FCC 47 CFR Parts 1 & 2
Published RF Exposure KDB Procedures
IEEE Std 1528-2003 and IEEE Std 1528a-2005

SAR EVALUATION REPORT

For
iPhone

Model: A1456 / A1532

FCC ID: BCG-E2644A

Report Number: 13U14987-21C
Issue Date: 9/5/2013

Prepared for
APPLE INC.
1 INFINITE LOOP, MS 26A
CUPERTINO, CA 95014-2084

Prepared by
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	7/20/2013	Initial Issue	--
A	8/30/13	Made the following changes based on reviewer's comments: 1. Removed OET 65 supplement C from cover page, Sec. 1, 2 and 10 2. Sec. 7.1: Added description of detect mode 3. Sec. 7.3 & 7.4: Corrected some typo 4. Sec. 8.2: Added explanation on selected test separation distance for Body-worn accessory test configurations. 5. Sec. 8.3: Added justification for testing at 5 mm to cover hotspot operation. 6. Sec. 9.5: Added WLAN channels 12 and 13 and added justification (note 2) why channels 12 and 13 were not tested. 7. Sec. 12.3.2., 12.4.2 and 12.5.2.: Added justification for SAR test exclusion for HSPA	Sunny Shih
B	9/5/2013	Made the following changes based on reviewer's comments: 1. Updated report no. form 13U14987-8A to 13U14987-21B 2. Sec. 7.1: Added flowchart and descriptions. 3. Sec. 9: Added note	Sunny Shih

Table of Contents

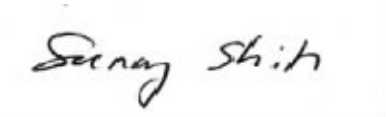
1. Attestation of Test Results

Applicant	Apple Inc.			
DUT description	iPhone			
Model	A1456 / A1532			
Test device is	An identical prototype			
Device category	Portable			
Exposure category	General Population/Uncontrolled Exposure			
Date tested	5/22/2013 – 7/19/2013			
The highest reported SAR values	RF exposure conditions	Licensed	DTS	UNII
	Head	1.187 W/kg	0.596 W/kg	0.586 W/kg
	Body-worn Accessory	1.180 W/kg	0.519 W/kg	0.566 W/kg
	Wireless Router (Hotspot)	1.190 W/kg	0.481 W/kg	N/A
	Simultaneous Transmission	1.589 W/kg	1.589 W/kg	1.576 W/kg
Applicable Standards	FCC 47 CFR Parts 1 & 2 Published RF Exposure KDB Procedures, and TCB workshop updates IEEE Std 1528-2003 and IEEE Std 1528a-2005			
Test Results	Pass			

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

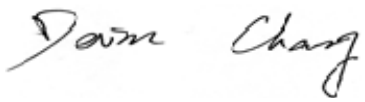
Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section.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

Approved & Released By:



Sunny Shih
WiSE Operations Manager
UL Verification Services Inc.

Prepared By:



Devin Chang
WiSE Engineer
UL Verification Services Inc.

2. Test Methodology

The tests documented in this report were performed in accordance with FCC 47 CFR Parts 1 & 2, IEEE STD 1528-2003, IEEE Std 1528a-2005, the following FCC Published RF exposure KDB procedures, and TCB workshop updates:

- 447498 D01 General RF Exposure Guidance v05r01
- 648474 D04 SAR Handsets Multi Xmiter and Ant v01r01
- 941225 D01 SAR test for 3G devices v02
- 941225 D02 HSPA and 1x Advanced v02r02
- 941225 D03 SAR Test Reduction GSM GPRS EDGE v01
- 941225 D04 SAR for GSM E GPRS Dual Xfer Mode v01
- 941225 D05 SAR for LTE Devices v02r02
- 941225 D06 Hot Spot SAR v01r01
- 248227 D01 SAR Meas for 802 11abg v01r02
- 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r01
- 865664 D02 SAR Reporting v01r01
- 690783 D01 SAR Listings on Grants v01r02

3. Facilities and Accreditation

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

4. Calibration and Uncertainty

4.1. Measuring Instrument Calibration

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.

Tissue Dielectric Properties

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Network Analyzer	Agilent	E5071B	MY42100131	2/21/2014
Dielectronic Probe kit	SPEAG	DAK-3.5	1087	10/16/2013
Dielectronic Probe kit	SPEAG	DAK-3.5 Short	SM DAK 200 BA	N/A
Thermometer	Control Company	4242	122529163	9/19/2013

System Performance Check

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Synthesized Signal Generator	HP	8665B	3546A00784	3/26/2014
Power Meter	HP	438A	3513U04320	9/24/2013
Power Sensor	HP	8481A	2237A31744	9/24/2013
Power Sensor	HP	8481A	2702A76223	8/21/2013
Amplifier	MITEQ	AMF-4D-00400600-50-30P	1795093	N/A
Directional coupler	Werlatone	C8060-102	2711	N/A
DC Power Supply	AMETEK	XHR60-18	1308A01935	N/A
Synthesized Signal Generator	HP	8665B	3744A01155	3/6/2014
Power Meter	HP	438A	2822A05684	10/7/2013
Power Sensor	HP	8481A	2702A66876	9/24/2013
Power Sensor	HP	8482A	2349A08568	9/26/2013
Amplifier	MITEQ	AMF-4D-00400600-50-30P	1622052	N/A
Directional coupler	Werlatone	C8060-102	2149	N/A
DC Power Supply	EKNWOOD	PA36-3A	7060074	N/A
Thermometer	TRACEABLE	4242	122529162	9/19/2013
E-Field Probe	SPEAG	EX3DV4	3749	1/15/2014
E-Field Probe	SPEAG	EX3DV4	3751	12/15/2013
E-Field Probe	SPEAG	EX3DV4	3772	2/20/2014
E-Field Probe	SPEAG	EX3DV4	3686	3/12/2014
E-Field Probe	SPEAG	EX3DV4	3901	2/13/2014
E-Field Probe	SPEAG	EX3DV4	3885	10/9/2013
Data Acquisition Electronics	SPEAG	DAE4	1343	8/20/2013
Data Acquisition Electronics	SPEAG	DAE4	1239	4/9/2014
Data Acquisition Electronics	SPEAG	DAE3	427	1/9/2014
Data Acquisition Electronics	SPEAG	DAE4	1258	3/6/2014
Data Acquisition Electronics	SPEAG	DAE4	1257	8/28/2013
Data Acquisition Electronics	SPEAG	DAE4	1357	2/5/2014
Data Acquisition Electronics	SPEAG	DAE4	1352	10/8/2013
Data Acquisition Electronics	SPEAG	DAE4	1360	2/7/2014
System Validation Dipole	SPEAG	D750V3	1071	10/5/2013
System Validation Dipole	SPEAG	D835V2	4d002	10/24/2013
System Validation Dipole	SPEAG	D835V2	4d142	10/4/2013
System Validation Dipole	SPEAG	D1750V2	1053	8/15/2013
System Validation Dipole	SPEAG	D1900V2	5d163	10/4/2013
System Validation Dipole	SPEAG	D2450V2	899	10/5/2013
System Validation Dipole	SPEAG	D5GHzV2	1138	10/9/2013
System Validation Dipole	SPEAG	D5GHzV2	1003	9/18/2013

Others

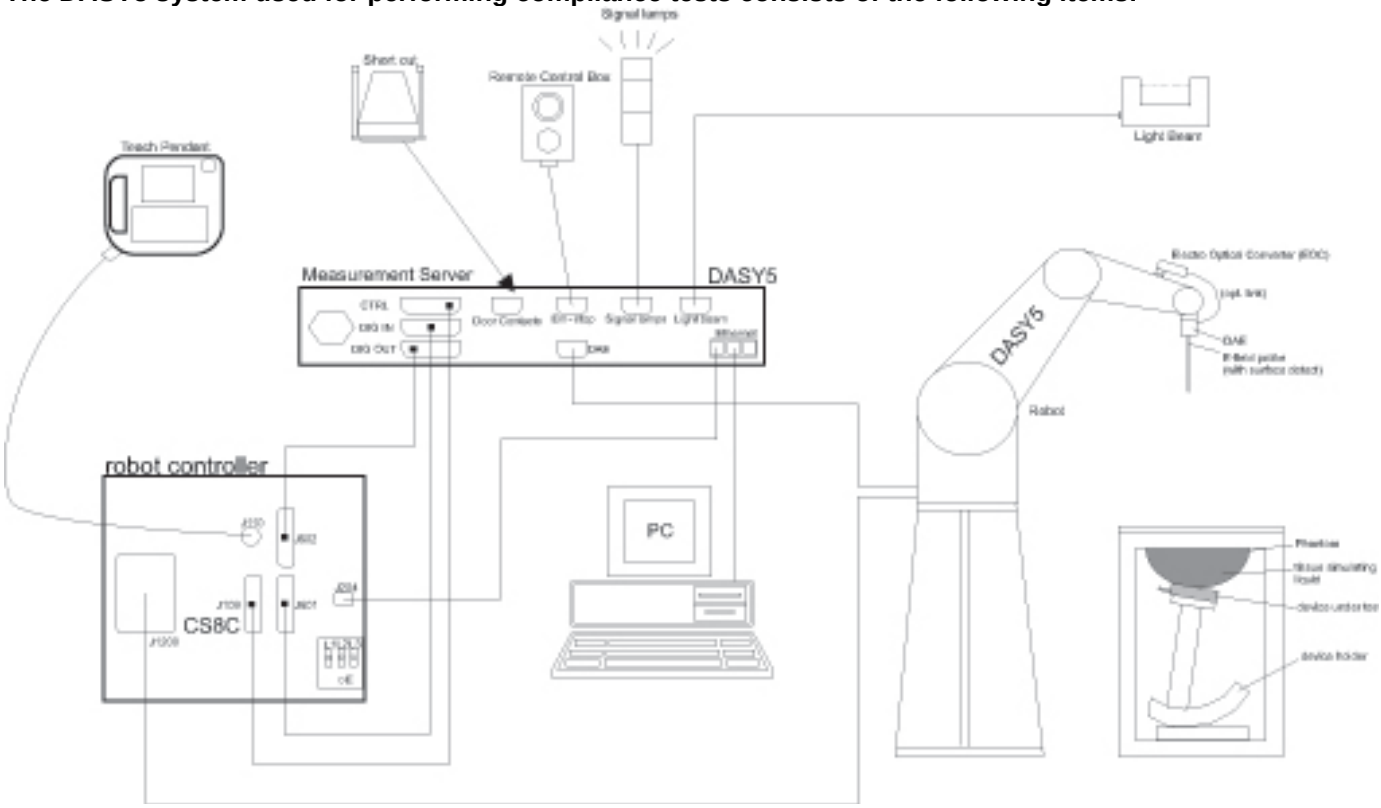
Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Base Station Simulator	Agilent	8960	MY48360200	3/20/2014
Base Station Simulator	R & S	CMU200	106291	8/8/2013
Base Station Simulator	R & S	CMU200	117455	5/20/2014
Base Station Simulator	R & S	CMU200	118715	5/20/2014
Base Station Simulator	R & S	CMW500	132910-cp	2/19/2014
Base Station Simulator	R & S	CMW500	132909-bp	2/19/2014
Base Station Simulator	R & S	CMW500	103764-dn	8/16/2014
Base Station Simulator	R & S	CMW500	103766-ly	8/19/2014
Base Station Simulator	R & S	CMW500	107513-be	7/26/2014
Power Meter	Agilent	N1912A	MY50001018	8/10/2013
Power Sensor	Agilent	N1921A	MY52020011	5/13/2014
Power Sensor	Agilent	N1921A	MY52200012	7/24/2013

4.2. Measurement Uncertainty

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r01 Section 2.8.1., 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 1528-2003 is not required in SAR reports submitted for equipment approval.

5. Measurement System Description and Setup

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.

6. SAR Measurement Procedure

6.1. Normal SAR Measurement Procedure

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 v01r01

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

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 v01r01

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ $1.5 \cdot \Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the area scan based *1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

Step 4: Power drift measurement

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

Step 5: Z-Scan (FCC only)

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

6.2. Volume Scan Procedures

Step 1: Repeat Step 1-4 in Section 6.1

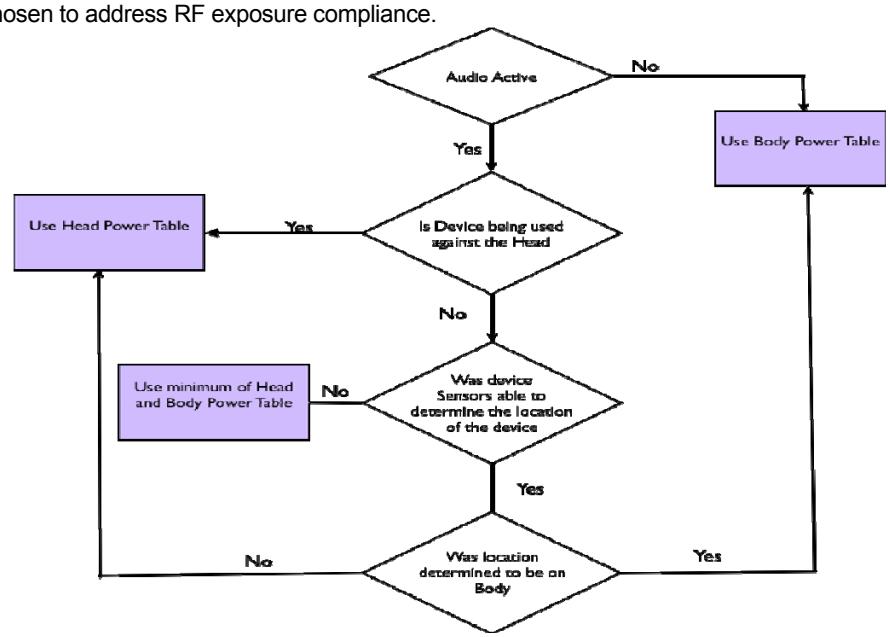
Step 2: Volume Scan
Volume Scans are used to assess peak SAR and averaged SAR measurements in largely extended 3-dimensional volumes within any phantom. This measurement does not need any previous area scan. The grid can be anchored to a user specific point or to the current probe location.

Step 3: 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.

7. Device Under Test

7.1. General Information

iPhone
Model: A1456 / A1532
The FCC ID: BCG-E2644A device uses sensors present in it to determine if the device is against the user's body so that the correct power table can be chosen to address RF exposure compliance.



Device uses 2 different power tables to meet RF exposure compliance:
- Head Power Table: Head Power Table is used when device is used against the head.
- Body Power Table: Body Power Table is used when device is used against the body. Device uses sensors to determine if the device is against the user's body or not.

The sensors used for this detection are a part of the device. The measurements from the sensors are processed to produce a metric. The device is declared to be on the body if the computed metric exceeds a priori specified threshold. When the device is identified to be on the body, the "body power table" is used. When the device is identified as not on the body, the "head power table" is used.

Operating Configuration(s)	Held to head and Body-worn (Voice call)
Mobile Hotspot	WiFi Hotspot mode permits the device to share its cellular data connection with other WiFi-enabled devices. ☒ Mobile Hotspot (WiFi 2.4 GHz) ☐ Mobile Hotspot (WiFi 5 GHz)
SV-LTE & SV-DO	Not Supported
AirPlay	AirPlay mode enabled devices transfer data directly between each other ☒ AirPlay (WiFi 2.4 GHz) ☒ AirPlay (WiFi 5 GHz)
RF Exposure Condition(s)	Head, Body-worn Accessory, Hotspot (wireless router)
Device dimension	Overall (Length x Width): 124.0 mm x 58.5 mm Overall Diagonal: 130.4 mm Display Diagonal: 103.0 mm
Accessory	Headset
Battery Options	☒ Standard – Lithium-ion battery, Rating 3.8 Vdc, 5.73 Wh ☐ Extended (large capacity)

7.2. Wireless Technologies

Wireless Technology and Frequency Bands	GSM: 850 / 1900 W-CDMA Band: 2 / 4 / 5 CDMA BC 0 / 1 / 10 / 15 LTE Band 2 / 4 / 5 / 13 / 17 / 25 / 26 WiFi: 2.4 / 5 GHz Bluetooth: 2.4 GHz.
Mode	GSM - ☒ Voice (GMSK) - ☒ GPRS (GMSK) - ☒ EGPRS (8PSK) W-CDMA - ☒ UMTS Rel. 99 (Voice & Data) - ☒ HSDPA (Rel. 7, CAT 14) - ☒ HSUPA (Rel. 6, CAT 6) - ☒ DC-HSDPA (Rel. 8, CAT 24) - ☒ HSPA+ (Rel. 6, CAT 6) CDMA2000 - ☒ 1xRTT (Voice & Data) - ☒ 1xEVDO Rel. 0 - ☒ 1xEVDO Rev. A - ☒ 1xAdvanced - ☒ 1xEVDO Rev. B (BC0 only) LTE - ☒ QPSK - ☒ 16QAM WiFi 2.4GHz (802.11b/g/n) - ☒ 802.11b - ☒ 802.11g - ☒ 802.11n (20MHz) - ☐ 802.11n (40MHz) WiFi 5GHz - ☒ 802.11a - ☒ 802.11n (20MHz) - ☒ 802.11n (40MHz) Bluetooth Ver. 4.0 (LE)
Duty Cycle	GSM Voice: 12.5%; GPRS 1 Slot: 12.5%; 2 Slots: 25% W-CDMA: 100% CDMA: 100% LTE: 100% WiFi 802.11a/b/g/n: 100% Bluetooth: 32.25% (DH1), 66.68% (DH3), 77.52% (DH5)
GPRS Multi-Slot Class	☐ Class 8 - One Up ☒ Class 10 - Two Up ☐ Class 12 - Four Up
Mobile Phone Capability	☐ Class A - Mobile phones can be connected to both GPRS and GSM services simultaneously. ☒ Class B - Mobile phones can be attached to both GPRS and GSM services, using one service at a time. ☐ Class C - Mobile phones are attached to either GPRS or GSM voice service. You need to switch manually between services
DTM (Dual Transfer Mode)	Not Supported
VoIP	Supported

7.3. Simultaneous Transmission Condition

RF Exposure Condition	Capable Transmit Configurations
Head	1. GSM 850/1900 Voice + WiFi 2.4/5GHz 2. GSM 850/1900 (GPRS/EDGE) + WiFi 2.4/5GHz 3. CDMA 1xRTT BC0/BC1/BC10/BC15 + WiFi 2.4/5GHz 4. CDMA 1xEVDO BC0/BC1/BC10/BC15 + WiFi 2.4/5GHz 5. WCDMA Band 2/4/5 + WiFi 2.4/5GHz 6. LTE B2/B4/B5/B13/B17/B25/B26 + WiFi 2.4/5GHz
Body-worn Accessory	1. GSM 850/1900 Voice + WiFi 2.4/5GHz 2. GSM 850/1900 Voice + BT 3. GSM 850/1900 (GPRS/EDGE) + WiFi 2.4/5GHz 4. GSM 850/1900 (GPRS/EDGE) + BT 5. CDMA 1xRTT BC0/BC1/BC10/BC15 + WiFi 2.4/5GHz 6. CDMA 1xRTT BC0/BC1/BC10/BC15 + BT 7. CDMA 1xEVDO BC0/BC1/BC10/BC15 + WiFi 2.4/5GHz 8. CDMA 1xEVDO BC0/BC1/BC10/BC15 + BT 9. WCDMA Band 2/4/5 + WiFi 2.4/5GHz 10. WCDMA Band 2/4/5 + BT 11. LTE B2/B4/B5/B13/B17/B25/B26 + WiFi 2.4/5GHz 12. LTE B2/B4/B5/B13/B17/B25/B26 + BT
Wireless Router (Hotspot)	1. GSM 850/1900 (GPRS/EDGE) + WiFi 2.4GHz 2. CDMA 1xRTT BC0/BC1/BC10/BC15 + WiFi 2.4GHz 3. CDMA 1xEVDO BC0/BC1/BC10/BC15 + WiFi 2.4GHz 4. WCDMA Band 2/4/5 (850/1900) + WiFi 2.4GHz 5. LTE B2/B4/B5/B13/B17/B25/B26 + WiFi 2.4GHz
Notes: 1. WiFi only 2.4GHz supports Hotspot. 2. GPRS/EDGE, CDMA, WCDMA and LTE support Hotspot. 3. VoIP is supported in CDMA, LTE, WCDMA and GPRS. 4. WiFi 2.4 GHz Radio cannot transmit simultaneously with Bluetooth Radio.	

7.4. 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 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		
	Band 17	Frequency range: 704 – 716 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low				23755/ 706.5		
	Mid			23790/ 710	23790/ 710		
	High				23825/ 713.5		

General LTE SAR Test and Reporting Considerations (Continued)

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1860</td><td>26115/
1857.5</td><td>26090/
1855</td><td>26065/
1852.5</td><td>26055/
1851.5</td><td>26047/
1850.7</td></tr>
<tr><td>Mid</td><td>26365/
1882.5</td><td>26365/
1882.5</td><td>26365/
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1882.5</td><td>26365/
1882.5</td><td>26365/
1882.5</td></tr>
<tr><td>High</td><td>26590/
1905</td><td>26615/
1907.5</td><td>26640/
1910</td><td>26665/
1912.5</td><td>26675/
1913.5</td><td>26683/
1914.3</td></tr>
<tr><td rowspan="2">Band 26</td><td colspan="6">Frequency range: 818.8 – 823.8 MHz
(Channels straddle part 24 and part 90 not supported)</td></tr>
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<tr><td>Low</td><td></td><td></td><td></td><td></td><td>26753/
820.3</td><td></td></tr>
<tr><td>Mid</td><td></td><td></td><td></td><td>26763/
821.3</td><td>26763/
821.3</td><td></td></tr>
<tr><td>High</td><td></td><td></td><td></td><td></td><td>26773/
822.3</td><td></td></tr>
<tr><td>LTE transmitter and antenna implementation</td><td colspan="7">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.</td></tr>
<tr><td>Maximum power reduction (MPR)</td><td colspan="7">
Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3
<table>
<tr><th rowspan="2">Modulation</th><th colspan="6">Channel bandwidth / Transmission bandwidth (RB)</th><th rowspan="2">MPR (dB)</th></tr>
<tr><th>1.4 MHz</th><th>3.0 MHz</th><th>5 MHz</th><th>10 MHz</th><th>15 MHz</th><th>20 MHz</th></tr>
<tr><td>QPSK</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 1</td></tr>
<tr><td>16 QAM</td><td>≤ 5</td><td>≤ 4</td><td>≤ 8</td><td>≤ 12</td><td>≤ 16</td><td>≤ 18</td><td>≤ 1</td></tr>
<tr><td>16 QAM</td><td>> 5</td><td>> 4</td><td>> 8</td><td>> 12</td><td>> 16</td><td>> 18</td><td>≤ 2</td></tr>
</table>
MPR Built-in by design
A-MPR (additional MPR) was disabled during SAR testing</td></tr>
<tr><td>Power reduction</td><td colspan="7">No</td></tr>
<tr><td>Spectrum plots for RB configurations</td><td colspan="7">When a properly configured basestation simulator is not used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration should be included in the SAR report to demonstrate that the tested RB allocations have been correctly established at the maximum output power conditions.</td></tr>
</table>

8. RF Exposure Conditions

Refer to Section 17 “Antenna Locations and Separation Distances” for the specific details of the antenna-to-antenna and antenna-to-edge(s) distances.

8.1. Head Exposure Conditions

For GSM, W-CDMA, CDMA, LTE and WiFi

Test Configurations	SAR Required	Note
Left Touch	Yes	
Left Tilt (15°)	Yes	
Right Touch	Yes	
Right Tilt (15°)	Yes	

8.2. Body-worn Accessory Exposure Conditions

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

For WWAN and LTE (LAT/Primary Antenna)

Test Configurations	Antenna-to-edge/surface	SAR Required	Note
Rear	<25 mm	Yes	
Front	<25 mm	Yes	

For WWAN and LTE (UAT/Secondary Antenna)

Test Configurations	Antenna-to-edge/surface	SAR Required	Note
Rear	<25 mm	Yes	
Front	<25 mm	Yes	

For WiFi

Test Configurations	Antenna-to-edge/surface	SAR Required	Note
Rear	<25 mm	Yes	
Front	<25 mm	Yes	

8.3. Hotspot Exposure Conditions

Per Section 4 of test plan submitted in the manufacturer KDB titled Detect Mode Feature, hotspot operation SAR test cases are covered by worse-cases in Body-worn SAR at 5 mm separation distance.

For WWAN and LTE (LAT/Primary Antenna)

Test Configurations	Antenna-to-edge/surface	SAR Required	Note
Rear	<25 mm	Yes	
Front	<25 mm	Yes	
Edge 1 (Top)	0 mm	Yes	
Edge 2 (Right)	0 mm	Yes	
Edge 3 (Bottom)	>25 mm	No	SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hot Spot SAR v01r01
Edge 4 (Left)	0 mm	Yes	

For WWAN and LTE (UAT/Secondary Antenna)

Test Configurations	Antenna-to-edge/surface	SAR Required	Note
Rear	<25 mm	Yes	
Front	<25 mm	Yes	
Edge 1 (Top)	>25 mm	No	SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hot Spot SAR v01r01
Edge 2 (Right)	0 mm	Yes	
Edge 3 (Bottom)	0 mm	Yes	
Edge 4 (Left)	0 mm	Yes	

For WiFi

Test Configurations	Antenna-to-edge/surface	SAR Required	Note
Rear	<25 mm	Yes	
Front	<25 mm	Yes	
Edge 1 (Top)	4.7 mm	Yes	
Edge 2 (Right)	35.2 mm	Yes	
Edge 3 (Bottom)	115.4 mm	No	SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hot Spot SAR v01r01
Edge 4 (Left)	10.5 mm	Yes	

9. RF Output Power Measurement

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

9.1. GSM

GSM (GMSK) - Voice Mode

Band	Ch No.	Freq. (MHz)	Avg Power (dBm)			
			HEAD		BODY	
			UAT	LAT	UAT	LAT
850	128	824.2	33.2	33.3	33.2	33.4
	190	836.6	33.2	33.3	33.2	33.4
	251	848.8	33.1	33.3	33.2	33.4

GPRS (GMSK) - Coding Scheme: CS1

Band	Ch No.	Freq. (MHz)	HEAD				BODY			
			UAT		LAT		UAT		LAT	
			1 slot	2 slots	1 slot	2 slots	1 slot	2 slots	1 slot	2 slots
			Burst Power (dBm)				Burst Power (dBm)			
850	128	824.2	33.2	**31.5**	33.3	**31.8**	33.2	**31.7**	33.5	**31.25**
	190	836.6	33.2	**31.4**	33.3	**31.8**	33.2	**31.8**	33.5	**31.25**
	251	848.8	33.2	**31.3**	33.2	**31.8**	33.2	**31.7**	33.5	**31.25**
			Frame Power (dBm)				Frame Power (dBm)			
850	128	824.2	24.2	**25.5**	24.3	**25.8**	24.2	**25.7**	24.5	**25.23**
	190	836.6	24.2	**25.4**	24.3	**25.8**	24.2	**25.8**	24.5	**25.23**
	251	848.8	24.2	**25.3**	24.2	**25.8**	24.2	**25.7**	24.5	**25.23**

EGPRS (8PSK) - Coding Scheme: MCS5

Band	Ch No.	Freq. (MHz)	HEAD				BODY			
			UAT		LAT		UAT		LAT	
			1 slot	2 slots	1 slot	2 slots	1 slot	2 slots	1 slot	2 slots
			Burst Power (dBm)				Burst Power (dBm)			
850	128	824.2	28.6	28.6	28.7	28.6	28.6	28.6	28.7	28.6
	190	836.6	28.7	28.7	28.8	28.7	28.7	28.7	28.8	28.7
	251	848.8	28.7	28.6	28.8	28.7	28.7	28.6	28.8	28.7
			Frame Power (dBm)				Frame Power (dBm)			
850	128	824.2	19.6	22.6	19.7	22.6	19.6	22.6	19.7	22.6
	190	836.6	19.6	22.7	19.8	22.7	19.6	22.7	19.8	22.7
	251	848.8	19.7	22.6	19.7	22.6	19.7	22.6	19.7	22.6

Notes:

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

- Head & Body-worn Accessory: GMSK Voice Mode
- Hotspot 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

GSM (GMSK) - Voice Mode

Band	Ch No.	Freq. (MHz)	Avg Power (dBm)			
			HEAD		BODY	
			UAT	LAT	UAT	LAT
1900	512	1850.2	30.9	31.1	30.9	29.5
	661	1880.0	30.9	31.1	30.9	29.5
	810	1909.8	30.9	31.1	30.7	29.5

GPRS (GMSK) - Coding Scheme: CS1

Band	Ch No.	Freq. (MHz)	HEAD				BODY			
			UAT		LAT		UAT		LAT	
			1 slot	2 slots	1 slot	2 slots	1 slot	2 slots	1 slot	2 slots
			Burst Power (dBm)				Burst Power (dBm)			
1900	512	1850.2	30.8	**29.9**	31.2	**28.5**	30.9	**29.7**	29.5	**27.0**
	661	1880.0	30.9	**29.8**	31.1	**28.5**	30.9	**29.5**	29.5	**27.0**
	810	1909.8	30.9	**29.7**	31.1	**28.5**	30.7	**29.3**	29.5	**27.0**
			Frame Power (dBm)				Frame Power (dBm)			
1900	512	1850.2	21.8	23.9	22.2	22.5	21.9	23.7	20.5	21.0
	661	1880.0	21.9	23.8	22.1	22.5	21.9	23.5	20.5	21.0
	810	1909.8	21.9	23.7	22.1	22.5	21.7	23.3	20.5	21.0

EGPRS (8PSK) - Coding Scheme: MCS5

Band	Ch No.	Freq. (MHz)	HEAD				BODY			
			UAT		LAT		UAT		LAT	
			1 slot	2 slots	1 slot	2 slots	1 slot	2 slots	1 slot	2 slots
			Burst Power (dBm)				Burst Power (dBm)			
1900	512	1850.2	27.4	27.4	27.8	27.8	27.4	27.4	27.8	27.8
	661	1880.0	27.4	27.4	28.0	28.0	27.4	27.4	28.0	28.0
	810	1909.8	27.4	27.3	27.8	27.7	27.4	27.3	27.8	27.7
			Frame Power (dBm)				Frame Power (dBm)			
1900	512	1850.2	18.4	21.4	18.8	21.8	18.4	21.4	18.8	21.8
	661	1880.0	18.3	21.3	19.0	22.0	18.3	21.3	19.0	22.0
	810	1909.8	18.3	21.3	18.8	21.7	18.3	21.3	18.8	21.7

Notes:

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

- Head & Body-worn Accessory: GMSK Voice Mode
- Hotspot 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

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 1
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	βc/βd	8/15

Measured Results

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
				HEAD		BODY	
				UAT	LAT	UAT	LAT
W-CDMA Band 2	Rel 99 (RMC, 12.2 kbps)	9262	1852.4	23.9	23.0	23.9	20.5
		9400	1880.0	23.9	23.0	23.9	20.5
		9538	1907.6	23.9	22.9	23.2	20.5
W-CDMA Band 4	Rel 99 (RMC, 12.2 kbps)	1312	1712.4	23.0	23.0	23.9	20.0
		1413	1732.6	23.0	23.0	23.9	20.0
		1513	1752.6	23.0	23.0	23.9	19.9
W-CDMA Band 5	Rel 99 (RMC, 12.2 kbps)	4132	826.4	24.2	24.4	24.2	24.25
		4183	836.6	24.2	24.5	24.2	24.25
		4233	846.6	24.2	24.5	24.2	24.25

HSDPA

The following 4 Sub-tests were completed according to Release 7 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subtest	1	2	3	4
W-CDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	Power Control Algorithm	Algorithm 2			
	βc	2/15	12/15	15/15	15/15
	βd	15/15	15/15	8/15	4/15
	Bd (SF)	64			
	βc/βd	2/15	12/15	15/8	15/4
	βhs	4/15	24/15	30/15	30/15
	MPR (dB)	0	1	1.5	1.5
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			
	Ahs =βhs/βc	30/15			

Measured Results

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
				HEAD		BODY	
				UAT	LAT	UAT	LAT
W-CDMA Band 2	Subtest 1	9262	1852.4	22.7	21.9	23.8	20.4
		9400	1880.0	22.6	21.8	23.8	20.4
		9538	1907.6	22.8	21.8	23.7	20.3
	Subtest 2	9262	1852.4	22.6	22.0	22.9	19.5
		9400	1880.0	22.5	21.8	23.0	19.4
		9538	1907.6	22.7	21.9	22.8	19.4
	Subtest 3	9262	1852.4	22.5	21.7	22.6	19.2
		9400	1880.0	22.3	21.6	22.5	19.2
		9538	1907.6	22.5	21.7	22.6	19.1
	Subtest 4	9262	1852.4	21.8	21.7	22.5	19.1
		9400	1880.0	21.9	21.6	22.5	19.1
		9538	1907.6	22.3	21.6	22.5	19.0
W-CDMA Band 4	Subtest 1	1312	1712.4	22.9	22.2	22.7	19.9
		1413	1732.6	22.8	22.3	22.8	20.0
		1513	1752.6	22.8	22.5	22.7	20.0
	Subtest 2	1312	1712.4	21.9	22.2	22.6	18,9
		1413	1732.6	22.0	22.3	22.8	19.0
		1513	1752.6	21.8	22.4	22.7	18.8
	Subtest 3	1312	1712.4	21.5	21.9	21.9	18.6
		1413	1732.6	21.6	21.9	21.9	18.5
		1513	1752.6	21.6	22.0	21.8	18.5
	Subtest 4	1312	1712.4	21.5	21.8	21.9	18.6
		1413	1732.6	21.5	22.0	21.9	18.4
		1513	1752.6	21.4	21.9	21.6	18.5
W-CDMA Band 5	Subtest 1	4132	826.4	23.2	23.2	24.2	24.10
		4183	836.6	23.1	23.1	24.2	24.20
		4233	846.6	23.0	23.2	24.1	24.20
	Subtest 2	4132	826.4	23.1	23.2	23.0	23.10
		4183	836.6	23.0	23.1	23.1	23.20
		4233	846.6	23.0	23.2	23.1	23.20
	Subtest 3	4132	826.4	22.8	23.0	22.6	22.70
		4183	836.6	22.7	22.9	22.7	22.75
		4233	846.6	22.7	22.9	22.7	22.80
	Subtest 4	4132	826.4	22.8	22.9	22.7	22.70
		4183	836.6	22.8	22.9	22.8	22.70
		4233	846.6	22.7	22.9	22.6	22.60

Maximum output power levels that are possible for all subtests reported.

HSPA (HSDPA & HSUPA)

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	HSPA	HSPA	HSPA	HSPA
	Subtest	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2kbps RMC				
	HSDPA FRC	H-Set1				
	HSUPA Test	HSUPA Loopback				
	Power Control Algorithm	Algorithm2				
	βc	11/15	6/15	15/15	2/15	15/15
	βd	15/15	15/15	9/15	15/15	15/15
	βec	209/225	12/15	30/15	2/15	24/15
	βc/βd	11/15	6/15	15/9	2/15	15/15
	βhs	22/15	12/15	30/15	4/15	30/15
	βed	1309/225	94/75	47/15 47/15	56/75	134/15
	CM (dB)	1.0	3.0	2.0	3.0	1.0
	MPR (dB)	0	2	1	2	0
HSDPA Specific Settings	DACK	8				
	DNAK	8				
	DCQI	8				
	Ack-Nack repetition factor	3				
	CQI Feedback (Table 5.2B.4)	4ms				
	CQI Repetition Factor (Table 5.2B.4)	2				
	Ahs = βhs/βc	30/15				
HSUPA Specific Settings	D E-DPCCH	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	E-TFCI 11 E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO 23 E-TFCI 75 E-TFCI PO 26 E-TFCI 81 E-TFCI PO 27		E-TFCI 11 E-TFCI PO 4 E-TFCI 92 E-TFCI PO 18	E-TFCI 11 E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO 23 E-TFCI 75 E-TFCI PO 26 E-TFCI 81 E-TFCI PO 27	

Measured Results

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
				HEAD		BODY	
				UAT	LAT	UAT	LAT
W-CDMA Band 2	Subtest 1	9262	1852.4	23.8	22.5	23.7	20.4
		9400	1880.0	23.8	22.8	23.8	20.3
		9538	1907.6	23.7	22.7	23.8	20.3
	Subtest 2	9262	1852.4	21.7	21.6	21.8	18.6
		9400	1880.0	21.7	21.9	21.8	18.4
		9538	1907.6	21.8	21.8	21.6	18.4
	Subtest 3	9262	1852.4	22.7	21.7	22.8	19.5
		9400	1880.0	22.8	21.9	22.8	19.4
		9538	1907.6	22.8	21.6	22.7	19.5
	Subtest 4	9262	1852.4	21.7	22.2	21.7	18.7
		9400	1880.0	21.7	22.1	21.6	18.5
		9538	1907.6	21.6	22.3	21.6	18.6
	Subtest 5	9262	1852.4	23.8	22.5	23.8	20.4
		9400	1880.0	23.7	22.6	23.8	20.4
		9538	1907.6	23.7	22.7	23.7	20.3
W-CDMA Band 4	Subtest 1	1312	1712.4	22.9	22.0	23.8	19.8
		1413	1732.6	22.8	22.2	23.7	19.8
		1513	1752.6	22.8	21.1	23.7	19.7
	Subtest 2	1312	1712.4	21.9	21.2	21.9	18.0
		1413	1732.6	21.9	21.0	22.0	17.9
		1513	1752.6	21.8	20.8	21.9	17.9
	Subtest 3	1312	1712.4	22.1	21.0	22.8	18.9
		1413	1732.6	22.0	21.3	22.9	19.1
		1513	1752.6	22.0	21.1	22.7	19.0
	Subtest 4	1312	1712.4	21.8	21.5	21.7	17.8
		1413	1732.6	21.7	21.2	21.8	17.8
		1513	1752.6	21.7	21.8	21.8	17.9
	Subtest 5	1312	1712.4	22.9	22.1	23.8	19.9
		1413	1732.6	23.0	21.9	23.8	20.0
		1513	1752.6	23.8	22.0	23.9	20.0
W-CDMA Band 5	Subtest 1	4132	826.4	24.1	23.2	24.0	24.20
		4183	836.6	24.1	23.7	24.2	24.25
		4233	846.6	24.2	23.5	24.1	24.25
	Subtest 2	4132	826.4	22.2	22.8	22.1	22.30
		4183	836.6	22.3	22.4	22.1	22.30
		4233	846.6	22.1	22.8	22.2	22.25
	Subtest 3	4132	826.4	23.2	21.8	23.0	23.10
		4183	836.6	23.2	22.1	23.2	23.10
		4233	846.6	23.1	22.7	23.2	23.00
	Subtest 4	4132	826.4	22.2	23.2	22.2	22.00
		4183	836.6	22.1	22.7	22.2	22.10
		4233	846.6	22.1	23.0	22.1	22.20
	Subtest 5	4132	826.4	24.2	22.9	24.2	24.10
		4183	836.6	24.1	22.8	24.2	24.25
		4233	846.6	24.1	22.9	24.1	24.10

DC-HSDPA

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.		

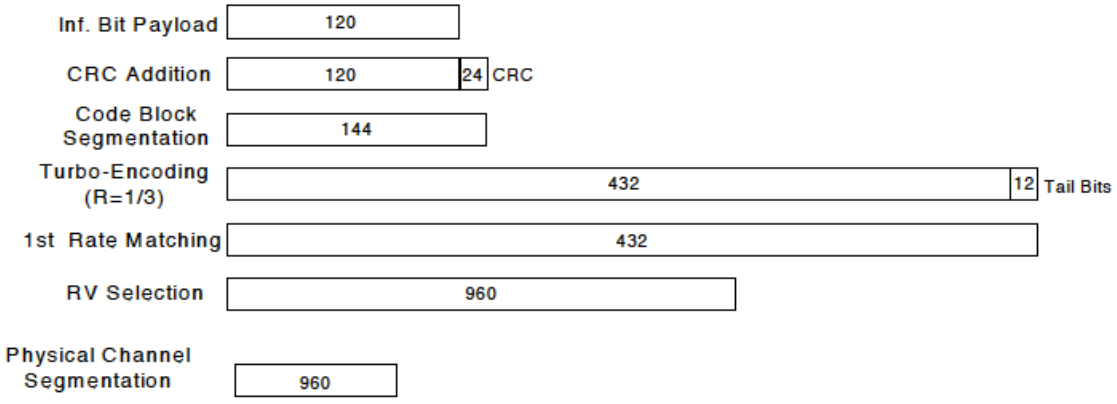

Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

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-Set1			
	Power Control Algorithm	Algorithm2			
	βc	2/15	12/15	15/15	15/15
	βd	15/15	15/15	8/15	4/15
	βd (SF)	64			
	βc/βd	2/15	12/15	15/8	15/4
	βhs	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			
	Ahs = βhs/ βc	30/15			

Up commands are set continuously to set the UE to Max power.

Measured Results

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
				HEAD		BODY	
				UAT	LAT	UAT	LAT
W-CDMA Band 2	Subtest 1	9262	1852.4	22.7	21.9	23.8	20.4
		9400	1880.0	22.6	21.8	23.8	20.4
		9538	1907.6	22.7	21.8	23.7	20.4
	Subtest 2	9262	1852.4	22.6	22.1	23.7	20.3
		9400	1880.0	22.6	21.8	23.7	20.3
		9538	1907.6	22.7	21.8	23.8	20.2
	Subtest 3	9262	1852.4	22.7	21.8	23.5	20.0
		9400	1880.0	22.3	21.7	23.6	19.8
		9538	1907.6	22.4	21.7	23.6	19.9
	Subtest 4	9262	1852.4	22.3	21.8	23.5	20.1
		9400	1880.0	22.4	21.6	23.4	20.0
		9538	1907.6	22.4	21.6	23.6	20.0
W-CDMA Band 4	Subtest 1	1312	1712.4	22.9	22.2	22.6	19.9
		1413	1732.6	22.8	22.3	22.5	19.8
		1513	1752.6	22.8	22.4	22.6	19.8
	Subtest 2	1312	1712.4	22.8	22.1	22.5	19.8
		1413	1732.6	22.8	22.2	22.7	19.7
		1513	1752.6	22.7	22.3	22.6	19.7
	Subtest 3	1312	1712.4	22.4	21.8	21.7	19.4
		1413	1732.6	22.5	21.8	21.8	19.5
		1513	1752.6	22.5	22.0	21.6	19.4
	Subtest 4	1312	1712.4	22.6	21.8	21.7	19.3
		1413	1732.6	22.5	22.0	21.7	19.4
		1513	1752.6	22.5	21.9	21.8	10.4
W-CDMA Band 5	Subtest 1	4132	826.4	23.3	23.0	24.1	24.20
		4183	836.6	23.3	23.1	24.2	24.10
		4233	846.6	23.4	23.1	24.2	24.10
	Subtest 2	4132	826.4	23.3	23.1	24.1	24.20
		4183	836.6	23.3	23.0	24.0	24.00
		4233	846.6	23.3	23.0	24.0	24.10
	Subtest 3	4132	826.4	23.0	23.0	23.6	23.80
		4183	836.6	22.8	22.8	23.7	23.70
		4233	846.6	22.9	22.9	23.8	23.70
	Subtest 4	4132	826.4	22.9	22.9	23.7	23.60
		4183	836.6	23.0	23.0	23.6	23.80
		4233	846.6	22.9	22.9	23.6	23.70

HSPA+

Since 16QAM is not used for uplink, the uplink Category and release is same as HSUPA, i.e., CAT 6 Rel 6. Therefore, the RF conducted power is not measured.

9.3. CDMA

1xRTT Measured Results

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
				HEAD		BODY	
				UAT	LAT	UAT	LAT
BC 0	RC1 SO55 (Loopback)	1013	824.70	24.2	24.4	24.4	24.20
		384	836.52	24.1	24.4	24.4	24.10
		777	848.31	24.1	24.2	24.3	24.10
	RC3 SO55 (Loopback)	1013	824.70	24.4	24.4	24.4	24.10
		384	836.52	24.5	24.4	24.5	24.20
		777	848.31	24.2	24.4	24.3	24.20
	RC3 SO32 (+F-SCH)	1013	824.70	24.4	24.4	24.5	24.10
		384	836.52	24.2	24.4	24.5	24.20
		777	848.31	24.1	24.1	24.4	24.10
BC 1	RC1 SO55 (Loopback)	25	1851.25	24.3	22.7	24.2	20.3
		600	1880.00	24.4	22.7	24.3	20.3
		1175	1908.75	24.3	23.0	24.3	20.4
	RC3 SO55 (Loopback)	25	1851.25	24.4	23.0	24.3	20.4
		600	1880.00	24.4	23.0	24.3	20.4
		1175	1908.75	24.0	23.0	24.4	20.5
	RC3 SO32 (+F-SCH)	25	1851.25	24.4	22.7	24.4	20.5
		600	1880.00	24.3	22.7	24.4	20.3
		1175	1908.75	24.3	23.0	24.0	20.5
BC 10	RC1 SO55 (Loopback)	476	817.9	24.7	25.0	24.2	24.10
		580	820.5	24.7	25.0	24.3	24.10
		684	823.1	24.7	24.9	24.1	24.10
	RC3 SO55 (Loopback)	476	817.9	24.7	25.0	24.3	24.00
		580	820.5	24.7	25.0	24.3	24.10
		684	823.1	24.7	25.0	24.2	24.10
	RC3 SO32 (+F-SCH)	476	817.9	24.6	25.0	24.3	24.00
		580	820.5	24.7	25.0	24.3	24.09
		684	823.1	24.1	25.0	24.1	24.09
BC 15	RC1 SO55 (Loopback)	25	1711.25	22.9	23.0	24.2	19.9
		450	1732.50	22.8	23.0	24.3	19.8
		875	1753.75	23.0	22.7	24.4	19.9
	RC3 SO55 (Loopback)	25	1711.25	23.0	23.0	24.2	19.9
		450	1732.50	22.9	23.0	24.1	20.0
		875	1753.75	23.0	22.8	24.4	20.0
	RC3 SO32 (+F-SCH)	25	1711.25	23.0	23.0	24.3	20.0
		450	1732.50	23.0	23.0	24.3	20.0
		875	1753.75	22.9	22.7	24.4	19.9

1x Advanced

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.

Measured Results

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
				HEAD		BODY	
				UAT	LAT	UAT	LAT
BC 0	Fwd11/Rvs8 SO75 (Loopback)	1013	824.70	24.2	24.3	24.3	24.10
		384	836.52	24.2	24.4	24.3	24.10
		777	848.31	24.4	24.2	24.2	24.20
BC 1	Fwd11/Rvs8 SO75 (Loopback)	25	1851.25	24.2	22.8	24.2	20.4
		600	1880.00	24.2	22.7	24.2	20.3
		1175	1908.75	24.2	22.9	24.2	20.3
BC 10	Fwd11/Rvs8 SO75 (Loopback)	476	817.9	24.7	24.5	24.2	24.10
		580	820.5	24.7	24.5	24.1	24.20
		684	823.1	24.6	24.5	24.1	24.00
BC 15	Fwd11/Rvs8 SO75 (Loopback)	25	1711.25	22.8	23.0	24.3	19.9
		450	1732.50	22.8	23.0	24.2	19.9
		875	1753.75	22.8	22.8	24.3	19.8

1xEv-Do Rel. 0 Measured Results

Band	FTAP Rate	RTAP Rate	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
					HEAD		BODY	
					UAT	LAT	UAT	LAT
BC 0	307.2 kbps (2 slot, QPSK)	153.6 kbps	1013	824.70	24.4	24.4	24.5	24.10
			384	836.52	24.5	24.4	24.5	24.20
			777	848.31	24.2	24.4	24.4	24.10
BC1	307.2 kbps (2 slot, QPSK)	153.6 kbps	25	1851.25	23.9	23.0	24.4	20.5
			600	1880.00	23.9	23.0	24.4	20.3
			1175	1908.75	23.9	23.0	23.8	20.5
BC10	307.2 kbps (2 slot, QPSK)	153.6 kbps	476	817.9	24.7	25.0	24.3	24.00
			580	820.5	24.7	25.0	24.3	24.09
			684	823.1	24.7	25.0	24.1	24.09
BC15	307.2 kbps (2 slot, QPSK)	153.6 kbps	25	1711.25	23.0	23.0	24.2	20.0
			450	1732.50	22.9	23.0	24.4	20.0
			875	1753.75	23.0	22.8	24.4	19.9

1xEv-Do Rev. A Measured Results

Band	FETAP Traffic Format	RETAP Data Payload Size	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)			
					HEAD		BODY	
					UAT	LAT	UAT	LAT
BC 0	307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	1013	824.70	24.4	24.0	24.2	24.20
			384	836.52	24.3	24.1	24.2	24.30
			777	848.31	24.2	24.2	24.1	24.10
BC1	307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	25	1851.25	24.4	23.0	24.3	20.4
			600	1880.00	24.1	22.9	24.2	20.3
			1175	1908.75	24.2	23.0	24.2	20.2
BC10	307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	476	817.9	24.3	25.0	24.2	24.00
			580	820.5	24.3	25.0	24.2	24.00
			684	823.1	24.1	24.9	24.3	24.10
BC15	307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	25	1711.25	22.8	22.9	24.4	19.8
			450	1732.50	22.9	23.0	24.4	19.9
			875	1753.75	22.8	23.0	24.4	19.7

1xEv-Do Rev. B

Call box setup procedure

1xEV-DO Release B

- CMW 500 Signal Generator > 1xEV-DO Taskbar Enable
- CMW 500 1xEV-DO Signaling Configuration Window >
- 1xEV-DO Signaling On Window:
  Under Access Network Control:
  Band Class: BC0: US Cellular
  RF Channel: 31
  1xEV-DO Power: -70 dBm
  Release B

- 1xEV-DO Signaling Configuration Window

  Under RF Frequency Band / Channel: Enter Ch. Frequency
  - Under Carrier Configuration: RF Frequency
    For Two Carriers: Low Channel (1013)

	RF Channel	RF Channel Offset
Carrier [0]	31	0
Carrier [1]	1013	982

  - Under Carrier Configuration: RF Pilot

	Carrier Sector	Active on AN	Assigned to AT
Pilot [0]	C0/S0	✓	✓
	CA/S1	✓	✓

    For Three Carriers: Low Channel (1013)

	RF Channel	RF Channel Offset
Carrier [0]	72	0
Carrier [1]	31	-41
Carrier [2]	1013	941

  - Under Carrier Configuration: RF Pilot

	Carrier Sector	Active on AN	Assigned to AT
Pilot [0]	C0/S0	✓	✓
Pilot [1]	C1/S1	✓	✓
Pilot [2]	C2/S2	✓	✓

- Rvs Power Ctrl > All Up bits (to get the maximum power)

Measured Results

Band	Test Set #	Channel	f (MHz)	Avg Pwr (dBm)			
				HEAD		BODY	
				UAT	LAT	UAT	LAT
BC0	Two Carrier Mini Separation	1013+31	824.70+825.93	21.5	21.9	21.7	21.9
		384+425	836.52+837.75	21.5	22.0	21.8	21.9
		736+777	847.08+848.31	21.4	21.8	21.8	21.8
	Two Carrier Max Separation	1013+156	824.70+829.68	21.5	21.7	21.8	21.8
		384+550	836.52+841.50	21.6	21.7	21.7	21.7
		611+777	843.33+848.31	21.5	21.8	21.7	21.8
	Three Carrier Max Separation	1013+31+72	824.70+825.93+827.16	21.6	21.8	21.7	21.9
		384+425+466	836.52+837.75+838.98	21.5	21.9	21.8	21.9
		695+736+777	845.85+847.08+848.31	21.6	21.8	21.9	21.8

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”.3

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

Network Signalling value	Requirements (sub-clause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	NA
NS_03	6.6.2.2.1	2, 4,10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	See Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10,15,20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	n/a
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 6.2.4-2	Table 6.2.4-2
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4-3	Table 6.2.4-3
NS_11	6.6.2.2.1	23[1]	1.4, 3, 5, 10	Table 6.2.4-5	Table 6.2.4-5
..					
NS_32	-	-	-	-	-
Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.					

9.4.1. LTE Band 2

Measured Results

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
20	18700	1860.0	QPSK	1	0	0	23.1	22.9	23.1	20.5
				1	49	0	23.3	23.0	22.7	20.5
				1	99	0	22.9	22.8	23.1	20.5
				50	0	1	22.8	22.6	22.4	19.5
				50	24	1	22.5	22.3	22.4	19.5
				50	49	1	22.3	22.2	22.4	19.5
				100	0	1	22.6	21.8	22.4	19.5
			16QAM	1	0	1	22.4	23.2	22.3	19.8
				1	49	1	22.3	22.1	22.3	19.9
				1	99	1	22.2	22.1	22.2	19.9
				50	0	2	21.9	22.1	21.6	19.0
				50	24	2	21.5	22.1	21.7	19.0
				50	49	2	21.3	21.9	21.4	19.0
				100	0	2	21.6	21.7	21.4	19.0
	18900	1880.0	QPSK	1	0	0	23.1	23.0	23.3	20.5
				1	49	0	23.4	23.0	23.4	20.5
				1	99	0	23.3	23.0	23.4	20.5
				50	0	1	22.5	22.7	22.4	19.5
				50	24	1	22.6	21.9	22.4	19.5
				50	49	1	22.7	21.7	22.4	19.5
				100	0	1	22.6	21.6	22.4	19.5
			16QAM	1	0	1	22.4	22.0	22.3	19.7
				1	49	1	22.3	22.0	22.4	19.6
				1	99	1	22.4	22.0	22.2	19.6
				50	0	2	21.4	21.7	21.4	18.6
				50	24	2	21.5	21.7	21.5	18.6
				50	49	2	21.7	21.7	21.5	18.6
				100	0	2	21.7	21.8	21.6	18.7
	19100	1900.0	QPSK	1	0	0	23.1	22.9	23.1	20.5
				1	49	0	23.4	23.0	22.8	20.5
				1	99	0	23.3	22.9	23.2	20.4
				50	0	1	22.4	22.8	22.4	19.5
				50	24	1	22.3	22.7	22.4	19.5
				50	49	1	22.4	21.5	22.4	19.5
				100	0	1	22.5	21.7	22.4	19.5
			16QAM	1	0	1	22.6	22.1	22.5	19.9
				1	49	1	22.3	22.0	22.4	19.9
				1	99	1	22.5	21.9	22.3	19.6
				50	0	2	21.4	21.9	21.5	18.9
				50	24	2	21.2	21.7	21.7	18.7
				50	49	2	21.3	21.5	21.5	18.7
				100	0	2	21.5	21.7	21.5	18.7

LTE Band 2 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
15	18675	1857.5	QPSK	1	0	0	23.4	23.0	23.1	20.5
				1	37	0	23.4	22.9	22.8	20.4
				1	74	0	23.4	22.9	23.1	20.5
				36	0	1	23.0	22.7	22.4	19.5
				36	16	1	22.8	22.7	22.5	19.4
				36	35	1	22.5	22.4	22.4	19.5
				75	0	1	22.6	22.2	22.4	19.3
			16QAM	1	0	1	22.6	22.1	22.3	19.8
				1	37	1	22.5	22.1	22.3	19.7
				1	74	1	22.4	22.1	22.3	19.9
				36	0	2	22.0	22.0	21.6	19.1
				36	16	2	21.8	22.0	21.6	19.0
				36	35	2	21.6	21.9	21.5	19.0
				75	0	2	21.6	21.8	21.4	19.0
	18900	1880.0	QPSK	1	0	0	23.4	23.0	23.3	20.5
				1	37	0	23.4	23.0	23.2	20.7
				1	74	0	23.4	22.9	23.3	20.5
				36	0	1	22.5	22.8	22.4	19.5
				36	16	1	22.6	22.8	22.4	19.6
				36	35	1	22.7	21.9	22.3	19.5
				75	0	1	22.6	22.0	22.4	19.5
			16QAM	1	0	1	22.5	22.0	22.3	19.7
				1	37	1	22.4	22.0	22.4	19.6
				1	74	1	22.4	21.8	22.5	19.6
				36	0	2	21.5	21.7	21.4	18.6
				36	16	2	21.6	21.7	21.4	18.6
				36	35	2	21.7	21.8	21.5	18.6
				75	0	2	21.7	21.7	21.6	18.7
	19125	1902.5	QPSK	1	0	0	23.4	23.0	23.0	20.5
				1	37	0	23.4	23.0	22.8	20.3
				1	74	0	23.4	22.9	23.1	20.3
				36	0	1	22.4	22.7	22.4	19.5
				36	16	1	22.5	22.6	22.2	19.6
				36	35	1	22.5	22.5	22.4	19.5
				75	0	1	22.5	22.6	22.4	19.4
			16QAM	1	0	1	22.4	22.2	22.5	19.7
				1	37	1	22.4	22.1	22.4	19.8
				1	74	1	22.4	22.1	22.3	19.6
				36	0	2	21.4	21.8	21.5	18.8
				36	16	2	21.5	21.7	21.5	18.7
				36	35	2	21.6	21.5	21.3	18.8
				75	0	2	21.5	21.6	21.5	18.7

LTE Band 2 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
10	18650	1855.0	QPSK	1	0	0	23.4	23.0	23.0	20.5
				1	24	0	23.4	23.0	22.8	20.4
				1	49	0	23.4	22.9	23.0	20.4
				25	0	1	23.1	22.9	22.3	19.4
				25	12	1	22.9	22.8	22.4	19.4
				25	24	1	22.8	22.0	22.4	19.5
				50	0	1	22.9	21.9	22.4	19.3
			16QAM	1	0	1	22.5	22.2	22.3	19.7
				1	24	1	22.5	22.1	22.3	19.7
				1	49	1	22.4	21.9	22.3	19.8
				25	0	2	22.1	21.9	21.6	19.1
				25	12	2	22.0	21.8	21.7	19.0
				25	24	2	21.8	21.8	21.5	19.1
				50	0	2	21.8	21.7	21.4	19.0
	18900	1880.0	QPSK	1	0	0	23.4	23.0	23.3	20.6
				1	24	0	23.4	23.0	23.2	20.7
				1	49	0	23.4	23.0	23.2	20.5
				25	0	1	22.5	22.8	22.4	19.5
				25	12	1	22.7	22.8	22.3	19.5
				25	24	1	22.6	22.7	22.3	19.5
				50	0	1	22.6	22.7	22.4	19.4
			16QAM	1	0	1	22.4	22.1	22.3	19.7
				1	24	1	22.3	22.0	22.4	19.4
				1	49	1	22.4	22.1	22.4	19.5
				25	0	2	21.5	21.8	21.4	18.6
				25	12	2	21.7	21.8	21.3	18.4
				25	24	2	21.6	21.7	21.5	18.6
				50	0	2	21.5	21.7	21.5	18.6
	19150	1905.0	QPSK	1	0	0	23.4	23.0	22.9	20.5
				1	24	0	23.4	23.0	22.8	20.4
				1	49	0	23.4	22.9	23.1	20.3
				25	0	1	22.5	22.7	22.3	19.5
				25	12	1	22.5	22.5	22.2	19.6
				25	24	1	22.6	22.3	22.3	19.5
				50	0	1	22.5	22.5	22.4	19.4
			16QAM	1	0	1	22.3	22.1	22.5	19.7
				1	24	1	22.5	22.0	22.4	19.8
				1	49	1	22.5	22.0	22.3	19.6
				25	0	2	21.5	21.8	21.5	18.8
				25	12	2	21.6	21.6	21.6	18.6
				25	24	2	21.7	21.4	21.4	18.8
				50	0	2	21.5	21.5	21.5	18.7

LTE Band 2 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
5	18625	1855.0	QPSK	1	0	0	23.4	23.0	22.9	20.4
				1	12	0	23.4	23.0	22.8	20.4
				1	24	0	23.4	22.9	23.0	20.4
				12	0	1	23.2	22.9	22.3	19.4
				12	6	1	23.2	22.6	22.2	19.5
				12	11	1	23.2	22.0	22.3	19.5
				25	0	1	23.0	21.6	22.4	19.3
			16QAM	1	0	1	22.5	22.1	22.3	19.7
				1	12	1	22.5	22.0	22.4	19.8
				1	24	1	22.5	22.0	22.3	19.8
				12	0	2	22.2	21.9	21.5	19.1
				12	6	2	22.1	21.4	21.7	19.0
				12	11	2	22.3	21.3	21.5	19.2
				25	0	2	22.0	21.1	21.4	19.0
	18900	1880.0	QPSK	1	0	0	23.3	23.0	23.3	20.4
				1	12	0	23.3	23.0	23.2	20.7
				1	24	0	23.4	22.9	23.2	20.5
				12	0	1	22.5	22.7	22.4	19.3
				12	6	1	22.6	21.9	22.3	19.5
				12	11	1	22.7	21.8	22.3	19.5
				25	0	1	22.6	21.8	22.4	19.3
			16QAM	1	0	1	22.6	22.1	22.3	19.6
				1	12	1	22.7	21.9	22.4	19.6
				1	24	1	22.7	21.9	22.4	19.5
				12	0	2	21.7	21.8	21.4	18.6
				12	6	2	21.7	21.7	21.3	18.4
				12	11	2	21.8	21.5	21.5	18.6
				25	0	2	21.6	21.4	21.5	18.4
	19175	1907.5	QPSK	1	0	0	23.4	23.0	22.9	20.5
				1	12	0	23.4	23.0	22.8	20.3
				1	24	0	23.4	22.8	23.1	20.3
				12	0	1	22.5	22.9	22.3	19.5
				12	6	1	22.6	21.8	22.2	19.5
				12	11	1	22.6	21.7	22.3	19.5
				25	0	1	22.5	21.6	22.4	19.4
			16QAM	1	0	1	22.6	22.1	22.5	19.7
				1	12	1	22.6	22.0	22.4	19.7
				1	24	1	22.4	22.0	22.3	19.6
				12	0	2	21.6	21.6	21.5	18.8
				12	6	2	21.7	21.5	21.5	18.6
				12	11	2	21.8	21.6	21.3	18.8
				25	0	2	21.6	21.4	21.5	18.7

LTE Band 2 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
3	18615	1851.5	QPSK	1	0	0	23.4	23.0	22.8	20.4
				1	7	0	23.4	22.9	22.8	20.4
				1	14	0	23.4	23.0	23.0	20.5
				8	0	1	23.1	22.1	22.3	19.4
				8	4	1	23.1	22.1	22.1	19.5
				8	7	1	23.2	22.4	22.3	19.5
				15	0	1	23.1	22.1	22.4	19.4
			16QAM	1	0	1	22.5	22.4	22.3	19.7
				1	7	1	22.5	22.4	22.3	19.6
				1	14	1	22.4	22.4	22.3	19.8
				8	0	2	22.1	22.1	21.5	19.2
				8	4	2	22.2	21.2	21.8	19.1
				8	7	2	22.2	21.3	21.5	19.2
				15	0	2	22.1	21.2	21.5	19.0
	18900	1880.0	QPSK	1	0	0	23.4	23.0	23.3	20.5
				1	7	0	23.4	22.9	23.2	20.7
				1	14	0	23.4	23.0	23.3	20.6
				8	0	1	22.6	23.0	22.4	19.3
				8	4	1	22.6	22.1	22.3	19.4
				8	7	1	22.6	22.5	22.4	19.5
				15	0	1	22.7	22.1	22.4	19.4
			16QAM	1	0	1	22.5	22.2	22.3	19.6
				1	7	1	22.5	22.3	22.4	19.5
				1	14	1	22.5	22.4	22.4	19.5
				8	0	2	21.6	21.3	21.3	18.6
				8	4	2	21.7	21.1	21.3	18.5
				8	7	2	21.7	21.1	21.5	18.6
				15	0	2	21.7	21.0	21.3	18.4
	19185	1908.5	QPSK	1	0	0	23.4	23.0	22.9	20.5
				1	7	0	23.4	22.9	22.8	20.4
				1	14	0	23.4	23.0	23.1	20.3
				8	0	1	22.6	22.1	22.3	19.5
				8	4	1	22.7	21.8	22.1	19.3
				8	7	1	22.8	22.0	22.3	19.5
				15	0	1	22.7	21.9	22.4	19.4
			16QAM	1	0	1	22.6	22.3	22.3	19.7
				1	7	1	22.5	22.2	22.4	19.7
				1	14	1	22.4	22.3	22.3	19.6
				8	0	2	21.7	22.1	21.5	18.8
				8	4	2	21.8	20.8	21.5	18.7
				8	7	2	21.8	21.0	21.3	18.8
				15	0	2	21.8	21.0	21.3	18.7

LTE Band 2 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
1.4	18607	1850.7	QPSK	1	0	0	23.4	23.0	23.0	20.4
				1	2	0	23.4	23.0	22.8	20.4
				1	5	0	23.4	23.0	23.0	20.3
				3	0	0	23.4	22.9	22.9	20.2
				3	1	0	23.4	22.9	22.9	20.2
				3	2	0	23.4	22.5	23.0	20.3
				6	0	1	23.1	22.3	22.4	19.5
			16QAM	1	0	1	22.5	22.1	22.0	19.3
				1	2	1	22.4	22.1	22.1	19.3
				1	5	1	22.4	22.0	22.1	19.4
				3	0	1	22.4	22.1	22.0	19.3
				3	1	1	22.4	22.1	22.1	19.3
				3	2	1	21.9	21.9	22.0	19.2
				6	0	2	21.4	21.7	21.1	18.5
	18900	1880.0	QPSK	1	0	0	23.3	23.0	23.0	20.3
				1	2	0	23.4	23.0	23.0	20.4
				1	5	0	23.4	22.9	22.9	20.3
				3	0	0	23.4	22.8	22.8	20.1
				3	1	0	23.4	22.5	22.9	20.2
				3	2	0	23.4	22.6	22.8	20.2
				6	0	1	22.6	21.9	22.5	19.7
			16QAM	1	0	1	22.6	22.1	22.0	19.3
				1	2	1	22.6	22.1	22.2	19.3
				1	5	1	22.6	22.0	22.1	19.2
				3	0	1	22.4	21.7	22.0	19.2
				3	1	1	22.5	21.7	22.1	19.3
				3	2	1	22.5	21.7	22.1	19.2
				6	0	2	21.6	21.6	21.2	18.4
	19193	1909.3	QPSK	1	0	0	23.4	23.0	22.8	20.3
				1	2	0	23.4	23.0	23.0	20.3
				1	5	0	23.3	22.8	22.9	20.3
				3	0	0	23.4	22.8	22.9	20.2
				3	1	0	23.4	22.6	22.8	20.1
				3	2	0	23.4	22.1	22.7	20.1
				6	0	1	22.7	21.8	22.3	19.6
			16QAM	1	0	1	22.4	22.1	22.2	19.2
				1	2	1	22.3	22.1	22.0	19.3
				1	5	1	22.4	22.0	22.2	19.2
				3	0	1	22.2	22.0	22.1	19.2
				3	1	1	22.0	22.2	22.0	19.1
				3	2	1	22.1	21.9	22.1	19.3
				6	0	2	21.8	21.4	21.1	18.3

9.4.2. LTE Band 4

Measured Results

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
20	20050	1720.0	QPSK	1	0	0	22.9	23.0	23.25	20.0
				1	49	0	23.0	23.0	23.25	20.0
				1	99	0	23.0	23.0	23.25	20.0
				50	0	1	21.9	21.7	23.05	19.0
				50	24	1	21.9	21.7	23.05	19.0
				50	49	1	21.9	21.8	23.08	18.9
				100	0	1	21.9	21.8	23.06	18.9
			16QAM	1	0	1	21.9	21.6	22.96	19.0
				1	49	1	21.8	21.8	22.25	19.0
				1	99	1	21.8	22.0	22.13	18.9
				50	0	2	20.9	20.7	21.99	18.0
				50	24	2	20.8	20.7	22.08	18.0
				50	49	2	20.7	20.7	22.12	17.9
				100	0	2	20.9	20.8	22.08	17.9
	20175	1732.5	QPSK	1	0	0	22.9	23.0	23.18	20.0
				1	49	0	22.9	23.0	23.25	20.0
				1	99	0	22.8	23.0	23.13	20.0
				50	0	1	21.8	21.8	23.06	18.9
				50	24	1	21.8	21.9	22.93	19.0
				50	49	1	21.7	22.0	22.88	19.0
				100	0	1	21.7	21.8	22.96	19.0
			16QAM	1	0	1	21.8	21.9	22.31	18.9
				1	49	1	21.8	22.1	22.18	18.9
				1	99	1	21.7	22.0	22.26	18.8
				50	0	2	20.9	20.8	22.07	17.8
				50	24	2	20.8	20.9	22.00	17.9
				50	49	2	20.8	20.9	21.92	17.9
				100	0	2	20.8	20.9	21.97	17.8
	20300	1745.0	QPSK	1	0	0	22.8	23.0	23.23	20.0
				1	49	0	22.5	23.0	23.18	19.8
				1	99	0	22.7	23.0	23.25	19.6
				50	0	1	21.6	21.8	22.74	18.9
				50	24	1	21.5	21.7	22.86	18.9
				50	49	1	21.4	21.7	22.97	18.8
				100	0	1	21.6	21.8	23.03	18.9
			16QAM	1	0	1	21.7	22.0	22.29	19.0
				1	49	1	21.7	22.0	22.23	19.0
				1	99	1	21.7	21.7	22.22	18.8
				50	0	2	20.8	20.9	21.77	18.1
				50	24	2	20.6	20.8	21.80	18.0
				50	49	2	20.8	20.7	21.91	18.1
				100	0	2	20.7	20.8	21.96	18.0

LTE Band 4 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
15	20025	1717.5	QPSK	1	0	0	22.9	22.8	23.19	19.8
				1	37	0	22.9	22.9	23.24	19.9
				1	74	0	22.9	22.8	23.25	20.0
				36	0	1	21.9	21.7	23.09	19.0
				36	16	1	21.9	21.6	23.13	18.9
				36	35	1	21.9	21.8	22.99	18.9
				75	0	1	21.7	21.8	23.07	18.8
			16QAM	1	0	1	21.9	21.8	22.35	19.0
				1	37	1	21.8	21.9	22.27	18.8
				1	74	1	21.7	21.9	22.29	18.9
				36	0	2	20.7	20.7	22.08	18.0
				36	16	2	20.8	20.7	22.18	17.8
				36	35	2	20.7	20.8	22.17	17.9
				75	0	2	20.8	20.8	21.78	18.0
	20175	1732.5	QPSK	1	0	0	22.9	22.9	23.25	19.8
				1	37	0	22.7	23.0	23.24	20.0
				1	74	0	22.7	23.0	23.19	19.9
				36	0	1	21.8	21.9	23.06	18.9
				36	16	1	21.7	21.9	23.02	19.0
				36	35	1	21.7	21.9	22.96	18.9
				75	0	1	21.7	21.9	22.94	19.0
			16QAM	1	0	1	21.7	21.9	23.07	19.0
				1	37	1	21.8	22.1	22.83	18.9
				1	74	1	21.6	22.0	22.90	18.8
				36	0	2	20.6	20.9	22.03	17.8
				36	16	2	20.8	21.0	22.09	17.9
				36	35	2	20.8	21.0	22.04	18.0
				75	0	2	20.7	20.9	22.03	17.8
	20325	1747.5	QPSK	1	0	0	22.8	22.9	23.19	19.9
				1	37	0	22.7	22.9	23.25	19.8
				1	74	0	22.7	22.7	23.16	19.7
				36	0	1	21.7	21.9	22.74	18.7
				36	16	1	21.6	21.8	22.89	18.8
				36	35	1	21.5	21.7	22.94	18.7
				75	0	1	21.6	21.7	22.89	18.9
			16QAM	1	0	1	21.7	22.0	22.47	18.8
				1	37	1	21.7	21.8	22.45	19.0
				1	74	1	21.7	21.6	22.27	18.8
				36	0	2	20.7	20.9	21.82	18.1
				36	16	2	20.6	20.8	22.02	18.1
				36	35	2	20.7	20.7	21.97	18.1
				75	0	2	20.7	20.8	21.89	18.0

LTE Band 4 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
10	20000	1715.0	QPSK	1	0	0	22.9	22.8	23.20	19.8
				1	24	0	22.9	22.9	23.19	19.9
				1	49	0	22.8	22.8	23.25	19.9
				25	0	1	21.8	21.7	22.92	19.0
				25	12	1	21.8	21.8	23.09	18.9
				25	24	1	21.8	21.8	23.01	18.9
				50	0	1	21.7	21.8	22.93	18.8
			16QAM	1	0	1	21.9	21.8	22.28	18.9
				1	24	1	21.8	21.8	22.32	18.8
				1	49	1	21.7	21.9	22.19	18.8
				25	0	2	20.8	20.9	22.09	18.0
				25	12	2	20.8	20.8	22.12	17.9
				25	24	2	20.8	20.9	21.78	17.9
				50	0	2	20.8	20.8	21.66	18.0
	20175	1732.5	QPSK	1	0	0	22.8	22.9	23.20	19.9
				1	24	0	22.9	23.0	23.25	20.0
				1	49	0	22.7	23.0	23.21	19.9
				25	0	1	21.8	21.9	22.97	18.9
				25	12	1	21.7	21.9	22.92	19.0
				25	24	1	21.8	22.0	23.01	18.8
				50	0	1	21.7	22.0	22.98	19.0
			16QAM	1	0	1	21.6	21.9	22.34	19.0
				1	24	1	21.8	22.0	22.32	18.9
				1	49	1	21.6	22.1	22.21	18.8
				25	0	2	20.6	21.0	22.12	17.8
				25	12	2	20.7	21.1	21.85	17.8
				25	24	2	20.8	21.1	21.81	18.0
				50	0	2	20.7	20.9	21.70	17.8
	20350	1750.0	QPSK	1	0	0	22.7	22.9	23.21	19.8
				1	24	0	22.7	22.8	23.21	19.8
				1	49	0	22.7	22.6	23.25	19.7
				25	0	1	21.8	21.8	22.93	18.7
				25	12	1	21.6	21.7	22.88	18.6
				25	24	1	21.6	21.6	22.91	18.7
				50	0	1	21.6	21.6	22.88	18.9
			16QAM	1	0	1	21.7	21.9	22.44	18.8
				1	24	1	21.7	21.7	22.40	19.0
				1	49	1	21.7	21.7	22.42	18.8
				25	0	2	20.7	20.8	22.00	18.1
				25	12	2	20.8	20.8	22.00	18.0
				25	24	2	20.7	20.8	21.91	18.2
				50	0	2	20.7	20.6	21.66	18.0

LTE Band 4 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
5	19975	1712.5	QPSK	1	0	0	22.8	22.9	23.20	19.8
				1	12	0	22.9	22.9	23.22	19.8
				1	24	0	22.8	22.9	23.25	20.0
				12	0	1	21.8	21.8	23.13	19.0
				12	6	1	21.7	21.8	23.02	18.8
				12	11	1	21.7	21.9	23.06	18.9
				25	0	1	21.7	21.8	22.92	18.8
			16QAM	1	0	1	21.9	22.0	22.31	18.9
				1	12	1	21.8	21.9	22.28	18.8
				1	24	1	21.7	22.0	22.25	18.9
				12	0	2	20.8	21.0	22.18	17.9
				12	6	2	20.7	21.0	22.13	17.8
				12	11	2	20.8	21.0	21.77	17.9
				25	0	2	20.7	20.8	21.66	18.0
	20175	1732.5	QPSK	1	0	0	22.8	23.0	23.19	19.8
				1	12	0	22.9	23.0	23.25	19.9
				1	24	0	22.8	23.0	23.25	19.9
				12	0	1	21.8	22.0	23.07	18.9
				12	6	1	21.9	22.0	23.06	18.9
				12	11	1	21.8	22.1	23.16	18.9
				25	0	1	21.7	21.9	23.03	19.0
			16QAM	1	0	1	21.6	22.1	22.27	19.0
				1	12	1	21.7	22.1	22.09	18.8
				1	24	1	21.6	22.3	22.17	18.8
				12	0	2	20.6	21.1	22.05	17.8
				12	6	2	20.6	21.2	21.74	18.0
				12	11	2	20.7	21.2	21.68	18.0
				25	0	2	20.7	21.0	21.65	17.8
	20375	1752.5	QPSK	1	0	0	22.7	22.9	23.25	19.9
				1	12	0	22.7	22.7	23.20	19.8
				1	24	0	22.8	22.7	23.20	19.8
				12	0	1	21.6	21.7	23.01	18.7
				12	6	1	21.6	21.7	23.03	18.8
				12	11	1	21.6	21.8	23.21	19.0
				25	0	1	21.6	21.7	22.93	19.0
			16QAM	1	0	1	21.7	21.8	22.33	18.8
				1	12	1	21.8	21.8	22.30	19.0
				1	24	1	21.7	21.8	22.32	18.8
				12	0	2	20.7	20.9	22.21	18.2
				12	6	2	20.8	20.9	21.86	18.1
				12	11	2	20.8	20.9	21.79	18.0
				25	0	2	20.7	20.7	21.56	18.0

LTE Band 4 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
3	19965	1711.5	QPSK	1	0	0	22.8	22.9	23.23	19.8
				1	7	0	22.8	22.9	23.24	19.9
				1	14	0	22.7	22.9	23.18	19.9
				8	0	1	21.7	21.9	23.09	18.9
				8	4	1	21.8	21.8	22.99	18.9
				8	7	1	21.8	21.9	22.98	18.9
				15	0	1	21.7	21.8	22.98	18.9
			16QAM	1	0	1	21.7	21.8	22.33	18.9
				1	7	1	21.9	21.9	22.25	18.8
				1	14	1	21.7	21.8	22.29	18.8
				8	0	2	20.8	20.9	22.12	17.9
				8	4	2	20.9	20.9	21.70	18.1
				8	7	2	20.8	21.0	21.79	17.9
				15	0	2	20.8	20.9	21.58	18.1
	20175	1732.5	QPSK	1	0	0	22.7	23.0	23.15	19.9
				1	7	0	22.9	23.0	23.14	20.0
				1	14	0	22.8	23.0	23.25	19.9
				8	0	1	21.8	22.0	23.05	18.9
				8	4	1	21.9	22.1	23.06	19.1
				8	7	1	21.8	22.1	23.10	18.8
				15	0	1	21.7	22.1	23.03	19.2
			16QAM	1	0	1	21.6	22.0	22.26	18.9
				1	7	1	21.8	22.0	22.25	19.0
				1	14	1	21.6	22.2	22.29	18.8
				8	0	2	20.5	21.1	22.14	17.8
				8	4	2	20.7	21.1	22.13	18.0
				8	7	2	20.8	21.2	21.65	18.0
				15	0	2	20.5	21.1	21.57	17.8
	20385	1753.5	QPSK	1	0	0	22.6	22.7	23.20	19.8
				1	7	0	22.8	22.6	23.22	19.9
				1	14	0	22.7	22.7	23.25	19.7
				8	0	1	21.8	21.7	23.03	18.7
				8	4	1	21.8	21.7	22.99	18.7
				8	7	1	21.7	21.7	22.98	18.7
				15	0	1	21.6	21.6	23.22	18.9
			16QAM	1	0	1	21.7	21.7	22.49	18.9
				1	7	1	21.8	21.7	22.41	19.0
				1	14	1	21.7	21.7	22.38	18.8
				8	0	2	20.7	20.8	22.05	18.1
				8	4	2	20.7	20.8	21.69	18.0
				8	7	2	20.7	20.8	21.68	18.1
				15	0	2	20.7	20.8	21.64	18.0

LTE Band 4 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
1.4	19957	1710.7	QPSK	1	0	0	22.8	22.8	23.21	19.8
				1	2	0	22.8	22.8	23.25	19.9
				1	5	0	22.7	22.8	23.25	19.9
				3	0	0	22.7	22.9	23.20	19.8
				3	1	0	22.7	22.8	23.25	19.8
				3	2	0	22.7	22.8	23.22	19.8
				6	0	1	21.8	21.8	23.03	19.0
			16QAM	1	0	1	21.8	21.8	22.95	19.0
				1	2	1	21.6	21.8	23.00	19.1
				1	5	1	21.7	21.8	23.09	19.0
				3	0	1	21.6	21.9	22.81	19.0
				3	1	1	21.6	21.9	22.82	19.1
				3	2	1	21.7	21.9	22.86	18.9
				6	0	2	21.0	20.9	21.93	17.8
	20175	1732.5	QPSK	1	0	0	22.8	22.9	23.17	19.9
				1	2	0	22.8	23.0	23.23	19.9
				1	5	0	22.7	23.0	23.25	19.9
				3	0	0	22.7	22.9	23.25	19.8
				3	1	0	22.6	23.0	23.25	19.8
				3	2	0	22.7	22.7	23.21	19.9
				6	0	1	21.8	22.1	23.07	19.1
			16QAM	1	0	1	21.7	22.1	22.30	19.0
				1	2	1	21.7	22.0	22.27	19.1
				1	5	1	21.6	22.1	22.23	19.1
				3	0	1	21.5	21.9	22.28	19.0
				3	1	1	21.7	21.9	22.13	19.0
				3	2	1	21.6	21.9	22.09	19.1
				6	0	2	20.9	21.1	21.49	17.8
	20393	1754.3	QPSK	1	0	0	22.7	22.7	23.10	19.7
				1	2	0	22.8	22.6	23.20	19.8
				1	5	0	22.7	22.7	23.25	19.8
				3	0	0	22.7	22.7	23.18	19.7
				3	1	0	22.6	22.6	23.20	19.8
				3	2	0	22.7	22.6	23.21	19.8
				6	0	1	21.7	21.7	22.25	18.9
			16QAM	1	0	1	21.8	21.7	22.15	19.0
				1	2	1	21.8	21.5	22.17	19.0
				1	5	1	21.7	21.6	22.05	19.1
				3	0	1	21.7	21.5	22.12	18.9
				3	1	1	21.8	21.5	21.72	19.0
				3	2	1	21.6	21.4	21.68	18.9
				6	0	2	20.8	20.7	21.53	18.0

9.4.3. LTE Band 5

Measured Results

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
10	20450	829.0	QPSK	1	0	0	23.7	24.0	22.9	22.80
				1	24	0	23.7	24.0	22.9	22.90
				1	49	0	23.7	24.0	22.9	22.90
				25	0	1	23.1	22.9	22.7	22.70
				25	12	1	23.1	22.9	22.7	22.70
				25	24	1	23.0	23.0	22.7	22.70
				50	0	1	23.1	22.9	22.7	22.70
			16QAM	1	0	1	23.0	23.0	21.8	21.80
				1	24	1	23.1	23.0	21.9	21.80
				1	49	1	23.1	23.0	22.0	21.70
				25	0	2	22.1	22.0	21.2	21.30
				25	12	2	22.2	21.9	21.1	21.20
				25	24	2	22.1	22.0	21.1	21.10
				50	0	2	22.0	21.8	21.2	21.10
	20525	836.5	QPSK	1	0	0	23.7	24.0	23.7	23.75
				1	24	0	23.7	24.0	23.7	23.75
				1	49	0	23.7	24.0	23.7	23.75
				25	0	1	22.8	22.9	22.7	22.75
				25	12	1	22.9	22.9	22.7	22.75
				25	24	1	23.0	22.9	22.7	22.75
				50	0	1	22.8	22.9	22.7	22.75
			16QAM	1	0	1	22.8	23.0	21.7	21.70
				1	24	1	22.8	22.9	21.8	21.80
				1	49	1	23.1	23.0	21.8	21.80
				25	0	2	21.8	21.9	21.1	21.20
				25	12	2	21.9	21.9	21.2	21.30
				25	24	2	22.0	21.9	21.2	21.30
				50	0	2	21.7	21.8	21.3	21.20
	20600	844.0	QPSK	1	0	0	23.7	24.0	23.2	23.00
				1	24	0	23.7	24.0	23.0	23.00
				1	49	0	23.7	24.0	22.9	22.80
				25	0	1	22.9	22.8	22.7	22.75
				25	12	1	22.9	22.6	22.7	22.75
				25	24	1	22.9	22.6	22.7	22.75
				50	0	1	23.0	22.7	22.7	22.75
			16QAM	1	0	1	23.1	22.9	21.8	21.60
				1	24	1	22.9	22.6	21.8	21.80
				1	49	1	23.1	22.4	21.6	21.70
				25	0	2	22.0	21.8	21.2	21.30
				25	12	2	22.0	21.6	21.2	21.20
				25	24	2	21.9	21.6	21.3	21.30
				50	0	2	21.9	21.6	21.3	21.30

LTE Band 5 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
5	20425	826.5	QPSK	1	0	0	23.7	23.8	23.3	23.00
				1	12	0	23.6	23.7	23.5	23.00
				1	24	0	23.7	23.7	23.2	23.00
				12	0	1	23.1	23.0	22.8	22.70
				12	6	1	23.2	23.0	22.6	22.70
				12	11	1	23.2	23.0	22.6	22.70
				25	0	1	23.1	23.0	22.5	22.70
			16QAM	1	0	1	23.2	23.1	21.8	21.80
				1	12	1	23.2	23.0	21.8	21.80
				1	24	1	23.2	23.1	21.7	21.70
				12	0	2	22.2	22.1	21.2	21.30
				12	6	2	22.3	22.1	21.2	21.20
				12	11	2	22.3	22.1	21.1	21.10
				25	0	2	22.1	21.9	21.2	21.10
	20525	836.5	QPSK	1	0	0	23.7	23.8	23.7	23.70
				1	12	0	23.6	23.8	23.7	23.70
				1	24	0	23.7	23.7	23.7	23.70
				12	0	1	22.9	23.1	22.7	22.75
				12	6	1	22.8	23.1	22.8	22.75
				12	11	1	22.8	23.1	22.7	22.75
				25	0	1	22.8	22.9	22.7	22.75
			16QAM	1	0	1	23.0	23.1	21.7	22.70
				1	12	1	22.9	23.2	21.8	22.60
				1	24	1	22.9	23.0	21.6	22.50
				12	0	2	22.0	22.2	21.1	21.40
				12	6	2	22.0	22.2	21.1	21.30
				12	11	2	22.0	22.1	21.2	21.30
				25	0	2	21.8	21.9	21.1	21.20
	20625	846.5	QPSK	1	0	0	23.7	23.7	23.2	23.00
				1	12	0	23.7	23.6	23.2	23.00
				1	24	0	23.7	23.4	23.2	22.80
				12	0	1	22.8	22.6	22.7	22.75
				12	6	1	22.9	22.5	22.7	22.75
				12	11	1	22.9	22.6	22.7	22.75
				25	0	1	22.8	22.5	22.7	22.75
			16QAM	1	0	1	23.0	22.7	21.8	21.60
				1	12	1	23.0	22.6	21.8	21.80
				1	24	1	23.1	22.5	21.6	21.70
				12	0	2	22.0	21.8	21.2	21.30
				12	6	2	22.1	21.7	21.2	21.20
				12	11	2	22.1	21.6	21.3	21.30
				25	0	2	21.9	21.5	21.3	21.30

LTE Band 5 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
3	20415	825.5	QPSK	1	0	0	23.7	23.8	22.9	22.80
				1	7	0	23.6	23.7	23.0	22.90
				1	14	0	23.7	23.8	22.9	22.90
				8	0	1	22.9	23.0	22.7	22.70
				8	4	1	22.9	23.1	22.8	22.70
				8	7	1	22.8	23.0	22.7	22.70
				15	0	1	22.9	23.0	22.7	22.70
			16QAM	1	0	1	22.9	23.0	21.8	21.70
				1	7	1	22.8	23.0	21.9	22.00
				1	14	1	22.9	23.1	22.0	21.80
				8	0	2	22.0	22.1	21.2	21.30
				8	4	2	21.9	22.1	21.2	21.20
				8	7	2	21.9	22.1	21.2	21.30
				15	0	2	21.9	22.1	21.2	21.10
	20525	836.5	QPSK	1	0	0	23.6	23.7	23.6	23.70
				1	7	0	23.7	23.7	23.6	23.70
				1	14	0	23.7	23.6	23.7	23.60
				8	0	1	23.1	23.1	22.7	22.75
				8	4	1	23.1	23.0	22.6	22.60
				8	7	1	23.2	23.0	22.5	22.75
				15	0	1	23.2	23.0	22.7	22.75
			16QAM	1	0	1	23.1	23.0	21.7	21.70
				1	7	1	23.2	23.0	21.6	21.80
				1	14	1	23.1	23.0	21.6	21.70
				8	0	2	22.2	22.1	21.2	21.20
				8	4	2	22.2	22.1	21.2	21.30
				8	7	2	22.2	22.0	21.1	21.20
				15	0	2	22.1	22.0	21.1	21.20
	20635	847.5	QPSK	1	0	0	23.7	23.8	23.0	23.10
				1	7	0	23.7	23.7	23.1	23.00
				1	14	0	23.7	23.5	23.0	22.90
				8	0	1	22.9	22.7	22.7	22.75
				8	4	1	23.1	22.6	22.6	22.90
				8	7	1	23.1	22.6	22.7	22.75
				15	0	1	23.0	22.5	22.7	22.75
			16QAM	1	0	1	22.9	22.6	21.7	21.60
				1	7	1	22.9	22.5	21.8	21.80
				1	14	1	23.1	22.4	21.6	21.80
				8	0	2	21.9	21.7	21.2	21.30
				8	4	2	22.1	21.6	21.1	21.20
				8	7	2	22.1	21.5	21.3	21.30
				15	0	2	22.0	21.6	21.3	21.30

LTE Band 5 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
1.4	20407	824.7	QPSK	1	0	0	23.7	23.7	22.9	22.80
				1	2	0	23.6	23.6	22.9	22.80
				1	5	0	23.7	23.8	22.8	22.90
				3	0	0	23.7	23.6	22.8	22.90
				3	1	0	23.7	23.7	23.0	22.90
				3	2	0	23.6	23.6	22.9	22.00
				6	0	1	22.9	23.0	21.2	21.30
			16QAM	1	0	1	22.9	23.0	22.7	22.60
				1	2	1	22.9	22.9	22.8	22.80
				1	5	1	22.9	23.1	22.8	22.80
				3	0	1	22.7	22.9	21.1	21.20
				3	1	1	22.8	22.8	21.2	21.20
				3	2	1	22.8	22.8	21.1	21.10
				6	0	2	21.9	22.1	21.1	21.00
	20525	836.5	QPSK	1	0	0	23.7	23.7	23.6	23.70
				1	2	0	23.7	23.6	23.6	23.70
				1	5	0	23.7	23.6	23.7	23.60
				3	0	0	23.7	23.7	23.5	23.60
				3	1	0	23.6	23.6	23.6	23.60
				3	2	0	23.7	23.6	23.6	23.50
				6	0	1	23.2	23.0	22.6	22.80
			16QAM	1	0	1	23.1	23.0	22.5	22.90
				1	2	1	23.1	23.0	22.6	22.70
				1	5	1	23.0	23.0	22.7	22.80
				3	0	1	23.0	22.9	22.5	22.60
				3	1	1	23.0	22.9	22.4	22.50
				3	2	1	23.0	22.9	22.5	22.40
				6	0	2	22.2	22.0	21.3	21.30
	20643	848.3	QPSK	1	0	0	23.7	23.9	23.0	23.10
				1	2	0	23.7	23.8	23.1	23.00
				1	5	0	23.7	23.6	23.0	22.90
				3	0	0	23.7	23.1	23.0	23.00
				3	1	0	23.6	23.1	22.9	23.00
				3	2	0	23.6	23.1	22.8	22.80
				6	0	1	23.1	22.6	21.2	22.80
			16QAM	1	0	1	23.0	22.5	22.7	22.70
				1	2	1	23.0	22.5	22.6	22.90
				1	5	1	23.0	22.4	22.8	22.70
				3	0	1	22.9	22.4	22.8	22.80
				3	1	1	22.9	22.3	22.7	22.70
				3	2	1	22.9	22.3	22.7	22.60
				6	0	2	22.1	21.5	21.2	21.20

9.4.4. LTE Band 13

Measured Results

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
10	23230	782.0	QPSK	1	0	0	23.7	24.0	23.7	24.0
				1	24	0	23.7	24.0	23.7	24.0
				1	49	0	23.7	24.0	23.6	23.8
				25	0	1	22.6	23.2	22.7	23.0
				25	12	1	22.6	23.0	22.7	23.0
				25	24	1	22.7	23.1	22.6	23.0
				50	0	1	22.6	23.1	22.6	23.0
			16QAM	1	0	1	22.8	23.2	22.7	23.0
				1	24	1	22.5	23.1	22.8	23.0
				1	49	1	22.7	23.2	22.6	22.9
				25	0	2	21.7	22.1	21.7	21.9
				25	12	2	21.7	22.1	21.6	21.8
				25	24	2	21.7	22.0	21.8	21.8
				50	0	2	21.6	22.0	21.5	22.0

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
5	23230	782.0	QPSK	1	0	0	23.7	24.0	23.6	23.8
				1	12	0	23.7	23.9	23.6	23.9
				1	24	0	23.7	24.0	23.5	23.8
				12	0	1	22.7	23.6	22.6	23.1
				12	6	1	22.5	23.2	22.7	23.1
				12	11	1	22.8	23.2	22.7	23.0
				25	0	1	22.5	23.1	22.7	22.2
			16QAM	1	0	1	22.5	23.3	22.8	22.1
				1	12	1	22.9	23.3	22.6	22.2
				1	24	1	23.1	23.2	22.6	22.2
				12	0	2	21.8	23.0	21.5	21.6
				12	6	2	21.7	22.3	21.6	21.7
				12	11	2	21.7	22.4	21.6	21.5
				25	0	2	21.6	22.2	21.5	21.6

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 KDB941225 D05 SAR for LTE Devices v02r02

9.4.5. LTE Band 17

Measured Results

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
10	23790	710.0	QPSK	1	0	0	23.6	23.9	23.7	23.7
				1	24	0	23.7	23.9	23.7	23.7
				1	49	0	23.7	23.9	23.7	23.7
				25	0	1	22.6	23.0	22.7	23.0
				25	12	1	22.6	22.9	22.7	23.0
				25	24	1	22.7	22.9	22.7	23.0
				50	0	1	22.6	23.0	22.7	23.0
			16QAM	1	0	1	22.7	23.2	22.6	22.6
				1	24	1	22.5	22.9	22.5	22.5
				1	49	1	23.0	23.1	22.7	22.7
				25	0	2	21.7	22.1	21.8	21.6
				25	12	2	21.6	21.9	21.7	21.7
				25	24	2	21.8	21.9	21.7	21.6
				50	0	2	21.6	22.0	21.6	21.7

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
5	23790	710.0	QPSK	1	0	0	23.7	23.7	23.6	23.6
				1	12	0	23.7	23.7	23.7	23.6
				1	24	0	23.7	23.7	23.6	23.6
				12	0	1	22.6	23.0	22.6	23.0
				12	6	1	22.6	23.0	22.8	23.0
				12	11	1	22.7	23.0	22.8	22.9
				25	0	1	22.7	22.9	22.7	22.8
			16QAM	1	0	1	22.7	23.0	22.6	22.7
				1	12	1	22.6	23.1	22.7	22.6
				1	24	1	22.9	23.1	22.7	22.5
				12	0	2	21.8	22.1	21.7	21.5
				12	6	2	21.8	22.1	21.8	21.6
				12	11	2	21.8	22.1	21.6	21.6
				25	0	2	21.7	21.9	21.7	21.6

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 KDB941225 D05 SAR for LTE Devices v02r02

9.4.6. LTE Band 25

Measured Results

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
20	26140	1860.0	QPSK	1	0	0	23.4	23.0	23.2	20.5
				1	49	0	23.4	23.0	23.2	20.5
				1	99	0	23.3	23.0	23.0	20.5
				50	0	1	22.8	22.6	22.4	19.5
				50	24	1	22.6	22.4	22.4	19.5
				50	49	1	22.3	22.4	22.4	19.5
				100	0	1	22.6	22.5	22.4	19.5
			16QAM	1	0	1	22.5	22.4	21.4	19.6
				1	49	1	22.4	22.6	21.3	19.7
				1	99	1	22.3	22.3	21.3	19.5
				50	0	2	21.8	21.6	20.4	18.5
				50	24	2	21.5	21.5	20.3	18.5
				50	49	2	21.3	21.4	20.2	18.6
				100	0	2	21.6	21.5	20.2	18.6
	26365	1882.5	QPSK	1	0	0	23.2	23.0	23.4	20.4
				1	49	0	23.3	23.0	23.4	20.4
				1	99	0	23.3	23.0	23.4	20.4
				50	0	1	22.5	22.1	22.4	19.4
				50	24	1	22.7	21.9	22.4	19.4
				50	49	1	22.8	22.0	22.4	19.4
				100	0	1	22.7	22.0	22.4	19.4
			16QAM	1	0	1	22.5	22.1	21.3	19.5
				1	49	1	22.4	21.9	21.4	19.4
				1	99	1	22.7	22.1	21.4	19.4
				50	0	2	21.6	21.0	20.3	18.6
				50	24	2	21.7	20.9	20.4	18.6
				50	49	2	21.7	21.0	20.2	18.4
				100	0	2	21.7	21.1	20.2	18.5
	26590	1905.0	QPSK	1	0	0	23.1	22.7	22.8	20.2
				1	49	0	23.2	22.7	22.8	20.2
				1	99	0	23.2	22.7	22.8	20.2
				50	0	1	22.3	21.9	22.4	19.4
				50	24	1	22.4	21.7	22.4	19.4
				50	49	1	22.7	21.7	22.4	19.4
				100	0	1	22.5	21.8	22.4	19.4
			16QAM	1	0	1	22.3	22.1	21.4	19.4
				1	49	1	22.4	21.7	21.3	19.3
				1	99	1	22.5	22.2	21.3	19.4
				50	0	2	21.2	20.9	20.3	18.5
				50	24	2	21.4	20.7	20.3	18.5
				50	49	2	21.7	20.6	20.2	18.6
				100	0	2	21.5	20.8	20.3	18.4

LTE Band 25 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
15	26115	1857.5	QPSK	1	0	0	23.4	23.0	23.1	20.4
				1	37	0	23.3	23.0	23.1	20.5
				1	74	0	23.3	22.9	23.1	20.3
				36	0	1	23.0	22.5	22.3	19.5
				36	16	1	22.8	22.5	22.4	19.5
				36	35	1	22.6	22.6	22.3	19.4
				75	0	1	22.6	22.4	22.4	19.3
			16QAM	1	0	1	22.5	22.4	21.4	19.6
				1	37	1	22.4	22.7	21.3	19.6
				1	74	1	22.3	22.5	21.3	19.5
				36	0	2	22.0	21.4	20.4	18.5
				36	16	2	21.8	21.6	20.3	18.4
				36	35	2	21.5	21.6	20.2	18.6
				75	0	2	21.7	21.5	20.2	18.6
	26365	1882.5	QPSK	1	0	0	23.4	23.0	23.3	20.4
				1	37	0	23.4	23.0	23.4	20.4
				1	74	0	23.4	22.9	23.3	20.4
				36	0	1	22.6	22.0	22.3	19.4
				36	16	1	22.7	21.9	22.4	19.3
				36	35	1	22.8	21.9	22.2	19.3
				75	0	1	22.7	21.9	22.4	19.4
			16QAM	1	0	1	22.4	22.1	21.3	19.5
				1	37	1	22.4	22.0	21.4	19.4
				1	74	1	22.5	22.0	21.4	19.4
				36	0	2	21.6	21.1	20.3	18.5
				36	16	2	21.7	20.9	20.3	18.5
				36	35	2	21.7	21.0	20.2	18.4
				75	0	2	21.7	21.0	20.1	18.4
	26615	1907.5	QPSK	1	0	0	23.3	23.0	22.9	20.2
				1	37	0	23.4	22.6	22.8	20.2
				1	74	0	23.4	23.0	22.9	20.1
				36	0	1	22.4	21.8	22.5	19.4
				36	16	1	22.6	21.7	22.4	19.5
				36	35	1	22.8	21.6	22.5	19.4
				75	0	1	22.5	21.7	22.4	19.4
			16QAM	1	0	1	22.3	21.9	21.5	19.4
				1	37	1	22.6	21.6	21.3	19.3
				1	74	1	22.7	22.0	21.4	19.4
				36	0	2	21.4	20.9	20.3	18.6
				36	16	2	21.7	20.7	20.4	18.5
				36	35	2	21.9	20.7	20.2	18.6
				75	0	2	21.6	20.7	20.4	18.5

LTE Band 25 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
10	26090	1855.0	QPSK	1	0	0	23.4	22.9	23.1	20.4
				1	24	0	23.4	23.0	23.2	20.4
				1	49	0	23.3	23.0	23.1	20.3
				25	0	1	23.1	22.5	22.3	19.5
				25	12	1	23.0	22.5	22.5	19.4
				25	24	1	22.8	22.6	22.3	19.4
				50	0	1	22.8	22.6	22.3	19.3
			16QAM	1	0	1	22.5	22.5	21.4	19.5
				1	24	1	22.4	22.6	21.3	19.6
				1	49	1	22.3	22.6	21.3	19.5
				25	0	2	22.1	21.5	20.3	18.5
				25	12	2	22.0	21.5	20.3	18.5
				25	24	2	21.9	21.7	20.1	18.6
				50	0	2	21.9	21.4	20.2	18.4
	26365	1882.5	QPSK	1	0	0	23.4	23.0	23.3	20.4
				1	24	0	23.4	23.0	23.4	20.4
				1	49	0	23.4	23.0	23.4	20.3
				25	0	1	22.6	22.0	22.3	19.4
				25	12	1	22.7	21.9	22.3	19.3
				25	24	1	22.7	21.9	22.2	19.5
				50	0	1	22.7	21.9	22.5	19.4
			16QAM	1	0	1	22.5	22.0	21.3	19.4
				1	24	1	22.5	22.0	21.4	19.3
				1	49	1	22.4	22.0	21.3	19.3
				25	0	2	21.5	21.1	20.3	18.4
				25	12	2	21.7	21.0	20.3	18.5
				25	24	2	21.8	21.1	20.3	18.3
				50	0	2	21.6	21.0	20.1	18.4
	26640	1910.0	QPSK	1	0	0	23.4	22.8	22.8	20.1
				1	24	0	23.4	22.7	22.8	20.2
				1	49	0	23.4	23.0	22.8	20.1
				25	0	1	22.7	21.6	22.4	19.4
				25	12	1	22.8	21.7	22.4	19.5
				25	24	1	23.0	21.8	22.5	19.4
				50	0	1	22.8	21.7	22.3	19.4
			16QAM	1	0	1	22.4	21.7	21.5	19.4
				1	24	1	22.4	21.6	21.3	19.4
				1	49	1	22.4	22.4	21.4	19.4
				25	0	2	21.8	20.7	20.3	18.4
				25	12	2	21.9	20.7	20.3	18.5
				25	24	2	22.0	20.9	20.3	18.6
				50	0	2	21.8	20.8	20.4	18.4

LTE Band 25 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
5	26065	1852.5	QPSK	1	0	0	23.4	22.9	23.1	20.3
				1	12	0	23.4	23.0	23.1	20.3
				1	24	0	23.4	23.0	23.2	20.2
				12	0	1	23.2	22.5	22.3	19.5
				12	6	1	23.2	22.5	22.4	19.4
				12	11	1	23.3	22.5	22.3	19.4
				25	0	1	23.1	22.5	22.2	19.4
			16QAM	1	0	1	22.4	22.3	21.4	19.5
				1	12	1	22.2	22.2	21.3	19.6
				1	24	1	22.2	22.3	21.2	19.4
				12	0	2	22.3	21.5	20.3	18.4
				12	6	2	22.2	21.6	20.1	18.5
				12	11	2	21.3	21.6	20.1	18.4
				25	0	2	21.3	21.4	20.2	18.3
	26365	1882.5	QPSK	1	0	0	23.4	23.0	23.2	20.4
				1	12	0	23.4	23.0	23.3	20.4
				1	24	0	23.4	23.0	23.3	20.3
				12	0	1	22.7	22.0	22.3	19.3
				12	6	1	22.7	22.0	22.3	19.3
				12	11	1	22.8	22.1	22.2	19.5
				25	0	1	22.7	22.0	22.4	19.5
			16QAM	1	0	1	22.7	22.1	21.3	19.4
				1	12	1	22.7	22.1	21.4	19.3
				1	24	1	22.8	22.0	21.3	19.3
				12	0	2	21.8	21.2	20.1	18.4
				12	6	2	21.8	21.2	20.2	18.6
				12	11	2	21.8	21.2	20.2	18.3
				25	0	2	21.6	21.0	20.1	18.6
	26665	1912.5	QPSK	1	0	0	23.4	22.8	23.0	20.1
				1	12	0	23.4	22.9	23.0	20.2
				1	24	0	23.3	23.0	22.9	20.2
				12	0	1	23.0	21.7	22.5	19.4
				12	6	1	23.0	21.8	22.4	19.4
				12	11	1	22.8	21.9	22.6	19.4
				25	0	1	22.9	22.0	22.4	19.4
			16QAM	1	0	1	22.9	21.8	21.5	19.5
				1	12	1	22.6	21.9	21.3	19.4
				1	24	1	22.5	22.2	21.4	19.3
				12	0	2	22.2	20.9	20.3	18.4
				12	6	2	22.0	21.0	20.4	18.3
				12	11	2	21.9	21.2	20.3	18.5
				25	0	2	21.8	20.9	20.4	18.4

LTE Band 25 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
3	26055	1851.5	QPSK	1	0	0	23.3	23.0	23.1	20.3
				1	7	0	23.4	23.0	23.2	20.3
				1	14	0	23.4	23.0	23.2	20.3
				8	0	1	23.2	22.5	22.2	19.5
				8	4	1	23.2	22.5	22.3	19.3
				8	7	1	23.3	22.5	22.3	19.4
				15	0	1	23.2	22.5	22.2	19.4
			16QAM	1	0	1	22.5	22.2	21.4	19.4
				1	7	1	22.5	22.1	21.3	19.5
				1	14	1	22.4	22.2	21.3	19.4
				8	0	2	22.2	21.5	20.3	18.4
				8	4	2	22.2	21.5	20.2	18.5
				8	7	2	21.8	21.6	20.2	18.4
				15	0	2	21.7	21.4	20.2	18.4
	26365	1882.5	QPSK	1	0	0	23.3	23.0	23.3	20.3
				1	7	0	23.4	23.0	23.3	20.4
				1	14	0	23.4	23.0	23.3	20.3
				8	0	1	22.7	22.0	22.3	19.3
				8	4	1	22.6	22.1	22.4	19.4
				8	7	1	22.7	22.1	22.2	19.4
				15	0	1	22.7	22.1	22.4	19.5
			16QAM	1	0	1	22.6	22.0	21.4	19.4
				1	7	1	22.6	22.0	21.4	19.3
				1	14	1	22.8	21.9	21.3	19.3
				8	0	2	21.8	21.1	20.3	18.5
				8	4	2	21.7	21.1	20.2	18.6
				8	7	2	21.8	21.2	20.2	18.4
				15	0	2	21.7	21.1	20.3	18.6
	26675	1913.5	QPSK	1	0	0	23.4	22.9	22.8	20.1
				1	7	0	23.4	23.0	22.9	20.2
				1	14	0	23.3	23.0	22.9	20.2
				8	0	1	23.0	21.9	22.6	19.4
				8	4	1	22.8	22.1	22.4	19.5
				8	7	1	22.8	22.1	22.4	19.4
				15	0	1	22.8	22.0	22.3	19.5
			16QAM	1	0	1	22.5	21.9	21.5	19.5
				1	7	1	22.4	22.1	21.3	19.4
				1	14	1	22.3	22.3	21.4	19.3
				8	0	2	22.0	21.1	20.4	18.4
				8	4	2	21.8	21.1	20.4	18.3
				8	7	2	21.9	21.2	20.3	18.4
				15	0	2	21.8	21.1	20.4	18.4

LTE Band 25 Measured Results (continued)

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
1.4	26047	1850.7	QPSK	1	0	0	23.4	23.0	23.1	20.3
				1	2	0	23.4	23.0	23.2	20.3
				1	5	0	23.4	23.0	23.2	20.3
				3	0	0	23.4	22.9	23.1	20.2
				3	1	0	23.4	22.9	23.2	20.3
				3	2	0	23.4	23.0	23.1	20.1
				6	0	1	23.3	22.6	22.3	19.3
			16QAM	1	0	1	22.5	22.1	22.2	19.5
				1	2	1	22.5	22.1	22.1	19.4
				1	5	1	22.2	22.0	22.3	19.4
				3	0	1	22.0	21.9	22.2	19.3
				3	1	1	22.0	22.0	22.1	19.4
				3	2	1	21.9	21.7	22.1	19.4
				6	0	2	21.9	21.5	21.3	18.5
	26365	1882.5	QPSK	1	0	0	23.4	23.0	23.3	20.3
				1	2	0	23.4	23.0	23.3	20.4
				1	5	0	23.3	23.0	23.3	20.3
				3	0	0	23.4	23.0	23.2	20.2
				3	1	0	23.4	22.9	23.3	20.3
				3	2	0	23.4	23.0	23.1	20.2
				6	0	1	22.7	22.1	22.4	19.4
			16QAM	1	0	1	22.7	21.9	22.4	19.5
				1	2	1	22.7	21.9	22.5	19.4
				1	5	1	22.7	22.0	22.4	19.4
				3	0	1	22.6	21.8	22.3	19.4
				3	1	1	22.5	21.8	22.4	19.5
				3	2	1	22.5	21.9	22.4	19.3
				6	0	2	21.7	21.1	21.4	18.4
	16683	1914.3	QPSK	1	0	0	23.4	23.0	23.0	20.1
				1	2	0	23.4	23.0	22.9	20.2
				1	5	0	23.3	23.0	22.9	20.2
				3	0	0	23.4	23.0	22.8	20.1
				3	1	0	23.4	23.0	22.9	20.1
				3	2	0	23.3	23.0	22.9	20.3
				6	0	1	22.8	22.2	22.0	19.2
			16QAM	1	0	1	22.6	22.1	22.2	19.3
				1	2	1	22.6	22.1	22.1	19.4
				1	5	1	22.6	22.4	22.1	19.3
				3	0	1	22.6	22.0	22.0	19.2
				3	1	1	22.6	22.0	22.2	19.3
				3	2	1	22.4	21.9	22.1	19.2
				6	0	2	21.8	21.1	21.5	19.2

9.4.7. LTE Band 26

Measured Results

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
5	26763	821.3	QPSK	1	0	0	23.6	23.9	23.6	23.8
				1	12	0	23.7	24.0	23.7	24.0
				1	24	0	23.6	23.9	23.5	23.9
				12	0	1	23.5	23.8	23.5	22.9
				12	6	1	23.7	24.0	23.7	23.0
				12	11	1	23.6	23.8	23.5	22.9
				25	0	1	23.7	23.9	23.5	23.0
			16QAM	1	0	1	22.7	22.7	22.7	23.1
				1	12	1	23.6	22.9	22.6	23.0
				1	24	1	22.6	22.9	22.6	22.9
				12	0	2	22.3	22.8	22.5	21.9
				12	6	2	22.3	22.8	22.5	22.0
				12	11	2	22.2	22.7	22.6	21.8
				25	0	2	22.2	22.7	22.5	22.0

BW (MHz)	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	MPR	Avg Pwr (dBm)			
							HEAD		BODY	
							UAT	LAT	UAT	LAT
3	26763	821.3	QPSK	1	0	0	23.6	23.8	23.6	23.8
				1	7	0	23.6	23.9	23.7	23.9
				1	14	0	23.5	23.9	23.6	23.8
				8	0	1	23.5	23.9	23.5	23.0
				8	4	1	23.6	23.8	23.6	23.0
				8	7	1	23.5	23.8	23.5	22.9
				15	0	1	23.5	23.7	23.5	22.8
			16QAM	1	0	1	22.6	22.7	22.8	23.0
				1	7	1	22.7	22.8	22.7	22.9
				1	14	1	22.5	22.8	22.7	22.8
				8	0	2	22.4	22.7	22.6	21.8
				8	4	2	22.3	22.7	22.8	21.8
				8	7	2	22.3	22.6	22.7	22.0
				15	0	2	22.3	22.6	22.7	21.7

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 KDB941225 D05 SAR for LTE Devices v02r02

9.5. WiFi (2.4 GHz Band)

Required Test Channels per KDB 248227 D01

Mode	Band	GHz	Channel	"Default Test Channels"	
				802.11b	802.11g
802.11b/g	2.4 GHz	**2.412**	1#	√	∇
		2.437	6	√	∇
		2.462	11#	√	∇

Notes:
√ = "default test channels"
∇ = possible 802.11g channels with maximum average output ¼ dB ≥ the "default test channels"
= when output power is reduced for channel 1 and /or 11 to meet restricted band requirements the highest output channels closest to each of these channels should be tested.

Measured Results

Band (GHz)	Mode	Ch #	Freq. (MHz)	Avg Pwr (dBm)	
				Vendor A	Vendor B
2.4 (DTS)	802.11b	1	2412	16.0	16.0
		6	2437	16.0	16.0
		11	2462	16.0	16.0
		12	2467	15.5	15.5
		13	2472	14.0	13.9
	802.11g	1	2412	15.9	16.0
		6	2437	16.0	16.0
		11	2462	15.9	15.9
		12	2467	11.5	11.4
		13	2472	4.5	4.5
	802.11n (HT20)	1	2412	16.0	16.0
		6	2437	15.9	15.9
		11	2462	16.0	16.0
		12	2467	11.4	11.3
		13	2472	4.5	4.4

Note(s):

1. Per KDB 248227 D01, SAR is not required for 802.11g/HT20 channels when the maximum average output power is less than 1/4 dB higher than that measured on the corresponding 802.11b channels.
2. Additionally, SAR is not required for Channels 12 and 13 because the tune-up limit and the measured output power for these two channels are no greater than those for the default test channels.

9.6. WiFi (5 GHz Bands)

Required Test Channels per KDB 248227 D01

Mode		Band	GHz	Channel	"Default Test Channels"	
					802.11a	
802.11a	UNII (15.407)	5.2 GHz	5.180	36	√	
			5.200	40		*
			2.220	44		*
			5.240	48	√	
		5.3 GHz	5.260	52	√	
			5.280	56		*
			5.300	60		*
			5.320	64	√	
		5.5 GHz	5.500	100		
			5.520	104	√	
			5.540	108		*
			5.560	112		*
			5.580	116	√	
			5.600	120		*
			5.620	124	√	
			5.640	128		*
			5.660	132		*
			5.680	136	√	
			5.700	140		*
	DTS (15.247)	5.8 GHz	5.745	149	√	
			5.765	153		*
			5.785	157	√	
			5.805	161		*
			5.825	165	√	

√ = "default test channels"

* = possible 802.11a channels with maximum average output > the "default test channels"

= when output power is reduced for channel 1 and /or 11 to meet restricted band requirements the highest output channels closest to each of these channels should be tested.

Measured Results

Band (GHz)	Mode	Ch #	Freq. (MHz)	Avg Pwr (dBm)	
				Vendor A	Vendor B
5.2 (UNII)	802.11a	36	5180	14.0	14.0
		40	5200	13.9	14.0
		44	5220	14.0	14.0
		48	5240	14.0	14.0
	802.11n (HT20)	36	5180	14.0	13.9
		40	5200	14.0	14.0
		48	5240	13.9	14.0
	802.11n (HT40)	38	5190	14.0	14.0
		46	5230	14.0	14.0
5.3 (UNII)	802.11a	52	5260	14.5	14.5
		56	5280	14.5	14.5
		60	5300	14.4	14.5
		64	5320	14.5	14.5
	802.11n (HT20)	52	5260	14.5	14.5
		60	5300	14.5	14.4
		64	5320	14.5	14.5
	802.11n (HT40)	54	5270	14.5	14.4
		62	5310	14.4	14.5
5.5 (UNII)	802.11a	100	5500	14.0	13.9
		104	5520	14.0	14.0
		108	5540	14.0	14.0
		112	5560	14.0	14.0
		116	5580	14.0	14.0
		120	5600	14.0	14.0
		124	5620	14.0	14.0
		128	5640	13.9	14.0
		132	5660	14.0	13.9
		136	5680	14.0	14.0
		140	5700	13.9	14.0
	802.11n (HT20)	100	5500	14.0	14.0
		116	5580	14.0	13.9
		140	5700	14.0	14.0
	802.11n (HT40)	102	5510	13.9	14.0
		118	5590	14.0	13.9
		134	5670	14.0	14.0
5.8 (DTS)	802.11a	149	5745	13.5	13.5
		153	5765	13.5	13.4
		157	5785	13.5	13.5
		161	5805	13.5	13.5
		165	5825	13.5	13.5
	802.11n (HT20)	149	5745	13.5	13.5
		157	5785	13.5	13.4
		165	5825	13.5	13.5
	802.11n (HT40)	151	5755	13.5	13.4
		159	5795	13.4	13.5

Note(s):

1. SAR is not required for 802.11n HT20/HT40 channels when the maximum average output power is less than 1/4 dB higher than that measured on the corresponding 802.11a channels. As per KDB 248227

9.7. Bluetooth

Band (GHz)	Mode	Ch #	Freq. (MHz)	Avg Pwr (dBm)	
				Vendor A	Vendor B
2.4	V3.0 + EDR, GFSK	0	2402	11.4	11.5
		39	2441	11.8	11.8
		78	2480	11.3	11.5
	V3.0 + EDR, 8-DPSK	0	2402	10.3	10.2
		39	2441	10.3	10.4
		78	2480	10.0	10.2
	V4.0 LE, GFSK	0	2402	8.1	8.2
		19	2440	8.8	8.6
		39	2480	8.6	8.6

10. Tissue Dielectric Properties

IEEE Std 1528-2003 Table 2

Target Frequency (MHz)	Head	
	ε_r	σ (S/m)
300	45.3	0.87
450	43.5	0.87
835	41.5	0.90
900	41.5	0.97
1450	40.5	1.20
1800 – 2000	40.0	1.40
2450	39.2	1.80
2600	39.0	1.96
3000	38.5	2.40

FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r01

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

10.1. Composition of Ingredients for the Tissue Material Used in the SAR Tests

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

Ingredients (% by weight)	Frequency (MHz)									
	450		835		915		1900		2450	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	38.56	51.16	41.45	52.4	41.05	56.0	54.9	40.4	62.7	73.2
Salt (NaCl)	3.95	1.49	1.45	1.4	1.35	0.76	0.18	0.5	0.5	0.04
Sugar	56.32	46.78	56.0	45.0	56.5	41.76	0.0	58.0	0.0	0.0
HEC	0.98	0.52	1.0	1.0	1.0	1.21	0.0	1.0	0.0	0.0
Bactericide	0.19	0.05	0.1	0.1	0.1	0.27	0.0	0.1	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.8	0.0
DGBE	0.0	0.0	0.0	0.0	0.0	0.0	44.92	0.0	0.0	26.7
Dielectric Constant	43.42	58.0	42.54	56.1	42.0	56.8	39.9	54.0	39.8	52.5
Conductivity (S/m)	0.85	0.83	0.91	0.95	1.0	1.07	1.42	1.45	1.88	1.78

Salt: 99+% Pure Sodium Chloride Sugar: 98+% Pure Sucrose
Water: De-ionized, 16 MΩ+ resistivity HEC: Hydroxyethyl Cellulose
DGBE: 99+% Di(ethylene glycol) butyl ether, [2-(2-butoxyethoxy)ethanol]
Triton X-100 (ultra pure): Polyethylene glycol mono [4-(1,1, 3, 3-tetramethylbutyl)phenyl]ether

MSL/HSL750 (Body and Head liquids for 700 – 800 MHz)

Item	Head Tissue Simulation Liquids HSL750 Muscle (body) Tissue Simulation Liquids MSL750
Type No	SL AAH 075
Manufacturer	SPEAG
The item is composed of the following ingredients:	
H^2O	Water, 35 – 58%
Sucrese	Sugar, white, refined, 40-60%
NaCl	Sodium Chloride, 0-6%
Hydroxyethel-cellulsoe	Medium Viscosity (CAS# 9004-62-0), <0.3%
Preventol-D7	Preservative: aqueous preparation, (CAS# 55965-84-9), containing 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyyl-3(2H)-isothiazolone, 0.1-0.7%

MSL/HSL1750 (Body and Head liquids for 1700 – 1800 MHz)

Item	Head Tissue Simulation Liquids HSL1750 Muscle (body) Tissue Simulation Liquids MSL1750
Type No	SL AAM 175
Manufacturer	SPEAG
-The item is composed of the following ingredients:	
H^2O	Water, 52 – 75%
C8H18O3	Diethylene glycol monobutyl ether (DGBE), 25-48%
NaCl	Sodium Chloride, <1.0%

Simulating Liquids for 5 GHz, Manufactured by SPEAG

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

10.2. Tissue Dielectric Parameter Check Results

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within ± 2°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.

SAR Room A

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
5/28/2013	Body 1750	e'	51.6200	Relative Permittivity (ε_r):	51.62	53.44	-3.41	5
		e"	15.0000	Conductivity (σ):	1.46	1.49	-1.79	5
	Body 1710	e'	51.7200	Relative Permittivity (ε_r):	51.72	53.54	-3.41	5
		e"	14.9200	Conductivity (σ):	1.42	1.46	-2.94	5
	Body 1755	e'	51.5700	Relative Permittivity (ε_r):	51.57	53.43	-3.48	5
		e"	15.0300	Conductivity (σ):	1.47	1.49	-1.51	5
5/28/2013	Head 1750	e'	39.2300	Relative Permittivity (ε_r):	39.23	40.08	-2.13	5
		e"	13.6400	Conductivity (σ):	1.33	1.37	-3.05	5
	Head 1710	e'	39.3900	Relative Permittivity (ε_r):	39.39	40.15	-1.88	5
		e"	13.5600	Conductivity (σ):	1.29	1.35	-4.24	5
	Head 1755	e'	39.1900	Relative Permittivity (ε_r):	39.19	40.08	-2.21	5
		e"	13.6600	Conductivity (σ):	1.33	1.37	-2.83	5
5/30/2013	Body 1750	e'	51.6700	Relative Permittivity (ε_r):	51.67	53.44	-3.31	5
		e"	15.2200	Conductivity (σ):	1.48	1.49	-0.35	5
	Body 1710	e'	51.7800	Relative Permittivity (ε_r):	51.78	53.54	-3.29	5
		e"	15.1000	Conductivity (σ):	1.44	1.46	-1.77	5
	Body 1755	e'	51.6300	Relative Permittivity (ε_r):	51.63	53.43	-3.37	5
		e"	15.2100	Conductivity (σ):	1.48	1.49	-0.33	5
5/30/2013	Head 1750	e'	39.4100	Relative Permittivity (ε_r):	39.41	40.08	-1.68	5
		e"	13.8800	Conductivity (σ):	1.35	1.37	-1.34	5
	Head 1710	e'	39.5500	Relative Permittivity (ε_r):	39.55	40.15	-1.48	5
		e"	13.7800	Conductivity (σ):	1.31	1.35	-2.69	5
	Head 1755	e'	39.3700	Relative Permittivity (ε_r):	39.37	40.08	-1.76	5
		e"	13.8900	Conductivity (σ):	1.36	1.37	-1.19	5
5/30/2013	Head 750	e'	40.4600	Relative Permittivity (ε_r):	40.46	41.96	-3.58	5
		e"	21.5100	Conductivity (σ):	0.90	0.89	0.44	5
	Head 700	e'	41.1500	Relative Permittivity (ε_r):	41.15	42.22	-2.53	5
		e"	21.9000	Conductivity (σ):	0.85	0.89	-4.14	5
	Head 790	e'	39.9400	Relative Permittivity (ε_r):	39.94	41.76	-4.35	5
		e"	21.2300	Conductivity (σ):	0.93	0.90	4.06	5
5/30/2013	Body 750	e'	54.4100	Relative Permittivity (ε_r):	54.41	55.55	-2.05	5
		e"	23.1200	Conductivity (σ):	0.96	0.96	0.11	5
	Body 700	e'	54.9400	Relative Permittivity (ε_r):	54.94	55.74	-1.43	5
		e"	23.5300	Conductivity (σ):	0.92	0.96	-4.52	5
	Body 790	e'	53.9600	Relative Permittivity (ε_r):	53.96	55.39	-2.59	5
		e"	22.8300	Conductivity (σ):	1.00	0.97	3.80	5
6/3/2013	Head 750	e'	40.8400	Relative Permittivity (ε_r):	40.84	41.96	-2.67	5
		e"	21.5600	Conductivity (σ):	0.90	0.89	0.67	5
	Head 700	e'	41.5600	Relative Permittivity (ε_r):	41.56	42.22	-1.56	5
		e"	21.9700	Conductivity (σ):	0.86	0.89	-3.84	5
	Head 790	e'	40.3600	Relative Permittivity (ε_r):	40.36	41.76	-3.34	5
		e"	21.3400	Conductivity (σ):	0.94	0.90	4.60	5

Tissue Dielectric Parameter Check Results (SAR Room A continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
6/3/2013	Body 750	e'	54.7500	Relative Permittivity (ε_r):	54.75	55.55	-1.43	5
		e"	23.1100	Conductivity (σ):	0.96	0.96	0.07	5
	Body 700	e'	55.3400	Relative Permittivity (ε_r):	55.34	55.74	-0.71	5
		e"	23.5600	Conductivity (σ):	0.92	0.96	-4.40	5
	Body 790	e'	54.3700	Relative Permittivity (ε_r):	54.37	55.39	-1.85	5
		e"	22.8700	Conductivity (σ):	1.00	0.97	3.98	5
6/4/2013	Head 1750	e'	40.9200	Relative Permittivity (ε_r):	40.92	40.08	2.08	5
		e"	14.0500	Conductivity (σ):	1.37	1.37	-0.13	5
	Head 1710	e'	41.0800	Relative Permittivity (ε_r):	41.08	40.15	2.33	5
		e"	13.9400	Conductivity (σ):	1.33	1.35	-1.56	5
	Head 1755	e'	40.9000	Relative Permittivity (ε_r):	40.90	40.08	2.05	5
		e"	14.0600	Conductivity (σ):	1.37	1.37	0.02	5
6/6/2013	Head 750	e'	40.4400	Relative Permittivity (ε_r):	40.44	41.96	-3.63	5
		e"	21.6000	Conductivity (σ):	0.90	0.89	0.86	5
	Head 700	e'	41.2000	Relative Permittivity (ε_r):	41.20	42.22	-2.41	5
		e"	21.9900	Conductivity (σ):	0.86	0.89	-3.75	5
	Head 790	e'	39.9300	Relative Permittivity (ε_r):	39.93	41.76	-4.37	5
		e"	21.3700	Conductivity (σ):	0.94	0.90	4.75	5
6/6/2013	Body 750	e'	54.5800	Relative Permittivity (ε_r):	54.58	55.55	-1.74	5
		e"	23.1000	Conductivity (σ):	0.96	0.96	0.03	5
	Body 700	e'	55.1700	Relative Permittivity (ε_r):	55.17	55.74	-1.02	5
		e"	23.4900	Conductivity (σ):	0.91	0.96	-4.69	5
	Body 790	e'	54.3000	Relative Permittivity (ε_r):	54.30	55.39	-1.97	5
		e"	22.8800	Conductivity (σ):	1.01	0.97	4.02	5
6/6/2013	Head 1750	e'	39.0400	Relative Permittivity (ε_r):	39.04	40.08	-2.61	5
		e"	14.6400	Conductivity (σ):	1.42	1.37	4.06	5
	Head 1710	e'	39.0800	Relative Permittivity (ε_r):	39.08	40.15	-2.66	5
		e"	14.5500	Conductivity (σ):	1.38	1.35	2.75	5
	Head 1755	e'	39.0000	Relative Permittivity (ε_r):	39.00	40.08	-2.69	5
		e"	14.6400	Conductivity (σ):	1.43	1.37	4.14	5
6/6/2013	Body 1750	e'	51.7800	Relative Permittivity (ε_r):	51.78	53.44	-3.11	5
		e"	15.2300	Conductivity (σ):	1.48	1.49	-0.28	5
	Body 1710	e'	51.8100	Relative Permittivity (ε_r):	51.81	53.54	-3.24	5
		e"	15.1200	Conductivity (σ):	1.44	1.46	-1.64	5
	Body 1755	e'	51.7500	Relative Permittivity (ε_r):	51.75	53.43	-3.14	5
		e"	15.2300	Conductivity (σ):	1.49	1.49	-0.20	5
6/10/2013	Head 1750	e'	40.7500	Relative Permittivity (ε_r):	40.75	40.08	1.66	5
		e"	14.3700	Conductivity (σ):	1.40	1.37	2.14	5
	Head 1710	e'	41.0300	Relative Permittivity (ε_r):	41.03	40.15	2.20	5
		e"	14.2700	Conductivity (σ):	1.36	1.35	0.77	5
	Head 1755	e'	40.7100	Relative Permittivity (ε_r):	40.71	40.08	1.58	5
		e"	14.3800	Conductivity (σ):	1.40	1.37	2.29	5
6/10/2013	Body 1750	e'	51.0500	Relative Permittivity (ε_r):	51.05	53.44	-4.47	5
		e"	15.7900	Conductivity (σ):	1.54	1.49	3.38	5
	Body 1710	e'	51.3100	Relative Permittivity (ε_r):	51.31	53.54	-4.17	5
		e"	15.6500	Conductivity (σ):	1.49	1.46	1.81	5
	Body 1755	e'	51.0300	Relative Permittivity (ε_r):	51.03	53.43	-4.49	5
		e"	15.8300	Conductivity (σ):	1.54	1.49	3.73	5
6/13/2013	Body 1750	e'	52.5300	Relative Permittivity (ε_r):	52.53	53.44	-1.70	5
		e"	14.8900	Conductivity (σ):	1.45	1.49	-2.51	5
	Body 1710	e'	52.7000	Relative Permittivity (ε_r):	52.70	53.54	-1.58	5
		e"	14.7700	Conductivity (σ):	1.40	1.46	-3.91	5
	Body 1755	e'	52.4800	Relative Permittivity (ε_r):	52.48	53.43	-1.77	5
		e"	14.9100	Conductivity (σ):	1.45	1.49	-2.30	5

Tissue Dielectric Parameter Check Results (SAR Room A continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
6/24/2013	Body 1750	e'	52.3800	Relative Permittivity (ε_r):	52.38	53.44	-1.99	5
		e"	15.0800	Conductivity (σ):	1.47	1.49	-1.26	5
	Body 1710	e'	52.4900	Relative Permittivity (ε_r):	52.49	53.54	-1.97	5
		e"	14.9200	Conductivity (σ):	1.42	1.46	-2.94	5
	Body 1755	e'	52.3700	Relative Permittivity (ε_r):	52.37	53.43	-1.98	5
		e"	15.0900	Conductivity (σ):	1.47	1.49	-1.12	5
6/27/2013	Body 750	e'	53.6600	Relative Permittivity (ε_r):	53.66	55.55	-3.40	5
		e"	23.2400	Conductivity (σ):	0.97	0.96	0.63	5
	Body 700	e'	54.1900	Relative Permittivity (ε_r):	54.19	55.74	-2.78	5
		e"	23.6400	Conductivity (σ):	0.92	0.96	-4.08	5
	Body 790	e'	53.2300	Relative Permittivity (ε_r):	53.23	55.39	-3.90	5
		e"	22.9600	Conductivity (σ):	1.01	0.97	4.39	5
7/15/2013	Head 835	e'	41.7800	Relative Permittivity (ε_r):	41.78	41.50	0.67	5
		e"	19.8700	Conductivity (σ):	0.92	0.90	2.50	5
	Head 820	e'	41.9300	Relative Permittivity (ε_r):	41.93	41.60	0.79	5
		e"	19.9200	Conductivity (σ):	0.91	0.90	1.09	5
	Head 850	e'	41.6200	Relative Permittivity (ε_r):	41.62	41.50	0.29	5
		e"	19.8300	Conductivity (σ):	0.94	0.92	2.43	5
7/18/2013	Head 835	e'	41.5700	Relative Permittivity (ε_r):	41.57	41.50	0.17	5
		e"	19.9800	Conductivity (σ):	0.93	0.90	3.07	5
	Head 820	e'	42.2600	Relative Permittivity (ε_r):	42.26	41.60	1.58	5
		e"	20.2300	Conductivity (σ):	0.92	0.90	2.66	5
	Head 850	e'	41.8600	Relative Permittivity (ε_r):	41.86	41.50	0.87	5
		e"	20.1200	Conductivity (σ):	0.95	0.92	3.93	5

SAR Room B

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
5/28/2013	Head 1900	e'	38.5000	Relative Permittivity (ϵ_r):	38.50	40.00	-3.75	5
		e"	13.6600	Conductivity (σ):	1.44	1.40	3.08	5
	Head 1850	e'	38.7200	Relative Permittivity (ϵ_r):	38.72	40.00	-3.20	5
		e"	13.5700	Conductivity (σ):	1.40	1.40	-0.29	5
	Head 1910	e'	38.4700	Relative Permittivity (ϵ_r):	38.47	40.00	-3.83	5
		e"	13.6800	Conductivity (σ):	1.45	1.40	3.77	5
5/28/2013	Body 1900	e'	52.4100	Relative Permittivity (ϵ_r):	52.41	53.30	-1.67	5
		e"	14.3800	Conductivity (σ):	1.52	1.52	-0.05	5
	Body 1850	e'	52.5900	Relative Permittivity (ϵ_r):	52.59	53.30	-1.33	5
		e"	14.2700	Conductivity (σ):	1.47	1.52	-3.43	5
	Body 1910	e'	52.3800	Relative Permittivity (ϵ_r):	52.38	53.30	-1.73	5
		e"	14.3900	Conductivity (σ):	1.53	1.52	0.54	5
5/30/2013	Body 1900	e'	53.6500	Relative Permittivity (ϵ_r):	53.65	53.30	0.66	5
		e"	14.4100	Conductivity (σ):	1.52	1.52	0.16	5
	Body 1850	e'	53.8600	Relative Permittivity (ϵ_r):	53.86	53.30	1.05	5
		e"	14.3100	Conductivity (σ):	1.47	1.52	-3.16	5
	Body 1910	e'	53.5800	Relative Permittivity (ϵ_r):	53.58	53.30	0.53	5
		e"	14.4200	Conductivity (σ):	1.53	1.52	0.75	5
5/30/2013	Head 1900	e'	40.4900	Relative Permittivity (ϵ_r):	40.49	40.00	1.23	5
		e"	13.6900	Conductivity (σ):	1.45	1.40	3.31	5
	Head 1850	e'	40.7200	Relative Permittivity (ϵ_r):	40.72	40.00	1.80	5
		e"	13.6000	Conductivity (σ):	1.40	1.40	-0.07	5
	Head 1910	e'	40.4400	Relative Permittivity (ϵ_r):	40.44	40.00	1.10	5
		e"	13.7200	Conductivity (σ):	1.46	1.40	4.08	5
6/2/2013	Body 1900	e'	51.6700	Relative Permittivity (ϵ_r):	51.67	53.30	-3.06	5
		e"	14.3100	Conductivity (σ):	1.51	1.52	-0.54	5
	Body 1850	e'	51.9000	Relative Permittivity (ϵ_r):	51.90	53.30	-2.63	5
		e"	14.2000	Conductivity (σ):	1.46	1.52	-3.90	5
	Body 1910	e'	51.6300	Relative Permittivity (ϵ_r):	51.63	53.30	-3.13	5
		e"	14.3400	Conductivity (σ):	1.52	1.52	0.19	5
6/2/2013	Head 1900	e'	39.5800	Relative Permittivity (ϵ_r):	39.58	40.00	-1.05	5
		e"	13.5800	Conductivity (σ):	1.43	1.40	2.48	5
	Head 1850	e'	39.8400	Relative Permittivity (ϵ_r):	39.84	40.00	-0.40	5
		e"	13.4900	Conductivity (σ):	1.39	1.40	-0.88	5
	Head 1910	e'	39.5500	Relative Permittivity (ϵ_r):	39.55	40.00	-1.13	5
		e"	13.6200	Conductivity (σ):	1.45	1.40	3.32	5
6/5/2013	Head 1900	e'	38.5600	Relative Permittivity (ϵ_r):	38.56	40.00	-3.60	5
		e"	13.7100	Conductivity (σ):	1.45	1.40	3.46	5
	Head 1850	e'	39.7700	Relative Permittivity (ϵ_r):	39.77	40.00	-0.57	5
		e"	13.5900	Conductivity (σ):	1.40	1.40	-0.15	5
	Head 1910	e'	38.5100	Relative Permittivity (ϵ_r):	38.51	40.00	-3.73	5
		e"	13.7300	Conductivity (σ):	1.46	1.40	4.15	5
6/6/2013	Head 1900	e'	39.1800	Relative Permittivity (ϵ_r):	39.18	40.00	-2.05	5
		e"	13.6300	Conductivity (σ):	1.44	1.40	2.85	5
	Head 1850	e'	39.4900	Relative Permittivity (ϵ_r):	39.49	40.00	-1.28	5
		e"	13.6400	Conductivity (σ):	1.40	1.40	0.22	5
	Head 1910	e'	39.0700	Relative Permittivity (ϵ_r):	39.07	40.00	-2.33	5
		e"	13.6400	Conductivity (σ):	1.45	1.40	3.47	5

Tissue Dielectric Parameter Check Results (SAR Room B continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
6/6/2013	Body 1900	e'	51.4600	Relative Permittivity (ϵ_r):	51.46	53.30	-3.45	5
		e"	14.5400	Conductivity (σ):	1.54	1.52	1.06	5
	Body 1850	e'	51.6000	Relative Permittivity (ϵ_r):	51.60	53.30	-3.19	5
		e"	14.4500	Conductivity (σ):	1.49	1.52	-2.21	5
	Body 1910	e'	51.4100	Relative Permittivity (ϵ_r):	51.41	53.30	-3.55	5
		e"	14.5600	Conductivity (σ):	1.55	1.52	1.73	5
6/10/2013	Head 1900	e'	39.0500	Relative Permittivity (ϵ_r):	39.05	40.00	-2.38	5
		e"	13.7700	Conductivity (σ):	1.45	1.40	3.91	5
	Head 1850	e'	39.2700	Relative Permittivity (ϵ_r):	39.27	40.00	-1.82	5
		e"	13.6900	Conductivity (σ):	1.41	1.40	0.59	5
	Head 1910	e'	38.9900	Relative Permittivity (ϵ_r):	38.99	40.00	-2.53	5
		e"	13.8000	Conductivity (σ):	1.47	1.40	4.68	5
6/10/2013	Body 1900	e'	52.1400	Relative Permittivity (ϵ_r):	52.14	53.30	-2.18	5
		e"	14.7900	Conductivity (σ):	1.56	1.52	2.80	5
	Body 1850	e'	52.2000	Relative Permittivity (ϵ_r):	52.20	53.30	-2.06	5
		e"	14.6500	Conductivity (σ):	1.51	1.52	-0.86	5
	Body 1910	e'	52.1300	Relative Permittivity (ϵ_r):	52.13	53.30	-2.20	5
		e"	14.8400	Conductivity (σ):	1.58	1.52	3.69	5
6/13/2013	Body 1900	e'	51.5000	Relative Permittivity (ϵ_r):	51.50	53.30	-3.38	5
		e"	14.5300	Conductivity (σ):	1.54	1.52	0.99	5
	Body 1850	e'	51.6900	Relative Permittivity (ϵ_r):	51.69	53.30	-3.02	5
		e"	14.4200	Conductivity (σ):	1.48	1.52	-2.41	5
	Body 1910	e'	51.4700	Relative Permittivity (ϵ_r):	51.47	53.30	-3.43	5
		e"	14.5600	Conductivity (σ):	1.55	1.52	1.73	5
6/17/2013	Head 1900	e'	39.2500	Relative Permittivity (ϵ_r):	39.25	40.00	-1.88	5
		e"	13.5700	Conductivity (σ):	1.43	1.40	2.40	5
	Head 1850	e'	39.4700	Relative Permittivity (ϵ_r):	39.47	40.00	-1.33	5
		e"	13.4900	Conductivity (σ):	1.39	1.40	-0.88	5
	Head 1910	e'	39.2300	Relative Permittivity (ϵ_r):	39.23	40.00	-1.93	5
		e"	13.5800	Conductivity (σ):	1.44	1.40	3.02	5
6/17/2013	Body 1900	e'	52.1000	Relative Permittivity (ϵ_r):	52.10	53.30	-2.25	5
		e"	14.4500	Conductivity (σ):	1.53	1.52	0.43	5
	Body 1850	e'	52.2700	Relative Permittivity (ϵ_r):	52.27	53.30	-1.93	5
		e"	14.3600	Conductivity (σ):	1.48	1.52	-2.82	5
	Body 1910	e'	52.0900	Relative Permittivity (ϵ_r):	52.09	53.30	-2.27	5
		e"	14.4600	Conductivity (σ):	1.54	1.52	1.03	5
6/24/2013	Head 1900	e'	40.6700	Relative Permittivity (ϵ_r):	40.67	40.00	1.68	5
		e"	13.6200	Conductivity (σ):	1.44	1.40	2.78	5
	Head 1850	e'	40.8800	Relative Permittivity (ϵ_r):	40.88	40.00	2.20	5
		e"	13.5200	Conductivity (σ):	1.39	1.40	-0.66	5
	Head 1910	e'	40.6300	Relative Permittivity (ϵ_r):	40.63	40.00	1.58	5
		e"	13.6500	Conductivity (σ):	1.45	1.40	3.55	5
6/24/2013	Body 1900	e'	52.1800	Relative Permittivity (ϵ_r):	52.18	53.30	-2.10	5
		e"	14.3700	Conductivity (σ):	1.52	1.52	-0.12	5
	Body 1850	e'	52.3700	Relative Permittivity (ϵ_r):	52.37	53.30	-1.74	5
		e"	14.2500	Conductivity (σ):	1.47	1.52	-3.56	5
	Body 1910	e'	52.1600	Relative Permittivity (ϵ_r):	52.16	53.30	-2.14	5
		e"	14.3800	Conductivity (σ):	1.53	1.52	0.47	5

SAR Room C

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
5/22/2013	Head 2450	e'	38.2700	Relative Permittivity (ϵ_r):	38.27	39.20	-2.37	5
		e"	13.7700	Conductivity (σ):	1.88	1.80	4.21	5
	Head 2410	e'	38.4700	Relative Permittivity (ϵ_r):	38.47	39.28	-2.06	5
		e"	13.6400	Conductivity (σ):	1.83	1.76	3.83	5
	Head 2475	e'	38.1500	Relative Permittivity (ϵ_r):	38.15	39.17	-2.60	5
		e"	13.8500	Conductivity (σ):	1.91	1.83	4.32	5
5/23/2013	Body 2450	e'	51.0100	Relative Permittivity (ϵ_r):	51.01	52.70	-3.21	5
		e"	14.7200	Conductivity (σ):	2.01	1.95	2.83	5
	Body 2410	e'	51.1600	Relative Permittivity (ϵ_r):	51.16	52.76	-3.03	5
		e"	14.5600	Conductivity (σ):	1.95	1.91	2.29	5
	Body 2475	e'	50.9200	Relative Permittivity (ϵ_r):	50.92	52.67	-3.32	5
		e"	14.8300	Conductivity (σ):	2.04	1.99	2.81	5
5/24/2013	Body 5180	e'	49.0500	Relative Permittivity (ϵ_r):	49.05	49.05	0.01	5
		e"	18.6100	Conductivity (σ):	5.36	5.27	1.68	5
	Body 5200	e'	48.9400	Relative Permittivity (ϵ_r):	48.94	49.02	-0.16	5
		e"	18.6200	Conductivity (σ):	5.38	5.29	1.68	5
	Body 5600	e'	48.3000	Relative Permittivity (ϵ_r):	48.30	48.48	-0.37	5
		e"	19.0500	Conductivity (σ):	5.93	5.76	2.96	5
	Body 5800	e'	48.0000	Relative Permittivity (ϵ_r):	48.00	48.20	-0.41	5
		e"	19.2900	Conductivity (σ):	6.22	6.00	3.68	5
	Body 5825	e'	47.9400	Relative Permittivity (ϵ_r):	47.94	48.20	-0.54	5
		e"	19.3100	Conductivity (σ):	6.25	6.00	4.24	5
5/24/2013	Head 5180	e'	36.8900	Relative Permittivity (ϵ_r):	36.89	36.01	2.44	5
		e"	15.6900	Conductivity (σ):	4.52	4.63	-2.41	5
	Head 5200	e'	36.8100	Relative Permittivity (ϵ_r):	36.81	35.99	2.28	5
		e"	15.7000	Conductivity (σ):	4.54	4.65	-2.40	5
	Head 5600	e'	36.2700	Relative Permittivity (ϵ_r):	36.27	35.53	2.07	5
		e"	15.9100	Conductivity (σ):	4.95	5.06	-2.10	5
	Head 5800	e'	36.0200	Relative Permittivity (ϵ_r):	36.02	35.30	2.04	5
		e"	16.0500	Conductivity (σ):	5.18	5.27	-1.78	5
	Head 5825	e'	35.9400	Relative Permittivity (ϵ_r):	35.94	35.30	1.81	5
		e"	16.0600	Conductivity (σ):	5.20	5.27	-1.30	5
5/28/2013	Body 5180	e'	48.1900	Relative Permittivity (ϵ_r):	48.19	49.05	-1.75	5
		e"	18.3400	Conductivity (σ):	5.28	5.27	0.21	5
	Body 5200	e'	48.1500	Relative Permittivity (ϵ_r):	48.15	49.02	-1.77	5
		e"	18.3000	Conductivity (σ):	5.29	5.29	-0.07	5
	Body 5600	e'	47.4900	Relative Permittivity (ϵ_r):	47.49	48.48	-2.04	5
		e"	18.8000	Conductivity (σ):	5.85	5.76	1.61	5
	Body 5800	e'	47.1600	Relative Permittivity (ϵ_r):	47.16	48.20	-2.16	5
		e"	18.9700	Conductivity (σ):	6.12	6.00	1.96	5
	Body 5825	e'	47.1400	Relative Permittivity (ϵ_r):	47.14	48.20	-2.20	5
		e"	18.9600	Conductivity (σ):	6.14	6.00	2.35	5
5/28/2013	Head 5180	e'	36.7200	Relative Permittivity (ϵ_r):	36.72	36.01	1.96	5
		e"	15.4600	Conductivity (σ):	4.45	4.63	-3.84	5
	Head 5200	e'	36.6800	Relative Permittivity (ϵ_r):	36.68	35.99	1.92	5
		e"	15.4100	Conductivity (σ):	4.46	4.65	-4.20	5
	Head 5600	e'	36.1100	Relative Permittivity (ϵ_r):	36.11	35.53	1.62	5
		e"	15.7200	Conductivity (σ):	4.89	5.06	-3.27	5
	Head 5800	e'	35.8200	Relative Permittivity (ϵ_r):	35.82	35.30	1.47	5
		e"	15.8000	Conductivity (σ):	5.10	5.27	-3.31	5
	Head 5825	e'	35.8100	Relative Permittivity (ϵ_r):	35.81	35.30	1.44	5
		e"	15.7900	Conductivity (σ):	5.11	5.27	-2.96	5

Tissue Dielectric Parameter Check Results (SAR Room C continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
5/30/2013	Body 5180	e'	50.0800	Relative Permittivity (ϵ_r):	50.08	49.05	2.11	5
		e"	18.6400	Conductivity (σ):	5.37	5.27	1.85	5
	Body 5200	e'	50.0500	Relative Permittivity (ϵ_r):	50.05	49.02	2.10	5
		e"	18.6700	Conductivity (σ):	5.40	5.29	1.95	5
	Body 5600	e'	49.3800	Relative Permittivity (ϵ_r):	49.38	48.48	1.86	5
		e"	19.1500	Conductivity (σ):	5.96	5.76	3.50	5
	Body 5800	e'	49.0500	Relative Permittivity (ϵ_r):	49.05	48.20	1.76	5
		e"	19.3500	Conductivity (σ):	6.24	6.00	4.01	5
	Body 5825	e'	49.0300	Relative Permittivity (ϵ_r):	49.03	48.20	1.72	5
		e"	19.3700	Conductivity (σ):	6.27	6.00	4.56	5
6/3/2013	Head 5180	e'	37.0700	Relative Permittivity (ϵ_r):	37.07	36.01	2.94	5
		e"	15.9900	Conductivity (σ):	4.61	4.63	-0.54	5
	Head 5200	e'	37.0200	Relative Permittivity (ϵ_r):	37.02	35.99	2.86	5
		e"	16.0100	Conductivity (σ):	4.63	4.65	-0.47	5
	Head 5600	e'	36.4400	Relative Permittivity (ϵ_r):	36.44	35.53	2.55	5
		e"	16.2800	Conductivity (σ):	5.07	5.06	0.18	5
	Head 5800	e'	36.1000	Relative Permittivity (ϵ_r):	36.10	35.30	2.27	5
		e"	16.3900	Conductivity (σ):	5.29	5.27	0.30	5
	Head 5825	e'	36.0700	Relative Permittivity (ϵ_r):	36.07	35.30	2.18	5
		e"	16.3900	Conductivity (σ):	5.31	5.27	0.73	5
6/3/2013	Body 5180	e'	48.0200	Relative Permittivity (ϵ_r):	48.02	49.05	-2.09	5
		e"	18.4400	Conductivity (σ):	5.31	5.27	0.75	5
	Body 5200	e'	47.9900	Relative Permittivity (ϵ_r):	47.99	49.02	-2.10	5
		e"	18.4400	Conductivity (σ):	5.33	5.29	0.70	5
	Body 5600	e'	47.3200	Relative Permittivity (ϵ_r):	47.32	48.48	-2.39	5
		e"	18.9100	Conductivity (σ):	5.89	5.76	2.21	5
	Body 5800	e'	46.9700	Relative Permittivity (ϵ_r):	46.97	48.20	-2.55	5
		e"	19.1100	Conductivity (σ):	6.16	6.00	2.72	5
	Body 5825	e'	46.9500	Relative Permittivity (ϵ_r):	46.95	48.20	-2.59	5
		e"	19.1200	Conductivity (σ):	6.19	6.00	3.21	5

SAR Room D

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
5/28/2013	Body 835	e'	54.0800	Relative Permittivity (ϵ_r):	54.08	55.20	-2.03	5
		e"	21.5300	Conductivity (σ):	1.00	0.97	3.05	5
	Body 820	e'	54.2000	Relative Permittivity (ϵ_r):	54.20	55.28	-1.95	5
		e"	21.6100	Conductivity (σ):	0.99	0.97	1.74	5
	Body 850	e'	53.9000	Relative Permittivity (ϵ_r):	53.90	55.16	-2.28	5
		e"	21.4800	Conductivity (σ):	1.02	0.99	2.84	5
5/28/2013	Head 835	e'	39.9300	Relative Permittivity (ϵ_r):	39.93	41.50	-3.78	5
		e"	19.2500	Conductivity (σ):	0.89	0.90	-0.69	5
	Head 820	e'	40.1400	Relative Permittivity (ϵ_r):	40.14	41.60	-3.52	5
		e"	19.2900	Conductivity (σ):	0.88	0.90	-2.11	5
	Head 850	e'	39.7400	Relative Permittivity (ϵ_r):	39.74	41.50	-4.24	5
		e"	19.2200	Conductivity (σ):	0.91	0.92	-0.72	5
5/30/2013	Body 835	e'	55.3400	Relative Permittivity (ϵ_r):	55.34	55.20	0.25	5
		e"	21.6300	Conductivity (σ):	1.00	0.97	3.53	5
	Body 820	e'	55.4800	Relative Permittivity (ϵ_r):	55.48	55.28	0.37	5
		e"	21.7000	Conductivity (σ):	0.99	0.97	2.16	5
	Body 850	e'	55.1900	Relative Permittivity (ϵ_r):	55.19	55.16	0.06	5
		e"	21.5800	Conductivity (σ):	1.02	0.99	3.32	5
5/30/2013	Head 835	e'	40.8300	Relative Permittivity (ϵ_r):	40.83	41.50	-1.61	5
		e"	19.2600	Conductivity (σ):	0.89	0.90	-0.64	5
	Head 820	e'	41.0300	Relative Permittivity (ϵ_r):	41.03	41.60	-1.38	5
		e"	19.2900	Conductivity (σ):	0.88	0.90	-2.11	5
	Head 850	e'	40.6300	Relative Permittivity (ϵ_r):	40.63	41.50	-2.10	5
		e"	19.2300	Conductivity (σ):	0.91	0.92	-0.67	5
6/2/2013	Head 835	e'	41.1100	Relative Permittivity (ϵ_r):	41.11	41.50	-0.94	5
		e"	19.5900	Conductivity (σ):	0.91	0.90	1.06	5
	Head 820	e'	41.3000	Relative Permittivity (ϵ_r):	41.30	41.60	-0.73	5
		e"	19.6300	Conductivity (σ):	0.90	0.90	-0.38	5
	Head 850	e'	40.9300	Relative Permittivity (ϵ_r):	40.93	41.50	-1.37	5
		e"	19.5000	Conductivity (σ):	0.92	0.92	0.72	5
6/2/2013	Body 835	e'	54.7000	Relative Permittivity (ϵ_r):	54.70	55.20	-0.91	5
		e"	21.6200	Conductivity (σ):	1.00	0.97	3.48	5
	Body 820	e'	54.8800	Relative Permittivity (ϵ_r):	54.88	55.28	-0.72	5
		e"	21.7100	Conductivity (σ):	0.99	0.97	2.21	5
	Body 850	e'	54.5700	Relative Permittivity (ϵ_r):	54.57	55.16	-1.06	5
		e"	21.5400	Conductivity (σ):	1.02	0.99	3.13	5
6/5/2013	Head 835	e'	41.7700	Relative Permittivity (ϵ_r):	41.77	41.50	0.65	5
		e"	19.9500	Conductivity (σ):	0.93	0.90	2.92	5
	Head 820	e'	41.9200	Relative Permittivity (ϵ_r):	41.92	41.60	0.76	5
		e"	19.9600	Conductivity (σ):	0.91	0.90	1.29	5
	Head 850	e'	41.5600	Relative Permittivity (ϵ_r):	41.56	41.50	0.14	5
		e"	19.8800	Conductivity (σ):	0.94	0.92	2.69	5
6/6/2013	Head 835	e'	41.9300	Relative Permittivity (ϵ_r):	41.93	41.50	1.04	5
		e"	20.0200	Conductivity (σ):	0.93	0.90	3.28	5
	Head 820	e'	42.1100	Relative Permittivity (ϵ_r):	42.11	41.60	1.22	5
		e"	20.0470	Conductivity (σ):	0.91	0.90	1.73	5
	Head 850	e'	41.7300	Relative Permittivity (ϵ_r):	41.73	41.50	0.55	5
		e"	19.9800	Conductivity (σ):	0.94	0.92	3.20	5

Tissue Dielectric Parameter Check Results (SAR Room D continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
6/6/2013	Body 835	e'	54.0600	Relative Permittivity (ϵ_r):	54.06	55.20	-2.07	5
		e"	21.8500	Conductivity (σ):	1.01	0.97	4.58	5
	Body 820	e'	54.1900	Relative Permittivity (ϵ_r):	54.19	55.28	-1.97	5
		e"	21.9100	Conductivity (σ):	1.00	0.97	3.15	5
	Body 850	e'	53.9000	Relative Permittivity (ϵ_r):	53.90	55.16	-2.28	5
		e"	21.7600	Conductivity (σ):	1.03	0.99	4.18	5
6/10/2013	Head 835	e'	43.3600	Relative Permittivity (ϵ_r):	43.36	41.50	4.48	5
		e"	20.3400	Conductivity (σ):	0.94	0.90	4.93	5
	Head 820	e'	43.5200	Relative Permittivity (ϵ_r):	43.52	41.60	4.61	5
		e"	20.4100	Conductivity (σ):	0.93	0.90	3.58	5
	Head 850	e'	43.1500	Relative Permittivity (ϵ_r):	43.15	41.50	3.98	5
		e"	20.3000	Conductivity (σ):	0.96	0.92	4.86	5
6/10/2013	Body 835	e'	54.8300	Relative Permittivity (ϵ_r):	54.83	55.20	-0.67	5
		e"	21.6600	Conductivity (σ):	1.01	0.97	3.67	5
	Body 820	e'	54.9600	Relative Permittivity (ϵ_r):	54.96	55.28	-0.57	5
		e"	21.7600	Conductivity (σ):	0.99	0.97	2.44	5
	Body 850	e'	54.6300	Relative Permittivity (ϵ_r):	54.63	55.16	-0.96	5
		e"	21.6200	Conductivity (σ):	1.02	0.99	3.51	5
6/13/2013	Head 835	e'	42.1900	Relative Permittivity (ϵ_r):	42.19	41.50	1.66	5
		e"	20.2000	Conductivity (σ):	0.94	0.90	4.21	5
	Head 820	e'	42.3300	Relative Permittivity (ϵ_r):	42.33	41.60	1.75	5
		e"	20.2500	Conductivity (σ):	0.92	0.90	2.76	5
	Head 850	e'	41.9700	Relative Permittivity (ϵ_r):	41.97	41.50	1.13	5
		e"	20.1600	Conductivity (σ):	0.95	0.92	4.13	5
6/13/2013	Body 835	e'	54.1500	Relative Permittivity (ϵ_r):	54.15	55.20	-1.90	5
		e"	21.8600	Conductivity (σ):	1.01	0.97	4.63	5
	Body 820	e'	54.2800	Relative Permittivity (ϵ_r):	54.28	55.28	-1.80	5
		e"	21.9200	Conductivity (σ):	1.00	0.97	3.20	5
	Body 850	e'	53.9600	Relative Permittivity (ϵ_r):	53.96	55.16	-2.17	5
		e"	21.8100	Conductivity (σ):	1.03	0.99	4.42	5
6/17/2013	Head 835	e'	40.4500	Relative Permittivity (ϵ_r):	40.45	41.50	-2.53	5
		e"	19.5300	Conductivity (σ):	0.91	0.90	0.75	5
	Head 820	e'	40.6400	Relative Permittivity (ϵ_r):	40.64	41.60	-2.31	5
		e"	19.5900	Conductivity (σ):	0.89	0.90	-0.59	5
	Head 850	e'	40.2700	Relative Permittivity (ϵ_r):	40.27	41.50	-2.96	5
		e"	19.4800	Conductivity (σ):	0.92	0.92	0.62	5
6/17/2013	Body 835	e'	53.0600	Relative Permittivity (ϵ_r):	53.06	55.20	-3.88	5
		e"	21.6900	Conductivity (σ):	1.01	0.97	3.82	5
	Body 820	e'	53.2000	Relative Permittivity (ϵ_r):	53.20	55.28	-3.76	5
		e"	21.7600	Conductivity (σ):	0.99	0.97	2.44	5
	Body 850	e'	52.8700	Relative Permittivity (ϵ_r):	52.87	55.16	-4.15	5
		e"	21.6100	Conductivity (σ):	1.02	0.99	3.46	5
6/20/2013	Head 835	e'	41.1500	Relative Permittivity (ϵ_r):	41.15	41.50	-0.84	5
		e"	19.6300	Conductivity (σ):	0.91	0.90	1.27	5
	Head 820	e'	41.3100	Relative Permittivity (ϵ_r):	41.31	41.60	-0.70	5
		e"	19.6600	Conductivity (σ):	0.90	0.90	-0.23	5
	Head 850	e'	40.9600	Relative Permittivity (ϵ_r):	40.96	41.50	-1.30	5
		e"	19.6300	Conductivity (σ):	0.93	0.92	1.40	5

Tissue Dielectric Parameter Check Results (SAR Room D continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
6/20/2013	Body 835	e'	52.9200	Relative Permittivity (ϵ_r):	52.92	55.20	-4.13	5
		e"	21.6400	Conductivity (σ):	1.00	0.97	3.58	5
	Body 820	e'	53.0400	Relative Permittivity (ϵ_r):	53.04	55.28	-4.05	5
		e"	21.6500	Conductivity (σ):	0.99	0.97	1.93	5
	Body 850	e'	52.7500	Relative Permittivity (ϵ_r):	52.75	55.16	-4.36	5
		e"	21.5800	Conductivity (σ):	1.02	0.99	3.32	5
6/24/2013	Head 835	e'	41.3800	Relative Permittivity (ϵ_r):	41.38	41.50	-0.29	5
		e"	19.6300	Conductivity (σ):	0.91	0.90	1.27	5
	Head 820	e'	41.5800	Relative Permittivity (ϵ_r):	41.58	41.60	-0.05	5
		e"	19.6300	Conductivity (σ):	0.90	0.90	-0.38	5
	Head 850	e'	41.2100	Relative Permittivity (ϵ_r):	41.21	41.50	-0.70	5
		e"	19.5400	Conductivity (σ):	0.92	0.92	0.93	5
6/24/2013	Body 835	e'	53.6200	Relative Permittivity (ϵ_r):	53.62	55.20	-2.86	5
		e"	21.3800	Conductivity (σ):	0.99	0.97	2.33	5
	Body 820	e'	53.7500	Relative Permittivity (ϵ_r):	53.75	55.28	-2.76	5
		e"	21.4400	Conductivity (σ):	0.98	0.97	0.94	5
	Body 850	e'	53.4700	Relative Permittivity (ϵ_r):	53.47	55.16	-3.06	5
		e"	21.3100	Conductivity (σ):	1.01	0.99	2.03	5
6/27/2013	Head 835	e'	42.2100	Relative Permittivity (ϵ_r):	42.21	41.50	1.71	5
		e"	20.0600	Conductivity (σ):	0.93	0.90	3.48	5
	Head 820	e'	42.4100	Relative Permittivity (ϵ_r):	42.41	41.60	1.94	5
		e"	20.1400	Conductivity (σ):	0.92	0.90	2.21	5
	Head 850	e'	42.0200	Relative Permittivity (ϵ_r):	42.02	41.50	1.25	5
		e"	19.9900	Conductivity (σ):	0.94	0.92	3.25	5
6/27/2013	Body 835	e'	53.6600	Relative Permittivity (ϵ_r):	53.66	55.20	-2.79	5
		e"	21.6000	Conductivity (σ):	1.00	0.97	3.39	5
	Body 820	e'	53.8100	Relative Permittivity (ϵ_r):	53.81	55.28	-2.65	5
		e"	21.6900	Conductivity (σ):	0.99	0.97	2.12	5
	Body 850	e'	53.4900	Relative Permittivity (ϵ_r):	53.49	55.16	-3.02	5
		e"	21.5700	Conductivity (σ):	1.02	0.99	3.27	5
7/1/2013	Head 835	e'	42.5800	Relative Permittivity (ϵ_r):	42.58	41.50	2.60	5
		e"	19.8900	Conductivity (σ):	0.92	0.90	2.61	5
	Head 820	e'	42.7600	Relative Permittivity (ϵ_r):	42.76	41.60	2.78	5
		e"	19.9300	Conductivity (σ):	0.91	0.90	1.14	5
	Head 850	e'	42.4000	Relative Permittivity (ϵ_r):	42.40	41.50	2.17	5
		e"	19.8400	Conductivity (σ):	0.94	0.92	2.48	5
7/1/2013	Body 835	e'	56.2800	Relative Permittivity (ϵ_r):	56.28	55.20	1.96	5
		e"	21.6100	Conductivity (σ):	1.00	0.97	3.44	5
	Body 820	e'	56.4000	Relative Permittivity (ϵ_r):	56.40	55.28	2.03	5
		e"	21.6900	Conductivity (σ):	0.99	0.97	2.12	5
	Body 850	e'	56.1400	Relative Permittivity (ϵ_r):	56.14	55.16	1.78	5
		e"	21.5400	Conductivity (σ):	1.02	0.99	3.13	5

SAR Room E

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
5/22/2013	Body 5180	e'	48.2100	Relative Permittivity (ϵ_r):	48.21	49.05	-1.71	5
		e"	18.4600	Conductivity (σ):	5.32	5.27	0.86	5
	Body 5200	e'	48.1400	Relative Permittivity (ϵ_r):	48.14	49.02	-1.79	5
		e"	18.4100	Conductivity (σ):	5.32	5.29	0.53	5
	Body 5600	e'	47.5100	Relative Permittivity (ϵ_r):	47.51	48.48	-2.00	5
		e"	18.6500	Conductivity (σ):	5.81	5.76	0.80	5
	Body 5800	e'	47.1600	Relative Permittivity (ϵ_r):	47.16	48.20	-2.16	5
		e"	18.8400	Conductivity (σ):	6.08	6.00	1.26	5
	Body 5825	e'	47.0800	Relative Permittivity (ϵ_r):	47.08	48.20	-2.32	5
		e"	18.8500	Conductivity (σ):	6.11	6.00	1.75	5
5/22/2013	Head 5180	e'	35.8200	Relative Permittivity (ϵ_r):	35.82	36.01	-0.54	5
		e"	16.2100	Conductivity (σ):	4.67	4.63	0.83	5
	Head 5200	e'	35.7900	Relative Permittivity (ϵ_r):	35.79	35.99	-0.56	5
		e"	16.2100	Conductivity (σ):	4.69	4.65	0.77	5
	Head 5600	e'	35.2400	Relative Permittivity (ϵ_r):	35.24	35.53	-0.83	5
		e"	16.3700	Conductivity (σ):	5.10	5.06	0.73	5
	Head 5800	e'	34.9500	Relative Permittivity (ϵ_r):	34.95	35.30	-0.99	5
		e"	16.4300	Conductivity (σ):	5.30	5.27	0.54	5
	Head 5825	e'	34.9400	Relative Permittivity (ϵ_r):	34.94	35.30	-1.02	5
		e"	16.4400	Conductivity (σ):	5.32	5.27	1.04	5
5/28/2013	Body 5180	e'	48.4800	Relative Permittivity (ϵ_r):	48.48	49.05	-1.16	5
		e"	18.1500	Conductivity (σ):	5.23	5.27	-0.83	5
	Body 5200	e'	48.4200	Relative Permittivity (ϵ_r):	48.42	49.02	-1.22	5
		e"	18.1300	Conductivity (σ):	5.24	5.29	-0.99	5
	Body 5600	e'	47.8100	Relative Permittivity (ϵ_r):	47.81	48.48	-1.38	5
		e"	18.6300	Conductivity (σ):	5.80	5.76	0.69	5
	Body 5800	e'	47.4300	Relative Permittivity (ϵ_r):	47.43	48.20	-1.60	5
		e"	18.8400	Conductivity (σ):	6.08	6.00	1.26	5
	Body 5825	e'	47.4200	Relative Permittivity (ϵ_r):	47.42	48.20	-1.62	5
		e"	18.8300	Conductivity (σ):	6.10	6.00	1.65	5
5/28/2013	Head 5180	e'	36.4600	Relative Permittivity (ϵ_r):	36.46	36.01	1.24	5
		e"	15.4800	Conductivity (σ):	4.46	4.63	-3.71	5
	Head 5200	e'	36.4300	Relative Permittivity (ϵ_r):	36.43	35.99	1.22	5
		e"	15.4500	Conductivity (σ):	4.47	4.65	-3.95	5
	Head 5600	e'	35.8700	Relative Permittivity (ϵ_r):	35.87	35.53	0.95	5
		e"	15.7200	Conductivity (σ):	4.89	5.06	-3.27	5
	Head 5800	e'	35.5700	Relative Permittivity (ϵ_r):	35.57	35.30	0.76	5
		e"	15.8200	Conductivity (σ):	5.10	5.27	-3.19	5
	Head 5825	e'	35.5700	Relative Permittivity (ϵ_r):	35.57	35.30	0.76	5
		e"	15.7900	Conductivity (σ):	5.11	5.27	-2.96	5
5/30/2013	Body 5180	e'	48.3500	Relative Permittivity (ϵ_r):	48.35	49.05	-1.42	5
		e"	18.5400	Conductivity (σ):	5.34	5.27	1.30	5
	Body 5200	e'	48.3300	Relative Permittivity (ϵ_r):	48.33	49.02	-1.41	5
		e"	18.5800	Conductivity (σ):	5.37	5.29	1.46	5
	Body 5600	e'	47.6900	Relative Permittivity (ϵ_r):	47.69	48.48	-1.62	5
		e"	19.0400	Conductivity (σ):	5.93	5.76	2.91	5
	Body 5800	e'	47.3200	Relative Permittivity (ϵ_r):	47.32	48.20	-1.83	5
		e"	19.2200	Conductivity (σ):	6.20	6.00	3.31	5
	Body 5825	e'	47.3200	Relative Permittivity (ϵ_r):	47.32	48.20	-1.83	5
		e"	19.2600	Conductivity (σ):	6.24	6.00	3.97	5

Tissue Dielectric Parameter Check Results (SAR Room E continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
6/3/2013	Head 5180	e'	35.5700	Relative Permittivity (ϵ_r):	35.57	36.01	-1.23	5
		e"	15.3300	Conductivity (σ):	4.42	4.63	-4.65	5
	Head 5200	e'	35.5300	Relative Permittivity (ϵ_r):	35.53	35.99	-1.28	5
		e"	15.3200	Conductivity (σ):	4.43	4.65	-4.76	5
	Head 5600	e'	35.0400	Relative Permittivity (ϵ_r):	35.04	35.53	-1.39	5
		e"	15.5700	Conductivity (σ):	4.85	5.06	-4.19	5
	Head 5800	e'	34.7400	Relative Permittivity (ϵ_r):	34.74	35.30	-1.59	5
		e"	15.6400	Conductivity (σ):	5.04	5.27	-4.29	5
	Head 5825	e'	34.6800	Relative Permittivity (ϵ_r):	34.68	35.30	-1.76	5
		e"	15.6600	Conductivity (σ):	5.07	5.27	-3.76	5
6/3/2013	Body 5180	e'	47.9600	Relative Permittivity (ϵ_r):	47.96	49.05	-2.22	5
		e"	18.3500	Conductivity (σ):	5.29	5.27	0.26	5
	Body 5200	e'	47.9200	Relative Permittivity (ϵ_r):	47.92	49.02	-2.24	5
		e"	18.3700	Conductivity (σ):	5.31	5.29	0.32	5
	Body 5600	e'	47.2900	Relative Permittivity (ϵ_r):	47.29	48.48	-2.45	5
		e"	18.8100	Conductivity (σ):	5.86	5.76	1.67	5
	Body 5800	e'	46.9000	Relative Permittivity (ϵ_r):	46.90	48.20	-2.70	5
		e"	18.9800	Conductivity (σ):	6.12	6.00	2.02	5
	Body 5825	e'	46.8900	Relative Permittivity (ϵ_r):	46.89	48.20	-2.72	5
		e"	19.0000	Conductivity (σ):	6.15	6.00	2.56	5
7/18/2013	Body 835	e'	56.1100	Relative Permittivity (ϵ_r):	56.11	55.20	1.65	5
		e"	21.8700	Conductivity (σ):	1.02	0.97	4.68	5
	Body 820	e'	55.9500	Relative Permittivity (ϵ_r):	55.95	55.28	1.22	5
		e"	21.8100	Conductivity (σ):	0.99	0.97	2.68	5
	Body 850	e'	55.8000	Relative Permittivity (ϵ_r):	55.80	55.16	1.17	5
		e"	21.7400	Conductivity (σ):	1.03	0.99	4.09	5

SAR Room F

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
5/22/2013	Head 5180	e'	36.4700	Relative Permittivity (ϵ_r):	36.47	36.01	1.27	5
		e"	16.1200	Conductivity (σ):	4.64	4.63	0.27	5
	Head 5200	e'	36.3900	Relative Permittivity (ϵ_r):	36.39	35.99	1.11	5
		e"	16.1100	Conductivity (σ):	4.66	4.65	0.15	5
	Head 5600	e'	35.8000	Relative Permittivity (ϵ_r):	35.80	35.53	0.75	5
		e"	16.3600	Conductivity (σ):	5.09	5.06	0.67	5
	Head 5800	e'	35.4800	Relative Permittivity (ϵ_r):	35.48	35.30	0.51	5
		e"	16.4600	Conductivity (σ):	5.31	5.27	0.73	5
	Head 5825	e'	35.4300	Relative Permittivity (ϵ_r):	35.43	35.30	0.37	5
		e"	16.4900	Conductivity (σ):	5.34	5.27	1.35	5
5/22/2013	Body 5180	e'	48.8200	Relative Permittivity (ϵ_r):	48.82	49.05	-0.46	5
		e"	18.1100	Conductivity (σ):	5.22	5.27	-1.05	5
	Body 5200	e'	48.7400	Relative Permittivity (ϵ_r):	48.74	49.02	-0.57	5
		e"	18.1000	Conductivity (σ):	5.23	5.29	-1.16	5
	Body 5600	e'	48.2500	Relative Permittivity (ϵ_r):	48.25	48.48	-0.47	5
		e"	18.2700	Conductivity (σ):	5.69	5.76	-1.25	5
	Body 5800	e'	48.0500	Relative Permittivity (ϵ_r):	48.05	48.20	-0.31	5
		e"	18.4600	Conductivity (σ):	5.95	6.00	-0.78	5
	Body 5825	e'	47.9700	Relative Permittivity (ϵ_r):	47.97	48.20	-0.48	5
		e"	18.4900	Conductivity (σ):	5.99	6.00	-0.19	5
5/28/2013	Body 5180	e'	50.1000	Relative Permittivity (ϵ_r):	50.10	49.05	2.15	5
		e"	18.5900	Conductivity (σ):	5.35	5.27	1.57	5
	Body 5200	e'	50.0600	Relative Permittivity (ϵ_r):	50.06	49.02	2.12	5
		e"	18.5500	Conductivity (σ):	5.36	5.29	1.30	5
	Body 5600	e'	49.3900	Relative Permittivity (ϵ_r):	49.39	48.48	1.88	5
		e"	19.0700	Conductivity (σ):	5.94	5.76	3.07	5
	Body 5800	e'	48.9600	Relative Permittivity (ϵ_r):	48.96	48.20	1.58	5
		e"	19.3000	Conductivity (σ):	6.22	6.00	3.74	5
	Body 5825	e'	48.9800	Relative Permittivity (ϵ_r):	48.98	48.20	1.62	5
		e"	19.2800	Conductivity (σ):	6.24	6.00	4.08	5
5/28/2013	Head 5180	e'	37.2300	Relative Permittivity (ϵ_r):	37.23	36.01	3.38	5
		e"	15.4200	Conductivity (σ):	4.44	4.63	-4.09	5
	Head 5200	e'	37.1800	Relative Permittivity (ϵ_r):	37.18	35.99	3.31	5
		e"	15.3800	Conductivity (σ):	4.45	4.65	-4.39	5
	Head 5600	e'	36.6200	Relative Permittivity (ϵ_r):	36.62	35.53	3.06	5
		e"	15.6200	Conductivity (σ):	4.86	5.06	-3.88	5
	Head 5800	e'	36.3400	Relative Permittivity (ϵ_r):	36.34	35.30	2.95	5
		e"	15.7300	Conductivity (σ):	5.07	5.27	-3.74	5
	Head 5825	e'	36.3300	Relative Permittivity (ϵ_r):	36.33	35.30	2.92	5
		e"	15.7100	Conductivity (σ):	5.09	5.27	-3.45	5
5/30/2013	Body 5180	e'	48.6000	Relative Permittivity (ϵ_r):	48.60	49.05	-0.91	5
		e"	18.7600	Conductivity (σ):	5.40	5.27	2.50	5
	Body 5200	e'	48.5600	Relative Permittivity (ϵ_r):	48.56	49.02	-0.94	5
		e"	18.7900	Conductivity (σ):	5.43	5.29	2.61	5
	Body 5600	e'	47.8900	Relative Permittivity (ϵ_r):	47.89	48.48	-1.21	5
		e"	19.2100	Conductivity (σ):	5.98	5.76	3.83	5
	Body 5800	e'	47.5800	Relative Permittivity (ϵ_r):	47.58	48.20	-1.29	5
		e"	19.3900	Conductivity (σ):	6.25	6.00	4.22	5
	Body 5825	e'	47.5600	Relative Permittivity (ϵ_r):	47.56	48.20	-1.33	5
		e"	19.4100	Conductivity (σ):	6.29	6.00	4.78	5

Tissue Dielectric Parameter Check Results (SAR Room F continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
6/3/2013	Head 5180	e'	35.6000	Relative Permittivity (ϵ_r):	35.60	36.01	-1.15	5
		e"	16.0800	Conductivity (σ):	4.63	4.63	0.02	5
	Head 5200	e'	35.5400	Relative Permittivity (ϵ_r):	35.54	35.99	-1.25	5
		e"	16.1000	Conductivity (σ):	4.66	4.65	0.09	5
	Head 5600	e'	34.8400	Relative Permittivity (ϵ_r):	34.84	35.53	-1.95	5
		e"	16.3500	Conductivity (σ):	5.09	5.06	0.61	5
	Head 5800	e'	34.4500	Relative Permittivity (ϵ_r):	34.45	35.30	-2.41	5
		e"	16.3900	Conductivity (σ):	5.29	5.27	0.30	5
	Head 5825	e'	34.4000	Relative Permittivity (ϵ_r):	34.40	35.30	-2.55	5
		e"	16.4100	Conductivity (σ):	5.32	5.27	0.85	5
6/3/2013	Body 5180	e'	45.7700	Relative Permittivity (ϵ_r):	45.77	49.05	-6.68	5
		e"	18.4700	Conductivity (σ):	5.32	5.27	0.92	5
	Body 5200	e'	45.7200	Relative Permittivity (ϵ_r):	45.72	49.02	-6.73	5
		e"	18.4900	Conductivity (σ):	5.35	5.29	0.97	5
	Body 5600	e'	45.1000	Relative Permittivity (ϵ_r):	45.10	48.48	-6.97	5
		e"	18.8800	Conductivity (σ):	5.88	5.76	2.04	5
	Body 5800	e'	44.7100	Relative Permittivity (ϵ_r):	44.71	48.20	-7.24	5
		e"	18.9900	Conductivity (σ):	6.12	6.00	2.07	5
	Body 5825	e'	44.7000	Relative Permittivity (ϵ_r):	44.70	48.20	-7.26	5
		e"	19.0000	Conductivity (σ):	6.15	6.00	2.56	5
6/17/2013	Body 5180	e'	48.5000	Relative Permittivity (ϵ_r):	48.50	49.05	-1.11	5
		e"	18.4100	Conductivity (σ):	5.30	5.27	0.59	5
	Body 5200	e'	48.4600	Relative Permittivity (ϵ_r):	48.46	49.02	-1.14	5
		e"	18.3900	Conductivity (σ):	5.32	5.29	0.43	5
	Body 5600	e'	47.8300	Relative Permittivity (ϵ_r):	47.83	48.48	-1.34	5
		e"	18.8000	Conductivity (σ):	5.85	5.76	1.61	5
	Body 5800	e'	47.4900	Relative Permittivity (ϵ_r):	47.49	48.20	-1.47	5
		e"	19.0100	Conductivity (σ):	6.13	6.00	2.18	5
	Body 5825	e'	47.4400	Relative Permittivity (ϵ_r):	47.44	48.20	-1.58	5
		e"	19.0100	Conductivity (σ):	6.16	6.00	2.62	5

11. System Performance 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 remeasured or sooner when marginal liquid parameters are used at the beginning of a series of measurements.

11.1. System Performance Check Measurement Conditions

- The measurements were performed in the flat section of the TWIN SAM or ELI phantom, shell thickness: 2.0 ±0.2 mm (bottom plate) filled with Body or Head simulating liquid of the following parameters.
- The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm ± 0.5 cm for SAR measurements ≤ 3 GHz and ≥ 10.0 cm ± 0.5 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.

11.2. Reference SAR Values for System Performance Check

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 (mW/g)		
				1g/10g	Head	Body
D750V3	1071	10/05/12	750	1g	8.29	8.79
				10g	5.49	5.82
D835V2	4d002	10/24/2012	835	1g	9.58	9.48
				10g	6.28	6.26
D835V2	4d142	10/04/2012	835	1g	9.45	9.5
				10g	6.23	6.29
D1750V2	1050	4/20/2013	1750	1g	36.5	37.1
				10g	19.4	20.1
D1900V2	5d163	10/04/2012	1900	1g	39.4	39.6
				10g	20.7	21.1
D2450V2	899	10/5/12	2450	1g	53.6	51.7
				10g	25.0	24.3
D5GHV2	1138	10/9/2012	5200	1g	79.5	73.2
				10g	22.8	20.4
			5500	1g	83.6	77.9
				10g	23.8	21.7
			5800	1g	78.7	72.8
				10g	22.4	20.1
D5GHV2	1003	9/18/2012	5200	1g	76.5	74.8
				10g	21.9	20.9
			5600	1g	82.8	79.0
				10g	23.6	22.0
			5800	1g	76.9	77.0
				10g	22.0	21.4

11.3. System Performance 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 Room A

Date Tested	System Dipole		T.S. Liquid		Measured Results			Target (Ref. Value)	Delta ±10 %	Est./Zoom Ratio ±3 %	Plots No.
	Type	Serial #			Area Scan	Zoom Scan	Normalize to 1 W				
5/28/2013	D1750V2	1050	Body	1g	3.81	3.73	37.30	37.10	0.54	2.10	
				10g	1.98	1.99	19.90	20.10	-1.00		
5/28/2013	D1750V2	1050	Head	1g	3.65	3.48	34.80	36.50	-4.66	4.66	
				10g	1.95	1.85	18.50	19.40	-4.64		
5/30/2013	D1750V2	1050	Body	1g	3.90	3.83	38.30	37.10	3.23	1.79	
				10g	2.04	2.04	20.40	20.10	1.49		
5/30/2013	D1750V2	1050	Head	1g	3.72	3.53	35.30	36.50	-3.29	5.11	
				10g	1.99	1.87	18.70	19.40	-3.61		
5/30/2013	D750V3	1071	Head	1g	0.86	0.84	8.39	8.29	1.21	2.56	
				10g	0.59	0.55	5.50	5.49	0.18		
5/30/2013	D750V3	1071	Body	1g	0.94	0.92	9.17	8.79	4.32	2.03	
				10g	0.63	0.61	6.10	5.82	4.81		
6/3/2013	D750V3	1071	Head	1g	0.84	0.83	8.29	8.29	0.00	1.43	
				10g	0.58	0.55	5.45	5.49	-0.73		
6/3/2013	D750V3	1071	Body	1g	0.86	0.85	8.48	8.79	-3.53	0.82	
				10g	0.58	0.56	5.63	5.82	-3.26		
6/4/2013	D1750V2	1050	Head	1g	3.79	3.63	36.30	36.50	-0.55	4.22	
				10g	2.03	1.91	19.10	19.40	-1.55		
6/6/2013	D750V3	1071	Head	1g	0.79	0.81	8.10	8.29	-2.29	-2.14	
				10g	0.54	0.57	5.70	5.49	3.83		
6/6/2013	D750V3	1071	Body	1g	0.88	0.87	8.66	8.79	-1.48	1.93	
				10g	0.60	0.58	5.77	5.82	-0.86		
6/6/2013	D1750V2	1050	Head	1g	3.75	3.61	36.10	37.10	-2.70	3.73	
				10g	1.99	1.87	18.70	20.10	-6.97		
6/6/2013	D1750V2	1050	Body	1g	3.90	3.83	38.30	36.50	4.93	1.79	
				10g	2.03	2.03	20.30	19.40	4.64		
6/10/2013	D1750V2	1050	Head	1g	3.89	3.72	37.20	37.10	0.27	4.37	
				10g	2.07	1.92	19.20	20.10	-4.48		
6/10/2013	D1750V2	1050	Body	1g	3.73	3.53	35.30	36.50	-3.29	5.36	
				10g	1.93	1.86	18.60	19.40	-4.12		
6/13/2013	D1750V2	1050	Body	1g	4.15	3.95	39.50	36.50	8.22	4.82	
				10g	2.15	2.08	20.80	19.40	7.22		
6/24/2013	D1750V2	1050	Body	1g	4.06	3.98	39.80	36.50	**9.04**	1.97	1, 2
				10g	2.11	2.11	21.10	19.40	8.76		
6/27/2013	D750V2	1071	Body	1g	0.82	0.81	8.05	8.79	**-8.42**	1.59	3,4
				10g	0.55	0.54	5.37	5.82	-7.73		
7/15/2013	D835V2	4d142	Head	1g	1.01	1.00	10.00	9.45	**5.82**	0.99	5,6
				10g	0.68	0.65	6.53	6.23	4.82		
7/18/2013	D835V2	4d142	Head	1g	0.95	0.94	9.43	9.45	-0.21	0.53	
				10g	0.64	0.62	6.18	6.23	-0.80		

SAR Room B

Date Tested	System Dipole		T.S. Liquid		Measured Results			Target (Ref. Value)	Delta ±10 %	Est./Zoom Ratio ±3 %	Plots No.
	Type	Serial #			Area Scan	Zoom Scan	Normalize to 1 W				
5/28/2013	D1900V2	5d163	Head	1g	3.97	3.91	39.1	39.4	-0.76	1.51	
				10g	2.09	2.02	20.2	20.7	-2.42		
5/28/2013	D1900V2	5d163	Body	1g	4.01	3.94	39.4	39.6	-0.51	1.75	
				10g	2.03	2.04	20.4	21.1	-3.32		
5/30/2013	D1900V2	5d163	Head	1g	4.00	4.03	40.3	39.4	2.28	-0.75	
				10g	2.10	2.07	20.7	20.7	0.00		
5/30/2013	D1900V2	5d163	Body	1g	4.16	3.96	39.6	39.6	0.00	4.81	
				10g	2.08	2.05	20.5	21.1	-2.84		
6/3/2013	D1900V2	5d163	Head	1g	3.89	3.96	39.6	39.4	0.51	-1.80	
				10g	2.05	2.04	20.4	20.7	-1.45		
6/2/2013	D1900V2	5d163	Body	1g	4.05	4.02	40.2	39.6	1.52	0.74	
				10g	2.05	2.09	20.9	21.1	-0.95		
6/5/2013	D1900V2	5d163	Body	1g	4.13	4.05	40.5	39.6	2.27	1.94	
				10g	2.13	2.08	20.8	21.1	-1.42		
6/6/2013	D1900V2	5d163	Head	1g	4.09	3.98	39.8	39.4	1.02	2.69	
				10g	2.11	2.07	20.7	20.7	0.00		
6/6/2013	D1900V2	5d163	Body	1g	4.09	4.06	40.6	39.6	2.53	0.73	
				10g	2.06	2.11	21.1	21.1	0.00		
6/10/2013	D1900V2	5d163	Head	1g	4.24	4.16	41.6	39.4	5.58	1.89	
				10g	2.24	2.13	21.3	20.7	2.90		
6/10/2013	D1900V2	5d163	Body	1g	4.06	4.03	40.3	39.6	1.77	0.74	
				10g	2.06	2.08	20.8	21.1	-1.42		
6/13/2013	D1900V2	5d163	Body	1g	4.17	4.13	41.30	39.6	4.29	0.96	
				10g	2.10	2.15	21.50	21.1	1.90		
6/17/2013	D1900V2	5d163	Head	1g	4.22	4.10	41.00	39.4	4.06	2.84	
				10g	2.22	2.11	21.10	20.7	1.93		
6/17/2013	D1900V2	5d163	Body	1g	4.20	4.18	41.80	39.6	5.56	0.48	
				10g	2.15	2.16	21.60	21.1	2.37		
6/24/2013	D1900V2	5d163	Head	1g	4.20	4.21	42.10	39.4	**6.85**	-0.24	7,8
				10g	2.22	2.17	21.70	20.7	4.83		
6/24/2013	D1900V2	5d163	Body	1g	4.20	4.18	41.80	39.6	5.56	0.48	
				10g	2.14	2.16	21.60	21.1	2.37		

SAR Room C

Date Tested	System Dipole		T.S. Liquid		Measured Results			Target (Ref. Value)	Delta ±10 %	Est./Zoom Ratio ±3 %	Plots No.
	Type	Serial #			Area Scan	Zoom Scan	Normalize to 1 W				
5/22/2013	D2450V2	899	Head	1g	5.32	5.23	52.3	53.6	-2.43	1.69	
				10g	2.33	2.38	23.8	25.0	-4.80		
5/23/2013	D2450V2	899	Body	1g	5.57	5.52	55.2	51.7	6.77	0.90	9,10
				10g	2.41	2.54	25.4	24.3	4.53		
5/24/2013	D5GHzV2 (5.8 GHz)	1138	Body	1g	6.68	7.19	71.9	72.8	-1.24	-7.63	
				10g	1.80	2.01	20.1	20.1	0.00		
5/24/2013	D5GHzV2 (5.8 GHz)	1138	Head	1g	7.22	7.93	79.3	78.7	0.76	-9.83	
				10g	2.01	2.26	22.6	22.4	0.89		
5/28/2013	D5GHzV2 (5.8 GHz)	1138	Body	1g	7.42	7.01	70.1	72.8	-3.71	5.53	
				10g	2.00	1.96	19.6	20.1	-2.49		
5/28/2013	D5GHzV2 (5.8 GHz)	1138	Head	1g	7.20	7.38	73.8	78.7	-6.23	-2.50	
				10g	2.01	2.11	21.1	22.4	-5.80		
5/30/2013	D5GHzV2 (5.8 GHz)	1138	Body	1g	6.03	6.66	66.6	72.8	-8.52	-10.45	11,12
				10g	1.70	1.89	18.9	20.1	-5.97		
6/3/2013	D5GHzV2 (5.8 GHz)	1138	Head	1g	7.25	7.60	76.0	78.7	-3.43	-4.83	
				10g	2.03	2.16	21.6	22.4	-3.57		
6/3/2013	D5GHzV2 (5.8 GHz)	1138	Body	1g	6.68	7.34	73.4	72.8	0.82	-9.88	
				10g	1.84	2.05	20.5	20.1	1.99		

SAR Room D

Date Tested	System Dipole		T.S. Liquid		Measured Results			Target (Ref. Value)	Delta ±10 %	Est./Zoom Ratio ±3 %	Plots No.
	Type	Serial #			Area Scan	Zoom Scan	Normalize to 1 W				
5/28/2013	D835V2	4d142	Body	1g	0.97	0.96	9.60	9.50	1.05	0.83	
				10g	0.65	0.63	6.33	6.29	0.64		
5/28/2013	D835V2	4d142	Head	1g	0.90	0.89	8.94	9.45	-5.40	0.89	
				10g	0.61	0.59	5.85	6.23	-6.10		
5/30/2013	D835V2	4d142	Body	1g	1.00	0.97	9.74	9.50	2.53	2.60	
				10g	0.67	0.64	6.43	6.29	2.23		
5/30/2013	D835V2	4d142	Head	1g	1.00	0.97	9.74	9.45	3.07	2.60	
				10g	0.67	0.64	6.43	6.23	3.21		
6/2/2013	D835V2	4d142	Body	1g	0.94	0.93	9.26	9.50	-2.53	1.28	
				10g	0.63	0.61	6.12	6.29	-2.70		
6/2/2013	D835V2	4d142	Head	1g	0.94	0.92	9.19	9.45	-2.75	2.23	
				10g	0.63	0.60	6.02	6.23	-3.37		
6/5/2013	D835V2	4d142	Head	1g	1.00	0.98	9.76	9.45	3.28	2.40	
				10g	0.67	0.64	6.40	6.23	2.73		
6/6/2013	D835V2	4d142	Head	1g	0.96	0.98	9.80	9.45	3.70	-1.98	
				10g	0.65	0.64	6.42	6.23	3.05		
6/6/2013	D835V2	4d142	Body	1g	1.03	1.02	10.2	9.50	7.37	0.97	
				10g	0.70	0.67	6.71	6.29	6.68		
6/10/2013	D835V2	4d142	Head	1g	0.99	0.97	9.67	9.45	2.33	2.22	
				10g	0.67	0.63	6.34	6.23	1.77		
6/10/2013	D835V2	4d142	Body	1g	0.97	0.95	9.47	9.50	-0.32	1.97	
				10g	0.65	0.62	6.24	6.29	-0.79		
6/13/2013	D835V2	4d142	Head	1g	1.01	1.00	10.0	9.45	5.82	0.99	
				10g	0.07	0.66	6.57	6.23	5.46		
6/13/2013	D835V2	4d142	Body	1g	1.04	1.03	10.3	9.50	8.42	0.96	13,14
				10g	0.70	0.68	6.78	6.29	7.79		
6/17/2013	D835V2	4d142	Head	1g	1.02	0.96	9.57	9.45	1.27	6.18	
				10g	0.68	0.63	6.27	6.23	0.64		
6/17/2013	D835V2	4d142	Body	1g	1.00	0.98	9.80	9.50	3.16	1.71	
				10g	0.67	0.65	6.47	6.29	2.86		
6/20/2013	D835V2	4d142	Head	1g	0.95	0.92	9.16	9.45	-3.07	3.68	
				10g	0.64	0.60	6.00	6.23	-3.69		
6/20/2013	D835V2	4d142	Body	1g	0.95	0.94	9.36	9.50	-1.47	1.78	
				10g	0.64	0.62	6.17	6.29	-1.91		
6/24/2013	D835V2	4d142	Head	1g	0.97	0.95	9.50	9.45	0.53	1.96	
				10g	0.65	0.62	6.23	6.23	0.00		
6/24/2013	D835V2	4d142	Body	1g	0.98	0.96	9.60	9.50	1.05	1.74	
				10g	0.66	0.63	6.33	6.29	0.64		
6/27/2013	D835V2	4d002	Head	1g	1.00	0.97	9.68	9.58	1.04	3.10	
				10g	0.67	0.63	6.34	6.28	0.96		
6/27/2013	D835V2	4d002	Body	1g	1.01	0.98	9.84	9.48	3.80	2.57	15,16
				10g	0.68	0.65	6.48	6.26	3.51		
7/1/2013	D835V2	4d142	Head	1g	0.90	0.91	9.08	9.45	-3.92	-0.67	
				10g	0.61	0.60	5.95	6.23	-4.49		
7/1/2013	D835V2	4d142	Body	1g	0.97	0.92	9.24	9.50	-2.74	5.13	
				10g	0.65	0.61	6.09	6.29	-3.18		
7/18/2013	D835V2	4d142	Body	1g	0.98	0.92	9.23	9.50	-2.84	6.10	
				10g	0.66	0.61	6.09	6.29	-3.18		

SAR Room E

Date Tested	System Dipole		T.S. Liquid		Measured Results			Target (Ref. Value)	Delta ±10 %	Est./Zoom Ratio ±3 %	Plots No.
	Type	Serial #			Area Scan	Zoom Scan	Normalize to 1 W				
5/22/2013	D5GHV2 (5.2 GHz)	1138	Body	1g	6.92	7.54	75.4	73.2	3.01	-8.96	
				10g	1.96	2.14	21.4	20.4	4.90		
5/22/2013	D5GHV2 (5.2 GHz)	1138	Head	1g	7.47	7.80	78.0	79.5	-1.89	-4.42	
				10g	2.04	2.20	22.0	22.8	-3.51		
5/28/2013	D5GHV2 (5.2 GHz)	1138	Body	1g	6.96	7.55	75.5	73.2	3.14	-8.48	
				10g	1.92	2.15	21.5	20.4	5.39		
5/28/2013	D5GHV2 (5.2 GHz)	1138	Head	1g	7.45	7.51	75.1	79.5	-5.53	-0.81	
				10g	2.07	2.13	21.3	22.8	-6.58		
5/30/2013	D5GHV2 (5.2 GHz)	1138	Body	1g	7.38	7.80	78.0	73.2	6.56	-5.69	
				10g	2.03	2.20	22.0	20.4	7.84		
6/3/2013	D5GHV2 (5.2 GHz)	1138	Head	1g	7.32	7.38	73.8	79.5	**-7.17**	-0.82	17,18
				10g	2.00	2.09	20.9	22.8	-8.33		
6/3/2013	D5GHV2 (5.2 GHz)	1138	Body	1g	7.14	7.46	74.6	73.2	1.91	-4.48	
				10g	1.97	2.13	21.3	20.4	4.41		

SAR Room F

Date Tested	System Dipole		T.S. Liquid		Measured Results			Target (Ref. Value)	Delta ±10 %	Est./Zoom Ratio ±3 %	Plots No.
	Type	Serial #			Area Scan	Zoom Scan	Normalize to 1 W				
5/22/2013	D5GHV2 (5.5 GHz)	1138	Head	1g	8.15	8.30	83.0	83.6	-0.72	-1.84	
				10g	2.21	2.38	23.8	23.8	0.00		
5/22/2013	D5GHV2 (5.6 GHz)	1138	Head	1g	7.23	7.76	77.6	83.6	**-7.18**	-7.33	19,20
				10g	1.96	2.22	22.2	23.8	-6.72		
5/22/2013	D5GHV2 (5.5 GHz)	1138	Body	1g	7.34	7.65	76.5	77.9	-1.80	-4.22	
				10g	2.01	2.17	21.7	21.7	0.00		
5/22/2013	D5GHV2 (5.6 GHz)	1138	Body	1g	7.23	7.41	74.1	77.9	-4.88	-2.49	
				10g	1.97	2.09	20.9	21.7	-3.69		
5/28/2013	D5GHV2 (5.5 GHz)	1138	Head	1g	7.44	7.93	79.3	83.6	**-5.14**	-6.59	21,22
				10g	2.04	2.29	22.9	23.8	-3.78		
5/28/2013	D5GHV2 (5.6 GHz)	1138	Head	1g	7.45	8.07	80.7	83.6	-3.47	-8.32	
				10g	2.01	2.31	23.1	23.8	-2.94		
5/28/2013	D5GHV2 (5.5 GHz)	1138	Body	1g	8.74	7.59	75.9	77.9	-2.57	13.16	
				10g	2.38	2.15	21.5	21.7	-0.92		
5/28/2013	D5GHV2 (5.6 GHz)	1138	Body	1g	8.85	7.51	75.1	77.9	-3.59	15.14	
				10g	2.39	2.12	21.2	21.7	-2.30		
5/30/2013	D5GHV2 (5.5 GHz)	1138	Body	1g	9.46	8.00	80.0	77.9	2.70	15.43	
				10g	2.58	2.27	22.7	21.7	4.61		
5/30/2013	D5GHV2 (5.6 GHz)	1138	Body	1g	9.07	8.10	81.0	77.9	3.98	10.69	
				10g	2.46	2.28	22.8	21.7	5.07		
6/3/2013	D5GHV2 (5.5 GHz)	1138	Head	1g	7.61	8.07	80.7	83.6	-3.47	-6.04	
				10g	2.11	2.31	23.1	23.8	-2.94		
6/3/2013	D5GHV2 (5.6 GHz)	1138	Head	1g	7.37	8.48	84.8	83.6	1.44	-15.06	
				10g	2.03	2.42	24.2	23.8	1.68		
6/3/2013	D5GHV2 (5.5 GHz)	1138	Body	1g	7.53	7.68	76.8	77.9	-1.41	-1.99	
				10g	2.06	2.18	21.8	21.7	0.46		
6/3/2013	D5GHV2 (5.6 GHz)	1138	Body	1g	7.65	7.77	77.7	77.9	-0.26	-1.57	
				10g	2.08	2.20	22.0	21.7	1.38		
6/17/2013	D5GHV2 (5.6 GHz)	1003	Body	1g	7.69	7.78	77.8	79.0	-1.52	-1.17	23,24
				10g	2.09	2.18	21.8	22.0	-0.91		

12. SAR Test Results

12.1. GSM850

12.1.1. Head Exposure Conditions

Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	Voice	190	836.6	33.2	33.2	0.466	0.466	0.333	0.333	
Left Tilt	UAT	Voice	190	836.6	33.2	33.2	0.325	0.325	0.196	0.196	
Right Touch	UAT	Voice	190	836.6	33.2	33.2	0.353	0.353	0.235	0.235	
Right Tilt	UAT	Voice	190	836.6	33.2	33.2	0.246	0.246	0.153	0.153	
Left Touch	UAT	GPRS 2 slots	190	836.6	32.2	31.4	0.493	0.593	0.351	0.422	
Left Tilt	UAT	GPRS 2 slots	190	836.6	32.2	31.4	0.322	0.387	0.191	0.230	
Right Touch	UAT	GPRS 2 slots	190	836.6	32.2	31.4	0.479	0.576	0.339	0.408	
Right Tilt	UAT	GPRS 2 slots	190	836.6	32.2	31.4	0.230	0.277	0.149	0.179	
Left Touch	LAT	Voice	190	836.6	33.5	33.3	0.592	0.620	0.442	0.463	
Left Tilt	LAT	Voice	190	836.6	33.5	33.3	0.333	0.349	0.250	0.262	
Right Touch	LAT	Voice	190	836.6	33.5	33.3	0.550	0.576	0.412	0.431	
Right Tilt	LAT	Voice	190	836.6	33.5	33.3	0.348	0.364	0.263	0.275	
Left Touch	LAT	GPRS 2 slots	128	824.2	32.0	31.8	0.752	0.787	0.563	0.590	
Left Touch	LAT	GPRS 2 slots	190	836.6	32.0	31.8	0.804	0.842	0.602	0.630	
Left Touch	LAT	GPRS 2 slots	251	848.8	32.0	31.8	0.853	0.893	0.637	0.667	1
Left Tilt	LAT	GPRS 2 slots	190	836.6	32.0	31.8	0.517	0.541	0.390	0.408	
Right Touch	LAT	GPRS 2 slots	190	836.6	32.0	31.8	0.748	0.783	0.554	0.580	
Right Tilt	LAT	GPRS 2 slots	190	836.6	32.0	31.8	0.580	0.607	0.437	0.458	

12.1.2. Body-worn Accessory Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	Voice	5	190	836.6	33.2	33.2	0.250	0.250	0.183	0.183	
Front	UAT	Voice	5	190	836.6	33.2	33.2	0.205	0.205	0.156	0.156	
Rear	LAT	Voice	5	128	824.2	33.5	33.4	0.767	0.785	0.575	0.588	
Rear	LAT	Voice	5	190	836.6	33.5	33.4	0.913	0.934	0.686	0.702	2
Rear	LAT	Voice	5	251	848.8	33.5	33.4	0.862	0.882	0.647	0.662	
Front	LAT	Voice	5	128	824.2	33.5	33.4	0.825	0.844	0.636	0.651	
Front	LAT	Voice	5	190	836.6	33.5	33.4	0.860	0.880	0.663	0.678	
Front	LAT	Voice	5	251	848.8	33.5	33.4	0.903	0.924	0.694	0.710	

12.1.3. Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	GPRS 2 slots	5	190	836.6	32.2	31.8	0.315	0.345	0.234	0.257	
Front	UAT	GPRS 2 slots	5	190	836.6	32.2	31.8	0.253	0.277	0.193	0.212	
Edge 1	UAT	GPRS 2 slots	5	190	836.6	32.2	31.8	0.120	0.132	0.055	0.060	
Edge 2	UAT	GPRS 2 slots	5	190	836.6	32.2	31.8	0.428	0.469	0.286	0.314	
Edge 4	UAT	GPRS 2 slots	5	190	836.6	32.2	31.8	0.193	0.212	0.127	0.139	
Rear	LAT	GPRS 2 slots	5	128	824.2	31.25	31.25	1.140	1.140	0.832	0.832	
Rear	LAT	GPRS 2 slots	5	190	836.6	31.25	31.25	1.150	1.150	0.849	0.849	
Rear	LAT	GPRS 2 slots	5	251	848.8	31.25	31.25	1.140	1.140	0.829	0.829	
Front	LAT	GPRS 2 slots	5	128	824.2	31.25	31.25	1.140	1.140	0.876	0.876	
Front	LAT	GPRS 2 slots	5	190	836.6	31.25	31.25	1.140	1.140	0.875	0.875	
Front	LAT	GPRS 2 slots	5	251	848.8	31.25	31.25	1.150	1.150	0.884	0.884	
Edge 2	LAT	GPRS 2 slots	5	190	836.6	31.25	31.25	0.893	0.893	0.590	0.590	
Edge 3	LAT	GPRS 2 slots	5	190	836.6	31.25	31.25	0.265	0.265	0.136	0.136	
Edge 4	LAT	GPRS 2 slots	5	128	824.2	31.25	31.25	1.120	1.120	0.753	0.753	
Edge 4	LAT	GPRS 2 slots	5	190	836.6	31.25	31.25	1.190	**1.190**	0.794	0.794	3
Edge 4	LAT	GPRS 2 slots	5	251	848.8	31.25	31.25	1.170	1.170	0.783	0.783	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.2. GSM1900

12.2.1. Head Exposure Conditions

Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	Voice	661	1880.0	30.9	30.9	0.494	0.494	0.256	0.256	
Left Tilt	UAT	Voice	661	1880.0	30.9	30.9	0.521	0.521	0.275	0.275	
Right Touch	UAT	Voice	512	1850.2	30.9	30.9	0.923	0.923	0.497	0.497	
Right Touch	UAT	Voice	661	1880.0	30.9	30.9	0.888	0.888	0.473	0.473	
Right Touch	UAT	Voice	810	1909.8	30.9	30.9	0.775	0.775	0.417	0.417	
Right Tilt	UAT	Voice	512	1850.2	30.9	30.9	0.875	0.875	0.462	0.462	
Right Tilt	UAT	Voice	661	1880.0	30.9	30.9	0.821	0.821	0.428	0.428	
Right Tilt	UAT	Voice	810	1909.8	30.9	30.9	0.768	0.768	0.395	0.395	
Left Touch	UAT	GPRS 2 slots	661	1880.0	29.9	29.9	0.736	0.736	0.408	0.408	
Left Tilt	UAT	GPRS 2 slots	661	1880.0	29.9	29.9	0.745	0.745	0.396	0.396	
Right Touch	UAT	GPRS 2 slots	512	1850.2	29.9	29.9	0.943	0.943	0.503	0.503	
Right Touch	UAT	GPRS 2 slots	661	1880.0	29.9	29.9	0.990	0.990	0.528	0.528	
Right Touch	UAT	GPRS 2 slots	810	1909.8	29.9	29.7	0.782	0.819	0.415	0.435	
Right Tilt	UAT	GPRS 2 slots	512	1850.2	29.9	29.9	0.977	0.977	0.516	0.516	
Right Tilt	UAT	GPRS 2 slots	661	1880.0	29.9	29.9	0.924	0.924	0.483	0.483	
Right Tilt	UAT	GPRS 2 slots	810	1909.8	29.9	29.7	0.751	0.786	0.390	0.408	
Left Touch	LAT	Voice	661	1880.0	31.5	31.1	0.447	0.490	0.301	0.330	
Left Tilt	LAT	Voice	661	1880.0	31.5	31.1	0.250	0.274	0.146	0.160	
Right Touch	LAT	Voice	661	1880.0	31.5	31.1	0.720	0.789	0.446	0.489	
Right Tilt	LAT	Voice	661	1880.0	31.5	31.1	0.215	0.236	0.135	0.148	
Left Touch	LAT	GPRS 2 slots	661	1880.0	28.5	28.5	0.680	0.680	0.459	0.459	
Left Tilt	LAT	GPRS 2 slots	661	1880.0	28.5	28.5	0.389	0.389	0.229	0.229	
Right Touch	LAT	GPRS 2 slots	512	1850.2	28.5	28.5	1.180	1.180	0.733	0.733	4
Right Touch	LAT	GPRS 2 slots	661	1880.0	28.5	28.5	1.130	1.130	0.702	0.702	
Right Touch	LAT	GPRS 2 slots	810	1909.8	28.5	28.5	1.180	1.180	0.725	0.725	
Right Tilt	LAT	GPRS 2 slots	661	1880.0	28.5	28.5	0.332	0.332	0.210	0.210	

12.2.2. Body-worn Accessory Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	Voice	5	661	1880.0	30.9	30.9	0.676	0.676	0.338	0.338	
Front	UAT	Voice	5	661	1880.0	30.9	30.9	0.471	0.471	0.249	0.249	
Rear	LAT	Voice	5	512	1850.2	29.5	29.5	0.901	0.901	0.505	0.505	
Rear	LAT	Voice	5	661	1880.0	29.5	29.5	0.915	0.915	0.509	0.509	
Rear	LAT	Voice	5	810	1909.8	29.5	29.5	1.030	1.030	0.570	0.570	5
Front	LAT	Voice	5	661	1880.0	29.5	29.5	0.689	0.689	0.425	0.425	

12.2.3. Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	GPRS 2 slots	5	512	1850.2	29.9	29.7	0.964	1.009	0.505	0.529	
Rear	UAT	GPRS 2 slots	5	661	1880.0	29.9	29.5	0.886	0.971	0.456	0.500	
Rear	UAT	GPRS 2 slots	5	810	1909.8	29.9	29.3	0.730	0.838	0.368	0.423	
Front	UAT	GPRS 2 slots	5	661	1880.0	29.9	29.5	0.699	0.766	0.369	0.405	
Edge 1	UAT	GPRS 2 slots	5	661	1880.0	29.9	29.5	0.663	0.727	0.287	0.315	
Edge 2	UAT	GPRS 2 slots	5	661	1880.0	29.9	29.5	0.220	0.241	0.119	0.130	
Edge 4	UAT	GPRS 2 slots	5	661	1880.0	29.9	29.5	0.569	0.624	0.304	0.333	
Rear	LAT	GPRS 2 slots	5	512	1850.2	27.0	27.0	0.900	0.900	0.521	0.521	
Rear	LAT	GPRS 2 slots	5	661	1880.0	27.0	27.0	0.902	0.902	0.527	0.527	
Rear	LAT	GPRS 2 slots	5	810	1909.8	27.0	27.0	0.952	0.952	0.556	0.556	
Front	LAT	GPRS 2 slots	5	512	1850.2	27.0	27.0	0.824	0.824	0.516	0.516	
Front	LAT	GPRS 2 slots	5	661	1880.0	27.0	27.0	0.845	0.845	0.528	0.528	
Front	LAT	GPRS 2 slots	5	810	1909.8	27.0	27.0	0.871	0.871	0.540	0.540	
Edge 2	LAT	GPRS 2 slots	5	661	1880.0	27.0	27.0	0.746	0.746	0.409	0.409	
Edge 3	LAT	GPRS 2 slots	5	661	1880.0	27.0	27.0	0.658	0.658	0.339	0.339	
Edge 4	LAT	GPRS 2 slots	5	661	1880.0	27.0	27.0	0.080	0.080	0.044	0.044	
Rear	LAT	EGPRS 2 slots	5	512	1850.2	28.0	28.0	1.050	1.050	0.595	0.595	
Rear	LAT	EGPRS 2 slots	5	661	1880.0	28.0	28.0	1.060	1.060	0.603	0.603	
Rear	LAT	EGPRS 2 slots	5	810	1909.8	28.0	28.0	1.120	1.120	0.639	0.639	6
Front	LAT	EGPRS 2 slots	5	512	1850.2	28.0	28.0	0.923	0.923	0.573	0.573	
Front	LAT	EGPRS 2 slots	5	661	1880.0	28.0	28.0	0.915	0.915	0.572	0.572	
Front	LAT	EGPRS 2 slots	5	810	1909.8	28.0	28.0	0.950	0.950	0.591	0.591	
Edge 2	LAT	EGPRS 2 slots	5	661	1880.0	28.0	28.0	0.786	0.786	0.427	0.427	
Edge 3	LAT	EGPRS 2 slots	5	661	1880.0	28.0	28.0	0.758	0.758	0.400	0.400	
Edge 4	LAT	EGPRS 2 slots	5	661	1880.0	28.0	28.0	0.099	0.099	0.054	0.054	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.3. W-CDMA Band 2

12.3.1. Head Exposure Conditions

Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	Rel. 99 RMC	9400	1880.0	23.9	23.9	0.542	0.542	0.273	0.273	
Left Tilt	UAT	Rel. 99 RMC	9400	1880.0	23.9	23.9	0.489	0.489	0.252	0.252	
Right Touch	UAT	Rel. 99 RMC	9262	1852.4	23.9	23.9	0.958	0.958	0.506	0.506	
Right Touch	UAT	Rel. 99 RMC	9400	1880.0	23.9	23.9	0.832	0.832	0.439	0.439	
Right Touch	UAT	Rel. 99 RMC	9538	1907.6	23.9	23.9	0.935	0.935	0.495	0.495	
Right Tilt	UAT	Rel. 99 RMC	9400	1880.0	23.9	23.9	0.696	0.696	0.347	0.347	
Left Touch	LAT	Rel. 99 RMC	9262	1852.4	23.0	23.0	0.801	0.801	0.544	0.544	
Left Touch	LAT	Rel. 99 RMC	9400	1880.0	23.0	23.0	0.867	0.867	0.576	0.576	
Left Touch	LAT	Rel. 99 RMC	9538	1907.6	23.0	22.9	0.815	0.834	0.544	0.557	
Left Tilt	LAT	Rel. 99 RMC	9400	1880.0	23.0	23.0	0.533	0.533	0.327	0.327	
Right Touch	LAT	Rel. 99 RMC	9262	1852.4	23.0	23.0	1.170	1.170	0.716	0.716	
Right Touch	LAT	Rel. 99 RMC	9400	1880.0	23.0	23.0	1.180	1.180	0.721	0.721	7
Right Touch	LAT	Rel. 99 RMC	9538	1907.6	23.0	22.9	1.110	1.136	0.677	0.693	
Right Tilt	LAT	Rel. 99 RMC	9400	1880.0	23.0	23.0	0.511	0.511	0.317	0.317	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.3.2. Body-worn Accessory & Hotspot Exposure Conditions

KDB 941225 D01 – Body SAR is not required for handsets with HSPA capabilities when the maximum average output of each RF channel with HSUPA/HSDPA active is less than ¼ dB higher than that measured without HSUPA/HSDPA using 12.2 kbps RMC and the maximum SAR for 12.2kbps RMC is ≤ 75% of the SAR limit. (pg.12)

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	Rel. 99 RMC	5	9400	1880.0	23.9	23.9	0.632	0.632	0.317	0.317	
Front	UAT	Rel. 99 RMC	5	9400	1880.0	23.9	23.9	0.451	0.451	0.234	0.234	
Rear	LAT	Rel. 99 RMC	5	9262	1852.4	20.5	20.5	1.010	1.010	0.591	0.591	
Rear	LAT	Rel. 99 RMC	5	9400	1880.0	20.5	20.5	1.130	1.130	0.643	0.643	8
Rear	LAT	Rel. 99 RMC	5	9538	1907.6	20.5	20.5	1.070	1.070	0.599	0.599	
Front	LAT	Rel. 99 RMC	5	9262	1852.4	20.5	20.5	0.822	0.822	0.517	0.517	
Front	LAT	Rel. 99 RMC	5	9400	1880.0	20.5	20.5	0.837	0.837	0.526	0.526	
Front	LAT	Rel. 99 RMC	5	9538	1907.6	20.5	20.5	0.756	0.756	0.478	0.478	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	Rel. 99 RMC	5	9400	1880.0	23.9	23.9	0.381	0.381	0.165	0.165	
Edge 2	UAT	Rel. 99 RMC	5	9400	1880.0	23.9	23.9	0.128	0.128	0.069	0.069	
Edge 4	UAT	Rel. 99 RMC	5	9400	1880.0	23.9	23.9	0.344	0.344	0.184	0.184	
Edge 2	LAT	Rel. 99 RMC	5	9400	1880.0	20.5	20.5	0.751	0.751	0.411	0.411	
Edge 3	LAT	Rel. 99 RMC	5	9400	1880.0	20.5	20.5	0.787	0.787	0.409	0.409	
Edge 4	LAT	Rel. 99 RMC	5	9400	1880.0	20.5	20.5	0.130	0.130	0.073	0.073	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.4. W-CDMA Band 4

12.4.1. Head Exposure Conditions

Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	Rel. 99 RMC	1413	1732.6	23.0	23.0	0.682	0.682	0.386	0.386	
Left Tilt	UAT	Rel. 99 RMC	1413	1732.6	23.0	23.0	0.607	0.607	0.336	0.336	
Right Touch	UAT	Rel. 99 RMC	1312	1712.4	23.0	23.0	0.697	0.697	0.373	0.373	
Right Touch	UAT	Rel. 99 RMC	1413	1732.6	23.0	23.0	0.907	0.907	0.487	0.487	
Right Touch	UAT	Rel. 99 RMC	1513	1752.6	23.0	23.0	0.806	0.806	0.444	0.444	
Right Tilt	UAT	Rel. 99 RMC	1413	1732.6	23.0	23.0	0.711	0.711	0.379	0.379	
Left Touch	LAT	Rel. 99 RMC	1413	1732.6	23.0	23.0	0.554	0.554	0.337	0.337	
Left Tilt	LAT	Rel. 99 RMC	1413	1732.6	23.0	23.0	0.314	0.314	0.177	0.177	
Right Touch	LAT	Rel. 99 RMC	1312	1712.4	23.0	23.0	0.983	0.983	0.622	0.622	
Right Touch	LAT	Rel. 99 RMC	1413	1732.6	23.0	23.0	1.080	1.080	0.683	0.683	9
Right Touch	LAT	Rel. 99 RMC	1513	1752.6	23.0	23.0	1.070	1.070	0.668	0.668	
Right Tilt	LAT	Rel. 99 RMC	1413	1732.6	23.0	23.0	0.349	0.349	0.228	0.228	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.4.2. Body-worn Accessory & Hotspot Exposure Conditions

KDB 941225 D01 – Body SAR is not required for handsets with HSPA capabilities when the maximum average output of each RF channel with HSUPA/HSDPA active is less than ¼ dB higher than that measured without HSUPA/HSDPA using 12.2 kbps RMC and the maximum SAR for 12.2kbps RMC is ≤ 75% of the SAR limit. (pg.12)

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	Rel. 99 RMC	5	1413	1732.6	23.9	23.9	0.632	0.632	0.364	0.364	
Front	UAT	Rel. 99 RMC	5	1413	1732.6	23.9	23.9	0.540	0.540	0.328	0.328	
Rear	LAT	Rel. 99 RMC	5	1312	1712.4	20.0	20.0	1.180	**1.180**	0.642	0.642	10
Rear	LAT	Rel. 99 RMC	5	1413	1732.6	20.0	20.0	1.130	1.130	0.635	0.635	
Rear	LAT	Rel. 99 RMC	5	1513	1752.6	20.0	19.9	1.050	1.074	0.591	0.605	
Front	LAT	Rel. 99 RMC	5	1312	1712.4	20.0	20.0	0.946	0.946	0.544	0.544	
Front	LAT	Rel. 99 RMC	5	1413	1732.6	20.0	20.0	0.877	0.877	0.512	0.512	
Front	LAT	Rel. 99 RMC	5	1513	1752.6	20.0	19.9	0.815	0.834	0.476	0.487	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	Rel. 99 RMC	5	1413	1732.6	23.9	23.9	0.419	0.419	0.187	0.187	
Edge 2	UAT	Rel. 99 RMC	5	1413	1732.6	23.9	23.9	0.292	0.292	0.160	0.160	
Edge 4	UAT	Rel. 99 RMC	5	1413	1732.6	23.9	23.9	0.385	0.385	0.208	0.208	
Edge 2	LAT	Rel. 99 RMC	5	1413	1732.6	20.0	20.0	0.736	0.736	0.398	0.398	
Edge 3	LAT	Rel. 99 RMC	5	1312	1712.4	20.0	20.0	1.140	1.140	0.589	0.589	
Edge 3	LAT	Rel. 99 RMC	5	1413	1732.6	20.0	20.0	1.140	1.140	0.582	0.582	
Edge 3	LAT	Rel. 99 RMC	5	1513	1752.6	20.0	19.9	1.040	1.064	0.535	0.547	
Edge 4	LAT	Rel. 99 RMC	5	1413	1732.6	20.0	20.0	0.065	0.065	0.037	0.037	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.5. W-CDMA Band 5

12.5.1. Head Exposure Conditions

Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	Rel. 99 RMC	4183	836.6	24.2	24.2	0.433	0.433	0.307	0.307	
Left Tilt	UAT	Rel. 99 RMC	4183	836.6	24.2	24.2	0.254	0.254	0.148	0.148	
Right Touch	UAT	Rel. 99 RMC	4183	836.6	24.2	24.2	0.333	0.333	0.221	0.221	
Right Tilt	UAT	Rel. 99 RMC	4183	836.6	24.2	24.2	0.230	0.230	0.134	0.134	
Left Touch	LAT	Rel. 99 RMC	4183	836.6	24.5	24.5	0.687	0.687	0.515	0.515	11
Left Tilt	LAT	Rel. 99 RMC	4183	836.6	24.5	24.5	0.390	0.390	0.293	0.293	
Right Touch	LAT	Rel. 99 RMC	4183	836.6	24.5	24.5	0.654	0.654	0.485	0.485	
Right Tilt	LAT	Rel. 99 RMC	4183	836.6	24.5	24.5	0.438	0.438	0.329	0.329	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.5.2. Body-worn Accessory & Hotspot Exposure Conditions

KDB 941225 D01 – Body SAR is not required for handsets with HSPA capabilities when the maximum average output of each RF channel with HSUPA/HSDPA active is less than ¼ dB higher than that measured without HSUPA/HSDPA using 12.2 kbps RMC and the maximum SAR for 12.2kbps RMC is ≤ 75% of the SAR limit. (pg.12)

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	Rel. 99 RMC	5	4183	836.6	24.2	24.2	0.174	0.174	0.113	0.113	
Front	UAT	Rel. 99 RMC	5	4183	836.6	24.2	24.2	0.139	0.139	0.093	0.093	
Rear	LAT	Rel. 99 RMC	5	4132	826.4	24.25	24.25	1.070	1.070	0.742	0.742	
Rear	LAT	Rel. 99 RMC	5	4183	836.6	24.25	24.25	1.070	1.070	0.746	0.746	12
Rear	LAT	Rel. 99 RMC	5	4233	846.6	24.25	24.25	1.060	1.060	0.731	0.731	
Front	LAT	Rel. 99 RMC	5	4183	836.6	24.25	24.25	0.774	0.774	0.597	0.597	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	Rel. 99 RMC	5	4183	836.6	24.2	24.2	0.068	0.068	0.031	0.031	
Edge 2	UAT	Rel. 99 RMC	5	4183	836.6	24.2	24.2	0.097	0.097	0.065	0.065	
Edge 4	UAT	Rel. 99 RMC	5	4183	836.6	24.2	24.2	0.050	0.050	0.032	0.032	
Edge 2	LAT	Rel. 99 RMC	5	4132	826.4	24.25	24.25	0.879	0.879	0.584	0.584	
Edge 2	LAT	Rel. 99 RMC	5	4183	836.6	24.25	24.25	0.805	0.805	0.533	0.533	
Edge 2	LAT	Rel. 99 RMC	5	4233	846.6	24.25	24.25	0.737	0.737	0.488	0.488	
Edge 3	LAT	Rel. 99 RMC	5	4183	836.6	24.25	24.25	0.219	0.219	0.113	0.113	
Edge 4	LAT	Rel. 99 RMC	5	4132	826.4	24.25	24.25	0.991	0.991	0.663	0.663	
Edge 4	LAT	Rel. 99 RMC	5	4183	836.6	24.25	24.25	0.930	0.930	0.624	0.624	
Edge 4	LAT	Rel. 99 RMC	5	4233	846.6	24.25	24.25	0.880	0.880	0.586	0.586	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.6. CDMA BC0

12.6.1. Head Exposure Conditions

Test Position	Antenna	Mode	Ch #	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	1xRTT(RC3, SO55)	384	836.52	24.5	24.5	0.268	0.270	0.193	0.194	
Left Tilt	UAT	1xRTT(RC3, SO55)	384	836.52	24.5	24.5	0.180	0.181	0.109	0.110	
Right Touch	UAT	1xRTT(RC3, SO55)	384	836.52	24.5	24.5	0.286	0.288	0.196	0.197	
Right Tilt	UAT	1xRTT(RC3, SO55)	384	836.52	24.5	24.5	0.154	0.155	0.098	0.099	
Left Touch	UAT	1xEVDO(Rel. 0)	384	836.52	24.5	24.5	0.307	0.309	0.218	0.220	
Left Tilt	UAT	1xEVDO(Rel. 0)	384	836.52	24.5	24.5	0.209	0.210	0.128	0.129	
Right Touch	UAT	1xEVDO(Rel. 0)	384	836.52	24.5	24.5	0.217	0.219	0.145	0.146	
Right Tilt	UAT	1xEVDO(Rel. 0)	384	836.52	24.5	24.5	0.156	0.157	0.101	0.102	
Left Touch	LAT	1xRTT(RC3, SO55)	384	836.52	24.5	24.4	0.728	0.738	0.543	0.551	
Left Tilt	LAT	1xRTT(RC3, SO55)	384	836.52	24.5	24.4	0.400	0.406	0.302	0.306	
Right Touch	LAT	1xRTT(RC3, SO55)	384	836.52	24.5	24.4	0.720	0.730	0.533	0.540	
Right Tilt	LAT	1xRTT(RC3, SO55)	384	836.52	24.5	24.4	0.578	0.586	0.438	0.444	
Left Touch	LAT	1xEVDO(Rel. 0)	384	836.52	24.5	24.4	0.764	0.775	0.573	0.581	13
Left Tilt	LAT	1xEVDO(Rel. 0)	384	836.52	24.5	24.4	0.491	0.498	0.370	0.375	
Right Touch	LAT	1xEVDO(Rel. 0)	384	836.52	24.5	24.4	0.729	0.739	0.543	0.551	
Right Tilt	LAT	1xEVDO(Rel. 0)	384	836.52	24.5	24.4	0.540	0.548	0.406	0.412	

Test Position	Antenna	Mode	Ch #	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	1xEVDO (Rev. B) Two Carrier Mini.	384+425	836.52+837.75	22.0	21.5	0.237	0.268	0.170	0.193	
Left Tilt	UAT		384+425	836.52+837.75	22.0	21.5	0.129	0.146	0.083	0.094	
Right Touch	UAT		384+425	836.52+837.75	22.0	21.5	0.176	0.199	0.118	0.134	
Right Tilt	UAT		384+425	836.52+837.75	22.0	21.5	0.141	0.160	0.083	0.094	
Left Touch	LAT		384+425	836.52+837.75	22.0	22.0	0.528	0.534	0.392	0.397	
Left Tilt	LAT		384+425	836.52+837.75	22.0	22.0	0.379	0.383	0.283	0.286	
Right Touch	LAT		384+425	836.52+837.75	22.0	22.0	0.474	0.479	0.349	0.353	
Right Tilt	LAT		384+425	836.52+837.75	22.0	22.0	0.298	0.301	0.223	0.226	
Left Touch	UAT	1xEVDO (Rev. B) Three Carrier Mini.	384+425+466	836.52+837.75+838.98	22.0	21.5	0.238	0.265	0.171	0.190	
Left Tilt	UAT		384+425+466	836.52+837.75+838.98	22.0	21.5	0.133	0.148	0.085	0.094	
Right Touch	UAT		384+425+466	836.52+837.75+838.98	22.0	21.5	0.176	0.196	0.119	0.132	
Right Tilt	UAT		384+425+466	836.52+837.75+838.98	22.0	21.5	0.140	0.156	0.083	0.093	
Left Touch	LAT		384+425+466	836.52+837.75+838.98	22.0	21.9	0.530	0.547	0.392	0.405	
Left Tilt	LAT		384+425+466	836.52+837.75+838.98	22.0	21.9	0.377	0.389	0.282	0.291	
Right Touch	LAT		384+425+466	836.52+837.75+838.98	22.0	21.9	0.472	0.487	0.348	0.359	
Right Tilt	LAT		384+425+466	836.52+837.75+838.98	22.0	21.9	0.323	0.334	0.241	0.249	

12.6.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	1xRTT(RC3, SO32)	5	384	836.52	24.5	24.5	0.127	0.127	0.080	0.080	
Front	UAT	1xRTT(RC3, SO32)	5	384	836.52	24.5	24.5	0.091	0.091	0.053	0.053	
Rear	LAT	1xRTT(RC3, SO32)	5	1013	824.70	24.25	24.1	0.922	0.954	0.684	0.708	
Rear	LAT	1xRTT(RC3, SO32)	5	384	836.52	24.25	24.2	1.010	1.022	0.744	0.753	
Rear	LAT	1xRTT(RC3, SO32)	5	777	848.31	24.25	24.1	1.050	1.087	0.772	0.799	14
Front	LAT	1xRTT(RC3, SO32)	5	1013	824.70	24.25	24.1	0.858	0.888	0.665	0.688	
Front	LAT	1xRTT(RC3, SO32)	5	384	836.52	24.25	24.2	0.929	0.940	0.072	0.073	
Front	LAT	1xRTT(RC3, SO32)	5	777	848.31	24.25	24.1	0.970	1.004	0.749	0.775	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	1xRTT(RC3, SO32)	5	384	836.52	24.5	24.5	0.059	0.059	0.027	0.027	
Edge 2	UAT	1xRTT(RC3, SO32)	5	384	836.52	24.5	24.5	0.196	0.196	0.131	0.131	
Edge 4	UAT	1xRTT(RC3, SO32)	5	384	836.52	24.5	24.5	0.100	0.100	0.066	0.066	
Rear	UAT	1xEVDO(Rel. 0)	5	384	836.52	24.5	24.5	0.140	0.140	0.087	0.087	
Front	UAT	1xEVDO(Rel. 0)	5	384	836.52	24.5	24.5	0.118	0.118	0.088	0.088	
Edge 1	UAT	1xEVDO(Rel. 0)	5	384	836.52	24.5	24.5	0.061	0.061	0.027	0.027	
Edge 2	UAT	1xEVDO(Rel. 0)	5	384	836.52	24.5	24.5	0.198	0.198	0.131	0.131	
Edge 4	UAT	1xEVDO(Rel. 0)	5	384	836.52	24.5	24.5	0.102	0.102	0.067	0.067	
Edge 2	LAT	1xRTT(RC3, SO32)	5	384	836.52	24.25	24.2	0.670	0.678	0.445	0.450	
Edge 3	LAT	1xRTT(RC3, SO32)	5	384	836.52	24.25	24.2	0.178	0.180	0.094	0.095	
Edge 4	LAT	1xRTT(RC3, SO32)	5	1013	824.70	24.25	24.1	0.970	1.004	0.648	0.671	
Edge 4	LAT	1xRTT(RC3, SO32)	5	384	836.52	24.25	24.2	1.040	1.052	0.690	0.698	
Edge 4	LAT	1xRTT(RC3, SO32)	5	777	848.31	24.25	24.1	0.980	1.014	0.652	0.675	
Rear	LAT	1xEVDO(Rel. 0)	5	1013	824.70	24.25	24.1	0.886	0.917	0.665	0.688	
Rear	LAT	1xEVDO(Rel. 0)	5	384	836.52	24.25	24.2	0.954	0.965	0.712	0.720	
Rear	LAT	1xEVDO(Rel. 0)	5	777	848.31	24.25	24.1	0.998	1.033	0.747	0.773	
Front	LAT	1xEVDO(Rel. 0)	5	1013	824.70	24.25	24.1	0.857	0.887	0.662	0.685	
Front	LAT	1xEVDO(Rel. 0)	5	384	836.52	24.25	24.2	0.917	0.928	0.709	0.717	
Front	LAT	1xEVDO(Rel. 0)	5	777	848.31	24.25	24.1	0.961	0.995	0.736	0.762	
Edge 2	LAT	1xEVDO(Rel. 0)	5	384	836.52	24.25	24.2	0.588	0.595	0.388	0.392	
Edge 3	LAT	1xEVDO(Rel. 0)	5	384	836.52	24.25	24.2	0.177	0.179	0.092	0.093	
Edge 4	LAT	1xEVDO(Rel. 0)	5	1013	824.70	24.25	24.1	0.816	0.845	0.545	0.564	
Edge 4	LAT	1xEVDO(Rel. 0)	5	384	836.52	24.25	24.2	0.837	0.847	0.559	0.565	
Edge 4	LAT	1xEVDO(Rel. 0)	5	777	848.31	24.25	24.1	0.833	0.862	0.555	0.575	

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	1xEVDO (Rev. B) Two Carrier Mini.	5	384+425	836.52+837.75	22.0	21.8	0.159	0.166	0.119	0.125	
Front	UAT		5	384+425	836.52+837.75	22.0	21.8	0.125	0.131	0.092	0.097	
Edge 1	UAT		5	384+425	836.52+837.75	22.0	21.8	0.053	0.055	0.023	0.024	
Edge 2	UAT		5	384+425	836.52+837.75	22.0	21.8	0.108	0.113	0.071	0.074	
Edge 4	UAT		5	384+425	836.52+837.75	22.0	21.8	0.196	0.205	0.131	0.137	
Rear	LAT		5	384+425	836.52+837.75	22.0	21.9	0.528	0.540	0.391	0.400	
Front	LAT		5	384+425	836.52+837.75	22.0	21.9	0.500	0.512	0.382	0.391	
Edge 2	LAT		5	384+425	836.52+837.75	22.0	21.9	0.290	0.297	0.191	0.195	
Edge 3	LAT		5	384+425	836.52+837.75	22.0	21.9	0.119	0.122	0.061	0.063	
Edge 4	LAT		5	384+425	836.52+837.75	22.0	21.9	0.518	0.530	0.345	0.353	
Rear	UAT	1xEVDO (Rev. B) Three Carrier Mini.	5	384+425+466	836.52+837.75+838.98	22.0	21.8	0.157	0.164	0.118	0.124	
Front	UAT		5	384+425+466	836.52+837.75+838.98	22.0	21.8	0.126	0.132	0.093	0.097	
Edge 1	UAT		5	384+425+466	836.52+837.75+838.98	22.0	21.8	0.053	0.055	0.023	0.024	
Edge 2	UAT		5	384+425+466	836.52+837.75+838.98	22.0	21.8	0.109	0.114	0.071	0.075	
Edge 4	UAT		5	384+425+466	836.52+837.75+838.98	22.0	21.8	0.196	0.205	0.132	0.138	
Rear	LAT		5	384+425+466	836.52+837.75+838.98	22.0	21.9	0.526	0.538	0.390	0.399	
Front	LAT		5	384+425+466	836.52+837.75+838.98	22.0	21.9	0.504	0.516	0.386	0.395	
Edge 2	LAT		5	384+425+466	836.52+837.75+838.98	22.0	21.9	0.312	0.319	0.204	0.209	
Edge 3	LAT		5	384+425+466	836.52+837.75+838.98	22.0	21.9	0.130	0.133	0.066	0.068	
Edge 4	LAT		5	384+425+466	836.52+837.75+838.98	22.0	21.9	0.611	0.625	0.408	0.418	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.7. CDMA BC1

12.7.1. Head Exposure Conditions

Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	1xRTT(RC3, SO55)	600	1880.00	24.4	24.4	0.472	0.471	0.254	0.253	
Left Tilt	UAT	1xRTT(RC3, SO55)	600	1880.00	24.4	24.4	0.450	0.450	0.236	0.236	
Right Touch	UAT	1xRTT(RC3, SO55)	25	1851.25	24.4	24.4	0.985	0.990	0.515	0.517	
Right Touch	UAT	1xRTT(RC3, SO55)	600	1880.00	24.4	24.4	0.757	0.760	0.400	0.402	
Right Touch	UAT	1xRTT(RC3, SO55)	1175	1908.75	24.4	24.0	0.657	0.727	0.348	0.385	
Right Tilt	UAT	1xRTT(RC3, SO55)	600	1880.00	24.4	24.4	0.641	0.645	0.318	0.320	
Left Touch	UAT	1xEVDO(Rel. 0)	600	1880.00	24.4	24.4	0.477	0.480	0.257	0.259	
Left Tilt	UAT	1xEVDO(Rel. 0)	600	1880.00	24.4	24.4	0.448	0.451	0.235	0.237	
Right Touch	UAT	1xEVDO(Rel. 0)	25	1851.25	24.4	24.4	0.976	0.985	0.510	0.515	
Right Touch	UAT	1xEVDO(Rel. 0)	600	1880.00	24.4	24.4	0.754	0.759	0.399	0.402	
Right Touch	UAT	1xEVDO(Rel. 0)	1175	1908.75	24.4	24.0	0.734	0.812	0.393	0.435	
Right Tilt	UAT	1xEVDO(Rel. 0)	600	1880.00	24.4	24.4	0.622	0.626	0.310	0.312	
Left Touch	LAT	1xRTT(RC3, SO55)	25	1851.25	23.0	23.0	0.677	0.677	0.464	0.464	
Left Touch	LAT	1xRTT(RC3, SO55)	600	1880.00	23.0	23.0	0.770	0.770	0.530	0.530	
Left Touch	LAT	1xRTT(RC3, SO55)	1175	1908.75	23.0	23.0	0.774	0.774	0.529	0.529	
Left Tilt	LAT	1xRTT(RC3, SO55)	600	1880.00	23.0	23.0	0.463	0.463	0.292	0.292	
Right Touch	LAT	1xRTT(RC3, SO55)	25	1851.25	23.0	23.0	1.130	1.130	0.689	0.689	
Right Touch	LAT	1xRTT(RC3, SO55)	600	1880.00	23.0	23.0	1.180	1.180	0.717	0.717	
Right Touch	LAT	1xRTT(RC3, SO55)	1175	1908.75	23.0	23.0	1.180	1.180	0.734	0.734	15
Right Tilt	LAT	1xRTT(RC3, SO55)	600	1880.00	23.0	23.0	0.506	0.506	0.318	0.318	
Left Touch	LAT	1xEVDO(Rel. 0)	600	1880.00	23.0	23.0	0.690	0.690	0.475	0.475	
Left Tilt	LAT	1xEVDO(Rel. 0)	600	1880.00	23.0	23.0	0.459	0.459	0.288	0.288	
Right Touch	LAT	1xEVDO(Rel. 0)	25	1851.25	23.0	23.0	1.040	1.040	0.656	0.656	
Right Touch	LAT	1xEVDO(Rel. 0)	600	1880.00	23.0	23.0	1.120	1.120	0.706	0.706	
Right Touch	LAT	1xEVDO(Rel. 0)	1175	1908.75	23.0	23.0	1.160	1.160	0.731	0.731	
Right Tilt	LAT	1xEVDO(Rel. 0)	600	1880.00	23.0	23.0	0.513	0.513	0.325	0.325	

12.7.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	1xRTT(RC3, SO32)	5	600	1880.00	24.4	24.4	0.753	0.751	0.376	0.375	
Front	UAT	1xRTT(RC3, SO32)	5	600	1880.00	24.4	24.4	0.506	0.505	0.266	0.265	
Rear	LAT	1xRTT(RC3, SO32)	5	25	1851.25	20.5	20.5	1.120	1.133	0.618	0.625	
Rear	LAT	1xRTT(RC3, SO32)	5	600	1880.00	20.5	20.3	1.090	1.149	0.600	0.633	16
Rear	LAT	1xRTT(RC3, SO32)	5	1175	1908.75	20.5	20.5	1.130	1.143	0.617	0.624	
Front	LAT	1xRTT(RC3, SO32)	5	25	1851.25	20.5	20.5	0.907	0.918	0.555	0.561	
Front	LAT	1xRTT(RC3, SO32)	5	600	1880.00	20.5	20.3	0.823	0.868	0.503	0.530	
Front	LAT	1xRTT(RC3, SO32)	5	1175	1908.75	20.5	20.5	0.799	0.808	0.487	0.493	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	1xRTT(RC3, SO32)	5	600	1880.00	24.4	24.4	0.501	0.500	0.215	0.215	
Edge 2	UAT	1xRTT(RC3, SO32)	5	600	1880.00	24.4	24.4	0.198	0.198	0.108	0.108	
Edge 4	UAT	1xRTT(RC3, SO32)	5	600	1880.00	24.4	24.4	0.520	0.519	0.273	0.272	
Rear	UAT	1xEVDO(Rel. 0)	5	600	1880.00	24.4	24.4	0.759	0.757	0.377	0.376	
Front	UAT	1xEVDO(Rel. 0)	5	600	1880.00	24.4	24.4	0.509	0.508	0.266	0.265	
Edge 1	UAT	1xEVDO(Rel. 0)	5	600	1880.00	24.4	24.4	0.519	0.518	0.220	0.219	
Edge 2	UAT	1xEVDO(Rel. 0)	5	600	1880.00	24.4	24.4	0.197	0.197	0.107	0.107	
Edge 4	UAT	1xEVDO(Rel. 0)	5	600	1880.00	24.4	24.4	0.517	0.516	0.273	0.272	
Edge 2	LAT	1xRTT(RC3, SO32)	5	25	1851.25	20.5	20.5	0.894	0.904	0.481	0.487	
Edge 2	LAT	1xRTT(RC3, SO32)	5	600	1880.00	20.5	20.3	0.847	0.893	0.456	0.481	
Edge 2	LAT	1xRTT(RC3, SO32)	5	1175	1908.75	20.5	20.5	0.836	0.846	0.447	0.452	
Edge 3	LAT	1xRTT(RC3, SO32)	5	25	1851.25	20.5	20.5	0.998	1.010	0.514	0.520	
Edge 3	LAT	1xRTT(RC3, SO32)	5	600	1880.00	20.5	20.3	0.888	0.936	0.456	0.481	
Edge 3	LAT	1xRTT(RC3, SO32)	5	1175	1908.75	20.5	20.5	0.867	0.877	0.440	0.445	
Edge 4	LAT	1xRTT(RC3, SO32)	5	600	1880.00	20.5	20.3	0.095	0.100	0.053	0.056	
Rear	LAT	1xEVDO(Rel. 0)	5	25	1851.25	20.5	20.5	1.120	1.133	0.619	0.626	
Rear	LAT	1xEVDO(Rel. 0)	5	600	1880.00	20.5	20.3	1.090	1.149	0.598	0.631	
Rear	LAT	1xEVDO(Rel. 0)	5	1175	1908.75	20.5	20.5	1.140	1.153	0.620	0.627	17
Front	LAT	1xEVDO(Rel. 0)	5	25	1851.25	20.5	20.5	0.899	0.909	0.551	0.557	
Front	LAT	1xEVDO(Rel. 0)	5	600	1880.00	20.5	20.3	0.818	0.862	0.501	0.528	
Front	LAT	1xEVDO(Rel. 0)	5	1175	1908.75	20.5	20.5	0.799	0.808	0.487	0.493	
Edge 2	LAT	1xEVDO(Rel. 0)	5	25	1851.25	20.5	20.5	0.931	0.942	0.497	0.503	
Edge 2	LAT	1xEVDO(Rel. 0)	5	600	1880.00	20.5	20.3	0.868	0.915	0.466	0.491	
Edge 2	LAT	1xEVDO(Rel. 0)	5	1175	1908.75	20.5	20.5	0.852	0.862	0.453	0.458	
Edge 3	LAT	1xEVDO(Rel. 0)	5	25	1851.25	20.5	20.5	0.960	0.971	0.497	0.503	
Edge 3	LAT	1xEVDO(Rel. 0)	5	600	1880.00	20.5	20.3	0.889	0.937	0.456	0.481	
Edge 3	LAT	1xEVDO(Rel. 0)	5	1175	1908.75	20.5	20.5	0.846	0.856	0.435	0.440	
Edge 4	LAT	1xEVDO(Rel. 0)	5	600	1880.00	20.5	20.3	0.088	0.093	0.049	0.052	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.8. CDMA BC10

12.8.1. Head Exposure Conditions

Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	1xRTT(RC3, SO55)	580	820.5	24.7	24.7	0.366	0.366	0.263	0.263	
Left Tilt	UAT	1xRTT(RC3, SO55)	580	820.5	24.7	24.7	0.261	0.261	0.159	0.159	
Right Touch	UAT	1xRTT(RC3, SO55)	580	820.5	24.7	24.7	0.279	0.279	0.185	0.185	
Right Tilt	UAT	1xRTT(RC3, SO55)	580	820.5	24.7	24.7	0.219	0.219	0.143	0.143	
Left Touch	UAT	1xEVDO(Rel. 0)	580	820.5	24.7	24.7	0.360	0.360	0.259	0.259	
Left Tilt	UAT	1xEVDO(Rel. 0)	580	820.5	24.7	24.7	0.259	0.259	0.155	0.155	
Right Touch	UAT	1xEVDO(Rel. 0)	580	820.5	24.7	24.7	0.270	0.270	0.179	0.179	
Right Tilt	UAT	1xEVDO(Rel. 0)	580	820.5	24.7	24.7	0.208	0.208	0.136	0.136	
Left Touch	LAT	1xRTT(RC3, SO55)	580	820.5	25.0	25.0	0.776	0.776	0.588	0.588	18
Left Tilt	LAT	1xRTT(RC3, SO55)	580	820.5	25.0	25.0	0.486	0.486	0.364	0.364	
Right Touch	LAT	1xRTT(RC3, SO55)	580	820.5	25.0	25.0	0.705	0.705	0.527	0.527	
Right Tilt	LAT	1xRTT(RC3, SO55)	580	820.5	25.0	25.0	0.569	0.569	0.429	0.429	
Left Touch	LAT	1xEVDO(Rel. 0)	580	820.5	25.0	25.0	0.718	0.718	0.536	0.536	
Left Tilt	LAT	1xEVDO(Rel. 0)	580	820.5	25.0	25.0	0.427	0.427	0.324	0.324	
Right Touch	LAT	1xEVDO(Rel. 0)	580	820.5	25.0	25.0	0.699	0.699	0.525	0.525	
Right Tilt	LAT	1xEVDO(Rel. 0)	580	820.5	25.0	25.0	0.467	0.467	0.355	0.355	

12.8.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	1xRTT(RC3, SO32)	5	580	820.5	24.7	24.3	0.148	0.163	0.095	0.105	
Front	UAT	1xRTT(RC3, SO32)	5	580	820.5	24.7	24.3	0.118	0.130	0.089	0.098	
Rear	LAT	1xRTT(RC3, SO32)	5	476	817.9	24.25	24.00	0.903	0.957	0.671	0.711	
Rear	LAT	1xRTT(RC3, SO32)	5	580	820.5	24.25	24.09	0.918	0.952	0.681	0.707	
Rear	LAT	1xRTT(RC3, SO32)	5	684	823.1	24.25	24.09	0.929	0.964	0.687	0.713	19
Front	LAT	1xRTT(RC3, SO32)	5	476	817.9	24.25	24.00	0.803	0.851	0.620	0.657	
Front	LAT	1xRTT(RC3, SO32)	5	580	820.5	24.25	24.09	0.868	0.901	0.671	0.696	
Front	LAT	1xRTT(RC3, SO32)	5	684	823.1	24.25	24.09	0.874	0.907	0.678	0.703	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	1xRTT(RC3, SO32)	5	580	820.5	24.7	24.3	0.046	0.050	0.021	0.023	
Edge 2	UAT	1xRTT(RC3, SO32)	5	580	820.5	24.7	24.3	0.150	0.165	0.101	0.111	
Edge 4	UAT	1xRTT(RC3, SO32)	5	580	820.5	24.7	24.3	0.101	0.111	0.067	0.074	
Rear	UAT	1xEVDO(Rel. 0)	5	580	820.5	24.7	24.3	0.151	0.166	0.110	0.121	
Front	UAT	1xEVDO(Rel. 0)	5	580	820.5	24.7	24.3	0.119	0.131	0.099	0.109	
Edge 1	UAT	1xEVDO(Rel. 0)	5	580	820.5	24.7	24.3	0.048	0.053	0.022	0.024	
Edge 2	UAT	1xEVDO(Rel. 0)	5	580	820.5	24.7	24.3	0.157	0.173	0.105	0.116	
Edge 4	UAT	1xEVDO(Rel. 0)	5	580	820.5	24.7	24.3	0.106	0.117	0.070	0.077	
Edge 2	LAT	1xRTT(RC3, SO32)	5	580	820.5	24.25	24.09	0.604	0.627	0.401	0.416	
Edge 3	LAT	1xRTT(RC3, SO32)	5	580	820.5	24.25	24.09	0.162	0.168	0.085	0.088	
Edge 4	LAT	1xRTT(RC3, SO32)	5	476	817.9	24.25	24.00	0.850	0.900	0.569	0.603	
Edge 4	LAT	1xRTT(RC3, SO32)	5	580	820.5	24.25	24.09	0.854	0.886	0.572	0.593	
Edge 4	LAT	1xRTT(RC3, SO32)	5	684	823.1	24.25	24.09	0.862	0.894	0.575	0.597	
Rear	LAT	1xEVDO(Rel. 0)	5	476	817.9	24.25	24.00	0.881	0.933	0.661	0.700	
Rear	LAT	1xEVDO(Rel. 0)	5	580	820.5	24.25	24.09	0.889	0.922	0.664	0.689	
Rear	LAT	1xEVDO(Rel. 0)	5	684	823.1	24.25	24.09	0.895	0.929	0.670	0.695	
Front	LAT	1xEVDO(Rel. 0)	5	476	817.9	24.25	24.00	0.833	0.882	0.645	0.683	
Front	LAT	1xEVDO(Rel. 0)	5	580	820.5	24.25	24.09	0.834	0.865	0.644	0.668	
Front	LAT	1xEVDO(Rel. 0)	5	684	823.1	24.25	24.09	0.854	0.886	0.660	0.685	
Edge 2	LAT	1xEVDO(Rel. 0)	5	580	820.5	24.25	24.09	0.682	0.708	0.454	0.471	
Edge 3	LAT	1xEVDO(Rel. 0)	5	580	820.5	24.25	24.09	0.165	0.171	0.086	0.089	
Edge 4	LAT	1xEVDO(Rel. 0)	5	476	817.9	24.25	24.00	0.930	0.985	0.625	0.662	20
Edge 4	LAT	1xEVDO(Rel. 0)	5	580	820.5	24.25	24.09	0.914	0.948	0.615	0.638	
Edge 4	LAT	1xEVDO(Rel. 0)	5	684	823.1	24.25	24.09	0.942	0.977	0.630	0.654	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.9. CDMA BC15

12.9.1. Head Exposure Conditions

Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
							Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	1xRTT(RC3, SO55)	450	1732.50	23.0	22.9	0.483	0.494	0.276	0.282	
Left Tilt	UAT	1xRTT(RC3, SO55)	450	1732.50	23.0	22.9	0.581	0.595	0.319	0.326	
Right Touch	UAT	1xRTT(RC3, SO55)	450	1732.50	23.0	22.9	0.743	0.760	0.401	0.410	
Right Tilt	UAT	1xRTT(RC3, SO55)	450	1732.50	23.0	22.9	0.637	0.652	0.352	0.360	
Left Touch	UAT	1xEVDO(Rel. 0)	450	1732.50	23.0	22.9	0.481	0.492	0.277	0.283	
Left Tilt	UAT	1xEVDO(Rel. 0)	450	1732.50	23.0	22.9	0.584	0.598	0.319	0.326	
Right Touch	UAT	1xEVDO(Rel. 0)	450	1732.50	23.0	22.9	0.741	0.758	0.401	0.410	
Right Tilt	UAT	1xEVDO(Rel. 0)	450	1732.50	23.0	22.9	0.642	0.657	0.354	0.362	
Left Touch	LAT	1xRTT(RC3, SO55)	450	1732.50	23.0	23.0	0.581	0.581	0.404	0.404	
Left Tilt	LAT	1xRTT(RC3, SO55)	450	1732.50	23.0	23.0	0.327	0.327	0.202	0.202	
Right Touch	LAT	1xRTT(RC3, SO55)	25	1711.25	23.0	23.0	1.020	1.020	0.654	0.654	
Right Touch	LAT	1xRTT(RC3, SO55)	450	1732.50	23.0	23.0	1.070	1.070	0.685	0.685	
Right Touch	LAT	1xRTT(RC3, SO55)	875	1753.75	23.0	22.8	1.030	1.079	0.650	0.681	
Right Tilt	LAT	1xRTT(RC3, SO55)	450	1732.50	23.0	23.0	0.340	0.340	0.219	0.219	
Left Touch	LAT	1xEVDO(Rel. 0)	450	1732.50	23.0	23.0	0.573	0.573	0.397	0.397	
Left Tilt	LAT	1xEVDO(Rel. 0)	450	1732.50	23.0	23.0	0.321	0.321	0.200	0.200	
Right Touch	LAT	1xEVDO(Rel. 0)	25	1711.25	23.0	23.0	1.020	1.020	0.649	0.649	
Right Touch	LAT	1xEVDO(Rel. 0)	450	1732.50	23.0	23.0	1.090	1.090	0.689	0.689	21
Right Touch	LAT	1xEVDO(Rel. 0)	875	1753.75	23.0	22.8	1.030	1.079	0.650	0.681	
Right Tilt	LAT	1xEVDO(Rel. 0)	450	1732.50	23.0	23.0	0.331	0.331	0.213	0.213	

12.9.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Rear	UAT	1xRTT(RC3, SO32)	5	450	1732.50	24.4	24.4	0.753	0.753	0.425	0.425	
Front	UAT	1xRTT(RC3, SO32)	5	450	1732.50	24.4	24.4	0.630	0.630	0.377	0.377	
Rear	LAT	1xRTT(RC3, SO32)	5	25	1711.25	20.0	20.0	1.130	1.130	0.627	0.627	22
Rear	LAT	1xRTT(RC3, SO32)	5	450	1732.50	20.0	20.0	1.110	1.110	0.620	0.620	
Rear	LAT	1xRTT(RC3, SO32)	5	875	1753.75	20.0	19.9	1.010	1.034	0.563	0.576	
Front	LAT	1xRTT(RC3, SO32)	5	25	1711.25	20.0	20.0	0.939	0.939	0.539	0.539	
Front	LAT	1xRTT(RC3, SO32)	5	450	1732.50	20.0	20.0	0.888	0.888	0.515	0.515	
Front	LAT	1xRTT(RC3, SO32)	5	875	1753.75	20.0	19.9	0.799	0.818	0.467	0.478	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Tune-up Limit	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	1xRTT(RC3, SO32)	5	450	1732.50	24.4	24.4	0.462	0.462	0.205	0.205	
Edge 2	UAT	1xRTT(RC3, SO32)	5	450	1732.50	24.4	24.4	0.269	0.269	0.147	0.147	
Edge 4	UAT	1xRTT(RC3, SO32)	5	450	1732.50	24.4	24.4	0.435	0.435	0.232	0.232	
Rear	UAT	1xEVDO(Rel. 0)	5	450	1732.50	24.4	24.4	0.665	0.665	0.369	0.369	
Front	UAT	1xEVDO(Rel. 0)	5	450	1732.50	24.4	24.4	0.556	0.556	0.338	0.338	
Edge 1	UAT	1xEVDO(Rel. 0)	5	450	1732.50	24.4	24.4	0.408	0.408	0.184	0.184	
Edge 2	UAT	1xEVDO(Rel. 0)	5	450	1732.50	24.4	24.4	0.245	0.245	0.134	0.134	
Edge 4	UAT	1xEVDO(Rel. 0)	5	450	1732.50	24.4	24.4	0.406	0.406	0.222	0.222	
Edge 2	LAT	1xRTT(RC3, SO32)	5	25	1711.25	20.0	20.0	0.844	0.844	0.454	0.454	
Edge 2	LAT	1xRTT(RC3, SO32)	5	450	1732.50	20.0	20.0	0.861	0.861	0.460	0.460	
Edge 2	LAT	1xRTT(RC3, SO32)	5	875	1753.75	20.0	19.9	0.795	0.814	0.424	0.434	
Edge 3	LAT	1xRTT(RC3, SO32)	5	25	1711.25	20.0	20.0	1.000	1.000	0.522	0.522	
Edge 3	LAT	1xRTT(RC3, SO32)	5	450	1732.50	20.0	20.0	0.964	0.964	0.499	0.499	
Edge 3	LAT	1xRTT(RC3, SO32)	5	875	1753.75	20.0	19.9	0.878	0.898	0.456	0.467	
Edge 4	LAT	1xRTT(RC3, SO32)	5	450	1732.50	20.0	20.0	0.061	0.061	0.035	0.035	
Rear	LAT	1xEVDO(Rel. 0)	5	25	1711.25	20.0	20.0	1.140	1.140	0.634	0.634	23
Rear	LAT	1xEVDO(Rel. 0)	5	450	1732.50	20.0	20.0	1.130	1.130	0.626	0.626	
Rear	LAT	1xEVDO(Rel. 0)	5	875	1753.75	20.0	19.9	1.020	1.044	0.567	0.580	
Front	LAT	1xEVDO(Rel. 0)	5	25	1711.25	20.0	20.0	0.870	0.870	0.495	0.495	
Front	LAT	1xEVDO(Rel. 0)	5	450	1732.50	20.0	20.0	0.810	0.810	0.470	0.470	
Front	LAT	1xEVDO(Rel. 0)	5	875	1753.75	20.0	19.9	0.729	0.746	0.425	0.435	
Edge 2	LAT	1xEVDO(Rel. 0)	5	450	1732.50	20.0	20.0	0.762	0.762	0.412	0.412	
Edge 3	LAT	1xEVDO(Rel. 0)	5	25	1711.25	20.0	20.0	1.080	1.080	0.561	0.561	
Edge 3	LAT	1xEVDO(Rel. 0)	5	450	1732.50	20.0	20.0	1.010	1.010	0.526	0.526	
Edge 3	LAT	1xEVDO(Rel. 0)	5	875	1753.75	20.0	19.9	0.910	0.931	0.473	0.484	
Edge 4	LAT	1xEVDO(Rel. 0)	5	450	1732.50	20.0	20.0	0.083	0.083	0.048	0.048	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. With headset attached. According to KDB 648474 Section 2.3, 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.

12.10. LTE Band 2 (20MHz Bandwidth)

12.10.1. Head Exposure Conditions

Test Position	Antenna	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	QPSK	18900	1880.0	1	49	23.4	0.560	0.560	0.291	0.291	
					50	24	22.6	0.425	0.425	0.221	0.221	
Left Tilt	UAT	QPSK	18900	1880.0	1	49	23.4	0.528	0.528	0.273	0.273	
					50	24	22.6	0.407	0.407	0.211	0.211	
Right Touch	UAT	QPSK	18700	1860.0	1	49	23.3	0.696	0.566	0.377	0.306	
			18900	1880.0	1	49	23.4	0.826	0.826	0.422	0.422	
					50	24	22.6	0.525	0.525	0.275	0.275	
					100	0	22.6	0.534	0.534	0.280	0.280	
			19100	1900.0	1	49	23.4	0.715	0.568	0.388	0.308	
Right Tilt	UAT	QPSK	18900	1880.0	1	49	23.4	0.542	0.542	0.266	0.266	
					50	24	22.6	0.449	0.449	0.230	0.230	
Left Touch	LAT	QPSK	18700	1860.0	1	49	23.0	0.714	0.714	0.487	0.487	
			18900	1880.0	1	49	23.0	0.751	0.751	0.507	0.507	
					50	24	21.9	0.586	0.586	0.393	0.393	
					100	0	21.9	0.587	0.601	0.394	0.403	
			19100	1900.0	1	49	23.0	0.716	0.716	0.480	0.480	
Left Tilt	LAT	QPSK	18900	1880.0	1	49	23.0	0.484	0.484	0.294	0.294	
					50	24	21.9	0.372	0.372	0.226	0.226	
Right Touch	LAT	QPSK	18700	1860.0	1	49	23.0	1.160	1.160	0.721	0.721	24
					50	24	22.3	0.918	0.918	0.568	0.568	
			18900	1880.0	1	49	23.0	1.150	1.150	0.714	0.714	
					50	24	21.9	0.889	0.889	0.548	0.548	
					100	0	21.8	0.708	0.708	0.433	0.433	
			19100	1900.0	1	49	23.0	1.170	1.170	0.716	0.716	
					50	24	22.7	0.939	0.939	0.576	0.576	
Right Tilt	LAT	QPSK	18900	1880.0	1	49	23.0	0.464	0.464	0.295	0.295	
					50	24	21.9	0.357	0.357	0.226	0.226	

12.10.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Rear	UAT	QPSK	5	18900	1880.0	1	49	23.4	0.608	0.608	0.302	0.302	
						50	24	22.4	0.473	0.473	0.236	0.236	
Front	UAT	QPSK	5	18900	1880.0	1	49	23.4	0.450	0.450	0.236	0.236	
						50	24	22.4	0.346	0.346	0.182	0.182	
Rear	LAT	QPSK	5	18700	1860.0	1	49	20.5	1.120	1.120	0.647	0.647	
						50	24	19.5	0.998	0.998	0.584	0.584	
				18900	1880.0	1	49	20.5	1.160	1.160	0.666	0.666	
						50	24	19.5	0.871	0.871	0.508	0.508	
						100	0	19.5	0.887	0.887	0.513	0.513	
				19100	1900.0	1	49	20.5	1.180	1.180	0.687	0.687	25
						50	24	19.5	0.915	0.915	0.530	0.530	
Front	LAT	QPSK	5	18700	1860.0	1	49	20.5	1.080	1.080	0.672	0.672	
				18900	1880.0	1	49	20.5	0.906	0.906	0.561	0.561	
						50	24	19.5	0.717	0.717	0.448	0.448	
						100	0	19.5	0.738	0.738	0.456	0.456	
				19100	1900.0	1	49	20.5	0.902	0.902	0.558	0.558	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	QPSK	5	18900	1880.0	1	49	23.4	0.450	0.450	0.193	0.193	
						50	24	22.4	0.347	0.347	0.147	0.147	
Edge 2	UAT	QPSK	5	18900	1880.0	1	49	23.4	0.093	0.093	0.051	0.051	
						50	24	22.4	0.072	0.072	0.039	0.039	
Edge 4	UAT	QPSK	5	18900	1880.0	1	49	23.4	0.375	0.375	0.200	0.200	
						50	24	22.4	0.290	0.290	0.154	0.154	
Edge 2	LAT	QPSK	5	18700	1860.0	1	49	20.5	1.000	1.000	0.539	0.539	
				18900	1880.0	1	49	20.5	0.836	0.836	0.452	0.452	
						50	24	19.5	0.659	0.659	0.355	0.355	
						100	0	19.5	0.665	0.665	0.360	0.360	
				19100	1900.0	1	49	20.5	0.818	0.818	0.440	0.440	
Edge 3	LAT	QPSK	5	18700	1860.0	1	49	20.5	1.040	1.040	0.543	0.543	
				18900	1880.0	1	49	20.5	0.881	0.881	0.456	0.456	
						50	24	19.5	0.710	0.710	0.367	0.367	
						100	0	19.5	0.708	0.708	0.367	0.367	
				19100	1900.0	1	49	20.5	0.885	0.885	0.458	0.458	
Edge 4	LAT	QPSK	5	18900	1880.0	1	49	20.5	0.108	0.108	0.059	0.059	
						50	24	19.5	0.086	0.086	0.048	0.048	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. Per KDB 941225 D05 SAR for LTE Devices, SAR test reduction is applied using the following criteria:
   - Testing for Low and High Channel 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 $\geq$ 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.
3. With headset attached. According to KDB 648474 Section 2.3, 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.

12.11. LTE Band 4 (20MHz Bandwidth)

12.11.1. Head Exposure Conditions

Test Position	Antenna	Mode	UL Ch #	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	QPSK	20175	1732.5	1	49	22.9	0.474	0.485	0.271	0.277	
					50	24	21.8	0.363	0.363	0.208	0.208	
Left Tilt	UAT	QPSK	20175	1732.5	1	49	22.9	0.537	0.550	0.299	0.306	
					50	24	21.8	0.411	0.411	0.229	0.229	
Right Touch	UAT	QPSK	20050	1720.0	1	49	22.9	0.689	0.705	0.376	0.385	
					50	24	21.8	0.528	0.528	0.290	0.290	
Right Tilt	UAT	QPSK	20175	1732.5	1	49	22.9	0.541	0.554	0.301	0.308	
					50	24	21.8	0.412	0.412	0.229	0.229	
Left Touch	LAT	QPSK	20175	1732.5	1	49	23.0	0.633	0.633	0.443	0.443	
					50	24	21.9	0.427	0.427	0.242	0.242	
Left Tilt	LAT	QPSK	20175	1732.5	1	49	23.0	0.340	0.340	0.214	0.214	
					50	24	21.9	0.254	0.254	0.159	0.159	
Right Touch	LAT	QPSK	20050	1720.0	1	49	23.0	0.985	0.985	0.622	0.622	
					50	24	21.7	0.770	0.770	0.486	0.486	
			20175	1732.5	1	49	23.0	1.100	1.100	0.688	0.688	
					50	24	21.9	0.856	0.856	0.538	0.538	
					100	0	21.8	0.861	0.861	0.541	0.541	
			20300	1745.0	1	49	23.0	1.120	1.120	0.706	0.706	26
					50	24	21.7	0.879	0.879	0.551	0.551	
Right Tilt	LAT	QPSK	20175	1732.5	1	49	23.0	0.251	0.251	0.160	0.160	
					50	24	21.9	0.184	0.184	0.119	0.119	

12.11.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Rear	UAT	QPSK	5	20175	1732.5	1	49	23.25	0.551	0.551	0.318	0.318	
						50	24	22.93	0.438	0.438	0.244	0.244	
Front	UAT	QPSK	5	20175	1732.5	1	49	23.25	0.474	0.474	0.289	0.289	
						50	24	22.93	0.369	0.369	0.225	0.225	
Rear	LAT	QPSK	5	20050	1720.0	1	49	20.0	1.070	1.070	0.605	0.605	
						50	24	19.0	0.836	0.836	0.471	0.471	
				20175	1732.5	1	49	20.0	1.110	1.110	0.627	0.627	27
						50	24	19.0	0.854	0.854	0.480	0.480	
						100	0	19.0	0.858	0.858	0.484	0.484	
				20300	1745.0	1	49	19.8	1.030	1.079	0.584	0.612	
						50	24	18.9	0.829	0.829	0.469	0.469	
Front	LAT	QPSK	5	20050	1720.0	1	49	20.0	0.903	0.903	0.520	0.520	
						50	24	19.0	0.708	0.708	0.409	0.409	
				20175	1732.5	1	49	20.0	0.912	0.912	0.533	0.533	
						50	24	19.0	0.718	0.718	0.417	0.417	
						100	0	19.0	0.725	0.725	0.416	0.416	
				20300	1745.0	1	49	19.8	0.855	0.895	0.496	0.519	
						50	24	18.9	0.668	0.668	0.389	0.389	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	QPSK	5	20175	1732.5	1	49	23.25	0.359	0.359	0.164	0.164	
						50	24	22.93	0.301	0.301	0.136	0.136	
Edge 2	UAT	QPSK	5	20175	1732.5	1	49	23.25	0.211	0.211	0.117	0.117	
						50	24	22.93	0.160	0.160	0.089	0.089	
Edge 4	UAT	QPSK	5	20175	1732.5	1	49	23.25	0.321	0.321	0.173	0.173	
						50	24	22.93	0.259	0.259	0.139	0.139	
Edge 2	LAT	QPSK	5	20050	1720.0	1	49	20.0	0.811	0.811	0.440	0.440	
						50	24	19.0	0.636	0.636	0.344	0.344	
				20175	1732.5	1	49	20.0	0.834	0.834	0.454	0.454	
						50	24	19.0	0.648	0.648	0.352	0.352	
						100	0	19.0	0.608	0.608	0.332	0.332	
				20300	1745.0	1	49	19.8	0.754	0.790	0.413	0.432	
						50	24	18.9	0.572	0.572	0.312	0.312	
Edge 3	LAT	QPSK	5	20050	1720.0	1	49	20.0	1.170	1.170	0.602	0.602	
						50	24	19.0	0.915	0.915	0.469	0.469	
				20175	1732.5	1	49	20.0	1.190	**1.190**	0.608	0.608	27
						50	24	19.0	0.929	0.929	0.474	0.474	
						100	0	19.0	0.857	0.857	0.440	0.440	
				20300	1745.0	1	49	19.8	1.090	1.141	0.563	0.590	
						50	24	18.9	0.853	0.853	0.439	0.439	
Edge 4	LAT	QPSK	5	20175	1732.5	1	49	20.0	0.075	0.075	0.043	0.043	
						50	24	19.0	0.058	0.058	0.035	0.035	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. Per KDB 941225 D05 SAR for LTE Devices, SAR test reduction is applied using the following criteria:
   - Testing for Low and High Channel 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 $\geq$ 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.
3. With headset attached. According to KDB 648474 Section 2.3, 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.

12.12. LTE Band 5 (10MHz Bandwidth)

12.12.1. Head Exposure Conditions

Test Position	Antenna	Mode	UL Ch #	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	QPSK	20525	836.6	1	24	23.7	0.426	0.426	0.303	0.303	
					25	12	22.9	0.359	0.359	0.255	0.255	
Left Tilt	UAT	QPSK	20525	836.6	1	24	23.7	0.206	0.206	0.126	0.126	
					25	12	22.9	0.229	0.229	0.136	0.136	
Right Touch	UAT	QPSK	20525	836.6	1	24	23.7	0.245	0.245	0.163	0.163	
					25	12	22.9	0.275	0.275	0.184	0.184	
Right Tilt	UAT	QPSK	20525	836.6	1	24	23.7	0.211	0.211	0.164	0.164	
					25	12	22.9	0.164	0.164	0.104	0.104	
Left Touch	LAT	QPSK	20525	836.6	1	24	24.0	0.580	0.580	0.435	0.435	29
					25	12	22.9	0.480	0.480	0.361	0.361	
Left Tilt	LAT	QPSK	20525	836.6	1	24	24.0	0.346	0.346	0.261	0.261	
					25	12	22.9	0.287	0.287	0.214	0.214	
Right Touch	LAT	QPSK	20525	836.6	1	24	24.0	0.501	0.501	0.376	0.376	
					25	12	22.9	0.447	0.447	0.335	0.335	
Right Tilt	LAT	QPSK	20525	836.6	1	24	24.0	0.169	0.169	0.129	0.129	
					25	12	22.9	0.198	0.198	0.148	0.148	

12.12.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Rear	UAT	QPSK	5	20525	836.6	1	24	23.7	0.173	0.173	0.116	0.116	
						25	12	22.7	0.135	0.135	0.091	0.091	
Front	UAT	QPSK	5	20525	836.6	1	24	23.7	0.134	0.134	0.090	0.090	
						25	12	22.7	0.102	0.102	0.069	0.069	
Rear	LAT	QPSK	5	20450	829.0	1	24	22.90	0.816	0.992	0.601	0.731	30
						25	12	22.70	0.642	0.642	0.473	0.473	
				20525	836.6	1	24	23.75	0.860	0.860	0.630	0.630	
						25	12	22.75	0.631	0.631	0.454	0.454	
						50	0	22.75	0.636	0.636	0.462	0.462	
				20600	844.0	1	24	23.00	0.827	0.983	0.603	0.717	
						25	12	22.75	0.641	0.641	0.465	0.465	
Front	LAT	QPSK	5	20525	836.6	1	24	23.75	0.713	0.713	0.536	0.536	
						25	12	22.75	0.548	0.548	0.413	0.413	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	QPSK	5	20525	836.6	1	24	23.7	0.078	0.078	0.035	0.035	
						25	12	22.7	0.060	0.060	0.027	0.027	
Edge 2	UAT	QPSK	5	20525	836.6	1	24	23.7	0.094	0.094	0.064	0.064	
						25	12	22.7	0.073	0.073	0.049	0.049	
Edge 4	UAT	QPSK	5	20525	836.6	1	24	23.7	0.049	0.049	0.030	0.030	
						25	12	22.7	0.034	0.034	0.022	0.022	
Edge 2	LAT	QPSK	5	20525	836.6	1	24	23.75	0.596	0.596	0.393	0.393	
						25	12	22.75	0.422	0.422	0.278	0.278	
Edge 3	LAT	QPSK	5	20525	836.6	1	24	23.75	0.170	0.170	0.086	0.086	
						25	12	22.75	0.130	0.130	0.066	0.066	
Edge 4	LAT	QPSK	5	20450	829.0	1	24	22.90	0.963	1.171	0.641	0.780	31
						25	12	22.70	0.910	0.910	0.606	0.606	
				20525	836.6	1	24	23.75	0.942	0.942	0.627	0.627	
						25	12	22.75	0.897	0.897	0.597	0.597	
						50	0	22.75	0.533	0.533	0.351	0.351	
				20600	844.0	1	24	23.00	0.883	1.049	0.587	0.698	
						25	12	22.75	0.771	0.771	0.510	0.510	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. Per KDB 941225 D05 SAR for LTE Devices, SAR test reduction is applied using the following criteria:
   - Testing for Low and High Channel 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 $\geq$ 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.
3. With headset attached. According to KDB 648474 Section 2.3, 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.

12.13. LTE Band 13 (10MHz Bandwidth)

12.13.1. Head Exposure Conditions

Test Position	Antenna	Mode	UL Ch #	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	QPSK	23230	782.0	1	24	23.7	0.354	0.354	0.253	0.253	
					25	12	23.6	0.314	0.314	0.224	0.224	
Left Tilt	UAT	QPSK	23230	782.0	1	24	23.7	0.205	0.205	0.134	0.134	
					25	12	23.6	0.181	0.181	0.118	0.118	
Right Touch	UAT	QPSK	23230	782.0	1	24	23.7	0.150	0.150	0.100	0.100	
					25	12	23.6	0.118	0.118	0.079	0.079	
Right Tilt	UAT	QPSK	23230	782.0	1	24	23.7	0.107	0.107	0.065	0.065	
					25	12	23.6	0.085	0.085	0.052	0.052	
Left Touch	LAT	QPSK	23230	782.0	1	24	24.0	0.498	0.498	0.371	0.371	32
					25	12	23.1	0.394	0.394	0.294	0.294	
Left Tilt	LAT	QPSK	23230	782.0	1	24	24.0	0.359	0.359	0.270	0.270	
					25	12	23.1	0.310	0.310	0.231	0.231	
Right Touch	LAT	QPSK	23230	782.0	1	24	24.0	0.482	0.482	0.354	0.354	
					25	12	23.1	0.384	0.384	0.283	0.283	
Right Tilt	LAT	QPSK	23230	782.0	1	24	24.0	0.364	0.364	0.274	0.274	
					25	12	23.1	0.275	0.275	0.208	0.208	

12.13.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Rear	UAT	QPSK	5	23230	782.0	1	24	23.7	0.213	0.213	0.156	0.156	
						25	12	22.7	0.186	0.186	0.136	0.136	
Front	UAT	QPSK	5	23230	782.0	1	24	23.7	0.167	0.167	0.124	0.124	
						25	12	22.7	0.146	0.146	0.108	0.108	
Rear	LAT	QPSK	5	23230	782.0	1	24	24.0	0.905	0.905	0.641	0.641	33
						25	12	23.0	0.738	0.738	0.523	0.523	
						50	0	23.0	0.741	0.741	0.525	0.525	
Front	LAT	QPSK	5	23230	782.0	1	24	24.0	0.786	0.786	0.588	0.588	
						25	12	23.0	0.644	0.644	0.481	0.481	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	QPSK	5	23230	782.0	1	24	23.7	0.110	0.110	0.051	0.051	
						25	12	22.7	0.096	0.096	0.044	0.044	
Edge 2	UAT	QPSK	5	23230	782.0	1	24	23.7	0.072	0.072	0.048	0.048	
						25	12	22.7	0.059	0.059	0.039	0.039	
Edge 4	UAT	QPSK	5	23230	782.0	1	24	23.7	0.035	0.035	0.022	0.022	
						25	12	22.7	0.029	0.029	0.018	0.018	
Edge 2	LAT	QPSK	5	23230	782.0	1	24	24.0	0.638	0.638	0.420	0.420	
						25	12	23.0	0.518	0.518	0.340	0.340	
Edge 3	LAT	QPSK	5	23230	782.0	1	24	24.0	0.695	0.695	0.466	0.466	
						25	12	23.0	0.567	0.567	0.378	0.378	
Edge 4	LAT	QPSK	5	23230	782.0	1	24	24.0	0.285	0.285	0.140	0.140	
						25	12	23.0	0.266	0.266	0.129	0.129	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. Per KDB 941225 D05 SAR for LTE Devices, SAR test reduction is applied using the following criteria:
   - Testing for Low and High Channel 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 $\geq$ 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.
3. With headset attached. According to KDB 648474 Section 2.3, 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.

12.14. LTE Band 17 (10MHz Bandwidth)

12.14.1. Head Exposure Conditions

Test Position	Antenna	Mode	UL Ch #	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	QPSK	23790	710.0	1	24	23.7	0.329	0.329	0.242	0.242	
					25	12	22.6	0.253	0.253	0.186	0.186	
Left Tilt	UAT	QPSK	23790	710.0	1	24	23.7	0.244	0.244	0.158	0.158	
					25	12	22.7	0.194	0.190	0.123	0.120	
Right Touch	UAT	QPSK	23790	710.0	1	24	23.7	0.273	0.273	0.191	0.191	
					25	12	22.7	0.201	0.196	0.141	0.138	
Right Tilt	UAT	QPSK	23790	710.0	1	24	23.7	0.231	0.231	0.144	0.144	
					25	12	22.7	0.181	0.177	0.112	0.109	
Left Touch	LAT	QPSK	23790	710.0	1	24	23.9	0.450	0.460	0.342	0.350	
					25	12	22.9	0.378	0.378	0.288	0.288	
Left Tilt	LAT	QPSK	23790	710.0	1	24	23.9	0.259	0.265	0.199	0.204	
					25	12	22.9	0.215	0.215	0.165	0.165	
Right Touch	LAT	QPSK	23790	710.0	1	24	23.9	0.437	0.447	0.323	0.331	34
					25	12	22.9	0.360	0.360	0.266	0.266	
Right Tilt	LAT	QPSK	23790	710.0	1	24	23.9	0.216	0.221	0.166	0.170	
					25	12	22.9	0.184	0.184	0.141	0.141	

12.14.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Rear	UAT	QPSK	5	23790	710.0	1	24	23.7	0.179	0.179	0.129	0.129	
						25	12	22.7	0.177	0.177	0.127	0.127	
Front	UAT	QPSK	5	23790	710.0	1	24	23.7	0.148	0.148	0.109	0.109	
						25	12	22.7	0.147	0.147	0.108	0.108	
Rear	LAT	QPSK	5	23790	710.0	1	24	23.7	0.909	0.974	0.639	0.685	35
						25	12	23.0	0.784	0.784	0.550	0.550	
						50	0	23.0	0.783	0.783	0.548	0.548	
Front	LAT	QPSK	5	23790	710.0	1	24	23.7	0.607	0.650	0.452	0.484	
						25	12	23.0	0.602	0.602	0.448	0.448	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	QPSK	5	23790	710.0	1	24	23.7	0.139	0.139	0.066	0.066	
						25	12	22.7	0.108	0.108	0.051	0.051	
Edge 2	UAT	QPSK	5	23790	710.0	1	24	23.7	0.161	0.161	0.110	0.110	
						25	12	22.7	0.157	0.157	0.107	0.107	
Edge 4	UAT	QPSK	5	23790	710.0	1	24	23.7	0.117	0.117	0.077	0.077	
						25	12	22.7	0.091	0.091	0.060	0.060	
Edge 2	LAT	QPSK	5	23790	710.0	1	24	23.7	0.497	0.533	0.329	0.353	
						25	12	23.0	0.431	0.431	0.285	0.285	
Edge 3	LAT	QPSK	5	23790	710.0	1	24	23.7	0.255	0.273	0.130	0.139	
						25	12	23.0	0.228	0.228	0.116	0.116	
Edge 4	LAT	QPSK	5	23790	710.0	1	24	23.7	0.600	0.643	0.412	0.441	
						25	12	23.0	0.519	0.519	0.355	0.355	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. Per KDB 941225 D05 SAR for LTE Devices, SAR test reduction is applied using the following criteria:
   - Testing for Low and High Channel 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 $\geq$ 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.
3. With headset attached. According to KDB 648474 Section 2.3, 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.

12.15. LTE Band 25 (20MHz Bandwidth)

12.15.1. Head Exposure Conditions

Test Position	Antenna	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	QPSK	26365	1882.5	1	49	23.3	0.649	0.664	0.359	0.367	
					50	24	22.7	0.508	0.508	0.279	0.279	
Left Tilt	UAT	QPSK	26365	1882.5	1	49	23.3	0.505	0.517	0.260	0.266	
					50	24	22.7	0.392	0.392	0.202	0.202	
Right Touch	UAT	QPSK	26365	1882.5	1	49	23.3	0.722	0.739	0.382	0.391	
					50	24	22.7	0.540	0.540	0.285	0.285	
Right Tilt	UAT	QPSK	26365	1882.5	1	49	23.3	0.564	0.577	0.293	0.300	
					50	24	22.7	0.427	0.427	0.221	0.221	
Left Touch	LAT	QPSK	26140	1860.0	1	49	23.0	0.850	0.850	0.570	0.570	
			26365	1882.5	1	49	23.0	0.828	0.828	0.552	0.552	
					50	24	21.9	0.649	0.649	0.432	0.432	
					100	0	22.0	0.655	0.655	0.441	0.441	
			26590	1905.0	1	49	22.7	0.762	0.816	0.500	0.536	
Left Tilt	LAT	QPSK	26365	1882.5	1	49	23.0	0.521	0.521	0.310	0.310	
					50	24	21.9	0.403	0.403	0.241	0.241	
Right Touch	LAT	QPSK	26140	1860.0	1	49	23.0	1.180	1.180	0.726	0.726	36
					50	24	22.6	0.942	0.942	0.576	0.576	
			26365	1882.5	1	49	23.0	1.160	1.160	0.706	0.706	
					50	24	21.9	0.892	0.892	0.544	0.544	
					100	0	22.0	0.839	0.839	0.519	0.519	
			26590	1905.0	1	49	22.7	1.050	1.125	0.638	0.684	
					50	24	21.7	0.900	0.900	0.546	0.546	
Right Tilt	LAT	QPSK	26365	1882.5	1	49	23.0	0.625	0.625	0.377	0.377	
					50	24	21.9	0.477	0.477	0.288	0.288	

12.15.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Rear	UAT	QPSK	5	26365	1882.5	1	49	23.4	0.566	0.566	0.286	0.286	
						50	24	22.4	0.429	0.429	0.218	0.218	
Front	UAT	QPSK	5	26365	1882.5	1	49	23.4	0.457	0.457	0.242	0.242	
						50	24	22.4	0.351	0.351	0.185	0.185	
Rear	LAT	QPSK	5	26140	1860.0	1	49	20.5	1.120	1.120	0.633	0.633	37
						50	24	19.5	0.855	0.855	0.484	0.484	
				26365	1882.5	1	49	20.4	1.070	1.095	0.596	0.610	
						50	24	19.4	0.836	0.855	0.466	0.477	
						100	0	19.4	0.853	0.873	0.477	0.488	
				26590	1905.0	1	49	20.2	0.982	1.052	0.539	0.578	
						50	24	19.2	0.804	0.862	0.439	0.470	
Front	LAT	QPSK	5	26365	1882.5	1	49	20.4	0.725	0.742	0.451	0.462	
						50	24	19.4	0.570	0.583	0.357	0.365	

Hotspot Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	QPSK	5	26365	1882.5	1	49	23.4	0.440	0.440	0.188	0.188	
						50	24	22.4	0.339	0.339	0.145	0.145	
Edge 2	UAT	QPSK	5	26365	1882.5	1	49	23.4	0.130	0.130	0.071	0.071	
						50	24	22.4	0.097	0.097	0.053	0.053	
Edge 4	UAT	QPSK	5	26365	1882.5	1	49	23.4	0.353	0.353	0.189	0.189	
						50	24	22.4	0.274	0.274	0.147	0.147	
Edge 2	LAT	QPSK	5	26365	1882.5	1	49	20.4	0.715	0.732	0.386	0.395	
						50	24	19.4	0.564	0.577	0.305	0.312	
Edge 3	LAT	QPSK	5	26365	1882.5	1	49	20.4	0.763	0.781	0.395	0.404	
						50	24	19.4	0.610	0.624	0.314	0.321	
Edge 4	LAT	QPSK	5	26365	1882.5	1	49	20.4	0.094	0.096	0.053	0.054	
						50	24	19.4	0.076	0.078	0.042	0.043	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. Per KDB 941225 D05 SAR for LTE Devices, SAR test reduction is applied using the following criteria:
   - Testing for Low and High Channel 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 $\geq$ 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.
3. With headset attached. According to KDB 648474 Section 2.3, 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.

12.16. LTE Band 26 (5MHz Bandwidth)

12.16.1. Head Exposure Conditions

Test Position	Antenna	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
								Meas.	Scaled	Meas.	Scaled	
Left Touch	UAT	QPSK	26763	821.3	1	12	23.7	0.433	0.433	0.309	0.309	
					12	6	23.7	0.429	0.429	0.307	0.307	
Left Tilt	UAT	QPSK	26763	821.3	1	12	23.7	0.229	0.229	0.144	0.144	
					12	6	23.7	0.230	0.230	0.145	0.145	
Right Touch	UAT	QPSK	26763	821.3	1	12	23.7	0.273	0.273	0.187	0.187	
					12	6	23.7	0.277	0.277	0.189	0.189	
Right Tilt	UAT	QPSK	26763	821.3	1	12	23.7	0.182	0.182	0.107	0.107	
					12	6	23.7	0.136	0.136	0.082	0.082	
Left Touch	LAT	QPSK	26763	821.3	1	12	24.0	0.643	0.643	0.477	0.477	
					12	6	24.0	0.639	0.639	0.475	0.475	
Left Tilt	LAT	QPSK	26763	821.3	1	12	24.0	0.431	0.431	0.323	0.323	
					12	6	24.0	0.361	0.361	0.272	0.272	
Right Touch	LAT	QPSK	26763	821.3	1	12	24.0	0.654	0.654	0.477	0.477	38
					12	6	24.0	0.647	0.647	0.470	0.470	
Right Tilt	LAT	QPSK	26763	821.3	1	12	24.0	0.431	0.431	0.322	0.322	
					12	6	24.0	0.287	0.287	0.215	0.215	

12.16.2. Body-worn Accessory & Hotspot Mode Exposure Conditions

Body-worn Accessory & Hotspot Mode Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Rear	UAT	QPSK	5	26763	821.3	1	12	23.7	0.120	0.120	0.078	0.078	
						12	6	23.7	0.106	0.106	0.069	0.069	
Front	UAT	QPSK	5	26763	821.3	1	12	23.7	0.095	0.095	0.063	0.063	
						12	6	23.7	0.085	0.085	0.056	0.056	
Rear	LAT	QPSK	5	26763	821.3	1	12	24.0	0.854	0.854	0.631	0.631	39
						12	6	23.0	0.671	0.671	0.498	0.498	
						25	0	23.0	0.661	0.661	0.490	0.490	
Front	LAT	QPSK	5	26763	821.3	1	37	24.0	0.766	0.766	0.588	0.588	
						36	16	23.0	0.607	0.607	0.465	0.465	

Hotspot Mode Exposure Conditions

Test Position	Antenna	Mode	Dist. (mm)	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Meas. Pwr (dBm)	1-g SAR (W/kg)		10-g SAR (W/kg)		Plot No.
									Meas.	Scaled	Meas.	Scaled	
Edge 1	UAT	QPSK	5	26763	821.3	1	12	23.7	0.057	0.057	0.025	0.025	
						12	6	23.7	0.051	0.051	0.023	0.023	
Edge 2	UAT	QPSK	5	26763	821.3	1	12	23.7	0.130	0.130	0.087	0.087	
						12	6	23.7	0.116	0.116	0.078	0.078	
Edge 4	UAT	QPSK	5	26763	821.3	1	12	23.7	0.037	0.037	0.024	0.024	
						12	6	23.7	0.033	0.033	0.021	0.021	
Edge 2	LAT	QPSK	5	26763	821.3	1	12	24.0	0.687	0.687	0.458	0.458	
						12	6	23.0	0.539	0.539	0.358	0.358	
Edge 3	LAT	QPSK	5	26763	821.3	1	12	24.0	0.157	0.157	0.082	0.082	
						12	6	23.0	0.120	0.120	0.063	0.063	
Edge 4	LAT	QPSK	5	26763	821.3	1	12	24.0	1.030	1.030	0.689	0.689	40
						12	6	23.0	0.806	0.806	0.540	0.540	
						25	0	23.0	0.793	0.793	0.534	0.534	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
2. Per KDB 941225 D05 SAR for LTE Devices, SAR test reduction is applied using the following criteria:
   - Testing for Low and High Channel 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 $\geq$ 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.
3. With headset attached. According to KDB 648474 Section 2.3, 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.

12.17. Wi-Fi (DTS Band)

12.17.1. Head Exposure Conditions

WiFi Vendor	Band	Test Position	Mode	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	
Vendor A	2.4GHz	Left Touch	802.11b	6	2437	16.0	16.0	0.209	0.209	0.107	0.107	
		Left Tilt	802.11b	6	2437	16.0	16.0	0.151	0.151	0.079	0.079	
		Right Touch	802.11b	6	2437	16.0	16.0	0.596	**0.596**	0.282	0.282	40
		Right Tilt	802.11b	6	2437	16.0	16.0	0.348	0.348	0.168	0.168	
Vendor B	2.4GHz	Left Touch	802.11b	6	2437	16.0	16.0	0.192	0.192	0.098	0.098	
		Left Tilt	802.11b	6	2437	16.0	16.0	0.142	0.142	0.074	0.074	
		Right Touch	802.11b	6	2437	16.0	16.0	0.461	0.461	0.215	0.215	
		Right Tilt	802.11b	6	2437	16.0	16.0	0.280	0.280	0.136	0.136	
Vendor A	5.8GHz	Left Touch	802.11a	157	5785	13.5	13.5	0.420	0.420	0.108	0.108	
		Left Tilt	802.11a	157	5785	13.5	13.5	0.229	0.229	0.062	0.062	
		Right Touch	802.11a	157	5785	13.5	13.5	0.567	0.567	0.136	0.136	41
		Right Tilt	802.11a	157	5785	13.5	13.5	0.370	0.370	0.088	0.088	
Vendor B	5.8GHz	Left Touch	802.11a	157	5785	13.5	13.5	0.262	0.262	0.060	0.060	
		Left Tilt	802.11a	157	5785	13.5	13.5	0.114	0.114	0.020	0.020	
		Right Touch	802.11a	157	5785	13.5	13.5	0.514	0.514	0.125	0.125	
		Right Tilt	802.11a	157	5785	13.5	13.5	0.318	0.318	0.086	0.086	

12.17.2. Body-worn Accessory & Hotspot Exposure Conditions

Body-worn Accessory & Hotspot Exposure Conditions

WiFi Vendor	Band	Test Position	Mode	Dist. (mm)	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	
Vendor A	2.4GHz	Rear	802.11b	5	6	2437	16.0	16.0	0.481	**0.481**	0.224	0.224	42
		Front	802.11b	5	6	2437	16.0	16.0	0.184	0.184	0.070	0.070	
Vendor B	2.4GHz	Rear	802.11b	5	6	2437	16.0	16.0	0.479	0.479	0.209	0.209	
		Front	802.11b	5	6	2437	16.0	16.0	0.185	0.185	0.096	0.096	

Body-worn Accessory Exposure Conditions

WiFi Vendor	Band	Test Position	Mode	Dist. (mm)	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	
Vendor A	5.8GHz	Rear	802.11a	5	157	5785	13.5	13.5	0.519	**0.519**	0.141	0.141	43
		Front	802.11a	5	157	5785	13.5	13.5	0.222	0.222	0.059	0.059	
Vendor B	5.8GHz	Rear	802.11a	5	157	5785	13.5	13.5	0.378	0.378	0.110	0.110	
		Front	802.11a	5	157	5785	13.5	13.5	0.172	0.172	0.047	0.047	

Hotspot Exposure Conditions

WiFi Vendor	Band	Test Position	Mode	Dist. (mm)	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	
Vendor A	2.4GHz	Edge 1	802.11b	5	6	2437	16.0	16.0	0.083	0.083	0.037	0.037	
		Edge 2	802.11b	5	6	2437	16.0	16.0	0.024	0.024	0.010	0.010	
		Edge 4	802.11b	5	6	2437	16.0	16.0	0.329	0.329	0.162	0.162	
Vendor B	2.4GHz	Edge 1	802.11b	5	6	2437	16.0	16.0	0.080	0.080	0.038	0.038	
		Edge 2	802.11b	5	6	2437	16.0	16.0	0.006	0.006	0.002	0.002	
		Edge 4	802.11b	5	6	2437	16.0	16.0	0.206	0.206	0.103	0.103	
Vendor A	5.8GHz	Edge 1	802.11a	5	157	5785	13.5	13.5	0.103	0.103	0.033	0.033	
		Edge 2	802.11a	5	157	5785	13.5	13.5	0.032	0.032	0.012	0.012	
		Edge 4	802.11a	5	157	5785	13.5	13.5	0.031	0.031	0.009	0.009	
Vendor B	5.8GHz	Edge 1	802.11a	5	157	5785	13.5	13.5	0.062	0.062	0.022	0.022	
		Edge 2	802.11a	5	157	5785	13.5	13.5	0.033	0.033	0.011	0.011	
		Edge 4	802.11a	5	157	5785	13.5	13.5	0.013	0.013	0.002	0.002	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

12.18. Wi-Fi (UNII Bands)

12.18.1. Head Exposure Conditions

WiFi Vendor	Band	Test Position	Mode	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	
Vendor A	5.2GHz	Left Touch	802.11a	48	5240	14.0	14.0	0.189	0.189	0.057	0.057	
		Left Tilt	802.11a	48	5240	14.0	14.0	0.134	0.134	0.039	0.039	
		Right Touch	802.11a	48	5240	14.0	14.0	0.247	0.247	0.072	0.072	44
		Right Tilt	802.11a	48	5240	14.0	14.0	0.208	0.208	0.064	0.064	
	5.3GHz	Left Touch	802.11a	52	5260	14.5	14.5	0.179	0.179	0.052	0.052	
		Left Tilt	802.11a	52	5260	14.5	14.5	0.165	0.165	0.053	0.053	
		Right Touch	802.11a	52	5260	14.5	14.5	0.235	0.235	0.069	0.069	45
		Right Tilt	802.11a	52	5260	14.5	14.5	0.178	0.178	0.056	0.056	
	5.5GHz	Left Touch	802.11a	104	5520	14.0	14.0	0.301	0.301	0.101	0.101	
				116	5580	14.0	14.0	0.172	0.172	0.061	0.061	
				124	5620	14.0	14.0	0.147	0.147	0.056	0.056	
				136	5680	14.0	14.0	0.390	0.390	0.131	0.131	
		Left Tilt	802.11a	104	5520	14.0	14.0	0.158	0.158	0.054	0.054	
				116	5580	14.0	14.0	0.172	0.172	0.058	0.058	
				124	5620	14.0	14.0	0.426	0.426	0.141	0.141	
				136	5680	14.0	14.0	0.378	0.378	0.125	0.125	
		Right Touch	802.11a	104	5520	14.0	14.0	0.469	0.469	0.139	0.139	
				116	5580	14.0	14.0	0.206	0.206	0.077	0.077	
				124	5620	14.0	14.0	0.586	**0.586**	0.169	0.169	46
				136	5680	14.0	14.0	0.488	0.488	0.132	0.132	
		Right Tilt	802.11a	104	5520	14.0	14.0	0.471	0.471	0.131	0.131	
				116	5580	14.0	14.0	0.191	0.191	0.061	0.061	
				124	5620	14.0	14.0	0.573	0.573	0.158	0.158	
				136	5680	14.0	14.0	0.466	0.466	0.127	0.127	

WiFi Vendor	Band	Test Position	Mode	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	
Vendor B	5.2GHz	Left Touch	802.11a	48	5240	14.0	14.0	0.129	0.129	0.037	0.037	
		Left Tilt	802.11a	48	5240	14.0	14.0	0.068	0.068	0.020	0.020	
		Right Touch	802.11a	48	5240	14.0	14.0	0.170	0.170	0.043	0.043	
		Right Tilt	802.11a	48	5240	14.0	14.0	0.141	0.141	0.039	0.039	
	5.3GHz	Left Touch	802.11a	52	5260	14.5	14.5	0.169	0.169	0.049	0.049	
		Left Tilt	802.11a	52	5260	14.5	14.5	0.098	0.098	0.029	0.029	
		Right Touch	802.11a	52	5260	14.5	14.5	0.221	0.221	0.057	0.057	
		Right Tilt	802.11a	52	5260	14.5	14.5	0.139	0.139	0.040	0.040	
	5.5GHz	Left Touch	802.11a	104	5520	14.0	14.0	0.254	0.254	0.078	0.078	
				116	5580	14.0	14.0	0.351	0.351	0.111	0.111	
				124	5620	14.0	14.0	0.196	0.196	0.066	0.066	
				136	5680	14.0	14.0	0.429	0.429	0.143	0.143	
		Left Tilt	802.11a	104	5520	14.0	14.0	0.190	0.190	0.063	0.063	
				116	5580	14.0	14.0	0.283	0.283	0.097	0.097	
				124	5620	14.0	14.0	0.160	0.160	0.055	0.055	
				136	5680	14.0	14.0	0.391	0.391	0.144	0.144	
		Right Touch	802.11a	104	5520	14.0	14.0	0.391	0.391	0.107	0.107	
				116	5580	14.0	14.0	0.523	0.523	0.150	0.150	
				124	5620	14.0	14.0	0.304	0.304	0.092	0.092	
				136	5680	14.0	14.0	0.527	0.527	0.143	0.143	
		Right Tilt	802.11a	104	5520	14.0	14.0	0.275	0.275	0.074	0.074	
				116	5580	14.0	14.0	0.420	0.420	0.121	0.121	
				124	5620	14.0	14.0	0.183	0.183	0.060	0.060	
				136	5680	14.0	14.0	0.581	0.581	0.175	0.175	

12.18.2. Body-worn Accessory Exposure Conditions

WiFi Vendor	Band	Test Position	Mode	Dist. (mm)	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	
Vendor A	5.2GHz	Rear	802.11a	5	48	5240	14.0	14.0	0.421	0.421	0.121	0.121	47
		Front	802.11a	5	48	5240	14.0	14.0	0.081	0.081	0.021	0.021	
	5.3GHz	Rear	802.11a	5	52	5260	14.5	14.5	0.566	**0.566**	0.165	0.165	48
		Front	802.11a	5	52	5260	14.5	14.5	0.127	0.127	0.037	0.037	
	5.5GHz	Rear	802.11a	5	104	5520	14.0	14.0	0.446	0.446	0.139	0.139	
					116	5580	14.0	14.0	0.296	0.296	0.105	0.105	
					124	5620	14.0	14.0	0.354	0.354	0.121	0.121	
					136	5680	14.0	14.0	0.547	0.547	0.183	0.183	49
		Front	802.11a	5	136	5680	14.0	14.0	0.129	0.129	0.058	0.058	
Vendor B	5.2GHz	Rear	802.11a	5	48	5240	14.0	14.0	0.329	0.329	0.097	0.097	
		Front	802.11a	5	48	5240	14.0	14.0	0.112	0.112	0.032	0.032	
	5.3GHz	Rear	802.11a	5	52	5260	14.5	14.5	0.487	0.487	0.138	0.138	
		Front	802.11a	5	52	5260	14.5	14.5	0.103	0.103	0.029	0.029	
	5.5GHz	Rear	802.11a	5	104	5520	14.0	14.0	0.465	0.465	0.149	0.149	
					116	5580	14.0	14.0	0.452	0.452	0.154	0.154	
					124	5620	14.0	14.0	0.388	0.388	0.133	0.133	
					136	5680	14.0	14.0	0.480	0.480	0.165	0.165	
		Front	802.11a	5	136	5680	14.0	14.0	0.210	0.210	0.084	0.084	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

12.19. Bluetooth (DTS Band)

12.19.1. Body-worn Accessory Exposure Considerations

WiFi Vendor A

WiFi Vendor	Test Position	Mode	Dist. (mm)	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	
Vendor A	Rear	GFSK	5	39	2441	12.0	11.8	0.011	0.012	0.004	0.004	50
	Front	GFSK	5	39	2441	12.0	11.8	0.002	0.002	<0.001	<0.001	
Vendor B	Rear	GFSK	5	39	2441	12.0	11.8	0.010	0.010	0.003	0.003	
	Front	GFSK	5	39	2441	12.0	11.8	0.002	0.002	<0.001	<0.001	

Note(s):

1. Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13. SAR Measurement Variability

In accordance with published RF Exposure KDB procedure 865664 D01 SAR measurement 100 MHz to 6 GHz v01. 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 ≥ 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 ≥ 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 ≥1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

13.1. The Highest Measured SAR Configuration in Each Frequency Band

Frequency Band (MHz)	Air Interface	Head	Body-worn Accessory	Hotspot
850	GSM 850			1.190 W/kg
	CDMA BC0			
	CDMA BC10			
	W-CDMA Band 5			
	LTE Band 5			
	LTE Band 26			
1900	GSM 1900	1.180 W/kg		
	CDMA BC1	1.180 W/kg		
	W-CDMA Band 2	1.180 W/kg		
	LTE Band 2		1.180 W/kg	
	LTE Band 25	1.180 W/kg		
1700	CDMA BC15			
	W-CDMA Band 4			
	LTE Band 4			1.190 W/kg
700	LTE Band 13			
	LTE Band 17		0.909 W/kg	
2400	WiFi 802.11b/g/n	< 0.80 W/kg	< 0.80 W/kg	< 0.80 W/kg
	Bluetooth	< 0.80 W/kg	< 0.80 W/kg	< 0.80 W/kg
5000	WiFi 802.11a/n	< 0.80 W/kg	< 0.80 W/kg	< 0.80 W/kg

13.2. Repeated Measurement Results

Head Exposure Condition

Frequency band	Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Meas. SAR (W/kg)		Largest to Smallest SAR Ratio	Note
						Original	Repeated		
GSM1900	Right Touch	LAT	GPRS 2 slots	512	1850.2	1.180	1.170	1.01	1
WCDMA Band 2	Right Touch	LAT	Rel. 99 RMC	9400	1880.0	1.180	1.130	1.04	1
CDMA BC1	Right Touch	LAT	1xRTT(RC3, SO55)	1175	1908.8	1.180	1.170	1.01	1
LTE Band 25	Right Touch	LAT	QPSK RB1/49	26140	1860.0	1.180	1.160	1.02	1

Body-worn Accessory Exposure Condition

Frequency band	Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Meas. SAR (W/kg)		Largest to Smallest SAR Ratio	Note
						Original	Repeated		
LTE Band 2	Rear	LAT	QPSK RB1/49	19100	1900.0	1.180	1.160	1.02	1
LTE Band 17	Rear	LAT	QPSK RB1/24	23790	710.0	0.909	0.880	1.03	1

Hotspot Exposure Conditions

Frequency band	Test Position	Antenna	Mode	Ch #.	Freq. (MHz)	Meas. SAR (W/kg)		Largest to Smallest SAR Ratio	Note
						Original	Repeated		
GSM850	Edge 4	LAT	GPRS 2slots	190	836.6	1.190	1.150	1.03	1
LTE Band 4	Edge 3	LAT	QPSK RB1/49	20175	1732.5	1.190	1.170	1.02	1

Note(s):

1. 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.

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14. Simultaneous Transmission SAR Analysis

KDB 447498 D01 General RF Exposure Guidance v05, 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_1 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_2 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 $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$

A new threshold of 0.04 is also introduced in the draft KDB. Thus, 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:

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

14.1. Sum of the SAR for GSM850 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		GSM 850	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.593	0.420			1.013	No
		0.593		0.429		1.022	No
	Left Tilt	0.387	0.229			0.616	No
		0.387		0.426		0.813	No
	Right Touch	0.576	0.596			1.172	No
		0.576		0.586		1.162	No
	Right Tilt	0.277	0.370			0.647	No
		0.277		0.581		0.858	No
Body-worn Accessory & Hotspot	Rear	0.345	0.519			0.864	No
		0.345		0.566		0.911	No
		0.345			0.012	0.357	No
	Front	0.277	0.222			0.499	No
		0.277		0.242		0.519	No
		0.277			0.002	0.279	No
Hotspot	Edge 1	0.132	0.083			0.215	No
	Edge 2	0.469	0.024			0.493	No
	Edge 3	0	0			0.000	No
	Edge 4	0.212	0.329			0.541	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.2. Sum of the SAR for GSM850 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		GSM 850	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.893	0.420			1.313	No
		0.893		0.429		1.322	No
	Left Tilt	0.541	0.229			0.770	No
		0.541		0.426		0.967	No
	Right Touch	0.783	0.596			1.379	No
		0.783		0.586		1.369	No
	Right Tilt	0.607	0.370			0.977	No
		0.607		0.581		1.188	No
Body-worn Accessory & Hotspot	Rear	1.150	0.519			1.669	**Yes**
		1.150		0.566		1.716	**Yes**
		1.150			0.012	1.162	No
	Front	1.150	0.222			1.372	No
		1.150		0.242		1.392	No
		1.150			0.002	1.152	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.893	0.024			0.917	No
	Edge 3	0.265	0			0.265	No
	Edge 4	1.190	0.329			1.519	No

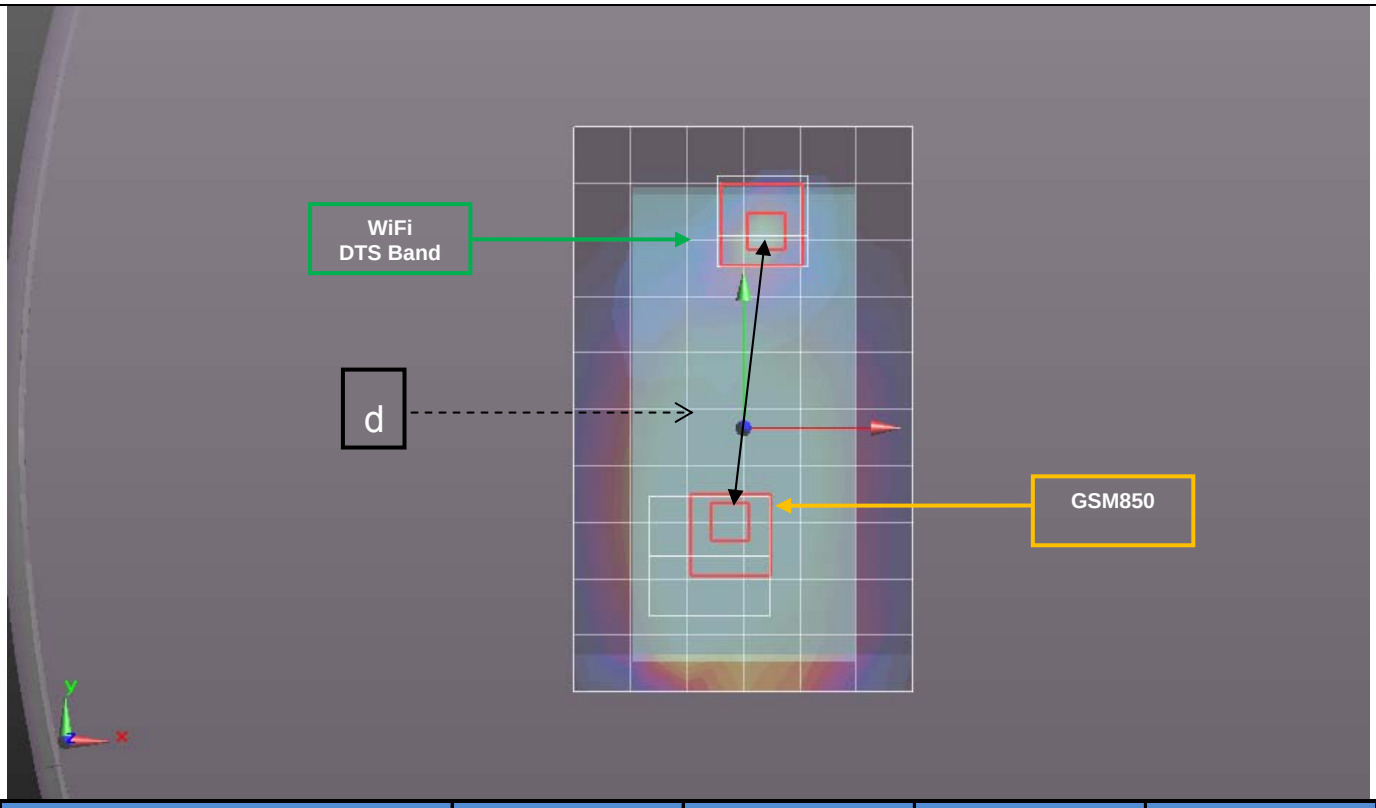
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			GSM 850	WiFi DTS Band	WiFi UNII Band					
1	Body-worn Accessory & Hotspot	Rear	1.150	0.519		1.669	86.4	0.025	No	1
			1.150		0.566	1.716	86.2	0.026	No	2

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.

Figure (1)

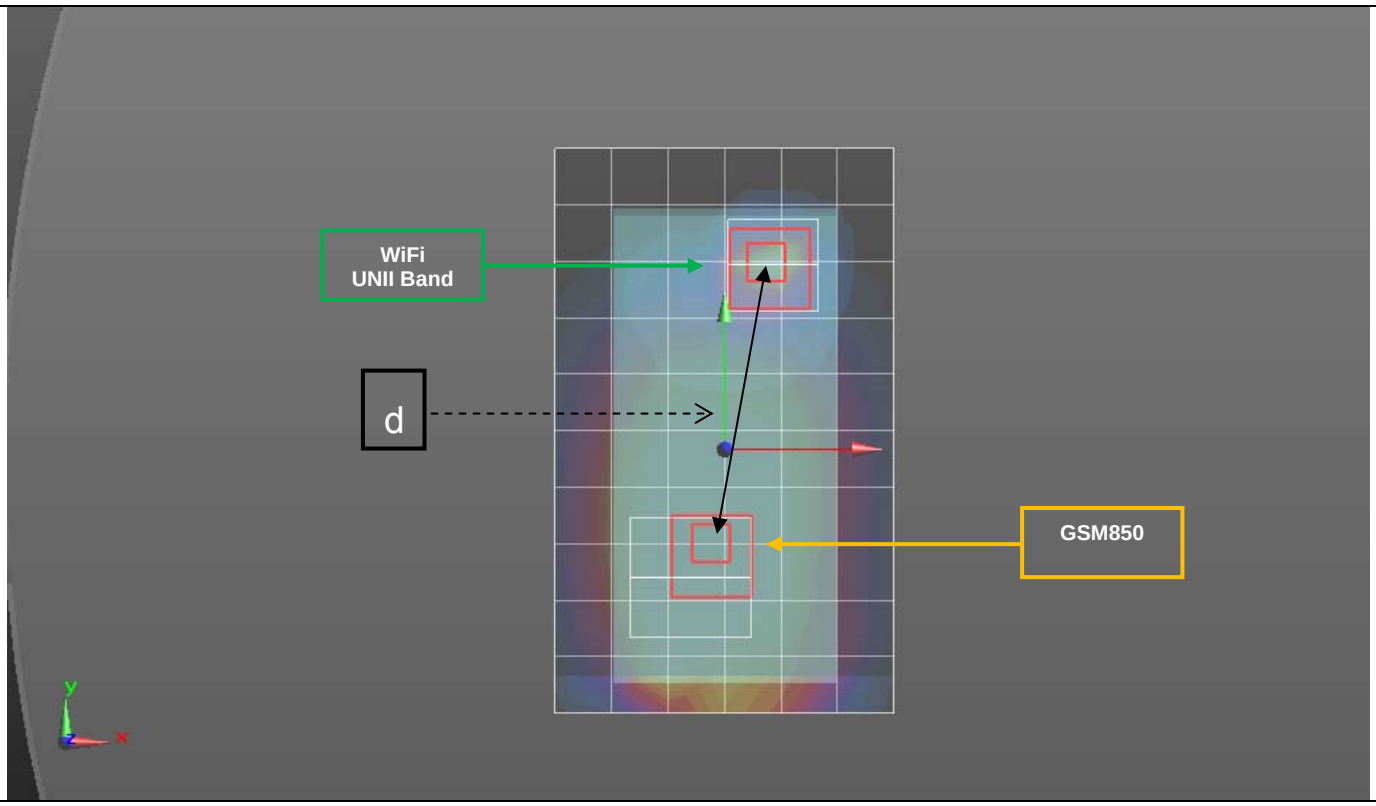


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
GSM850	1.29	-0.009	-0.034	-0.19
WiFi DTS Band	1.04	0.005	0.051	-0.183

d: Calculated distance (mm)
86.4

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (2)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
GSM850	1.29	-0.009	-0.034	-0.19
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
86.2

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.3. Sum of the SAR for GSM1900 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		GSM 1900	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.736	0.420			1.156	No
		0.736		0.429		1.165	No
	Left Tilt	0.745	0.229			0.974	No
		0.745		0.426		1.171	No
	Right Touch	0.990	0.596			1.586	No
		0.990		0.586		**1.576**	No
	Right Tilt	0.977	0.370			1.347	No
		0.977		0.581		1.558	No
Body-worn Accessory & Hotspot	Rear	1.009	0.519			1.528	No
		1.009		0.566		1.575	No
		1.009			0.012	1.021	No
	Front	0.766	0.222			0.988	No
		0.766		0.242		1.008	No
		0.766			0.002	0.768	No
Hotspot	Edge 1	0.727	0.083			0.810	No
	Edge 2	0.241	0.024			0.265	No
	Edge 3	0	0			0.000	No
	Edge 4	0.624	0.329			0.953	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.4. Sum of the SAR for GSM1900 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		GSM 1900	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.680	0.420			1.100	No
		0.680		0.429		1.109	No
	Left Tilt	0.389	0.229			0.618	No
		0.389		0.426		0.815	No
	Right Touch	1.180	0.596			1.776	**Yes**
		1.180		0.586		1.766	**Yes**
	Right Tilt	0.332	0.370			0.702	No
		0.332		0.581		0.913	No
Body-worn Accessory & Hotspot	Rear	1.120	0.519			1.639	**Yes**
		1.120		0.566		1.686	**Yes**
		1.120			0.012	1.132	No
	Front	0.950	0.222			1.172	No
		0.950		0.242		1.192	No
		0.950			0.002	0.952	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.786	0.024			0.810	No
	Edge 3	0.758	0			0.758	No
	Edge 4	0.099	0.329			0.428	No

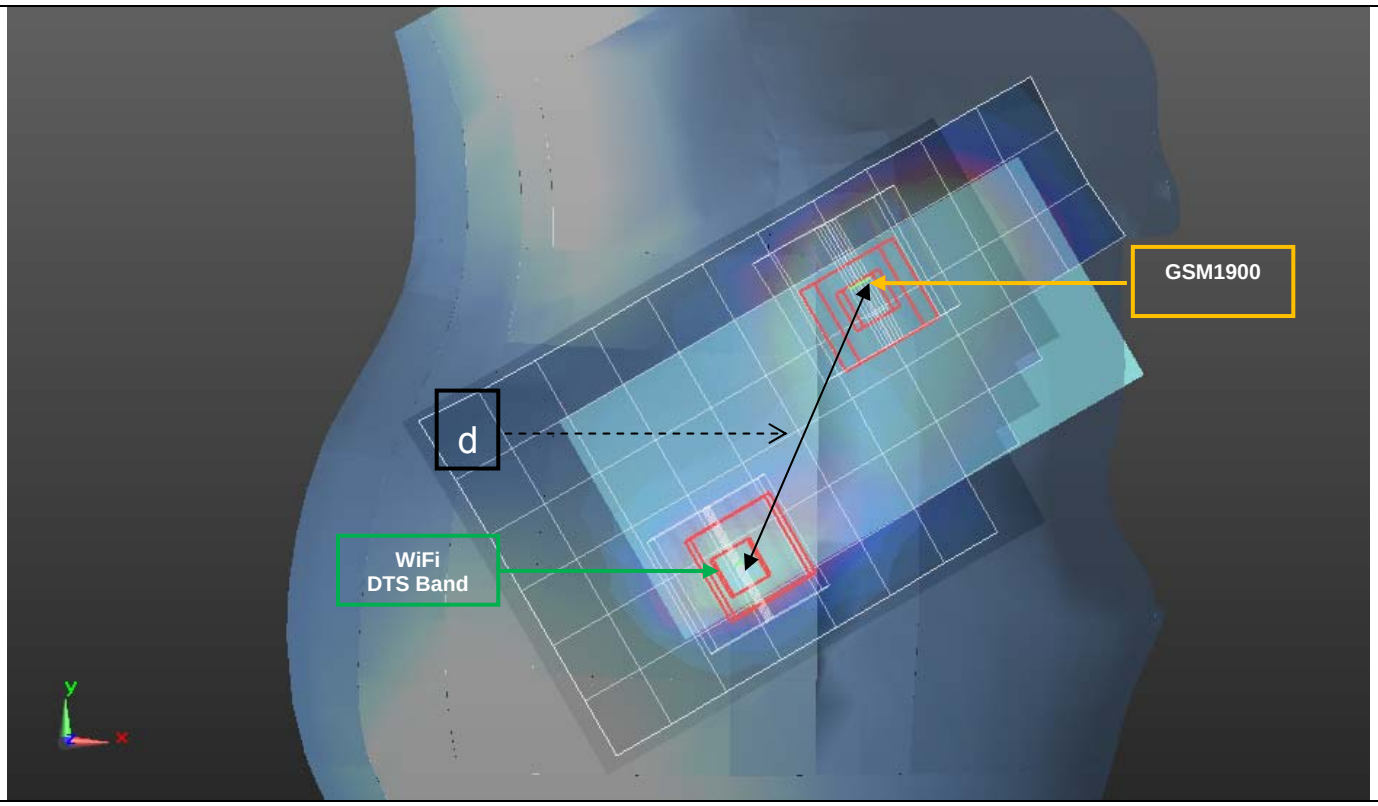
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			GSM 1900	WiFi DTS Band	WiFi UNII Band					
2	Head	Right Touch	1.180	0.596		1.776	74.0	0.032	No	1
			1.180		0.586	1.766	77.5	0.030	No	2
	Body-worn Accessory & Hotspot	Rear	1.120	0.519		1.639	109.1	0.019	No	3
			1.120		0.566	1.686	108.8	0.020	No	4

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.

Figure (1)

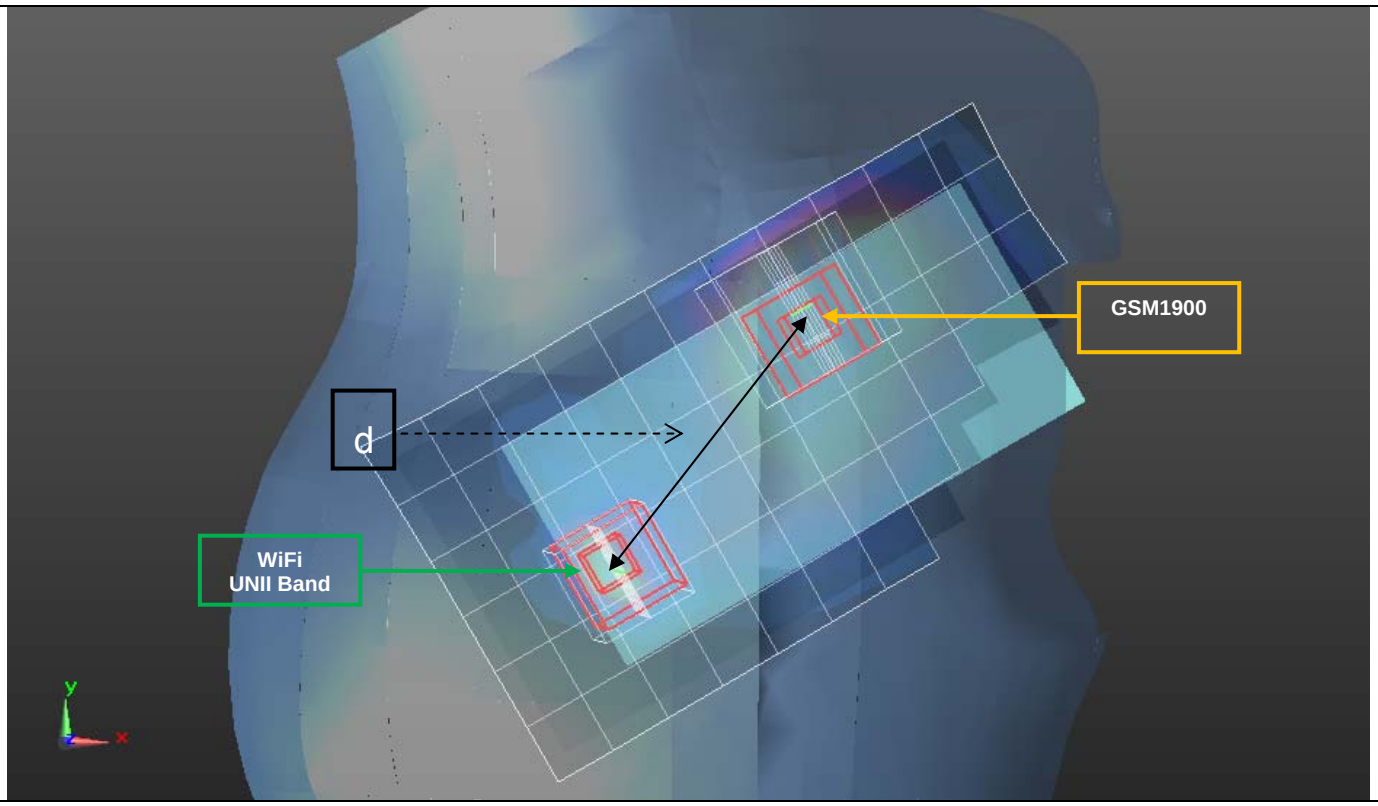


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
GSM1900	1.43	0.0622	-0.256	-0.172
WiFi DTS Band	0.82	0.0308	-0.323	-0.173

d: Calculated distance (mm)
74.0

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (2)

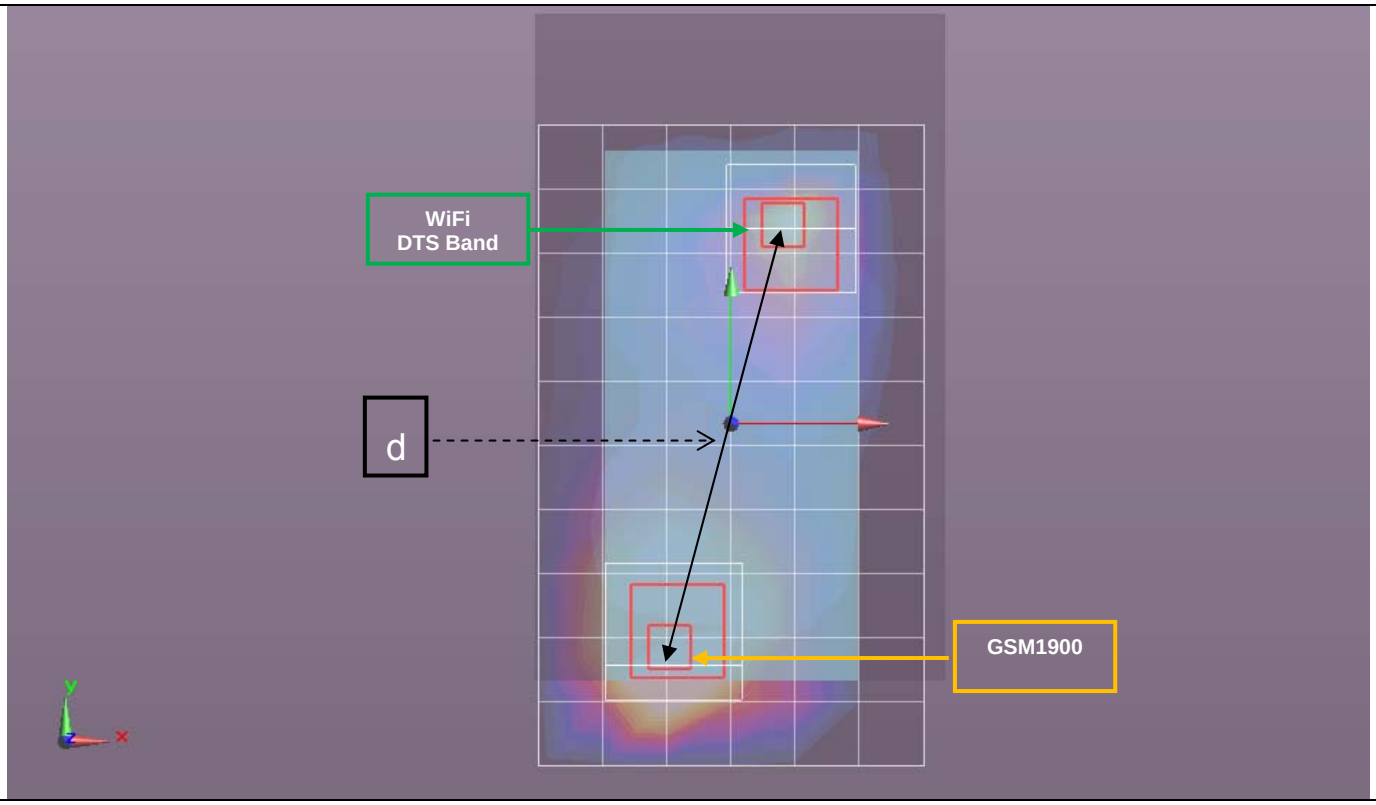


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
GSM1900	1.43	0.0622	-0.256	-0.172
WiFi UNII Band	1.25	0.0157	-0.318	-0.172

d: Calculated distance (mm)
77.5

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (3)

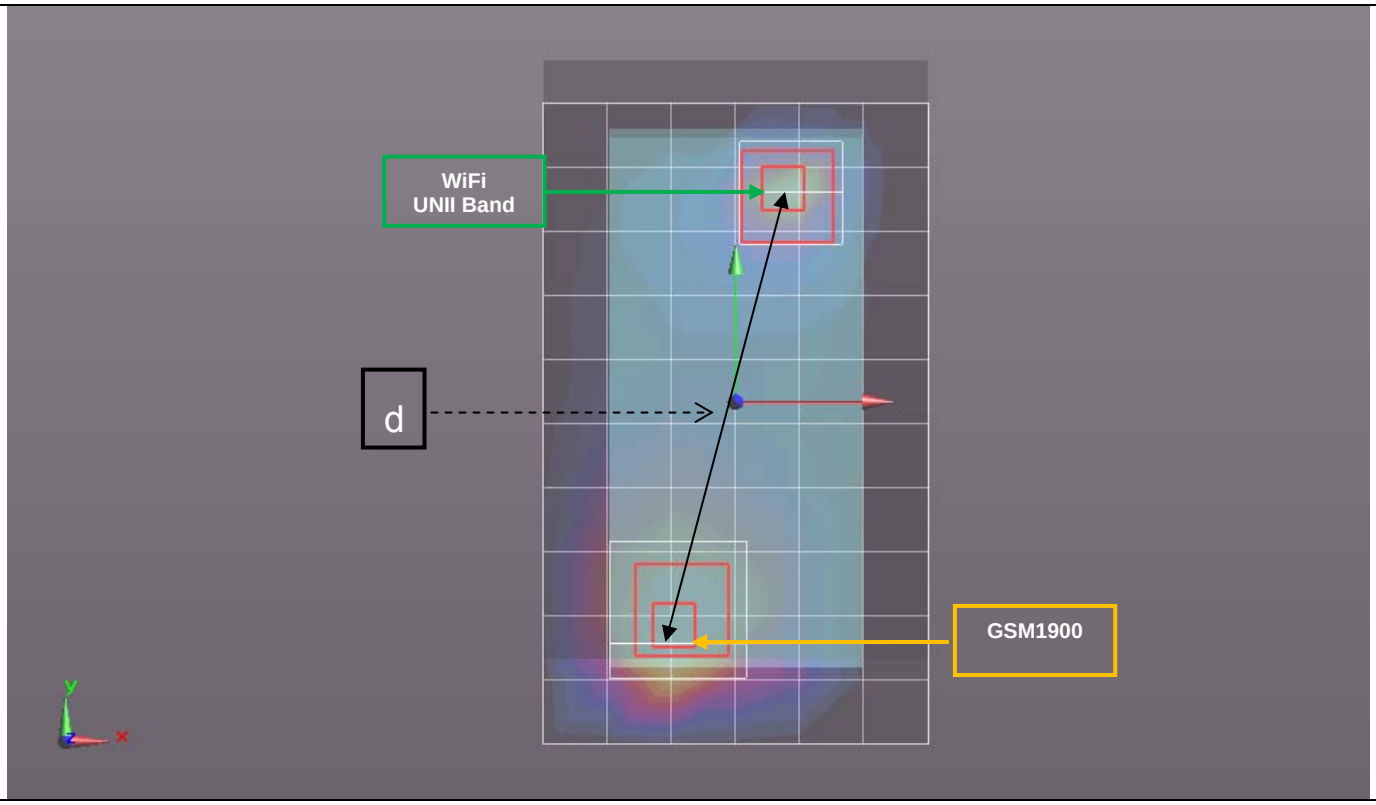


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
GSM1900	1.37	-0.0135	-0.0565	-0.183
WiFi DTS Band	1.04	0.005	0.051	-0.183

d: Calculated distance (mm)
109.1

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (4)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
GSM1900	1.37	-0.0135	-0.0565	-0.183
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
108.8

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.5. Sum of the SAR for W-CDMA Band 2 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		W-CDMA Band 2	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.542	0.420			0.962	No
		0.542		0.429		0.971	No
	Left Tilt	0.489	0.229			0.718	No
		0.489		0.426		0.915	No
	Right Touch	0.958	0.596			1.554	No
		0.958		0.586		1.544	No
	Right Tilt	0.696	0.370			1.066	No
		0.696		0.581		1.277	No
Body-worn Accessory & Hotspot	Rear	0.632	0.519			1.151	No
		0.632		0.566		1.198	No
		0.632			0.012	0.644	No
	Front	0.451	0.222			0.673	No
		0.451		0.242		0.693	No
		0.451			0.002	0.453	No
Hotspot	Edge 1	0.381	0.083			0.464	No
	Edge 2	0.128	0.024			0.152	No
	Edge 3	0	0			0.000	No
	Edge 4	0.344	0.329			0.673	No

SAR to Peak Location Separation Ratio (SPLSR)

As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.6. Sum of the SAR for W-CDMA Band 2 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		W-CDMA Band 2	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.867	0.420			1.287	No
		0.867		0.429		1.296	No
	Left Tilt	0.533	0.229			0.762	No
		0.533		0.426		0.959	No
	Right Touch	1.180	0.596			1.776	**Yes**
		1.180		0.586		1.766	**Yes**
	Right Tilt	0.511	0.370			0.881	No
		0.511		0.581		1.092	No
Body-worn Accessory & Hotspot	Rear	1.130	0.519			1.649	**Yes**
		1.130		0.566		1.696	**Yes**
		1.130			0.012	1.142	No
	Front	0.837	0.222			1.059	No
		0.837		0.242		1.079	No
		0.837			0.002	0.839	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.751	0.024			0.775	No
	Edge 3	0.787	0			0.787	No
	Edge 4	0.130	0.329			0.459	No

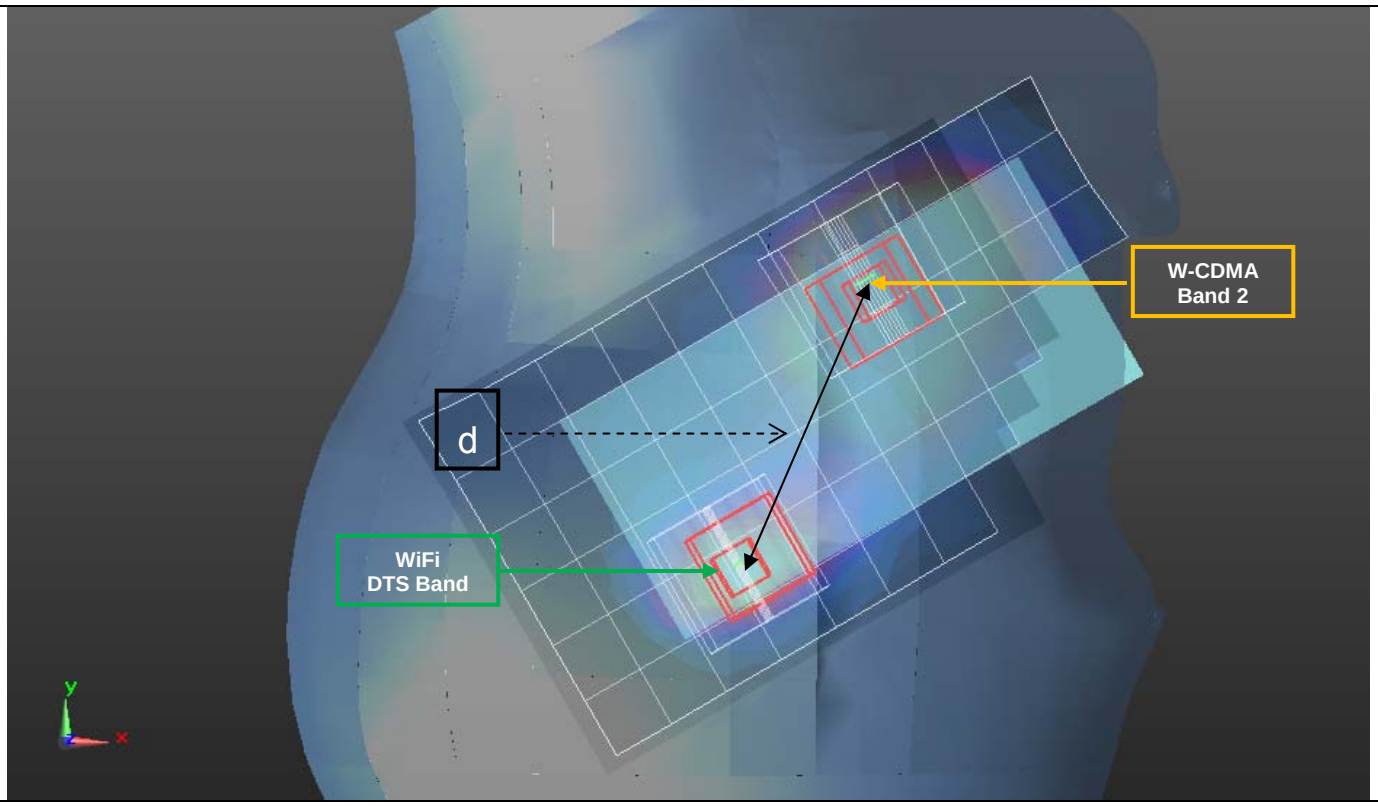
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			W-CDMA Band 2	WiFi DTS Band	WiFi UNII Band					
3	Head	Right Touch	1.180	0.596		1.776	75.5	0.031	No	1
			1.180		0.586	1.766	79.1	0.030	No	2
	Body-worn Accessory & Hotspot	Rear	1.130	0.519		1.649	108.6	0.019	No	3
			1.130		0.566	1.696	108.1	0.020	No	4

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.

Figure (1)

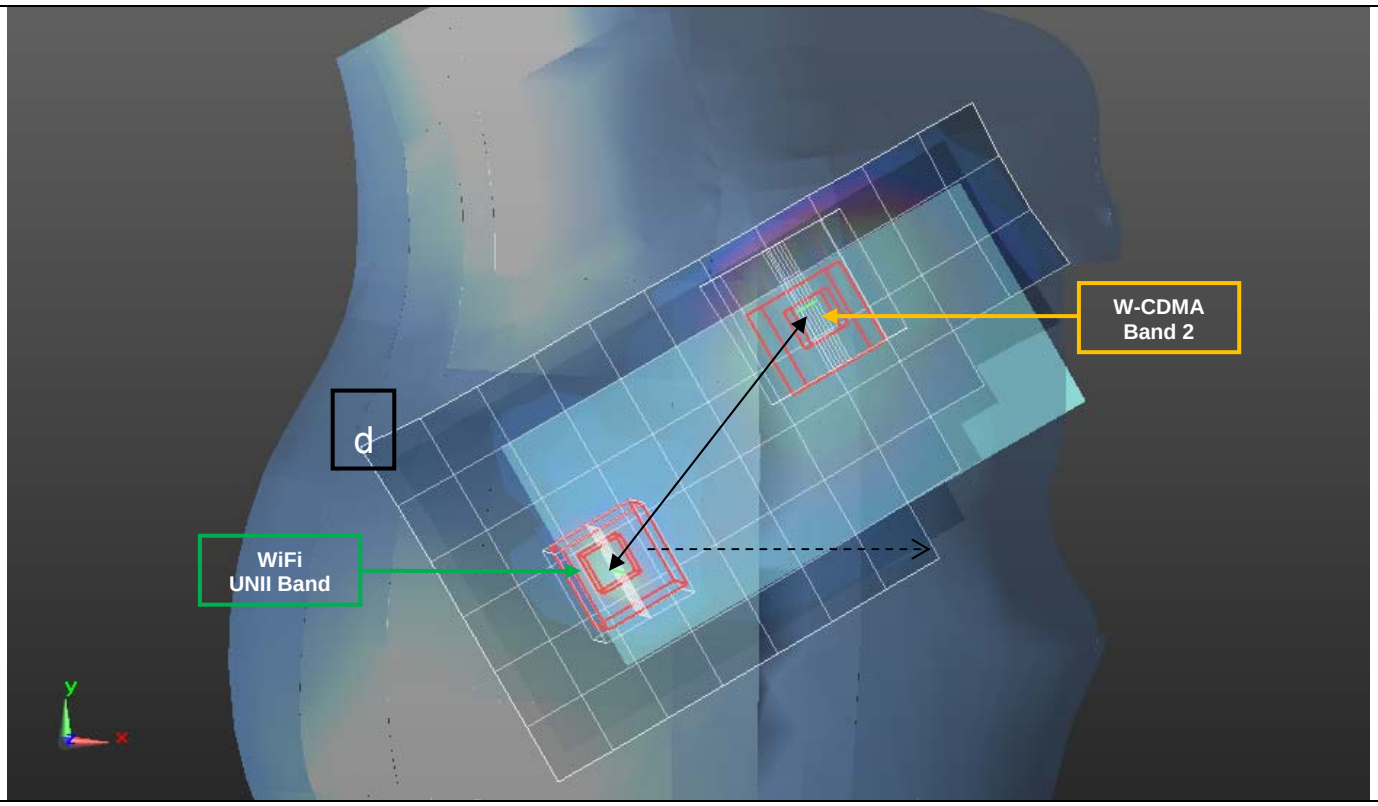


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
W-CDMA Band 2	1.44	0.0635	-0.255	-0.172
WiFi DTS Band	0.82	0.0308	-0.323	-0.173

d: Calculated distance (mm)
75.5

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (2)

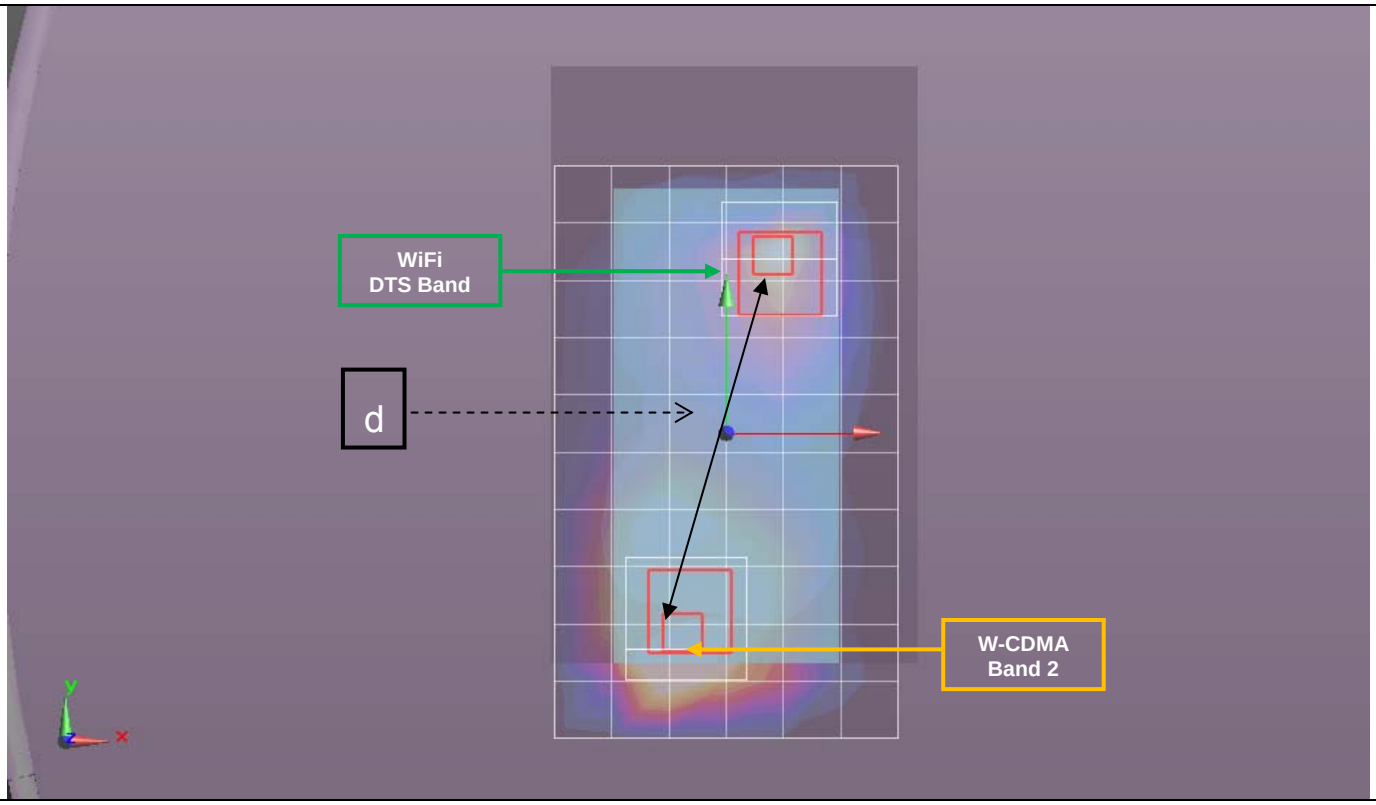


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
W-CDMA Band 2	1.44	0.0635	-0.255	-0.172
WiFi UNII Band	1.25	0.0157	-0.318	-0.172

d: Calculated distance (mm)
79.1

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (3)

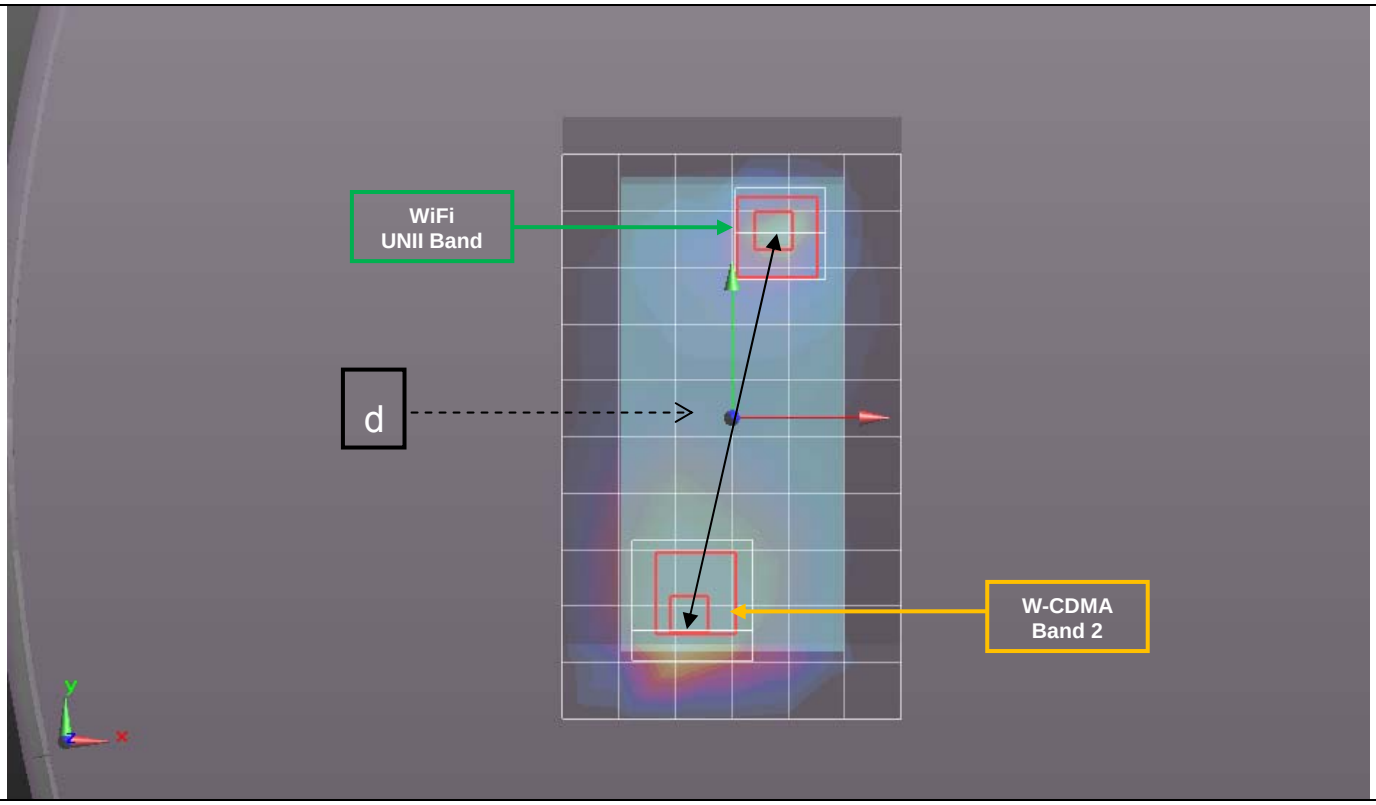


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
W-CDMA Band 2	1.46	-0.0105	-0.0565	-0.183
WiFi DTS Band	1.04	0.005	0.051	-0.183

d: Calculated distance (mm)
108.6

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (4)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
W-CDMA Band 2	1.46	-0.0105	-0.0565	-0.183
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
108.1

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.7. Sum of the SAR for W-CDMA Band 4 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		W-CDMA Band 4	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.682	0.420			1.102	No
		0.682		0.429		1.111	No
	Left Tilt	0.607	0.229			0.836	No
		0.607		0.426		1.033	No
	Right Touch	0.907	0.596			1.503	No
		0.907		0.586		1.493	No
	Right Tilt	0.711	0.370			1.081	No
		0.711		0.581		1.292	No
Body-worn Accessory & Hotspot	Rear	0.632	0.519			1.151	No
		0.632		0.566		1.198	No
		0.632			0.012	0.644	No
	Front	0.540	0.222			0.762	No
		0.540		0.242		0.782	No
		0.540			0.002	0.542	No
Hotspot	Edge 1	0.419	0.083			0.502	No
	Edge 2	0.292	0.024			0.316	No
	Edge 3	0	0			0.000	No
	Edge 4	0.208	0.329			0.537	No

SAR to Peak Location Separation Ratio (SPLSR)

As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.8. Sum of the SAR for W-CDMA Band 4 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		W-CDMA Band 4	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.554	0.420			0.974	No
		0.554		0.429		0.983	No
	Left Tilt	0.314	0.229			0.543	No
		0.314		0.426		0.740	No
	Right Touch	1.080	0.596			1.676	**Yes**
		1.080		0.586		1.666	**Yes**
	Right Tilt	0.349	0.370			0.719	No
		0.349		0.581		0.930	No
Body-worn Accessory & Hotspot	Rear	1.180	0.519			1.699	**Yes**
		1.180		0.566		1.746	**Yes**
		1.180			0.012	1.192	No
	Front	0.946	0.222			1.168	No
		0.946		0.242		1.188	No
		0.946			0.002	0.948	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.736	0.024			0.760	No
	Edge 3	1.140	0			1.140	No
	Edge 4	0.065	0.329			0.394	No

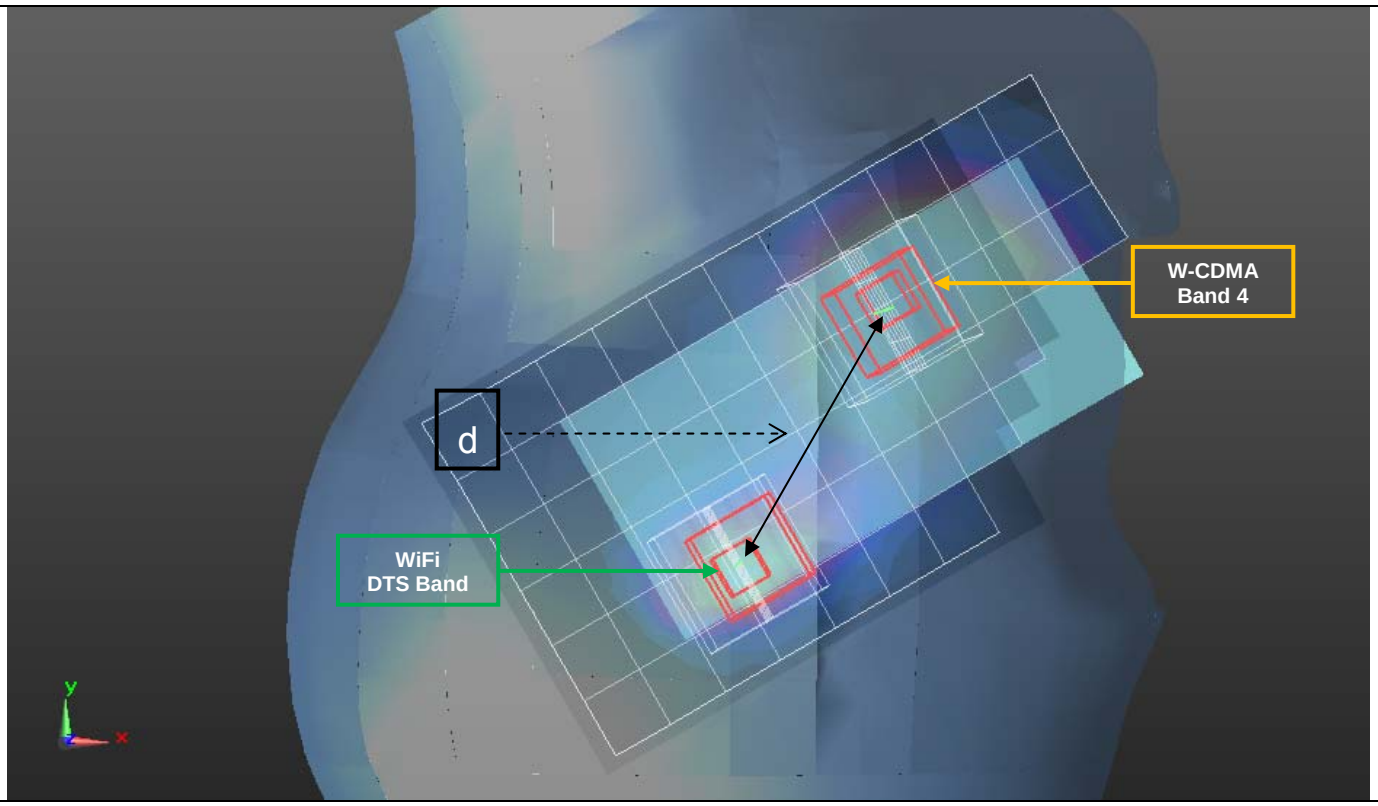
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			W-CDMA Band 4	WiFi DTS Band	WiFi UNII Band					
4	Head	Right Touch	1.080	0.596		1.676	70.7	0.031	No	1
			1.080		0.586	1.666	76.0	0.028	No	2
	Body-worn Accessory & Hotspot	Rear	1.180	0.519		1.699	109.6	0.020	No	3
			1.180		0.566	1.746	108.2	0.021	No	4

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.

Figure (1)

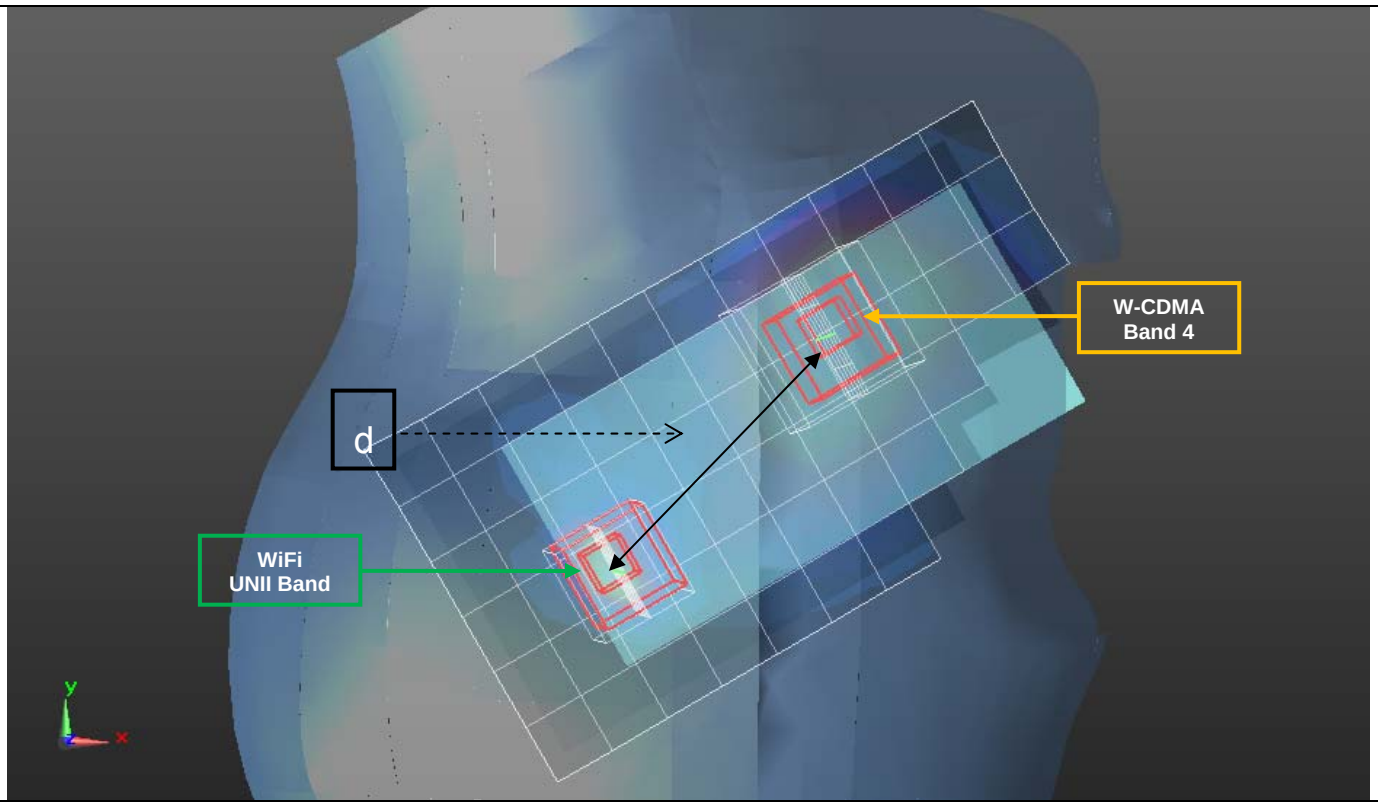


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
W-CDMA Band 4	1.31	0.0682	-0.263	-0.172
WiFi DTS Band	0.82	0.0308	-0.323	-0.173

d: Calculated distance (mm)
70.7

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (2)

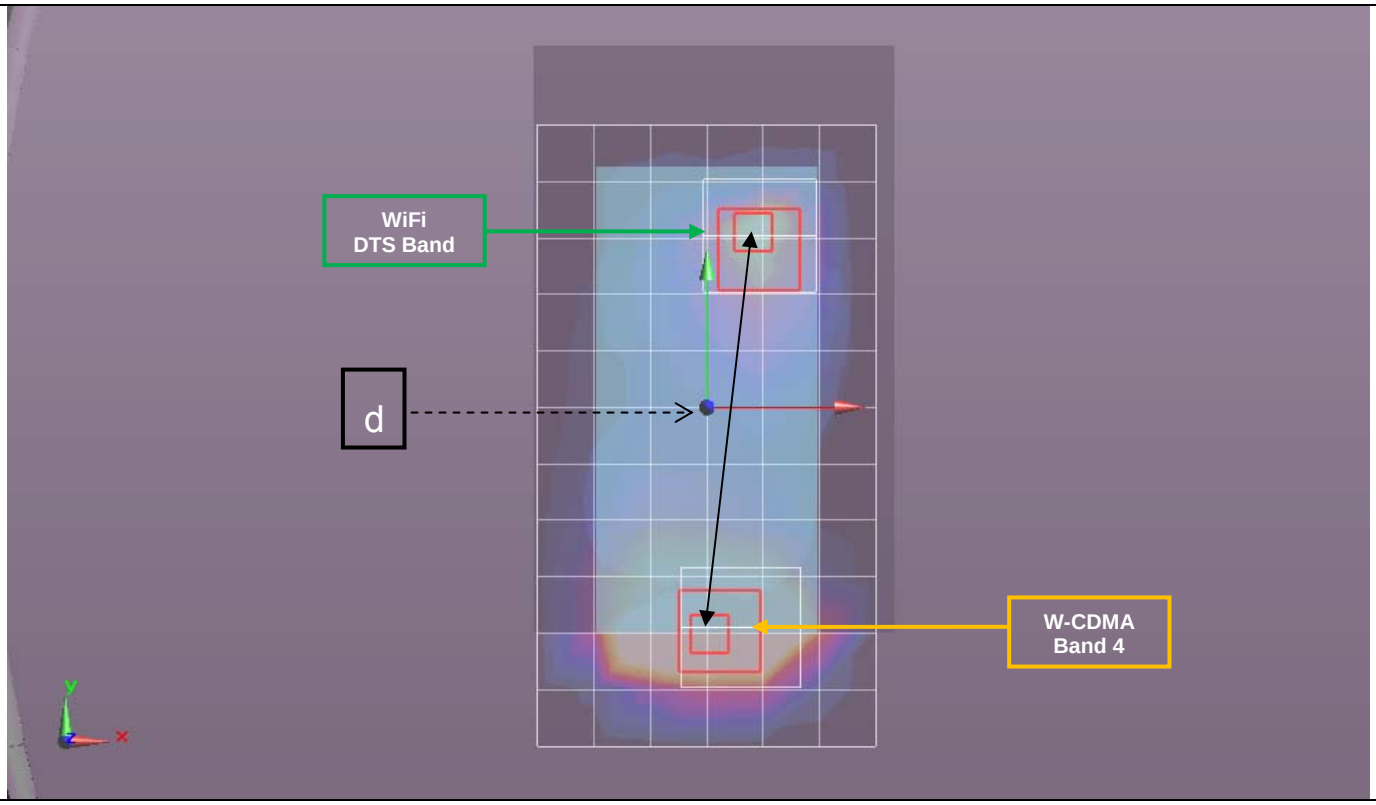


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
W-CDMA Band 4	1.31	0.0682	-0.263	-0.172
WiFi UNII Band	1.25	0.0157	-0.318	-0.172

d: Calculated distance (mm)
76.0

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (3)

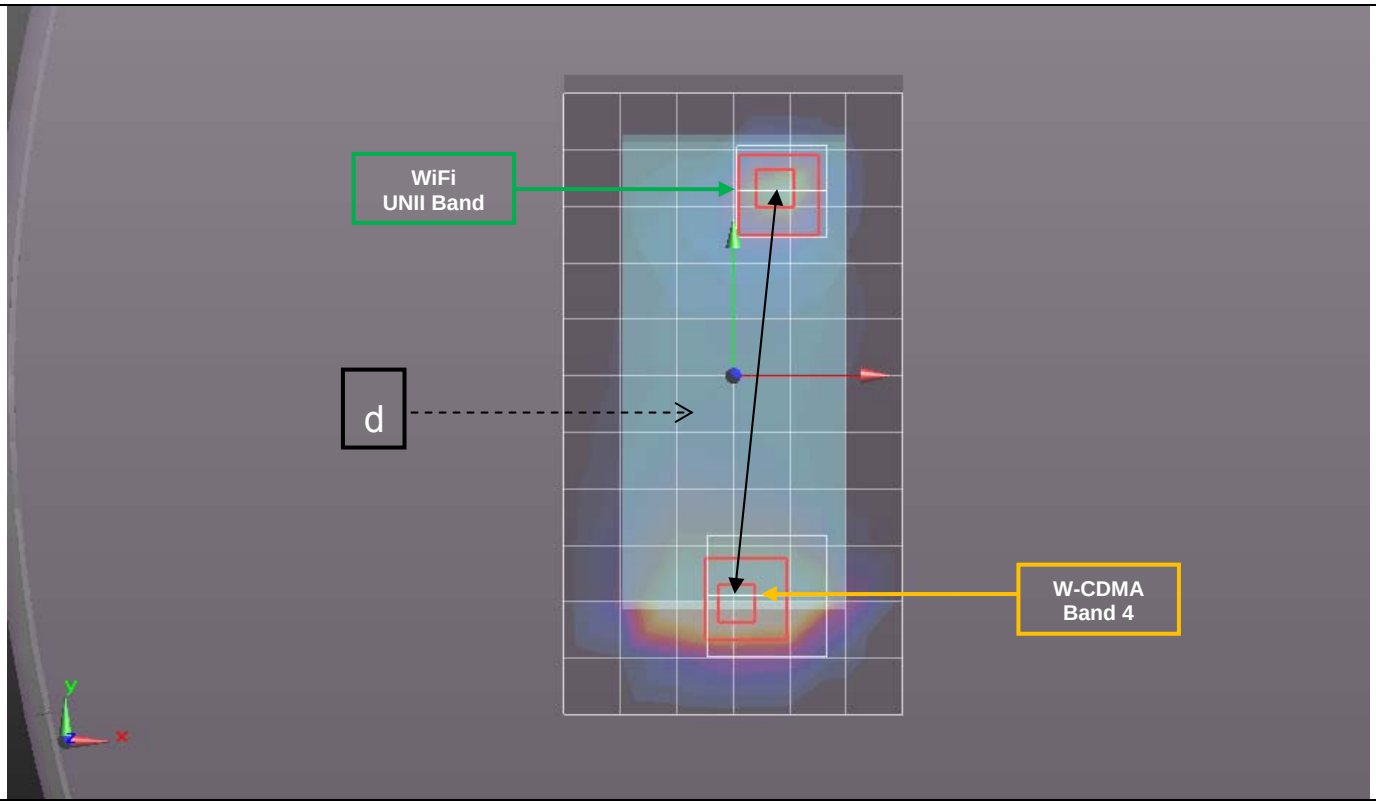


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
W-CDMA Band 4	1.52	0.001	-0.0585	-0.183
WiFi DTS Band	1.04	0.005	0.051	-0.183

d: Calculated distance (mm)
109.6

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (4)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
W-CDMA Band 4	1.52	0.001	-0.0585	-0.183
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
108.2

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.9. Sum of the SAR for W-CDMA Band 5 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		W-CDMA Band 5	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.433	0.420			0.853	No
		0.433		0.429		0.862	No
	Left Tilt	0.254	0.229			0.483	No
		0.254		0.426		0.680	No
	Right Touch	0.333	0.596			0.929	No
		0.333		0.586		0.919	No
	Right Tilt	0.230	0.370			0.600	No
		0.230		0.581		0.811	No
Body-worn Accessory & Hotspot	Rear	0.174	0.519			0.693	No
		0.174		0.566		0.740	No
		0.174			0.012	0.186	No
	Front	0.139	0.222			0.361	No
		0.139		0.242		0.381	No
		0.139			0.002	0.141	No
Hotspot	Edge 1	0.068	0.083			0.151	No
	Edge 2	0.097	0.024			0.121	No
	Edge 3	0	0			0.000	No
	Edge 4	0.050	0.329			0.379	No

SAR to Peak Location Separation Ratio (SPLSR)

As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.10. Sum of the SAR for W-CDMA Band 5 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		W-CDMA Band 5	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.687	0.420			1.107	No
		0.687		0.429		1.116	No
	Left Tilt	0.390	0.229			0.619	No
		0.390		0.426		0.816	No
	Right Touch	0.654	0.596			1.250	No
		0.654		0.586		1.240	No
	Right Tilt	0.438	0.370			0.808	No
		0.438		0.581		1.019	No
Body-worn Accessory & Hotspot	Rear	1.070	0.519			**1.589**	No
		1.070		0.566		1.636	**Yes**
		1.070			0.012	1.082	No
	Front	0.774	0.222			0.996	No
		0.774		0.242		1.016	No
		0.774			0.002	0.776	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.879	0.024			0.903	No
	Edge 3	0.219	0			0.219	No
	Edge 4	0.991	0.329			1.320	No

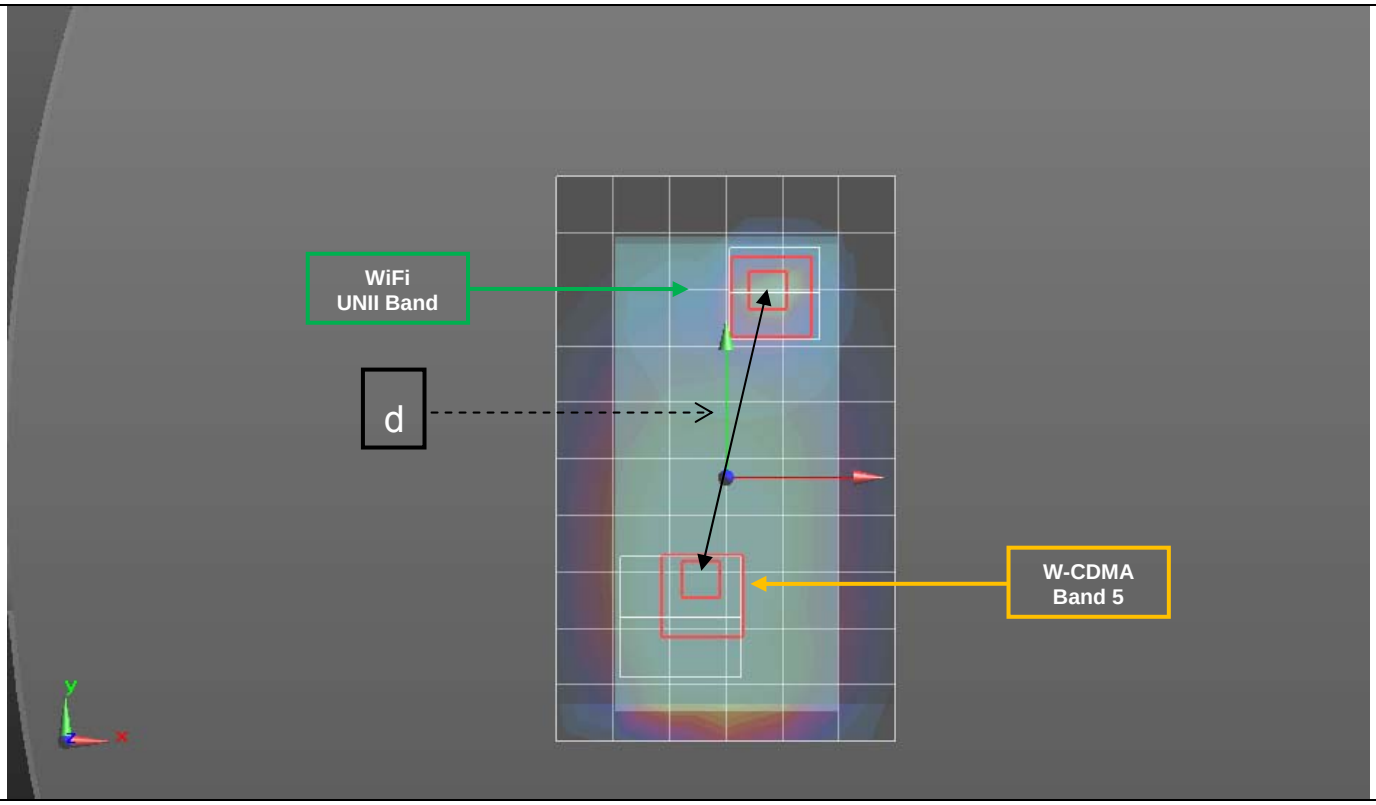
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			W-CDMA Band 5	WiFi DTS Band	WiFi UNII Band					
5	Body-worn Accessory & Hotspot	Rear	1.070		0.566	1.636	89.8	0.023	No	1

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.

Figure (1)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
W-CDMA Band 5	1.24	-0.012	-0.037	-0.19
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
89.8

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.11. Sum of the SAR for CDMA BC0 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		CDMA BC0	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.309	0.420			0.729	No
		0.309		0.429		0.738	No
	Left Tilt	0.210	0.229			0.439	No
		0.210		0.426		0.636	No
	Right Touch	0.196	0.596			0.792	No
		0.196		0.586		0.782	No
	Right Tilt	0.157	0.370			0.527	No
		0.157		0.581		0.738	No
Body-worn Accessory & Hotspot	Rear	0.140	0.519			0.659	No
		0.140		0.566		0.706	No
		0.140			0.012	0.152	No
	Front	0.118	0.222			0.340	No
		0.118		0.242		0.360	No
		0.118			0.002	0.120	No
Hotspot	Edge 1	0.061	0.083			0.144	No
	Edge 2	0.198	0.024			0.222	No
	Edge 3	0	0			0.000	No
	Edge 4	0.102	0.329			0.431	No

SAR to Peak Location Separation Ratio (SPLSR)

As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.12. Sum of the SAR for CDMA BC0 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		CDMA BC0	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.775	0.420			1.195	No
		0.775		0.429		1.204	No
	Left Tilt	0.489	0.229			0.718	No
		0.489		0.426		0.915	No
	Right Touch	0.739	0.596			1.335	No
		0.739		0.586		1.325	No
	Right Tilt	0.586	0.370			0.956	No
		0.586		0.581		1.167	No
Body-worn Accessory & Hotspot	Rear	1.087	0.519			1.606	**Yes**
		1.087		0.566		1.653	**Yes**
		1.087			0.012	1.099	No
	Front	1.004	0.222			1.226	No
		1.004		0.242		1.246	No
		1.004			0.002	1.006	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.678	0.024			0.702	No
	Edge 3	0.180	0			0.180	No
	Edge 4	1.052	0.329			1.381	No

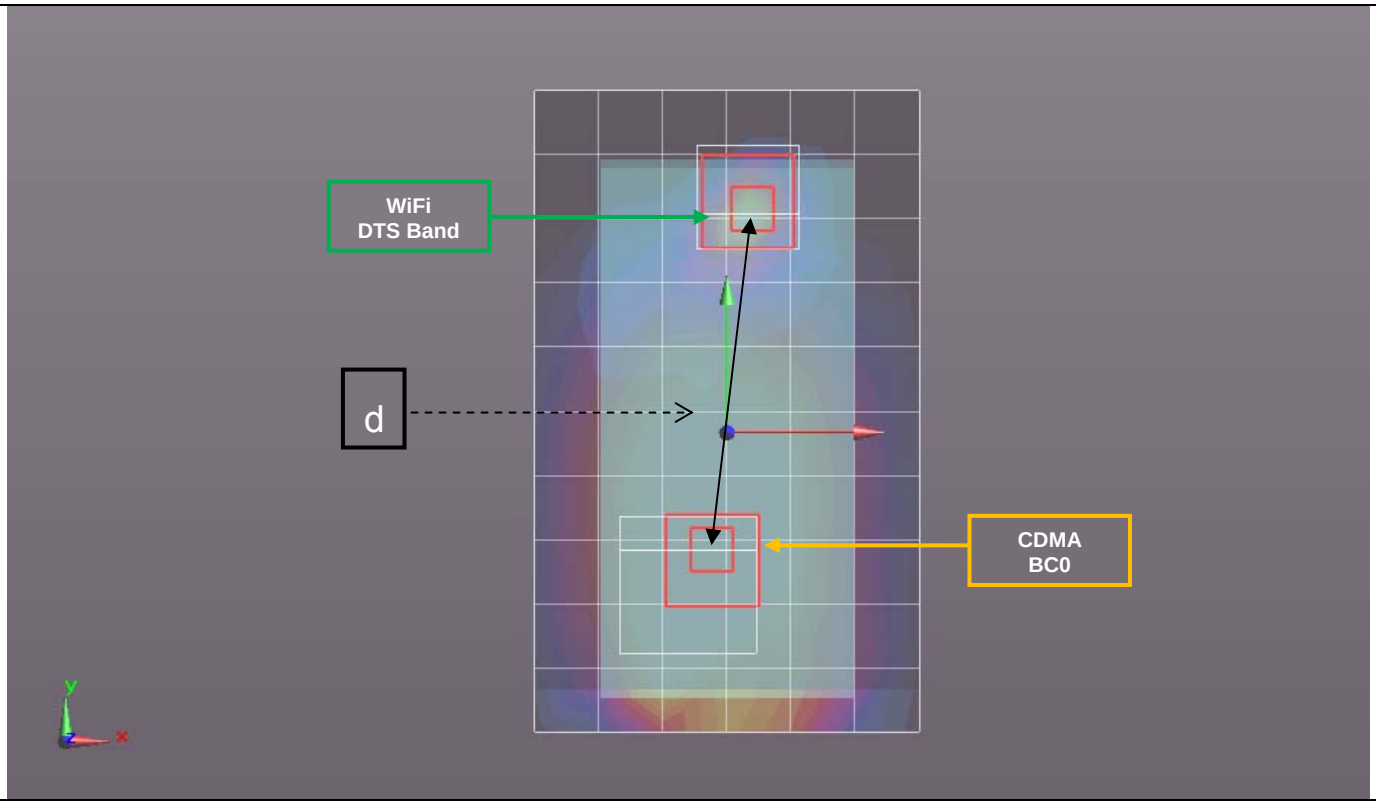
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			CDMA BC0	WiFi DTS Band	WiFi UNII Band					
6	Body-worn Accessory & Hotspot	Rear	1.087	0.519		1.606	79.0	0.026	No	1
		Rear	1.087		0.566	1.653	78.1	0.027	No	2

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.

Figure (1)

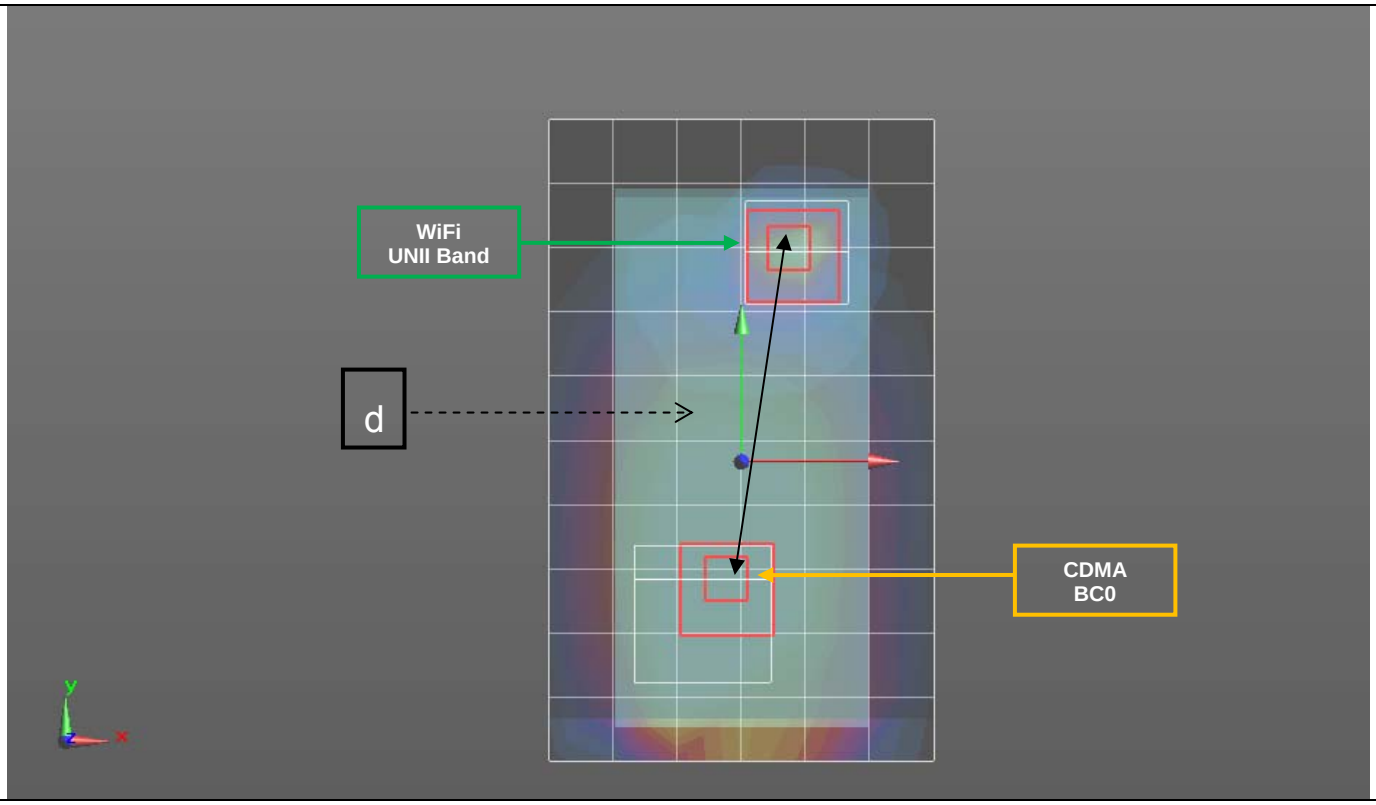


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
CDMA BC0	1.17	-0.001	-0.0275	-0.19
WiFi DTS Band	1.04	0.005	0.051	-0.183

d: Calculated distance (mm)
79.0

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (2)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
CDMA BC0	1.17	-0.001	-0.0275	-0.19
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
78.1

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.13. Sum of the SAR for CDMA BC1 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		CDMA BC1	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.477	0.420			0.897	No
		0.477		0.429		0.906	No
	Left Tilt	0.450	0.229			0.679	No
		0.450		0.426		0.876	No
	Right Touch	0.985	0.596			1.581	No
		0.985		0.586		1.571	No
	Right Tilt	0.641	0.370			1.011	No
		0.641		0.581		1.222	No
Body-worn Accessory & Hotspot	Rear	0.757	0.519			1.276	No
		0.757		0.566		1.323	No
		0.757			0.012	0.769	No
	Front	0.508	0.222			0.730	No
		0.508		0.242		0.750	No
		0.508			0.002	0.510	No
Hotspot	Edge 1	0.518	0.083			0.601	No
	Edge 2	0.198	0.024			0.222	No
	Edge 3	0	0			0	No
	Edge 4	0.519	0.329			0.848	No

SAR to Peak Location Separation Ratio (SPLSR)

As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.14. Sum of the SAR for CDMA BC1 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		CDMA BC1	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.774	0.420			1.194	No
		0.774		0.429		1.203	No
	Left Tilt	0.463	0.229			0.692	No
		0.463		0.426		0.889	No
	Right Touch	1.180	0.596			1.776	**Yes**
		1.180		0.586		1.766	**Yes**
	Right Tilt	0.513	0.370			0.883	No
		0.513		0.581		1.094	No
Body-worn Accessory & Hotspot	Rear	1.153	0.519			1.672	**Yes**
		1.153		0.566		1.719	**Yes**
		1.153			0.012	1.165	No
	Front	0.918	0.222			1.140	No
		0.918		0.242		1.160	No
		0.918			0.002	0.920	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.942	0.024			0.966	No
	Edge 3	1.010	0			1.010	No
	Edge 4	0.100	0.329			0.429	No

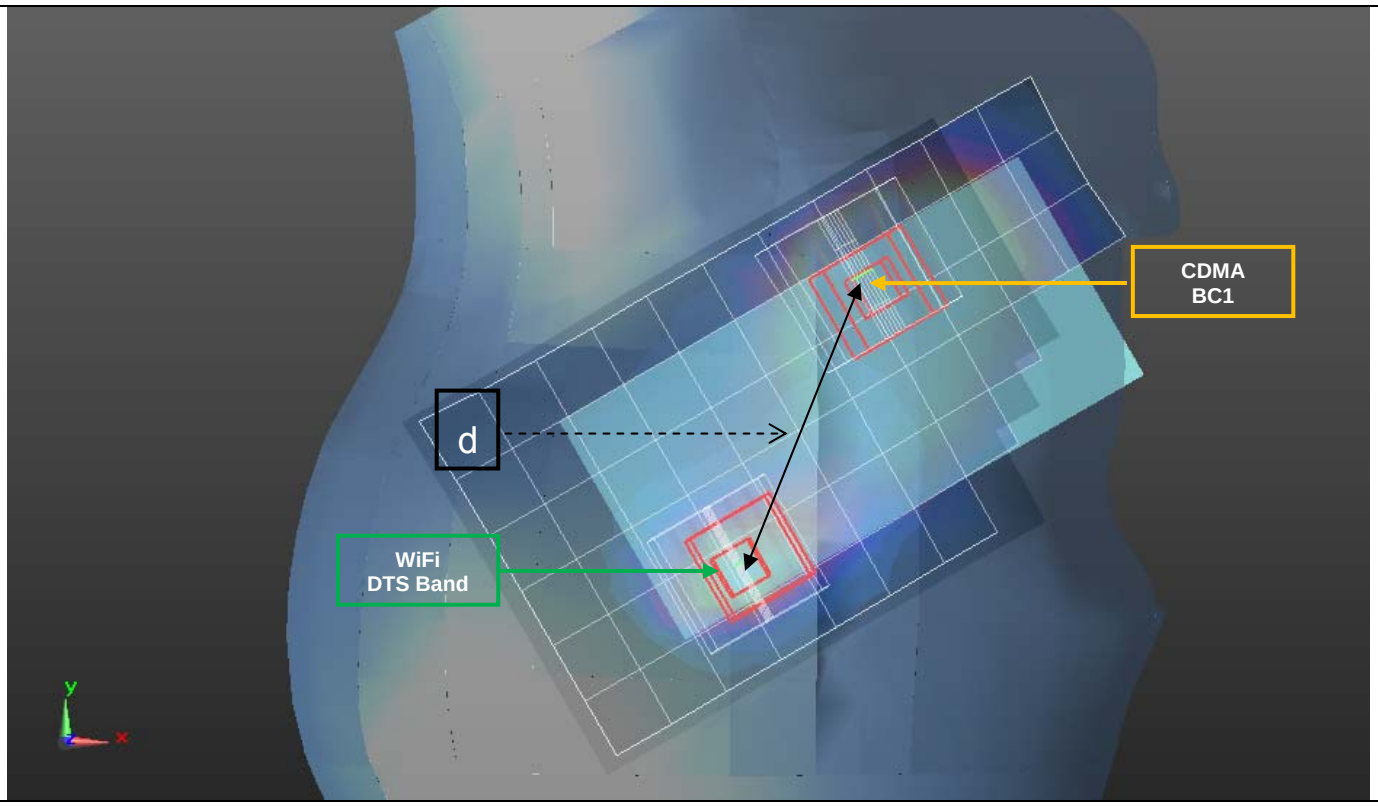
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			CDMA BC1	WiFi DTS Band	WiFi UNII Band					
7	Head	Right Touch	1.180	0.596		1.776	76.0	0.031	No	1
			1.180		0.586	1.766	79.4	0.030	No	2
	Body-worn Accessory & Hotspot	Rear	1.153	0.519		1.672	108.8	0.020	No	3
			1.153		0.566	1.719	108.4	0.021	No	4

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.

Figure (1)

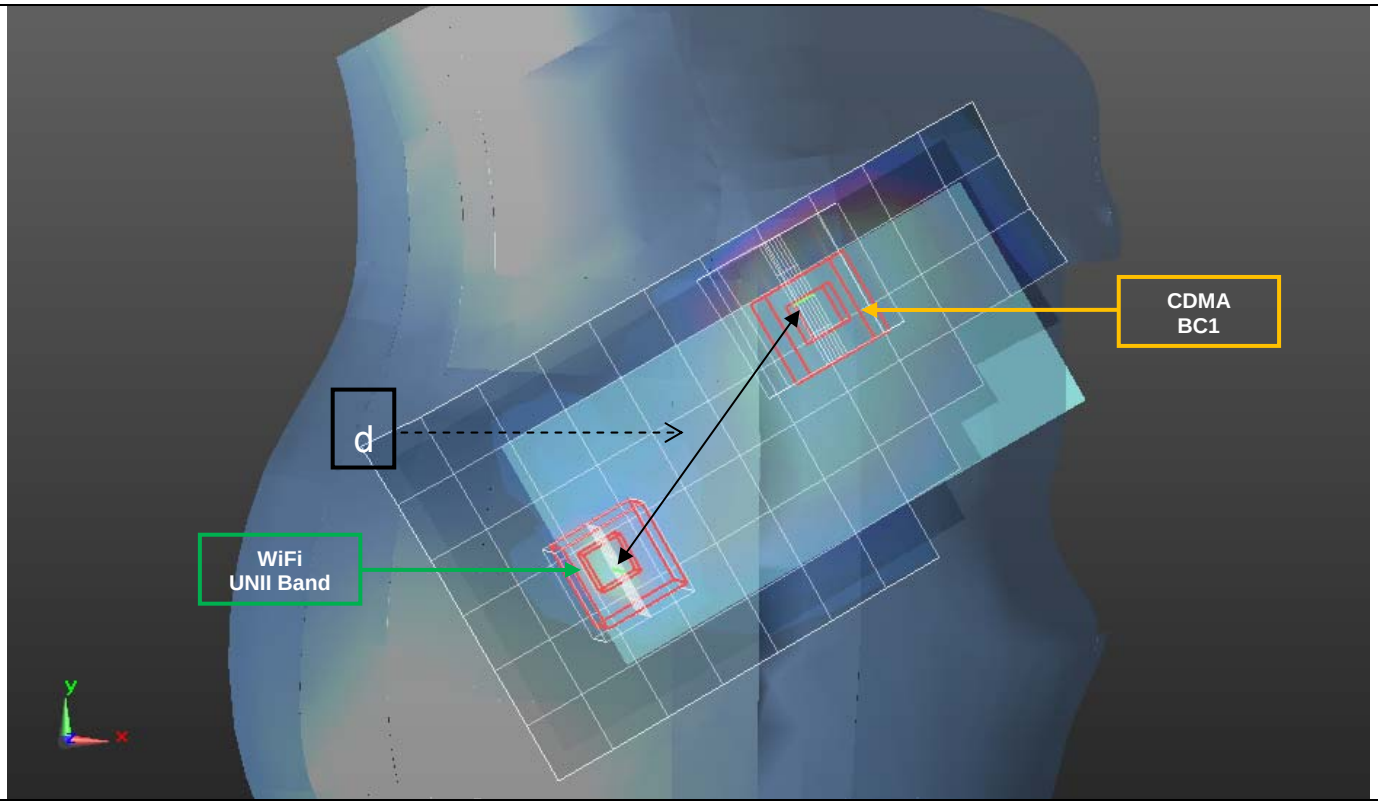


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
CDMA BC1	1.41	0.0627	-0.254	-0.172
WiFi DTS Band	0.82	0.0308	-0.323	-0.173

d: Calculated distance (mm)
76.0

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (2)

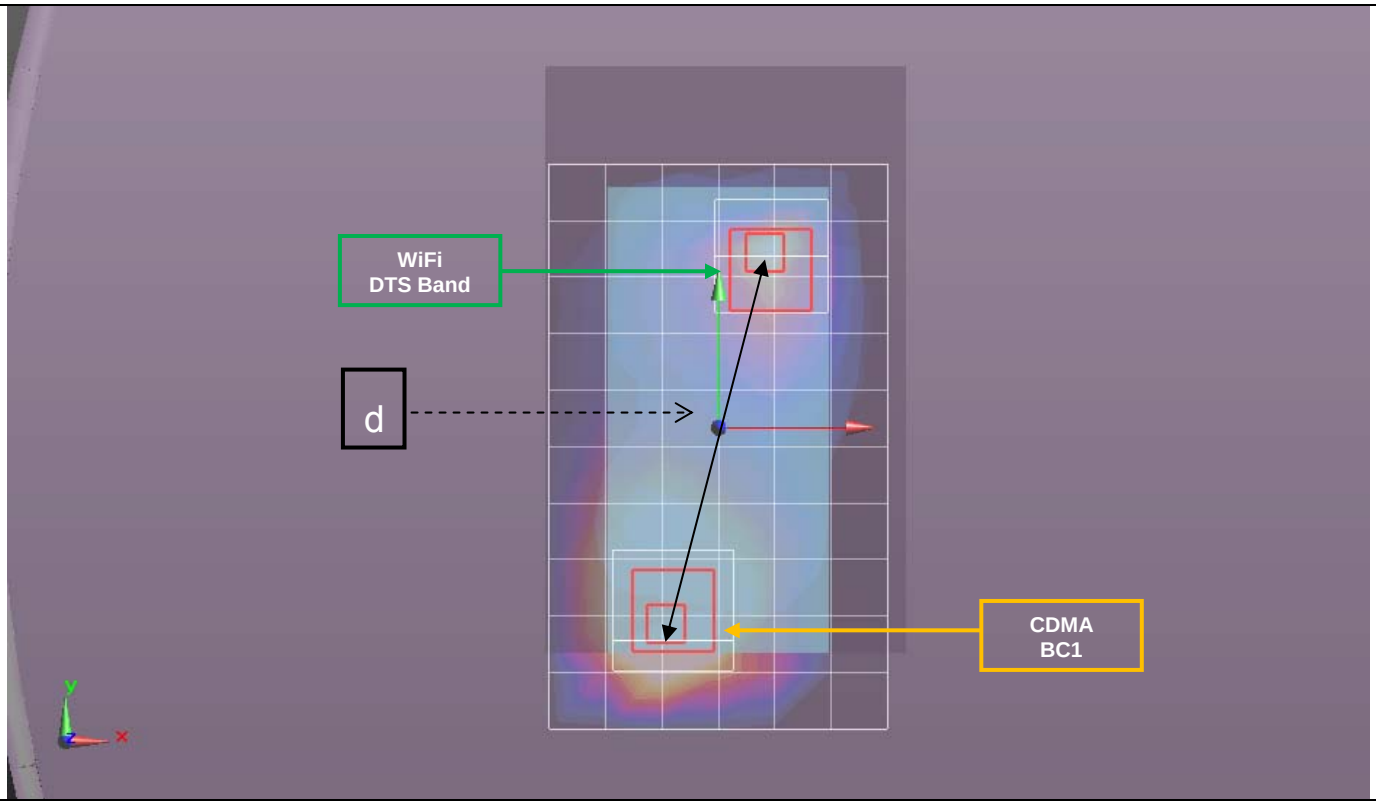


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
CDMA BC1	1.41	0.0627	-0.254	-0.172
WiFi UNII Band	1.25	0.0157	-0.318	-0.172

d: Calculated distance (mm)
79.4

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (3)

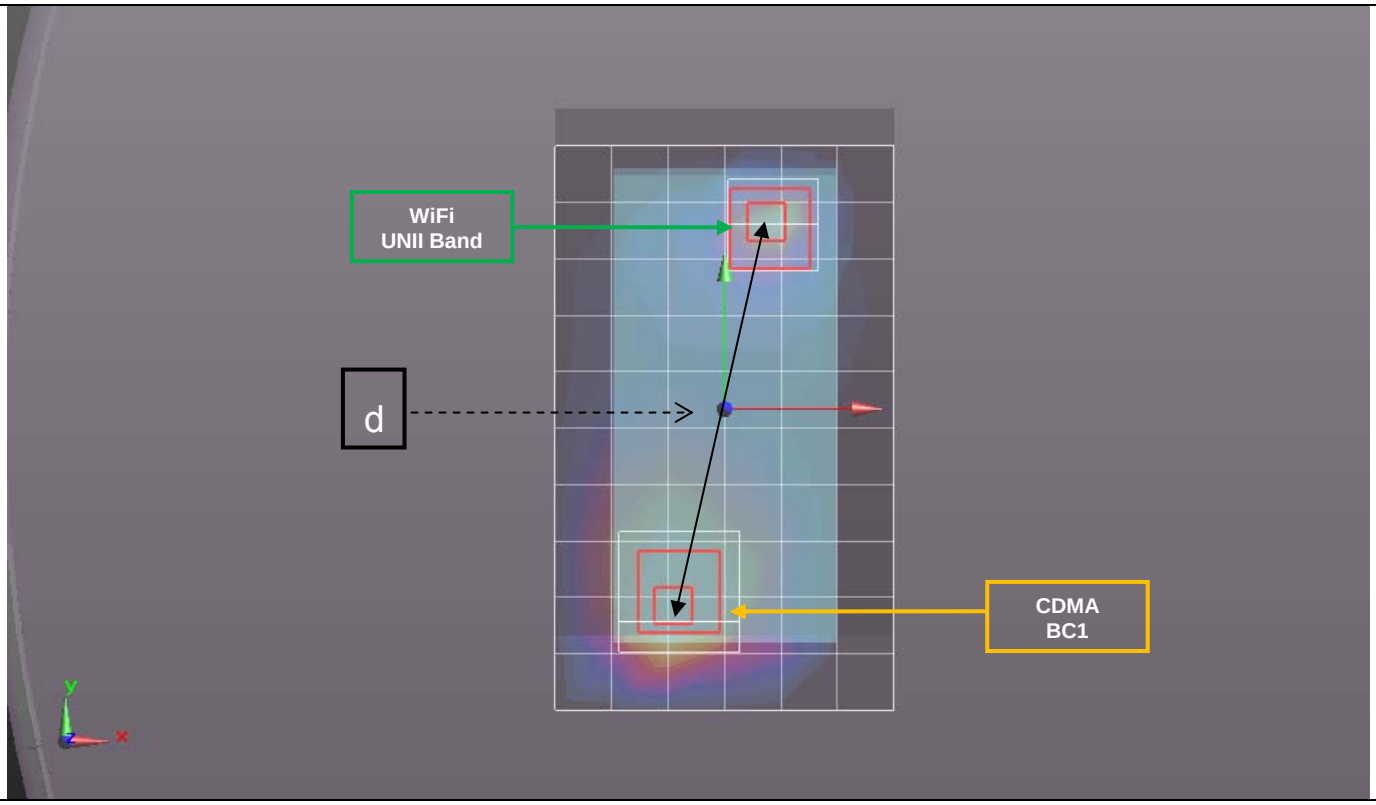


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
CDMA BC1	1.45	-0.012	-0.0565	-0.184
WiFi DTS Band	1.04	0.005	0.051	-0.183

d: Calculated distance (mm)
108.8

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (4)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
CDMA BC1	1.45	-0.012	-0.0565	-0.184
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
108.4

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.15. Sum of the SAR for CDMA BC10 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		CDMA BC10	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.366	0.420			0.786	No
		0.366		0.429		0.795	No
	Left Tilt	0.261	0.229			0.490	No
		0.261		0.426		0.687	No
	Right Touch	0.279	0.596			0.875	No
		0.279		0.586		0.865	No
	Right Tilt	0.219	0.370			0.589	No
		0.219		0.581		0.800	No
Body-worn Accessory & Hotspot	Rear	0.166	0.519			0.685	No
		0.166		0.566		0.732	No
		0.166			0.012	0.178	No
	Front	0.131	0.222			0.353	No
		0.131		0.242		0.373	No
		0.131			0.002	0.133	No
Hotspot	Edge 1	0.053	0.083			0.136	No
	Edge 2	0.173	0.024			0.197	No
	Edge 3	0	0			0.000	No
	Edge 4	0.117	0.329			0.446	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.16. Sum of the SAR for CDMA BC10 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		CDMA BC10	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.776	0.420			1.196	No
		0.776		0.429		1.205	No
	Left Tilt	0.486	0.229			0.715	No
		0.486		0.426		0.912	No
	Right Touch	0.705	0.596			1.301	No
		0.705		0.586		1.291	No
	Right Tilt	0.569	0.370			0.939	No
		0.569		0.581		1.150	No
Body-worn Accessory & Hotspot	Rear	0.964	0.519			1.483	No
		0.964		0.566		1.530	No
		0.964			0.012	0.976	No
	Front	0.907	0.222			1.129	No
		0.907		0.242		1.149	No
		0.907			0.002	0.909	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.708	0.024			0.732	No
	Edge 3	0.171	0			0.171	No
	Edge 4	0.985	0.329			1.314	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.17. Sum of the SAR for CDMA BC15 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		CDMA BC15	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.494	0.420			0.914	No
		0.494		0.429		0.923	No
	Left Tilt	0.598	0.229			0.827	No
		0.598		0.426		1.024	No
	Right Touch	0.760	0.596			1.356	No
		0.760		0.586		1.346	No
	Right Tilt	0.657	0.370			1.027	No
		0.657		0.581		1.238	No
Body-worn Accessory & Hotspot	Rear	0.753	0.519			1.272	No
		0.753		0.566		1.319	No
		0.753			0.012	0.765	No
	Front	0.630	0.222			0.852	No
		0.630		0.242		0.872	No
		0.630			0.002	0.632	No
Hotspot	Edge 1	0.462	0.083			0.545	No
	Edge 2	0.269	0.024			0.293	No
	Edge 3	0	0			0.000	No
	Edge 4	0.435	0.329			0.764	No

SAR to Peak Location Separation Ratio (SPLSR)

As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.18. Sum of the SAR for CDMA BC15 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		CDMA BC15	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.581	0.420			1.001	No
		0.581		0.429		1.010	No
	Left Tilt	0.327	0.229			0.556	No
		0.327		0.426		0.753	No
	Right Touch	1.090	0.596			1.686	**Yes**
		1.090		0.586		1.676	**Yes**
	Right Tilt	0.340	0.370			0.710	No
		0.340		0.581		0.921	No
Body-worn Accessory & Hotspot	Rear	1.140	0.519			1.659	**Yes**
		1.140		0.566		1.706	**Yes**
		1.140			0.012	1.152	No
	Front	0.939	0.222			1.161	No
		0.939		0.242		1.181	No
		0.939			0.002	0.941	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.861	0.024			0.885	No
	Edge 3	1.080	0			1.080	No
	Edge 4	0.083	0.329			0.412	No

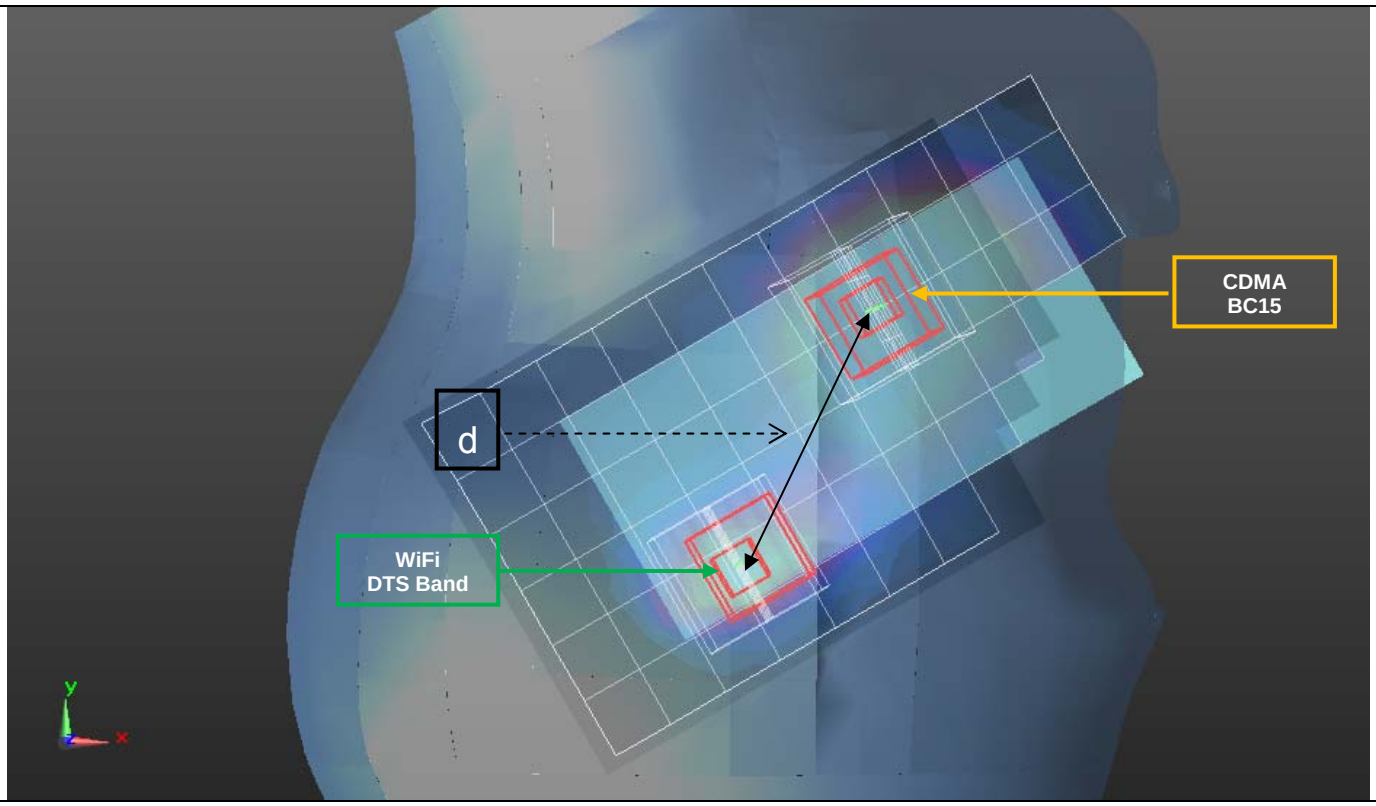
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			CDMA BC1	WiFi DTS Band	WiFi UNII Band					
8	Head	Right Touch	1.090	0.596		1.686	70.5	0.031	No	1
			1.090		0.586	1.676	75.3	0.029	No	2
	Body-worn Accessory & Hotspot	Rear	1.140	0.519		1.659	103.5	0.021	No	3
			1.140		0.566	1.706	102.9	0.022	No	4

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.

Figure (1)

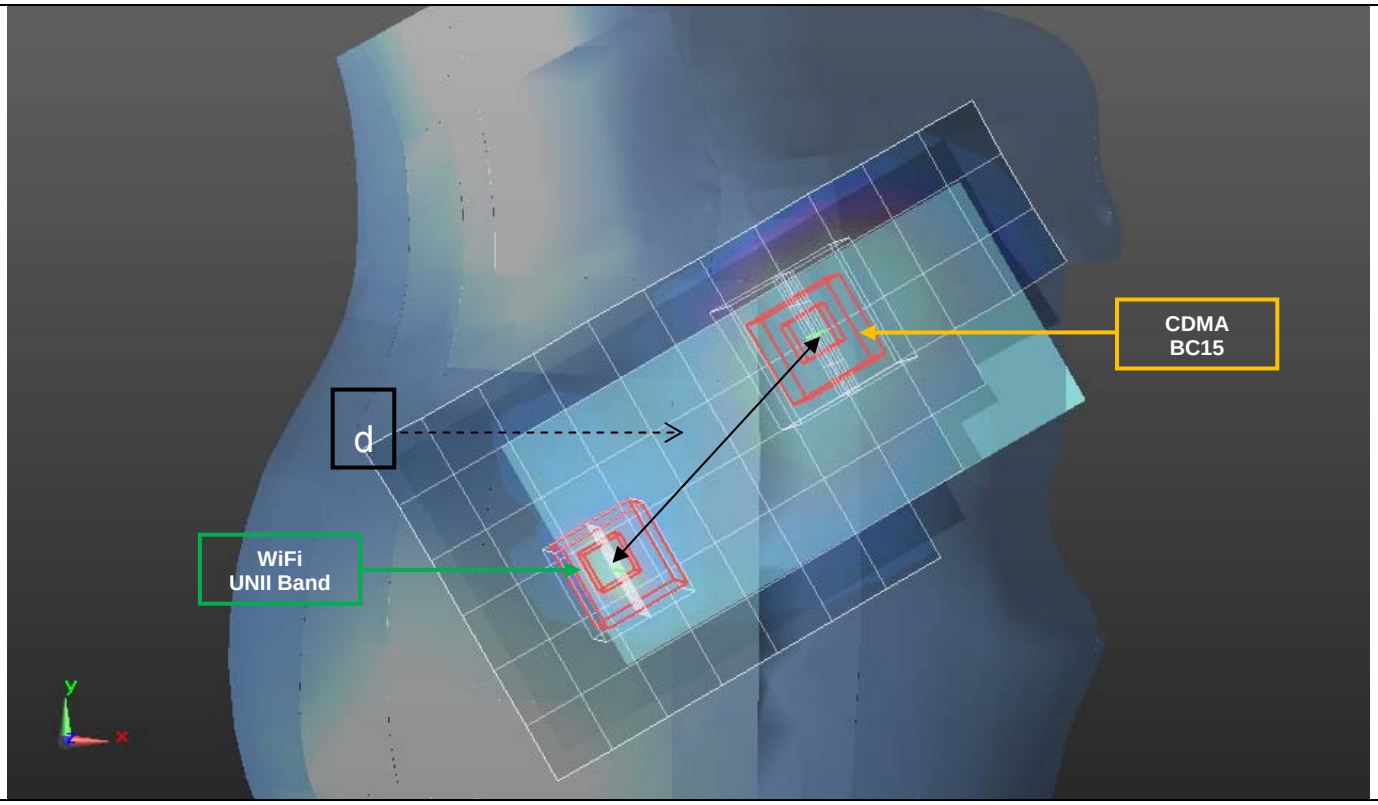


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
CDMA BC15	1.29	0.0661	-0.262	-0.173
WiFi DTS Band	0.82	0.0308	-0.323	-0.173

d: Calculated distance (mm)
70.5

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (2)

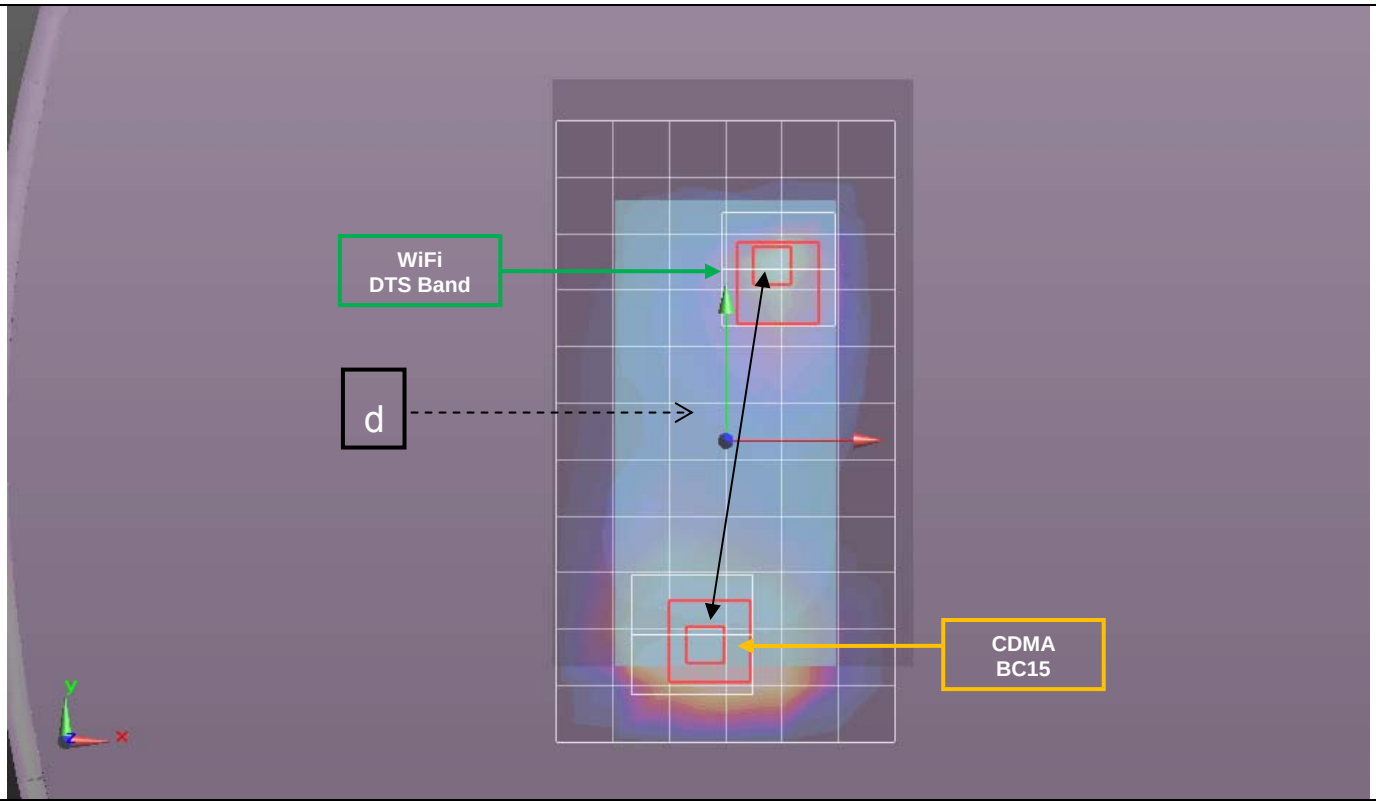


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
CDMA BC15	1.29	0.0661	-0.262	-0.173
WiFi UNII Band	1.25	0.0157	-0.318	-0.172

d: Calculated distance (mm)
75.3

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (3)

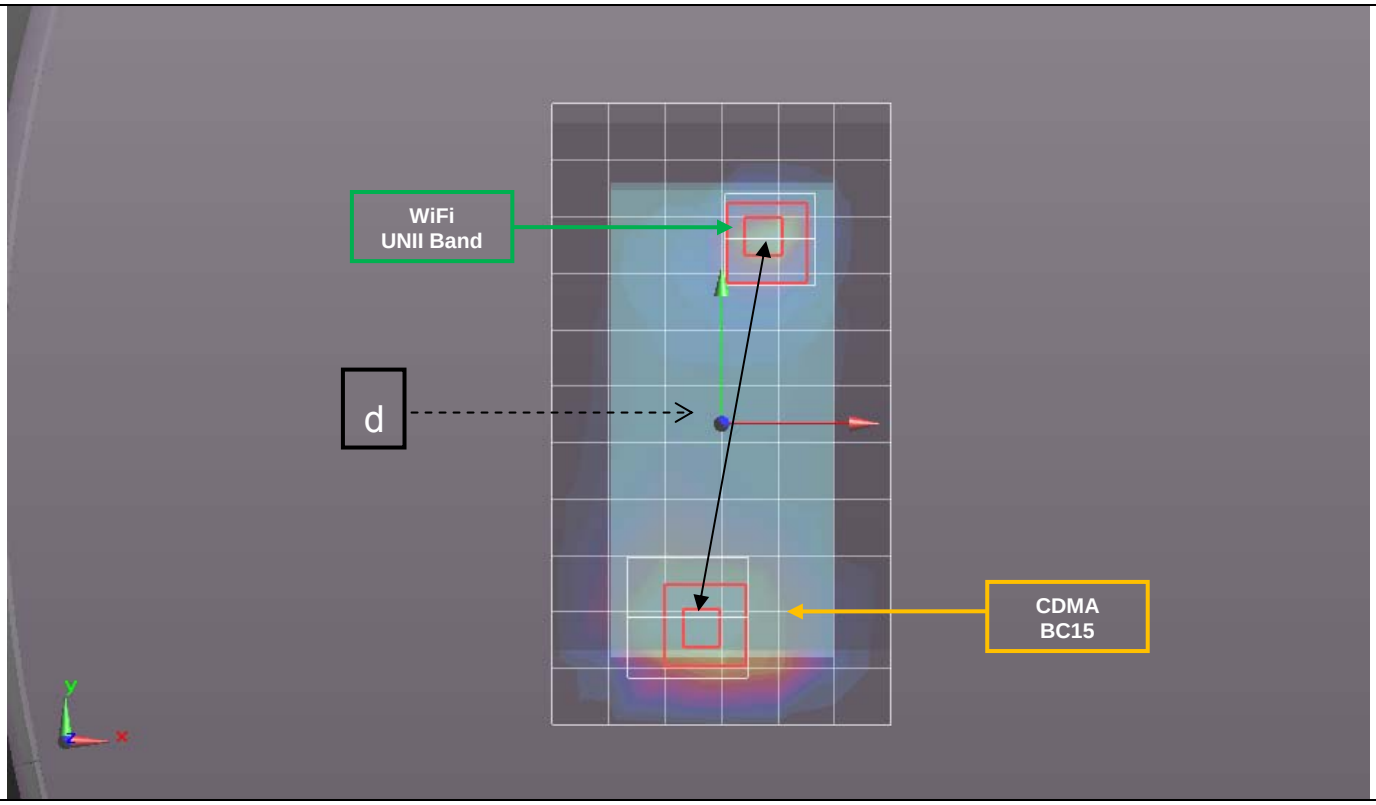


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
CDMA BC15	1.42	-0.009	-0.0515	-0.183
WiFi DTS Band	1.04	0.005	0.051	-0.183

d: Calculated distance (mm)
103.5

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (4)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
CDMA BC15	1.42	-0.009	-0.0515	-0.183
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
102.9

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.19. Sum of the SAR for LTE Band 2 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 2	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.560	0.420			0.980	No
		0.560		0.429		0.989	No
	Left Tilt	0.528	0.229			0.757	No
		0.528		0.426		0.954	No
	Right Touch	0.826	0.596			1.422	No
		0.826		0.586		1.412	No
	Right Tilt	0.542	0.370			0.912	No
		0.542		0.581		1.123	No
Body-worn Accessory & Hotspot	Rear	0.608	0.519			1.127	No
		0.608		0.566		1.174	No
		0.608			0.012	0.620	No
	Front	0.450	0.222			0.672	No
		0.450		0.242		0.692	No
		0.450			0.002	0.452	No
Hotspot	Edge 1	0.450	0.083			0.533	No
	Edge 2	0.051	0.024			0.075	No
	Edge 3	0	0			0.000	No
	Edge 4	0.375	0.329			0.704	No

SAR to Peak Location Separation Ratio (SPLSR)

As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.20. Sum of the SAR for LTE Band 2 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 2	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.751	0.420			1.171	No
		0.751		0.429		1.180	No
	Left Tilt	0.484	0.229			0.713	No
		0.484		0.426		0.910	No
	Right Touch	1.170	0.596			1.766	**Yes**
		1.170		0.586		1.756	**Yes**
	Right Tilt	0.464	0.370			0.834	No
		0.464		0.581		1.045	No
Body-worn Accessory & Hotspot	Rear	1.180	0.519			1.699	**Yes**
		1.180		0.566		1.746	**Yes**
		1.180			0.012	1.192	No
	Front	1.080	0.222			1.302	No
		1.080		0.242		1.322	No
		1.080			0.002	1.082	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	1.000	0.024			1.024	No
	Edge 3	1.040	0			1.040	No
	Edge 4	0.108	0.329			0.437	No

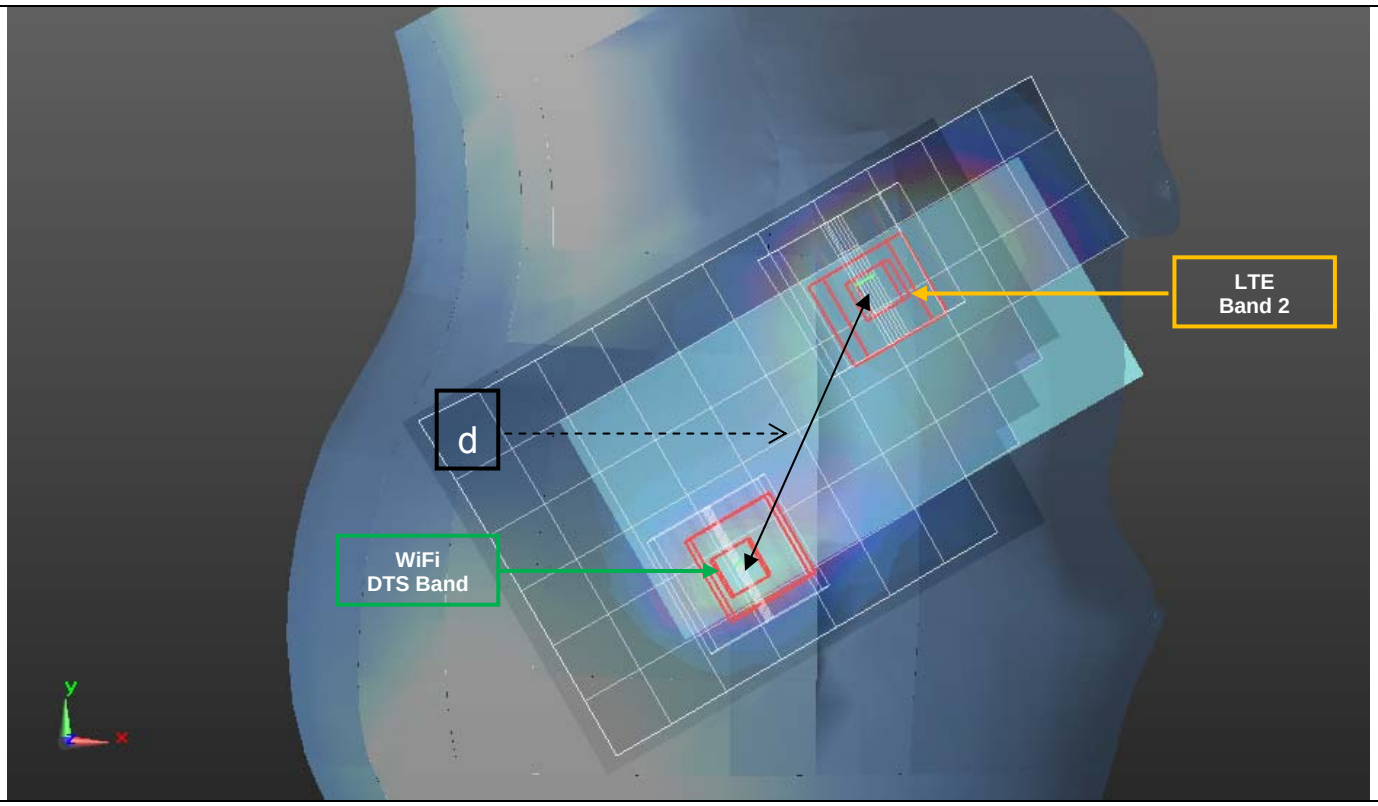
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			LTE Band 2	WiFi DTS Band	WiFi UNII Band					
9	Head	Right Touch	1.170	0.596		1.766	75.5	0.031	No	1
			1.170		0.586	1.756	79.1	0.029	No	2
	Body-worn Accessory & Hotspot	Rear	1.180	0.519		1.699	110.1	0.020	No	3
			1.180		0.566	1.746	109.6	0.021	No	4

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.

Figure (1)

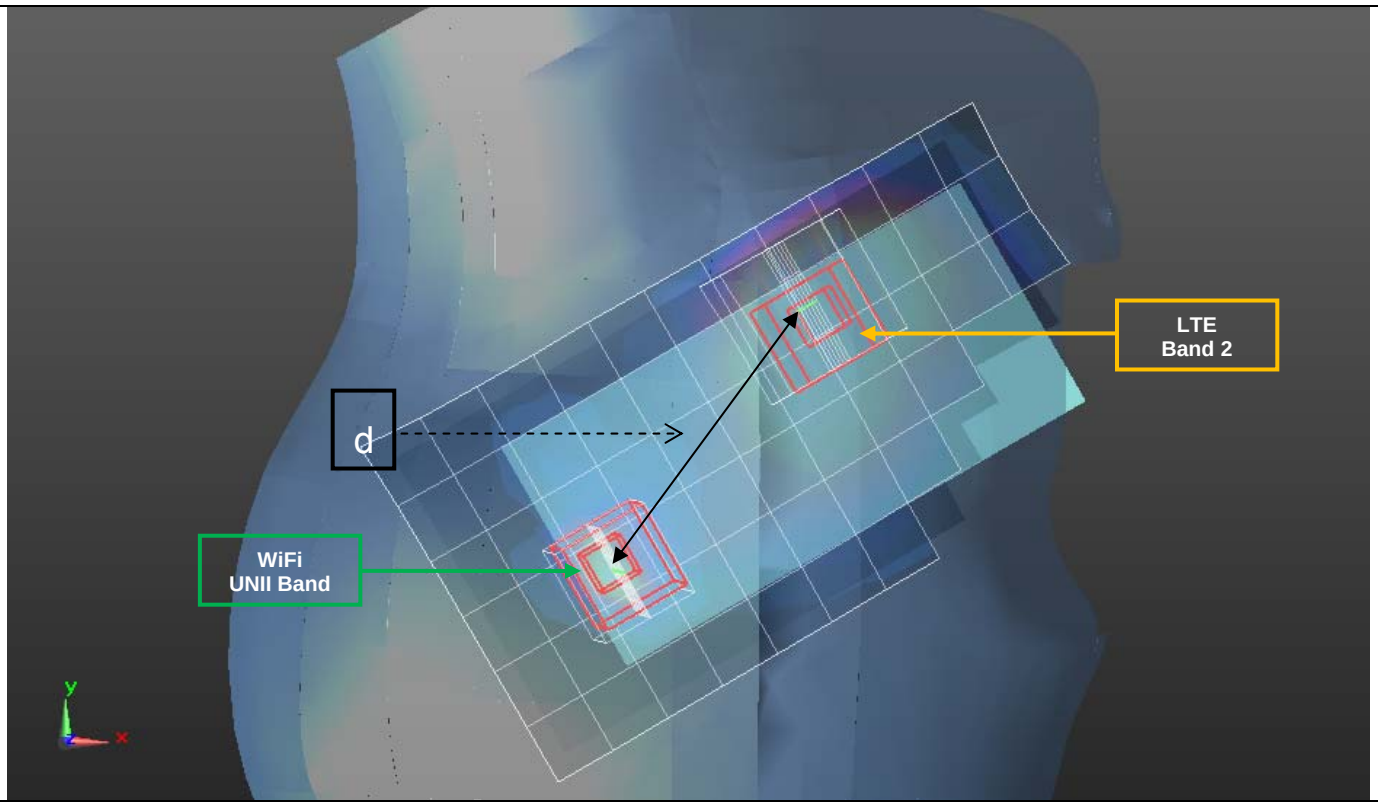


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 2	1.42	0.0635	-0.255	-0.172
WiFi DTS Band	0.82	0.0308	-0.323	-0.173

d: Calculated distance (mm)
75.5

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (2)

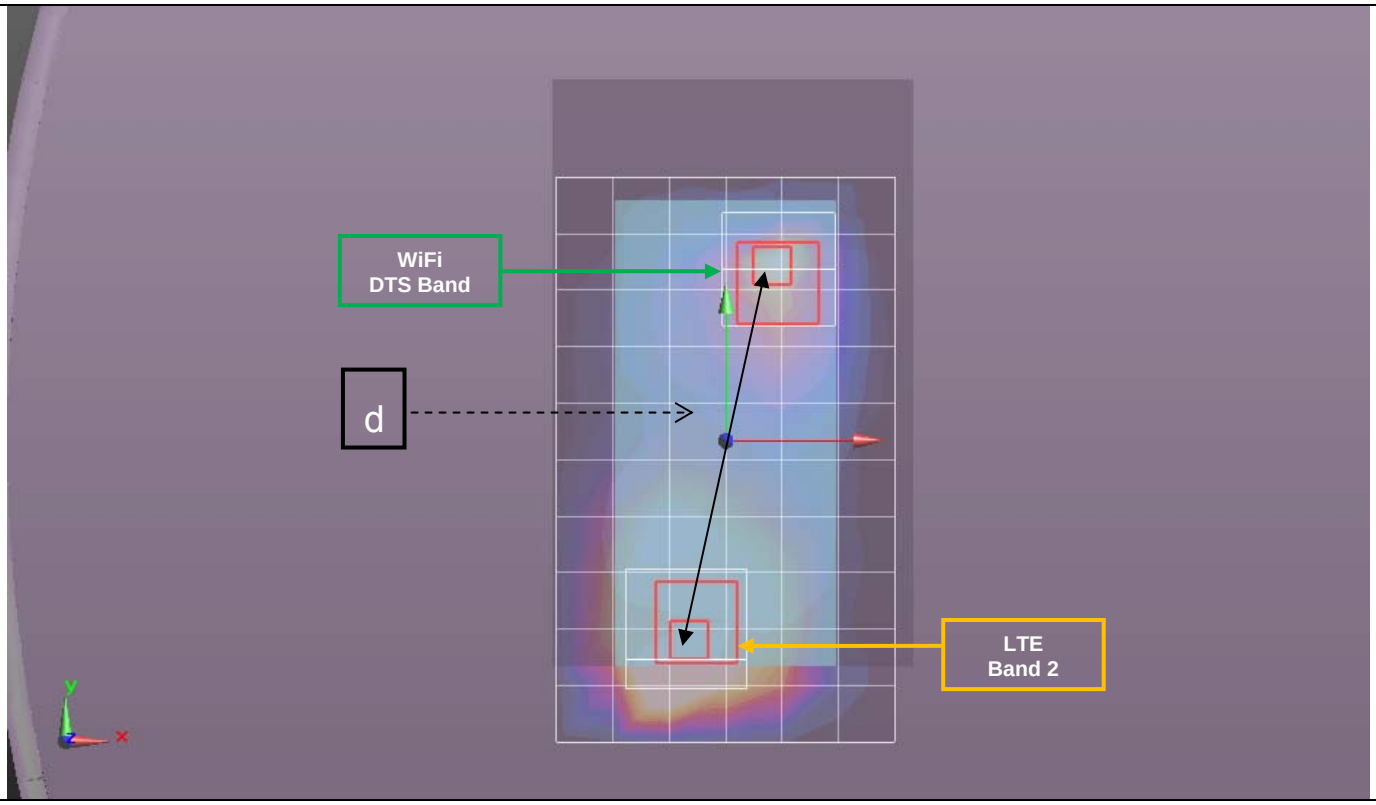


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 2	1.42	0.0635	-0.255	-0.172
WiFi UNII Band	1.25	0.0157	-0.318	-0.172

d: Calculated distance (mm)
79.1

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (3)

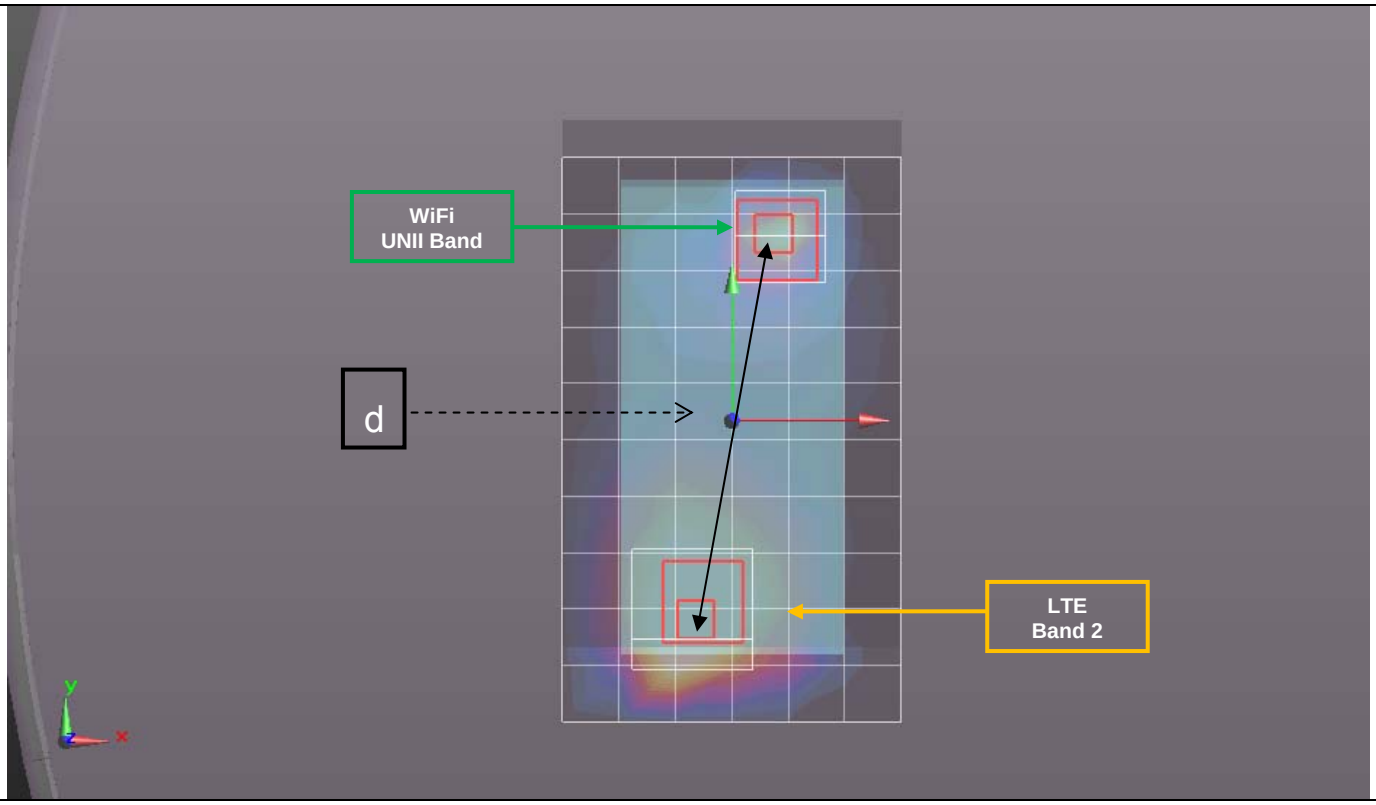


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 2	1.53	-0.0105	-0.058	-0.183
WiFi DTS Band	1.04	0.005	0.051	-0.183

d: Calculated distance (mm)
110.1

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (4)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 2	1.53	-0.0105	-0.058	-0.183
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
109.6

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.21. Sum of the SAR for LTE Band 4 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 4	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.485	0.420			0.905	No
		0.485		0.429		0.914	No
	Left Tilt	0.550	0.229			0.779	No
		0.550		0.426		0.976	No
	Right Touch	0.705	0.596			1.301	No
		0.705		0.586		1.291	No
	Right Tilt	0.554	0.370			0.924	No
		0.554		0.581		1.135	No
Body-worn Accessory & Hotspot	Rear	0.551	0.519			1.070	No
		0.551		0.566		1.117	No
		0.551			0.012	0.563	No
	Front	0.474	0.222			0.696	No
		0.474		0.242		0.716	No
		0.474			0.002	0.476	No
Hotspot	Edge 1	0.359	0.083			0.442	No
	Edge 2	0.211	0.024			0.235	No
	Edge 3	0	0			0.000	No
	Edge 4	0.321	0.329			0.650	No

SAR to Peak Location Separation Ratio (SPLSR)

As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.22. Sum of the SAR for LTE Band 4 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 4	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.633	0.420			1.053	No
		0.633		0.429		1.062	No
	Left Tilt	0.340	0.229			0.569	No
		0.340		0.426		0.766	No
	Right Touch	1.120	0.596			1.716	**Yes**
		1.120		0.586		1.706	**Yes**
	Right Tilt	0.251	0.370			0.621	No
		0.251		0.581		0.832	No
Body-worn Accessory & Hotspot	Rear	1.110	0.519			1.629	**Yes**
		1.110		0.566		1.676	**Yes**
		1.110			0.012	1.122	No
	Front	0.912	0.222			1.134	No
		0.912		0.242		1.154	No
		0.912			0.002	0.914	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.834	0.024			0.858	No
	Edge 3	1.190	0			1.190	No
	Edge 4	0.075	0.329			0.404	No

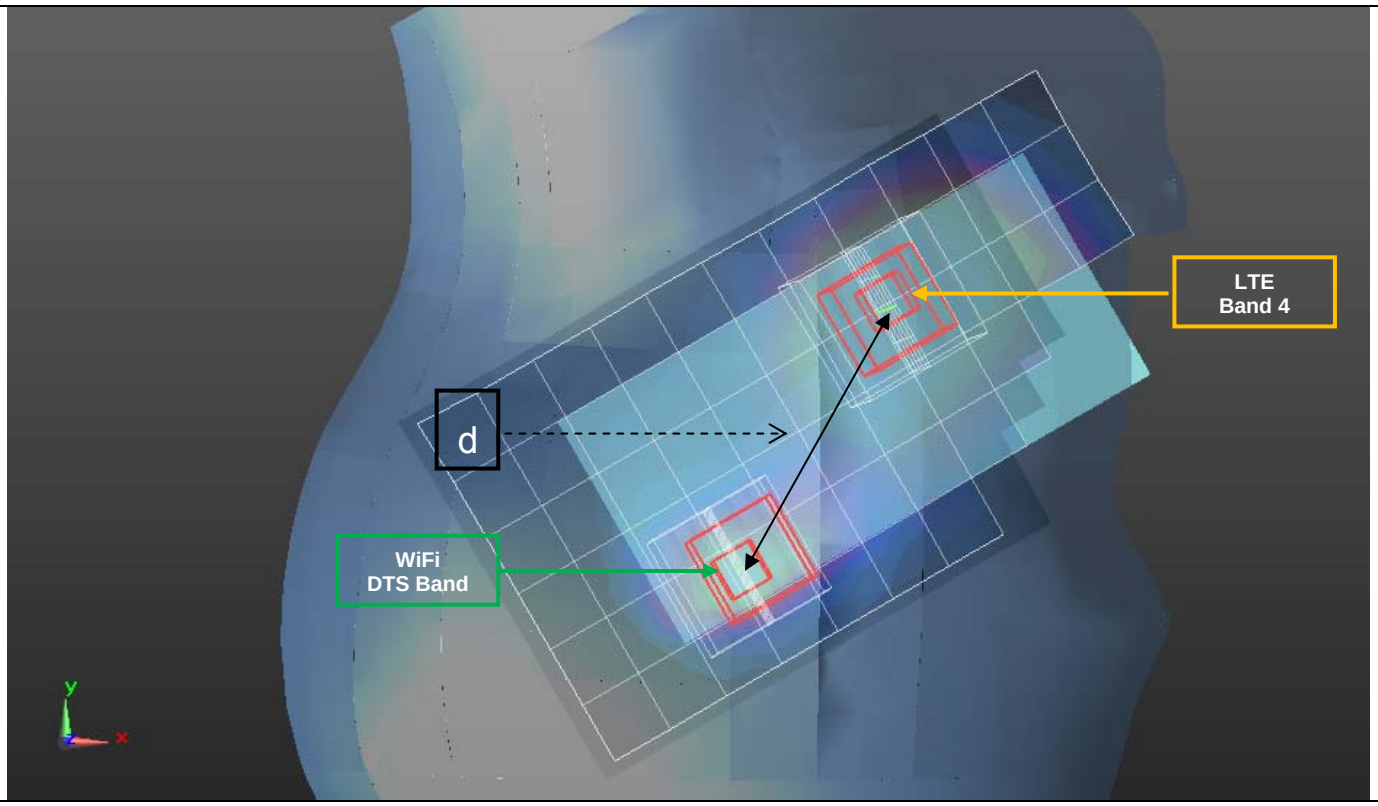
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			LTE Band 4	WiFi DTS Band	WiFi UNII Band					
10	Head	Right Touch	1.120	0.596		1.716	70.7	0.032	No	1
			1.120		0.586	1.706	76.0	0.029	No	2
	Body-worn Accessory & Hotspot	Rear	1.110	0.519		1.629	106.6	0.020	No	3
			1.110		0.566	1.676	105.2	0.021	No	4

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.

Figure (1)

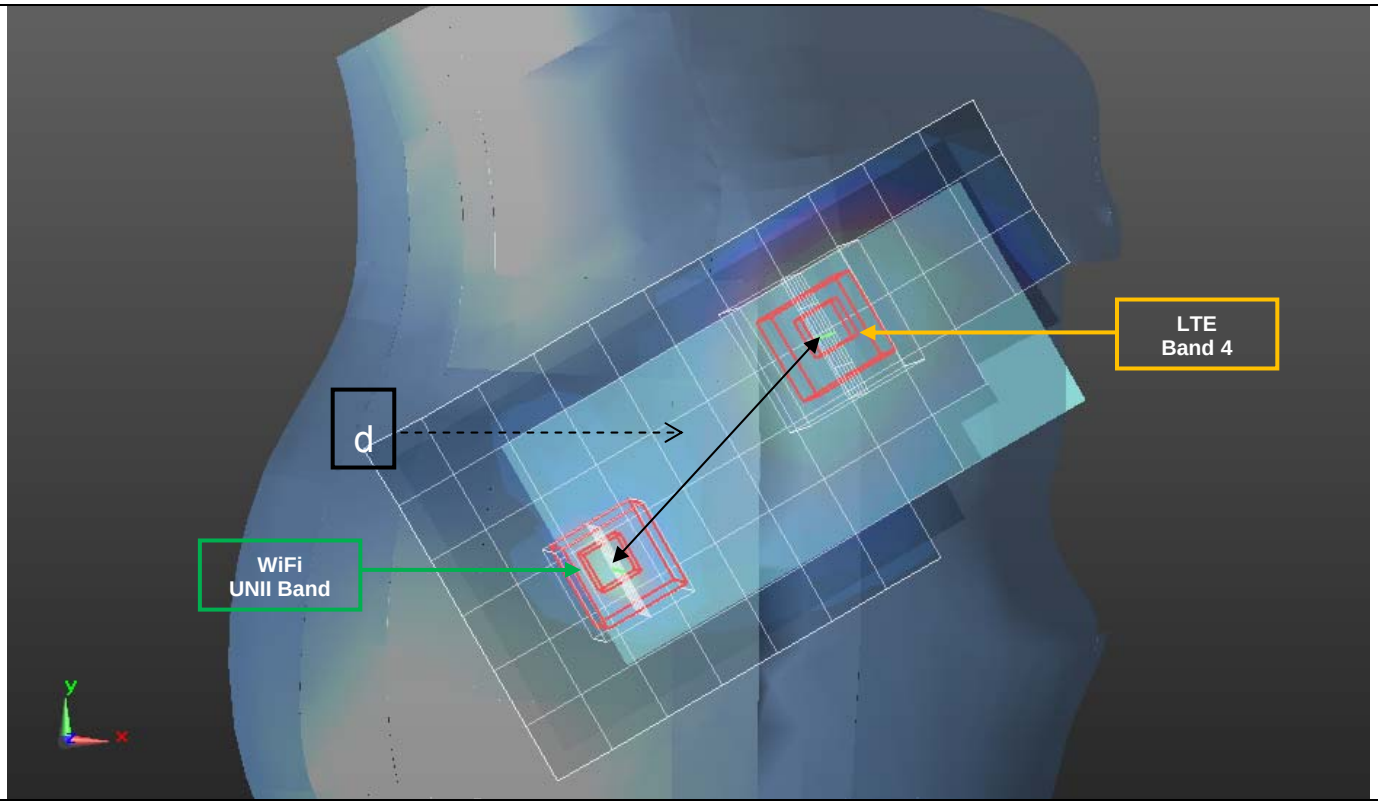


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 4	1.34	0.0681	-0.263	-0.172
WiFi DTS Band	0.82	0.0308	-0.323	-0.173

d: Calculated distance (mm)
70.7

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (2)

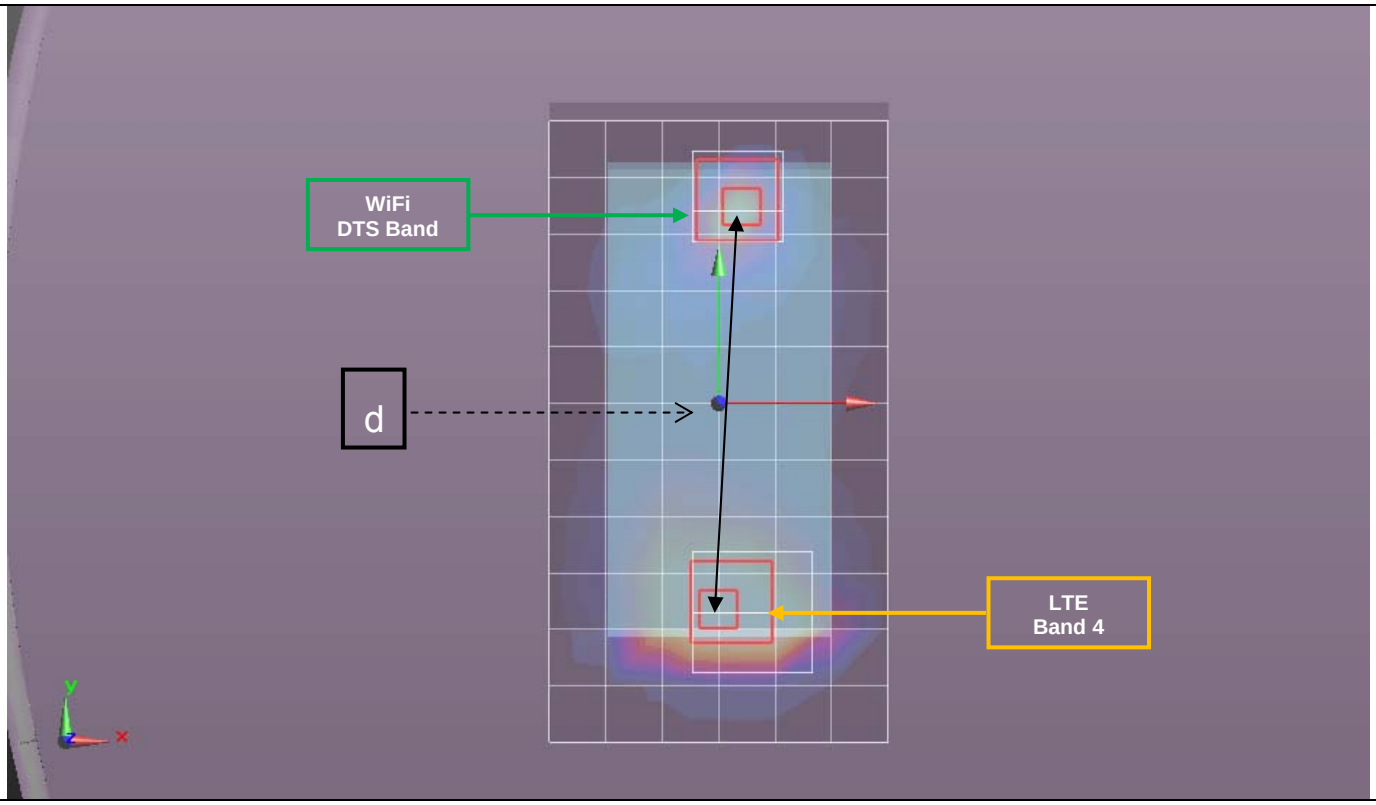


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 4	1.34	0.0681	-0.263	-0.172
WiFi UNII Band	1.25	0.0157	-0.318	-0.172

d: Calculated distance (mm)
76.0

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (3)

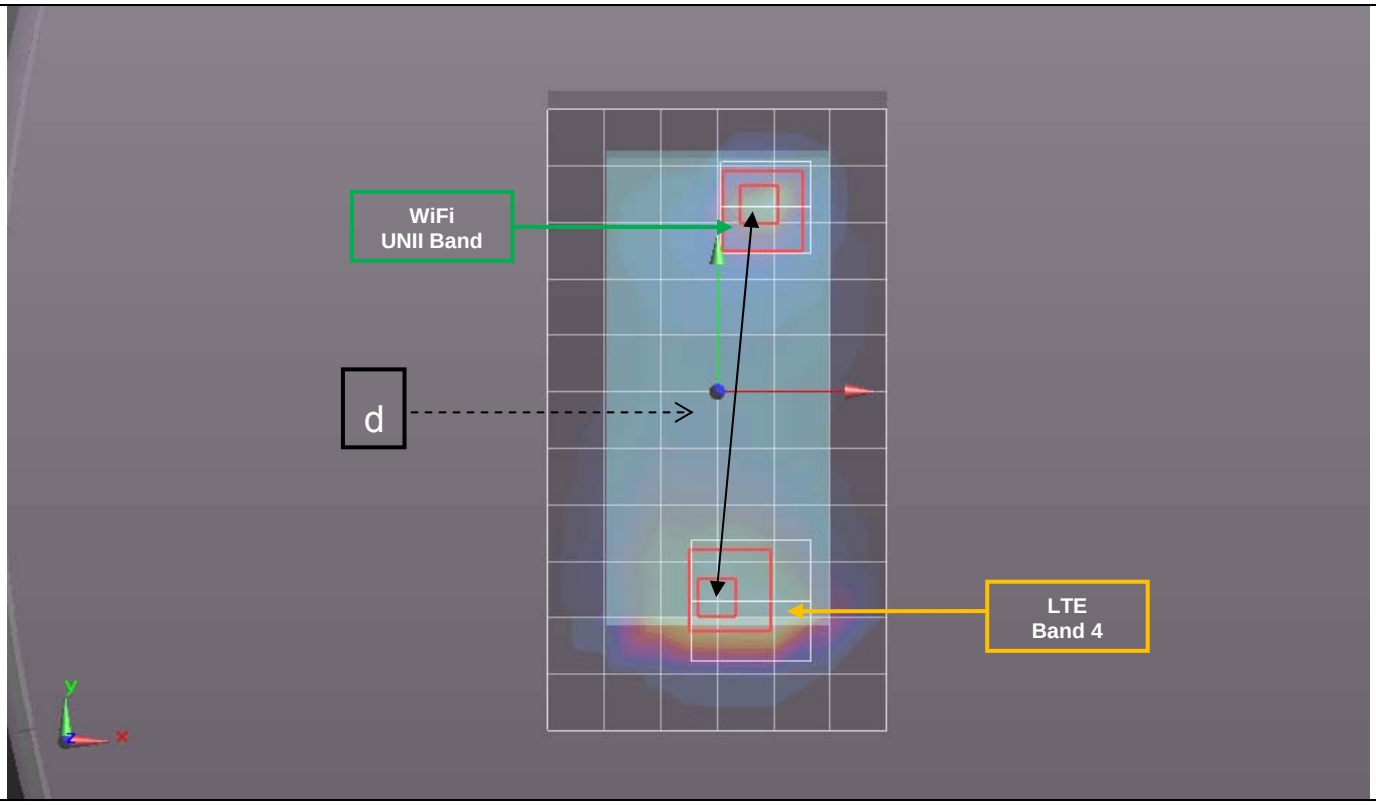


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 4	1.43	0.001	-0.0555	-0.183
WiFi DTS Band	1.04	0.005	0.051	-0.183

d: Calculated distance (mm)
106.6

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (4)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 4	1.43	0.001	-0.0555	-0.183
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
105.2

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.23. Sum of the SAR for LTE Band 5 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 5	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.426	0.420			0.846	No
		0.426		0.429		0.855	No
	Left Tilt	0.229	0.229			0.458	No
		0.229		0.426		0.655	No
	Right Touch	0.275	0.596			0.871	No
		0.275		0.586		0.861	No
	Right Tilt	0.211	0.370			0.581	No
		0.211		0.581		0.792	No
Body-worn Accessory & Hotspot	Rear	0.173	0.519			0.692	No
		0.173		0.566		0.739	No
		0.173			0.012	0.185	No
	Front	0.134	0.222			0.356	No
		0.134		0.242		0.376	No
		0.134			0.002	0.136	No
Hotspot	Edge 1	0.780	0.083			0.863	No
	Edge 2	0.940	0.024			0.964	No
	Edge 3	0	0			0.000	No
	Edge 4	0.490	0.329			0.819	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.24. Sum of the SAR for LTE Band 5 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 5	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.580	0.420			1.000	No
		0.580		0.429		1.009	No
	Left Tilt	0.346	0.229			0.575	No
		0.346		0.426		0.772	No
	Right Touch	0.501	0.596			1.097	No
		0.501		0.586		1.087	No
	Right Tilt	0.198	0.370			0.568	No
		0.198		0.581		0.779	No
Body-worn Accessory & Hotspot	Rear	0.992	0.519			1.511	No
		0.992		0.566		1.558	No
		0.992			0.012	1.004	No
	Front	0.713	0.222			0.935	No
		0.713		0.242		0.955	No
		0.713			0.002	0.715	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.596	0.024			0.620	No
	Edge 3	0.170	0			0.170	No
	Edge 4	1.171	0.329			1.500	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.25. Sum of the SAR for LTE Band 13 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 13	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.354	0.420			0.774	No
		0.354		0.429		0.783	No
	Left Tilt	0.205	0.229			0.434	No
		0.205		0.426		0.631	No
	Right Touch	0.150	0.596			0.746	No
		0.150		0.586		0.736	No
	Right Tilt	0.107	0.370			0.477	No
		0.107		0.581		0.688	No
Body-worn Accessory & Hotspot	Rear	0.213	0.519			0.732	No
		0.213		0.566		0.779	No
		0.213			0.012	0.225	No
	Front	0.167	0.222			0.389	No
		0.167		0.242		0.409	No
		0.167			0.002	0.169	No
Hotspot	Edge 1	0.110	0.083			0.193	No
	Edge 2	0.072	0.024			0.096	No
	Edge 3	0	0			0.000	No
	Edge 4	0.035	0.329			0.364	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.26. Sum of the SAR for LTE Band 13 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 13	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.498	0.420			0.918	No
		0.498		0.429		0.927	No
	Left Tilt	0.359	0.229			0.588	No
		0.359		0.426		0.785	No
	Right Touch	0.482	0.596			1.078	No
		0.482		0.586		1.068	No
	Right Tilt	0.364	0.370			0.734	No
		0.364		0.581		0.945	No
Body-worn Accessory & Hotspot	Rear	0.905	0.519			1.424	No
		0.905		0.566		1.471	No
		0.905			0.012	0.917	No
	Front	0.786	0.222			1.008	No
		0.786		0.242		1.028	No
		0.786			0.002	0.788	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.638	0.024			0.662	No
	Edge 3	0.695	0			0.695	No
	Edge 4	0.285	0.329			0.614	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.27. Sum of the SAR for LTE Band 17 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 17	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.329	0.420			0.749	No
		0.329		0.429		0.758	No
	Left Tilt	0.244	0.229			0.473	No
		0.244		0.426		0.670	No
	Right Touch	0.273	0.596			0.869	No
		0.273		0.586		0.859	No
	Right Tilt	0.231	0.370			0.601	No
		0.231		0.581		0.812	No
Body-worn Accessory & Hotspot	Rear	0.179	0.519			0.698	No
		0.179		0.566		0.745	No
		0.179			0.012	0.191	No
	Front	0.148	0.222			0.370	No
		0.148		0.242		0.390	No
		0.148			0.002	0.150	No
Hotspot	Edge 1	0.139	0.083			0.222	No
	Edge 2	0.161	0.024			0.185	No
	Edge 3	0	0			0.000	No
	Edge 4	0.117	0.329			0.446	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.28. Sum of the SAR for LTE Band 17 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 17	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.460	0.420			0.880	No
		0.460		0.429		0.889	No
	Left Tilt	0.265	0.229			0.494	No
		0.265		0.426		0.691	No
	Right Touch	0.447	0.596			1.043	No
		0.447		0.586		1.033	No
	Right Tilt	0.221	0.370			0.591	No
		0.221		0.581		0.802	No
Body-worn Accessory & Hotspot	Rear	0.974	0.519			1.493	No
		0.974		0.566		1.540	No
		0.974			0.012	0.986	No
	Front	0.650	0.222			0.872	No
		0.650		0.242		0.892	No
		0.650			0.002	0.652	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.533	0.024			0.557	No
	Edge 3	0.273	0			0.273	No
	Edge 4	0.643	0.329			0.972	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.29. Sum of the SAR for LTE Band 25 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 25	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.664	0.420			1.084	No
		0.664		0.429		1.093	No
	Left Tilt	0.517	0.229			0.746	No
		0.517		0.426		0.943	No
	Right Touch	0.739	0.596			1.335	No
		0.739		0.586		1.325	No
	Right Tilt	0.577	0.370			0.947	No
		0.577		0.581		1.158	No
Body-worn Accessory & Hotspot	Rear	0.566	0.519			1.085	No
		0.566		0.566		1.132	No
		0.566			0.012	0.578	No
	Front	0.457	0.222			0.679	No
		0.457		0.242		0.699	No
		0.457			0.002	0.459	No
Hotspot	Edge 1	0.440	0.083			0.523	No
	Edge 2	0.130	0.024			0.154	No
	Edge 3	0	0			0.000	No
	Edge 4	0.353	0.329			0.682	No

SAR to Peak Location Separation Ratio (SPLSR)

As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.30. Sum of the SAR for LTE Band 25 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 25	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.850	0.420			1.270	No
		0.850		0.429		1.279	No
	Left Tilt	0.521	0.229			0.750	No
		0.521		0.426		0.947	No
	Right Touch	1.180	0.596			1.776	**Yes**
		1.180		0.586		1.766	**Yes**
	Right Tilt	0.625	0.370			0.995	No
		0.625		0.581		1.206	No
Body-worn Accessory & Hotspot	Rear	1.120	0.519			1.639	**Yes**
		1.120		0.566		1.686	**Yes**
		1.120			0.012	1.132	No
	Front	0.742	0.222			0.964	No
		0.742		0.242		0.984	No
		0.742			0.002	0.744	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.732	0.024			0.756	No
	Edge 3	0.781	0			0.781	No
	Edge 4	0.096	0.329			0.425	No

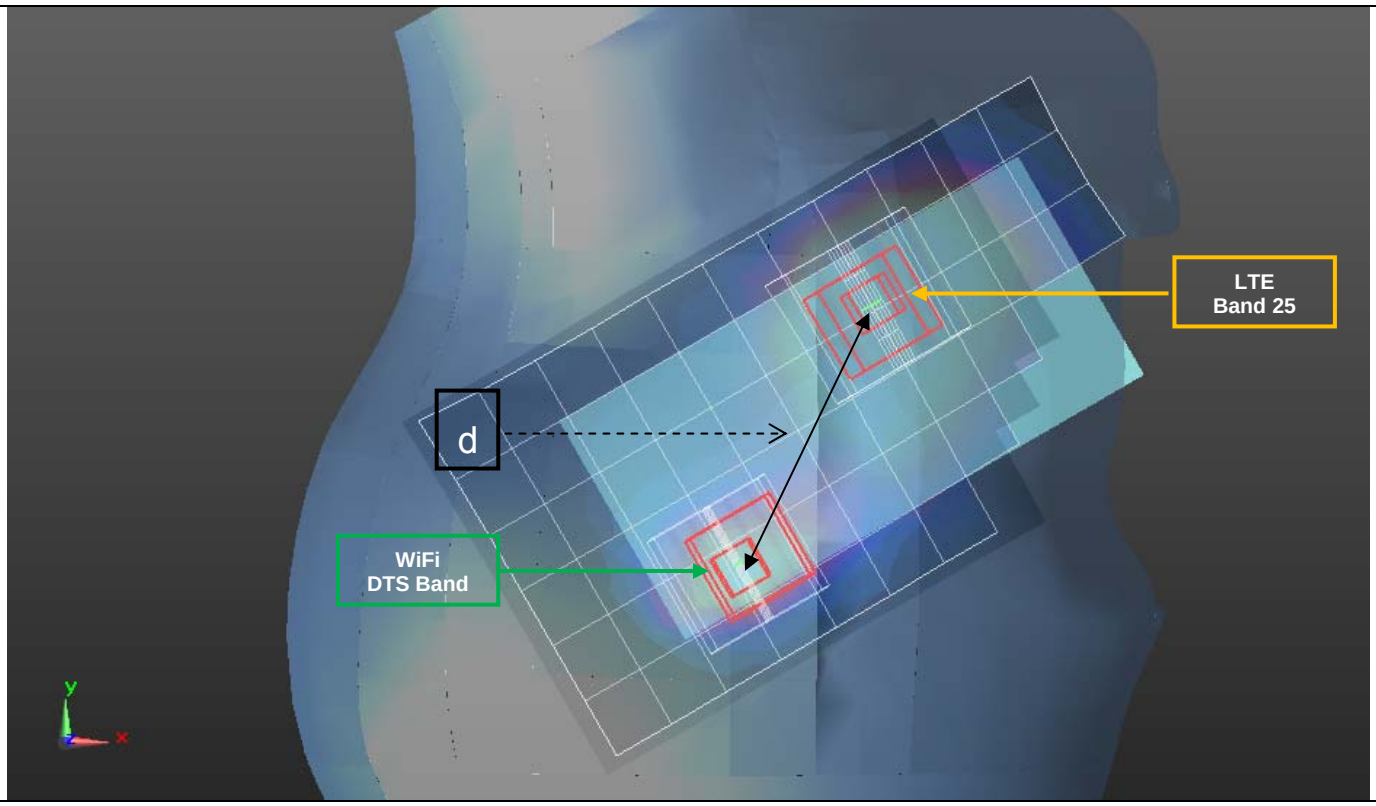
SAR to Peak Location Separation Ratio (SPLSR)

Case #	RF Exposure conditions	Test Position	Worst-case combination			∑ 1-g SAR (mW/g)	Calculated distance (mm)	SPLSR (≤ 0.04)	Volume Scan (Yes/ No)	Figure
			LTE Band 25	WiFi DTS Band	WiFi UNII Band					
11	Head	Right Touch	1.180	0.596		1.776	70.9	0.033	No	1
			1.180		0.586	1.766	75.5	0.031	No	2
	Body-worn Accessory & Hotspot	Rear	1.120	0.519		1.639	106.6	0.020	No	3
			1.120		0.566	1.686	106.1	0.021	No	4

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.

Figure (1)

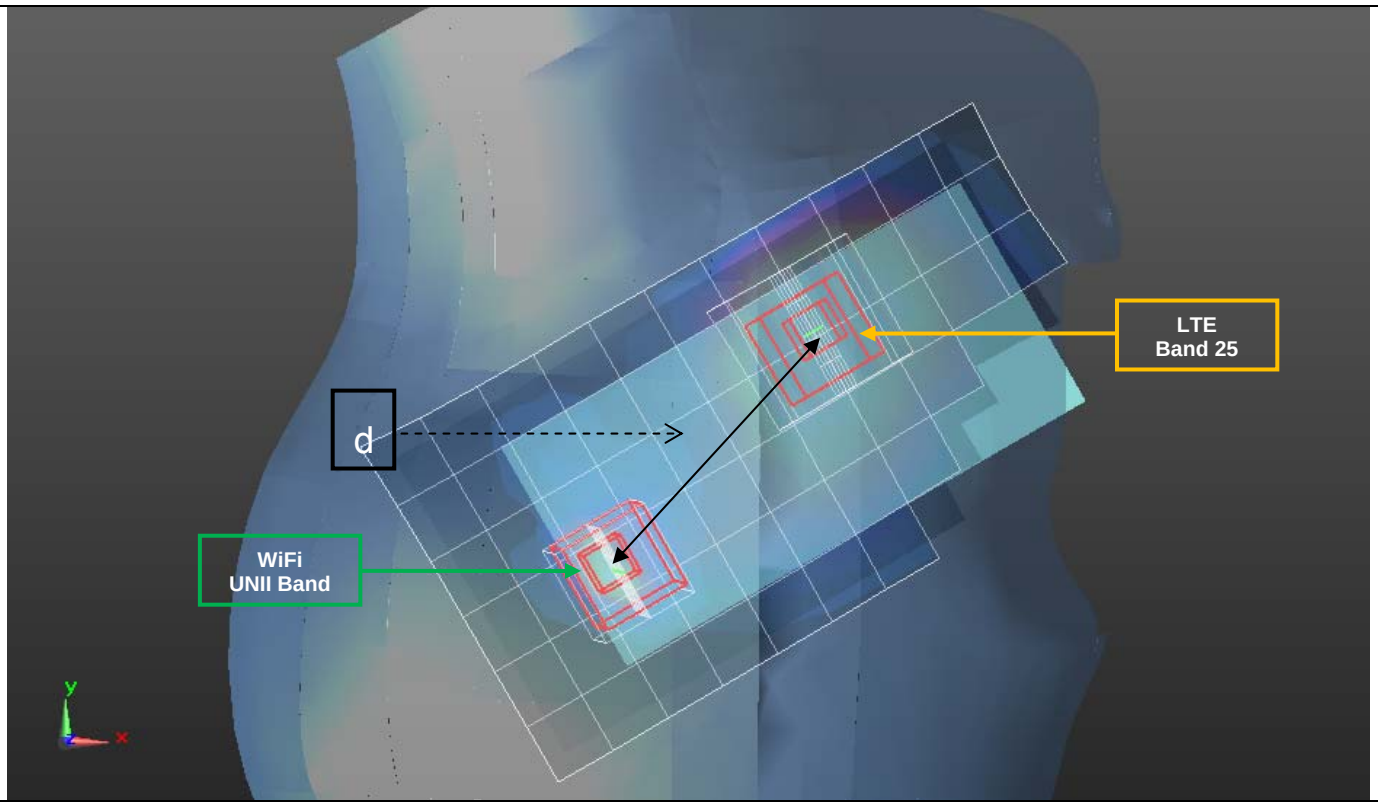


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 25	1.45	0.0652	-0.261	-0.172
WiFi DTS Band	0.82	0.0308	-0.323	-0.173

d: Calculated distance (mm)
70.9

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (2)

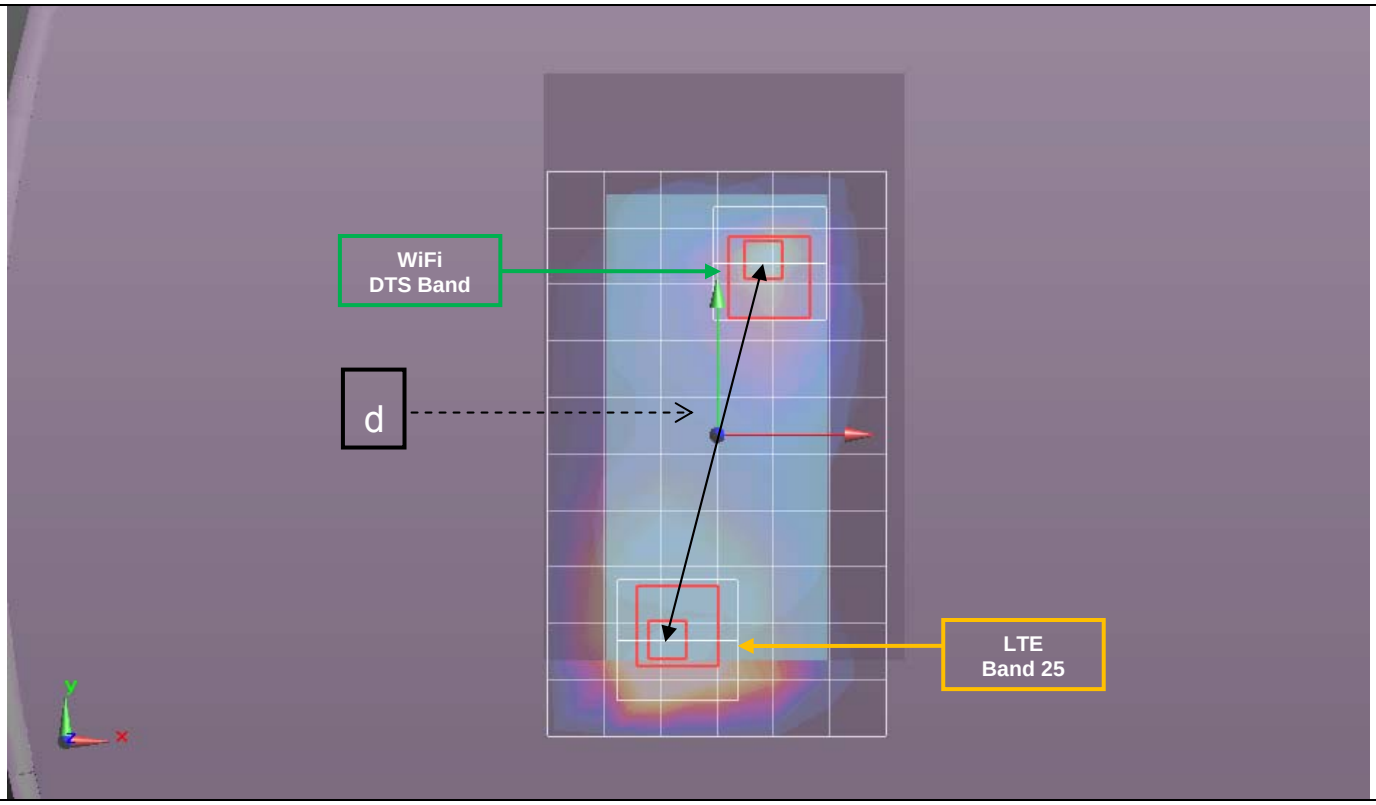


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 25	1.45	0.0652	-0.261	-0.172
WiFi UNII Band	1.25	0.0157	-0.318	-0.172

d: Calculated distance (mm)
75.5

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (3)

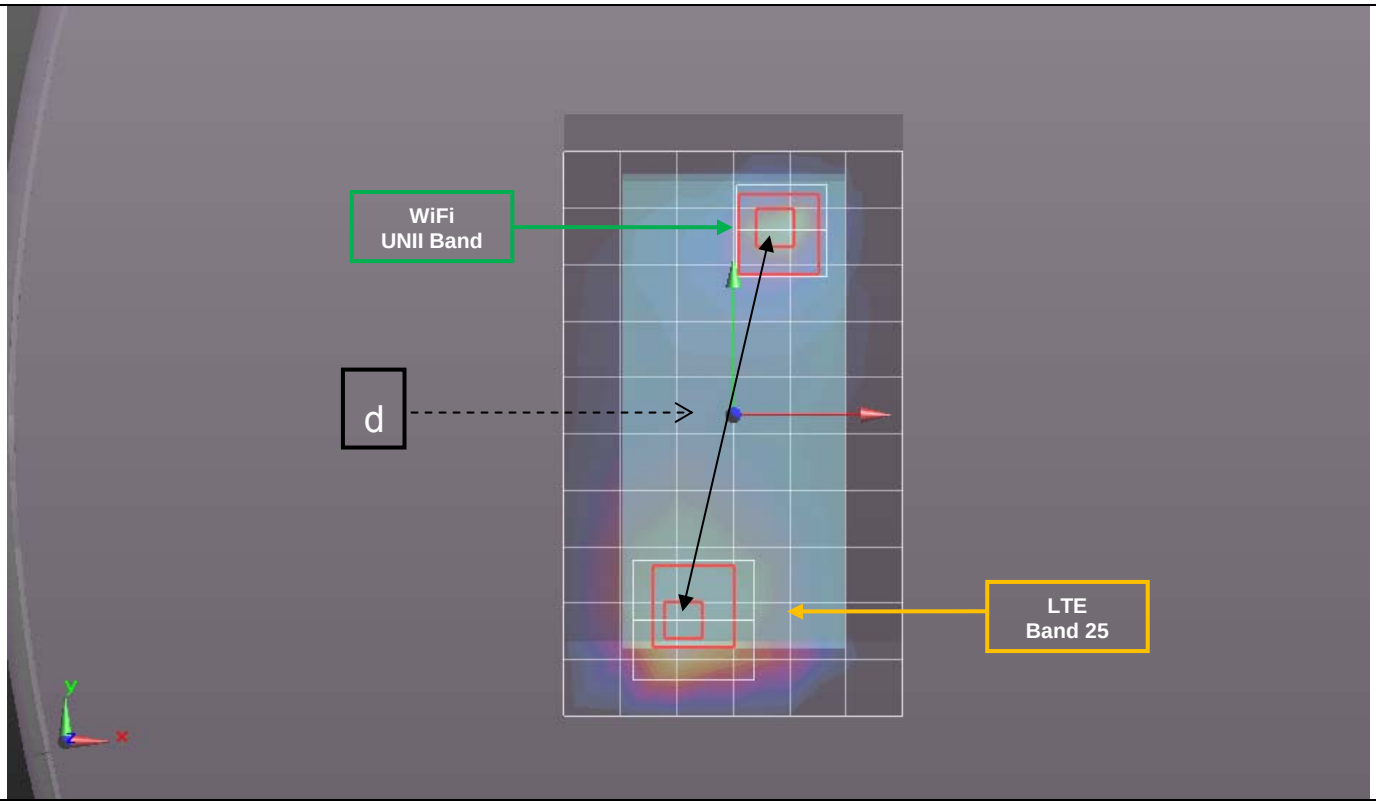


Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 25	1.45	-0.0105	-0.0545	-0.183
WiFi DTS Band	1.04	0.005	0.051	-0.183

d: Calculated distance (mm)
106.6

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

Figure (4)



Mode	Peak SAR	X	Y	Z
	mW/g	m	m	m
LTE Band 25	1.45	-0.0105	-0.0545	-0.183
WiFi UNII Band	1.14	0.013	0.049	-0.183

d: Calculated distance (mm)
106.1

The Peak Location Separation Distance is computed by using the formula below:
SQRT((X1-X2)^2+(Y1-Y2)^2+(Z1-Z2)^2)

14.31. Sum of the SAR for LTE Band 26 (UAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 26	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.433	0.420			0.853	No
		0.433		0.429		0.862	No
	Left Tilt	0.230	0.229			0.459	No
		0.230		0.426		0.656	No
	Right Touch	0.277	0.596			0.873	No
		0.291		0.586		0.877	No
	Right Tilt	0.182	0.370			0.552	No
		0.182		0.581		0.763	No
Body-worn Accessory & Hotspot	Rear	0.120	0.519			0.639	No
		0.120		0.566		0.686	No
		0.120			0.012	0.132	No
	Front	0.095	0.222			0.317	No
		0.095		0.242		0.337	No
		0.095			0.002	0.097	No
Hotspot	Edge 1	0.057	0.083			0.140	No
	Edge 2	0.130	0.024			0.154	No
	Edge 3	0	0			0.000	No
	Edge 4	0.037	0.329			0.366	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

14.32. Sum of the SAR for LTE Band 26 (LAT) + WiFi DTS & UNII Band & BT

RF Exposure conditions	Test Position	Simultaneous Transmission Scenario				∑ 1-g SAR (mW/g)	SPLSR (Yes/ No)
		LTE Band 26	WiFi DTS Band	WiFi UNII Band	Bluetooth		
Head	Left Touch	0.643	0.420			1.063	No
		0.643		0.429		1.072	No
	Left Tilt	0.431	0.229			0.660	No
		0.431		0.426		0.857	No
	Right Touch	0.654	0.596			1.250	No
		0.654		0.586		1.240	No
	Right Tilt	0.431	0.370			0.801	No
		0.431		0.581		1.012	No
Body-worn Accessory & Hotspot	Rear	0.854	0.519			1.373	No
		0.854		0.566		1.420	No
		0.854			0.012	0.866	No
	Front	0.766	0.222			0.988	No
		0.766		0.242		1.008	No
		0.766			0.002	0.768	No
Hotspot	Edge 1	0	0.083			0.083	No
	Edge 2	0.687	0.024			0.711	No
	Edge 3	0.157	0			0.157	No
	Edge 4	1.03	0.329			1.359	No

SAR to Peak Location Separation Ratio (SPLSR)
As the Sum of the SAR is not greater than 1.6 W/kg SPLSR assessment is not required.

15. Appendixes

Refer to separated files for the following appendixes.

15.1. System Performance Check Plots

15.2. Highest SAR Test Plots

15.3. Calibration Certificate for E-Field Probe EX3DV4 - SN 3749

15.4. Calibration Certificate for E-Field Probe EX3DV4 - SN 3751

15.5. Calibration Certificate for E-Field Probe EX3DV4 - SN 3772

15.6. Calibration Certificate for E-Field Probe EX3DV4 - SN 3686

15.7. Calibration Certificate for E-Field Probe EX3DV4 - SN 3901

15.8. Calibration Certificate for E-Field Probe EX3DV4 - SN 3885

15.9. Calibration Certificate for D750V3 - SN 1071

15.10. Calibration Certificate for D835V2 - SN 4d002

15.11. Calibration Certificate for D835V2 - SN 4d142

15.12. Calibration Certificate for D1750V2 - SN 1050

15.13. Calibration Certificate for D1900V2- SN 5d163

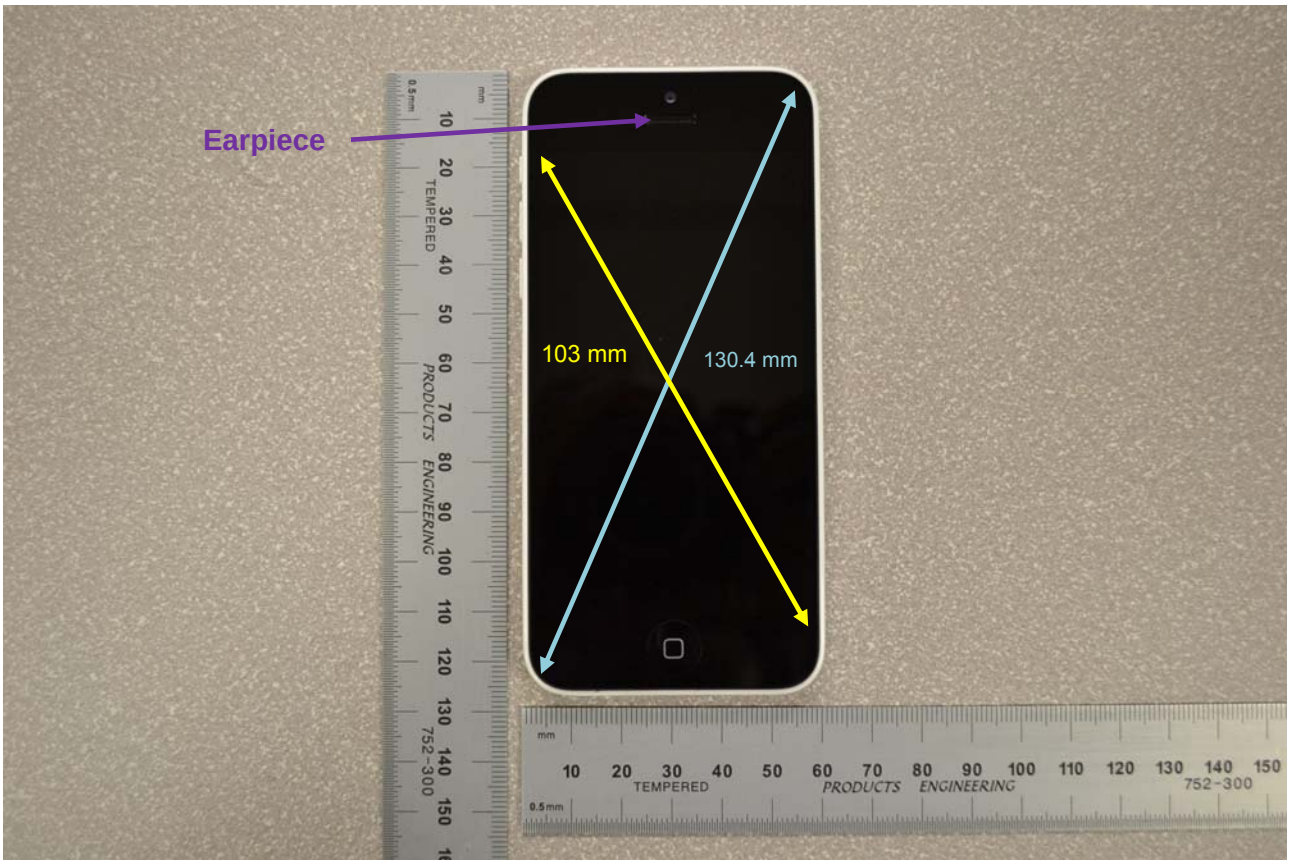
15.14. Calibration Certificate for D2450V2 - SN 899

15.15. Calibration Certificate for D5GHzV2 - SN 1003

15.16. Calibration Certificate for D5GHzV2 - SN 1138

16. External Photos

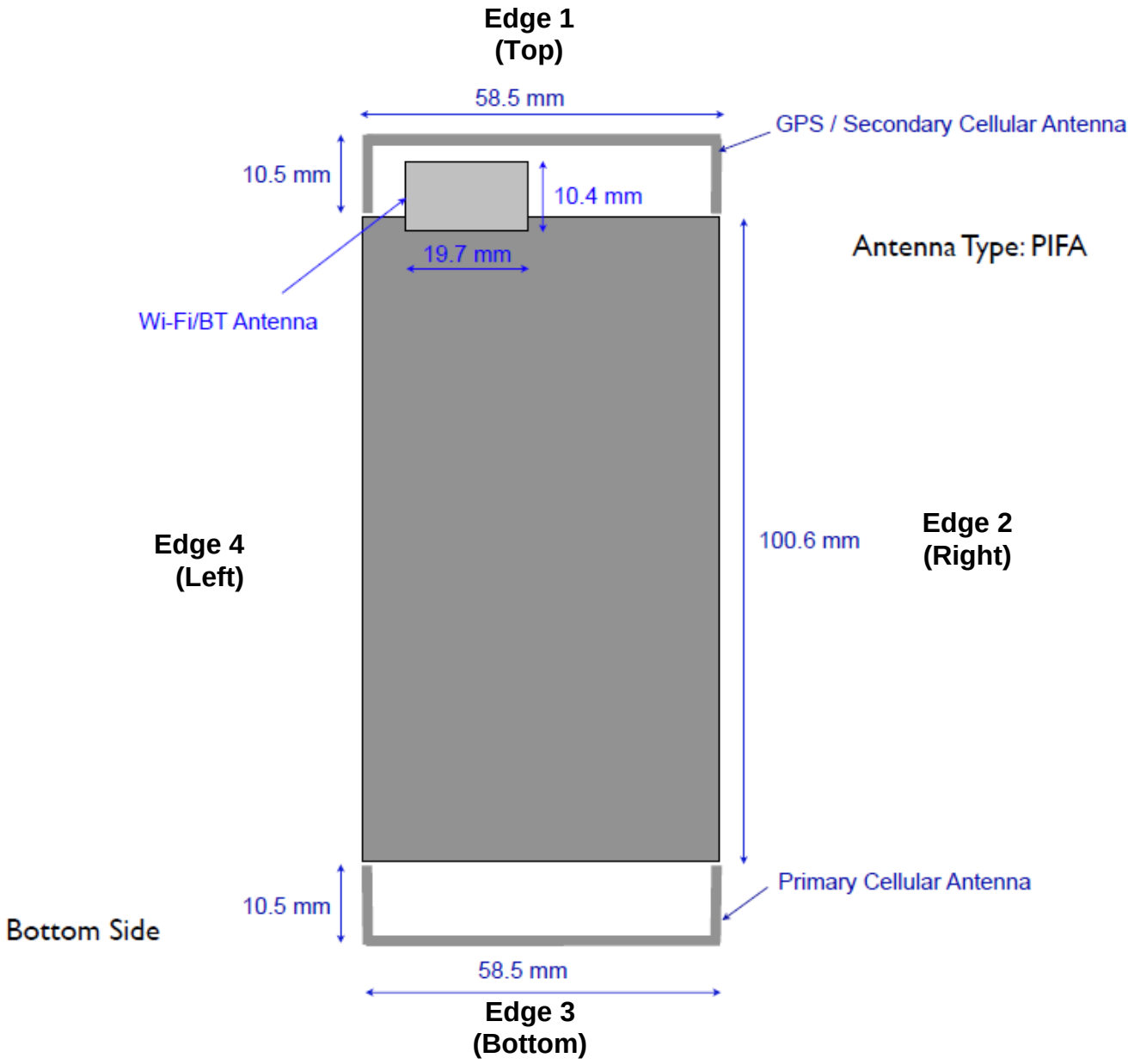
Overall Dimensions



Front View of the DUT

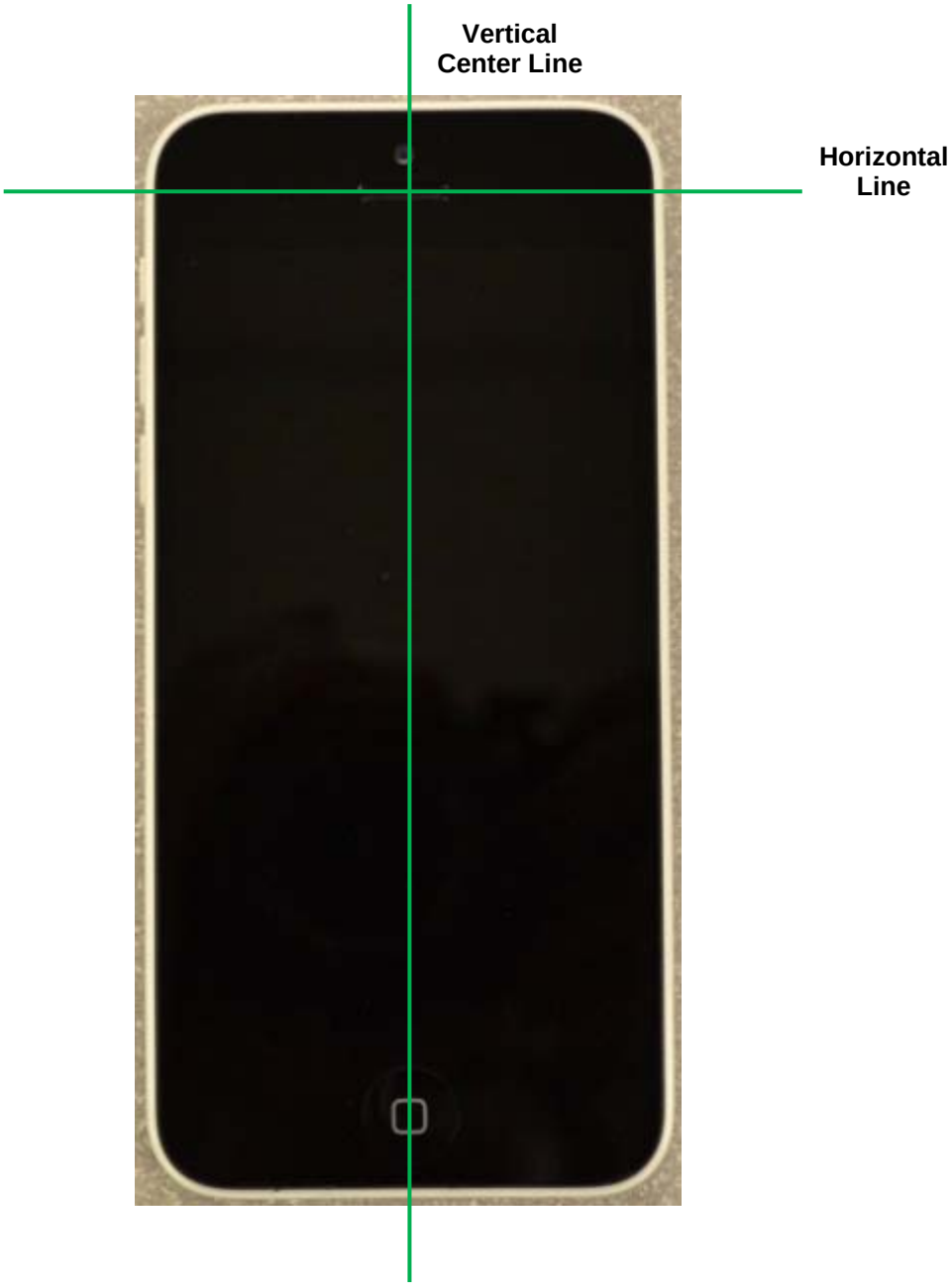
Rear View of the DUT

17. Antenna Locations & Separation Distances



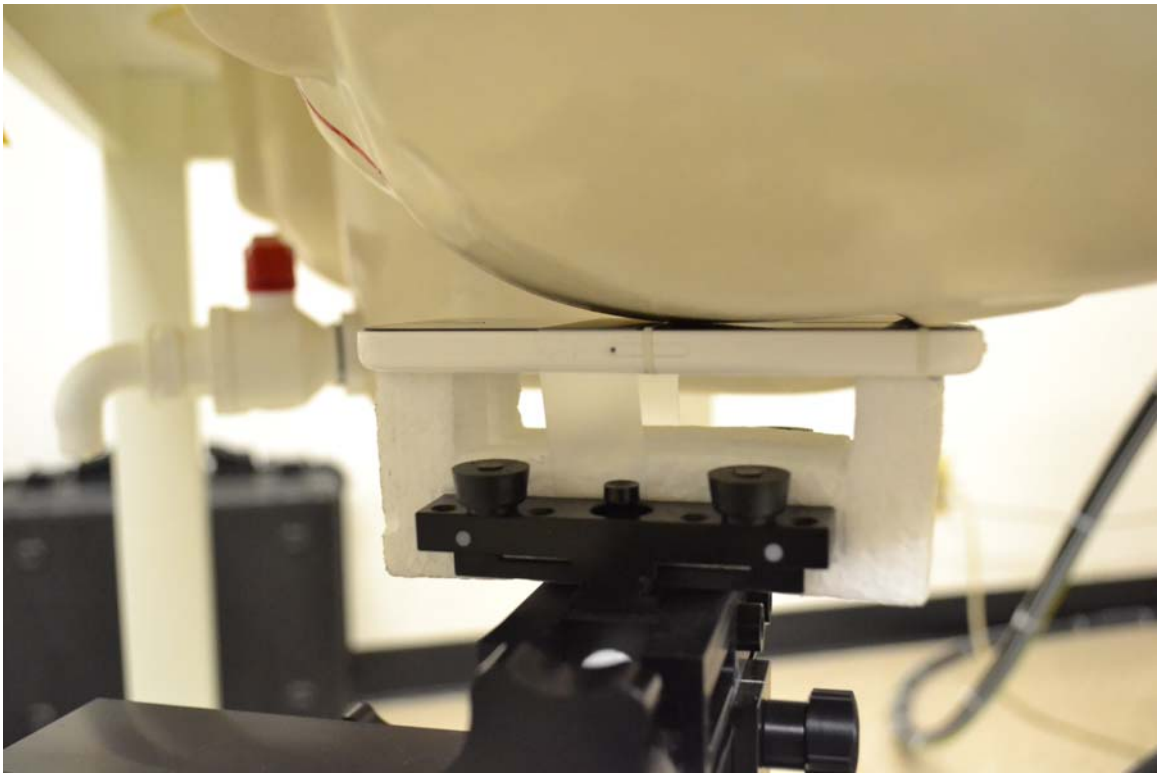
18. Setup Photos

Handset Vertical and Horizontal Reference Lines

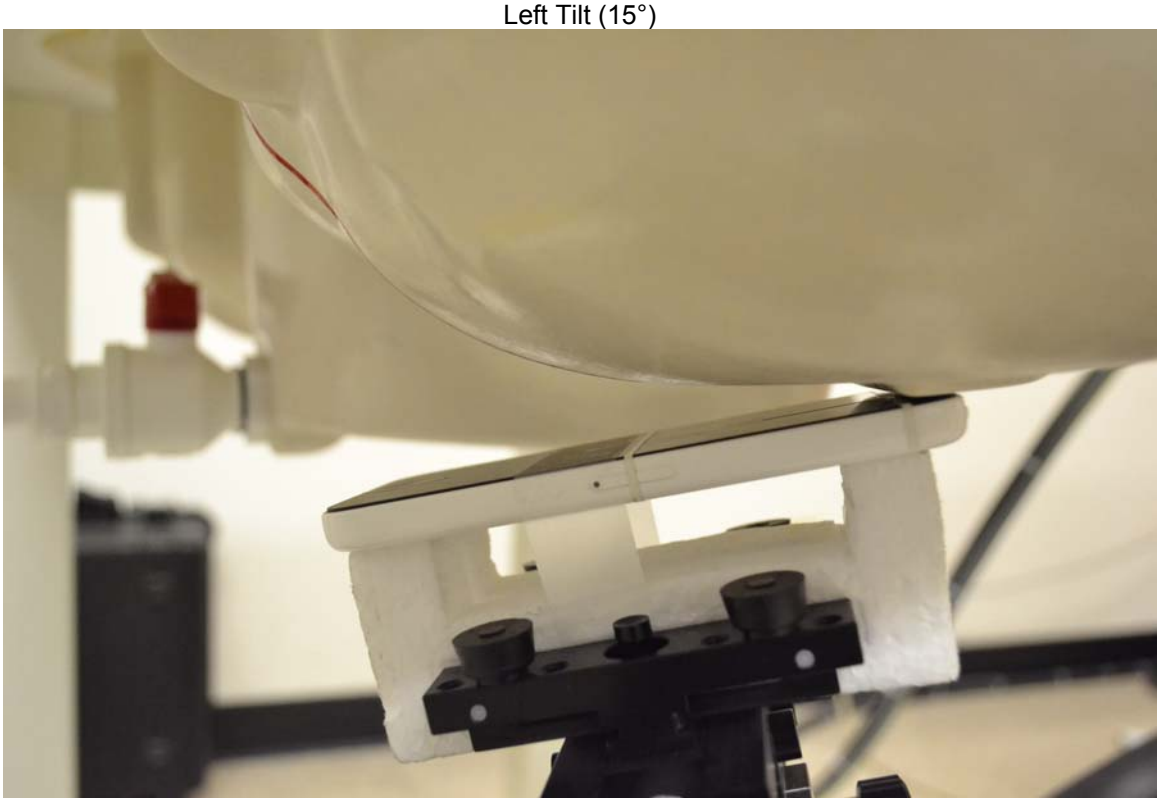


19. Head Exposure Conditions

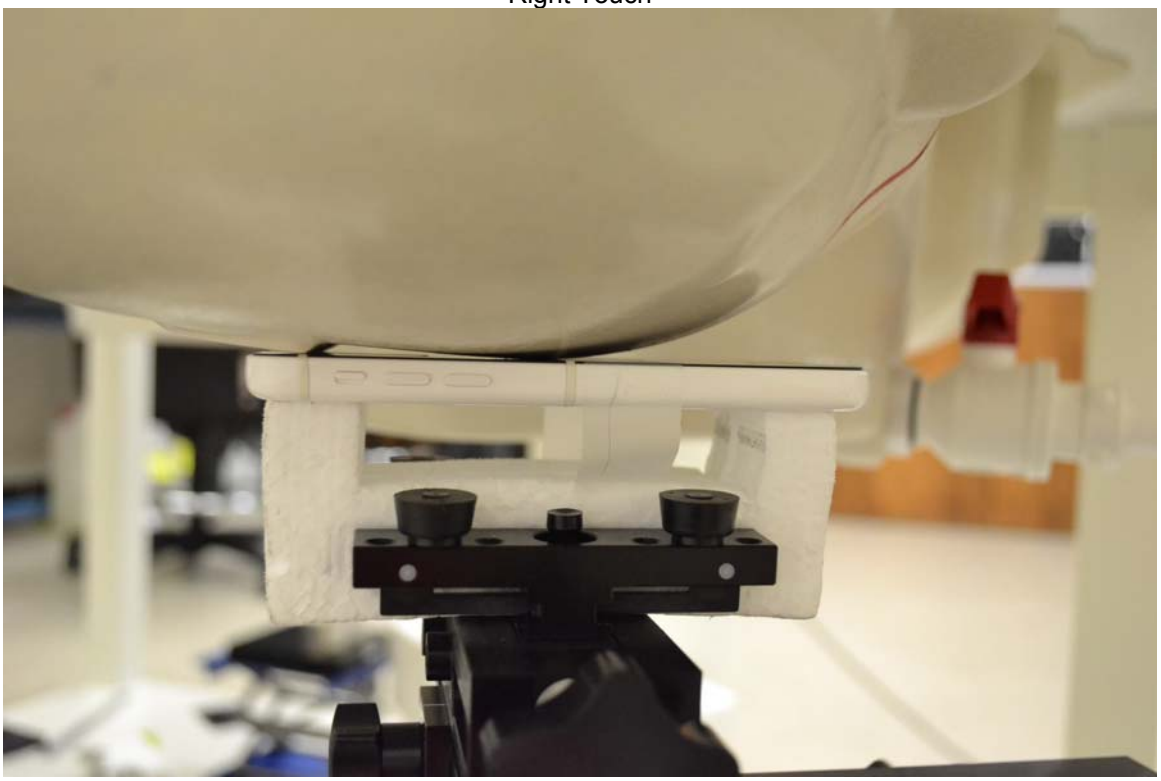
Left Touch



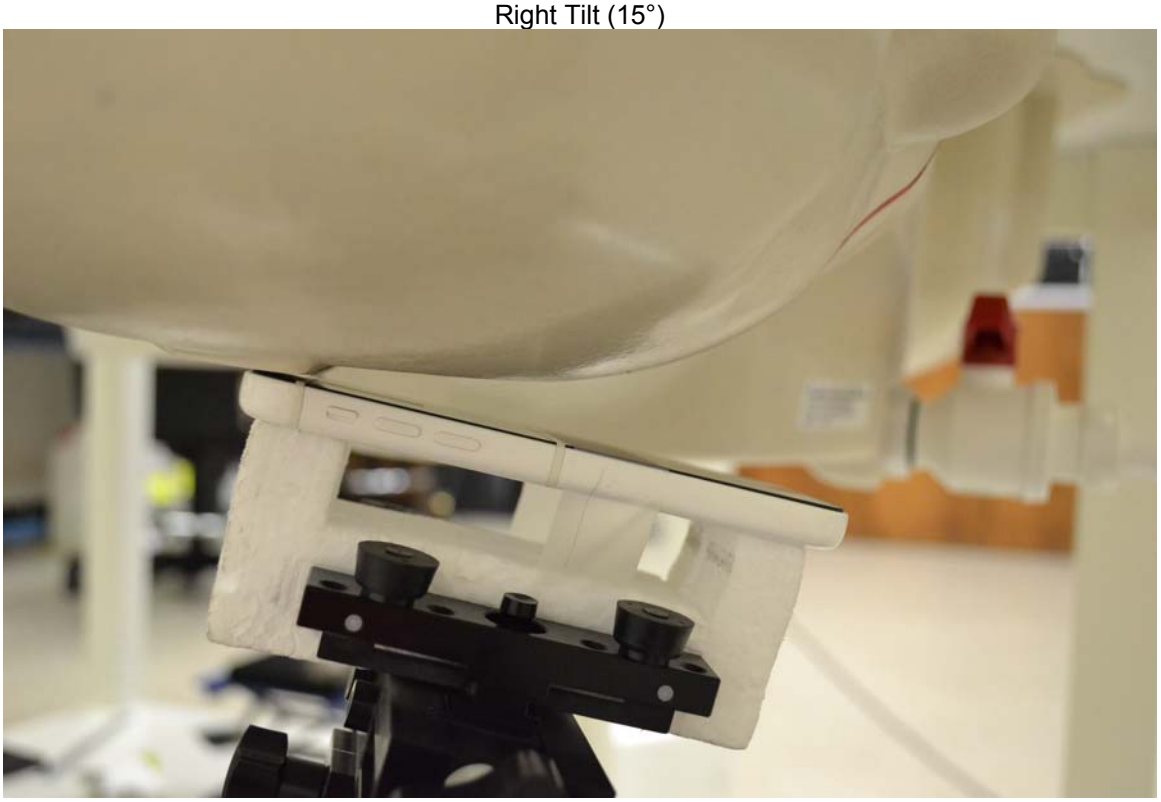
Left Tilt (15°)



Right Touch

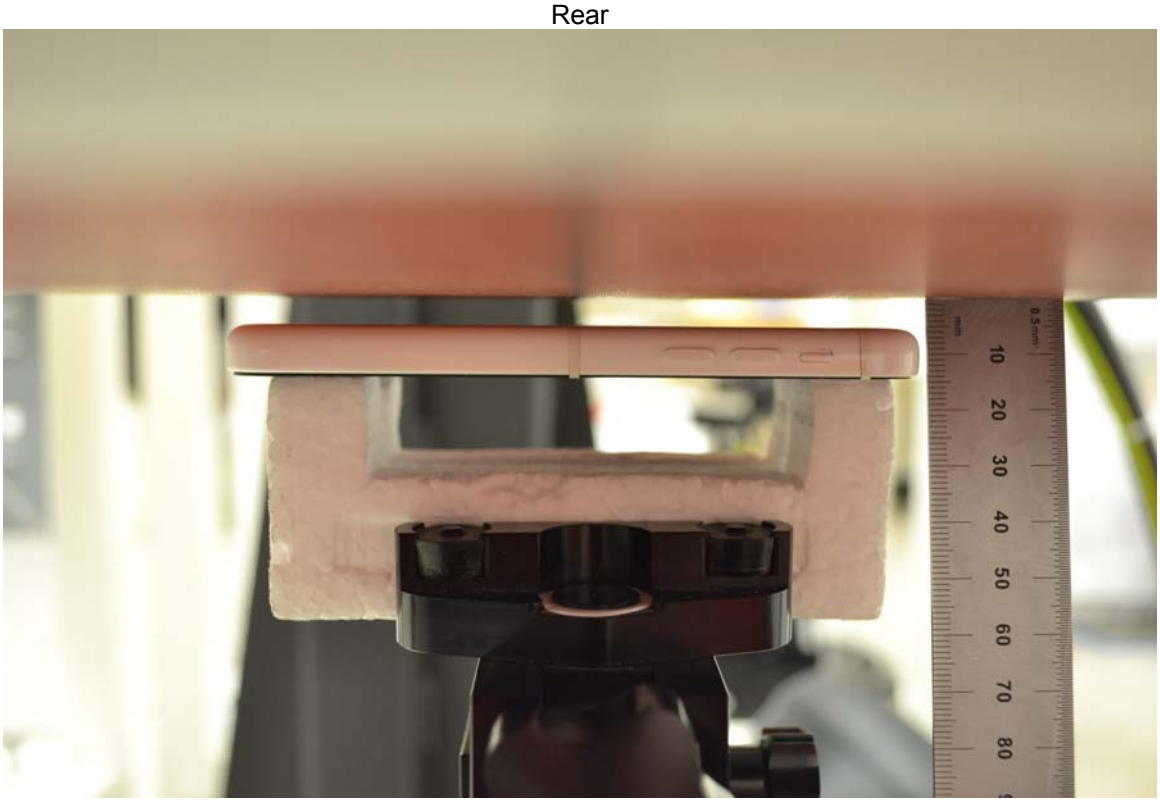


Right Tilt (15°)

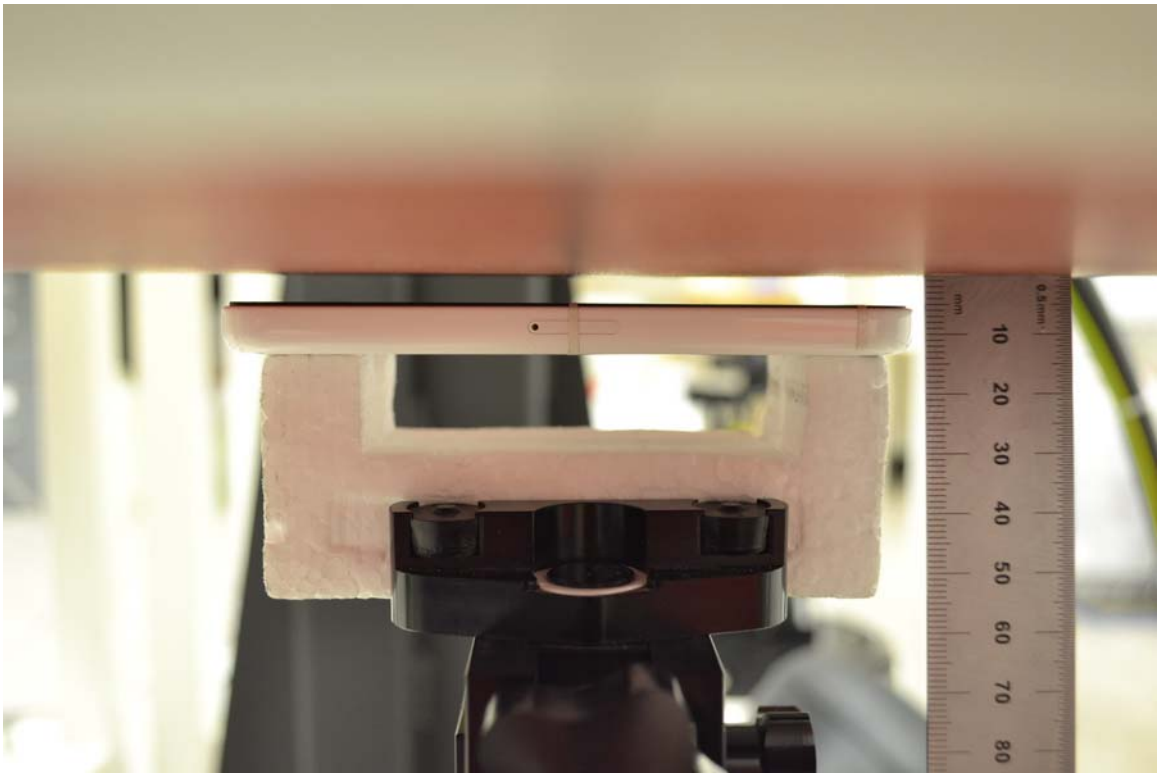


19.1. Body-worn Accessory & Hotspot Exposure Conditions

Rear

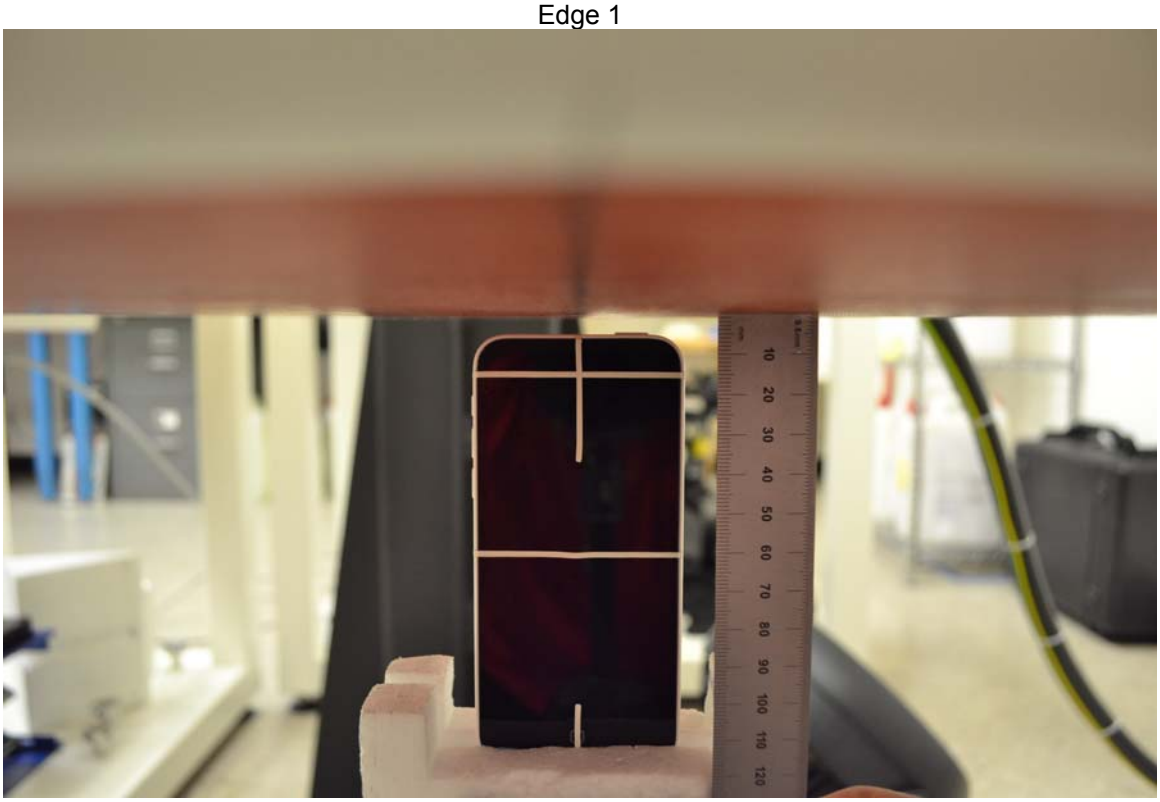


Front

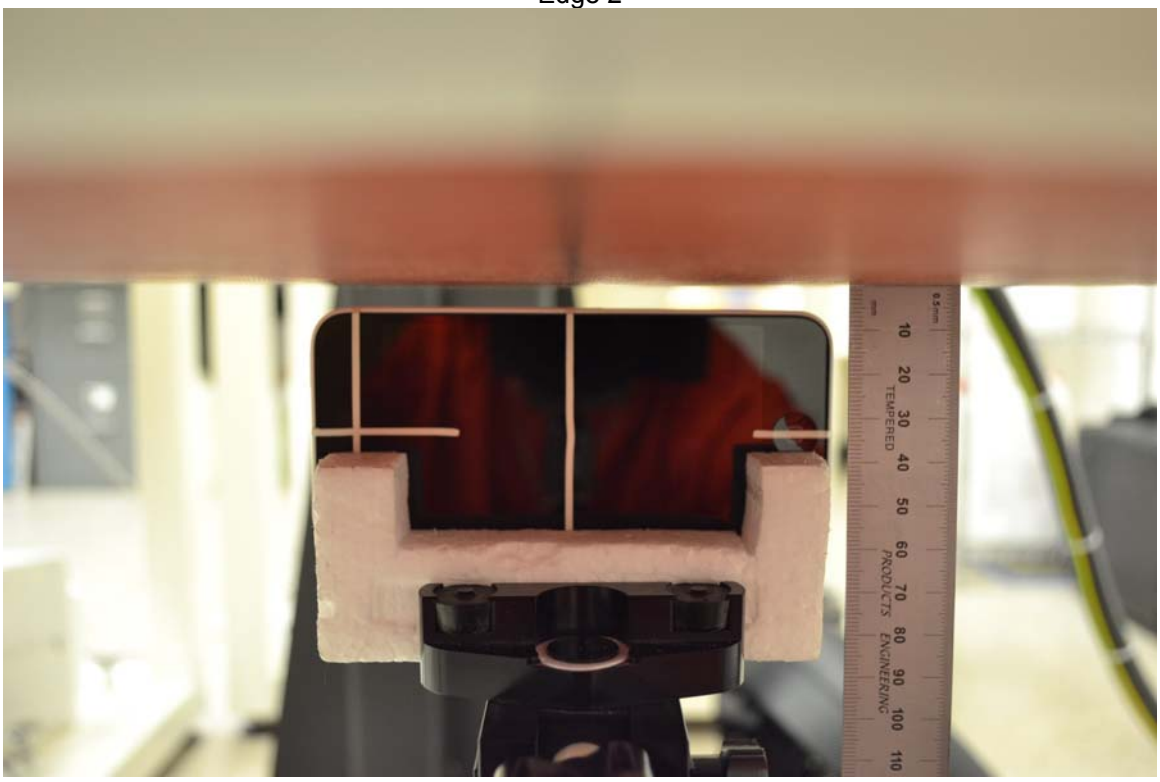


19.2. Hotspot Exposure Conditions

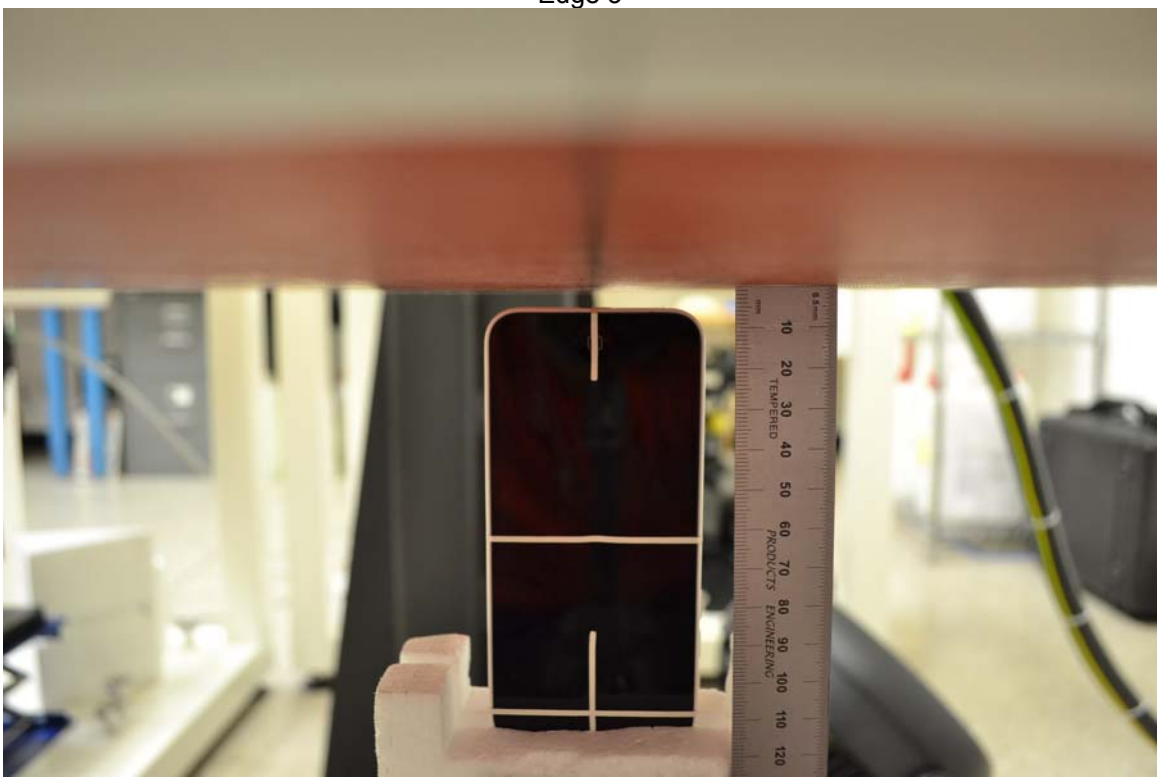
Edge 1



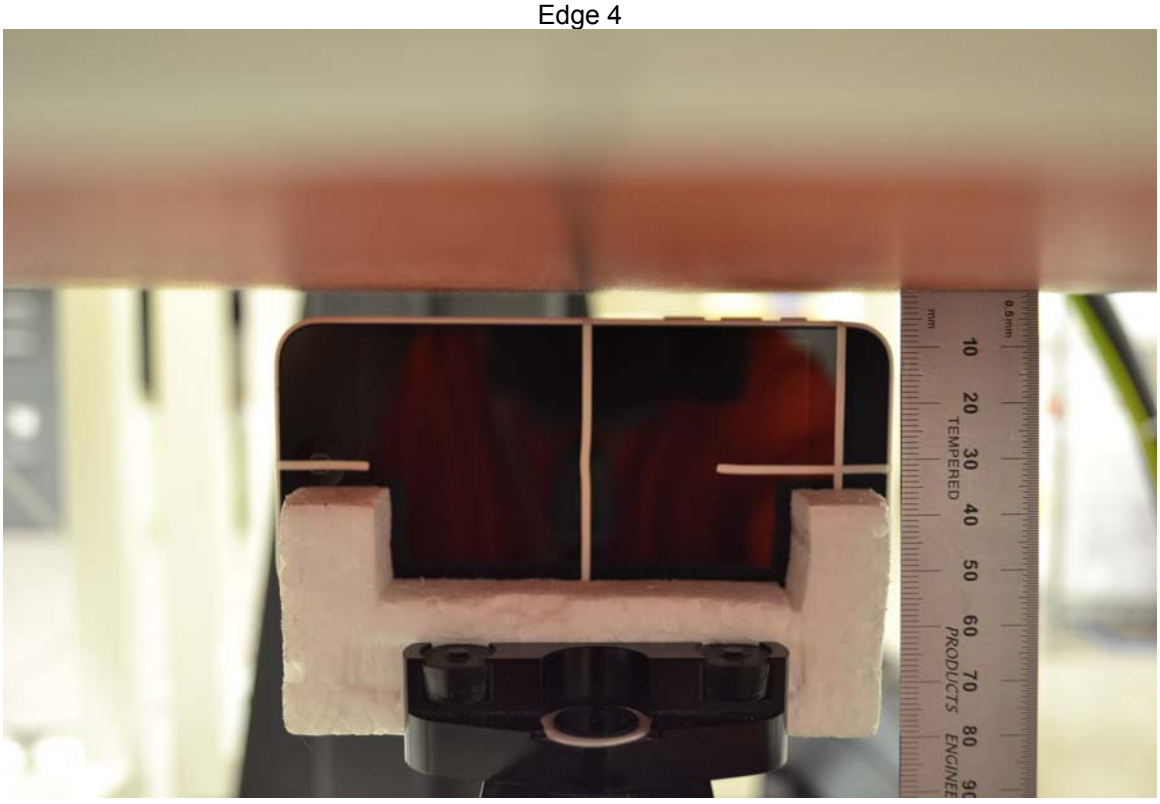
Edge 2



Edge 3



Edge 4



END OF REPORT