



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

SAR EVALUATION REPORT

For
Wireless Module
(Tested inside of Panasonic Tablet PC FZ-G1)

Model: RU-865
FCC ID: MAD-RU-865

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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
--	12/02/2014	Initial Issue	T. Hatakeda
1	12/05/2014	<p>Page 9</p> <p>The 15.249 was changed to 15.247.</p> <p>Page 11</p> <p>The equipment listed are corrected.</p> <p>Page 32</p> <p>DH5 was added after description of Bluetooth in a table.</p> <p>Page 37</p> <p>Relative Permittivity (ϵ_r) of Body 5300MHz on October 27 was corrected.</p> <p>48.29 was changed to 48.39.</p> <p>Section 15.17</p> <p>11b mode aux antenna test in Rear 2 was corrected.</p> <p>2437MHz was changed to 2412MHz.</p> <p>Page 64</p> <p>11a mode aux antenna frequency in Rear 2 and Edge1 tilt in a table was corrected.</p> <p>5200MHz was changed to 5240MHz.</p> <p>Page 72, 76, 80, 82, 84, 88, 104, 120</p> <p>The color of Edge 3 of WWAN was corrected.</p> <p>Pink was changed to green. Green means estimated SAR.</p> <p>Section 15.31</p> <p>D2450V2 Calibration for Impedance and Return-loss was added after CALIBRATION CERTIFICATE.</p> <p>Section 16, 18</p> <p>Photograph was corrected.</p>	T. Hatakeda
2	12/10/2014	<p>Section 15.17 Plot No.3</p> <p>11g mode main antenna test in Edge2 tilt was corrected.</p> <p>2412MHz was changed to 2437MHz.</p>	T. Hatakeda

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1. Attestation of Test Results

Applicant	Microelectronics Technology Inc.	
DUT description	Wireless Module (Tested inside of Panasonic Laptop PC FZ-G1)	
Model	RU-865	
Test device is	An identical prototype	
Device category	Portable	
Exposure category	General Population/Uncontrolled Exposure	
Date tested	October 16 to November 17, 2014	
Applicable Standards		Test Results
FCC 47 CFR Parts 1 & 2 FCC Published RF exposure KDB procedures, and TCB workshop updates IEEE Std 1528-2003 and IEEE Std 1528a-2005		Pass
<ol style="list-style-type: none"> 1. This test report shall not be reproduced in full or partial, without the written approval of UL Japan, Inc. 2. The results in this report apply only to the sample tested. 3. This sample tested is in compliance with the limits of the above regulation. 4. The test results in this report are traceable to the national or international standards. 5. This test report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. 6. This report is a revised version of 10520976H-A-R1. 10520976H-A-R1 is replaced with this report. 		

Approved & Released For UL Japan, Inc By:

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1.1. Summary of Highest 1-g SAR Results

Worst Case SAR data for each Frequency Band

RF Exposure Rule	Freq. Range	Highest Reported SAR	Limit
15.247	902.75-927.25 MHz	Body: 0.859 W/kg (Edge 1)	1.6 W/kg
Simultaneous Transmission Condition		1.590 W/kg (refer to Section 14) (The highest across exposure conditions)	

LEGEND:

- Rear 1 = Back side(UHF-RFID area is removed, but the 4.7mm height corner guards are added.)
- Rear 2 = Back side
- Edge 1 = Top
- Edge 2 = Right
- Edge 3 = Bottom
- Edge 4 = Left
- Edge 1 tilt = Top tilt
- Edge 2 tilt = Right tilt
- Edge 3 tilt = Bottom tilt

Notes:

1. Refer to 17. Antenna Dimensions & Separation distances

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, TCB workshop updates, and the following KDB procedures:

- 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r03
- 865664 D02 SAR Reporting v01r01
- 447498 D01 General RF Exposure Guidance v05r02
- 616217 D04 SAR for laptop and tablets v02

3. Facilities and Accreditation

*Shielded room for SAR testings

The test sites and measurement facilities used to collect data are located at 4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN.

UL Japan, Inc. is accredited by NVLAP, Laboratory Code 200572-0

The full scope of accreditation can be viewed at

<http://www.ul.com/japan/jpn/pages/services/emc/about/mark1/index.jsp#nvlap>

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.

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due date		
				MM	DD	Year
Power Meter	Agilent	N1914A	MY53060017	6	30	2015
Power sensor	Agilent	N8482H	MY53050001	6	30	2015
Power sensor	Agilent	N8482H	MY52460010	7	31	2015
Dual Directional Coupler	Agilent	778D	MY52180243	N/A		
Directional Coupler	Agilent	87300B	14893A	N/A		
Pre Amplifier	R&K	R&K CGA020M602-2633R	B30550	6	30	2015
Signal Generator	Rohde & Schwarz	SMA 100A	103764	6	30	2015
Dipole Antenna	Schmid&Partner Engineering AG	D750V3	1058	5	31	2015
Dipole Antenna	Schmid&Partner Engineering AG	D900V2	155	12	31	2014
Dipole Antenna	Schmid&Partner Engineering AG	D1800V2	2d040	12	31	2014
Dipole Antenna	Schmid&Partner Engineering AG	D2450V2	713	9	30	2015
Dipole Antenna	Schmid&Partner Engineering AG	D5GHzV2	1020	1	31	2015
Dipole Antenna	Schmid&Partner Engineering AG	D2000V2	1029	6	30	2015
Vector Network Analyzer	Schmid&Partner Engineering AG	PLANAR R140	30913	1	31	2015
Digital thermometer	LKM electronic	DTM3000	-	7	31	2015
Dielectric assessment kit	Schmid&Partner Engineering AG	DAK-3.5 Probe	8	3	31	2015
Data Acquisition Electronics	Schmid&Partner Engineering AG	DAE4	1372	6	30	2015
Dosimetric E-Field Probe	Schmid&Partner Engineering AG	EX3DV4	3922	6	30	2015
2mm Oval Flat Phantom	Schmid&Partner Engineering AG	QDOVA001BB	1203	6	30	2015
Thermo-Hygrometer	Custom	CTH-201	3101	7	31	2015
SAR robot	Schmid&Partner Engineering AG	TX60 Lspeag	F13/5PP1A1/A/01	6	30	2015
Data Acquisition Electronics	Schmid&Partner Engineering AG	DAE4	509	7	31	2015
Dosimetric E-Field Probe	Schmid&Partner Engineering AG	EX3DV4	3825	12	31	2014
2mm Oval Flat Phantom	Schmid&Partner Engineering AG	QDOVA001BB	1045	5	31	2015
Digital thermometer	HANNA	Checktemp-2	MOS-10	8	31	2015
Thermo-Hygrometer	CUSTOM	CTH-201	A08Q29	5	31	2015
SAR robot	Schmid&Partner Engineering AG	TX60 Lspeag	F10/5E3LA1/A/01	5	31	2015
Data Acquisition Electronics	Schmid&Partner Engineering AG	DAE4	1369	5	31	2015
Dosimetric E-Field Probe	Schmid&Partner Engineering AG	EX3DV4	3917	5	31	2015
2mm Oval Flat Phantom	Schmid&Partner Engineering AG	QDOVA001BB	1207	6	30	2015
Thermo-Hygrometer	Custom	CTH-201	3001	7	31	2015
Digital thermometer	HANNA	Checktemp 4	-	7	31	2015
SAR robot	Schmid&Partner Engineering AG	TX60 Lspeag	F13/5PP1D1/A/01	6	30	2015

These test equipment was used for the tests before the expiration date of the calibration.

The expiration date of the calibration is the end of the expired month.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

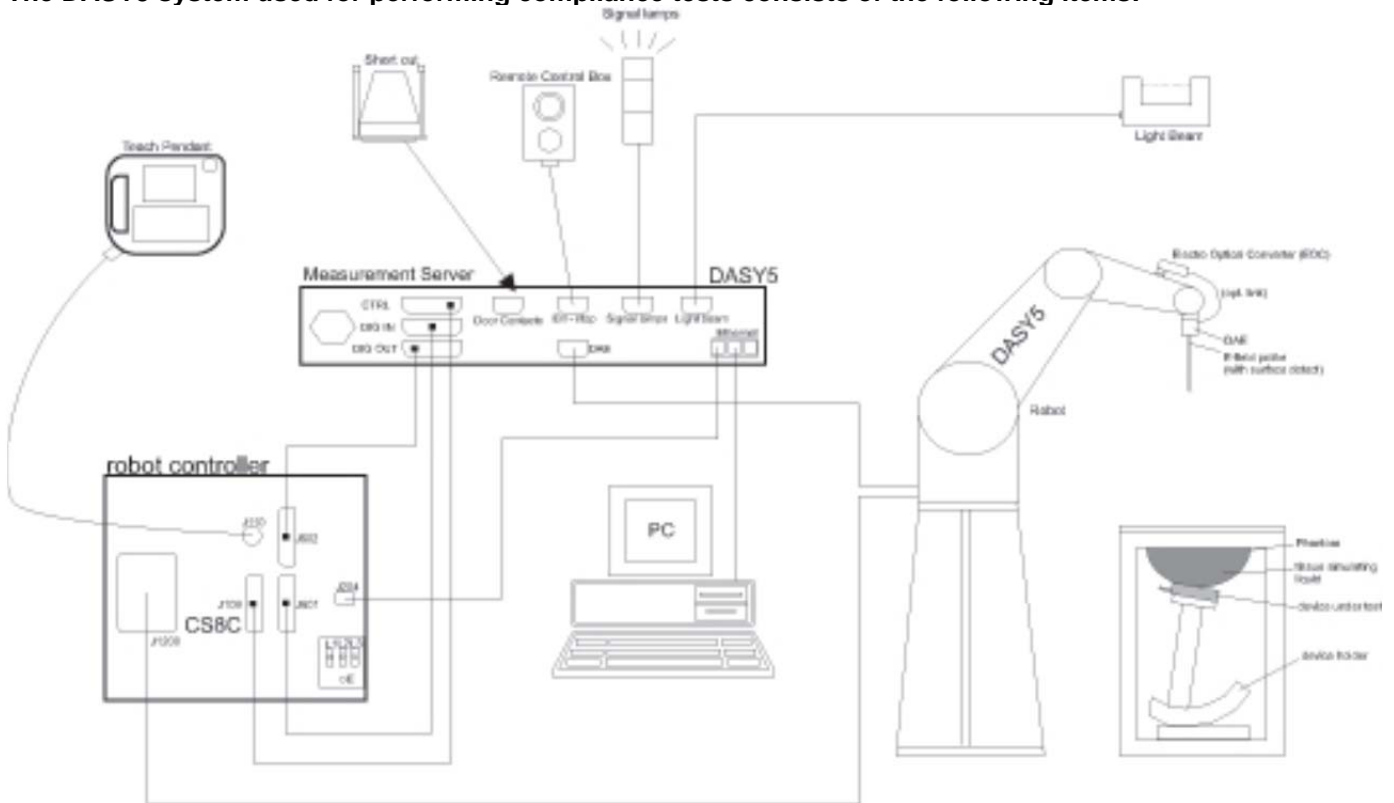
As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

4.2. Measurement Uncertainty

Per KDB 865664, when no measured SAR values exceed 1.5 W/kg, measurement uncertainty analysis does not need to be provided in the test report.

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 v01

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 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 v01

		≤ 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 1 st two points closest to phantom surface	≤ 4 mm 3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5 · $\Delta z_{Zoom}(n-1)$
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 <i>reported</i> SAR from the area scan based <i>1-g SAR estimation</i> procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.			

Step 4: Power drift measurement

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

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

UHF-RF-ID Module (Tested inside of Panasonic Tablet PC FZ-G1) Model: RU-865	
Operating Configuration(s)	<ul style="list-style-type: none">Tablet Mode
Exposure Condition(s)	<ul style="list-style-type: none">The device is used in close proximity to the body. Specific details of the required test positions are provided in Section 8 "Exposure Conditions"
Accessory	<ul style="list-style-type: none">None

7.1. Band and Air Interfaces

Tx Frequency Bands	<ul style="list-style-type: none">902.75MHz – 927.25MHz
Modulation	<ul style="list-style-type: none">ASK
Duty Cycle	<ul style="list-style-type: none">38%

7.2. Hotspot (Wireless Router) Exposure Condition

N/A

7.3. Simultaneous Transmission

WWAN + Wi-Fi 2.4 GHz SISO (1 Tx) + Bluetooth + UHF-RFID

Usage Scenario	Modes	Mode of Operation	BAND	CDMA 1xRTT	CDMA 1xEV-DO	GPRS/EDGE	WCDMA	HSDPA	HSUPA	HSPA+	DC-HSPA	LTE	Wi-Fi 2.4GHz Main	Wi-Fi 2.4GHz Aux	Wi-Fi 5 GHz Bands Main	Wi-Fi 5 GHz Bands Aux	BT 2.4 GHz	UHF-RFID		
Body SAR	WWAN + 2.4 GHz WLAN + UHF-RFID	CDMA 1xRTT	BC0	YES	No	No	No	No	No	No	No	No	YES	No	No	No	YES	YES		
		CDMA 1xRTT	BC1	YES	No	No	No	No	No	No	No	No	No	YES	No	No	No	YES	YES	
		CDMA 1xRTT	BC10	YES	No	No	No	No	No	No	No	No	No	YES	No	No	No	YES	YES	
		CDMA 1xEVDO	BC0	No	YES	No	No	No	No	No	No	No	No	YES	No	No	No	YES	YES	
		CDMA 1xEVDO	BC1	No	YES	No	No	No	No	No	No	No	No	YES	No	No	No	YES	YES	
		CDMA 1xEVDO	BC10	No	YES	No	No	No	No	No	No	No	No	YES	No	No	No	YES	YES	
		EDGE	850	No	No	YES	No	No	No	No	No	No	No	YES	No	No	No	YES	YES	
		EDGE	1900	No	No	YES	No	No	No	No	No	No	No	YES	No	No	No	YES	YES	
		W-CDMA	850	No	No	No	YES	No	No	No	No	No	No	YES	No	No	No	YES	YES	
		W-CDMA	1700	No	No	No	YES	No	No	No	No	No	No	YES	No	No	No	YES	YES	
		W-CDMA	1900	No	No	No	YES	No	No	No	No	No	No	YES	No	No	No	YES	YES	
		HSDPA	850	No	No	No	No	YES	No	No	No	No	No	YES	No	No	No	YES	YES	
		HSDPA	1700	No	No	No	No	YES	No	No	No	No	No	YES	No	No	No	YES	YES	
		HSDPA	1900	No	No	No	No	YES	No	No	No	No	No	YES	No	No	No	YES	YES	
		HSUPA	850	No	No	No	No	No	YES	No	No	No	No	YES	No	No	No	YES	YES	
		HSUPA	1700	No	No	No	No	No	YES	No	No	No	No	YES	No	No	No	YES	YES	
		HSUPA	1900	No	No	No	No	No	YES	No	No	No	No	YES	No	No	No	YES	YES	
		HSPA+	850	No	No	No	No	No	No	YES	No	No	No	YES	No	No	No	YES	YES	
		HSPA+	1700	No	No	No	No	No	No	YES	No	No	No	YES	No	No	No	YES	YES	
		HSPA+	1900	No	No	No	No	No	No	YES	No	No	No	YES	No	No	No	YES	YES	
		DC-HSDPA	850	No	No	No	No	No	No	No	YES	No	YES	No	YES	No	No	No	YES	YES
		DC-HSDPA	1700	No	No	No	No	No	No	No	YES	No	YES	No	YES	No	No	No	YES	YES
		DC-HSDPA	1900	No	No	No	No	No	No	No	YES	No	YES	No	YES	No	No	No	YES	YES
		LTE	2	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES	YES
		LTE	4	No	No	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES	YES
		LTE	5	No	No	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES	YES
		LTE	13	No	No	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES	YES
		LTE	17	No	No	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES	YES
		LTE	25	No	No	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES	YES
		CDMA 1xRTT	BC0	YES	No	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		CDMA 1xRTT	BC1	YES	No	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		CDMA 1xRTT	BC10	YES	No	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		CDMA 1xEVDO	BC0	No	YES	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		CDMA 1xEVDO	BC1	No	YES	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		CDMA 1xEVDO	BC10	No	YES	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		EDGE	850	No	No	YES	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		EDGE	1900	No	No	YES	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		W-CDMA	850	No	No	No	YES	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		W-CDMA	1700	No	No	No	YES	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		W-CDMA	1900	No	No	No	YES	No	No	No	No	No	No	No	YES	No	No	No	No	YES
		HSDPA	850	No	No	No	No	YES	No	No	No	No	No	No	YES	No	No	No	No	YES
		HSDPA	1700	No	No	No	No	YES	No	No	No	No	No	No	YES	No	No	No	No	YES
		HSDPA	1900	No	No	No	No	YES	No	No	No	No	No	No	YES	No	No	No	No	YES
		HSUPA	850	No	No	No	No	No	YES	No	No	No	No	No	YES	No	No	No	No	YES
		HSUPA	1700	No	No	No	No	No	YES	No	No	No	No	No	YES	No	No	No	No	YES
HSUPA	1900	No	No	No	No	No	YES	No	No	No	No	No	YES	No	No	No	No	YES		
HSPA+	850	No	No	No	No	No	No	YES	No	No	No	No	YES	No	No	No	No	YES		
HSPA+	1700	No	No	No	No	No	No	YES	No	No	No	No	YES	No	No	No	No	YES		
HSPA+	1900	No	No	No	No	No	No	YES	No	No	No	No	YES	No	No	No	No	YES		
DC-HSDPA	850	No	No	No	No	No	No	No	YES	No	YES	No	YES	No	No	No	No	YES		
DC-HSDPA	1700	No	No	No	No	No	No	No	YES	No	YES	No	YES	No	No	No	No	YES		
DC-HSDPA	1900	No	No	No	No	No	No	No	YES	No	YES	No	YES	No	No	No	No	YES		
LTE	2	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	No	YES		
LTE	4	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	No	YES		
LTE	5	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	No	YES		
LTE	13	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	No	YES		
LTE	17	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	No	YES		
LTE	25	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	No	YES		

WWAN + Wi-Fi 5 GHz Bands SISO (1 Tx) + Bluetooth + UHF-RFID

Usage Scenario	Modes	Mode of Operation	BAND	CDMA 1xRTT	CDMA 1xEV-DO	GPRS/EDGE	WCDMA	HSDPA	HSUPA	HSPA+	DC-HSPA	LTE	Wi-Fi 2.4GHz Main	Wi-Fi 2.4GHz Aux	Wi-Fi 5 GHz Bands Main	Wi-Fi 5 GHz Bands Aux	BT 2.4 GHz	UHF-RFID		
Body SAR	WWAN + 5 GHz Bands WLAN + UHF-RFID	CDMA 1xRTT	BC0	YES	No	No	No	No	No	No	No	No	No	No	YES	No	YES	YES		
		CDMA 1xRTT	BC1	YES	No	No	No	No	No	No	No	No	No	No	No	YES	No	YES	YES	
		CDMA 1xRTT	BC10	YES	No	No	No	No	No	No	No	No	No	No	No	YES	No	YES	YES	
		CDMA 1xEVDO	BC0	No	YES	No	No	No	No	No	No	No	No	No	No	YES	No	YES	YES	
		CDMA 1xEVDO	BC1	No	YES	No	No	No	No	No	No	No	No	No	No	YES	No	YES	YES	
		CDMA 1xEVDO	BC10	No	YES	No	No	No	No	No	No	No	No	No	No	YES	No	YES	YES	
		EDGE	850	No	No	YES	No	No	No	No	No	No	No	No	No	YES	No	YES	YES	
		EDGE	1900	No	No	YES	No	No	No	No	No	No	No	No	No	YES	No	YES	YES	
		W-CDMA	850	No	No	No	YES	No	No	No	No	No	No	No	No	YES	No	YES	YES	
		W-CDMA	1700	No	No	No	YES	No	No	No	No	No	No	No	No	YES	No	YES	YES	
		W-CDMA	1900	No	No	No	YES	No	No	No	No	No	No	No	No	YES	No	YES	YES	
		HSDPA	850	No	No	No	No	YES	No	No	No	No	No	No	No	YES	No	YES	YES	
		HSDPA	1700	No	No	No	No	YES	No	No	No	No	No	No	No	YES	No	YES	YES	
		HSDPA	1900	No	No	No	No	YES	No	No	No	No	No	No	No	YES	No	YES	YES	
		HSUPA	850	No	No	No	No	No	YES	No	No	No	No	No	No	YES	No	YES	YES	
		HSUPA	1700	No	No	No	No	No	YES	No	No	No	No	No	No	YES	No	YES	YES	
		HSUPA	1900	No	No	No	No	No	YES	No	No	No	No	No	No	YES	No	YES	YES	
		HSPA+	850	No	No	No	No	No	No	YES	No	No	No	No	No	YES	No	YES	YES	
		HSPA+	1700	No	No	No	No	No	No	YES	No	No	No	No	No	YES	No	YES	YES	
		HSPA+	1900	No	No	No	No	No	No	YES	No	No	No	No	No	YES	No	YES	YES	
		DC-HSDPA	850	No	No	No	No	No	No	No	YES	No	No	No	No	YES	No	YES	YES	
		DC-HSDPA	1700	No	No	No	No	No	No	No	YES	No	No	No	No	YES	No	YES	YES	
		DC-HSDPA	1900	No	No	No	No	No	No	No	YES	No	No	No	No	YES	No	YES	YES	
		LTE	2	No	No	No	No	No	No	No	No	No	YES	No	No	YES	No	YES	YES	
		LTE	4	No	No	No	No	No	No	No	No	No	YES	No	No	YES	No	YES	YES	
		LTE	5	No	No	No	No	No	No	No	No	No	YES	No	No	YES	No	YES	YES	
		LTE	13	No	No	No	No	No	No	No	No	No	YES	No	No	YES	No	YES	YES	
		LTE	17	No	No	No	No	No	No	No	No	No	YES	No	No	YES	No	YES	YES	
		LTE	25	No	No	No	No	No	No	No	No	No	YES	No	No	YES	No	YES	YES	
		CDMA 1xRTT	BC0	YES	No	No	No	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		CDMA 1xRTT	BC1	YES	No	No	No	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		CDMA 1xRTT	BC10	YES	No	No	No	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		CDMA 1xEVDO	BC0	No	YES	No	No	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		CDMA 1xEVDO	BC1	No	YES	No	No	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		CDMA 1xEVDO	BC10	No	YES	No	No	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		EDGE	850	No	No	YES	No	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		EDGE	1900	No	No	YES	No	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		W-CDMA	850	No	No	No	YES	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		W-CDMA	1700	No	No	No	YES	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		W-CDMA	1900	No	No	No	YES	No	No	No	No	No	No	No	No	No	No	YES	No	YES
		HSDPA	850	No	No	No	No	YES	No	No	No	No	No	No	No	No	No	YES	No	YES
		HSDPA	1700	No	No	No	No	YES	No	No	No	No	No	No	No	No	No	YES	No	YES
		HSDPA	1900	No	No	No	No	YES	No	No	No	No	No	No	No	No	No	YES	No	YES
		HSUPA	850	No	No	No	No	No	YES	No	No	No	No	No	No	No	No	YES	No	YES
		HSUPA	1700	No	No	No	No	No	YES	No	No	No	No	No	No	No	No	YES	No	YES
		HSUPA	1900	No	No	No	No	No	YES	No	No	No	No	No	No	No	No	YES	No	YES
		HSPA+	850	No	No	No	No	No	No	YES	No	No	No	No	No	No	No	YES	No	YES
		HSPA+	1700	No	No	No	No	No	No	YES	No	No	No	No	No	No	No	YES	No	YES
		HSPA+	1900	No	No	No	No	No	No	YES	No	No	No	No	No	No	No	YES	No	YES
		DC-HSDPA	850	No	No	No	No	No	No	No	YES	No	No	No	No	No	No	YES	No	YES
DC-HSDPA	1700	No	No	No	No	No	No	No	YES	No	No	No	No	No	No	YES	No	YES		
DC-HSDPA	1900	No	No	No	No	No	No	No	YES	No	No	No	No	No	No	YES	No	YES		
LTE	2	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES	No	YES		
LTE	4	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES	No	YES		
LTE	5	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES	No	YES		
LTE	13	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES	No	YES		
LTE	17	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES	No	YES		
LTE	25	No	No	No	No	No	No	No	No	No	YES	No	No	No	No	YES	No	YES		

WWAN + Wi-Fi MIMO (2 Tx) + UHF-RFID

Usage Scenario	Modes	Mode of Operation	BAND	CDMA 1xRTT	CDMA 1xEV-DO	GPRS/EDGE	WCDMA	HSDPA	HSUPA	HSPA+	DC-HSPA	LTE	Wi-Fi 2.4GHz Main	Wi-Fi 2.4GHz Aux	Wi-Fi 5 Ghz Bands Main	Wi-Fi 5 Ghz Bands Aux	BT 2.4 GHz	UHF-RFID			
Body SAR	WWAN + 2.4GHz WLAN MIMO (2Tx on WLAN) + UHF-RFID	CDMA 1xRTT	BC0	YES	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES			
		CDMA 1xRTT	BC1	YES	No	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES		
		CDMA 1xRTT	BC10	YES	No	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES		
		CDMA 1xEVDO	BC0	No	YES	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES		
		CDMA 1xEVDO	BC1	No	YES	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES		
		CDMA 1xEVDO	BC10	No	YES	No	No	No	No	No	No	No	No	YES	YES	No	No	No	YES		
		EDGE	850	No	No	YES	No	No	No	No	No	No	No	YES	YES	No	No	No	YES		
		EDGE	1900	No	No	YES	No	No	No	No	No	No	No	YES	YES	No	No	No	YES		
		W-CDMA	850	No	No	No	YES	No	No	No	No	No	No	YES	YES	No	No	No	YES		
		W-CDMA	1700	No	No	No	YES	No	No	No	No	No	No	YES	YES	No	No	No	YES		
		W-CDMA	1900	No	No	No	YES	No	No	No	No	No	No	YES	YES	No	No	No	YES		
		HSDPA	850	No	No	No	No	YES	No	No	No	No	No	YES	YES	No	No	No	YES		
		HSDPA	1700	No	No	No	No	YES	No	No	No	No	No	YES	YES	No	No	No	YES		
		HSDPA	1900	No	No	No	No	YES	No	No	No	No	No	YES	YES	No	No	No	YES		
		HSUPA	850	No	No	No	No	No	YES	No	No	No	No	YES	YES	No	No	No	YES		
		HSUPA	1700	No	No	No	No	No	YES	No	No	No	No	YES	YES	No	No	No	YES		
		HSUPA	1900	No	No	No	No	No	YES	No	No	No	No	YES	YES	No	No	No	YES		
		HSPA+	850	No	No	No	No	No	No	YES	No	No	No	YES	YES	No	No	No	YES		
		HSPA+	1700	No	No	No	No	No	No	YES	No	No	No	YES	YES	No	No	No	YES		
		HSPA+	1900	No	No	No	No	No	No	YES	No	No	No	YES	YES	No	No	No	YES		
		DC-HSDPA	850	No	No	No	No	No	No	No	YES	No	YES	YES	YES	No	No	No	YES		
		DC-HSDPA	1700	No	No	No	No	No	No	No	YES	No	YES	YES	YES	No	No	No	YES		
		DC-HSDPA	1900	No	No	No	No	No	No	No	YES	No	YES	YES	YES	No	No	No	YES		
		LTE	2	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES	
		LTE	4	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES	
		LTE	5	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES	
		LTE	13	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES	
		LTE	17	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES	
		LTE	25	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES	
		Body SAR	WWAN + 5 GHz Bands WLAN MIMO (2Tx on WLAN) + UHF-RFID	CDMA 1xRTT	BC0	YES	No	No	No	No	No	No	No	No	No	No	YES	YES	No	YES	
				CDMA 1xRTT	BC1	YES	No	No	No	No	No	No	No	No	No	No	YES	YES	No	YES	
				CDMA 1xRTT	BC10	YES	No	No	No	No	No	No	No	No	No	No	YES	YES	No	YES	
				CDMA 1xEVDO	BC0	No	YES	No	No	No	No	No	No	No	No	No	No	YES	YES	No	YES
				CDMA 1xEVDO	BC1	No	YES	No	No	No	No	No	No	No	No	No	No	YES	YES	No	YES
				CDMA 1xEVDO	BC10	No	YES	No	No	No	No	No	No	No	No	No	No	YES	YES	No	YES
				EDGE	850	No	No	YES	No	No	No	No	No	No	No	No	No	YES	YES	No	YES
				EDGE	1900	No	No	YES	No	No	No	No	No	No	No	No	No	YES	YES	No	YES
				W-CDMA	850	No	No	No	YES	No	No	No	No	No	No	No	No	YES	YES	No	YES
				W-CDMA	1700	No	No	No	YES	No	No	No	No	No	No	No	No	YES	YES	No	YES
				W-CDMA	1900	No	No	No	YES	No	No	No	No	No	No	No	No	YES	YES	No	YES
				HSDPA	850	No	No	No	No	YES	No	No	No	No	No	No	No	YES	YES	No	YES
				HSDPA	1700	No	No	No	No	YES	No	No	No	No	No	No	No	YES	YES	No	YES
HSDPA	1900			No	No	No	No	YES	No	No	No	No	No	No	No	YES	YES	No	YES		
HSUPA	850			No	No	No	No	No	YES	No	No	No	No	No	No	YES	YES	No	YES		
HSUPA	1700			No	No	No	No	No	YES	No	No	No	No	No	No	YES	YES	No	YES		
HSUPA	1900			No	No	No	No	No	YES	No	No	No	No	No	No	YES	YES	No	YES		
HSPA+	850			No	No	No	No	No	No	YES	No	No	No	No	No	YES	YES	No	YES		
HSPA+	1700			No	No	No	No	No	No	YES	No	No	No	No	No	YES	YES	No	YES		
HSPA+	1900			No	No	No	No	No	No	YES	No	No	No	No	No	YES	YES	No	YES		
DC-HSDPA	850			No	No	No	No	No	No	No	YES	No	No	No	No	YES	YES	No	YES		
DC-HSDPA	1700			No	No	No	No	No	No	No	YES	No	No	No	No	YES	YES	No	YES		
DC-HSDPA	1900			No	No	No	No	No	No	No	YES	No	No	No	No	YES	YES	No	YES		
LTE	2			No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES	
LTE	4	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES			
LTE	5	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES			
LTE	13	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES			
LTE	17	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES			
LTE	25	No	No	No	No	No	No	No	No	No	No	YES	YES	YES	No	No	No	YES			

Notes:

- Bluetooth can transmit simultaneously with the WLAN Main Antenna, in either of the WLAN bands.
- Bluetooth cannot transmit simultaneously with the WLAN Aux Antenna, in either of the WLAN bands; this also precludes the transmission of Bluetooth when WLAN is in MIMO mode.

8. Exposure Conditions

Refer to Section 17 “Antenna Dimensions and Separation Distances”.

8.1. Test Configurations for the UHF-RFID antenna

Test Configurations	Antenna-to-edge/surface	SAR Required	Note
Rear 2	3.95mm	Yes	
Front	-	No	SAR is not required as this is not a typical use scenario
Edge 1	83.4mm	Yes	
Edge 2	28.1mm	Yes	
Edge 3	39.9mm	Yes	
Edge 4	223.3mm	Yes	Though SAR was not required for standalone, the test was performed for simultaneous transmitting evaluation. Refer to section 12.2.1 Notes 1
Edge 1 tilt *1	9.0mm	Yes	
Edge 2 tilt*1	10.5mm	Yes	
Edge 3 tilt*1	8.0mm	Yes	

*1 Special test considerations

Testing base against the flat phantom with the rear has upheaval did not represent the most conservative usage scenarios. Therefore, measurement of Edge 1 tilt, Edge 2 tilt and Edge 3 tilt was added. Please refer to section 18 Setup consideration for details.

LEGEND:

- Rear 1= Back side (UHF-RFID area is removed, but the 4.7mm height corner guards are added.)
- Rear 2 = Back side
- Edge 1 = Top
- Edge 2 = Right
- Edge 3 = Bottom
- Edge 4 = Left
- Edge 1 tilt = Top tilt
- Edge 2 tilt = Right tilt
- Edge 3 tilt = Bottom tilt

Note(s):

1. Refer to 17. Antenna Dimensions & Separation distances

8.2. Test Configurations for WWAN

All WWAN 1-g SAR values were taken from results recorded in SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.

8.3. Test Configurations for WLAN

All WLAN 1-g SAR values were taken from results recorded in SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.

9. RF Output Power Measurement

Measured power level has its own set of target power and tune-up limit, and the scaling of SAR values is applied according to the corresponding target for the given operating power level

9.1. Output Power

The target power is the absolute maximum.

Tune-up Tolerance

The Target power is the upper limit of tune-up tolerance.

Mode	Band	Channel	Frequency (MHz)	Target Power (dBm)	Measured Power (dBm)
UHF-RFID	902.75-927.25 MHz	0	902.75	25.0	24.90
		24	914.75	25.0	24.82
		49	927.25	25.0	24.20

9.2. GSM850

Full Power

Target Power for GSM850 32.5 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

GPRS (GMSK) - Coding Scheme: CS1			
Band	Ch No.	f (MHz)	2 Slot Power (dBm)
			Burst Avg
850	128	824.2	31.53

Reduced Power

Target Power for GSM850 27.3 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

GPRS (GMSK) - Coding Scheme: CS1			
Band	Ch No.	f (MHz)	2 Slot Power (dBm)
			Burst Avg
850	128	824.2	26.49

9.3. GSM1900

Full Power

Target Power for GSM1900 29.5 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

GPRS (GMSK) - Coding Scheme: CS1			
Band	Ch No.	f (MHz)	2 Slot Power (dBm)
			Burst Avg
1900	512	1850.2	28.83

Reduced Power

Target Power for GSM1900 23.1 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

GPRS (GMSK) - Coding Scheme: CS1			
Band	Ch No.	f (MHz)	2 Slot Power (dBm)
			Burst Avg
1900	810	1909.8	23.27

9.4. W-CDMA Band V

Full Power

Target Power for W-CDMA Band V 23 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)
				Full Power
W-CDMA (UMTS)	Rel 99 (RMC, 12.2 kbps)	4233	846.6	22.34

Reduced Power

Target Power for W-CDMA Band V 19.9 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)
				Reduced Power
W-CDMA (UMTS)	Rel 99 (RMC, 12.2 kbps)	4132	826.4	20.79

9.5 W-CDMA Band IV

Full Power

Target Power for W-CDMA Band IV 23 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)
				Full Power
W-CDMA (UMTS)	Rel 99 (RMC, 12.2 kbps)	1413	1732.6	22.71

Reduced Power

Target Power for W-CDMA Band IV 17 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)
				Reduced Power
W-CDMA (UMTS)	Rel 99 (RMC, 12.2 kbps)	1312	1712.4	17.44

9.6 W-CDMA Band II

Full Power

Target Power for W-CDMA Band II 23 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)
				Full Power
W-CDMA (UMTS)	Rel 99 (RMC, 12.2 kbps)	9262	1852.4	22.83

Reduced Power

Target Power for W-CDMA Band II 17.5 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

Band	Mode	UL Ch No.	Freq. (MHz)	Avg Pwr (dBm)
				Reduced Power
W-CDMA (UMTS)	Rel 99 (RMC, 12.2 kbps)	9538	1907.6	17.82

9.7. CDMA BC0

Full Power

Target Power for CDMA BC0 24.0 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

1xRTT Output Power Measurement Results

CDMA			Avg Pwr (dBm)
			RC3 - SO32
Band	Ch	Freq. (MHz)	(+F-SCH)
			Full Power
BC 0	1013	824.70	23.65

Reduced Power

Target Power for CDMA BC0 19.9 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

1xEV-DO Rel. 0 Output Power Measurement Results

Band	FTAP Rate	RTAP Rate	Channel	f (MHz)	Avg Pwr (dBm)
					Reduced Power
BC 0	307.2 kbps	153.6	1013	824.70	20.52

9.8. CDMA BC1

Full Power

Target Power for CDMA BC1 24.0 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

1xRTT Output Power Measurement Results

CDMA			Avg Pwr (dBm)
			RC3 - SO32
Band	Ch	Freq. (MHz)	(+F-SCH)
			Full Power
BC 1	600	1880	23.77

Reduced Power

Target Power for CDMA BC1 17.7 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

1xEV-DO Rel. 0 Output Power Measurement Results

Band	FTAP Rate	RTAP Rate	Channel	f (MHz)	Avg Pwr (dBm)
					Reduced Power
BC 1	307.2 kbps	153.6	600	1880.0	17.70

9.9. CDMA BC10

Full Power

Target Power for CDMA BC10 24 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

1xEV-DO Rel. 0 Output Power Measurement Results

Band	FTAP Rate	RTAP Rate	Channel	f (MHz)	Avg Pwr (dBm)
					Full Power
BC 10	307.2 kbps (2 slot, QPSK)	153.6 kbps	670	822.75	23.75

Reduced Power

Target Power for CDMA BC10 20.2 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

1xEV-DO Rel. 0 Output Power Measurement Results

Band	FTAP Rate	RTAP Rate	Channel	f (MHz)	Avg Pwr (dBm)
					Reduced Power
BC 10	307.2 kbps (2 slot, QPSK)	153.6 kbps	450	820.0	20.77

9.10. LTE Band 2

Full Power

Target Power for LTE Band 2 23 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
20	18900	1880	QPSK	50	0	21.72

Reduced Power

Target Power for LTE Band 2 17.0 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
20	19100	1900	QPSK	50	49	17.85

9.11. LTE Band 4

Full Power

Target Power for LTE Band 4 23.0 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
20	10175	1720	QPSK	50	24	21.65

Reduced Power

Target Power for LTE Band 4 16.5 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
20	20050	1720	QPSK	50	24	17.16

9.12. LTE Band 5

Full Power

Target Power for LTE Band 5 23.0 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
10	20450	829	QPSK	25	0	21.56

Reduced Power

Target Power for LTE Band 5 20.0 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
10	20525	836.5	QPSK	1	0	20.53

9.13. LTE Band 13

Full Power

Target Power for LTE Band 13 23.0 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
10	23230	782	QPSK	1	24	22.83

Reduced Power

Target Power for LTE Band 13 20.0 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
10	23230	782	QPSK	1	24	20.90

9.14. LTE Band 17

Full Power

Target Power for LTE Band 17 23.0 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
10	23780	709	QPSK	25	24	21.56

Reduced Power

Target Power for LTE Band 17 20.5 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
10	23790	710	QPSK	1	24	21.08

9.15. LTE Band 25

Full Power

Target Power for LTE Band 25 23.0dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
20	26365	1882.5	QPSK	1	49	22.43

Reduced Power

Target Power for LTE Band 25 17.0 dBm

Tune-Up Tolerance: +1.0 dB/- 1.0 dB

BW	Ch	Freq. (MHz)	Mode	UL RB Allocation	UL RB Start	Avg Pwr (dBm)
20	26365	1882.5	QPSK	50	0	17.49

9.16. WiFi 2.4GHz, 5GHz and Bluetooth

The target power is the absolute maximum.

Tune-up Tolerance

The Target power is the upper limit of tune-up tolerance.

Mode	Antenna	BAND	Channel	Frequency (MHz)	Target Power (dBm)	Measured Power (dBm)
802.11g	Main	2400MHz	6	2437	15.0	14.52
802.11b	Aux		1	2412	14.5	14.05
802.11a	Main	5200MHz	48	5240	14.0	13.61
	Aux		40	5200	14.0	13.60
	Main	5300MHz	56	5280	14.5	14.33
	Aux		52	5260	14.5	14.34
	Main	5600MHz	108	5540	15.0	14.74
	Aux		120	5600	15.0	14.83
	Main	5800MHz	149	5745	15.0	14.88
	Aux		165	5825	15.0	14.80
Bluetooth DH5	Aux	2400MHz	0	2402	7.0	6.37

*All power measurements were conducted with the highest SAR channel reported by the SAR report 10258100H-A-R2 for WWAN(submitted under FCC ID ACJ9TGWW13B1), SAR report 10258104H-A-R1 for WLAN(submitted under FCC ID ACJ9TGWL13A).

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

KDB865664 D01 SAR Measurement 100 MHz to 6 GHz v01

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

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 $\pm 2^\circ\text{C}$ of the temperature when the tissue parameters are characterized.

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

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

Tissue Dielectric Parameter Check Results

Tissue Dielectric Parameter Check for UHF-RFID SAR test

Date	Freq. (MHz)	Liquid Parameters	Measured	Target	Delta (%)	Limit \pm (%)
2014/10/16	Body 900	Relative Permittivity (ϵ_r):	53.72	55.00	-2.32	5
		Conductivity (σ):	1.04	1.05	-1.41	5
	Body 930	Relative Permittivity (ϵ_r):	53.38	54.95	-2.86	5
		Conductivity (σ):	1.07	1.06	1.10	5
2014/10/24	Body 900	Relative Permittivity (ϵ_r):	54.32	55.00	-1.23	5
		Conductivity (σ):	1.04	1.05	-1.24	5
	Body 930	Relative Permittivity (ϵ_r):	53.96	54.95	-1.80	5
		Conductivity (σ):	1.07	1.06	0.73	5

Tissue Dielectric Parameter Check for WWAN SAR test

Date	Freq. (MHz)	Liquid Parameters	Measured	Target	Delta (%)	Limit ±(%)
2014/11/6	Body 900	Relative Permittivity (ϵ_r):	54.41	55.00	-1.07	5
		Conductivity (σ):	1.04	1.05	-0.86	5
	Body 815	Relative Permittivity (ϵ_r):	55.09	55.30	-0.38	5
		Conductivity (σ):	0.95	0.97	-2.21	5
	Body 820	Relative Permittivity (ϵ_r):	55.05	55.28	-0.41	5
		Conductivity (σ):	0.95	0.97	-1.71	5
Body 850	Relative Permittivity (ϵ_r):	54.76	55.16	-0.72	5	
	Conductivity (σ):	0.98	0.99	-0.70	5	
2014/11/10	Body 1800	Relative Permittivity (ϵ_r):	52.61	53.30	-1.30	5
		Conductivity (σ):	1.55	1.52	2.15	5
	Body 1710	Relative Permittivity (ϵ_r):	52.85	53.54	-1.30	5
		Conductivity (σ):	1.46	1.46	-0.25	5
	Body 1755	Relative Permittivity (ϵ_r):	52.76	53.43	-1.25	5
		Conductivity (σ):	1.50	1.49	0.74	5
2014/11/10	Body 1800	Relative Permittivity (ϵ_r):	53.66	53.30	0.68	5
		Conductivity (σ):	1.47	1.52	-3.16	5
	Body 2000	Relative Permittivity (ϵ_r):	52.98	53.30	-0.60	5
		Conductivity (σ):	1.57	1.52	3.22	5
	Body 1850	Relative Permittivity (ϵ_r):	53.44	53.30	0.26	5
		Conductivity (σ):	1.53	1.52	0.53	5
Body 1910	Relative Permittivity (ϵ_r):	53.35	53.30	0.09	5	
	Conductivity (σ):	1.55	1.52	2.24	5	
2014/11/10	Body 750	Relative Permittivity (ϵ_r):	54.15	55.55	-2.51	5
		Conductivity (σ):	0.97	0.96	0.76	5
	Body 705	Relative Permittivity (ϵ_r):	54.65	55.72	-1.92	5
		Conductivity (σ):	0.93	0.96	-3.45	5
	Body 720	Relative Permittivity (ϵ_r):	54.53	55.66	-2.03	5
		Conductivity (σ):	0.94	0.96	-2.10	5
	Body 775	Relative Permittivity (ϵ_r):	53.88	55.45	-2.83	5
		Conductivity (σ):	1.00	0.97	3.20	5
	Body 790	Relative Permittivity (ϵ_r):	53.69	55.39	-3.07	5
		Conductivity (σ):	1.01	0.97	4.33	5

Tissue Dielectric Parameter Check for WLAN SAR test

Date	Freq. (MHz)	Liquid Parameters	Measured	Target	Delta (%)	Limit ±(%)
2014/10/26	Body 2450	Relative Permittivity (ϵ_r):	50.19	52.70	-4.76	5
		Conductivity (σ):	1.88	1.95	-3.49	5
	Body 2400	Relative Permittivity (ϵ_r):	50.42	52.77	-4.46	5
		Conductivity (σ):	1.81	1.90	-4.85	5
	Body 2480	Relative Permittivity (ϵ_r):	50.09	52.66	-4.88	5
		Conductivity (σ):	1.93	1.99	-3.27	5
2014/11/16	Body 2450	Relative Permittivity (ϵ_r):	50.31	52.70	-4.54	5
		Conductivity (σ):	1.93	1.95	-1.08	5
	Body 2400	Relative Permittivity (ϵ_r):	50.54	52.77	-4.23	5
		Conductivity (σ):	1.83	1.90	-3.69	5
	Body 2480	Relative Permittivity (ϵ_r):	50.21	52.66	-4.66	5
		Conductivity (σ):	1.97	1.99	-0.91	5
2014/10/27	Body 5200	Relative Permittivity (ϵ_r):	48.04	49.02	-2.00	10
		Conductivity (σ):	5.16	5.29	-2.51	5
	Body 5300	Relative Permittivity (ϵ_r):	48.39	48.88	-1.02	10
		Conductivity (σ):	5.57	5.41	2.93	5
	Body 5180	Relative Permittivity (ϵ_r):	48.33	49.05	-1.46	10
		Conductivity (σ):	5.17	5.27	-1.98	5
	Body 5320	Relative Permittivity (ϵ_r):	48.66	48.86	-0.40	10
		Conductivity (σ):	5.39	5.43	-0.88	5
2014/10/28	Body 5200	Relative Permittivity (ϵ_r):	48.08	49.02	-1.92	10
		Conductivity (σ):	5.14	5.29	-2.92	5
	Body 5300	Relative Permittivity (ϵ_r):	48.30	48.88	-1.19	10
		Conductivity (σ):	5.51	5.41	1.82	5
	Body 5180	Relative Permittivity (ϵ_r):	48.10	49.05	-1.93	10
		Conductivity (σ):	5.13	5.27	-2.64	5
	Body 5320	Relative Permittivity (ϵ_r):	48.09	48.86	-1.57	10
		Conductivity (σ):	5.28	5.43	-2.83	5
2014/10/29	Body 5600	Relative Permittivity (ϵ_r):	46.44	48.48	-4.20	10
		Conductivity (σ):	5.91	5.76	2.60	5
	Body 5800	Relative Permittivity (ϵ_r):	47.03	48.20	-2.43	10
		Conductivity (σ):	6.15	6.00	2.45	5
	Body 5500	Relative Permittivity (ϵ_r):	46.58	48.61	-4.18	10
		Conductivity (σ):	5.70	5.64	0.95	5
	Body 5700	Relative Permittivity (ϵ_r):	46.61	48.34	-3.58	10
		Conductivity (σ):	6.14	5.88	4.52	5
	Body 5745	Relative Permittivity (ϵ_r):	46.23	48.28	-4.24	10
		Conductivity (σ):	6.08	5.93	2.53	5
	Body 5825	Relative Permittivity (ϵ_r):	46.35	48.20	-3.85	10
		Conductivity (σ):	6.22	6.00	3.68	5
2014/11/17	Body 5200	Relative Permittivity (ϵ_r):	48.26	49.02	-1.55	10
		Conductivity (σ):	5.42	5.29	2.33	5
	Body 5300	Relative Permittivity (ϵ_r):	47.99	48.88	-1.83	10
		Conductivity (σ):	5.64	5.41	4.21	5
	Body 5600	Relative Permittivity (ϵ_r):	47.23	48.48	-2.57	10
		Conductivity (σ):	5.98	5.76	3.75	5
	Body 5800	Relative Permittivity (ϵ_r):	47.82	48.20	-0.79	10
		Conductivity (σ):	6.22	6.00	3.60	5
	Body 5180	Relative Permittivity (ϵ_r):	48.30	49.05	-1.52	10
		Conductivity (σ):	5.34	5.27	1.23	5
	Body 5320	Relative Permittivity (ϵ_r):	47.22	48.86	-3.35	10
		Conductivity (σ):	5.60	5.43	2.97	5
	Body 5500	Relative Permittivity (ϵ_r):	47.56	48.61	-2.17	10
		Conductivity (σ):	5.89	5.64	4.26	5
	Body 5700	Relative Permittivity (ϵ_r):	47.40	48.34	-1.95	10
		Conductivity (σ):	6.09	5.88	3.61	5
	Body 5745	Relative Permittivity (ϵ_r):	47.02	48.28	-2.60	10
		Conductivity (σ):	6.15	5.93	3.71	5
Body 5825	Relative Permittivity (ϵ_r):	47.14	48.20	-2.20	10	
	Conductivity (σ):	6.29	6.00	4.83	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.
- 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 3GHz), 12 mm (1GHz to 3GHz) and 15 mm (below 1 GHz) from dipole center to the simulating liquid surface.
- The coarse grid with a grid spacing of 12 mm (1GHz to 3GHz) and 15 mm (below 1GHz) 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(For 5GHz band) or 250 mW(For 2.4GHz band).
- 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	1058	05/10/2012	750	1g	8.64	8.88
				10g	5.64	5.84
D900v2	155	12/06/2013	900	1g	10.48	10.60
				10g	6.72	6.84
D1800v2	2d040	12/09/2013	1800	1g	38.72	38.96
				10g	20.20	20.52
D2000v2	1029	06/15/2012	2000	1g	40.00	39.64
				10g	21.12	20.72

System Dipole	Serial No.	Cal. Date	Freq. (MHz)	Target SAR Values (mW/g)		
				1g/10g	Head	Body
D2450V2	713	9/10/2013	2450	1g	52.0	50.4
				10g	24.2	23.6
D5GHV2	1020	1/17/2014	5.2GHz	1g	81.2	75.0
				10g	23.3	20.9
			5.3GHz	1g	84.1	76.3
				10g	24.2	21.4
			5.5GHz	1g	86.1	79.7
				10g	24.5	22.2
			5.6GHz	1g	86.0	80.8
				10g	24.4	22.4
			5.8GHz	1g	81.3	75.3
				10g	23.1	20.8

These test equipment was used for the tests before the expiration date of the calibration.

The expiration date of the calibration is the end of the expired month.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

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.

System Performance Check for UHF-RFID SAR test

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	
	Type	Serial #		Zoom Scan	Normalize to 1 W			
10/16/2014	D900V2	155	Body	1g	2.42	9.68	10.60	-8.68
				10g	1.56	6.24	6.84	-8.77
10/24/2014	D900V2	155	Body	1g	2.48	9.92	10.60	-6.42
				10g	1.59	6.36	6.84	-7.02

System Performance Check for WWAN SAR test

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	
	Type	Serial #		Zoom Scan	Normalize to 1 W			
11/6/2014	D900V2	155	Body	1g	2.48	9.9	10.60	-6.42
				10g	1.61	6.4	6.84	-5.85
11/10/2014	D1800V2	2d040	Body	1g	10.30	41.20	38.96	5.75
				10g	5.13	20.52	20.52	0.00
11/10/2014	D1800V2	2d040	Body	1g	9.78	39.12	38.96	0.41
				10g	5.13	20.52	20.52	0.00
11/10/2014	D2000V2	1029	Body	1g	9.54	38.16	39.64	-3.73
				10g	4.69	18.76	20.72	-9.46
11/10/2014	D750V3	1058	Body	1g	2.21	8.8	8.88	-0.45
				10g	1.47	5.88	5.84	0.68

System Performance Check for WLAN SAR test

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	
	Type	Serial #		Zoom Scan	Normalize to 1 W			
10/26/2014	D2450V2	713	Body	1g	12.40	49.6	50.4	-1.59
				10g	5.65	22.6	23.6	-4.24
11/6/2014	D2450V2	713	Body	1g	13.80	55.2	50.4	9.52
				10g	6.37	25.5	23.6	7.97
10/27/2014	D5GHzV2 5.2 GHz	1020	Body	1g	7.63	76.3	75.0	1.73
				10g	2.09	20.9	20.9	0.00
10/27/2014	D5GHzV2 5.3 GHz	1020	Body	1g	8.24	82.4	76.3	7.99
				10g	2.24	22.4	21.4	4.67
10/28/2014	D5GHzV2 5.2 GHz	1020	Body	1g	7.57	75.7	75.0	0.93
				10g	2.09	20.9	20.9	0.00
10/28/2014	D5GHzV2 5.3 GHz	1020	Body	1g	7.99	79.9	76.3	4.72
				10g	2.20	22.0	21.4	2.80
10/29/2014	D5GHzV2 5.6 GHz	1020	Body	1g	8.08	80.8	80.8	0.00
				10g	2.20	22.0	22.4	-1.79
10/29/2014	D5GHzV2 5.8 GHz	1020	Body	1g	7.36	73.6	75.3	-2.26
				10g	2.01	20.1	20.8	-3.37
11/17/2014	D5GHzV2 5.2 GHz	1020	Body	1g	7.98	79.8	75.0	6.40
				10g	2.20	22.0	20.9	5.26
11/17/2014	D5GHzV2 5.3 GHz	1020	Body	1g	8.18	81.8	76.3	7.21
				10g	2.25	22.5	21.4	5.14
11/17/2014	D5GHzV2 5.6 GHz	1020	Body	1g	8.18	81.8	80.8	1.24
				10g	2.22	22.2	22.4	-0.89
11/17/2014	D5GHzV2 5.8 GHz	1020	Body	1g	7.44	74.4	75.3	-1.20
				10g	2.04	20.4	20.8	-1.92

12. SAR Test Results

12.1. Standalone SAR Test Exclusion Considerations

Standalone SAR test exclusion was based upon the following criteria:

1. According to KDB 447498 § 4.1.5 if the antenna is at close proximity to user then the outer surface of the DUT should be treated as the radiating surface. The test separation distance is then determined by the smallest distance between the outer surface of the device and the user. For the purposes of this report close proximity has been defined as closer than 50 mm. For antennas <50 mm from the back side or edge the separation distance used for the SAR exclusion calculations is 0mm.
2. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.
3. If the antenna to DUT adjacent back side or edge separation distance is >50mm the actual antenna to user separation distance is used to determine SAR exclusion and estimated SAR value

12.1.1. SAR exclusion calculations for UHF-RFID for antenna <50mm from the user

Antenna	Tx	Frequency (MHz)	Output power		Separation distances (mm)									Calculated Threshold Value									
			dBm	mW	Rear2	Edge 1	Edge 2	Edge 3	Edge 4	Edge1 tilt	Edge2 tilt	Edge3 tilt	Front	Rear2	Edge 1	Edge 2	Edge 3	Edge 4	Edge1 tilt	Edge2 tilt	Edge3 tilt	Front	
UHF-RFID	UHF-RFID	927.25	25.0	316	0	83	0	0	223	0	0	0	Front	61	>50 mm	61	61	>50 mm	61	61	61	61	N/A

Note(s):

1. According to KDB 447498, if the calculated threshold value is >3 then SAR testing is required.

12.1.2. SAR exclusion calculations for UHF-RFID for antenna for antenna >50mm from the user

Antenna	Tx	Frequency (MHz)	Output power		Separation distances (mm)									Calculated Threshold Value									
			dBm	mW	Rear2	Edge 1	Edge 2	Edge 3	Edge 4	Edge1 tilt	Edge2 tilt	Edge3 tilt	Front	Rear2	Edge 1	Edge 2	Edge 3	Edge 4	Edge1 tilt	Edge2 tilt	Edge3 tilt	Front	
UHF-RFID	UHF-RFID	927.25	25.0	316	0	83	0	0	223	0	0	0		< 50 mm	362.2	< 50 mm	< 50 mm	< 50 mm	1227.1	< 50 mm	< 50 mm	< 50 mm	N/A

Note(s):

1. According to KDB 447498, if the calculated Power threshold is less than the output power then SAR testing is required.

Conclusion:

As the calculated Power Threshold is greater than the DUT output power for Edge 1 and Edge 4, SAR testing is not required.

12.2. Estimated SAR for Simultaneous Transmission SAR Analysis

Considerations for using estimated SAR values:

1. According to KDB 447498 § 4.1.5 if the antenna is at close proximity to user then the outer surface of the DUT should be treated as the radiating surface. The test separation distance is then determined by the smallest distance between the outer surface of the device and the user. For the purposes of this report close proximity has been defined as closer than 50 mm. For antennas <50 mm from the back side or edge the separation distance used for the estimated SAR calculations is 0mm.
2. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.
3. Output power is the maximum rated power (including tune-up or manufacturing tolerances) and includes source-based averaging.
4. If the antenna separation distance is > 50mm then the estimated SAR value is 0.4 W/Kg.
5. Formulas round separation distance to nearest mm and power to nearest mW before calculating estimated SAR

12.2.1. Estimated SAR for UHF-RFID

Antenna	Tx	Frequency (MHz)	Output power		Separation distances (mm)									Estimated SAR Value									
			dBm	mW	Rear2	Edge 1	Edge 2	Edge 3	Edge 4	Edge1 tilt	Edge4 tilt	Edge4 tilt	Front	Rear2	Edge 1	Edge 2	Edge 3	Edge 4	Edge1 tilt	Edge1 tilt	Edge4 tilt	Front	
UHF-RFID	UHF-RFID	927.25	25.0	316	0	83	0	0	223	0	0	0		Measure	0.400	Measure	Measure	Measure	0.400	Measure	Measure	Measure	N/A

Notes:

1. Though SAR for UHF-RFID antenna in Edge 1 and Edge 4 was not required for standalone, test was performed. The reason is as follows.
 - This model in which UHF-RFID module, WLAN module and WWAN module were installed. When considering simultaneous transmitting exclusion of Edge1 and Edge4, 0.4W/kg had very large estimated SAR of Edge1 and Edge 4 of UHF-RFID, and since the sum of SAR value exceeded 1.6W/kg, estimated SAR was not used in this report. Since Edge 1 and Edge4 of UHF-RFID were measured standalone SAR for simultaneous transmitting evaluation, measured standalone SAR value was used in this report.

12.3. UHF-RFID Band

About maximum duty cycle of UHF-RFID Tx

Maximum transmission burst duration: 608 ms

Shortest cycle: 1600 ms

Maximum duty cycle: 38%

Maximum duty cycle of UHF-RFID Tx is 38% for user.

When SAR was measured, Duty cycle of UHF-RFID Tx is 100%. Therefore, SAR result was scaled 38%.

UHF-RFID Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg) Duty 100%		1-g SAR (W/kg) Duty 38%		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Power scaled	Duty scaled			
Rear	UHF-RFID	0	0	902.75	25.00	24.90	1.210	1.238	0.471	1		
	UHF-RFID	0	24	914.75	25.00	24.82	1.780	1.855	0.705	2		
	UHF-RFID	0	49	927.25	25.00	24.20	1.410	1.695	0.644	3		
Edge1	UHF-RFID	0	0	902.75	25.00	24.90	0.018	0.018	0.007	4	1	
Edge2	UHF-RFID	0	0	902.75	25.00	24.90	0.315	0.322	0.122	5	1	
Edge3	UHF-RFID	0	0	902.75	25.00	24.90	0.074	0.076	0.029	6	1	
Edge4	UHF-RFID	0	0	902.75	25.00	24.90	0.003	0.003	0.001	7	1	
Edge 1 tilt	UHF-RFID	0	0	902.75	25.00	24.90	0.822	0.841	0.320	8		
	UHF-RFID	0	24	914.75	25.00	24.82	1.060	1.105	0.420	9		
	UHF-RFID	0	49	927.25	25.00	24.20	0.723	0.869	0.330	10		
Edge 2 tilt	UHF-RFID	0	0	902.75	25.00	24.90	1.580	1.617	0.614	11		
	UHF-RFID	0	24	914.75	25.00	24.82	1.520	1.584	0.602	12		
	UHF-RFID	0	49	927.25	25.00	24.20	1.150	1.383	0.525	13		
Edge 3 tilt	UHF-RFID	0	0	902.75	25.00	24.90	2.110	2.159	0.820	14		
	UHF-RFID	0	24	914.75	25.00	24.82	2.170	2.262	0.859	15		
	UHF-RFID	0	49	927.25	25.00	24.20	1.720	2.068	0.786	16		

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

12.4. Summary of Highest SAR Values

Results for the highest measured SAR values in each frequency band and mode

Technology/ Band	Test configuration			Mode	Dist. (mm)	Freq. (Mhz)	Power (dBm)	1g SAR (W/kg)
	Transmit Antenna	Exposure	Position					
UHF-RFID	UHF- RFID	Body	Edge 3 tilt	UHF-RFID	0	914.75	24.82	2.170

12.5. SAR Measurement Variability and Uncertainty

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.

Wireless Technologies	Test Configuration		Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Meas. SAR (W/kg)		Largest to Smallest SAR Ratio	Plot No.
	Exposure	Position					Original	Repeated		
UHF-RFID	Body	Edge 3 tilt	UHF-RFID	0	0	914.75	2.170	2.10	1.03	1
UHF-RFID	Body	Edge 3 tilt	UHF-RFID	0	0	914.75	2.170	2.11	1.03	2
UHF-RFID	Body	Edge 3 tilt	UHF-RFID	0	0	914.75	2.170	1.94	1.12	3

13. Additional SAR Test Results

The SAR result of WWAN and WLAN/Bluetooth in the former report is used for simultaneous transmission SAR analysis of UHF-RFID+WWAN+WLAN. Please refer to section 14 for simultaneous transmission SAR analysis of UHF-RFID+WWAN+WLAN/Bluetooth.

The UHF-RFID area whose height is 13.5mm is connected to the back side of this host device. Therefore, additional test positions(Edge 1 tilt, Edge 2 tilt, Edge 3 tilt) are performed as additional measurement including WWAN and WLAN/Bluetooth.

About the definition of test setup position

- Rear 1= Back side (UHF-RFID area is removed, but the 4.7mm height corner guards are added.):
Rear 1 means the back side of EUT when UHF-RFID area is removed and the 4.7mm height corner guards are added. The SAR measurement of WWAN and WLAN/Bluetooth was performed in the original reports (WWAN report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1 and WLAN report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A) using the host device without RFID area and with 4.7mm height corner guards.

- Rear 2 = Back side:
Rear 2 means the back side of EUT when UHF-RFID area is attached to Rear 1.
The SAR value of the following composition is used.
The SAR value of WWAN(Full power) Rear 2 separation 4.2mm comes from the SAR value of Rear 1 separation 13.0mm in the original report (WWAN report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1).

The SAR value of WWAN(Reduced power) Rear 2 separation 0mm comes from the SAR value of Rear 1 separation 0mm in the original report (WWAN report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1).

The SAR value of WLAN/Bluetooth Main/Aux Rear 2 separation 4.2mm comes from the SAR value of Rear 2 separation 0mm in the this report.

The WLAN/Bluetooth Main/Aux Rear 2 separation 0mm is measured.

- Edge 1 = Top:
The SAR value of the following composition is used.
The SAR value of WWAN(Reduce power) Top separation 0mm comes from the original report (WWAN report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1).

The SAR value of WWAN(Full power) Top separation 21.0mm comes from the original report (WWAN report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1).

The SAR value of WLAN Main/Aux antenna Top separation 0mm comes from the original report (WLAN report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A).

The SAR value of WLAN/Bluetooth Main/Aux Top separation 21.0mm comes from the original report (WLAN report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A).

- Edge 2 = Right:
The SAR value of the following composition is used.
The WWAN SAR Value is estimated.(It does not include GSM850)
The SAR value of GSM850 Right separation 0mm comes from the original report (WWAN report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1).

The WLAN/Bluetooth Main/Aux SAR Value is estimated.

Edge 3 = Bottom:

The SAR value of the following composition is used.

The WWAN SAR Value is estimated.(It does not include GSM850)

The SAR value of GSM850 Right separation 0mm comes from the original report (WWAN report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1).

The WLAN Main antenna SAR Value is estimated.

The SAR value of WLAN/Bluetooth Aux antenna Bottom separation 0mm comes from the original report (WLAN report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A).

- Edge 4 = Left:

The SAR value of the following composition is used.

The SAR value of WWAN Left separation 0mm comes from the original report (WWAN report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1).

The SAR value of WLAN/Bluetooth Left separation 0mm comes from the original report (WLAN report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A)

- Edge 1 tilt = Top tilt:

Additional measurement is performed in order to consider simultaneous transmission SAR analysis.

- Edge 2 tilt = Right tilt:

Additional measurement is performed in order to consider simultaneous transmission SAR analysis.

- Edge 3 tilt = Top tilt:

Additional measurement is performed in order to consider simultaneous transmission SAR analysis.

13.1. GSM850

Reduced Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	GPRS 2 Slots	128	824.2	28.3	26.49	0.499	0.757	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	GPRS 2 Slots	128	824.2	33.5	31.53	0.008	0.013	2	1
Edge 3 tilt	0	GPRS 2 Slots	128	824.2	33.5	31.53	0.041	0.065	3	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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.

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.2. GSM1900

Reduced Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	GPRS 2 Slots	810	1909.8	24.1	23.27	0.448	0.542	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	GPRS 2 Slots	512	1850.2	30.5	28.83	0.010	0.014	2	1
Edge 3 tilt	0	GPRS 2 Slots	512	1850.2	30.5	28.83	0.013	0.019	3	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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.

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.3. W-CDMA Band V
Reduced Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	Rel 99 RMC 12.2 kbps	4132	826.4	20.9	20.79	0.404	0.414	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Edge2 tilt	0	Rel 99 RMC 12.2 kbps	4233	846.6	24.0	22.34	0.005	0.008	2	1
Edge3 tilt	0	Rel 99 RMC 12.2 kbps	4233	846.6	24.0	22.34	0.014	0.021	3	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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.

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.4. W-CDMA Band IV

Reduced Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	Rel 99 RMC 12.2 kbps	1312	1712.4	18.0	17.44	0.343	0.390	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	Rel 99 RMC 12.2 kbps	1413	1732.6	24.0	22.71	0.016	0.022	2	1
Edge 3 tilt	0	Rel 99 RMC 12.2 kbps	1413	1732.6	24.0	22.71	0.017	0.023	3	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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.

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.5 W-CDMA Band II Reduced Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	Rel 99 RMC 12.2 kbps	9538	1907.6	18.5	17.82	0.526	0.615	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	Rel 99 RMC 12.2 kbps	9262	1852.4	24.0	22.83	0.014	0.018	2	1
Edge 3 tilt	0	Rel 99 RMC 12.2 kbps	9262	1852.4	24.0	22.83	0.015	0.020	3	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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.

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.6 CDMA Band 0

Reduced Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-Up Limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	1xEVDO Rel. 0	1013	824.7	20.9	20.52	0.439	0.479	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-Up Limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	1xRTT (RC3 SO32)	384	836.52	25.0	23.65	0.004	0.005	2	1
Edge 3 tilt	0	1xRTT (RC3 SO32)	384	836.52	25.0	23.65	0.032	0.044	3	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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.

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.7 CDMA Band 1

Reduced Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-Up Limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	1xEVDO Rel. 0	600	1880	18.7	17.70	0.535	0.674	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-Up Limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	1xRTT (RC3 SO32)	600	1880	25.0	23.77	0.022	0.029	2	1
Edge 3 tilt	0	1xRTT (RC3 SO32)	600	1880	25.0	23.77	0.030	0.040	3	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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.

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.8 CDMA Band 10

Reduced Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-Up Limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	1xEVDO Rel. 0	450	817.25	21.2	20.77	0.475	0.524	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-Up Limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	1xEVDO Rel. 0	670	822.75	25.0	23.75	0.000	0.000	2	1
Edge 3 tilt	0	1xEVDO Rel. 0	670	822.75	25.0	23.75	0.026	0.035	3	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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.

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.9 LTE Band 2 Reduced Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	QPSK	19100	1900	50	49	18.0	17.85	0.445	0.461	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	QPSK	18900	1880	50	0	24.0	21.72	0.005	0.008	2	1
Edge 3 tilt	0	QPSK	18900	1880	50	0	24.0	21.72	0.000	0.000	3	1

Note(s):

Per KDB 941225 D05 SAR for LTE Devices v02, SAR test reduction is applied using the following criteria:

- Beginning with QPSK modulation at the largest channel bandwidth, testing for 1 RB allocation configurations is initially performed for the channel/RB offset combination with the highest output power among 1 RB allocation configurations.
- 1. When the reported SAR for the initial measurement is < 0.8 W/kg, no further assessment is required for 1 RB allocation configurations.
- 2. When the reported SAR for the initial measurement is > 0.8 W/kg, the remaining channels are evaluated using the RB offset with the highest output power within the respective channels.
- 3. For all reported SAR that is > 1.45 W/kg, SAR, SAR is required for the remaining RB offset configurations of the same channel.

13.10 LTE Band 4

Reduced Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	QPSK	20050	1720	50	24	17.5	17.16	0.244	0.264	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	QPSK	20050	1720	1	49	24.0	22.65	0.012	0.016	2	1
Edge 3 tilt	0	QPSK	20050	1720	1	49	24.0	22.65	0.027	0.037	3	1

Note(s):

Per KDB 941225 D05 SAR for LTE Devices v02, SAR test reduction is applied using the following criteria:

- Beginning with QPSK modulation at the largest channel bandwidth, testing for 1 RB allocation configurations is initially performed for the channel/RB offset combination with the highest output power among 1 RB allocation configurations.
- 1. When the reported SAR for the initial measurement is < 0.8 W/kg, no further assessment is required for 1 RB allocation configurations.
- 2. When the reported SAR for the initial measurement is > 0.8 W/kg, the remaining channels are evaluated using the RB offset with the highest output power within the respective channels.
- 3. For all reported SAR that is > 1.45 W/kg, SAR, SAR is required for the remaining RB offset configurations of the same channel.

13.11 LTE Band 5

Reduced Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	QPSK	20525	836.5	1	0	21.0	20.53	0.453	0.505	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	QPSK	20450	829	25	0	24.0	21.56	0.000	0.000	2	1
Edge 3 tilt	0	QPSK	20450	829	25	0	24.0	21.56	0.017	0.030	3	1

Note(s):

Per KDB 941225 D05 SAR for LTE Devices v02, SAR test reduction is applied using the following criteria:

- Beginning with QPSK modulation at the largest channel bandwidth, testing for 1 RB allocation configurations is initially performed for the channel/RB offset combination with the highest output power among 1 RB allocation configurations.
- 1. When the reported SAR for the initial measurement is < 0.8 W/kg, no further assessment is required for 1 RB allocation configurations.
- 2. When the reported SAR for the initial measurement is > 0.8 W/kg, the remaining channels are evaluated using the RB offset with the highest output power within the respective channels.
- 3. For all reported SAR that is > 1.45 W/kg, SAR, SAR is required for the remaining RB offset configurations of the same channel.

13.12 LTE Band 13

Reduced Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	QPSK	23230	782	1	24	21.0	20.90	0.781	0.799	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	QPSK	23230	782	1	24	24.0	22.83	0.032	0.042	2	1
Edge 3 tilt	0	QPSK	23230	782	1	24	24.0	22.83	0.034	0.045	3	1

Note(s):

Per KDB 941225 D05 SAR for LTE Devices v02, SAR test reduction is applied using the following criteria:

- Beginning with QPSK modulation at the largest channel bandwidth, testing for 1 RB allocation configurations is initially performed for the channel/RB offset combination with the highest output power among 1 RB allocation configurations.
- 1. When the reported SAR for the initial measurement is < 0.8 W/kg, no further assessment is required for 1 RB allocation configurations.
- 2. When the reported SAR for the initial measurement is > 0.8 W/kg, the remaining channels are evaluated using the RB offset with the highest output power within the respective channels.
- 3. For all reported SAR that is > 1.45 W/kg, SAR, SAR is required for the remaining RB offset configurations of the same channel.

13.13 LTE Band 17

Reduced Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	QPSK	23790	710	1	24	21.5	21.08	0.687	0.757	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	QPSK	23780	709	25	24	24.0	21.56	0.037	0.065	2	1
Edge 3 tilt	0	QPSK	23780	709	25	24	24.0	21.56	0.029	0.051	3	1

Note(s):

Per KDB 941225 D05 SAR for LTE Devices v02, SAR test reduction is applied using the following criteria:

- Beginning with QPSK modulation at the largest channel bandwidth, testing for 1 RB allocation configurations is initially performed for the channel/RB offset combination with the highest output power among 1 RB allocation configurations.
 1. When the reported SAR for the initial measurement is < 0.8 W/kg, no further assessment is required for 1 RB allocation configurations.
 2. When the reported SAR for the initial measurement is > 0.8 W/kg, the remaining channels are evaluated using the RB offset with the highest output power within the respective channels.
 3. For all reported SAR that is > 1.45 W/kg, SAR, SAR is required for the remaining RB offset configurations of the same channel.

13.14 LTE Band 25

Reduced Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 1 tilt	0	QPSK	26365	1882.5	50	0	18.0	17.49	0.464	0.522	1	1

Full Power Operation

Test Position	Dist. (mm)	Mode	UL Ch #.	Freq. (MHz)	UL RB Allocation	UL RB Start	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
							Tune-up limit	Meas.	Meas.	Scaled		
Edge 2 tilt	0	QPSK	26365	1882.5	1	49	24.0	22.43	0.017	0.024	2	1
Edge 3 tilt	0	QPSK	26365	1882.5	1	49	24.0	22.43	0.010	0.014	3	1

Note(s):

Per KDB 941225 D05 SAR for LTE Devices v02, SAR test reduction is applied using the following criteria:

- Beginning with QPSK modulation at the largest channel bandwidth, testing for 1 RB allocation configurations is initially performed for the channel/RB offset combination with the highest output power among 1 RB allocation configurations.
 1. When the reported SAR for the initial measurement is < 0.8 W/kg, no further assessment is required for 1 RB allocation configurations.
 2. When the reported SAR for the initial measurement is > 0.8 W/kg, the remaining channels are evaluated using the RB offset with the highest output power within the respective channels.
 3. For all reported SAR that is > 1.45 W/kg, SAR, SAR is required for the remaining RB offset configurations of the same channel.

13.15 Wi-Fi 2.4 GHz Band

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear2	802.11g	0	6	2437	15.00	14.52	0.013	0.015	1	1
Edge 1 tilt	802.11g	0	6	2437	15.00	14.52	0.067	0.075	2	1
Edge 2 tilt	802.11g	0	6	2437	15.00	14.52	0.001	0.001	3	1
Edge 3 tilt	11g	0	6	2437	15.00	14.52	0.022	0.025	4	1

Main Antenna

Auxiliary Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear2	802.11b	0	1	2412	14.5	14.05	0.012	0.013	5	1
Edge 1 tilt	802.11b	0	1	2412	14.5	14.05	0.005	0.005	6	1
Edge 2 tilt	802.11b	0	1	2412	14.5	14.05	0.013	0.014	7	1
Edge 3 tilt	802.11b	0	1	2412	14.5	14.05	0.190	0.211	8	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.16. Wi-Fi 5.2 GHz Band

Main Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear2	802.11a	0	48	5240	14.00	13.61	0.025	0.027	1	1
Edge1 tilt	802.11a	0	48	5240	14.00	13.61	0.000	0.000	2	1
Edge 2 tilt	802.11a	0	48	5240	14.00	13.61	0.000	0.000	3	1
Edge 3 tilt	802.11a	0	48	5240	14.00	13.61	0.000	0.000	4	1

Auxiliary Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear 2	802.11a	0	48	5240	14.00	13.60	0.032	0.035	5	1
Edge1 tilt	802.11a	0	48	5240	14.00	13.60	0.000	0.000	6	1
Edge 2 tilt	802.11a	0	48	5240	14.00	13.60	0.000	0.000	7	1
Edge 3 tilt	802.11a	0	48	5240	14.00	13.60	0.209	0.229	8	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.17. Wi-Fi 5.3 GHz Band

Main Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear 2	802.11a	0	56	5280	14.50	14.33	0.040	0.042	1	1
Edge 1 tilt	802.11a	0	56	5280	14.50	14.33	0.000	0.000	2	1
Edge 2 tilt	802.11a	0	56	5280	14.50	14.33	0.000	0.000	3	1
Edge 3 tilt	802.11a	0	56	5280	14.50	14.33	0.000	0.000	4	1

Auxiliary Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear2	802.11a	0	52	5260	14.50	14.34	0.046	0.048	5	1
Edge1 tilt	802.11a	0	52	5260	14.50	14.34	0.000	0.000	6	1
Edge 2 tilt	802.11a	0	52	5260	14.50	14.34	0.000	0.000	7	1
Edge 3 tilt	802.11a	0	52	5260	14.50	14.34	0.282	0.293	8	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.18. Wi-Fi 5.6 GHz Band

Main Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear 2	802.11a	0	108	5540	15.00	14.74	0.041	0.044	1	3
Edge 1 tilt	802.11a	0	108	5540	15.00	14.74	0.061	0.065	2	3
Edge 2 tilt	802.11a	0	108	5540	15.00	14.74	0.00006	0.00006	3	3
Edge 3 tilt	802.11a	0	108	5540	15.00	14.74	0.000	0.000	4	3

Auxiliary Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear 2	802.11a	0	120	5600	15.00	14.83	0.063	0.066	5	3
Edge 1 tilt	802.11a	0	120	5600	15.00	14.83	0.000	0.000	6	3
Edge 2 tilt	802.11a	0	120	5600	15.00	14.83	0.000	0.000	7	3
Edge 3 tilt	802.11a	0	120	5600	15.00	14.83	0.239	0.249	8	3

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.19. Wi-Fi 5.8 GHz Band

Main Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear 2	802.11a	0	149	5745	15.00	14.88	0.043	0.044	1	1
Edge 1 tilt	802.11a	0	149	5745	15.00	14.88	0.036	0.037	2	1
Edge 2 tilt	802.11a	0	149	5745	15.00	14.88	0.000	0.000	3	1
Edge 3 tilt	802.11a	0	149	5745	15.00	14.88	0.000	0.000	4	1

Auxiliary Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear 2	802.11a	0	165	5825	15.00	14.80	0.064	0.067	5	1
Edge 1 tilt	802.11a	0	165	5825	15.00	14.80	0.000	0.000	6	1
Edge 2 tilt	802.11a	0	165	5825	15.00	14.80	0.000	0.000	7	1
Edge 3 tilt	802.11a	0	165	5825	15.00	14.80	0.216	0.226	8	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.20. Bluetooth

Auxiliary Antenna

Test Position	Mode	Dist. (mm)	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.	Note
					Tune-up limit	Meas.	Meas.	Scaled		
Rear2	DH5	0	0	2402	7.00	6.37	0.00000	0.00000	1	1
Edge4	DH5	0	0	2402	7.00	6.37	0.00012	0.00013	2	1
Edge1 tilt	DH5	0	0	2402	7.00	6.37	0.00164	0.00190	3	1
Edge2 tilt	DH5	0	0	2402	7.00	6.37	0.0000000	0.0000000	4	1
Edge3 tilt	DH5	0	0	2402	7.00	6.37	0.0230	0.0266	5	1

Note(s):

According to KDB 447498 D01 General RF Exposure Guidance v05, 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

1. ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
2. ≤ 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
3. ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz

13.21. SAR Plots (from Summary of Highest Measured SAR Values)

UHF-RFID Edge 3 tilt Mid ch Duty 100%

Communication System: UID 0, CW (0); Communication System Band: RFID900; Frequency: 914.75 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 915 \text{ MHz}$; $\sigma = 1.057 \text{ S/m}$; $\epsilon_r = 53.579$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration

Probe: EX3DV4 - SN3922; ConvF(9.77, 9.77, 9.77); Calibrated: 2014/06/13; $\{\text{Probe: Calibration Date}\}$

Sensor-Surface: 2mm (Mechanical Surface Detection)

Electronics: DAE4 Sn1372; Calibrated: 2014/06/18

Phantom: ELI v5.0 TP1207; Type: QDOVA001BB; Serial: TP:1207

Measurement SW: DASYS2, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Area Scan 2 2 (81x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 2.90 W/kg

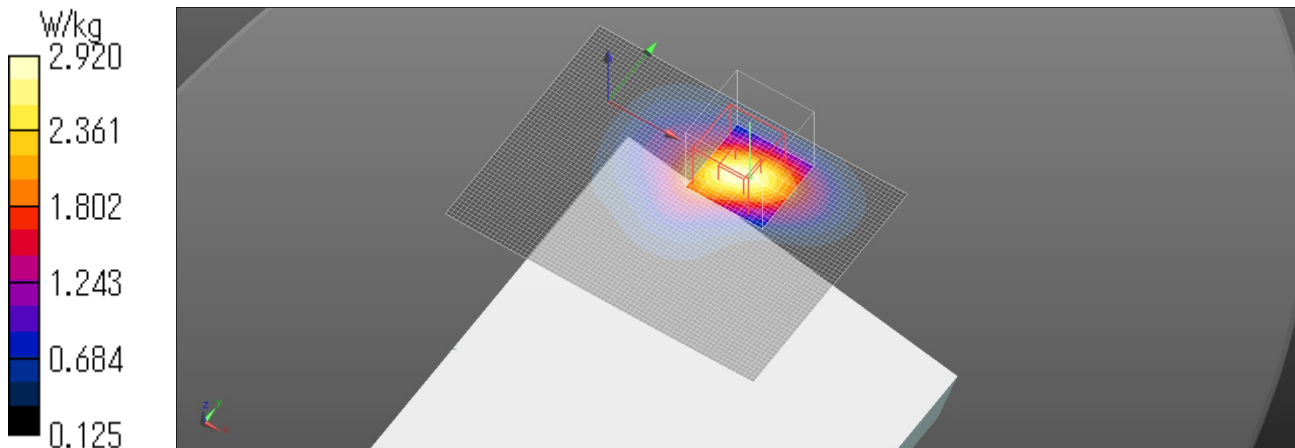
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 54.05 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 3.71 W/kg

SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.27 W/kg

Maximum value of SAR (measured) = 2.92 W/kg



14. Simultaneous Transmission SAR Analysis

14.1 Sum of the SAR for GSM & Wi-Fi 2.4 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	GSM850	GSM1900	WiFi 2.4 GHz Main	WiFi 2.4 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.643		0.015		0.000	0.705	1.363
		0.205	0.015		0.000	0.705	0.925
	0.643			0.013		0.705	1.361
		0.205		0.013		0.705	0.923
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.670		0.015		0.000	0.705	1.390
		0.256	0.015		0.000	0.705	0.976
	0.670			0.013		0.705	1.388
		0.256		0.013		0.705	0.974
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.643		0.015	0.013		0.705	1.376
		0.205	0.015	0.013		0.705	0.938
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.670		0.015	0.013		0.705	1.403
		0.256	0.015	0.013		0.705	0.989
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.193		0.057		0.00013	0.00684	1.257
		1.059	0.057		0.00013	0.00684	1.123
	1.193			0.00204		0.007	1.202
		1.059		0.00204		0.007	1.068
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.4813		0.057		0.00013	0.00684	0.545
		0.456	0.057		0.00013	0.00684	0.520
	0.4813			0.00204		0.007	0.490
		0.456		0.00204		0.007	0.465
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.193		0.057	0.00204		0.007	1.259
		1.059	0.057	0.00204		0.007	1.125
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.4813		0.057	0.00204		0.007	0.547
		0.456	0.057	0.00204		0.007	0.522
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.400		0.400	0.122	1.048
		0.400	0.400		0.400	0.122	1.322
	0.126			0.400		0.122	0.648
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.400	0.400		0.122	1.048
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.027		0.400		0.210	0.029	0.666
		0.400	0.400		0.210	0.029	1.039
	0.027			0.520		0.029	0.576
		0.400		0.520		0.029	0.949
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.027		0.400	0.520		0.029	0.976
		0.400	0.400	0.520		0.029	1.349

Edge4 0mm, Wi-Fi 1 Tx	0.197		0.467		0.000	0.001	0.665
		0.388	0.467		0.000	0.001	0.856
WWAN Full Tx	0.197			0.080		0.001	0.278
		0.388		0.080		0.001	0.469
Edge4 0mm, Wi-Fi 2 Tx	0.197		0.467	0.080		0.001	0.745
		0.388	0.467	0.080		0.001	0.936
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.757		0.075		0.002	0.420	1.254
		0.542	0.075		0.002	0.420	1.039
WWAN Reduce Tx	0.757			0.005		0.420	1.182
		0.542		0.005		0.420	0.967
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.757		0.075	0.005		0.420	1.257
		0.542	0.075	0.005		0.420	1.042
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.013		0.001		0.000	0.614	0.628
		0.014	0.001		0.000	0.614	0.629
WWAN Full Tx	0.013			0.014		0.614	0.641
		0.014		0.014		0.614	0.642
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.013		0.001	0.014		0.614	0.642
		0.014	0.001	0.014		0.614	0.643
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.065		0.0025		0.027	0.860	0.954
		0.019	0.0025		0.027	0.860	0.908
WWAN Full Tx	0.065			0.211		0.860	1.136
		0.019		0.211		0.860	1.090
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.065		0.0025	0.211		0.860	1.138
		0.019	0.0025	0.211		0.860	1.092

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.2 Sum of the SAR for W-CDMA Band V, IV & Wi-Fi 2.4 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	WCDMA V	WCDMA IV	WiFi 2.4 GHz Main	WiFi 2.4 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.453		0.015		0.000	0.705	1.173
		0.178	0.015		0.000	0.705	0.898
	0.453			0.013		0.705	1.171
		0.178		0.013		0.705	0.896
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.217		0.015		0.000	0.705	0.937
		0.157	0.015		0.000	0.705	0.877
	0.217			0.013		0.705	0.935
		0.157		0.013		0.705	0.875
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.453		0.015	0.013		0.705	1.186
		0.178	0.015	0.013		0.705	0.911
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.217		0.015	0.013		0.705	0.950
		0.157	0.015	0.013		0.705	0.890
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.184		0.057		0.00013	0.00684	1.248
		1.108	0.057		0.00013	0.00684	1.172
	1.184			0.00204		0.007	1.193
		1.108		0.00204		0.007	1.117
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.151		0.057		0.00013	0.00684	0.215
		0.299	0.057		0.00013	0.00684	0.363
	0.151			0.00204		0.007	0.160
		0.299		0.00204		0.007	0.308
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.184		0.057	0.00204		0.007	1.250
		1.108	0.057	0.00204		0.007	1.174
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.151		0.057	0.00204		0.007	0.217
		0.299	0.057	0.00204		0.007	0.365
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.520		0.029	0.949
		0.400		0.520		0.029	0.949
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.520		0.029	1.349
		0.400	0.400	0.520		0.029	1.349

Edge4 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.057		0.467		0.000	0.001	0.525
		0.174	0.467		0.000	0.001	0.642
	0.057			0.080		0.001	0.138
		0.174		0.080		0.001	0.255
Edge4 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.057		0.467	0.080		0.001	0.605
		0.174	0.467	0.080		0.001	0.722
Edge1 tilt 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.414		0.075		0.002	0.420	0.911
		0.390	0.075		0.002	0.420	0.887
	0.414			0.005		0.420	0.839
		0.390		0.005		0.420	0.815
Edge1 tilt 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.414		0.075	0.005		0.420	0.914
		0.390	0.075	0.005		0.420	0.890
Edge2 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.008		0.001		0.000	0.614	0.623
		0.022	0.001		0.000	0.614	0.637
	0.008			0.014		0.614	0.636
		0.022		0.014		0.614	0.650
Edge2 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.008		0.001	0.014		0.614	0.637
		0.022	0.001	0.014		0.614	0.651
Edge3 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.021		0.0025		0.027	0.860	0.910
		0.023	0.0025		0.027	0.860	0.912
	0.021			0.211		0.860	1.092
		0.023		0.211		0.860	1.094
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.021		0.0025	0.211		0.860	1.094
		0.023	0.0025	0.211		0.860	1.096

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.3 Sum of the SAR for W-CDMA Band II & Wi-Fi 2.4 GHz Band

Test Position	Data					Σ 1-g SAR (mW/g)
	WCDMA II	WiFi 2.4 GHz Main	WiFi 2.4 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx	0.277	0.015		0.000	0.705	0.997
WWAN Reduce Tx	0.277		0.013		0.705	0.995
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 1 Tx	0.152	0.015		0.000	0.705	0.872
WWAN Full Tx	0.152		0.013		0.705	0.870
UHF-RFID Tx						
Rear2 0mm, Wi-Fi 2 Tx	0.277	0.015	0.013		0.705	1.010
WWAN Reduce Tx						
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 2 Tx	0.152	0.015	0.013		0.705	0.885
WWAN Full Tx						
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 1 Tx	1.098	0.05700		0.00013	0.00684	1.162
WWAN Reduce Tx	1.098		0.002		0.007	1.107
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 1 Tx	0.243	0.05700		0.00013	0.00684	0.307
WWAN Full Tx	0.243		0.002		0.007	0.252
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 2 Tx	1.098	0.05700	0.002		0.007	1.164
WWAN Reduce Tx						
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 2 Tx	0.243	0.05700	0.002		0.007	0.309
WWAN Full Tx						
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 1 Tx	0.400	0.400		0.400	0.122	1.322
WWAN Full Tx	0.400		0.400		0.122	0.922
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 2 Tx	0.400	0.400	0.400		0.122	1.322
WWAN Full Tx						
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 1 Tx	0.400	0.400		0.210	0.029	1.039
WWAN Full Tx	0.400		0.520		0.029	0.949
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 2 Tx	0.400	0.400	0.520		0.029	1.349
WWAN Full Tx						
UHF-RFID Tx						

Edge4 0mm, Wi-Fi 1 Tx	0.077	0.467		0.000	0.001	0.545
WWAN Full Tx UHF-RFID Tx	0.077		0.080		0.001	0.158
Edge4 0mm, Wi-Fi 2 Tx	0.077	0.467	0.080		0.001	0.625
WWAN Full Tx UHF-RFID Tx						
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.615	0.075		0.002	0.420	1.112
WWAN Reduce Tx UHF-RFID Tx	0.615		0.005		0.420	1.040
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.615	0.075	0.005		0.420	1.115
WWAN Reduce Tx UHF-RFID Tx						
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.018	0.00		0.000	0.614	0.633
WWAN Full Tx UHF-RFID Tx	0.018		0.014		0.614	0.646
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.018	0.00	0.014		0.614	0.647
WWAN Full Tx UHF-RFID Tx						
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.020	0.00		0.027	0.860	0.909
WWAN Full Tx UHF-RFID Tx	0.020		0.211		0.860	1.091
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.020	0.00	0.211		0.860	1.093
WWAN Full Tx UHF-RFID Tx						

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.4 Sum of the SAR for CDMA BC0, 1 & Wi-Fi 2.4 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	CDMA 0	CDMA 1	WiFi 2.4 GHz Main	WiFi 2.4 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.717		0.015		0.000	0.705	1.437
		0.318	0.015		0.000	0.705	1.038
	0.717			0.013		0.705	1.435
		0.318		0.013		0.705	1.036
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.484		0.015		0.000	0.705	1.204
		0.382	0.015		0.000	0.705	1.102
	0.484			0.013		0.705	1.202
		0.382		0.013		0.705	1.100
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.717		0.015	0.013		0.705	1.450
		0.318	0.015	0.013		0.705	1.051
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.484		0.015	0.013		0.705	1.217
		0.382	0.015	0.013		0.705	1.115
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.171		0.057		0.00013	0.00684	1.235
		1.175	0.057		0.00013	0.00684	1.239
	1.171			0.00204		0.007	1.180
		1.175		0.00204		0.007	1.184
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.293		0.057		0.00013	0.00684	0.357
		0.662	0.057		0.00013	0.00684	0.726
	0.293			0.00204		0.007	0.302
		0.662		0.00204		0.007	0.671
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.171		0.057	0.00204		0.007	1.237
		1.175	0.057	0.00204		0.007	1.241
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.293		0.057	0.00204		0.007	0.359
		0.662	0.057	0.00204		0.007	0.728
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.520		0.029	0.949
		0.400		0.520		0.029	0.949
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.520		0.029	1.349
		0.400	0.400	0.520		0.029	1.349

Edge4 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.121		0.467		0.000	0.001	0.589
		0.148	0.467		0.000	0.001	0.616
	0.121			0.080		0.001	0.202
		0.148		0.080		0.001	0.229
Edge4 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.121		0.467	0.080		0.001	0.669
		0.148	0.467	0.080		0.001	0.696
Edge1 tilt 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.479		0.075		0.002	0.420	0.976
		0.674	0.075		0.002	0.420	1.171
	0.479			0.005		0.420	0.904
Edge1 tilt 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx		0.674		0.005		0.420	1.099
	0.479		0.075	0.005		0.420	0.979
Edge1 tilt 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx		0.674	0.075	0.005		0.420	1.174
	0.005		0.001		0.000	0.614	0.620
Edge2 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx		0.029	0.001		0.000	0.614	0.644
	0.005			0.014		0.614	0.633
		0.029		0.014		0.614	0.657
Edge2 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.005		0.001	0.014		0.614	0.634
		0.029	0.001	0.014		0.614	0.658
Edge3 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.044		0.0025		0.027	0.860	0.933
		0.040	0.0025		0.027	0.860	0.929
	0.044			0.211		0.860	1.115
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx		0.040		0.211		0.860	1.111
	0.044		0.0025	0.211		0.860	1.117
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx		0.040	0.0025	0.211		0.860	1.113

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.5 Sum of the SAR for CDMA BC10 & Wi-Fi 2.4 GHz Band

Test Position	Data					Σ 1-g SAR (mW/g)
	CDMA 10	WiFi 2.4 GHz Main	WiFi 2.4 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx	0.775	0.015		0.000	0.705	1.495
WWAN Reduce Tx UHF-RFID Tx	0.775		0.013		0.705	1.493
Rear2 4.2mm, Wi-Fi 1 Tx	0.491	0.015		0.000	0.705	1.211
WWAN Full Tx UHF-RFID Tx	0.491		0.013		0.705	1.209
Rear2 0mm, Wi-Fi 2 Tx	0.775	0.015	0.013		0.705	1.508
WWAN Reduce Tx UHF-RFID Tx	0.775		0.013		0.705	1.508
Rear2 4.2mm, Wi-Fi 2 Tx	0.491	0.015	0.013		0.705	1.224
WWAN Full Tx UHF-RFID Tx	0.491		0.013		0.705	1.224
Edge 1 0mm, Wi-Fi 1 Tx	1.15	0.05700		0.00013	0.00684	1.214
WWAN Reduce Tx UHF-RFID Tx	1.15		0.002		0.007	1.159
Edge 1 21mm, Wi-Fi 1 Tx	0.378	0.05700		0.00013	0.00684	0.442
WWAN Full Tx UHF-RFID Tx	0.378		0.002		0.007	0.387
Edge 1 0mm, Wi-Fi 2 Tx	1.15	0.05700	0.002		0.007	1.216
WWAN Reduce Tx UHF-RFID Tx	1.15		0.002		0.007	1.216
Edge 1 21mm, Wi-Fi 2 Tx	0.378	0.05700	0.002		0.007	0.444
WWAN Full Tx UHF-RFID Tx	0.378		0.002		0.007	0.444
Edge2 0mm, Wi-Fi 1 Tx	0.400	0.400		0.400	0.122	1.322
WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx	0.400	0.400	0.400		0.122	1.322
WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx	0.400	0.400		0.210	0.029	1.039
WWAN Full Tx UHF-RFID Tx	0.400		0.520		0.029	0.949
Edge3 0mm, Wi-Fi 2 Tx	0.400	0.400	0.520		0.029	1.349
WWAN Full Tx UHF-RFID Tx	0.400		0.520		0.029	1.349

Edge4 0mm, Wi-Fi 1 Tx	0.176	0.467		0.000	0.001	0.644
WWAN Full Tx UHF-RFID Tx	0.176		0.080		0.001	0.257
Edge4 0mm, Wi-Fi 2 Tx	0.176	0.467	0.080		0.001	0.724
WWAN Full Tx UHF-RFID Tx						
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.524	0.075		0.002	0.420	1.021
WWAN Reduce Tx UHF-RFID Tx	0.524		0.005		0.420	0.949
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.524	0.075	0.005		0.420	1.024
WWAN Reduce Tx UHF-RFID Tx						
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.000	0.00		0.000	0.614	0.615
WWAN Full Tx UHF-RFID Tx	0.000		0.014		0.614	0.628
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.000	0.00	0.014		0.614	0.629
WWAN Full Tx UHF-RFID Tx						
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.035	0.00		0.027	0.860	0.924
WWAN Full Tx UHF-RFID Tx	0.035		0.211		0.860	1.106
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.035	0.00	0.211		0.860	1.108
WWAN Full Tx UHF-RFID Tx						

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.6 Sum of the SAR for LTE Band 2, 4 & Wi-Fi 2.4 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 2	LTE 4	WiFi 2.4 GHz Main	WiFi 2.4 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.262		0.015		0.000	0.705	0.982
		0.165	0.015		0.000	0.705	0.885
	0.262			0.013		0.705	0.980
		0.165		0.013		0.705	0.883
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.214		0.015		0.000	0.705	0.934
		0.261	0.015		0.000	0.705	0.981
	0.214			0.013		0.705	0.932
		0.261		0.013		0.705	0.979
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.262		0.015	0.013		0.705	0.995
		0.165	0.015	0.013		0.705	0.898
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.214		0.015	0.013		0.705	0.947
		0.261	0.015	0.013		0.705	0.994
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.046		0.057		0.00013	0.00684	1.110
		1.038	0.057		0.00013	0.00684	1.102
	1.046			0.00204		0.007	1.055
		1.038		0.00204		0.007	1.047
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.433		0.057		0.00013	0.00684	0.497
		0.409	0.057		0.00013	0.00684	0.473
	0.433			0.00204		0.007	0.442
		0.409		0.00204		0.007	0.418
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.046		0.057	0.00204		0.007	1.112
		1.038	0.057	0.00204		0.007	1.104
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.433		0.057	0.00204		0.007	0.499
		0.409	0.057	0.00204		0.007	0.475
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.520		0.029	0.949
		0.400		0.520		0.029	0.949
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.520		0.029	1.349
		0.400	0.400	0.520		0.029	1.349

Edge4 0mm, Wi-Fi 1 Tx	0.356		0.467		0.000	0.001	0.824
		0.199	0.467		0.000	0.001	0.667
WWAN Full Tx	0.356			0.080		0.001	0.437
		0.199		0.080		0.001	0.280
Edge4 0mm, Wi-Fi 2 Tx	0.356		0.467	0.080		0.001	0.904
		0.199	0.467	0.080		0.001	0.747
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.461		0.075		0.002	0.420	0.958
		0.264	0.075		0.002	0.420	0.761
WWAN Reduce Tx	0.461			0.005		0.420	0.886
		0.264		0.005		0.420	0.689
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.461		0.075	0.005		0.420	0.961
		0.264	0.075	0.005		0.420	0.764
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.008		0.001		0.000	0.614	0.623
		0.016	0.001		0.000	0.614	0.631
WWAN Full Tx	0.008			0.014		0.614	0.636
		0.016		0.014		0.614	0.644
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.008		0.001	0.014		0.614	0.637
		0.016	0.001	0.014		0.614	0.645
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.000		0.0025		0.027	0.860	0.889
		0.037	0.0025		0.027	0.860	0.926
WWAN Full Tx	0.000			0.211		0.860	1.071
		0.037		0.211		0.860	1.108
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.000		0.0025	0.211		0.860	1.073
		0.037	0.0025	0.211		0.860	1.110

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.7 Sum of the SAR for LTE Band 5, 13 & Wi-Fi 2.4 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 5	LTE 13	WiFi 2.4 GHz Main	WiFi 2.4 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.744		0.015		0.000	0.705	1.464
		0.746	0.015		0.000	0.705	1.466
	0.744			0.013		0.705	1.462
		0.746		0.013		0.705	1.464
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.359		0.015		0.000	0.705	1.079
		0.359	0.015		0.000	0.705	1.079
	0.359			0.013		0.705	1.077
		0.359		0.013		0.705	1.077
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.744		0.015	0.013		0.705	1.477
		0.746	0.015	0.013		0.705	1.479
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.359		0.015	0.013		0.705	1.092
		0.359	0.015	0.013		0.705	1.092
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.159		0.057		0.00013	0.00684	1.223
		1.124	0.057		0.00013	0.00684	1.188
	1.159			0.00204		0.007	1.168
		1.124		0.00204		0.007	1.133
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.284		0.057		0.00013	0.00684	0.348
		0.244	0.057		0.00013	0.00684	0.308
	0.284			0.00204		0.007	0.293
		0.244		0.00204		0.007	0.253
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.159		0.057	0.00204		0.007	1.225
		1.124	0.057	0.00204		0.007	1.190
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.284		0.057	0.00204		0.007	0.350
		0.244	0.057	0.00204		0.007	0.310
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.520		0.029	0.949
		0.400		0.520		0.029	0.949
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.520		0.029	1.349
		0.400	0.400	0.520		0.029	1.349

Edge4 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.123		0.467		0.000	0.001	0.591
		0.134	0.467		0.000	0.001	0.602
	0.123			0.080		0.001	0.204
		0.134		0.080		0.001	0.215
Edge4 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.123		0.467	0.080		0.001	0.671
		0.134	0.467	0.080		0.001	0.682
Edge1 tilt 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.505		0.075		0.002	0.420	1.002
		0.799	0.075		0.002	0.420	1.296
	0.505			0.005		0.420	0.930
		0.799		0.005		0.420	1.224
Edge1 tilt 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.505		0.075	0.005		0.420	1.005
		0.799	0.075	0.005		0.420	1.299
Edge2 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.000		0.001		0.000	0.614	0.615
		0.042	0.001		0.000	0.614	0.657
	0.000			0.014		0.614	0.628
		0.042		0.014		0.614	0.670
Edge2 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.000		0.001	0.014		0.614	0.629
		0.042	0.001	0.014		0.614	0.671
Edge3 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.030		0.0025		0.027	0.860	0.919
		0.045	0.0025		0.027	0.860	0.934
	0.030			0.211		0.860	1.101
		0.045		0.211		0.860	1.116
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.030		0.0025	0.211		0.860	1.103
		0.045	0.0025	0.211		0.860	1.118

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.8 Sum of the SAR for LTE Band 25 & Wi-Fi 2.4 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 17	LTE 25	WiFi 2.4 GHz Main	WiFi 2.4 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.469		0.015		0.000	0.705	1.189
		0.289	0.015		0.000	0.705	1.009
	0.469			0.013		0.705	1.187
		0.289		0.013		0.705	1.007
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.139		0.015		0.000	0.705	0.859
		0.304	0.015		0.000	0.705	1.024
	0.139			0.013		0.705	0.857
		0.304		0.013		0.705	1.022
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.469		0.015	0.013		0.705	1.202
		0.289	0.015	0.013		0.705	1.022
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.139		0.015	0.013		0.705	0.872
		0.304	0.015	0.013		0.705	1.037
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.982		0.057		0.00013	0.00684	1.046
		1.027	0.057		0.00013	0.00684	1.091
	0.982			0.00204		0.007	0.991
		1.027		0.00204		0.007	1.036
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.057		0.00013	0.00684	0.190
		0.440	0.057		0.00013	0.00684	0.504
	0.126			0.00204		0.007	0.135
		0.440		0.00204		0.007	0.449
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.982		0.057	0.00204		0.007	1.048
		1.027	0.057	0.00204		0.007	1.093
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.057	0.00204		0.007	0.192
		0.440	0.057	0.00204		0.007	0.506
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.520		0.029	0.949
		0.400		0.520		0.029	0.949
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.520		0.029	1.349
		0.400	0.400	0.520		0.029	1.349

Edge4 0mm, Wi-Fi 1 Tx	0.106		0.467		0.000	0.001	0.574
		0.286	0.467		0.000	0.001	0.754
WWAN Full Tx	0.106			0.080		0.001	0.187
		0.286		0.080		0.001	0.367
Edge4 0mm, Wi-Fi 2 Tx	0.106		0.467	0.080		0.001	0.654
		0.286	0.467	0.080		0.001	0.834
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.757		0.075		0.002	0.420	1.254
		0.522	0.075		0.002	0.420	1.019
WWAN Reduce Tx	0.757			0.005		0.420	1.182
		0.522		0.005		0.420	0.947
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.757		0.075	0.005		0.420	1.257
		0.522	0.075	0.005		0.420	1.022
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.065		0.001		0.000	0.614	0.680
		0.024	0.001		0.000	0.614	0.639
WWAN Full Tx	0.065			0.014		0.614	0.693
		0.024		0.014		0.614	0.652
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.065		0.001	0.014		0.614	0.694
		0.024	0.001	0.014		0.614	0.653
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.051		0.0025		0.027	0.860	0.940
		0.014	0.0025		0.027	0.860	0.903
WWAN Full Tx	0.051			0.211		0.860	1.122
		0.014		0.211		0.860	1.085
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.051		0.0025	0.211		0.860	1.124
		0.014	0.0025	0.211		0.860	1.087

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.9 Sum of the SAR for GSM & Wi-Fi 5.2 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	GSM850	GSM1900	WiFi 5.2GHz Main	WiFi 5.2 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.643		0.027		0.000	0.705	1.375
		0.205	0.027		0.000	0.705	0.937
	0.643			0.035		0.705	1.383
		0.205		0.035		0.705	0.945
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.670		0.027		0.000	0.705	1.402
		0.256	0.027		0.000	0.705	0.988
	0.670			0.035		0.705	1.410
		0.256		0.035		0.705	0.996
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.643		0.027	0.035		0.705	1.410
		0.205	0.027	0.035		0.705	0.972
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.670		0.027	0.035		0.705	1.437
		0.256	0.027	0.035		0.705	1.023
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.193		0.032		0.00013	0.00684	1.232
		1.059	0.032		0.00013	0.00684	1.098
	1.193			0.01600		0.007	1.216
		1.059		0.01600		0.007	1.082
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.4813		0.032		0.00013	0.00684	0.520
		0.456	0.032		0.00013	0.00684	0.495
	0.4813			0.01600		0.007	0.504
		0.456		0.01600		0.007	0.479
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.193		0.032	0.01600		0.007	1.248
		1.059	0.032	0.01600		0.007	1.114
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.4813		0.032	0.01600		0.007	0.536
		0.456	0.032	0.01600		0.007	0.511
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.400		0.400	0.122	1.048
		0.400	0.400		0.400	0.122	1.322
	0.126			0.400		0.122	0.648
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.400	0.400		0.122	1.048
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.027		0.400		0.210	0.029	0.666
		0.400	0.400		0.210	0.029	1.039
	0.027			0.219		0.029	0.275
		0.400		0.219		0.029	0.648
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.027		0.400	0.219		0.029	0.675
		0.400	0.400	0.219		0.029	1.048

Edge4 0mm, Wi-Fi 1 Tx	0.197		0.236		0.000	0.001	0.434
		0.388	0.236		0.000	0.001	0.625
WWAN Full Tx	0.197			0.032		0.001	0.230
		0.388		0.032		0.001	0.421
Edge4 0mm, Wi-Fi 2 Tx	0.197		0.236	0.032		0.001	0.466
		0.388	0.236	0.032		0.001	0.657
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.757		0		0.002	0.420	1.179
		0.542	0		0.002	0.420	0.964
WWAN Reduce Tx	0.757			0.000		0.420	1.177
		0.542		0.000		0.420	0.962
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.757		0	0.000		0.420	1.177
		0.542	0	0.000		0.420	0.962
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.013		0		0.000	0.614	0.627
		0.014	0		0.000	0.614	0.628
WWAN Full Tx	0.013			0.000		0.614	0.627
		0.014		0.000		0.614	0.628
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.013		0	0.000		0.614	0.627
		0.014	0	0.000		0.614	0.628
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.065		0		0.027	0.860	0.951
		0.019	0		0.027	0.860	0.905
WWAN Full Tx	0.065			0.229		0.860	1.154
		0.019		0.229		0.860	1.108
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.065		0	0.229		0.860	1.154
		0.019	0	0.229		0.860	1.108

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.10 Sum of the SAR for W-CDMA Band V, IV & Wi-Fi 5.2 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	WCDMA V	WCDMA IV	WiFi 5.2GHz Main	WiFi 5.2 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.453		0.027		0.000	0.705	1.185
		0.178	0.027		0.000	0.705	0.910
	0.453			0.035		0.705	1.193
		0.178		0.035		0.705	0.918
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.217		0.027		0.000	0.705	0.949
		0.157	0.027		0.000	0.705	0.889
	0.217			0.035		0.705	0.957
		0.157		0.035		0.705	0.897
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.453		0.027	0.035		0.705	1.220
		0.178	0.027	0.035		0.705	0.945
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.217		0.027	0.035		0.705	0.984
		0.157	0.027	0.035		0.705	0.924
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.184		0.032		0.00013	0.00684	1.223
		1.108	0.032		0.00013	0.00684	1.147
	1.184			0.01600		0.007	1.207
		1.108		0.01600		0.007	1.131
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.151		0.032		0.00013	0.00684	0.190
		0.299	0.032		0.00013	0.00684	0.338
	0.151			0.01600		0.007	0.174
		0.299		0.01600		0.007	0.322
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.184		0.032	0.01600		0.007	1.239
		1.108	0.032	0.01600		0.007	1.163
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.151		0.032	0.01600		0.007	0.206
		0.299	0.032	0.01600		0.007	0.354
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.219		0.029	0.648
		0.400		0.219		0.029	0.648
Edge3 0mm, Wi-Fi 2 Tx WWANFull Tx UHF-RFID Tx	0.400		0.400	0.219		0.029	1.048
		0.400	0.400	0.219		0.029	1.048

Edge4 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.057		0.236		0.000	0.001	0.294
		0.174	0.236		0.000	0.001	0.411
	0.057			0.032		0.001	0.090
		0.174		0.032		0.001	0.207
Edge4 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.057		0.236	0.032		0.001	0.326
		0.174	0.236	0.032		0.001	0.443
	0.414		0.000		0.002	0.420	0.836
		0.390	0.000		0.002	0.420	0.812
Edge1 tilt 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.414			0.000		0.420	0.834
		0.390		0.000		0.420	0.810
	0.414		0.000	0.000		0.420	0.834
		0.390	0.000	0.000		0.420	0.810
Edge2 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.008		0.000		0.000	0.614	0.622
		0.022	0.000		0.000	0.614	0.636
	0.008			0.000		0.614	0.622
		0.022		0.000		0.614	0.636
Edge2 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.008		0.000	0.000		0.614	0.622
		0.022	0.000	0.000		0.614	0.636
	0.021		0.000		0.027	0.860	0.907
		0.023	0.000		0.027	0.860	0.909
Edge3 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.021			0.229		0.860	1.110
		0.023		0.229		0.860	1.112
	0.021		0.000	0.229		0.860	1.110
		0.023	0.000	0.229		0.860	1.112
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.021		0.000	0.229		0.860	1.110
		0.023	0.000	0.229		0.860	1.112

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.11 Sum of the SAR for W-CDMA Band II & Wi-Fi 5.2 GHz Band

Test Position	Data					Σ 1-g SAR (mW/g)
	WCDMA II	WiFi 5.2GHz Main	WiFi 5.2 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx	0.277	0.027		0.000	0.705	1.009
WWAN Reduce Tx	0.277		0.035		0.705	1.017
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 1 Tx	0.152	0.027		0.000	0.705	0.884
WWAN Full Tx	0.152		0.035		0.705	0.892
UHF-RFID Tx						
Rear2 0mm, Wi-Fi 2 Tx	0.277	0.027	0.035		0.705	1.044
WWAN Reduce Tx						
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 2 Tx	0.152	0.027	0.035		0.705	0.919
WWAN Full Tx						
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 1 Tx	1.098	0.03200		0.00013	0.00684	1.137
WWAN Reduce Tx	1.098		0.016		0.007	1.121
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 1 Tx	0.243	0.03200		0.00013	0.00684	0.282
WWAN Full Tx	0.243		0.016		0.007	0.266
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 2 Tx	1.098	0.03200	0.016		0.007	1.153
WWAN Reduce Tx						
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 2 Tx	0.243	0.03200	0.016		0.007	0.298
WWAN Full Tx						
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 1 Tx	0.400	0.400		0.400	0.122	1.322
WWAN Full Tx	0.400		0.400		0.122	0.922
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 2 Tx	0.400	0.400	0.400		0.122	1.322
WWAN Full Tx						
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 1 Tx	0.400	0.400		0.210	0.029	1.039
WWAN Full Tx	0.400		0.219		0.029	0.648
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 2 Tx	0.400	0.400	0.219		0.029	1.048
WWAN Full Tx						
UHF-RFID Tx						

Edge4 0mm, Wi-Fi 1 Tx	0.077	0.236		0.000	0.001	0.314
WWAN Full Tx UHF-RFID Tx	0.077		0.032		0.001	0.110
Edge4 0mm, Wi-Fi 2 Tx	0.077	0.236	0.032		0.001	0.346
WWAN Full Tx UHF-RFID Tx						
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.615	0.000		0.002	0.420	1.037
WWAN Reduce Tx UHF-RFID Tx	0.615		0.000		0.420	1.035
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.615	0.000	0.000		0.420	1.035
WWAN Reduce Tx UHF-RFID Tx						
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.018	0.00		0.000	0.614	0.632
WWAN Full Tx UHF-RFID Tx	0.018		0.000		0.614	0.632
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.018	0.00	0.000		0.614	0.632
WWAN Full Tx UHF-RFID Tx						
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.020	0.00		0.027	0.860	0.906
WWAN Full Tx UHF-RFID Tx	0.020		0.229		0.860	1.109
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.020	0.00	0.229		0.860	1.109
WWAN Full Tx UHF-RFID Tx						

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit.
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.12 Sum of the SAR for CDMA BC0, 1 & Wi-Fi 5.2 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	CDMA 0	CDMA 1	WiFi 5.2GHz Main	WiFi 5.2 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.717		0.027		0.000	0.705	1.449
		0.318	0.027		0.000	0.705	1.050
	0.717			0.035		0.705	1.457
		0.318		0.035		0.705	1.058
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.484		0.027		0.000	0.705	1.216
		0.382	0.027		0.000	0.705	1.114
	0.484			0.035		0.705	1.224
		0.382		0.035		0.705	1.122
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.717		0.027	0.035		0.705	1.484
		0.318	0.027	0.035		0.705	1.085
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.484		0.027	0.035		0.705	1.251
		0.382	0.027	0.035		0.705	1.149
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.171		0.032		0.00013	0.00684	1.210
		1.175	0.032		0.00013	0.00684	1.214
	1.171			0.016		0.007	1.194
		1.175		0.016		0.007	1.198
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.293		0.032		0.00013	0.00684	0.332
		0.662	0.032		0.00013	0.00684	0.701
	0.293			0.016		0.007	0.316
		0.662		0.016		0.007	0.685
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.171		0.032	0.016		0.007	1.226
		1.175	0.032	0.016		0.007	1.230
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.293		0.032	0.016		0.007	0.348
		0.662	0.032	0.016		0.007	0.717
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.219		0.029	0.648
		0.400		0.219		0.029	0.648
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.219		0.029	1.048
		0.400	0.400	0.219		0.029	1.048

Edge4 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.121		0.236		0.000	0.001	0.358
		0.148	0.236		0.000	0.001	0.385
	0.121			0.032		0.001	0.154
		0.148		0.032		0.001	0.181
Edge4 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.121		0.236	0.032		0.001	0.390
		0.148	0.236	0.032		0.001	0.417
Edge1 tilt 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.479		0.000		0.002	0.420	0.901
		0.674	0.000		0.002	0.420	1.096
	0.479			0.000		0.420	0.899
		0.674		0.000		0.420	1.094
Edge1 tilt 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.479		0.000	0.000		0.420	0.899
		0.674	0.000	0.000		0.420	1.094
Edge2 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.005		0.000		0.000	0.614	0.619
		0.029	0.000		0.000	0.614	0.643
	0.005			0.000		0.614	0.619
		0.029		0.000		0.614	0.643
Edge2 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.005		0.000	0.000		0.614	0.619
		0.029	0.000	0.000		0.614	0.643
Edge3 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.044		0.000		0.027	0.860	0.930
		0.040	0.000		0.027	0.860	0.926
	0.044			0.229		0.860	1.133
		0.040		0.229		0.860	1.129
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.044		0.000	0.229		0.860	1.133
		0.040	0.000	0.229		0.860	1.129

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.13 Sum of the SAR for CDMA BC10 & Wi-Fi 5.2 GHz Band

Test Position	Data					Σ 1-g SAR (mW/g)
	CDMA 10	WiFi 5.2GHz Main	WiFi 5.2 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx	0.775	0.027		0.000	0.705	1.507
WWAN Reduce Tx	0.775		0.035		0.705	1.515
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 1 Tx	0.491	0.027		0.000	0.705	1.223
WWAN Full Tx	0.491		0.035		0.705	1.231
UHF-RFID Tx						
Rear2 0mm, Wi-Fi 2 Tx	0.775	0.027	0.035		0.705	1.542
WWAN Reduce Tx						
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 2 Tx	0.491	0.027	0.035		0.705	1.258
WWAN Full Tx						
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 1 Tx	1.15	0.03200		0.00013	0.00684	1.189
WWAN Reduce Tx	1.15		0.016		0.007	1.173
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 1 Tx	0.378	0.03200		0.00013	0.00684	0.417
WWAN Full Tx	0.378		0.016		0.007	0.401
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 2 Tx	1.15	0.03200	0.016		0.007	1.205
WWAN Reduce Tx						
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 2 Tx	0.378	0.03200	0.016		0.007	0.433
WWAN Full Tx						
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 1 Tx	0.400	0.400		0.400	0.122	1.322
WWAN Full Tx	0.400		0.400		0.122	0.922
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 2 Tx	0.400	0.400	0.400		0.122	1.322
WWAN Full Tx						
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 1 Tx	0.400	0.400		0.210	0.029	1.039
WWAN Full Tx	0.400		0.219		0.029	0.648
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 2 Tx	0.400	0.400	0.219		0.029	1.048
WWAN Full Tx						
UHF-RFID Tx						

Edge4 0mm, Wi-Fi 1 Tx	0.176	0.236		0.000	0.001	0.413
WWAN Full Tx UHF-RFID Tx	0.176		0.032		0.001	0.209
Edge4 0mm, Wi-Fi 2 Tx	0.176	0.236	0.032		0.001	0.445
WWAN Full Tx UHF-RFID Tx						
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.524	0.000		0.002	0.420	0.946
WWAN Reduce Tx UHF-RFID Tx	0.524		0.000		0.420	0.944
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.524	0.000	0.000		0.420	0.944
WWAN Reduce Tx UHF-RFID Tx						
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.000	0.00		0.000	0.614	0.614
WWAN Full Tx UHF-RFID Tx	0.000		0.000		0.614	0.614
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.000	0.00	0.000		0.614	0.614
WWAN Full Tx UHF-RFID Tx						
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.035	0.00		0.027	0.860	0.921
WWAN Full Tx UHF-RFID Tx	0.035		0.229		0.860	1.124
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.035	0.00	0.229		0.860	1.124
WWAN Full Tx UHF-RFID Tx						

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.14 Sum of the SAR for LTE Band 2, 4 & Wi-Fi 5.2 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 2	LTE 4	WiFi 5.2GHz Main	WiFi 5.2 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.262		0.027		0.000	0.705	0.994
		0.165	0.027		0.000	0.705	0.897
	0.262			0.035		0.705	1.002
		0.165		0.035		0.705	0.905
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.214		0.027		0.000	0.705	0.946
		0.261	0.027		0.000	0.705	0.993
	0.214			0.035		0.705	0.954
		0.261		0.035		0.705	1.001
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.262		0.027	0.035		0.705	1.029
		0.165	0.027	0.035		0.705	0.932
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.214		0.027	0.035		0.705	0.981
		0.261	0.027	0.035		0.705	1.028
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.046		0.032		0.00013	0.00684	1.085
		1.038	0.032		0.00013	0.00684	1.077
	1.046			0.016		0.007	1.069
		1.038		0.016		0.007	1.061
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.433		0.032		0.00013	0.00684	0.472
		0.409	0.032		0.00013	0.00684	0.448
	0.433			0.016		0.007	0.456
		0.409		0.016		0.007	0.432
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.046		0.032	0.016		0.007	1.101
		1.038	0.032	0.016		0.007	1.093
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.433		0.032	0.016		0.007	0.488
		0.409	0.032	0.016		0.007	0.464
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.219		0.029	0.648
		0.400		0.219		0.029	0.648
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.219		0.029	1.048
		0.400	0.400	0.219		0.029	1.048

Edge4 0mm, Wi-Fi 1 Tx	0.356		0.236		0.000	0.001	0.593
		0.199	0.236		0.000	0.001	0.436
WWAN Full Tx	0.356			0.032		0.001	0.389
		0.199		0.032		0.001	0.232
Edge4 0mm, Wi-Fi 2 Tx	0.356		0.236	0.032		0.001	0.625
		0.199	0.236	0.032		0.001	0.468
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.461		0.000		0.002	0.420	0.883
		0.264	0.000		0.002	0.420	0.686
WWAN Reduce Tx	0.461			0.000		0.420	0.881
		0.264		0.000		0.420	0.684
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.461		0.000	0.000		0.420	0.881
		0.264	0.000	0.000		0.420	0.684
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.008		0.000		0.000	0.614	0.622
		0.016	0.000		0.000	0.614	0.630
WWAN Full Tx	0.008			0.000		0.614	0.622
		0.016		0.000		0.614	0.630
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.008		0.000	0.000		0.614	0.622
		0.016	0.000	0.000		0.614	0.630
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.000		0.000		0.027	0.860	0.886
		0.037	0.000		0.027	0.860	0.923
WWAN Full Tx	0.000			0.229		0.860	1.089
		0.037		0.229		0.860	1.126
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.000		0.000	0.229		0.860	1.089
		0.037	0.000	0.229		0.860	1.126

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.15 Sum of the SAR for LTE Band 5, 13 & Wi-Fi 5.2 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 5	LTE 13	WiFi 5.2GHz Main	WiFi 5.2 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.744		0.027		0.000	0.705	1.476
		0.746	0.027		0.000	0.705	1.478
	0.744			0.035		0.705	1.484
		0.746		0.035		0.705	1.486
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.359		0.027		0.000	0.705	1.091
		0.359	0.027		0.000	0.705	1.091
	0.359			0.035		0.705	1.099
		0.359		0.035		0.705	1.099
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.744		0.027	0.035		0.705	1.511
		0.746	0.027	0.035		0.705	1.513
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.359		0.027	0.035		0.705	1.126
		0.359	0.027	0.035		0.705	1.126
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.159		0.032		0.00013	0.00684	1.198
		1.124	0.032		0.00013	0.00684	1.163
	1.159			0.016		0.007	1.182
		1.124		0.016		0.007	1.147
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.284		0.032		0.00013	0.00684	0.323
		0.244	0.032		0.00013	0.00684	0.283
	0.284			0.016		0.007	0.307
		0.244		0.016		0.007	0.267
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.159		0.032	0.016		0.007	1.214
		1.124	0.032	0.016		0.007	1.179
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.284		0.032	0.016		0.007	0.339
		0.244	0.032	0.016		0.007	0.299
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.219		0.029	0.648
		0.400		0.219		0.029	0.648
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.219		0.029	1.048
		0.400	0.400	0.219		0.029	1.048

Edge4 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.123		0.236		0.000	0.001	0.360
		0.134	0.236		0.000	0.001	0.371
	0.123			0.032		0.001	0.156
		0.134		0.032		0.001	0.167
Edge4 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.123		0.236	0.032		0.001	0.392
		0.134	0.236	0.032		0.001	0.403
Edge1 tilt 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.505		0.000		0.002	0.420	0.927
		0.799	0.000		0.002	0.420	1.221
	0.505			0.000		0.420	0.925
Edge1 tilt 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx		0.799	0.000	0.000		0.420	1.219
	0.505		0.000	0.000		0.420	0.925
Edge2 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.000		0.000		0.000	0.614	0.614
		0.042	0.000		0.000	0.614	0.656
	0.000			0.000		0.614	0.614
		0.042		0.000		0.614	0.656
Edge2 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.000		0.000	0.000		0.614	0.614
		0.042	0.000	0.000		0.614	0.656
Edge3 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.030		0.000		0.027	0.860	0.916
		0.045	0.000		0.027	0.860	0.931
	0.030			0.229		0.860	1.119
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx		0.045		0.229		0.860	1.134
	0.030		0.000	0.229		0.860	1.119
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx		0.045	0.000	0.229		0.860	1.134
	0.030		0.000	0.229		0.860	1.119

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.16 Sum of the SAR for LTE Band 17, 25 & Wi-Fi 5.2 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 17	LTE 25	WiFi 5.2GHz Main	WiFi 5.2 GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.469		0.027		0.000	0.705	1.201
		0.289	0.027		0.000	0.705	1.021
	0.469			0.035		0.705	1.209
		0.289		0.035		0.705	1.029
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.139		0.027		0.000	0.705	0.871
		0.304	0.027		0.000	0.705	1.036
	0.139			0.035		0.705	0.879
		0.304		0.035		0.705	1.044
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.469		0.027	0.035		0.705	1.236
		0.289	0.027	0.035		0.705	1.056
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.139		0.027	0.035		0.705	0.906
		0.304	0.027	0.035		0.705	1.071
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.982		0.032		0.00013	0.00684	1.021
		1.027	0.032		0.00013	0.00684	1.066
	0.982			0.016		0.007	1.005
		1.027		0.016		0.007	1.050
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.032		0.00013	0.00684	0.165
		0.440	0.032		0.00013	0.00684	0.479
	0.126			0.016		0.007	0.149
		0.440		0.016		0.007	0.463
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.982		0.032	0.016		0.007	1.037
		1.027	0.032	0.016		0.007	1.082
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.032	0.016		0.007	0.181
		0.440	0.032	0.016		0.007	0.495
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.219		0.029	0.648
		0.400		0.219		0.029	0.648
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.219		0.029	1.048
		0.400	0.400	0.219		0.029	1.048

Edge4 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.106		0.236		0.000	0.001	0.343
		0.286	0.236		0.000	0.001	0.523
	0.106			0.032		0.001	0.139
		0.286		0.032		0.001	0.319
Edge4 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.106		0.236	0.032		0.001	0.375
		0.286	0.236	0.032		0.001	0.555
Edge1 tilt 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.757		0.000		0.002	0.420	1.179
		0.522	0.000		0.002	0.420	0.944
	0.757			0.000		0.420	1.177
		0.522		0.000		0.420	0.942
Edge1 tilt 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.757		0.000	0.000		0.420	1.177
		0.522	0.000	0.000		0.420	0.942
Edge2 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.065		0.000		0.000	0.614	0.679
		0.024	0.000		0.000	0.614	0.638
	0.065			0.000		0.614	0.679
		0.024		0.000		0.614	0.638
Edge2 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.065		0.000	0.000		0.614	0.679
		0.024	0.000	0.000		0.614	0.638
Edge3 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.051		0.000		0.027	0.860	0.937
		0.014	0.000		0.027	0.860	0.900
	0.051			0.229		0.860	1.140
		0.014		0.229		0.860	1.103
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.051		0.000	0.229		0.860	1.140
		0.014	0.000	0.229		0.860	1.103

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.17 Sum of the SAR for GSM & Wi-Fi 5.3 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	GSM850	GSM1900	WiFi 5.3GHz Main	WiFi 5.3GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.643		0.042		0.000	0.705	1.390
		0.205	0.042			0.705	0.952
	0.643			0.048		0.705	1.396
		0.205		0.048		0.705	0.958
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.670		0.042		0.000	0.705	1.417
		0.256	0.042		0.000	0.705	1.003
	0.670			0.048		0.705	1.423
		0.256		0.048		0.705	1.009
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.643		0.042	0.048		0.705	1.438
		0.205	0.042	0.048		0.705	1.000
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.670		0.042	0.048		0.705	1.465
		0.256	0.042	0.048		0.705	1.051
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.193		0.025		0.00013	0.00684	1.225
		1.059	0.025		0.00013	0.00684	1.091
	1.193			0.013		0.007	1.213
		1.059		0.013		0.007	1.079
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.4813		0.025		0.00013	0.00684	0.513
		0.456	0.025		0.00013	0.00684	0.488
	0.4813			0.013		0.007	0.501
		0.456		0.013		0.007	0.476
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.193		0.025	0.013		0.007	1.238
		1.059	0.025	0.013		0.007	1.104
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.4813		0.025	0.013		0.007	0.526
		0.456	0.025	0.013		0.007	0.501
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.400		0.400	0.122	1.048
		0.400	0.400		0.400	0.122	1.322
	0.126			0.400		0.122	0.648
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.400	0.400		0.122	1.048
		0.400	0.400	0.400		0.122	1.322
	0.126				0.210	0.029	0.666
		0.400	0.400		0.210	0.029	1.039
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.027			0.337		0.029	0.393
		0.400		0.337		0.029	0.766
	0.027		0.400	0.337		0.029	0.793
		0.400	0.400	0.337		0.029	1.166

Edge4 0mm, Wi-Fi 1 Tx	0.197		0.228		0.000	0.001	0.426
		0.388	0.228		0.000	0.001	0.617
WWAN Full Tx	0.197			0.039		0.001	0.237
		0.388		0.039		0.001	0.428
Edge4 0mm, Wi-Fi 2 Tx	0.197		0.228	0.039		0.001	0.465
		0.388	0.228	0.039		0.001	0.656
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.757		0.000		0.002	0.420	1.179
		0.542	0.000		0.002	0.420	0.964
WWAN Reduce Tx	0.757			0.000		0.420	1.177
		0.542		0.000		0.420	0.962
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.757		0.000	0.000		0.420	1.177
		0.542	0.000	0.000		0.420	0.962
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.013		0.000		0.000	0.614	0.627
		0.014	0.000		0.000	0.614	0.628
WWAN Full Tx	0.013			0.000		0.614	0.627
		0.014		0.000		0.614	0.628
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.013		0.000	0.000		0.614	0.627
		0.014	0.000	0.000		0.614	0.628
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.065		0.000		0.027	0.860	0.951
		0.019	0.000		0.027	0.860	0.905
WWAN Full Tx	0.065			0.293		0.860	1.218
		0.019		0.293		0.860	1.172
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.065		0.000	0.293		0.860	1.218
		0.019	0.000	0.293		0.860	1.172

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.18 Sum of the SAR for W-CDMA Band V, IV & Wi-Fi 5.3 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	WCDMA V	WCDMA IV	WiFi 5.3GHz Main	WiFi 5.3GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.453		0.042		0.000	0.705	1.200
		0.178	0.042		0.000	0.705	0.925
	0.453			0.048		0.705	1.206
		0.178		0.048		0.705	0.931
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.217		0.042		0.000	0.705	0.964
		0.157	0.042		0.000	0.705	0.904
	0.217			0.048		0.705	0.970
		0.157		0.048		0.705	0.910
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.453		0.042	0.048		0.705	1.248
		0.178	0.042	0.048		0.705	0.973
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.217		0.042	0.048		0.705	1.012
		0.157	0.042	0.048		0.705	0.952
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.184		0.025		0.00013	0.00684	1.216
		1.108	0.025		0.00013	0.00684	1.140
	1.184			0.013		0.007	1.204
		1.108		0.013		0.007	1.128
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.151		0.025		0.00013	0.00684	0.183
		0.299	0.025		0.00013	0.00684	0.331
	0.151			0.013		0.007	0.171
		0.299		0.013		0.007	0.319
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.184		0.025	0.013		0.007	1.229
		1.108	0.025	0.013		0.007	1.153
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.151		0.025	0.013		0.007	0.196
		0.299	0.025	0.013		0.007	0.344
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.337		0.029	0.766
		0.400		0.337		0.029	0.766
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.337		0.029	1.166
		0.400	0.400	0.337		0.029	1.166

Edge4 0mm, Wi-Fi 1 Tx	0.057		0.228		0.000	0.001	0.286
		0.174	0.228		0.000	0.001	0.403
WWAN Full Tx UHF-RFID Tx	0.057			0.039		0.001	0.097
		0.174		0.039		0.001	0.214
Edge4 0mm, Wi-Fi 2 Tx	0.057		0.228	0.039		0.001	0.325
		0.174	0.228	0.039		0.001	0.442
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.414		0.000		0.002	0.420	0.836
		0.390	0.000		0.002	0.420	0.812
WWAN Reduce Tx UHF-RFID Tx	0.414			0.000		0.420	0.834
		0.390		0.000		0.420	0.810
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.414		0.000	0.000		0.420	0.834
		0.390	0.000	0.000		0.420	0.810
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.008		0.000		0.000	0.614	0.622
		0.022	0.000		0.000	0.614	0.636
WWAN Full Tx UHF-RFID Tx	0.008			0.000		0.614	0.622
		0.022		0.000		0.614	0.636
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.008		0.000	0.000		0.614	0.622
		0.022	0.000	0.000		0.614	0.636
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.021		0.000		0.027	0.860	0.907
		0.023	0.000		0.027	0.860	0.909
WWAN Full Tx UHF-RFID Tx	0.021			0.293		0.860	1.174
		0.023		0.293		0.860	1.176
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.021		0.000	0.293		0.860	1.174
		0.023	0.000	0.293		0.860	1.176

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.19 Sum of the SAR for W-CDMA Band II & Wi-Fi 5.3 GHz Band

Test Position	Data					Σ 1-g SAR (mW/g)
	WCDMA II	WiFi 5.3GHz Main	WiFi 5.3GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx	0.277	0.042		0.000	0.705	1.024
WWAN Reduce Tx	0.277		0.048		0.705	1.030
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 1 Tx	0.152	0.042		0.000	0.705	0.899
WWAN Full Tx	0.152		0.048		0.705	0.905
UHF-RFID Tx						
Rear2 0mm, Wi-Fi 2 Tx	0.277	0.042	0.048		0.705	1.072
WWAN Reduce Tx						
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 2 Tx	0.152	0.042	0.048		0.705	0.947
WWAN Full Tx						
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 1 Tx	1.098	0.02500		0.00013	0.00684	1.130
WWAN Reduce Tx	1.098		0.013		0.007	1.118
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 1 Tx	0.243	0.02500		0.00013	0.00684	0.275
WWAN Full Tx	0.243		0.013		0.007	0.263
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 2 Tx	1.098	0.02500	0.013		0.007	1.143
WWAN Reduce Tx						
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 2 Tx	0.243	0.02500	0.013		0.007	0.288
WWAN Full Tx						
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 1 Tx	0.400	0.400		0.400	0.122	1.322
WWAN Full Tx	0.400		0.400		0.122	0.922
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 2 Tx	0.400	0.400	0.400		0.122	1.322
WWAN Full Tx						
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 1 Tx	0.400	0.400		0.210	0.029	1.039
WWAN Full Tx	0.400		0.337		0.029	0.766
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 2 Tx	0.400	0.400	0.337		0.029	1.166
WWAN Full Tx						
UHF-RFID Tx						

Edge4 0mm, Wi-Fi 1 Tx	0.077	0.228		0.000	0.001	0.306
WWAN Full Tx UHF-RFID Tx	0.077		0.039		0.001	0.117
Edge4 0mm, Wi-Fi 2 Tx	0.077	0.228	0.039		0.001	0.345
WWAN Full Tx UHF-RFID Tx						
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.615	0.000		0.002	0.420	1.037
WWAN Reduce Tx UHF-RFID Tx	0.615		0.000		0.420	1.035
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.615	0.000	0.000		0.420	1.035
WWAN Reduce Tx UHF-RFID Tx						
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.018	0.00		0.000	0.614	0.632
WWAN Full Tx UHF-RFID Tx	0.018		0.000		0.614	0.632
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.018	0.00	0.000		0.614	0.632
WWAN Full Tx UHF-RFID Tx						
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.020	0.00		0.027	0.860	0.906
WWAN Full Tx UHF-RFID Tx	0.020		0.293		0.860	1.173
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.020	0.00	0.293		0.860	1.173
WWAN Full Tx UHF-RFID Tx						

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.20 Sum of the SAR for CDMA BC0, 1 & Wi-Fi 5.3 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	CDMA 0	CDMA 1	WiFi 5.3GHz Main	WiFi 5.3GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.717		0.042		0.000	0.705	1.464
		0.318	0.042		0.000	0.705	1.065
	0.717			0.048		0.705	1.470
		0.318		0.048		0.705	1.071
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.484		0.042		0.000	0.705	1.231
		0.382	0.042		0.000	0.705	1.129
	0.484			0.048		0.705	1.237
		0.382		0.048		0.705	1.135
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.717		0.042	0.048		0.705	1.512
		0.318	0.042	0.048		0.705	1.113
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.484		0.042	0.048		0.705	1.279
		0.382	0.042	0.048		0.705	1.177
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.171		0.025		0.00013	0.00684	1.203
		1.175	0.025		0.00013	0.00684	1.207
	1.171			0.013		0.007	1.191
		1.175		0.013		0.007	1.195
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.293		0.025		0.00013	0.00684	0.325
		0.662	0.025		0.00013	0.00684	0.694
	0.293			0.013		0.007	0.313
		0.662		0.013		0.007	0.682
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.171		0.025	0.013		0.007	1.216
		1.175	0.025	0.013		0.007	1.220
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.293		0.025	0.013		0.007	0.338
		0.662	0.025	0.013		0.007	0.707
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.337		0.029	0.766
		0.400		0.337		0.029	0.766
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.337		0.029	1.166
		0.400	0.400	0.337		0.029	1.166

Edge4 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.121		0.228		0.000	0.001	0.350
		0.148	0.228		0.000	0.001	0.377
	0.121			0.039		0.001	0.161
		0.148		0.039		0.001	0.188
Edge4 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.121		0.228	0.039		0.001	0.389
		0.148	0.228	0.039		0.001	0.416
Edge1 tilt 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.479		0.000		0.002	0.420	0.901
		0.674	0.000		0.002	0.420	1.096
	0.479			0.000		0.420	0.899
		0.674		0.000		0.420	1.094
Edge1 tilt 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.479		0.000	0.000		0.420	0.899
		0.674	0.000	0.000		0.420	1.094
Edge2 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.005		0.000		0.000	0.614	0.619
		0.029	0.000		0.000	0.614	0.643
	0.005			0.000		0.614	0.619
		0.029		0.000		0.614	0.643
Edge2 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.005		0.000	0.000		0.614	0.619
		0.029	0.000	0.000		0.614	0.643
Edge3 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.044		0.000		0.027	0.860	0.930
		0.040	0.000		0.027	0.860	0.926
	0.044			0.293		0.860	1.197
		0.040		0.293		0.860	1.193
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.044		0.000	0.293		0.860	1.197
		0.040	0.000	0.293		0.860	1.193

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.21 Sum of the SAR for CDMA BC10 & Wi-Fi 5.3 GHz Band

Test Position	Data					Σ 1-g SAR (mW/g)
	CDMA 10	WiFi 5.3GHz Main	WiFi 5.3GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx	0.775	0.042		0.000	0.705	1.522
WWAN Reduce Tx	0.775		0.048		0.705	1.528
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 1 Tx	0.491	0.042		0.000	0.705	1.238
WWAN Full Tx	0.491		0.048		0.705	1.244
UHF-RFID Tx						
Rear2 0mm, Wi-Fi 2 Tx	0.775	0.042	0.048		0.705	1.570
WWAN Reduce Tx						
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 2 Tx	0.491	0.042	0.048		0.705	1.286
WWAN Full Tx						
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 1 Tx	1.15	0.02500		0.00013	0.00684	1.182
WWAN Reduce Tx	1.15		0.013		0.007	1.170
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 1 Tx	0.378	0.02500		0.00013	0.00684	0.410
WWAN Full Tx	0.378		0.013		0.007	0.398
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 2 Tx	1.15	0.02500	0.013		0.007	1.195
WWAN Reduce Tx						
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 2 Tx	0.378	0.02500	0.013		0.007	0.423
WWAN Full Tx						
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 1 Tx	0.400	0.400		0.400	0.122	1.322
WWAN Full Tx	0.400		0.400		0.122	0.922
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 2 Tx	0.400	0.400	0.400		0.122	1.322
WWAN Full Tx						
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 1 Tx	0.400	0.400		0.210	0.029	1.039
WWAN Full Tx	0.400		0.337		0.029	0.766
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 2 Tx	0.400	0.400	0.337		0.029	1.166
WWAN Full Tx						
UHF-RFID Tx						

Edge4 0mm, Wi-Fi 1 Tx	0.176	0.228		0.000	0.001	0.405
WWAN Full Tx UHF-RFID Tx	0.176		0.039		0.001	0.216
Edge4 0mm, Wi-Fi 2 Tx	0.176	0.228	0.039		0.001	0.444
WWAN Full Tx UHF-RFID Tx						
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.524	0.000		0.002	0.420	0.946
WWAN Reduce Tx UHF-RFID Tx	0.524		0.000		0.420	0.944
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.524	0.000	0.000		0.420	0.944
WWAN Reduce Tx UHF-RFID Tx						
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.000	0.00		0.000	0.614	0.614
WWAN Full Tx UHF-RFID Tx	0.000		0.000		0.614	0.614
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.000	0.00	0.000		0.614	0.614
WWAN Full Tx UHF-RFID Tx						
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.035	0.00		0.027	0.860	0.921
WWAN Full Tx UHF-RFID Tx	0.035		0.293		0.860	1.188
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.035	0.00	0.293		0.860	1.188
WWAN Full Tx UHF-RFID Tx						

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.22 Sum of the SAR for LTE Band 2, 4 & Wi-Fi 5.3 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 2	LTE 4	WiFi 5.3GHz Main	WiFi 5.3GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.262		0.042		0.000	0.705	1.009
		0.165	0.042		0.000	0.705	0.912
	0.262			0.048		0.705	1.015
		0.165		0.048		0.705	0.918
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.214		0.042		0.000	0.705	0.961
		0.261	0.042		0.000	0.705	1.008
	0.214			0.048		0.705	0.967
		0.261		0.048		0.705	1.014
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.262		0.042	0.048		0.705	1.057
		0.165	0.042	0.048		0.705	0.960
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.214		0.042	0.048		0.705	1.009
		0.261	0.042	0.048		0.705	1.056
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.046		0.025		0.00013	0.00684	1.078
		1.038	0.025		0.00013	0.00684	1.070
	1.046			0.013		0.007	1.066
		1.038		0.013		0.007	1.058
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.433		0.025		0.00013	0.00684	0.465
		0.409	0.025		0.00013	0.00684	0.441
	0.433			0.013		0.007	0.453
		0.409		0.013		0.007	0.429
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.046		0.025	0.013		0.007	1.091
		1.038	0.025	0.013		0.007	1.083
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.433		0.025	0.013		0.007	0.478
		0.409	0.025	0.013		0.007	0.454
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.337		0.029	0.766
		0.400		0.337		0.029	0.766
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.337		0.029	1.166
		0.400	0.400	0.337		0.029	1.166

Edge4 0mm, Wi-Fi 1 Tx	0.356		0.228		0.000	0.001	0.585
		0.199	0.228		0.000	0.001	0.428
WWAN Full Tx UHF-RFID Tx	0.356			0.039		0.001	0.396
		0.199		0.039		0.001	0.239
Edge4 0mm, Wi-Fi 2 Tx	0.356		0.228	0.039		0.001	0.624
		0.199	0.228	0.039		0.001	0.467
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.461		0.000		0.002	0.420	0.883
		0.264	0.000		0.002	0.420	0.686
WWAN Reduce Tx UHF-RFID Tx	0.461			0.000		0.420	0.881
		0.264		0.000		0.420	0.684
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.461		0.000	0.000		0.420	0.881
		0.264	0.000	0.000		0.420	0.684
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.008		0.000		0.000	0.614	0.622
		0.016	0.000		0.000	0.614	0.630
WWAN Full Tx UHF-RFID Tx	0.008			0.000		0.614	0.622
		0.016		0.000		0.614	0.630
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.008		0.000	0.000		0.614	0.622
		0.016	0.000	0.000		0.614	0.630
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.000		0.000		0.027	0.860	0.886
		0.037	0.000		0.027	0.860	0.923
WWAN Full Tx UHF-RFID Tx	0.000			0.293		0.860	1.153
		0.037		0.293		0.860	1.190
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.000		0.000	0.293		0.860	1.153
		0.037	0.000	0.293		0.860	1.190

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.23 Sum of the SAR for LTE Band 5, 13 & Wi-Fi 5.3 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 5	LTE 13	WiFi 5.3GHz Main	WiFi 5.3GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.744		0.042		0.000	0.705	1.491
		0.746	0.042		0.000	0.705	1.493
	0.744			0.048		0.705	1.497
		0.746		0.048		0.705	1.499
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.359		0.042		0.000	0.705	1.106
		0.359	0.042		0.000	0.705	1.106
	0.359			0.048		0.705	1.112
		0.359		0.048		0.705	1.112
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.744		0.042	0.048		0.705	1.539
		0.746	0.042	0.048		0.705	1.541
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.359		0.042	0.048		0.705	1.154
		0.359	0.042	0.048		0.705	1.154
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.159		0.025		0.00013	0.00684	1.191
		1.124	0.025		0.00013	0.00684	1.156
	1.159			0.013		0.007	1.179
		1.124		0.013		0.007	1.144
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.284		0.025		0.00013	0.00684	0.316
		0.244	0.025		0.00013	0.00684	0.276
	0.284			0.013		0.007	0.304
		0.244		0.013		0.007	0.264
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.159		0.025	0.013		0.007	1.204
		1.124	0.025	0.013		0.007	1.169
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.284		0.025	0.013		0.007	0.329
		0.244	0.025	0.013		0.007	0.289
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.337		0.029	0.766
		0.400		0.337		0.029	0.766
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.337		0.029	1.166
		0.400	0.400	0.337		0.029	1.166

Edge4 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.123		0.228		0.000	0.001	0.352
		0.134	0.228		0.000	0.001	0.363
	0.123			0.039		0.001	0.163
		0.134		0.039		0.001	0.174
Edge4 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.123		0.228	0.039		0.001	0.391
		0.134	0.228	0.039		0.001	0.402
Edge1 tilt 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.505		0.000		0.002	0.420	0.927
		0.799	0.000		0.002	0.420	1.221
	0.505			0.000		0.420	0.925
		0.799		0.000		0.420	1.219
Edge1 tilt 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.505		0.000	0.000		0.420	0.925
		0.799	0.000	0.000		0.420	1.219
Edge2 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.000		0.000		0.000	0.614	0.614
		0.042	0.000		0.000	0.614	0.656
	0.000			0.000		0.614	0.614
		0.042		0.000		0.614	0.656
Edge2 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.000		0.000	0.000		0.614	0.614
		0.042	0.000	0.000		0.614	0.656
Edge3 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.030		0.000		0.027	0.860	0.916
		0.045	0.000		0.027	0.860	0.931
	0.030			0.293		0.860	1.183
		0.045		0.293		0.860	1.198
Edge3 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.030		0.000	0.293		0.860	1.183
		0.045	0.000	0.293		0.860	1.198

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.24 Sum of the SAR for LTE Band 17, 25 & Wi-Fi 5.3 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 17	LTE 25	WiFi 5.3GHz Main	WiFi 5.3GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.469		0.042		0.000	0.705	1.216
		0.289	0.042		0.000	0.705	1.036
	0.469			0.048		0.705	1.222
		0.289		0.048		0.705	1.042
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.139		0.042		0.000	0.705	0.886
		0.304	0.042		0.000	0.705	1.051
	0.139			0.048		0.705	0.892
		0.304		0.048		0.705	1.057
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.469		0.042	0.048		0.705	1.264
		0.289	0.042	0.048		0.705	1.084
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.139		0.042	0.048		0.705	0.934
		0.304	0.042	0.048		0.705	1.099
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.982		0.025		0.00013	0.00684	1.014
		1.027	0.025		0.00013	0.00684	1.059
	0.982			0.013		0.007	1.002
		1.027		0.013		0.007	1.047
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.025		0.00013	0.00684	0.158
		0.440	0.025		0.00013	0.00684	0.472
	0.126			0.013		0.007	0.146
		0.440		0.013		0.007	0.460
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.982		0.025	0.013		0.007	1.027
		1.027	0.025	0.013		0.007	1.072
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.025	0.013		0.007	0.171
		0.440	0.025	0.013		0.007	0.485
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.337		0.029	0.766
		0.400		0.337		0.029	0.766
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.337		0.029	1.166
		0.400	0.400	0.337		0.029	1.166

Edge4 0mm, Wi-Fi 1 Tx	0.106		0.228		0.000	0.001	0.335
		0.286	0.228		0.000	0.001	0.515
WWAN Full Tx	0.106			0.039		0.001	0.146
		0.286		0.039		0.001	0.326
Edge4 0mm, Wi-Fi 2 Tx	0.106		0.228	0.039		0.001	0.374
		0.286	0.228	0.039		0.001	0.554
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.757		0.000		0.002	0.420	1.179
		0.522	0.000		0.002	0.420	0.944
WWAN Reduce Tx	0.757			0.000		0.420	1.177
		0.522		0.000		0.420	0.942
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.757		0.000	0.000		0.420	1.177
		0.522	0.000	0.000		0.420	0.942
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.065		0.000		0.000	0.614	0.679
		0.024	0.000		0.000	0.614	0.638
WWAN Full Tx	0.065			0.000		0.614	0.679
		0.024		0.000		0.614	0.638
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.065		0.000	0.000		0.614	0.679
		0.024	0.000	0.000		0.614	0.638
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.051		0.000		0.027	0.860	0.937
		0.014	0.000		0.027	0.860	0.900
WWAN Full Tx	0.051			0.293		0.860	1.204
		0.014		0.293		0.860	1.167
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.051		0.000	0.293		0.860	1.204
		0.014	0.000	0.293		0.860	1.167

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.25 Sum of the SAR for GSM & Wi-Fi 5.6 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	GSM850	GSM1900	WiFi 5.5GHz Main	WiFi 5.5GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.643		0.044		0.000	0.705	1.392
		0.205	0.044		0.000	0.705	0.954
	0.643			0.066		0.705	1.414
		0.205		0.066		0.705	0.976
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.670		0.044		0.000	0.705	1.419
		0.256	0.044		0.000	0.705	1.005
	0.670			0.066		0.705	1.441
		0.256		0.066		0.705	1.027
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.643		0.044	0.066		0.705	1.458
		0.205	0.044	0.066		0.705	1.020
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.670		0.044	0.066		0.705	1.485
		0.256	0.044	0.066		0.705	1.071
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.193		0.038		0.00013	0.00684	1.238
		1.059	0.038		0.00013	0.00684	1.104
	1.193			0.018		0.007	1.218
		1.059		0.018		0.007	1.084
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.4813		0.038		0.00013	0.00684	0.526
		0.456	0.038		0.00013	0.00684	0.501
	0.4813			0.018		0.007	0.506
		0.456		0.018		0.007	0.481
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.193		0.038	0.018		0.007	1.256
		1.059	0.038	0.018		0.007	1.122
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.4813		0.038	0.018		0.007	0.544
		0.456	0.038	0.018		0.007	0.519
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.400		0.400	0.122	1.048
		0.400	0.400		0.400	0.122	1.322
	0.126			0.400		0.122	0.648
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.400	0.400		0.122	1.048
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.027		0.400		0.210	0.029	0.666
		0.400	0.400		0.210	0.029	1.039
	0.027			0.312		0.029	0.368
		0.400		0.312		0.029	0.741
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.027		0.400	0.312		0.029	0.768
		0.400	0.400	0.312		0.029	1.141

Edge4 0mm, Wi-Fi 1 Tx	0.197		0.306		0.000	0.001	0.504
		0.388	0.306		0.000	0.001	0.695
WWAN Full Tx	0.197			0.026		0.001	0.224
		0.388		0.026		0.001	0.415
Edge4 0mm, Wi-Fi 2 Tx	0.197		0.306	0.026		0.001	0.530
		0.388	0.306	0.026		0.001	0.721
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.757		0.065		0.002	0.420	1.244
		0.542	0.065		0.002	0.420	1.029
WWAN Reduce Tx	0.757			0.000		0.420	1.177
		0.542		0.000		0.420	0.962
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.757		0.065	0.000		0.420	1.242
		0.542	0.065	0.000		0.420	1.027
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.013		0.000		0.000	0.614	0.628
		0.014	0.000		0.000	0.614	0.629
WWAN Full Tx	0.013			0.000		0.614	0.627
		0.014		0.000		0.614	0.628
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.013		0.000	0.000		0.614	0.628
		0.014	0.000	0.000		0.614	0.629
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.065		0.000		0.027	0.860	0.951
		0.019	0.000		0.027	0.860	0.905
WWAN Full Tx	0.065			0.249		0.860	1.174
		0.019		0.249		0.860	1.128
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.065		0.000	0.249		0.860	1.174
		0.019	0.000	0.249		0.860	1.128

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.26 Sum of the SAR for W-CDMA Band V, IV & Wi-Fi 5.6GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	WCDMA V	WCDMA IV	WiFi 5.5GHz Main	WiFi 5.5GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.453		0.044		0.000	0.705	1.202
		0.178	0.044		0.000	0.705	0.927
	0.453			0.066		0.705	1.224
		0.178		0.066		0.705	0.949
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.217		0.044		0.000	0.705	0.966
		0.157	0.044		0.000	0.705	0.906
	0.217			0.066		0.705	0.988
		0.157		0.066		0.705	0.928
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.453		0.044	0.066		0.705	1.268
		0.178	0.044	0.066		0.705	0.993
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.217		0.044	0.066		0.705	1.032
		0.157	0.044	0.066		0.705	0.972
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.184		0.038		0.00013	0.00684	1.229
		1.108	0.038		0.00013	0.00684	1.153
	1.184			0.018		0.007	1.209
		1.108		0.018		0.007	1.133
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.151		0.038		0.00013	0.00684	0.196
		0.299	0.038		0.00013	0.00684	0.344
	0.151			0.018		0.007	0.176
		0.299		0.018		0.007	0.324
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.184		0.038	0.018		0.007	1.247
		1.108	0.038	0.018		0.007	1.171
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.151		0.038	0.018		0.007	0.214
		0.299	0.038	0.018		0.007	0.362
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.312		0.029	0.741
		0.400		0.312		0.029	0.741
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.312		0.029	1.141
		0.400	0.400	0.312		0.029	1.141

Edge4 0mm, Wi-Fi 1 Tx	0.057		0.306		0.000	0.001	0.364
		0.174	0.306		0.000	0.001	0.481
WWAN Full Tx	0.057			0.026		0.001	0.084
		0.174		0.026		0.001	0.201
Edge4 0mm, Wi-Fi 2 Tx	0.057		0.306	0.026		0.001	0.390
		0.174	0.306	0.026		0.001	0.507
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.414		0.065		0.002	0.420	0.901
		0.390	0.065		0.002	0.420	0.877
WWAN Reduce Tx	0.414			0.000		0.420	0.834
		0.390		0.000		0.420	0.810
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.414		0.065	0.000		0.420	0.899
		0.390	0.065	0.000		0.420	0.875
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.008		0.000		0.000	0.614	0.623
		0.022	0.000		0.000	0.614	0.637
WWAN Full Tx	0.008			0.000		0.614	0.622
		0.022		0.000		0.614	0.636
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.008		0.000	0.000		0.614	0.623
		0.022	0.000	0.000		0.614	0.637
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.021		0.000		0.027	0.860	0.907
		0.023	0.000		0.027	0.860	0.909
WWAN Full Tx	0.021			0.249		0.860	1.130
		0.023		0.249		0.860	1.132
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.021		0.000	0.249		0.860	1.130
		0.023	0.000	0.249		0.860	1.132

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.27 Sum of the SAR for W-CDMA Band II & Wi-Fi 5.6 GHz Band

Test Position	Data					Σ 1-g SAR (mW/g)
	WCDMA II	WiFi 5.5GHz Main	WiFi 5.5GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx	0.277	0.044		0.000	0.705	1.026
WWAN Reduce Tx	0.277		0.066		0.705	1.048
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 1 Tx	0.152	0.044		0.000	0.705	0.901
WWAN Full Tx	0.152		0.066		0.705	0.923
UHF-RFID Tx						
Rear2 0mm, Wi-Fi 2 Tx	0.277	0.044	0.066		0.705	1.092
WWAN Reduce Tx						
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 2 Tx	0.152	0.044	0.066		0.705	0.967
WWAN Full Tx						
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 1 Tx	1.098	0.03800		0.00013	0.00684	1.143
WWAN Reduce Tx	1.098		0.018		0.007	1.123
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 1 Tx	0.243	0.03800		0.00013	0.00684	0.288
WWAN Full Tx	0.243		0.018		0.007	0.268
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 2 Tx	1.098	0.03800	0.018		0.007	1.161
WWAN Reduce Tx						
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 2 Tx	0.243	0.03800	0.018		0.007	0.306
WWAN Full Tx						
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 1 Tx	0.400	0.400		0.400	0.122	1.322
WWAN Full Tx	0.400		0.400		0.122	0.922
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 2 Tx	0.400	0.400	0.400		0.122	1.322
WWAN Full Tx						
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 1 Tx	0.400	0.400		0.210	0.029	1.039
WWAN Full Tx	0.400		0.312		0.029	0.741
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 2 Tx	0.400	0.400	0.312		0.029	1.141
WWAN Full Tx						
UHF-RFID Tx						

Edge4 0mm, Wi-Fi 1 Tx	0.077	0.306		0.000	0.001	0.384
WWAN Full Tx UHF-RFID Tx	0.077		0.026		0.001	0.104
Edge4 0mm, Wi-Fi 2 Tx	0.077	0.306	0.026		0.001	0.410
WWAN Full Tx UHF-RFID Tx						
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.615	0.065		0.002	0.420	1.102
WWAN Reduce Tx UHF-RFID Tx	0.615		0.000		0.420	1.035
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.615	0.065	0.000		0.420	1.100
WWAN Reduce Tx UHF-RFID Tx						
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.018	0.00		0.000	0.614	0.633
WWAN Full Tx UHF-RFID Tx	0.018		0.000		0.614	0.632
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.018	0.00	0.000		0.614	0.633
WWAN Full Tx UHF-RFID Tx						
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.020	0.00		0.027	0.860	0.906
WWAN Full Tx UHF-RFID Tx	0.020		0.249		0.860	1.129
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.020	0.00	0.249		0.860	1.129
WWAN Full Tx UHF-RFID Tx						

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.28 Sum of the SAR for CDMA BC0, 1 & Wi-Fi 5.6GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	CDMA 0	CDMA 1	WiFi 5.5GHz Main	WiFi 5.5GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.717		0.044		0.000	0.705	1.466
		0.318	0.044		0.000	0.705	1.067
	0.717			0.066		0.705	1.488
		0.318		0.066		0.705	1.089
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.484		0.044		0.000	0.705	1.233
		0.382	0.044		0.000	0.705	1.131
	0.484			0.066		0.705	1.255
		0.382		0.066		0.705	1.153
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.717		0.044	0.066		0.705	1.532
		0.318	0.044	0.066		0.705	1.133
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.484		0.044	0.066		0.705	1.299
		0.382	0.044	0.066		0.705	1.197
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.171		0.038		0.00013	0.00684	1.216
		1.175	0.038		0.00013	0.00684	1.220
	1.171			0.018		0.007	1.196
		1.175		0.018		0.007	1.200
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.293		0.038		0.00013	0.00684	0.338
		0.662	0.038		0.00013	0.00684	0.707
	0.293			0.018		0.007	0.318
		0.662		0.018		0.007	0.687
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.171		0.038	0.018		0.007	1.234
		1.175	0.038	0.018		0.007	1.238
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.293		0.038	0.018		0.007	0.356
		0.662	0.038	0.018		0.007	0.725
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.312		0.029	0.741
		0.400		0.312		0.029	0.741
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.312		0.029	1.141
		0.400	0.400	0.312		0.029	1.141

Edge4 0mm, Wi-Fi 1 Tx	0.121		0.306		0.000	0.001	0.428
		0.148	0.306		0.000	0.001	0.455
WWAN Full Tx	0.121			0.026		0.001	0.148
		0.148		0.026		0.001	0.175
Edge4 0mm, Wi-Fi 2 Tx	0.121		0.306	0.026		0.001	0.454
		0.148	0.306	0.026		0.001	0.481
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.479		0.065		0.002	0.420	0.966
		0.674	0.065		0.002	0.420	1.161
WWAN Reduce Tx	0.479			0.000		0.420	0.899
		0.674		0.000		0.420	1.094
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.479		0.065	0.000		0.420	0.964
		0.674	0.065	0.000		0.420	1.159
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.005		0.000		0.000	0.614	0.620
		0.029	0.000		0.000	0.614	0.644
WWAN Full Tx	0.005			0.000		0.614	0.619
		0.029		0.000		0.614	0.643
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.005		0.000	0.000		0.614	0.620
		0.029	0.000	0.000		0.614	0.644
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.044		0.000		0.027	0.860	0.930
		0.040	0.000		0.027	0.860	0.926
WWAN Full Tx	0.044			0.249		0.860	1.153
		0.040		0.249		0.860	1.149
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.044		0.000	0.249		0.860	1.153
		0.040	0.000	0.249		0.860	1.149

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.29 Sum of the SAR for CDMA BC10 & Wi-Fi 5.6 GHz Band

Test Position	Data					Σ 1-g SAR (mW/g)
	CDMA 10	WiFi 5.5GHz Main	WiFi 5.5GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx	0.775	0.044		0.000	0.705	1.524
WWAN Reduce Tx	0.775		0.066		0.705	1.546
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 1 Tx	0.491	0.044		0.000	0.705	1.240
WWAN Full Tx	0.491		0.066		0.705	1.262
UHF-RFID Tx						
Rear2 0mm, Wi-Fi 2 Tx	0.775	0.044	0.066		0.705	1.590
WWAN Reduce Tx						
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 2 Tx	0.491	0.044	0.066		0.705	1.306
WWAN Full Tx						
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 1 Tx	1.15	0.03800		0.00013	0.00684	1.195
WWAN Reduce Tx	1.15		0.018		0.007	1.175
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 1 Tx	0.378	0.03800		0.00013	0.00684	0.423
WWAN Full Tx	0.378		0.018		0.007	0.403
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 2 Tx	1.15	0.03800	0.018		0.007	1.213
WWAN Reduce Tx						
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 2 Tx	0.378	0.03800	0.018		0.007	0.441
WWAN Full Tx						
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 1 Tx	0.400	0.400		0.400	0.122	1.322
WWAN Full Tx	0.400		0.400		0.122	0.922
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 2 Tx	0.400	0.400	0.400		0.122	1.322
WWAN Full Tx						
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 1 Tx	0.400	0.400		0.210	0.029	1.039
WWAN Full Tx	0.400		0.312		0.029	0.741
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 2 Tx	0.400	0.400	0.312		0.029	1.141
WWAN Full Tx						
UHF-RFID Tx						

Edge4 0mm, Wi-Fi 1 Tx	0.176	0.306		0.000	0.001	0.483
WWAN Full Tx UHF-RFID Tx	0.176		0.026		0.001	0.203
Edge4 0mm, Wi-Fi 2 Tx	0.176	0.306	0.026		0.001	0.509
WWAN Full Tx UHF-RFID Tx						
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.524	0.065		0.002	0.420	1.011
WWAN Reduce Tx UHF-RFID Tx	0.524		0.000		0.420	0.944
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.524	0.065	0.000		0.420	1.009
WWAN Reduce Tx UHF-RFID Tx						
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.000	0.00		0.000	0.614	0.615
WWAN Full Tx UHF-RFID Tx	0.000		0.000		0.614	0.614
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.000	0.00	0.000		0.614	0.615
WWAN Full Tx UHF-RFID Tx						
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.035	0.00		0.027	0.860	0.921
WWAN Full Tx UHF-RFID Tx	0.035		0.249		0.860	1.144
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.035	0.00	0.249		0.860	1.144
WWAN Full Tx UHF-RFID Tx						

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.30 Sum of the SAR for LTE Band 4, 5 & Wi-Fi 5.6 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 2	LTE 4	WiFi 5.5GHz Main	WiFi 5.5GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.262		0.044		0.000	0.705	1.011
		0.165	0.044		0.000	0.705	0.914
	0.262			0.066		0.705	1.033
		0.165		0.066		0.705	0.936
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.214		0.044		0.000	0.705	0.963
		0.261	0.044		0.000	0.705	1.010
	0.214			0.066		0.705	0.985
		0.261		0.066		0.705	1.032
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.262		0.044	0.066		0.705	1.077
		0.165	0.044	0.066		0.705	0.980
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.214		0.044	0.066		0.705	1.029
		0.261	0.044	0.066		0.705	1.076
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.046		0.038		0.00013	0.00684	1.091
		1.038	0.038		0.00013	0.00684	1.083
	1.046			0.018		0.007	1.071
		1.038		0.018		0.007	1.063
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.433		0.038		0.00013	0.00684	0.478
		0.409	0.038		0.00013	0.00684	0.454
	0.433			0.018		0.007	0.458
		0.409		0.018		0.007	0.434
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.046		0.038	0.018		0.007	1.109
		1.038	0.038	0.018		0.007	1.101
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.433		0.038	0.018		0.007	0.496
		0.409	0.038	0.018		0.007	0.472
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.312		0.029	0.741
		0.400		0.312		0.029	0.741
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.312		0.029	1.141
		0.400	0.400	0.312		0.029	1.141

Edge4 0mm, Wi-Fi 1 Tx	0.356		0.306		0.000	0.001	0.663
		0.199	0.306		0.000	0.001	0.506
WWAN Full Tx UHF-RFID Tx	0.356			0.026		0.001	0.383
		0.199		0.026		0.001	0.226
Edge4 0mm, Wi-Fi 2 Tx	0.356		0.306	0.026		0.001	0.689
		0.199	0.306	0.026		0.001	0.532
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.461		0.065		0.002	0.420	0.948
		0.264	0.065		0.002	0.420	0.751
WWAN Reduce Tx UHF-RFID Tx	0.461			0.000		0.420	0.881
		0.264		0.000		0.420	0.684
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.461		0.065	0.000		0.420	0.946
		0.264	0.065	0.000		0.420	0.749
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.008		0.000		0.000	0.614	0.623
		0.016	0.000		0.000	0.614	0.631
WWAN Full Tx UHF-RFID Tx	0.008			0.000		0.614	0.622
		0.016		0.000		0.614	0.630
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.008		0.000	0.000		0.614	0.623
		0.016	0.000	0.000		0.614	0.631
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.000		0.000		0.027	0.860	0.886
		0.037	0.000		0.027	0.860	0.923
WWAN Full Tx UHF-RFID Tx	0.000			0.249		0.860	1.109
		0.037		0.249		0.860	1.146
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.000		0.000	0.249		0.860	1.109
		0.037	0.000	0.249		0.860	1.146

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.31 Sum of the SAR for LTE Band 5, 13 & Wi-Fi 5.6 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 5	LTE 13	WiFi 5.5GHz Main	WiFi 5.5GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.744		0.044		0.000	0.705	1.493
		0.746	0.044		0.000	0.705	1.495
	0.744			0.066		0.705	1.515
		0.746		0.066		0.705	1.517
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.359		0.044		0.000	0.705	1.108
		0.359	0.044		0.000	0.705	1.108
	0.359			0.066		0.705	1.130
		0.359		0.066		0.705	1.130
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.744		0.044	0.066		0.705	1.559
		0.746	0.044	0.066		0.705	1.561
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.359		0.044	0.066		0.705	1.174
		0.359	0.044	0.066		0.705	1.174
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.159		0.038		0.00013	0.00684	1.204
		1.124	0.038		0.00013	0.00684	1.169
	1.159			0.018		0.007	1.184
		1.124		0.018		0.007	1.149
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.284		0.038		0.00013	0.00684	0.329
		0.244	0.038		0.00013	0.00684	0.289
	0.284			0.018		0.007	0.309
		0.244		0.018		0.007	0.269
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.159		0.038	0.018		0.007	1.222
		1.124	0.038	0.018		0.007	1.187
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.284		0.038	0.018		0.007	0.347
		0.244	0.038	0.018		0.007	0.307
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.312		0.029	0.741
		0.400		0.312		0.029	0.741
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.312		0.029	1.141
		0.400	0.400	0.312		0.029	1.141

Edge4 0mm, Wi-Fi 1 Tx	0.123		0.306		0.000	0.001	0.430
		0.134	0.306		0.000	0.001	0.441
WWAN Full Tx	0.123			0.026		0.001	0.150
		0.134		0.026		0.001	0.161
Edge4 0mm, Wi-Fi 2 Tx	0.123		0.306	0.026		0.001	0.456
		0.134	0.306	0.026		0.001	0.467
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.505		0.065		0.002	0.420	0.992
		0.799	0.065		0.002	0.420	1.286
WWAN Reduce Tx	0.505			0.000		0.420	0.925
		0.799		0.000		0.420	1.219
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.505		0.065	0.000		0.420	0.990
		0.799	0.065	0.000		0.420	1.284
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.000		0.000		0.000	0.614	0.615
		0.042	0.000		0.000	0.614	0.657
WWAN Full Tx	0.000			0.000		0.614	0.614
		0.042		0.000		0.614	0.656
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.000		0.000	0.000		0.614	0.615
		0.042	0.000	0.000		0.614	0.657
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.030		0.000		0.027	0.860	0.916
		0.045	0.000		0.027	0.860	0.931
WWAN Full Tx	0.030			0.249		0.860	1.139
		0.045		0.249		0.860	1.154
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.030		0.000	0.249		0.860	1.139
		0.045	0.000	0.249		0.860	1.154

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.32 Sum of the SAR for LTE Band 17, 25 & Wi-Fi 5.6 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 17	LTE 25	WiFi 5.5GHz Main	WiFi 5.5GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.469		0.044		0.000	0.705	1.218
		0.289	0.044		0.000	0.705	1.038
	0.469			0.066		0.705	1.240
		0.289		0.066		0.705	1.060
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.139		0.044		0.000	0.705	0.888
		0.304	0.044		0.000	0.705	1.053
	0.139			0.066		0.705	0.910
		0.304		0.066		0.705	1.075
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.469		0.044	0.066		0.705	1.284
		0.289	0.044	0.066		0.705	1.104
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.139		0.044	0.066		0.705	0.954
		0.304	0.044	0.066		0.705	1.119
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.982		0.038		0.00013	0.00684	1.027
		1.027	0.038		0.00013	0.00684	1.072
	0.982			0.018		0.007	1.007
		1.027		0.018		0.007	1.052
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.038		0.00013	0.00684	0.171
		0.440	0.038		0.00013	0.00684	0.485
	0.126			0.018		0.007	0.151
		0.440		0.018		0.007	0.465
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.982		0.038	0.018		0.007	1.045
		1.027	0.038	0.018		0.007	1.090
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.038	0.018		0.007	0.189
		0.440	0.038	0.018		0.007	0.503
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.312		0.029	0.741
		0.400		0.312		0.029	0.741
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.312		0.029	1.141
		0.400	0.400	0.312		0.029	1.141

Edge4 0mm, Wi-Fi 1 Tx	0.106		0.306		0.000	0.001	0.413
		0.286	0.306		0.000	0.001	0.593
WWAN Full Tx	0.106			0.026		0.001	0.133
		0.286		0.026		0.001	0.313
Edge4 0mm, Wi-Fi 2 Tx	0.106		0.306	0.026		0.001	0.439
		0.286	0.306	0.026		0.001	0.619
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.757		0.065		0.002	0.420	1.244
		0.522	0.065		0.002	0.420	1.009
WWAN Reduce Tx	0.757			0.000		0.420	1.177
		0.522		0.000		0.420	0.942
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.757		0.065	0.000		0.420	1.242
		0.522	0.065	0.000		0.420	1.007
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.065		0.000		0.000	0.614	0.680
		0.024	0.000		0.000	0.614	0.639
WWAN Full Tx	0.065			0.000		0.614	0.679
		0.024		0.000		0.614	0.638
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.065		0.000	0.000		0.614	0.680
		0.024	0.000	0.000		0.614	0.639
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.051		0.000		0.027	0.860	0.937
		0.014	0.000		0.027	0.860	0.900
WWAN Full Tx	0.051			0.249		0.860	1.160
		0.014		0.249		0.860	1.123
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.051		0.000	0.249		0.860	1.160
		0.014	0.000	0.249		0.860	1.123

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.33 Sum of the SAR for GSM & Wi-Fi 5.8 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	GSM850	GSM1900	WiFi 5.8GHz Main	WiFi 5.8GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.643		0.044		0.000	0.705	1.392
		0.205	0.044		0.000	0.705	0.954
	0.643			0.067		0.705	1.415
		0.205		0.067		0.705	0.977
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.670		0.044		0.000	0.705	1.419
		0.256	0.044		0.000	0.705	1.005
	0.670			0.067		0.705	1.442
		0.256		0.067		0.705	1.028
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.643		0.044	0.067		0.705	1.459
		0.205	0.044	0.067		0.705	1.021
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.670		0.044	0.067		0.705	1.486
		0.256	0.044	0.067		0.705	1.072
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.193		0.00718		0.00013	0.00684	1.207
		1.059	0.00718		0.00013	0.00684	1.073
	1.193			0.020		0.007	1.220
		1.059		0.020		0.007	1.086
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.4813		0.00718		0.00013	0.00684	0.495
		0.456	0.00718		0.00013	0.00684	0.470
	0.4813			0.020		0.007	0.508
		0.456		0.020		0.007	0.483
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.193		0.00718	0.020		0.007	1.227
		1.059	0.00718	0.020		0.007	1.093
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.4813		0.00718	0.020		0.007	0.515
		0.456	0.00718	0.020		0.007	0.490
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.400		0.400	0.122	1.048
		0.400	0.400		0.400	0.122	1.322
	0.126			0.400		0.122	0.648
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.400	0.400		0.122	1.048
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.027		0.400		0.210	0.029	0.666
		0.400	0.400		0.210	0.029	1.039
	0.027			0.369		0.029	0.425
		0.400		0.369		0.029	0.798
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.027		0.400	0.369		0.029	0.825
		0.400	0.400	0.369		0.029	1.198

Edge4 0mm, Wi-Fi 1 Tx	0.197		0.266		0.000	0.001	0.464
		0.388	0.266		0.000	0.001	0.655
WWAN Full Tx	0.197			0.021		0.001	0.219
		0.388		0.021		0.001	0.410
Edge4 0mm, Wi-Fi 2 Tx	0.197		0.266	0.021		0.001	0.485
		0.388	0.266	0.021		0.001	0.676
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.757		0.037		0.002	0.420	1.216
		0.542	0.037		0.002	0.420	1.001
WWAN Reduce Tx	0.757			0.000		0.420	1.177
		0.542		0.000		0.420	0.962
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.757		0.037	0.000		0.420	1.214
		0.542	0.037	0.000		0.420	0.999
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.013		0.00		0.000	0.614	0.628
		0.014	0.00		0.000	0.614	0.629
WWAN Full Tx	0.013			0.000		0.614	0.627
		0.014		0.000		0.614	0.628
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.013		0.00	0.000		0.614	0.628
		0.014	0.00	0.000		0.614	0.629
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.065		0.00		0.027	0.860	0.951
		0.019	0.00		0.027	0.860	0.905
WWAN Full Tx	0.065			0.226		0.860	1.151
		0.019		0.226		0.860	1.105
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.065		0.00	0.226		0.860	1.151
		0.019	0.00	0.226		0.860	1.105

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.34 Sum of the SAR for W-CDMA Band V, IV & Wi-Fi 5.8GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	WCDMA V	WCDMA IV	WiFi 5.8GHz Main	WiFi 5.8GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.453		0.044		0.000	0.705	1.202
		0.178	0.044		0.000	0.705	0.927
	0.453			0.067		0.705	1.225
		0.178		0.067		0.705	0.950
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.217		0.044		0.000	0.705	0.966
		0.157	0.044		0.000	0.705	0.906
	0.217			0.067		0.705	0.989
		0.157		0.067		0.705	0.929
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.453		0.044	0.067		0.705	1.269
		0.178	0.044	0.067		0.705	0.994
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.217		0.044	0.067		0.705	1.033
		0.157	0.044	0.067		0.705	0.973
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.184		0.00718		0.00013	0.00684	1.198
		1.108	0.00718		0.00013	0.00684	1.122
	1.184			0.020		0.007	1.211
		1.108		0.020		0.007	1.135
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.151		0.00718		0.00013	0.00684	0.165
		0.299	0.00718		0.00013	0.00684	0.313
	0.151			0.020		0.007	0.178
		0.299		0.020		0.007	0.326
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.184		0.00718	0.020		0.007	1.218
		1.108	0.00718	0.020		0.007	1.142
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.151		0.00718	0.020		0.007	0.185
		0.299	0.00718	0.020		0.007	0.333
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.369		0.029	0.798
		0.400		0.369		0.029	0.798
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.369		0.029	1.198
		0.400	0.400	0.369		0.029	1.198

Edge4 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.057		0.266		0.000	0.001	0.324
		0.174	0.266		0.000	0.001	0.441
	0.057			0.021		0.001	0.079
		0.174		0.021		0.001	0.196
Edge4 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.057		0.266	0.021		0.001	0.345
		0.174	0.266	0.021		0.001	0.462
	0.414		0.037		0.002	0.420	0.873
		0.390	0.037		0.002	0.420	0.849
Edge1 tilt 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.414			0.000		0.420	0.834
		0.390		0.000		0.420	0.810
	0.414		0.037	0.000		0.420	0.871
		0.390	0.037	0.000		0.420	0.847
Edge2 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.008		0.00		0.000	0.614	0.623
		0.022	0.00		0.000	0.614	0.637
	0.008			0.000		0.614	0.622
		0.022		0.000		0.614	0.636
Edge2 tilt 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.008		0.00	0.000		0.614	0.623
		0.022	0.00	0.000		0.614	0.637
	0.021		0.00		0.027	0.860	0.907
		0.023	0.00		0.027	0.860	0.909
Edge3 tilt 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.021			0.226		0.860	1.107
		0.023		0.226		0.860	1.109
	0.021		0.00	0.226		0.860	1.107
		0.023	0.00	0.226		0.860	1.109

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.35 Sum of the SAR for W-CDMA Band II & Wi-Fi 5.8 GHz Band

Test Position	Data					Σ 1-g SAR (mW/g)
	WCDMA II	WiFi 5.8GHz Main	WiFi 5.8GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx	0.277	0.044		0.000	0.705	1.026
WWAN Reduce Tx	0.277		0.067		0.705	1.049
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 1 Tx	0.152	0.044		0.000	0.705	0.901
WWAN Full Tx	0.152		0.067		0.705	0.924
UHF-RFID Tx						
Rear2 0mm, Wi-Fi 2 Tx	0.277	0.044	0.067		0.705	1.093
WWAN Reduce Tx						
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 2 Tx	0.152	0.044	0.067		0.705	0.968
WWAN Full Tx						
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 1 Tx	1.098	0.00718		0.00013	0.00684	1.112
WWAN Reduce Tx	1.098		0.020		0.007	1.125
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 1 Tx	0.243	0.00718		0.00013	0.00684	0.257
WWAN Full Tx	0.243		0.020		0.007	0.270
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 2 Tx	1.098	0.00718	0.020		0.007	1.132
WWAN Reduce Tx						
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 2 Tx	0.243	0.00718	0.020		0.007	0.277
WWAN Full Tx						
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 1 Tx	0.400	0.400		0.400	0.122	1.322
WWAN Full Tx	0.400		0.400		0.122	0.922
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 2 Tx	0.400	0.400	0.400		0.122	1.322
WWAN Full Tx						
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 1 Tx	0.400	0.400		0.210	0.029	1.039
WWAN Full Tx	0.400		0.369		0.029	0.798
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 2 Tx	0.400	0.400	0.369		0.029	1.198
WWAN Full Tx						
UHF-RFID Tx						

Edge4 0mm, Wi-Fi 1 Tx	0.077	0.266		0.000	0.001	0.344
WWAN Full Tx UHF-RFID Tx	0.077		0.021		0.001	0.099
Edge4 0mm, Wi-Fi 2 Tx	0.077	0.266	0.021		0.001	0.365
WWAN Full Tx UHF-RFID Tx						
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.615	0.037		0.002	0.420	1.074
WWAN Reduce Tx UHF-RFID Tx	0.615		0.000		0.420	1.035
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.615	0.037	0.000		0.420	1.072
WWAN Reduce Tx UHF-RFID Tx						
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.018	0.00		0.000	0.614	0.633
WWAN Full Tx UHF-RFID Tx	0.018		0.000		0.614	0.632
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.018	0.00	0.000		0.614	0.633
WWAN Full Tx UHF-RFID Tx						
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.020	0.00		0.027	0.860	0.906
WWAN Full Tx UHF-RFID Tx	0.020		0.226		0.860	1.106
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.020	0.00	0.226		0.860	1.106
WWAN Full Tx UHF-RFID Tx						

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.36 Sum of the SAR for CDMA BC0, 1 & Wi-Fi 5.8GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	CDMA 0	CDMA 1	WiFi 5.8GHz Main	WiFi 5.8GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.717		0.044		0.000	0.705	1.466
		0.318	0.044			0.705	1.067
	0.717			0.067		0.705	1.489
		0.318		0.067		0.705	1.090
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.484		0.044		0.000	0.705	1.233
		0.382	0.044		0.000	0.705	1.131
	0.484			0.067		0.705	1.256
		0.382		0.067		0.705	1.154
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.717		0.044	0.067		0.705	1.533
		0.318	0.044	0.067		0.705	1.134
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.484		0.044	0.067		0.705	1.300
		0.382	0.044	0.067		0.705	1.198
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.171		0.00718		0.00013	0.00684	1.185
		1.175	0.00718		0.00013	0.00684	1.189
	1.171			0.020		0.007	1.198
		1.175		0.020		0.007	1.202
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.293		0.00718		0.00013	0.00684	0.307
		0.662	0.00718		0.00013	0.00684	0.676
	0.293			0.020		0.007	0.320
		0.662		0.020		0.007	0.689
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.171		0.00718	0.020		0.007	1.205
		1.175	0.00718	0.020		0.007	1.209
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.293		0.00718	0.020		0.007	0.327
		0.662	0.00718	0.020		0.007	0.696
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.369		0.029	0.798
		0.400		0.369		0.029	0.798
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.369		0.029	1.198
		0.400	0.400	0.369		0.029	1.198

Edge4 0mm, Wi-Fi 1 Tx	0.121		0.266		0.000	0.001	0.388
		0.148	0.266		0.000	0.001	0.415
WWAN Full Tx	0.121			0.021		0.001	0.143
		0.148		0.021		0.001	0.170
Edge4 0mm, Wi-Fi 2 Tx	0.121		0.266	0.021		0.001	0.409
		0.148	0.266	0.021		0.001	0.436
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.479		0.037		0.002	0.420	0.938
		0.674	0.037		0.002	0.420	1.133
WWAN Reduce Tx	0.479			0.000		0.420	0.899
		0.674		0.000		0.420	1.094
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.479		0.037	0.000		0.420	0.936
		0.674	0.037	0.000		0.420	1.131
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.005		0.00		0.000	0.614	0.620
		0.029	0.00		0.000	0.614	0.644
WWAN Full Tx	0.005			0.000		0.614	0.619
		0.029		0.000		0.614	0.643
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.005		0.00	0.000		0.614	0.620
		0.029	0.00	0.000		0.614	0.644
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.044		0.00		0.027	0.860	0.930
		0.040	0.00		0.027	0.860	0.926
WWAN Full Tx	0.044			0.226		0.860	1.130
		0.040		0.226		0.860	1.126
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.044		0.00	0.226		0.860	1.130
		0.040	0.00	0.226		0.860	1.126

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.37 Sum of the SAR for CDMA BC10 & Wi-Fi 5.8 GHz Band

Test Position	Data					Σ 1-g SAR (mW/g)
	CDMA 10	WiFi 5.8GHz Main	WiFi 5.8GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx	0.775	0.044		0.000	0.705	1.524
WWAN Reduce Tx	0.775		0.067		0.705	1.547
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 1 Tx	0.491	0.044		0.000	0.705	1.240
WWAN Full Tx	0.491		0.067		0.705	1.263
UHF-RFID Tx						
Rear2 0mm, Wi-Fi 2 Tx	0.775	0.044	0.067		0.705	1.591
WWAN Reduce Tx						
UHF-RFID Tx						
Rear2 4.2mm, Wi-Fi 2 Tx	0.491	0.044	0.067		0.705	1.307
WWAN Full Tx						
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 1 Tx	1.15	0.00718		0.00013	0.00684	1.164
WWAN Reduce Tx	1.15		0.020		0.007	1.177
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 1 Tx	0.378	0.00718		0.00013	0.00684	0.392
WWAN Full Tx	0.378		0.020		0.007	0.405
UHF-RFID Tx						
Edge 1 0mm, Wi-Fi 2 Tx	1.15	0.00718	0.020		0.007	1.184
WWAN Reduce Tx						
UHF-RFID Tx						
Edge 1 21mm, Wi-Fi 2 Tx	0.378	0.00718	0.020		0.007	0.412
WWAN Full Tx						
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 1 Tx	0.400	0.400		0.400	0.122	1.322
WWAN Full Tx	0.400		0.400		0.122	0.922
UHF-RFID Tx						
Edge2 0mm, Wi-Fi 2 Tx	0.400	0.400	0.400		0.122	1.322
WWAN Full Tx						
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 1 Tx	0.400	0.400		0.210	0.029	1.039
WWAN Full Tx	0.400		0.369		0.029	0.798
UHF-RFID Tx						
Edge3 0mm, Wi-Fi 2 Tx	0.400	0.400	0.369		0.029	1.198
WWAN Full Tx						
UHF-RFID Tx						

Edge4 0mm, Wi-Fi 1 Tx	0.176	0.266		0.000	0.001	0.443
WWAN Full Tx UHF-RFID Tx	0.176		0.021		0.001	0.198
Edge4 0mm, Wi-Fi 2 Tx	0.176	0.266	0.021		0.001	0.464
WWAN Full Tx UHF-RFID Tx						
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.524	0.037		0.002	0.420	0.983
WWAN Reduce Tx UHF-RFID Tx	0.524		0.000		0.420	0.944
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.524	0.037	0.000		0.420	0.981
WWAN Reduce Tx UHF-RFID Tx						
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.000	0.00		0.000	0.614	0.615
WWAN Full Tx UHF-RFID Tx	0.000		0.000		0.614	0.614
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.000	0.00	0.000		0.614	0.615
WWAN Full Tx UHF-RFID Tx						
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.035	0.00		0.027	0.860	0.921
WWAN Full Tx UHF-RFID Tx	0.035		0.226		0.860	1.121
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.035	0.00	0.226		0.860	1.121
WWAN Full Tx UHF-RFID Tx						

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.38 Sum of the SAR for LTE Band 2, 4 & Wi-Fi 5.8 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 2	LTE 4	WiFi 5.8GHz Main	WiFi 5.8GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.262		0.044		0.000	0.705	1.011
		0.165	0.044		0.000	0.705	0.914
	0.262			0.067		0.705	1.034
		0.165		0.067		0.705	0.937
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.214		0.044		0.000	0.705	0.963
		0.261	0.044		0.000	0.705	1.010
	0.214			0.067		0.705	0.986
		0.261		0.067		0.705	1.033
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.262		0.044	0.067		0.705	1.078
		0.165	0.044	0.067		0.705	0.981
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.214		0.044	0.067		0.705	1.030
		0.261	0.044	0.067		0.705	1.077
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.046		0.00718		0.00013	0.00684	1.060
		1.038	0.00718		0.00013	0.00684	1.052
	1.046			0.020		0.007	1.073
		1.038		0.020		0.007	1.065
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.433		0.00718		0.00013	0.00684	0.447
		0.409	0.00718		0.00013	0.00684	0.423
	0.433			0.020		0.007	0.460
		0.409		0.020		0.007	0.436
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.046		0.00718	0.020		0.007	1.080
		1.038	0.00718	0.020		0.007	1.072
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.433		0.00718	0.020		0.007	0.467
		0.409	0.00718	0.020		0.007	0.443
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.369		0.029	0.798
		0.400		0.369		0.029	0.798
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.369		0.029	1.198
		0.400	0.400	0.369		0.029	1.198

Edge4 0mm, Wi-Fi 1 Tx	0.356		0.266		0.000	0.001	0.623
		0.199	0.266		0.000	0.001	0.466
WWAN Full Tx	0.356			0.021		0.001	0.378
		0.199		0.021		0.001	0.221
Edge4 0mm, Wi-Fi 2 Tx	0.356		0.266	0.021		0.001	0.644
		0.199	0.266	0.021		0.001	0.487
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.461		0.037		0.002	0.420	0.920
		0.264	0.037		0.002	0.420	0.723
WWAN Reduce Tx	0.461			0.000		0.420	0.881
		0.264		0.000		0.420	0.684
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.461		0.037	0.000		0.420	0.918
		0.264	0.037	0.000		0.420	0.721
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.008		0.00		0.000	0.614	0.623
		0.016	0.00		0.000	0.614	0.631
WWAN Full Tx	0.008			0.000		0.614	0.622
		0.016		0.000		0.614	0.630
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.008		0.00	0.000		0.614	0.623
		0.016	0.00	0.000		0.614	0.631
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.000		0.00		0.027	0.860	0.886
		0.037	0.00		0.027	0.860	0.923
WWAN Full Tx	0.000			0.226		0.860	1.086
		0.037		0.226		0.860	1.123
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.000		0.00	0.226		0.860	1.086
		0.037	0.00	0.226		0.860	1.123

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.39 Sum of the SAR for LTE Band 5, 13 & Wi-Fi 5.8 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 5	LTE 13	WiFi 5.8GHz Main	WiFi 5.8GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.744		0.044		0.000	0.705	1.493
		0.746	0.044		0.000	0.705	1.495
	0.744			0.067		0.705	1.516
		0.746		0.067		0.705	1.518
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.359		0.044		0.000	0.705	1.108
		0.359	0.044		0.000	0.705	1.108
	0.359			0.067		0.705	1.131
		0.359		0.067		0.705	1.131
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.744		0.044	0.067		0.705	1.560
		0.746	0.044	0.067		0.705	1.562
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.359		0.044	0.067		0.705	1.175
		0.359	0.044	0.067		0.705	1.175
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	1.159		0.00718		0.00013	0.00684	1.173
		1.124	0.00718		0.00013	0.00684	1.138
	1.159			0.020		0.007	1.186
		1.124		0.020		0.007	1.151
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.284		0.00718		0.00013	0.00684	0.298
		0.244	0.00718		0.00013	0.00684	0.258
	0.284			0.020		0.007	0.311
		0.244		0.020		0.007	0.271
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	1.159		0.00718	0.020		0.007	1.193
		1.124	0.00718	0.020		0.007	1.158
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.284		0.00718	0.020		0.007	0.318
		0.244	0.00718	0.020		0.007	0.278
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.369		0.029	0.798
		0.400		0.369		0.029	0.798
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.369		0.029	1.198
		0.400	0.400	0.369		0.029	1.198

Edge4 0mm, Wi-Fi 1 Tx	0.123		0.266		0.000	0.001	0.390
		0.134	0.266		0.000	0.001	0.401
WWAN Full Tx	0.123			0.021		0.001	0.145
		0.134		0.021		0.001	0.156
Edge4 0mm, Wi-Fi 2 Tx	0.123		0.266	0.021		0.001	0.411
		0.134	0.266	0.021		0.001	0.422
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.505		0.037		0.002	0.420	0.964
		0.799	0.037		0.002	0.420	1.258
WWAN Reduce Tx	0.505			0.000		0.420	0.925
		0.799		0.000		0.420	1.219
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.505		0.037	0.000		0.420	0.962
		0.799	0.037	0.000		0.420	1.256
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.000		0.00		0.000	0.614	0.615
		0.042	0.00		0.000	0.614	0.657
WWAN Full Tx	0.000			0.000		0.614	0.614
		0.042		0.000		0.614	0.656
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.000		0.00	0.000		0.614	0.615
		0.042	0.00	0.000		0.614	0.657
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.030		0.00		0.027	0.860	0.916
		0.045	0.00		0.027	0.860	0.931
WWAN Full Tx	0.030			0.226		0.860	1.116
		0.045		0.226		0.860	1.131
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.030		0.00	0.226		0.860	1.116
		0.045	0.00	0.226		0.860	1.131

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

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.

14.40 Sum of the SAR for LTE Band 17, 25 & Wi-Fi 5.8 GHz Band

Test Position	Data						Σ 1-g SAR (mW/g)
	LTE 17	LTE 25	WiFi 5.8GHz Main	WiFi 5.8GHz Aux	Bluetooth	UHF-RFID	
Rear2 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.469		0.044		0.000	0.705	1.218
		0.289	0.044		0.000	0.705	1.038
	0.469			0.067		0.705	1.241
		0.289		0.067		0.705	1.061
Rear2 4.2mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.139		0.044		0.000	0.705	0.888
		0.304	0.044		0.000	0.705	1.053
	0.139			0.067		0.705	0.911
		0.304		0.067		0.705	1.076
Rear2 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.469		0.044	0.067		0.705	1.285
		0.289	0.044	0.067		0.705	1.105
Rear2 4.2mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.139		0.044	0.067		0.705	0.955
		0.304	0.044	0.067		0.705	1.120
Edge 1 0mm, Wi-Fi 1 Tx WWAN Reduce Tx UHF-RFID Tx	0.982		0.00718		0.00013	0.00684	0.996
		1.027	0.00718		0.00013	0.00684	1.041
	0.982			0.020		0.007	1.009
		1.027		0.020		0.007	1.054
Edge 1 21mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.00718		0.00013	0.00684	0.140
		0.440	0.00718		0.00013	0.00684	0.454
	0.126			0.020		0.007	0.153
		0.440		0.020		0.007	0.467
Edge 1 0mm, Wi-Fi 2 Tx WWAN Reduce Tx UHF-RFID Tx	0.982		0.00718	0.020		0.007	1.016
		1.027	0.00718	0.020		0.007	1.061
Edge 1 21mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.126		0.00718	0.020		0.007	0.160
		0.440	0.00718	0.020		0.007	0.474
Edge2 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.400	0.122	1.322
		0.400	0.400		0.400	0.122	1.322
	0.400			0.400		0.122	0.922
		0.400		0.400		0.122	0.922
Edge2 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.400		0.122	1.322
		0.400	0.400	0.400		0.122	1.322
Edge3 0mm, Wi-Fi 1 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400		0.210	0.029	1.039
		0.400	0.400		0.210	0.029	1.039
	0.400			0.369		0.029	0.798
		0.400		0.369		0.029	0.798
Edge3 0mm, Wi-Fi 2 Tx WWAN Full Tx UHF-RFID Tx	0.400		0.400	0.369		0.029	1.198
		0.400	0.400	0.369		0.029	1.198

Edge4 0mm, Wi-Fi 1 Tx	0.106		0.266		0.000	0.001	0.373
		0.286	0.266		0.000	0.001	0.553
WWAN Full Tx	0.106			0.021		0.001	0.128
		0.286		0.021		0.001	0.308
Edge4 0mm, Wi-Fi 2 Tx	0.106		0.266	0.021		0.001	0.394
		0.286	0.266	0.021		0.001	0.574
Edge1 tilt 0mm, Wi-Fi 1 Tx	0.757		0.037		0.002	0.420	1.216
		0.522	0.037		0.002	0.420	0.981
WWAN Reduce Tx	0.757			0.000		0.420	1.177
		0.522		0.000		0.420	0.942
Edge1 tilt 0mm, Wi-Fi 2 Tx	0.757		0.037	0.000		0.420	1.214
		0.522	0.037	0.000		0.420	0.979
Edge2 tilt 0mm, Wi-Fi 1 Tx	0.065		0.00		0.000	0.614	0.680
		0.024	0.00		0.000	0.614	0.639
WWAN Full Tx	0.065			0.000		0.614	0.679
		0.024		0.000		0.614	0.638
Edge2 tilt 0mm, Wi-Fi 2 Tx	0.065		0.00	0.000		0.614	0.680
		0.024	0.00	0.000		0.614	0.639
Edge3 tilt 0mm, Wi-Fi 1 Tx	0.051		0.00		0.027	0.860	0.937
		0.014	0.00		0.027	0.860	0.900
WWAN Full Tx	0.051			0.226		0.860	1.137
		0.014		0.226		0.860	1.100
Edge3 tilt 0mm, Wi-Fi 2 Tx	0.051		0.00	0.226		0.860	1.137
		0.014	0.00	0.226		0.860	1.100

Note(s):

- a) Bluetooth and Wi-Fi Main antenna can simultaneously transmit
- b) Values shaded green are estimated SAR
- c) Values shaded pink are referred to from SAR report 10258100H-A-R2, submitted under FCC ID ACJ9TGWW13B1.
- d) Values shaded orange are referred to from SAR report 10258104H-A-R1, submitted under FCC ID ACJ9TGWL13A.
- e) As the SISO (1 Tx) mode powers are higher than the MIMO (2Tx) powers separate testing of the MIMO (2 Tx) SAR was considered unnecessary. The reported stand-alone values for 1Tx mode are used to cover simultaneous conditions.
- f) The data of "Rear 1 13mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 4.2mm of WWAN " because which was applied to "Rear 1 13mm of WWAN".
- g) The data of "Rear 1 0mm of WWAN from SAR report 10258100H-A-R2 was diverted to that of "Rear 2 0mm of WWAN " because which was applied to "Rear 1 0mm of WWAN".
- h) The data of "Edge1 21mm of UHF-RFID from this report was diverted to that of "Edge1 0mm of UHF-RFID".
- i) Measured value was used for the data of "Rear2 0mm of Bluetooth Aux antenna" instead of Estimated SAR.

Conclusion:

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

Appendixes

Refer to separated files for the following appendixes.

- 15.1. System Performance Check Plots
- 15.2. SAR Test Plots for UHF-RFID
- 15.3. SAR Test Plots for GSM850
- 15.4. SAR Test Plots for GSM1900
- 15.5. SAR Test Plots for WCDMA Band V
- 15.6. SAR Test Plots for WCDMA Band IV
- 15.7. SAR Test Plots for WCDMA Band II
- 15.8. SAR Test Plots for CDMA BC0
- 15.9. SAR Test Plots for CDMA BC1
- 15.10. SAR Test Plots for CDMA BC10
- 15.11. SAR Test Plots for LTE Band 2
- 15.12. SAR Test Plots for LTE Band 4
- 15.13. SAR Test Plots for LTE Band 5
- 15.14. SAR Test Plots for LTE Band 13
- 15.15. SAR Test Plots for LTE Band 17
- 15.16. SAR Test Plots for LTE Band 25
- 15.17. SAR Test Plots for Wi-Fi 2.4 GHz Band
- 15.18. SAR Test Plots for Wi-Fi 5.2 GHz Bands
- 15.19. SAR Test Plots for Wi-Fi 5.3 GHz Bands
- 15.20. SAR Test Plots for Wi-Fi 5.6 GHz Bands
- 15.21. SAR Test Plots for Wi-Fi 5.8 GHz Bands
- 15.22. SAR Test Plots for Bluetooth
- 15.23. SAR test plots for Repeat Measurement
- 15.24. Calibration Certificate for E-Field Probe EX3DV4 - SN 3917
- 15.25. Calibration Certificate for E-Field Probe EX3DV4 - SN 3922
- 15.26. Calibration Certificate for E-Field Probe EX3DV4 - SN 3825
- 15.27. Calibration Certificate for D750 V3 - SN 1058
- 15.28. Calibration Certificate for D900 V2 - SN 155
- 15.29. Calibration Certificate for D1800 V2 - SN 2d040
- 15.30. Calibration Certificate for D2000 V2 - SN 1029
- 15.31. Calibration Certificate for D2450V2 - SN 713
- 15.32. Calibration Certificate for D5GHzV2 - SN 1020