.356	0.356	0.203	0.203			

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	18900	1880.0	1	49	24.0	24.0	0.472	0.472	0.316	0.316				
						50	24	23.0	23.0	0.370	0.370	0.246	0.246				
			Left Tilt	18900	1880.0	1	49	24.0	24.0	0.338	0.338	0.207	0.207				
						50	24	23.0	23.0	0.288	0.288	0.175	0.175				
			Right Touch	18700	1860.0	1	49	24.0	24.0	0.802	0.802	0.513	0.513				
				18900	1880.0	1	49	24.0	24.0	0.881	0.881	0.559	0.559				
						50	24	23.0	23.0	0.716	0.716	0.449	0.449				
			Right Tilt	19100	1900.0	1	49	24.0	24.0	0.897	0.897	0.570	0.570				
				18900	1880.0	1	49	24.0	24.0	0.344	0.344	0.203	0.203				
						50	24	23.0	23.0	0.293	0.293	0.165	0.165				
			Body-worn & Hotspot	QPSK	5	Rear	18700	1860.0	1	49	19.3	19.3	1.110	1.110	0.549	0.549	
									50	24	18.3	18.3	0.883	0.883	0.440	0.440	
18900	1880.0	1					49	19.3	19.3	1.100	1.100	0.541	0.541				
		50					24	18.3	18.3	0.832	0.832	0.406	0.406				
		100					0	18.3	18.3	0.803	0.803	0.403	0.403				
19100	1900.0	1					49	19.3	19.3	1.120	1.120	0.546	0.546				
		50				24	18.3	18.3	0.862	0.862	0.428	0.428					
Front	18700	1860.0				1	49	19.3	19.3	1.030	1.030	0.524	0.524				
						50	24	18.3	18.3	0.758	0.758	0.390	0.390				
	18900	1880.0				1	49	19.3	19.3	1.070	1.070	0.545	0.545				
						50	24	18.3	18.3	0.885	0.885	0.437	0.437				
						100	0	18.3	18.3	0.745	0.745	0.370	0.370				
	19100	1900.0				1	49	19.3	19.3	1.130	1.130	0.570	0.570	21			
50						24	18.3	18.3	0.842	0.842	0.427	0.427					
Hotspot	QPSK	5				Edge 2	18900	1880.0	1	49	19.3	19.3	0.601	0.601	0.336	0.336	
									50	24	18.3	18.3	0.458	0.458	0.257	0.257	
						Edge 3	18900	1880.0	1	49	19.3	19.3	0.687	0.687	0.323	0.323	
									50	24	18.3	18.3	0.543	0.543	0.255	0.255	
			Edge 4	18900	1880.0	1	49	19.3	19.3	0.058	0.058	0.033	0.033				
						50	24	18.3	18.3	0.045	0.045	0.025	0.025				

### 10.11. 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	18.8	18.8	0.259	0.259	0.150	0.150	
						50	24	17.8	17.8	0.207	0.207	0.124	0.124	
			Left Tilt	20175	1732.5	1	49	18.8	18.8	0.286	0.286	0.157	0.157	
						50	24	17.8	17.8	0.231	0.231	0.129	0.129	
			Right Touch	20050	1720.0	1	49	18.8	18.8	0.854	0.854	0.455	0.455	
						1	49	18.8	18.8	0.907	0.907	0.483	0.483	
		50				24	17.8	17.8	0.614	0.614	0.330	0.330		
		Right Tilt	20175	1732.5	1	49	18.8	18.8	0.982	0.982	0.508	0.508	22	
					50	24	17.8	17.8	0.544	0.544	0.264	0.264		
		Body-worn & Hotspot	QPSK	5	Rear	20175	1732.5	1	49	20.0	20.0	0.784	0.784	0.372
50	24							19.0	19.0	0.693	0.693	0.330	0.330	
Front	20175				1732.5	1	49	20.0	20.0	0.579	0.579	0.296	0.296	
						50	24	19.0	19.0	0.475	0.475	0.245	0.245	
Hotspot	QPSK	5	Edge 1	20175	1732.5	1	49	20.0	20.0	0.470	0.470	0.246	0.246	
						50	24	19.0	19.0	0.321	0.321	0.168	0.168	
			Edge 2	20175	1732.5	1	49	20.0	20.0	0.033	0.033	0.017	0.017	
						50	24	19.0	19.0	0.024	0.024	0.013	0.013	
			Edge 4	20175	1732.5	1	49	20.0	20.0	0.401	0.401	0.230	0.230	
						50	24	19.0	19.0	0.262	0.262	0.153	0.153	



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	20175	1732.5	1	49	24.0	24.0	0.361	0.361	0.243	0.243				
						50	24	23.0	23.0	0.285	0.285	0.190	0.190				
			Left Tilt	20175	1732.5	1	49	24.0	24.0	0.289	0.289	0.168	0.168				
						50	24	23.0	23.0	0.229	0.229	0.132	0.132				
			Right Touch	20175	1732.5	1	49	24.0	24.0	0.659	0.659	0.431	0.431				
						50	24	23.0	23.0	0.578	0.578	0.373	0.373				
			Right Tilt	20175	1732.5	1	49	24.0	24.0	0.260	0.260	0.151	0.151				
						50	24	23.0	23.0	0.221	0.221	0.128	0.128				
Body-worn & Hotspot	QPSK	5	Rear	20050	1720.0	1	49	20.3	20.3	1.100	1.100	0.561	0.561				
						50	24	19.3	19.3	0.873	0.873	0.443	0.443				
				20175	1732.5	1	49	20.3	20.3	1.020	1.020	0.521	0.521				
						50	24	19.3	19.3	0.915	0.915	0.469	0.469				
						100	0	19.3	19.3	0.884	0.884	0.457	0.457				
				20300	1745.0	1	49	20.3	20.3	1.120	1.120	0.576	0.576				
			50			24	19.3	19.3	0.895	0.895	0.461	0.461					
			Front	20050	1720.0	1	49	20.3	20.3	1.110	1.110	0.585	0.585				
						50	24	19.3	19.3	0.906	0.906	0.472	0.472				
				20175	1732.5	1	49	20.3	20.3	1.110	1.110	0.581	0.581				
						50	24	19.3	19.3	0.860	0.860	0.442	0.442				
						100	0	19.3	19.3	0.914	0.914	0.475	0.475				
				20300	1745.0	1	49	20.3	20.3	1.120	1.120	0.580	0.580	23			
						50	24	19.3	19.3	0.919	0.919	0.474	0.474				
				Hotspot	QPSK	5	Edge 2	20175	1732.5	1	49	20.3	20.3	0.698	0.698	0.399	0.399
			50							24	19.3	19.3	0.406	0.406	0.236	0.236	
Edge 3	20050	1720.0	1				49	20.3	20.3	0.982	0.982	0.491	0.491				
			20175				1732.5	1	49	20.3	20.3	0.952	0.952	0.473	0.473		
	50	24	19.3					19.3	0.699	0.699	0.348	0.348					
20300	1745.0	1	49				20.3	20.3	0.967	0.967	0.474	0.474					
Edge 4	20175	1732.5	1				49	20.3	20.3	0.034	0.034	0.018	0.018				
			50				24	19.3	19.3	0.023	0.023	0.011	0.011				

### 10.12. LTE Band 5 (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	20525	836.5	1	24	22.0	22.0	0.393	0.393	0.293	0.293	24		
						25	12	21.0	21.0	0.302	0.302	0.225	0.225			
			Left Tilt	20525	836.5	1	24	22.0	22.0	0.306	0.306	0.153	0.153			
						25	12	21.0	21.0	0.236	0.236	0.119	0.119			
			Right Touch	20525	836.5	1	24	22.0	22.0	0.487	0.487	0.292	0.292			
						25	12	21.0	21.0	0.408	0.408	0.246	0.246			
			Right Tilt	20525	836.5	1	24	22.0	22.0	0.317	0.317	0.171	0.171			
						25	12	21.0	21.0	0.248	0.248	0.134	0.134			
Body-worn & Hotspot	QPSK	5	Rear	20525	836.5	1	24	22.0	22.0	0.356	0.356	0.220	0.220			
						25	12	21.0	21.0	0.310	0.310	0.185	0.185			
			Front	20525	836.5	1	24	22.0	22.0	0.389	0.389	0.234	0.234			
						25	12	21.0	21.0	0.300	0.300	0.176	0.176			
			Hotspot	QPSK	5	Edge 1	20525	836.5	1	24	22.0	22.0	0.274	0.274	0.127	0.127
									25	12	21.0	21.0	0.231	0.231	0.099	0.099
Edge 2	20525	836.5				1	24	22.0	22.0	0.308	0.308	0.203	0.203			
						25	12	21.0	21.0	0.225	0.225	0.143	0.143			
Edge 4	20525	836.5	1	24	22.0	22.0	0.127	0.127	0.083	0.083						
			25	12	21.0	21.0	0.090	0.090	0.057	0.057						

#### 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	20525	836.5	1	24	24.0	24.0	0.296	0.296	0.226	0.226			
						25	12	23.0	23.0	0.226	0.226	0.172	0.172			
			Left Tilt	20525	836.5	1	24	24.0	24.0	0.096	0.096	0.076	0.076			
						25	12	23.0	23.0	0.074	0.074	0.058	0.058			
			Right Touch	20525	836.5	1	24	24.0	24.0	0.226	0.226	0.177	0.177			
						25	12	23.0	23.0	0.174	0.174	0.137	0.137			
			Right Tilt	20525	836.5	1	24	24.0	24.0	0.098	0.098	0.077	0.077			
						25	12	23.0	23.0	0.079	0.079	0.061	0.061			
Body-worn & Hotspot	QPSK	5	Rear	20525	836.5	1	24	24.0	24.0	0.531	0.531	0.344	0.344			
						25	12	23.0	23.0	0.394	0.394	0.256	0.256			
			Front	20525	836.5	1	24	24.0	24.0	0.754	0.754	0.420	0.420	25		
						25	12	23.0	23.0	0.537	0.537	0.312	0.312			
			Hotspot	QPSK	5	Edge 2	20525	836.5	1	24	24.0	24.0	0.139	0.139	0.092	0.092
									25	12	23.0	23.0	0.127	0.127	0.084	0.084
Edge 3	20525	836.5				1	24	24.0	24.0	0.414	0.414	0.191	0.191			
						25	12	23.0	23.0	0.354	0.354	0.160	0.160			
Edge 4	20525	836.5	1	24	24.0	24.0	0.362	0.362	0.241	0.241						
			25	12	23.0	23.0	0.303	0.303	0.203	0.203						

### 10.13. 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	16.8	16.8	0.252	0.252	0.123	0.123			
						50	24	15.8	15.8	0.182	0.182	0.087	0.087			
			Left Tilt	21100	2535.0	1	49	16.8	16.8	0.322	0.322	0.144	0.144			
						50	24	15.8	15.8	0.250	0.250	0.112	0.112			
			Right Touch	20850	2510.0	1	49	16.8	16.8	0.965	0.965	0.424	0.424	26		
						21100	2535.0	1	49	16.8	16.8	0.901	0.901	0.388	0.388	
								50	24	15.8	15.8	0.789	0.789	0.340	0.340	
			21350	2560.0	1	49	16.8	16.8	0.960	0.960	0.423	0.423				
					50	24	15.8	15.8	0.547	0.547	0.222	0.222				
			Body-worn & Hotspot	QPSK	5	Rear	20850	2510.0	1	49	19.8	19.8	0.942	0.942	0.456	0.456
21100	2535.0	1							49	19.8	19.8	0.934	0.934	0.448	0.448	
		50							24	18.8	18.8	0.713	0.713	0.359	0.359	
21350	2560.0	1				49	19.8	19.8	0.910	0.910	0.438	0.438				
		Front				21100	2535.0	1	49	19.8	19.8	0.790	0.790	0.378	0.378	
								50	24	18.8	18.8	0.624	0.624	0.300	0.300	
Hotspot	QPSK	5	Edge 1	21100	2535.0	1	49	19.8	19.8	0.609	0.609	0.237	0.237			
						50	24	18.8	18.8	0.466	0.466	0.181	0.181			
			Edge 2	21100	2535.0	1	49	19.8	19.8	0.074	0.074	0.036	0.036			
						50	24	18.8	18.8	0.055	0.055	0.025	0.025			
			Edge 4	20850	2510.0	1	49	19.8	19.8	0.873	0.873	0.409	0.409			
						21100	2535.0	1	49	19.8	19.8	0.915	0.915	0.428	0.428	
								50	24	18.8	18.8	0.783	0.783	0.365	0.365	
						21350	2560.0	1	49	19.8	19.8	0.828	0.828	0.384	0.384	

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	21100	2535.0	1	49	22.5	22.5	0.579	0.579	0.328	0.328				
						50	24	21.5	21.5	0.513	0.513	0.288	0.288				
			Left Tilt	21100	2535.0	1	49	22.5	22.5	0.138	0.138	0.072	0.072				
						50	24	21.5	21.5	0.114	0.114	0.059	0.059				
			Right Touch	21100	2535.0	1	49	22.5	22.5	0.339	0.339	0.193	0.193				
						50	24	21.5	21.5	0.282	0.282	0.161	0.161				
			Right Tilt	21100	2535.0	1	49	22.5	22.5	0.323	0.323	0.139	0.139				
						50	24	21.5	21.5	0.263	0.263	0.113	0.113				
Body-worn & Hotspot	QPSK	5	Rear	21100	2535.0	1	49	18.8	18.8	1.020	1.020	0.449	0.449				
						50	24	17.8	17.8	0.796	0.796	0.330	0.330				
						20850	2510.0	1	49	18.8	18.8	1.060	1.060	0.469	0.469	27	
						21350		2560.0	1	49	18.8	18.8	1.060	1.060	0.469	0.469	
			Front	21100	2535.0	1	49	18.8	18.8	1.060	1.060	0.430	0.430				
						50	24	17.8	17.8	0.837	0.837	0.343	0.343				
						100	0	17.8	17.8	0.888	0.888	0.363	0.363				
						21350	2560.0	1	49	18.8	18.8	1.030	1.030	0.431	0.431		
			50	24	17.8	17.8		0.799	0.799	0.332	0.332						
			Hotspot	QPSK	5	Edge 2	21100	2535.0	1	49	18.8	18.8	0.082	0.082	0.039	0.039	
									50	24	17.8	17.8	0.030	0.030	0.013	0.013	
						Edge 3	21100	2535.0	1	49	18.8	18.8	0.620	0.620	0.225	0.225	
50	24	17.8							17.8	0.476	0.476	0.173	0.173				
Edge 4	21100	2535.0				20850	2510.0	1	49	18.8	18.8	0.823	0.823	0.369	0.369		
						21350		2560.0	1	49	18.8	18.8	0.816	0.816	0.370	0.370	
						50	24		17.8	17.8	0.599	0.599	0.273	0.273			
						21350	2560.0	1	49	18.8	18.8	0.802	0.802	0.354	0.354		

### 10.14. 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	22.4	22.4	0.372	0.372	0.282	0.282	28
						25	12	21.4	21.4	0.281	0.281	0.214	0.214	
			Left Tilt	23095	707.5	1	24	22.4	22.4	0.301	0.301	0.163	0.163	
						25	12	21.4	21.4	0.233	0.233	0.126	0.126	
			Right Touch	23095	707.5	1	24	22.4	22.4	0.467	0.467	0.286	0.286	
						25	12	21.4	21.4	0.326	0.326	0.199	0.199	
			Right Tilt	23095	707.5	1	24	22.4	22.4	0.314	0.314	0.171	0.171	
						25	12	21.4	21.4	0.278	0.278	0.147	0.147	
Body-worn & Hotspot	QPSK	5	Rear	23095	707.5	1	24	22.4	22.4	0.183	0.183	0.117	0.117	
						25	12	21.4	21.4	0.143	0.143	0.091	0.091	
			Front	23095	707.5	1	24	22.4	22.4	0.170	0.170	0.112	0.112	
						25	12	21.4	21.4	0.128	0.128	0.085	0.085	
Hotspot	QPSK	5	Edge 1	23095	707.5	1	24	22.4	22.4	0.091	0.091	0.044	0.044	
						25	12	21.4	21.4	0.072	0.072	0.036	0.036	
			Edge 2	23095	707.5	1	24	22.4	22.4	0.305	0.305	0.207	0.207	
						25	12	21.4	21.4	0.239	0.239	0.162	0.162	
			Edge 4	23095	707.5	1	24	22.4	22.4	0.134	0.134	0.090	0.090	
						25	12	21.4	21.4	0.091	0.091	0.061	0.061	

#### 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	23095	707.5	1	24	24.0	24.0	0.264	0.264	0.207	0.207	
						25	12	23.0	23.0	0.217	0.217	0.169	0.169	
			Left Tilt	23095	707.5	1	24	24.0	24.0	0.127	0.127	0.101	0.101	
						25	12	23.0	23.0	0.107	0.107	0.086	0.086	
			Right Touch	23095	707.5	1	24	24.0	24.0	0.224	0.224	0.175	0.175	
						25	12	23.0	23.0	0.171	0.171	0.135	0.135	
			Right Tilt	23095	707.5	1	24	24.0	24.0	0.121	0.121	0.096	0.096	
						25	12	23.0	23.0	0.097	0.097	0.077	0.077	
Body-worn & Hotspot	QPSK	5	Rear	23095	707.5	1	24	24.0	24.0	0.376	0.376	0.239	0.239	
						25	12	23.0	23.0	0.296	0.296	0.200	0.200	
			Front	23095	707.5	1	24	24.0	24.0	0.480	0.480	0.283	0.283	
						25	12	23.0	23.0	0.394	0.394	0.233	0.233	
Hotspot	QPSK	5	Edge 2	23095	707.5	1	24	24.0	24.0	0.452	0.452	0.305	0.305	
						25	12	23.0	23.0	0.400	0.400	0.270	0.270	
			Edge 3	23095	707.5	1	24	24.0	24.0	0.367	0.367	0.180	0.180	
						25	12	23.0	23.0	0.289	0.289	0.142	0.142	
			Edge 4	23060	704.0	1	24	24.0	24.0	0.823	0.823	0.563	0.563	
						25	12	23.0	23.0	0.680	0.680	0.461	0.461	
				23095	707.5	1	24	24.0	24.0	0.846	0.846	0.572	0.572	
						25	12	23.0	23.0	0.680	0.680	0.461	0.461	
23130	711.0	1	24	24.0	24.0	0.858	0.858	0.582	0.582					

### 10.15. 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	22.4	22.4	0.390	0.390	0.281	0.281	31
						25	12	21.4	21.4	0.318	0.318	0.231	0.231	
			Left Tilt	23230	782.0	1	24	22.4	22.4	0.345	0.345	0.178	0.178	
						25	12	21.4	21.4	0.286	0.286	0.149	0.149	
			Right Touch	23230	782.0	1	24	22.4	22.4	0.436	0.436	0.259	0.259	
						25	12	21.4	21.4	0.300	0.300	0.178	0.178	
			Right Tilt	23230	782.0	1	24	22.4	22.4	0.320	0.320	0.165	0.165	
						25	12	21.4	21.4	0.260	0.260	0.137	0.137	
Body-worn & Hotspot	QPSK	5	Rear	23230	782.0	1	24	22.4	22.4	0.208	0.208	0.129	0.129	
						25	12	21.4	21.4	0.160	0.160	0.099	0.099	
			Front	23230	782.0	1	24	22.4	22.4	0.227	0.227	0.130	0.130	
						25	12	21.4	21.4	0.181	0.181	0.104	0.104	
Hotspot	QPSK	5	Edge 1	23230	782.0	1	24	22.4	22.4	0.210	0.210	0.099	0.099	
						25	12	21.4	21.4	0.167	0.167	0.078	0.078	
			Edge 2	23230	782.0	1	24	22.4	22.4	0.203	0.203	0.135	0.135	
						25	12	21.4	21.4	0.168	0.168	0.111	0.111	
			Edge 4	23230	782.0	1	24	22.4	22.4	0.080	0.080	0.052	0.052	
						25	12	21.4	21.4	0.066	0.066	0.043	0.043	

#### 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	23230	782.0	1	24	24.0	24.0	0.281	0.281	0.215	0.215	
						25	12	23.0	23.0	0.241	0.241	0.183	0.183	
			Left Tilt	23230	782.0	1	24	24.0	24.0	0.162	0.162	0.126	0.126	
						25	12	23.0	23.0	0.132	0.132	0.102	0.102	
			Right Touch	23230	782.0	1	24	24.0	24.0	0.249	0.249	0.191	0.191	
						25	12	23.0	23.0	0.196	0.196	0.151	0.151	
			Right Tilt	23230	782.0	1	24	24.0	24.0	0.150	0.150	0.116	0.116	
						25	12	23.0	23.0	0.136	0.136	0.105	0.105	
Body-worn & Hotspot	QPSK	5	Rear	23230	782.0	1	24	24.0	24.0	0.555	0.555	0.324	0.324	
						25	12	23.0	23.0	0.414	0.414	0.245	0.245	
			Front	23230	782.0	1	24	24.0	24.0	0.681	0.681	0.378	0.378	
						25	12	23.0	23.0	0.494	0.494	0.279	0.279	
Hotspot	QPSK	5	Edge 2	23230	782.0	1	24	24.0	24.0	0.227	0.227	0.149	0.149	
						25	12	23.0	23.0	0.177	0.177	0.117	0.117	
			Edge 3	23230	782.0	1	24	24.0	24.0	0.583	0.583	0.277	0.277	
						25	12	23.0	23.0	0.449	0.449	0.215	0.215	
			Edge 4	23230	782.0	1	24	24.0	24.0	0.647	0.647	0.429	0.429	
						25	12	23.0	23.0	0.508	0.508	0.338	0.338	

### 10.16. LTE Band 17 (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	23790	710.0	1	24	22.4	22.4	0.362	0.362	0.275	0.275	33
						25	12	21.4	21.4	0.289	0.289	0.220	0.220	
			Left Tilt	23790	710.0	1	24	22.4	22.4	0.271	0.271	0.150	0.150	
						25	12	21.4	21.4	0.260	0.260	0.137	0.137	
			Right Touch	23790	710.0	1	24	22.4	22.4	0.466	0.466	0.287	0.287	
						25	12	21.4	21.4	0.358	0.358	0.214	0.214	
			Right Tilt	23790	710.0	1	24	22.4	22.4	0.321	0.321	0.174	0.174	
						25	12	21.4	21.4	0.303	0.303	0.159	0.159	
Body-worn & Hotspot	QPSK	5	Rear	23790	710.0	1	24	22.4	22.4	0.183	0.183	0.117	0.117	
						25	12	21.4	21.4	0.143	0.143	0.091	0.091	
			Front	23790	710.0	1	24	22.4	22.4	0.171	0.171	0.112	0.112	
						25	12	21.4	21.4	0.128	0.128	0.085	0.085	
Hotspot	QPSK	5	Edge 1	23790	710.0	1	24	22.4	22.4	0.095	0.095	0.046	0.046	
						25	12	21.4	21.4	0.075	0.075	0.037	0.037	
			Edge 2	23790	710.0	1	24	22.4	22.4	0.300	0.300	0.203	0.203	
						25	12	21.4	21.4	0.225	0.225	0.152	0.152	
			Edge 4	23790	710.0	1	24	22.4	22.4	0.119	0.119	0.080	0.080	
						25	12	21.4	21.4	0.084	0.084	0.056	0.056	

#### 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	23790	710.0	1	24	24.0	24.0	0.262	0.262	0.205	0.205	
						25	12	23.0	23.0	0.218	0.218	0.169	0.169	
			Left Tilt	23790	710.0	1	24	24.0	24.0	0.129	0.129	0.104	0.104	
						25	12	23.0	23.0	0.120	0.120	0.095	0.095	
			Right Touch	23790	710.0	1	24	24.0	24.0	0.220	0.220	0.174	0.174	
						25	12	23.0	23.0	0.170	0.170	0.134	0.134	
			Right Tilt	23790	710.0	1	24	24.0	24.0	0.128	0.128	0.101	0.101	
						25	12	23.0	23.0	0.114	0.114	0.091	0.091	
Body-worn & Hotspot	QPSK	5	Rear	23790	710.0	1	24	24.0	24.0	0.434	0.434	0.265	0.265	
						25	12	23.0	23.0	0.317	0.317	0.193	0.193	
			Front	23790	710.0	1	24	24.0	24.0	0.529	0.529	0.310	0.310	
						25	12	23.0	23.0	0.378	0.378	0.225	0.225	
Hotspot	QPSK	5	Edge 2	23790	710.0	1	24	24.0	24.0	0.476	0.476	0.320	0.320	
						25	12	23.0	23.0	0.416	0.416	0.281	0.281	
			Edge 3	23790	710.0	1	24	24.0	24.0	0.395	0.395	0.193	0.193	
						25	12	23.0	23.0	0.300	0.300	0.147	0.147	
			Edge 4	23790	710.0	1	24	24.0	24.0	0.898	0.898	0.608	0.608	
						25	12	23.0	23.0	0.743	0.743	0.504	0.504	

### 10.17. 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	16.5	16.5	0.359	0.359	0.184	0.184				
						50	24	15.5	15.5	0.293	0.293	0.155	0.155				
			Left Tilt	26365	1882.5	1	49	16.5	16.5	0.367	0.367	0.184	0.184				
						50	24	15.5	15.5	0.293	0.293	0.148	0.148				
			Right Touch	26140	1860.0	1	49	16.5	16.5	0.883	0.883	0.450	0.450				
						26365	1882.5	1	49	16.5	16.5	0.889	0.889	0.446	0.446		
								50	24	15.5	15.5	0.699	0.699	0.356	0.356		
			26590	1905.0	1	49	16.5	16.5	0.833	0.833	0.413	0.413					
					Right Tilt	26365	1882.5	1	49	16.5	16.5	0.730	0.730	0.336	0.336		
			50	24				15.5	15.5	0.626	0.626	0.293	0.293				
			Body-worn & Hotspot	QPSK	5	Rear	26140	1860.0	1	49	18.3	18.3	0.996	0.996	0.477	0.477	
									26365	1882.5	1	49	18.3	18.3	0.961	0.961	0.461
50	24	17.3									17.3	0.704	0.704	0.336	0.336		
26590	1905.0	1				49	18.3	18.3	0.900	0.900	0.431	0.431					
Front	26140	1860.0				1	49	18.3	18.3	0.798	0.798	0.387	0.387				
						26365	1882.5	1	49	18.3	18.3	0.834	0.834	0.402	0.402		
								50	24	17.3	17.3	0.660	0.660	0.318	0.318		
26590	1905.0	1				49	18.3	18.3	0.764	0.764	0.362	0.362					
Hotspot	QPSK	5	Edge 1	26365	1882.5	1	49	18.3	18.3	0.538	0.538	0.258	0.258				
						50	24	17.3	17.3	0.444	0.444	0.208	0.208				
			Edge 2	26365	1882.5	1	49	18.3	18.3	0.072	0.072	0.038	0.038				
						50	24	17.3	17.3	0.061	0.061	0.033	0.033				
			Edge 4	26365	1882.5	1	49	18.3	18.3	0.444	0.444	0.251	0.251				
						50	24	17.3	17.3	0.341	0.341	0.194	0.194				



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	26365	1882.5	1	49	24.0	24.0	0.486	0.486	0.325	0.325				
						50	24	23.0	23.0	0.392	0.392	0.261	0.261				
			Left Tilt	26365	1882.5	1	49	24.0	24.0	0.367	0.367	0.220	0.220				
						50	24	23.0	23.0	0.317	0.317	0.190	0.190				
			Right Touch	26140	1860.0	1	49	24.0	24.0	0.894	0.894	0.560	0.560				
				26365	1882.5	1	49	24.0	24.0	0.940	0.940	0.586	0.586				
				26590	1905.0	1	49	24.0	24.0	0.976	0.976	0.602	0.602	36			
			Right Tilt	26365	1882.5	1	49	24.0	24.0	0.347	0.347	0.199	0.199				
						50	24	23.0	23.0	0.308	0.308	0.181	0.181				
			Body-worn & Hotspot	QPSK	5	Rear	26140	1860.0	1	49	19.3	19.3	1.000	1.000	0.500	0.500	
									50	24	18.3	18.3	0.737	0.737	0.368	0.368	
							26365	1882.5	1	49	19.3	19.3	1.090	1.090	0.547	0.547	
50	24	18.3							18.3	0.830	0.830	0.411	0.411				
100	0	18.3							18.3	0.842	0.842	0.420	0.420				
26590	1905.0	1					49	19.3	19.3	1.140	1.140	0.566	0.566	37			
		50					24	18.3	18.3	0.852	0.852	0.420	0.420				
Body-worn & Hotspot	QPSK	5					Front	26140	1860.0	1	49	19.3	19.3	0.996	0.996	0.491	0.491
			50	24	18.3	18.3				0.810	0.810	0.400	0.400				
			26365	1882.5	1	49		19.3	19.3	1.100	1.100	0.536	0.536				
					50	24		18.3	18.3	0.823	0.823	0.407	0.407				
					100	0		18.3	18.3	0.832	0.832	0.412	0.412				
			26590	1905.0	1	49		19.3	19.3	1.120	1.120	0.538	0.538				
					50	24		18.3	18.3	0.920	0.920	0.443	0.443				
			Hotspot	QPSK	5	Edge 2		26365	1882.5	1	49	19.3	19.3	0.680	0.680	0.371	0.371
50	24	18.3					18.3			0.462	0.462	0.259	0.259				
Edge 3	26140	1860.0				1	49	19.3	19.3	0.719	0.719	0.324	0.324				
	26365	1882.5				1	49	19.3	19.3	0.810	0.810	0.360	0.360				
						50	24	18.3	18.3	0.572	0.572	0.257	0.257				
26590	1905.0	1				49	19.3	19.3	0.892	0.892	0.387	0.387					
Edge 4	26365	1882.5				1	49	19.3	19.3	0.063	0.063	0.034	0.034				
						50	24	18.3	18.3	0.052	0.052	0.028	0.028				

### 10.18. 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	26740	819.0	1	24	22.0	22.0	0.286	0.286	0.214	0.214	
						25	12	21.0	21.0	0.203	0.203	0.142	0.142	
			Left Tilt	26740	819.0	1	24	22.0	22.0	0.196	0.196	0.100	0.100	
						25	12	21.0	21.0	0.134	0.134	0.078	0.078	
			Right Touch	26740	819.0	1	24	22.0	22.0	0.356	0.356	0.213	0.213	38
						25	12	21.0	21.0	0.282	0.282	0.168	0.168	
			Right Tilt	26740	819.0	1	24	22.0	22.0	0.231	0.231	0.124	0.124	
						25	12	21.0	21.0	0.177	0.177	0.094	0.094	
Body-worn & Hotspot	QPSK	5	Rear	26740	819.0	1	24	22.0	22.0	0.160	0.160	0.097	0.097	
						25	12	21.0	21.0	0.134	0.134	0.081	0.081	
			Front	26740	819.0	1	24	22.0	22.0	0.178	0.178	0.110	0.110	
						25	12	21.0	21.0	0.156	0.156	0.096	0.096	
Hotspot	QPSK	5	Edge 1	26740	819.0	1	24	22.0	22.0	0.077	0.077	0.036	0.036	
						25	12	21.0	21.0	0.074	0.074	0.033	0.033	
			Edge 2	26740	819.0	1	24	22.0	22.0	0.130	0.130	0.085	0.085	
						25	12	21.0	21.0	0.111	0.111	0.073	0.073	
			Edge 4	26740	819.0	1	24	22.0	22.0	0.065	0.065	0.043	0.043	
						25	12	21.0	21.0	0.052	0.052	0.035	0.035	

#### 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	26740	819.0	1	24	24.0	24.0	0.188	0.188	0.146	0.146	
						25	12	23.0	23.0	0.137	0.137	0.106	0.106	
			Left Tilt	26740	819.0	1	24	24.0	24.0	0.085	0.085	0.066	0.066	
						25	12	23.0	23.0	0.058	0.058	0.045	0.045	
			Right Touch	26740	819.0	1	24	24.0	24.0	0.153	0.153	0.120	0.120	
						25	12	23.0	23.0	0.120	0.120	0.094	0.094	
			Right Tilt	26740	819.0	1	24	24.0	24.0	0.078	0.078	0.060	0.060	
						25	12	23.0	23.0	0.063	0.063	0.048	0.048	
Body-worn & Hotspot	QPSK	5	Rear	26740	819.0	1	24	24.0	24.0	0.386	0.386	0.252	0.252	
						25	12	23.0	23.0	0.317	0.317	0.206	0.206	
			Front	26740	819.0	1	24	24.0	24.0	0.502	0.502	0.301	0.301	39
						25	12	23.0	23.0	0.388	0.388	0.245	0.245	
Hotspot	QPSK	5	Edge 2	26740	819.0	1	24	24.0	24.0	0.108	0.108	0.072	0.072	
						25	12	23.0	23.0	0.099	0.099	0.065	0.065	
			Edge 3	26740	819.0	1	24	24.0	24.0	0.246	0.246	0.117	0.117	
						25	12	23.0	23.0	0.171	0.171	0.083	0.083	
			Edge 4	26740	819.0	1	24	24.0	24.0	0.292	0.292	0.195	0.195	
						25	12	23.0	23.0	0.239	0.239	0.159	0.159	

**10.19. LTE Band 27 (10MHz Bandwidth)**

SAR for LTE Band 27 is covered by LTE Band 26 due to similar frequency range, same maximum tune-up limit and same channel bandwidth.

### 10.20. 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	17.7	17.7	0.264	0.264	0.148	0.148	40	
						25	12	16.7	16.7	0.147	0.147	0.078	0.078		
			Left Tilt	27710	2310.0	1	24	17.7	17.7	0.288	0.288	0.129	0.129		
						25	12	16.7	16.7	0.205	0.205	0.092	0.092		
			Right Touch	27710	2310.0	1	24	17.7	17.7	0.978	0.978	0.457	0.457		
						25	12	16.7	16.7	0.797	0.797	0.376	0.376		
		Right Tilt	27710	2310.0	1	24	17.7	17.7	0.774	0.774	0.335	0.335			
					25	12	16.7	16.7	0.582	0.582	0.258	0.258			
		Body-worn & Hotspot	QPSK	5	Rear	27710	2310.0	1	24	20.3	20.3	0.883	0.883	0.425	0.425
								25	12	19.3	19.3	0.721	0.721	0.345	0.345
					Front	27710	2310.0	1	24	20.3	20.3	0.874	0.874	0.420	0.420
								25	12	19.3	19.3	0.676	0.676	0.326	0.326
Hotspot	QPSK			5	Edge 1	27710	2310.0	1	24	20.3	20.3	0.459	0.459	0.188	0.188
								25	12	19.3	19.3	0.365	0.365	0.147	0.147
Edge 2	27710	2310.0	1	24	20.3	20.3	0.060	0.060	0.030	0.030					
			25	12	19.3	19.3	0.041	0.041	0.019	0.019					
Edge 4	27710	2310.0	1	24	20.3	20.3	0.852	0.852	0.411	0.411					
			25	12	19.3	19.3	0.748	0.748	0.355	0.355					

#### 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	0.242	0.242	0.143	0.143		
						25	12	22.0	22.0	0.183	0.183	0.107	0.107		
			Left Tilt	27710	2310.0	1	24	23.0	23.0	0.128	0.128	0.065	0.065		
						25	12	22.0	22.0	0.097	0.097	0.049	0.049		
			Right Touch	27710	2310.0	1	24	23.0	23.0	0.171	0.171	0.101	0.101		
						25	12	22.0	22.0	0.137	0.137	0.079	0.079		
		Right Tilt	27710	2310.0	1	24	23.0	23.0	0.184	0.184	0.086	0.086			
					25	12	22.0	22.0	0.153	0.153	0.070	0.070			
		Body-worn & Hotspot	QPSK	5	Rear	27710	2310.0	1	24	20.5	20.5	0.932	0.932	0.389	0.389
								25	12	19.5	19.5	0.601	0.601	0.254	0.254
					Front	27710	2310.0	1	24	20.5	20.5	1.060	1.060	0.446	0.446
								25	12	19.5	19.5	0.985	0.985	0.405	0.405
Hotspot	QPSK			5	Edge 2	27710	2310.0	1	24	20.5	20.5	0.331	0.331	0.164	0.164
								25	12	19.5	19.5	0.295	0.295	0.146	0.146
Edge 3	27710	2310.0	1	24	20.5	20.5	0.955	0.955	0.366	0.366					
			25	12	19.5	19.5	0.711	0.711	0.272	0.272					
Edge 4	27710	2310.0	1	24	20.5	20.5	0.630	0.630	0.305	0.305					
			25	12	19.5	19.5	0.544	0.544	0.260	0.260					

### 10.21. 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	18.0	18.0	0.206	0.206	0.096	0.096			
						50	24	17.0	17.0	0.115	0.115	0.052	0.052			
			Left Tilt	40620	2593.0	1	49	18.0	18.0	0.240	0.240	0.107	0.107			
						50	24	17.0	17.0	0.170	0.170	0.077	0.077			
			Right Touch	40620	2593.0	1	49	18.0	18.0	0.752	0.752	0.329	0.329	42		
						50	24	17.0	17.0	0.558	0.558	0.246	0.246			
			Right Tilt	40620	2593.0	1	49	18.0	18.0	0.554	0.554	0.251	0.251			
						50	24	17.0	17.0	0.391	0.391	0.173	0.173			
Body-worn & Hotspot	QPSK	5	Rear	40620	2593.0	1	49	21.5	21.5	0.900	0.900	0.457	0.457			
						40185	2549.5	1	49	21.5	21.5	0.959	0.959	0.462	0.462	
						50	24	20.5	20.5	0.728	0.728	0.354	0.354			
						41055	2636.5	1	49	21.5	21.5	0.903	0.903	0.441	0.441	
						41490	2680.0	1	49	21.5	21.5	0.684	0.684	0.336	0.336	
						50	24	20.5	20.5	0.565	0.565	0.269	0.269			
			Front	40620	2593.0	1	49	21.5	21.5	0.671	0.671	0.323	0.323			
						50	24	20.5	20.5	0.565	0.565	0.269	0.269			
Hotspot	QPSK	5	Edge 1	40620	2593.0	1	49	21.5	21.5	0.640	0.640	0.246	0.246			
						50	24	20.5	20.5	0.461	0.461	0.179	0.179			
			Edge 2	40620	2593.0	1	49	21.5	21.5	0.067	0.067	0.030	0.030			
						50	24	20.5	20.5	0.046	0.046	0.021	0.021			
			Edge 4	40620	2593.0	39750	2506.0	1	49	21.5	21.5	0.830	0.830	0.393	0.393	
						40185	2549.5	1	49	21.5	21.5	0.878	0.878	0.404	0.404	
						50	24	20.5	20.5	0.875	0.875	0.399	0.399			
						41055	2636.5	1	49	21.5	21.5	0.780	0.780	0.350	0.350	
41490	2680.0	1	49	21.5	21.5	0.612	0.612	0.270	0.270							

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	0.445	0.445	0.245	0.245	
						50	24	21.5	21.5	0.280	0.280	0.156	0.156	
			Left Tilt	40620	2593.0	1	49	22.5	22.5	0.083	0.083	0.042	0.042	
						50	24	21.5	21.5	0.063	0.063	0.038	0.038	
			Right Touch	40620	2593.0	1	49	22.5	22.5	0.210	0.210	0.120	0.120	
						50	24	21.5	21.5	0.168	0.168	0.095	0.095	
			Right Tilt	40620	2593.0	1	49	22.5	22.5	0.136	0.136	0.064	0.064	
						50	24	21.5	21.5	0.100	0.100	0.044	0.044	
Body-worn & Hotspot	QPSK	5	Rear	39750	2506.0	1	49	21.0	21.0	1.050	1.050	0.464	0.464	
						50	24	20.0	20.0	0.839	0.839	0.371	0.371	
				40185	2549.5	1	49	21.0	21.0	0.956	0.956	0.487	0.487	
						50	24	20.0	20.0	0.928	0.928	0.413	0.413	
				40620	2593.0	1	49	21.0	21.0	1.050	1.050	0.471	0.471	43
						50	24	20.0	20.0	0.888	0.888	0.397	0.397	
			100			0	20.0	20.0	0.868	0.868	0.384	0.384		
			41055	2636.5	1	49	21.0	21.0	1.010	1.010	0.462	0.462		
					50	24	20.0	20.0	0.830	0.830	0.380	0.380		
			41490	2680.0	1	49	21.0	21.0	0.825	0.825	0.388	0.388		
					50	24	20.0	20.0	0.659	0.659	0.310	0.310		
			Front	39750	2506.0	1	49	21.0	21.0	1.040	1.040	0.425	0.425	
						40185	2549.5	1	49	21.0	21.0	1.050	1.050	0.437
				40620	2593.0	1	49	21.0	21.0	0.892	0.892	0.383	0.383	
						50	24	20.0	20.0	0.705	0.705	0.301	0.301	
				41055	2636.5	1	49	21.0	21.0	1.020	1.020	0.428	0.428	
41490	2680.0	1		49	21.0	21.0	0.798	0.798	0.345	0.345				
Hotspot	QPSK	5	Edge 2	40620	2593.0	1	49	21.0	21.0	0.167	0.167	0.079	0.079	
						50	24	20.0	20.0	0.126	0.126	0.060	0.060	
			Edge 3	40620	2593.0	1	49	21.0	21.0	0.512	0.512	0.207	0.207	
						50	24	20.0	20.0	0.389	0.389	0.156	0.156	
			Edge 4	40620	2593.0	1	49	21.0	21.0	0.787	0.787	0.346	0.346	
						50	24	20.0	20.0	0.583	0.583	0.256	0.256	

### 10.22. Wi-Fi (DTS Band)

Cell On

Band	RF Exposure	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots
								UAT		LAT			UAT				LAT				
								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			0.105									
					Left Tilt	6	2437	14.0	14.0			0.116									
					Right Touch	6	2437	14.0	14.0			0.526	0.397	0.174	0.397	0.174					
					Right Tilt	6	2437	14.0	14.0			0.415									
					Left Touch	6	2437			18.0	18.0	0.131									
					Left Tilt	6	2437			18.0	18.0	0.074									
		Right Touch	6	2437			18.0	18.0	0.222					0.178	0.101	0.178	0.101				
		Right Tilt	6	2437			18.0	18.0	0.039												
		Left Touch	6	2437	14.0	14.0	18.0	18.0	0.145												
		Left Tilt	6	2437	14.0	14.0	18.0	18.0	0.154												
	Right Touch	6	2437	14.0	14.0	18.0	18.0	0.544	0.383	0.176	0.383	0.176									
	Right Tilt	6	2437	14.0	14.0	18.0	18.0	0.163													
	Body-worn & Hotspot	802.11b 20MHz	5	1 Tx	Rear	6	2437	15.5	15.5			0.503	0.344	0.178	0.344	0.178					
					Front	6	2437	15.5	15.5			0.320									
					Edge 1	6	2437	15.5	15.5			0.205									
					Edge 2	6	2437	15.5	15.5			0.007									
					Edge 4	6	2437	15.5	15.5			0.400									
					Rear	6	2437			12.5	12.5	0.212									
					Front	6	2437			12.5	12.5	0.360					0.249	0.117	0.249	0.117	
					Edge 2	6	2437			12.5	12.5	0.237									
Edge 3		6	2437			12.5	12.5	0.072													
Edge 4		6	2437			12.5	12.5	0.005													
802.11g 20MHz	5	2 Tx	Rear	6	2437	15.5	15.5	12.5	12.5	0.567	0.390	0.187	0.390	0.187							
			Front	6	2437	15.5	15.5	12.5	12.5	0.398											
			Edge 1	6	2437	15.5	15.5	12.5	12.5	0.225											
			Edge 2	6	2437	15.5	15.5	12.5	12.5	0.201											
			Edge 3	6	2437	15.5	15.5	12.5	12.5	0.078											
			Edge 4	6	2437	15.5	15.5	12.5	12.5	0.423											

**Notes:**

For some of the 2Tx measurements, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Cell Off

Band	RF Exposure	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots						
								UAT		LAT			UAT				LAT										
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured	Scaled	Measured	Scaled	Measured	Scaled									
																			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	18.0	18.0			0.329															
					Left Tilt	6	2437	18.0	18.0			0.293															
					Right Touch	2	2417	18.0	18.0				0.999	0.445	0.999	0.445											44
						6	2437	18.0	18.0			1.380	0.995	0.439	0.995	0.439											
					Right Tilt	6	2437	18.0	18.0			1.040	0.777	0.348	0.777	0.348											
					Left Touch	6	2437			18.0	18.0	0.131															
		Left Tilt	6	2437			18.0	18.0	0.074																		
		Right Touch	6	2437			18.0	18.0	0.222						0.178	0.101	0.178	0.101									
		Right Tilt	6	2437			18.0	18.0	0.039																		
		802.11g 20MHz	0	2 Tx	Left Touch	6	2437	18.0	18.0	18.0	18.0	0.288															
					Left Tilt	6	2437	18.0	18.0	18.0	18.0	0.331	0.250	0.122	0.250	0.122											
					Right Touch	6	2437	18.0	18.0	18.0	18.0	1.300	0.947	0.431	0.947	0.431											
	9					2452	18.0	18.0	18.0	18.0	0.966	0.966	0.437	0.966	0.437												
	Right Tilt				6	2437	18.0	18.0	18.0	18.0	0.940	0.804	0.342	0.804	0.342												
					9	2452	18.0	18.0	18.0	18.0	0.928	0.928	0.399	0.928	0.399												
	Body-worn & Hotspot	802.11b 20MHz	5	1 Tx	Rear	6	2437	18.5	18.5			1.029	0.661	0.345	0.661	0.345											
					Front	6	2437	18.5	18.5			0.782	0.554	0.263	0.554	0.263											
					Edge 1	6	2437	18.5	18.5			0.356															
					Edge 2	6	2437	18.5	18.5			0.014															
					Edge 4	6	2437	18.5	18.5			0.628															
					Rear	6	2437			18.0	18.0	0.706					0.623	0.306	0.623	0.306							
					Front	2	2417			18.0	18.0						0.829	0.406	0.829	0.406							
						6	2437			18.0	18.0	1.246					0.881	0.413	0.881	0.413							45
					Edge 2	6	2437			18.0	18.0	0.667															
Edge 3					6	2437			18.0	18.0	0.189																
Edge 4					6	2437			18.0	18.0	0.015																
802.11g 20MHz					5	2 Tx	Rear	3	2422	18.5	18.5	18.0	18.0		0.726	0.348	0.726	0.348	0.547	0.275	0.547	0.275					
		6	2437	18.5				18.5	18.0	18.0	1.095	0.819	0.390	0.819	0.390	0.663	0.329	0.663	0.329								
		Front	6	2437			18.5	18.5	18.0	18.0	1.120	0.733	0.353	0.733	0.353												
		Edge 1	6	2437			18.5	18.5	18.0	18.0	0.272																
		Edge 2	6	2437			18.5	18.5	18.0	18.0	0.700																
		Edge 3	6	2437			18.5	18.5	18.0	18.0	0.273																
Edge 4		6	2437	18.5	18.5	18.0	18.0	0.729	0.633	0.313	0.633	0.313															

Notes:

For some of the 2Tx measurements, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.



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

Cell On

Band	RF Exposure	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots	
								UAT		LAT			UAT				LAT					
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured	Scaled	Measured	Scaled	Measured	Scaled				
5.3 GHz	Head	802.11ac VHT80	0	1 Tx	Left Touch	58	5290	11.0	10.5			0.348										
					Left Tilt	58	5290	11.0	10.5			0.241										
					Right Touch	58	5290	11.0	10.5			0.584	0.292	0.084	0.328	0.094						
					Right Tilt	58	5290	11.0	10.5			0.353										
		802.11a	0	1 Tx	Left Touch	60	5300			18.5	18.5	0.287										
					Left Tilt	60	5300			18.5	18.5	0.121										
					Right Touch	60	5300			18.5	18.5	0.593				0.188	0.066	0.188	0.066			
					Right Tilt	60	5300			18.5	18.5	0.109										
		802.11n HT40 CDD	0	2 Tx	Left Touch	54	5270	11.0	11.0	18.0	18.0	0.408										
					Left Tilt	54	5270	11.0	11.0	18.0	18.0	0.315										
					Right Touch	54	5270	11.0	11.0	18.0	18.0	0.733	0.353	0.107	0.353	0.107						
					Right Tilt	54	5270	11.0	11.0	18.0	18.0	0.644										
5.2 GHz	Body-worn & Hotspot	802.11n HT40	5	1 Tx	Rear	46	5230	15.5	15.5			0.972	0.383	0.108	0.383	0.108						
					Front	46	5230	15.5	15.5			0.336										
					Edge 1	46	5230	15.5	15.5			0.291										
					Edge 2	46	5230	15.5	15.5			0.035										
					Edge 4	46	5230	15.5	15.5			0.228										
		802.11ac VHT80	5	1 Tx	Rear	42	5210			9.0	9.0	0.010										
					Front	42	5210			9.0	9.0	0.551				0.223	0.050	0.223	0.050			
					Edge 2	42	5210			9.0	9.0	0.031										
					Edge 3	42	5210			9.0	9.0	0.066										
					Edge 4	42	5210			9.0	9.0	0.009										
		802.11n HT40 CDD	5	2 Tx	Rear	46	5230	15.5	15.5	9.0	9.0	0.606	0.381	0.098	0.381	0.098						
					Front	46	5230	15.5	15.5	9.0	9.0	0.384										
					Edge 1	46	5230	15.5	15.5	9.0	9.0	0.211										
					Edge 2	46	5230	15.5	15.5	9.0	9.0	0.266										
					Edge 3	46	5230	15.5	15.5	9.0	9.0	0.037										
					Edge 4	46	5230	15.5	15.5	9.0	9.0	0.156										

**Notes:**

For some of the 2Tx measurements, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Cell Off

Band	RF Exposure	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots
								UAT		LAT			UAT				LAT				
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured	Scaled	Measured	Scaled	Measured	Scaled			
																			1-g	10-g	
5.3 GHz	Head	802.11n HT40	0	1 Tx	Left Touch	54	5270	15.0	14.5			0.854									
					Left Tilt	54	5270	15.0	14.5			0.621									
					Right Touch	54	5270	15.0	14.5			1.170	0.634	0.190	0.711	0.213					
					Right Tilt	54	5270	15.0	14.5			0.997	0.446	0.131	0.500	0.147					
		802.11a	0	1 Tx	Left Touch	60	5300			18.5	18.5	0.287									
					Left Tilt	60	5300			18.5	18.5	0.121									
					Right Touch	60	5300			18.5	18.5	0.593					0.188	0.066	0.188	0.066	
					Right Tilt	60	5300			18.5	18.5	0.109									
		802.11n HT40 CDD	0	2 Tx	Left Touch	54	5270	15.0	15.0	18.0	18.0	0.399									
					Left Tilt	54	5270	15.0	15.0	18.0	18.0	0.555									
					Right Touch	54	5270	15.0	15.0	18.0	18.0	1.370	0.741	0.254	0.741	0.254					
					Right Tilt	54	5270	15.0	15.0	18.0	18.0	1.040	0.623	0.194	0.623	0.194					46
5.3 GHz	Body-worn & Hotspot	802.11a	5	1 Tx	Rear	56	5280	18.0	18.0				0.690	0.187	0.690	0.187					
						60	5300	18.0	18.0			1.670	0.848	0.224	0.848	0.224					
					Front	60	5300	18.0	18.0			0.565	0.354	0.116	0.354	0.116					
					Edge 1	60	5300	18.0	18.0			0.541									
					Edge 2	60	5300	18.0	18.0			0.056									
					Edge 4	60	5300	18.0	18.0			0.488									
					Rear	46	5230			15.5	15.5	0.134									
					Front	38	5190			13.5	13.5						0.735	0.158	0.735	0.158	
5.2 GHz	Body-worn & Hotspot	802.11n HT40	5	1 Tx		46	5230			15.5	15.5	1.930					1.140	0.295	1.140	0.295	47
					Edge 2	46	5230			15.5	15.5	0.312									
					Edge 3	46	5230			15.5	15.5	0.440				0.254	0.083	0.254	0.083		
					Edge 4	46	5230			15.5	15.5	0.082									
5.3 GHz	Body-worn & Hotspot	802.11n HT40 CDD	5	2 Tx	Rear	54	5270	17.5	17.5	13.5	13.5	1.320	0.774	0.211	0.774	0.211					
					Front	54	5270	17.5	17.5	13.5	13.5	1.330	0.539	0.160	0.539	0.160	0.690	0.185	0.690	0.185	
					Edge 1	54	5270	17.5	17.5	13.5	13.5	0.660									
					Edge 2	54	5270	17.5	17.5	13.5	13.5	0.192									
					Edge 3	54	5270	17.5	17.5	13.5	13.5	0.266									
					Edge 4	54	5270	17.5	17.5	13.5	13.5	0.464									

**Notes:**

For some of the 2Tx measurements, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

### 10.24. Wi-Fi (U-NII-2C Band)

Cell On

Band	RF Exposure	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots
								UAT		LAT			UAT				LAT				
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured	Scaled	1-g	10-g	Measured	Scaled	1-g	10-g	
5.5 GHz	Head	802.11ac VHT80	0	1 Tx	Left Touch	106	5530	11.0	10.8			0.248									
					Left Tilt	106	5530	11.0	10.8			0.241									
					Right Touch	106	5530	11.0	10.8			0.508	0.322	0.094	0.337	0.098					
					Right Tilt	106	5530	11.0	10.8			0.354									
		802.11a	0	1 Tx	Left Touch	120	5600			18.5	18.5	0.367									
					Left Tilt	120	5600			18.5	18.5	0.058									
					Right Touch	120	5600			18.5	18.5	0.377				0.228	0.082	0.228	0.082		
					Right Tilt	120	5600			18.5	18.5	0.045									
	802.11ac VHT80 CDD	0	2 Tx	Left Touch	122	5610	11.0	10.8	18.0	18.0	0.348										
				Left Tilt	122	5610	11.0	10.8	18.0	18.0	0.304										
				Right Touch	122	5610	11.0	10.8	18.0	18.0	0.553	0.248	0.079	0.260	0.083						
				Right Tilt	122	5610	11.0	10.8	18.0	18.0	0.375										
5.5 GHz	Body-worn & Hotspot	802.11ac VHT80	5	1 Tx	Rear	122	5610	16.0	16.0			0.536									
					Front	122	5610	16.0	16.0			0.625	0.359	0.125	0.359	0.125					
					Edge 1	122	5610	16.0	16.0			0.316									
					Edge 2	122	5610	16.0	16.0			0.031									
					Edge 4	122	5610	16.0	16.0			0.327									
		802.11ac VHT80	5	1 Tx	Rear	122	5610			6.5	6.5	0.022									
					Front	122	5610			6.5	6.5	0.421				0.223	0.053	0.223	0.053		
					Edge 2	122	5610			6.5	6.5	0.148									
					Edge 3	122	5610			6.5	6.5	0.196									
					Edge 4	122	5610			6.5	6.5	0.015									
		802.11ac VHT80 CDD	5	2 Tx	Rear	122	5610	16.0	16.0	6.5	6.5	0.532									
					Front	122	5610	16.0	16.0	6.5	6.5	0.678	0.349	0.116	0.349	0.116					
					Edge 1	122	5610	16.0	16.0	6.5	6.5	0.375									
					Edge 2	122	5610	16.0	16.0	6.5	6.5	0.041									
					Edge 3	122	5610	16.0	16.0	6.5	6.5	0.026									
					Edge 4	122	5610	16.0	16.0	6.5	6.5	0.329									

**Notes:**

For some of the 2Tx measurements, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Cell Off

Band	RF Exposure	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots				
								UAT		LAT			UAT				LAT								
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured	Scaled	Measured	Scaled	Measured	Scaled							
																			1-g	10-g		1-g	10-g	1-g	10-g
5.5 GHz	Head	802.11ac VHT80	0	1 Tx	Left Touch	122	5610	15.0	14.5			0.872													
					Left Tilt	122	5610	15.0	14.5			0.677													
					Right Touch	122	5610	15.0	14.5			1.330	0.642	0.206	0.720	0.231									48
					Right Tilt	122	5610	15.0	14.5			1.150	0.524	0.177	0.588	0.199									
		802.11a	0	1 Tx	Left Touch	120	5600			18.5	18.5	0.367													
					Left Tilt	120	5600			18.5	18.5	0.058													
					Right Touch	120	5600			18.5	18.5	0.377					0.228	0.082	0.228	0.082					
					Right Tilt	120	5600			18.5	18.5	0.045													
		802.11ac VHT80 CDD	0	2 Tx	Left Touch	122	5610	15.0	14.5	18.0	18.0	0.695													
					Left Tilt	122	5610	15.0	14.5	18.0	18.0	0.792													
					Right Touch	122	5610	15.0	14.5	18.0	18.0	1.200	0.583	0.201	0.654	0.226									
					Right Tilt	122	5610	15.0	14.5	18.0	18.0	1.060	0.495	0.168	0.555	0.188									
5.5 GHz	Body-worn & Hotspot	802.11a	5	1 Tx	Rear	104	5520	18.0	18.0			0.832	0.376	0.106	0.376	0.106									
					Front	104	5520	18.0	18.0			1.430	0.877	0.306	0.877	0.306									
						120	5600	18.0	17.9				0.834	0.299	0.853	0.306									
					Edge 1	104	5520	18.0	18.0			0.412													
					Edge 2	104	5520	18.0	18.0			0.184													
					Edge 4	104	5520	18.0	18.0			0.364													
		802.11ac VHT80	5	1 Tx	Rear	138	5690			13.5	13.5	0.146													
					Front	122	5610			13.5	13.5	1.960					0.959	0.270	0.959	0.270					49
						138	5690			13.5	13.5						0.654	0.182	0.654	0.182					
					Edge 2	122	5610			13.5	13.5	0.175													
					Edge 3	122	5610			13.5	13.5	0.216					0.148	0.031	0.148	0.031					
					Edge 4	122	5610			13.5	13.5	0.042													
		802.11ac VHT80 CDD	5	2 Tx	Rear	122	5610	17.5	17.5	13.5	13.5	0.610	0.286	0.057	0.286	0.057									
					Front	122	5610	17.5	17.5	13.5	13.5	1.860					0.874	0.236	0.874	0.236					
						138	5690	17.5	17.5	13.5	13.5		0.584	0.197	0.584	0.197	0.595	0.148	0.595	0.148					
					Edge 1	138	5690	17.5	17.5	13.5	13.5	0.470													
					Edge 2	138	5690	17.5	17.5	13.5	13.5	0.150													
					Edge 3	138	5690	17.5	17.5	13.5	13.5	0.221													

Notes:

For some of the 2Tx measurements, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

### 10.25. Wi-Fi (U-NII-3 Band)

Cell On

Band	RF Exposure	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots																
								UAT		LAT			UAT				LAT																				
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured	Scaled	Measured	Scaled	Measured	Scaled																			
5.8 GHz	Head	802.11ac VHT80	0	1 Tx	Left Touch	155	5775	12.0	11.5			0.397																									
					Left Tilt	155	5775	12.0	11.5			0.345																									
					Right Touch	155	5775	12.0	11.5			0.567	0.303	0.093	0.340	0.104																					
					Right Tilt	155	5775	12.0	11.5			0.454																									
		802.11n HT40	0	1 Tx	Left Touch	159	5795			18.0	18.0	0.239																									
					Left Tilt	159	5795			18.0	18.0	0.034																									
					Right Touch	159	5795			18.0	18.0	0.304					0.162	0.053	0.162	0.053																	
					Right Tilt	159	5795			18.0	18.0	0.031																									
		802.11a	0	2 Tx	Left Touch	157	5785	12.0	11.5	18.0	18.0	0.429																									
					Left Tilt	157	5785	12.0	11.5	18.0	18.0	0.411																									
					Right Touch	157	5785	12.0	11.5	18.0	18.0	0.567	0.331	0.009	0.371	0.010																					
					Right Tilt	157	5785	12.0	11.5	18.0	18.0	0.532																									
5.8 GHz	Body-worn & Hotspot	802.11ac VHT80	5	1 Tx	Rear	155	5775	14.0	14.0			0.538																									
					Front	155	5775	14.0	14.0			0.662	0.322	0.107	0.322	0.107																					
					Edge 1	155	5775	14.0	14.0			0.257																									
					Edge 2	155	5775	14.0	14.0			0.029																									
		802.11ac VHT80	5	1 Tx	Rear	155	5775			10.5	10.5	0.013																									
					Front	155	5775			10.5	10.5	0.445					0.229	0.052	0.229	0.052																	
					Edge 2	155	5775			10.5	10.5	0.032																									
					Edge 3	155	5775			10.5	10.5	0.056																									
		802.11n HT40 CDD	5	2 Tx	Edge 4	155	5775			10.5	10.5	0.006																									
					Rear	159	5795	14.0	14.0	10.5	10.5	0.488																									
					Front	159	5795	14.0	14.0	10.5	10.5	0.623	0.297	0.096	0.297	0.096																					
					Edge 1	159	5795	14.0	14.0	10.5	10.5	0.226																									
																					Edge 2	159	5795	14.0	14.0	10.5	10.5	0.026									
																					Edge 3	159	5795	14.0	14.0	10.5	10.5	0.057									
																					Edge 4	159	5795	14.0	14.0	10.5	10.5	0.106									

**Notes:**

For some of the 2Tx measurements, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

Cell Off

Band	RF Exposure	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #	Freq. (MHz)	Power (dBm)				Area Scan Measured Peak	SAR (W/kg)								Plots
								UAT		LAT			UAT				LAT				
								Tune-up Limit	Measured	Tune-up Limit	Measured		Measured	Scaled	Measured	Scaled	Measured	Scaled			
																			1-g	10-g	
5.8 GHz	Head	802.11n HT40	0	1 Tx	Left Touch	159	5795	16.0	16.0			0.965									
					Left Tilt	159	5795	16.0	16.0			0.973									
					Right Touch	159	5795	16.0	16.0			1.350	0.793	0.255	0.793	0.255					
		Right Tilt	159	5795	16.0	16.0			1.260	0.744	0.235	0.744	0.235								
		802.11n HT40	0	1 Tx	Left Touch	159	5795			18.0	18.0	0.239									
					Left Tilt	159	5795			18.0	18.0	0.034									
	Right Touch				159	5795			18.0	18.0	0.304					0.162	0.053	0.162	0.053		
	Right Tilt	159	5795			18.0	18.0	0.031													
	802.11a	0	2 Tx	Left Touch	157	5785	16.0	16.0	18.0	18.0	0.959	0.523	0.177	0.523	0.177						
				Left Tilt	157	5785	16.0	16.0	18.0	18.0	0.845										
				Right Touch	157	5785	16.0	16.0	18.0	18.0	1.740	0.905	0.273	0.905	0.273						
				Right Tilt	157	5785	16.0	16.0	18.0	18.0	0.922	0.906	0.277	0.906	0.277						
5.8 GHz	Body-worn & Hotspot	802.11a	5	1 Tx	Rear	157	5785	18.0	18.0			1.590	0.955	0.233	0.955	0.233					
						161	5805	18.0	18.0				0.912	0.223	0.912	0.223					
					Front	157	5785	18.0	18.0			0.986	0.574	0.206	0.574	0.206					
					Edge 1	157	5785	18.0	18.0			0.877									
					Edge 2	157	5785	18.0	18.0			0.124									
					Edge 4	157	5785	18.0	18.0			0.351									
		802.11n HT40	5	1 Tx	Rear	159	5795			17.0	17.0	0.085									
					Front	151	5755			14.5	14.5						0.730	0.196	0.730	0.196	
						159	5795			17.0	17.0	1.430					1.100	0.289	1.100	0.289	
					Edge 2	159	5795			17.0	17.0	0.128									
					Edge 3	159	5795			17.0	17.0	0.215					0.089	0.028	0.089	0.028	
		Edge 4	159	5795			17.0	17.0	0.051												
		802.11a	5	2 Tx	Rear	157	5785	18.0	18.0	17.0	17.0	1.840	0.826	0.203	0.826	0.203					
						161	5805	18.0	18.0	17.0	17.0		0.967	0.239	0.967	0.239					
					Front	157	5785	18.0	18.0	17.0	17.0	1.760	0.714	0.224	0.714	0.224	0.999	0.256	0.999	0.256	
						161	5805	18.0	18.0	17.0	17.0		0.851	0.271	0.851	0.271	0.931	0.236	0.931	0.236	
					Edge 1	157	5785	18.0	18.0	17.0	17.0	0.655	0.328	0.114	0.328	0.114					
					Edge 2	157	5785	18.0	18.0	17.0	17.0	0.117									
Edge 3	157				5785	18.0	18.0	17.0	17.0	0.181											
Edge 4	157	5785	18.0	18.0	17.0	17.0	0.240														

**Notes:**

For some of the 2Tx measurements, there is no additional zoom scans due to secondary peak not being within 2dB of maximum peak.

### 10.26. Wi-Fi Murata Spot Check

Band	Mode	Dist. (mm)	No. of Transmitters	Position	Ch #.	Freq. (MHz)	Power (dBm)				SAR (W/kg)								Plots
							UAT		LAT		UAT				LAT				
							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	802.11b 20MHz	0	1 Tx	Right Touch	2	2417	18.0	18.0			0.963	0.437	0.963	0.437					
	802.11b 20MHz	5	1 Tx	Front	6	2437			18.0	18.0					0.796	0.378	0.796	0.378	
5.3 GHz	802.11n HT40 CDD	0	2 Tx	Right Touch	54	5270	15.0	15.0	18.0	18.0	0.694	0.203	0.694	0.203					
5.2 GHz	802.11n HT40	5	1 Tx	Front	46	5230			15.5	15.5					1.010	0.272	1.010	0.272	
5.5 GHz	802.11ac VHT80	0	1 Tx	Right Touch	122	5610	15.0	14.5			0.617	0.201	0.692	0.226					
	802.11ac VHT80	5	1 Tx	Front	122	5610			13.5	13.5					0.948	0.241	0.948	0.241	
5.8 GHz	802.11a	0	2 Tx	Right Touch	161	5805	16.0	16.0	18.0	18.0	0.834	0.270	0.834	0.270					
	802.11n HT40	5	1 Tx	Front	159	5795			17.0	16.5					0.932	0.242	1.046	0.272	

**10.27. 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	15.0	15.0	0.079	0.079	0.040	0.040	
				Left Tilt	39	2441.0	15.0	15.0	0.091	0.091	0.042	0.042	
				Right Touch	39	2441.0	15.0	15.0	0.367	0.367	0.164	0.164	52
				Right Tilt	39	2441.0	15.0	15.0	0.267	0.267	0.113	0.113	
	Body-worn	GFSK	5	Rear	39	2441.0	15.0	15.0	0.348	0.348	0.168	0.168	53
				Front	39	2441.0	15.0	15.0	0.233	0.233	0.110	0.110	

 $P_{low}$ 

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	10.5	10.5	0.005	0.005	0.001	0.001	
				Left Tilt	39	2441.0	10.5	10.5	0.010	0.010	0.004	0.004	
				Right Touch	39	2441.0	10.5	10.5	0.041	0.041	0.018	0.018	
				Right Tilt	39	2441.0	10.5	10.5	0.035	0.035	0.012	0.012	
	Body-worn	GFSK	5	Rear	39	2441.0	10.5	10.5	0.037	0.037	0.017	0.017	
				Front	39	2441.0	10.5	10.5	0.022	0.022	0.009	0.009	



## 10.28. Non LTE Band 30 Model Spot Check

Testing for Model A1687 was performed on a spot check basis for the worst-case positions established from model A1634 as well as highest power levels.

Band	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Ant.	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)	
							Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled
GSM 850	GPRS 2 Slots	5	Rear	190	836.6	LAT	32.5	32.5	0.916	0.916	0.505	0.505
GSM 1900	GPRS 2 Slots	5	Front	810	1909.8	LAT	28.2	28.2	1.100	1.100	0.538	0.538
W-CDMA V	Rel 99 RMC	5	Front	4233	846.6	LAT	25.0	25.0	0.862	0.862	0.479	0.479
W-CDMA IV	Rel 99 RMC	5	Front	1413	1732.6	LAT	20.3	20.3	1.100	1.100	0.570	0.570
W-CDMA II	Rel 99 RMC	5	Rear	9400	1880.0	LAT	19.3	19.3	1.100	1.100	0.548	0.548
CDMA BC1	1xRTT (RC3 SO32)	5	Rear	1175	1908.8	LAT	19.3	19.3	0.982	0.982	0.491	0.491
CDMA BC15	1xRTT (RC3 SO32)	5	Rear	875	1753.8	LAT	20.3	20.3	1.130	1.130	0.567	0.567
LTE Band 2 (20 MHz)	QPSK RB 1/49	5	Front	19100	1900.0	LAT	19.3	19.3	1.020	1.020	0.514	0.514
LTE Band 4 (20 MHz)	QPSK RB 1/49	5	Front	20300	1745.0	LAT	20.3	20.3	1.120	1.120	0.572	0.572
LTE Band 7 (20 MHz)	QPSK RB 1/49	5	Rear	21350	2560.0	LAT	18.8	18.8	1.020	1.020	0.450	0.450
LTE Band 12 (10 MHz)	QPSK RB 1/24	5	Edge 4	23130	711.0	LAT	24.0	24.0	0.770	0.770	0.528	0.528
LTE Band 17 (10 MHz)	QPSK RB 1/24	5	Edge 4	23790	710.0	LAT	24.0	24.0	0.822	0.822	0.560	0.560
LTE Band 25 (20 MHz)	QPSK RB 1/49	5	Rear	26590	1905.0	LAT	19.3	19.3	1.090	1.090	0.539	0.539
LTE Band 41 (20 MHz)	QPSK RB 1/49	5	Rear	40620	2593.0	LAT	21.0	21.0	1.010	1.010	0.454	0.454
2.4 GHz	802.11b 20 MHz	0	Right Touch	2	2417.0	UAT	18.0	18.0	0.979	0.979	0.448	0.448
5.2 GHz	802.11n HT40 CDD	5	Front	46	5230.0	LAT	15.5	15.5	1.080	1.080	0.287	0.287
5.5 GHz	802.11ac VHT80 CDD	5	Front	122	5610.0	LAT	13.5	13.5	0.872	0.872	0.220	0.220
5.8 GHz	802.11n HT40 CDD	5	Front	159	5795.0	LAT	17.0	17.0	1.070	1.070	0.271	0.271

Band	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Ant.	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)	
							Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled
GSM 850	Voice	5	Front	190	836.6	LAT	33.5	33.5	0.659	0.659	0.401	0.401
GSM 1900	Voice	0	Right Touch	661	1880.0	LAT	30.5	30.0	0.362	0.406	0.226	0.254
GSM 1900	GPRS 2 Slots	0	Right Touch	661	1880.0	LAT	29.5	29.0	0.559	0.627	0.351	0.394
W-CDMA IV	Rel 99 RMC 12.2 kbps	0	Right Touch	1413	1732.6	LAT	25.0	24.5	0.555	0.623	0.363	0.407
W-CDMA II	Rel 99 RMC 12.2 kbps	0	Right Touch	9538	1907.6	LAT	25.0	25.0	1.050	1.050	0.651	0.651
CDMA BC0	1xRTT (RC3 SO32)	5	Front	384	836.5	LAT	25.0	25.0	0.604	0.604	0.380	0.380
CDMA BC1	1xRTT (RC3 SO55)	0	Right Touch	1175	1908.8	LAT	25.0	25.0	0.918	0.918	0.570	0.570
CDMA BC10	1xRTT (RC3 SO55)	5	Edge 4	580	820.5	LAT	25.0	25.0	0.569	0.569	0.383	0.383
CDMA BC15	1xRTT (RC3 SO55)	0	Right Touch	875	1753.8	LAT	25.0	25.0	0.922	0.922	0.605	0.605
LTE Band 2 (20 MHz)	QPSK RB 1/49	0	Right Touch	19100	1900.0	LAT	24.0	24.0	0.815	0.815	0.506	0.506
LTE Band 4 (20 MHz)	QPSK RB 1/49	0	Right Touch	20175	1732.5	LAT	24.0	24.0	0.631	0.631	0.410	0.410
LTE Band 5 (10 MHz)	QPSK RB 1/24	5	Front	20525	836.5	LAT	24.0	24.0	0.690	0.690	0.391	0.391
LTE Band 7 (20 MHz)	QPSK RB 1/49	0	Left Touch	21100	2535.0	LAT	22.5	22.5	0.513	0.513	0.290	0.290
LTE Band 13 (10 MHz)	QPSK RB 1/24	5	Front	23230	782.0	LAT	24.0	24.0	0.651	0.651	0.368	0.368
LTE Band 25 (20 MHz)	QPSK RB 1/49	0	Right Touch	26590	1905.0	LAT	24.0	24.0	0.951	0.951	0.591	0.591
LTE Band 26 (10 MHz)	QPSK RB 1/24	5	Front	26740	819.0	LAT	24.0	24.0	0.462	0.462	0.294	0.294
LTE Band 41 (20 MHz)	QPSK RB 1/49	0	Left Touch	40620	2593.0	LAT	22.5	22.5	0.441	0.441	0.245	0.245

## 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 < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is  $\geq 0.80$  W/kg, 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 when the original or repeated measurement is  $\geq 1.45$  W/kg (~ 10% from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is  $\geq 1.5$  W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Frequency Band (MHz)	Air Interface	RF Exposure Conditions	Test Position	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Repeated Measured SAR (W/kg)	Largest to Smallest SAR Ratio
700	LTE Band 12	Body	Edge 4	No	0.858	N/A	N/A
	LTE Band 13	Body	Front	No	0.681	N/A	N/A
	LTE Band 17	Body	Edge 4	Yes	0.898	0.826	1.09
850	GSM 850	Body	Rear	Yes	0.978	0.930	1.05
	CDMA BC0	Body	Front	No	0.650	N/A	N/A
	CDMA BC10	Body	Front	No	0.610	N/A	N/A
	WCDMA Band V	Body	Front	No	0.952	N/A	N/A
	LTE Band 5	Body	Front	No	0.754	N/A	N/A
	LTE Band 26	Body	Front	No	0.502	N/A	N/A
1750	CDMA BC15	Body	Rear	Yes	1.140	1.130	1.01
	WCDMA Band IV	Body	Front	No	1.130	N/A	N/A
	LTE Band 4	Body	Front	No	1.120	N/A	N/A
1900	GSM 1900	Body	Front	No	1.130	N/A	N/A
	CDMA BC1	Body	Rear	No	1.010	N/A	N/A
	WCDMA Band II	Body	Rear	No	1.130	N/A	N/A
	LTE Band 2	Body	Front	No	1.130	N/A	N/A
	LTE Band 25	Body	Rear	Yes	1.140	1.130	1.01
2300	LTE Band 30	Body	Front	Yes	1.060	0.993	1.07
2400	Wi-Fi 802.11b/g/n	Head	Right Touch	Yes	0.999	0.985	1.01
2600	LTE Band 7	Body	Rear	Yes	1.060	1.020	1.04
	LTE Band 41	Body	Rear	No	1.050	N/A	N/A
5200	Wi-Fi 802.11a/n/ac	Body	Front	Yes	1.140	1.080	1.06
5500	Wi-Fi 802.11a/n/ac	Body	Front	Yes	0.959	0.902	1.06
5800	Wi-Fi 802.11a/n/ac	Body	Front	Yes	1.100	1.070	1.03

### 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.

## 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:

**SAR<sub>1</sub>** 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

**SAR<sub>2</sub>** 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	1	WWAN OFF	+ LAT Wi-Fi 2.4 GHz SISO + Bluetooth (P <sub>high</sub> )
	2		+ UAT Wi-Fi 5 GHz SISO + Bluetooth (P <sub>high</sub> )
	3		+ LAT Wi-Fi 5 GHz SISO + Bluetooth (P <sub>high</sub> )
	4		+ Wi-Fi 5 GHz MIMO + Bluetooth (P <sub>high</sub> )
	5		+ LAT Wi-Fi 2.4 GHz SISO + Bluetooth (P <sub>low</sub> )
	6		+ UAT Wi-Fi 5 GHz SISO + Bluetooth (P <sub>low</sub> )
	7		+ LAT Wi-Fi 5 GHz SISO + Bluetooth (P <sub>low</sub> )
	8		+ Wi-Fi 5 GHz MIMO + Bluetooth (P <sub>low</sub> )
Body Worn Accessory	9	WWAN ON	+ UAT Wi-Fi 2.4 GHz SISO
Hotspots	10		+ LAT Wi-Fi 2.4 GHz SISO
	11		+ Wi-Fi 2.4 GHz MIMO
Airplay	12		+ Bluetooth (P <sub>low</sub> )
	13		+ LAT Wi-Fi 2.4 GHz SISO + Bluetooth (P <sub>low</sub> )
	14		+ UAT Wi-Fi 5 GHz SISO
	15		+ LAT Wi-Fi 5 GHz SISO
	16		+ Wi-Fi 5 GHz MIMO
	17		+ UAT Wi-Fi 5 GHz SISO + Bluetooth (P <sub>low</sub> )
	18		+ LAT Wi-Fi 5 GHz SISO + Bluetooth (P <sub>low</sub> )
	19		+ Wi-Fi 5 GHz MIMO + Bluetooth (P <sub>low</sub> )
Notes:			
1. UAT Wi-Fi 2.4GHz Radio cannot transmit simultaneously with Bluetooth Radio.			

**12.1. Sum of the SAR for Wi-Fi (Cell Off) & BT(P<sub>high</sub>)**

RF Exposure Conditions	Test Position	①	②	③	④	⑤	① + ⑤		② + ⑤		③ + ⑤		④ + ⑤	
		Wi-Fi 2.4GHz (LAT)	Wi-Fi 5GHz (UAT)	Wi-Fi 5GHz (LAT)	Wi-Fi 5GHz (MIMO)	Bluetooth (P <sub>high</sub> )	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.178	0.793	0.228	0.523	0.079	0.257	No	0.872	No	0.307	No	0.602	No
	Left Tilt	0.178	0.793	0.228	0.906	0.091	0.269	No	0.884	No	0.319	No	0.997	No
	Right Touch	0.178	0.793	0.228	0.906	0.367	0.545	No	1.160	No	0.595	No	1.273	No
	Right Tilt	0.178	0.744	0.228	0.623	0.267	0.445	No	1.011	No	0.495	No	0.890	No
Body-worn	Rear	0.623	0.955	1.140	0.967	0.348	0.971	No	1.303	No	1.488	No	1.315	No
	Front	0.881	0.877	1.140	0.999	0.233	1.114	No	1.110	No	1.373	No	1.232	No

**12.2. Sum of the SAR for Wi-Fi (Cell Off) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	①	②	③	④	⑤	① + ⑤		② + ⑤		③ + ⑤		④ + ⑤	
		Wi-Fi 2.4GHz (LAT)	Wi-Fi 5GHz (UAT)	Wi-Fi 5GHz (LAT)	Wi-Fi 5GHz (MIMO)	Bluetooth (P <sub>low</sub> )	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.178	0.793	0.228	0.523	0.005	0.183	No	0.798	No	0.233	No	0.528	No
	Left Tilt	0.178	0.793	0.228	0.906	0.010	0.188	No	0.803	No	0.238	No	0.916	No
	Right Touch	0.178	0.793	0.228	0.906	0.041	0.219	No	0.834	No	0.269	No	0.947	No
	Right Tilt	0.178	0.744	0.228	0.623	0.035	0.213	No	0.779	No	0.263	No	0.658	No
Body-worn	Rear	0.623	0.955	1.140	0.967	0.037	0.660	No	0.992	No	1.177	No	1.004	No
	Front	0.881	0.877	1.140	0.999	0.022	0.903	No	0.899	No	1.162	No	1.021	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.

### 12.3. Sum of the SAR for GSM850 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.670	0.397	0.178	0.383	0.005	1.067	No	0.848	No	1.053	No	0.675	No	0.853	No
	Left Tilt	0.562	0.397	0.178	0.383	0.010	0.959	No	0.740	No	0.945	No	0.572	No	0.750	No
	Right Touch	0.882	0.397	0.178	0.383	0.041	1.279	No	1.060	No	1.265	No	0.923	No	1.101	No
	Right Tilt	0.544	0.397	0.178	0.383	0.035	0.941	No	0.722	No	0.927	No	0.579	No	0.757	No
Body-worn & Hotspot & Airplay	Rear	0.490	0.344	0.249	0.390	0.037	0.834	No	0.739	No	0.880	No	0.527	No	0.776	No
	Front	0.487	0.344	0.249	0.390	0.022	0.831	No	0.736	No	0.877	No	0.509	No	0.758	No
Hotspot & Airplay	Edge 1	0.328	0.344	0.249	0.390	N/A	0.672	No	0.577	No	0.718	No				
	Edge 2	0.335	0.344	0.249	0.390	N/A	0.679	No	0.584	No	0.725	No				
	Edge 4	0.133	0.344	0.249	0.390	N/A	0.477	No	0.382	No	0.523	No				

### 12.4. Sum of the SAR for GSM850 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.846	0.397	0.178	0.383	0.005	1.243	No	1.024	No	1.229	No	0.851	No	1.029	No
	Left Tilt	0.383	0.397	0.178	0.383	0.010	0.780	No	0.561	No	0.766	No	0.393	No	0.571	No
	Right Touch	0.622	0.397	0.178	0.383	0.041	1.019	No	0.800	No	1.005	No	0.663	No	0.841	No
	Right Tilt	0.433	0.397	0.178	0.383	0.035	0.830	No	0.611	No	0.816	No	0.468	No	0.646	No
Body-worn & Hotspot & Airplay	Rear	0.978	0.344	0.249	0.390	0.037	1.322	No	1.227	No	1.368	No	1.015	No	1.264	No
	Front	0.739	0.344	0.249	0.390	0.022	1.083	No	0.988	No	1.129	No	0.761	No	1.010	No
Hotspot & Airplay	Edge 2	0.286	0.344	0.249	0.390	N/A	0.630	No	0.535	No	0.676	No				
	Edge 3	0.619	0.344	0.249	0.390	N/A	0.963	No	0.868	No	1.009	No				
	Edge 4	0.665	0.344	0.249	0.390	N/A	1.009	No	0.914	No	1.055	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.

## 12.5. Sum of the SAR for GSM1900 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.392	0.397	0.178	0.383	0.005	0.789	No	0.570	No	0.775	No	0.397	No	0.575	No
	Left Tilt	0.400	0.397	0.178	0.383	0.010	0.797	No	0.578	No	0.783	No	0.410	No	0.588	No
	Right Touch	0.967	0.397	0.178	0.383	0.041	1.364	No	1.145	No	1.350	No	1.008	No	1.186	No
	Right Tilt	0.944	0.397	0.178	0.383	0.035	1.341	No	1.122	No	1.327	No	0.979	No	1.157	No
Body-worn & Hotspot & Airplay	Rear	0.995	0.344	0.249	0.390	0.037	1.339	No	1.244	No	1.385	No	1.032	No	1.281	No
	Front	0.964	0.344	0.249	0.390	0.022	1.308	No	1.213	No	1.354	No	0.986	No	1.235	No
Hotspot & Airplay	Edge 1	0.485	0.344	0.249	0.390	N/A	0.829	No	0.734	No	0.875	No				
	Edge 2	0.045	0.344	0.249	0.390	N/A	0.389	No	0.294	No	0.435	No				
	Edge 4	0.346	0.344	0.249	0.390	N/A	0.690	No	0.595	No	0.736	No				

## 12.6. Sum of the SAR for GSM1900 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.325	0.397	0.178	0.383	0.005	0.722	No	0.503	No	0.708	No	0.330	No	0.508	No
	Left Tilt	0.246	0.397	0.178	0.383	0.010	0.643	No	0.424	No	0.629	No	0.256	No	0.434	No
	Right Touch	0.737	0.397	0.178	0.383	0.041	1.134	No	0.915	No	1.120	No	0.778	No	0.956	No
	Right Tilt	0.172	0.397	0.178	0.383	0.035	0.569	No	0.350	No	0.555	No	0.207	No	0.385	No
Body-worn & Hotspot & Airplay	Rear	1.100	0.344	0.249	0.390	0.037	1.444	No	1.349	No	1.490	No	1.137	No	1.386	No
	Front	1.130	0.344	0.249	0.390	0.022	1.474	No	1.379	No	1.520	No	1.152	No	1.401	No
Hotspot & Airplay	Edge 2	0.418	0.344	0.249	0.390	N/A	0.762	No	0.667	No	0.808	No				
	Edge 3	0.520	0.344	0.249	0.390	N/A	0.864	No	0.769	No	0.910	No				
	Edge 4	0.070	0.344	0.249	0.390	N/A	0.414	No	0.319	No	0.460	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.

### 12.7. Sum of the SAR for W-CDMA V (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.405	0.397	0.178	0.383	0.005	0.802	No	0.583	No	0.788	No	0.410	No	0.588	No
	Left Tilt	0.322	0.397	0.178	0.383	0.010	0.719	No	0.500	No	0.705	No	0.332	No	0.510	No
	Right Touch	0.581	0.397	0.178	0.383	0.041	0.978	No	0.759	No	0.964	No	0.622	No	0.800	No
	Right Tilt	0.354	0.397	0.178	0.383	0.035	0.751	No	0.532	No	0.737	No	0.389	No	0.567	No
Body-worn & Hotspot & Airplay	Rear	0.260	0.344	0.249	0.390	0.037	0.604	No	0.509	No	0.650	No	0.297	No	0.546	No
	Front	0.283	0.344	0.249	0.390	0.022	0.627	No	0.532	No	0.673	No	0.305	No	0.554	No
Hotspot & Airplay	Edge 1	0.150	0.344	0.249	0.390	N/A	0.494	No	0.399	No	0.540	No				
	Edge 2	0.219	0.344	0.249	0.390	N/A	0.563	No	0.468	No	0.609	No				
	Edge 4	0.091	0.344	0.249	0.390	N/A	0.435	No	0.340	No	0.481	No				

### 12.8. Sum of the SAR for W-CDMA V (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.390	0.397	0.178	0.383	0.005	0.787	No	0.568	No	0.773	No	0.395	No	0.573	No
	Left Tilt	0.189	0.397	0.178	0.383	0.010	0.586	No	0.367	No	0.572	No	0.199	No	0.377	No
	Right Touch	0.325	0.397	0.178	0.383	0.041	0.722	No	0.503	No	0.708	No	0.366	No	0.544	No
	Right Tilt	0.179	0.397	0.178	0.383	0.035	0.576	No	0.357	No	0.562	No	0.214	No	0.392	No
Body-worn & Hotspot & Airplay	Rear	0.620	0.344	0.249	0.390	0.037	0.964	No	0.869	No	1.010	No	0.657	No	0.906	No
	Front	0.952	0.344	0.249	0.390	0.022	1.296	No	1.201	No	1.342	No	0.974	No	1.223	No
Hotspot & Airplay	Edge 2	0.381	0.344	0.249	0.390	N/A	0.725	No	0.630	No	0.771	No				
	Edge 3	0.653	0.344	0.249	0.390	N/A	0.997	No	0.902	No	1.043	No				
	Edge 4	0.879	0.344	0.249	0.390	N/A	1.223	No	1.128	No	1.269	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.



### 12.9. Sum of the SAR for W-CDMA IV (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.378	0.397	0.178	0.383	0.005	0.775	No	0.556	No	0.761	No	0.383	No	0.561	No
	Left Tilt	0.344	0.397	0.178	0.383	0.010	0.741	No	0.522	No	0.727	No	0.354	No	0.532	No
	Right Touch	0.993	0.397	0.178	0.383	0.041	1.390	No	1.171	No	1.376	No	1.034	No	1.212	No
	Right Tilt	0.792	0.397	0.178	0.383	0.035	1.189	No	0.970	No	1.175	No	0.827	No	1.005	No
Body-worn & Hotspot & Airplay	Rear	0.971	0.344	0.249	0.390	0.037	1.315	No	1.220	No	1.361	No	1.008	No	1.257	No
	Front	0.936	0.344	0.249	0.390	0.022	1.280	No	1.185	No	1.326	No	0.958	No	1.207	No
Hotspot & Airplay	Edge 1	0.568	0.344	0.249	0.390	N/A	0.912	No	0.817	No	0.958	No				
	Edge 2	0.021	0.344	0.249	0.390	N/A	0.365	No	0.270	No	0.411	No				
	Edge 4	0.558	0.344	0.249	0.390	N/A	0.902	No	0.807	No	0.948	No				

### 12.10. Sum of the SAR for W-CDMA IV (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.386	0.397	0.178	0.383	0.005	0.783	No	0.564	No	0.769	No	0.391	No	0.569	No
	Left Tilt	0.302	0.397	0.178	0.383	0.010	0.699	No	0.480	No	0.685	No	0.312	No	0.490	No
	Right Touch	0.778	0.397	0.178	0.383	0.041	1.175	No	0.956	No	1.161	No	0.819	No	0.997	No
	Right Tilt	0.313	0.397	0.178	0.383	0.035	0.710	No	0.491	No	0.696	No	0.348	No	0.526	No
Body-worn & Hotspot & Airplay	Rear	1.120	0.344	0.249	0.390	0.037	1.464	No	1.369	No	1.510	No	1.157	No	1.406	No
	Front	1.130	0.344	0.249	0.390	0.022	1.474	No	1.379	No	1.520	No	1.152	No	1.401	No
Hotspot & Airplay	Edge 2	0.714	0.344	0.249	0.390	N/A	1.058	No	0.963	No	1.104	No				
	Edge 3	0.980	0.344	0.249	0.390	N/A	1.324	No	1.229	No	1.370	No				
	Edge 4	0.052	0.344	0.249	0.390	N/A	0.396	No	0.301	No	0.442	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.

**12.11. Sum of the SAR for W-CDMA II (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.332	0.397	0.178	0.383	0.005	0.729	No	0.510	No	0.715	No	0.337	No	0.515	No
	Left Tilt	0.338	0.397	0.178	0.383	0.010	0.735	No	0.516	No	0.721	No	0.348	No	0.526	No
	Right Touch	0.904	0.397	0.178	0.383	0.041	1.301	No	1.082	No	1.287	No	0.945	No	1.123	No
	Right Tilt	0.763	0.397	0.178	0.383	0.035	1.160	No	0.941	No	1.146	No	0.798	No	0.976	No
Body-worn & Hotspot & Airplay	Rear	0.996	0.344	0.249	0.390	0.037	1.340	No	1.245	No	1.386	No	1.033	No	1.282	No
	Front	0.663	0.344	0.249	0.390	0.022	1.007	No	0.912	No	1.053	No	0.685	No	0.934	No
Hotspot & Airplay	Edge 1	0.544	0.344	0.249	0.390	N/A	0.888	No	0.793	No	0.934	No				
	Edge 2	0.068	0.344	0.249	0.390	N/A	0.412	No	0.317	No	0.458	No				
	Edge 4	0.400	0.344	0.249	0.390	N/A	0.744	No	0.649	No	0.790	No				

**12.12. Sum of the SAR for W-CDMA II (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.645	0.397	0.178	0.383	0.005	1.042	No	0.823	No	1.028	No	0.650	No	0.828	No
	Left Tilt	0.430	0.397	0.178	0.383	0.010	0.827	No	0.608	No	0.813	No	0.440	No	0.613	No
	Right Touch	1.120	0.397	0.178	0.383	0.041	1.517	No	1.298	No	1.503	No	1.161	No	1.339	No
	Right Tilt	0.483	0.397	0.178	0.383	0.035	0.880	No	0.661	No	0.866	No	0.518	No	0.696	No
Body-worn & Hotspot & Airplay	Rear	1.130	0.344	0.249	0.390	0.037	1.474	No	1.379	No	1.520	No	1.167	No	1.416	No
	Front	1.090	0.344	0.249	0.390	0.022	1.434	No	1.339	No	1.480	No	1.112	No	1.361	No
Hotspot & Airplay	Edge 2	0.563	0.344	0.249	0.390	N/A	0.907	No	0.812	No	0.953	No				
	Edge 3	0.712	0.344	0.249	0.390	N/A	1.056	No	0.961	No	1.102	No				
	Edge 4	0.059	0.344	0.249	0.390	N/A	0.403	No	0.308	No	0.449	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.

**12.13. Sum of the SAR for CDMA BC0 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.408	0.397	0.178	0.383	0.005	0.805	No	0.586	No	0.791	No	0.413	No	0.591	No
	Left Tilt	0.390	0.397	0.178	0.383	0.010	0.787	No	0.568	No	0.773	No	0.400	No	0.578	No
	Right Touch	0.549	0.397	0.178	0.383	0.041	0.946	No	0.727	No	0.932	No	0.590	No	0.768	No
	Right Tilt	0.329	0.397	0.178	0.383	0.035	0.726	No	0.507	No	0.712	No	0.364	No	0.542	No
Body-worn & Hotspot & Airplay	Rear	0.288	0.344	0.249	0.390	0.037	0.632	No	0.537	No	0.678	No	0.325	No	0.574	No
	Front	0.298	0.344	0.249	0.390	0.022	0.642	No	0.547	No	0.688	No	0.320	No	0.569	No
Hotspot & Airplay	Edge 1	0.168	0.344	0.249	0.390	N/A	0.512	No	0.417	No	0.558	No				
	Edge 2	0.255	0.344	0.249	0.390	N/A	0.599	No	0.504	No	0.645	No				
	Edge 4	0.115	0.344	0.249	0.390	N/A	0.459	No	0.364	No	0.505	No				

**12.14. Sum of the SAR for CDMA BC0 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.335	0.397	0.178	0.383	0.005	0.732	No	0.513	No	0.718	No	0.340	No	0.518	No
	Left Tilt	0.130	0.397	0.178	0.383	0.010	0.527	No	0.308	No	0.513	No	0.140	No	0.318	No
	Right Touch	0.285	0.397	0.178	0.383	0.041	0.682	No	0.463	No	0.668	No	0.326	No	0.504	No
	Right Tilt	0.133	0.397	0.178	0.383	0.035	0.530	No	0.311	No	0.516	No	0.168	No	0.346	No
Body-worn & Hotspot & Airplay	Rear	0.569	0.344	0.249	0.390	0.037	0.913	No	0.818	No	0.959	No	0.606	No	0.855	No
	Front	0.650	0.344	0.249	0.390	0.022	0.994	No	0.899	No	1.040	No	0.672	No	0.921	No
Hotspot & Airplay	Edge 2	0.248	0.344	0.249	0.390	N/A	0.592	No	0.497	No	0.638	No				
	Edge 3	0.458	0.344	0.249	0.390	N/A	0.802	No	0.707	No	0.848	No				
	Edge 4	0.629	0.344	0.249	0.390	N/A	0.973	No	0.878	No	1.019	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.

**12.15. Sum of the SAR for CDMA BC1 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.357	0.397	0.178	0.383	0.005	0.754	No	0.535	No	0.740	No	0.362	No	0.540	No
	Left Tilt	0.314	0.397	0.178	0.383	0.010	0.711	No	0.492	No	0.697	No	0.324	No	0.502	No
	Right Touch	0.935	0.397	0.178	0.383	0.041	1.332	No	1.113	No	1.318	No	0.976	No	1.154	No
	Right Tilt	0.843	0.397	0.178	0.383	0.035	1.240	No	1.021	No	1.226	No	0.878	No	1.056	No
Body-worn & Hotspot & Airplay	Rear	0.922	0.344	0.249	0.390	0.037	1.266	No	1.171	No	1.312	No	0.959	No	1.208	No
	Front	0.527	0.344	0.249	0.390	0.022	0.871	No	0.776	No	0.917	No	0.549	No	0.798	No
Hotspot & Airplay	Edge 1	0.436	0.344	0.249	0.390	N/A	0.780	No	0.685	No	0.826	No				
	Edge 2	0.054	0.344	0.249	0.390	N/A	0.398	No	0.303	No	0.444	No				
	Edge 4	0.449	0.344	0.249	0.390	N/A	0.793	No	0.698	No	0.839	No				

**12.16. Sum of the SAR for CDMA BC1 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.629	0.397	0.178	0.383	0.005	1.026	No	0.807	No	1.012	No	0.634	No	0.812	No
	Left Tilt	0.510	0.397	0.178	0.383	0.010	0.907	No	0.688	No	0.893	No	0.520	No	0.698	No
	Right Touch	0.971	0.397	0.178	0.383	0.041	1.368	No	1.149	No	1.354	No	1.012	No	1.190	No
	Right Tilt	0.449	0.397	0.178	0.383	0.035	0.846	No	0.627	No	0.832	No	0.484	No	0.662	No
Body-worn & Hotspot & Airplay	Rear	1.010	0.344	0.249	0.390	0.037	1.354	No	1.259	No	1.400	No	1.047	No	1.296	No
	Front	0.940	0.344	0.249	0.390	0.022	1.284	No	1.189	No	1.330	No	0.962	No	1.211	No
Hotspot & Airplay	Edge 2	0.663	0.344	0.249	0.390	N/A	1.007	No	0.912	No	1.053	No				
	Edge 3	0.979	0.344	0.249	0.390	N/A	1.323	No	1.228	No	1.369	No				
	Edge 4	0.068	0.344	0.249	0.390	N/A	0.412	No	0.317	No	0.458	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.

**12.17. Sum of the SAR for CDMA BC10 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.339	0.397	0.178	0.383	0.005	0.736	No	0.517	No	0.722	No	0.344	No	0.522	No
	Left Tilt	0.213	0.397	0.178	0.383	0.010	0.610	No	0.391	No	0.596	No	0.223	No	0.401	No
	Right Touch	0.494	0.397	0.178	0.383	0.041	0.891	No	0.672	No	0.877	No	0.535	No	0.713	No
	Right Tilt	0.308	0.397	0.178	0.383	0.035	0.705	No	0.486	No	0.691	No	0.343	No	0.521	No
Body-worn & Hotspot & Airplay	Rear	0.191	0.344	0.249	0.390	0.037	0.535	No	0.440	No	0.581	No	0.228	No	0.477	No
	Front	0.228	0.344	0.249	0.390	0.022	0.572	No	0.477	No	0.618	No	0.250	No	0.499	No
Hotspot & Airplay	Edge 1	0.092	0.344	0.249	0.390	N/A	0.436	No	0.341	No	0.482	No				
	Edge 2	0.190	0.344	0.249	0.390	N/A	0.534	No	0.439	No	0.580	No				
	Edge 4	0.097	0.344	0.249	0.390	N/A	0.441	No	0.346	No	0.487	No				

**12.18. Sum of the SAR for CDMA BC10 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.251	0.397	0.178	0.383	0.005	0.648	No	0.429	No	0.634	No	0.256	No	0.434	No
	Left Tilt	0.097	0.397	0.178	0.383	0.010	0.494	No	0.275	No	0.480	No	0.107	No	0.285	No
	Right Touch	0.204	0.397	0.178	0.383	0.041	0.601	No	0.382	No	0.587	No	0.245	No	0.423	No
	Right Tilt	0.100	0.397	0.178	0.383	0.035	0.497	No	0.278	No	0.483	No	0.135	No	0.313	No
Body-worn & Hotspot & Airplay	Rear	0.495	0.344	0.249	0.390	0.037	0.839	No	0.744	No	0.885	No	0.532	No	0.781	No
	Front	0.610	0.344	0.249	0.390	0.022	0.954	No	0.859	No	1.000	No	0.632	No	0.881	No
Hotspot & Airplay	Edge 2	0.300	0.344	0.249	0.390	N/A	0.644	No	0.549	No	0.690	No				
	Edge 3	0.347	0.344	0.249	0.390	N/A	0.691	No	0.596	No	0.737	No				
	Edge 4	0.610	0.344	0.249	0.390	N/A	0.954	No	0.859	No	1.000	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.

**12.19. Sum of the SAR for CDMA BC15 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.303	0.397	0.178	0.383	0.005	0.700	No	0.481	No	0.686	No	0.308	No	0.486	No
	Left Tilt	0.293	0.397	0.178	0.383	0.010	0.690	No	0.471	No	0.676	No	0.303	No	0.481	No
	Right Touch	0.973	0.397	0.178	0.383	0.041	1.370	No	1.151	No	1.356	No	1.014	No	1.192	No
	Right Tilt	0.774	0.397	0.178	0.383	0.035	1.171	No	0.952	No	1.157	No	0.809	No	0.987	No
Body-worn & Hotspot & Airplay	Rear	0.938	0.344	0.249	0.390	0.037	1.282	No	1.187	No	1.328	No	0.975	No	1.224	No
	Front	0.668	0.344	0.249	0.390	0.022	1.012	No	0.917	No	1.058	No	0.690	No	0.939	No
Hotspot & Airplay	Edge 1	0.521	0.344	0.249	0.390	N/A	0.865	No	0.770	No	0.911	No				
	Edge 2	0.017	0.344	0.249	0.390	N/A	0.361	No	0.266	No	0.407	No				
	Edge 4	0.513	0.344	0.249	0.390	N/A	0.857	No	0.762	No	0.903	No				

**12.20. Sum of the SAR for CDMA BC15 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.503	0.397	0.178	0.383	0.005	0.900	No	0.681	No	0.886	No	0.508	No	0.686	No
	Left Tilt	0.345	0.397	0.178	0.383	0.010	0.742	No	0.523	No	0.728	No	0.355	No	0.533	No
	Right Touch	0.931	0.397	0.178	0.383	0.041	1.328	No	1.109	No	1.314	No	0.972	No	1.150	No
	Right Tilt	0.303	0.397	0.178	0.383	0.035	0.700	No	0.481	No	0.686	No	0.338	No	0.516	No
Body-worn & Hotspot & Airplay	Rear	1.140	0.344	0.249	0.390	0.037	1.484	No	1.389	No	1.530	No	1.177	No	1.426	No
	Front	1.140	0.344	0.249	0.390	0.022	1.484	No	1.389	No	1.530	No	1.162	No	1.411	No
Hotspot & Airplay	Edge 2	0.683	0.344	0.249	0.390	N/A	1.027	No	0.932	No	1.073	No				
	Edge 3	1.010	0.344	0.249	0.390	N/A	1.354	No	1.259	No	1.400	No				
	Edge 4	0.049	0.344	0.249	0.390	N/A	0.393	No	0.298	No	0.439	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.

### 12.21. Sum of the SAR for LTE Band 2 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.466	0.397	0.178	0.383	0.005	0.863	No	0.644	No	0.849	No	0.471	No	0.649	No
	Left Tilt	0.458	0.397	0.178	0.383	0.010	0.855	No	0.636	No	0.841	No	0.468	No	0.646	No
	Right Touch	0.992	0.397	0.178	0.383	0.041	1.389	No	1.170	No	1.375	No	1.033	No	1.211	No
	Right Tilt	0.932	0.397	0.178	0.383	0.035	1.329	No	1.110	No	1.315	No	0.967	No	1.145	No
Body-worn & Hotspot & Airplay	Rear	0.926	0.344	0.249	0.390	0.037	1.270	No	1.175	No	1.316	No	0.963	No	1.212	No
	Front	0.861	0.344	0.249	0.390	0.022	1.205	No	1.110	No	1.251	No	0.883	No	1.132	No
Hotspot & Airplay	Edge 1	0.694	0.344	0.249	0.390	N/A	1.038	No	0.943	No	1.084	No				
	Edge 2	0.084	0.344	0.249	0.390	N/A	0.428	No	0.333	No	0.474	No				
	Edge 4	0.470	0.344	0.249	0.390	N/A	0.814	No	0.719	No	0.860	No				

### 12.22. Sum of the SAR for LTE Band 2 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.472	0.397	0.178	0.383	0.005	0.869	No	0.650	No	0.855	No	0.477	No	0.655	No
	Left Tilt	0.338	0.397	0.178	0.383	0.010	0.735	No	0.516	No	0.721	No	0.348	No	0.526	No
	Right Touch	0.897	0.397	0.178	0.383	0.041	1.294	No	1.075	No	1.280	No	0.938	No	1.116	No
	Right Tilt	0.344	0.397	0.178	0.383	0.035	0.741	No	0.522	No	0.727	No	0.379	No	0.557	No
Body-worn & Hotspot & Airplay	Rear	1.120	0.344	0.249	0.390	0.037	1.464	No	1.369	No	1.510	No	1.157	No	1.406	No
	Front	1.130	0.344	0.249	0.390	0.022	1.474	No	1.379	No	1.520	No	1.152	No	1.401	No
Hotspot & Airplay	Edge 2	0.601	0.344	0.249	0.390	N/A	0.945	No	0.850	No	0.991	No				
	Edge 3	0.687	0.344	0.249	0.390	N/A	1.031	No	0.936	No	1.077	No				
	Edge 4	0.058	0.344	0.249	0.390	N/A	0.402	No	0.307	No	0.448	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.

**12.23. Sum of the SAR for LTE Band 4 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.259	0.397	0.178	0.383	0.005	0.656	No	0.437	No	0.642	No	0.264	No	0.442	No
	Left Tilt	0.286	0.397	0.178	0.383	0.010	0.683	No	0.464	No	0.669	No	0.296	No	0.474	No
	Right Touch	0.982	0.397	0.178	0.383	0.041	1.379	No	1.160	No	1.365	No	1.023	No	1.201	No
	Right Tilt	0.769	0.397	0.178	0.383	0.035	1.166	No	0.947	No	1.152	No	0.804	No	0.982	No
Body-worn & Hotspot & Airplay	Rear	0.784	0.344	0.249	0.390	0.037	1.128	No	1.033	No	1.174	No	0.821	No	1.070	No
	Front	0.579	0.344	0.249	0.390	0.022	0.923	No	0.828	No	0.969	No	0.601	No	0.850	No
Hotspot & Airplay	Edge 1	0.470	0.344	0.249	0.390	N/A	0.814	No	0.719	No	0.860	No				
	Edge 2	0.033	0.344	0.249	0.390	N/A	0.377	No	0.282	No	0.423	No				
	Edge 4	0.401	0.344	0.249	0.390	N/A	0.745	No	0.650	No	0.791	No				

**12.24. Sum of the SAR for LTE Band 4 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.361	0.397	0.178	0.383	0.005	0.758	No	0.539	No	0.744	No	0.366	No	0.544	No
	Left Tilt	0.289	0.397	0.178	0.383	0.010	0.686	No	0.467	No	0.672	No	0.299	No	0.477	No
	Right Touch	0.659	0.397	0.178	0.383	0.041	1.056	No	0.837	No	1.042	No	0.700	No	0.878	No
	Right Tilt	0.260	0.397	0.178	0.383	0.035	0.657	No	0.438	No	0.643	No	0.295	No	0.473	No
Body-worn & Hotspot & Airplay	Rear	1.120	0.344	0.249	0.390	0.037	1.464	No	1.369	No	1.510	No	1.157	No	1.406	No
	Front	1.120	0.344	0.249	0.390	0.022	1.464	No	1.369	No	1.510	No	1.142	No	1.391	No
Hotspot & Airplay	Edge 2	0.698	0.344	0.249	0.390	N/A	1.042	No	0.947	No	1.088	No				
	Edge 3	0.982	0.344	0.249	0.390	N/A	1.326	No	1.231	No	1.372	No				
	Edge 4	0.034	0.344	0.249	0.390	N/A	0.378	No	0.283	No	0.424	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.



**12.25. Sum of the SAR for LTE Band 5 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.393	0.397	0.178	0.383	0.005	0.790	No	0.571	No	0.776	No	0.398	No	0.576	No
	Left Tilt	0.306	0.397	0.178	0.383	0.010	0.703	No	0.484	No	0.689	No	0.316	No	0.494	No
	Right Touch	0.487	0.397	0.178	0.383	0.041	0.884	No	0.665	No	0.870	No	0.528	No	0.706	No
	Right Tilt	0.317	0.397	0.178	0.383	0.035	0.714	No	0.495	No	0.700	No	0.352	No	0.530	No
Body-worn & Hotspot & Airplay	Rear	0.356	0.344	0.249	0.390	0.037	0.700	No	0.605	No	0.746	No	0.393	No	0.642	No
	Front	0.389	0.344	0.249	0.390	0.022	0.733	No	0.638	No	0.779	No	0.411	No	0.660	No
Hotspot & Airplay	Edge 1	0.274	0.344	0.249	0.390	N/A	0.618	No	0.523	No	0.664	No				
	Edge 2	0.308	0.344	0.249	0.390	N/A	0.652	No	0.557	No	0.698	No				
	Edge 4	0.127	0.344	0.249	0.390	N/A	0.471	No	0.376	No	0.517	No				

**12.26. Sum of the SAR for LTE Band 5 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.296	0.397	0.178	0.383	0.005	0.693	No	0.474	No	0.679	No	0.301	No	0.479	No
	Left Tilt	0.096	0.397	0.178	0.383	0.010	0.493	No	0.274	No	0.479	No	0.106	No	0.284	No
	Right Touch	0.226	0.397	0.178	0.383	0.041	0.623	No	0.404	No	0.609	No	0.267	No	0.445	No
	Right Tilt	0.098	0.397	0.178	0.383	0.035	0.495	No	0.276	No	0.481	No	0.133	No	0.311	No
Body-worn & Hotspot & Airplay	Rear	0.531	0.344	0.249	0.390	0.037	0.875	No	0.780	No	0.921	No	0.568	No	0.817	No
	Front	0.754	0.344	0.249	0.390	0.022	1.098	No	1.003	No	1.144	No	0.776	No	1.025	No
Hotspot & Airplay	Edge 2	0.139	0.344	0.249	0.390	N/A	0.483	No	0.388	No	0.529	No				
	Edge 3	0.414	0.344	0.249	0.390	N/A	0.758	No	0.663	No	0.804	No				
	Edge 4	0.362	0.344	0.249	0.390	N/A	0.706	No	0.611	No	0.752	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.

**12.27. Sum of the SAR for LTE Band 7 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.252	0.397	0.178	0.383	0.005	0.649	No	0.430	No	0.635	No	0.257	No	0.435	No
	Left Tilt	0.322	0.397	0.178	0.383	0.010	0.719	No	0.500	No	0.705	No	0.332	No	0.510	No
	Right Touch	0.965	0.397	0.178	0.383	0.041	1.362	No	1.143	No	1.348	No	1.006	No	1.184	No
	Right Tilt	0.724	0.397	0.178	0.383	0.035	1.121	No	0.902	No	1.107	No	0.759	No	0.937	No
Body-worn & Hotspot & Airplay	Rear	0.942	0.344	0.249	0.390	0.037	1.286	No	1.191	No	1.332	No	0.979	No	1.228	No
	Front	0.790	0.344	0.249	0.390	0.022	1.134	No	1.039	No	1.180	No	0.812	No	1.061	No
Hotspot & Airplay	Edge 1	0.609	0.344	0.249	0.390	N/A	0.953	No	0.858	No	0.999	No				
	Edge 2	0.074	0.344	0.249	0.390	N/A	0.418	No	0.323	No	0.464	No				
	Edge 4	0.915	0.344	0.249	0.390	N/A	1.259	No	1.164	No	1.305	No				

**12.28. Sum of the SAR for LTE Band 7 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.579	0.397	0.178	0.383	0.005	0.976	No	0.757	No	0.962	No	0.584	No	0.762	No
	Left Tilt	0.188	0.397	0.178	0.383	0.010	0.535	No	0.316	No	0.521	No	0.148	No	0.326	No
	Right Touch	0.339	0.397	0.178	0.383	0.041	0.736	No	0.517	No	0.722	No	0.380	No	0.558	No
	Right Tilt	0.323	0.397	0.178	0.383	0.035	0.720	No	0.501	No	0.706	No	0.358	No	0.536	No
Body-worn & Hotspot & Airplay	Rear	1.060	0.344	0.249	0.390	0.037	1.404	No	1.309	No	1.450	No	1.097	No	1.346	No
	Front	1.060	0.344	0.249	0.390	0.022	1.404	No	1.309	No	1.450	No	1.082	No	1.331	No
Hotspot & Airplay	Edge 2	0.082	0.344	0.249	0.390	N/A	0.426	No	0.331	No	0.472	No				
	Edge 3	0.620	0.344	0.249	0.390	N/A	0.964	No	0.869	No	1.010	No				
	Edge 4	0.823	0.344	0.249	0.390	N/A	1.167	No	1.072	No	1.213	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.

**12.29. Sum of the SAR for LTE Band 12 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.372	0.397	0.178	0.383	0.005	0.769	No	0.550	No	0.755	No	0.377	No	0.555	No
	Left Tilt	0.301	0.397	0.178	0.383	0.010	0.698	No	0.479	No	0.684	No	0.311	No	0.489	No
	Right Touch	0.467	0.397	0.178	0.383	0.041	0.864	No	0.645	No	0.850	No	0.508	No	0.686	No
	Right Tilt	0.314	0.397	0.178	0.383	0.035	0.711	No	0.492	No	0.697	No	0.349	No	0.527	No
Body-worn & Hotspot & Airplay	Rear	0.183	0.344	0.249	0.390	0.037	0.527	No	0.432	No	0.573	No	0.220	No	0.469	No
	Front	0.170	0.344	0.249	0.390	0.022	0.514	No	0.419	No	0.560	No	0.192	No	0.441	No
Hotspot & Airplay	Edge 1	0.091	0.344	0.249	0.390	N/A	0.435	No	0.340	No	0.481	No				
	Edge 2	0.305	0.344	0.249	0.390	N/A	0.649	No	0.554	No	0.695	No				
	Edge 4	0.134	0.344	0.249	0.390	N/A	0.478	No	0.383	No	0.524	No				

**12.30. Sum of the SAR for LTE Band 12 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.264	0.397	0.178	0.383	0.005	0.661	No	0.442	No	0.647	No	0.269	No	0.447	No
	Left Tilt	0.127	0.397	0.178	0.383	0.010	0.524	No	0.305	No	0.510	No	0.137	No	0.315	No
	Right Touch	0.224	0.397	0.178	0.383	0.041	0.621	No	0.402	No	0.607	No	0.265	No	0.443	No
	Right Tilt	0.121	0.397	0.178	0.383	0.035	0.518	No	0.299	No	0.504	No	0.156	No	0.334	No
Body-worn & Hotspot & Airplay	Rear	0.376	0.344	0.249	0.390	0.037	0.720	No	0.625	No	0.766	No	0.413	No	0.662	No
	Front	0.480	0.344	0.249	0.390	0.022	0.824	No	0.729	No	0.870	No	0.502	No	0.751	No
Hotspot & Airplay	Edge 2	0.452	0.344	0.249	0.390	N/A	0.796	No	0.701	No	0.842	No				
	Edge 3	0.367	0.344	0.249	0.390	N/A	0.711	No	0.616	No	0.757	No				
	Edge 4	0.858	0.344	0.249	0.390	N/A	1.202	No	1.107	No	1.248	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.

### 12.31. Sum of the SAR for LTE Band 13 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.390	0.397	0.178	0.383	0.005	0.787	No	0.568	No	0.773	No	0.395	No	0.573	No
	Left Tilt	0.345	0.397	0.178	0.383	0.010	0.742	No	0.523	No	0.728	No	0.355	No	0.533	No
	Right Touch	0.436	0.397	0.178	0.383	0.041	0.833	No	0.614	No	0.819	No	0.477	No	0.655	No
	Right Tilt	0.320	0.397	0.178	0.383	0.035	0.717	No	0.498	No	0.703	No	0.355	No	0.533	No
Body-worn & Hotspot & Airplay	Rear	0.208	0.344	0.249	0.390	0.037	0.552	No	0.457	No	0.598	No	0.245	No	0.494	No
	Front	0.227	0.344	0.249	0.390	0.022	0.571	No	0.476	No	0.617	No	0.249	No	0.498	No
Hotspot & Airplay	Edge 1	0.210	0.344	0.249	0.390	N/A	0.554	No	0.459	No	0.600	No				
	Edge 2	0.203	0.344	0.249	0.390	N/A	0.547	No	0.452	No	0.593	No				
	Edge 4	0.080	0.344	0.249	0.390	N/A	0.424	No	0.329	No	0.470	No				

### 12.32. Sum of the SAR for LTE Band 13 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.281	0.397	0.178	0.383	0.005	0.678	No	0.459	No	0.664	No	0.286	No	0.464	No
	Left Tilt	0.162	0.397	0.178	0.383	0.010	0.559	No	0.340	No	0.545	No	0.172	No	0.350	No
	Right Touch	0.249	0.397	0.178	0.383	0.041	0.646	No	0.427	No	0.632	No	0.290	No	0.468	No
	Right Tilt	0.150	0.397	0.178	0.383	0.035	0.547	No	0.328	No	0.533	No	0.185	No	0.363	No
Body-worn & Hotspot & Airplay	Rear	0.555	0.344	0.249	0.390	0.037	0.899	No	0.804	No	0.945	No	0.592	No	0.841	No
	Front	0.681	0.344	0.249	0.390	0.022	1.025	No	0.930	No	1.071	No	0.703	No	0.952	No
Hotspot & Airplay	Edge 2	0.227	0.344	0.249	0.390	N/A	0.571	No	0.476	No	0.617	No				
	Edge 3	0.583	0.344	0.249	0.390	N/A	0.927	No	0.832	No	0.973	No				
	Edge 4	0.647	0.344	0.249	0.390	N/A	0.991	No	0.896	No	1.037	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.

### 12.33. Sum of the SAR for LTE Band 17 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.362	0.397	0.178	0.383	0.005	0.759	No	0.540	No	0.745	No	0.367	No	0.545	No
	Left Tilt	0.271	0.397	0.178	0.383	0.010	0.668	No	0.449	No	0.654	No	0.281	No	0.459	No
	Right Touch	0.466	0.397	0.178	0.383	0.041	0.863	No	0.644	No	0.849	No	0.507	No	0.685	No
	Right Tilt	0.321	0.397	0.178	0.383	0.035	0.718	No	0.499	No	0.704	No	0.356	No	0.534	No
Body-worn & Hotspot & Airplay	Rear	0.183	0.344	0.249	0.390	0.037	0.527	No	0.432	No	0.573	No	0.220	No	0.469	No
	Front	0.171	0.344	0.249	0.390	0.022	0.515	No	0.420	No	0.561	No	0.193	No	0.442	No
Hotspot & Airplay	Edge 1	0.095	0.344	0.249	0.390	N/A	0.439	No	0.344	No	0.485	No				
	Edge 2	0.300	0.344	0.249	0.390	N/A	0.644	No	0.549	No	0.690	No				
	Edge 4	0.119	0.344	0.249	0.390	N/A	0.463	No	0.368	No	0.509	No				

### 12.34. Sum of the SAR for LTE Band 17 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.262	0.397	0.178	0.383	0.005	0.659	No	0.440	No	0.645	No	0.267	No	0.445	No
	Left Tilt	0.129	0.397	0.178	0.383	0.010	0.526	No	0.307	No	0.512	No	0.139	No	0.317	No
	Right Touch	0.220	0.397	0.178	0.383	0.041	0.617	No	0.398	No	0.603	No	0.261	No	0.439	No
	Right Tilt	0.128	0.397	0.178	0.383	0.035	0.525	No	0.306	No	0.511	No	0.163	No	0.341	No
Body-worn & Hotspot & Airplay	Rear	0.434	0.344	0.249	0.390	0.037	0.778	No	0.683	No	0.824	No	0.471	No	0.720	No
	Front	0.529	0.344	0.249	0.390	0.022	0.873	No	0.778	No	0.919	No	0.551	No	0.800	No
Hotspot & Airplay	Edge 2	0.476	0.344	0.249	0.390	N/A	0.820	No	0.725	No	0.866	No				
	Edge 3	0.395	0.344	0.249	0.390	N/A	0.739	No	0.644	No	0.785	No				
	Edge 4	0.898	0.344	0.249	0.390	N/A	1.242	No	1.147	No	1.288	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.

### 12.35. Sum of the SAR for LTE Band 25 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.359	0.397	0.178	0.383	0.005	0.756	No	0.537	No	0.742	No	0.364	No	0.542	No
	Left Tilt	0.367	0.397	0.178	0.383	0.010	0.764	No	0.545	No	0.750	No	0.377	No	0.555	No
	Right Touch	0.889	0.397	0.178	0.383	0.041	1286	No	1067	No	1272	No	0.930	No	1.108	No
	Right Tilt	0.730	0.397	0.178	0.383	0.035	1.127	No	0.908	No	1.113	No	0.765	No	0.943	No
Body-worn & Hotspot & Airplay	Rear	0.996	0.344	0.249	0.390	0.037	1340	No	1245	No	1386	No	1033	No	1282	No
	Front	0.834	0.344	0.249	0.390	0.022	1.178	No	1083	No	1224	No	0.856	No	1.105	No
Hotspot & Airplay	Edge 1	0.538	0.344	0.249	0.390	N/A	0.882	No	0.787	No	0.928	No				
	Edge 2	0.072	0.344	0.249	0.390	N/A	0.416	No	0.321	No	0.462	No				
	Edge 4	0.444	0.344	0.249	0.390	N/A	0.788	No	0.693	No	0.834	No				

### 12.36. Sum of the SAR for LTE Band 25 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.486	0.397	0.178	0.383	0.005	0.883	No	0.664	No	0.869	No	0.491	No	0.669	No
	Left Tilt	0.367	0.397	0.178	0.383	0.010	0.764	No	0.545	No	0.750	No	0.377	No	0.555	No
	Right Touch	0.976	0.397	0.178	0.383	0.041	1373	No	1154	No	1359	No	1017	No	1.195	No
	Right Tilt	0.347	0.397	0.178	0.383	0.035	0.744	No	0.525	No	0.730	No	0.382	No	0.560	No
Body-worn & Hotspot & Airplay	Rear	1.140	0.344	0.249	0.390	0.037	1484	No	1389	No	1530	No	1.177	No	1426	No
	Front	1.120	0.344	0.249	0.390	0.022	1464	No	1369	No	1510	No	1.142	No	1391	No
Hotspot & Airplay	Edge 2	0.680	0.344	0.249	0.390	N/A	1.024	No	0.929	No	1.070	No				
	Edge 3	0.892	0.344	0.249	0.390	N/A	1236	No	1.141	No	1282	No				
	Edge 4	0.063	0.344	0.249	0.390	N/A	0.407	No	0.312	No	0.453	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.

### 12.37. Sum of the SAR for LTE Band 26 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.286	0.397	0.178	0.383	0.005	0.683	No	0.464	No	0.669	No	0.291	No	0.469	No
	Left Tilt	0.196	0.397	0.178	0.383	0.010	0.593	No	0.374	No	0.579	No	0.206	No	0.384	No
	Right Touch	0.356	0.397	0.178	0.383	0.041	0.753	No	0.534	No	0.739	No	0.397	No	0.575	No
	Right Tilt	0.231	0.397	0.178	0.383	0.035	0.628	No	0.409	No	0.614	No	0.266	No	0.444	No
Body-worn & Hotspot & Airplay	Rear	0.160	0.344	0.249	0.390	0.037	0.504	No	0.409	No	0.550	No	0.197	No	0.446	No
	Front	0.178	0.344	0.249	0.390	0.022	0.522	No	0.427	No	0.568	No	0.200	No	0.449	No
Hotspot & Airplay	Edge 1	0.077	0.344	0.249	0.390	N/A	0.421	No	0.326	No	0.467	No				
	Edge 2	0.130	0.344	0.249	0.390	N/A	0.474	No	0.379	No	0.520	No				
	Edge 4	0.065	0.344	0.249	0.390	N/A	0.409	No	0.314	No	0.455	No				

### 12.38. Sum of the SAR for LTE Band 26 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.188	0.397	0.178	0.383	0.005	0.585	No	0.366	No	0.571	No	0.193	No	0.371	No
	Left Tilt	0.085	0.397	0.178	0.383	0.010	0.482	No	0.263	No	0.468	No	0.095	No	0.273	No
	Right Touch	0.153	0.397	0.178	0.383	0.041	0.550	No	0.331	No	0.536	No	0.194	No	0.372	No
	Right Tilt	0.078	0.397	0.178	0.383	0.035	0.475	No	0.256	No	0.461	No	0.113	No	0.291	No
Body-worn & Hotspot & Airplay	Rear	0.386	0.344	0.249	0.390	0.037	0.730	No	0.635	No	0.776	No	0.423	No	0.672	No
	Front	0.502	0.344	0.249	0.390	0.022	0.846	No	0.751	No	0.892	No	0.524	No	0.773	No
Hotspot & Airplay	Edge 2	0.108	0.344	0.249	0.390	N/A	0.452	No	0.357	No	0.498	No				
	Edge 3	0.246	0.344	0.249	0.390	N/A	0.590	No	0.495	No	0.636	No				
	Edge 4	0.292	0.344	0.249	0.390	N/A	0.636	No	0.541	No	0.682	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.

### 12.39. Sum of the SAR for LTE Band 30 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.264	0.397	0.178	0.383	0.005	0.661	No	0.442	No	0.647	No	0.269	No	0.447	No
	Left Tilt	0.288	0.397	0.178	0.383	0.010	0.685	No	0.466	No	0.671	No	0.298	No	0.476	No
	Right Touch	0.978	0.397	0.178	0.383	0.041	1.375	No	1.156	No	1.361	No	1.019	No	1.197	No
	Right Tilt	0.774	0.397	0.178	0.383	0.035	1.171	No	0.952	No	1.157	No	0.809	No	0.987	No
Body-worn & Hotspot & Airplay	Rear	0.883	0.344	0.249	0.390	0.037	1.227	No	1.132	No	1.273	No	0.920	No	1.169	No
	Front	0.874	0.344	0.249	0.390	0.022	1.218	No	1.123	No	1.264	No	0.896	No	1.145	No
Hotspot & Airplay	Edge 1	0.459	0.344	0.249	0.390	N/A	0.803	No	0.708	No	0.849	No				
	Edge 2	0.060	0.344	0.249	0.390	N/A	0.404	No	0.309	No	0.450	No				
	Edge 4	0.852	0.344	0.249	0.390	N/A	1.196	No	1.101	No	1.242	No				

### 12.40. Sum of the SAR for LTE Band 30 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.242	0.397	0.178	0.383	0.005	0.639	No	0.420	No	0.625	No	0.247	No	0.425	No
	Left Tilt	0.128	0.397	0.178	0.383	0.010	0.525	No	0.306	No	0.511	No	0.138	No	0.316	No
	Right Touch	0.171	0.397	0.178	0.383	0.041	0.568	No	0.349	No	0.554	No	0.212	No	0.390	No
	Right Tilt	0.184	0.397	0.178	0.383	0.035	0.581	No	0.362	No	0.567	No	0.219	No	0.397	No
Body-worn & Hotspot & Airplay	Rear	0.932	0.344	0.249	0.390	0.037	1.276	No	1.181	No	1.322	No	0.969	No	1.218	No
	Front	1.060	0.344	0.249	0.390	0.022	1.404	No	1.309	No	1.450	No	1.082	No	1.331	No
Hotspot & Airplay	Edge 2	0.331	0.344	0.249	0.390	N/A	0.675	No	0.580	No	0.721	No				
	Edge 3	0.955	0.344	0.249	0.390	N/A	1.299	No	1.204	No	1.345	No				
	Edge 4	0.630	0.344	0.249	0.390	N/A	0.974	No	0.879	No	1.020	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.



**12.41. Sum of the SAR for LTE Band 41 (UAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.206	0.397	0.178	0.383	0.005	0.603	No	0.384	No	0.589	No	0.211	No	0.389	No
	Left Tilt	0.240	0.397	0.178	0.383	0.010	0.637	No	0.418	No	0.623	No	0.250	No	0.428	No
	Right Touch	0.752	0.397	0.178	0.383	0.041	1.149	No	0.930	No	1.135	No	0.793	No	0.971	No
	Right Tilt	0.554	0.397	0.178	0.383	0.035	0.951	No	0.732	No	0.937	No	0.589	No	0.767	No
Body-worn & Hotspot & Airplay	Rear	0.971	0.344	0.249	0.390	0.037	1.315	No	1.220	No	1.361	No	1.008	No	1.257	No
	Front	0.671	0.344	0.249	0.390	0.022	1.015	No	0.920	No	1.061	No	0.693	No	0.942	No
Hotspot & Airplay	Edge 1	0.640	0.344	0.249	0.390	N/A	0.984	No	0.889	No	1.030	No				
	Edge 2	0.067	0.344	0.249	0.390	N/A	0.411	No	0.316	No	0.457	No				
	Edge 4	0.878	0.344	0.249	0.390	N/A	1.222	No	1.127	No	1.268	No				

**12.42. Sum of the SAR for LTE Band 41 (LAT) & Wi-Fi DTS (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 2.4GHz (UAT)	③ Wi-Fi 2.4GHz (LAT)	④ Wi-Fi 2.4GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+⑤		①+③+⑤	
							∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.445	0.397	0.178	0.383	0.005	0.842	No	0.623	No	0.828	No	0.450	No	0.628	No
	Left Tilt	0.083	0.397	0.178	0.383	0.010	0.480	No	0.261	No	0.466	No	0.093	No	0.271	No
	Right Touch	0.210	0.397	0.178	0.383	0.041	0.607	No	0.388	No	0.593	No	0.251	No	0.429	No
	Right Tilt	0.136	0.397	0.178	0.383	0.035	0.533	No	0.314	No	0.519	No	0.171	No	0.349	No
Body-worn & Hotspot & Airplay	Rear	1.050	0.344	0.249	0.390	0.037	1.394	No	1.299	No	1.440	No	1.087	No	1.336	No
	Front	1.050	0.344	0.249	0.390	0.022	1.394	No	1.299	No	1.440	No	1.072	No	1.321	No
Hotspot & Airplay	Edge 2	0.167	0.344	0.249	0.390	N/A	0.511	No	0.416	No	0.557	No				
	Edge 3	0.512	0.344	0.249	0.390	N/A	0.856	No	0.761	No	0.902	No				
	Edge 4	0.787	0.344	0.249	0.390	N/A	1.131	No	1.036	No	1.177	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.

**12.43. Sum of the SAR for GSM850 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.670	0.340	0.228	0.371	0.005	1.010	No	0.898	No	1.041	No	1.015	No	0.903	No	1.046	No
	Left Tilt	0.562	0.340	0.228	0.371	0.010	0.902	No	0.790	No	0.933	No	0.912	No	0.800	No	0.943	No
	Right Touch	0.882	0.340	0.228	0.371	0.041	1.222	No	1.110	No	1.253	No	1.263	No	1.151	No	1.294	No
	Right Tilt	0.544	0.340	0.228	0.371	0.035	0.884	No	0.772	No	0.915	No	0.919	No	0.807	No	0.950	No
Body-worn Accessory & Airplay	Rear	0.490	0.383	0.229	0.381	0.037	0.873	No	0.719	No	0.871	No	0.910	No	0.756	No	0.908	No
	Front	0.487	0.383	0.229	0.381	0.022	0.870	No	0.716	No	0.868	No	0.892	No	0.738	No	0.890	No
Airplay	Edge 1	0.328	0.383	0.229	0.381	N/A	0.711	No	0.557	No	0.709	No						
	Edge 2	0.335	0.383	0.229	0.381	N/A	0.718	No	0.564	No	0.716	No						
	Edge 4	0.133	0.383	0.229	0.381	N/A	0.516	No	0.362	No	0.514	No						

**12.44. Sum of the SAR for GSM850 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.846	0.340	0.228	0.371	0.005	1.186	No	1.074	No	1.217	No	1.191	No	1.079	No	1.222	No
	Left Tilt	0.383	0.340	0.228	0.371	0.010	0.723	No	0.611	No	0.754	No	0.733	No	0.621	No	0.764	No
	Right Touch	0.622	0.340	0.228	0.371	0.041	0.962	No	0.850	No	0.993	No	1.003	No	0.891	No	1.034	No
	Right Tilt	0.433	0.340	0.228	0.371	0.035	0.773	No	0.661	No	0.804	No	0.808	No	0.696	No	0.839	No
Body-worn Accessory & Airplay	Rear	0.978	0.383	0.229	0.381	0.037	1.361	No	1.207	No	1.359	No	1.398	No	1.244	No	1.396	No
	Front	0.739	0.383	0.229	0.381	0.022	1.122	No	0.968	No	1.120	No	1.144	No	0.990	No	1.142	No
Airplay	Edge 2	0.286	0.383	0.229	0.381	N/A	0.669	No	0.515	No	0.667	No						
	Edge 3	0.619	0.383	0.229	0.381	N/A	1.002	No	0.848	No	1.000	No						
	Edge 4	0.665	0.383	0.229	0.381	N/A	1.048	No	0.894	No	1.046	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.

**12.45. Sum of the SAR for GSM1900 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.392	0.340	0.228	0.371	0.005	0.732	No	0.620	No	0.763	No	0.737	No	0.625	No	0.768	No
	Left Tilt	0.400	0.340	0.228	0.371	0.010	0.740	No	0.628	No	0.771	No	0.750	No	0.638	No	0.781	No
	Right Touch	0.967	0.340	0.228	0.371	0.041	1.307	No	1.195	No	1.338	No	1.348	No	1.236	No	1.379	No
	Right Tilt	0.944	0.340	0.228	0.371	0.035	1.284	No	1.172	No	1.315	No	1.319	No	1.207	No	1.350	No
Body-worn Accessory & Airplay	Rear	0.995	0.383	0.229	0.381	0.037	1.378	No	1.224	No	1.376	No	1.415	No	1.261	No	1.413	No
	Front	0.964	0.383	0.229	0.381	0.022	1.347	No	1.193	No	1.345	No	1.369	No	1.215	No	1.367	No
Airplay	Edge 1	0.485	0.383	0.229	0.381	N/A	0.868	No	0.714	No	0.866	No						
	Edge 2	0.045	0.383	0.229	0.381	N/A	0.428	No	0.274	No	0.426	No						
	Edge 4	0.346	0.383	0.229	0.381	N/A	0.729	No	0.575	No	0.727	No						

**12.46. Sum of the SAR for GSM1900 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.325	0.340	0.228	0.371	0.005	0.665	No	0.553	No	0.696	No	0.670	No	0.558	No	0.701	No
	Left Tilt	0.246	0.340	0.228	0.371	0.010	0.586	No	0.474	No	0.617	No	0.596	No	0.484	No	0.627	No
	Right Touch	0.737	0.340	0.228	0.371	0.041	1.077	No	0.965	No	1.108	No	1.118	No	1.006	No	1.149	No
	Right Tilt	0.172	0.340	0.228	0.371	0.035	0.512	No	0.400	No	0.543	No	0.547	No	0.435	No	0.578	No
Body-worn Accessory & Airplay	Rear	1.100	0.383	0.229	0.381	0.037	1.483	No	1.329	No	1.481	No	1.520	No	1.366	No	1.518	No
	Front	1.130	0.383	0.229	0.381	0.022	1.513	No	1.359	No	1.511	No	1.535	No	1.381	No	1.533	No
Airplay	Edge 2	0.418	0.383	0.229	0.381	N/A	0.801	No	0.647	No	0.799	No						
	Edge 3	0.520	0.383	0.229	0.381	N/A	0.903	No	0.749	No	0.901	No						
	Edge 4	0.070	0.383	0.229	0.381	N/A	0.453	No	0.299	No	0.451	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.

**12.47. Sum of the SAR for W-CDMA V (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.405	0.340	0.228	0.371	0.005	0.745	No	0.633	No	0.776	No	0.750	No	0.638	No	0.781	No
	Left Tilt	0.322	0.340	0.228	0.371	0.010	0.662	No	0.550	No	0.693	No	0.672	No	0.560	No	0.703	No
	Right Touch	0.581	0.340	0.228	0.371	0.041	0.921	No	0.809	No	0.952	No	0.962	No	0.850	No	0.993	No
	Right Tilt	0.354	0.340	0.228	0.371	0.035	0.694	No	0.582	No	0.725	No	0.729	No	0.617	No	0.760	No
Body-worn Accessory & Airplay	Rear	0.260	0.383	0.229	0.381	0.037	0.643	No	0.489	No	0.641	No	0.680	No	0.526	No	0.678	No
	Front	0.283	0.383	0.229	0.381	0.022	0.666	No	0.512	No	0.664	No	0.688	No	0.534	No	0.686	No
Airplay	Edge 1	0.150	0.383	0.229	0.381	N/A	0.533	No	0.379	No	0.531	No						
	Edge 2	0.219	0.383	0.229	0.381	N/A	0.602	No	0.448	No	0.600	No						
	Edge 4	0.091	0.383	0.229	0.381	N/A	0.474	No	0.320	No	0.472	No						

**12.48. Sum of the SAR for W-CDMA V (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.390	0.340	0.228	0.371	0.005	0.730	No	0.618	No	0.761	No	0.735	No	0.623	No	0.766	No
	Left Tilt	0.189	0.340	0.228	0.371	0.010	0.529	No	0.417	No	0.560	No	0.539	No	0.427	No	0.570	No
	Right Touch	0.325	0.340	0.228	0.371	0.041	0.665	No	0.553	No	0.696	No	0.706	No	0.594	No	0.737	No
	Right Tilt	0.179	0.340	0.228	0.371	0.035	0.519	No	0.407	No	0.550	No	0.554	No	0.442	No	0.585	No
Body-worn Accessory & Airplay	Rear	0.620	0.383	0.229	0.381	0.037	1.003	No	0.849	No	1.001	No	1.040	No	0.886	No	1.038	No
	Front	0.952	0.383	0.229	0.381	0.022	1.335	No	1.181	No	1.333	No	1.357	No	1.203	No	1.355	No
Airplay	Edge 2	0.381	0.383	0.229	0.381	N/A	0.764	No	0.610	No	0.762	No						
	Edge 3	0.653	0.383	0.229	0.381	N/A	1.036	No	0.882	No	1.034	No						
	Edge 4	0.879	0.383	0.229	0.381	N/A	1.262	No	1.108	No	1.260	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.

**12.49. Sum of the SAR for W-CDMA IV (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.378	0.340	0.228	0.371	0.005	0.718	No	0.606	No	0.749	No	0.723	No	0.611	No	0.754	No
	Left Tilt	0.344	0.340	0.228	0.371	0.010	0.684	No	0.572	No	0.715	No	0.694	No	0.582	No	0.725	No
	Right Touch	0.993	0.340	0.228	0.371	0.041	1.333	No	1.221	No	1.364	No	1.374	No	1.262	No	1.405	No
	Right Tilt	0.792	0.340	0.228	0.371	0.035	1.132	No	1.020	No	1.163	No	1.167	No	1.055	No	1.198	No
Body-worn Accessory & Airplay	Rear	0.971	0.383	0.229	0.381	0.037	1.354	No	1.200	No	1.352	No	1.391	No	1.237	No	1.389	No
	Front	0.936	0.383	0.229	0.381	0.022	1.319	No	1.165	No	1.317	No	1.341	No	1.187	No	1.339	No
Airplay	Edge 1	0.568	0.383	0.229	0.381	N/A	0.951	No	0.797	No	0.949	No						
	Edge 2	0.021	0.383	0.229	0.381	N/A	0.404	No	0.250	No	0.402	No						
	Edge 4	0.558	0.383	0.229	0.381	N/A	0.941	No	0.787	No	0.939	No						

**12.50. Sum of the SAR for W-CDMA IV (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.386	0.340	0.228	0.371	0.005	0.726	No	0.614	No	0.757	No	0.731	No	0.619	No	0.762	No
	Left Tilt	0.302	0.340	0.228	0.371	0.010	0.642	No	0.530	No	0.673	No	0.652	No	0.540	No	0.683	No
	Right Touch	0.778	0.340	0.228	0.371	0.041	1.118	No	1.006	No	1.149	No	1.159	No	1.047	No	1.190	No
	Right Tilt	0.313	0.340	0.228	0.371	0.035	0.653	No	0.541	No	0.684	No	0.688	No	0.576	No	0.719	No
Body-worn Accessory & Airplay	Rear	1.120	0.383	0.229	0.381	0.037	1.503	No	1.349	No	1.501	No	1.540	No	1.386	No	1.538	No
	Front	1.130	0.383	0.229	0.381	0.022	1.513	No	1.359	No	1.511	No	1.535	No	1.381	No	1.533	No
Airplay	Edge 2	0.714	0.383	0.229	0.381	N/A	1.097	No	0.943	No	1.095	No						
	Edge 3	0.980	0.383	0.229	0.381	N/A	1.363	No	1.209	No	1.361	No						
	Edge 4	0.052	0.383	0.229	0.381	N/A	0.435	No	0.281	No	0.433	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.

**12.51. Sum of the SAR for W-CDMA II (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.332	0.340	0.228	0.371	0.005	0.672	No	0.560	No	0.703	No	0.677	No	0.565	No	0.708	No
	Left Tilt	0.338	0.340	0.228	0.371	0.010	0.678	No	0.566	No	0.709	No	0.688	No	0.576	No	0.719	No
	Right Touch	0.904	0.340	0.228	0.371	0.041	1.244	No	1.132	No	1.275	No	1.285	No	1.173	No	1.316	No
	Right Tilt	0.763	0.340	0.228	0.371	0.035	1.103	No	0.991	No	1.134	No	1.138	No	1.026	No	1.169	No
Body-worn Accessory & Airplay	Rear	0.996	0.383	0.229	0.381	0.037	1.379	No	1.225	No	1.377	No	1.416	No	1.262	No	1.444	No
	Front	0.663	0.383	0.229	0.381	0.022	1.046	No	0.892	No	1.044	No	1.068	No	0.914	No	1.066	No
Airplay	Edge 1	0.544	0.383	0.229	0.381	N/A	0.927	No	0.773	No	0.925	No						
	Edge 2	0.068	0.383	0.229	0.381	N/A	0.451	No	0.297	No	0.449	No						
	Edge 4	0.400	0.383	0.229	0.381	N/A	0.783	No	0.629	No	0.781	No						

**12.52. Sum of the SAR for W-CDMA II (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.645	0.340	0.228	0.371	0.005	0.985	No	0.873	No	1.016	No	0.990	No	0.878	No	1.021	No
	Left Tilt	0.430	0.340	0.228	0.371	0.010	0.770	No	0.658	No	0.801	No	0.780	No	0.668	No	0.811	No
	Right Touch	1.120	0.340	0.228	0.371	0.041	1.460	No	1.348	No	1.491	No	1.501	No	1.389	No	1.532	No
	Right Tilt	0.483	0.340	0.228	0.371	0.035	0.823	No	0.711	No	0.854	No	0.858	No	0.746	No	0.889	No
Body-worn Accessory & Airplay	Rear	1.130	0.383	0.229	0.381	0.037	1.513	No	1.359	No	1.511	No	1.550	No	1.396	No	1.548	No
	Front	1.090	0.383	0.229	0.381	0.022	1.473	No	1.319	No	1.471	No	1.495	No	1.341	No	1.493	No
Airplay	Edge 2	0.563	0.383	0.229	0.381	N/A	0.946	No	0.792	No	0.944	No						
	Edge 3	0.712	0.383	0.229	0.381	N/A	1.095	No	0.941	No	1.093	No						
	Edge 4	0.059	0.383	0.229	0.381	N/A	0.442	No	0.288	No	0.440	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.

### 12.53. Sum of the SAR for CDMA BC0 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.408	0.340	0.228	0.371	0.005	0.748	No	0.636	No	0.779	No	0.753	No	0.641	No	0.784	No
	Left Tilt	0.390	0.340	0.228	0.371	0.010	0.730	No	0.618	No	0.761	No	0.740	No	0.628	No	0.771	No
	Right Touch	0.549	0.340	0.228	0.371	0.041	0.889	No	0.777	No	0.920	No	0.930	No	0.818	No	0.961	No
	Right Tilt	0.329	0.340	0.228	0.371	0.035	0.669	No	0.557	No	0.700	No	0.704	No	0.592	No	0.735	No
Body-worn Accessory & Airplay	Rear	0.288	0.383	0.229	0.381	0.037	0.671	No	0.517	No	0.669	No	0.708	No	0.554	No	0.706	No
	Front	0.298	0.383	0.229	0.381	0.022	0.681	No	0.527	No	0.679	No	0.703	No	0.549	No	0.701	No
Airplay	Edge 1	0.168	0.383	0.229	0.381	N/A	0.551	No	0.397	No	0.549	No						
	Edge 2	0.255	0.383	0.229	0.381	N/A	0.638	No	0.484	No	0.636	No						
	Edge 4	0.115	0.383	0.229	0.381	N/A	0.498	No	0.344	No	0.496	No						

### 12.54. Sum of the SAR for CDMA BC0 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.335	0.340	0.228	0.371	0.005	0.675	No	0.563	No	0.706	No	0.680	No	0.568	No	0.711	No
	Left Tilt	0.130	0.340	0.228	0.371	0.010	0.470	No	0.358	No	0.501	No	0.480	No	0.368	No	0.511	No
	Right Touch	0.285	0.340	0.228	0.371	0.041	0.625	No	0.513	No	0.656	No	0.666	No	0.554	No	0.697	No
	Right Tilt	0.133	0.340	0.228	0.371	0.035	0.473	No	0.361	No	0.504	No	0.508	No	0.396	No	0.539	No
Body-worn Accessory & Airplay	Rear	0.569	0.383	0.229	0.381	0.037	0.952	No	0.798	No	0.950	No	0.989	No	0.835	No	0.987	No
	Front	0.650	0.383	0.229	0.381	0.022	1.033	No	0.879	No	1.031	No	1.055	No	0.901	No	1.053	No
Airplay	Edge 2	0.248	0.383	0.229	0.381	N/A	0.631	No	0.477	No	0.629	No						
	Edge 3	0.458	0.383	0.229	0.381	N/A	0.841	No	0.687	No	0.839	No						
	Edge 4	0.629	0.383	0.229	0.381	N/A	1.012	No	0.858	No	1.010	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.

**12.55. Sum of the SAR for CDMA BC1 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.357	0.340	0.228	0.371	0.005	0.697	No	0.585	No	0.728	No	0.702	No	0.590	No	0.733	No
	Left Tilt	0.314	0.340	0.228	0.371	0.010	0.654	No	0.542	No	0.685	No	0.664	No	0.552	No	0.695	No
	Right Touch	0.935	0.340	0.228	0.371	0.041	1.275	No	1.163	No	1.306	No	1.316	No	1.204	No	1.347	No
	Right Tilt	0.843	0.340	0.228	0.371	0.035	1.183	No	1.071	No	1.214	No	1.218	No	1.106	No	1.249	No
Body-worn Accessory & Airplay	Rear	0.922	0.383	0.229	0.381	0.037	1.305	No	1.151	No	1.303	No	1.342	No	1.188	No	1.340	No
	Front	0.527	0.383	0.229	0.381	0.022	0.910	No	0.756	No	0.908	No	0.932	No	0.778	No	0.930	No
Airplay	Edge 1	0.436	0.383	0.229	0.381	N/A	0.819	No	0.665	No	0.817	No						
	Edge 2	0.054	0.383	0.229	0.381	N/A	0.437	No	0.283	No	0.435	No						
	Edge 4	0.449	0.383	0.229	0.381	N/A	0.832	No	0.678	No	0.830	No						

**12.56. Sum of the SAR for CDMA BC1 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.629	0.340	0.228	0.371	0.005	0.969	No	0.857	No	1.000	No	0.974	No	0.862	No	1.005	No
	Left Tilt	0.510	0.340	0.228	0.371	0.010	0.850	No	0.738	No	0.881	No	0.860	No	0.748	No	0.891	No
	Right Touch	0.971	0.340	0.228	0.371	0.041	1.311	No	1.199	No	1.342	No	1.352	No	1.240	No	1.383	No
	Right Tilt	0.449	0.340	0.228	0.371	0.035	0.789	No	0.677	No	0.820	No	0.824	No	0.712	No	0.855	No
Body-worn Accessory & Airplay	Rear	1.010	0.383	0.229	0.381	0.037	1.393	No	1.239	No	1.391	No	1.430	No	1.276	No	1.428	No
	Front	0.940	0.383	0.229	0.381	0.022	1.323	No	1.169	No	1.321	No	1.345	No	1.191	No	1.343	No
Airplay	Edge 2	0.663	0.383	0.229	0.381	N/A	1.046	No	0.892	No	1.044	No						
	Edge 3	0.979	0.383	0.229	0.381	N/A	1.362	No	1.208	No	1.360	No						
	Edge 4	0.068	0.383	0.229	0.381	N/A	0.451	No	0.297	No	0.449	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.



### 12.57. Sum of the SAR for CDMA BC10 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.339	0.340	0.228	0.371	0.005	0.679	No	0.567	No	0.710	No	0.684	No	0.572	No	0.715	No
	Left Tilt	0.213	0.340	0.228	0.371	0.010	0.553	No	0.441	No	0.584	No	0.563	No	0.451	No	0.594	No
	Right Touch	0.494	0.340	0.228	0.371	0.041	0.834	No	0.722	No	0.865	No	0.875	No	0.763	No	0.906	No
	Right Tilt	0.308	0.340	0.228	0.371	0.035	0.648	No	0.536	No	0.679	No	0.683	No	0.571	No	0.714	No
Body-worn Accessory & Airplay	Rear	0.191	0.383	0.229	0.381	0.037	0.574	No	0.420	No	0.572	No	0.611	No	0.457	No	0.609	No
	Front	0.228	0.383	0.229	0.381	0.022	0.611	No	0.457	No	0.609	No	0.633	No	0.479	No	0.631	No
Airplay	Edge 1	0.092	0.383	0.229	0.381	N/A	0.475	No	0.321	No	0.473	No						
	Edge 2	0.190	0.383	0.229	0.381	N/A	0.573	No	0.419	No	0.571	No						
	Edge 4	0.097	0.383	0.229	0.381	N/A	0.480	No	0.326	No	0.478	No						

### 12.58. Sum of the SAR for CDMA BC10 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.251	0.340	0.228	0.371	0.005	0.591	No	0.479	No	0.622	No	0.596	No	0.484	No	0.627	No
	Left Tilt	0.097	0.340	0.228	0.371	0.010	0.437	No	0.325	No	0.468	No	0.447	No	0.335	No	0.478	No
	Right Touch	0.204	0.340	0.228	0.371	0.041	0.544	No	0.432	No	0.575	No	0.585	No	0.473	No	0.616	No
	Right Tilt	0.100	0.340	0.228	0.371	0.035	0.440	No	0.328	No	0.471	No	0.475	No	0.363	No	0.506	No
Body-worn Accessory & Airplay	Rear	0.495	0.383	0.229	0.381	0.037	0.878	No	0.724	No	0.876	No	0.915	No	0.761	No	0.913	No
	Front	0.610	0.383	0.229	0.381	0.022	0.993	No	0.839	No	0.991	No	1.015	No	0.861	No	1.013	No
Airplay	Edge 2	0.300	0.383	0.229	0.381	N/A	0.683	No	0.529	No	0.681	No						
	Edge 3	0.347	0.383	0.229	0.381	N/A	0.730	No	0.576	No	0.728	No						
	Edge 4	0.610	0.383	0.229	0.381	N/A	0.993	No	0.839	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.

### 12.59. Sum of the SAR for CDMA BC15 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.303	0.340	0.228	0.371	0.005	0.643	No	0.531	No	0.674	No	0.648	No	0.536	No	0.679	No
	Left Tilt	0.293	0.340	0.228	0.371	0.010	0.633	No	0.521	No	0.664	No	0.643	No	0.531	No	0.674	No
	Right Touch	0.973	0.340	0.228	0.371	0.041	1313	No	1201	No	1344	No	1354	No	1242	No	1385	No
	Right Tilt	0.774	0.340	0.228	0.371	0.035	1.114	No	1.002	No	1.145	No	1.149	No	1.037	No	1.180	No
Body-worn Accessory & Airplay	Rear	0.938	0.383	0.229	0.381	0.037	1321	No	1.167	No	1.319	No	1358	No	1204	No	1356	No
	Front	0.668	0.383	0.229	0.381	0.022	1051	No	0.897	No	1.049	No	1073	No	0.919	No	1.071	No
Airplay	Edge 1	0.521	0.383	0.229	0.381	N/A	0.904	No	0.750	No	0.902	No						
	Edge 2	0.017	0.383	0.229	0.381	N/A	0.400	No	0.246	No	0.398	No						
	Edge 4	0.513	0.383	0.229	0.381	N/A	0.896	No	0.742	No	0.894	No						

### 12.60. Sum of the SAR for CDMA BC15 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.503	0.340	0.228	0.371	0.005	0.843	No	0.731	No	0.874	No	0.848	No	0.736	No	0.879	No
	Left Tilt	0.345	0.340	0.228	0.371	0.010	0.685	No	0.573	No	0.716	No	0.695	No	0.583	No	0.726	No
	Right Touch	0.931	0.340	0.228	0.371	0.041	1271	No	1.159	No	1302	No	1312	No	1200	No	1343	No
	Right Tilt	0.303	0.340	0.228	0.371	0.035	0.643	No	0.531	No	0.674	No	0.678	No	0.566	No	0.709	No
Body-worn Accessory & Airplay	Rear	1.140	0.383	0.229	0.381	0.037	1523	No	1369	No	1521	No	1560	No	1406	No	1558	No
	Front	1.140	0.383	0.229	0.381	0.022	1523	No	1369	No	1521	No	1545	No	1391	No	1543	No
Airplay	Edge 2	0.683	0.383	0.229	0.381	N/A	1066	No	0.912	No	1064	No						
	Edge 3	1.010	0.383	0.229	0.381	N/A	1393	No	1239	No	1391	No						
	Edge 4	0.049	0.383	0.229	0.381	N/A	0.432	No	0.278	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.

**12.61. Sum of the SAR for LTE Band 2 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.466	0.340	0.228	0.371	0.005	0.806	No	0.694	No	0.837	No	0.811	No	0.699	No	0.842	No
	Left Tilt	0.458	0.340	0.228	0.371	0.010	0.798	No	0.686	No	0.829	No	0.808	No	0.696	No	0.839	No
	Right Touch	0.992	0.340	0.228	0.371	0.041	1332	No	1220	No	1363	No	1373	No	1261	No	1404	No
	Right Tilt	0.932	0.340	0.228	0.371	0.035	1272	No	1160	No	1303	No	1307	No	1195	No	1338	No
Body-worn Accessory & Airplay	Rear	0.926	0.383	0.229	0.381	0.037	1309	No	1155	No	1307	No	1346	No	1192	No	1344	No
	Front	0.861	0.383	0.229	0.381	0.022	1244	No	1090	No	1242	No	1266	No	1112	No	1264	No
Airplay	Edge 1	0.694	0.383	0.229	0.381	N/A	1077	No	0.923	No	1075	No						
	Edge 2	0.084	0.383	0.229	0.381	N/A	0.467	No	0.313	No	0.465	No						
	Edge 4	0.470	0.383	0.229	0.381	N/A	0.853	No	0.699	No	0.851	No						

**12.62. Sum of the SAR for LTE Band 2 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.472	0.340	0.228	0.371	0.005	0.812	No	0.700	No	0.843	No	0.817	No	0.705	No	0.848	No
	Left Tilt	0.338	0.340	0.228	0.371	0.010	0.678	No	0.566	No	0.709	No	0.688	No	0.576	No	0.719	No
	Right Touch	0.897	0.340	0.228	0.371	0.041	1237	No	1125	No	1268	No	1278	No	1166	No	1309	No
	Right Tilt	0.344	0.340	0.228	0.371	0.035	0.684	No	0.572	No	0.715	No	0.719	No	0.607	No	0.750	No
Body-worn Accessory & Airplay	Rear	1.120	0.383	0.229	0.381	0.037	1503	No	1349	No	1501	No	1540	No	1386	No	1538	No
	Front	1.130	0.383	0.229	0.381	0.022	1513	No	1359	No	1511	No	1535	No	1381	No	1533	No
Airplay	Edge 2	0.601	0.383	0.229	0.381	N/A	0.984	No	0.830	No	0.982	No						
	Edge 3	0.687	0.383	0.229	0.381	N/A	1.070	No	0.916	No	1.068	No						
	Edge 4	0.058	0.383	0.229	0.381	N/A	0.441	No	0.287	No	0.439	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.

**12.63. um of the SAR for LTE Band 4 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.259	0.340	0.228	0.371	0.005	0.599	No	0.487	No	0.630	No	0.604	No	0.492	No	0.635	No
	Left Tilt	0.286	0.340	0.228	0.371	0.010	0.626	No	0.514	No	0.657	No	0.636	No	0.524	No	0.667	No
	Right Touch	0.982	0.340	0.228	0.371	0.041	1.322	No	1.210	No	1.353	No	1.363	No	1.251	No	1.394	No
	Right Tilt	0.769	0.340	0.228	0.371	0.035	1.109	No	0.997	No	1.140	No	1.144	No	1.032	No	1.175	No
Body-worn Accessory & Airplay	Rear	0.784	0.383	0.229	0.381	0.037	1.167	No	1.013	No	1.165	No	1.204	No	1.050	No	1.202	No
	Front	0.579	0.383	0.229	0.381	0.022	0.962	No	0.808	No	0.960	No	0.984	No	0.830	No	0.982	No
Airplay	Edge 1	0.470	0.383	0.229	0.381	N/A	0.853	No	0.699	No	0.851	No						
	Edge 2	0.033	0.383	0.229	0.381	N/A	0.416	No	0.262	No	0.414	No						
	Edge 4	0.401	0.383	0.229	0.381	N/A	0.784	No	0.630	No	0.782	No						

**12.64. Sum of the SAR for LTE Band 4 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.361	0.340	0.228	0.371	0.005	0.701	No	0.589	No	0.732	No	0.706	No	0.594	No	0.737	No
	Left Tilt	0.289	0.340	0.228	0.371	0.010	0.629	No	0.517	No	0.660	No	0.639	No	0.527	No	0.670	No
	Right Touch	0.659	0.340	0.228	0.371	0.041	0.999	No	0.887	No	1.030	No	1.040	No	0.928	No	1.071	No
	Right Tilt	0.260	0.340	0.228	0.371	0.035	0.600	No	0.488	No	0.631	No	0.635	No	0.523	No	0.666	No
Body-worn Accessory & Airplay	Rear	1.120	0.383	0.229	0.381	0.037	1.503	No	1.349	No	1.501	No	1.540	No	1.386	No	1.538	No
	Front	1.120	0.383	0.229	0.381	0.022	1.503	No	1.349	No	1.501	No	1.525	No	1.371	No	1.523	No
Airplay	Edge 2	0.698	0.383	0.229	0.381	N/A	1.081	No	0.927	No	1.079	No						
	Edge 3	0.982	0.383	0.229	0.381	N/A	1.365	No	1.211	No	1.363	No						
	Edge 4	0.034	0.383	0.229	0.381	N/A	0.417	No	0.263	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.

**12.65. Sum of the SAR for LTE Band 5 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.393	0.340	0.228	0.371	0.005	0.733	No	0.621	No	0.764	No	0.738	No	0.626	No	0.769	No
	Left Tilt	0.306	0.340	0.228	0.371	0.010	0.646	No	0.534	No	0.677	No	0.656	No	0.544	No	0.687	No
	Right Touch	0.487	0.340	0.228	0.371	0.041	0.827	No	0.715	No	0.858	No	0.868	No	0.756	No	0.899	No
	Right Tilt	0.317	0.340	0.228	0.371	0.035	0.657	No	0.545	No	0.688	No	0.692	No	0.580	No	0.723	No
Body-worn Accessory & Airplay	Rear	0.356	0.383	0.229	0.381	0.037	0.739	No	0.585	No	0.737	No	0.776	No	0.622	No	0.774	No
	Front	0.389	0.383	0.229	0.381	0.022	0.772	No	0.618	No	0.770	No	0.794	No	0.640	No	0.792	No
Airplay	Edge 1	0.274	0.383	0.229	0.381	N/A	0.657	No	0.503	No	0.655	No						
	Edge 2	0.308	0.383	0.229	0.381	N/A	0.691	No	0.537	No	0.689	No						
	Edge 4	0.127	0.383	0.229	0.381	N/A	0.510	No	0.356	No	0.508	No						

**12.66. Sum of the SAR for LTE Band 5 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.296	0.340	0.228	0.371	0.005	0.636	No	0.524	No	0.667	No	0.641	No	0.529	No	0.672	No
	Left Tilt	0.096	0.340	0.228	0.371	0.010	0.436	No	0.324	No	0.467	No	0.446	No	0.334	No	0.477	No
	Right Touch	0.226	0.340	0.228	0.371	0.041	0.566	No	0.454	No	0.597	No	0.607	No	0.495	No	0.638	No
	Right Tilt	0.098	0.340	0.228	0.371	0.035	0.438	No	0.326	No	0.469	No	0.473	No	0.361	No	0.504	No
Body-worn Accessory & Airplay	Rear	0.531	0.383	0.229	0.381	0.037	0.914	No	0.760	No	0.912	No	0.951	No	0.797	No	0.949	No
	Front	0.754	0.383	0.229	0.381	0.022	1.137	No	0.983	No	1.135	No	1.159	No	1.005	No	1.157	No
Airplay	Edge 2	0.139	0.383	0.229	0.381	N/A	0.522	No	0.368	No	0.520	No						
	Edge 3	0.414	0.383	0.229	0.381	N/A	0.797	No	0.643	No	0.795	No						
	Edge 4	0.362	0.383	0.229	0.381	N/A	0.745	No	0.591	No	0.743	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.

**12.67. Sum of the SAR for LTE Band 7 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.252	0.340	0.228	0.371	0.005	0.592	No	0.480	No	0.623	No	0.597	No	0.485	No	0.628	No
	Left Tilt	0.322	0.340	0.228	0.371	0.010	0.662	No	0.550	No	0.693	No	0.672	No	0.560	No	0.703	No
	Right Touch	0.965	0.340	0.228	0.371	0.041	1305	No	1.193	No	1336	No	1346	No	1234	No	1377	No
	Right Tilt	0.724	0.340	0.228	0.371	0.035	1064	No	0.952	No	1095	No	1099	No	0.987	No	1.130	No
Body-worn Accessory & Airplay	Rear	0.942	0.383	0.229	0.381	0.037	1325	No	1.171	No	1323	No	1362	No	1208	No	1360	No
	Front	0.790	0.383	0.229	0.381	0.022	1.173	No	1.019	No	1.171	No	1.195	No	1.041	No	1.193	No
Airplay	Edge 1	0.609	0.383	0.229	0.381	N/A	0.992	No	0.838	No	0.990	No						
	Edge 2	0.074	0.383	0.229	0.381	N/A	0.457	No	0.303	No	0.455	No						
	Edge 4	0.915	0.383	0.229	0.381	N/A	1298	No	1.144	No	1296	No						

**12.68. Sum of the SAR for LTE Band 7 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.579	0.340	0.228	0.371	0.005	0.919	No	0.807	No	0.950	No	0.924	No	0.812	No	0.955	No
	Left Tilt	0.138	0.340	0.228	0.371	0.010	0.478	No	0.366	No	0.509	No	0.488	No	0.376	No	0.519	No
	Right Touch	0.339	0.340	0.228	0.371	0.041	0.679	No	0.567	No	0.710	No	0.720	No	0.608	No	0.751	No
	Right Tilt	0.323	0.340	0.228	0.371	0.035	0.663	No	0.551	No	0.694	No	0.698	No	0.586	No	0.729	No
Body-worn Accessory & Airplay	Rear	1.060	0.383	0.229	0.381	0.037	1443	No	1.289	No	1441	No	1480	No	1.326	No	1478	No
	Front	1.060	0.383	0.229	0.381	0.022	1443	No	1.289	No	1441	No	1465	No	1.311	No	1463	No
Airplay	Edge 2	0.082	0.383	0.229	0.381	N/A	0.465	No	0.311	No	0.463	No						
	Edge 3	0.620	0.383	0.229	0.381	N/A	1.003	No	0.849	No	1.001	No						
	Edge 4	0.823	0.383	0.229	0.381	N/A	1206	No	1.052	No	1204	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.

**12.69. Sum of the SAR for LTE Band 12 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.372	0.340	0.228	0.371	0.005	0.712	No	0.600	No	0.743	No	0.717	No	0.605	No	0.748	No
	Left Tilt	0.301	0.340	0.228	0.371	0.010	0.641	No	0.529	No	0.672	No	0.651	No	0.539	No	0.682	No
	Right Touch	0.467	0.340	0.228	0.371	0.041	0.807	No	0.695	No	0.838	No	0.848	No	0.736	No	0.879	No
	Right Tilt	0.314	0.340	0.228	0.371	0.035	0.654	No	0.542	No	0.685	No	0.689	No	0.577	No	0.720	No
Body-worn Accessory & Airplay	Rear	0.183	0.383	0.229	0.381	0.037	0.566	No	0.412	No	0.564	No	0.603	No	0.449	No	0.601	No
	Front	0.170	0.383	0.229	0.381	0.022	0.553	No	0.399	No	0.551	No	0.575	No	0.421	No	0.573	No
Airplay	Edge 1	0.091	0.383	0.229	0.381	N/A	0.474	No	0.320	No	0.472	No						
	Edge 2	0.305	0.383	0.229	0.381	N/A	0.688	No	0.534	No	0.686	No						
	Edge 4	0.134	0.383	0.229	0.381	N/A	0.517	No	0.363	No	0.515	No						

**12.70. Sum of the SAR for LTE Band 12 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.264	0.340	0.228	0.371	0.005	0.604	No	0.492	No	0.635	No	0.609	No	0.497	No	0.640	No
	Left Tilt	0.127	0.340	0.228	0.371	0.010	0.467	No	0.355	No	0.498	No	0.477	No	0.365	No	0.508	No
	Right Touch	0.224	0.340	0.228	0.371	0.041	0.564	No	0.452	No	0.595	No	0.605	No	0.493	No	0.636	No
	Right Tilt	0.121	0.340	0.228	0.371	0.035	0.461	No	0.349	No	0.492	No	0.496	No	0.384	No	0.527	No
Body-worn Accessory & Airplay	Rear	0.376	0.383	0.229	0.381	0.037	0.759	No	0.605	No	0.757	No	0.796	No	0.642	No	0.794	No
	Front	0.480	0.383	0.229	0.381	0.022	0.863	No	0.709	No	0.861	No	0.885	No	0.731	No	0.883	No
Airplay	Edge 2	0.452	0.383	0.229	0.381	N/A	0.835	No	0.681	No	0.833	No						
	Edge 3	0.367	0.383	0.229	0.381	N/A	0.750	No	0.596	No	0.748	No						
	Edge 4	0.858	0.383	0.229	0.381	N/A	1241	No	1087	No	1239	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.

**12.71. Sum of the SAR for LTE Band 13 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.390	0.340	0.228	0.371	0.005	0.730	No	0.618	No	0.761	No	0.735	No	0.623	No	0.766	No
	Left Tilt	0.345	0.340	0.228	0.371	0.010	0.685	No	0.573	No	0.716	No	0.695	No	0.583	No	0.726	No
	Right Touch	0.436	0.340	0.228	0.371	0.041	0.776	No	0.664	No	0.807	No	0.817	No	0.705	No	0.848	No
	Right Tilt	0.320	0.340	0.228	0.371	0.035	0.660	No	0.548	No	0.691	No	0.695	No	0.583	No	0.726	No
Body-worn Accessory & Airplay	Rear	0.208	0.383	0.229	0.381	0.037	0.591	No	0.437	No	0.589	No	0.628	No	0.474	No	0.626	No
	Front	0.227	0.383	0.229	0.381	0.022	0.610	No	0.456	No	0.608	No	0.632	No	0.478	No	0.630	No
Airplay	Edge 1	0.210	0.383	0.229	0.381	N/A	0.593	No	0.439	No	0.591	No						
	Edge 2	0.203	0.383	0.229	0.381	N/A	0.586	No	0.432	No	0.584	No						
	Edge 4	0.080	0.383	0.229	0.381	N/A	0.463	No	0.309	No	0.461	No						

**12.72. Sum of the SAR for LTE Band 13 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.281	0.340	0.228	0.371	0.005	0.621	No	0.509	No	0.652	No	0.626	No	0.514	No	0.657	No
	Left Tilt	0.162	0.340	0.228	0.371	0.010	0.502	No	0.390	No	0.533	No	0.512	No	0.400	No	0.543	No
	Right Touch	0.249	0.340	0.228	0.371	0.041	0.589	No	0.477	No	0.620	No	0.630	No	0.518	No	0.661	No
	Right Tilt	0.150	0.340	0.228	0.371	0.035	0.490	No	0.378	No	0.521	No	0.525	No	0.413	No	0.556	No
Body-worn Accessory & Airplay	Rear	0.555	0.383	0.229	0.381	0.037	0.938	No	0.784	No	0.936	No	0.975	No	0.821	No	0.973	No
	Front	0.681	0.383	0.229	0.381	0.022	1.064	No	0.910	No	1.062	No	1.086	No	0.932	No	1.084	No
Airplay	Edge 2	0.227	0.383	0.229	0.381	N/A	0.610	No	0.456	No	0.608	No						
	Edge 3	0.583	0.383	0.229	0.381	N/A	0.966	No	0.812	No	0.964	No						
	Edge 4	0.647	0.383	0.229	0.381	N/A	1.030	No	0.876	No	1.028	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.



**12.73. Sum of the SAR for LTE Band 17 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.362	0.340	0.228	0.371	0.005	0.702	No	0.590	No	0.733	No	0.707	No	0.595	No	0.738	No
	Left Tilt	0.271	0.340	0.228	0.371	0.010	0.611	No	0.499	No	0.642	No	0.621	No	0.509	No	0.652	No
	Right Touch	0.466	0.340	0.228	0.371	0.041	0.806	No	0.694	No	0.837	No	0.847	No	0.735	No	0.878	No
	Right Tilt	0.321	0.340	0.228	0.371	0.035	0.661	No	0.549	No	0.692	No	0.696	No	0.584	No	0.727	No
Body-worn Accessory & Airplay	Rear	0.183	0.383	0.229	0.381	0.037	0.566	No	0.412	No	0.564	No	0.603	No	0.449	No	0.601	No
	Front	0.171	0.383	0.229	0.381	0.022	0.554	No	0.400	No	0.552	No	0.576	No	0.422	No	0.574	No
Airplay	Edge 1	0.095	0.383	0.229	0.381	N/A	0.478	No	0.324	No	0.476	No						
	Edge 2	0.300	0.383	0.229	0.381	N/A	0.683	No	0.529	No	0.681	No						
	Edge 4	0.119	0.383	0.229	0.381	N/A	0.502	No	0.348	No	0.500	No						

**12.74. Sum of the SAR for LTE Band 17 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.262	0.340	0.228	0.371	0.005	0.602	No	0.490	No	0.633	No	0.607	No	0.495	No	0.638	No
	Left Tilt	0.129	0.340	0.228	0.371	0.010	0.469	No	0.357	No	0.500	No	0.479	No	0.367	No	0.510	No
	Right Touch	0.220	0.340	0.228	0.371	0.041	0.560	No	0.448	No	0.591	No	0.601	No	0.489	No	0.632	No
	Right Tilt	0.128	0.340	0.228	0.371	0.035	0.468	No	0.356	No	0.499	No	0.503	No	0.391	No	0.534	No
Body-worn Accessory & Airplay	Rear	0.434	0.383	0.229	0.381	0.037	0.817	No	0.663	No	0.815	No	0.854	No	0.700	No	0.852	No
	Front	0.529	0.383	0.229	0.381	0.022	0.912	No	0.758	No	0.910	No	0.934	No	0.780	No	0.932	No
Airplay	Edge 2	0.476	0.383	0.229	0.381	N/A	0.859	No	0.705	No	0.857	No						
	Edge 3	0.395	0.383	0.229	0.381	N/A	0.778	No	0.624	No	0.776	No						
	Edge 4	0.898	0.383	0.229	0.381	N/A	1.281	No	1.127	No	1.279	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.

**12.75. Sum of the SAR for LTE Band 25 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.359	0.340	0.228	0.371	0.005	0.699	No	0.587	No	0.730	No	0.704	No	0.592	No	0.735	No
	Left Tilt	0.367	0.340	0.228	0.371	0.010	0.707	No	0.595	No	0.738	No	0.717	No	0.605	No	0.748	No
	Right Touch	0.889	0.340	0.228	0.371	0.041	1.229	No	1.117	No	1.260	No	1.270	No	1.158	No	1.301	No
	Right Tilt	0.730	0.340	0.228	0.371	0.035	1.070	No	0.958	No	1.101	No	1.105	No	0.993	No	1.136	No
Body-worn Accessory & Airplay	Rear	0.996	0.383	0.229	0.381	0.037	1.379	No	1.225	No	1.377	No	1.416	No	1.262	No	1.414	No
	Front	0.834	0.383	0.229	0.381	0.022	1.217	No	1.063	No	1.215	No	1.239	No	1.085	No	1.237	No
Airplay	Edge 1	0.538	0.383	0.229	0.381	N/A	0.921	No	0.767	No	0.919	No						
	Edge 2	0.072	0.383	0.229	0.381	N/A	0.455	No	0.301	No	0.453	No						
	Edge 4	0.444	0.383	0.229	0.381	N/A	0.827	No	0.673	No	0.825	No						

**12.76. Sum of the SAR for LTE Band 25 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.486	0.340	0.228	0.371	0.005	0.826	No	0.714	No	0.857	No	0.831	No	0.719	No	0.862	No
	Left Tilt	0.367	0.340	0.228	0.371	0.010	0.707	No	0.595	No	0.738	No	0.717	No	0.605	No	0.748	No
	Right Touch	0.976	0.340	0.228	0.371	0.041	1.316	No	1.204	No	1.347	No	1.357	No	1.245	No	1.388	No
	Right Tilt	0.347	0.340	0.228	0.371	0.035	0.687	No	0.575	No	0.718	No	0.722	No	0.610	No	0.753	No
Body-worn Accessory & Airplay	Rear	1.140	0.383	0.229	0.381	0.037	1.523	No	1.369	No	1.521	No	1.560	No	1.406	No	1.558	No
	Front	1.120	0.383	0.229	0.381	0.022	1.503	No	1.349	No	1.501	No	1.525	No	1.371	No	1.523	No
Airplay	Edge 2	0.680	0.383	0.229	0.381	N/A	1.063	No	0.909	No	1.061	No						
	Edge 3	0.892	0.383	0.229	0.381	N/A	1.275	No	1.121	No	1.273	No						
	Edge 4	0.063	0.383	0.229	0.381	N/A	0.446	No	0.292	No	0.444	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.

**12.77. Sum of the SAR for LTE Band 26 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.286	0.340	0.228	0.371	0.005	0.626	No	0.514	No	0.657	No	0.631	No	0.519	No	0.662	No
	Left Tilt	0.196	0.340	0.228	0.371	0.010	0.536	No	0.424	No	0.567	No	0.546	No	0.434	No	0.577	No
	Right Touch	0.356	0.340	0.228	0.371	0.041	0.696	No	0.584	No	0.727	No	0.737	No	0.625	No	0.768	No
	Right Tilt	0.231	0.340	0.228	0.371	0.035	0.571	No	0.459	No	0.602	No	0.606	No	0.494	No	0.637	No
Body-worn Accessory & Airplay	Rear	0.160	0.383	0.229	0.381	0.037	0.543	No	0.389	No	0.541	No	0.580	No	0.426	No	0.578	No
	Front	0.178	0.383	0.229	0.381	0.022	0.561	No	0.407	No	0.559	No	0.583	No	0.429	No	0.581	No
Airplay	Edge 1	0.077	0.383	0.229	0.381	N/A	0.460	No	0.306	No	0.458	No						
	Edge 2	0.130	0.383	0.229	0.381	N/A	0.513	No	0.359	No	0.511	No						
	Edge 4	0.065	0.383	0.229	0.381	N/A	0.448	No	0.294	No	0.446	No						

**12.78. Sum of the SAR for LTE Band 26 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.188	0.340	0.228	0.371	0.005	0.528	No	0.416	No	0.559	No	0.533	No	0.421	No	0.564	No
	Left Tilt	0.085	0.340	0.228	0.371	0.010	0.425	No	0.313	No	0.456	No	0.435	No	0.323	No	0.466	No
	Right Touch	0.153	0.340	0.228	0.371	0.041	0.493	No	0.381	No	0.524	No	0.534	No	0.422	No	0.565	No
	Right Tilt	0.078	0.340	0.228	0.371	0.035	0.418	No	0.306	No	0.449	No	0.453	No	0.341	No	0.484	No
Body-worn Accessory & Airplay	Rear	0.386	0.383	0.229	0.381	0.037	0.769	No	0.615	No	0.767	No	0.806	No	0.652	No	0.804	No
	Front	0.502	0.383	0.229	0.381	0.022	0.885	No	0.731	No	0.883	No	0.907	No	0.753	No	0.905	No
Airplay	Edge 2	0.108	0.383	0.229	0.381	N/A	0.491	No	0.337	No	0.489	No						
	Edge 3	0.246	0.383	0.229	0.381	N/A	0.629	No	0.475	No	0.627	No						
	Edge 4	0.292	0.383	0.229	0.381	N/A	0.675	No	0.521	No	0.673	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.

**12.79. Sum of the SAR for LTE Band 30 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.264	0.340	0.228	0.371	0.005	0.604	No	0.492	No	0.635	No	0.609	No	0.497	No	0.640	No
	Left Tilt	0.288	0.340	0.228	0.371	0.010	0.628	No	0.516	No	0.659	No	0.638	No	0.526	No	0.669	No
	Right Touch	0.978	0.340	0.228	0.371	0.041	1318	No	1206	No	1349	No	1359	No	1247	No	1390	No
	Right Tilt	0.774	0.340	0.228	0.371	0.035	1.114	No	1.002	No	1.145	No	1.149	No	1.037	No	1.180	No
Body-worn Accessory & Airplay	Rear	0.883	0.383	0.229	0.381	0.037	1266	No	1.112	No	1264	No	1303	No	1.149	No	1301	No
	Front	0.874	0.383	0.229	0.381	0.022	1257	No	1.103	No	1255	No	1279	No	1.125	No	1277	No
Airplay	Edge 1	0.459	0.383	0.229	0.381	N/A	0.842	No	0.688	No	0.840	No						
	Edge 2	0.060	0.383	0.229	0.381	N/A	0.443	No	0.289	No	0.441	No						
	Edge 4	0.852	0.383	0.229	0.381	N/A	1235	No	1.081	No	1233	No						

**12.80. Sum of the SAR for LTE Band 30 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.242	0.340	0.228	0.371	0.005	0.582	No	0.470	No	0.613	No	0.587	No	0.475	No	0.618	No
	Left Tilt	0.128	0.340	0.228	0.371	0.010	0.468	No	0.356	No	0.499	No	0.478	No	0.366	No	0.509	No
	Right Touch	0.171	0.340	0.228	0.371	0.041	0.511	No	0.399	No	0.542	No	0.552	No	0.440	No	0.583	No
	Right Tilt	0.184	0.340	0.228	0.371	0.035	0.524	No	0.412	No	0.555	No	0.559	No	0.447	No	0.590	No
Body-worn Accessory & Airplay	Rear	0.932	0.383	0.229	0.381	0.037	1315	No	1.161	No	1313	No	1352	No	1.198	No	1350	No
	Front	1.060	0.383	0.229	0.381	0.022	1443	No	1289	No	1441	No	1465	No	1.311	No	1463	No
Airplay	Edge 2	0.331	0.383	0.229	0.381	N/A	0.714	No	0.560	No	0.712	No						
	Edge 3	0.955	0.383	0.229	0.381	N/A	1338	No	1.184	No	1336	No						
	Edge 4	0.630	0.383	0.229	0.381	N/A	1.013	No	0.859	No	1.011	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.

**12.81. Sum of the SAR for LTE Band 41 (UAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.206	0.340	0.228	0.371	0.005	0.546	No	0.434	No	0.577	No	0.551	No	0.439	No	0.582	No
	Left Tilt	0.240	0.340	0.228	0.371	0.010	0.580	No	0.468	No	0.611	No	0.590	No	0.478	No	0.621	No
	Right Touch	0.752	0.340	0.228	0.371	0.041	1.092	No	0.980	No	1.123	No	1.133	No	1.021	No	1.164	No
	Right Tilt	0.554	0.340	0.228	0.371	0.035	0.894	No	0.782	No	0.925	No	0.929	No	0.817	No	0.960	No
Body-worn Accessory & Airplay	Rear	0.971	0.383	0.229	0.381	0.037	1354	No	1200	No	1352	No	1391	No	1237	No	1389	No
	Front	0.671	0.383	0.229	0.381	0.022	1054	No	0.900	No	1052	No	1076	No	0.922	No	1074	No
Airplay	Edge 1	0.640	0.383	0.229	0.381	N/A	1023	No	0.869	No	1021	No						
	Edge 2	0.067	0.383	0.229	0.381	N/A	0.450	No	0.296	No	0.448	No						
	Edge 4	0.878	0.383	0.229	0.381	N/A	1261	No	1.107	No	1259	No						

**12.82. Sum of the SAR for LTE Band 41 (LAT) & Wi-Fi UNII (Cell On) & BT(P<sub>low</sub>)**

RF Exposure Conditions	Test Position	① WWAN	② Wi-Fi 5GHz (UAT)	③ Wi-Fi 5GHz (LAT)	④ Wi-Fi 5GHz (MIMO)	⑤ Bluetooth (P <sub>low</sub> )	①+②		①+③		①+④		①+②+⑤		①+③+⑤		①+④+⑤	
							∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)	∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
Head	Left Touch	0.445	0.340	0.228	0.371	0.005	0.785	No	0.673	No	0.816	No	0.790	No	0.678	No	0.821	No
	Left Tilt	0.083	0.340	0.228	0.371	0.010	0.423	No	0.311	No	0.454	No	0.433	No	0.321	No	0.464	No
	Right Touch	0.210	0.340	0.228	0.371	0.041	0.550	No	0.438	No	0.581	No	0.591	No	0.479	No	0.622	No
	Right Tilt	0.136	0.340	0.228	0.371	0.035	0.476	No	0.364	No	0.507	No	0.511	No	0.399	No	0.542	No
Body-worn Accessory & Airplay	Rear	1.050	0.383	0.229	0.381	0.037	1433	No	1279	No	1431	No	1470	No	1316	No	1468	No
	Front	1.050	0.383	0.229	0.381	0.022	1433	No	1279	No	1431	No	1455	No	1301	No	1453	No
Airplay	Edge 2	0.167	0.383	0.229	0.381	N/A	0.550	No	0.396	No	0.548	No						
	Edge 3	0.512	0.383	0.229	0.381	N/A	0.895	No	0.741	No	0.893	No						
	Edge 4	0.787	0.383	0.229	0.381	N/A	1.170	No	1.016	No	1.168	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.**

**A\_15U20162v0 SAR Photos (STC\_180days)**

**B\_15U20162v1 SAR System Check Plots**

**C\_15U20162v1 SAR Highest Test Plots**

**D\_15U20162v0 SAR Tissue Ingredients**

**E\_15U20162v1 SAR Probe Cal. Certificates**

**F\_15U20162v1 SAR Dipole Cal. Certificates**