



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

SAR EVALUATION REPORT

FOR

GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac/ax, NFC, WPT and UWB

MODEL NUMBER: SM-S906B/DS

FCC ID: A3LSMS906B

REPORT NUMBER: 4790089626-S1V4

ISSUE DATE: 12/21/2021

Prepared for
**SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,
GYEONGGI-DO, 16677, KOREA**

Prepared by
**UL Korea, Ltd.
26th floor, 152, Teheran-ro, Gangnam-gu Seoul, 06236, Korea**

**Suwon Test Site: UL Korea, Ltd. Suwon Laboratory
218 Maeyeong-ro, Yeongtong-gu,
Suwon-si, Gyeonggi-do, 16675, Korea
TEL: (031) 337-9902
FAX: (031) 213-5433**



Testing Laboratory

TL-637

Revision History

Rev.	Date	Revisions	Revised By
V1	11/11/2021	Initial Issue	--
V2	11/22/2021	Revised Section 6.2, 6.3, 6.4, 7, 9.1, and 9.6 - Section 6.2, corrected BT duty cycle - Section 9.6, Added 160MHz BW power limits and data	Eunji Choi
V3	12/14/2021	Revised Section 8.2 and 9.4 - Section 8.2, added cal. due date in the Reference Target SAR values table - Section 9.4, revised Procedures for NR power measurement	Eunji Choi
V4	12/21/2021	Revised SAR report, Appendix B,C,E,F and I - Added Variant model (Version 2 & 3) spot-check data and SAR results	Eunji Choi

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1. Attestation of Test Results

Applicant Name		SAMSUNG ELECTRONICS CO.,LTD.			
FCC ID		A3LSMS906B			
Model Number		SM-S906B/DS			
Applicable Standards		FCC 47 CFR § 2.1093 IEEE Std 1528-2013 Published RF exposure KDB procedures			
Exposure Category		SAR Limits (W/Kg)			
		Peak spatial-average (1g of tissue)		Product Specific 10g (10g of tissue)	
General population / Uncontrolled exposure		1.6		4.0	
RF Exposure Conditions		Equipment Class - The Highest Reported SAR (W/kg)			
		PCE	DTS	NII	DSS
Head		1.16	0.63	0.65	0.28
Body-worn		0.75	0.19	0.53	0.16
Hotspot		1.29	0.43	0.53	0.45
Product Specific 10g		2.24	N/A	2.29	N/A
Simultaneous TX	Head	1.58	1.58	1.58	1.58
	Body-worn	1.59	1.45	1.59	1.55
	Hotspot	1.59	1.59	1.59	1.59
	Product Specific 10g	3.90	N/A	3.90	N/A
Date Tested		9/8/2021 to 11/11/2021 and 12/8/2021 to 12/20/2021			
Test Results		Pass			
UL Korea, Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Korea, Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report. Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Korea, Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Korea, Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by IAS, any agency of the Federal Government, or any agency of any government.					
Approved & Released By:			Prepared By:		
					
Justin Park Operations Leader UL Korea, Ltd. Suwon Laboratory			Eunji Choi Test Engineer UL Korea, Ltd. Suwon Laboratory		

1.1. The Highest Reported SAR for RF exposure conditions for each bands

Equipment Class	Band	Antenna	The Highest Reported SAR (W/kg)			
			1g of tissue			10g of tissue
			Head Exposure condition	Body-worn Exposure condition	Hotspot Exposure condition	Product Specific Exposure condition
PCE	GSM 850	Main.1 Ant.	0.269	0.305	0.615	N/A
	GSM 1900	Main.1 Ant.	0.125	0.397	1.124	N/A
	WCDMA Band II	Main.1 Ant.	0.096	0.659	1.161	1.495
	WCDMA Band IV	Main.1 Ant.	0.174	0.736	1.175	1.672
	WCDMA Band V	Main.1 Ant.	0.246	0.353	0.734	N/A
	LTE Band 2	Main.3 Ant.	0.659	0.196	0.434	N/A
	LTE Band 4	Main.3 Ant.	0.796	0.342	0.574	N/A
	LTE Band 5	Main.1 Ant.	N/A	N/A	N/A	N/A
	LTE Band 12	Main.1 Ant.	0.171	0.308	0.418	N/A
	LTE Band 13	Main.1 Ant.	0.204	0.308	0.657	N/A
	LTE Band 17	Main.1 Ant.	N/A	N/A	N/A	N/A
	LTE Band 25	Main.1 Ant.	0.170	0.606	1.285	2.236
	LTE Band 26	Main.1 Ant.	0.266	0.301	0.609	N/A
	LTE Band 66	Main.1 Ant.	0.169	0.751	1.087	1.952
	LTE Band 41	Main.2 Ant.	0.113	0.263	0.581	N/A
	NR Band n5	Main.1 Ant.	0.236	0.238	0.547	N/A
	NR Band n66	Main.1 Ant.	0.178	0.684	1.064	1.819
	NR Band n66	Main.3 Ant.	1.159	0.364	1.099	N/A
DTS	2.4GHz WLAN	All	0.629	0.187	0.426	N/A
UNII	5GHz WLAN	All	0.653	0.528	0.530	2.286
DSS	Bluetooth	All	0.283	0.156	0.453	N/A

1.2. Spot-check Results

														Version 1 (Original)		Version 2		Version 3		
Antenna	Test Band	RF Exposure Conditions	Mode	Pwr Back-off	Test distance (mm)	Test Position	Ch	Freq (MHz)	RB Allocation	RB Offset	Duty (%)	Power		1-g SAR (W/kg) or 10-g SAR (W/kg)		1-g SAR (W/kg) or 10-g SAR (W/kg)		1-g SAR (W/kg) or 10-g SAR (W/kg)		Note
												Tune-up Limit	Meas	Meas.	Scaled	Meas.	Scaled	Meas.	Scaled	
Main Ant.3	LTE Band 2	Head	QPSK	On	0	Left Tilt	19100	1900.0	1	0		17.5	17.1	0.602	0.659	0.438	0.479	0.478	0.523	
		Body-worn	QPSK	Off	15	Rear	19100	1900.0	1	0		22.5	22.2	0.184	0.196	0.181	0.193	0.179	0.191	
		Hotspot	QPSK	On	10	Edge 1	19100	1900.0	1	0		19.5	18.4	0.339	0.434	0.236	0.302	0.267	0.342	
Main Ant.3	LTE Band 4	Head	QPSK	On	0	Left Tilt	20175	1732.5	50	0		17.5	16.8	0.682	0.796	0.544	0.635	0.558	0.651	
		Body-worn	QPSK	Off	15	Rear	20175	1732.5	50	0		21.5	21.2	0.233	0.251	0.265	0.286	0.201	0.217	1
		Hotspot	QPSK	On	10	Edge 1	20175	1732.5	50	0		19.5	18.7	0.481	0.574	0.308	0.368	0.344	0.411	
Main Ant.3	NR Band n66	Head	DFT-s-OFDM (QPSK)	On	0	Left Tilt	344000	1720	1	104		19.0	17.9	0.904	1.159	0.801	1.027	0.755	0.968	
		Body-worn	DFT-s-OFDM (QPSK)	Off	15	Rear	349000	1745	50	25		23.0	22.4	0.283	0.326	0.316	0.364	0.306	0.352	1
		Hotspot	DFT-s-OFDM (QPSK)	Off	10	Edge 1	349000	1745	50	25		23.0	22.4	0.955	1.099	0.866	0.997	0.892	1.027	
Bluetooth SISO Ant.1	Bluetooth	Head	GFSK	On	0	Right Touch	39	2441.0			77.0	15.0	14.2	0.046	0.071	0.032	0.049	0.028	0.044	
		Body-worn	GFSK	Off	15	Rear	78	2480.0			77.0	19.0	17.7	0.089	0.156	0.062	0.109	0.074	0.130	
		Hotspot	GFSK	Off	10	Rear	78	2480.0			77.0	19.0	17.7	0.258	0.453	0.216	0.379	0.193	0.339	
Bluetooth SISO Ant.2	Bluetooth	Head	GFSK	On	0	Right Touch	0	2402.0			77.0	15.0	14.6	0.200	0.283	0.125	0.177	0.133	0.188	
		Body-worn	GFSK	Off	15	Rear	78	2480.0			77.0	19.0	17.7	0.081	0.141	0.045	0.078	0.068	0.117	
		Hotspot	GFSK	Off	10	Rear	78	2480.0			77.0	19.0	17.7	0.183	0.318	0.102	0.177	0.123	0.214	
Bluetooth MIMO Ant.1 & 2	Bluetooth	Head	GFSK	Off	0	Right Touch	0	2402.0			77.0	12.0	11.0	0.151	0.245	0.102	0.166	0.084	0.136	
		Body-worn	GFSK	Off	15	Rear	0	2402.0			77.0	12.0	11.0	0.030	0.049	0.020	0.033	0.025	0.041	
		Hotspot	GFSK	Off	10	Rear	0	2402.0			77.0	12.0	11.3	0.069	0.106	0.044	0.068	0.060	0.093	
WiFi 2.4GHz SISO Ant.1	DTS	Head	802.11b	On	0	Left Touch	11	2462.0			99.3	17.0	16.1	0.086	0.107	0.037	0.046	0.046	0.057	
		Body-worn	802.11b	Off	15	Rear	1	2412.0			99.3	19.0	18.7	0.144	0.157	0.134	0.146	0.143	0.156	
		Hotspot	802.11b	Off	10	Rear	1	2412.0			99.3	19.0	18.7	0.389	0.423	0.344	0.375	0.320	0.348	
WiFi 2.4GHz SISO Ant.2	DTS	Head	802.11b	On	0	Left Touch	11	2462.0			99.3	17.0	16.5	0.362	0.406	0.231	0.259	0.279	0.313	
		Body-worn	802.11b	Off	15	Rear	1	2412.0			99.3	19.0	18.0	0.149	0.187	0.095	0.119	0.088	0.110	
		Hotspot	802.11b	Off	10	Edge 4	1	2412.0			99.3	19.0	18.0	0.339	0.426	0.264	0.332	0.203	0.255	
WiFi 2.4GHz MIMO Ant.1 & 2	DTS	Head	802.11g	On	0	Right Touch	6	2437.0			96.4	17.0	16.0	0.481	0.629	0.319	0.417	0.368	0.482	
		Body-worn	802.11g	Off	15	Rear	6	2437.0			96.4	18.0	16.7	0.111	0.155	0.098	0.136	0.094	0.131	
		Hotspot	802.11g	Off	10	Edge 4	6	2437.0			96.4	18.0	16.9	0.247	0.331	0.188	0.252	0.128	0.171	
WiFi 5.3GHz MIMO Ant.1 & 2	UNII	Head	802.11ac (VHT80)	On	0	Right Touch	58	5290.0			94.4	15.0	14.0	0.493	0.653	0.279	0.369	0.388	0.514	
		Body-worn	802.11a	Off	15	Rear	60	5300.0			96.4	18.0	17.0	0.320	0.423	0.283	0.374	0.323	0.427	1
		Product Specific 10-g	802.11a	Off	0	Rear	60	5300.0			96.4	18.0	17.0	1.380	1.823	1.140	1.506	1.730	2.286	1
WiFi 5.5GHz MIMO Ant.1 & 2	UNII	Head	802.11ac (VHT80)	On	0	Right Touch	122	5610.0			94.4	15.0	15.0	0.504	0.536	0.368	0.392	0.443	0.471	
		Body-worn	802.11a	Off	15	Rear	144	5720.0			96.4	18.0	16.6	0.257	0.369	0.257	0.369	0.273	0.392	1
		Product Specific 10-g	802.11a	Off	0	Rear	144	5720.0			96.4	18.0	16.6	0.697	1.000	0.893	1.282	0.913	1.310	1
WiFi 5.8GHz MIMO Ant.1 & 2	UNII	Head	802.11ac (VHT80)	On	0	Right Touch	155	5775.0			94.4	15.0	14.2	0.216	0.276	0.118	0.151	0.275	0.351	1
		Body-worn	802.11a	Off	15	Rear	165	5825.0			96.4	18.0	16.9	0.300	0.400	0.368	0.491	0.364	0.485	1
		Hotspot	802.11a	Off	10	Rear	149	5745.0			96.4	18.0	16.8	0.389	0.530	0.341	0.464	0.380	0.517	
WiFi 5.9GHz MIMO Ant.1 & 2	UNII	Head	802.11ac (VHT80)	On	0	Right Touch	171	5855.0			94.4	15.0	14.0	0.149	0.199	0.098	0.131	0.149	0.199	
		Body-worn	802.11a	Off	15	Rear	177	5885.0			96.4	18.0	17.0	0.400	0.528	0.315	0.416	0.362	0.478	
		Product Specific 10-g	802.11a	Off	0	Rear	177	5885.0			96.4	18.0	17.0	1.170	1.546	0.854	1.128	0.942	1.245	

Note(s):

First, SAR test was performed with Original model (Version 1), and then Variant models (Version 2 & 3) are performed spot-check at worst configuration of each RF exposure conditions from Original model. Spot-check bands were considered for antennas of Top side.

1. If Variant model's Reported SAR is higher than Original model, then the corresponding RF exposure are required full test with variant model.

2. Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE STD 1528-2013, ANSI C63.26-2015 the following FCC Published RF exposure [KDB](#) procedures:

- 248227 D01 802.11 Wi-Fi SAR v02r02
- 447498 D01 General RF Exposure Guidance v06
- 648474 D04 Handset SAR v01r03
- 690783 D01 SAR Listings on Grants v01r03
- 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
- 865664 D02 RF Exposure Reporting v01r02
- 941225 D01 3G SAR Procedures v03r01
- 941225 D05 SAR for LTE Devices v02r05
- 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02
- 941225 D06 Hotspot Mode v02r01
- 941225 D07 UMPC Mini Tablet v01r02
- 971168 D01 Power Meas License Digital System v03r01

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

- [TCB workshop](#) October, 2014; RF Exposure Procedures Update (Overlapping LTE Bands)
- [TCB workshop](#) October, 2014; RF Exposure Procedures Update (Other LTE Considerations)
- [TCB workshop](#) October, 2016; RF Exposure Procedures (Bluetooth Duty Factor)
- [TCB workshop](#) October, 2016; RF Exposure Procedures (DUT Holder Perturbations)
- [TCB workshop](#) May, 2017; RF Exposure Procedures (LTE Test Conditions)
- [TCB workshop](#) May, 2017; RF Exposure Procedures (LTE Band 41 Power Class 2)
- [TCB workshop](#) November, 2017; RF Exposure Procedures (LTE UL/DL Carrier Aggregation SAR)
- [TCB workshop](#) April, 2018; RF Exposure Procedures (LTE DL CA SAR Test Exclusion Update)
- [TCB workshop](#) April, 2018; RF Exposure Procedures (LTE Inter-Band Uplink Carrier Aggregation – Interim Procedures)
- [TCB workshop](#) April, 2019; RF Exposure Procedures (Tissue Simulating Liquids (TSL))
- [TCB workshop](#) October, 2020; 5G RFX Policies (Intra-band and Inter-band NSA-EN-DC evaluation)

3. Facilities and Accreditation

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

Suwon
SAR 1 Room
SAR 2 Room
SAR 3 Room
SAR 4 Room
SAR 5 Room

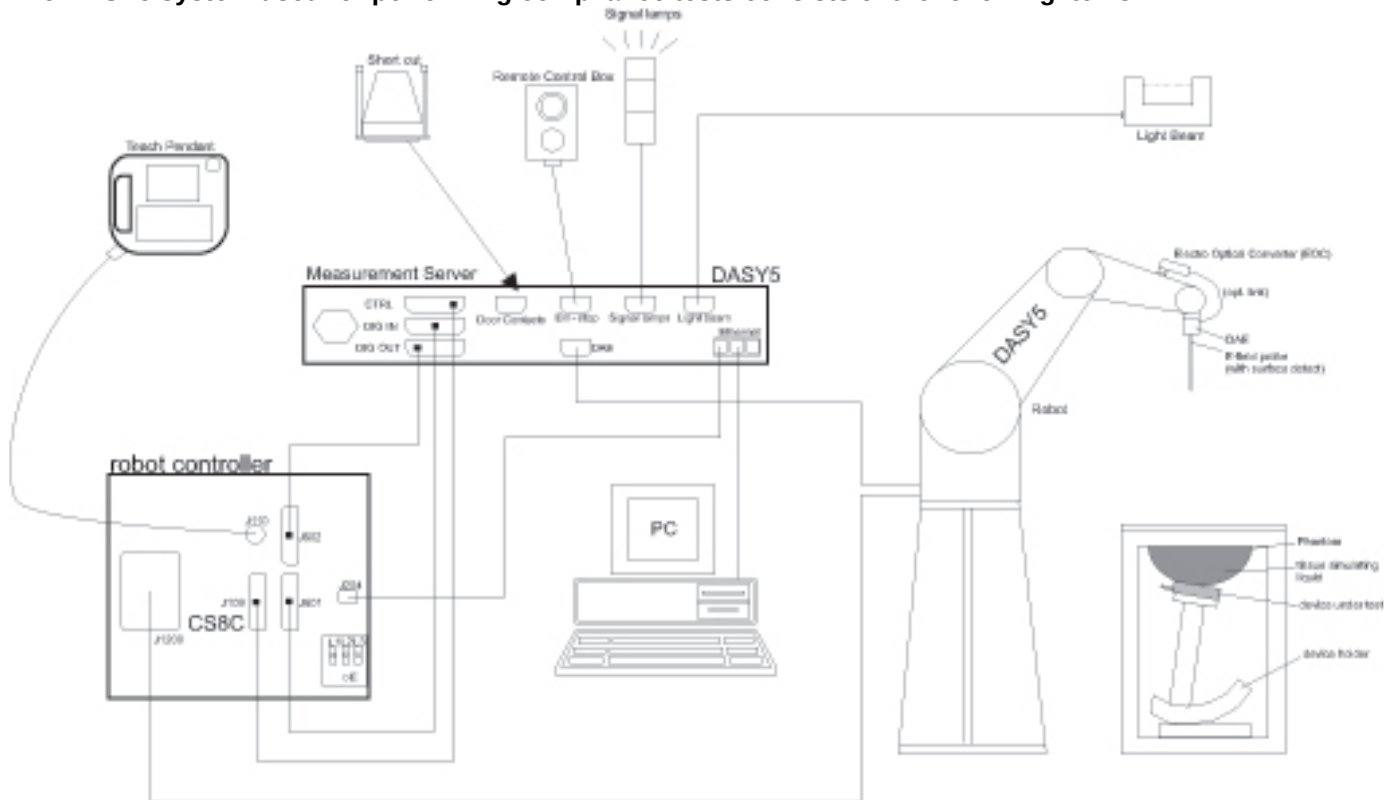
UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637.

The full scope of accreditation can be viewed at <https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf>.

4. SAR Measurement System & Test Equipment

4.1. SAR Measurement System

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



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

4.2. SAR Scan Procedures

Step 1: Power Reference Measurement

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

Step 2: Area Scan

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

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

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$	≤ 2 GHz: ≤ 15 mm $2 - 3$ GHz: ≤ 12 mm	$3 - 4$ GHz: ≤ 12 mm $4 - 6$ GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

Step 3: Zoom Scan

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

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

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.				
* When zoom scan is required and the <u>reported</u> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

Step 4: Power drift measurement

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

Step 5: Z-Scan (FCC only)

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

4.3. Test Equipment

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

Dielectric Property Measurements

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Network Analyzer	Agilent	E5071C	MY46522054	8-6-2022
Dielectric Assessment Kit	SPEAG	DAK-3.5	1196	7-21-2022
Shorting block	SPEAG	DAK-3.5 Short	SM DAK 200 BA	N/A
Thermometer	LKM	DTM3000	3851	8-4-2022

System Check

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
MXG Analog Signal Generator	Agilent	N5181A	MY50145882	8-4-2022
Power Sensor	Agilent	U2000A	MY54260007	8-4-2022
Power Sensor	Agilent	U2000A	MY60180020	8-4-2022
Power Amplifier	EXODUS	1410025-AMP2027-10003	10003	8-4-2022
Directional Coupler	Agilent	772D	MY52180193	8-3-2022
Directional Coupler	Agilent	778D	MY52180432	8-3-2022
Low Pass Filter	MINI-CIRCUITS	NLP-1200	VUU19301915	8-4-2022
Low Pass Filter	MICROLAB	LA-15N	3943	8-3-2022
Low Pass Filter	FILTRON	L14012FL	1410003S	8-3-2022
Low Pass Filter	MICROLAB	LA-60N	3942	8-4-2022
Attenuator	MINI-CIRCUITS	BW-N3W5+	N/A	8-4-2022
Attenuator	Agilent	8491B/003	MY39272275	8-17-2022
Attenuator	Agilent	8491B/010	MY39272011	8-4-2022
Attenuator	Agilent	8491B/020	MY39271973	8-4-2022
E-Field Probe	SPEAG	EX3DV4	7314	5-31-2022
E-Field Probe	SPEAG	EX3DV4	7610	8-26-2022
E-Field Probe	SPEAG	EX3DV4	7645	4-15-2022
E-Field Probe	SPEAG	EX3DV4	7545	8-26-2022
E-Field Probe	SPEAG	EX3DV4	7330	9-29-2022
E-Field Probe	SPEAG	EX3DV4	7376	7-30-2022
E-Field Probe	SPEAG	EX3DV4	7313	2-23-2022
E-Field Probe	SPEAG	EX3DV4	3697	3-22-2022
E-Field Probe	SPEAG	EX3DV4	7309	4-20-2022
Data Acquisition Electronics	SPEAG	DAE4	614	3-5-2022
Data Acquisition Electronics	SPEAG	DAE4	1591	3-26-2022
Data Acquisition Electronics	SPEAG	DAE4	1343	8-23-2022
Data Acquisition Electronics	SPEAG	DAE4	1468	9-27-2022
Data Acquisition Electronics	SPEAG	DAE4	1494	7-27-2022
System Validation Dipole	SPEAG	D750V3	1122	2-24-2022
System Validation Dipole	SPEAG	D835V2	4d194	3-20-2022
System Validation Dipole	SPEAG	D1750V2	1125	2-21-2022
System Validation Dipole	SPEAG	D1900V2	5d199	3-19-2022
System Validation Dipole	SPEAG	D2450V2	960	3-20-2022
System Validation Dipole	SPEAG	D2600V2	1178	4-21-2023
System Validation Dipole	SPEAG	D5GHzV2	1209	2-27-2022
System Validation Dipole	SPEAG	D5GHzV2	1209	11-24-2023
System Validation Dipole	SPEAG	D5GHzV2	1184	12-3-2022
System Validation Dipole	SPEAG	D5GHzV2	1094	11-23-2021
System Validation Dipole	SPEAG	D5GHzV2	1293	7-22-2023
Thermometer	Lutron	MHB-382SD	AH.50213	8-4-2022
Thermometer	Lutron	MHB-382SD	AJ.45903	8-3-2022
Thermometer	Lutron	MHB-382SD	AK.12123	8-3-2022

Others

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Base Station Simulator	R & S	CMW500	169801	8-3-2022
Base Station Simulator	R & S	CMW500	169799	8-3-2022
Base Station Simulator	R & S	CMW500	169800	8-3-2022
Base Station Simulator	R & S	CMW500	169798	8-3-2022
Base Station Simulator	R & S	CMW500	169797	8-3-2022
Base Station Simulator	R & S	CMW500	150313	8-3-2022
Base Station Simulator	R & S	CMW500	150314	8-4-2022
Base Station Simulator	R & S	CMW500	162790	8-3-2022
UXM 5G Wireless Test Platform	Keysight	E7515B	MY57510596	8-6-2022
UXM 5G Wireless Test Platform	Keysight	E7515B	MY58010202	6-16-2022
UXM 5G Wireless Test Platform	Keysight	E7515B	MY59150850	12-13-2022

Note(s):

1. For System Validation Dipole, Calibration interval applied every 2 years according to referencing KDB 865664 guidance.
2. Refer to Appendix F that mentioned about justification for Extended SAR Dipole Calibrations. (for blue box items)
3. All equipments were used until Cal.Due data.

5. Measurement Uncertainty

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

5.1. DECISION RULE

Decision rule for statement(s) of conformity is based on Procedures 1, Clause 4.4.2 in IEC Guide 115:2007.

6. Device Under Test (DUT) Information

6.1. DUT Description

Device Dimension	Refer to Appendix A.				
Back Cover	☒ The Back Cover is not removable.				
Battery Options	☒ The rechargeable battery is not user accessible				
Wireless Router (Hotspot)	Wi-Fi Hotspot mode permits the device to share its cellular data connection with other Wi-Fi-enabled devices. ☒ Mobile Hotspot (Wi-Fi 2.4 GHz) ☒ Mobile Hotspot (Wi-Fi 5.8 GHz)				
Wi-Fi Direct	Wi-Fi Direct enabled devices transfer data directly between each other ☒ Wi-Fi Direct (Wi-Fi 2.4 GHz) ☒ Wi-Fi Direct (Wi-Fi 5.2 GHz_UNII-1, Wi-Fi 5.8 GHz_UNII-3)				
Test Sample Information	Version 1 (Original model)				
	No.	S/N	Notes	No.	S/N
	1	R3CR80TB8QD	Main Conducted	10	R3CR80TBWCV
	2	R3CR80TBD6T	Main Conducted	11	R3CR80TBTBE
	3	R3CR80TBWBD	Main Conducted	12	R3CR80TBVSW
	4	R3CR80TBT6V	Wi-Fi & BT Conducted	13	R3CR80TBW4H
	5	R3CR80TBVCN	Wi-Fi & BT Conducted	14	R3CR90YJLPP
	6	R3CR80TBVKZ	Wi-Fi & BT Conducted	15	R3CR70QKDGf
	7	R3CR80TBCXY	SAR	16	R3CR90YJH9K
	8	R3CR80TB98D	SAR	17	R3CR90YJKHM
	9	R3CR80TBVJR	SAR		
	Version 2 (Variant model)				
	No.	S/N	Notes	No.	S/N
	1	R3CRB0P2P2K	SAR	2	R3CRB0P2M5D
	Version 3 (Variant model)				
	No.	S/N	Notes	No.	S/N
	1	R3CRB0P339X	SAR	3	R3CRB0P32XM
	2	R3CRB0P33CW	SAR		

6.2. Wireless Technologies

Wireless technologies	Frequency bands	Operating mode		Duty Cycle used for SAR testing
GSM	850 1900	Voice (GMSK) GPRS (GMSK) EGPRS (8PSK)	GPRS Multi-Slot Class: ☐ Class 8 - 1 Up, 4 Down ☐ Class 10 - 2 Up, 4 Down ☐ Class 12 - 4 Up, 4 Down ☒ Class 33 - 4 Up, 5 Down	GSM Voice: 12.5% (E)GPRS: 1 Slot: 12.5% 2 Slots: 25% 3 Slots: 37.5% 4 Slots: 50%
	Does this device support DTM (Dual Transfer Mode)? ☐ Yes ☒ No			
W-CDMA (UMTS)	Band II Band IV Band V	UMTS Rel. 99 (Voice & Data) HSDPA (Category 24) HSUPA (Category 6) DC-HSDPA (Category 24) HSPA+ (DL only)		100%
LTE	FDD Band 2 FDD Band 4 FDD Band 5 FDD Band 12 FDD Band 13 FDD Band 17 FDD Band 25 FDD Band 26 TDD Band 41 ^{Power Class 3} TDD Band 41 ^{Power Class 2} FDD Band 66 <u>Uplink inter-band Carrier Aggregation(2CC)</u> CA_2A-4A CA_4A-5A CA_4A-12A CA_5A-66A CA_12A-66A	QPSK 16QAM 64QAM 256QAM Rel. 15 Carrier Aggregation (2 Uplink and 5 Downlinks)		100% (FDD) 63.3% (TDD) ^{Power Class 3} 43.3% (TDD) ^{Power Class 2}
	Does this device support SV-LTE (1xRTT-LTE)? ☐ Yes ☒ No			
5G NR (Sub 6)	NR Band n5 NR Band n66	DFT-s-OFDM: ■ $\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: ■ QPSK, 16QAM, 64QAM, 256QAM		100%
Wi-Fi	2.4 GHz	802.11b 802.11g 802.11n (HT20) 802.11ax (HE20)		SISO mode 99.5% (802.11b) MIMO mode 96.4% (802.11g)
	5 GHz	802.11a 802.11n (HT20) & (HT40) 802.11ac (VHT20) & (VHT40) & (VHT80) & (VHT160) 802.11ax (HE20) & (HE40) & (HE80) & (HE160)		MIMO mode 96.4% (802.11a) 94.4% (802.11ac (VHT80))
	Does this device support bands 5.60 ~ 5.65 GHz? ☒ Yes ☐ No			
	Does this device support Band gap channel(s)? ☒ Yes ☐ No			
Bluetooth	2.4 GHz	Version 5.0 LE		77.0% (DH5)
NFC	13.56 MHz	Type A/B/F		N/A ⁴
UWB	6.24 ~ 8.24 GHz	BPM-BPSK		N/A ⁴

Notes:

1. The Bluetooth protocol is considered source-based averaging. Bluetooth GFSK (DH5) was verified to have the highest duty cycle of 77.0% and was considered and used for SAR Testing.
2. Duty cycle for Wi-Fi is referenced from the DTS and UNII report.
3. This device supports Power Class 2(HPUE) and Power Class 3 for LTE Band 41.
4. Measured Duty Cycle is not required due to SAR test exemption.
5. This device supports inter-band Uplink Carrier Aggregation.

6.3. Nominal and Maximum Output Power

KDB 447498 sec.4.1. at the maximum rated output power and within the tune-up tolerance range specified for the product, but not more than 2 dB lower than the maximum tune-up tolerance limit

RF Air interface	Antenna	Mode	Time Slots	Max. RF Output Power (dBm)		Reduced. RF Output Power (Hotspot & Proximity sensor & Earjack back-off) (dBm)	
				Tune-up Limit	Frame Pwr	Tune-up Limit	Frame Pwr
GSM850	Main 1 Ant.	Voice	1	34.0	25.0		
		GPRS	1	34.0	25.0		
		GPRS	2	31.0	25.0		
		GPRS	3	30.0	25.7		
		GPRS	4	29.0	26.0		
		EGPRS	1	27.5	18.5		
		EGPRS	2	26.0	20.0		
		EGPRS	3	24.0	19.7		
		EGPRS	4	23.0	20.0		
GSM1900	Main 1 Ant.	Voice	1	31.0	22.0	29.0	20.0
		GPRS	1	31.0	22.0	29.0	20.0
		GPRS	2	29.5	23.5	29.5	23.5
		GPRS	3	27.5	23.2	27.5	23.2
		GPRS	4	25.5	22.5	25.5	22.5
		EGPRS	1	26.5	17.5	26.5	17.5
		EGPRS	2	25.5	19.5	25.5	19.5
		EGPRS	3	23.5	19.2	23.5	19.2
		EGPRS	4	22.5	19.5	22.5	19.5

RF Air interface	Antenna	Mode	Max. RF Output Power (dBm)	Reduced. RF Output Power (Hotspot & Proximity sensor & Earjack back-off) (dBm)
W-CDMA Band II	Main 1 Ant.	R99	25.0	21.0
		HSDPA	23.0	21.0
		HSUPA	23.0	21.0
		DC-HSDPA	23.0	21.0
W-CDMA Band IV	Main 1 Ant.	R99	24.5	21.0
		HSDPA	22.0	21.0
		HSUPA	22.0	21.0
		DC-HSDPA	22.0	21.0
W-CDMA Band V	Main 1 Ant.	R99	25.5	
		HSDPA	25.0	
		HSUPA	23.0	
		DC-HSDPA	25.0	

RF Air interface	Antenna	Mode	Max. RF Output Power (dBm)	Reduced. RF Output Power (dBm)		
				Hotspot back-off	Proximity sensor & Ear-jack back-off	RCV back-off
LTE Band 2	Main 1 Ant.	QPSK	25.0	21.5	21.5	
LTE Band 2	Main 3 Ant.	QPSK	22.5	19.5		17.5
LTE Band 4	Main 1 Ant.	QPSK	25.0	21.5	21.5	
LTE Band 4	Main 3 Ant.	QPSK	22.5	19.5		17.5
LTE Band 5	Main 1 Ant.	QPSK	25.5			
LTE Band 12	Main 1 Ant.	QPSK	25.5			
LTE Band 13	Main 1 Ant.	QPSK	25.5			
LTE Band 17	Main 1 Ant.	QPSK	25.5			
LTE Band 25	Main 1 Ant.	QPSK	25.0	22.0	22.0	
LTE Band 26	Main 1 Ant.	QPSK	25.5			
LTE Band 66	Main 1 Ant.	QPSK	25.0	21.5	21.5	
LTE Band 41(PC3)	Main 2 Ant.	QPSK	25.0	23.0	23.0	
LTE Band 41(PC2)	Main 2 Ant.	QPSK	26.5	24.0	24.0	

RF Air interface	Antenna	Mode	Max. RF Output Power (dBm)	Reduced. RF Output Power (dBm)		
				Hotspot back-off	Proximity sensor & Ear-jack back-off	RCV back-off
NR Band n5	Main 1 Ant.	DFT-s-OFDM QPSK	25.0			
NR Band n66	Main 1 Ant.	DFT-s-OFDM QPSK	25.0	21.0	21.0	
NR Band n66	Main 3 Ant.	DFT-s-OFDM QPSK	23.0	19.0		

Normal WLAN-Maximum power

Band	Mode	SISO (dBm)	WiFi Ant.1, Ant.2 MIMO mode (dBm)					MIMO (Ant.1 + Ant.2) (dBm)				
		b	a	g	n	ac	ax	a	g	n	ac	ax
2.4GHz	1Ch	19.0		16.0	16.0		15.0		19.0	19.0		18.0
2.4GHz	2-10Ch	19.0		18.0	18.0		18.0		21.0	21.0		21.0
2.4GHz	11Ch	19.0		18.0	16.0		18.0		21.0	19.0		21.0
2.4GHz	12Ch	17.0		14.0	14.0		14.0		17.0	17.0		17.0
2.4GHz	13Ch	6.0		3.0	3.0		3.0		6.0	6.0		6.0
5GHz (20MHz)	UNII-1		18.0		18.0	18.0	18.0	21.0		21.0	21.0	21.0
	UNII-2A		18.0		18.0	18.0	18.0	21.0		21.0	21.0	21.0
	UNII-2C		18.0		18.0	18.0	18.0	21.0		21.0	21.0	21.0
	UNII-3		18.0		18.0	18.0	18.0	21.0		21.0	21.0	21.0
	UNII-4		18.0		18.0	18.0	18.0	21.0		21.0	21.0	21.0
5GHz (40MHz)	UNII-1				17.0	17.0	17.0			20.0	20.0	20.0
	UNII-2A				ch38: 16	ch38: 16	ch38: 16			ch38: 19	ch38: 19	ch38: 19
					17.0	17.0	17.0			20.0	20.0	20.0
					ch62: 15	ch62: 15	ch62: 15			ch62: 18	ch62: 18	ch62: 18
	UNII-2C				17.0	17.0	17.0			20.0	20.0	20.0
					ch102: 16	ch102: 16	ch102: 16			ch102: 19	ch102: 19	ch102: 19
					17.0	17.0	17.0			20.0	20.0	20.0
	UNII-4				17.0	17.0	17.0			20.0	20.0	20.0
5GHz (80MHz)	UNII-1					15.0	15.0				18.0	18.0
	UNII-2A					15.0	15.0				18.0	18.0
	UNII-2C					16.0	16.0				19.0	19.0
	UNII-3					16.0	16.0				19.0	19.0
	UNII-4					16.0	16.0				19.0	19.0
5GHz (160MHz)	UNII-1 & UNII-2A					15.0	15.0				18.0	18.0
	UNII-2C					14.0	14.0				17.0	17.0
	UNII-3 & UNII-4					15.0	15.0				18.0	18.0

Normal WLAN-Reduced power

Band	Mode	SISO (dBm)	WiFi Ant.1, Ant.2 MIMO mode (dBm)					MIMO (Ant.1 + Ant.2) (dBm)				
		b	a	g	n	ac	ax	a	g	n	ac	ax
2.4GHz	1Ch	17.0		16.0	16.0		15.0		19.0	19.0		18.0
2.4GHz	2-10Ch	17.0		17.0	17.0		17.0		20.0	20.0		20.0
2.4GHz	11Ch	17.0		17.0	16.0		17.0		20.0	19.0		20.0
2.4GHz	12Ch	17.0		14.0	14.0		14.0		17.0	17.0		17.0
2.4GHz	13Ch	6.0		3.0	3.0		3.0		6.0	6.0		6.0
5GHz (20MHz)	UNII-1		15.0		15.0	15.0	15.0	18.0		18.0	18.0	18.0
	UNII-2A		15.0		15.0	15.0	15.0	18.0		18.0	18.0	18.0
	UNII-2C		15.0		15.0	15.0	15.0	18.0		18.0	18.0	18.0
	UNII-3		15.0		15.0	15.0	15.0	18.0		18.0	18.0	18.0
	UNII-4		15.0		15.0	15.0	15.0	18.0		18.0	18.0	18.0
5GHz (40MHz)	UNII-1				15.0	15.0	15.0			18.0	18.0	18.0
	UNII-2A				15.0	15.0	15.0			18.0	18.0	18.0
	UNII-2C				15.0	15.0	15.0			18.0	18.0	18.0
	UNII-3				15.0	15.0	15.0			18.0	18.0	18.0
	UNII-4				15.0	15.0	15.0			18.0	18.0	18.0
5GHz (80MHz)	UNII-1					15.0	15.0				18.0	18.0
	UNII-2A					15.0	15.0				18.0	18.0
	UNII-2C					15.0	15.0				18.0	18.0
	UNII-3					15.0	15.0				18.0	18.0
	UNII-4					15.0	15.0				18.0	18.0
5GHz (160MHz)	UNII-1 & UNII-2A					15.0	15.0				18.0	18.0
	UNII-2C					14.0	14.0				17.0	17.0
	UNII-3 & UNII-4					15.0	15.0				18.0	18.0

Note(s):

1. This device uses an independent fixed level power reduction mechanism for WLAN mode operations during RCV operation. Detailed descriptions of the power reduction mechanism are included in the operational description.
2. Except 802.11b mode, All modes are only operate MIMO mode.

RSDB WLAN-Maximum power

Band	Mode	SISO (dBm)	WiFi Ant.1, Ant.2 MIMO mode (dBm)					MIMO (Ant.1 + Ant.2) (dBm)				
		b	a	g	n	ac	ax	a	g	n	ac	ax
2.4GHz	1Ch	17.0		16.0	16.0		15.0		19.0	19.0		18.0
2.4GHz	2-10Ch	17.0		17.0	17.0		17.0		20.0	20.0		20.0
2.4GHz	11Ch	17.0		17.0	16.0		17.0		20.0	19.0		20.0
2.4GHz	12Ch	17.0		14.0	14.0		14.0		17.0	17.0		17.0
2.4GHz	13Ch	6.0		3.0	3.0		3.0		6.0	6.0		6.0
5GHz (20MHz)	UNII-1		14.0		14.0	14.0	14.0	17.0		17.0	17.0	17.0
	UNII-2A		14.0		14.0	14.0	14.0	17.0		17.0	17.0	17.0
	UNII-2C		14.0		14.0	14.0	14.0	17.0		17.0	17.0	17.0
	UNII-3		14.0		14.0	14.0	14.0	17.0		17.0	17.0	17.0
	UNII-4		14.0		14.0	14.0	14.0	17.0		17.0	17.0	17.0
5GHz (40MHz)	UNII-1				14.0	14.0	14.0			17.0	17.0	17.0
	UNII-2A				14.0	14.0	14.0			17.0	17.0	17.0
	UNII-2C				14.0	14.0	14.0			17.0	17.0	17.0
	UNII-3				14.0	14.0	14.0			17.0	17.0	17.0
	UNII-4				14.0	14.0	14.0			17.0	17.0	17.0
5GHz (80MHz)	UNII-1					14.0	14.0				17.0	17.0
	UNII-2A					14.0	14.0				17.0	17.0
	UNII-2C					14.0	14.0				17.0	17.0
	UNII-3					14.0	14.0				17.0	17.0
	UNII-4					14.0	14.0				17.0	17.0
5GHz (160MHz)	UNII-1 & UNII-2A					14.0	14.0				17.0	17.0
	UNII-2C					14.0	14.0				17.0	17.0
	UNII-3 & UNII-4					14.0	14.0				17.0	17.0

RSDB WLAN-Reduced power

Band	Mode	SISO (dBm)	WiFi Ant.1, Ant.2 MIMO mode (dBm)					MIMO (Ant.1 + Ant.2) (dBm)				
		b	a	g	n	ac	ax	a	g	n	ac	ax
2.4GHz	1Ch	14.0		14.0	14.0		14.0		17.0	17.0		17.0
2.4GHz	2-10Ch	14.0		14.0	14.0		14.0		17.0	17.0		17.0
2.4GHz	11Ch	14.0		14.0	14.0		14.0		17.0	17.0		17.0
2.4GHz	12Ch	14.0		14.0	14.0		14.0		17.0	17.0		17.0
2.4GHz	13Ch	6.0		3.0	3.0		3.0		6.0	6.0		6.0
5GHz (20MHz)	UNII-1		14.0		14.0	14.0	14.0	17.0		17.0	17.0	17.0
	UNII-2A		14.0		14.0	14.0	14.0	17.0		17.0	17.0	17.0
	UNII-2C		14.0		14.0	14.0	14.0	17.0		17.0	17.0	17.0
	UNII-3		14.0		14.0	14.0	14.0	17.0		17.0	17.0	17.0
	UNII-4		14.0		14.0	14.0	14.0	17.0		17.0	17.0	17.0
5GHz (40MHz)	UNII-1				14.0	14.0	14.0			17.0	17.0	17.0
	UNII-2A				14.0	14.0	14.0			17.0	17.0	17.0
	UNII-2C				14.0	14.0	14.0			17.0	17.0	17.0
	UNII-3				14.0	14.0	14.0			17.0	17.0	17.0
	UNII-4				14.0	14.0	14.0			17.0	17.0	17.0
5GHz (80MHz)	UNII-1					14.0	14.0				17.0	17.0
	UNII-2A					14.0	14.0				17.0	17.0
	UNII-2C					14.0	14.0				17.0	17.0
	UNII-3					14.0	14.0				17.0	17.0
	UNII-4					14.0	14.0				17.0	17.0
5GHz (160MHz)	UNII-1 & UNII-2A					14.0	14.0				17.0	17.0
	UNII-2C					14.0	14.0				17.0	17.0
	UNII-3 & UNII-4					14.0	14.0				17.0	17.0

Bluetooth-Maximum power

Band	Mode	Maximum output power (dBm)			Reduced output power (dBm)		
		Ant.1, Ant.2 SISO mode (dBm)	Ant.1, Ant.2 MIMO mode (dBm)	MIMO Ant.1 + Ant.2	Ant.1, Ant.2 SISO mode (dBm)	Ant.1, Ant.2 MIMO mode (dBm)	MIMO Ant.1 + Ant.2
2.4GHz	Bluetooth_GFSK	19.0	12.0	15.0	15.0		
2.4GHz	Bluetooth_EDR	18.0	10.0	13.0	15.0		
2.4GHz	Bluetooth_LE	17.0	9.5	12.5	15.0		

Note(s):

1. This device uses an independent fixed level power reduction mechanism for WLAN mode and Bluetooth operations during RCV operation. Detailed descriptions of the power reduction mechanism are included in the operational description.
2. Except 802.11b mode, all modes are only operated MIMO mode.
3. Refer to section12 for the WLAN operation scenarios.

6.4. Power Back-off Operation

This device supports multiple power back-off modes: WWAN (Hotspot), WWAN (Proximity sensor), WWAN (ear-jack), WWAN (RCV) and WLAN (RCV). Each of the power back-off operates within specific exposure conditions for certain technologies. For full details on how each power back-off mode operates, refer to the Operational Description.

Power Back-off mode	Technologies Supported	Exposure Conditions Active			
		Head	Body-worn	Hotspot	Product Specific 10-g
WWAN (Hotspot)	GSM 1900 WCDMA Band II & IV LTE Band 2 & 4 & 25 & 66 & 41 NR Band n66 (Ant.1)	N/A	N/A	✓	N/A
WWAN (Proximity sensor)	GSM 1900 WCDMA Band II & IV LTE Band 2 & 4 (Ant.1), 25 & 66 & 41 NR Band n66 (Ant.1)	N/A	N/A	N/A	✓
WWAN (Ear-jack)	GSM 1900 WCDMA Band II & IV LTE Band 2 & 4 (Ant.1), 25 & 66 & 41 NR Band n66 (Ant.1)	N/A	✓	N/A	✓
WWAN (RCV)	LTE Band 2 & 4 (Ant.3) NR Band n66 (Ant.3)	✓	N/A	N/A	N/A
WLAN (RCV)	2.4GHz/5GHz WLAN & Bluetooth	✓	N/A	N/A	N/A

Note(s):

1. WWAN Back-off priority: RCV → Ear-jack → Proximity Sensor → Hotspot
2. Body-worn SAR with ear-jack connected is not required due to Body-worn measured at max power is not over 1.2 W/kg.

Product Specific 10g Adjusted SAR Calculation

Wireless technologies	Max Tune-up Limit (dBm)	Reduced Tune-Up Limit (dBm)	Power Factor	Reported SAR Limit (W/kg)
GSM 1900	23.5	23.5	1.00	1.200
WCDMA Band II	25.0	21.0	2.51	0.478
WCDMA Band IV	24.5	21.0	2.24	0.536
LTE Band 25/2 (Ant.1)	25.0	22.0	2.00	0.601
LTE Band 66/4 (Ant.1)	25.0	21.5	2.24	0.536
LTE Band 41	25.0	23.0	1.58	0.757
NR Band n66 (Ant.1)	25.0	21.0	2.51	0.478

Note(s):

1. Tune-up limit powers for GSM 1900 are frame power(dBm).
2. Hotspot mode supports power reduction. When the measured SAR is scaled to the maximum tune-up limit, the adjusted SAR is < 1.2 W/kg. Therefore, Extremity SAR testing is not required for this band in accordance with KDB 648474 §2.5 b. Refer to §10 for Reported SAR results. If the Reported SAR 1g value in §10 is less than the Reported SAR Limit listed above, then Extremity SAR is not required.
3. LTE 50% RB is scaled up to the Max Tune-Up Limit with MPR included.
4. For Reported SAR limit in above table, it was calculated using Max tune-up Limit & Reduced Tune-up limit & Reported SAR 1.2 W/kg.
(Reported SAR Limit = $1.2 \text{ W/kg} / \text{Power factor}$, Power factor = $10^{((\text{Max tune-up limit} - \text{Reduced tune-up limit})/10)}$)

6.5. General LTE SAR Test and Reporting Considerations

Item	Description						
Frequency range, Channel Bandwidth, Numbers and Frequencies	Band 2	Frequency range: 1850 - 1910 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low	18700/ 1860	18675/ 1857.5	18650/ 1855	18625/ 1852.5	18615/ 1851.5	18607/ 1850.7
	Mid	18900/ 1880	18900/ 1880	18900/ 1880	18900/ 1880	18900/ 1880	18900/ 1880
	High	19100/ 1900	19125/ 1902.5	19150/ 1905	19175/ 1907.5	19185/ 1908.5	19193/ 1909.3
	Band 4	Frequency range: 1710 - 1755 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low	20050/ 1720	20025/ 1717.5	20000/ 1715	19975/ 1712.5	19965/ 1711.5	19957/ 1710.7
	Mid	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5	20175/ 1732.5
	High	20300/ 1745	20325/ 1747.5	20350/ 1750	20375/ 1752.5	20385/ 1753.5	20393/ 1754.3
	Band 5	Frequency range: 824 - 849 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low			20450/ 829	20425/ 826.5	20415/ 825.5	20407/ 824.7
	Mid			20525/ 836.5	20525/ 836.5	20525/ 836.5	20525/ 836.5
	High			20600/ 844	20625/ 846.5	20635/ 847.5	20643/ 848.3
	Band 12	Frequency range: 699 - 716 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low			23060/ 704	23035/ 701.5	23025/ 700.5	23017/ 699.7
	Mid			23095/ 707.5	23095/ 707.5	23095/ 707.5	23095/ 707.5
	High			23130/ 711	23155/ 713.5	23165/ 714.5	23173/ 715.3
	Band 13	Frequency range: 777 - 787 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low				23205/ 779.5		
	Mid			23230/ 782	23230/ 782		
	High				23255/ 784.5		
	Band 17	Frequency range: 704 - 716 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low			23780/ 709	23755/ 706.5		
	Mid			23790/ 710	23790/ 710		
	High			23800/ 711	23825/ 713.5		

General LTE SAR Test and Reporting Considerations (Continued)

Frequency range, Channel Bandwidth, Numbers and Frequencies	Band 25	Frequency range: 1850 - 1915 MHz						
		Channel Bandwidth						
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz	
	Low	26140/ 1860	26115/ 1857.5	26090/ 1855	26065/ 1852.5	26055/ 1851.5	26047/ 1850.7	
	Mid	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	
	High	26590/ 1905	26615/ 1907.5	26640/ 1910	26665/ 1912.5	26675/ 1913.5	26683/ 1914.3	
	Band 26	Frequency range: 814 - 849 MHz						
		Channel Bandwidth						
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz	
	Low		26765/ 821.5	26740/ 819	26715/ 816.5	26705/ 815.5	26697/ 814.7	
	Mid		26865/ 831.5	26865/ 831.5	26865/ 831.5	26865/ 831.5	26865/ 831.5	
	High		26965/ 841.5	26990/ 844	27015/ 846.5	27025/ 847.5	27033/ 848.3	
	Band 41	Frequency range: 2496 - 2690 MHz						
		Channel Bandwidth						
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz	
	Low	39750 / 2506.0						
	Low-Mid	40185 / 2549.5						
	Mid	40620 / 2593.0						
	Mid-High	41055 / 2636.5						
	High	41490 / 2680.0						
	Band 66	Frequency range: 1710 - 1780 MHz						
		Channel Bandwidth						
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz	
	Low	132072/ 1720	132047/ 1717.5	132022/ 1715	131997/ 1712.5	131987/ 1711.5	131979/ 1710.7	
	Mid	132322/ 1745	132322/ 1745	132322/ 1745	132322/ 1745	132322/ 1745	132322/ 1745	
	High	132572/ 1770	132597/ 1772.5	132622/ 1775	132647/ 1777.5	132657/ 1778.5	132665/ 1779.3	
LTE transmitter and antenna implementation	Refer to Appendix A.							
Maximum power reduction (MPR)	Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3							
	Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})					MPR (dB)	
		1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz		20 MHz
	QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
	16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
	16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
	64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
	64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
	256 QAM	≥ 1					≤ 5	
	MPR Built-in by design							
	The manufacturer MPR values are always within the 3GPP maximum MPR allowance but may not follow the default MPR values.							
	A-MPR (additional MPR) was disabled during SAR testing							
Power reduction	Yes							
Spectrum plots for RB configurations	A properly configured base station simulator was used for the SAR and power measurements; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.							

Notes:

- Maximum bandwidth does not support at least three non-overlapping channels in certain channel bandwidths. When a device supports Overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing per KDB 941225 D05 SAR for LTE devices.
- LTE Band 41 test channels in accordance with October 2014 TCB workshop for all channels bandwidths.
- SAR Testing for LTE was performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

6.6. LTE (TDD) Considerations

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

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

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

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

Calculated Duty Cycle

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

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

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

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

where

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

Note(s):

This device supports uplink-downlink configurations 0-6. The configuration with highest duty cycle was used for SAR Testing: configuration 0 at 63.3% duty cycle. Only LTE Band 41 Power Class 2 was used configuration 1 at 43.3% duty cycle for SAR testing.

6.7. NR (Sub 6GHz) SAR Test and Reporting Considerations

Item	Description													
Frequency range, Channel Bandwidth, Numbers and Frequencies	Band n5	Frequency range: 824 - 849 MHz												
		Channel Bandwidth (MHz)												
		100	90	80	70	60	50	40	30	25	20	15	10	5
	Low										166800/834	166300/831.5	165800/829	165300/826.5
	Mid										167300/836.5	167300/836.5	167300/836.5	167300/836.5
	High										167800/839	168300/841.5	168800/844	169300/846.5
	Band n66	Frequency range: 1710 - 1780 MHz												
		Channel Bandwidth (MHz)												
		100	90	80	70	60	50	40	30	25	20	15	10	5
	Low										344000/1720	343500/1717.5	343000/1715	342500/1712.5
	Mid										349000/1745	349000/1745	349000/1745	349000/1745
	High										354000/1770	354500/1772.5	355000/1775	355500/1777.5
SCS	15 kHz													
Modulations Supported in UL	DFT-s-OFDM: $\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM													
A-MPR (Additional MPR) disabled for SAR Testing?	Yes													
EN-DC Carrier Aggregation Possible Combinations														
LTE Anchor Bands for NR Band n5	LTE Band 2, 66													
LTE Anchor Bands for NR Band n66 (Main Ant.1)	LTE Band 5, 12, 13													
LTE Anchor Bands for NR Band n66 (Main Ant.3)	LTE Band 2													

Notes:

- SAR test for NR bands and LTE anchor Bands were performed separately due to limitations in SAR probe calibration factors. And, due to test setup limitations, SAR testing for NR was performed using test mode software to establish the connection.
- NR configurations of SAR test were determined according to Section 5.2 of KDB 941225 D05.
- All NR Bands support both SA and NSA. But NR Bands of Main Ant.3 supports only NSA mode.

7. RF Exposure Conditions (Test Configurations)

Refer to Appendix A for the specific details of the antenna-to-antenna and antenna-to-edge(s) distances.

Wireless technologies	RF Exposure Conditions	Antennas	DUT-to-User Separation	Test Position	Antenna-to-edge/surface	SAR Required	Note
WWAN	Head	All Main Antennas	0 mm	Left Touch	N/A	Yes	
				Left Tilt (15°)	N/A	Yes	
				Right Touch	N/A	Yes	
				Right Tilt (15°)	N/A	Yes	
	Body	All Main Antennas	15 mm	Rear	N/A	Yes	
				Front	N/A	Yes	
	Hotspot	Main 1 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	> 25 mm	No	1
				Edge 2 (Right)	< 25 mm	Yes	
				Edge 3 (Bottom)	< 25 mm	Yes	
	Hotspot	Main 2 Ant.	10 mm	Edge 4 (Left)	< 25 mm	Yes	
				Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	> 25 mm	No	1
				Edge 2 (Right)	< 25 mm	Yes	
	Hotspot	Main 3 Ant.	10 mm	Edge 3 (Bottom)	< 25 mm	Yes	
				Edge 4 (Left)	> 25 mm	No	1
				Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	< 25 mm	Yes	
	Product Specific 10-g	All Main Antennas	0 mm	Edge 2 (Right)	< 25 mm	Yes	
				Edge 3 (Bottom)	> 25 mm	No	1
				Edge 4 (Left)	> 25 mm	No	1
				Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
2.4GHz WLAN/BT & 5GHz WLAN	Head	All Main Antennas	0 mm	Left Touch	N/A	Yes	
				Left Tilt (15°)	N/A	Yes	
				Right Touch	N/A	Yes	
				Right Tilt (15°)	N/A	Yes	
	Body		15 mm	Rear	N/A	Yes	
				Front	N/A	Yes	
	Hotspot	WiFi/BT 2.4G Ant.1 or MIMO & WiFi 5G MIMO	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	< 25 mm	Yes	
				Edge 2 (Right)	> 25 mm	No	1
				Edge 3 (Bottom)	> 25 mm	No	1
	Hotspot	WiFi/BT 2.4G Ant.2	10 mm	Edge 4 (Left)	< 25 mm	Yes	
				Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	> 25 mm	No	1
				Edge 2 (Right)	> 25 mm	No	1
	Product Specific 10-g	All Main Antennas	0 mm	Edge 3 (Bottom)	> 25 mm	No	1
				Edge 4 (Left)	< 25 mm	Yes	
				Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	< 25 mm	Yes	

Notes:

- SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hot Spot SAR.
- For Phablet devices: When hotspot mode applies, Product specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.
- For Phablet devices: When hotspot mode applies and power reduction applies to hotspot mode, Product specific 10-g SAR is required for each test position that has an adjusted SAR to maximum power that is > 1.2 W/kg.
- For Phablet devices: When hotspot mode is not supported, Product specific 10-g SAR is required for all surfaces and edges with an antenna located at ≤ 25mm from that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions.

8. Dielectric Property Measurements & System Check

8.1. Dielectric Property Measurements

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

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

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

Tissue Dielectric Parameters

FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

Target Frequency (MHz)	Head		Body	
	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

SAR test were performed in All RF exposure conditions using Head tissue according to TCB workshop note of April. 2019.

IEEE Std 1528-2013

Refer to Table 3 within the IEEE Std 1528-2013

Dielectric Property Measurements Results: SAR 1 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
10/18/2021	Head 1750	e'	39.6000	Relative Permittivity (ϵ_r):	39.60	40.07	-1.18	5
		e''	13.9100	Conductivity (σ):	1.35	1.37	-1.31	5
	Head 1710	e'	39.6500	Relative Permittivity (ϵ_r):	39.65	40.13	-1.19	5
		e''	13.8400	Conductivity (σ):	1.32	1.35	-2.42	5
	Head 1755	e'	39.5800	Relative Permittivity (ϵ_r):	39.58	40.06	-1.21	5
		e''	13.9000	Conductivity (σ):	1.36	1.37	-1.30	5
10/19/2021	Head 5250	e'	35.7900	Relative Permittivity (ϵ_r):	35.79	35.95	-0.45	5
		e''	16.2400	Conductivity (σ):	4.74	4.71	0.65	5
	Head 5260	e'	35.7700	Relative Permittivity (ϵ_r):	35.77	35.94	-0.47	5
		e''	16.2500	Conductivity (σ):	4.75	4.72	0.69	5
	Head 5600	e'	35.1100	Relative Permittivity (ϵ_r):	35.11	35.50	-1.10	5
		e''	16.4800	Conductivity (σ):	5.13	5.07	1.21	5
	Head 5750	e'	34.8200	Relative Permittivity (ϵ_r):	34.82	35.35	-1.50	5
		e''	16.5900	Conductivity (σ):	5.30	5.22	1.61	5
	Head 5800	e'	34.7200	Relative Permittivity (ϵ_r):	34.72	35.30	-1.64	5
		e''	16.6300	Conductivity (σ):	5.36	5.27	1.77	5
	Head 5925	e'	34.4900	Relative Permittivity (ϵ_r):	34.49	35.18	-1.95	5
		e''	16.7000	Conductivity (σ):	5.50	5.40	1.86	5
10/22/2021	Head 5250	e'	35.5100	Relative Permittivity (ϵ_r):	35.51	35.95	-1.22	5
		e''	16.4100	Conductivity (σ):	4.79	4.71	1.71	5
	Head 5260	e'	35.5000	Relative Permittivity (ϵ_r):	35.50	35.94	-1.22	5
		e''	16.4200	Conductivity (σ):	4.80	4.72	1.75	5
	Head 5600	e'	34.8600	Relative Permittivity (ϵ_r):	34.86	35.50	-1.80	5
		e''	16.6900	Conductivity (σ):	5.20	5.07	2.50	5
	Head 5750	e'	34.5800	Relative Permittivity (ϵ_r):	34.58	35.35	-2.18	5
		e''	16.8300	Conductivity (σ):	5.38	5.22	3.08	5
	Head 5825	e'	34.4400	Relative Permittivity (ϵ_r):	34.44	35.28	-2.37	5
		e''	16.8700	Conductivity (σ):	5.46	5.30	3.17	5
10/25/2021	Head 5250	e'	35.5300	Relative Permittivity (ϵ_r):	35.53	35.95	-1.17	5
		e''	15.9500	Conductivity (σ):	4.66	4.71	-1.15	5
	Head 5260	e'	35.5100	Relative Permittivity (ϵ_r):	35.51	35.94	-1.20	5
		e''	15.9600	Conductivity (σ):	4.67	4.72	-1.10	5
	Head 5600	e'	34.8800	Relative Permittivity (ϵ_r):	34.88	35.50	-1.75	5
		e''	16.1500	Conductivity (σ):	5.03	5.07	-0.81	5
	Head 5750	e'	34.6000	Relative Permittivity (ϵ_r):	34.60	35.35	-2.12	5
		e''	16.2400	Conductivity (σ):	5.19	5.22	-0.53	5
	Head 5800	e'	34.5100	Relative Permittivity (ϵ_r):	34.51	35.30	-2.24	5
		e''	16.2600	Conductivity (σ):	5.24	5.27	-0.50	5
Head 5925	e'	34.2900	Relative Permittivity (ϵ_r):	34.29	35.18	-2.52	5	
	e''	16.3100	Conductivity (σ):	5.37	5.40	-0.52	5	
10/28/2021	Head 835	e'	40.7200	Relative Permittivity (ϵ_r):	40.72	41.50	-1.88	5
		e''	20.3100	Conductivity (σ):	0.94	0.90	4.77	5
	Head 820	e'	40.7700	Relative Permittivity (ϵ_r):	40.77	41.57	-1.93	5
		e''	20.5800	Conductivity (σ):	0.94	0.90	4.46	5
	Head 850	e'	40.6900	Relative Permittivity (ϵ_r):	40.69	41.50	-1.95	5
		e''	20.0500	Conductivity (σ):	0.95	0.92	3.43	5
10/28/2021	Head 1750	e'	39.0000	Relative Permittivity (ϵ_r):	39.00	40.07	-2.67	5
		e''	13.9800	Conductivity (σ):	1.36	1.37	-0.81	5
	Head 1710	e'	39.1500	Relative Permittivity (ϵ_r):	39.15	40.13	-2.44	5
		e''	14.1200	Conductivity (σ):	1.34	1.35	-0.45	5
	Head 1755	e'	38.9800	Relative Permittivity (ϵ_r):	38.98	40.06	-2.71	5
		e''	13.9700	Conductivity (σ):	1.36	1.37	-0.80	5
10/28/2021	Head 1900	e'	38.8500	Relative Permittivity (ϵ_r):	38.85	40.00	-2.88	5
		e''	13.5900	Conductivity (σ):	1.44	1.40	2.55	5
	Head 1850	e'	38.8800	Relative Permittivity (ϵ_r):	38.88	40.00	-2.80	5
		e''	13.6700	Conductivity (σ):	1.41	1.40	0.44	5
	Head 1910	e'	38.8500	Relative Permittivity (ϵ_r):	38.85	40.00	-2.88	5
		e''	13.5900	Conductivity (σ):	1.44	1.40	3.09	5

SAR 1 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
10/29/2021	Head 5250	e'	36.2400	Relative Permittivity (ϵ_r):	36.24	35.95	0.81	5
		e''	15.7400	Conductivity (σ):	4.59	4.71	-2.45	5
	Head 5260	e'	36.2200	Relative Permittivity (ϵ_r):	36.22	35.94	0.78	5
		e''	15.7600	Conductivity (σ):	4.61	4.72	-2.34	5
	Head 5600	e'	35.6200	Relative Permittivity (ϵ_r):	35.62	35.50	0.34	5
		e''	16.0200	Conductivity (σ):	4.99	5.07	-1.61	5
	Head 5750	e'	35.3700	Relative Permittivity (ϵ_r):	35.37	35.35	0.06	5
		e''	16.1400	Conductivity (σ):	5.16	5.22	-1.14	5
	Head 5825	e'	35.2400	Relative Permittivity (ϵ_r):	35.24	35.28	-0.10	5
		e''	16.1700	Conductivity (σ):	5.24	5.30	-1.11	5
10/31/2021	Head 750	e'	42.2500	Relative Permittivity (ϵ_r):	42.25	41.90	0.84	5
		e''	21.6100	Conductivity (σ):	0.90	0.89	1.26	5
	Head 700	e'	42.4100	Relative Permittivity (ϵ_r):	42.41	42.17	0.58	5
		e''	22.5100	Conductivity (σ):	0.88	0.89	-1.19	5
	Head 790	e'	42.1200	Relative Permittivity (ϵ_r):	42.12	41.71	0.98	5
		e''	20.8000	Conductivity (σ):	0.91	0.89	2.12	5
10/31/2021	Head 835	e'	41.8800	Relative Permittivity (ϵ_r):	41.88	41.50	0.92	5
		e''	20.0500	Conductivity (σ):	0.93	0.90	3.43	5
	Head 820	e'	41.9500	Relative Permittivity (ϵ_r):	41.95	41.57	0.91	5
		e''	20.2700	Conductivity (σ):	0.92	0.90	2.89	5
	Head 850	e'	41.8500	Relative Permittivity (ϵ_r):	41.85	41.50	0.84	5
		e''	19.8400	Conductivity (σ):	0.94	0.92	2.35	5
11/2/2021	Head 2450	e'	38.1300	Relative Permittivity (ϵ_r):	38.13	39.20	-2.73	5
		e''	13.3700	Conductivity (σ):	1.82	1.80	1.19	5
	Head 2400	e'	38.2200	Relative Permittivity (ϵ_r):	38.22	39.29	-2.71	5
		e''	13.3900	Conductivity (σ):	1.79	1.76	1.77	5
	Head 2480	e'	38.0700	Relative Permittivity (ϵ_r):	38.07	39.16	-2.78	5
		e''	13.3700	Conductivity (σ):	1.84	1.83	0.64	5
11/3/2021	Head 5250	e'	36.4400	Relative Permittivity (ϵ_r):	36.44	35.95	1.36	5
		e''	16.2100	Conductivity (σ):	4.73	4.71	0.47	5
	Head 5260	e'	36.4200	Relative Permittivity (ϵ_r):	36.42	35.94	1.34	5
		e''	16.2200	Conductivity (σ):	4.74	4.72	0.51	5
	Head 5600	e'	35.8000	Relative Permittivity (ϵ_r):	35.80	35.50	0.85	5
		e''	16.5100	Conductivity (σ):	5.14	5.07	1.40	5
	Head 5750	e'	35.5300	Relative Permittivity (ϵ_r):	35.53	35.35	0.51	5
		e''	16.6500	Conductivity (σ):	5.32	5.22	1.98	5
	Head 5800	e'	35.4400	Relative Permittivity (ϵ_r):	35.44	35.30	0.40	5
		e''	16.6900	Conductivity (σ):	5.38	5.27	2.13	5
Head 5925	e'	35.2300	Relative Permittivity (ϵ_r):	35.23	35.18	0.16	5	
	e''	16.7800	Conductivity (σ):	5.53	5.40	2.35	5	
11/3/2021	Head 1750	e'	39.5700	Relative Permittivity (ϵ_r):	39.57	40.07	-1.25	5
		e''	13.8400	Conductivity (σ):	1.35	1.37	-1.80	5
	Head 1710	e'	39.7100	Relative Permittivity (ϵ_r):	39.71	40.13	-1.04	5
		e''	13.9800	Conductivity (σ):	1.33	1.35	-1.43	5
	Head 1755	e'	39.5500	Relative Permittivity (ϵ_r):	39.55	40.06	-1.28	5
		e''	13.8400	Conductivity (σ):	1.35	1.37	-1.73	5
11/3/2021	Head 1900	e'	39.3800	Relative Permittivity (ϵ_r):	39.38	40.00	-1.55	5
		e''	13.4200	Conductivity (σ):	1.42	1.40	1.27	5
	Head 1850	e'	39.4500	Relative Permittivity (ϵ_r):	39.45	40.00	-1.37	5
		e''	13.5500	Conductivity (σ):	1.39	1.40	-0.44	5
	Head 1910	e'	39.3800	Relative Permittivity (ϵ_r):	39.38	40.00	-1.55	5
		e''	13.4100	Conductivity (σ):	1.42	1.40	1.73	5
11/8/2021	Head 1900	e'	38.9900	Relative Permittivity (ϵ_r):	38.99	40.00	-2.53	5
		e''	13.3500	Conductivity (σ):	1.41	1.40	0.74	5
	Head 1850	e'	39.0600	Relative Permittivity (ϵ_r):	39.06	40.00	-2.35	5
		e''	13.4100	Conductivity (σ):	1.38	1.40	-1.47	5
	Head 1910	e'	38.9700	Relative Permittivity (ϵ_r):	38.97	40.00	-2.58	5
		e''	13.3500	Conductivity (σ):	1.42	1.40	1.27	5

SAR 1 Room (Continued)

Date	Freq. (MHz)		Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)
11/9/2021	Head 5250	e'	35.3900	Relative Permittivity (ϵ_r):	35.39	35.95	-1.56	5
		e''	15.7900	Conductivity (σ):	4.61	4.71	-2.14	5
	Head 5260	e'	35.3800	Relative Permittivity (ϵ_r):	35.38	35.94	-1.56	5
		e''	15.8000	Conductivity (σ):	4.62	4.72	-2.10	5
	Head 5600	e'	34.7800	Relative Permittivity (ϵ_r):	34.78	35.50	-2.03	5
		e''	16.0700	Conductivity (σ):	5.00	5.07	-1.31	5
	Head 5750	e'	34.5000	Relative Permittivity (ϵ_r):	34.50	35.35	-2.40	5
		e''	16.2100	Conductivity (σ):	5.18	5.22	-0.72	5
	Head 5800	e'	34.4000	Relative Permittivity (ϵ_r):	34.40	35.30	-2.55	5
		e''	16.2400	Conductivity (σ):	5.24	5.27	-0.62	5
	Head 5925	e'	34.2000	Relative Permittivity (ϵ_r):	34.20	35.18	-2.77	5
		e''	16.3300	Conductivity (σ):	5.38	5.40	-0.40	5
11/10/2021	Head 5250	e'	36.2700	Relative Permittivity (ϵ_r):	36.27	35.95	0.89	5
		e''	15.9700	Conductivity (σ):	4.66	4.71	-1.02	5
	Head 5260	e'	36.2500	Relative Permittivity (ϵ_r):	36.25	35.94	0.86	5
		e''	15.9700	Conductivity (σ):	4.67	4.72	-1.04	5
	Head 5600	e'	35.7500	Relative Permittivity (ϵ_r):	35.75	35.50	0.70	5
		e''	16.1300	Conductivity (σ):	5.02	5.07	-0.94	5
	Head 5750	e'	35.5100	Relative Permittivity (ϵ_r):	35.51	35.35	0.45	5
		e''	16.2400	Conductivity (σ):	5.19	5.22	-0.53	5
	Head 5800	e'	35.4300	Relative Permittivity (ϵ_r):	35.43	35.30	0.37	5
		e''	16.2600	Conductivity (σ):	5.24	5.27	-0.50	5
	Head 5925	e'	35.2100	Relative Permittivity (ϵ_r):	35.21	35.18	0.10	5
		e''	16.3100	Conductivity (σ):	5.37	5.40	-0.52	5
12/9/2021	Head 5250	e'	35.7100	Relative Permittivity (ϵ_r):	35.71	35.95	-0.67	5
		e''	16.0900	Conductivity (σ):	4.70	4.71	-0.28	5
	Head 5260	e'	35.6800	Relative Permittivity (ϵ_r):	35.68	35.94	-0.72	5
		e''	16.0900	Conductivity (σ):	4.71	4.72	-0.30	5
	Head 5600	e'	34.8800	Relative Permittivity (ϵ_r):	34.88	35.50	-1.75	5
		e''	16.4200	Conductivity (σ):	5.11	5.07	0.84	5
	Head 5750	e'	34.6100	Relative Permittivity (ϵ_r):	34.61	35.35	-2.09	5
		e''	16.5900	Conductivity (σ):	5.30	5.22	1.61	5
Head 5825	e'	34.4800	Relative Permittivity (ϵ_r):	34.48	35.28	-2.25	5	
	e''	16.6300	Conductivity (σ):	5.39	5.30	1.70	5	
12/13/2021	Head 5250	e'	35.5100	Relative Permittivity (ϵ_r):	35.51	35.95	-1.22	5
		e''	15.8300	Conductivity (σ):	4.62	4.71	-1.89	5
	Head 5260	e'	35.5000	Relative Permittivity (ϵ_r):	35.50	35.94	-1.22	5
		e''	15.8400	Conductivity (σ):	4.63	4.72	-1.85	5
	Head 5600	e'	34.8100	Relative Permittivity (ϵ_r):	34.81	35.50	-1.94	5
		e''	16.0700	Conductivity (σ):	5.00	5.07	-1.31	5
	Head 5750	e'	34.5300	Relative Permittivity (ϵ_r):	34.53	35.35	-2.32	5
		e''	16.2200	Conductivity (σ):	5.19	5.22	-0.65	5
Head 5825	e'	34.4600	Relative Permittivity (ϵ_r):	34.46	35.28	-2.31	5	
	e''	16.2900	Conductivity (σ):	5.28	5.30	-0.38	5	
12/16/2021	Head 5250	e'	35.1400	Relative Permittivity (ϵ_r):	35.14	35.95	-2.25	5
		e''	15.7600	Conductivity (σ):	4.60	4.71	-2.32	5
	Head 5260	e'	35.1200	Relative Permittivity (ϵ_r):	35.12	35.94	-2.28	5
		e''	15.7700	Conductivity (σ):	4.61	4.72	-2.28	5
	Head 5600	e'	34.7700	Relative Permittivity (ϵ_r):	34.77	35.50	-2.06	5
		e''	15.9400	Conductivity (σ):	4.96	5.07	-2.10	5
	Head 5750	e'	34.5100	Relative Permittivity (ϵ_r):	34.51	35.35	-2.38	5
		e''	16.0300	Conductivity (σ):	5.13	5.22	-1.82	5
Head 5825	e'	34.2800	Relative Permittivity (ϵ_r):	34.28	35.28	-2.82	5	
	e''	16.0500	Conductivity (σ):	5.20	5.30	-1.85	5	

SAR 2 Room

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
12/13/2021	Head 5250	e'	36.8800	Relative Permittivity (ϵ_r):	36.88	35.95	2.59	5
		e"	15.8200	Conductivity (σ):	4.62	4.71	-1.95	5
	Head 5260	e'	36.8700	Relative Permittivity (ϵ_r):	36.87	35.94	2.59	5
		e"	15.8300	Conductivity (σ):	4.63	4.72	-1.91	5
	Head 5600	e'	36.2700	Relative Permittivity (ϵ_r):	36.27	35.50	2.17	5
		e"	16.0000	Conductivity (σ):	4.98	5.07	-1.73	5
	Head 5750	e'	36.0200	Relative Permittivity (ϵ_r):	36.02	35.35	1.90	5
		e"	16.0900	Conductivity (σ):	5.14	5.22	-1.45	5
	Head 5800	e'	35.9400	Relative Permittivity (ϵ_r):	35.94	35.30	1.81	5
		e"	16.1100	Conductivity (σ):	5.20	5.27	-1.41	5
	Head 5925	e'	35.7400	Relative Permittivity (ϵ_r):	35.74	35.18	1.61	5
		e"	16.1700	Conductivity (σ):	5.33	5.40	-1.37	5
12/15/2021	Head 5250	e'	36.2500	Relative Permittivity (ϵ_r):	36.25	35.95	0.83	5
		e"	16.3800	Conductivity (σ):	4.78	4.71	1.52	5
	Head 5260	e'	36.2300	Relative Permittivity (ϵ_r):	36.23	35.94	0.81	5
		e"	16.3900	Conductivity (σ):	4.79	4.72	1.56	5
	Head 5600	e'	35.7400	Relative Permittivity (ϵ_r):	35.74	35.50	0.68	5
		e"	16.5100	Conductivity (σ):	5.14	5.07	1.40	5
	Head 5750	e'	35.5300	Relative Permittivity (ϵ_r):	35.53	35.35	0.51	5
		e"	16.5800	Conductivity (σ):	5.30	5.22	1.55	5
	Head 5800	e'	35.4600	Relative Permittivity (ϵ_r):	35.46	35.30	0.45	5
		e"	16.6000	Conductivity (σ):	5.35	5.27	1.58	5
	Head 5925	e'	35.2900	Relative Permittivity (ϵ_r):	35.29	35.18	0.33	5
		e"	16.6500	Conductivity (σ):	5.49	5.40	1.56	5

SAR 3 Room

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
9/9/2021	Head 1750	e'	41.0000	Relative Permittivity (ϵ_r):	41.00	40.07	2.32	5
		e"	13.9000	Conductivity (σ):	1.35	1.37	-1.38	5
	Head 1710	e'	41.1000	Relative Permittivity (ϵ_r):	41.10	40.13	2.42	5
		e"	14.0000	Conductivity (σ):	1.33	1.35	-1.29	5
	Head 1755	e'	40.9900	Relative Permittivity (ϵ_r):	40.99	40.06	2.31	5
		e"	13.8800	Conductivity (σ):	1.35	1.37	-1.44	5
9/9/2021	Head 1900	e'	40.8400	Relative Permittivity (ϵ_r):	40.84	40.00	2.10	5
		e"	13.4800	Conductivity (σ):	1.42	1.40	1.72	5
	Head 1850	e'	40.8600	Relative Permittivity (ϵ_r):	40.86	40.00	2.15	5
		e"	13.5800	Conductivity (σ):	1.40	1.40	-0.22	5
	Head 1910	e'	40.8400	Relative Permittivity (ϵ_r):	40.84	40.00	2.10	5
		e"	13.4700	Conductivity (σ):	1.43	1.40	2.18	5
9/13/2021	Head 1900	e'	40.6200	Relative Permittivity (ϵ_r):	40.62	40.00	1.55	5
		e"	13.5400	Conductivity (σ):	1.43	1.40	2.17	5
	Head 1850	e'	40.7500	Relative Permittivity (ϵ_r):	40.75	40.00	1.88	5
		e"	13.6200	Conductivity (σ):	1.40	1.40	0.07	5
	Head 1910	e'	40.5900	Relative Permittivity (ϵ_r):	40.59	40.00	1.48	5
		e"	13.5200	Conductivity (σ):	1.44	1.40	2.56	5
9/16/2021	Head 1750	e'	39.3300	Relative Permittivity (ϵ_r):	39.33	40.07	-1.85	5
		e"	13.4700	Conductivity (σ):	1.31	1.37	-4.43	5
	Head 1710	e'	39.3600	Relative Permittivity (ϵ_r):	39.36	40.13	-1.92	5
		e"	13.5100	Conductivity (σ):	1.28	1.35	-4.75	5
	Head 1755	e'	39.3200	Relative Permittivity (ϵ_r):	39.32	40.06	-1.86	5
		e"	13.4600	Conductivity (σ):	1.31	1.37	-4.42	5
9/16/2021	Head 1900	e'	38.9900	Relative Permittivity (ϵ_r):	38.99	40.00	-2.53	5
		e"	13.2800	Conductivity (σ):	1.40	1.40	0.21	5
	Head 1850	e'	39.1100	Relative Permittivity (ϵ_r):	39.11	40.00	-2.23	5
		e"	13.3400	Conductivity (σ):	1.37	1.40	-1.98	5
	Head 1910	e'	38.9600	Relative Permittivity (ϵ_r):	38.96	40.00	-2.60	5
		e"	13.2700	Conductivity (σ):	1.41	1.40	0.66	5
9/23/2021	Head 1750	e'	40.1300	Relative Permittivity (ϵ_r):	40.13	40.07	0.15	5
		e"	13.8100	Conductivity (σ):	1.34	1.37	-2.02	5
	Head 1710	e'	40.2400	Relative Permittivity (ϵ_r):	40.24	40.13	0.28	5
		e"	13.9200	Conductivity (σ):	1.32	1.35	-1.86	5
	Head 1755	e'	40.1200	Relative Permittivity (ϵ_r):	40.12	40.06	0.14	5
		e"	13.8000	Conductivity (σ):	1.35	1.37	-2.01	5

SAR 3 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
9/23/2021	Head 1900	e'	39.9800	Relative Permittivity (ϵ_r):	39.98	40.00	-0.05	5
		e''	13.3500	Conductivity (σ):	1.41	1.40	0.74	5
	Head 1850	e'	39.9800	Relative Permittivity (ϵ_r):	39.98	40.00	-0.05	5
		e''	13.4800	Conductivity (σ):	1.39	1.40	-0.95	5
	Head 1910	e'	39.9900	Relative Permittivity (ϵ_r):	39.99	40.00	-0.02	5
		e''	13.3300	Conductivity (σ):	1.42	1.40	1.12	5
9/26/2021	Head 1750	e'	39.3500	Relative Permittivity (ϵ_r):	39.35	40.07	-1.80	5
		e''	13.9500	Conductivity (σ):	1.36	1.37	-1.02	5
	Head 1710	e'	39.3700	Relative Permittivity (ϵ_r):	39.37	40.13	-1.89	5
		e''	14.0300	Conductivity (σ):	1.33	1.35	-1.08	5
	Head 1755	e'	39.3500	Relative Permittivity (ϵ_r):	39.35	40.06	-1.78	5
		e''	13.9400	Conductivity (σ):	1.36	1.37	-1.02	5
9/26/2021	Head 1900	e'	39.1500	Relative Permittivity (ϵ_r):	39.15	40.00	-2.13	5
		e''	13.7100	Conductivity (σ):	1.45	1.40	3.46	5
	Head 1850	e'	39.2300	Relative Permittivity (ϵ_r):	39.23	40.00	-1.93	5
		e''	13.7900	Conductivity (σ):	1.42	1.40	1.32	5
	Head 1910	e'	39.1200	Relative Permittivity (ϵ_r):	39.12	40.00	-2.20	5
		e''	13.6900	Conductivity (σ):	1.45	1.40	3.85	5
10/12/2021	Head 1750	e'	40.1900	Relative Permittivity (ϵ_r):	40.19	40.07	0.30	5
		e''	14.2500	Conductivity (σ):	1.39	1.37	1.11	5
	Head 1710	e'	40.2700	Relative Permittivity (ϵ_r):	40.27	40.13	0.35	5
		e''	14.3500	Conductivity (σ):	1.36	1.35	1.18	5
	Head 1755	e'	40.1800	Relative Permittivity (ϵ_r):	40.18	40.06	0.29	5
		e''	14.2200	Conductivity (σ):	1.39	1.37	0.97	5
12/8/2021	Head 1750	e'	40.8800	Relative Permittivity (ϵ_r):	40.88	40.07	2.02	5
		e''	13.7400	Conductivity (σ):	1.34	1.37	-2.51	5
	Head 1710	e'	41.0300	Relative Permittivity (ϵ_r):	41.03	40.13	2.25	5
		e''	13.7200	Conductivity (σ):	1.30	1.35	-3.27	5
	Head 1755	e'	40.8500	Relative Permittivity (ϵ_r):	40.85	40.06	1.96	5
		e''	13.7400	Conductivity (σ):	1.34	1.37	-2.44	5
12/8/2021	Head 1900	e'	40.5100	Relative Permittivity (ϵ_r):	40.51	40.00	1.28	5
		e''	13.6900	Conductivity (σ):	1.45	1.40	3.31	5
	Head 1850	e'	40.6500	Relative Permittivity (ϵ_r):	40.65	40.00	1.63	5
		e''	13.6800	Conductivity (σ):	1.41	1.40	0.51	5
	Head 1910	e'	40.4900	Relative Permittivity (ϵ_r):	40.49	40.00	1.23	5
		e''	13.7000	Conductivity (σ):	1.45	1.40	3.93	5
12/13/2021	Head 1750	e'	39.7500	Relative Permittivity (ϵ_r):	39.75	40.07	-0.80	5
		e''	14.4000	Conductivity (σ):	1.40	1.37	2.17	5
	Head 1710	e'	39.8600	Relative Permittivity (ϵ_r):	39.86	40.13	-0.67	5
		e''	14.6400	Conductivity (σ):	1.39	1.35	3.22	5
	Head 1755	e'	39.7400	Relative Permittivity (ϵ_r):	39.74	40.06	-0.81	5
		e''	14.3600	Conductivity (σ):	1.40	1.37	1.97	5

SAR 4 Room

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
9/14/2021	Head 2600	e'	37.2000	Relative Permittivity (ϵ_r):	37.20	39.00	-4.62	5
		e''	13.3700	Conductivity (σ):	1.93	1.96	-1.38	5
	Head 2500	e'	37.3400	Relative Permittivity (ϵ_r):	37.34	39.13	-4.58	5
		e''	13.3200	Conductivity (σ):	1.85	1.85	-0.09	5
	Head 2700	e'	36.9600	Relative Permittivity (ϵ_r):	36.96	38.88	-4.93	5
		e''	13.4600	Conductivity (σ):	2.02	2.07	-2.38	5
9/23/2021	Head 2600	e'	38.2900	Relative Permittivity (ϵ_r):	38.29	39.00	-1.82	5
		e''	13.3900	Conductivity (σ):	1.94	1.96	-1.24	5
	Head 2500	e'	38.4600	Relative Permittivity (ϵ_r):	38.46	39.13	-1.72	5
		e''	13.4300	Conductivity (σ):	1.87	1.85	0.73	5
	Head 2700	e'	38.1000	Relative Permittivity (ϵ_r):	38.10	38.88	-1.99	5
		e''	13.3900	Conductivity (σ):	2.01	2.07	-2.89	5
9/27/2021	Head 2450	e'	40.2900	Relative Permittivity (ϵ_r):	40.29	39.20	2.78	5
		e''	13.1400	Conductivity (σ):	1.79	1.80	-0.55	5
	Head 2400	e'	40.3400	Relative Permittivity (ϵ_r):	40.34	39.29	2.68	5
		e''	13.1100	Conductivity (σ):	1.75	1.76	-0.35	5
	Head 2480	e'	40.2500	Relative Permittivity (ϵ_r):	40.25	39.16	2.78	5
		e''	13.1400	Conductivity (σ):	1.81	1.83	-1.09	5
9/29/2021	Head 2450	e'	39.7100	Relative Permittivity (ϵ_r):	39.71	39.20	1.30	5
		e''	13.2200	Conductivity (σ):	1.80	1.80	0.05	5
	Head 2400	e'	39.8100	Relative Permittivity (ϵ_r):	39.81	39.29	1.33	5
		e''	13.3400	Conductivity (σ):	1.78	1.76	1.39	5
	Head 2480	e'	39.6300	Relative Permittivity (ϵ_r):	39.63	39.16	1.20	5
		e''	13.2500	Conductivity (σ):	1.83	1.83	-0.27	5
10/4/2021	Head 2450	e'	37.7700	Relative Permittivity (ϵ_r):	37.77	39.20	-3.65	5
		e''	13.2800	Conductivity (σ):	1.81	1.80	0.51	5
	Head 2400	e'	37.8500	Relative Permittivity (ϵ_r):	37.85	39.29	-3.65	5
		e''	13.2800	Conductivity (σ):	1.77	1.76	0.94	5
	Head 2480	e'	37.7200	Relative Permittivity (ϵ_r):	37.72	39.16	-3.68	5
		e''	13.2600	Conductivity (σ):	1.83	1.83	-0.19	5
10/7/2021	Head 2450	e'	37.9300	Relative Permittivity (ϵ_r):	37.93	39.20	-3.24	5
		e''	13.2800	Conductivity (σ):	1.81	1.80	0.51	5
	Head 2400	e'	38.0300	Relative Permittivity (ϵ_r):	38.03	39.29	-3.20	5
		e''	13.3000	Conductivity (σ):	1.77	1.76	1.09	5
	Head 2480	e'	37.8800	Relative Permittivity (ϵ_r):	37.88	39.16	-3.27	5
		e''	13.2600	Conductivity (σ):	1.83	1.83	-0.19	5
10/11/2021	Head 2450	e'	39.3200	Relative Permittivity (ϵ_r):	39.32	39.20	0.31	5
		e''	13.3100	Conductivity (σ):	1.81	1.80	0.73	5
	Head 2400	e'	39.3500	Relative Permittivity (ϵ_r):	39.35	39.29	0.16	5
		e''	13.3600	Conductivity (σ):	1.78	1.76	1.55	5
	Head 2480	e'	39.2900	Relative Permittivity (ϵ_r):	39.29	39.16	0.33	5
		e''	13.2800	Conductivity (σ):	1.83	1.83	-0.04	5
10/14/2021	Head 2450	e'	38.5200	Relative Permittivity (ϵ_r):	38.52	39.20	-1.73	5
		e''	13.5500	Conductivity (σ):	1.85	1.80	2.55	5
	Head 2400	e'	38.7000	Relative Permittivity (ϵ_r):	38.70	39.29	-1.49	5
		e''	13.5000	Conductivity (σ):	1.80	1.76	2.61	5
	Head 2480	e'	38.4300	Relative Permittivity (ϵ_r):	38.43	39.16	-1.86	5
		e''	13.6200	Conductivity (σ):	1.88	1.83	2.52	5
10/18/2021	Head 2600	e'	38.6600	Relative Permittivity (ϵ_r):	38.66	39.00	-0.87	5
		e''	13.1600	Conductivity (σ):	1.90	1.96	-2.93	5
	Head 2500	e'	38.7700	Relative Permittivity (ϵ_r):	38.77	39.13	-0.93	5
		e''	13.1500	Conductivity (σ):	1.83	1.85	-1.37	5
	Head 2700	e'	38.5500	Relative Permittivity (ϵ_r):	38.55	38.88	-0.84	5
		e''	13.3000	Conductivity (σ):	2.00	2.07	-3.54	5
10/19/2021	Head 2450	e'	38.4200	Relative Permittivity (ϵ_r):	38.42	39.20	-1.99	5
		e''	13.2600	Conductivity (σ):	1.81	1.80	0.35	5
	Head 2400	e'	38.6000	Relative Permittivity (ϵ_r):	38.60	39.29	-1.75	5
		e''	13.2300	Conductivity (σ):	1.77	1.76	0.56	5
	Head 2480	e'	38.3200	Relative Permittivity (ϵ_r):	38.32	39.16	-2.15	5
		e''	13.2900	Conductivity (σ):	1.83	1.83	0.03	5

SAR 4 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
10/21/2021	Head 2600	e'	37.9300	Relative Permittivity (ϵ_r):	37.93	39.00	-2.74	5
		e''	13.8600	Conductivity (σ):	2.00	1.96	2.23	5
	Head 2500	e'	38.0700	Relative Permittivity (ϵ_r):	38.07	39.13	-2.72	5
		e''	13.8100	Conductivity (σ):	1.92	1.85	3.58	5
	Head 2700	e'	37.7200	Relative Permittivity (ϵ_r):	37.72	38.88	-2.97	5
		e''	13.9100	Conductivity (σ):	2.09	2.07	0.88	5
10/24/2021	Head 2450	e'	37.7100	Relative Permittivity (ϵ_r):	37.71	39.20	-3.80	5
		e''	13.5300	Conductivity (σ):	1.84	1.80	2.40	5
	Head 2400	e'	37.8200	Relative Permittivity (ϵ_r):	37.82	39.29	-3.73	5
		e''	13.5700	Conductivity (σ):	1.81	1.76	3.14	5
	Head 2480	e'	37.6900	Relative Permittivity (ϵ_r):	37.69	39.16	-3.75	5
		e''	13.5200	Conductivity (σ):	1.86	1.83	1.77	5
10/24/2021	Head 2600	e'	37.6700	Relative Permittivity (ϵ_r):	37.67	39.00	-3.41	5
		e''	13.5300	Conductivity (σ):	1.96	1.96	-0.20	5
	Head 2500	e'	37.7000	Relative Permittivity (ϵ_r):	37.70	39.13	-3.66	5
		e''	13.5200	Conductivity (σ):	1.88	1.85	1.41	5
	Head 2700	e'	37.5600	Relative Permittivity (ϵ_r):	37.56	38.88	-3.38	5
		e''	13.5700	Conductivity (σ):	2.04	2.07	-1.58	5
10/27/2021	Head 2450	e'	40.3600	Relative Permittivity (ϵ_r):	40.36	39.20	2.96	5
		e''	13.1500	Conductivity (σ):	1.79	1.80	-0.48	5
	Head 2400	e'	40.3900	Relative Permittivity (ϵ_r):	40.39	39.29	2.81	5
		e''	13.1600	Conductivity (σ):	1.76	1.76	0.03	5
	Head 2480	e'	40.3300	Relative Permittivity (ϵ_r):	40.33	39.16	2.99	5
		e''	13.1700	Conductivity (σ):	1.82	1.83	-0.87	5
10/27/2021	Head 2600	e'	40.2900	Relative Permittivity (ϵ_r):	40.29	39.00	3.31	5
		e''	13.1700	Conductivity (σ):	1.90	1.96	-2.86	5
	Head 2500	e'	40.2900	Relative Permittivity (ϵ_r):	40.29	39.13	2.96	5
		e''	13.2000	Conductivity (σ):	1.83	1.85	-0.99	5
	Head 2700	e'	40.2500	Relative Permittivity (ϵ_r):	40.25	38.88	3.54	5
		e''	13.3000	Conductivity (σ):	2.00	2.07	-3.54	5
10/30/2021	Head 2450	e'	38.4400	Relative Permittivity (ϵ_r):	38.44	39.20	-1.94	5
		e''	13.4900	Conductivity (σ):	1.84	1.80	2.10	5
	Head 2400	e'	38.4800	Relative Permittivity (ϵ_r):	38.48	39.29	-2.05	5
		e''	13.5800	Conductivity (σ):	1.81	1.76	3.22	5
	Head 2480	e'	38.3800	Relative Permittivity (ϵ_r):	38.38	39.16	-1.99	5
		e''	13.4200	Conductivity (σ):	1.85	1.83	1.01	5
12/8/2021	Head 2450	e'	38.3400	Relative Permittivity (ϵ_r):	38.34	39.20	-2.19	5
		e''	13.2800	Conductivity (σ):	1.81	1.80	0.51	5
	Head 2400	e'	38.4300	Relative Permittivity (ϵ_r):	38.43	39.29	-2.18	5
		e''	13.2900	Conductivity (σ):	1.77	1.76	1.01	5
	Head 2480	e'	38.3600	Relative Permittivity (ϵ_r):	38.36	39.16	-2.04	5
		e''	13.2900	Conductivity (σ):	1.83	1.83	0.03	5
12/13/2021	Head 2450	e'	39.6700	Relative Permittivity (ϵ_r):	39.67	39.20	1.20	5
		e''	12.9500	Conductivity (σ):	1.76	1.80	-1.99	5
	Head 2400	e'	39.8100	Relative Permittivity (ϵ_r):	39.81	39.29	1.33	5
		e''	12.9000	Conductivity (σ):	1.72	1.76	-1.95	5
	Head 2480	e'	39.6100	Relative Permittivity (ϵ_r):	39.61	39.16	1.15	5
		e''	13.0400	Conductivity (σ):	1.80	1.83	-1.85	5
12/15/2021	Head 2450	e'	37.7400	Relative Permittivity (ϵ_r):	37.74	39.20	-3.72	5
		e''	13.4900	Conductivity (σ):	1.84	1.80	2.10	5
	Head 2400	e'	37.8400	Relative Permittivity (ϵ_r):	37.84	39.29	-3.68	5
		e''	13.5100	Conductivity (σ):	1.80	1.76	2.69	5
	Head 2480	e'	37.6800	Relative Permittivity (ϵ_r):	37.68	39.16	-3.78	5
		e''	13.4900	Conductivity (σ):	1.86	1.83	1.54	5

SAR 5 Room

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
9/8/2021	Head 750	e'	40.9000	Relative Permittivity (ϵ_r):	40.90	41.90	-2.39	5
		e''	22.0800	Conductivity (σ):	0.92	0.89	3.46	5
	Head 700	e'	41.0000	Relative Permittivity (ϵ_r):	41.00	42.17	-2.77	5
		e''	23.2100	Conductivity (σ):	0.90	0.89	1.89	5
	Head 790	e'	40.8200	Relative Permittivity (ϵ_r):	40.82	41.71	-2.14	5
		e''	21.1300	Conductivity (σ):	0.93	0.89	3.74	5
9/8/2021	Head 835	e'	40.6600	Relative Permittivity (ϵ_r):	40.66	41.50	-2.02	5
		e''	20.0800	Conductivity (σ):	0.93	0.90	3.59	5
	Head 820	e'	40.7100	Relative Permittivity (ϵ_r):	40.71	41.57	-2.07	5
		e''	20.4200	Conductivity (σ):	0.93	0.90	3.65	5
	Head 850	e'	40.6400	Relative Permittivity (ϵ_r):	40.64	41.50	-2.07	5
		e''	19.7700	Conductivity (σ):	0.93	0.92	1.99	5
9/13/2021	Head 750	e'	41.1500	Relative Permittivity (ϵ_r):	41.15	41.90	-1.79	5
		e''	21.7600	Conductivity (σ):	0.91	0.89	1.96	5
	Head 700	e'	41.3000	Relative Permittivity (ϵ_r):	41.30	42.17	-2.06	5
		e''	21.8900	Conductivity (σ):	0.85	0.89	-3.91	5
	Head 790	e'	41.0400	Relative Permittivity (ϵ_r):	41.04	41.71	-1.61	5
		e''	20.9500	Conductivity (σ):	0.92	0.89	2.86	5
9/13/2021	Head 835	e'	40.9200	Relative Permittivity (ϵ_r):	40.92	41.50	-1.40	5
		e''	20.1300	Conductivity (σ):	0.93	0.90	3.85	5
	Head 820	e'	40.9500	Relative Permittivity (ϵ_r):	40.95	41.57	-1.49	5
		e''	20.4000	Conductivity (σ):	0.93	0.90	3.55	5
	Head 850	e'	40.9000	Relative Permittivity (ϵ_r):	40.90	41.50	-1.45	5
		e''	19.8500	Conductivity (σ):	0.94	0.92	2.40	5
9/16/2021	Head 835	e'	40.2200	Relative Permittivity (ϵ_r):	40.22	41.50	-3.08	5
		e''	19.5600	Conductivity (σ):	0.91	0.90	0.90	5
	Head 820	e'	40.2600	Relative Permittivity (ϵ_r):	40.26	41.57	-3.15	5
		e''	19.8100	Conductivity (σ):	0.90	0.90	0.56	5
	Head 850	e'	40.1800	Relative Permittivity (ϵ_r):	40.18	41.50	-3.18	5
		e''	19.3000	Conductivity (σ):	0.91	0.92	-0.43	5
9/23/2021	Head 835	e'	40.5300	Relative Permittivity (ϵ_r):	40.53	41.50	-2.34	5
		e''	20.0100	Conductivity (σ):	0.93	0.90	3.23	5
	Head 820	e'	40.5700	Relative Permittivity (ϵ_r):	40.57	41.57	-2.41	5
		e''	20.3000	Conductivity (σ):	0.93	0.90	3.04	5
	Head 850	e'	40.5000	Relative Permittivity (ϵ_r):	40.50	41.50	-2.41	5
		e''	19.7500	Conductivity (σ):	0.93	0.92	1.89	5
10/14/2021	Head 835	e'	41.4900	Relative Permittivity (ϵ_r):	41.49	41.50	-0.02	5
		e''	19.7200	Conductivity (σ):	0.92	0.90	1.73	5
	Head 820	e'	41.5400	Relative Permittivity (ϵ_r):	41.54	41.57	-0.07	5
		e''	19.9700	Conductivity (σ):	0.91	0.90	1.37	5
	Head 850	e'	41.4900	Relative Permittivity (ϵ_r):	41.49	41.50	-0.02	5
		e''	19.5000	Conductivity (σ):	0.92	0.92	0.60	5
10/18/2021	Head 835	e'	40.9100	Relative Permittivity (ϵ_r):	40.91	41.50	-1.42	5
		e''	19.9100	Conductivity (σ):	0.92	0.90	2.71	5
	Head 820	e'	41.0100	Relative Permittivity (ϵ_r):	41.01	41.57	-1.35	5
		e''	20.2100	Conductivity (σ):	0.92	0.90	2.59	5
	Head 850	e'	40.8600	Relative Permittivity (ϵ_r):	40.86	41.50	-1.54	5
		e''	19.6300	Conductivity (σ):	0.93	0.92	1.27	5
10/19/2021	Head 1750	e'	39.7000	Relative Permittivity (ϵ_r):	39.70	40.07	-0.93	5
		e''	14.0900	Conductivity (σ):	1.37	1.37	-0.03	5
	Head 1710	e'	39.8100	Relative Permittivity (ϵ_r):	39.81	40.13	-0.79	5
		e''	14.1700	Conductivity (σ):	1.35	1.35	-0.09	5
	Head 1755	e'	39.6900	Relative Permittivity (ϵ_r):	39.69	40.06	-0.93	5
		e''	14.0800	Conductivity (σ):	1.37	1.37	-0.02	5
10/21/2021	Head 1750	e'	38.6000	Relative Permittivity (ϵ_r):	38.60	40.07	-3.67	5
		e''	14.1500	Conductivity (σ):	1.38	1.37	0.40	5
	Head 1710	e'	38.7400	Relative Permittivity (ϵ_r):	38.74	40.13	-3.46	5
		e''	14.2300	Conductivity (σ):	1.35	1.35	0.33	5
	Head 1755	e'	38.5900	Relative Permittivity (ϵ_r):	38.59	40.06	-3.68	5
		e''	14.1300	Conductivity (σ):	1.38	1.37	0.33	5

SAR 5 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
10/21/2021	Head 1900	e'	38.4600	Relative Permittivity (ϵ_r):	38.46	40.00	-3.85	5
		e"	13.7500	Conductivity (σ):	1.45	1.40	3.76	5
	Head 1850	e'	38.5000	Relative Permittivity (ϵ_r):	38.50	40.00	-3.75	5
		e"	13.8000	Conductivity (σ):	1.42	1.40	1.40	5
	Head 1910	e'	38.4600	Relative Permittivity (ϵ_r):	38.46	40.00	-3.85	5
		e"	13.7500	Conductivity (σ):	1.46	1.40	4.31	5
10/24/2021	Head 1750	e'	39.4200	Relative Permittivity (ϵ_r):	39.42	40.07	-1.63	5
		e"	13.8300	Conductivity (σ):	1.35	1.37	-1.87	5
	Head 1710	e'	39.6200	Relative Permittivity (ϵ_r):	39.62	40.13	-1.27	5
		e"	13.9400	Conductivity (σ):	1.33	1.35	-1.72	5
	Head 1755	e'	39.3900	Relative Permittivity (ϵ_r):	39.39	40.06	-1.68	5
		e"	13.8200	Conductivity (σ):	1.35	1.37	-1.87	5
10/27/2021	Head 2450	e'	39.4700	Relative Permittivity (ϵ_r):	39.47	39.20	0.69	5
		e"	12.6000	Conductivity (σ):	1.72	1.80	-4.64	5
	Head 2400	e'	39.6900	Relative Permittivity (ϵ_r):	39.69	39.29	1.03	5
		e"	12.9100	Conductivity (σ):	1.72	1.76	-1.87	5
	Head 2480	e'	39.2700	Relative Permittivity (ϵ_r):	39.27	39.16	0.28	5
		e"	12.7500	Conductivity (σ):	1.76	1.83	-4.03	5
10/31/2021	Head 1750	e'	38.5400	Relative Permittivity (ϵ_r):	38.54	40.07	-3.82	5
		e"	14.4100	Conductivity (σ):	1.40	1.37	2.24	5
	Head 1710	e'	38.6400	Relative Permittivity (ϵ_r):	38.64	40.13	-3.71	5
		e"	14.5400	Conductivity (σ):	1.38	1.35	2.51	5
	Head 1755	e'	38.5300	Relative Permittivity (ϵ_r):	38.53	40.06	-3.83	5
		e"	14.4000	Conductivity (σ):	1.41	1.37	2.25	5
11/1/2021	Head 1900	e'	38.4700	Relative Permittivity (ϵ_r):	38.47	40.00	-3.83	5
		e"	13.0700	Conductivity (σ):	1.38	1.40	-1.37	5
	Head 1850	e'	38.4300	Relative Permittivity (ϵ_r):	38.43	40.00	-3.93	5
		e"	13.0800	Conductivity (σ):	1.35	1.40	-3.89	5
	Head 1910	e'	38.4900	Relative Permittivity (ϵ_r):	38.49	40.00	-3.78	5
		e"	13.0800	Conductivity (σ):	1.39	1.40	-0.78	5
11/3/2021	Head 2450	e'	38.7800	Relative Permittivity (ϵ_r):	38.78	39.20	-1.07	5
		e"	13.3900	Conductivity (σ):	1.82	1.80	1.34	5
	Head 2400	e'	38.8600	Relative Permittivity (ϵ_r):	38.86	39.29	-1.08	5
		e"	13.4000	Conductivity (σ):	1.79	1.76	1.85	5
	Head 2480	e'	38.7200	Relative Permittivity (ϵ_r):	38.72	39.16	-1.12	5
		e"	13.3800	Conductivity (σ):	1.85	1.83	0.71	5
12/8/2021	Head 1750	e'	39.2400	Relative Permittivity (ϵ_r):	39.24	40.07	-2.07	5
		e"	13.4500	Conductivity (σ):	1.31	1.37	-4.57	5
	Head 1710	e'	39.2900	Relative Permittivity (ϵ_r):	39.29	40.13	-2.09	5
		e"	13.6500	Conductivity (σ):	1.30	1.35	-3.76	5
	Head 1755	e'	39.2200	Relative Permittivity (ϵ_r):	39.22	40.06	-2.11	5
		e"	13.4100	Conductivity (σ):	1.31	1.37	-4.78	5
12/13/2021	Head 1750	e'	39.8200	Relative Permittivity (ϵ_r):	39.82	40.07	-0.63	5
		e"	13.6000	Conductivity (σ):	1.32	1.37	-3.51	5
	Head 1710	e'	40.0000	Relative Permittivity (ϵ_r):	40.00	40.13	-0.32	5
		e"	13.7200	Conductivity (σ):	1.30	1.35	-3.27	5
	Head 1755	e'	39.8000	Relative Permittivity (ϵ_r):	39.80	40.06	-0.66	5
		e"	13.6000	Conductivity (σ):	1.33	1.37	-3.43	5
12/15/2021	Head 1750	e'	40.1700	Relative Permittivity (ϵ_r):	40.17	40.07	0.25	5
		e"	14.1700	Conductivity (σ):	1.38	1.37	0.54	5
	Head 1710	e'	40.3600	Relative Permittivity (ϵ_r):	40.36	40.13	0.58	5
		e"	14.2900	Conductivity (σ):	1.36	1.35	0.75	5
	Head 1755	e'	40.1500	Relative Permittivity (ϵ_r):	40.15	40.06	0.21	5
		e"	14.1500	Conductivity (σ):	1.38	1.37	0.47	5

8.2. System Check

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

System Performance Check Measurement Conditions:

- The measurements were performed in the flat section of the TWIN SAM or ELI phantom, shell thickness: 2.0 $\pm$ 0.2 mm (bottom plate) filled with Body or Head simulating liquid of the following parameters.
- The depth of tissue-equivalent liquid in a phantom must be $\geq$ 15.0 cm for SAR measurements $\leq$ 3 GHz and $\geq$ 10.0 cm for measurements $>$ 3 GHz.
- The DASY system with an E-Field Probe was used for the measurements.
- The dipole was mounted on the small tripod so that the dipole feed point was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10 mm (above 1 GHz) and 15 mm (below 1 GHz) from dipole center to the simulating liquid surface.
- The coarse grid with a grid spacing of 15 mm was aligned with the dipole.
For 5 GHz band - The coarse grid with a grid spacing of 10 mm was aligned with the dipole.
- Special 7x7x7 (below 3 GHz) and/or 8x8x7 (above 3 GHz) fine cube was chosen for the cube.
- Distance between probe sensors and phantom surface was set to 2.5 mm.
For 5 GHz band - Distance between probe sensors and phantom surface was set to 1.4 mm
- The dipole input power (forward power) was 100 mW.
- The results are normalized to 1 W input power.

Reference Target SAR Values

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

System Dipole	Serial No.	Cal. Date	Cal. Due Date	Freq. (MHz)	Target SAR Values (W/kg)	
					1g/10g	Head
D750V3	1122	2/24/2020	2/24/2022	750	1g	8.54
					10g	5.59
D835V2	4d194	3/20/2020	3/20/2022	835	1g	9.76
					10g	6.42
D1750V2	1125	2/21/2020	2/21/2022	1750	1g	36.50
					10g	19.20
D1900V2	5d199	3/19/2020	3/19/2022	1900	1g	40.50
					10g	21.00
D2450V2	960	3/20/2020	3/20/2022	2450	1g	53.20
					10g	24.80
D2600V2	1178	4/21/2021	4/21/2023	2600	1g	56.60
					10g	25.40
D5GHzV2	1209	2/27/2020	2/27/2022	5250	1g	79.90
					10g	22.60
				5600	1g	83.60
					10g	23.60
				5750	1g	80.20
					10g	22.60
D5GHzV2	1209	11/24/2021	11/24/2023	5250	1g	78.00
					10g	22.40
				5600	1g	80.90
					10g	23.10
				5800	1g	79.00
					10g	22.40
D5GHzV2	1094	11/23/2019	11/23/2021	5800	1g	81.20
					10g	22.80
D5GHzV2	1184	12/3/2020	12/3/2022	5250	1g	79.10
					10g	22.70
				5600	1g	82.40
					10g	23.30
				5750	1g	79.90
					10g	22.60
D5GHzV2	1293	7/22/2021	7/22/2023	5800	1g	80.60
					10g	22.90

Note(s):

1. For System Validation Dipole, Calibration interval applied every 2 years according to referencing KDB 865664 guidance.
2. Refer to Appendix F that mentioned about justification for Extended SAR Dipole Calibrations.

System Check Results

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

SAR 1 Room

Date Tested	System Dipole		T.S. Liquid		Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.
	Type	Serial #			Zoom Scan to 100 mW	Normalize to 1 W			
10/18/2021	D1750V2	1125	Head	1g	3.54	35.4	36.50	-3.01	
				10g	1.89	18.9	19.20	-1.56	
10/19/2021	D5GHzV2 (5800)	1094	Head	1g	7.54	75.4	81.20	-7.14	1,2
				10g	2.17	21.7	22.80	-4.82	
10/22/2021	D5GHzV2 (5250)	1209	Head	1g	7.53	75.3	79.90	-5.76	
				10g	2.18	21.8	22.60	-3.54	
10/22/2021	D5GHzV2 (5600)	1209	Head	1g	8.53	85.3	83.60	2.03	
				10g	2.45	24.5	23.60	3.81	
10/22/2021	D5GHzV2 (5750)	1209	Head	1g	8.11	81.1	80.20	1.12	
				10g	2.33	23.3	22.60	3.10	
10/25/2021	D5GHzV2 (5250)	1209	Head	1g	7.52	75.2	79.90	-5.88	3,4
				10g	2.19	21.9	22.60	-3.10	
10/25/2021	D5GHzV2 (5600)	1209	Head	1g	8.39	83.9	83.60	0.36	
				10g	2.40	24.0	23.60	1.69	
10/25/2021	D5GHzV2 (5750)	1209	Head	1g	7.88	78.8	80.20	-1.75	
				10g	2.28	22.8	22.60	0.88	
10/25/2021	D5GHzV2 (5800)	1094	Head	1g	8.11	81.1	81.20	-0.12	
				10g	2.34	23.4	22.80	2.63	
10/28/2021	D835V2	4d194	Head	1g	1.00	10.0	9.76	2.46	
				10g	0.65	6.5	6.42	1.71	
10/28/2021	D1750V2	1125	Head	1g	3.61	36.1	36.50	-1.10	
				10g	1.92	19.2	19.20	0.00	
10/28/2021	D1900V2	5d199	Head	1g	3.94	39.4	40.50	-2.72	
				10g	2.03	20.3	21.00	-3.33	
10/29/2021	D5GHzV2 (5250)	1209	Head	1g	7.99	79.9	79.90	0.00	
				10g	2.32	23.2	22.60	2.65	
10/29/2021	D5GHzV2 (5750)	1209	Head	1g	7.87	78.7	80.20	-1.87	
				10g	2.28	22.8	22.60	0.88	
10/31/2021	D750V3	1122	Head	1g	0.86	8.6	8.54	0.82	
				10g	0.56	5.6	5.59	0.89	
10/31/2021	D835V2	4d194	Head	1g	1.00	10.0	9.76	2.15	
				10g	0.65	6.5	6.42	0.93	
11/02/2021	D2450V2	960	Head	1g	5.16	51.6	53.20	-3.01	
				10g	2.40	24.0	24.80	-3.23	
11/03/2021	D5GHzV2 (5800)	1094	Head	1g	7.90	79.0	81.20	-2.71	
				10g	2.26	22.6	22.80	-0.88	
11/03/2021	D1750V2	1125	Head	1g	3.53	35.3	36.50	-3.29	
				10g	1.87	18.7	19.20	-2.60	
11/03/2021	D1900V2	5d199	Head	1g	3.88	38.8	40.50	-4.20	
				10g	1.99	19.9	21.00	-5.24	
11/08/2021	D1900V2	5d199	Head	1g	3.82	38.2	40.50	-5.68	
				10g	1.97	19.7	21.00	-6.19	
11/09/2021	D5GHzV2 (5250)	1184	Head	1g	7.96	79.6	79.10	0.63	
				10g	2.31	23.1	22.70	1.76	
11/09/2021	D5GHzV2 (5600)	1184	Head	1g	8.63	86.3	82.40	4.73	
				10g	2.47	24.7	23.30	6.01	
11/11/2021	D5GHzV2 (5800)	1293	Head	1g	8.47	84.7	80.60	5.09	
				10g	2.38	23.8	22.90	3.93	

SAR 1 Room (Continued)

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W			
12/09/2021	D5GHzV2 (5250)	1184	Head	1g	8.01	80.1	79.10	1.26
				10g	2.39	23.9	22.70	5.29
12/09/2021	D5GHzV2 (5600)	1184	Head	1g	8.32	83.2	82.40	0.97
				10g	2.44	24.4	23.30	4.72
12/09/2021	D5GHzV2 (5750)	1184	Head	1g	8.02	80.2	79.90	0.38
				10g	2.37	23.7	22.60	4.87
12/13/2021	D5GHzV2 (5250)	1184	Head	1g	7.66	76.6	79.10	-3.16
				10g	2.26	22.6	22.70	-0.44
12/13/2021	D5GHzV2 (5600)	1184	Head	1g	8.44	84.4	82.40	2.43
				10g	2.46	24.6	23.30	5.58
12/13/2021	D5GHzV2 (5750)	1184	Head	1g	8.25	82.5	79.90	3.25
				10g	2.41	24.1	22.60	6.64
12/16/2021	D5GHzV2 (5250)	1184	Head	1g	7.83	78.3	79.10	-1.01
				10g	2.35	23.5	22.70	3.52
12/16/2021	D5GHzV2 (5600)	1184	Head	1g	8.35	83.5	82.40	1.33
				10g	2.46	24.6	23.30	5.58
12/16/2021	D5GHzV2 (5750)	1184	Head	1g	7.82	78.2	79.90	-2.13
				10g	2.32	23.2	22.60	2.65

SAR 2 Room

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W			
12/15/2021	D5GHzV2 (5250)	1184	Head	1g	7.98	79.8	79.10	0.88
				10g	2.27	22.7	22.70	0.00
12/15/2021	D5GHzV2 (5600)	1184	Head	1g	8.79	87.9	82.40	6.67
				10g	2.46	24.6	23.30	5.58
12/15/2021	D5GHzV2 (5750)	1184	Head	1g	7.74	77.4	79.90	-3.13
				10g	2.19	21.9	22.60	-3.10
12/15/2021	D5GHzV2 (5800)	1209	Head	1g	7.67	76.7	79.00	-2.91
				10g	2.17	21.7	22.40	-3.13
12/20/2021	D5GHzV2 (5600)	1184	Head	1g	8.10	81.0	82.40	-1.70
				10g	2.27	22.7	23.30	-2.58

SAR 3 Room

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W			
9/09/2021	D1750V2	1125	Head	1g	3.51	35.1	36.50	-3.84
				10g	1.88	18.8	19.20	-2.08
9/09/2021	D1900V2	5d199	Head	1g	3.98	39.8	40.50	-1.73
				10g	2.08	20.8	21.00	-0.95
9/13/2021	D1900V2	5d199	Head	1g	3.92	39.2	40.50	-3.21
				10g	2.05	20.5	21.00	-2.38
9/16/2021	D1750V2	1125	Head	1g	3.46	34.6	36.50	-5.21
				10g	1.85	18.5	19.20	-3.65
9/16/2021	D1900V2	5d199	Head	1g	4.04	40.4	40.50	-0.25
				10g	2.11	21.1	21.00	0.48
9/23/2021	D1750V2	1125	Head	1g	3.54	35.4	36.50	-3.01
				10g	1.89	18.9	19.20	-1.56
9/23/2021	D1900V2	5d199	Head	1g	4.12	41.2	40.50	1.73
				10g	2.14	21.4	21.00	1.90
9/26/2021	D1750V2	1125	Head	1g	3.61	36.1	36.50	-1.10
				10g	1.93	19.3	19.20	0.52
9/26/2021	D1900V2	5d199	Head	1g	4.18	41.8	40.50	3.21
				10g	2.18	21.8	21.00	3.81
10/12/2021	D1750V2	1125	Head	1g	3.76	37.6	36.50	3.01
				10g	2.03	20.3	19.20	5.73
12/08/2021	D1750V2	1125	Head	1g	3.41	34.1	36.50	-6.58
				10g	1.81	18.1	19.20	-5.73
12/08/2021	D1900V2	5d199	Head	1g	3.99	39.9	40.50	-1.48
				10g	2.06	20.6	21.00	-1.90
12/13/2021	D1750V2	1125	Head	1g	3.76	37.6	36.50	3.01
				10g	2.05	20.5	19.20	6.77

SAR 4 Room

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
9/14/2021	D2600V2	1178	Head	1g	5.20	52.0	56.60	-8.13	
				10g	2.32	23.2	25.40	-8.66	
9/23/2021	D2600V2	1178	Head	1g	5.76	57.6	56.60	1.77	
				10g	2.56	25.6	25.40	0.79	
9/27/2021	D2450V2	960	Head	1g	5.43	54.3	53.20	2.07	
				10g	2.48	24.8	24.80	0.00	
9/29/2021	D2450V2	960	Head	1g	5.73	57.3	53.20	7.71	
				10g	2.62	26.2	24.80	5.65	
10/04/2021	D2450V2	960	Head	1g	5.29	52.9	53.20	-0.56	
				10g	2.42	24.2	24.80	-2.42	
10/07/2021	D2450V2	960	Head	1g	5.26	52.6	53.20	-1.13	
				10g	2.40	24.0	24.80	-3.23	
10/11/2021	D2450V2	960	Head	1g	5.43	54.3	53.20	2.07	
				10g	2.48	24.8	24.80	0.00	
10/14/2021	D2450V2	960	Head	1g	5.55	55.5	53.20	4.32	
				10g	2.54	25.4	24.80	2.42	
10/18/2021	D2600V2	1178	Head	1g	5.14	51.4	56.60	-9.19	11,12
				10g	2.31	23.1	25.40	-9.06	
10/19/2021	D2450V2	960	Head	1g	5.10	51.0	53.20	-4.14	
				10g	2.35	23.5	24.80	-5.24	
10/21/2021	D2600V2	1178	Head	1g	5.57	55.7	56.60	-1.59	
				10g	2.49	24.9	25.40	-1.97	
10/24/2021	D2450V2	960	Head	1g	5.21	52.1	53.20	-2.07	
				10g	2.40	24.0	24.80	-3.23	
10/24/2021	D2600V2	1178	Head	1g	5.32	53.2	56.60	-6.01	
				10g	2.38	23.8	25.40	-6.30	
10/27/2021	D2450V2	960	Head	1g	4.89	48.9	53.20	-8.08	13,14
				10g	2.26	22.6	24.80	-8.87	
10/27/2021	D2600V2	1178	Head	1g	5.24	52.4	56.60	-7.42	
				10g	2.34	23.4	25.40	-7.87	
10/30/2021	D2450V2	960	Head	1g	5.22	52.2	53.20	-1.88	
				10g	2.41	24.1	24.80	-2.82	
12/08/2021	D2450V2	960	Head	1g	5.00	50.0	53.20	-6.02	
				10g	2.30	23.0	24.80	-7.26	
12/13/2021	D2450V2	960	Head	1g	5.07	50.7	53.20	-4.70	
				10g	2.33	23.3	24.80	-6.05	
12/15/2021	D2450V2	960	Head	1g	5.13	51.3	53.20	-3.57	
				10g	2.36	23.6	24.80	-4.84	

SAR 5 Room

Date Tested	System Dipole		T.S. Liquid	Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.	
	Type	Serial #		Zoom Scan to 100 mW	Normalize to 1 W				
9/08/2021	D750V3	1122	Head	1g	0.87	8.7	8.54	1.29	
				10g	0.57	5.7	5.59	1.97	
9/08/2021	D835V2	4d194	Head	1g	1.02	10.2	9.76	4.51	
				10g	0.67	6.7	6.42	4.05	
9/13/2021	D750V3	1122	Head	1g	0.87	8.7	8.54	1.41	15,16
				10g	0.57	5.7	5.59	1.97	
9/13/2021	D835V2	4d194	Head	1g	1.04	10.4	9.76	6.56	17,18
				10g	0.68	6.8	6.42	5.92	
9/16/2021	D835V2	4d194	Head	1g	1.02	10.2	9.76	4.51	
				10g	0.67	6.7	6.42	4.05	
9/23/2021	D835V2	4d194	Head	1g	1.03	10.3	9.76	5.53	
				10g	0.67	6.7	6.42	4.83	
10/14/2021	D835V2	4d194	Head	1g	1.00	10.0	9.76	2.46	
				10g	0.65	6.5	6.42	1.40	
10/18/2021	D835V2	4d194	Head	1g	1.02	10.2	9.76	4.51	
				10g	0.67	6.7	6.42	4.36	
10/19/2021	D1750V2	1125	Head	1g	3.67	36.7	36.50	0.55	
				10g	1.93	19.3	19.20	0.52	
10/21/2021	D1750V2	1125	Head	1g	3.96	39.6	36.50	8.49	19,20
				10g	2.07	20.7	19.20	7.81	
10/21/2021	D1900V2	5d199	Head	1g	3.99	39.9	40.50	-1.48	
				10g	2.05	20.5	21.00	-2.38	
10/24/2021	D1750V2	1125	Head	1g	3.60	36.0	36.50	-1.37	
				10g	1.90	19.0	19.20	-1.04	
10/27/2021	D2450V2	960	Head	1g	4.89	48.9	53.20	-8.08	21,22
				10g	2.25	22.5	24.80	-9.27	
10/31/2021	D1750V2	1125	Head	1g	3.64	36.4	36.50	-0.27	
				10g	1.91	19.1	19.20	-0.52	
11/01/2021	D1900V2	5d199	Head	1g	3.73	37.3	40.50	-7.90	23,24
				10g	1.91	19.1	21.00	-9.05	
11/03/2021	D2450V2	960	Head	1g	5.19	51.9	53.20	-2.44	
				10g	2.39	23.9	24.80	-3.63	
12/08/2021	D1750V2	1125	Head	1g	3.71	37.1	36.50	1.64	
				10g	1.99	19.9	19.20	3.65	
12/13/2021	D1750V2	1125	Head	1g	3.78	37.8	36.50	3.56	
				10g	2.05	20.5	19.20	6.77	
12/15/2021	D1750V2	1125	Head	1g	3.86	38.6	36.50	5.75	
				10g	2.08	20.8	19.20	8.33	

9. Conducted Output Power Measurements

9.1. GSM

Per KDB 941225 D01 3G SAR Procedures:

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

GSM850 Measured Results

Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)			
					Measured		Tune-up Limit	
					Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM (Voice)	CS1	1	128	824.2	32.8	23.8	34.0	25.0
			190	836.6	32.9	23.9		
			251	848.8	32.8	23.7		
GPRS (GMSK)	CS1	1	128	824.2	33.0	23.9	34.0	25.0
			190	836.6	33.1	24.1		
			251	848.8	32.9	23.9		
		2	128	824.2	30.5	24.4	31.0	25.0
			190	836.6	30.5	24.5		
			251	848.8	30.3	24.3		
		3	128	824.2	28.9	24.6	30.0	25.7
			190	836.6	28.9	24.7		
			251	848.8	28.7	24.4		
		4	128	824.2	27.5	24.4	29.0	26.0
			190	836.6	27.7	24.7		
			251	848.8	27.4	24.3		
EGPRS (8PSK)	MCS5	1	128	824.2	25.9	16.8	27.5	18.5
			190	836.6	25.9	16.9		
			251	848.8	25.7	16.7		
		2	128	824.2	23.7	17.7	26.0	20.0
			190	836.6	24.0	18.0		
			251	848.8	23.9	17.8		
		3	128	824.2	22.3	18.1	24.0	19.7
			190	836.6	22.3	18.0		
			251	848.8	22.1	17.8		
		4	128	824.2	20.5	17.5	23.0	20.0
			190	836.6	20.6	17.6		
			251	848.8	20.6	17.6		

Notes:

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

- GMSK (GPRS) mode with 4 time slots for Max power, based on the Tune-up Procedure. Refer to §6.3.
- SAR is not required for EGPRS (8PSK) mode because the maximum output power and tune-up limit is $\leq 1/4$ dB higher than GMSK GPRS or the adjusted SAR of the highest reported SAR of GMSK GPRS is ≤ 1.2 W/kg.

GSM1900 Measured Results

Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)				Reduced Average Power (dBm) Hotspot back-off				Reduced Average Power (dBm) Proximity sensor back-off			
					Measured		Tune-up Limit		Measured		Tune-up Limit		Measured		Tune-up Limit	
					Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM (Voice)	CS1	1	512	1850.2	30.7	21.7	31.0	22.0	28.4	19.3	29.0	20.0	28.5	19.5	29.0	20.0
			661	1880.0	30.4	21.4			28.0	19.0			28.5	19.5		
			810	1909.8	30.8	21.7			28.2	19.1			28.9	19.9		
GPRS (GMSK)	CS1	1	512	1850.2	30.6	21.6	31.0	22.0	28.3	19.3	29.0	20.0	28.4	19.3	29.0	20.0
			661	1880.0	30.5	21.4			28.2	19.1			27.9	18.9		
			810	1909.8	30.8	21.8			28.3	19.2			28.0	19.0		
		2	512	1850.2	27.8	21.8	29.5	23.5	27.7	21.6	29.5	23.5	27.7	21.6	29.5	23.5
			661	1880.0	27.7	21.7			27.7	21.7			27.8	21.8		
			810	1909.8	27.6	21.6			27.6	21.6			27.7	21.7		
		3	512	1850.2	25.8	21.6	27.5	23.2	25.9	21.6	27.5	23.2	26.1	21.8	27.5	23.2
			661	1880.0	25.3	21.0			25.4	21.2			25.4	21.1		
			810	1909.8	25.7	21.5			25.9	21.6			25.6	21.4		
		4	512	1850.2	24.1	21.1	25.5	22.5	24.3	21.3	25.5	22.5	24.1	21.1	25.5	22.5
			661	1880.0	23.3	20.3			23.7	20.7			23.5	20.4		
			810	1909.8	23.1	20.1			23.6	20.6			23.6	20.6		
EGPRS (8PSK)	MCSS	1	512	1850.2	25.4	16.4	26.5	17.5	25.3	16.3	26.5	17.5	25.1	16.0	26.5	17.5
			661	1880.0	25.2	16.2			25.1	16.1			24.9	15.9		
			810	1909.8	25.6	16.6			25.3	16.3			25.3	16.3		
		2	512	1850.2	23.3	17.2	25.5	19.5	23.3	17.3	25.5	19.5	23.1	17.1	25.5	19.5
			661	1880.0	23.0	17.0			23.1	17.0			23.2	17.2		
			810	1909.8	23.5	17.4			23.3	17.3			23.3	17.3		
		3	512	1850.2	21.8	17.6	23.5	19.2	22.1	17.8	23.5	19.2	22.1	17.9	23.5	19.2
			661	1880.0	21.6	17.3			21.8	17.5			21.8	17.6		
			810	1909.8	21.7	17.4			22.1	17.8			21.8	17.6		
		4	512	1850.2	20.1	17.0	22.5	19.5	20.9	17.9	22.5	19.5	20.7	17.7	22.5	19.5
			661	1880.0	20.3	17.3			20.3	17.3			20.3	17.3		
			810	1909.8	20.3	17.3			20.5	17.5			20.5	17.5		

Notes:

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

- GMSK (GPRS) mode with 2 time slots for Max power, based on the Tune-up Procedure. Refer to §6.3.
- GMSK (GPRS) mode with 2 time slots for Reduced power, based on the Tune-up Procedure. Refer to §6.3.
- SAR is not required for EGPRS (8PSK) mode because the maximum output power and tune-up limit is $\leq 1/4$ dB higher than GMSK GPRS or the adjusted SAR of the highest reported SAR of GMSK GPRS is ≤ 1.2 W/kg.

9.2. W-CDMA

Release 99 Setup Procedures used to establish the test signals

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

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

HSDPA Setup Procedures used to establish the test signals

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

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

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

The following 5 Sub-tests were completed according to Release 6 procedures in table C.11.1.3 of 3GPP TS 34.121-1 v13.
A summary of these settings are illustrated below:

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

DC-HSDPA Setup Procedures used to establish the test signals

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

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

Table E.5.0: Levels for HSDPA connection setup

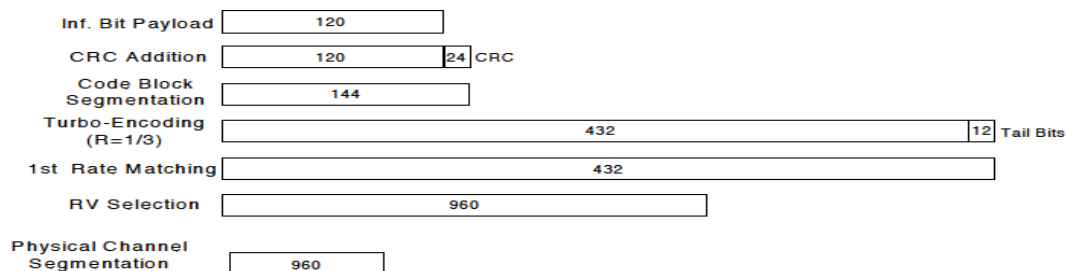
Parameter During Connection setup	Unit	Value
P-CPICH E_c/I_{or}	dB	-10
P-CCPCH and SCH E_c/I_{or}	dB	-12
PICH E_c/I_{or}	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH E_c/I_{or}	dB	-5
OCNS E_c/I_{or}	dB	-3.1

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

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

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

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

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

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

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subtest	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set 12			
	Power Control Algorithm	Algorithm2			
	β_c	2/15	11/15	15/15	15/15
	β_d	15/15	15/15	8/15	4/15
	β_d (SF)	64			
	β_c/β_d	2/15	11/15	15/8	15/4
	β_{hs}	4/15	24/15	30/15	30/15
HSDPA Specific Settings	MPR (dB)	0	0	0.5	0.5
	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack Repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	A β_{hs} = β_{hs}/β_c	30/15			

HSPA+

HSPA+ is only supported to down link. Therefore, the RF conducted power is not measured.

W-CDMA Band II Measured Results

Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)			Reduced Average Power (dBm) Hotspot back-off			Reduced Average Power (dBm) Proximity sensor back-off		
				Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	9262	1852.4	23.5	N/A	25.0	19.8	N/A	21.0	19.8	N/A	21.0
		9400	1880.0	23.2			19.6			19.9		
		9538	1907.6	23.5			20.0			19.9		
HSDPA	Subtest 1	9262	1852.4	21.9	0	23.0	19.7	0	21.0	19.5	0	21.0
		9400	1880.0	21.7			19.6			19.4		
		9538	1907.6	22.0			20.0			19.8		
	Subtest 2	9262	1852.4	20.7	0	23.0	19.7	0	21.0	19.5	0	21.0
		9400	1880.0	20.7			19.5			19.4		
		9538	1907.6	21.1			19.9			19.8		
	Subtest 3	9262	1852.4	21.7	0.5	22.5	19.6	0.5	20.5	19.5	0.5	20.5
		9400	1880.0	21.7			19.5			19.4		
		9538	1907.6	22.1			19.9			19.8		
	Subtest 4	9262	1852.4	20.4	0.5	22.5	19.6	0.5	20.5	19.6	0.5	20.5
		9400	1880.0	20.3			19.5			19.4		
		9538	1907.6	20.2			19.9			19.8		
HSUPA	Subtest 1	9262	1852.4	20.8	0	23.0	18.5	1	20.0	18.4	1	20.0
		9400	1880.0	20.7			18.4			18.3		
		9538	1907.6	21.1			18.7			18.5		
	Subtest 2	9262	1852.4	18.8	2	21.0	18.5	2	19.0	18.4	2	19.0
		9400	1880.0	18.7			18.3			18.3		
		9538	1907.6	19.0			18.7			18.6		
	Subtest 3	9262	1852.4	21.8	1	22.0	18.4	1	20.0	18.4	1	20.0
		9400	1880.0	21.7			18.3			18.3		
		9538	1907.6	21.9			18.7			18.6		
	Subtest 4	9262	1852.4	18.8	2	21.0	18.4	2	19.0	18.4	2	19.0
		9400	1880.0	18.7			18.3			18.3		
		9538	1907.6	19.0			18.7			18.6		
	Subtest 5	9262	1852.4	22.0	0	23.0	19.7	0	21.0	19.7	0	21.0
		9400	1880.0	21.8			19.5			19.9		
		9538	1907.6	22.2			19.9			19.7		
DC-HSDPA	Subtest 1	9262	1852.4	22.0	0	23.0	19.4	0	21.0	19.5	0	21.0
		9400	1880.0	21.9			19.6			19.6		
		9538	1907.6	21.9			19.7			19.7		
	Subtest 2	9262	1852.4	20.9	0	23.0	19.5	0	21.0	19.5	0	21.0
		9400	1880.0	20.9			19.6			19.6		
		9538	1907.6	21.0			19.7			19.7		
	Subtest 3	9262	1852.4	20.0	0.5	22.5	19.5	0.5	20.5	19.5	0.5	20.5
		9400	1880.0	20.0			19.6			19.6		
		9538	1907.6	20.1			19.7			19.7		
	Subtest 4	9262	1852.4	20.1	0.5	22.5	19.5	0.5	20.5	19.5	0.5	20.5
		9400	1880.0	20.1			19.6			19.6		
		9538	1907.6	20.1			19.7			19.7		

W-CDMA Band IV Measured Results

Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)			Reduced Average Power (dBm) Hotspot back-off			Reduced Average Power (dBm) Proximity sensor back-off		
				Measured Pwr	MFR	Tune-up Limit	Measured Pwr	MFR	Tune-up Limit	Measured Pwr	MFR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	1312	1712.4	23.0	N/A	24.5	19.8	N/A	21.0	20.2	N/A	21.0
		1413	1732.6	23.3			20.0			20.6		
		1513	1752.6	23.2			19.9			20.5		
HSDPA	Subtest 1	1312	1712.4	21.8	0	22.0	19.7	0	21.0	19.9	0	21.0
		1413	1732.6	21.7			20.1			20.2		
		1513	1752.6	21.8			20.0			20.1		
	Subtest 2	1312	1712.4	20.5	0	22.0	19.7	0	21.0	19.8	0	21.0
		1413	1732.6	20.9			20.1			20.1		
		1513	1752.6	20.7			19.9			20.0		
	Subtest 3	1312	1712.4	19.5	0.5	21.5	19.7	0.5	20.5	19.8	0.5	20.5
		1413	1732.6	19.9			20.1			20.1		
		1513	1752.6	19.9			19.9			20.0		
	Subtest 4	1312	1712.4	19.5	0.5	21.5	19.2	0.5	20.5	19.8	0.5	20.5
		1413	1732.6	19.8			19.6			20.1		
		1513	1752.6	19.7			19.5			20.0		
HSUPA	Subtest 1	1312	1712.4	20.3	0	22.0	18.6	0	21.0	18.7	0	21.0
		1413	1732.6	20.6			19.0			19.0		
		1513	1752.6	20.4			18.8			18.9		
	Subtest 2	1312	1712.4	18.5	1	21.0	18.1	2	19.0	18.7	2	19.0
		1413	1732.6	18.5			18.4			19.0		
		1513	1752.6	18.7			18.3			18.9		
	Subtest 3	1312	1712.4	21.2	0	22.0	18.6	1	20.0	18.7	1	20.0
		1413	1732.6	21.5			19.0			19.0		
		1513	1752.6	21.4			18.8			18.8		
	Subtest 4	1312	1712.4	17.2	3	19.5	17.2	2	19.0	18.1	2	19.0
		1413	1732.6	17.4			17.4			18.4		
		1513	1752.6	17.3			17.3			18.3		
	Subtest 5	1312	1712.4	21.4	0	22.0	19.9	0	21.0	19.9	0	21.0
		1413	1732.6	21.7			20.2			20.2		
		1513	1752.6	21.5			20.0			20.0		
DC-HSDPA	Subtest 1	1312	1712.4	21.8	0	22.0	19.9	0	21.0	19.5	0	21.0
		1413	1732.6	22.0			20.4			19.5		
		1513	1752.6	21.9			20.3			20.3		
	Subtest 2	1312	1712.4	20.6	0	22.0	19.9	0	21.0	19.5	0	21.0
		1413	1732.6	21.0			20.3			19.5		
		1513	1752.6	21.0			20.3			19.5		
	Subtest 3	1312	1712.4	19.5	0.5	21.5	19.9	0.5	20.5	19.9	0.5	20.5
		1413	1732.6	19.9			20.3			20.3		
		1513	1752.6	19.9			20.3			20.2		
	Subtest 4	1312	1712.4	19.5	0.5	21.5	19.9	0.5	20.5	19.9	0.5	20.5
		1413	1732.6	19.9			20.3			20.3		
		1513	1752.6	19.9			20.3			20.3		

W-CDMA Band V Measured Results

Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)		
				Measured Pwr	MFR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	4132	826.4	24.6	N/A	25.5
		4183	836.6	24.7		
		4233	846.6	24.1		
HSDPA	Subtest 1	4132	826.4	24.3	0	25.0
		4183	836.6	24.5		
		4233	846.6	24.3		
	Subtest 2	4132	826.4	24.4	0	25.0
		4183	836.6	24.4		
		4233	846.6	24.2		
	Subtest 3	4132	826.4	24.4	0	25.0
		4183	836.6	24.4		
		4233	846.6	24.4		
	Subtest 4	4132	826.4	24.3	0	25.0
		4183	836.6	24.4		
		4233	846.6	24.3		
HSUPA	Subtest 1	4132	826.4	22.0	0	23.0
		4183	836.6	22.0		
		4233	846.6	21.8		
	Subtest 2	4132	826.4	19.0	2	21.0
		4183	836.6	19.0		
		4233	846.6	18.7		
	Subtest 3	4132	826.4	21.9	1	23.0
		4183	836.6	20.8		
		4233	846.6	21.2		
	Subtest 4	4132	826.4	19.0	2	21.0
		4183	836.6	19.0		
		4233	846.6	18.7		
	Subtest 5	4132	826.4	21.6	0	23.0
		4183	836.6	21.5		
		4233	846.6	21.6		
DC-HSDPA	Subtest 1	4132	826.4	24.3	0	25.0
		4183	836.6	24.4		
		4233	846.6	24.4		
	Subtest 2	4132	826.4	24.4	0	25.0
		4183	836.6	24.4		
		4233	846.6	24.4		
	Subtest 3	4132	826.4	24.5	0	25.0
		4183	836.6	24.4		
		4233	846.6	24.4		
	Subtest 4	4132	826.4	24.4	0	25.0
		4183	836.6	24.5		
		4233	846.6	24.3		

9.3. LTE

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

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

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
256 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
	≥ 1						≤ 5

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

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

Network Signalling value	Requirements (subclause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	N/A

Maximum Output Power (Tune-up Limit) for LTE

According to April 2015 TCB workshop, SAR test exclusion can be applied for testing overlapping LTE bands as follows:

- The maximum output power, including tolerance, for the smaller band must be $\leq$ the larger band to qualify for the SAR test exclusion.
- The channel bandwidth and other operating parameters for the smaller band must be fully supported by the larger band.
 - LTE Band 2 (1850 – 1910 MHz) is covered by LTE Band 25 (1850 – 1915 MHz) in Main 1 Ant.
 - LTE Band 4 (1710 – 1755 MHz) is covered by LTE Band 66 (1710 – 1780 MHz) in Main 1 Ant.
 - LTE Band 5 (824 – 849 MHz) is covered by LTE Band 26 (814 – 849 MHz)
 - LTE Band 17 (704 – 716 MHz) is covered by LTE Band 12 (699 – 716 MHz)

Maximum bandwidth does not support at least three non-overlapping channels in certain channel bandwidths.

When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing per KDB 941225 D05 SAR for LTE Devices.

LTE QPSK configuration has the highest maximum average output power per 3GPP standard.

SAR measurement is not required for Higher order modulations. When the highest maximum output power for Higher order modulations are ≤ 0.5 dB higher than the QPSK or when the reported SAR for QPSK configuration is ≤ 1.45 W/kg.

1. Max power**LTE Band 2 (Ant.3) Measured Results**

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MFR	Tune-up Limit
				18700	18900	19100		
				1860 MHz	1880 MHz	1900 MHz		
20 MHz	QPSK	1	0	21.8	21.6	22.2	0.0	22.5
		1	49	21.9	22.2	22.2	0.0	22.5
		1	99	21.9	21.9	22.2	0.0	22.5
		50	0	21.0	20.9	21.2	1.0	21.5
		50	24	21.0	20.9	21.2	1.0	21.5
		50	50	20.9	20.9	21.2	1.0	21.5
		100	0	21.0	20.9	21.1	1.0	21.5
	16QAM	1	0	21.3	21.0	21.3	1.0	21.5
		1	49	21.2	21.1	21.2	1.0	21.5
		1	99	21.0	21.0	20.3	1.0	21.5
		50	0	19.9	20.0	20.1	2.0	20.5
		50	24	19.9	19.9	20.2	2.0	20.5
		50	50	19.8	19.9	20.1	2.0	20.5
		100	0	19.8	19.8	20.2	2.0	20.5
	64QAM	1	0	19.8	19.5	20.3	2.0	20.5
		1	49	19.7	20.0	20.2	2.0	20.5
		1	99	19.5	20.1	19.1	2.0	20.5
		50	0	18.9	19.0	19.1	3.0	19.5
		50	24	18.9	18.9	19.2	3.0	19.5
		50	50	18.8	18.9	19.1	3.0	19.5
		100	0	18.9	19.0	19.2	3.0	19.5
	256QAM	1	0	17.0	17.2	17.1	5.0	17.5
		1	49	17.0	17.3	17.1	5.0	17.5
		1	99	17.0	17.1	17.0	5.0	17.5
		50	0	16.7	16.8	16.9	5.0	17.5
		50	24	16.7	16.8	16.9	5.0	17.5
		50	50	16.7	16.8	16.9	5.0	17.5
		100	0	16.8	16.9	17.0	5.0	17.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MFR	Tune-up Limit
				18675	18900	19125		
				1857.5 MHz	1880 MHz	1902.5 MHz		
15 MHz	QPSK	1	0	21.7	21.3	22.1	0.0	22.5
		1	37	21.8	21.8	22.0	0.0	22.5
		1	74	21.4	21.6	21.1	0.0	22.5
		36	0	20.7	20.7	20.9	1.0	21.5
		36	20	20.6	20.7	20.8	1.0	21.5
		36	39	20.6	20.6	20.8	1.0	21.5
		75	0	20.7	20.7	20.8	1.0	21.5
	16QAM	1	0	21.0	20.6	21.3	1.0	21.5
		1	37	20.7	20.7	21.3	1.0	21.5
		1	74	20.8	20.7	20.3	1.0	21.5
		36	0	19.6	19.7	20.3	2.0	20.5
		36	20	19.6	19.7	19.8	2.0	20.5
		36	39	19.6	19.6	19.8	2.0	20.5
		75	0	19.6	19.6	19.7	2.0	20.5
	64QAM	1	0	19.6	19.2	19.6	2.0	20.5
		1	37	19.5	19.6	19.7	2.0	20.5
		1	74	19.4	19.5	18.8	2.0	20.5
		36	0	18.6	18.7	18.9	3.0	19.5
		36	20	18.6	18.7	18.8	3.0	19.5
		36	39	18.6	18.6	18.8	3.0	19.5
		75	0	18.6	18.7	18.8	3.0	19.5
	256QAM	1	0	17.0	17.0	17.0	5.0	17.5
		1	37	17.3	16.5	16.8	5.0	17.5
		1	74	16.9	16.9	17.0	5.0	17.5
		36	0	16.8	16.8	16.9	5.0	17.5
		36	20	16.8	16.8	16.9	5.0	17.5
		36	39	16.7	16.8	16.8	5.0	17.5
		75	0	16.7	16.8	16.9	5.0	17.5

LTE Band 2 (Ant.3) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18650	18900	19150		
				1855 MHz	1880 MHz	1905 MHz		
10 MHz	QPSK	1	0	21.8	21.9	22.1	0.0	22.5
		1	25	21.8	21.8	22.0	0.0	22.5
		1	49	21.8	21.7	22.2	0.0	22.5
		25	0	20.7	20.9	20.9	1.0	21.5
		25	12	20.7	20.9	20.9	1.0	21.5
		25	25	20.7	20.9	20.9	1.0	21.5
		50	0	20.7	20.9	20.9	1.0	21.5
	16QAM	1	0	20.6	20.9	21.0	1.0	21.5
		1	25	20.6	20.9	20.7	1.0	21.5
		1	49	20.7	20.7	20.4	1.0	21.5
		25	0	19.8	19.9	19.9	2.0	20.5
		25	12	19.7	19.9	19.9	2.0	20.5
		25	25	19.7	19.8	19.9	2.0	20.5
		50	0	19.7	19.8	19.9	2.0	20.5
	64QAM	1	0	19.7	20.0	20.0	2.0	20.5
		1	25	19.7	19.8	19.8	2.0	20.5
		1	49	19.7	19.9	19.4	2.0	20.5
		25	0	18.8	18.8	18.9	3.0	19.5
		25	12	18.8	18.8	18.8	3.0	19.5
		25	25	18.7	18.8	18.8	3.0	19.5
		50	0	18.7	18.8	18.8	3.0	19.5
	256QAM	1	0	17.1	17.3	17.1	5.0	17.5
		1	25	16.9	17.2	17.0	5.0	17.5
		1	49	16.9	17.1	17.1	5.0	17.5
		25	0	16.8	16.8	16.7	5.0	17.5
		25	12	16.7	16.7	16.7	5.0	17.5
		25	25	16.7	16.7	16.7	5.0	17.5
		50	0	16.7	16.7	16.7	5.0	17.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18625	18900	19175		
				1852.5 MHz	1880 MHz	1907.5 MHz		
5 MHz	QPSK	1	0	21.8	21.9	21.8	0.0	22.5
		1	12	21.9	22.1	21.9	0.0	22.5
		1	24	21.7	21.7	21.9	0.0	22.5
		12	0	20.8	20.8	20.7	1.0	21.5
		12	7	20.9	20.8	20.7	1.0	21.5
		12	13	20.8	20.8	20.8	1.0	21.5
		25	0	20.9	20.9	20.8	1.0	21.5
	16QAM	1	0	20.9	20.7	20.7	1.0	21.5
		1	12	20.9	20.8	20.8	1.0	21.5
		1	24	20.9	20.8	20.6	1.0	21.5
		12	0	19.8	19.9	19.7	2.0	20.5
		12	7	19.8	19.9	19.7	2.0	20.5
		12	13	19.9	19.8	19.8	2.0	20.5
		25	0	19.8	19.8	19.7	2.0	20.5
	64QAM	1	0	19.9	19.8	19.8	2.0	20.5
		1	12	20.0	19.8	19.7	2.0	20.5
		1	24	20.0	19.7	19.7	2.0	20.5
		12	0	18.8	18.8	18.7	3.0	19.5
		12	7	18.8	18.8	18.7	3.0	19.5
		12	13	18.8	18.8	18.7	3.0	19.5
		25	0	18.9	18.8	18.7	3.0	19.5
	256QAM	1	0	17.1	17.0	17.0	5.0	17.5
		1	12	17.4	17.3	17.2	5.0	17.5
		1	24	17.2	17.1	17.1	5.0	17.5
		12	0	16.8	16.8	16.7	5.0	17.5
		12	7	16.8	16.8	16.8	5.0	17.5
		12	13	16.8	16.8	16.8	5.0	17.5
		25	0	16.9	16.8	16.9	5.0	17.5

LTE Band 2 (Ant.3) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18615	18900	19185		
				1851.5 MHz	1880 MHz	1908.5 MHz		
3 MHz	QPSK	1	0	21.8	21.6	21.7	0.0	22.5
		1	8	21.8	21.7	21.7	0.0	22.5
		1	14	21.8	21.8	21.4	0.0	22.5
		8	0	20.9	20.8	20.8	1.0	21.5
		8	4	20.9	20.8	20.8	1.0	21.5
		8	7	20.9	20.8	20.8	1.0	21.5
		15	0	20.9	20.8	20.9	1.0	21.5
	16QAM	1	0	21.0	21.0	21.0	1.0	21.5
		1	8	20.9	20.8	20.8	1.0	21.5
		1	14	20.1	20.9	20.6	1.0	21.5
		8	0	19.9	19.8	19.8	2.0	20.5
		8	4	19.8	19.7	19.8	2.0	20.5
		8	7	19.9	19.8	19.7	2.0	20.5
		15	0	19.8	19.7	19.7	2.0	20.5
	64QAM	1	0	20.0	19.8	19.9	2.0	20.5
		1	8	19.9	19.8	19.8	2.0	20.5
		1	14	20.0	19.8	19.2	2.0	20.5
		8	0	18.8	18.7	18.8	3.0	19.5
		8	4	18.9	18.8	18.8	3.0	19.5
		8	7	18.9	18.8	18.8	3.0	19.5
		15	0	19.0	18.9	18.9	3.0	19.5
	256QAM	1	0	16.9	16.9	16.8	5.0	17.5
		1	8	17.0	16.8	16.7	5.0	17.5
		1	14	16.9	16.8	16.7	5.0	17.5
		8	0	16.8	16.7	16.7	5.0	17.5
		8	4	16.8	16.7	16.7	5.0	17.5
		8	7	16.8	16.7	16.7	5.0	17.5
		15	0	16.8	16.8	16.7	5.0	17.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				18607	18900	19193		
				1850.7 MHz	1880 MHz	1909.3 MHz		
1.4 MHz	QPSK	1	0	21.8	21.7	21.9	0.0	22.5
		1	3	21.7	21.8	21.7	0.0	22.5
		1	5	21.9	21.9	21.6	0.0	22.5
		3	0	21.8	21.8	21.8	0.0	22.5
		3	1	21.8	21.9	21.8	0.0	22.5
		3	3	21.7	21.8	21.8	0.0	22.5
		6	0	20.8	20.7	20.9	1.0	21.5
	16QAM	1	0	20.4	20.3	21.0	1.0	21.5
		1	3	20.4	20.3	20.7	1.0	21.5
		1	5	20.6	20.5	20.8	1.0	21.5
		3	0	20.8	20.8	21.0	1.0	21.5
		3	1	20.8	20.8	21.0	1.0	21.5
		3	3	20.7	20.6	20.8	1.0	21.5
		6	0	19.8	19.7	19.8	2.0	20.5
	64QAM	1	0	20.2	20.1	20.2	2.0	20.5
		1	3	19.9	20.0	19.8	2.0	20.5
		1	5	20.2	20.1	19.4	2.0	20.5
		3	0	19.5	19.9	19.9	2.0	20.5
		3	1	19.8	19.8	19.8	2.0	20.5
		3	3	19.8	19.8	19.5	2.0	20.5
		6	0	18.9	18.7	18.8	3.0	19.5
	256QAM	1	0	16.9	16.8	16.9	5.0	17.5
		1	3	16.8	16.9	16.9	5.0	17.5
		1	5	16.8	16.9	16.9	5.0	17.5
		3	0	16.9	16.9	16.9	5.0	17.5
		3	1	17.0	16.7	17.0	5.0	17.5
		3	3	17.0	16.7	16.8	5.0	17.5
		6	0	16.9	16.8	16.8	5.0	17.5

LTE Band 4 (Ant.3) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					
				Measured Pwr (dBm)			MPR	Tune-up Limit	
				20050	20175	20300			
				1720 MHz	1732.5 MHz	1745 MHz			
20 MHz	QPSK	1	0		22.4		0.0	22.5	
		1	49		22.4		0.0	22.5	
		1	99		22.3		0.0	22.5	
		50	0		21.2		1.0	21.5	
		50	24		21.1		1.0	21.5	
		50	50		21.1		1.0	21.5	
	16QAM	100	0		21.1		1.0	21.5	
		1	0		21.4		1.0	21.5	
		1	49		21.2		1.0	21.5	
		1	99		21.1		1.0	21.5	
		50	0		20.1		2.0	20.5	
		50	24		20.1		2.0	20.5	
	64QAM	50	50		20.1		2.0	20.5	
		100	0		20.1		2.0	20.5	
		1	0		20.3		2.0	20.5	
		1	49		20.4		2.0	20.5	
		1	99		20.3		2.0	20.5	
		50	0		19.1		3.0	19.5	
	256QAM	50	24		19.1		3.0	19.5	
		50	50		19.1		3.0	19.5	
		100	0		19.1		3.0	19.5	
		1	0		17.3		5.0	17.5	
		1	49		17.3		5.0	17.5	
		1	99		17.3		5.0	17.5	
	15 MHz	QPSK	50	0		17.3		5.0	17.5
			50	24		17.3		5.0	17.5
			50	50		17.4		5.0	17.5
			100	0		17.1		5.0	17.5
1			0		22.1	21.9	22.4	0.0	22.5
1			37		21.8	22.0	22.2	0.0	22.5
16QAM		1	74		21.9	21.9	22.1	0.0	22.5
		36	0		21.1	20.9	21.3	1.0	21.5
		36	20		21.0	20.9	21.2	1.0	21.5
		36	39		21.0	20.9	21.2	1.0	21.5
		75	0		21.0	20.8	21.2	1.0	21.5
		1	0		21.0	20.9	21.3	1.0	21.5
64QAM	1	37		21.1	20.9	21.2	1.0	21.5	
	1	74		20.9	20.6	21.0	1.0	21.5	
	36	0		20.1	19.9	20.2	2.0	20.5	
	36	20		20.0	19.9	20.2	2.0	20.5	
	36	39		19.9	19.9	20.2	2.0	20.5	
	75	0		20.0	19.9	20.1	2.0	20.5	
256QAM	1	0		19.9	19.9	20.2	2.0	20.5	
	1	37		19.9	19.9	20.2	2.0	20.5	
	1	74		19.9	19.9	20.2	2.0	20.5	
	36	0		19.0	18.9	19.2	3.0	19.5	
	36	20		19.0	18.9	19.1	3.0	19.5	
	36	39		18.9	18.8	19.1	3.0	19.5	
256QAM	75	0		19.0	18.9	19.2	3.0	19.5	
	1	0		17.0	17.2	17.2	5.0	17.5	
	1	37		16.9	16.9	17.1	5.0	17.5	
	1	74		16.8	16.9	17.2	5.0	17.5	
	36	0		16.9	16.9	17.0	5.0	17.5	
	36	20		16.8	16.9	17.1	5.0	17.5	
256QAM	36	39		16.8	16.9	17.1	5.0	17.5	
	75	0		16.9	17.0	17.1	5.0	17.5	

LTE Band 4 (Ant.3) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20000	20175	20350		
				1715 MHz	1732.5 MHz	1750 MHz		
10 MHz	QPSK	1	0	22.0	22.0	22.3	0.0	22.5
		1	25	21.8	22.0	22.1	0.0	22.5
		1	49	21.9	22.0	22.1	0.0	22.5
		25	0	20.9	21.0	21.2	1.0	21.5
		25	12	20.8	21.0	21.2	1.0	21.5
		25	25	20.8	21.0	21.1	1.0	21.5
	16QAM	50	0	20.8	21.0	21.1	1.0	21.5
		1	0	20.9	21.1	21.2	1.0	21.5
		1	25	20.8	21.0	21.2	1.0	21.5
		1	49	20.9	21.1	21.2	1.0	21.5
		25	0	19.8	20.0	20.1	2.0	20.5
		25	12	19.8	20.0	20.1	2.0	20.5
	64QAM	25	25	19.8	20.0	20.1	2.0	20.5
		50	0	19.8	19.1	20.1	2.0	20.5
		1	0	19.9	20.2	20.2	2.0	20.5
		1	25	20.0	19.9	20.1	2.0	20.5
		1	49	19.8	20.0	20.1	2.0	20.5
		25	0	18.8	19.0	19.1	3.0	19.5
	256QAM	25	12	18.8	19.0	19.1	3.0	19.5
		25	25	18.8	19.0	19.1	3.0	19.5
		50	0	18.8	19.0	19.1	3.0	19.5
		1	0	17.0	16.9	17.3	5.0	17.5
		1	25	16.8	16.8	17.2	5.0	17.5
		1	49	16.8	16.9	17.2	5.0	17.5
5 MHz	QPSK	25	0	16.8	17.0	17.1	5.0	17.5
		25	12	16.8	17.0	17.1	5.0	17.5
		25	25	16.7	17.0	17.1	5.0	17.5
		50	0	16.8	17.0	17.2	5.0	17.5
		1	0	21.9	22.1	22.2	0.0	22.5
		1	12	21.9	22.1	22.3	0.0	22.5
	16QAM	1	24	22.0	22.1	22.3	0.0	22.5
		12	0	20.8	21.0	21.2	1.0	21.5
		12	7	20.8	21.0	21.2	1.0	21.5
		12	13	20.8	21.0	21.2	1.0	21.5
		25	0	20.9	21.1	21.2	1.0	21.5
		1	0	20.9	21.0	21.2	1.0	21.5
	64QAM	1	12	20.7	21.0	21.3	1.0	21.5
		1	24	20.9	20.9	21.3	1.0	21.5
		12	0	19.7	20.0	20.1	2.0	20.5
		12	7	19.7	20.0	20.1	2.0	20.5
		12	13	19.7	20.0	20.1	2.0	20.5
		25	0	19.7	20.0	20.1	2.0	20.5
	256QAM	1	0	20.0	20.1	20.2	2.0	20.5
		1	12	19.9	19.9	20.2	2.0	20.5
		1	24	20.0	20.0	20.2	2.0	20.5
		12	0	18.6	19.0	19.1	3.0	19.5
		12	7	18.6	19.0	19.2	3.0	19.5
		12	13	18.7	19.0	19.1	3.0	19.5
5 MHz	QPSK	25	0	18.8	19.0	19.1	3.0	19.5
		1	0	17.1	17.2	17.2	5.0	17.5
		1	12	17.1	17.0	17.1	5.0	17.5
		1	24	17.0	17.1	17.2	5.0	17.5
		12	0	16.7	17.0	17.1	5.0	17.5
		12	7	16.7	17.0	17.2	5.0	17.5
	16QAM	12	13	16.7	17.0	17.2	5.0	17.5
		25	0	16.8	17.0	17.2	5.0	17.5
		1	0	17.1	17.2	17.2	5.0	17.5
		1	12	17.1	17.0	17.1	5.0	17.5
		1	24	17.0	17.1	17.2	5.0	17.5
		12	0	16.7	17.0	17.1	5.0	17.5

LTE Band 4 (Ant.3) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				19965	20175	20385		
				1711.5 MHz	1732.5 MHz	1753.5 MHz		
3 MHz	QPSK	1	0	22.0	21.1	22.4	0.0	22.5
		1	8	21.9	22.0	22.4	0.0	22.5
		1	14	21.8	22.1	22.4	0.0	22.5
		8	0	20.9	21.1	21.3	1.0	21.5
		8	4	20.8	21.0	21.3	1.0	21.5
		8	7	20.9	21.2	21.3	1.0	21.5
		15	0	20.9	21.1	21.3	1.0	21.5
	16QAM	1	0	20.8	21.0	21.5	1.0	21.5
		1	8	20.8	21.0	21.2	1.0	21.5
		1	14	20.7	21.1	21.5	1.0	21.5
		8	0	19.8	19.9	20.2	2.0	20.5
		8	4	19.7	20.0	20.2	2.0	20.5
		8	7	19.8	20.0	20.1	2.0	20.5
		15	0	19.8	20.0	20.3	2.0	20.5
	64QAM	1	0	19.8	20.0	20.3	2.0	20.5
		1	8	19.9	19.9	20.0	2.0	20.5
		1	14	20.0	20.0	20.0	2.0	20.5
		8	0	18.8	19.0	19.0	3.0	19.5
		8	4	18.8	19.0	19.0	3.0	19.5
		8	7	18.8	19.1	19.1	3.0	19.5
		15	0	18.8	19.1	19.2	3.0	19.5
	256QAM	1	0	17.0	17.1	17.3	5.0	17.5
		1	8	17.0	17.1	17.2	5.0	17.5
		1	14	17.0	17.2	17.2	5.0	17.5
		8	0	16.9	16.7	17.2	5.0	17.5
		8	4	16.8	17.0	17.2	5.0	17.5
		8	7	16.8	17.0	17.1	5.0	17.5
		15	0	16.7	17.0	17.2	5.0	17.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				19957	20175	20393		
				1710.7 MHz	1732.5 MHz	1754.3 MHz		
1.4 MHz	QPSK	1	0	21.9	22.1	22.4	0.0	22.5
		1	3	22.0	22.1	22.3	0.0	22.5
		1	5	22.1	22.3	22.3	0.0	22.5
		3	0	21.9	22.1	22.3	0.0	22.5
		3	1	22.0	22.1	22.2	0.0	22.5
		3	3	22.0	22.0	22.2	0.0	22.5
		6	0	20.9	21.1	21.3	1.0	21.5
	16QAM	1	0	21.1	21.1	21.3	1.0	21.5
		1	3	21.1	21.2	21.2	1.0	21.5
		1	5	21.1	21.2	21.3	1.0	21.5
		3	0	20.9	21.1	21.3	1.0	21.5
		3	1	21.0	20.8	21.0	1.0	21.5
		3	3	21.0	21.0	21.1	1.0	21.5
		6	0	19.8	20.0	20.1	2.0	20.5
	64QAM	1	0	19.9	20.0	20.0	2.0	20.5
		1	3	19.7	19.9	20.0	2.0	20.5
		1	5	19.7	20.0	20.1	2.0	20.5
		3	0	19.8	20.1	20.1	2.0	20.5
		3	1	19.8	20.1	19.9	2.0	20.5
		3	3	19.7	20.0	20.0	2.0	20.5
		6	0	18.8	19.0	19.2	3.0	19.5
	256QAM	1	0	16.8	17.1	17.2	5.0	17.5
		1	3	16.8	16.9	17.0	5.0	17.5
		1	5	16.8	17.0	17.2	5.0	17.5
		3	0	17.0	17.3	17.2	5.0	17.5
		3	1	17.1	17.3	17.2	5.0	17.5
		3	3	16.9	17.2	17.3	5.0	17.5
		6	0	16.8	17.1	17.1	5.0	17.5

LTE Band 12 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MFR	Tune-up Limit
				23060	23095	23130		
				704 MHz	707.5 MHz	711 MHz		
10 MHz	QPSK	1	0		24.3		0.0	25.5
		1	25		24.3		0.0	25.5
		1	49		24.2		0.0	25.5
		25	0		22.5		1.0	24.5
		25	12		22.6		1.0	24.5
		25	25		22.6		1.0	24.5
	16QAM	50	0		22.3		1.0	24.5
		1	0		22.4		1.0	24.5
		1	25		22.5		1.0	24.5
		1	49		22.3		1.0	24.5
		25	0		21.4		2.0	23.5
		25	12		21.3		2.0	23.5
	64QAM	25	25		21.3		2.0	23.5
		50	0		21.3		2.0	23.5
		1	0		21.6		2.0	23.5
		1	25		21.7		2.0	23.5
		1	49		21.5		2.0	23.5
		25	0		20.5		3.0	22.5
	256QAM	25	12		20.4		3.0	22.5
		25	25		20.4		3.0	22.5
		50	0		20.4		3.0	22.5
		1	0		20.4		5.0	20.5
		1	25		20.5		5.0	20.5
		1	49		20.3		5.0	20.5
		25	0		19.7		5.0	20.5
		25	12		19.6		5.0	20.5
		25	25		19.5		5.0	20.5
		50	0		19.5		5.0	20.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MFR	Tune-up Limit
				23035	23095	23155		
				701.5 MHz	707.5 MHz	713.5 MHz		
5 MHz	QPSK	1	0	24.9	24.8	24.7	0.0	25.5
		1	12	24.9	24.8	24.7	0.0	25.5
		1	24	24.8	24.8	24.6	0.0	25.5
		12	0	22.8	22.8	22.7	1.0	24.5
		12	7	22.8	22.8	22.7	1.0	24.5
		12	13	22.8	22.8	22.7	1.0	24.5
	16QAM	25	0	22.8	22.8	22.7	1.0	24.5
		1	0	23.3	23.1	22.7	1.0	24.5
		1	12	23.0	22.8	22.6	1.0	24.5
		1	24	23.2	23.0	22.8	1.0	24.5
		12	0	21.8	21.7	21.7	2.0	23.5
		12	7	21.8	21.7	21.7	2.0	23.5
	64QAM	12	13	21.7	21.6	21.6	2.0	23.5
		25	0	21.7	21.7	21.6	2.0	23.5
		1	0	21.9	21.9	21.8	2.0	23.5
		1	12	21.8	21.8	21.9	2.0	23.5
		1	24	21.8	21.8	21.8	2.0	23.5
		12	0	20.8	20.8	20.6	3.0	22.5
	256QAM	12	7	20.8	20.8	20.6	3.0	22.5
		12	13	20.8	20.7	20.6	3.0	22.5
		25	0	20.7	20.7	20.6	3.0	22.5
		1	0	20.4	20.4	20.3	5.0	20.5
		1	12	20.5	20.2	19.9	5.0	20.5
		1	24	20.5	20.3	19.9	5.0	20.5
		12	0	20.0	19.9	19.7	5.0	20.5
		12	7	20.0	19.9	19.6	5.0	20.5
		12	13	20.0	19.8	19.6	5.0	20.5
		25	0	20.0	19.8	19.6	5.0	20.5

LTE Band 12 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				23025	23095	23165		
				700.5 MHz	707.5 MHz	714.5 MHz		
3 MHz	QPSK	1	0	24.9	24.9	24.7	0.0	25.5
		1	8	24.8	24.9	24.7	0.0	25.5
		1	14	24.3	24.9	24.7	0.0	25.5
		8	0	23.1	23.0	23.8	1.0	24.5
		8	4	23.0	23.0	23.8	1.0	24.5
		8	7	23.0	22.9	23.8	1.0	24.5
		15	0	23.0	22.9	22.8	1.0	24.5
	16QAM	1	0	23.3	23.0	22.9	1.0	24.5
		1	8	23.2	23.0	22.9	1.0	24.5
		1	14	23.2	22.9	22.8	1.0	24.5
		8	0	22.0	21.9	22.8	2.0	23.5
		8	4	22.1	21.9	22.8	2.0	23.5
		8	7	22.0	21.8	22.8	2.0	23.5
		15	0	22.0	21.7	21.7	2.0	23.5
	64QAM	1	0	22.8	22.1	21.7	2.0	23.5
		1	8	22.0	22.1	21.7	2.0	23.5
		1	14	22.0	22.0	21.6	2.0	23.5
		8	0	21.9	21.8	21.7	3.0	22.5
		8	4	21.9	21.8	21.7	3.0	22.5
		8	7	21.9	21.9	21.7	3.0	22.5
		15	0	20.8	21.1	20.7	3.0	22.5
	256QAM	1	0	20.4	20.4	20.3	5.0	20.5
		1	8	20.3	20.3	20.4	5.0	20.5
		1	14	20.0	20.2	20.2	5.0	20.5
		8	0	19.8	19.9	19.8	5.0	20.5
		8	4	19.8	19.8	19.7	5.0	20.5
		8	7	19.8	19.7	19.7	5.0	20.5
		15	0	19.8	20.1	19.8	5.0	20.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				23017	23095	23173		
				699.7 MHz	707.5 MHz	715.3 MHz		
1.4 MHz	QPSK	1	0	24.9	24.9	24.9	0.0	25.5
		1	3	24.9	24.6	24.8	0.0	25.5
		1	5	24.9	24.9	24.9	0.0	25.5
		3	0	24.7	24.7	24.9	0.0	25.5
		3	1	24.9	24.9	24.8	0.0	25.5
		3	3	24.9	24.8	24.9	0.0	25.5
	16QAM	6	0	23.0	22.9	22.8	1.0	24.5
		1	0	23.1	23.2	23.0	1.0	24.5
		1	3	23.1	23.3	23.2	1.0	24.5
		1	5	23.0	23.3	23.1	1.0	24.5
		3	0	23.1	23.2	23.1	1.0	24.5
		3	1	23.1	23.1	23.0	1.0	24.5
	64QAM	3	3	23.1	23.1	23.0	1.0	24.5
		6	0	22.0	21.9	21.9	2.0	23.5
		1	0	21.7	22.1	21.6	2.0	23.5
		1	3	21.8	22.0	21.4	2.0	23.5
		1	5	21.7	21.9	21.6	2.0	23.5
		3	0	21.7	21.9	21.8	2.0	23.5
	256QAM	3	1	21.7	21.8	21.7	2.0	23.5
		3	3	21.5	21.8	21.5	2.0	23.5
		6	0	20.6	20.7	20.7	3.0	22.5
		1	0	20.4	20.5	20.5	5.0	20.5
		1	3	20.4	20.4	20.4	5.0	20.5
		1	5	20.4	20.5	20.4	5.0	20.5
	256QAM	3	0	20.4	20.4	20.0	5.0	20.5
		3	1	20.3	20.3	19.9	5.0	20.5
		3	3	20.2	20.3	19.9	5.0	20.5
		6	0	19.7	19.9	19.6	5.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				23205 779.5 MHz	23230 782 MHz	23255 784.5 MHz		
10 MHz	QPSK	1	0	24.8		0.0	25.5	
		1	25	24.5		0.0	25.5	
		1	49	24.4		0.0	25.5	
		25	0	22.7		1.0	24.5	
		25	12	22.6		1.0	24.5	
		25	25	22.5		1.0	24.5	
	16QAM	50	0	22.7		1.0	24.5	
		1	0	22.2		1.0	24.5	
		1	25	22.3		1.0	24.5	
		1	49	22.0		1.0	24.5	
		25	0	21.6		2.0	23.5	
		25	12	21.3		2.0	23.5	
	64QAM	25	25	21.2		2.0	23.5	
		50	0	21.0		2.0	23.5	
		1	0	21.1		2.0	23.5	
		1	25	21.9		2.0	23.5	
		1	49	22.3		2.0	23.5	
		25	0	20.5		3.0	22.5	
	256QAM	25	12	21.1		3.0	22.5	
		25	25	21.1		3.0	22.5	
		50	0	20.8		3.0	22.5	
		1	0	20.2		5.0	20.5	
		1	25	20.3		5.0	20.5	
		1	49	20.2		5.0	20.5	
5 MHz	QPSK	25	0	19.0		5.0	20.5	
		25	12	19.1		5.0	20.5	
		25	25	19.2		5.0	20.5	
		50	0	18.9		5.0	20.5	
		1	0	24.5		0.0	25.5	
		1	12	24.6		0.0	25.5	
	16QAM	1	24	24.5		0.0	25.5	
		12	0	22.1		1.0	24.5	
		12	7	22.0		1.0	24.5	
		12	13	22.0		1.0	24.5	
		25	0	22.0		1.0	24.5	
		1	0	22.3		1.0	24.5	
64QAM	1	12	22.2		1.0	24.5		
	1	24	21.1		2.0	23.5		
	12	7	21.1		2.0	23.5		
	12	13	21.1		2.0	23.5		
	25	0	21.0		2.0	23.5		
	1	0	21.2		2.0	23.5		
256QAM	1	12	21.2		2.0	23.5		
	1	24	20.2		3.0	22.5		
	12	7	20.1		3.0	22.5		
	12	13	20.1		3.0	22.5		
	25	0	20.0		3.0	22.5		
	1	0	19.8		5.0	20.5		
256QAM	1	12	19.7		5.0	20.5		
	1	24	19.8		5.0	20.5		
	12	0	18.9		5.0	20.5		
	12	7	18.9		5.0	20.5		
	12	13	18.9		5.0	20.5		
	25	0	19.0		5.0	20.5		

LTE Band 25 (Main 1 Ant.) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MFR	Tune-up Limit
				26140	26365	26590		
				1860 MHz	1882.5 MHz	1905 MHz		
20 MHz	QPSK	1	0	23.8	23.6	23.8	0.0	25.0
		1	49	23.7	23.7	23.6	0.0	25.0
		1	99	23.7	23.6	23.4	0.0	25.0
		50	0	21.8	21.7	22.5	1.0	24.0
		50	24	21.8	21.6	22.4	1.0	24.0
		50	50	21.7	21.6	22.2	1.0	24.0
	16QAM	100	0	21.7	21.6	22.2	1.0	24.0
		1	0	22.1	21.7	22.6	1.0	24.0
		1	49	22.1	21.7	22.6	1.0	24.0
		1	99	22.0	21.7	22.4	1.0	24.0
		50	0	20.8	20.6	21.2	2.0	23.0
		50	24	20.8	20.6	21.1	2.0	23.0
	64QAM	50	50	20.8	20.6	21.1	2.0	23.0
		100	0	20.8	20.6	21.1	2.0	23.0
		1	0	20.8	20.5	21.2	3.0	22.0
		1	49	20.9	20.8	21.4	3.0	22.0
		1	99	20.8	20.5	21.2	3.0	22.0
		50	0	19.8	19.6	20.1	3.0	22.0
	256QAM	50	24	19.7	19.6	20.1	3.0	22.0
		50	50	19.7	19.6	20.0	3.0	22.0
		100	0	19.7	19.6	20.1	3.0	22.0
		1	0	19.7	20.1	19.6	4.0	21.0
		1	49	19.8	20.2	19.5	4.0	21.0
		1	99	19.7	20.2	19.5	4.0	21.0
15 MHz	QPSK	50	0	19.7	19.8	19.8	4.0	21.0
		50	24	19.6	19.8	19.8	4.0	21.0
		50	50	19.7	19.8	19.6	4.0	21.0
		100	0	19.8	19.8	19.5	4.0	21.0
	16QAM	1	0	23.6	23.4	23.8	0.0	25.0
		1	37	23.5	23.3	23.6	0.0	25.0
		1	74	23.5	23.4	23.7	0.0	25.0
		36	0	21.6	21.8	21.7	1.0	24.0
		36	20	21.6	21.9	21.9	1.0	24.0
		36	39	21.6	21.9	21.8	1.0	24.0
	64QAM	75	0	21.6	21.7	21.9	1.0	24.0
		1	0	21.8	21.6	22.3	1.0	24.0
		1	37	21.8	21.6	22.1	1.0	24.0
		1	74	21.7	21.6	22.1	1.0	24.0
		36	0	20.8	20.8	21.0	2.0	23.0
		36	20	20.8	20.9	20.9	2.0	23.0
	256QAM	36	39	20.6	21.0	20.9	2.0	23.0
		75	0	20.6	21.0	20.9	2.0	23.0
		1	0	21.0	20.8	21.1	3.0	22.0
		1	37	20.7	20.6	20.9	3.0	22.0
		1	74	20.8	20.7	20.9	3.0	22.0
		36	0	19.7	19.7	20.0	3.0	22.0
15 MHz	16QAM	36	20	19.7	19.7	19.9	3.0	22.0
		36	39	19.6	19.6	19.9	3.0	22.0
		75	0	19.6	19.5	19.9	3.0	22.0
	256QAM	1	0	19.6	19.7	19.9	4.0	21.0
		1	37	19.5	19.5	19.7	4.0	21.0
		1	74	19.6	19.9	19.9	4.0	21.0
	64QAM	36	0	19.8	19.0	19.7	4.0	21.0
		36	20	19.7	19.8	19.4	4.0	21.0
		36	39	19.6	19.5	19.5	4.0	21.0
		75	0	19.7	19.6	19.9	4.0	21.0

LTE Band 25 (Main 1 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26090	26365	26640		
				1855 MHz	1882.5 MHz	1910 MHz		
10 MHz	QPSK	1	0	23.1	23.0	23.4	0.0	25.0
		1	25	23.0	22.9	23.2	0.0	25.0
		1	49	23.1	23.0	23.3	0.0	25.0
		25	0	22.0	21.8	21.8	1.0	24.0
		25	12	21.5	21.7	22.0	1.0	24.0
		25	25	21.5	21.9	21.6	1.0	24.0
	16QAM	50	0	21.7	21.7	21.7	1.0	24.0
		1	0	21.5	21.6	21.7	1.0	24.0
		1	25	21.9	21.7	21.5	1.0	24.0
		1	49	21.8	21.6	21.5	1.0	24.0
		25	0	20.9	20.8	20.8	2.0	23.0
		25	12	20.6	20.9	20.9	2.0	23.0
	64QAM	25	25	20.8	20.9	20.6	2.0	23.0
		50	0	20.8	20.8	20.7	2.0	23.0
		1	0	21.0	20.6	20.7	3.0	22.0
		1	25	20.5	20.6	20.6	3.0	22.0
		1	49	20.9	20.7	20.5	3.0	22.0
		25	0	19.6	19.7	19.5	3.0	22.0
	256QAM	25	12	19.8	19.9	19.6	3.0	22.0
		25	25	19.7	19.8	19.8	3.0	22.0
		50	0	19.8	19.7	19.9	3.0	22.0
		1	0	19.4	19.9	19.9	4.0	21.0
		1	25	19.3	19.7	19.8	4.0	21.0
		1	49	19.3	19.7	19.9	4.0	21.0
5 MHz	QPSK	25	0	19.8	19.3	19.7	4.0	21.0
		25	12	19.8	19.5	19.2	4.0	21.0
		25	25	19.4	19.1	19.1	4.0	21.0
		50	0	19.6	19.4	19.1	4.0	21.0
		1	0	23.2	23.1	23.4	0.0	25.0
		1	12	23.1	22.9	23.3	0.0	25.0
	16QAM	1	24	23.1	23.1	23.4	0.0	25.0
		12	0	21.5	21.6	21.8	1.0	24.0
		12	7	21.8	21.7	21.8	1.0	24.0
		12	13	21.8	21.9	21.6	1.0	24.0
		25	0	21.7	22.0	21.8	1.0	24.0
		1	0	21.6	21.9	21.7	1.0	24.0
	64QAM	1	12	21.5	21.6	21.6	1.0	24.0
		1	24	21.5	21.5	21.7	1.0	24.0
		12	0	20.6	20.7	20.6	2.0	23.0
		12	7	20.7	20.8	21.0	2.0	23.0
		12	13	20.5	20.6	20.8	2.0	23.0
		25	0	21.0	20.8	20.6	2.0	23.0
	256QAM	1	0	20.9	20.8	20.8	3.0	22.0
		1	12	20.5	20.9	20.8	3.0	22.0
		1	24	20.8	20.7	20.6	3.0	22.0
		12	0	19.9	19.7	19.9	3.0	22.0
		12	7	20.0	19.8	19.8	3.0	22.0
		12	13	19.9	20.0	20.0	3.0	22.0
	256QAM	25	0	19.6	19.8	19.5	3.0	22.0
		1	0	19.8	19.9	19.9	4.0	21.0
		1	12	19.9	19.8	19.9	4.0	21.0
		1	24	19.9	19.9	19.9	4.0	21.0
		12	0	19.8	19.8	19.2	4.0	21.0
		12	7	19.7	19.8	19.3	4.0	21.0
		12	13	19.8	19.8	19.3	4.0	21.0
		25	0	19.6	19.8	19.2	4.0	21.0

LTE Band 25 (Main 1 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26055	26365	26675		
				1851.5 MHz	1882.5 MHz	1913.5 MHz		
3 MHz	QPSK	1	0	23.5	23.6	24.0	0.0	25.0
		1	8	23.2	23.5	24.0	0.0	25.0
		1	14	23.4	23.5	24.0	0.0	25.0
		8	0	22.0	21.5	22.0	1.0	24.0
		8	4	21.7	21.8	22.0	1.0	24.0
		8	7	21.8	21.6	22.0	1.0	24.0
		15	0	21.5	21.9	22.0	1.0	24.0
	16QAM	1	0	21.9	21.7	22.3	1.0	24.0
		1	8	21.6	21.7	22.3	1.0	24.0
		1	14	21.9	21.7	22.2	1.0	24.0
		8	0	20.8	20.9	21.0	2.0	23.0
		8	4	20.8	20.8	21.0	2.0	23.0
		8	7	20.8	20.9	21.0	2.0	23.0
		15	0	20.5	20.6	21.0	2.0	23.0
	64QAM	1	0	20.4	20.4	20.6	3.0	22.0
		1	8	20.3	20.1	20.6	3.0	22.0
		1	14	20.4	20.2	20.6	3.0	22.0
		8	0	20.1	20.1	20.3	3.0	22.0
		8	4	20.1	20.0	20.2	3.0	22.0
		8	7	20.1	20.1	20.3	3.0	22.0
		15	0	20.2	20.1	20.3	3.0	22.0
	256QAM	1	0	19.6	19.9	19.8	4.0	21.0
		1	8	19.6	19.7	20.0	4.0	21.0
		1	14	19.7	19.9	19.9	4.0	21.0
		8	0	19.7	19.7	19.4	4.0	21.0
		8	4	19.8	19.6	19.6	4.0	21.0
		8	7	19.6	19.8	19.6	4.0	21.0
		15	0	19.8	19.8	19.5	4.0	21.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26047	26365	26683		
				1850.7 MHz	1882.5 MHz	1914.3 MHz		
1.4 MHz	QPSK	1	0	23.4	23.4	23.8	0.0	25.0
		1	3	23.5	23.2	23.6	0.0	25.0
		1	5	23.4	23.4	23.7	0.0	25.0
		3	0	23.4	23.4	23.8	0.0	25.0
		3	1	23.4	23.3	23.8	0.0	25.0
		3	3	23.4	23.3	23.6	0.0	25.0
		6	0	21.6	21.6	21.7	1.0	24.0
	16QAM	1	0	21.8	21.9	22.1	1.0	24.0
		1	3	21.8	21.6	22.2	1.0	24.0
		1	5	21.8	21.5	22.1	1.0	24.0
		3	0	21.8	21.9	21.8	1.0	24.0
		3	1	21.6	21.8	21.9	1.0	24.0
		3	3	21.6	21.9	21.8	1.0	24.0
		6	0	20.9	20.8	20.7	2.0	23.0
	64QAM	1	0	20.3	20.4	20.3	3.0	22.0
		1	3	20.4	20.8	20.3	3.0	22.0
		1	5	20.1	20.6	20.4	3.0	22.0
		3	0	20.1	20.3	20.2	3.0	22.0
		3	1	20.0	20.5	20.2	3.0	22.0
		3	3	20.1	20.7	20.3	3.0	22.0
		6	0	20.4	20.5	20.5	3.0	22.0
	256QAM	1	0	19.9	19.9	19.3	4.0	21.0
		1	3	19.9	19.3	19.3	4.0	21.0
		1	5	19.8	19.8	19.5	4.0	21.0
		3	0	19.9	19.4	19.5	4.0	21.0
		3	1	19.9	20.0	19.5	4.0	21.0
		3	3	19.8	19.3	19.6	4.0	21.0
		6	0	19.2	19.2	19.6	4.0	21.0

LTE Band 26 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					
				Measured Pw r (dBm)			MPR	Tune-up Limit	
				26765	26865	26965			
				821.5 MHz	831.5 MHz	841.5 MHz			
15 MHz	QPSK	1	0		24.6		0.0	25.5	
		1	37		24.3		0.0	25.5	
		1	74		24.4		0.0	25.5	
		36	0		22.6		1.0	24.5	
		36	20		22.6		1.0	24.5	
		36	39		22.5		1.0	24.5	
	16QAM	75	0		22.6		1.0	24.5	
		1	0		22.7		1.0	24.5	
		1	37		22.5		1.0	24.5	
		1	74		22.5		1.0	24.5	
		36	0		21.5		2.0	23.5	
		36	20		21.5		2.0	23.5	
	64QAM	36	39		21.4		2.0	23.5	
		75	0		21.6		2.0	23.5	
		1	0		21.6		2.0	23.5	
		1	37		21.5		2.0	23.5	
		1	74		21.5		2.0	23.5	
		36	0		20.7		3.0	22.5	
	256QAM	36	20		20.7		3.0	22.5	
		36	39		20.6		3.0	22.5	
		75	0		20.6		3.0	22.5	
		1	0		20.1		4.0	21.5	
		1	37		20.4		4.0	21.5	
		1	74		20.5		4.0	21.5	
	36	0		20.1		4.0	21.5		
	36	20		20.3		4.0	21.5		
	36	39		20.5		4.0	21.5		
	75	0		20.4		4.0	21.5		
	BW (MHz)	Mode	RB Allocation	RB offset	Measured Pw r (dBm)			MPR	Tune-up Limit
	26740	26865	26990						
819 MHz	831.5 MHz	844 MHz							
10 MHz	QPSK	1	0	24.6	24.8	24.6	0.0	25.5	
		1	25	24.5	24.8	24.6	0.0	25.5	
		1	49	24.6	24.8	24.5	0.0	25.5	
		25	0	22.6	22.9	22.7	1.0	24.5	
		25	12	22.6	22.9	22.7	1.0	24.5	
		25	25	22.6	22.9	22.6	1.0	24.5	
	16QAM	50	0	22.7	22.9	22.7	1.0	24.5	
		1	0	23.0	23.0	22.9	1.0	24.5	
		1	25	23.1	22.9	23.0	1.0	24.5	
		1	49	23.0	22.7	22.9	1.0	24.5	
		25	0	21.6	21.9	21.7	2.0	23.5	
		25	12	21.6	21.9	21.6	2.0	23.5	
	64QAM	25	25	21.6	21.8	21.7	2.0	23.5	
		50	0	21.6	21.8	21.6	2.0	23.5	
		1	0	22.1	22.0	21.7	2.0	23.5	
		1	25	22.7	22.1	21.7	2.0	23.5	
		1	49	21.9	21.9	21.6	2.0	23.5	
		25	0	20.7	20.9	20.6	3.0	22.5	
	256QAM	25	12	20.7	20.9	20.5	3.0	22.5	
		25	25	20.9	20.9	20.5	3.0	22.5	
		50	0	20.6	20.8	20.5	3.0	22.5	
		1	0	20.0	20.5	20.1	4.0	21.5	
		1	25	20.3	20.3	19.9	4.0	21.5	
		1	49	20.0	20.2	20.0	4.0	21.5	
	25	0	19.3	20.3	19.6	4.0	21.5		
	25	12	20.2	20.4	19.6	4.0	21.5		
	25	25	19.5	20.2	19.5	4.0	21.5		
	50	0	19.9	20.4	19.5	4.0	21.5		

LTE Band 26 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26715	26865	27015		
				816.5 MHz	831.5 MHz	846.5 MHz		
5 MHz	QPSK	1	0	24.6	24.8	24.4	0.0	25.5
		1	12	24.5	24.9	24.6	0.0	25.5
		1	24	24.6	24.9	24.5	0.0	25.5
		12	0	22.6	23.0	22.5	1.0	24.5
		12	7	22.6	22.9	22.5	1.0	24.5
		12	13	22.6	22.9	22.5	1.0	24.5
		25	0	22.6	22.9	22.5	1.0	24.5
	16QAM	1	0	23.1	23.2	22.8	1.0	24.5
		1	12	22.9	23.3	22.8	1.0	24.5
		1	24	23.1	23.2	22.7	1.0	24.5
		12	0	21.5	21.8	21.5	2.0	23.5
		12	7	21.5	21.8	21.4	2.0	23.5
		12	13	21.5	21.7	21.4	2.0	23.5
		25	0	21.5	21.8	21.4	2.0	23.5
	64QAM	1	0	22.2	22.2	22.1	2.0	23.5
		1	12	22.0	22.2	22.1	2.0	23.5
		1	24	22.0	22.1	22.0	2.0	23.5
		12	0	20.9	21.0	20.7	3.0	22.5
		12	7	20.8	20.9	20.6	3.0	22.5
		12	13	20.8	21.2	20.6	3.0	22.5
		25	0	20.9	21.3	20.6	3.0	22.5
	256QAM	1	0	19.7	20.4	19.6	4.0	21.5
		1	12	19.7	20.4	19.7	4.0	21.5
		1	24	19.8	20.3	19.7	4.0	21.5
		12	0	19.7	20.2	19.7	4.0	21.5
		12	7	19.7	20.2	19.9	4.0	21.5
		12	13	19.9	20.4	19.7	4.0	21.5
		25	0	19.6	20.4	19.6	4.0	21.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26705	26865	27025		
				815.5 MHz	831.5 MHz	847.5 MHz		
3 MHz	QPSK	1	0	24.6	24.7	24.5	0.0	25.5
		1	8	24.5	24.8	24.5	0.0	25.5
		1	14	24.6	24.7	24.5	0.0	25.5
		8	0	22.6	22.8	22.4	1.0	24.5
		8	4	22.6	22.8	22.4	1.0	24.5
		8	7	22.6	22.8	22.5	1.0	24.5
		15	0	22.7	22.8	22.4	1.0	24.5
	16QAM	1	0	22.8	23.3	22.9	1.0	24.5
		1	8	22.7	23.3	22.9	1.0	24.5
		1	14	22.8	23.3	22.8	1.0	24.5
		8	0	21.5	21.9	21.4	2.0	23.5
		8	4	21.6	21.9	21.4	2.0	23.5
		8	7	21.5	21.8	21.4	2.0	23.5
		15	0	21.6	21.7	21.4	2.0	23.5
	64QAM	1	0	22.0	22.0	21.6	2.0	23.5
		1	8	21.9	22.1	21.7	2.0	23.5
		1	14	22.0	22.0	21.6	2.0	23.5
		8	0	20.9	21.3	20.6	3.0	22.5
		8	4	20.8	21.4	20.6	3.0	22.5
		8	7	20.8	21.1	20.6	3.0	22.5
		15	0	20.7	21.1	20.7	3.0	22.5
	256QAM	1	0	19.6	20.4	20.4	4.0	21.5
		1	8	19.7	20.2	20.1	4.0	21.5
		1	14	19.6	20.3	20.2	4.0	21.5
		8	0	19.7	20.0	19.8	4.0	21.5
		8	4	19.8	20.4	19.8	4.0	21.5
		8	7	19.7	20.0	19.8	4.0	21.5
		15	0	19.6	20.5	19.8	4.0	21.5

LTE Band 26 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26697	26865	27033		
				814.7 MHz	831.5 MHz	848.3 MHz		
1.4 MHz	QPSK	1	0	24.4	24.9	24.5	0.0	25.5
		1	3	24.4	24.9	24.5	0.0	25.5
		1	5	24.6	24.9	24.5	0.0	25.5
		3	0	24.4	25.0	24.5	0.0	25.5
		3	1	24.6	25.0	24.5	0.0	25.5
		3	3	24.8	25.0	24.5	0.0	25.5
		6	0	22.5	22.7	22.3	1.0	24.5
	16QAM	1	0	23.0	23.3	22.8	1.0	24.5
		1	3	22.1	23.3	22.8	1.0	24.5
		1	5	22.5	23.2	22.8	1.0	24.5
		3	0	22.6	23.1	22.7	1.0	24.5
		3	1	22.0	23.1	22.7	1.0	24.5
		3	3	22.1	23.1	22.6	1.0	24.5
		6	0	22.1	23.0	22.5	2.0	23.5
	64QAM	1	0	22.3	23.2	21.8	2.0	23.5
		1	3	22.2	22.0	21.9	2.0	23.5
		1	5	22.2	22.9	21.8	2.0	23.5
		3	0	22.3	22.0	21.8	2.0	23.5
		3	1	22.1	22.5	21.8	2.0	23.5
		3	3	22.1	22.4	21.8	2.0	23.5
		6	0	20.9	22.0	21.8	3.0	22.5
	256QAM	1	0	20.4	20.1	20.3	4.0	21.5
		1	3	20.4	20.5	20.4	4.0	21.5
		1	5	20.3	20.5	20.4	4.0	21.5
		3	0	20.4	20.5	20.4	4.0	21.5
		3	1	20.4	20.5	20.2	4.0	21.5
		3	3	20.4	20.5	20.4	4.0	21.5
		6	0	19.7	20.2	19.7	4.0	21.5

LTE Band 66 (Main 1 Ant.) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				Measured Pwr (dBm)			MFR	Tune-up Limit
				132072	132322	132572		
				1720 MHz	1745 MHz	1770 MHz		
20 MHz	QPSK	1	0	23.7	24.0	23.8	0.0	25.0
		1	49	24.1	23.9	23.7	0.0	25.0
		1	99	23.6	23.9	23.7	0.0	25.0
		50	0	22.4	22.2	21.8	1.0	24.0
		50	24	21.7	22.1	21.8	1.0	24.0
		50	50	21.7	22.1	21.7	1.0	24.0
	16QAM	100	0	21.7	22.0	21.7	1.0	24.0
		1	0	22.1	22.1	22.1	1.0	24.0
		1	49	22.2	22.0	22.3	1.0	24.0
		1	99	22.1	22.0	22.0	1.0	24.0
		50	0	21.0	21.2	20.8	2.0	23.0
		50	24	20.8	21.1	20.8	2.0	23.0
	64QAM	50	50	20.8	21.0	20.7	2.0	23.0
		100	0	20.8	21.0	20.7	2.0	23.0
		1	0	21.2	21.2	20.8	2.0	23.0
		1	49	21.1	21.0	20.8	2.0	23.0
		1	99	21.0	21.0	20.7	2.0	23.0
		50	0	19.9	20.0	19.8	3.0	22.0
	256QAM	50	24	19.8	19.9	19.8	3.0	22.0
		50	50	19.7	19.9	19.7	3.0	22.0
		100	0	19.7	19.9	19.7	3.0	22.0
		1	0	19.8	19.6	19.8	4.0	21.0
		1	49	20.0	19.5	19.9	4.0	21.0
		1	99	19.5	19.5	19.7	4.0	21.0
15 MHz	QPSK	50	0	19.3	19.8	19.5	4.0	21.0
		50	24	19.3	19.9	19.4	4.0	21.0
		50	50	19.9	19.7	19.3	4.0	21.0
		100	0	19.5	19.7	19.6	4.0	21.0
	16QAM	1	0	23.6	23.8	23.7	0.0	25.0
		1	37	23.8	23.9	23.8	0.0	25.0
		1	74	23.6	23.7	23.6	0.0	25.0
		36	0	21.8	21.9	21.8	1.0	24.0
		36	20	21.8	21.9	21.8	1.0	24.0
		36	39	21.8	21.8	21.7	1.0	24.0
	64QAM	75	0	21.8	21.9	21.8	1.0	24.0
		1	0	22.0	22.3	22.3	1.0	24.0
		1	37	22.1	22.3	22.3	1.0	24.0
		1	74	21.9	22.1	22.1	1.0	24.0
		36	0	20.9	20.9	20.9	2.0	23.0
		36	20	20.7	20.9	20.8	2.0	23.0
	256QAM	36	39	20.7	20.9	20.8	2.0	23.0
		75	0	20.7	20.8	20.8	2.0	23.0
		1	0	21.2	21.2	21.2	2.0	23.0
		1	37	21.3	21.1	21.2	2.0	23.0
		1	74	21.1	21.0	21.0	2.0	23.0
		36	0	20.2	20.1	20.0	3.0	22.0
15 MHz	16QAM	36	20	20.1	20.1	20.0	3.0	22.0
		36	39	20.1	20.0	20.0	3.0	22.0
		75	0	20.2	20.0	19.9	3.0	22.0
	256QAM	1	0	19.6	19.5	19.8	4.0	21.0
		1	37	19.4	19.4	19.5	4.0	21.0
		1	74	19.4	19.4	19.7	4.0	21.0
	64QAM	36	0	19.6	19.1	19.1	4.0	21.0
		36	20	19.2	19.2	19.8	4.0	21.0
		36	39	19.2	19.2	19.7	4.0	21.0
		75	0	19.5	19.3	19.6	4.0	21.0

LTE Band 66 (Main 1 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				132022	132322	132622		
				1715 MHz	1745 MHz	1775 MHz		
10 MHz	QPSK	1	0	23.7	23.9	23.6	0.0	25.0
		1	25	23.7	23.9	23.7	0.0	25.0
		1	49	23.7	23.8	23.6	0.0	25.0
		25	0	21.8	21.9	21.8	1.0	24.0
		25	12	21.7	21.9	21.7	1.0	24.0
		25	25	21.7	21.9	21.7	1.0	24.0
	16QAM	50	0	21.7	21.9	21.7	1.0	24.0
		1	0	21.9	22.3	22.2	1.0	24.0
		1	25	21.9	22.4	22.0	1.0	24.0
		1	49	21.8	22.3	22.0	1.0	24.0
		25	0	20.8	21.0	20.8	2.0	23.0
		25	12	20.8	21.0	20.8	2.0	23.0
	64QAM	25	25	20.7	21.0	20.7	2.0	23.0
		50	0	20.8	20.9	20.7	2.0	23.0
		1	0	20.9	21.4	21.2	2.0	23.0
		1	25	20.8	21.2	21.5	2.0	23.0
		1	49	20.9	21.3	21.1	2.0	23.0
		25	0	20.0	20.1	20.1	3.0	22.0
	256QAM	25	12	20.0	20.1	20.0	3.0	22.0
		25	25	19.9	21.3	19.9	3.0	22.0
		50	0	19.9	20.0	19.9	3.0	22.0
		1	0	19.9	19.4	19.5	4.0	21.0
		1	25	19.3	19.5	19.4	4.0	21.0
		1	49	19.4	19.6	19.4	4.0	21.0
5 MHz	QPSK	25	0	19.8	19.8	19.9	4.0	21.0
		25	12	20.0	19.2	20.0	4.0	21.0
		25	25	19.6	20.0	19.5	4.0	21.0
		50	0	19.7	19.4	19.9	4.0	21.0
		1	0	23.6	23.7	23.8	0.0	25.0
		1	12	23.7	23.7	23.8	0.0	25.0
	16QAM	1	24	23.7	23.8	23.6	0.0	25.0
		12	0	21.7	21.9	21.8	1.0	24.0
		12	7	21.7	21.9	21.7	1.0	24.0
		12	13	21.7	21.8	21.7	1.0	24.0
		25	0	21.7	22.3	21.7	1.0	24.0
		1	0	22.2	22.2	21.8	1.0	24.0
	64QAM	1	12	22.0	22.5	21.9	1.0	24.0
		1	24	22.1	22.4	21.8	1.0	24.0
		12	0	20.8	21.0	20.8	2.0	23.0
		12	7	20.8	21.0	20.7	2.0	23.0
		12	13	20.7	20.9	20.7	2.0	23.0
		25	0	20.7	20.9	20.7	2.0	23.0
	256QAM	1	0	21.2	21.3	21.2	2.0	23.0
		1	12	21.2	21.3	21.3	2.0	23.0
		1	24	21.1	21.1	21.2	2.0	23.0
		12	0	19.9	20.1	19.9	3.0	22.0
		12	7	19.8	20.0	19.9	3.0	22.0
		12	13	19.8	20.0	19.9	3.0	22.0
5 MHz	QPSK	25	0	19.8	19.9	19.9	3.0	22.0
		1	0	19.2	19.3	19.3	4.0	21.0
		1	12	19.3	19.4	19.2	4.0	21.0
		1	24	19.4	19.4	19.3	4.0	21.0
		12	0	19.9	19.4	19.5	4.0	21.0
		12	7	19.2	19.4	19.5	4.0	21.0
	16QAM	12	13	19.0	19.4	19.6	4.0	21.0
		25	0	19.9	19.4	19.6	4.0	21.0
		1	0	19.2	19.3	19.3	4.0	21.0
		1	12	19.3	19.4	19.2	4.0	21.0
		1	24	19.4	19.4	19.3	4.0	21.0
		12	0	19.9	19.4	19.5	4.0	21.0

LTE Band 66 (Main 1 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	
				131987	132322	132657			
				1711.5 MHz	1745 MHz	1778.5 MHz			
3 MHz	QPSK	1	0	23.7	23.8	23.7	0.0	25.0	
		1	8	23.8	24.0	23.8	0.0	25.0	
		1	14	23.8	23.9	23.7	0.0	25.0	
		8	0	21.8	22.0	21.8	1.0	24.0	
		8	4	21.8	21.9	21.7	1.0	24.0	
		8	7	21.7	21.9	21.7	1.0	24.0	
		15	0	21.7	21.9	21.7	1.0	24.0	
	16QAM	1	0	21.9	22.2	22.0	1.0	24.0	
		1	8	22.0	22.3	22.1	1.0	24.0	
		1	14	21.8	22.3	21.9	1.0	24.0	
		8	0	20.7	21.0	20.8	2.0	23.0	
		8	4	20.7	21.0	20.8	2.0	23.0	
		8	7	20.6	20.9	20.8	2.0	23.0	
		15	0	20.8	20.9	20.7	2.0	23.0	
	64QAM	1	0	21.0	21.3	21.1	2.0	23.0	
		1	8	20.9	21.4	21.2	2.0	23.0	
		1	14	21.0	21.2	21.0	2.0	23.0	
		8	0	19.8	20.0	19.8	3.0	22.0	
		8	4	19.8	19.9	19.7	3.0	22.0	
		8	7	19.8	19.9	19.7	3.0	22.0	
		15	0	19.9	20.0	19.8	3.0	22.0	
	256QAM	1	0	19.3	19.5	19.2	4.0	21.0	
		1	8	19.5	19.5	19.1	4.0	21.0	
		1	14	19.6	19.5	19.2	4.0	21.0	
		8	0	19.7	19.8	19.4	4.0	21.0	
		8	4	19.7	19.7	19.4	4.0	21.0	
		8	7	19.6	19.5	19.3	4.0	21.0	
		15	0	19.6	19.9	19.4	4.0	21.0	
1.4 MHz	QPSK	9.00			131979	132322	132665	MPR	Tune-up Limit
		1	0	23.8	24.0	23.9	0.0	25.0	
		1	3	23.8	23.9	23.7	0.0	25.0	
		1	5	23.8	23.9	23.8	0.0	25.0	
		3	0	24.0	24.1	23.8	0.0	25.0	
		3	1	23.9	23.9	23.8	0.0	25.0	
	16QAM	3	3	23.8	23.8	23.8	0.0	25.0	
		6	0	21.8	22.3	21.8	1.0	24.0	
		1	0	22.4	22.3	21.8	1.0	24.0	
1		3	22.4	22.5	21.7	1.0	24.0		
1		5	22.3	22.3	21.8	1.0	24.0		
3		0	22.0	22.1	21.9	1.0	24.0		
3		1	21.9	22.1	21.8	1.0	24.0		
64QAM	3	3	22.0	21.9	21.9	1.0	24.0		
	6	0	21.0	21.2	20.9	2.0	23.0		
	1	0	21.0	21.7	21.1	2.0	23.0		
	1	3	21.1	21.6	21.2	2.0	23.0		
	1	5	21.0	21.6	21.1	2.0	23.0		
	3	0	21.0	21.2	21.0	2.0	23.0		
	3	1	21.0	21.2	20.9	2.0	23.0		
256QAM	3	3	20.9	21.5	20.9	2.0	23.0		
	6	0	19.8	20.3	19.8	3.0	22.0		
	1	0	19.9	19.8	19.9	4.0	21.0		
	1	3	19.5	19.9	20.0	4.0	21.0		
	1	5	19.2	19.4	20.0	4.0	21.0		
	3	0	19.2	19.4	19.3	4.0	21.0		
	3	1	19.3	19.5	19.3	4.0	21.0		
256QAM	3	3	19.3	19.4	20.0	4.0	21.0		
	6	0	19.0	19.3	19.0	4.0	21.0		

LTE Band 41-Power Class 3 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)						
				Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
20 MHz	QPSK	1	0	23.8	23.7	23.8	23.9	23.6	0.0	25.0
		1	49	23.6	23.7	23.7	23.9	23.5	0.0	25.0
		1	99	23.7	23.7	23.7	23.8	23.5	0.0	25.0
		50	0	22.8	22.9	22.8	22.9	22.7	1.0	24.0
		50	24	22.7	22.9	22.8	22.9	22.7	1.0	24.0
		50	50	22.7	22.9	22.8	22.9	22.6	1.0	24.0
	16QAM	100	0	22.7	22.9	22.8	22.9	22.6	1.0	24.0
		1	0	22.7	23.4	22.8	22.7	23.0	1.0	24.0
		1	49	22.9	22.7	22.7	22.7	22.9	1.0	24.0
		1	99	22.8	23.3	23.0	23.1	22.8	1.0	24.0
		50	0	21.7	22.0	21.8	21.9	21.6	2.0	23.0
		50	24	21.8	21.9	21.8	21.9	21.6	2.0	23.0
	64QAM	50	50	21.8	21.9	21.8	22.0	21.6	2.0	23.0
		100	0	21.8	21.9	21.7	22.0	21.6	2.0	23.0
		1	0	22.0	22.0	21.5	22.3	21.7	2.0	23.0
		1	49	21.5	21.9	21.2	21.0	21.2	2.0	23.0
		1	99	21.9	22.0	21.5	22.2	21.6	2.0	23.0
		50	0	20.8	20.9	20.8	21.0	20.6	3.0	22.0
	256QAM	50	24	20.8	20.9	20.8	21.0	20.6	3.0	22.0
		50	50	20.9	20.9	20.7	20.9	20.5	3.0	22.0
		100	0	20.8	20.9	20.8	20.9	20.5	3.0	22.0
		1	0	19.3	19.2	18.8	18.9	18.4	5.0	20.0
		1	49	18.9	19.0	18.5	18.8	18.5	5.0	20.0
		1	99	18.5	19.1	18.7	18.9	18.6	5.0	20.0
		50	0	18.8	18.8	18.8	18.9	18.4	5.0	20.0
		50	24	18.8	18.8	18.8	18.9	18.4	5.0	20.0
		50	50	18.7	18.8	18.8	18.9	18.3	5.0	20.0
		100	0	18.7	18.8	18.8	18.9	18.3	5.0	20.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
15 MHz	QPSK	1	0	24.0	24.0	24.0	24.0	23.9	0.0	25.0
		1	37	23.9	23.9	24.0	24.0	23.9	0.0	25.0
		1	74	23.9	23.9	23.9	24.0	23.8	0.0	25.0
		36	0	22.9	22.9	22.9	23.0	22.8	1.0	24.0
		36	20	22.9	22.9	22.9	23.0	22.8	1.0	24.0
		36	39	22.9	23.0	22.9	23.0	22.8	1.0	24.0
		75	0	22.9	23.0	22.9	23.0	22.8	1.0	24.0
	16QAM	1	0	22.5	22.9	22.9	23.3	22.7	1.0	24.0
		1	37	22.9	22.8	22.6	22.7	22.4	1.0	24.0
		1	74	22.5	23.1	22.7	22.8	22.5	1.0	24.0
		36	0	21.9	22.0	21.9	22.1	21.8	2.0	23.0
		36	20	21.9	22.0	21.9	22.0	21.8	2.0	23.0
		36	39	21.9	22.0	21.9	22.0	21.8	2.0	23.0
		75	0	21.9	22.0	21.9	22.0	21.8	2.0	23.0
	64QAM	1	0	22.0	21.6	21.8	22.2	21.7	2.0	23.0
		1	37	21.5	21.5	21.9	21.9	21.2	2.0	23.0
		1	74	22.0	21.7	21.9	22.2	21.5	2.0	23.0
		36	0	20.9	21.0	21.0	21.1	21.0	3.0	22.0
		36	20	20.9	21.0	20.9	21.1	20.9	3.0	22.0
		36	39	20.9	21.0	21.0	21.1	20.9	3.0	22.0
		75	0	20.9	21.0	21.0	21.1	20.9	3.0	22.0
	256QAM	1	0	18.9	19.0	18.5	19.0	18.9	5.0	20.0
		1	37	18.8	18.9	18.7	18.9	18.7	5.0	20.0
		1	74	18.9	18.9	18.5	19.1	18.8	5.0	20.0
		36	0	18.9	19.0	19.0	19.1	18.9	5.0	20.0
		36	20	18.9	18.9	18.9	19.1	18.9	5.0	20.0
		36	39	18.9	19.0	19.0	19.1	18.8	5.0	20.0
		75	0	19.0	19.0	19.0	19.1	18.9	5.0	20.0

LTE Band 41-Power Class 3 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
10 MHz	QPSK	1	0	24.0	24.0	24.0	24.1	23.9	0.0	25.0
		1	25	23.9	23.9	23.8	23.9	23.7	0.0	25.0
		1	49	24.0	24.0	23.9	24.0	23.8	0.0	25.0
		25	0	23.0	23.0	22.9	23.0	22.8	1.0	24.0
		25	12	23.0	23.0	22.9	23.0	22.8	1.0	24.0
		25	25	23.0	23.0	22.9	23.0	22.8	1.0	24.0
	16QAM	50	0	23.0	23.0	22.9	23.0	22.8	1.0	24.0
		1	0	23.1	23.1	23.0	23.2	22.9	1.0	24.0
		1	25	23.0	23.0	22.9	23.0	22.8	1.0	24.0
		1	49	23.2	23.2	23.0	23.2	22.9	1.0	24.0
		25	0	22.0	22.0	21.9	22.0	21.8	2.0	23.0
		25	12	21.9	22.0	21.9	22.0	21.8	2.0	23.0
	64QAM	25	25	22.0	22.0	21.9	22.0	21.8	2.0	23.0
		50	0	22.0	22.0	21.9	22.1	21.8	2.0	23.0
		1	0	21.8	21.9	22.2	22.0	21.9	2.0	23.0
		1	25	21.8	21.8	22.0	21.9	21.7	2.0	23.0
		1	49	21.9	21.9	22.1	22.0	21.8	2.0	23.0
		25	0	21.0	21.1	21.0	21.2	20.9	3.0	22.0
5 MHz	QPSK	25	12	21.0	21.1	21.0	21.2	20.9	3.0	22.0
		25	25	21.0	21.1	21.0	21.2	20.9	3.0	22.0
		50	0	21.0	21.0	21.0	21.2	20.8	3.0	22.0
	16QAM	1	0	18.9	19.1	18.8	19.0	18.7	5.0	20.0
		1	25	18.8	18.9	18.7	18.9	18.6	5.0	20.0
		1	49	18.8	19.1	18.8	19.0	18.8	5.0	20.0
	64QAM	25	0	19.0	19.1	19.1	19.1	18.8	5.0	20.0
		25	12	18.9	19.1	19.0	19.1	18.8	5.0	20.0
		25	25	18.9	19.0	19.1	19.1	18.8	5.0	20.0
	256QAM	50	0	19.0	19.1	19.0	19.1	18.8	5.0	20.0
		1	0	24.2	24.1	24.1	24.1	23.8	0.0	25.0
	QPSK	1	12	24.0	23.8	24.0	23.9	23.7	0.0	25.0
		1	24	24.2	24.0	24.0	24.0	23.7	0.0	25.0
		12	0	23.2	23.1	23.0	23.1	22.9	1.0	24.0
		12	7	23.2	23.1	23.0	23.1	22.9	1.0	24.0
	16QAM	12	13	23.2	23.1	23.0	23.1	22.9	1.0	24.0
		25	0	23.2	23.1	23.0	23.1	22.9	1.0	24.0
	64QAM	1	0	23.0	23.1	23.0	22.9	22.8	1.0	24.0
		1	12	22.9	23.0	22.9	22.9	22.7	1.0	24.0
		1	24	23.1	23.2	22.9	23.0	22.8	1.0	24.0
	256QAM	12	0	22.1	22.1	22.0	22.1	21.9	2.0	23.0
		12	7	22.1	22.1	22.0	22.1	21.9	2.0	23.0
		12	13	22.1	22.1	22.0	22.1	21.9	2.0	23.0
	QPSK	25	0	22.1	22.1	22.0	22.1	21.9	2.0	23.0
		1	0	22.0	22.0	22.0	22.2	22.0	2.0	23.0
	16QAM	1	12	21.9	21.9	21.9	22.1	21.8	2.0	23.0
		1	24	22.1	22.1	21.9	22.3	21.9	2.0	23.0
		12	0	21.0	21.0	21.0	21.2	20.9	3.0	22.0
	64QAM	12	7	21.0	21.0	21.0	21.1	20.9	3.0	22.0
		12	13	21.0	21.0	21.0	21.1	20.9	3.0	22.0
	256QAM	25	0	21.0	21.0	21.0	21.1	20.8	3.0	22.0
		1	0	18.9	18.9	19.1	19.1	19.0	5.0	20.0
		1	12	18.8	18.8	19.0	19.0	18.9	5.0	20.0
		1	24	18.9	18.9	19.1	19.1	19.0	5.0	20.0
		12	0	18.9	18.9	19.0	19.1	18.8	5.0	20.0
		12	7	18.9	18.9	19.0	19.1	18.8	5.0	20.0
		12	13	18.9	18.9	18.9	19.1	18.8	5.0	20.0
		25	0	18.9	18.9	18.9	19.0	18.8	5.0	20.0

LTE Band 41-Power Class 2 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)							
				Measured Pwr (dBm)					MPR	Tune-up Limit	
				39750	40185	40620	41055	41490			
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			
20 MHz	QPSK	1	0	25.1	24.9	24.9	25.1	24.9	0.0	26.5	
		1	49	24.9	24.8	24.8	25.1	24.7	0.0	26.5	
		1	99	25.1	25.0	25.0	25.1	24.9	0.0	26.5	
		50	0	23.9	24.2	24.1	24.1	23.9	1.0	25.5	
		50	24	24.1	24.4	23.8	24.2	23.8	1.0	25.5	
		50	50	24.0	23.9	23.9	24.7	23.7	1.0	25.5	
	16QAM	100	0	23.9	23.9	23.8	23.9	23.8	1.0	25.5	
		1	0	24.6	24.8	24.0	24.6	24.3	1.0	25.5	
		1	49	24.3	24.7	24.2	24.1	24.1	1.0	25.5	
		1	99	24.6	24.6	24.0	24.3	24.1	1.0	25.5	
		50	0	23.0	23.1	22.8	23.0	23.2	2.0	24.5	
		50	24	23.2	23.6	23.7	23.0	22.9	2.0	24.5	
	64QAM	50	50	23.6	23.3	23.4	23.0	22.8	2.0	24.5	
		100	0	23.2	23.9	22.8	23.0	23.4	2.0	24.5	
		1	0	23.3	23.9	23.4	23.1	23.8	2.0	24.5	
		1	49	23.5	23.1	23.0	23.0	22.9	2.0	24.5	
		1	99	23.8	23.7	23.1	23.1	23.7	2.0	24.5	
		50	0	22.7	22.6	22.0	22.2	23.1	3.0	23.5	
	256QAM	50	24	23.5	22.3	22.1	22.3	21.9	3.0	23.5	
		50	50	23.4	23.4	22.3	23.1	21.8	3.0	23.5	
		100	0	21.9	21.9	21.9	22.2	21.7	3.0	23.5	
		1	0	20.2	20.3	20.7	21.2	20.6	5.0	21.5	
		1	49	21.2	20.9	20.3	20.7	20.3	5.0	21.5	
		1	99	20.8	20.3	20.8	20.6	20.6	5.0	21.5	
15 MHz	QPSK	50	0	20.6	21.0	21.0	20.4	20.3	5.0	21.5	
		50	24	21.1	20.2	20.9	21.2	20.1	5.0	21.5	
		50	50	20.5	21.3	20.3	20.5	20.1	5.0	21.5	
		100	0	20.3	21.2	21.1	20.1	19.8	5.0	21.5	
		16QAM	Measured Pwr (dBm)					MPR	Tune-up Limit		
			BW (MHz)	Mode	RB Allocation	RB offset	39750	40185	40620	41055	41490
	2506 MHz						2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz	
	QPSK		1	0	24.9	25.0	24.9	25.0	24.8	0.0	26.5
			1	37	24.8	24.8	24.6	24.9	24.6	0.0	26.5
			1	74	24.8	25.0	24.9	24.9	24.8	0.0	26.5
		36	0	23.9	24.0	23.9	24.0	23.8	1.0	25.5	
		36	20	23.9	24.0	23.9	24.0	23.8	1.0	25.5	
		36	39	23.9	24.0	23.9	24.0	23.8	1.0	25.5	
	16QAM	75	0	23.9	24.0	24.0	24.0	23.8	1.0	25.5	
		1	0	24.2	24.4	24.3	24.4	24.0	1.0	25.5	
		1	37	24.3	24.0	24.1	24.5	23.5	1.0	25.5	
		1	74	24.2	24.3	24.3	24.3	23.9	1.0	25.5	
		36	0	22.9	23.0	23.0	23.0	22.8	2.0	24.5	
		36	20	22.8	23.0	23.0	23.0	22.8	2.0	24.5	
	64QAM	36	39	22.9	23.0	22.9	23.0	22.8	2.0	24.5	
		75	0	22.9	23.0	22.9	23.0	22.8	2.0	24.5	
		1	0	23.2	23.2	23.5	23.3	22.8	2.0	24.5	
		1	37	23.3	23.3	23.3	23.4	22.7	2.0	24.5	
		1	74	23.2	23.2	23.5	23.2	22.8	2.0	24.5	
		36	0	21.9	22.0	22.0	22.1	21.9	3.0	23.5	
	256QAM	36	20	21.9	22.0	22.0	22.0	21.8	3.0	23.5	
		36	39	21.9	22.0	21.9	22.0	21.8	3.0	23.5	
		75	0	21.9	21.9	22.0	22.1	21.8	3.0	23.5	
		1	0	20.3	20.2	20.0	20.6	20.1	5.0	21.5	
		1	37	20.1	20.2	20.3	20.4	20.1	5.0	21.5	
		1	74	20.3	20.2	20.0	20.5	20.0	5.0	21.5	
	256QAM	36	0	19.9	20.0	20.0	20.1	19.9	5.0	21.5	
		36	20	19.9	20.0	20.0	20.1	19.9	5.0	21.5	
		36	39	19.9	20.0	20.0	20.1	19.9	5.0	21.5	
		75	0	20.0	20.0	20.0	20.1	19.9	5.0	21.5	

LTE Band 41-Power Class 2 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
10 MHz	QPSK	1	0	24.8	25.1	25.0	24.9	24.9	0.0	26.5
		1	25	24.7	24.9	24.9	24.8	24.8	0.0	26.5
		1	49	24.9	25.0	25.0	25.0	24.8	0.0	26.5
		25	0	23.9	23.9	24.0	24.1	23.8	1.0	25.5
		25	12	23.9	23.9	23.9	24.0	23.8	1.0	25.5
		25	25	23.9	23.9	24.0	24.0	23.8	1.0	25.5
	16QAM	50	0	23.9	24.0	23.9	24.1	23.8	1.0	25.5
		1	0	24.2	24.7	24.2	24.3	24.3	1.0	25.5
		1	25	24.2	24.6	24.1	24.3	24.2	1.0	25.5
		1	49	24.4	24.7	24.2	24.5	24.3	1.0	25.5
		25	0	23.0	23.0	22.8	23.1	22.8	2.0	24.5
		25	12	23.0	22.9	22.8	23.1	22.8	2.0	24.5
	64QAM	25	25	22.9	22.9	22.8	23.1	22.8	2.0	24.5
		50	0	22.9	23.0	22.9	23.1	22.8	2.0	24.5
		1	0	23.1	23.0	23.4	23.0	23.2	2.0	24.5
		1	25	23.1	22.8	23.2	22.9	23.0	2.0	24.5
		1	49	23.2	22.9	23.3	23.1	23.1	2.0	24.5
		25	0	22.0	22.1	21.9	22.1	21.9	3.0	23.5
	256QAM	25	12	22.0	22.0	21.9	22.1	21.9	3.0	23.5
		25	25	22.0	22.0	21.8	22.1	21.9	3.0	23.5
		50	0	21.9	22.0	21.9	22.1	21.8	3.0	23.5
		1	0	20.3	20.3	19.9	20.4	20.1	5.0	21.5
		1	25	20.2	20.2	19.9	20.3	20.0	5.0	21.5
		1	49	20.3	20.3	19.9	20.4	20.2	5.0	21.5
5 MHz	QPSK	25	0	19.9	20.0	20.1	20.1	19.9	5.0	21.5
		25	12	19.9	20.0	20.1	20.1	19.8	5.0	21.5
		25	25	19.9	20.0	20.1	20.2	19.8	5.0	21.5
		50	0	19.9	20.0	19.9	20.1	19.9	5.0	21.5
		1	0	24.9	25.0	25.2	25.1	24.8	0.0	26.5
		1	12	25.3	25.4	25.3	25.4	25.0	0.0	26.5
	16QAM	1	24	25.0	24.9	25.1	25.1	24.7	0.0	26.5
		12	0	23.9	23.9	23.9	24.0	23.8	1.0	25.5
		12	7	23.9	23.9	23.9	24.0	23.8	1.0	25.5
		12	13	23.9	23.9	24.0	24.0	23.8	1.0	25.5
		25	0	23.9	23.9	23.9	24.0	23.8	1.0	25.5
		1	0	24.2	24.4	24.0	24.2	23.9	1.0	25.5
	64QAM	1	12	23.7	24.2	24.0	23.6	23.8	1.0	25.5
		1	24	24.2	24.6	23.8	24.2	24.0	1.0	25.5
		12	0	23.0	23.0	22.9	22.9	22.9	2.0	24.5
		12	7	23.0	23.0	22.9	22.9	22.8	2.0	24.5
		12	13	23.1	23.0	22.9	23.0	22.8	2.0	24.5
		25	0	23.0	22.9	22.9	23.0	22.8	2.0	24.5
	256QAM	1	0	23.1	23.4	23.2	23.4	23.0	2.0	24.5
		1	12	23.1	23.3	23.3	23.6	22.6	2.0	24.5
		1	24	22.9	23.1	23.4	23.2	22.8	2.0	24.5
		12	0	21.8	22.0	21.9	22.1	21.9	3.0	23.5
		12	7	21.8	21.9	21.9	22.1	21.9	3.0	23.5
		12	13	21.9	22.0	22.0	22.1	22.0	3.0	23.5
5 MHz	256QAM	25	0	21.7	22.0	21.9	22.1	21.9	3.0	23.5
		1	0	20.2	20.5	20.3	20.5	20.2	5.0	21.5
		1	12	20.2	20.4	20.6	20.2	20.4	5.0	21.5
		1	24	20.2	20.5	20.4	20.5	20.3	5.0	21.5
		12	0	19.8	20.0	20.0	20.1	19.9	5.0	21.5
		12	7	19.8	20.0	19.9	20.1	19.9	5.0	21.5
	256QAM	12	13	19.8	20.0	20.0	20.1	19.9	5.0	21.5
		25	0	19.8	20.0	19.9	20.1	19.8	5.0	21.5
		1	0	20.2	20.5	20.3	20.5	20.2	5.0	21.5
		1	12	20.2	20.4	20.6	20.2	20.4	5.0	21.5
		1	24	20.2	20.5	20.4	20.5	20.3	5.0	21.5
		12	0	19.8	20.0	20.0	20.1	19.9	5.0	21.5

2. Reduced power

LTE Band 2 (Ant.3) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Hotspot back-off					Reduced Average Power (dBm) RCV-Back off				
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				18700	18900	19100			18700	18900	19100		
				1860 MHz	1880 MHz	1900 MHz			1860 MHz	1880 MHz	1900 MHz		
20 MHz	QPSK	1	0	18.4	18.4	18.4	0.0	19.5	16.8	17.0	17.1	0.0	17.5
		1	49	18.2	18.3	18.4	0.0	19.5	17.0	16.9	17.0	0.0	17.5
		1	99	18.3	18.3	18.2	0.0	19.5	16.7	16.9	16.9	0.0	17.5
		50	0	18.2	18.2	18.4	0.0	19.5	16.6	16.7	16.9	0.0	17.5
		50	24	18.1	18.2	18.3	0.0	19.5	16.6	16.6	16.8	0.0	17.5
		50	50	18.1	18.2	18.2	0.0	19.5	16.5	16.6	16.8	0.0	17.5
		100	0	18.2	18.2	18.4	0.0	19.5	16.6	16.6	16.9	0.0	17.5
		1	0	18.7	18.6	18.9	0.0	19.5	16.7	17.0	17.0	0.0	17.5
	16QAM	1	49	18.7	18.5	18.9	0.0	19.5	16.8	16.9	17.1	0.0	17.5
		1	99	18.6	18.3	18.8	0.0	19.5	16.9	16.6	17.1	0.0	17.5
		50	0	18.5	18.2	18.5	0.0	19.5	16.6	16.7	16.9	0.0	17.5
		50	24	18.1	18.2	18.3	0.0	19.5	16.6	16.7	16.8	0.0	17.5
		50	50	18.1	18.1	18.3	0.0	19.5	16.6	16.6	16.8	0.0	17.5
		100	0	18.2	18.2	18.4	0.0	19.5	16.7	16.7	16.9	0.0	17.5
		1	0	18.4	18.3	18.3	0.0	19.5	16.5	16.9	17.2	0.0	17.5
		1	49	18.0	18.2	18.5	0.0	19.5	16.4	16.9	17.2	0.0	17.5
	64QAM	1	99	18.0	18.3	18.2	0.0	19.5	16.4	16.5	17.0	0.0	17.5
		50	0	18.2	18.2	18.4	0.0	19.5	16.6	16.7	16.9	0.0	17.5
		50	24	18.1	18.2	18.3	0.0	19.5	16.7	16.7	16.8	0.0	17.5
		50	50	18.1	18.2	18.3	0.0	19.5	16.6	16.7	16.8	0.0	17.5
		100	0	18.2	18.3	18.5	0.0	19.5	16.6	16.7	16.9	0.0	17.5
		1	0	16.8	17.2	17.0	2.0	17.5	16.7	16.8	16.9	0.0	17.5
		1	49	16.7	17.2	17.0	2.0	17.5	16.5	16.7	16.9	0.0	17.5
		1	99	16.7	17.1	17.0	2.0	17.5	16.7	16.7	16.8	0.0	17.5
	256QAM	50	0	16.6	16.6	16.8	2.0	17.5	16.6	16.6	16.7	0.0	17.5
		50	24	16.5	16.6	16.8	2.0	17.5	16.5	16.6	16.7	0.0	17.5
		50	50	16.4	16.6	16.7	2.0	17.5	16.5	16.6	16.7	0.0	17.5
		100	0	16.6	16.7	16.8	2.0	17.5	16.6	16.7	16.7	0.0	17.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				18675	18900	19125			18675	18900	19125		
				1857.5 MHz	1880 MHz	1902.5 MHz			1857.5 MHz	1880 MHz	1902.5 MHz		
15 MHz	QPSK	1	0	18.1	18.3	18.5	0.0	19.5	16.5	16.5	16.7	0.0	17.5
		1	37	18.1	18.2	18.2	0.0	19.5	16.6	16.5	16.6	0.0	17.5
		1	74	18.1	18.2	18.3	0.0	19.5	16.4	16.4	16.5	0.0	17.5
		36	0	18.3	18.3	18.4	0.0	19.5	16.3	16.4	16.5	0.0	17.5
		36	20	18.2	18.2	18.3	0.0	19.5	16.3	16.4	16.5	0.0	17.5
		36	39	18.2	18.2	18.3	0.0	19.5	16.3	16.3	16.5	0.0	17.5
		75	0	18.2	18.2	18.3	0.0	19.5	16.4	16.3	16.5	0.0	17.5
		1	0	18.7	18.5	18.7	0.0	19.5	16.4	16.8	16.9	0.0	17.5
	16QAM	1	37	18.5	18.4	18.5	0.0	19.5	16.3	16.9	16.5	0.0	17.5
		1	74	18.4	18.4	18.5	0.0	19.5	16.4	16.6	16.8	0.0	17.5
		36	0	18.2	18.1	18.4	0.0	19.5	16.3	16.4	16.6	0.0	17.5
		36	20	18.2	18.2	18.3	0.0	19.5	16.3	16.4	16.5	0.0	17.5
		36	39	18.2	18.2	18.3	0.0	19.5	16.3	16.4	16.5	0.0	17.5
		75	0	18.2	18.2	18.4	0.0	19.5	16.3	16.3	16.5	0.0	17.5
		1	0	18.1	18.2	18.6	0.0	19.5	16.4	16.5	16.8	0.0	17.5
		1	37	18.2	18.2	18.3	0.0	19.5	16.5	16.4	16.7	0.0	17.5
	64QAM	1	74	18.2	18.1	18.2	0.0	19.5	16.5	16.2	16.7	0.0	17.5
		36	0	18.2	18.3	18.5	0.0	19.5	16.4	16.4	16.6	0.0	17.5
		36	20	18.2	18.2	18.4	0.0	19.5	16.3	16.3	16.5	0.0	17.5
		36	39	18.2	18.2	18.4	0.0	19.5	16.3	16.3	16.5	0.0	17.5
		75	0	18.2	18.3	18.4	0.0	19.5	16.4	16.4	16.6	0.0	17.5
		1	0	16.9	17.1	17.1	2.0	17.5	16.7	16.7	16.7	0.0	17.5
		1	37	16.8	17.0	17.0	2.0	17.5	16.6	16.3	16.8	0.0	17.5
		1	74	16.7	17.0	17.0	2.0	17.5	16.6	16.5	16.8	0.0	17.5
	256QAM	36	0	16.6	16.7	16.8	2.0	17.5	16.4	16.5	16.6	0.0	17.5
		36	20	16.6	16.7	16.7	2.0	17.5	16.4	16.4	16.6	0.0	17.5
		36	39	16.5	16.6	16.7	2.0	17.5	16.4	16.6	16.5	0.0	17.5
		75	0	16.6	16.6	16.8	2.0	17.5	16.4	16.7	16.5	0.0	17.5

LTE Band 2 (Ant.3) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				18650	18900	19150			18650	18900	19150		
				1855 MHz	1880 MHz	1905 MHz			1855 MHz	1880 MHz	1905 MHz		
10 MHz	QPSK	1	0	18.2	18.3	18.2	0.0	19.5	16.5	16.4	16.5	0.0	17.5
		1	25	18.0	18.1	18.0	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		1	49	18.0	18.1	18.0	0.0	19.5	16.5	16.4	16.5	0.0	17.5
		25	0	18.2	18.2	18.0	0.0	19.5	16.5	16.4	16.5	0.0	17.5
		25	12	18.2	18.2	18.2	0.0	19.5	16.5	16.4	16.5	0.0	17.5
		25	25	18.2	18.2	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		50	0	18.2	18.2	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
	16QAM	1	0	18.7	18.5	18.5	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		1	25	18.5	18.3	18.4	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		1	49	18.5	18.3	18.5	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		25	0	18.3	18.1	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		25	12	18.3	18.2	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		25	25	18.2	18.2	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		50	0	18.2	18.2	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
	64QAM	1	0	18.3	18.1	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		1	25	18.2	18.0	18.0	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		1	49	18.1	18.0	18.1	0.0	19.5	16.5	16.2	16.5	0.0	17.5
		25	0	18.2	18.2	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		25	12	18.2	18.2	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		25	25	18.2	18.2	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		50	0	18.2	18.2	18.2	0.0	19.5	16.5	16.5	16.5	0.0	17.5
	256QAM	1	0	16.9	17.0	17.0	2.0	17.5	16.8	16.9	16.7	0.0	17.5
		1	25	16.8	16.9	16.8	2.0	17.5	16.7	16.7	16.6	0.0	17.5
		1	49	16.8	16.8	16.9	2.0	17.5	16.7	16.7	16.8	0.0	17.5
		25	0	16.7	16.6	16.7	2.0	17.5	16.5	16.5	16.5	0.0	17.5
		25	12	16.6	16.6	16.6	2.0	17.5	16.4	16.4	16.5	0.0	17.5
		25	25	16.6	16.5	16.6	2.0	17.5	16.4	16.4	16.4	0.0	17.5
		50	0	16.7	16.6	16.7	2.0	17.5	16.5	16.5	16.5	0.0	17.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				18625	18900	19175			18625	18900	19175		
				1852.5 MHz	1880 MHz	1907.5 MHz			1852.5 MHz	1880 MHz	1907.5 MHz		
5 MHz	QPSK	1	0	18.3	18.1	18.2	0.0	19.5	16.6	16.6	16.5	0.0	17.5
		1	12	18.2	18.0	18.3	0.0	19.5	16.8	16.8	16.7	0.0	17.5
		1	24	18.2	18.2	18.2	0.0	19.5	16.7	16.6	16.6	0.0	17.5
		12	0	18.3	18.2	18.2	0.0	19.5	16.6	16.4	16.4	0.0	17.5
		12	7	18.3	18.2	18.2	0.0	19.5	16.5	16.4	16.4	0.0	17.5
		12	13	18.3	18.2	18.2	0.0	19.5	16.5	16.4	16.4	0.0	17.5
		25	0	18.3	18.2	18.2	0.0	19.5	16.5	16.4	16.4	0.0	17.5
	16QAM	1	0	18.5	18.4	18.3	0.0	19.5	17.0	16.8	16.8	0.0	17.5
		1	12	18.5	18.2	18.4	0.0	19.5	16.9	16.8	16.7	0.0	17.5
		1	24	18.6	18.5	18.3	0.0	19.5	17.1	16.9	16.8	0.0	17.5
		12	0	18.2	18.1	18.1	0.0	19.5	16.6	16.5	16.5	0.0	17.5
		12	7	18.2	18.2	18.1	0.0	19.5	16.7	16.5	16.5	0.0	17.5
		12	13	18.2	18.1	18.1	0.0	19.5	16.6	16.4	16.3	0.0	17.5
		25	0	18.2	18.2	18.1	0.0	19.5	16.5	16.4	16.4	0.0	17.5
	64QAM	1	0	18.1	18.1	18.1	0.0	19.5	16.8	16.7	16.7	0.0	17.5
		1	12	18.0	18.1	18.0	0.0	19.5	16.6	16.8	16.8	0.0	17.5
		1	24	18.1	18.1	18.0	0.0	19.5	16.4	16.6	16.6	0.0	17.5
		12	0	18.3	18.2	18.2	0.0	19.5	16.6	16.4	16.3	0.0	17.5
		12	7	18.3	18.2	18.2	0.0	19.5	16.6	16.4	16.3	0.0	17.5
		12	13	18.3	18.2	18.2	0.0	19.5	16.6	16.4	16.3	0.0	17.5
		25	0	18.3	18.2	18.2	0.0	19.5	16.5	16.4	16.4	0.0	17.5
	256QAM	1	0	16.8	16.9	16.8	2.0	17.5	16.6	16.7	16.7	0.0	17.5
		1	12	16.6	16.8	16.7	2.0	17.5	16.5	16.8	16.8	0.0	17.5
		1	24	16.8	16.7	16.8	2.0	17.5	16.5	16.6	16.6	0.0	17.5
		12	0	16.7	16.5	16.6	2.0	17.5	16.5	16.5	16.5	0.0	17.5
		12	7	16.7	16.6	16.6	2.0	17.5	16.6	16.5	16.5	0.0	17.5
		12	13	16.7	16.6	16.6	2.0	17.5	16.6	16.4	16.5	0.0	17.5
		25	0	16.6	16.6	16.6	2.0	17.5	16.6	16.5	16.5	0.0	17.5

LTE Band 2 (Ant.3) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				18615	18900	19185			18615	18900	19185		
				1851.5 MHz	1880 MHz	1908.5 MHz			1851.5 MHz	1880 MHz	1908.5 MHz		
3 MHz	QPSK	1	0	18.3	18.2	18.3	0.0	19.5	16.5	16.5	16.6	0.0	17.5
		1	8	18.2	18.1	18.2	0.0	19.5	16.5	16.4	16.5	0.0	17.5
		1	14	18.2	18.1	18.1	0.0	19.5	16.6	16.5	16.5	0.0	17.5
		8	0	18.3	18.2	18.2	0.0	19.5	16.5	16.3	16.5	0.0	17.5
		8	4	18.3	18.2	18.2	0.0	19.5	16.6	16.4	16.5	0.0	17.5
		8	7	18.3	18.2	18.2	0.0	19.5	16.5	16.4	16.5	0.0	17.5
	16QAM	15	0	18.3	18.2	18.3	0.0	19.5	16.6	16.5	16.5	0.0	17.5
		1	0	18.5	18.5	18.5	0.0	19.5	16.7	16.5	16.5	0.0	17.5
		1	8	18.6	18.4	18.5	0.0	19.5	16.6	16.5	16.6	0.0	17.5
		1	14	18.5	18.5	18.4	0.0	19.5	16.7	16.6	16.6	0.0	17.5
		8	0	18.1	18.1	18.1	0.0	19.5	16.5	16.5	16.5	0.0	17.5
		8	4	18.2	18.0	18.1	0.0	19.5	16.5	16.5	16.5	0.0	17.5
	64QAM	8	7	18.2	18.1	18.1	0.0	19.5	16.5	16.4	16.6	0.0	17.5
		15	0	18.4	18.1	18.3	0.0	19.5	16.6	16.5	16.4	0.0	17.5
		1	0	18.2	18.1	18.1	0.0	19.5	16.5	16.4	16.8	0.0	17.5
		1	8	18.3	18.1	18.0	0.0	19.5	16.7	16.3	16.6	0.0	17.5
		1	14	18.2	18.1	18.1	0.0	19.5	16.7	16.6	16.7	0.0	17.5
		8	0	18.3	18.1	18.1	0.0	19.5	16.5	16.5	16.5	0.0	17.5
	256QAM	8	4	18.2	18.1	18.1	0.0	19.5	16.5	16.4	16.5	0.0	17.5
		8	7	18.3	18.2	18.1	0.0	19.5	16.6	16.4	16.5	0.0	17.5
		15	0	18.3	18.2	18.3	0.0	19.5	16.6	16.5	16.6	0.0	17.5
		1	0	17.0	17.0	16.8	2.0	17.5	16.8	16.5	16.5	0.0	17.5
		1	8	16.7	16.8	16.8	2.0	17.5	16.8	16.4	16.4	0.0	17.5
		1	14	17.0	16.9	16.8	2.0	17.5	16.8	16.5	16.5	0.0	17.5
		8	0	16.6	16.5	16.5	2.0	17.5	16.6	16.4	16.4	0.0	17.5
		8	4	16.7	16.5	16.6	2.0	17.5	16.6	16.4	16.4	0.0	17.5
		8	7	16.7	16.5	16.5	2.0	17.5	16.6	16.4	16.5	0.0	17.5
		15	0	16.7	16.6	16.6	2.0	17.5	16.6	16.5	16.5	0.0	17.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				18607	18900	19193			18607	18900	19193		
				1850.7 MHz	1880 MHz	1909.3 MHz			1850.7 MHz	1880 MHz	1909.3 MHz		
1.4 MHz	QPSK	1	0	18.4	18.2	18.2	0.0	19.5	16.7	16.4	16.5	0.0	17.5
		1	3	18.3	18.0	18.1	0.0	19.5	16.6	16.4	16.5	0.0	17.5
		1	5	18.4	18.3	18.2	0.0	19.5	16.6	16.5	16.6	0.0	17.5
		3	0	18.4	18.2	18.3	0.0	19.5	16.5	16.4	16.4	0.0	17.5
		3	1	18.4	18.2	18.1	0.0	19.5	16.5	16.4	16.4	0.0	17.5
		3	3	18.3	18.2	18.1	0.0	19.5	16.4	16.4	16.5	0.0	17.5
	16QAM	6	0	18.4	18.3	18.3	0.0	19.5	16.5	16.4	16.4	0.0	17.5
		1	0	18.6	18.4	18.4	0.0	19.5	16.8	16.5	16.7	0.0	17.5
		1	3	18.6	18.4	18.3	0.0	19.5	16.6	16.4	16.5	0.0	17.5
		1	5	18.8	18.4	18.4	0.0	19.5	16.6	16.3	16.3	0.0	17.5
		3	0	18.3	18.2	18.2	0.0	19.5	16.5	16.6	16.5	0.0	17.5
		3	1	18.4	18.0	18.1	0.0	19.5	16.7	16.7	16.5	0.0	17.5
	64QAM	3	3	18.2	18.1	18.0	0.0	19.5	16.6	16.5	16.4	0.0	17.5
		6	0	18.3	18.2	18.2	0.0	19.5	16.4	16.3	16.4	0.0	17.5
		1	0	18.0	18.0	18.0	0.0	19.5	16.5	16.6	16.3	0.0	17.5
		1	3	18.1	18.0	18.0	0.0	19.5	16.5	16.2	16.2	0.0	17.5
		1	5	18.2	18.1	18.0	0.0	19.5	16.3	16.2	16.1	0.0	17.5
		3	0	18.2	18.1	18.0	0.0	19.5	16.5	16.6	16.4	0.0	17.5
	256QAM	3	1	18.0	18.0	17.9	0.0	19.5	16.4	16.4	16.3	0.0	17.5
		3	3	18.4	18.1	18.0	0.0	19.5	16.3	16.4	16.3	0.0	17.5
		6	0	18.3	18.3	18.3	0.0	19.5	16.6	16.4	16.4	0.0	17.5
		1	0	17.0	16.8	17.0	2.0	17.5	16.6	16.6	16.5	0.0	17.5
		1	3	16.7	16.8	16.8	2.0	17.5	16.5	16.5	16.5	0.0	17.5
		1	5	16.9	16.9	17.0	2.0	17.5	16.5	16.4	16.5	0.0	17.5
		3	0	16.6	16.6	16.8	2.0	17.5	16.5	16.6	16.5	0.0	17.5
		3	1	16.5	16.6	16.8	2.0	17.5	16.5	16.6	16.5	0.0	17.5
		3	3	16.6	16.7	16.6	2.0	17.5	16.5	16.5	16.5	0.0	17.5
		6	0	16.6	16.7	16.7	2.0	17.5	16.7	16.6	16.6	0.0	17.5

LTE Band 4 (Ant.3) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Hotspot back-off					Reduced Average Power (dBm) RCV Back-off				
				Measured Pwr r (dBm)			MPR	Tune-up Limit	Measured Pwr r (dBm)			MPR	Tune-u Limit
				20050	20175	20300			20050	20175	20300		
				1720 MHz	1732.5 MHz	1745 MHz			1720 MHz	1732.5 MHz	1745 MHz		
20 MHz	QPSK	1	0		19.0		0.0	19.5		17.1		0.0	17.5
		1	49		19.0		0.0	19.5		17.0		0.0	17.5
		1	99		18.8		0.0	19.5		16.8		0.0	17.5
		50	0		18.7		0.0	19.5		16.8		0.0	17.5
		50	24		18.7		0.0	19.5		16.8		0.0	17.5
		50	50		18.7		0.0	19.5		16.8		0.0	17.5
		100	0		18.7		0.0	19.5		16.8		0.0	17.5
		1	0		18.9		0.0	19.5		16.7		0.0	17.5
	16QAM	1	49		19.0		0.0	19.5		17.1		0.0	17.5
		1	99		18.8		0.0	19.5		16.7		0.0	17.5
		50	0		18.8		0.0	19.5		16.8		0.0	17.5
		50	24		18.7		0.0	19.5		16.8		0.0	17.5
		50	50		18.7		0.0	19.5		16.8		0.0	17.5
		100	0		18.8		0.0	19.5		16.8		0.0	17.5
		1	0		18.8		0.0	19.5		17.3		0.0	17.5
		1	49		19.0		0.0	19.5		17.2		0.0	17.5
	64QAM	1	99		18.7		0.0	19.5		17.2		0.0	17.5
		50	0		18.8		0.0	19.5		16.9		0.0	17.5
		50	24		18.7		0.0	19.5		16.8		0.0	17.5
		50	50		18.7		0.0	19.5		16.8		0.0	17.5
		100	0		18.7		0.0	19.5		16.8		0.0	17.5
		1	0		17.3		2.0	17.5		17.3		0.0	17.5
		1	49		17.5		2.0	17.5		17.4		0.0	17.5
		1	99		17.3		2.0	17.5		17.0		0.0	17.5
	256QAM	50	0		17.0		2.0	17.5		16.9		0.0	17.5
		50	24		17.0		2.0	17.5		16.9		0.0	17.5
		50	50		17.0		2.0	17.5		16.9		0.0	17.5
		100	0		17.0		2.0	17.5		16.9		0.0	17.5
1		0		17.0		2.0	17.5		16.9		0.0	17.5	
1		49		17.0		2.0	17.5		16.9		0.0	17.5	
1		99		17.0		2.0	17.5		16.9		0.0	17.5	
50		0		17.0		2.0	17.5		16.9		0.0	17.5	
1	0		17.0		2.0	17.5		16.9		0.0	17.5		
1	49		17.0		2.0	17.5		16.9		0.0	17.5		
1	99		17.0		2.0	17.5		16.9		0.0	17.5		
50	0		17.0		2.0	17.5		16.9		0.0	17.5		
50	24		17.0		2.0	17.5		16.9		0.0	17.5		
50	50		17.0		2.0	17.5		16.9		0.0	17.5		
100	0		17.0		2.0	17.5		16.9		0.0	17.5		
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr r (dBm)			MPR	Tune-up Limit	Measured Pwr r (dBm)			MPR	Tune-u Limit
20025	20175	20325	20025	20175	20325								
				1717.5 MHz	1732.5 MHz	1747.5 MHz	1717.5 MHz	1732.5 MHz	1747.5 MHz				
15 MHz	QPSK	1	0	19.0	18.7	19.2	0.0	19.5	16.7	16.6	16.9	0.0	17.5
		1	37	18.7	18.8	19.0	0.0	19.5	16.4	16.5	17.0	0.0	17.5
		1	74	18.8	18.7	19.0	0.0	19.5	16.6	16.7	16.9	0.0	17.5
		36	0	18.8	18.7	19.0	0.0	19.5	16.6	16.6	16.8	0.0	17.5
		36	20	18.8	18.8	19.0	0.0	19.5	16.5	16.6	16.8	0.0	17.5
		36	39	18.7	18.7	19.0	0.0	19.5	16.5	16.5	16.8	0.0	17.5
		75	0	18.7	18.7	19.0	0.0	19.5	16.6	16.6	16.7	0.0	17.5
		1	0	18.9	19.1	19.2	0.0	19.5	16.6	16.8	16.7	0.0	17.5
	16QAM	1	37	18.6	18.7	19.0	0.0	19.5	16.6	16.7	16.8	0.0	17.5
		1	74	18.7	18.6	19.1	0.0	19.5	16.6	16.8	16.9	0.0	17.5
		36	0	18.7	18.8	19.0	0.0	19.5	16.5	16.6	16.7	0.0	17.5
		36	20	18.7	18.7	18.9	0.0	19.5	16.6	16.6	16.6	0.0	17.5
		36	39	18.6	18.7	18.9	0.0	19.5	16.5	16.5	16.6	0.0	17.5
		75	0	18.7	18.7	18.9	0.0	19.5	16.5	16.6	16.7	0.0	17.5
		1	0	19.0	19.0	19.4	0.0	19.5	16.5	16.6	16.7	0.0	17.5
		1	37	18.6	18.9	19.0	0.0	19.5	16.5	16.6	16.8	0.0	17.5
	64QAM	1	74	18.7	18.7	19.0	0.0	19.5	16.5	16.7	16.7	0.0	17.5
		36	0	18.8	18.8	19.0	0.0	19.5	16.6	16.6	16.7	0.0	17.5
		36	20	18.7	18.8	19.0	0.0	19.5	16.6	16.6	16.7	0.0	17.5
		36	39	18.7	18.7	18.9	0.0	19.5	16.5	16.6	16.6	0.0	17.5
		75	0	18.8	18.8	18.9	0.0	19.5	16.6	16.7	16.7	0.0	17.5
		1	0	17.5	17.1	17.2	2.0	17.5	16.6	16.7	16.8	0.0	17.5
		1	37	17.4	16.8	17.4	2.0	17.5	16.6	16.7	16.8	0.0	17.5
		1	74	17.3	17.2	17.4	2.0	17.5	16.6	16.7	16.8	0.0	17.5
	256QAM	36	0	17.0	16.9	17.2	2.0	17.5	16.6	16.7	16.8	0.0	17.5
		36	20	16.9	17.0	17.2	2.0	17.5	16.7	16.7	16.8	0.0	17.5
		36	39	16.9	17.0	17.1	2.0	17.5	16.6	16.7	16.8	0.0	17.5
		75	0	17.0	17.1	17.1	2.0	17.5	16.6	16.7	16.8	0.0	17.5
1		0	17.0	17.1	17.1	2.0	17.5	16.6	16.7	16.8	0.0	17.5	
1		37	17.4	16.8	17.4	2.0	17.5	16.6	16.7	16.8	0.0	17.5	
1		74	17.3	17.2	17.4	2.0	17.5	16.6	16.7	16.8	0.0	17.5	
36		0	17.0	16.9	17.2	2.0	17.5	16.6	16.7	16.8	0.0	17.5	

LTE Band 4 (Ant.3) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				20000	20175	20350			20000	20175	20350		
				1715 MHz	1732.5 MHz	1750 MHz			1715 MHz	1732.5 MHz	1750 MHz		
10 MHz	QPSK	1	0	18.8	18.9	19.2	0.0	19.5	16.6	16.8	16.9	0.0	17.5
		1	25	18.7	18.8	19.1	0.0	19.5	16.5	16.6	17.1	0.0	17.5
		1	49	18.7	18.8	19.1	0.0	19.5	16.4	16.7	16.9	0.0	17.5
		25	0	18.8	18.9	19.1	0.0	19.5	16.6	16.7	16.9	0.0	17.5
		25	12	18.8	19.0	19.1	0.0	19.5	16.5	16.7	16.8	0.0	17.5
		25	25	18.7	18.9	19.0	0.0	19.5	16.5	16.7	16.8	0.0	17.5
	16QAM	50	0	18.7	18.9	19.1	0.0	19.5	16.5	16.7	16.9	0.0	17.5
		1	0	19.1	19.0	19.3	0.0	19.5	16.6	16.7	16.9	0.0	17.5
		1	25	19.0	18.8	19.1	0.0	19.5	16.5	16.7	16.8	0.0	17.5
		1	49	18.8	19.0	19.0	0.0	19.5	16.5	16.8	16.9	0.0	17.5
		25	0	18.7	18.9	19.0	0.0	19.5	16.6	16.7	16.9	0.0	17.5
		25	12	18.7	18.9	19.0	0.0	19.5	16.5	16.8	16.8	0.0	17.5
	64QAM	25	25	18.6	18.9	19.0	0.0	19.5	16.5	16.7	16.8	0.0	17.5
		50	0	18.7	18.9	19.1	0.0	19.5	16.5	16.7	16.9	0.0	17.5
		1	0	18.9	19.2	19.2	0.0	19.5	16.7	16.7	17.0	0.0	17.5
		1	25	18.8	19.0	18.9	0.0	19.5	16.6	16.7	16.9	0.0	17.5
		1	49	18.8	18.8	19.0	0.0	19.5	16.5	16.7	16.8	0.0	17.5
		25	0	18.8	18.9	19.1	0.0	19.5	16.5	16.6	16.8	0.0	17.5
	256QAM	25	12	18.7	19.0	19.1	0.0	19.5	16.5	16.6	16.8	0.0	17.5
		25	25	18.7	18.9	19.0	0.0	19.5	16.4	16.7	16.8	0.0	17.5
		50	0	18.7	18.8	19.0	0.0	19.5	16.5	16.7	16.9	0.0	17.5
		1	0	16.9	17.2	17.4	2.0	17.5	16.3	16.4	16.5	0.0	17.5
		1	25	16.9	17.1	17.2	2.0	17.5	16.3	16.4	16.5	0.0	17.5
		1	49	16.9	17.2	17.2	2.0	17.5	16.2	16.4	16.5	0.0	17.5
		25	0	16.8	17.0	17.1	2.0	17.5	16.2	16.4	16.5	0.0	17.5
		25	12	16.8	17.0	17.1	2.0	17.5	16.2	16.4	16.6	0.0	17.5
		25	25	16.7	17.0	17.1	2.0	17.5	16.2	16.5	16.6	0.0	17.5
		50	0	16.8	16.9	17.1	2.0	17.5	16.3	16.5	16.5	0.0	17.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				19975	20175	20375			19975	20175	20375		
				1712.5 MHz	1732.5 MHz	1752.5 MHz			1712.5 MHz	1732.5 MHz	1752.5 MHz		
5 MHz	QPSK	1	0	18.7	19.2	19.3	0.0	19.5	16.6	16.9	16.9	0.0	17.5
		1	12	18.7	19.2	19.4	0.0	19.5	16.6	17.0	16.9	0.0	17.5
		1	24	18.7	19.1	19.3	0.0	19.5	16.4	16.8	16.9	0.0	17.5
		12	0	18.7	19.0	19.1	0.0	19.5	16.4	16.7	16.8	0.0	17.5
		12	7	18.7	18.9	19.2	0.0	19.5	16.5	16.7	16.8	0.0	17.5
		12	13	18.7	19.0	19.1	0.0	19.5	16.5	16.7	16.9	0.0	17.5
	16QAM	25	0	18.7	19.0	19.1	0.0	19.5	16.5	16.7	16.9	0.0	17.5
		1	0	18.5	18.9	19.3	0.0	19.5	16.7	16.9	17.0	0.0	17.5
		1	12	18.5	18.8	19.5	0.0	19.5	16.7	16.9	17.0	0.0	17.5
		1	24	18.7	19.0	19.2	0.0	19.5	16.6	16.8	17.0	0.0	17.5
		12	0	18.7	18.8	19.2	0.0	19.5	16.4	16.7	16.8	0.0	17.5
		12	7	18.7	18.9	19.2	0.0	19.5	16.4	16.6	16.8	0.0	17.5
	64QAM	12	13	18.7	18.9	19.2	0.0	19.5	16.4	16.6	16.8	0.0	17.5
		25	0	18.7	18.9	19.1	0.0	19.5	16.5	16.7	16.9	0.0	17.5
		1	0	18.8	19.1	19.3	0.0	19.5	16.6	16.7	16.9	0.0	17.5
		1	12	18.8	19.3	19.4	0.0	19.5	16.6	16.8	17.0	0.0	17.5
		1	24	18.6	19.1	19.3	0.0	19.5	16.7	17.0	17.0	0.0	17.5
		12	0	18.7	18.9	19.1	0.0	19.5	16.4	16.8	16.8	0.0	17.5
	256QAM	12	7	18.6	18.8	19.1	0.0	19.5	16.4	16.7	16.9	0.0	17.5
		12	13	18.6	18.9	19.1	0.0	19.5	16.4	16.6	16.9	0.0	17.5
		25	0	18.6	19.0	19.1	0.0	19.5	16.4	16.6	16.9	0.0	17.5
		1	0	16.9	17.1	17.1	2.0	17.5	16.6	17.0	16.8	0.0	17.5
		1	12	16.3	16.7	16.8	2.0	17.5	16.6	16.6	16.8	0.0	17.5
		1	24	16.9	16.6	17.3	2.0	17.5	16.5	17.0	16.8	0.0	17.5
		12	0	16.7	17.0	17.1	2.0	17.5	16.5	16.8	16.9	0.0	17.5
		12	7	16.7	16.9	17.1	2.0	17.5	16.6	16.9	16.9	0.0	17.5
		12	13	16.8	17.0	17.1	2.0	17.5	16.6	16.9	16.9	0.0	17.5
		25	0	16.8	17.0	17.2	2.0	17.5	16.5	16.7	16.9	0.0	17.5

LTE Band 4 (Ant.3) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				19965	20175	20385			19965	20175	20385		
				1711.5 MHz	1732.5 MHz	1753.5 MHz			1711.5 MHz	1732.5 MHz	1753.5 MHz		
3 MHz	QPSK	1	0	19.0	19.0	19.5	0.0	19.5	16.5	16.7	16.8	0.0	17.5
		1	8	18.8	19.0	19.3	0.0	19.5	16.4	16.7	16.9	0.0	17.5
		1	14	18.9	19.2	19.4	0.0	19.5	16.6	16.7	17.0	0.0	17.5
		8	0	18.8	19.0	19.3	0.0	19.5	16.5	16.6	16.9	0.0	17.5
		8	4	18.8	18.9	19.1	0.0	19.5	16.4	16.6	16.9	0.0	17.5
		8	7	18.8	19.0	19.1	0.0	19.5	16.5	16.7	16.9	0.0	17.5
		15	0	18.8	19.0	19.2	0.0	19.5	16.4	16.6	16.9	0.0	17.5
		1	0	18.8	19.1	19.2	0.0	19.5	16.4	16.6	16.8	0.0	17.5
	16QAM	1	8	18.8	18.9	19.2	0.0	19.5	16.5	16.7	17.0	0.0	17.5
		1	14	18.8	19.1	19.3	0.0	19.5	16.6	16.8	17.0	0.0	17.5
		8	0	18.6	18.8	19.2	0.0	19.5	16.4	16.6	16.8	0.0	17.5
		8	4	18.7	18.9	19.2	0.0	19.5	16.4	16.6	16.8	0.0	17.5
		8	7	18.7	18.9	19.1	0.0	19.5	16.3	16.7	16.9	0.0	17.5
		15	0	18.8	18.9	19.2	0.0	19.5	16.4	16.7	16.9	0.0	17.5
		1	0	18.6	19.1	19.4	0.0	19.5	16.7	17.1	16.9	0.0	17.5
		1	8	18.8	19.0	19.2	0.0	19.5	16.5	16.8	17.0	0.0	17.5
	64QAM	1	14	18.8	19.1	19.3	0.0	19.5	16.6	16.8	17.0	0.0	17.5
		8	0	18.7	18.9	19.2	0.0	19.5	16.4	16.6	16.8	0.0	17.5
		8	4	18.7	19.0	19.2	0.0	19.5	16.2	16.5	16.7	0.0	17.5
		8	7	18.8	19.1	19.3	0.0	19.5	16.4	16.6	16.8	0.0	17.5
		15	0	18.8	19.1	19.3	0.0	19.5	16.3	16.5	16.7	0.0	17.5
		1	0	16.7	17.0	17.3	2.0	17.5	16.8	17.2	17.1	0.0	17.5
		1	8	16.8	16.9	17.3	2.0	17.5	16.7	16.9	17.2	0.0	17.5
		1	14	16.8	17.0	17.3	2.0	17.5	16.7	17.1	17.2	0.0	17.5
	256QAM	8	0	16.8	16.8	17.3	2.0	17.5	16.5	16.8	16.9	0.0	17.5
		8	4	16.7	16.9	17.1	2.0	17.5	16.4	16.6	17.0	0.0	17.5
		8	7	16.7	16.9	17.2	2.0	17.5	16.5	16.7	17.0	0.0	17.5
		15	0	16.7	16.9	17.1	2.0	17.5	16.6	16.8	16.9	0.0	17.5
3 MHz	QPSK	1	0	19.0	19.0	19.5	0.0	19.5	16.5	16.7	16.8	0.0	17.5
		1	8	18.8	19.0	19.3	0.0	19.5	16.4	16.7	16.9	0.0	17.5
		1	14	18.9	19.2	19.4	0.0	19.5	16.6	16.7	17.0	0.0	17.5
1.4 MHz	QPSK	3	0	19.0	19.2	19.3	0.0	19.5	16.4	16.7	16.9	0.0	17.5
		3	1	18.8	19.2	19.2	0.0	19.5	16.5	16.6	16.8	0.0	17.5
		3	3	18.8	19.1	19.2	0.0	19.5	16.5	16.6	16.9	0.0	17.5
		6	0	18.9	19.1	19.2	0.0	19.5	16.4	16.6	16.9	0.0	17.5
	16QAM	1	0	18.9	19.1	19.4	0.0	19.5	16.5	16.8	16.9	0.0	17.5
		1	3	18.7	19.1	19.5	0.0	19.5	16.4	16.6	16.7	0.0	17.5
		1	5	18.9	19.1	19.3	0.0	19.5	16.4	16.7	16.8	0.0	17.5
		3	0	18.8	18.9	19.1	0.0	19.5	16.5	16.6	17.0	0.0	17.5
		3	1	18.8	19.0	19.3	0.0	19.5	16.5	16.5	16.9	0.0	17.5
		3	3	18.8	19.1	19.3	0.0	19.5	16.5	16.8	16.8	0.0	17.5
		6	0	18.7	19.0	19.2	0.0	19.5	16.3	16.5	16.7	0.0	17.5
		1	0	18.9	19.3	19.5	0.0	19.5	16.8	16.9	17.1	0.0	17.5
	64QAM	1	3	18.5	18.9	19.1	0.0	19.5	16.5	16.6	16.9	0.0	17.5
		1	5	18.8	19.1	19.2	0.0	19.5	16.6	16.8	17.0	0.0	17.5
		3	0	18.9	19.1	19.3	0.0	19.5	16.6	16.8	17.1	0.0	17.5
		3	1	18.9	19.0	19.2	0.0	19.5	16.5	16.8	16.9	0.0	17.5
		3	3	18.9	19.1	19.3	0.0	19.5	16.4	16.6	16.8	0.0	17.5
		6	0	18.9	19.2	19.3	0.0	19.5	16.6	16.8	16.9	0.0	17.5
		1	0	16.9	16.7	17.2	2.0	17.5	16.6	16.9	17.3	0.0	17.5
		1	3	16.8	17.0	17.1	2.0	17.5	16.6	16.9	17.1	0.0	17.5
	256QAM	1	5	16.9	17.0	17.2	2.0	17.5	16.7	17.0	17.2	0.0	17.5
		3	0	16.9	17.0	17.1	2.0	17.5	16.4	16.6	16.9	0.0	17.5
		3	1	16.9	17.0	17.0	2.0	17.5	16.6	16.8	17.0	0.0	17.5
		3	3	16.8	17.0	17.1	2.0	17.5	16.5	16.7	16.9	0.0	17.5
		6	0	16.6	16.9	17.1	2.0	17.5	16.5	16.6	16.9	0.0	17.5

LTE Band 25 (Main 1 Ant.) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Hotspot back-off					Reduced Average Power (dBm) Proximity sensor back-off				
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26140	26365	26590			26140	26365	26590		
				1860 MHz	1882.5 MHz	1905 MHz			1860 MHz	1882.5 MHz	1905 MHz		
20 MHz	QPSK	1	0	20.9	20.5	21.1	0.0	22.0	20.7	20.6	21.0	0.0	22.0
		1	49	20.7	20.5	21.0	0.0	22.0	20.7	20.6	21.0	0.0	22.0
		1	99	20.7	20.5	20.9	0.0	22.0	20.6	20.5	20.8	0.0	22.0
		50	0	20.9	20.6	21.0	0.0	22.0	20.8	20.6	21.0	0.0	22.0
		50	24	20.8	20.6	21.0	0.0	22.0	20.7	20.6	20.9	0.0	22.0
		50	50	20.8	20.6	20.9	0.0	22.0	20.7	20.6	20.9	0.0	22.0
		100	0	20.8	20.6	21.0	0.0	22.0	20.7	20.6	20.9	0.0	22.0
	16QAM	1	0	21.3	20.7	21.2	0.0	22.0	21.1	20.7	21.2	0.0	22.0
		1	49	21.3	20.7	21.3	0.0	22.0	21.0	20.7	21.3	0.0	22.0
		1	99	21.2	20.7	21.1	0.0	22.0	21.1	20.7	21.1	0.0	22.0
		50	0	20.9	20.7	21.0	0.0	22.0	20.8	20.6	21.0	0.0	22.0
		50	24	20.8	20.8	21.0	0.0	22.0	20.8	20.6	21.0	0.0	22.0
		50	50	20.8	20.8	21.0	0.0	22.0	20.8	20.6	20.9	0.0	22.0
		100	0	20.8	20.8	21.0	0.0	22.0	20.8	20.6	21.0	0.0	22.0
	64QAM	1	0	21.0	21.1	21.2	0.0	22.0	20.7	21.0	21.0	0.0	22.0
		1	49	20.7	21.1	21.6	0.0	22.0	21.0	21.0	21.1	0.0	22.0
		1	99	20.9	21.0	21.2	0.0	22.0	20.9	20.9	21.0	0.0	22.0
		50	0	20.0	19.9	20.3	0.0	22.0	19.8	19.7	20.1	0.0	22.0
		50	24	19.9	19.9	20.6	0.0	22.0	19.8	19.7	20.1	0.0	22.0
		50	50	19.9	19.8	20.2	0.0	22.0	19.8	19.7	20.0	0.0	22.0
		100	0	19.9	19.8	20.2	0.0	22.0	19.8	19.6	20.0	0.0	22.0
	256QAM	1	0	19.9	19.6	19.6	1.0	21.0	19.8	19.6	19.4	1.0	21.0
		1	49	19.8	19.8	19.6	1.0	21.0	19.7	19.7	19.4	1.0	21.0
		1	99	19.8	19.5	19.5	1.0	21.0	19.7	19.8	19.6	1.0	21.0
		50	0	18.9	19.0	19.4	1.0	21.0	19.0	19.9	19.1	1.0	21.0
		50	24	18.9	18.9	18.8	1.0	21.0	19.0	19.7	19.0	1.0	21.0
		50	50	18.7	19.0	20.3	1.0	21.0	19.0	18.6	19.0	1.0	21.0
		100	0	18.8	19.0	19.1	1.0	21.0	19.0	18.6	19.0	1.0	21.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26115	26365	26615			26115	26365	26615		
				1857.5 MHz	1882.5 MHz	1907.5 MHz			1857.5 MHz	1882.5 MHz	1907.5 MHz		
15 MHz	QPSK	1	0	20.6	20.6	21.0	0.0	22.0	20.7	20.6	20.5	0.0	22.0
		1	37	20.4		20.8	0.0	22.0	20.6	20.6	20.5	0.0	22.0
		1	74	20.5	20.5	20.8	0.0	22.0	20.6	20.5	20.5	0.0	22.0
		36	0	20.6	20.6	21.0	0.0	22.0	20.8	20.6	20.6	0.0	22.0
		36	20	20.6	20.6	21.0	0.0	22.0	20.8	20.6	20.6	0.0	22.0
		36	39	20.6	20.6	20.9	0.0	22.0	20.7	20.6	20.6	0.0	22.0
		75	0	20.6	20.6	21.0	0.0	22.0	20.8	20.6	20.6	0.0	22.0
	16QAM	1	0	21.0	20.8	21.3	0.0	22.0	20.9	20.9	20.8	0.0	22.0
		1	37	21.1	20.7	21.1	0.0	22.0	20.9	20.8	20.9	0.0	22.0
		1	74	21.1	20.8	21.1	0.0	22.0	20.8	20.9	20.9	0.0	22.0
		36	0	20.8	20.7	21.0	0.0	22.0	20.8	20.7	20.7	0.0	22.0
		36	20	20.7	20.7	21.0	0.0	22.0	20.7	20.7	20.8	0.0	22.0
		36	39	20.7	20.6	20.9	0.0	22.0	20.7	20.7	20.8	0.0	22.0
		75	0	20.7	20.6	21.0	0.0	22.0	20.7	20.7	20.7	0.0	22.0
	64QAM	1	0	20.8	20.6	20.9	0.0	22.0	20.7	20.7	19.7	0.0	22.0
		1	37	20.6	20.5	20.7	0.0	22.0	20.6	20.4	20.9	0.0	22.0
		1	74	20.7	20.5	20.8	0.0	22.0	20.6	20.7	20.8	0.0	22.0
		36	0	19.5	19.5	19.7	0.0	22.0	19.7	19.6	19.7	0.0	22.0
		36	20	19.5	19.6	19.7	0.0	22.0	19.6	19.5	19.6	0.0	22.0
		36	39	19.7	19.7	19.6	0.0	22.0	19.6	19.5	19.7	0.0	22.0
		75	0	19.6	19.6	19.7	0.0	22.0	19.5	19.5	19.6	0.0	22.0
	256QAM	1	0	19.7	19.4	19.6	1.0	21.0	19.6	19.4	19.7	1.0	21.0
		1	37	19.9	19.4	19.4	1.0	21.0	19.6	19.4	19.8	1.0	21.0
		1	74	19.4	19.5	19.5	1.0	21.0	19.7	19.4	19.9	1.0	21.0
		36	0	18.8	19.6	18.6	1.0	21.0	18.7	18.7	18.8	1.0	21.0
		36	20	18.6	18.7	18.6	1.0	21.0	18.6	18.5	18.8	1.0	21.0
		36	39	18.9	19.6	19.3	1.0	21.0	19.0	18.5	18.8	1.0	21.0
		75	0	18.6	18.7	19.0	1.0	21.0	18.7	18.6	18.8	1.0	21.0

LTE Band 25 (Main 1 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26090	26365	26640			26090	26365	26640		
				1855 MHz	1882.5 MHz	1910 MHz			1855 MHz	1882.5 MHz	1910 MHz		
10 MHz	QPSK	1	0	20.6	20.4	20.8	0.0	22.0	20.7	20.6	21.1	0.0	22.0
		1	25	20.6	20.3	20.9	0.0	22.0	20.6	20.6	21.1	0.0	22.0
		1	49	20.5	20.4	20.7	0.0	22.0	20.6	20.6	21.1	0.0	22.0
		25	0	20.6	20.5	20.8	0.0	22.0	20.8	20.6	21.0	0.0	22.0
		25	12	20.6	20.5	20.8	0.0	22.0	20.7	20.6	21.0	0.0	22.0
		25	25	20.6	20.4	20.8	0.0	22.0	20.7	20.6	21.0	0.0	22.0
	16QAM	50	0	20.6	20.4	20.8	0.0	22.0	20.7	20.6	21.0	0.0	22.0
		1	0	21.0	20.7	21.0	0.0	22.0	21.1	20.9	21.3	0.0	22.0
		1	25	20.9	20.7	21.0	0.0	22.0	21.1	20.9	21.3	0.0	22.0
		1	49	20.8	20.6	20.9	0.0	22.0	21.0	20.9	21.3	0.0	22.0
		25	0	20.7	20.5	21.0	0.0	22.0	20.8	20.6	21.1	0.0	22.0
		25	12	20.7	20.5	20.9	0.0	22.0	20.8	20.7	21.1	0.0	22.0
	64QAM	25	25	20.7	20.5	20.9	0.0	22.0	20.7	20.7	21.1	0.0	22.0
		50	0	20.6	20.5	20.8	0.0	22.0	20.7	20.6	21.1	0.0	22.0
		1	0	20.7	20.5	21.1	0.0	22.0	20.9	20.6	21.2	0.0	22.0
		1	25	20.6	20.5	20.9	0.0	22.0	20.8	20.6	21.2	0.0	22.0
		1	49	20.6	20.5	20.9	0.0	22.0	20.7	20.6	21.2	0.0	22.0
		25	0	19.6	19.6	19.9	0.0	22.0	19.7	19.5	20.0	0.0	22.0
	256QAM	25	12	19.6	19.5	19.8	0.0	22.0	19.6	19.6	19.9	0.0	22.0
		25	25	19.5	19.5	19.8	0.0	22.0	19.6	19.6	19.9	0.0	22.0
		50	0	19.5	19.5	19.7	0.0	22.0	19.5	19.5	19.9	0.0	22.0
		1	0	19.5	19.8	19.9	1.0	21.0	19.7	19.8	19.6	1.0	21.0
		1	25	19.5	19.6	19.8	1.0	21.0	19.8	19.9	19.5	1.0	21.0
		1	49	19.7	19.6	19.6	1.0	21.0	19.8	19.7	19.4	1.0	21.0
		25	0	19.1	19.1	19.6	1.0	21.0	19.0	18.7	19.8	1.0	21.0
		25	12	19.0	19.5	19.5	1.0	21.0	19.0	18.7	18.9	1.0	21.0
		25	25	19.0	19.2	19.4	1.0	21.0	18.9	18.7	19.1	1.0	21.0
		50	0	19.0	19.1	19.5	1.0	21.0	18.8	18.7	19.9	1.0	21.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26065	26365	26665			26065	26365	26665		
				1852.5 MHz	1882.5 MHz	1912.5 MHz			1852.5 MHz	1882.5 MHz	1912.5 MHz		
5 MHz	QPSK	1	0	20.5	20.3	20.6	0.0	22.0	20.8	20.5	21.0	0.0	22.0
		1	12	20.4	20.1	20.5	0.0	22.0	20.8	20.6	21.0	0.0	22.0
		1	24	20.5	20.3	20.6	0.0	22.0	20.8	20.5	21.0	0.0	22.0
		12	0	20.5	20.3	20.7	0.0	22.0	20.8	20.6	21.0	0.0	22.0
		12	7	20.5	20.3	20.6	0.0	22.0	20.8	20.6	21.0	0.0	22.0
		12	13	20.4	20.3	20.6	0.0	22.0	20.8	20.6	21.0	0.0	22.0
	16QAM	25	0	20.5	20.3	20.6	0.0	22.0	20.7	20.6	21.0	0.0	22.0
		1	0	20.9	20.7	21.0	0.0	22.0	21.2	20.8	21.3	0.0	22.0
		1	12	20.7	20.6	20.9	0.0	22.0	21.1	20.7	21.4	0.0	22.0
		1	24	20.9	20.7	21.0	0.0	22.0	21.1	20.8	21.4	0.0	22.0
		12	0	20.5	20.3	20.7	0.0	22.0	20.8	20.8	21.1	0.0	22.0
		12	7	20.5	20.3	20.7	0.0	22.0	20.8	20.8	21.1	0.0	22.0
	64QAM	12	13	20.5	20.3	20.7	0.0	22.0	20.8	20.8	21.1	0.0	22.0
		25	0	20.5	20.4	20.7	0.0	22.0	20.7	20.6	21.1	0.0	22.0
		1	0	20.6	20.7	21.2	0.0	22.0	20.9	20.7	21.3	0.0	22.0
		1	12	20.5	20.7	20.9	0.0	22.0	20.7	20.5	21.2	0.0	22.0
		1	24	20.6	20.8	21.1	0.0	22.0	20.8	20.6	21.2	0.0	22.0
		12	0	19.6	19.5	19.9	0.0	22.0	19.5	19.6	19.8	0.0	22.0
	256QAM	12	7	19.6	19.5	19.8	0.0	22.0	19.6	19.5	19.8	0.0	22.0
		12	13	19.6	19.5	19.8	0.0	22.0	19.6	19.6	19.8	0.0	22.0
		25	0	19.6	19.6	19.8	0.0	22.0	19.6	19.5	19.8	0.0	22.0
		1	0	19.4	19.8	19.8	1.0	21.0	19.7	19.8	19.8	1.0	21.0
		1	12	19.4	19.9	19.7	1.0	21.0	19.7	19.7	19.8	1.0	21.0
		1	24	19.5	19.9	19.8	1.0	21.0	19.8	19.9	19.7	1.0	21.0
		12	0	18.7	19.5	19.4	1.0	21.0	18.9	19.2	19.6	1.0	21.0
		12	7	18.7	19.4	19.4	1.0	21.0	18.8	19.3	19.5	1.0	21.0
		12	13	18.8	19.3	19.4	1.0	21.0	18.8	19.3	19.5	1.0	21.0
		25	0	18.7	19.4	19.3	1.0	21.0	18.9	19.3	19.5	1.0	21.0

LTE Band 25 (Main 1 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26055	26365	26675			26055	26365	26675		
				1851.5 MHz	1882.5 MHz	1913.5 MHz			1851.5 MHz	1882.5 MHz	1913.5 MHz		
3 MHz	QPSK	1	0	20.4	20.3	20.7	0.0	22.0	20.7	20.5	20.9	0.0	22.0
		1	8	20.2	20.1	20.5	0.0	22.0	20.5	20.3	20.8	0.0	22.0
		1	14	20.4	20.3	20.6	0.0	22.0	20.8	20.7	20.8	0.0	22.0
		8	0	20.4	20.3	20.6	0.0	22.0	20.8	20.7	20.9	0.0	22.0
		8	4	20.4	20.3	20.6	0.0	22.0	20.8	20.6	20.9	0.0	22.0
		8	7	20.4	20.3	20.7	0.0	22.0	20.7	20.6	20.9	0.0	22.0
		15	0	20.4	20.3	20.7	0.0	22.0	20.8	20.6	20.9	0.0	22.0
		1	0	20.6	20.3	21.1	0.0	22.0	20.9	20.6	21.2	0.0	22.0
	16QAM	1	8	20.4	20.2	20.9	0.0	22.0	20.8	20.6	21.1	0.0	22.0
		1	14	20.5	20.3	21.1	0.0	22.0	20.8	20.6	21.3	0.0	22.0
		8	0	20.5	20.4	20.8	0.0	22.0	20.8	20.6	21.0	0.0	22.0
		8	4	20.5	20.4	20.8	0.0	22.0	20.9	20.6	21.0	0.0	22.0
		8	7	20.5	20.4	20.8	0.0	22.0	20.8	20.6	21.0	0.0	22.0
		15	0	20.5	20.3	20.7	0.0	22.0	20.7	20.5	20.9	0.0	22.0
		1	0	20.8	20.7	21.2	0.0	22.0	20.9	20.7	20.9	0.0	22.0
		1	8	20.7	20.6	21.0	0.0	22.0	20.7	20.5	20.6	0.0	22.0
	64QAM	1	14	20.8	20.6	21.1	0.0	22.0	20.8	20.6	20.8	0.0	22.0
		8	0	19.8	19.6	19.9	0.0	22.0	19.5	19.5	19.8	0.0	22.0
		8	4	19.8	19.5	19.8	0.0	22.0	19.6	19.5	19.7	0.0	22.0
		8	7	19.8	19.6	19.8	0.0	22.0	19.5	19.6	19.8	0.0	22.0
		15	0	19.8	19.5	19.8	0.0	22.0	19.5	19.5	19.7	0.0	22.0
		1	0	19.7	19.7	19.6	1.0	21.0	19.9	19.5	19.4	1.0	21.0
		1	8	19.5	19.8	19.5	1.0	21.0	19.9	19.5	19.4	1.0	21.0
		1	14	19.7	19.7	19.8	1.0	21.0	20.0	19.5	19.7	1.0	21.0
	256QAM	8	0	19.4	19.4	18.9	1.0	21.0	19.1	19.6	18.9	1.0	21.0
		8	4	19.6	19.6	18.9	1.0	21.0	19.0	18.6	18.7	1.0	21.0
		8	7	19.4	19.4	18.9	1.0	21.0	19.1	18.7	18.9	1.0	21.0
		15	0	19.3	19.5	18.9	1.0	21.0	19.0	18.6	18.8	1.0	21.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26047	26365	26683			26047	26365	26683		
				1850.7 MHz	1882.5 MHz	1914.3 MHz			1850.7 MHz	1882.5 MHz	1914.3 MHz		
1.4 MHz	QPSK	1	0	20.5	20.3	20.6	0.0	22.0	20.6	20.6	20.6	0.0	22.0
		1	3	20.2	20.3	20.4	0.0	22.0	20.6	20.6	20.7	0.0	22.0
		1	5	20.4	20.3	20.6	0.0	22.0	20.5	20.6	20.7	0.0	22.0
		3	0	20.5	20.3	20.6	0.0	22.0	20.6	20.7	20.6	0.0	22.0
		3	1	20.4	20.3	20.6	0.0	22.0	20.5	20.6	20.6	0.0	22.0
		3	3	20.3	20.3	20.6	0.0	22.0	20.6	20.6	20.6	0.0	22.0
		6	0	20.4	20.3	20.6	0.0	22.0	20.6	20.6	20.6	0.0	22.0
		1	0	20.7	20.4	20.6	0.0	22.0	20.6	20.6	20.9	0.0	22.0
	16QAM	1	3	20.7	20.4	20.8	0.0	22.0	20.6	20.6	21.0	0.0	22.0
		1	5	20.7	20.4	20.7	0.0	22.0	20.6	20.7	20.8	0.0	22.0
		3	0	20.4	20.3	20.8	0.0	22.0	20.7	20.7	20.6	0.0	22.0
		3	1	20.5	20.3	20.7	0.0	22.0	20.6	20.7	20.5	0.0	22.0
		3	3	20.5	20.3	20.7	0.0	22.0	20.7	20.7	20.5	0.0	22.0
		6	0	20.4	20.4	20.7	0.0	22.0	20.6	20.7	20.6	0.0	22.0
		1	0	21.0	20.6	21.0	0.0	22.0	20.7	20.3	20.9	0.0	22.0
		1	3	20.9	20.8	21.0	0.0	22.0	20.6	20.5	21.0	0.0	22.0
	64QAM	1	5	20.9	20.7	21.0	0.0	22.0	20.6	20.5	20.9	0.0	22.0
		3	0	21.0	20.7	21.0	0.0	22.0	20.8	20.3	20.9	0.0	22.0
		3	1	20.7	20.6	21.0	0.0	22.0	20.8	20.3	20.8	0.0	22.0
		3	3	20.8	20.5	21.0	0.0	22.0	20.7	20.4	20.9	0.0	22.0
		6	0	19.8	19.7	19.9	0.0	22.0	19.6	20.3	20.7	0.0	22.0
		1	0	19.6	19.6	19.6	1.0	21.0	19.4	19.9	19.9	1.0	21.0
		1	3	19.7	19.8	19.8	1.0	21.0	19.6	19.9	20.0	1.0	21.0
		1	5	19.7	19.7	19.9	1.0	21.0	19.5	19.8	20.0	1.0	21.0
	256QAM	3	0	19.8	19.9	19.9	1.0	21.0	19.7	20.3	19.9	1.0	21.0
		3	1	19.7	19.9	19.9	1.0	21.0	19.7	19.4	19.9	1.0	21.0
		3	3	19.6	19.7	19.7	1.0	21.0	19.7	20.4	19.9	1.0	21.0
		6	0	18.9	18.7	19.0	1.0	21.0	18.7	20.3	19.9	1.0	21.0

LTE Band 66 (Main 1 Ant.) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Hotspot back-off					Reduced Average Power (dBm) Proximity sensor back-off				
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				132072	132322	132572			132072	132322	132572		
				1720 MHz	1745 MHz	1770 MHz			1720 MHz	1745 MHz	1770 MHz		
20 MHz	QPSK	1	0	20.6	20.6	20.6	0.0	21.5	20.5	20.5	20.4	0.0	21.5
		1	49	20.7	20.6	20.5	0.0	21.5	20.6	20.4	20.5	0.0	21.5
		1	99	20.5	20.6	20.4	0.0	21.5	20.4	20.5	20.3	0.0	21.5
		50	0	20.8	20.8	20.6	0.0	21.5	20.6	20.6	20.5	0.0	21.5
		50	24	20.7	20.7	20.6	0.0	21.5	20.5	20.6	20.5	0.0	21.5
		50	50	20.6	20.7	20.5	0.0	21.5	20.4	20.5	20.4	0.0	21.5
		100	0	20.7	20.7	20.5	0.0	21.5	20.5	20.6	20.4	0.0	21.5
	16QAM	1	0	21.0	20.9	20.9	0.0	21.5	20.7	21.0	20.5	0.0	21.5
		1	49	21.1	20.9	21.0	0.0	21.5	20.6	21.0	20.5	0.0	21.5
		1	99	20.8	20.7	20.8	0.0	21.5	20.5	20.8	20.3	0.0	21.5
		50	0	20.8	20.8	20.6	0.0	21.5	20.6	20.7	20.5	0.0	21.5
		50	24	20.7	20.7	20.6	0.0	21.5	20.5	20.6	20.5	0.0	21.5
		50	50	20.6	20.7	20.5	0.0	21.5	20.4	20.6	20.4	0.0	21.5
		100	0	20.7	20.7	20.6	0.0	21.5	20.5	20.6	20.5	0.0	21.5
	64QAM	1	0	20.4	21.0	20.9	0.0	21.5	20.3	20.8	20.6	0.0	21.5
		1	49	20.6	21.0	21.1	0.0	21.5	20.6	20.9	20.7	0.0	21.5
		1	99	20.5	20.9	20.8	0.0	21.5	20.4	20.7	20.4	0.0	21.5
		50	0	20.1	20.3	20.2	0.0	21.5	20.0	20.1	20.0	0.0	21.5
		50	24	20.1	20.3	20.2	0.0	21.5	19.9	20.0	20.0	0.0	21.5
		50	50	20.0	20.2	20.1	0.0	21.5	19.8	20.0	19.9	0.0	21.5
		100	0	20.0	20.2	20.1	0.0	21.5	19.9	20.0	19.9	0.0	21.5
	256QAM	1	0	19.9	19.9	19.8	0.5	21.0	19.7	19.9	19.5	0.5	21.0
		1	49	19.7	19.9	20.0	0.5	21.0	19.8	19.9	19.6	0.5	21.0
		1	99	19.9	20.0	19.8	0.5	21.0	19.6	19.6	19.4	0.5	21.0
		50	0	19.2	19.7	19.2	0.5	21.0	19.1	19.6	19.1	0.5	21.0
		50	24	19.2	19.8	19.2	0.5	21.0	19.1	19.4	19.1	0.5	21.0
		50	50	19.2	19.4	19.1	0.5	21.0	19.0	19.5	19.0	0.5	21.0
		100	0	19.2	19.7	19.2	0.5	21.0	19.1	19.4	19.1	0.5	21.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					Measured Pwr (dBm)				
				132047	132322	132597	MPR	Tune-up Limit	132047	132322	132597	MPR	Tune-up Limit
				1717.5 MHz	1745 MHz	1772.5 MHz			1717.5 MHz	1745 MHz	1772.5 MHz		
15 MHz	QPSK	1	0	20.4	20.4	20.4	0.0	21.5	20.3	20.4	20.2	0.0	21.5
		1	37	20.5	20.5	20.5	0.0	21.5	20.5	20.5	20.2	0.0	21.5
		1	74	20.3	20.4	20.3	0.0	21.5	20.3	20.4	20.1	0.0	21.5
		36	0	20.4	20.5	20.5	0.0	21.5	20.4	20.4	20.3	0.0	21.5
		36	20	20.4	20.5	20.4	0.0	21.5	20.4	20.4	20.3	0.0	21.5
		36	39	20.4	20.5	20.4	0.0	21.5	20.4	20.4	20.2	0.0	21.5
		75	0	20.5	20.5	20.5	0.0	21.5	20.3	20.4	20.3	0.0	21.5
	16QAM	1	0	20.8	20.9	20.9	0.0	21.5	20.6	20.8	20.8	0.0	21.5
		1	37	20.9	21.0	21.0	0.0	21.5	20.6	20.7	20.9	0.0	21.5
		1	74	20.7	20.9	20.7	0.0	21.5	20.4	20.7	20.7	0.0	21.5
		36	0	20.5	20.5	20.5	0.0	21.5	20.3	20.4	20.4	0.0	21.5
		36	20	20.5	20.5	20.5	0.0	21.5	20.3	20.4	20.4	0.0	21.5
		36	39	20.5	20.5	20.5	0.0	21.5	20.3	20.4	20.3	0.0	21.5
		75	0	20.5	20.6	20.5	0.0	21.5	20.3	20.4	20.3	0.0	21.5
	64QAM	1	0	20.8	20.8	20.7	0.0	21.5	20.6	20.9	20.8	0.0	21.5
		1	37	20.8	20.6	20.4	0.0	21.5	20.6	20.7	20.7	0.0	21.5
		1	74	20.6	20.6	20.5	0.0	21.5	20.5	20.7	20.5	0.0	21.5
		36	0	20.1	20.3	20.1	0.0	21.5	20.0	20.1	20.1	0.0	21.5
		36	20	20.1	20.2	20.1	0.0	21.5	19.9	20.1	20.0	0.0	21.5
		36	39	20.0	20.2	20.0	0.0	21.5	19.9	20.0	20.0	0.0	21.5
		75	0	20.0	20.1	20.0	0.0	21.5	19.9	20.0	20.0	0.0	21.5
	256QAM	1	0	19.3	19.8	19.7	0.5	21.0	19.9	19.8	19.6	0.5	21.0
		1	37	19.6	19.9	19.7	0.5	21.0	19.7	19.9	19.8	0.5	21.0
		1	74	19.4	19.9	19.7	0.5	21.0	19.9	19.8	19.5	0.5	21.0
		36	0	19.0	19.2	19.6	0.5	21.0	19.1	19.2	18.9	0.5	21.0
		36	20	18.9	19.2	19.5	0.5	21.0	19.1	19.2	19.0	0.5	21.0
		36	39	19.0	19.3	19.6	0.5	21.0	19.1	19.3	18.9	0.5	21.0
		75	0	19.3	19.2	19.6	0.5	21.0	19.1	19.3	19.1	0.5	21.0

LTE Band 66 (Main 1 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				132022	132322	132622			132022	132322	132622		
				1715 MHz	1745 MHz	1775 MHz			1715 MHz	1745 MHz	1775 MHz		
10 MHz	QPSK	1	0	20.8	20.8	20.5	0.0	21.5	20.4	20.6	20.5	0.0	21.5
		1	25	20.8	20.9	20.5	0.0	21.5	20.5	20.6	20.4	0.0	21.5
		1	49	20.8	20.8	20.4	0.0	21.5	20.4	20.5	20.4	0.0	21.5
		25	0	20.8	20.9	20.6	0.0	21.5	20.5	20.6	20.4	0.0	21.5
		25	12	20.8	20.8	20.6	0.0	21.5	20.5	20.6	20.4	0.0	21.5
		25	25	20.8	20.8	20.5	0.0	21.5	20.5	20.6	20.4	0.0	21.5
	16QAM	50	0	20.8	20.9	20.6	0.0	21.5	20.5	20.6	20.4	0.0	21.5
		1	0	21.0	21.1	21.1	0.0	21.5	20.7	21.1	20.9	0.0	21.5
		1	25	20.8	20.7	21.1	0.0	21.5	20.6	21.0	20.9	0.0	21.5
		1	49	20.8	21.0	21.0	0.0	21.5	20.6	21.0	20.8	0.0	21.5
		25	0	20.8	20.9	20.7	0.0	21.5	20.6	20.7	20.4	0.0	21.5
		25	12	20.8	20.8	20.6	0.0	21.5	20.5	20.6	20.4	0.0	21.5
	64QAM	25	25	20.7	20.8	20.6	0.0	21.5	20.5	20.6	20.4	0.0	21.5
		50	0	20.8	20.7	20.6	0.0	21.5	20.5	20.6	20.4	0.0	21.5
		1	0	20.9	20.6	20.6	0.0	21.5	20.6	20.7	20.9	0.0	21.5
		1	25	20.7	20.7	20.6	0.0	21.5	20.6	20.5	20.8	0.0	21.5
		1	49	20.6	20.6	20.5	0.0	21.5	20.6	20.5	20.6	0.0	21.5
		25	0	20.2	20.2	20.1	0.0	21.5	20.0	20.2	20.1	0.0	21.5
	256QAM	25	12	20.1	20.1	20.1	0.0	21.5	20.0	20.2	20.0	0.0	21.5
		25	25	20.1	20.1	20.0	0.0	21.5	19.9	20.1	19.9	0.0	21.5
		50	0	20.0	20.1	20.0	0.0	21.5	19.9	20.1	19.9	0.0	21.5
		1	0	19.2	19.8	19.3	0.5	21.0	19.6	19.6	19.7	0.5	21.0
		1	25	19.2	19.6	19.2	0.5	21.0	19.8	19.7	19.8	0.5	21.0
		1	49	19.2	19.8	19.4	0.5	21.0	19.6	19.6	19.8	0.5	21.0
		25	0	19.2	19.2	19.5	0.5	21.0	19.1	19.3	19.2	0.5	21.0
		25	12	19.1	19.2	19.5	0.5	21.0	19.1	19.3	19.1	0.5	21.0
		25	25	19.3	19.3	19.3	0.5	21.0	19.1	19.4	19.2	0.5	21.0
		50	0	19.4	19.3	19.4	0.5	21.0	19.1	19.2	19.1	0.5	21.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				131997	132322	132647			131997	132322	132647		
				1712.5 MHz	1745 MHz	1777.5 MHz			1712.5 MHz	1745 MHz	1777.5 MHz		
5 MHz	QPSK	1	0	20.8	21.1	20.7	0.0	21.5	20.8	20.5	20.4	0.0	21.5
		1	12	20.8	21.1	20.9	0.0	21.5	20.9	20.6	20.5	0.0	21.5
		1	24	20.8	21.0	20.7	0.0	21.5	20.7	20.5	20.4	0.0	21.5
		12	0	20.9	21.0	20.8	0.0	21.5	20.7	20.6	20.5	0.0	21.5
		12	7	20.8	21.0	20.8	0.0	21.5	20.6	20.6	20.5	0.0	21.5
		12	13	20.8	20.9	20.7	0.0	21.5	20.6	20.5	20.5	0.0	21.5
	16QAM	25	0	20.8	20.9	20.7	0.0	21.5	20.6	20.6	20.6	0.0	21.5
		1	0	21.1	20.8	21.0	0.0	21.5	21.0	21.1	20.9	0.0	21.5
		1	12	21.0	21.0	20.9	0.0	21.5	20.8	19.9	20.7	0.0	21.5
		1	24	21.1	20.8	21.0	0.0	21.5	21.0	21.0	20.8	0.0	21.5
		12	0	20.8	20.9	20.7	0.0	21.5	20.5	20.6	20.4	0.0	21.5
		12	7	20.8	20.9	20.7	0.0	21.5	20.5	20.6	20.4	0.0	21.5
	64QAM	12	13	20.8	20.9	20.6	0.0	21.5	20.5	20.6	20.3	0.0	21.5
		25	0	20.7	20.8	20.7	0.0	21.5	20.5	20.5	20.4	0.0	21.5
		1	0	20.9	20.9	21.0	0.0	21.5	20.7	20.9	20.9	0.0	21.5
		1	12	20.8	21.0	21.0	0.0	21.5	21.0	20.9	20.7	0.0	21.5
		1	24	20.8	21.0	21.1	0.0	21.5	20.7	20.7	20.7	0.0	21.5
		12	0	20.2	20.3	20.1	0.0	21.5	20.0	20.1	20.0	0.0	21.5
	256QAM	12	7	20.1	20.2	20.0	0.0	21.5	19.9	20.1	19.9	0.0	21.5
		12	13	20.1	20.2	20.0	0.0	21.5	19.9	20.1	19.9	0.0	21.5
		25	0	20.1	20.1	20.0	0.0	21.5	19.9	20.0	19.9	0.0	21.5
		1	0	19.1	19.3	19.4	0.5	21.0	19.2	19.6	19.8	0.5	21.0
		1	12	19.1	20.0	19.3	0.5	21.0	19.2	19.8	19.9	0.5	21.0
		1	24	19.2	20.0	19.4	0.5	21.0	19.8	19.7	19.7	0.5	21.0
		12	0	19.5	19.4	19.3	0.5	21.0	19.6	19.3	19.5	0.5	21.0
		12	7	19.4	19.4	19.1	0.5	21.0	19.2	19.3	19.4	0.5	21.0
		12	13	19.5	19.4	19.2	0.5	21.0	19.3	19.3	19.4	0.5	21.0
		25	0	19.5	19.4	19.2	0.5	21.0	19.2	19.3	19.3	0.5	21.0

LTE Band 66 (Main 1 Ant.) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-u Limit
				131987	132322	132657			131987	132322	132657		
				1711.5 MHz	1745 MHz	1778.5 MHz			1711.5 MHz	1745 MHz	1778.5 MHz		
3 MHz	QPSK	1	0	20.8	21.1	20.8	0.0	21.5	20.4	20.5	20.5	0.0	21.5
		1	8	20.9	21.1	20.9	0.0	21.5	20.5	20.7	20.5	0.0	21.5
		1	14	20.9	21.1	20.7	0.0	21.5	20.5	20.5	20.4	0.0	21.5
		8	0	20.8	21.0	20.7	0.0	21.5	20.4	20.6	20.5	0.0	21.5
		8	4	20.8	20.9	20.7	0.0	21.5	20.4	20.5	20.4	0.0	21.5
		8	7	20.8	21.0	20.7	0.0	21.5	20.4	20.6	20.5	0.0	21.5
		15	0	20.8	20.9	20.7	0.0	21.5	20.4	20.5	20.5	0.0	21.5
	16QAM	1	0	20.9	21.1	21.0	0.0	21.5	20.7	20.9	20.9	0.0	21.5
		1	8	20.9	21.1	21.1	0.0	21.5	20.8	20.9	21.0	0.0	21.5
		1	14	20.9	21.0	21.0	0.0	21.5	20.6	20.9	20.9	0.0	21.5
		8	0	20.9	20.9	20.8	0.0	21.5	20.5	20.6	20.6	0.0	21.5
		8	4	20.8	20.9	20.8	0.0	21.5	20.5	20.6	20.6	0.0	21.5
		8	7	20.8	20.9	20.8	0.0	21.5	20.5	20.6	20.5	0.0	21.5
		15	0	20.8	20.9	20.8	0.0	21.5	20.5	20.6	20.5	0.0	21.5
	64QAM	1	0	21.0	20.6	20.9	0.0	21.5	20.7	20.6	20.6	0.0	21.5
		1	8	20.7	20.7	20.9	0.0	21.5	20.8	20.6	20.6	0.0	21.5
		1	14	20.9	20.6	20.8	0.0	21.5	20.7	20.7	20.5	0.0	21.5
		8	0	20.3	20.1	20.1	0.0	21.5	19.9	20.0	20.0	0.0	21.5
		8	4	20.2	20.0	20.1	0.0	21.5	19.9	20.0	19.9	0.0	21.5
		8	7	20.2	20.0	20.1	0.0	21.5	19.9	20.0	19.9	0.0	21.5
		15	0	20.1	20.1	20.0	0.0	21.5	19.9	20.0	19.9	0.0	21.5
	256QAM	1	0	19.1	19.6	19.7	0.5	21.0	19.7	19.7	19.9	0.5	21.0
		1	8	19.6	19.5	19.7	0.5	21.0	19.8	19.9	19.5	0.5	21.0
		1	14	19.6	19.6	19.8	0.5	21.0	19.9	19.7	20.0	0.5	21.0
		8	0	18.8	19.8	19.3	0.5	21.0	19.6	18.9	19.5	0.5	21.0
		8	4	18.9	18.9	19.1	0.5	21.0	19.3	18.9	19.6	0.5	21.0
		8	7	18.9	18.9	19.1	0.5	21.0	19.4	19.1	19.6	0.5	21.0
		15	0	18.9	19.0	19.2	0.5	21.0	19.8	19.2	19.5	0.5	21.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-u Limit
131979	132322	132665	131979	132322	132665								
1710.7 MHz	1745 MHz	1779.3 MHz	1710.7 MHz	1745 MHz	1779.3 MHz								
1.4 MHz	QPSK	1	0	20.7	20.9	20.9	0.0	21.5	20.3	20.5	20.5	0.0	21.5
		1	3	20.8	21.0	20.9	0.0	21.5	20.2	20.5	20.3	0.0	21.5
		1	5	20.7	20.9	20.8	0.0	21.5	20.3	20.5	20.4	0.0	21.5
		3	0	20.7	20.8	20.7	0.0	21.5	20.4	20.4	20.4	0.0	21.5
		3	1	20.8	20.8	20.8	0.0	21.5	20.3	20.5	20.3	0.0	21.5
		3	3	20.8	20.8	20.8	0.0	21.5	20.2	20.5	20.3	0.0	21.5
		6	0	20.8	20.8	20.8	0.0	21.5	20.3	20.4	20.4	0.0	21.5
	16QAM	1	0	20.8	21.0	20.7	0.0	21.5	20.8	20.5	20.4	0.0	21.5
		1	3	20.7	20.9	20.5	0.0	21.5	20.8	20.5	20.6	0.0	21.5
		1	5	20.8	21.1	20.7	0.0	21.5	20.8	20.6	20.5	0.0	21.5
		3	0	20.8	21.0	20.9	0.0	21.5	20.5	20.6	20.2	0.0	21.5
		3	1	20.9	21.1	20.9	0.0	21.5	20.4	20.6	20.3	0.0	21.5
		3	3	20.9	21.0	20.9	0.0	21.5	20.4	20.6	20.3	0.0	21.5
		6	0	20.9	21.0	20.9	0.0	21.5	20.2	20.5	20.4	0.0	21.5
	64QAM	1	0	21.0	21.0	20.5	0.0	21.5	20.8	20.6	20.8	0.0	21.5
		1	3	20.9	21.0	20.6	0.0	21.5	20.8	20.6	20.7	0.0	21.5
		1	5	20.8	20.8	20.6	0.0	21.5	20.8	20.6	20.6	0.0	21.5
		3	0	20.7	20.8	20.6	0.0	21.5	20.6	20.6	20.5	0.0	21.5
		3	1	20.6	20.7	20.5	0.0	21.5	20.6	20.6	20.4	0.0	21.5
		3	3	20.7	20.8	20.4	0.0	21.5	20.4	20.5	20.4	0.0	21.5
		6	0	20.1	20.1	19.9	0.0	21.5	19.9	20.0	19.8	0.0	21.5
	256QAM	1	0	19.7	19.7	19.4	0.5	21.0	19.6	19.5	19.3	0.5	21.0
		1	3	19.9	19.9	19.6	0.5	21.0	19.6	19.7	19.5	0.5	21.0
		1	5	19.8	19.8	19.5	0.5	21.0	19.7	19.6	19.5	0.5	21.0
		3	0	19.8	19.8	19.8	0.5	21.0	19.7	19.9	19.5	0.5	21.0
		3	1	19.8	19.9	19.8	0.5	21.0	19.7	19.8	19.4	0.5	21.0
		3	3	19.9	20.0	19.7	0.5	21.0	19.7	19.8	19.5	0.5	21.0
		6	0	19.2	19.3	19.1	0.5	21.0	19.1	19.1	19.0	0.5	21.0

LTE Band 41-Power Class 3 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Hotspot back-off							Reduced Average Power (dBm) Proximity sensor back-off						
				Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490			39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
20 MHz	QPSK	1	0	22.3	22.3	22.2	22.4	22.3	0.0	23.0	22.2	22.3	22.3	22.4	22.2	0.0	23.0
		1	49	22.2	22.2	22.1	22.2	22.1	0.0	23.0	22.1	22.2	22.1	22.2	22.1	0.0	23.0
		1	99	22.3	22.3	22.2	22.3	22.1	0.0	23.0	22.4	22.3	22.3	22.4	22.2	0.0	23.0
		50	0	22.4	22.5	22.3	22.7	22.3	0.0	23.0	22.3	22.5	22.3	22.7	22.3	0.0	23.0
		50	24	22.4	22.5	22.3	22.5	22.3	0.0	23.0	22.3	22.4	22.3	22.5	22.3	0.0	23.0
		50	50	22.4	22.5	22.3	22.5	22.3	0.0	23.0	22.3	22.4	22.3	22.5	22.3	0.0	23.0
	16QAM	100	0	22.4	22.5	22.3	22.5	22.3	0.0	23.0	22.3	22.4	22.3	22.5	22.3	0.0	23.0
		1	0	22.8	22.5	22.6	22.8	22.5	0.0	23.0	22.4	22.8	22.3	22.7	22.5	0.0	23.0
		1	49	22.5	22.9	22.4	22.9	22.4	0.0	23.0	22.4	22.5	22.0	22.3	22.5	0.0	23.0
		1	99	22.5	22.9	22.4	22.5	22.5	0.0	23.0	22.5	22.6	22.8	22.4	22.4	0.0	23.0
		50	0	21.4	21.4	21.3	21.5	21.2	0.0	23.0	21.3	21.5	21.3	21.5	21.2	0.0	23.0
		50	24	21.4	21.4	21.4	21.5	21.2	0.0	23.0	21.4	21.5	21.3	21.5	21.2	0.0	23.0
	64QAM	50	50	21.4	21.5	21.2	21.5	21.2	0.0	23.0	21.4	21.4	21.3	21.5	21.3	0.0	23.0
		100	0	21.4	21.4	21.3	21.5	21.3	0.0	23.0	21.4	21.4	21.3	21.5	21.3	0.0	23.0
		1	0	21.2	21.3	21.3	21.4	21.3	0.0	23.0	21.2	21.4	21.6	21.3	21.2	0.0	23.0
		1	49	20.9	21.3	21.2	21.3	21.0	0.0	23.0	21.6	20.8	21.4	21.3	21.2	0.0	23.0
		1	99	21.4	21.3	21.4	21.5	21.3	0.0	23.0	21.7	21.3	21.2	21.5	21.5	0.0	23.0
		50	0	20.2	20.4	20.4	20.5	20.3	1.0	22.0	20.4	20.5	20.4	20.5	20.3	1.0	22.0
	256QAM	50	24	20.2	20.4	20.3	20.5	20.3	1.0	22.0	20.3	20.5	20.4	20.5	20.3	1.0	22.0
		50	50	20.3	20.3	20.3	20.5	20.3	1.0	22.0	20.3	20.5	20.3	20.5	20.4	1.0	22.0
		100	0	20.2	20.3	20.3	20.5	20.3	1.0	22.0	20.3	20.4	20.3	20.5	20.3	1.0	22.0
		1	0	17.9	18.3	18.6	18.3	18.3	3.0	20.0	18.5	18.9	18.3	18.5	18.4	3.0	20.0
		1	49	18.0	18.0	18.3	18.4	18.1	3.0	20.0	18.4	18.8	18.4	18.1	18.3	3.0	20.0
		1	99	18.3	18.3	18.4	18.5	18.3	3.0	20.0	18.4	18.4	18.3	18.5	18.6	3.0	20.0
15 MHz	QPSK	50	0	18.2	18.3	18.3	18.5	18.2	3.0	20.0	18.3	18.4	18.3	18.5	18.3	3.0	20.0
		50	24	18.2	18.2	18.3	18.5	18.2	3.0	20.0	18.3	18.4	18.3	18.4	18.3	3.0	20.0
		50	50	18.3	18.2	18.3	18.5	18.2	3.0	20.0	18.3	18.4	18.3	18.5	18.3	3.0	20.0
		100	0	18.3	18.3	18.3	18.5	18.3	3.0	20.0	18.4	18.4	18.3	18.5	18.3	3.0	20.0
	16QAM	1	0	23.0	22.9	22.9	23.0	22.9	0.0	23.0	22.9	22.9	22.9	22.9	22.9	0.0	23.0
		1	37	23.0	23.0	22.9	23.0	22.8	0.0	23.0	22.9	22.9	22.9	23.0	22.7	0.0	23.0
		1	74	22.9	22.9	22.9	22.9	22.8	0.0	23.0	23.0	22.7	22.8	22.7	22.9	0.0	23.0
		36	0	23.0	22.8	22.7	22.9	22.9	0.0	23.0	22.9	22.8	23.0	22.9	22.9	0.0	23.0
		36	20	23.0	22.8	23.0	22.8	22.9	0.0	23.0	22.9	22.7	23.0	22.8	22.9	0.0	23.0
		36	39	23.0	22.8	22.8	22.9	22.9	0.0	23.0	22.9	22.7	23.0	22.8	22.9	0.0	23.0
	64QAM	75	0	23.0	22.8	22.9	22.9	22.9	0.0	23.0	23.0	22.8	22.9	22.9	22.9	0.0	23.0
		1	0	22.7	22.9	23.0	22.8	22.7	0.0	23.0	22.7	22.8	22.9	22.8	22.8	0.0	23.0
		1	37	22.7	22.8	22.7	22.6	22.7	0.0	23.0	22.9	22.8	22.5	22.9	22.5	0.0	23.0
		1	74	22.7	22.9	22.9	22.8	22.9	0.0	23.0	22.8	22.8	22.9	22.9	22.5	0.0	23.0
		36	0	22.0	22.2	22.0	22.1	21.9	0.0	23.0	22.0	22.0	22.0	22.2	21.9	0.0	23.0
		36	20	22.0	22.0	22.0	22.1	21.9	0.0	23.0	21.9	22.0	22.0	22.1	21.9	0.0	23.0
	256QAM	36	39	22.0	22.0	22.0	22.1	21.9	0.0	23.0	22.0	22.0	22.0	22.2	21.9	0.0	23.0
		75	0	22.0	22.1	22.0	22.1	21.9	0.0	23.0	22.0	22.0	22.0	22.1	21.9	0.0	23.0
		1	0	22.0	21.6	21.6	22.1	21.7	0.0	23.0	22.0	21.5	22.3	21.9	21.7	0.0	23.0
		1	37	21.9	21.5	21.7	21.7	21.6	0.0	23.0	21.7	21.9	21.8	22.0	22.0	0.0	23.0
		1	74	22.0	21.9	22.1	22.4	21.7	0.0	23.0	21.7	22.0	22.2	21.8	22.1	0.0	23.0
		36	0	21.0	21.1	21.0	21.1	20.9	1.0	22.0	20.9	21.1	21.0	21.1	20.9	1.0	22.0
	16QAM	36	20	20.9	21.1	21.0	21.1	20.9	1.0	22.0	20.9	21.1	21.0	21.1	20.9	1.0	22.0
		36	39	20.9	21.1	21.0	21.1	20.9	1.0	22.0	20.9	21.0	21.1	21.1	20.9	1.0	22.0
		75	0	21.0	21.0	21.0	21.1	20.9	1.0	22.0	21.0	21.0	21.0	21.1	20.9	1.0	22.0
		1	0	19.1	18.7	18.5	19.0	19.0	3.0	20.0	18.8	19.0	18.9	19.4	18.8	3.0	20.0
		1	37	18.7	18.5	18.2	19.1	18.7	3.0	20.0	18.9	18.8	18.8	19.3	18.6	3.0	20.0
		1	74	19.1	19.0	18.5	19.2	18.8	3.0	20.0	18.9	19.0	18.5	19.0	18.9	3.0	20.0
	256QAM	36	0	19.0	19.0	19.0	19.1	18.8	3.0	20.0	18.9	19.0	19.0	19.1	18.9	3.0	20.0
		36	20	18.9	19.0	19.0	19.1	18.8	3.0	20.0	18.9	19.0	18.9	19.1	18.9	3.0	20.0
		36	39	18.9	19.0	19.0	19.1	18.8	3.0	20.0	18.9	19.0	18.9	19.1	18.8	3.0	20.0
		75	0	19.0	19.0	19.0	19.1	18.9	3.0	20.0	18.9	19.0	19.0	19.1	18.9	3.0	20.0

LTE Band 41-Power Class 3 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490			39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
10 MHz	QPSK	1	0	22.8	22.7	22.7	22.9	22.9	0.0	23.0	23.0	22.9	22.8	22.8	23.0	0.0	23.0
		1	25	22.9	22.9	22.9	23.0	22.8	0.0	23.0	22.9	22.9	22.9	22.8	22.8	0.0	23.0
		1	49	23.0	22.8	23.0	23.0	22.9	0.0	23.0	22.9	23.0	23.0	22.8	22.9	0.0	23.0
		25	0	23.0	22.9	23.0	22.8	22.9	0.0	23.0	23.0	22.8	23.0	22.8	22.9	0.0	23.0
		25	12	23.0	22.8	23.0	22.8	22.9	0.0	23.0	23.0	22.8	23.0	22.7	22.9	0.0	23.0
		25	25	23.0	22.8	23.0	22.8	22.9	0.0	23.0	23.0	22.8	23.0	22.7	22.9	0.0	23.0
		50	0	23.0	22.9	23.0	22.9	22.9	0.0	23.0	23.0	22.7	23.0	22.9	22.9	0.0	23.0
		1	0	22.8	23.0	22.9	22.9	22.8	0.0	23.0	22.8	22.9	22.8	23.0	22.8	0.0	23.0
	16QAM	1	25	22.8	22.8	22.8	22.9	23.0	0.0	23.0	22.8	22.8	22.8	22.7	22.8	0.0	23.0
		1	49	22.8	22.9	23.0	22.9	23.0	0.0	23.0	22.8	22.9	22.8	22.9	22.8	0.0	23.0
		25	0	21.9	22.0	22.0	22.2	21.9	0.0	23.0	22.0	22.0	21.9	22.2	21.9	0.0	23.0
		25	12	21.9	22.0	22.0	22.1	21.9	0.0	23.0	22.0	22.0	21.9	22.2	21.9	0.0	23.0
		25	25	22.0	22.0	22.0	22.1	21.9	0.0	23.0	21.9	22.0	21.9	22.2	21.9	0.0	23.0
		50	0	22.0	22.0	22.0	22.2	21.9	0.0	23.0	22.0	22.1	22.0	22.1	21.9	0.0	23.0
		1	0	21.8	22.0	22.0	21.9	21.7	0.0	23.0	21.8	21.8	21.8	22.0	21.8	0.0	23.0
		1	25	21.7	21.8	21.8	21.9	21.7	0.0	23.0	21.7	21.7	21.8	21.9	21.7	0.0	23.0
	64QAM	1	49	21.8	21.9	21.9	22.0	21.8	0.0	23.0	21.9	21.8	21.9	22.0	21.8	0.0	23.0
		25	0	21.0	21.1	21.0	21.2	20.9	1.0	22.0	21.0	21.0	21.0	21.1	20.9	1.0	22.0
		25	12	21.0	21.1	21.0	21.2	20.9	1.0	22.0	20.9	21.0	21.0	21.1	20.9	1.0	22.0
		25	25	21.0	21.1	21.0	21.2	20.9	1.0	22.0	21.0	21.0	21.0	21.1	20.9	1.0	22.0
		50	0	21.0	21.0	20.9	21.2	20.8	1.0	22.0	20.9	21.0	20.9	21.1	20.8	1.0	22.0
		1	0	18.9	19.1	18.7	18.9	18.7	3.0	20.0	18.7	18.9	18.8	19.0	18.7	3.0	20.0
		1	25	18.8	19.0	18.6	18.9	18.6	3.0	20.0	18.6	18.8	18.7	18.8	18.5	3.0	20.0
		1	49	18.8	19.1	18.7	18.9	18.7	3.0	20.0	18.8	18.9	18.8	19.0	18.6	3.0	20.0
	256QAM	25	0	18.9	19.0	19.0	19.1	18.8	3.0	20.0	18.9	19.0	19.0	19.1	18.8	3.0	20.0
		25	12	18.9	19.0	19.0	19.1	18.9	3.0	20.0	18.9	19.0	19.0	19.1	18.9	3.0	20.0
		25	25	18.9	19.0	19.0	19.1	18.8	3.0	20.0	18.9	19.0	18.9	19.1	18.8	3.0	20.0
		50	0	19.0	19.0	19.0	19.1	18.8	3.0	20.0	18.9	19.0	19.0	19.1	18.8	3.0	20.0
5 MHz	QPSK	1	0	22.8	23.0	22.9	22.9	22.7	0.0	23.0	22.8	23.0	23.0	22.8	22.8	0.0	23.0
		1	12	23.0	22.9	22.8	22.8	22.7	0.0	23.0	23.0	22.9	22.9	22.9	22.7	0.0	23.0
		1	24	23.0	22.9	22.9	22.7	22.7	0.0	23.0	23.0	22.9	22.9	22.8	22.7	0.0	23.0
		12	0	23.0	22.8	23.0	22.9	22.8	0.0	23.0	22.8	22.7	23.0	22.8	22.8	0.0	23.0
		12	7	23.0	23.0	22.9	22.9	22.8	0.0	23.0	23.0	22.7	23.0	22.8	22.8	0.0	23.0
		12	13	23.0	22.7	23.0	22.8	22.8	0.0	23.0	23.0	22.8	23.0	22.7	22.8	0.0	23.0
		25	0	23.0	22.8	23.0	22.9	22.8	0.0	23.0	23.0	22.7	23.0	23.0	22.8	0.0	23.0
		1	0	23.0	23.0	22.7	22.9	23.0	0.0	23.0	23.0	22.8	22.9	22.8	22.9	0.0	23.0
	16QAM	1	12	23.0	22.9	22.7	22.8	22.8	0.0	23.0	22.8	22.9	22.8	22.9	22.9	0.0	23.0
		1	24	22.8	22.8	22.8	22.9	23.0	0.0	23.0	22.9	22.8	23.0	23.0	23.0	0.0	23.0
		12	0	22.0	22.0	21.9	22.2	21.8	0.0	23.0	22.0	22.1	22.0	22.2	21.8	0.0	23.0
		12	7	22.0	22.0	21.9	22.2	21.8	0.0	23.0	22.0	22.1	21.9	22.2	21.9	0.0	23.0
		12	13	22.0	22.1	21.9	22.1	21.8	0.0	23.0	22.0	22.1	22.0	22.2	21.9	0.0	23.0
		25	0	22.0	22.1	21.9	22.1	21.9	0.0	23.0	22.0	22.1	21.9	22.1	21.9	0.0	23.0
		1	0	21.8	22.1	22.1	22.0	21.9	0.0	23.0	21.8	21.9	22.0	22.1	21.8	0.0	23.0
		1	12	21.7	22.1	21.9	21.8	21.8	0.0	23.0	21.8	21.8	21.9	22.0	21.6	0.0	23.0
	64QAM	1	24	21.7	22.2	22.0	21.9	22.0	0.0	23.0	21.8	21.8	22.1	22.0	21.7	0.0	23.0
		12	0	20.9	21.0	21.0	21.2	20.9	1.0	22.0	20.9	21.0	21.0	21.1	20.9	1.0	22.0
		12	7	20.9	21.0	20.9	21.1	20.9	1.0	22.0	20.8	20.9	20.9	21.1	20.8	1.0	22.0
		12	13	20.9	21.0	20.9	21.1	20.9	1.0	22.0	20.8	21.0	20.9	21.1	20.9	1.0	22.0
		25	0	20.9	21.0	20.9	21.2	20.9	1.0	22.0	20.8	21.0	20.9	21.0	20.9	1.0	22.0
		1	0	18.8	19.0	19.1	19.3	18.8	3.0	20.0	18.9	19.1	19.0	19.2	19.0	3.0	20.0
		1	12	18.8	18.9	19.0	19.2	18.8	3.0	20.0	19.0	19.0	19.0	19.2	18.9	3.0	20.0
		1	24	18.9	19.0	19.1	19.3	18.8	3.0	20.0	19.0	19.1	19.0	19.2	19.0	3.0	20.0
	256QAM	12	0	18.8	19.0	18.9	19.1	18.9	3.0	20.0	18.8	18.9	19.0	19.0	18.9	3.0	20.0
		12	7	18.8	19.0	18.9	19.1	18.9	3.0	20.0	18.8	18.9	18.9	19.0	18.8	3.0	20.0
		12	13	18.8	19.0	18.9	19.1	18.9	3.0	20.0	18.8	18.9	18.9	19.0	18.8	3.0	20.0
		25	0	18.8	18.9	18.9	19.1	18.8	3.0	20.0	18.8	18.9	18.9	19.1	18.8	3.0	20.0

LTE Band 41-Power Class 2 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) Hotspot back-off							Reduced Average Power (dBm) Proximity sensor back-off						
				Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490			39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
20 MHz	QPSK	1	0	23.1	23.0	22.9	23.0	22.9	0.0	24.0	22.5	22.5	22.4	23.1	22.3	0.0	24.0
		1	49	23.0	22.8	22.8	22.8	22.8	0.0	24.0	22.3	22.4	22.3	22.7	22.2	0.0	24.0
		1	99	23.1	23.0	22.9	23.0	22.9	0.0	24.0	22.5	22.5	22.4	22.7	22.3	0.0	24.0
		50	0	22.9	22.9	22.8	22.9	22.7	0.0	24.0	22.3	22.4	22.3	22.5	22.2	0.0	24.0
		50	24	22.9	22.9	22.8	22.9	22.7	0.0	24.0	22.3	22.4	22.3	22.8	22.2	0.0	24.0
		50	50	22.9	22.9	22.8	22.9	22.7	0.0	24.0	22.3	22.4	22.3	22.6	22.3	0.0	24.0
	16QAM	100	0	22.9	22.9	22.8	22.9	22.7	0.0	24.0	22.3	22.4	22.2	22.5	22.2	0.0	24.0
		1	0	23.2	23.3	23.3	23.4	23.1	0.0	24.0	22.7	22.8	22.6	23.1	22.5	0.0	24.0
		1	49	23.2	23.2	23.2	23.2	23.1	0.0	24.0	22.6	22.7	22.4	23.0	22.4	0.0	24.0
		1	99	23.3	23.3	23.4	23.3	23.2	0.0	24.0	22.6	22.7	22.5	23.1	22.5	0.0	24.0
		50	0	21.9	21.9	21.8	22.0	21.7	1.0	23.0	21.4	21.5	21.8	22.2	21.3	1.0	23.0
		50	24	21.9	21.8	21.8	22.0	21.7	1.0	23.0	21.4	21.4	21.5	21.8	21.5	1.0	23.0
	64QAM	50	50	21.9	21.8	21.8	22.0	21.7	1.0	23.0	21.3	21.4	21.5	21.6	21.7	1.0	23.0
		100	0	21.9	21.9	21.7	22.0	21.7	1.0	23.0	21.3	21.4	21.3	21.7	21.4	1.0	23.0
		1	0	22.4	22.2	22.1	22.4	22.0	1.0	23.0	21.7	22.4	21.8	21.6	22.1	1.0	23.0
		1	49	22.2	22.2	22.0	22.3	21.9	1.0	23.0	21.9	21.9	21.7	21.5	22.0	1.0	23.0
		1	99	22.4	22.2	22.1	22.4	22.0	1.0	23.0	21.8	21.6	21.9	21.6	22.1	1.0	23.0
		50	0	21.0	21.0	20.8	21.0	20.8	2.0	22.0	20.4	20.8	20.4	20.5	20.2	2.0	22.0
	256QAM	50	24	20.9	20.9	20.8	21.0	20.8	2.0	22.0	20.8	20.5	21.0	20.5	20.2	2.0	22.0
		50	50	20.9	20.9	20.8	21.0	20.8	2.0	22.0	21.0	21.1	20.6	20.5	20.2	2.0	22.0
		100	0	20.9	20.9	20.8	21.0	20.7	2.0	22.0	20.7	21.1	20.3	20.4	20.2	2.0	22.0
		1	0	19.2	19.5	19.1	19.3	19.3	4.0	20.0	19.9	20.0	19.0	18.6	18.7	4.0	20.0
		1	49	19.1	19.4	19.0	19.2	19.2	4.0	20.0	18.9	19.1	19.6	18.6	18.5	4.0	20.0
		1	99	19.3	19.5	19.2	19.3	19.3	4.0	20.0	18.4	19.9	19.2	18.6	19.1	4.0	20.0
		50	0	18.9	18.9	18.8	19.0	18.8	4.0	20.0	18.7	19.5	19.5	18.4	18.7	4.0	20.0
		50	24	18.9	18.9	18.8	19.0	18.8	4.0	20.0	19.4	19.7	18.9	18.4	18.5	4.0	20.0
		50	50	18.9	18.9	18.8	18.9	18.8	4.0	20.0	19.6	18.9	18.9	18.4	18.7	4.0	20.0
		100	0	18.9	18.9	18.8	18.9	18.7	4.0	20.0	18.2	18.7	18.6	18.4	18.4	4.0	20.0
15 MHz	QPSK	1	0	22.9	23.0	23.1	23.0	22.8	0.0	24.0	23.2	23.3	23.3	23.2	22.9	0.0	24.0
		1	37	22.4	22.6	22.9	22.6	22.6	0.0	24.0	22.9	23.1	23.4	23.0	22.7	0.0	24.0
		1	74	22.9	22.9	23.1	23.0	22.7	0.0	24.0	23.2	23.3	23.3	23.1	22.7	0.0	24.0
		36	0	22.9	23.0	23.0	23.0	22.9	0.0	24.0	23.2	23.3	23.2	23.0	22.8	0.0	24.0
		36	20	22.9	23.0	23.0	23.0	22.9	0.0	24.0	23.2	23.3	23.2	22.9	22.8	0.0	24.0
		36	39	22.9	23.0	22.9	23.0	22.8	0.0	24.0	23.2	23.3	23.2	22.9	22.7	0.0	24.0
	16QAM	75	0	22.9	23.0	23.0	23.0	22.8	0.0	24.0	23.3	23.3	23.2	23.0	22.8	0.0	24.0
		1	0	23.0	23.1	23.5	23.5	23.1	0.0	24.0	23.5	23.5	23.6	23.5	23.0	0.0	24.0
		1	37	22.6	23.2	23.4	23.4	23.1	0.0	24.0	23.6	23.5	23.5	23.0	23.0	0.0	24.0
		1	74	22.9	23.0	23.5	23.4	23.0	0.0	24.0	23.4	23.6	23.4	23.3	22.9	0.0	24.0
		36	0	22.0	22.0	22.0	22.1	21.9	1.0	23.0	22.2	22.3	22.2	22.0	21.7	1.0	23.0
		36	20	22.0	22.0	21.9	22.1	21.9	1.0	23.0	22.2	22.3	22.2	22.0	21.7	1.0	23.0
	64QAM	36	39	22.0	22.0	22.0	22.1	21.9	1.0	23.0	22.2	22.3	22.2	22.0	21.7	1.0	23.0
		75	0	21.9	22.0	22.0	22.1	21.8	1.0	23.0	22.2	22.3	22.3	22.0	21.7	1.0	23.0
		1	0	21.9	22.2	22.2	21.9	22.0	1.0	23.0	21.9	22.3	21.9	22.0	22.1	1.0	23.0
		1	37	21.8	21.7	22.3	21.8	21.9	1.0	23.0	21.1	22.5	22.0	21.5	22.4	1.0	23.0
		1	74	21.9	22.2	22.2	21.9	22.1	1.0	23.0	21.9	22.2	21.9	22.0	22.1	1.0	23.0
		36	0	20.8	20.9	20.8	21.0	20.7	2.0	22.0	20.9	20.9	20.9	21.0	20.8	2.0	22.0
	256QAM	36	20	20.8	20.8	20.8	20.9	20.7	2.0	22.0	20.9	20.9	20.9	21.0	20.7	2.0	22.0
		36	39	20.8	20.8	20.8	20.9	20.7	2.0	22.0	20.9	20.9	20.9	21.0	20.7	2.0	22.0
		75	0	20.8	20.8	20.8	20.9	20.7	2.0	22.0	20.9	20.9	20.9	20.8	21.0	2.0	22.0
		1	0	18.8	18.9	19.6	19.1	18.5	4.0	20.0	18.5	19.3	19.2	19.0	19.2	4.0	20.0
		1	37	18.9	19.0	19.4	18.5	18.7	4.0	20.0	18.7	19.1	19.0	19.1	19.0	4.0	20.0
		1	74	18.8	18.8	19.6	19.0	18.5	4.0	20.0	18.6	19.3	19.1	18.9	19.2	4.0	20.0
		36	0	18.8	18.8	18.8	18.9	18.7	4.0	20.0	18.8	18.9	18.8	18.9	18.7	4.0	20.0
		36	20	18.7	18.8	18.7	18.9	18.7	4.0	20.0	18.8	18.9	18.8	18.9	18.7	4.0	20.0
		36	39	18.7	18.8	18.8	18.9	18.7	4.0	20.0	18.8	18.9	18.8	18.9	18.7	4.0	20.0
		75	0	18.8	18.8	18.8	18.9	18.7	4.0	20.0	18.8	18.9	18.8	18.9	18.7	4.0	20.0

LTE Band 41-Power Class 2 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MFR	Tune-up Limit	Measured Pwr (dBm)					MFR	Tune-up Limit
				39750	40185	40620	41055	41490			39750	40185	40620	41055	41490		
				2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
10 MHz	QPSK	1	0	23.1	22.9	23.0	23.2	22.8	0.0	24.0	23.4	23.1	23.2	23.5	23.0	0.0	24.0
		1	25	22.9	22.8	22.9	23.0	22.7	0.0	24.0	23.4	23.0	23.1	23.4	22.9	0.0	24.0
		1	49	23.0	23.0	23.0	23.1	22.9	0.0	24.0	23.3	23.2	23.2	23.4	23.1	0.0	24.0
		25	0	22.9	23.0	22.9	23.1	22.9	0.0	24.0	23.2	23.3	23.2	23.4	23.1	0.0	24.0
		25	12	22.9	23.0	22.9	23.1	22.8	0.0	24.0	23.2	23.3	23.2	23.4	23.1	0.0	24.0
		25	25	23.0	23.0	22.9	23.1	22.9	0.0	24.0	23.3	23.3	23.2	23.4	23.1	0.0	24.0
		50	0	22.9	23.0	22.9	23.1	22.8	0.0	24.0	23.2	23.3	23.2	23.4	23.1	0.0	24.0
		1	0	23.3	23.1	23.2	23.4	23.0	0.0	24.0	23.5	23.6	23.6	23.5	23.4	0.0	24.0
	16QAM	1	25	23.2	23.1	23.1	23.3	23.0	0.0	24.0	23.5	23.5	23.6	23.5	23.4	0.0	24.0
		1	49	23.2	23.3	23.2	23.4	23.2	0.0	24.0	23.5	23.5	23.6	23.5	23.5	0.0	24.0
		25	0	21.9	22.0	21.8	22.1	21.9	1.0	23.0	22.3	22.3	22.2	22.4	22.2	1.0	23.0
		25	12	21.9	22.0	21.8	22.1	21.9	1.0	23.0	22.2	22.3	22.2	22.4	22.2	1.0	23.0
		25	25	21.9	22.0	21.8	22.1	21.9	1.0	23.0	22.3	22.3	22.2	22.4	22.2	1.0	23.0
		50	0	21.9	21.9	21.9	22.1	21.8	1.0	23.0	22.3	22.3	22.2	22.4	22.1	1.0	23.0
		1	0	21.9	22.1	22.2	22.4	22.1	1.0	23.0	22.0	22.0	22.2	22.2	22.1	1.0	23.0
		1	25	21.7	22.0	22.0	22.3	22.1	1.0	23.0	22.0	21.9	22.0	22.1	22.0	1.0	23.0
	64QAM	1	49	21.8	22.2	22.1	22.3	22.2	1.0	23.0	22.2	22.0	22.1	22.3	22.1	1.0	23.0
		25	0	20.8	20.9	20.8	21.0	20.7	2.0	22.0	20.9	21.0	20.9	20.9	20.8	2.0	22.0
		25	12	20.8	20.9	20.8	21.0	20.7	2.0	22.0	20.9	21.0	20.9	21.0	20.7	2.0	22.0
		25	25	20.8	20.9	20.8	21.0	20.7	2.0	22.0	20.9	20.9	20.9	21.0	20.7	2.0	22.0
		50	0	20.8	20.9	20.8	20.9	20.7	2.0	22.0	20.8	20.9	20.8	21.0	20.7	2.0	22.0
		1	0	18.7	19.0	18.8	18.8	18.8	4.0	20.0	19.0	19.1	18.7	19.1	18.9	4.0	20.0
		1	25	18.6	18.8	18.8	18.7	18.8	4.0	20.0	18.9	19.0	18.6	19.0	18.8	4.0	20.0
		1	49	18.7	18.9	18.9	18.8	18.9	4.0	20.0	19.0	19.1	18.7	19.0	18.9	4.0	20.0
	256QAM	25	0	18.8	18.9	18.8	19.0	18.7	4.0	20.0	18.8	18.9	18.8	19.0	18.7	4.0	20.0
		25	12	18.8	18.9	18.8	19.0	18.7	4.0	20.0	18.8	18.9	18.8	19.0	18.7	4.0	20.0
		25	25	18.8	18.9	18.8	19.0	18.7	4.0	20.0	18.8	18.9	18.8	19.0	18.7	4.0	20.0
		50	0	18.7	18.8	18.8	18.9	18.7	4.0	20.0	18.8	18.9	18.8	19.0	18.7	4.0	20.0
5 MHz	QPSK	1	0	23.0	23.2	23.1	23.1	23.0	0.0	24.0	23.4	23.4	23.3	23.5	23.1	0.0	24.0
		1	12	23.1	23.3	23.2	23.1	23.1	0.0	24.0	23.5	23.5	23.5	23.5	23.1	0.0	24.0
		1	24	23.0	23.1	22.9	23.1	22.9	0.0	24.0	23.3	23.3	23.3	23.5	23.0	0.0	24.0
		12	0	22.9	23.0	22.9	23.0	22.8	0.0	24.0	23.1	23.2	23.2	23.3	23.1	0.0	24.0
		12	7	22.9	23.0	22.9	23.0	22.8	0.0	24.0	23.1	23.2	23.2	23.3	23.1	0.0	24.0
		12	13	22.9	23.0	22.9	23.1	22.9	0.0	24.0	23.2	23.2	23.2	23.3	23.1	0.0	24.0
		25	0	22.9	22.9	22.9	23.0	22.8	0.0	24.0	23.1	23.2	23.2	23.3	23.1	0.0	24.0
		1	0	23.2	23.4	23.1	23.4	23.2	0.0	24.0	23.4	23.5	23.4	23.6	23.2	0.0	24.0
	16QAM	1	12	23.1	23.4	22.7	23.3	23.0	0.0	24.0	23.4	23.4	23.3	23.4	23.3	0.0	24.0
		1	24	23.2	23.2	23.3	23.5	23.0	0.0	24.0	23.5	23.4	23.5	23.5	23.4	0.0	24.0
		12	0	21.9	22.0	22.0	22.1	21.8	1.0	23.0	22.2	22.4	22.2	22.4	22.2	1.0	23.0
		12	7	21.9	22.0	22.0	22.1	21.8	1.0	23.0	22.2	22.4	22.2	22.3	22.2	1.0	23.0
		12	13	22.0	22.0	21.9	22.1	21.8	1.0	23.0	22.2	22.3	22.2	22.3	22.1	1.0	23.0
		25	0	21.9	22.0	21.9	22.0	21.8	1.0	23.0	22.2	22.2	22.2	22.4	22.0	1.0	23.0
		1	0	22.1	22.4	22.1	22.2	22.1	1.0	23.0	22.0	22.2	22.1	22.2	22.2	1.0	23.0
		1	12	22.2	22.5	21.8	22.2	22.2	1.0	23.0	21.3	22.2	21.8	22.0	22.5	1.0	23.0
	64QAM	1	24	22.3	22.2	21.8	22.3	22.0	1.0	23.0	22.2	22.0	22.0	22.4	22.0	1.0	23.0
		12	0	20.8	20.8	20.8	21.0	20.7	2.0	22.0	20.9	20.9	20.8	21.0	20.7	2.0	22.0
		12	7	20.8	20.8	20.8	21.0	20.7	2.0	22.0	20.9	20.8	20.8	21.0	20.7	2.0	22.0
		12	13	20.8	20.8	20.8	21.0	20.7	2.0	22.0	20.9	20.9	20.8	21.0	20.7	2.0	22.0
		25	0	20.7	20.8	20.8	20.9	20.6	2.0	22.0	20.8	20.8	20.8	21.0	20.6	2.0	22.0
		1	0	19.0	19.2	19.1	19.3	18.9	4.0	20.0	19.1	19.5	18.9	19.3	19.2	4.0	20.0
		1	12	19.2	19.4	19.0	19.6	19.1	4.0	20.0	19.3	19.8	18.9	19.4	19.5	4.0	20.0
		1	24	19.1	19.1	19.3	19.2	19.1	4.0	20.0	19.0	19.5	19.1	19.2	19.3	4.0	20.0
	256QAM	12	0	18.7	18.8	18.8	19.0	18.7	4.0	20.0	18.8	18.9	18.9	18.9	18.6	4.0	20.0
		12	7	18.7	18.8	18.8	18.9	18.6	4.0	20.0	18.8	18.8	18.8	18.9	18.6	4.0	20.0
		12	13	18.7	18.8	18.8	19.0	18.7	4.0	20.0	18.8	18.8	18.9	19.0	18.6	4.0	20.0
		25	0	18.7	18.8	18.8	18.9	18.6	4.0	20.0	18.7	18.8	18.8	18.9	18.7	4.0	20.0

9.4. NR (Sub 6GHz)

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS 138.521-1 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS138.521-1.

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

Modulation	MPR (dB)		
	Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM PI/2 BPSK	$\leq 3.5^1$	$\leq 1.2^1$	$\leq 0.2^1$
	$\leq 0.5^2$		0^2
DFT-s-OFDM QPSK	≤ 1		0
DFT-s-OFDM 16 QAM	≤ 2		≤ 1
DFT-s-OFDM 64 QAM		≤ 2.5	
DFT-s-OFDM 256 QAM		≤ 4.5	
CP-OFDM QPSK	≤ 3		≤ 1.5
CP-OFDM 16 QAM	≤ 3		≤ 2
CP-OFDM 64 QAM		≤ 3.5	
CP-OFDM 256 QAM		≤ 6.5	
NOTE 1: Applicable for UE operating in TDD mode with PI/2 BPSK modulation and UE indicates support for UE capability <i>powerBoosting-pi2BPSK</i> and if the IE <i>powerBoostPi2BPSK</i> is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0dB MPR is 26dBm.			
NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 and if the IE <i>powerBoostPi2BPSK</i> is set to 0 and if more than 40% of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.			

The allowed A-MPR values specified below in Table 6.2.3.3.1-1 of 3GPP TS138.521-1 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01"

Table 6.2.3.3.1-1: Additional maximum power reduction (A-MPR)

Network Signalling label	Requirements (subclause)	NR Band	Channel bandwidth (MHz)	Resources Blocks (N _{RB})	A-MPR (dB)
NS_01		Table 5.2-1	5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100	Table 5.3.2-1	N/A

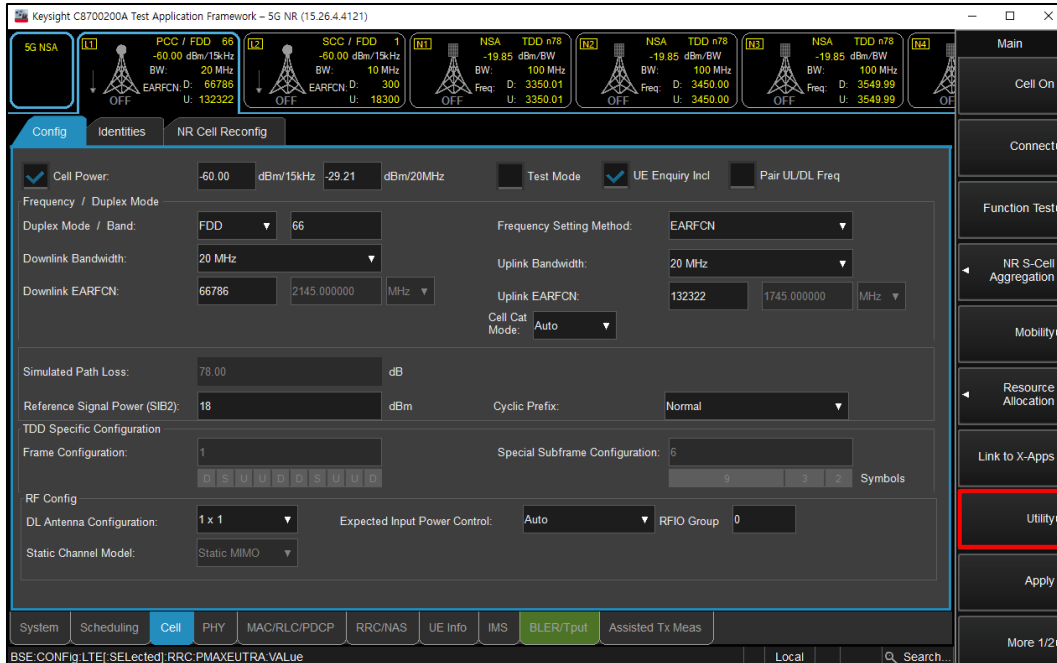
Uplink RB allocations were used to Table 6.1-1 of the 3GPP TS 138.521-1.

Channel Bandwidth	SCS(kHz)	OFDM	RB allocation							
			Edge_Full_Left	Edge_Full_Right	Edge_1RB_Left	Edge_1RB_Right	Outer_Full	Inner_Full	Inner_1RB_Left	Inner_1RB_Right
5MHz	15	DFT-s	2@0	2@23	1@0	1@24	25@0	12@6	1@1	1@23
		CP	2@0	2@23	1@0	1@24	25@0	13@6	1@1	1@23
	30	DFT-s	2@0	2@9	1@0	1@10	10@0	5@2 ¹	1@1	1@9
		CP	2@0	2@9	1@0	1@10	11@0	5@2 ¹	1@1	1@9
	60	DFT-s	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		CP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10MHz	15	DFT-s	2@0	2@50	1@0	1@51	50@0	25@12	1@1	1@50
		CP	2@0	2@50	1@0	1@51	52@0	26@13	1@1	1@50
	30	DFT-s	2@0	2@22	1@0	1@23	24@0	12@6	1@1	1@22
		CP	2@0	2@22	1@0	1@23	24@0	12@6	1@1	1@22
	60	DFT-s	2@0	2@9	1@0	1@10	10@0	5@2 ¹	1@1	1@9
		CP	2@0	2@9	1@0	1@10	11@0	5@2 ¹	1@1	1@9
15MHz	15	DFT-s	2@0	2@77	1@0	1@78	75@0	38@18	1@1	1@77
		CP	2@0	2@77	1@0	1@78	79@0	39@19 ¹	1@1	1@77
	30	DFT-s	2@0	2@36	1@0	1@37	36@0	18@9	1@1	1@36
		CP	2@0	2@36	1@0	1@37	38@0	19@9	1@1	1@36
	60	DFT-s	2@0	2@16	1@0	1@17	18@0	9@4	1@1	1@16
		CP	2@0	2@16	1@0	1@17	18@0	9@4	1@1	1@16
20MHz	15	DFT-s	2@0	2@104	1@0	1@105	100@0	50@25	1@1	1@104
		CP	2@0	2@104	1@0	1@105	106@0	53@26	1@1	1@104
	30	DFT-s	2@0	2@49	1@0	1@50	50@0	25@12	1@1	1@49
		CP	2@0	2@49	1@0	1@50	51@0	25@12 ¹	1@1	1@49
	60	DFT-s	2@0	2@22	1@0	1@23	24@0	12@6	1@1	1@22
		CP	2@0	2@22	1@0	1@23	24@0	12@6	1@1	1@22

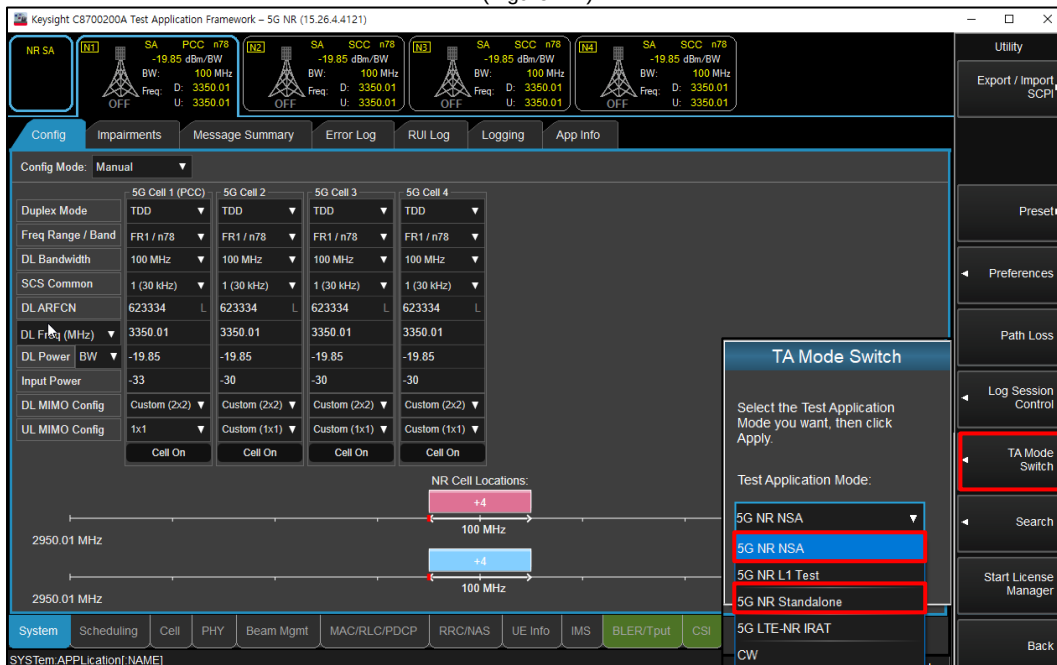
Procedures used to establish power measurement for NR Bands

Switching to NSA mode or SA mode

- Click the “Utility” button in the right of Test application screen
- Select “5G NR NSA” in the “TA Mode Switch” for NSA mode
- Select “5G NR Standalone” in the “TA Mode Switch” for SA mode



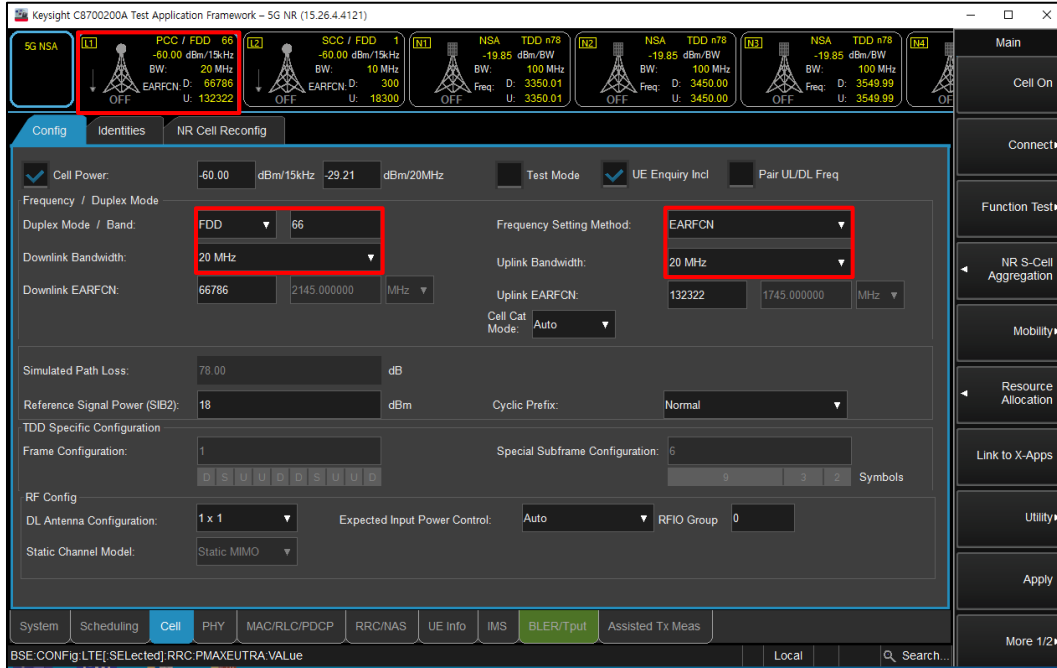
(Figure 1-1)



(Figure 1-2)

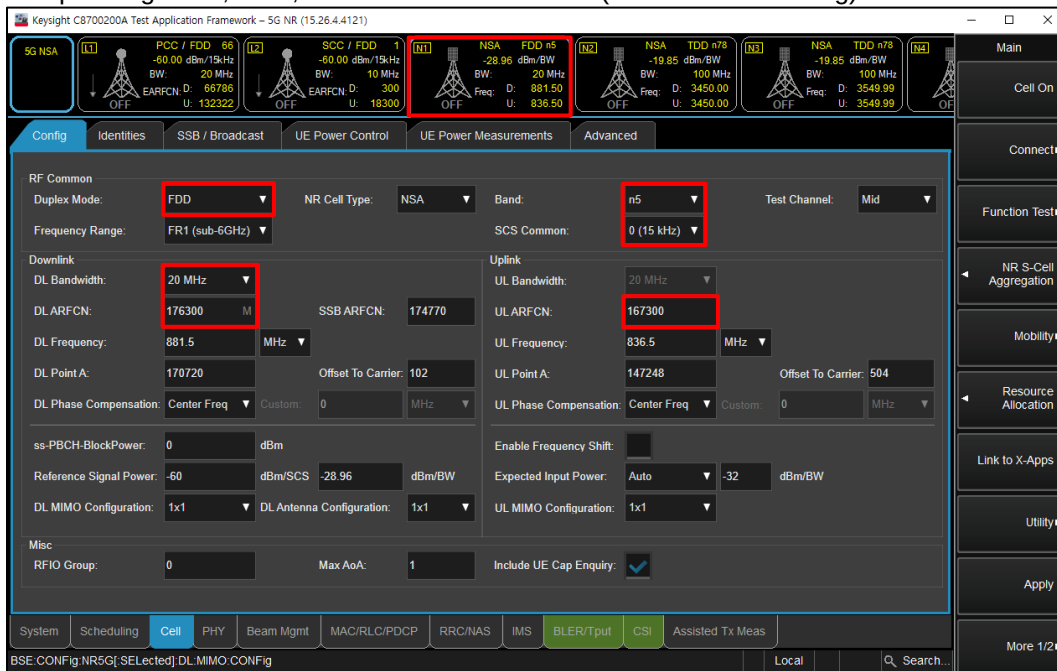
NSA Mode

- Select operating band, BW and Channel for LTE (LTE -> Cell -> Config)



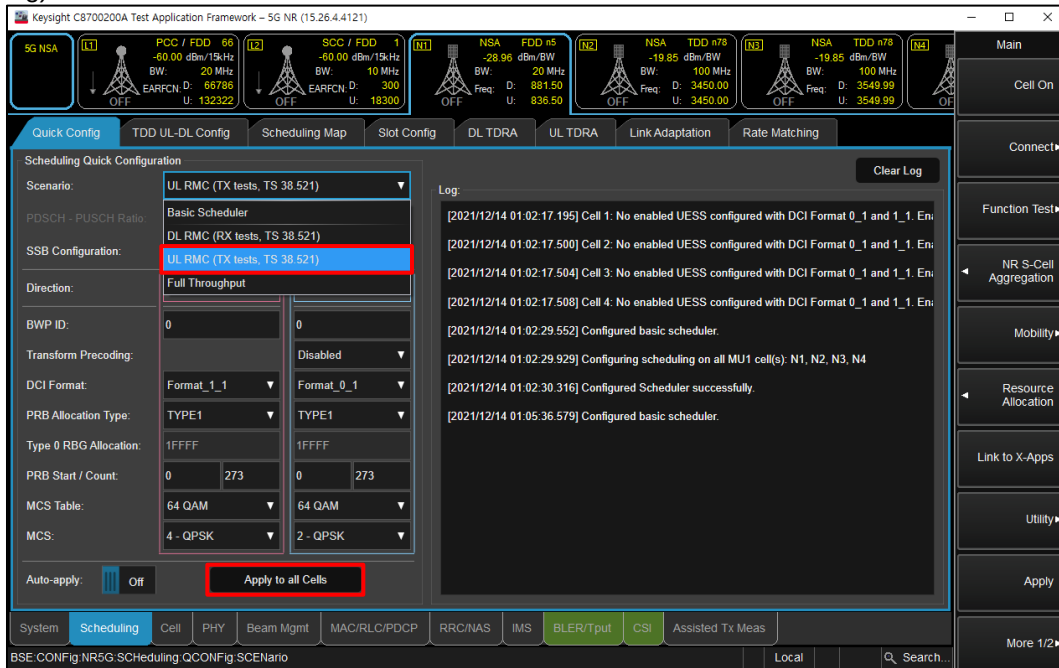
(Figure 2-1)

- Select operating band, SCS, BW and Channel for NR (NR -> Cell -> Config)



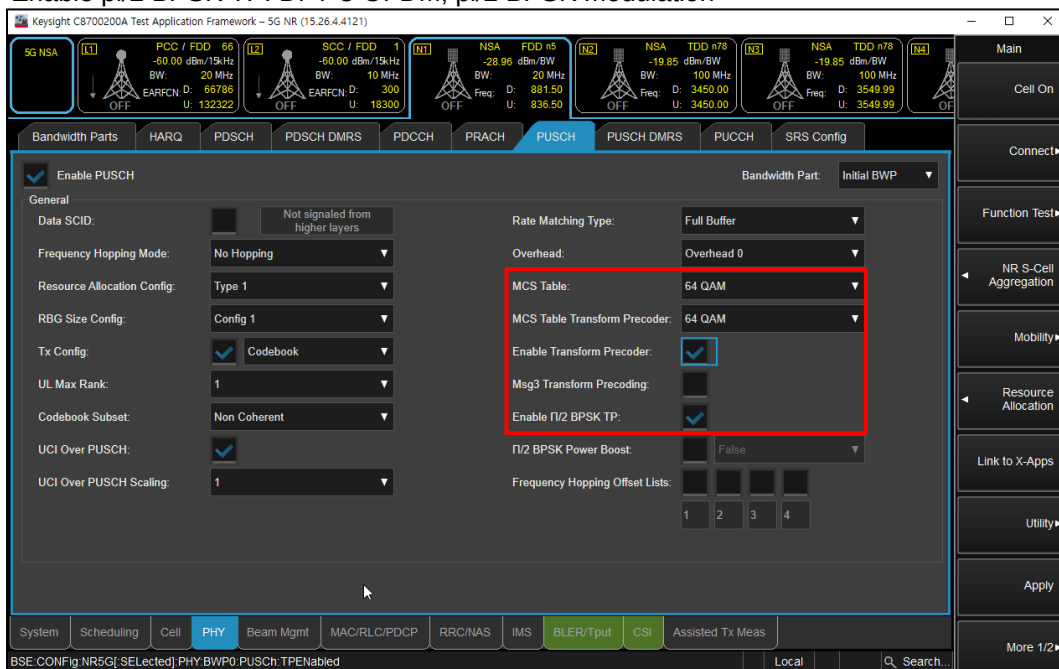
(Figure 2-2)

- Select “UL RMC (TX tests, TS 38.521)” for maximum power RB scheduling (NR -> Scheduling -> Quick Config)



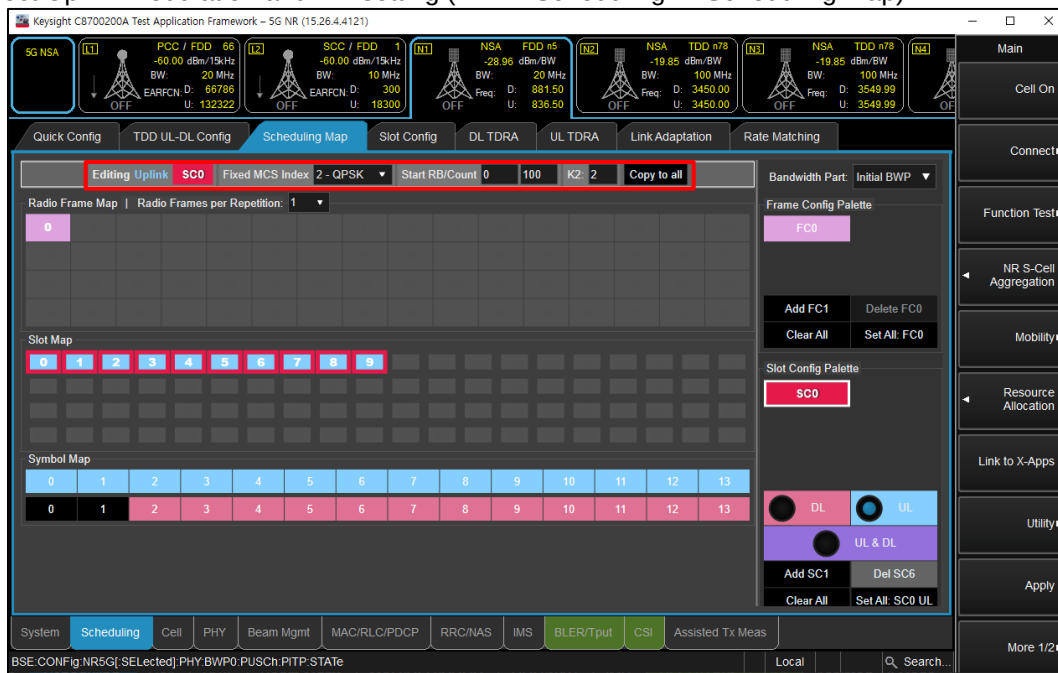
(Figure 2-3)

- To set waveform for NR Band (NR -> PHY -> PUSCH)
 - Select highest modulation in the MCS Table and MCS Table Transform Precoder
 - Enable Transform Precoder: DFT-s-OFDM / disable for CP-OFDM
 - Enable $\pi/2$ BPSK TP: DFT-s-OFDM, $\pi/2$ BPSK modulation



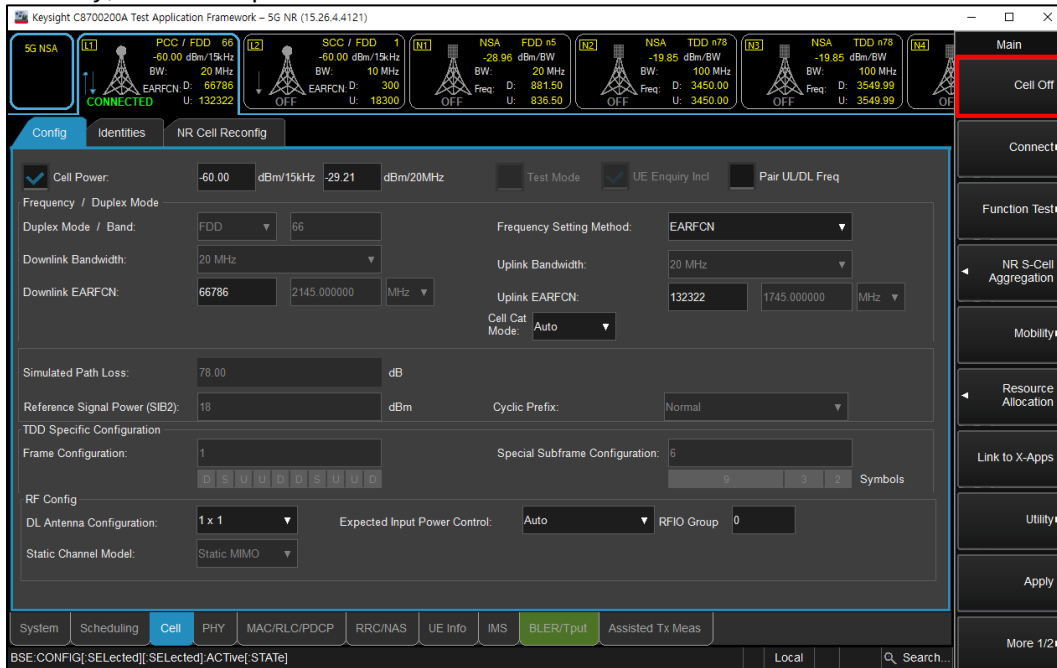
(Figure 2-4)

- Select Uplink Modulation and RB setting (NR -> Scheduling -> Scheduling Map)



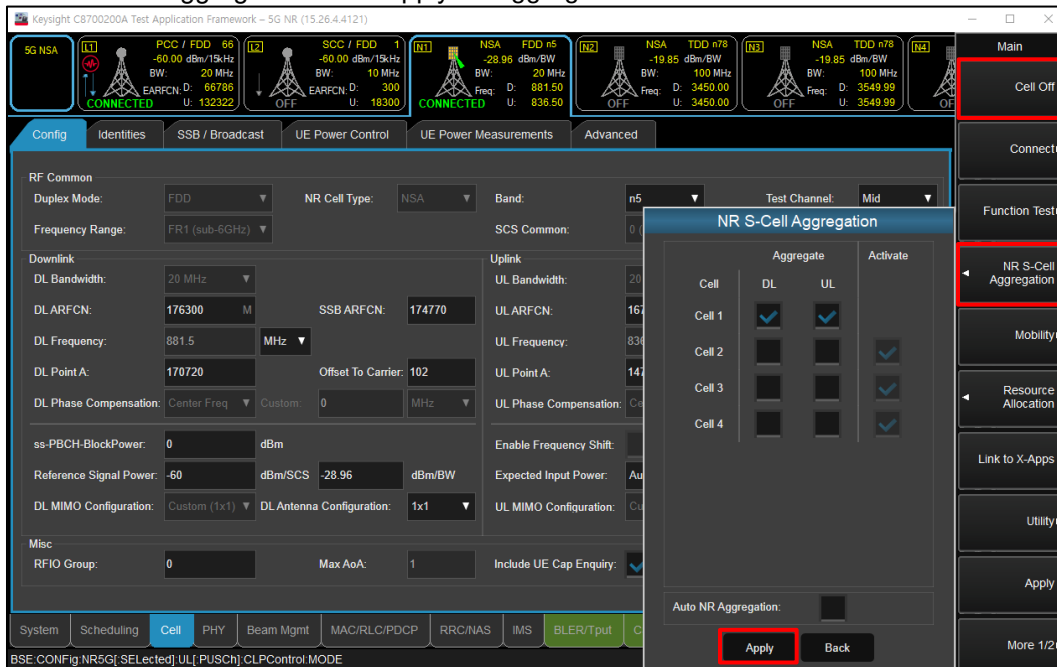
(Figure 2-5)

- Click “Cell On” button in the right of Test application screen in the LTE tab
- If necessary, turn the Airplane Mode on/off in the DUT



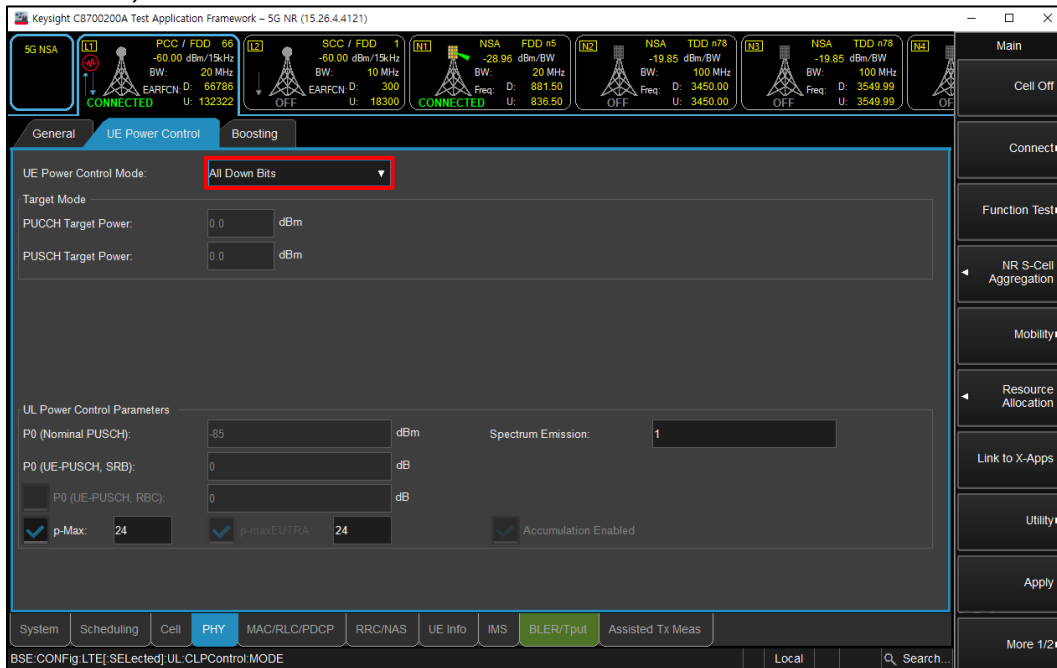
(Figure 2-6)

- Click “Cell On” button in the right of Test application screen in the NR tab
- Click “NR S-Cell Aggregation” and “Apply” to aggregate NR band



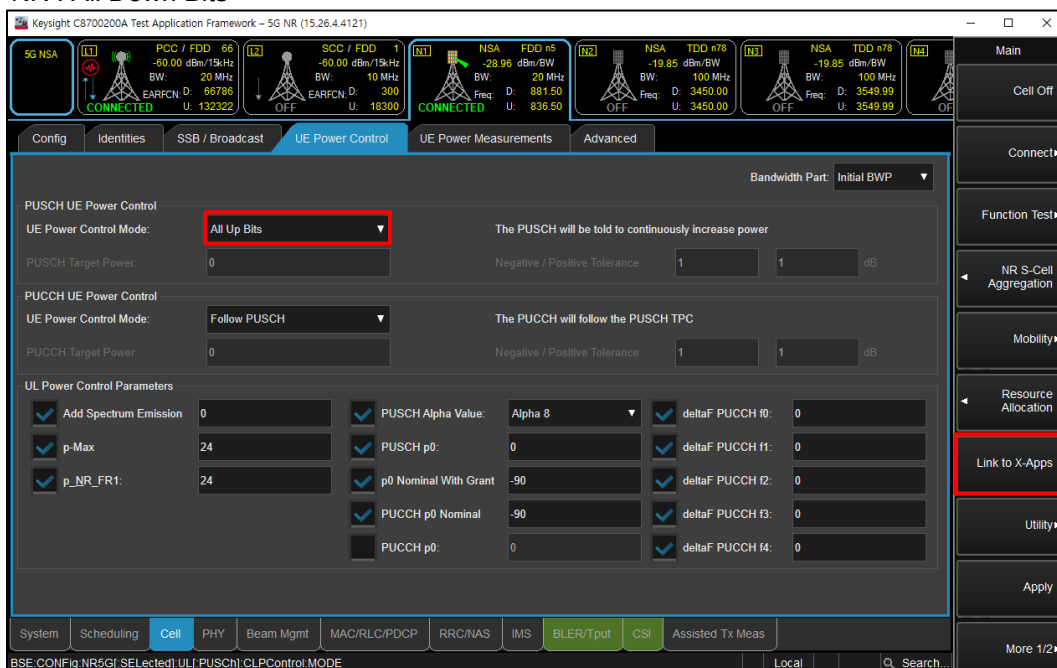
(Figure 2-7)

- Select “All Down Bits” of UL Power control Mode in LTE tab for NR maximum power (LTE -> PHY -> UE Power Control)



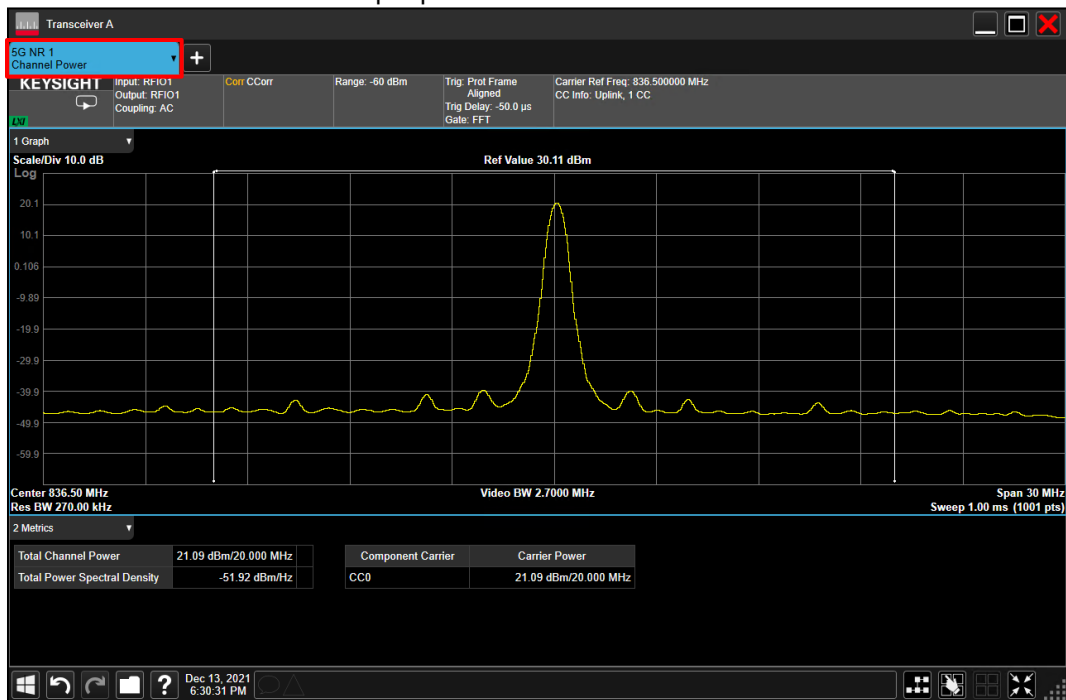
(Figure 2-8)

- Select “All Up Bits” of UL Power control Mode in NR tab for NR maximum power (NR -> Cell -> UE Power Control)
- To read the NR output power, click the “Link to X-Apps” in the NR tab (NR -> Link to X-Apps)
- UE Power Control Mode
 - LTE : All Down Bits
 - NR : All Up Bits
- To read the LTE output power, click the “Link to X-Apps” in the LTE tab (LTE -> Link to X-Apps)
- UE Power Control Mode
 - LTE : All Up Bits
 - NR : All Down Bits



(Figure 2-9)

- Select “Channel Power” for NR output power



(Figure 2-10)

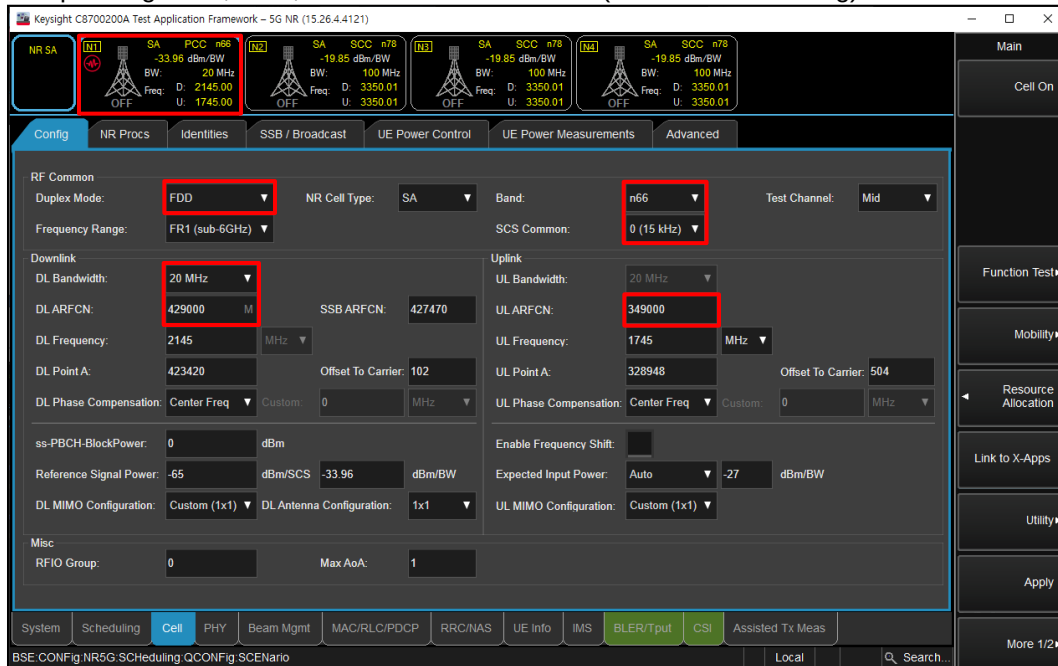
- Select “Channel Power” for LTE output power



(Figure 2-11)

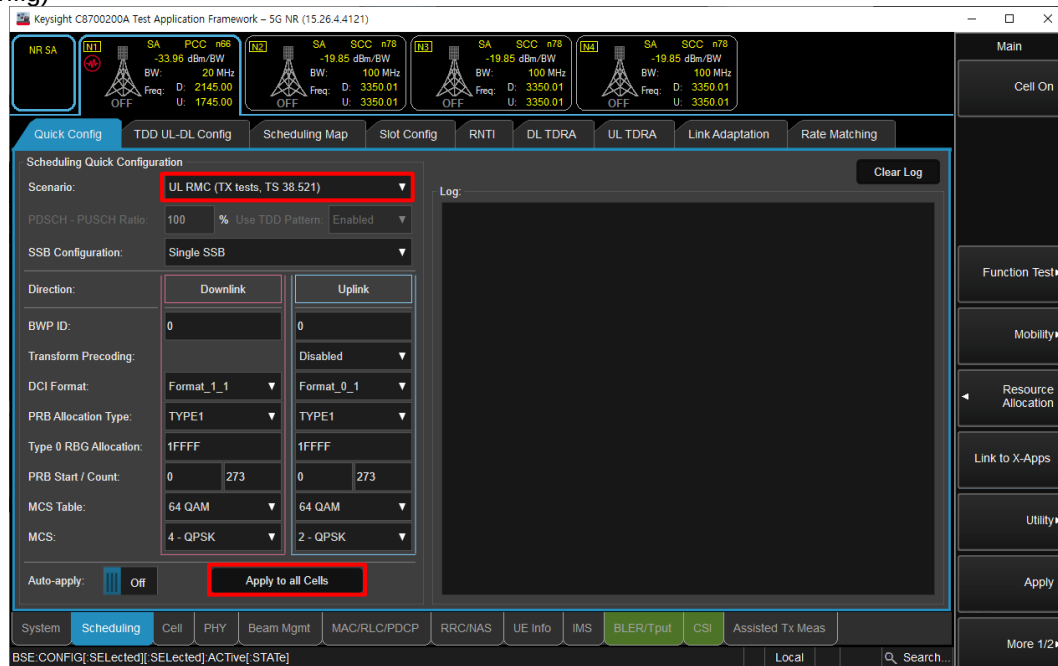
SA Mode

- Select operating band, SCS, BW and Channel for NR (NR -> Cell -> Config)



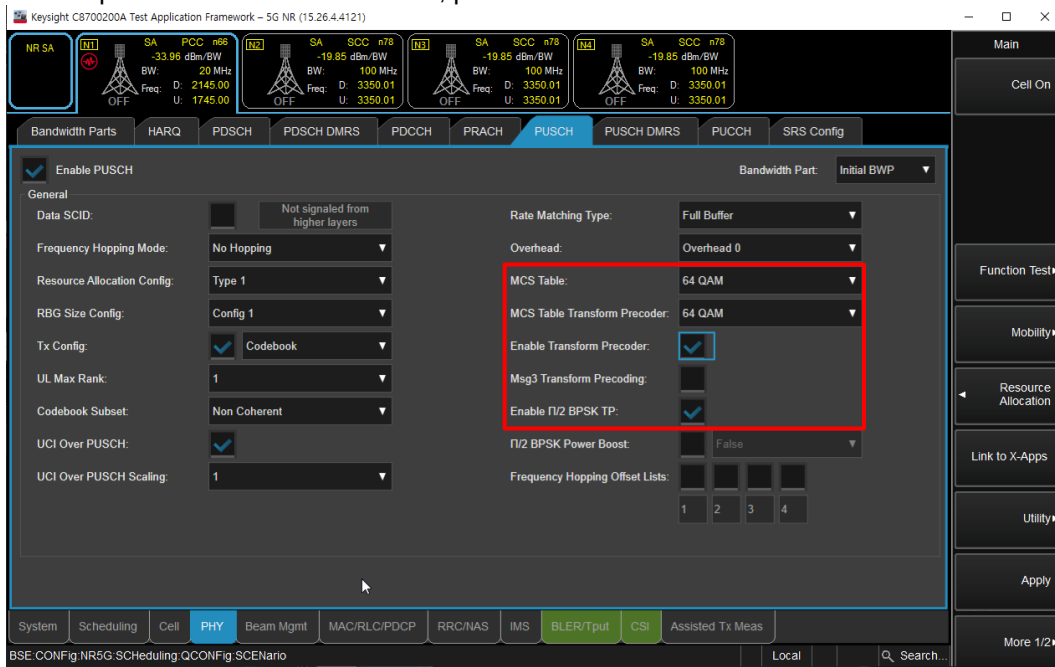
(Figure 3-1)

- Select "UL RMC (TX tests, TS 38.521)" for maximum power RB scheduling (NR -> Scheduling -> Quick Config)



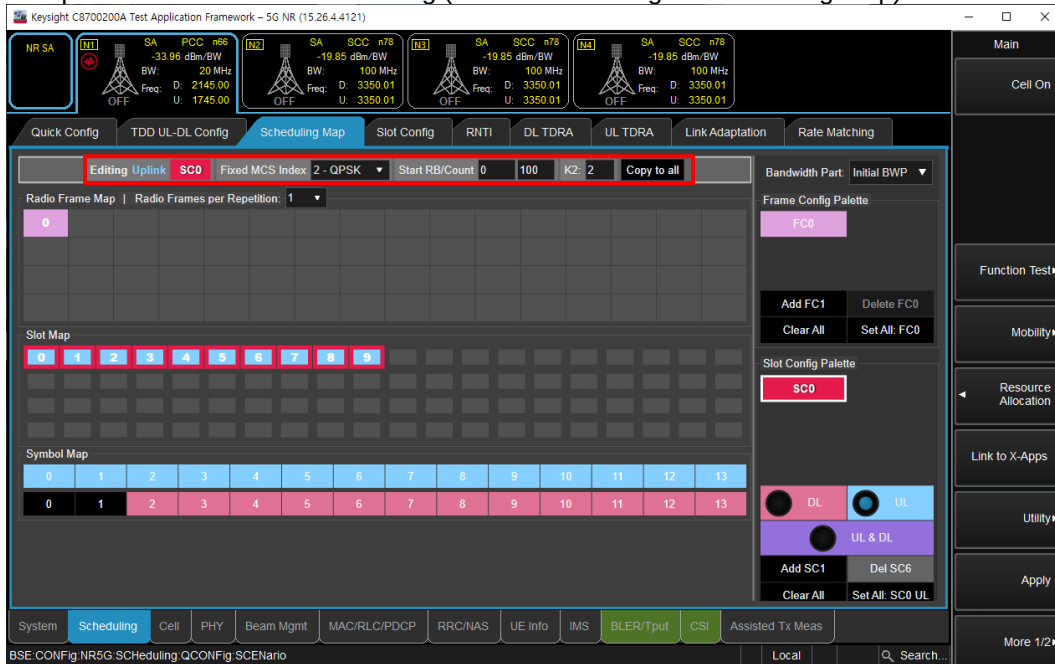
(Figure 3-2)

- To set waveform for NR Band (NR -> PHY -> PUSCH)
 - Select highest modulation in the MCS Table and MCS Table Transform Precoder
 - Enable Transform Precoder: DFT-s-OFDM / disable for CP-OFDM
 - Enable $\pi/2$ BPSK TP: DFT-s-OFDM, $\pi/2$ BPSK modulation



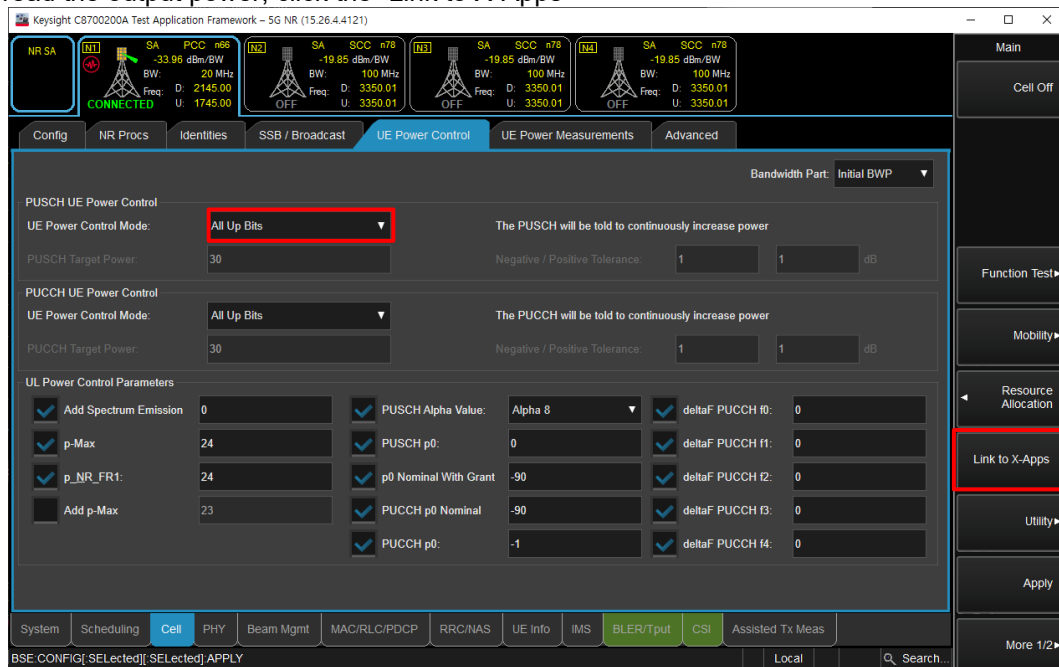
(Figure 3-3)

- Select Uplink Modulation and RB setting (NR -> Scheduling -> Scheduling Map)



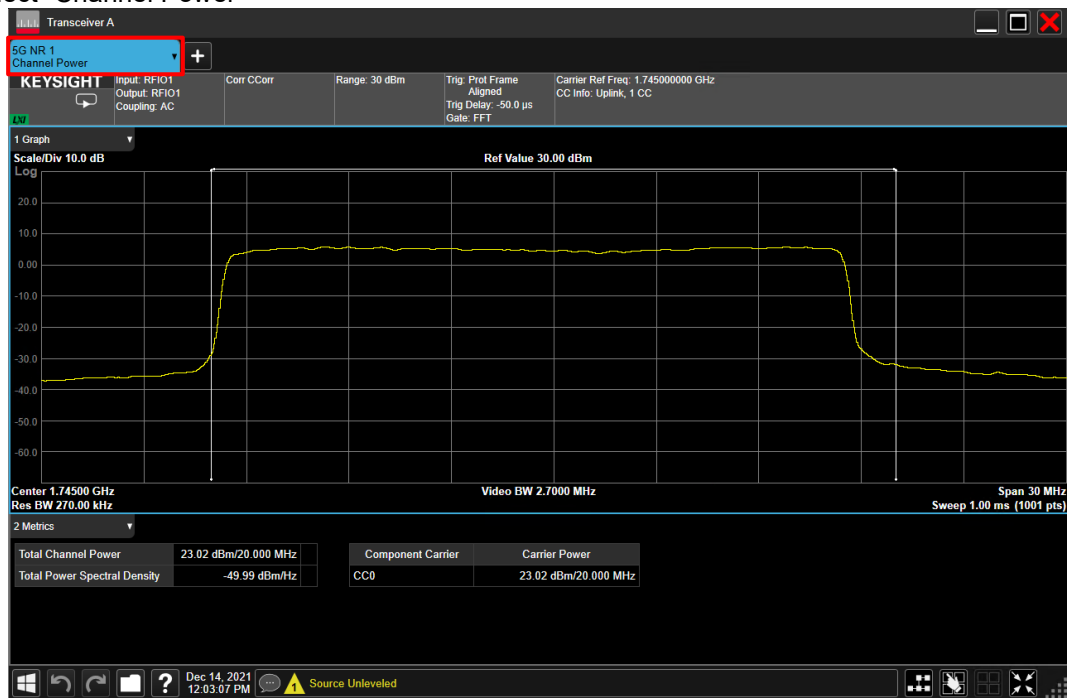
(Figure 3-4)

- Click “Cell On” button in the right of Test application screen
- If necessary, turn the Airplane Mode on/off in the DUT
- Select “All Up Bits” of UL Power control Mode (Cell -> UE Power Control)
- To read the output power, click the “Link to X-Apps”



(Figure 3-5)

- Select “Channel Power”



(Figure 3-6)

1. Max power**NR Band n5 Measured Results**

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					
					Measured Pwr (dBm)			MPR	Tune-up Limit	
					166800 834 MHz	167300 836.5 MHz	167800 839 MHz			
20 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1		24.4		0.0	25.0	
			1	53		24.7		0.0	25.0	
			1	104		24.4		0.0	25.0	
			50	0		24.0		0.5	24.5	
			50	25		24.6		0.0	25.0	
			50	54		24.0		0.5	24.5	
		QPSK	100	0		24.1		0.5	24.5	
			1	1		24.4		0.0	25.0	
			1	53		24.6		0.0	25.0	
			1	104		24.4		0.0	25.0	
			50	0		23.5		1.0	24.0	
			50	25		24.6		0.0	25.0	
			50	54		23.5		1.0	24.0	
			100	0		23.6		1.0	24.0	
		16QAM	1	1		23.4		1.0	24.0	
		64QAM	1	1		21.9		2.5	22.5	
		256QAM	1	1		19.9		4.5	20.5	
	CP-OFDM	QPSK	1	1		22.9		1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					
					Measured Pwr (dBm)			MPR	Tune-up Limit	
					166300 831.5 MHz	167300 836.5 MHz	168300 841.5 MHz			
15 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1		24.4		0.0	25.0	
			1	40		24.5		0.0	25.0	
			1	77		24.4		0.0	25.0	
			36	0		24.0		0.5	24.5	
			36	18		24.6		0.0	25.0	
			36	43		24.0		0.5	24.5	
		QPSK	75	0		24.0		0.5	24.5	
			1	1		24.4		0.0	25.0	
			1	40		24.5		0.0	25.0	
			1	77		24.4		0.0	25.0	
			36	0		23.5		1.0	24.0	
			36	18		24.5		0.0	25.0	
			36	43		23.5		1.0	24.0	
			75	0		23.6		1.0	24.0	
		16QAM	1	1		23.5		1.0	24.0	
		64QAM	1	1		21.9		2.5	22.5	
		256QAM	1	1		19.9		4.5	20.5	
	CP-OFDM	QPSK	1	1		22.9		1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					
					Measured Pwr (dBm)			MPR	Tune-up Limit	
					165800 829 MHz	167300 836.5 MHz	168800 844 MHz			
10 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1		24.5		0.0	25.0	
			1	26		24.7		0.0	25.0	
			1	50		24.5		0.0	25.0	
			25	0		24.0		0.5	24.5	
			25	12		24.6		0.0	25.0	
			25	27		24.0		0.5	24.5	
		QPSK	50	0		24.1		0.5	24.5	
			1	1		24.5		0.0	25.0	
			1	26		24.6		0.0	25.0	
			1	50		24.5		0.0	25.0	
			25	0		23.5		1.0	24.0	
			25	12		24.6		0.0	25.0	
			25	27		23.5		1.0	24.0	
			50	0		23.6		1.0	24.0	
		16QAM	1	1		23.5		1.0	24.0	
		64QAM	1	1		22.0		2.5	22.5	
		256QAM	1	1		20.0		4.5	20.5	
	CP-OFDM	QPSK	1	1		23.0		1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					
					Measured Pwr (dBm)			MPR	Tune-up Limit	
					165300 826.5 MHz	167300 836.5 MHz	169300 846.5 MHz			
5 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1		24.4	24.6	24.5	0.0	25.0
			1	13		24.4	24.5	24.4	0.0	25.0
			1	23		24.5	24.6	24.4	0.0	25.0
			12	0		23.9	24.1	23.9	0.5	24.5
			12	6		24.5	24.6	24.4	0.0	25.0
			12	13		24.0	24.1	23.9	0.5	24.5
		QPSK	25	0		23.9	24.1	23.9	0.5	24.5
			1	1		24.4	24.6	24.4	0.0	25.0
			1	13		24.4	24.5	24.3	0.0	25.0
			1	23		24.5	24.5	24.4	0.0	25.0
			12	0		23.4	23.5	23.4	1.0	24.0
			12	6		24.4	24.6	24.4	0.0	25.0
			12	13		23.5	23.5	23.4	1.0	24.0
			25	0		23.4	23.6	23.4	1.0	24.0
		16QAM	1	1		23.3	23.6	23.4	1.0	24.0
		64QAM	1	1		21.8	22.1	22.0	2.5	22.5
		256QAM	1	1		19.9	20.1	20.0	4.5	20.5
	CP-OFDM	QPSK	1	1		22.9	23.1	23.0	1.5	23.5

NR Band n66 (Main Ant.1) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					344000	349000	354000		
					1720 MHz	1745 MHz	1770 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.1	24.0	23.8	0.0	25.0
			1	53	24.1	23.9	23.8	0.0	25.0
			1	104	23.9	23.7	23.9	0.0	25.0
			50	0	23.6	23.4	23.3	0.5	24.5
			50	25	24.1	23.9	23.8	0.0	25.0
			50	54	23.5	23.3	23.3	0.5	24.5
		QPSK	100	0	23.5	23.4	23.3	0.5	24.5
			1	1	23.8	23.9	23.7	0.0	25.0
			1	53	24.1	24.1	23.8	0.0	25.0
			1	104	23.9	24.0	23.8	0.0	25.0
			50	0	23.1	22.9	22.8	1.0	24.0
			50	25	23.8	23.9	23.8	0.0	25.0
		16QAM	50	54	23.1	22.8	22.8	1.0	24.0
			100	0	23.0	22.8	22.8	1.0	24.0
			1	1	23.0	23.0	23.0	1.0	24.0
			64QAM	1	1	21.9	21.4	21.5	2.5
		256QAM	1	1	19.8	19.4	19.5	4.0	21.0
			CP-OFDM	QPSK	1	1	22.6	22.3	22.3
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
15 MHz	DFT-s-OFDM	π/2 BPSK			343500	349000	354500		
					1717.5 MHz	1745 MHz	1772.5 MHz		
			1	1	23.8	23.9	23.9	0.0	25.0
			1	40	23.8	23.8	23.8	0.0	25.0
			1	77	23.9	23.9	23.7	0.0	25.0
			36	0	23.4	23.5	23.4	0.5	24.5
		QPSK	36	18	23.9	24.0	23.8	0.0	25.0
			36	43	23.4	23.5	23.3	0.5	24.5
			75	0	23.4	23.5	23.3	0.5	24.5
			1	1	23.9	24.0	23.9	0.0	25.0
			1	40	23.9	23.9	23.8	0.0	25.0
			1	77	23.9	23.9	23.7	0.0	25.0
		16QAM	36	0	22.9	23.1	22.9	1.0	24.0
			36	18	23.9	24.0	23.8	0.0	25.0
			36	43	22.9	23.0	22.8	1.0	24.0
			75	0	22.9	23.0	22.8	1.0	24.0
		256QAM	1	1	22.9	23.2	22.6	1.0	24.0
			64QAM	1	1	21.5	21.6	21.4	2.5
256QAM	1	1	19.4	19.5	19.2	4.0	21.0		
CP-OFDM	QPSK	1	1	22.4	22.4	22.3	1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
10 MHz	DFT-s-OFDM	π/2 BPSK			343000	349000	355000		
					1715 MHz	1745 MHz	1775 MHz		
			1	1	23.8	24.1	23.8	0.0	25.0
			1	26	23.8	24.0	23.8	0.0	25.0
			1	50	23.9	24.0	23.8	0.0	25.0
			25	0	23.4	23.6	23.3	0.5	24.5
		QPSK	25	12	23.9	24.1	23.8	0.0	25.0
			25	27	23.4	23.6	23.3	0.5	24.5
			50	0	23.4	23.6	23.3	0.5	24.5
			1	1	23.9	24.2	23.9	0.0	25.0
			1	26	23.9	24.1	23.9	0.0	25.0
			1	50	23.9	24.1	23.8	0.0	25.0
		16QAM	25	0	22.8	23.1	22.8	1.0	24.0
			25	12	23.8	24.1	23.8	0.0	25.0
			25	27	22.9	23.1	22.8	1.0	24.0
			50	0	22.9	23.1	22.8	1.0	24.0
		256QAM	1	1	22.7	22.7	22.9	1.0	24.0
			64QAM	1	1	21.5	21.6	21.5	2.5
256QAM	1	1	19.3	19.7	19.6	4.0	21.0		
CP-OFDM	QPSK	1	1	22.5	22.6	22.5	1.5	23.5	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
5 MHz	DFT-s-OFDM	π/2 BPSK			342500	349000	355500		
					1712.5 MHz	1745 MHz	1777.5 MHz		
			1	1	23.8	24.0	23.8	0.0	25.0
			1	13	23.7	23.9	23.7	0.0	25.0
			1	23	23.9	24.0	23.8	0.0	25.0
			12	0	23.3	23.5	23.3	0.5	24.5
		QPSK	12	6	23.8	23.9	23.8	0.0	25.0
			12	13	23.3	23.5	23.3	0.5	24.5
			25	0	23.3	23.5	23.3	0.5	24.5
			1	1	23.8	24.0	23.8	0.0	25.0
			1	13	23.8	23.9	23.7	0.0	25.0
			1	23	23.9	24.0	23.8	0.0	25.0
		16QAM	12	0	22.8	23.0	22.8	1.0	24.0
			12	6	23.8	24.0	23.8	0.0	25.0
			12	13	22.8	23.0	22.8	1.0	24.0
			25	0	22.8	23.0	22.8	1.0	24.0
		256QAM	1	1	22.7	23.0	22.6	1.0	24.0
			64QAM	1	1	21.5	21.8	21.5	2.5
256QAM	1	1	19.7	19.7	19.6	4.0	21.0		
CP-OFDM	QPSK	1	1	22.6	22.5	22.4	1.5	23.5	

NR Band n66 (Main Ant.3) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					344000	349000	354000		
					1720 MHz	1745 MHz	1770 MHz		
20 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1	21.8	22.3	21.8	0.0	23.0
			1	53	22.0	22.4	21.8	0.0	23.0
			1	104	22.0	22.4	21.4	0.0	23.0
			50	0	21.4	21.8	21.4	0.5	22.5
			50	25	22.0	22.4	21.8	0.0	23.0
			50	54	21.5	21.9	21.3	0.5	22.5
			100	0	21.5	21.9	21.5	0.5	22.5
			1	1	21.7	22.3	21.8	0.0	23.0
		QPSK	1	53	21.9	22.3	21.6	0.0	23.0
			1	104	22.0	22.4	22.0	0.0	23.0
			50	0	20.9	21.4	20.9	1.0	22.0
			50	25	22.0	22.4	21.8	0.0	23.0
			50	54	21.0	21.4	20.8	1.0	22.0
			100	0	21.0	21.4	21.0	1.0	22.0
		16QAM	1	1	20.7	21.4	20.7	1.0	22.0
		64QAM	1	1	19.5	19.9	19.1	2.5	20.5
		256QAM	1	1	17.6	17.7	17.7	4.5	18.5
	CP-OFDM	QPSK	1	1	20.2	20.8	20.2	1.5	21.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)				
					343500	349000	354500	MPR	Tune-up Limit
					1717.5 MHz	1745 MHz	1772.5 MHz		
					1717.5 MHz	1745 MHz	1772.5 MHz		
15 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1	21.8	22.4	21.9	0.0	23.0
			1	40	21.9	22.5	21.7	0.0	23.0
			1	77	21.9	22.6	21.7	0.0	23.0
			36	0	21.4	22.0	21.4	0.5	22.5
			36	18	21.9	22.5	21.8	0.0	23.0
			36	43	21.4	22.1	21.3	0.5	22.5
			75	0	21.5	22.0	21.3	0.5	22.5
			1	1	21.8	22.3	21.8	0.0	23.0
		QPSK	1	40	21.8	22.4	21.7	0.0	23.0
			1	77	21.9	22.6	21.7	0.0	23.0
			36	0	20.9	21.5	20.9	1.0	22.0
			36	18	21.9	22.5	21.8	0.0	23.0
			36	43	21.0	21.6	20.9	1.0	22.0
			75	0	21.0	21.5	20.8	1.0	22.0
		16QAM	1	1	20.9	21.5	20.9	1.0	22.0
		64QAM	1	1	19.3	20.1	19.4	2.5	20.5
		256QAM	1	1	17.6	18.0	17.7	4.5	18.5
	CP-OFDM	QPSK	1	1	20.2	20.9	20.3	1.5	21.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)				
					343000	349000	355000	MPR	Tune-up Limit
					1715 MHz	1745 MHz	1775 MHz		
					1715 MHz	1745 MHz	1775 MHz		
10 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1	21.8	22.5	21.8	0.0	23.0
			1	26	21.8	22.5	21.7	0.0	23.0
			1	50	22.0	22.6	21.8	0.0	23.0
			25	0	21.3	22.0	21.3	0.5	22.5
			25	12	21.9	22.5	21.8	0.0	23.0
			25	27	21.4	22.0	21.3	0.5	22.5
			50	0	21.3	22.0	21.3	0.5	22.5
			1	1	21.8	22.5	21.8	0.0	23.0
		QPSK	1	26	21.7	22.4	21.7	0.0	23.0
			1	50	22.0	22.6	21.7	0.0	23.0
			25	0	20.8	21.5	20.8	1.0	22.0
			25	12	21.8	22.5	21.8	0.0	23.0
			25	27	20.9	21.6	20.9	1.0	22.0
			50	0	20.9	21.5	20.9	1.0	22.0
		16QAM	1	1	20.8	21.5	20.9	1.0	22.0
		64QAM	1	1	19.3	20.0	19.4	2.5	20.5
		256QAM	1	1	17.4	18.1	17.4	4.5	18.5
	CP-OFDM	QPSK	1	1	20.3	20.9	20.2	1.5	21.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)				
					342500	349000	355500	MPR	Tune-up Limit
					1712.5 MHz	1745 MHz	1777.5 MHz		
					1712.5 MHz	1745 MHz	1777.5 MHz		
5 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1	21.8	22.5	21.8	0.0	23.0
			1	13	21.7	22.5	21.8	0.0	23.0
			1	23	21.8	22.5	21.8	0.0	23.0
			12	0	21.2	22.0	21.3	0.5	22.5
			12	6	21.8	22.5	21.8	0.0	23.0
			12	13	21.3	22.0	21.3	0.5	22.5
			25	0	21.2	22.0	21.3	0.5	22.5
			1	1	21.7	22.4	21.7	0.0	23.0
		QPSK	1	13	21.7	21.4	21.7	0.0	23.0
			1	23	21.8	22.5	21.7	0.0	23.0
			12	0	20.8	21.5	20.8	1.0	22.0
			12	6	21.8	22.5	21.8	0.0	23.0
			12	13	20.8	21.5	20.8	1.0	22.0
			25	0	20.8	21.5	20.8	1.0	22.0
		16QAM	1	1	20.8	21.5	20.8	1.0	22.0
		64QAM	1	1	19.4	20.0	19.3	2.5	20.5
		256QAM	1	1	17.6	17.8	17.5	4.5	18.5
	CP-OFDM	QPSK	1	1	20.3	21.0	20.2	1.5	21.5

2. Reduced power

NR Band n66 (Main Ant.1) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Reduced Average Power (dBm)					Reduced Average Power (dBm)				
					Hotspot back-off					Proximity sensor back-off				
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					344000 1720 MHz	349000 1745 MHz	354000 1770 MHz			344000 1720 MHz	349000 1745 MHz	354000 1770 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	20.5	20.4	20.2	0.0	21.0	20.6	20.5	20.2	0.0	21.0
			1	53	20.6	20.4	20.3	0.0	21.0	20.7	20.4	20.2	0.0	21.0
			1	104	20.4	20.3	20.2	0.0	21.0	20.6	20.2	20.2	0.0	21.0
			50	0	20.6	20.3	20.3	0.0	21.0	20.7	20.3	20.3	0.0	21.0
			50	25	20.6	20.3	20.3	0.0	21.0	20.5	20.3	20.3	0.0	21.0
			50	54	20.5	20.3	20.3	0.0	21.0	20.5	20.3	20.3	0.0	21.0
		QPSK	100	0	20.5	20.3	20.3	0.0	21.0	20.6	20.3	20.3	0.0	21.0
			1	1	20.4	20.3	20.3	0.0	21.0	20.4	20.4	20.3	0.0	21.0
			1	53	20.4	20.5	20.3	0.0	21.0	20.5	20.6	20.3	0.0	21.0
			1	104	20.3	20.5	20.4	0.0	21.0	20.5	20.5	20.3	0.0	21.0
			50	0	20.4	20.3	20.3	0.0	21.0	20.5	20.4	20.2	0.0	21.0
			50	25	20.4	20.5	20.3	0.0	21.0	20.5	20.5	20.3	0.0	21.0
			50	54	20.4	20.3	20.3	0.0	21.0	20.5	20.3	20.3	0.0	21.0
			100	0	20.3	20.4	20.3	0.0	21.0	20.6	20.3	20.3	0.0	21.0
			16QAM	1	1	20.5	20.1	20.4	0.0	21.0	20.6	20.2	20.4	0.0
64QAM	1	1	20.4	20.4	20.2	0.0	21.0	20.8	20.2	20.1	0.0	21.0		
256QAM	1	1	19.4	19.7	19.6	0.0	21.0	19.8	19.7	19.3	0.0	21.0		
CP-OFDM	QPSK	1	1	20.5	20.3	20.2	0.0	21.0	20.5	20.3	20.2	0.0	21.0	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					343500 1717.5 MHz	349000 1745 MHz	354500 1772.5 MHz			343500 1717.5 MHz	349000 1745 MHz	354500 1772.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	20.5	20.3	20.2	0.0	21.0	20.5	20.3	20.6	0.0	21.0
			1	40	20.4	20.2	20.2	0.0	21.0	20.4	20.2	20.2	0.0	21.0
			1	77	20.4	20.0	20.2	0.0	21.0	20.4	20.0	20.2	0.0	21.0
			36	0	20.5	20.3	20.3	0.0	21.0	20.5	20.3	20.3	0.0	21.0
			36	18	20.5	20.3	20.2	0.0	21.0	20.5	20.3	20.3	0.0	21.0
			36	43	20.5	20.2	20.3	0.0	21.0	20.5	20.2	20.3	0.0	21.0
		QPSK	75	0	20.5	20.3	20.2	0.0	21.0	20.5	20.3	20.3	0.0	21.0
			1	1	20.5	20.4	20.3	0.0	21.0	20.6	20.4	20.3	0.0	21.0
			1	40	20.5	20.3	20.3	0.0	21.0	20.5	20.3	20.3	0.0	21.0
			1	77	20.5	20.1	20.3	0.0	21.0	20.5	20.1	20.3	0.0	21.0
			36	0	20.5	20.3	20.2	0.0	21.0	20.5	20.3	20.2	0.0	21.0
			36	18	20.5	20.3	20.2	0.0	21.0	20.5	20.3	20.2	0.0	21.0
			36	43	20.5	20.2	20.3	0.0	21.0	20.5	20.2	20.3	0.0	21.0
			75	0	20.5	20.3	20.2	0.0	21.0	20.5	20.3	20.2	0.0	21.0
			16QAM	1	1	20.4	20.3	20.3	0.0	21.0	20.6	20.5	20.2	0.0
64QAM	1	1	20.4	20.3	20.5	0.0	21.0	20.5	20.2	20.2	0.0	21.0		
256QAM	1	1	19.2	19.3	19.2	0.0	21.0	19.3	19.3	19.2	0.0	21.0		
CP-OFDM	QPSK	1	1	20.1	20.6	20.3	0.0	21.0	20.2	20.5	20.3	0.0	21.0	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					343000 1715 MHz	349000 1745 MHz	355000 1775 MHz			343000 1715 MHz	349000 1745 MHz	355000 1775 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	20.5	20.3	20.3	0.0	21.0	20.5	20.8	20.3	0.0	21.0
			1	26	20.5	20.4	20.4	0.0	21.0	20.5	20.4	20.3	0.0	21.0
			1	50	20.4	20.2	20.3	0.0	21.0	20.4	20.2	20.2	0.0	21.0
			25	0	20.6	20.3	20.3	0.0	21.0	20.6	20.3	20.3	0.0	21.0
			25	12	20.5	20.3	20.3	0.0	21.0	20.5	20.3	20.3	0.0	21.0
			25	27	20.5	20.3	20.3	0.0	21.0	20.5	20.3	20.3	0.0	21.0
		QPSK	50	0	20.5	20.3	20.3	0.0	21.0	20.5	20.3	20.3	0.0	21.0
			1	1	20.8	20.5	20.4	0.0	21.0	20.8	20.6	20.5	0.0	21.0
			1	26	20.8	20.6	20.4	0.0	21.0	20.8	20.7	20.5	0.0	21.0
			1	50	20.6	20.4	20.4	0.0	21.0	20.6	20.4	20.5	0.0	21.0
			25	0	20.6	20.3	20.3	0.0	21.0	20.5	20.3	20.3	0.0	21.0
			25	12	20.5	20.2	20.3	0.0	21.0	20.5	20.2	20.3	0.0	21.0
			25	27	20.5	20.3	20.3	0.0	21.0	20.5	20.2	20.3	0.0	21.0
			50	0	20.5	20.3	20.3	0.0	21.0	20.5	20.3	20.3	0.0	21.0
			16QAM	1	1	20.7	20.6	20.4	0.0	21.0	20.5	20.6	20.5	0.0
64QAM	1	1	20.4	20.3	20.7	0.0	21.0	20.4	20.5	20.4	0.0	21.0		
256QAM	1	1	19.3	19.6	19.2	0.0	21.0	19.5	19.3	19.7	0.0	21.0		
CP-OFDM	QPSK	1	1	20.3	20.5	20.3	0.0	21.0	20.3	20.5	20.5	0.0	21.0	
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					342500 1712.5 MHz	349000 1745 MHz	355500 1777.5 MHz			342500 1712.5 MHz	349000 1745 MHz	355500 1777.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	20.5	20.3	20.4	0.0	21.0	20.5	20.3	20.4	0.0	21.0
			1	13	20.4	20.2	20.3	0.0	21.0	20.5	20.2	20.3	0.0	21.0
			1	23	20.5	20.2	20.4	0.0	21.0	20.5	20.2	20.4	0.0	21.0
			12	0	20.5	20.4	20.4	0.0	21.0	20.5	20.3	20.4	0.0	21.0
			12	6	20.6	20.3	20.4	0.0	21.0	20.5	20.2	20.4	0.0	21.0
			12	13	20.5	20.3	20.4	0.0	21.0	20.5	20.2	20.3	0.0	21.0
		QPSK	25	0	20.6	20.2	20.4	0.0	21.0	20.6	20.2	20.4	0.0	21.0
			1	1	20.7	20.6	20.5	0.0	21.0	20.8	20.5	20.5	0.0	21.0
			1	13	20.7	20.5	20.4	0.0	21.0	20.7	20.4	20.4	0.0	21.0
			1	23	20.7	20.5	20.3	0.0	21.0	20.7	20.4	20.4	0.0	21.0
			12	0	20.6	20.3	20.3	0.0	21.0	20.5	20.3	20.4	0.0	21.0
			12	6	20.5	20.3	20.4	0.0	21.0	20.5	20.2	20.4	0.0	21.0
			12	13	20.6	20.2	20.4	0.0	21.0	20.5	20.2	20.4	0.0	21.0
			25	0	20.5	20.3	20.3	0.0	21.0	20.5	20.2	20.3	0.0	21.0
			16QAM	1	1	20.3	20.4	20.6	0.0	21.0	20.6	20.4	20.4	0.0
64QAM	1	1	20.4	20.6	20.5	0.0	21.0	20.4	20.7	20.3	0.0	21.0		
256QAM	1	1	19.5	19.6	19.4	0.0	21.0	19.5	19.6	19.6	0.0	21.0		
CP-OFDM	QPSK	1	1	20.5	20.5	20.4	0.0	21.0	20.4	20.5	20.4	0.0	21.0	

NR Band n66 (Main Ant.3) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Reduced Average Power (dBm)					
					RCV back-off			MPR	Tune-up Limit	
					Measured Pwr (dBm)					
					344000 1720 MHz	349000 1745 MHz	354000 1770 MHz			
20 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1	17.9	18.3	18.2	0.0	19.0	
			1	53	18.0	18.4	17.8	0.0	19.0	
			1	104	18.0	18.5	17.9	0.0	19.0	
			50	0	17.9	18.4	18.0	0.0	19.0	
			50	25	18.1	18.4	17.8	0.0	19.0	
			50	54	18.1	18.5	17.9	0.0	19.0	
		QPSK	100	0	18.0	18.5	17.8	0.0	19.0	
			1	1	17.8	18.3	18.1	0.0	19.0	
			1	53	17.9	18.3	17.8	0.0	19.0	
			1	104	17.9	18.4	17.8	0.0	19.0	
			50	0	17.8	18.4	18.0	0.0	19.0	
			50	25	17.9	18.5	17.8	0.0	19.0	
		16QAM	50	54	17.9	18.5	17.9	0.0	19.0	
			100	0	17.9	18.4	17.8	0.0	19.0	
			1	1	17.8	18.4	18.1	0.0	19.0	
			64QAM	1	1	17.7	18.1	18.0	0.0	19.0
			256QAM	1	1	17.2	17.8	17.7	0.5	18.5
			CP-OFDM	QPSK	1	1	17.7	18.3	17.9	0.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	
RCV back-off										
343500 1717.5 MHz	349000 1745 MHz	354500 1772.5 MHz								
15 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1	17.8	18.4	17.9	0.0	19.0	
			1	40	17.8	18.4	17.6	0.0	19.0	
			1	77	17.9	18.5	17.8	0.0	19.0	
			36	0	17.8	18.4	17.8	0.0	19.0	
			36	18	17.9	18.4	17.7	0.0	19.0	
			36	43	17.9	18.5	17.8	0.0	19.0	
		QPSK	75	0	17.9	18.4	17.7	0.0	19.0	
			1	1	17.7	18.4	17.8	0.0	19.0	
			1	40	17.8	18.4	17.6	0.0	19.0	
			1	77	17.9	18.4	17.7	0.0	19.0	
			36	0	17.8	18.4	17.8	0.0	19.0	
			36	18	17.8	18.4	17.8	0.0	19.0	
		16QAM	36	43	17.9	18.5	17.8	0.0	19.0	
			75	0	17.9	18.4	17.7	0.0	19.0	
			1	1	17.8	18.5	18.0	0.0	19.0	
			64QAM	1	1	17.7	18.4	17.8	0.0	19.0
			256QAM	1	1	17.4	17.9	17.5	0.5	18.5
			CP-OFDM	QPSK	1	1	17.7	18.5	17.8	0.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	
RCV back-off										
343000 1715 MHz	349000 1745 MHz	355000 1775 MHz								
10 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1	17.8	18.5	17.8	0.0	19.0	
			1	26	17.8	18.5	17.8	0.0	19.0	
			1	50	17.9	18.6	17.8	0.0	19.0	
			25	0	17.8	18.4	17.7	0.0	19.0	
			25	12	17.8	18.4	17.8	0.0	19.0	
			25	27	17.8	18.5	17.8	0.0	19.0	
		QPSK	50	0	17.8	18.5	17.8	0.0	19.0	
			1	1	17.7	18.4	17.7	0.0	19.0	
			1	26	17.8	18.4	17.7	0.0	19.0	
			1	50	17.8	18.5	17.8	0.0	19.0	
			25	0	17.8	18.5	17.7	0.0	19.0	
			25	12	17.8	18.5	17.8	0.0	19.0	
		16QAM	25	27	17.9	18.5	17.8	0.0	19.0	
			50	0	17.8	18.5	17.8	0.0	19.0	
			1	1	17.8	18.5	17.8	0.0	19.0	
			64QAM	1	1	17.8	18.4	17.7	0.0	19.0
			256QAM	1	1	17.4	18.0	17.5	0.5	18.5
			CP-OFDM	QPSK	1	1	17.7	18.6	17.8	0.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	
RCV back-off										
342500 1712.5 MHz	349000 1745 MHz	355500 1777.5 MHz								
5 MHz	DFT-s-OFDM	$\pi/2$ BPSK	1	1	17.8	18.4	17.8	0.0	19.0	
			1	13	17.7	18.5	17.7	0.0	19.0	
			1	23	17.8	18.4	17.8	0.0	19.0	
			12	0	17.7	18.4	17.7	0.0	19.0	
			12	6	17.7	18.5	17.7	0.0	19.0	
			12	13	17.8	18.5	17.8	0.0	19.0	
		QPSK	25	0	17.7	18.4	17.8	0.0	19.0	
			1	1	17.7	18.3	17.7	0.0	19.0	
			1	13	17.6	18.4	17.6	0.0	19.0	
			1	23	17.8	18.4	17.7	0.0	19.0	
			12	0	17.7	18.4	17.7	0.0	19.0	
			12	6	17.7	18.5	17.8	0.0	19.0	
		16QAM	12	13	17.8	18.5	17.8	0.0	19.0	
			25	0	17.7	18.4	17.8	0.0	19.0	
			1	1	17.7	18.4	17.8	0.0	19.0	
			64QAM	1	1	17.8	18.5	17.8	0.0	19.0
			256QAM	1	1	17.4	17.8	17.2	0.5	18.5
			CP-OFDM	QPSK	1	1	17.8	18.4	17.7	0.0

9.5. Wi-Fi 2.4 GHz (DTS Band)

Normal WLAN output power results

Antenna	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
					Max. Average Power			Reduced Average Power		
					Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
WiFi 2.4G SISO Ant.1	802.11b	1 Mbps	1	2412.0	18.7	19.0	Yes	15.9	17.0	Yes
			6	2437.0	18.2			15.7		
			11	2462.0	18.6			16.1		
			12	2467.0	Not Required	17.0	No		17.0	No
			13	2472.0		6.0			6.0	
WiFi 2.4G SISO Ant.2	802.11b	1 Mbps	1	2412.0	18.0	19.0	Yes	15.4	17.0	Yes
			6	2437.0	17.5			15.8		
			11	2462.0	17.9			16.5		
			12	2467.0	Not Required	17.0	No		17.0	No
			13	2472.0		6.0			6.0	
WiFi 2.4G MIMO Ant.1	802.11g	6 Mbps	1	2412.0	14.7	16.0	Yes		16.0	
			2	2417.0	16.2			15.1		
			6	2437.0	16.7			15.5		
			11	2462.0	16.4	14.0	No	15.1	17.0	Yes
			12	2467.0	Not Required	3.0			14.0	
	802.11n	6.5 Mbps	1	2412.0	Not Required	16.0	No	Not Required	16.0	No
			2	2417.0						
			6	2437.0						
			11	2462.0						
			12	2467.0						
	802.11ax	7.3 Mbps	1	2412.0	Not Required	15.0	No	Not Required	15.0	No
			2	2417.0						
			6	2437.0						
			11	2462.0						
			12	2467.0						
WiFi 2.4G MIMO Ant.2	802.11g	6 Mbps	1	2412.0	15.0	16.0	Yes		16.0	
			2	2417.0	16.9			15.7		
			6	2437.0	16.9			16.0		
			11	2462.0	16.9	14.0	No	15.5	17.0	Yes
			12	2467.0	Not Required	3.0			14.0	
	802.11n	6.5 Mbps	1	2412.0	Not Required	16.0	No	Not Required	16.0	No
			2	2417.0						
			6	2437.0						
			11	2462.0						
			12	2467.0						
	802.11ax	7.3 Mbps	1	2412.0	Not Required	15.0	No	Not Required	15.0	No
			2	2417.0						
			6	2437.0						
			11	2462.0						
			12	2467.0						

Note(s):

- SAR is not required for 802.11g/n modes when the adjusted SAR for 802.11b is < 1.2 W/kg.
- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11n/g/ax mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.
- Additionally, SAR is not required for Channels 12 and 13 because the tune-up limit and the measured output power for these two channels are no greater than those for the default test channels. Refer to §6.3.
- Normal WLAN MIMO SAR & RSDB WLAN SAR were additionally evaluated for satisfy to simultaneous transmission analysis.

RSDB WLAN SISO output power results

Antenna	Mode	Data Rate	Ch #	Freq. (MHz)	RSDB WLAN mode power						
					Max. Average Power			Reduced Average Power			
					Meas. Avg Pw r (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Meas. Avg Pw r (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	
WiFi 2.4G SISO Ant.1	802.11b	1 Mbps	1	2412.0	15.9	17.0	Yes	12.8	14.0	Yes	
			6	2437.0	15.7			12.5			
			11	2462.0	16.1			12.9			
			12	2467.0		17.0	No		14.0	No	
			13	2472.0		6.0			6.0		
WiFi 2.4G SISO Ant.2	802.11b	1 Mbps	1	2412.0	15.4	17.0	Yes	13.3	14.0	Yes	
			6	2437.0	15.8			12.9			
			11	2462.0	16.5			13.3			
			12	2467.0		17.0	No		14.0	No	
			13	2472.0		6.0			6.0		
WiFi 2.4G MIMO Ant.1	802.11g	6 Mbps	1	2412.0		16.0	Yes	12.1	14.0	Yes	
			2	2417.0	15.1	17.0					
			6	2437.0	15.5			12.8			
			11	2462.0	15.1	No	12.1	No			
			12	2467.0			14.0		3.0		
	13	2472.0		3.0							
	802.11n	6.5 Mbps	1	2412.0	Not Required	16.0	No	Not Required	14.0	No	
			2	2417.0		17.0					
			6	2437.0		16.0					
			11	2462.0		14.0				14.0	No
			13	2472.0		3.0			3.0		
	802.11ax	7.3 Mbps	1	2412.0	Not Required	15.0	No	Not Required	14.0	No	
			2	2417.0		17.0					
			6	2437.0		14.0					14.0
			11	2462.0		3.0				3.0	
13			2472.0								
WiFi 2.4G MIMO Ant.2	802.11g	6 Mbps	1	2412.0		16.0	Yes	13.0	14.0	Yes	
			2	2417.0	15.7	17.0					
			6	2437.0	16.0			13.0			
			11	2462.0	15.5	No	12.6	No			
			12	2467.0			14.0		14.0		
	13	2472.0		3.0	3.0						
	802.11n	6.5 Mbps	1	2412.0	Not Required	16.0	No	Not Required	14.0	No	
			2	2417.0		17.0					
			6	2437.0		16.0					
			11	2462.0		14.0				14.0	No
			13	2472.0		3.0			3.0		
	802.11ax	7.3 Mbps	1	2412.0	Not Required	15.0	No	Not Required	14.0	No	
			2	2417.0		17.0					
			6	2437.0		14.0					14.0
			11	2462.0		3.0				3.0	
13			2472.0								

Note(s):

- SAR is not required for 802.11g/n modes when the adjusted SAR for 802.11b is < 1.2 W/kg.
- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11n/g/ax mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.
- Additionally, SAR is not required for Channels 12 and 13 because the tune-up limit and the measured output power for these two channels are no greater than those for the default test channels. Refer to §6.3.
- Normal WLAN MIMO SAR & RSDB WLAN SAR were additionally evaluated for satisfy to simultaneous transmission analysis.

9.6. Wi-Fi 5GHz (U-NII Bands)

Normal WLAN MIMO Ant.1 output power Results

Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
					Max. Average Power			Reduced Average Power		
					Avg Pw r (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pw r (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5.3 (U-NII 2A)	802.11a	6 Mbps	52	5260	16.3	18.0	Yes	Not Required	15.0	No
			56	5280	16.7					
			60	5300	17.0					
			64	5320	16.9					
	802.11n (HT20)	6.5 Mbps	52	5260	Not Required	18.0	No	Not Required	15.0	No
			56	5280						
			60	5300						
	802.11n (HT40)	13.5 Mbps	54	5270	Not Required	17.0	No	Not Required	15.0	No
			62	5310		15.0				
	802.11ac (VHT20)	6.5 Mbps	52	5260	Not Required	18.0	No	Not Required	15.0	No
			56	5280						
			60	5300						
	802.11ac (VHT40)	13.5 Mbps	54	5270	Not Required	17.0	No	Not Required	15.0	No
			62	5310		15.0				
	802.11ac (VHT80)	29.3 Mbps	58	5290	Not Required	15.0	No	13.7	15.0	Yes
	802.11ax (HE20)	7.3 Mbps	52	5260	Not Required	18.0	No	Not Required	15.0	No
			56	5280						
			60	5300						
64			5320							
802.11ax (HE40)	14.6 Mbps	54	5270	Not Required	17.0	No	Not Required	15.0	No	
		62	5310		15.0					
802.11ax (HE80)	36.0 Mbps	58	5290	Not Required	15.0	No	Not Required	15.0	No	
U-NII 1 & U-NII 2A	802.11ac (VHT160)	58.5 Mbps	50	5250	Not Required	15.0	No	13.7	15.0	No
	802.11ax (HE160)	72.0 Mbps	50	5250	Not Required	15.0	No	Not Required	15.0	No
5.5 (U-NII 2C)	802.11a	6 Mbps	100	5500	16.7	18.0	Yes	Not Required	15.0	No
			120	5600	16.6					
			124	5620	16.8					
			144	5720	16.6					
	802.11n (HT20)	6.5 Mbps	100	5500	Not Required	18.0	No	Not Required	15.0	No
			120	5600						
			124	5620						
			144	5720						
	802.11n (HT40)	13.5 Mbps	102	5510	Not Required	16.0	No	Not Required	15.0	No
			118	5590		17.0				
			126	5630						
			142	5710						
	802.11ac (VHT20)	6.5 Mbps	100	5500	Not Required	18.0	No	Not Required	15.0	No
			120	5600						
			124	5620						
			144	5720						
	802.11ac (VHT40)	13.5 Mbps	102	5510	Not Required	16.0	No	Not Required	15.0	No
			118	5590		17.0				
			126	5630						
			142	5710						
	802.11ac (VHT80)	29.3 Mbps	106	5530	Not Required	16.0	No	14.2	15.0	Yes
			122	5610				14.5		
			138	5690				13.5		
	802.11ac (VHT160)	58.5 Mbps	114	5570	Not Required	14.0	No	Not Required	14.0	No
	802.11ax (HE20)	7.3 Mbps	100	5500	Not Required	18.0	No	Not Required	15.0	No
			120	5600						
			124	5620						
			144	5720						
802.11ax (HE40)	14.6 Mbps	102	5510	Not Required	16.0	No	Not Required	15.0	No	
		118	5590		17.0					
		126	5630							
		142	5710							
802.11ax (HE80)	36.0 Mbps	106	5530	Not Required	16.0	No	Not Required	15.0	No	
		122	5610							
		138	5690							
802.11ax (HE160)	72.0 Mbps	114	5570	Not Required	14.0	No	Not Required	14.0	No	

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.

Normal WLAN MIMO Ant.1 output power Results (Continued)

Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
					Max. Average Power			Reduced Average Power		
					Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5.8 (U-NII 3)	802.11a	6 Mbps	149	5745	16.8	18.0	Yes	Not Required	15.0	No
			157	5785	16.8					
			165	5825	16.9					
	802.11n (HT20)	6.5 Mbps	149	5745	Not Required	18.0	No	Not Required	15.0	No
			157	5785						
			165	5825						
	802.11n (HT40)	13.5 Mbps	151	5755	Not Required	17.0	No	Not Required	15.0	No
			159	5795						
	802.11ac (VHT20)	6.5 Mbps	149	5745	Not Required	18.0	No	Not Required	15.0	No
			157	5785						
			165	5825						
	802.11ac (VHT40)	13.5 Mbps	151	5755	Not Required	17.0	No	Not Required	15.0	No
			159	5795						
	802.11ac (VHT80)	29.3 Mbps	155	5775	Not Required	16.0	No	14.8	15.0	Yes
5.9 (U-NII 4)	802.11a	6 Mbps	169	5845	16.8	18.0	Yes	Not Required	15.0	No
			173	5865	16.8					
			177	5885	17.0					
	802.11n (HT20)	6.5 Mbps	169	5845	Not Required	18.0	No	Not Required	15.0	No
			173	5865						
			177	5885						
	802.11n (HT40)	13.5 Mbps	167	5835	Not Required	17.0	No	Not Required	15.0	No
			175	5875						
	802.11ac (VHT20)	6.5 Mbps	169	5845	Not Required	18.0	No	Not Required	15.0	No
			173	5865						
			177	5885						
	802.11ac (VHT40)	13.5 Mbps	167	5835	Not Required	17.0	No	Not Required	15.0	No
			175	5875						
	802.11ac (VHT80)	29.3 Mbps	171	5855	Not Required	16.0	No	14.7	15.0	Yes
U-NII 3 & U-NII 4	802.11ax (HE20)	7.3 Mbps	169	5845	Not Required	18.0	No	Not Required	15.0	No
			173	5865						
			177	5885						
	802.11ax (HE40)	14.6 Mbps	167	5835	Not Required	17.0	No	Not Required	15.0	No
			175	5875						
	802.11ax (HE80)	36.0 Mbps	171	5855	Not Required	16.0	No	Not Required	15.0	No
U-NII 3 & U-NII 4	802.11ac (VHT160)	58.5 Mbps	163	5815	Not Required	15.0	No	13.5	15.0	No
	802.11ax (HE160)	72.0 Mbps	163	5815	Not Required	15.0	No	Not Required	15.0	No

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.

Normal WLAN MIMO Ant.2 output power Results

Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
					Max. Average Power			Reduced Average Power		
					Avg Pw r (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pw r (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5.3 (UNII 2A)	802.11a	6 Mbps	52	5260	17.3	18.0	Yes	Not Required	15.0	No
			56	5280	17.5					
			60	5300	17.7					
			64	5320	17.5					
	802.11n (HT20)	6.5 Mbps	52	5260	Not Required	18.0	No	Not Required	15.0	No
			56	5280						
			60	5300						
			64	5320						
	802.11n (HT40)	13.5 Mbps	54	5270	Not Required	17.0	No	Not Required	15.0	No
			62	5310		15.0				
	802.11ac (VHT20)	6.5 Mbps	52	5260	Not Required	18.0	No	Not Required	15.0	No
			56	5280						
			60	5300						
			64	5320						
	802.11ac (VHT40)	13.5 Mbps	54	5270	Not Required	17.0	No	Not Required	15.0	No
			62	5310		15.0				
	802.11ac (VHT80)	29.3 Mbps	58	5290	Not Required	15.0	No	14.0	15.0	Yes
	802.11ax (HE20)	7.3 Mbps	52	5260	Not Required	18.0	No	Not Required	15.0	No
56			5280							
60			5300							
64			5320							
802.11ax (HE40)	14.6 Mbps	54	5270	Not Required	17.0	No	Not Required	15.0	No	
		62	5310		15.0					
802.11ax (HE80)	30.6 Mbps	58	5290	Not Required	15.0	No	Not Required	15.0	No	
U-NII 1 & U-NII 2A	802.11ac (VHT160)	58.5 Mbps	50	5250	Not Required	15.0	Yes	14.1	15.0	Yes
	802.11ax (HE160)	72.0 Mbps	50	5250	Not Required	15.0	Yes	Not Required	15.0	Yes
5.5 (U-NII 2C)	802.11a	6 Mbps	100	5500	16.9	18.0	Yes	Not Required	15.0	No
			120	5600	17.2					
			124	5620	17.4					
			144	5720	17.7					
	802.11n (HT20)	6.5 Mbps	100	5500	Not Required	18.0	No	Not Required	15.0	No
			120	5600						
			124	5620						
			144	5720						
	802.11n (HT40)	13.5 Mbps	102	5510	Not Required	16.0	No	Not Required	15.0	No
			118	5590		17.0				
			126	5630						
			142	5710						
	802.11ac (VHT20)	6.5 Mbps	100	5500	Not Required	18.0	No	Not Required	15.0	No
			120	5600						
			124	5620						
			144	5720						
	802.11ac (VHT40)	13.5 Mbps	102	5510	Not Required	16.0	No	Not Required	15.0	No
			118	5590		17.0				
			126	5630						
			142	5710						
	802.11ac (VHT80)	29.3 Mbps	106	5530	Not Required	16.0	No	14.8	15.0	Yes
			122	5610				15.0		
			138	5690				14.6		
	802.11ac (VHT160)	58.5 Mbps	114	5570	Not Required	14.0	Yes	Not Required	14.0	Yes
	802.11ax (HE20)	7.3 Mbps	100	5500	Not Required	18.0	No	Not Required	15.0	No
			120	5600						
			124	5620						
			144	5720						
802.11ax (HE40)	14.6 Mbps	102	5510	Not Required	16.0	No	Not Required	15.0	No	
		118	5590		17.0					
		126	5630							
		142	5710							
802.11ax (HE80)	30.6 Mbps	106	5530	Not Required	16.0	No	Not Required	15.0	No	
		122	5610							
		138	5690							
802.11ax (HE160)	72.0 Mbps	114	5570	Not Required	14.0	Yes	Not Required	14.0	Yes	

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.

Normal WLAN MIMO Ant.2 output power Results (Continued)

Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
					Max. Average Power			Reduced Average Power		
					Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5.8 (U-NII 3)	802.11a	6 Mbps	149	5745	16.7	18.0	Yes	Not Required	15.0	No
			157	5785	16.8					
			165	5825	16.7					
	802.11n (HT20)	6.5 Mbps	149	5745	Not Required	18.0	No	Not Required	15.0	No
			157	5785						
			165	5825						
	802.11n (HT40)	13.5 Mbps	151	5755	Not Required	17.0	No	Not Required	15.0	No
			159	5795						
			149	5745						
	802.11ac (VHT20)	6.5 Mbps	157	5785	Not Required	18.0	No	Not Required	15.0	No
			165	5825						
			151	5755						
	802.11ac (VHT40)	13.5 Mbps	159	5795	Not Required	17.0	No	Not Required	15.0	No
5.9 (U-NII 4)	802.11ac (VHT80)	29.3 Mbps	155	5775	Not Required	16.0	No	14.2	15.0	Yes
			149	5745						
			157	5785						
	802.11ax (HE20)	7.3 Mbps	165	5825	Not Required	18.0	No	Not Required	15.0	No
			151	5755						
			159	5795						
	802.11ax (HE40)	14.6 Mbps	155	5775	Not Required	17.0	No	Not Required	15.0	No
			149	5745						
			157	5785						
	802.11ax (HE80)	30.6 Mbps	155	5775	Not Required	16.0	No	Not Required	15.0	No
			149	5745						
			157	5785						
U-NII 3 & U-NII 4	802.11a	6 Mbps	169	5845	16.7	18.0	Yes	Not Required	15.0	No
			173	5865	16.8					
			177	5885	16.9					
	802.11n (HT20)	6.5 Mbps	169	5845	Not Required	18.0	No	Not Required	15.0	No
			173	5865						
			177	5885						
	802.11n (HT40)	13.5 Mbps	167	5835	Not Required	17.0	No	Not Required	15.0	No
			175	5875						
			169	5845						
	802.11ac (VHT20)	6.5 Mbps	173	5865	Not Required	18.0	No	Not Required	15.0	No
			177	5885						
			167	5835						
	802.11ac (VHT40)	13.5 Mbps	175	5875	Not Required	17.0	No	Not Required	15.0	No
			171	5855						
			169	5845						
	802.11ac (VHT80)	29.3 Mbps	173	5865	Not Required	16.0	No	14.0	15.0	Yes
			177	5885						
			167	5835						
	802.11ax (HE20)	7.3 Mbps	175	5875	Not Required	17.0	No	Not Required	15.0	No
			169	5845						
			173	5865						
	802.11ax (HE40)	14.6 Mbps	177	5885	Not Required	18.0	No	Not Required	15.0	No
			171	5855						
			167	5835						
	802.11ax (HE80)	30.6 Mbps	171	5855	Not Required	16.0	No	Not Required	15.0	No
			169	5845						
			173	5865						
U-NII 3 & U-NII 4	802.11ac (VHT160)	58.5 Mbps	163	5815	Not Required	15.0	Yes	13.8	15.0	Yes
			163	5815						

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.

RSDB WLAN MIMO Ant 1 & 2 output power Results

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	RSDB WLAN mode power		
						Max. Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.1	5.3 (UNII 2A)	802.11a	6 Mbps	52	5260	Not Required	14.0	No
				56	5280			
				60	5300			
				64	5320			
		802.11n (HT20)	6.5 Mbps	52	5260	Not Required	14.0	No
				56	5280			
				60	5300			
				64	5320			
		802.11n (HT40)	13.5 Mbps	54	5270	Not Required	14.0	No
				52	5260			
				56	5280			
				60	5300			
		802.11ac (VHT20)	6.5 Mbps	54	5270	Not Required	14.0	No
				52	5260			
				56	5280			
				60	5300			
		802.11ac (VHT40)	13.5 Mbps	54	5270	Not Required	14.0	No
				52	5260			
				56	5280			
				60	5300			
		802.11ac (VHT80)	29.3 Mbps	58	5290	Not Required	14.0	Yes
				52	5260			
				56	5280			
				60	5300			
	U-NII 1 & U-NII 2A	802.11ax (HE20)	7.3 Mbps	54	5270	Not Required	14.0	No
				52	5260			
				56	5280			
				60	5300			
		802.11ax (HE40)	14.6 Mbps	54	5270	Not Required	14.0	No
				52	5260			
				56	5280			
				60	5300			
		802.11ax (HE80)	30.6 Mbps	58	5290	Not Required	14.0	No
				52	5260			
				56	5280			
				60	5300			
		802.11ac (VHT160)	58.5 Mbps	50	5250	Not Required	14.0	No
				52	5260			
				54	5270			
				58	5290			
	5.5 (U-NII 2C)	802.11a	6 Mbps	100	5500	Not Required	14.0	No
				120	5600			
				144	5720			
				144	5720			
		802.11n (HT20)	6.5 Mbps	100	5500	Not Required	14.0	No
				120	5600			
				124	5620			
				144	5720			
		802.11n (HT40)	13.5 Mbps	102	5510	Not Required	14.0	No
				118	5590			
				126	5630			
				142	5710			
		802.11ac (VHT20)	6.5 Mbps	100	5500	Not Required	14.0	No
				120	5600			
				124	5620			
				144	5720			
		802.11ac (VHT40)	13.5 Mbps	102	5510	Not Required	14.0	No
				118	5590			
				126	5630			
				142	5710			
		802.11ac (VHT80)	29.3 Mbps	106	5530	Not Required	14.0	Yes
				122	5610			
				138	5690			
				138	5690			
		802.11ac (VHT160)	58.5 Mbps	114	5570	Not Required	14.0	No
				100	5500			
				120	5600			
				144	5720			
		802.11ax (HE20)	7.3 Mbps	102	5510	Not Required	14.0	No
				118	5590			
				126	5630			
				142	5710			
		802.11ax (HE40)	14.6 Mbps	106	5530	Not Required	14.0	No
				122	5610			
				138	5690			
				138	5690			
		802.11ax (HE80)	30.6 Mbps	114	5570	Not Required	14.0	No
				100	5500			
				120	5600			
				144	5720			
		802.11ax (HE160)	72.0 Mbps	114	5570	Not Required	14.0	No
				100	5500			
				120	5600			
				144	5720			

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.
- RSDB WLAN MIMO SAR were additionally evaluated for satisfy to simultaneous transmission analysis.

RSDB WLAN MIMO Ant 1 & 2 output power Results (Continued)

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	RSDB WLAN mode power		
						Max. Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.1	5.8 (U-NII 3)	802.11a	6 Mbps	149	5745	Not Required	14.0	No
				157	5785			
				165	5825			
		802.11n (HT20)	6.5 Mbps	149	5745	Not Required	14.0	No
				157	5785			
				165	5825			
		802.11n (HT40)	13.5 Mbps	151	5755	Not Required	14.0	No
				159	5795			
				149	5745			
		802.11ac (VHT20)	6.5 Mbps	157	5785	Not Required	14.0	No
				165	5825			
				151	5755			
		802.11ac (VHT40)	13.5 Mbps	159	5795	Not Required	14.0	No
				159	5795			
				155	5775			
		802.11ac (VHT80)	29.3 Mbps	155	5775	13.6	14.0	Yes
				149	5745			
				157	5785			
	5.9 (U-NII 4)	802.11ax (HE20)	7.3 Mbps	165	5825	Not Required	14.0	No
				151	5755			
				159	5795			
		802.11ax (HE40)	14.6 Mbps	159	5795	Not Required	14.0	No
				155	5775			
				169	5845			
		802.11a	6 Mbps	169	5845	Not Required	14.0	No
				173	5865			
				177	5885			
		802.11n (HT20)	6.5 Mbps	169	5845	Not Required	14.0	No
				173	5865			
				177	5885			
		802.11n (HT40)	13.5 Mbps	167	5835	Not Required	14.0	No
				175	5875			
				169	5845			
		802.11ac (VHT20)	6.5 Mbps	173	5865	Not Required	14.0	No
				177	5885			
				167	5835			
		802.11ac (VHT40)	13.5 Mbps	175	5875	Not Required	14.0	No
				175	5875			
				171	5855			
		802.11ac (VHT80)	29.3 Mbps	169	5845	Not Required	14.0	Yes
				173	5865			
				177	5885			
		802.11ax (HE20)	7.3 Mbps	173	5865	Not Required	14.0	No
				177	5885			
				167	5835			
		802.11ax (HE40)	14.6 Mbps	175	5875	Not Required	14.0	No
				175	5875			
				171	5855			
	U-NII 3 & U-NII 4	802.11ac (VHT160)	58.5 Mbps	163	5815	12.9	14.0	No
				163	5815			
5GHz MIMO Ant.2	5.8 (U-NII 3)	802.11a	6 Mbps	149	5745	Not Required	14.0	No
				157	5785			
				165	5825			
		802.11n (HT20)	6.5 Mbps	149	5745	Not Required	14.0	No
				157	5785			
				165	5825			
		802.11n (HT40)	13.5 Mbps	151	5755	Not Required	14.0	No
				159	5795			
				149	5745			
		802.11ac (VHT20)	6.5 Mbps	157	5785	Not Required	14.0	No
				165	5825			
				151	5755			
		802.11ac (VHT40)	13.5 Mbps	159	5795	Not Required	14.0	No
				159	5795			
				155	5775			
		802.11ac (VHT80)	29.3 Mbps	155	5775	13.1	14.0	Yes
				149	5745			
				157	5785			
	5.9 (U-NII 4)	802.11ax (HE20)	7.3 Mbps	165	5825	Not Required	14.0	No
				151	5755			
				159	5795			
		802.11ax (HE40)	14.6 Mbps	159	5795	Not Required	14.0	No
				155	5775			
				169	5845			
		802.11a	6 Mbps	169	5845	Not Required	14.0	No
				173	5865			
				177	5885			
		802.11n (HT20)	6.5 Mbps	169	5845	Not Required	14.0	No
				173	5865			
				177	5885			
		802.11n (HT40)	13.5 Mbps	167	5835	Not Required	14.0	No
				175	5875			
				169	5845			
		802.11ac (VHT20)	6.5 Mbps	173	5865	Not Required	14.0	No
				177	5885			
				167	5835			
		802.11ac (VHT40)	13.5 Mbps	175	5875	Not Required	14.0	No
				175	5875			
				171	5855			
		802.11ac (VHT80)	29.3 Mbps	169	5845	Not Required	14.0	Yes
				173	5865			
				177	5885			
		802.11ax (HE20)	7.3 Mbps	173	5865	Not Required	14.0	No
				177	5885			
				167	5835			
		802.11ax (HE40)	14.6 Mbps	175	5875	Not Required	14.0	No
				175	5875			
				171	5855			
	U-NII 3 & U-NII 4	802.11ac (VHT160)	58.5 Mbps	163	5815	13.0	14.0	No
				163	5815			

Note(s):

- For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
- When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.
- When the specified maximum output power is the same for both UNII band I and UNII band 2A, begin SAR measurement in UNII band 2A; and if the highest reported SAR for UNII band 2A is
 - ≤ 1.2 W/kg, SAR is not required for UNII band I
 - > 1.2 W/kg, both bands should be tested independently for SAR.
- RSDB WLAN MIMO SAR were additionally evaluated for satisfy to simultaneous transmission analysis.

9.7. Bluetooth

Bluetooth SISO Measured Results

Band (GHz)	Antenna	Mode	Ch #	Freq. (MHz)	Maximum Average Power (dBm)		Reduced Average Power (dBm) RCV Back-off	
					Meas Pwr	Tune-up Limit	Meas Pwr	Tune-up Limit
2.4	BT SISO Ant.1	GFSK	0	2402	17.6	19.0	13.4	15.0
			39	2441	17.3		14.2	
			78	2480	17.7		14.1	
		EDR	0	2402	17.0	18.0	13.8	15.0
			39	2441	16.5		13.9	
			78	2480	17.2		14.0	
		LE	0	2402	15.0	17.0	13.7	15.0
			19	2440	15.8		13.7	
			39	2480	15.1		13.9	
2.4	BT SISO Ant.2	GFSK	0	2402	17.3	19.0	14.6	15.0
			39	2441	17.0		13.3	
			78	2480	17.7		14.6	
		EDR	0	2402	15.9	18.0	13.6	15.0
			39	2441	15.4		13.4	
			78	2480	16.4		14.2	
		LE	0	2402	15.7	17.0	13.2	15.0
			19	2440	15.7		14.2	
			39	2480	15.0		14.0	

Bluetooth MIMO Measured Results

Band (GHz)	Antenna	Mode	Ch #	Freq. (MHz)	Maximum Average Power (dBm)	
					Meas Pwr	Tune-up Limit
2.4	BT Ant.1	GFSK	0	2402	11.3	12.0
			39	2441	11.2	
			78	2480	11.2	
		EDR	0	2402	8.7	10.0
			39	2441	9.4	
			78	2480	9.4	
		LE	0	2402	8.9	9.5
			19	2440	9.3	
			39	2480	8.9	
2.4	BT Ant.2	GFSK	0	2402	11.0	12.0
			39	2441	11.0	
			78	2480	10.6	
		EDR	0	2402	8.3	10.0
			39	2441	7.5	
			78	2480	7.4	
		LE	0	2402	8.3	9.5
			19	2440	7.9	
			39	2480	7.7	

Note(s):

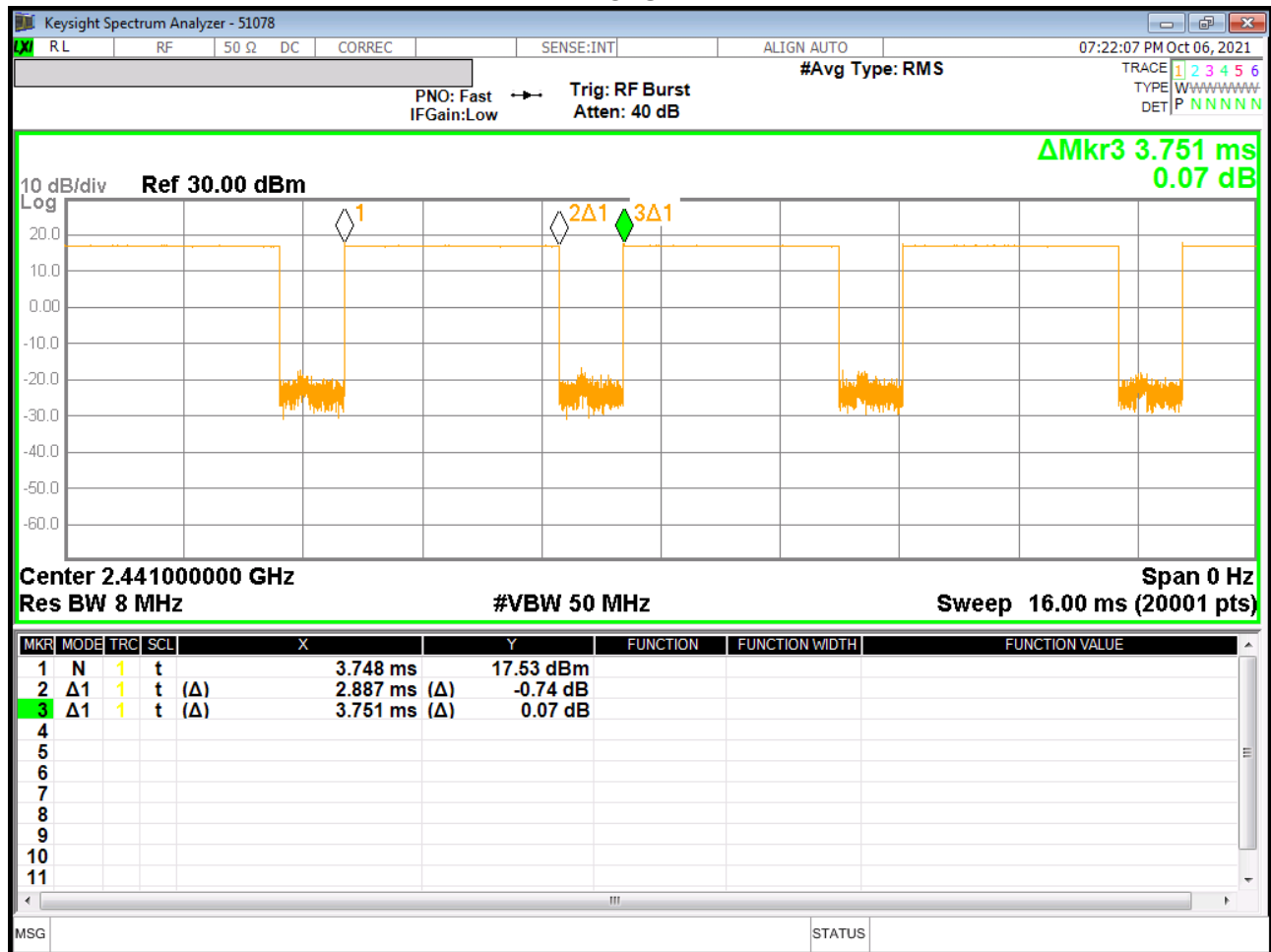
For All exposure conditions, SAR test is evaluated at GFSK mode in Bluetooth using maximum power condition.

Bluetooth (Continued)**Duty Factor Measured Results**

Mode	Type	T on (ms)	Period (ms)	Duty Cycle	Crest Factor (1/duty cycle)
GFSK	DH5	2.887	3.751	77.0%	1.30

Duty Cycle plots

GFSK



10. Measured and Reported (Scaled) SAR Results

SAR Test Reduction criteria are as follows:

- Reported SAR(W/kg) for WWAN= Measured SAR *Tune-up Scaling Factor
- Reported SAR(W/kg) for Wi-Fi and Bluetooth= Measured SAR * Tune-up scaling factor * Duty Cycle scaling factor
- Duty Cycle scaling factor = 1 / Duty cycle (%)

KDB 447498 D01 General RF Exposure Guidance:

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

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

KDB 648474 D04 Handset SAR:

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

KDB 648474 D04 Handset SAR (Phablet Only):

For smart phones, with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm.

When hotspot mode does not apply, 10-g extremity SAR is required for all surfaces and edges with an antenna located at ≤ 25 mm From that surface or edge in direct contact with a flat phantom, to address interactive hand use exposure conditions. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; However, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, Including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.

Additional 1-g SAR testing at 5 mm is not required when hotspot mode 10-g extremity SAR is not required for the surfaces and edges; since all 1-g reported SAR < 1.2 W/kg.

KDB 941225 D01 SAR test for 3G devices:

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

KDB 941225 D05 SAR for LTE Devices:

SAR test reduction is applied using the following criteria:

- Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel.
- When the reported SAR is > 0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.
- Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are > 0.8 W/kg. Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation < 1.45 W/kg.
- Testing for 16-QAM modulation is not required because the reported SAR for QPSK is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of QPSK.
- Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.
- For LTE bands that do not support at least three non-overlapping channels in certain channel bandwidths, test the available non-overlapping channels instead. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing; therefore, the requirement for H, M and L channels may not fully apply.

KDB 248227 D01 SAR meas for 802.11:

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

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

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

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

10.1. GSM 850**Original model**

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	GPRS 4 Slots	N/A	0	Left Touch	190	836.6	29.0	27.7	0.135	0.181	
					Left Tilt	190	836.6	29.0	27.7	0.072	0.097	
					Right Touch	190	836.6	29.0	27.7	0.200	0.269	1
					Right Tilt	190	836.6	29.0	27.7	0.081	0.109	
	Body-worn	GPRS 4 Slots	N/A	15	Rear	190	836.6	29.0	27.7	0.227	0.305	2
					Front	190	836.6	29.0	27.7	0.175	0.235	
	Hotspot	GPRS 4 Slots	N/A	10	Rear	190	836.6	29.0	27.7	0.458	0.615	3
					Front	190	836.6	29.0	27.7	0.203	0.273	
					Edge 2	190	836.6	29.0	27.7	0.260	0.349	
					Edge 3	190	836.6	29.0	27.7	0.164	0.220	
					Edge 4	190	836.6	29.0	27.7	0.171	0.230	

10.2. GSM 1900**Original model**

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	GPRS 2 Slots	Off	0	Left Touch	661	1880.0	29.5	27.7	0.084	0.125	4
					Left Tilt	661	1880.0	29.5	27.7	0.031	0.047	
					Right Touch	661	1880.0	29.5	27.7	0.041	0.062	
					Right Tilt	661	1880.0	29.5	27.7	0.041	0.061	
	Body-worn	GPRS 2 Slots	Off	15	Rear	661	1880.0	29.5	27.7	0.265	0.397	5
					Front	661	1880.0	29.5	27.7	0.193	0.289	
	Hotspot	GPRS 3 Slots	Off	10	Rear	661	1880.0	29.5	27.7	0.342	0.516	
					Front	661	1880.0	29.5	27.7	0.265	0.400	
					Edge 2	661	1880.0	29.5	27.7	0.041	0.062	
					Edge 3	512	1850.2	29.5	27.7	0.679	1.035	
						661	1880.0	29.5	27.7	0.640	0.966	
						810	1909.8	29.5	27.6	0.727	1.124	6
					Edge 4	661	1880.0	29.5	27.7	0.032	0.049	

10.3. WCDMA Band II**Original model**

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	Rel 99 RMC	Off	0	Left Touch	9400	1880.0	25.0	23.2	0.064	0.096	7
					Left Tilt	9400	1880.0	25.0	23.2	0.026	0.038	
					Right Touch	9400	1880.0	25.0	23.2	0.049	0.074	
					Right Tilt	9400	1880.0	25.0	23.2	0.030	0.044	
	Body-worn	Rel 99 RMC	Off	15	Rear	9400	1880.0	25.0	23.2	0.439	0.659	8
					Front	9400	1880.0	25.0	23.2	0.324	0.486	
	Hotspot	Rel 99 RMC	On	10	Rear	9400	1880.0	21.0	19.6	0.435	0.599	
					Front	9400	1880.0	21.0	19.6	0.357	0.492	
					Edge 2	9400	1880.0	21.0	19.6	0.047	0.065	
					Edge 3	9262	1852.4	21.0	19.8	0.766	1.008	
						9400	1880.0	21.0	19.6	0.781	1.076	
					Edge 4	9538	1907.6	21.0	20.0	0.919	1.161	9
						9400	1880.0	21.0	19.6	0.050	0.068	
Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Product Specific 10-g	Rel 99 RMC	Off	13	Rear	9400	1880.0	25.0	23.2	0.395	0.593	
				9	Front	9400	1880.0	25.0	23.2	0.510	0.766	
				13	Edge 3	9400	1880.0	25.0	23.2	0.838	1.258	
			On	0	Rear	9400	1880.0	21.0	19.9	1.090	1.393	
				0	Front	9400	1880.0	21.0	19.9	0.994	1.270	
				0	Edge 3	9400	1880.0	21.0	19.9	1.170	1.495	10

10.4. WCDMA Band IV**Original model**

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	Rel 99 RMC	Off	0	Left Touch	1413	1732.6	24.5	23.3	0.131	0.174	11
					Left Tilt	1413	1732.6	24.5	23.3	0.044	0.058	
					Right Touch	1413	1732.6	24.5	23.3	0.080	0.107	
					Right Tilt	1413	1732.6	24.5	23.3	0.068	0.091	
	Body-worn	Rel 99 RMC	Off	15	Rear	1413	1732.6	24.5	23.3	0.555	0.736	12
					Front	1413	1732.6	24.5	23.3	0.445	0.590	
	Hotspot	Rel 99 RMC	On	10	Rear	1413	1732.6	21.0	20.0	0.440	0.548	
					Front	1413	1732.6	21.0	20.0	0.335	0.417	
					Edge 2	1413	1732.6	21.0	20.0	0.036	0.045	
					Edge 3	1312	1712.4	21.0	19.8	0.759	1.011	
						1413	1732.6	21.0	20.0	0.816	1.017	
					Edge 4	1513	1752.6	21.0	19.9	0.921	1.175	13
						1413	1732.6	21.0	20.0	0.074	0.092	
Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		10-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Product Specific 10-g	Rel 99 RMC	Off	13	Rear	1413	1732.6	24.5	23.3	0.421	0.559	
				13	Edge 3	1413	1732.6	24.5	23.3	0.802	1.064	
			On	0	Rear	1413	1732.6	21.0	20.6	1.470	1.617	
				0	Edge 3	1413	1732.6	21.0	20.6	1.520	1.672	14

10.5. WCDMA Band V

Original model

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
								Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	Rel 99 RMC	N/A	0	Left Touch	4183	836.6	25.5	24.7	0.195	0.237	
					Left Tilt	4183	836.6	25.5	24.7	0.124	0.151	
					Right Touch	4183	836.6	25.5	24.7	0.202	0.246	15
					Right Tilt	4183	836.6	25.5	24.7	0.119	0.145	
	Body-worn	Rel 99 RMC	N/A	15	Rear	4183	836.6	25.5	24.7	0.290	0.353	16
					Front	4183	836.6	25.5	24.7	0.177	0.215	
	Hotspot	Rel 99 RMC	N/A	10	Rear	4183	836.6	25.5	24.7	0.604	0.734	17
					Front	4183	836.6	25.5	24.7	0.263	0.320	
					Edge 2	4183	836.6	25.5	24.7	0.275	0.334	
					Edge 3	4183	836.6	25.5	24.7	0.209	0.254	
					Edge 4	4183	836.6	25.5	24.7	0.143	0.174	

10.6. LTE Band 2 (20MHz Bandwidth)

Original model

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 3 Ant.	Head	QPSK	On	0	Left Touch	19100	1900.0	1	0	17.5	17.1	0.431	0.471	
								50	0	17.5	16.9	0.413	0.480	
					Left Tilt	19100	1900.0	1	0	17.5	17.1	0.602	0.659	18
								50	0	17.5	16.9	0.534	0.620	
					Right Touch	19100	1900.0	1	0	17.5	17.1	0.260	0.284	
								50	0	17.5	16.9	0.252	0.293	
					Right Tilt	19100	1900.0	1	0	17.5	17.1	0.355	0.388	
								50	0	17.5	16.9	0.327	0.380	
	Body-worn	QPSK	Off	15	Rear	19100	1900.0	1	0	22.5	22.2	0.184	0.196	19
								50	0	21.5	21.2	0.144	0.155	
					Front	19100	1900.0	1	0	22.5	22.2	0.100	0.106	
								50	0	21.5	21.2	0.076	0.082	
	Hotspot	QPSK	On	10	Rear	19100	1900.0	1	0	19.5	18.4	0.151	0.193	
								50	0	19.5	18.4	0.137	0.176	
					Front	19100	1900.0	1	0	19.5	18.4	0.114	0.146	
								50	0	19.5	18.4	0.108	0.139	
					Edge 1	19100	1900.0	1	0	19.5	18.4	0.339	0.434	20
								50	0	19.5	18.4	0.316	0.406	
					Edge 2	19100	1900.0	1	0	19.5	18.4	0.057	0.072	
								50	0	19.5	18.4	0.052	0.066	

Note(s):

For LTE Band 2 of Main 3 Ant., it works only UL CA inter-band configuration.

10.7. LTE Band 4 (20MHz Bandwidth)

Original model

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 3 Ant.	Head	QPSK	On	0	Left Touch	20175	1732.5	1	0	17.5	17.1	0.542	0.592	
								50	0	17.5	16.8	0.568	0.663	
					Left Tilt	20175	1732.5	1	0	17.5	17.1	0.681	0.743	
								50	0	17.5	16.8	0.682	0.796	21
					Right Touch	20175	1732.5	1	0	17.5	17.1	0.316	0.345	
								50	0	17.5	16.8	0.302	0.352	
	Body-worn	QPSK	Off	15	Rear	20175	1732.5	1	0	22.5	22.4	0.215	0.221	
								50	0	21.5	21.2	0.233	0.251	22
					Front	20175	1732.5	1	0	22.5	22.4	0.159	0.163	
								50	0	21.5	21.2	0.127	0.137	
	Hotspot	QPSK	On	10	Rear	20175	1732.5	1	0	19.5	19.0	0.306	0.344	
								50	0	19.5	18.7	0.302	0.361	
					Front	20175	1732.5	1	0	19.5	19.0	0.241	0.271	
								50	0	19.5	18.7	0.231	0.276	
					Edge 1	20175	1732.5	1	0	19.5	19.0	0.467	0.525	
								50	0	19.5	18.7	0.481	0.574	23
	Edge 2							1	0	19.5	19.0	0.081	0.091	
								50	0	19.5	18.7	0.078	0.093	

Variant model (Version 2)

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 3 Ant.	Body-worn	QPSK	Off	15	Rear	20175	1732.5	1	0	22.5	22.4	0.333	0.342	24
								50	0	21.5	21.2	0.265	0.286	
					Front	20175	1732.5	1	0	22.5	22.4	0.265	0.272	
								50	0	21.5	21.2	0.199	0.215	

Note(s):

For LTE Band 4 of Main 3 Ant., it works only UL CA inter-band configuration.

10.8. LTE Band 12 (10MHz Bandwidth)

Original model

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	QPSK	NA	0	Left Touch	23095	707.5	1	0	25.5	24.3	0.121	0.159	
								25	12	24.5	22.6	0.074	0.114	
					Left Tilt	23095	707.5	1	0	25.5	24.3	0.076	0.100	
								25	12	24.5	22.6	0.046	0.071	
					Right Touch	23095	707.5	1	0	25.5	24.3	0.130	0.171	25
								25	12	24.5	22.6	0.088	0.135	
					Right Tilt	23095	707.5	1	0	25.5	24.3	0.068	0.089	
								25	12	24.5	22.6	0.046	0.071	
	Body-worn	QPSK	NA	15	Rear	23095	707.5	1	0	25.5	24.3	0.234	0.308	26
								25	12	24.5	22.6	0.152	0.233	
					Front	23095	707.5	1	0	25.5	24.3	0.210	0.277	
								25	12	24.5	22.6	0.139	0.213	
	Hotspot	QPSK	NA	10	Rear	23095	707.5	1	0	25.5	24.3	0.317	0.418	27
								25	12	24.5	22.6	0.208	0.319	
					Front	23095	707.5	1	0	25.5	24.3	0.230	0.303	
								25	12	24.5	22.6	0.151	0.231	
					Edge 2	23095	707.5	1	0	25.5	24.3	0.225	0.296	
								25	12	24.5	22.6	0.150	0.230	
					Edge 3	23095	707.5	1	0	25.5	24.3	0.095	0.125	
								25	12	24.5	22.6	0.070	0.107	
					Edge 4	23095	707.5	1	0	25.5	24.3	0.188	0.248	
								25	12	24.5	22.6	0.125	0.192	

10.9. LTE Band 13 (10MHz Bandwidth)

Original model

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	QPSK	NA	0	Left Touch	23230	782.0	1	0	25.5	24.8	0.162	0.189	
								25	0	24.5	22.7	0.084	0.127	
					Left Tilt	23230	782.0	1	0	25.5	24.8	0.091	0.105	
								25	0	24.5	22.7	0.052	0.079	
					Right Touch	23230	782.0	1	0	25.5	24.8	0.175	0.204	28
								25	0	24.5	22.7	0.100	0.151	
					Right Tilt	23230	782.0	1	0	25.5	24.8	0.079	0.092	
								25	0	24.5	22.7	0.040	0.061	
	Body-worn	QPSK	NA	15	Rear	23230	782.0	1	0	25.5	24.8	0.265	0.308	29
								25	0	24.5	22.7	0.137	0.208	
					Front	23230	782.0	1	0	25.5	24.8	0.228	0.265	
								25	0	24.5	22.7	0.122	0.185	
	Hotspot	QPSK	NA	10	Rear	23230	782.0	1	0	25.5	24.8	0.564	0.657	30
								25	0	24.5	22.7	0.323	0.491	
					Front	23230	782.0	1	0	25.5	24.8	0.277	0.322	
								25	0	24.5	22.7	0.156	0.237	
					Edge 2	23230	782.0	1	0	25.5	24.8	0.312	0.363	
								25	0	24.5	22.7	0.169	0.257	
					Edge 3	23230	782.0	1	0	25.5	24.8	0.195	0.227	
								25	0	24.5	22.7	0.107	0.163	
					Edge 4	23230	782.0	1	0	25.5	24.8	0.153	0.178	
								25	0	24.5	22.7	0.080	0.122	

10.10. LTE Band 25 (20MHz Bandwidth)**Original model**

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	QPSK	Off	0	Left Touch	26590	1905.0	1	0	25.0	23.8	0.129	0.170	31
								50	0	24.0	22.5	0.076	0.107	
					Left Tilt	26590	1905.0	1	0	25.0	23.8	0.053	0.070	
								50	0	24.0	22.5	0.027	0.038	
					Right Touch	26590	1905.0	1	0	25.0	23.8	0.077	0.102	
								50	0	24.0	22.5	0.049	0.069	
					Right Tilt	26590	1905.0	1	0	25.0	23.8	0.055	0.072	
								50	0	24.0	22.5	0.033	0.047	
	Body-worn	QPSK	Off	15	Rear	26590	1905.0	1	0	25.0	23.8	0.459	0.606	32
								50	0	24.0	22.5	0.317	0.451	
					Front	26590	1905.0	1	0	25.0	23.8	0.256	0.338	
								50	0	24.0	22.5	0.164	0.233	
	Hotspot	QPSK	On	10	Rear	26590	1905.0	1	0	22.0	21.1	0.362	0.445	
								50	0	22.0	21.0	0.362	0.452	
					Front	26590	1905.0	1	0	22.0	21.1	0.360	0.442	
								50	0	22.0	21.0	0.364	0.454	
					Edge 2	26590	1905.0	1	0	22.0	21.1	0.032	0.040	
								50	0	22.0	21.0	0.033	0.041	
					Edge 3	26140	1860.0	1	0	22.0	20.9	0.708	0.919	
								50	0	22.0	20.9	0.685	0.891	
						26365	1882.5	1	0	22.0	20.5	0.653	0.921	
								50	0	22.0	20.6	0.674	0.928	
					26590	1905.0	1905.0	1	0	22.0	21.1	0.960	1.179	
								50	0	22.0	21.0	1.030	1.285	33
					Edge 4	26590	1905.0	100	0	22.0	21.0	0.957	1.209	
								1	0	22.0	21.1	0.067	0.082	
								50	0	22.0	21.0	0.063	0.079	
Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		10-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Product Specific 10-g	QPSK	Off	13	Edge 3	26590	1905.0	1	0	25.0	23.8	0.851	1.124	
			On	0	Edge 3	26140	1860.0	50	0	24.0	22.5	0.554	0.788	
								1	0	22.0	20.7	1.630	2.180	
								50	0	22.0	20.8	1.690	2.236	34
								1	0	22.0	20.6	1.580	2.191	
						26365	1882.5	50	0	22.0	20.6	1.610	2.235	
								1	0	22.0	21.0	1.690	2.139	
								50	0	22.0	21.0	1.700	2.152	
								100	0	22.0	20.9	1.670	2.134	

10.11. LTE Band 26 (15MHz Bandwidth)**Original model**

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	QPSK	NA	0	Left Touch	26865	831.5	1	0	25.5	24.6	0.194	0.238	
								36	0	24.5	22.6	0.113	0.175	
					Left Tilt	26865	831.5	1	0	25.5	24.6	0.118	0.145	
								36	0	24.5	22.6	0.070	0.108	
					Right Touch	26865	831.5	1	0	25.5	24.6	0.217	0.266	35
								36	0	24.5	22.6	0.126	0.195	
					Right Tilt	26865	831.5	1	0	25.5	24.6	0.109	0.134	
								36	0	24.5	22.6	0.063	0.098	
	Body-worn	QPSK	NA	15	Rear	26865	831.5	1	0	25.5	24.6	0.245	0.301	36
								36	0	24.5	22.6	0.155	0.240	
					Front	26865	831.5	1	0	25.5	24.6	0.237	0.291	
								36	0	24.5	22.6	0.147	0.228	
	Hotspot	QPSK	NA	10	Rear	26865	831.5	1	0	25.5	24.6	0.496	0.609	37
								36	0	24.5	22.6	0.315	0.488	
					Front	26865	831.5	1	0	25.5	24.6	0.280	0.344	
								36	0	24.5	22.6	0.175	0.271	
					Edge 2	26865	831.5	1	0	25.5	24.6	0.370	0.454	
								36	0	24.5	22.6	0.232	0.359	
					Edge 3	26865	831.5	1	0	25.5	24.6	0.232	0.285	
								36	0	24.5	22.6	0.149	0.231	
					Edge 4	26865	831.5	1	0	25.5	24.6	0.149	0.183	
								36	0	24.5	22.6	0.090	0.139	

10.12. LTE Band 41 (20MHz Bandwidth)**Original model****LTE Band 41 Power Class 3**

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.	
										Tune-up limit	Meas.	Meas.	Scaled		
Main 2 Ant.	Head	QPSK	Off	0	Left Touch	41055	2636.5	1	0	25.0	23.9	0.087	0.113	38	
				Left Tilt	41055	2636.5	1	0	25.0	23.9	0.045	0.058			
	Right Touch	41055	2636.5	1	0	25.0	23.9	0.043	0.055						
	Right Tilt	41055	2636.5	1	0	25.0	23.9	0.047	0.061						
	Body-w orn	QPSK	Off	15	Rear	41055	2636.5	1	0	25.0	23.9	0.202	0.263	39	
Hotspot	QPSK	On	10	Rear	41055	2636.5	1	0	23.0	22.4	0.324	0.376			
				Front	41055	2636.5	1	0	23.0	22.4	0.176	0.204			
				Edge 3	41055	2636.5	1	0	23.0	22.4	0.463	0.537			
Edge 4	41055	2636.5	1	0	23.0	22.4	0.370	0.429							

LTE Band 41 Power Class 2

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 2 Ant.	Head	QPSK	Off	0	Left Touch	41055	2636.5	1	0	26.5	25.1	0.068	0.093	
	Body-worn	QPSK	Off	15	Rear	41055	2636.5	1	0	26.5	25.1	0.138	0.189	
	Hotspot	QPSK	On	10	Edge 3	41055	2636.5	50	0	24.0	22.9	0.225	0.290	

From May 2017 TCB workshop, SAR tested were performed using Power Class 3. SAR test for Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination. According to the highest time averaged power for UL-DL configurations, configuration # 1 with duty cycle 43.3% is used for Power Class 2 SAR test.

Additional SAR testing for Power Class 2 is not required when:

- The reported SAR vs. output power can be linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 or 3.5 W/kg (1-g or 10-g respectively)

Reported SAR vs. Output power linearly scaled

Antenna	RF Exposure Conditions	Power Class 2				Power Class 3				PC2 linearly scaled Reported SAR (W/kg)	Linearly scaled (<10%)
		Duty Cycle (%)	Tune-up Power (dBm)	Fram Avg. Power (dBm)	Reported SAR (W/kg)	Duty Cycle	Tune-up Power (dBm)	Fram Avg. Power (dBm)	Reported SAR (W/kg)		
Main 2 Ant.	Head	43.3	26.5	193.4	0.093	63.3	25.0	200.2	0.113	0.109	-14.8
	Body-worn	43.3	26.5	193.4	0.189	63.3	25.0	200.2	0.263	0.254	-25.6
	Hotspot	43.3	24.0	108.8	0.290	63.3	23.0	126.3	0.581	0.500	-42.0

Note(s):

SAR test for Power Class 2 is not required base on the reported SAR < 1.4 or 3.5 W/kg (1-g or 10-g respectively) and reported SAR vs. output power linearly scaled < 10%.

10.13. LTE Band 66 (20MHz Bandwidth)**Original model**

Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	QPSK	Off	0	Left Touch	132072	1720.0	1	49	25.0	24.1	0.136	0.169	41
								50	0	24.0	22.4	0.079	0.115	
					Left Tilt	132072	1720.0	1	49	25.0	24.1	0.055	0.068	
								50	0	24.0	22.4	0.032	0.047	
					Right Touch	132072	1720.0	1	49	25.0	24.1	0.078	0.097	
								50	0	24.0	22.4	0.046	0.066	
					Right Tilt	132072	1720.0	1	49	25.0	24.1	0.053	0.066	
								50	0	24.0	22.4	0.032	0.046	
	Body-worn	QPSK	Off	15	Rear	132072	1720.0	1	49	25.0	24.1	0.605	0.751	42
								50	0	24.0	22.4	0.370	0.537	
					Front	132072	1720.0	1	49	25.0	24.1	0.362	0.450	
								50	0	24.0	22.4	0.245	0.356	
	Hotspot	QPSK	On	10	Rear	132072	1720.0	1	49	21.5	20.7	0.566	0.686	
								50	0	21.5	20.8	0.547	0.645	
					Front	132072	1720.0	1	49	21.5	20.7	0.333	0.404	
								50	0	21.5	20.8	0.355	0.418	
					Edge 2	132072	1720.0	1	49	21.5	20.7	0.039	0.047	
								50	0	21.5	20.8	0.041	0.049	
					Edge 3	132072	1720.0	1	49	21.5	20.7	0.708	0.858	
								50	0	21.5	20.8	0.753	0.888	
						132322	1745.0	1	49	21.5	20.6	0.866	1.063	
								50	0	21.5	20.8	0.867	1.030	
						100		1	49	21.5	20.7	0.864	1.042	
								50	0	21.5	20.7	0.864	1.042	
					Edge 3	132572	1770.0	1	49	21.5	20.5	0.872	1.087	43
								50	0	21.5	20.6	0.863	1.068	
					Edge 4	132072	1720.0	1	49	21.5	20.7	0.077	0.094	
								50	0	21.5	20.8	0.081	0.095	
Antenna	RF Exposure Conditions	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		10-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Product Specific 10-g	QPSK	Off	13	Rear	132072	1720.0	1	49	25.0	24.1	0.403	0.500	
				13	Edge 3	132072	1720.0	1	49	25.0	24.1	0.724	0.899	
								50	0	24.0	22.4	0.481	0.699	
			On	0	Rear	132072	1720.0	1	49	21.5	20.6	1.250	1.547	
					Edge 3	132072	1720.0	1	49	21.5	20.6	1.450	1.795	
								50	0	21.5	20.6	1.600	1.952	44

10.14. NR Band n5 (20MHz Bandwidth)**Original model**

Antenna	RF Exposure Conditions	Modulation	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	
Main 1 Ant.	Head	DFT-s-OFDM	QPSK	N/A	0	Left Touch	167300	836.5	1	53	25.0	24.6	0.143	0.156	
									50	25	25.0	24.6	0.144	0.158	
						Left Tilt	167300	836.5	1	53	25.0	24.6	0.093	0.102	
									50	25	25.0	24.6	0.085	0.094	
						Right Touch	167300	836.5	1	53	25.0	24.6	0.216	0.236	45
									50	25	25.0	24.6	0.189	0.207	
						Right Tilt	167300	836.5	1	53	25.0	24.6	0.070	0.076	
									50	25	25.0	24.6	0.077	0.084	
		CP-OFDM	QPSK	N/A	0	Right Touch	167300	836.5	1	1	23.5	22.9	0.116	0.132	
	Body-worn	DFT-s-OFDM	QPSK	N/A	15	Rear	167300	836.5	1	53	25.0	24.6	0.218	0.238	
									50	25	25.0	24.6	0.217	0.238	46
						Front	167300	836.5	1	53	25.0	24.6	0.138	0.151	
									50	25	25.0	24.6	0.163	0.179	
		CP-OFDM	QPSK	N/A	15	Rear	167300	836.5	1	1	23.5	22.9	0.112	0.128	
	Hotspot	DFT-s-OFDM	QPSK	N/A	10	Rear	167300	836.5	1	53	25.0	24.6	0.448	0.489	
									50	25	25.0	24.6	0.499	0.547	47
						Front	167300	836.5	1	53	25.0	24.6	0.283	0.309	
									50	25	25.0	24.6	0.306	0.335	
						Edge 2	167300	836.5	1	53	25.0	24.6	0.241	0.263	
									50	25	25.0	24.6	0.249	0.273	
						Edge 3	167300	836.5	1	53	25.0	24.6	0.194	0.212	
									50	25	25.0	24.6	0.197	0.216	
						Edge 4	167300	836.5	1	53	25.0	24.6	0.073	0.079	
									50	25	25.0	24.6	0.073	0.080	
		CP-OFDM	QPSK	N/A	10	Rear	167300	836.5	1	1	23.5	22.9	0.296	0.338	

Note(s):

CP-OFDM mode were evaluated at worst configuration of DFT-s-OFDM in each exposure conditions.

10.15. NR Band n66 (20MHz Bandwidth)**Original model****Main 1 Ant. SAR results**

Antenna	RF Exposure Conditions	Modulation	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Pow er (dBm)		1-g SAR (W/kg)		Plot No.	
											Tune-up limit	Meas.	Meas.	Scaled		
Main 1 Ant.	Head	DFT-s-OFDM	QPSK	Off	0	Left Touch	349000	1745.0	1	53	25.0	24.1	0.140	0.172	48	
						50	25	25.0	23.9	0.138	0.178					
						Left Tilt	349000	1745.0	1	53	25.0	24.1	0.066	0.081		
						50	25	25.0	23.9	0.065	0.084					
						Right Touch	349000	1745.0	1	53	25.0	24.1	0.095	0.117		
						50	25	25.0	23.9	0.085	0.109					
						Right Tilt	349000	1745.0	1	53	25.0	24.1	0.059	0.072		
						50	25	25.0	23.9	0.063	0.081					
		CP-OFDM	QPSK	Off	0	Left Touch	349000	1745.0	1	1	23.5	22.3	0.103	0.135		
		Body-worn	DFT-s-OFDM	QPSK	Off	15	Rear	349000	1745.0	1	53	25.0	24.1	0.494	0.608	49
	50						25	25.0	23.9	0.530	0.684					
	Front						349000	1745.0	1	53	25.0	24.1	0.434	0.534		
	50						25	25.0	23.9	0.425	0.549					
	CP-OFDM		QPSK	Off	15	Rear	349000	1745.0	1	1	23.5	22.3	0.390	0.509		
	Hotspot		DFT-s-OFDM	QPSK	On	10	Rear	349000	1745.0	1	53	21.0	20.5	0.580	0.654	
		50					25	21.0	20.5	0.545	0.605					
		Front					349000	1745.0	1	53	21.0	20.5	0.420	0.474		
		50					25	21.0	20.5	0.500	0.555					
		Edge 2					349000	1745.0	1	53	21.0	20.5	0.016	0.018		
		50					25	21.0	20.5	0.048	0.053					
		Edge 3					344000	1720.0	1	53	21.0	20.4	0.867	0.986		
							50	25	21.0	20.4	0.836	0.951				
							349000	1745.0	1	53	21.0	20.5	0.944	1.064	50	
								50	25	21.0	20.5	0.918	1.019			
								100	0	21.0	20.4	0.884	1.009			
								1	53	21.0	20.3	0.886	1.035			
		354000					1770.0	50	25	21.0	20.3	0.887	1.046			
							1	53	21.0	20.3	0.887	1.046				
							Edge 4	349000	1745.0	1	53	21.0	20.5	0.044	0.050	
							50	25	21.0	20.5	0.101	0.112				
		CP-OFDM	QPSK	On	10	Edge 3	349000	1745.0	1	1	21.0	20.3	0.747	0.888		
		Antenna	RF Exposure Conditions	Modulation	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Pow er (dBm)		10-g SAR (W/kg)	
	Main 1 Ant.	Product Specific 10-g	DFT-s-OFDM	QPSK	Off	13	Rear	349000	1745.0	1	53	25.0	24.1	0.460	0.566	
							50	25	25.0	23.9	0.466	0.602				
9						Front	349000	1745.0	50	25	25.0	23.9	0.563	0.727		
						1	53	25.0	24.1	0.931	1.145					
13						Edge 3	349000	1745.0	50	25	25.0	23.9	0.973	1.256		
						1	53	25.0	24.1	0.931	1.145					
On					0	Rear	349000	1745.0	1	53	21.0	20.6	1.180	1.300		
						50	25	21.0	20.5	1.150	1.283					
						Front	349000	1745.0	50	25	21.0	20.5	1.060	1.183		
						1	53	21.0	20.6	1.540	1.696					
						Edge 3	349000	1745.0	50	25	21.0	20.5	1.630	1.819	51	
						1	53	21.0	20.5	1.630	1.819					
			CP-OFDM	QPSK	On	0	Edge 3	349000	1745.0	1	1	21.0	20.3	1.510	1.758	

Original model**Main 3 Ant. SAR results**

Antenna	RF Exposure Conditions	Modulation	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.			
											Tune-up limit	Meas.	Meas.	Scaled				
Main 3 Ant.	Head	DFT-s-OFDM	QPSK	On	0	Left Touch	344000	1720.0	1	104	19.0	17.9	0.748	0.959				
									50	25	19.0	17.9	0.718	0.923				
							349000	1745.0	1	104	19.0	18.4	0.782	0.894				
									50	25	19.0	18.5	0.791	0.892				
									100	0	19.0	18.4	0.825	0.949				
							354000	1770.0	1	104	19.0	17.8	0.682	0.901				
						50			25	19.0	17.8	0.631	0.826					
						Left Tilt	344000	1720.0	1	104	19.0	17.9	0.904	1.159	52			
									50	25	19.0	17.9	0.865	1.112				
							349000	1745.0	1	104	19.0	18.4	0.886	1.013				
									50	25	19.0	18.5	0.864	0.974				
									100	0	19.0	18.4	0.844	0.971				
							354000	1770.0	1	104	19.0	17.8	0.839	1.109				
						50			25	19.0	17.8	0.864	1.131					
						Right Touch	349000	1745.0	1	104	19.0	18.4	0.471	0.538				
									50	25	19.0	18.5	0.400	0.451				
						Right Tilt	344000	1720.0	50	25	19.0	17.9	0.571	0.734				
									1	104	19.0	18.4	0.650	0.743				
							349000	1745.0	50	25	19.0	18.5	0.818	0.922				
									1	104	19.0	17.8	0.577	0.755				
		354000	1770.0	50	25	19.0	17.8	0.577	0.755									
	344000	1720.0	1	1	19.0	17.7	0.784	1.055										
	Body-worn	DFT-s-OFDM	QPSK	Off	15	Rear	349000	1745.0	1	104	23.0	22.4	0.263	0.303				
									50	25	23.0	22.4	0.283	0.326	53			
						Front	349000	1745.0	1	104	23.0	22.4	0.177	0.204				
									50	25	23.0	22.4	0.239	0.275				
		CP-OFDM	QPSK	Off	15	Rear	349000	1745.0	1	1	21.5	20.8	0.150	0.177				
	Hotspot	DFT-s-OFDM	QPSK	Off	10	Rear	344000	1720.0	50	25	23.0	22.0	0.459	0.577				
									1	104	23.0	22.4	0.555	0.640				
							349000	1745.0	50	25	23.0	22.4	0.715	0.823				
									50	25	23.0	21.8	0.462	0.615				
							Front	349000	1745.0	1	104	23.0	22.4	0.395	0.456			
										50	25	23.0	22.4	0.409	0.471			
						Edge 1	344000	1720.0	1	104	23.0	22.0	0.836	1.048				
									50	25	23.0	22.0	0.862	1.083				
							349000	1745.0	1	104	23.0	22.4	0.926	1.068				
									50	25	23.0	22.4	0.955	1.099	54			
									100	0	22.0	21.4	0.766	0.871				
							354000	1770.0	1	104	23.0	22.0	0.778	0.991				
						50			25	23.0	21.8	0.824	1.096					
						Edge 2	349000	1745.0	1	104	23.0	22.4	0.181	0.209				
									50	25	23.0	22.4	0.191	0.220				
CP-OFDM						QPSK	Off	10	Edge 1	349000	1745.0	1	1	21.5	20.8	0.565	0.665	

Variant model (Version 2)

Antenna	RF Exposure Conditions	Modulation	Mode	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offset	Power (dBm)		1-g SAR (W/kg)		Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	
Main 3 Ant.	Body-worn	DFT-s-OFDM	QPSK	Off	15	Rear	349000	1745.0	1	104	23.0	22.4	0.293	0.338	
									50	25	23.0	22.4	0.316	0.364	55
						Front	349000	1745.0	1	104	23.0	22.4	0.231	0.266	
									50	25	23.0	22.4	0.248	0.285	
		CP-OFDM	QPSK	Off	15	Rear	349000	1745.0	1	1	21.5	20.8	0.260	0.306	

Note(s):

1. CP-OFDM mode were evaluated at worst configuration of DFT-s-OFDM in each exposure conditions.
2. For NR Band n66 of Main 3 Ant., it works only EN-DC scenarios.

10.16. Wi-Fi (DTS Band)**Original model****Normal WLAN 2.4GHz SAR results**

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
WLAN SISO Ant.1	2.4GHz	802.11b 1 Mbps	Head	On	0	Left Touch	11	2462.0	0.107	99.3%	17.0	16.1	0.086	0.107	4	
						Left Tilt	11	2462.0	0.114	99.3%	17.0	16.1	0.082	0.101	1	
						Right Touch	11	2462.0	0.112	99.3%	17.0	16.1	0.077	0.095	4	
						Right Tilt	11	2462.0	0.082	99.3%	17.0	16.1	0.065	0.080	4	
			Body-worn	Off	15	Rear	1	2412.0	0.231	99.3%	19.0	18.7	0.144	0.157	1	
						Front	1	2412.0	0.028	99.3%	19.0	18.7	0.018	0.019	4	
						Rear	1	2412.0	0.642	99.3%	19.0	18.7	0.389	0.423	2	
						Front	1	2412.0	0.052	99.3%	19.0	18.7				
			Hotspot	Off	10	Edge 1	1	2412.0	0.062	99.3%	19.0	18.7	0.041	0.044		
						Edge 4	1	2412.0	0.011	99.3%	19.0	18.7				
WLAN SISO Ant.2	2.4GHz	802.11b 1 Mbps	Head	On	0	Left Touch	11	2462.0	0.585	99.3%	17.0	16.5	0.362	0.406	2	
						Left Tilt	11	2462.0	0.105	99.3%	17.0	16.5	0.070	0.078	4	
						Right Touch	11	2462.0	0.549	99.3%	17.0	16.5	0.315	0.353		
						Right Tilt	11	2462.0	0.113	99.3%	17.0	16.5	0.076	0.086	4	
			Body-worn	Off	15	Rear	1	2412.0	0.211	99.3%	19.0	18.0	0.149	0.187	1	56
						Front	1	2412.0	0.165	99.3%	19.0	18.0				
			Hotspot	Off	10	Rear	1	2412.0	0.382	99.3%	19.0	18.0	0.273	0.343		
						Front	1	2412.0	0.320	99.3%	19.0	18.0				
						Edge 4	1	2412.0	0.480	99.3%	19.0	18.0	0.339	0.426	2	57
WLAN MIMO Ant.1	2.4GHz	802.11g 6 Mbps	Head	On	0	Left Touch	6	2437.0	0.388	96.4%	17.0	15.5	0.311	0.451		
						Left Tilt	6	2437.0	0.185	96.4%	17.0	15.5	0.119	0.173	4	
						Right Touch	6	2437.0	0.679	96.4%	17.0	15.5			2	
						Right Tilt	6	2437.0	0.231	96.4%	17.0	15.5	0.164	0.238	4	
			Body-worn	Off	15	Rear	6	2437.0	0.188	96.4%	18.0	16.7	0.111	0.155	1	
						Front	6	2437.0	0.111	96.4%	18.0	16.7				
			Hotspot	Off	10	Rear	6	2437.0	0.370	96.4%	18.0	16.7	0.202	0.281	1	
						Front	6	2437.0	0.246	96.4%	18.0	16.7			4	
						Edge 1	6	2437.0	0.064	96.4%	18.0	16.7	0.038	0.053	4	
						Edge 4	6	2437.0	0.368	96.4%	18.0	16.7			4	
WLAN MIMO Ant.2	2.4GHz	802.11g 6 Mbps	Head	On	0	Left Touch	6	2437.0	0.388	96.4%	17.0	16.0				
						Left Tilt	6	2437.0	0.185	96.4%	17.0	16.0			4	
						Right Touch	6	2437.0	0.679	96.4%	17.0	16.0	0.481	0.629	2	58
						Right Tilt	6	2437.0	0.231	96.4%	17.0	16.0			4	
			Body-worn	Off	15	Rear	6	2437.0	0.188	96.4%	18.0	16.9	0.105	0.141	1	
						Front	6	2437.0	0.111	96.4%	18.0	16.9				
			Hotspot	Off	10	Rear	6	2437.0	0.370	96.4%	18.0	16.9			1	
						Front	6	2437.0	0.246	96.4%	18.0	16.9	0.151	0.202	4	
						Edge 1	6	2437.0	0.064	96.4%	18.0	16.9			4	
						Edge 4	6	2437.0	0.368	96.4%	18.0	16.9	0.247	0.331	4	

Note(s):

1. When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
2. Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
3. Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
4. Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
5. SAR testing is not required for OFDM mode(s) when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

RSDB WLAN 2.4GHz SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
WLAN SISO Ant.1	2.4GHz	802.11b 1 Mbps	Head	On	0	Left Touch	11	2462.0	0.032	99.3%	14.0	12.9	0.021	0.027	4	
						Left Tilt	11	2462.0	0.032	99.3%	14.0	12.9	0.020	0.026	4	
						Right Touch	11	2462.0	0.068	99.3%	14.0	12.9	0.051	0.066	1	
						Right Tilt	11	2462.0	0.058	99.3%	14.0	12.9	0.043	0.056	4	
			Body-worn	Off	15	Rear	11	2462.0	0.123	99.3%	17.0	16.1	0.077	0.095	1	
						Front	11	2462.0	0.012	99.3%	17.0	16.1				
			Hotspot	Off	10	Rear	11	2462.0	0.345	99.3%	17.0	16.1	0.199	0.247	1	
						Front	11	2462.0	0.026	99.3%	17.0	16.1	0.018	0.023	4	
						Edge 1	11	2462.0	0.029	99.3%	17.0	16.1	0.018	0.023	4	
						Edge 4	11	2462.0	0.009	99.3%	17.0	16.1	0.002	0.002	4	
WLAN SISO Ant.2	2.4GHz	802.11b 1 Mbps	Head	On	0	Left Touch	11	2462.0	0.160	99.3%	14.0	13.3	0.124	0.145	4	
						Left Tilt	11	2462.0	0.036	99.3%	14.0	13.3	0.023	0.027	4	
						Right Touch	11	2462.0	0.258	99.3%	14.0	13.3	0.180	0.211	1	
						Right Tilt	11	2462.0	0.074	99.3%	14.0	13.3	0.049	0.057	4	
			Body-worn	Off	15	Rear	11	2462.0	0.122	99.3%	17.0	16.5	0.087	0.097	1	
						Front	11	2462.0	0.096	99.3%	17.0	16.5				
			Hotspot	Off	10	Rear	11	2462.0	0.253	99.3%	17.0	16.5	0.187	0.210	4	
						Front	11	2462.0	0.191	99.3%	17.0	16.5				
						Edge 4	11	2462.0	0.268	99.3%	17.0	16.5	0.193	0.217	1	
WLAN MIMO Ant.1	2.4GHz	802.11g 6 Mbps	Head	On	0	Left Touch	6	2437.0	0.152	96.4%	14.0	12.8			4	
						Left Tilt	6	2437.0	0.043	96.4%	14.0	12.8	0.028	0.038	4	
						Right Touch	6	2437.0	0.214	96.4%	14.0	12.8			1	
						Right Tilt	6	2437.0	0.067	96.4%	14.0	12.8	0.046	0.063	4	
			Body-worn	Off	15	Rear	6	2437.0	0.153	96.4%	17.0	15.5	0.101	0.147	1	
						Front	6	2437.0	0.096	96.4%	17.0	15.5				
			Hotspot	Off	10	Rear	6	2437.0	0.293	96.4%	17.0	15.5	0.217	0.315	4	
						Front	6	2437.0	0.211	96.4%	17.0	15.5				
						Edge 1	6	2437.0	0.039	96.4%	17.0	15.5				
						Edge 4	6	2437.0	0.368	96.4%	17.0	15.5			1	
WLAN MIMO Ant.2	2.4GHz	802.11g 6 Mbps	Head	On	0	Left Touch	6	2437.0	0.152	96.4%	14.0	13.0	0.102	0.135	4	
						Left Tilt	6	2437.0	0.043	96.4%	14.0	13.0	0.028	0.037	4	
						Right Touch	6	2437.0	0.214	96.4%	14.0	13.0	0.169	0.223	1	
						Right Tilt	6	2437.0	0.067	96.4%	14.0	13.0	0.046	0.061	4	
			Body-worn	Off	15	Rear	6	2437.0	0.153	96.4%	17.0	16.0	0.084	0.110	1	
						Front	6	2437.0	0.096	96.4%	17.0	16.0				
			Hotspot	Off	10	Rear	6	2437.0	0.293	96.4%	17.0	16.0	0.169	0.221	4	
						Front	6	2437.0	0.211	96.4%	17.0	16.0				
						Edge 1	6	2437.0	0.039	96.4%	17.0	16.0				
						Edge 4	6	2437.0	0.368	96.4%	17.0	16.0	0.247	0.323	1	

Note(s):

- When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
- Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
- Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
- Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
- SAR testing is not required for OFDM mode(s) when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
- RSDB WLAN SAR was additionally evaluated to satisfy simultaneous transmission criteria of RSDB configurations.

10.17. Wi-Fi (U-NII Bands)**Original model****Normal U-NII 2A & 2C SAR Results**

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled		
WLAN MIMO Ant.1	5.3 GHz U-NII 2A	802.11ac VHT 80 29.3 Mbps	Head	On	0	Left Touch	58	5290.0	0.422	94.4%	15.0	13.7					4	
						Left Tilt	58	5290.0	0.119	94.4%	15.0	13.7					2	
						Right Touch	58	5290.0	1.028	94.4%	15.0	13.7						
						Right Tilt	58	5290.0	0.205	94.4%	15.0	13.7	0.077	0.110			4	
		802.11a 6 Mbps	Body-worn	Off	15	Rear	60	5300.0	0.691	96.4%	18.0	17.0	0.320	0.423			2	59
						Front	60	5300.0	0.182	96.4%	18.0	17.0						
			Product Specific 10-g	Off	0	Rear	60	5300.0	11.567	96.4%	18.0	17.0			1.380	1.823		60
						Front	60	5300.0	7.016	96.4%	18.0	17.0					4	
						Edge 1	60	5300.0	1.050	96.4%	18.0	17.0			0.148	0.196	4	
						Edge 4	60	5300.0	13.622	96.4%	18.0	17.0					2	
WLAN MIMO Ant.2	5.3 GHz U-NII 2A	802.11ac VHT 80 29.3 Mbps	Head	On	0	Left Touch	58	5290.0	0.422	94.4%	15.0	14.0	0.182	0.241				
						Left Tilt	58	5290.0	0.119	94.4%	15.0	14.0	0.050	0.067			4	
						Right Touch	58	5290.0	1.028	94.4%	15.0	14.0	0.493	0.653			2	61
						Right Tilt	58	5290.0	0.205	94.4%	15.0	14.0	0.088	0.117			4	
		802.11a 6 Mbps	Body-worn	Off	15	Rear	60	5300.0	0.691	96.4%	18.0	17.7					2	
						Front	60	5300.0	0.182	96.4%	18.0	17.7	0.095	0.106				
			Product Specific 10-g	Off	0	Rear	60	5300.0	11.567	96.4%	18.0	17.7						
						Front	60	5300.0	7.016	96.4%	18.0	17.7			0.998	1.112	4	
						Edge 1	60	5300.0	1.050	96.4%	18.0	17.7					4	
						Edge 4	60	5300.0	13.622	96.4%	18.0	17.7			1.220	1.359	2	
WLAN MIMO Ant.1	5.5 GHz U-NII 2C	802.11ac VHT 80 29.3 Mbps	Head	On	0	Left Touch	122	5610.0	0.198	94.4%	15.0	14.5						
						Left Tilt	122	5610.0	0.066	94.4%	15.0	14.5	0.026	0.030			4	
						Right Touch	122	5610.0	1.187	94.4%	15.0	14.5					2	
						Right Tilt	122	5610.0	0.110	94.4%	15.0	14.5					4	
		802.11a 6 Mbps	Body-worn	Off	15	Rear	144	5720.0	0.566	96.4%	18.0	16.6	0.257	0.369			1	62
						Front	144	5720.0	0.095	96.4%	18.0	16.6						
			Product Specific 10-g	Off	0	Rear	144	5720.0	6.703	96.4%	18.0	16.6			0.697	1.000	1	63
						Front	144	5720.0	5.065	96.4%	18.0	16.6					4	
						Edge 1	144	5720.0	0.581	96.4%	18.0	16.6			0.077	0.111	4	
						Edge 4	144	5720.0	5.888	96.4%	18.0	16.6					4	
WLAN MIMO Ant.2	5.5 GHz U-NII 2C	802.11ac VHT 80 29.3 Mbps	Head	On	0	Left Touch	122	5610.0	0.198	94.4%	15.0	15.0	0.076	0.081				
						Left Tilt	122	5610.0	0.066	94.4%	15.0	15.0					4	
						Right Touch	122	5610.0	1.187	94.4%	15.0	15.0	0.504	0.536			2	64
						Right Tilt	122	5610.0	0.110	94.4%	15.0	15.0	0.072	0.077			4	
		802.11a 6 Mbps	Body-worn	Off	15	Rear	144	5720.0	0.566	96.4%	18.0	17.7					1	
						Front	144	5720.0	0.095	96.4%	18.0	17.7						
			Product Specific 10-g	Off	0	Rear	144	5720.0	6.703	96.4%	18.0	17.7			0.575	0.644	1	
						Front	144	5720.0	5.065	96.4%	18.0	17.7			0.587	0.657	4	
						Edge 1	144	5720.0	0.581	96.4%	18.0	17.7					4	
						Edge 4	144	5720.0	5.888	96.4%	18.0	17.7			0.579	0.648	4	

Note(s):

1. When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
2. Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
3. Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
4. Additional testing required in order satisfying FCC simultaneous transmission limit criteria.

Normal U-NII 3 & 4 SAR Results

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled		
WLAN MIMO Ant.1	5.8 GHz U-NII 3	802.11ac VHT 80 29.3 Mbps	Head	On	0	Left Touch	155	5775.0	0.094	94.4%	15.0	14.8					4	
						Left Tilt	155	5775.0	0.033	94.4%	15.0	14.8					4	
						Right Touch	155	5775.0	0.437	94.4%	15.0	14.8					1	
						Right Tilt	155	5775.0	0.078	94.4%	15.0	14.8					4	
		802.11a 6 Mbps	Body-worn	Off	15	Rear	165	5825.0	0.653	96.4%	18.0	16.9	0.300	0.400			1	65
						Front	165	5825.0	0.067	96.4%	18.0	16.9					4	
			Hotspot	Off	10	Rear	149	5745.0	0.906	96.4%	18.0	16.8	0.389	0.530			2	66
						Front	149	5745.0	0.129	96.4%	18.0	16.8					4	
						Edge 1	149	5745.0	0.132	96.4%	18.0	16.8					4	
						Edge 4	149	5745.0	0.237	96.4%	18.0	16.8						
WLAN MIMO Ant.2	5.8 GHz U-NII 3	802.11ac VHT 80 29.3 Mbps	Head	On	0	Left Touch	155	5775.0	0.094	94.4%	15.0	14.2	0.028	0.036			4	
						Left Tilt	155	5775.0	0.033	94.4%	15.0	14.2	0.015	0.019			4	
						Right Touch	155	5775.0	0.437	94.4%	15.0	14.2	0.216	0.276			1	67
						Right Tilt	155	5775.0	0.078	94.4%	15.0	14.2	0.028	0.036			4	
		802.11a 6 Mbps	Body-worn	Off	15	Rear	165	5825.0	0.653	96.4%	18.0	16.7					1	
						Front	165	5825.0	0.067	96.4%	18.0	16.7	0.030	0.041			4	
			Hotspot	Off	10	Rear	149	5745.0	0.906	96.4%	18.0	16.7					2	
						Front	149	5745.0	0.129	96.4%	18.0	16.7	0.079	0.111			4	
						Edge 1	149	5745.0	0.132	96.4%	18.0	16.7	0.055	0.077			4	
						Edge 4	149	5745.0	0.237	96.4%	18.0	16.7	0.109	0.152				
WLAN MIMO Ant.1	5.9 GHz U-NII 4	802.11ac VHT 80 29.3 Mbps	Head	On	0	Left Touch	171	5855.0	0.064	94.4%	15.0	14.7						
						Left Tilt	171	5855.0	0.029	94.4%	15.0	14.7					4	
						Right Touch	171	5855.0	0.391	94.4%	15.0	14.7					1	
						Right Tilt	171	5855.0	0.058	94.4%	15.0	14.7					4	
		802.11a 6 Mbps	Body-worn	Off	15	Rear	177	5885.0	0.896	96.4%	18.0	17.0	0.400	0.528			2	68
						Front	177	5885.0	0.046	96.4%	18.0	17.0	0.016	0.022				
			Product Specific 10-g	Off	0	Rear	177	5885.0	14.038	96.4%	18.0	17.0			1.170	1.546	2	69
						Front	177	5885.0	2.370	96.4%	18.0	17.0			0.245	0.324	4	
						Edge 1	177	5885.0	0.505	96.4%	18.0	17.0			0.079	0.104	4	
						Edge 4	177	5885.0	3.549	96.4%	18.0	17.0			0.255	0.337		
WLAN MIMO Ant.2	5.9 GHz U-NII 4	802.11ac VHT 80 29.3 Mbps	Head	On	0	Left Touch	171	5855.0	0.064	94.4%	15.0	14.0						
						Left Tilt	171	5855.0	0.029	94.4%	15.0	14.0	0.011	0.015			4	
						Right Touch	171	5855.0	0.391	94.4%	15.0	14.0	0.149	0.199			1	70
						Right Tilt	171	5855.0	0.058	94.4%	15.0	14.0	0.018	0.024			4	
		802.11a 6 Mbps	Body-worn	Off	15	Rear	177	5885.0	0.896	96.4%	18.0	16.9					2	
						Front	177	5885.0	0.046	96.4%	18.0	16.9						
			Product Specific 10-g	Off	0	Rear	177	5885.0	14.038	96.4%	18.0	16.9					2	
						Front	177	5885.0	2.370	96.4%	18.0	16.9					4	
						Edge 1	177	5885.0	0.505	96.4%	18.0	16.9					4	
						Edge 4	177	5885.0	3.549	96.4%	18.0	16.9						

Note(s):

1. When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
2. Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
3. Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
4. Additional testing required in order satisfying FCC simultaneous transmission limit criteria.

Variant model (Version 3)**Normal U-NII 2A & 2C & 3 SAR Results**

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled		
WLAN MIMO Ant.1	5.3 GHz U-NII 2A	802.11a 6 Mbps	Body-worn	Off	15	Rear	60	5300.0	0.650	96.4%	18.0	17.0	0.323	0.427				71
						Front	60	5300.0	0.190	96.4%	18.0	17.0					2	
			Product Specific 10-g	Off	0	Rear	56	5280.0	10.230	96.4%	18.0	16.7			1.540	2.145	3	
							60	5300.0	13.126	96.4%	18.0	17.0			1.730	2.286		72
						Front	60	5300.0	8.786	96.4%	18.0	17.0					4	
						Edge 1	60	5300.0	1.370	96.4%	18.0	17.0			0.198	0.262	4	
WLAN MIMO Ant.2	5.3 GHz U-NII 2A	802.11a 6 Mbps	Body-worn	Off	15	Rear	60	5300.0	0.650	96.4%	18.0	17.7						
						Front	60	5300.0	0.190	96.4%	18.0	17.7	0.097	0.108			2	
			Product Specific 10-g	Off	0	Rear	56	5280.0	10.230	96.4%	18.0	16.7					3	
							60	5300.0	13.126	96.4%	18.0	17.7						
						Front	60	5300.0	8.786	96.4%	18.0	17.7			1.140	1.270	4	
						Edge 1	60	5300.0	1.370	96.4%	18.0	17.7					4	
WLAN MIMO Ant.1	5.5 GHz U-NII 2C	802.11a 6 Mbps	Body-worn	Off	15	Rear	144	5720.0	0.546	96.4%	18.0	16.6	0.273	0.392			1	73
						Front	144	5720.0	0.108	96.4%	18.0	16.6						
			Product Specific 10-g	Off	0	Rear	144	5720.0	6.691	96.4%	18.0	16.6			0.913	1.310		74
						Front	144	5720.0	5.091	96.4%	18.0	16.6					2	
						Edge 1	144	5720.0	0.644	96.4%	18.0	16.6			0.101	0.145	4	
						Edge 4	144	5720.0	4.955	96.4%	18.0	16.6			0.534	0.766	4	
WLAN MIMO Ant.2	5.5 GHz U-NII 2C	802.11a 6 Mbps	Body-worn	Off	15	Rear	144	5720.0	0.546	96.4%	18.0	17.7					1	
						Front	144	5720.0	0.108	96.4%	18.0	17.7						
			Product Specific 10-g	Off	0	Rear	144	5720.0	6.691	96.4%	18.0	17.7						
						Front	144	5720.0	5.091	96.4%	18.0	17.7			0.735	0.823	2	
						Edge 1	144	5720.0	0.644	96.4%	18.0	17.7					4	
						Edge 4	144	5720.0	4.955	96.4%	18.0	17.7					4	
WLAN MIMO Ant.1	5.8 GHz U-NII 3	802.11ac VHT 80 29.3 Mbps	Head	On	0	Left Touch	155	5775.0	0.082	94.4%	15.0	14.8					4	
						Left Tilt	155	5775.0	0.036	94.4%	15.0	14.8	0.014	0.015			4	
						Right Touch	155	5775.0	0.550	94.4%	15.0	14.8					1	
						Right Tilt	155	5775.0	0.060	94.4%	15.0	14.8	0.021	0.023			4	
		802.11a 6 Mbps	Body-worn	Off	15	Rear	165	5825.0	0.842	96.4%	18.0	16.9	0.364	0.485				75
						Front	165	5825.0	0.079	96.4%	18.0	16.9					2	
WLAN MIMO Ant.2	5.8 GHz U-NII 3	802.11ac VHT 80 29.3 Mbps	Head	On	0	Left Touch	155	5775.0	0.082	94.4%	15.0	14.2	0.031	0.039			4	
						Left Tilt	155	5775.0	0.036	94.4%	15.0	14.2	0.010	0.012			4	
						Right Touch	155	5775.0	0.550	94.4%	15.0	14.2	0.275	0.351			1	76
						Right Tilt	155	5775.0	0.060	94.4%	15.0	14.2	0.013	0.016			4	
		802.11a 6 Mbps	Body-worn	Off	15	Rear	165	5825.0	0.842	96.4%	18.0	16.7						
						Front	165	5825.0	0.079	96.4%	18.0	16.7	0.031	0.043			2	

Note(s):

1. When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
2. Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
3. Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
4. Additional testing required in order satisfying FCC simultaneous transmission limit criteria.

Original model**RSDB UNII Bands SAR results**

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
5.3 GHz U-NII 2A	WLAN MIMO Ant.1	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	58	5290.0	0.311	94.4%	14.0	12.8	0.142	0.201	1	
						Front	58	5290.0	0.056	94.4%	14.0	12.8				
	WLAN MIMO Ant.2	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	58	5290.0	0.311	94.4%	14.0	13.1			1	
						Front	58	5290.0	0.056	94.4%	14.0	13.1				
5.5 GHz U-NII 2C	WLAN MIMO Ant.1	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	122	5610.0	0.190	94.4%	14.0	13.4	0.070	0.084	1	
						Front	122	5610.0	0.038	94.4%	14.0	13.4				
	WLAN MIMO Ant.2	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	122	5610.0	0.190	94.4%	14.0	13.9			1	
						Front	122	5610.0	0.038	94.4%	14.0	13.9				
5.8 GHz U-NII 3	WLAN MIMO Ant.1	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	155	5775.0	0.329	94.4%	14.0	13.6	0.136	0.158	1	
						Front	155	5775.0	0.021	94.4%	14.0	13.6				
						Rear	155	5775.0	0.463	94.4%	14.0	13.6	0.184	0.214	1	
			Hotspot	Off	10	Front	155	5775.0	0.040	94.4%	14.0	13.6				
						Edge 1	155	5775.0	0.028	94.4%	14.0	13.6	0.011	0.012	4	
						Edge 4	155	5775.0	0.077	94.4%	14.0	13.6				
	WLAN MIMO Ant.2	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	155	5775.0	0.329	94.4%	14.0	13.1			1	
						Front	155	5775.0	0.021	94.4%	14.0	13.1				
						Rear	155	5775.0	0.463	94.4%	14.0	13.1			1	
			Hotspot	Off	10	Front	155	5775.0	0.040	94.4%	14.0	13.1				
						Edge 1	155	5775.0	0.028	94.4%	14.0	13.1			4	
						Edge 4	155	5775.0	0.077	94.4%	14.0	13.1				
5.9 GHz U-NII 4	WLAN MIMO Ant.1	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	171	5855.0	0.349	96.4%	14.0	13.6	0.161	0.183	1	
						Front	171	5855.0	0.019	96.4%	14.0	13.6				
	WLAN MIMO Ant.2	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	171	5855.0	0.349	96.4%	14.0	13.1			1	
						Front	171	5855.0	0.019	96.4%	14.0	13.1				

Note(s):

- When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
- Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
- Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
- Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
- RSDB UNII Bands SAR was additionally evaluated in Body-worn & Hotspot exposure condition to satisfy simultaneous transmission criteria of RSDB configurations.

Variant model (Version 3)**RSDB UNII Bands SAR results**

Frequency Band	Antenna	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle (%)	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
5.3 GHz U-NII 2A	WLAN MIMO Ant.1	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	58	5290.0	0.398	94.4%	14.0	12.8	0.173	0.244	1	
						Front	58	5290.0	0.083	94.4%	14.0	12.8				
	WLAN MIMO Ant.2	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	58	5290.0	0.398	94.4%	14.0	13.1			1	
						Front	58	5290.0	0.083	94.4%	14.0	13.1				
5.5 GHz U-NII 2C	WLAN MIMO Ant.1	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	122	5610.0	0.372	94.4%	14.0	13.4	0.153	0.185	1	
						Front	122	5610.0	0.070	94.4%	14.0	13.4				
	WLAN MIMO Ant.2	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	122	5610.0	0.372	94.4%	14.0	13.9			1	
						Front	122	5610.0	0.070	94.4%	14.0	13.9				
5.8 GHz U-NII 3	WLAN MIMO Ant.1	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	155	5775.0	0.369	94.4%	14.0	13.6	0.177	0.206	1	
						Front	155	5775.0	0.024	94.4%	14.0	13.6				
	WLAN MIMO Ant.2	802.11ac VHT 80 29.3 Mbps	Body-worn	Off	15	Rear	155	5775.0	0.369	94.4%	14.0	13.1			1	
						Front	155	5775.0	0.024	94.4%	14.0	13.1				

Note(s):

- When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
- Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
- Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
- Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
- RSDB UNII Bands SAR was additionally evaluated in Body-worn & Hotspot exposure condition to satisfy simultaneous transmission criteria of RSDB configurations.

10.18. Bluetooth**Original model**

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
BT SISO Ant.1	2.4GHz	GFSK	Head	On	0	Left Touch	39	2441.0	77.0%	15.0	14.2	0.026	0.040	
						Left Tilt	39	2441.0	77.0%	15.0	14.2	0.001	0.001	
						Right Touch	39	2441.0	77.0%	15.0	14.2	0.046	0.071	
						Right Tilt	39	2441.0	77.0%	15.0	14.2	0.031	0.048	
			Body-worn	Off	15	Rear	78	2480.0	77.0%	19.0	17.7	0.089	0.156	77
						Front	78	2480.0	77.0%	19.0	17.7	0.012	0.021	
			Hotspot	Off	10	Rear	78	2480.0	77.0%	19.0	17.7	0.258	0.453	78
						Front	78	2480.0	77.0%	19.0	17.7	0.024	0.042	
						Edge 1	78	2480.0	77.0%	19.0	17.7	0.015	0.026	
						Edge 4	78	2480.0	77.0%	19.0	17.7	0.002	0.003	
BT SISO Ant.2	2.4GHz	GFSK	Head	On	0	Left Touch	0	2402.0	77.0%	15.0	14.6	0.106	0.150	
						Left Tilt	0	2402.0	77.0%	15.0	14.6	0.014	0.019	
						Right Touch	0	2402.0	77.0%	15.0	14.6	0.200	0.283	79
						Right Tilt	0	2402.0	77.0%	15.0	14.6	0.040	0.057	
			Body-worn	Off	15	Rear	78	2480.0	77.0%	19.0	17.7	0.081	0.140	
						Front	78	2480.0	77.0%	19.0	17.7	0.046	0.080	
			Hotspot	Off	10	Rear	78	2480.0	77.0%	19.0	17.7	0.183	0.318	
						Front	78	2480.0	77.0%	19.0	17.7	0.114	0.198	
						Edge 4	78	2480.0	77.0%	19.0	17.7	0.179	0.311	
						Edge 1	78	2480.0	77.0%	19.0	17.7	0.002	0.003	
BT MIMO Ant.1	2.4GHz	GFSK	Head	On	0	Left Touch	0	2402.0	77.0%	12.0	11.3			
						Left Tilt	0	2402.0	77.0%	12.0	11.3	0.029	0.045	
						Right Touch	0	2402.0	77.0%	12.0	11.3			
						Right Tilt	0	2402.0	77.0%	12.0	11.3	0.042	0.064	
			Body-worn	Off	15	Rear	0	2402.0	77.0%	12.0	11.3	0.030	0.046	
						Front	0	2402.0	77.0%	12.0	11.3			
			Hotspot	Off	10	Rear	0	2402.0	77.0%	12.0	11.3	0.069	0.106	
						Front	0	2402.0	77.0%	12.0	11.3			
						Edge 1	0	2402.0	77.0%	12.0	11.3	0.011	0.017	
						Edge 4	0	2402.0	77.0%	12.0	11.3			
BT MIMO Ant.2	2.4GHz	GFSK	Head	N/A	0	Left Touch	0	2402.0	77.0%	12.0	11.0	0.055	0.089	
						Left Tilt	0	2402.0	77.0%	12.0	11.0			
						Right Touch	0	2402.0	77.0%	12.0	11.0	0.151	0.245	
						Right Tilt	0	2402.0	77.0%	12.0	11.0	0.035	0.057	
			Body-worn	N/A	15	Rear	0	2402.0	77.0%	12.0	11.0	0.019	0.030	
						Front	0	2402.0	77.0%	12.0	11.0	0.018	0.030	
			Hotspot	N/A	10	Rear	0	2402.0	77.0%	12.0	11.0			
						Front	0	2402.0	77.0%	12.0	11.0	0.037	0.061	
						Edge 1	0	2402.0	77.0%	12.0	11.0			
						Edge 4	0	2402.0	77.0%	12.0	11.0	0.063	0.102	

11. SAR Measurement Variability

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

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

Peak spatial-average (1g of tissue)

Frequency Band (MHz)	Air Interface	RF Exposure Conditions	Test Position	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Repeated Measured SAR (W/kg)	Largest to Smallest SAR Ratio
700	LTE Band 12	Hotspot	Rear	No	0.317	N/A	N/A
	LTE Band 13	Hotspot	Rear	No	0.564	N/A	N/A
835	GSM 850	Hotspot	Rear	No	0.458	N/A	N/A
	WCDMA Band V	Hotspot	Rear	No	0.604	N/A	N/A
	LTE Band 26	Hotspot	Rear	No	0.496	N/A	N/A
	NR Band n5	Hotspot	Rear	No	0.499	N/A	N/A
1750	WCDMA Band IV	Hotspot	Edge 3	No	0.921	N/A	N/A
	LTE Band 4	Head	Left Tilt	No	0.682	N/A	N/A
	LTE Band 66	Hotspot	Edge 3	No	0.872	N/A	N/A
	NR Band n66	Hotspot	Edge 1	Yes	0.955	0.948	-0.01
1900	GSM 1900	Hotspot	Edge 3	No	0.727	N/A	N/A
	WCDMA Band II	Hotspot	Edge 3	No	0.919	N/A	N/A
	LTE Band 2	Head	Left Tilt	No	0.602	N/A	N/A
	LTE Band 25	Hotspot	Edge3	Yes	1.030	1.030	0.00
2400	Wi-Fi 802.11b/g/n	Head	Right Touch	No	0.481	N/A	N/A
	Bluetooth	Hotspot	Rear	No	0.258	N/A	N/A
2600	LTE Band 41	Hotspot	Edge 3	No	0.542	N/A	N/A
5300	Wi-Fi 802.11a/n	Head	Right Touch	No	0.493	N/A	N/A
5500	Wi-Fi 802.11a/n	Head	Right Touch	No	0.504	N/A	N/A
5800	Wi-Fi 802.11a/n	Hotspot	Rear	No	0.389	N/A	N/A
5900	Wi-Fi 802.11a/n	Body-worn	Rear	No	0.400	N/A	N/A

Peak spatial-average (10g of tissue)

Frequency Band (MHz)	Air Interface	RF Exposure Conditions	Test Position	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Repeated Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1750	WCDMA Band IV	Product Specific 10-g	Edge 3	No	1.520	N/A	N/A
	LTE Band 66	Product Specific 10-g	Edge 3	No	1.600	N/A	N/A
	NR Band n66	Product Specific 10-g	Edge 3	No	1.630	N/A	N/A
1900	WCDMA Band II	Product Specific 10-g	Edge 3	No	1.170	N/A	N/A
	LTE Band 25	Product Specific 10-g	Edge 3	No	1.700	N/A	N/A
5300	Wi-Fi 802.11a/n	Product Specific 10-g	Rear	No	1.730	N/A	N/A
5500	Wi-Fi 802.11a/n	Product Specific 10-g	Rear	No	0.913	N/A	N/A
5900	Wi-Fi 802.11a/n	Product Specific 10-g	Rear	No	1.170	N/A	N/A

Note(s):

Second Repeated Measurement is not required since the ratio of the largest to smallest SAR for the original and first repeated measurement is not > 1.20 .

12. Simultaneous Transmission SAR Analysis

Simultaneous Transmission Condition

RF Exposure Condition	Item	Capable Transmit Configurations						
Head & Body-worn & Hotspot & Phablet-10g	1	WWAN (2G/3G/LTE/NR)	+	DTS Ant.1	or	DTS Ant.2		Non-RSDB Scenarios
	2	WWAN (2G/3G/LTE/NR)	+	DTS MIMO				
	3	WWAN (2G/3G/LTE/NR)	+	UNII MIMO				
	4	WWAN (2G/3G/LTE/NR)	+	BT Ant.1	or	BT Ant.2		
	5	WWAN (2G/3G/LTE/NR)	+	BT MIMO				
	6	WWAN (2G/3G/LTE/NR)	+	UNII MIMO	+	BT Ant.1	or	
	7	WWAN (2G/3G/LTE/NR)	+	UNII MIMO	+	BT MIMO		
	8	WWAN (2G/3G/LTE/NR)	+	UNII MIMO	+	DTS Ant.1	or	RSDB Scenarios
	9	WWAN (2G/3G/LTE/NR)	+	UNII MIMO	+	DTS MIMO		
	10	WWAN (ENDC(LTE+NR)	+	DTS Ant.1	or	DTS Ant.2		Non-RSDB Scenarios
	11	WWAN (ENDC(LTE+NR)	+	DTS MIMO				
	12	WWAN (ENDC(LTE+NR)	+	UNII MIMO				
	13	WWAN (ENDC(LTE+NR)	+	BT Ant.1	or	BT Ant.2		
	14	WWAN (ENDC(LTE+NR)	+	BT MIMO				
	15	WWAN (ENDC(LTE+NR)	+	UNII MIMO	+	BT Ant.1	or	
	16	WWAN (ENDC(LTE+NR)	+	UNII MIMO	+	BT MIMO		
	17	WWAN (ENDC(LTE+NR)	+	UNII MIMO	+	DTS Ant.1	or	RSDB Scenarios
	18	WWAN (ENDC(LTE+NR)	+	UNII MIMO	+	DTS MIMO		
	19	WWAN (LTE ULCA(PCC+SCC)	+	DTS Ant.1	or	DTS Ant.2		Non-RSDB Scenarios
	20	WWAN (LTE ULCA(PCC+SCC)	+	DTS MIMO				
	21	WWAN (LTE ULCA(PCC+SCC)	+	UNII MIMO				
	22	WWAN (LTE ULCA(PCC+SCC)	+	BT Ant.1	or	BT Ant.2		
	23	WWAN (LTE ULCA(PCC+SCC)	+	BT MIMO				
	24	WWAN (LTE ULCA(PCC+SCC)	+	UNII MIMO	+	BT Ant.1	or	
	25	WWAN (LTE ULCA(PCC+SCC)	+	UNII MIMO	+	BT MIMO		
	26	WWAN (LTE ULCA(PCC+SCC)	+	UNII MIMO	+	DTS Ant.1	or	RSDB Scenarios
	27	WWAN (LTE ULCA(PCC+SCC)	+	UNII MIMO	+	DTS MIMO		

Notes:

1. DTS supports Wi-Fi Direct, Hotspot and VoIP.
2. U-NII supports Wi-Fi Direct, Hotspot and VoIP.
3. U-NII only supports MIMO mode.
4. GPRS, W-CDMA, LTE, NR supports Hotspot and VoIP.
5. U-NII Radio can transmit simultaneously with Bluetooth Radio.
6. DTS Radio cannot transmit simultaneously with Bluetooth Radio.
7. DTS Radio can transmit simultaneously with U-NII Radio in only RSDB Scenarios.
8. NR Radio support to both SA and NSA(ENDC) Radio.
9. BT tethering is considered about each RF exposure conditions.
10. LTE support UL CA interband configurations.

Simultaneous transmission SAR test exclusion considerations

KDB 447498 D01 General RF Exposure Guidance provides two procedures for determining simultaneous transmission SAR test exclusion: Sum of SAR and SAR to Peak Location Ratio (SPLSR)

Sum of SAR

To qualify for simultaneous transmission SAR test exclusion based upon Sum of SAR the sum of the reported standalone SARs for all simultaneously transmitting antennas shall be below the applicable standalone SAR limit. If the sum of the SARs is above the applicable limit then simultaneous transmission SAR test exclusion may still apply if the requirements of the SAR to Peak Location Ratio (SPLSR) evaluation are met.

SAR to Peak Location Ratio (SPLSR)

KDB 447498 D01 General RF Exposure Guidance explains how to calculate the SAR to Peak Location Ratio (SPLSR) between pairs of simultaneously transmitting antennas:

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

Where:

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

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

Ri is the separation distance between the pair of simultaneous transmitting antennas. When the SAR is measured, for both antennas in the pair, it is determined by the actual x, y and z coordinates in the 1-g SAR for each SAR peak location, based on the extrapolated and interpolated result in the zoom scan measurement, using the formula of

$$[(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2]$$

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

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

When an individual antenna transmits at on two bands simultaneously, the sum of the highest *reported* SAR for the frequency bands should be used to determine **SAR₁** or **SAR₂**. When SPLSR is necessary, the smallest distance between the peak SAR locations for the antenna pair with respect to the peaks from each antenna should be used.

The antennas in all antenna pairs that do not qualify for simultaneous transmission SAR test exclusion must be tested for SAR compliance, according to the enlarged zoom scan and volume scan post-processing procedures in KDB Publication 865664 D01

The antennas for the unlicensed transmitters are closely situated. As a result, the associated SAR hotspots are also closely situated. Some of the sum of SAR calculations yielded results over 1.6 W/kg. The SPLSR calculations for these situations were performed by treating the unlicensed SAR values as a single transmitter. The most conservative distance between all the unlicensed hotspots to the licensed hotspot was used for the value of *d* in the SPLSR calculation.

Simultaneous transmission SAR measurement

When simultaneous transmission SAR measurements are required in different frequency bands not covered by a single probe calibration point then separate tests for each frequency band are performed. The tests are performed using enlarged zoom scans which are processed, by means of superposition, using the DASY5 volume scan postprocessing procedures to determine the 1-g SAR for the aggregate SAR distribution.

The spatial resolution used for all enlarged zoom scans is the same as used for the most stringent zoom scans. I.E. the scan parameters required for the highest frequency assessed are used for all enlarged zoom scans. The scans cover the complete area of the device to ensure all transmitting antennas and radiating structures are assessed.

DASY5 provides the ability to perform Multiband Evaluations according to the latest standards using the Volume Scan job as well as appropriate routines for the Post-processing.

In order to extract and process measurements within different frequency bands, the SEMCAD X Post-processor performs the combination and subsequent superposition of these measurement data via DASY5= Combined MultiBand Averaged SAR.

Combined Multi Band Averaged SAR allows - in addition to the data extraction - an evaluation of the 1 g, 10 g and/or arbitrary averaged mass SAR.

Power Scaling Factor is used to allow the volume scans to be scaled by a value other than "1", this is important when the results need to be scaled to different maximum power levels. The Power Scaling Factor is applied to each individual point of the scan. When power scaling is used in multi-band combinations the scaling factor is applied to each individual point of the first scan, the second factor is then applied to each individual point of the second scan and so on. The scans are then combined.

SPLSR Hotspot Combination

Per November 2019 TCB Workshop Notes, SPLSR Hotspot Combination procedure can be applied to evaluate to simultaneous transmission SAR analysis.

Hybrid SPLSR and enlarged zoom scan (Volume scan) can be applied when Simultaneous transmission SAR is over 1.6 or 4.0 W/kg (1-g or 10-g respectively), it does not meet SPLSR criteria, and antenna pair is co-located. Antenna co-location means that SAR distributions overlap because the antennas are not significantly spatially separated.

Test procedure

Step.1 Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR.

Step.2 Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair.

12.1. Sum of the SAR for GSM850 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)												
		Non-RSDB scenarios																						
		WWAN	DTS Awt.1	DTS Awt.2	DTS MIMO	UNII MIMO (5GHz)	BT Awt.1	BT Awt.2	BT MIMO	UNII MIMO (6GHz)	WWAN+ DTS Awt.1	WWAN+ DTS Awt.2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Awt.1	WWAN+ BT Awt.2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Awt.1	WWAN+ UNII MIMO+ BT Awt.2	WWAN+ UNII MIMO+ BT MIMO				
		1	2	3	4	5	6	7	8	9	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+5+6	1+5+7	1+5+8			
Head (1-g SAR)	Left Touch	0.181	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.288	0.587	0.632	0.422	0.221	0.331	0.270	0.462	0.572	0.511	0.200	0.240	0.350	0.289
	Left Tilt	0.097	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.198	0.175	0.270	0.164	0.098	0.116	0.142	0.165	0.183	0.209	0.117	0.118	0.136	0.162
	Right Touch	0.269	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.364	0.622	0.898	0.922	0.340	0.552	0.333	0.993	1.205	0.986	0.390	0.461	0.673	0.454
	Right Tilt	0.109	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.189	0.195	0.347	0.226	0.157	0.166	0.155	0.274	0.283	0.272	0.126	0.174	0.183	0.172
Body-Worn (1-g SAR)	Rear	0.305	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	0.462	0.492	0.460	0.833	0.461	0.445	0.335	0.989	0.973	0.863	0.449	0.605	0.589	0.479
	Front	0.235	0.019	0.197	0.155	0.392	0.021	0.080	0.030	0.144	0.254	0.422	0.390	0.627	0.256	0.315	0.265	0.648	0.707	0.657	0.379	0.400	0.459	0.409
	Edge 1	0.615	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.038	0.958	0.896	1.145	1.068	0.933	0.721	1.598	1.463	1.251				
	Edge 2	0.273	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.696	0.616	0.475	0.384	0.315	0.471	0.334	0.426	0.582	0.445				
Hotspot (1-g SAR)	Edge 1		0.044		0.053	0.077		0.026		0.017														
	Edge 2	0.349																						
	Edge 3	0.220																						
	Edge 4	0.230	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.653	0.656	0.561	0.382	0.233	0.541	0.332	0.385	0.693	0.484				
SAR to Peak Location Separation Ratio (SPLSR)																								
RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)												
		WWAN	DTS Awt.1	DTS Awt.2	DTS MIMO	UNII MIMO (5GHz)	BT Awt.1	BT Awt.2	BT MIMO	UNII MIMO (6GHz)	Sum of SAR (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.10)	Volume Scan (Yes/No)	Figure									
Hotspot (1-g SAR)	Rear	0.615				0.530		0.453			1+5+6	1.598												
						0.530		0.453			5+6	0.983	18.8	0.05	Yes									
Hybrid SPLSR Note.3		0.615					0.717				1+(5+6)	1.947	139.5	0.02	No									

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Awt.1	DTS Awt.2	DTS MIMO	UNII MIMO (5GHz)	BT Awt.1	BT Awt.2	BT MIMO	UNII MIMO (6GHz)	WWAN+ DTS Awt.1+ UNII MIMO	WWAN+ DTS Awt.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ UNII MIMO	WWAN+ DTS Awt.1+ UNII MIMO	WWAN+ DTS Awt.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ UNII MIMO	WWAN+ UNII MIMO	WWAN+ UNII MIMO	WWAN+ UNII MIMO
Head (1-g SAR)	Left Touch	0.181	0.027	0.145	0.135	0.241	0.019	0.049	0.057	0.019	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5
	Left Tilt	0.097	0.026	0.026	0.038	0.067	0.020	0.190	0.191	0.202	0.105	0.143	0.144	0.155	0.058	0.058	0.058	0.058	0.058	0.058	0.058
	Right Touch	0.269	0.066	0.211	0.223	0.653	0.121	0.988	1.133	1.145	0.876	0.456	0.601	0.613	0.344	0.344	0.344	0.344	0.344	0.344	0.344
	Right Tilt	0.109	0.056	0.057	0.063	0.117	0.017	0.282	0.283	0.289	0.180	0.182	0.183	0.189	0.080	0.080	0.080	0.080	0.080	0.080	0.080
Body-Worn (1-g SAR)	Rear	0.305	0.095	0.097	0.147	0.244	0.144	0.644	0.646	0.696	0.391	0.544	0.546	0.596	0.291	0.291	0.291	0.291	0.291	0.291	0.291
	Front	0.235	0.095	0.097	0.147	0.244	0.144	0.574	0.576	0.626	0.391	0.474	0.476	0.526	0.291	0.291	0.291	0.291	0.291	0.291	0.291
	Edge 1	0.615	0.247	0.210	0.315	0.214		1.076	1.039	1.144	0.529										
	Edge 2	0.273	0.023	0.217	0.323	0.214		0.510	0.704	0.810	0.537										
Hotspot (1-g SAR)	Edge 1		0.023		0.323	0.012					0.335										
	Edge 2	0.349																			
	Edge 3	0.220																			
	Edge 4	0.230	0.002	0.217	0.323	0.214		0.446	0.661	0.767	0.537										

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.2. Sum of the SAR for GSM1900 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Awt.1	DTS Awt.2	DTS MIMO	UNII MIMO (5GHz)	BT Awt.1	BT Awt.2	BT MIMO	UNII MIMO (6GHz)	WWAN+ DTS Awt.1	WWAN+ DTS Awt.2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Awt.1	WWAN+ BT Awt.2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Awt.1	WWAN+ UNII MIMO+ BT Awt.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT Awt.1
Head (1-g SAR)	Left Touch	0.125	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	1.5+2	1+3	1+3+5	1+5	1+5	1+5	1+5	1+5+6	1+5+6	1+5+6	1+5+6
	Left Tilt	0.047	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.148	0.125	0.220	0.114	0.048	0.066	0.092	0.115	0.133	0.159	0.067
	Right Touch	0.062	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.157	0.415	0.691	0.715	0.133	0.345	0.126	0.786	0.998	0.779	0.183
	Right Tilt	0.061	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.141	0.147	0.299	0.178	0.109	0.118	0.107	0.226	0.235	0.224	0.078
Body-Worn (1-g SAR)	Rear	0.397	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	0.554	0.584	0.552	0.925	0.553	0.537	0.427	1.081	1.065	0.955	0.541
	Front	0.289	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.308	0.476	0.444	0.681	0.310	0.369	0.319	0.702	0.761	0.711	0.433
	Edge 1	0.516	0.423	0.343	0.281	0.530	0.453	0.318	0.106		0.939	0.859	0.797	1.046	0.969	0.834	0.622	1.499	1.364	1.152	
	Edge 2	0.400	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.823	0.743	0.602	0.511	0.442	0.598	0.461	0.553	0.709	0.572	
Hotspot (1-g SAR)	Edge 1		0.044		0.053	0.077	0.026		0.017												
	Edge 2	0.062																			
	Edge 3	1.124																			
	Edge 4	0.049	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.472	0.475	0.380	0.201	0.052	0.360	0.151	0.204	0.512	0.303	

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Ant.1		DTS Ant.2		DTS MIMO		UNII MIMO (5GHz)		UNII MIMO (5GHz)		WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	DTS MIMO+ UNII MIMO	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	DTS MIMO+ UNII MIMO	
		1	2	3	4	5	6	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5		
Head (1-g SAR)	Left Touch	0.125	0.027	0.145	0.135	0.241	0.019	0.393	0.511	0.501	0.376	0.171	0.289	0.279	0.154						
	Left Tilt	0.047	0.026	0.027	0.038	0.067	0.020	0.140	0.141	0.152	0.105	0.093	0.094	0.105	0.058						
	Right Touch	0.062	0.066	0.211	0.223	0.653	0.121	0.781	0.926	0.938	0.876	0.249	0.394	0.406	0.344						
	Right Tilt	0.061	0.056	0.057	0.063	0.117	0.017	0.234	0.235	0.241	0.180	0.134	0.135	0.141	0.080						
Body-Worn (1-g SAR)	Rear	0.397	0.095	0.097	0.147	0.244	0.144	0.736	0.738	0.788	0.391	0.636	0.638	0.688	0.291						
	Front	0.289	0.095	0.097	0.147	0.244	0.144	0.628	0.630	0.680	0.391	0.528	0.530	0.580	0.291						
	Rear	0.516	0.247	0.210	0.315	0.214		0.977	0.940	1.045	0.529										
	Front	0.400	0.023	0.217	0.323	0.214		0.637	0.831	0.937	0.537										
Hotspot (1-g SAR)	Edge 1	0.062	0.023		0.323	0.012					0.335										
	Edge 2																				
	Edge 3	1.124																			
	Edge 4	0.049	0.002	0.217	0.323	0.214		0.265	0.480	0.588	0.537										

12.3. Sum of the SAR for WCDMA Band II & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)															
		Non-RSDB scenarios										Sum of SAR (W/kg)															
		Non-RSDB scenarios										Sum of SAR (W/kg)															
		1	2	3	4	5	6	7	8	UNIT MMIO (GHz)	WWAN+ DTS Aml-1	WWAN+ DTS Aml-2	WWAN+ DTS MIMO	WWAN+ UNIT MMIO	WWAN+ BT Aml-1	WWAN+ BT Aml-2	WWAN+ UNIT MMIO+ BT Aml-1	WWAN+ UNIT MMIO+ BT Aml-2	WWAN+ UNIT MMIO	WWAN+ UNIT MMIO+ BT Aml-1	WWAN+ UNIT MMIO+ BT Aml-2	WWAN+ UNIT MMIO	WWAN+ UNIT MMIO+ BT Aml-1	WWAN+ UNIT MMIO+ BT Aml-2	WWAN+ UNIT MMIO		
1	2	3	4	5	6	7	8	UNIT MMIO (GHz)	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10	1+11	1+12	1+13	1+14	1+15	1+16				
Head (1-g SAR)	Left Touch	0.096	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.203	0.502	0.547	0.337	0.136	0.246	0.185	0.377	0.487	0.426	0.115	0.155	0.265	0.204			
	Left Tilt	0.038	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.139	0.116	0.211	0.105	0.039	0.057	0.083	0.106	0.124	0.150	0.058	0.059	0.077	0.103			
	Right Touch	0.074	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.169	0.427	0.703	0.727	0.145	0.357	0.138	0.798	1.010	0.791	0.195	0.266	0.478	0.259			
	Right Tilt	0.044	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.124	0.130	0.282	0.161	0.092	0.101	0.090	0.209	0.218	0.207	0.061	0.109	0.118	0.107			
Body-Worn (1-g SAR)	Rear	0.659	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	0.816	0.846	0.814	1.187	0.815	0.799	0.689	1.343	1.327	1.217	0.803	0.959	0.943	0.833			
	Front	0.486	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.505	0.673	0.641	0.878	0.507	0.566	0.516	0.899	0.958	0.908	0.630	0.651	0.710	0.660			
	Edge 1	0.599	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.022	0.942	0.880	1.129	1.052	0.917	0.705	1.582	1.447	1.235							
	Edge 2	0.492	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.915	0.835	0.694	0.603	0.534	0.690	0.553	0.645	0.801	0.664							
Hotspot (1-g SAR)	Edge 3	0.065	0.044		0.053	0.077	0.026		0.017																		
	Edge 4	1.161																									
	Edge 5	0.068	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.491	0.494	0.399	0.220	0.071	0.379	0.170	0.223	0.531	0.322							
	Rear	1.393								0.304																	
Product Specific 10-g (10-g SAR)	Front	1.270								0.062																	
	Edge 1									0.019																	
	Edge 2																										
	Edge 3	1.495																									
	Edge 4									1.437																	

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)											
		WWAN	Non-RSDB scenarios								WWAN + DTS Ant.1	WWAN + DTS Ant.2	WWAN + DTS MIMO	DTS MIMO + WWAN	WWAN + DTS Ant.1 + DTS MIMO	WWAN + DTS Ant.2 + DTS MIMO	WWAN + DTS MIMO + DTS Ant.1 + DTS MIMO	DTS MIMO + WWAN + DTS Ant.1 + DTS MIMO					
			Non-RSDB scenarios																				
			DTS Ant.1	DTS Ant.2	DTS MIMO	UNI MIMO (GHz)	UNI MIMO (GHz)	1+2+5	1+3+5	1+4+5									4+5	1+2+5	1+3+5	1+4+5	4+5
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18						
Head (1-g SAR)	Left Touch	0.096	0.027	0.145	0.135	0.241	0.019	0.364	0.482	0.472	0.376	0.142	0.260	0.250	0.154								
	Left Tilt	0.038	0.026	0.027	0.038	0.067	0.020	0.131	0.132	0.143	0.105	0.084	0.085	0.096	0.058								
	Right Touch	0.074	0.066	0.211	0.223	0.653	0.121	0.793	0.938	0.950	0.876	0.261	0.406	0.418	0.344								
Body-Worn (1-g SAR)	Right Tilt	0.044	0.056	0.057	0.063	0.117	0.017	0.217	0.218	0.224	0.180	0.117	0.118	0.124	0.080								
	Rear	0.659	0.095	0.097	0.147	0.244	0.144	0.998	1.000	1.050	0.391	0.898	0.900	0.950	0.291								
	Front	0.486	0.095	0.097	0.147	0.244	0.144	0.998	1.000	1.050	0.391	0.898	0.900	0.950	0.291								
	Neck	0.599	0.247	0.210	0.315	0.214		1.060	1.023	1.128	0.529												
	Rear	0.492	0.023	0.217	0.323	0.214		0.729	0.923	1.029	0.537												
	Edge 1		0.023		0.323	0.012						0.335											
Hotspot (1-g SAR)	Edge 2	0.065																					
	Edge 3	1.161																					
	Edge 4	0.068	0.002	0.217	0.323	0.214		0.284	0.499	0.605	0.537												

Note(s):

- Green value is estimated SAR value.

12.4. Sum of the SAR for WCDMA Band IV & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)															
		WWAN	Non-RSDB scenarios								UNIT MMIO (GHz)	Sum of SAR (W/kg)															
			Non-RSDB scenarios									Sum of SAR (W/kg)															
			1	2	3	4	5	6	7	8		1+2	1+3	1+4	1+5	1+6	1+7	1+8	WWAN+ UNIT MMIO- BT Anc.1	WWAN+ UNIT MMIO- BT Anc.2	WWAN+ UNIT MMIO- BT Anc.3	WWAN+ UNIT MMIO- BT Anc.4	WWAN+ UNIT MMIO- BT Anc.5	WWAN+ UNIT MMIO- BT Anc.6	WWAN+ UNIT MMIO- BT Anc.7	WWAN+ UNIT MMIO- BT Anc.8	
Head (1-g SAR)	Left Touch	0.174	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.019	0.281	0.580	0.625	0.415	0.214	0.324	0.263	0.455	0.565	0.504	0.193	0.233	0.343	0.282		
	Left Tilt	0.058	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.159	0.136	0.231	0.125	0.059	0.077	0.103	0.126	0.144	0.170	0.078	0.079	0.097	0.123			
	Right Touch	0.107	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.202	0.460	0.736	0.760	0.178	0.390	0.171	0.831	1.043	0.824	0.228	0.299	0.511	0.292			
	Right Tilt	0.091	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.171	0.177	0.329	0.208	0.139	0.148	0.137	0.256	0.265	0.254	0.108	0.156	0.165	0.154			
Body-Worn (1-g SAR)	Rear	0.736	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	0.893	0.923	0.891	1.264	0.892	0.876	0.766	1.420	1.404	1.294	0.880	1.036	1.020	0.910			
	Front	0.590	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.609	0.777	0.745	0.982	0.611	0.670	0.620	1.003	1.062	1.012	0.734	0.755	0.814	0.764			
	Edge 1	0.548	0.423	0.343	0.281	0.530	0.453	0.318	0.106		0.971	0.891	0.829	1.078	1.001	0.866	0.654	1.531	1.396	1.184							
	Edge 2	0.417	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.840	0.760	0.619	0.528	0.459	0.615	0.478	0.570	0.726	0.589							
Hotspot (1-g SAR)	Edge 3	0.045			0.053	0.077	0.026			0.017																	
	Edge 4	1.175																									
	Edge 5	0.092	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.515	0.518	0.423	0.244	0.095	0.403	0.194	0.247	0.555	0.346							
	Rear	1.617								0.304																	
Product Specific 10-g (10-g SAR)	Front									0.062																	
	Edge 1									0.019																	
	Edge 2																										
	Edge 4	1.672				1.437				0.059																	

12.5. Sum of the SAR for WCDMA Band V & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (5GHz)	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ BT Ant.1+ UNII MIMO	WWAN+ BT Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ BT Ant.1+ UNII MIMO	WWAN+ DTS MIMO+ BT Ant.2+ UNII MIMO	WWAN+ UNII MIMO+ BT Ant.1	WWAN+ UNII MIMO+ BT Ant.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT MIMO
Head (1-g SAR)	Left Touch	0.237	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.344	0.643	0.688	0.478	0.277	0.326	0.518	0.628	0.567	0.256	0.296
	Left Tilt	0.151	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.252	0.229	0.324	0.218	0.150	0.196	0.219	0.237	0.263	0.171	0.172
	Right Touch	0.246	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.341	0.599	0.875	0.899	0.317	0.529	0.310	0.970	1.182	0.963	0.387
	Right Tilt	0.145	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.225	0.231	0.383	0.262	0.193	0.202	0.191	0.310	0.319	0.308	0.162
Body-Worn (1-g SAR)	Rear	0.353	0.157	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.510	0.540	0.508	0.881	0.509	0.493	0.383	1.037	1.021	0.911	0.497
	Front	0.215	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.234	0.402	0.370	0.607	0.236	0.295	0.245	0.628	0.687	0.637	0.359
	Rear	0.734	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.157	1.077	1.015	1.264	1.187	1.052	0.840	1.717	1.582	1.370	0.637
	Front	0.320	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.743	0.663	0.522	0.431	0.362	0.518	0.381	0.473	0.629	0.492	
Hotspot (1-g SAR)	Edge 1		0.044		0.053	0.077	0.026		0.017												
	Edge 2		0.334																		
	Edge 3		0.254																		
	Edge 4		0.174	0.423	0.426	0.331	0.152	0.003	0.311	0.102	0.597	0.600	0.505	0.326	0.177	0.485	0.276	0.329	0.637	0.428	

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg) (1-g or 10-g)		Calculated Distance (mm)	1-g SPLSR (≤0.04 or 10-g SPLSR (≤0.10))	Volume Scan (Yes/No)	Figure
		WWAN	DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (5GHz)							
		1	2	3	4	5	6	7	8	9							
Hotspot (1-g SAR)	Rear	0.734				0.530	0.453				1+5+6	1.717					
						0.530	0.453				5+6	0.983	18.8	0.05	Yes	2	
Hybrid SPLSR Note.3		0.734				0.717					1+(5+6)	2.185	132.1	0.02	No		

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (5GHz)	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ BT Ant.1+ UNII MIMO	WWAN+ BT Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ BT Ant.1+ UNII MIMO	WWAN+ DTS MIMO+ BT Ant.2+ UNII MIMO	WWAN+ UNII MIMO+ BT Ant.1	WWAN+ UNII MIMO+ BT Ant.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT MIMO
Head (1-g SAR)	Left Touch	0.237	0.027	0.145	0.135	0.241	0.019	0.019	0.019	0.019	0.375	0.613	0.375	0.282	0.401	0.391	0.154				
	Left Tilt	0.151	0.026	0.027	0.038	0.067	0.020	0.244	0.245	0.256	0.105	0.197	0.198	0.209	0.058						
	Right Touch	0.246	0.066	0.211	0.223	0.653	0.121	0.965	1.110	1.122	0.876	0.433	0.578	0.590	0.344						
	Right Tilt	0.145	0.056	0.057	0.063	0.117	0.017	0.318	0.319	0.325	0.180	0.218	0.219	0.225	0.080						
Body-Worn (1-g SAR)	Rear	0.353	0.095	0.097	0.147	0.244	0.144	0.692	0.694	0.744	0.391	0.592	0.594	0.644	0.291						
	Front	0.215	0.095	0.097	0.147	0.244	0.144	0.554	0.556	0.606	0.391	0.454	0.456	0.506	0.291						
	Rear	0.734	0.247	0.210	0.315	0.214		1.195	1.158	1.263	0.529										
	Front	0.320	0.023	0.217	0.323	0.214		0.557	0.751	0.857	0.537										
Hotspot (1-g SAR)	Edge 1		0.023		0.323	0.012															
	Edge 2		0.334																		
	Edge 3		0.254																		
	Edge 4		0.174	0.002	0.217	0.323	0.214	0.390	0.605	0.711	0.537										

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.6. Sum of the SAR for LTE Band 12 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (5GHz)	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ BT Ant.1+ UNII MIMO	WWAN+ BT Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ BT Ant.1+ UNII MIMO	WWAN+ DTS MIMO+ BT Ant.2+ UNII MIMO	WWAN+ UNII MIMO+ BT Ant.1	WWAN+ UNII MIMO+ BT Ant.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT MIMO
Head (1-g SAR)	Left Touch	0.159	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.344	0.643	0.610	0.400	0.199	0.309	0.248	0.440	0.550	0.489	0.218
	Left Tilt	0.100	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.201	0.178	0.273	0.167	0.101	0.119	0.145	0.168	0.186	0.212	0.139
	Right Touch	0.171	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.266	0.524	0.800	0.824	0.242	0.454	0.235	0.895	1.107	0.888	0.292
	Right Tilt	0.089	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.169	0.175	0.327	0.206	0.137	0.146	0.135	0.254	0.263	0.252	0.106
Body-Worn (1-g SAR)	Rear	0.308	0.157	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.465	0.495	0.463	0.836	0.464	0.448	0.338	0.992	0.976	0.866	0.452
	Front	0.277	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.296	0.464	0.432	0.669	0.298	0.357	0.307	0.690	0.749	0.699	0.421
	Rear	0.418	0.423	0.343	0.281	0.530	0.453	0.318	0.106		0.841	0.761	0.699	0.948	0.871	0.736	0.524	1.401	1.266	1.054	
	Front	0.303	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.726	0.646	0.505	0.414	0.345	0.501	0.364	0.456	0.612	0.475	
Hotspot (1-g SAR)	Edge 1		0.044		0.053	0.077	0.026		0.017												
	Edge 2		0.296																		
	Edge 3		0.125																		
	Edge 4		0.248	0.423	0.426	0.331	0.152	0.003	0.311	0.102	0.671	0.674	0.579	0.400	0.251	0.559	0.350	0.403	0.711	0.502	

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Ant.1		DTS Ant.2		RSDB MIMO (5GHz)		UNII MIMO (5GHz)		WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	DTS MIMO+ UNII MIMO	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	DTS MIMO+ UNII MIMO			
		1	2	3	4	5	6	1+2+5	1+3+5	1+4+5	4+5	1+2+6	1+3+6	1+4+6	4+6						
Head (1-g SAR)	Left Touch	0.159	0.027	0.145	0.135	0.241	0.019	0.427	0.545	0.535	0.376	0.205	0.323	0.313	0.154						
	Left Tilt	0.100	0.026	0.027	0.038	0.067	0.020	0.193	0.194	0.205	0.105	0.146	0.158	0.058							
	Right Touch	0.171	0.066	0.211	0.223	0.653	0.121	0.890	1.035	1.047	0.876	0.358	0.503	0.515	0.344						
	Right Tilt	0.089	0.056	0.057	0.063	0.117	0.017	0.262	0.263	0.269	0.180	0.162	0.169	0.080							
Body-Worn (1-g SAR)	Rear	0.308	0.095	0.097	0.147	0.244	0.144	0.647	0.649	0.699	0.391	0.547	0.549	0.599	0.291						
	Front	0.277	0.095	0.097	0.147	0.244	0.144	0.616	0.618	0.661	0.391	0.516	0.518	0.568	0.291						
	Rear	0.418	0.247	0.210	0.315	0.214		0.879	0.842	0.947	0.529										
	Front	0.303	0.023	0.217	0.323	0.214		0.540	0.734	0.840	0.537										
Hotspot (1-g SAR)	Edge 1		0.023		0.323	0.012						0.335									
	Edge 2	0.296																			
	Edge 3	0.125																			
	Edge 4	0.249	0.002	0.217	0.323	0.214		0.464	0.679	0.785	0.537										

12.7. Sum of the SAR for LTE Band 13 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (GHz)	WWAN+ DTS Ant.1	WWAN+ DTS Ant.2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Ant.1	WWAN+ BT Ant.2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Ant.1	WWAN+ UNII MIMO+ BT Ant.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT Ant.1
Head (1-g SAR)	Left Touch	0.189	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.277	0.576	0.621	0.411	0.210	0.320	0.259	0.451	0.561	0.500	0.189
	Left Tilt	0.105	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.206	0.183	0.278	0.172	0.106	0.124	0.150	0.173	0.191	0.217	0.125
	Right Touch	0.204	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.299	0.557	0.833	0.857	0.275	0.487	0.268	0.928	1.140	0.921	0.325
	Right Tilt	0.092	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.172	0.178	0.330	0.209	0.140	0.149	0.138	0.257	0.266	0.255	0.109
Body-Worn (1-g SAR)	Rear	0.308	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	0.465	0.495	0.463	0.836	0.454	0.448	0.338	0.992	0.976	0.866	0.452
	Front	0.265	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.284	0.452	0.420	0.657	0.286	0.345	0.295	0.678	0.737	0.687	0.409
	Edge 1	0.657	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.080	1.000	0.938	1.187	1.110	0.975	0.763	1.640	1.505	1.293	0.866
	Edge 2	0.322	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.745	0.665	0.524	0.433	0.364	0.520	0.383	0.475	0.631	0.494	0.439
Hotspot (1-g SAR)	Edge 3	0.227	0.044	0.053	0.077	0.026	0.017														
	Edge 4	0.178	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.601	0.604	0.509	0.330	0.181	0.489	0.290	0.333	0.641	0.432	

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (GHz)	WWAN+ DTS Ant.1	WWAN+ DTS Ant.2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Ant.1	WWAN+ BT Ant.2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Ant.1	WWAN+ UNII MIMO+ BT Ant.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT Ant.1
Hotspot (1-g SAR)	Rear	0.657				0.530	0.453				1+5+6	1.640									
	Hybrid SPLSR Note.3	0.657				0.530	0.453				1+5+6	0.983	18.8	0.05							
Hybrid SPLSR Note.3		0.657				0.717					1+(5+6)	2.031	137.6	0.02	No						

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (GHz)	WWAN+ DTS Ant.1	WWAN+ DTS Ant.2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Ant.1	WWAN+ BT Ant.2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Ant.1	WWAN+ UNII MIMO+ BT Ant.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT Ant.1
Head (1-g SAR)	Left Touch	0.189	0.027	0.145	0.135	0.241	0.019	0.457	0.575	0.055	0.375	0.235	0.353	0.343	0.154						
	Left Tilt	0.105	0.026	0.027	0.038	0.067	0.020	0.198	0.199	0.210	0.105	0.151	0.152	0.163	0.058						
	Right Touch	0.204	0.066	0.211	0.223	0.653	0.121	0.923	1.068	1.080	0.876	0.391	0.536	0.548	0.344						
	Right Tilt	0.092	0.056	0.057	0.063	0.117	0.017	0.265	0.266	0.272	0.180	0.165	0.166	0.172	0.080						
Body-Worn (1-g SAR)	Rear	0.308	0.095	0.097	0.147	0.244	0.144	0.647	0.649	0.699	0.391	0.547	0.549	0.599	0.291						
	Front	0.265	0.095	0.097	0.147	0.244	0.144	0.604	0.606	0.656	0.391	0.504	0.506	0.556	0.291						
	Edge 1	0.657	0.247	0.210	0.315	0.214		1.118	1.081	1.186	0.529										
	Edge 2	0.322	0.023	0.217	0.323	0.214		0.559	0.753	0.859	0.537										
Hotspot (1-g SAR)	Edge 3	0.227																			
	Edge 4	0.178	0.002	0.217	0.323	0.214		0.394	0.609	0.715	0.537										

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.8. Sum of the SAR for LTE Band 25 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (GHz)	WWAN+ DTS Ant.1	WWAN+ DTS Ant.2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Ant.1	WWAN+ BT Ant.2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Ant.1	WWAN+ UNII MIMO+ BT Ant.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT Ant.1
Head (1-g SAR)	Left Touch	0.170	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.277	0.576	0.621	0.411	0.210	0.320	0.259	0.451	0.561	0.500	0.189
	Left Tilt	0.070	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.171	0.148	0.243	0.137	0.071	0.089	0.115	0.138	0.156	0.182	0.090
	Right Touch	0.102	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.197	0.455	0.731	0.755	0.173	0.385	0.166	0.826	1.038	0.819	0.223
	Right Tilt	0.072	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.152	0.158	0.310	0.189	0.120	0.129	0.118	0.237	0.246	0.235	0.089
Body-Worn (1-g SAR)	Rear	0.606	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	0.763	0.793	0.761	1.134	0.762	0.746	0.636	1.290	1.274	1.164	0.750
	Front	0.338	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.357	0.525	0.493	0.730	0.359	0.418	0.368	0.751	0.810	0.760	0.482
	Edge 1	0.452	0.423	0.343	0.281	0.530	0.453	0.318	0.106		0.875	0.795	0.733	0.982	0.905	0.770	0.558	1.435	1.300	1.088	0.866
	Edge 2	0.454	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.877	0.797	0.656	0.565	0.496	0.652	0.515	0.607	0.763	0.626	0.439
Hotspot (1-g SAR)	Edge 3	0.227	0.044	0.053	0.077	0.026	0.017														
	Edge 4	0.178	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.505	0.508	0.413	0.234	0.085	0.393	0.184	0.237	0.545	0.336	
Product Specific 10-g (10-g SAR)	Rear	0.338	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.357	0.525	0.493	0.730	0.359	0.418	0.368	0.751	0.810	0.760	0.482
	Front	0.452	0.423	0.343	0.281	0.530	0.453	0.318	0.106		0.875	0.795	0.733	0.982	0.905	0.770	0.558	1.435	1.300	1.088	0.866
	Edge 1	0.454	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.877	0.797	0.656	0.565	0.496	0.652	0.515	0.607	0.763	0.626	0.439
	Edge 2	0.227	0.044	0.053	0.077	0.026	0.017														

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN	DTS Ant.1		DTS Ant.2		DTS MIMO		UNII MIMO (GHz)	UNII MIMO (GHz)	WWAN+ DTS Ant.1	WWAN+ DTS Ant.2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	DTS MIMO+ UNII MIMO	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	DTS MIMO+ UNII MIMO		
		1	2	3	4	5	6	1+2+5	1+3+5	1+4+5	4+5	1+2+6	1+3+6	1+4+6	4+6						
Head (1-g SAR)	Left Touch	0.170	0.027	0.145	0.135	0.241	0.019	0.438	0.556	0.546	0.376	0.216	0.334	0.324	0.154						
	Left Tilt	0.070	0.026	0.027	0.038	0.067	0.020	0.163	0.164	0.175	0.105	0.116	0.117	0.128	0.058						
	Right Touch	0.102	0.066	0.211	0.223	0.653	0.121	0.821	0.966	0.978	0.876	0.289	0.434	0.446	0.344						
	Right Tilt	0.072	0.056	0.057	0.063	0.117	0.017	0.245	0.246	0.252	0.180	0.145	0.146	0.152	0.080						
Body-Worn (1-g SAR)	Rear	0.606	0.095	0.097	0.147	0.244	0.144	0.945	0.947	0.997	0.391	0.845	0.847	0.897	0.291						
	Front	0.338	0.095	0.097	0.147	0.244	0.144	0.677	0.679	0.729	0.391	0.577	0.579	0.629	0.291						
	Rear	0.452	0.247	0.210	0.315	0.214	0.913	0.876	0.981	0.529											
	Front	0.454	0.023	0.217	0.323	0.214	0.691	0.885	0.991	0.537											
Hotspot (1-g SAR)	Edge 1		0.041				0.012														
	Edge 2																				
	Edge 3		1.285																		
	Edge 4	0.083	0.002	0.217	0.323	0.214		0.298	0.513	0.619	0.537										

12.9. Sum of the SAR for LTE Band 26 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)													
		Non-RSDB scenarios										Non-RSDB scenarios													
		WWAN	DTS Awt.1	DTS Awt.2	DTS MIMO	UNI MIMO (SGHz)	BT Awt.1	BT Awt.2	BT MIMO	UNI MIMO (6GHz)	WWAN+ DTS Awt.1	WWAN+ DTS Awt.2	WWAN+ DTS MIMO	WWAN+ UNI MIMO	WWAN+ BT Awt.1	WWAN+ BT Awt.2	WWAN+ BT MIMO	WWAN+ UNI MIMO (SGHz)	WWAN+ UNI MIMO (BT Awt.1)	WWAN+ UNI MIMO (BT Awt.2)	WWAN+ UNI MIMO (BT MIMO)	WWAN+ UNI MIMO (SGHz)	WWAN+ UNI MIMO (BT Awt.1)	WWAN+ UNI MIMO (BT Awt.2)	WWAN+ UNI MIMO (BT MIMO)
		1	2	3	4	5	6	7	8	9	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+6	1+5+7	1+5+8	1+9	1+6+9	1+7+9	1+8+9	
Head (1-g SAR)	Left Touch	0.238	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.345	0.644	0.689	0.479	0.278	0.388	0.327	0.519	0.629	0.568	0.257	0.297	0.407	0.346	
	Left Tilt	0.145	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.246	0.223	0.318	0.212	0.146	0.164	0.190	0.213	0.231	0.257	0.165	0.166	0.184	0.210	
	Right Touch	0.266	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.361	0.619	0.895	0.919	0.337	0.549	0.330	0.990	1.202	0.983	0.387	0.458	0.670	0.451	
	Right Tilt	0.134	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.214	0.220	0.372	0.251	0.182	0.191	0.180	0.299	0.308	0.297	0.151	0.190	0.208	0.197	
Body-Worn (1-g SAR)	Rear	0.301	0.157	0.187	0.155	0.532	0.156	0.140	0.030	0.144	0.458	0.488	0.456	0.829	0.457	0.441	0.331	0.985	0.969	0.859	0.445	0.601	0.585	0.475	
	Front	0.291	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.310	0.478	0.446	0.683	0.312	0.371	0.321	0.704	0.763	0.713	0.435	0.456	0.515	0.465	
	Rear	0.609	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.032	0.952	0.890	1.139	1.062	0.927	0.715	1.592	1.457	1.245					
	Front	0.344	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.767	0.687	0.546	0.455	0.386	0.542	0.405	0.497	0.653	0.516					
Hotspot (1-g SAR)	Edge 1		0.044		0.053	0.077	0.026		0.017																
	Edge 2	0.454																							
	Edge 3	0.285																							
	Edge 4	0.183	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.606	0.609	0.514	0.335	0.186	0.494	0.285	0.338	0.646	0.437					

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)									Sum of SAR (W/kg)											
		Non-RSDB scenarios									WWAN+ DTS Ant.1 UNI MIMO	WWAN+ DTS Ant.2 UNI MIMO	WWAN+ DTS MIMO UNI MIMO	DTS MIMO UNI MIMO	WWAN+ DTS Ant.1 UNI MIMO	WWAN+ DTS Ant.2 UNI MIMO	WWAN+ DTS MIMO UNI MIMO	DTS MIMO UNI MIMO				
		Non-RSDB scenarios																				
		WWAN	DTS Ant.1	DTS Ant.2	DTS MIMO	UNI MIMO (GHz)	UNI MIMO (GHz)	1+2+5	1+3+5	1+4+5									4+5	1+2+3	1+3+4	1+4+5
Head (1-g SAR)	Left Touch	0.238	0.027	0.145	0.135	0.241	0.019	0.506	0.624	0.614	0.376	0.284	0.402	0.392	0.154							
	Left Tilt	0.145	0.026	0.027	0.038	0.067	0.020	0.238	0.239	0.250	0.105	0.191	0.192	0.203	0.058							
	Right Touch	0.265	0.066	0.211	0.223	0.653	0.121	0.985	1.130	1.142	0.876	0.453	0.598	0.610	0.344							
	Right Tilt	0.134	0.056	0.067	0.063	0.063	0.017	0.307	0.308	0.314	0.180	0.207	0.208	0.214	0.044							
Body-Worn (1-g SAR)	Rear	0.301	0.095	0.097	0.147	0.244	0.144	0.640	0.642	0.692	0.391	0.540	0.542	0.592	0.291							
	Front	0.291	0.095	0.097	0.147	0.244	0.144	0.630	0.632	0.682	0.391	0.530	0.532	0.582	0.291							
	Rear	0.609	0.247	0.210	0.315	0.214		1.070	1.033	1.138	0.529											
	Front	0.344	0.023	0.217	0.323	0.214		0.581	0.775	0.881	0.537											
Hotspot (1-g SAR)	Edge 1		0.023		0.323	0.012					0.335											
	Edge 2	0.454																				
	Edge 3	0.285																				
	Edge 4	0.183	0.002	0.217	0.323	0.214		0.399	0.614	0.720	0.537											

Note(s):

- Green value is estimated SAR value.

12.10. Sum of the SAR for LTE Band 41 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)														
		Non-RSDB scenarios										Non-RSDB scenarios														
		WWAN	DTS Awt.1	DTS Awt.2	DTS MIMO	UNI MIMO (SGHz)	BT Awt.1	BT Awt.2	BT MIMO	UNI MIMO (6GHz)	WWAN+ DTS Awt.1	WWAN+ DTS Awt.2	WWAN+ DTS MIMO	WWAN+ UNI MIMO	WWAN+ BT Awt.1	WWAN+ BT Awt.2	WWAN+ BT MIMO	WWAN+ UNI MIMO	WWAN+ UNI MIMO	WWAN+ UNI MIMO	WWAN+ UNI MIMO	WWAN+ UNI MIMO	WWAN+ UNI MIMO	WWAN+ UNI MIMO	WWAN+ UNI MIMO	WWAN+ UNI MIMO
		1	2	3	4	5	6	7	8	9	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+6	1+5+7	1+5+8	1+9	1+6+9	1+7+9	1+8+9	1+9+9	1+9+9
		1	2	3	4	5	6	7	8	9	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+5+6	1+5+7	1+5+8	1+9	1+6+9	1+7+9	1+8+9	1+9+9	1+9+9
Head (1-g SAR)	Left Touch	0.113	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.220	0.519	0.564	0.354	0.153	0.263	0.202	0.394	0.504	0.443	0.132	0.172	0.282	0.221	0.221	
	Left Tilt	0.058	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.159	0.136	0.231	0.125	0.059	0.077	0.103	0.126	0.144	0.170	0.078	0.079	0.097	0.123		
	Right Touch	0.055	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.150	0.408	0.684	0.708	0.126	0.338	0.119	0.779	0.991	0.772	0.176	0.247	0.459	0.240		
	Right Tilt	0.061	0.080	0.096	0.238	0.117	0.048	0.057	0.046	0.017	0.141	0.147	0.299	0.178	0.109	0.118	0.107	0.226	0.235	0.224	0.078	0.126	0.135	0.124		
Body-Worn (1-g SAR)	Rear	0.263	0.157	0.187	0.155	0.538	0.156	0.140	0.030	0.144	0.420	0.450	0.418	0.791	0.419	0.403	0.293	0.947	0.931	0.821	0.407	0.563	0.547	0.437		
	Front	0.188	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.207	0.375	0.343	0.580	0.209	0.268	0.218	0.601	0.660	0.610	0.332	0.353	0.412	0.362		
	Rear	0.376	0.423	0.343	0.281	0.530	0.453	0.318	0.106		0.799	0.719	0.657	0.906	0.829	0.694	0.482	1.359	1.224	1.012						
	Front	0.204	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.627	0.547	0.406	0.315	0.246	0.402	0.265	0.357	0.513	0.376						
Hotspot (1-g SAR)	Edge 1		0.044		0.053	0.077	0.026		0.017																	
	Edge 2																									
	Edge 3	0.581																								
	Edge 4	0.429	0.423	0.426	0.331	0.152	0.003	0.031	0.102		0.852	0.855	0.760	0.581	0.432	0.740	0.531	0.584	0.892	0.683						
	Edge 5																									

12.11. Sum of the SAR for LTE Band 66 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)															
		Non-RSDB scenarios										Sum of SAR (W/kg)															
		WWAN	DTS Ant. 1	DTS Ant. 2	DTS MIMO	UNII MIMO (5GHz)	BT Ant. 1	BT Ant. 2	BT MIMO	UNII MIMO (6GHz)	WWAN+ DTS Ant. 1+ UNII MIMO	WWAN+ DTS Ant. 2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ UNII MIMO	WWAN+ BT Ant. 1	WWAN+ BT Ant. 2	WWAN+ BT MIMO+ UNII MIMO	WWAN+ UNII MIMO+ BT Ant. 1	WWAN+ UNII MIMO+ BT Ant. 2	WWAN+ UNII MIMO+ BT MIMO							
		1	2	3	4	5	6	7	8	9	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10	1+11	1+12						
Head (1-g SAR)	Left Touch	0.169	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.276	0.575	0.620	0.410	0.209	0.319	0.258	0.450	0.560	0.499	0.188	0.228	0.338	0.277			
	Left Tilt	0.068	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.169	0.146	0.241	0.135	0.069	0.087	0.113	0.136	0.154	0.180	0.088	0.089	0.107	0.133			
	Right Touch	0.097	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.192	0.450	0.726	0.750	0.168	0.380	0.161	0.821	1.033	0.814	0.218	0.289	0.501	0.282			
	Right Tilt	0.066	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.146	0.152	0.304	0.183	0.114	0.123	0.112	0.231	0.240	0.229	0.083	0.131	0.140	0.129			
Body-Worn (1-g SAR)	Rear	0.751	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	0.908	0.938	0.906	1.279	0.907	0.891	0.781	1.435	1.419	1.309	0.895	1.051	1.035	0.925			
	Front	0.450	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.469	0.637	0.605	0.842	0.471	0.530	0.480	0.863	0.922	0.872	0.584	0.615	0.674	0.624			
	Rear	0.686	0.423	0.343	0.281	0.530	0.453	0.318	0.106	0.019	1.109	1.029	0.967	1.216	1.139	1.004	0.792	1.669	1.534	1.322	0.584	0.615	0.674	0.624			
	Front	0.418	0.423	0.343	0.202	0.111	0.042	0.198	0.061	0.017	0.841	0.761	0.620	0.529	0.460	0.616	0.479	0.571	0.727	0.590							
Hotspot (1-g SAR)	Edge 1		0.044		0.053		0.077	0.026		0.017																	
	Edge 2	0.049																									
	Edge 3	1.087																									
	Edge 4	0.095	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.518	0.521	0.426	0.247	0.098	0.406	0.197	0.250	0.558	0.349							
Product Specific 10-g (10-g SAR)	Rear	1.547								0.304																	
	Front									1.270				3.833							1.851						
	Edge 1									0.262				0.019													
	Edge 2																										
Product Specific 10-g (10-g SAR)	Edge 3	1.952																									
	Edge 4									1.437			0.059														

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)									Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04 or 10-g SPLSR (≤0.10))	Volume Scan (Yes/No) Note 2	Figure	
		WWAN	DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (6GHz)						
		1	2	3	4	5	6	7	8	9						
Hotspot (1-g SAR)	Rear	0.686				0.530	0.453				1+5+6	1.669				4
						0.530	0.453				5+6	0.963	18.8	0.05	Yes	
Hybrid SPLSR Note 3		0.686				0.717					1+(5+6)	2.089	151.4	0.02	No	

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)															
		Non-RSDB scenarios										Sum of SAR (W/kg)															
		WWAN	DTS Aht.1	DTS Aht.2	DTS MIMO	UNII MIMO (5GHz)	BT Aht.1	BT Aht.2	BT MIMO	UNII MIMO (6GHz)	WWAN+ DTS Aht.1+ UNII MIMO	WWAN+ DTS Aht.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ UNII MIMO	WWAN+ BT Aht.1	WWAN+ BT Aht.2	WWAN+ BT MIMO+ UNII MIMO	WWAN+ UNII MIMO+ BT Aht.1	WWAN+ UNII MIMO+ BT Aht.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT Aht.1	WWAN+ UNII MIMO+ BT Aht.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT Aht.1	WWAN+ UNII MIMO+ BT Aht.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT Aht.1
		1	2	3	4	5	6	7	8	9	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10	1+11	1+12	1+13	1+14	1+15	1+16	1+17	1+18
Head (1-g SAR)	Left Touch	0.169	0.027	0.145	0.135	0.241	0.019	0.047	0.055	0.545	0.376	0.215	0.333	0.223	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154
	Left Tilt	0.068	0.026	0.027	0.038	0.067	0.020	0.161	0.162	0.173	0.105	0.114	0.115	0.126	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058
	Right Touch	0.097	0.066	0.211	0.223	0.653	0.121	0.816	0.961	0.973	0.876	0.284	0.429	0.441	0.344	0.344	0.344	0.344	0.344	0.344	0.344	0.344	0.344	0.344	0.344	0.344	0.344
	Right Tilt	0.066	0.056	0.057	0.063	0.117	0.017	0.239	0.240	0.246	0.180	0.130	0.140	0.146	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080
Body-Worn (1-g SAR)	Rear	0.751	0.095	0.097	0.147	0.244	0.144	1.090	1.092	1.142	0.391	0.990	0.992	1.042	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291
	Front	0.450	0.095	0.097	0.147	0.244	0.144	0.789	0.791	0.841	0.391	0.689	0.691	0.741	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291	0.291
	Left Tilt	0.068	0.247	0.210	0.315	0.214	0.147	1.110	1.110	1.215	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529	0.529
	Right Tilt	0.418	0.023	0.217	0.323	0.214	0.655	0.849	0.849	0.955	0.537	0.537	0.537	0.537	0.537	0.537	0.537	0.537	0.537	0.537	0.537	0.537	0.537	0.537	0.537	0.537	0.537
Hotspot (1-g SAR)	Edge 1	0.049	0.023	0.023	0.323	0.012					0.335																
	Edge 2	1.087																									
	Edge 3	0.095	0.002	0.217	0.323	0.214	0.311	0.526	0.632	0.537																	
	Edge 4	0.095	0.002	0.217	0.323	0.214	0.311	0.526	0.632	0.537																	

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.12. Sum of the SAR for NR Band n5 & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)															
		Non-RSDB scenarios										Sum of SAR (W/kg)															
		WWAN	DTS Aht.1	DTS Aht.2	DTS MIMO	UNII MIMO (5GHz)	BT Aht.1	BT Aht.2	BT MIMO	UNII MIMO (6GHz)	WWAN+ DTS Aht.1	WWAN+ DTS Aht.2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Aht.1	WWAN+ BT Aht.2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Aht.1	WWAN+ UNII MIMO+ BT Aht.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO	WWAN+ UNII MIMO+ BT Aht.1	WWAN+ UNII MIMO+ BT Aht.2	WWAN+ UNII MIMO+ BT MIMO			
1	2	3	4	5	6	7	8	9	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10	1+11	1+12	1+13	1+14	1+15	1+16	1+17	1+18		
Head (1-g SAR)	Left Touch	0.158	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.265	0.364	0.609	0.399	0.198	0.308	0.247	0.439	0.549	0.488	1.177	0.217	0.327	0.266			
	Left Tilt	0.102	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.203	0.180	0.275	0.169	0.103	0.121	0.147	0.170	0.188	0.214	0.122	0.123	0.141	0.167			
	Right Touch	0.236	0.095	0.353	0.629	0.053	0.071	0.283	0.064	0.121	0.331	0.589	0.865	0.889	0.307	0.519	0.300	0.960	1.172	0.953	0.357	0.428	0.640	0.421			
Body-Worn (1-g SAR)	Right Tilt	0.084	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.164	0.170	0.322	0.201	0.132	0.141	0.130	0.249	0.258	0.247	0.101	0.149	0.158	0.147			
	Rear	0.298	0.157	0.187	0.195	0.528	0.056	0.040	0.030	0.144	0.395	0.425	0.393	0.766	0.384	0.378	0.268	0.922	0.905	0.796	0.382	0.538	0.522	0.412			
	Front	0.179	0.019	0.187	0.187	0.187	0.036	0.030	0.030	0.144	0.136	0.362	0.334	0.573	0.359	0.269	0.502	0.601	0.569	0.601	0.323	0.344	0.403	0.353			
Hotspot (1-g SAR)	Rear	0.547	0.423	0.343	0.281	0.530	0.453	0.318	0.106		0.970	0.890	0.828	1.077	1.000	0.865	0.653	1.530	1.395	1.183							
	Front	0.335	0.422	0.343	0.202	0.111	0.042	0.198	0.061		0.758	0.678	0.537	0.446	0.377	0.533	0.396	0.488	0.644	0.507							
	Edge 1		0.044		0.053	0.077	0.026		0.017																		
	Edge 2	0.273																									
	Edge 3	0.216																									
	Edge 4	0.080	0.423	0.343	0.331	0.152	0.003	0.311	0.102		0.503	0.506	0.411	0.232	0.083	0.381	0.182	0.235	0.543	0.334							

12.13. Sum of the SAR for NR Band n66 (Main 1 Ant.) & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)													
		Non-RSDB scenarios																							
		WWAN	DTS Ant. 1		DTS Ant. 2		DTS MIMO	UNII MIMO (5GHz)	BT Ant. 1	BT Ant. 2	BT MIMO	UNII MIMO (6GHz)	WWAN+ DTS Ant. 1	WWAN+ DTS Ant. 2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Ant. 1	WWAN+ BT Ant. 2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Ant. 1	WWAN+ UNII MIMO+ BT Ant. 2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT Ant. 1	WWAN+ UNII MIMO+ BT Ant. 2	WWAN+ UNII MIMO+ BT MIMO
		1	2	3	4	5	6	7	8	9	10	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10	1+11	1+12	1+13	1+14	
Head (1-g SAR)	Left Touch	0.178	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.285	0.584	0.629	0.419	0.218	0.328	0.267	0.459	0.569	0.508	0.197	0.237	0.347	0.286	
	Left Tilt	0.084	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.185	0.162	0.257	0.151	0.085	0.103	0.129	0.152	0.170	0.196	0.104	0.105	0.123	0.149	
	Right Touch	0.117	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.212	0.470	0.746	0.770	0.188	0.400	0.181	0.841	1.053	0.834	0.238	0.309	0.521	0.302	
	Right Tilt	0.081	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.161	0.167	0.319	0.198	0.129	0.138	0.127	0.246	0.255	0.244	0.098	0.146	0.155	0.144	
Body-Worn (1-g SAR)	Rear	0.684	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	0.841	0.871	0.839	1.212	0.840	0.824	0.714	1.368	1.352	1.242	0.828	0.984	0.968	0.858	
	Front	0.549	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.568	0.736	0.704	0.941	0.570	0.629	0.579	0.962	1.021	0.971	0.693	0.714	0.773	0.723	
	Rear	0.654	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.077	0.997	0.935	1.184	1.107	0.972	0.760	1.637	1.502	1.290					
	Front	0.555	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.978	0.898	0.757	0.666	0.597	0.753	0.616	0.708	0.864	0.727					
Hotspot (1-g SAR)	Edge 1		0.044		0.053	0.077	0.026		0.017																
	Edge 2		0.053																						
	Edge 3		1.064																						
	Edge 4		0.112	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.535	0.538	0.443	0.264	0.115	0.423	0.214	0.267	0.575	0.366				
Product Specific 10-g (10-g SAR)	Rear									0.304											1.604				
	Front		1.183							0.062											1.245				
	Edge 1									0.019															
	Edge 2																								
Hotspot (1-g SAR)	Edge 3		1.819																						
	Edge 4							1.437			0.059														

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)		Calculated Distance (mm)	1-g SPLSR (=0.04 or 10-g SPLSR (=0.18))	Volume Scan (Yes/No) Note.2	Figure
		WWAN	DTS Ant. 1	DTS Ant. 2	DTS MIMO	UNII MIMO (5GHz)	BT Ant. 1	BT Ant. 2	BT MIMO	UNII MIMO (6GHz)		1-g or 10-g					
		1	2	3	4	5	6	7	8	9							
Hotspot (1-g SAR)	Rear	0.654				0.530	0.453				1+5+6	1.637					
						0.530	0.453				5+6	0.983	18.8	0.05	Yes		5
Hybrid SPLSR Note.3		0.654				0.717					1+(5+6)	2.025	152.6	0.02	No		

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		Non-RSDB scenarios																			
		WWAN							WWAN+ DTS Ant. 1+ UNII MIMO	WWAN+ DTS Ant. 2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	DTS MIMO+ UNII MIMO	WWAN+ DTS Ant. 1+ UNII MIMO	WWAN+ DTS Ant. 2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	DTS MIMO+ UNII MIMO					
		DTS Ant. 1	DTS Ant. 2	DTS MIMO	UNII MIMO (5GHz)	UNII MIMO (6GHz)	UNII MIMO (5GHz)	UNII MIMO (6GHz)	UNII MIMO (5GHz)	UNII MIMO (6GHz)	UNII MIMO (5GHz)	UNII MIMO (6GHz)	UNII MIMO (5GHz)	UNII MIMO (6GHz)	UNII MIMO (5GHz)	UNII MIMO (6GHz)					
1	2	3	4	5	6	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5								
Head (1-g SAR)	Left Touch	0.178	0.027	0.145	0.135	0.241	0.019	0.446	0.564	0.554	0.376	0.224	0.342	0.332	0.154						
	Left Tilt	0.084	0.026	0.027	0.038	0.067	0.020	0.177	0.178	0.189	0.105	0.130	0.131	0.142	0.058						
	Right Touch	0.117	0.066	0.211	0.223	0.653	0.121	0.836	0.981	0.993	0.876	0.304	0.449	0.461	0.344						
Body-Worn (1-g SAR)	Right Tilt	0.081	0.056	0.057	0.063	0.117	0.017	0.254	0.255	0.261	0.180	0.154	0.155	0.161	0.080						
	Rear	0.684	0.095	0.097	0.147	0.244	0.144	1.023	1.025	1.075	0.391	0.923	0.925	0.975	0.291						
	Front	0.549	0.095	0.097	0.147	0.244	0.144	0.888	0.890	0.940	0.391	0.788	0.790	0.840	0.291						
	Rear	0.654	0.247	0.210	0.315	0.214		1.115	1.078	1.183	0.529										
Hotspot (1-g SAR)	Front	0.555	0.023	0.217	0.323	0.214		0.792	0.986	1.092	0.537										
	Edge 1		0.023		0.323	0.012						0.335									
	Edge 2	0.053																			
	Edge 3	1.064																			
	Edge 4	0.112	0.002	0.217	0.323	0.214	0.328	0.543	0.649	0.537											

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.14. Sum of the SAR for ENDC(LTE B2 + NR Bn5) & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)													
		Non-RSDB scenarios																							
		WWAN	DTS Ant. 1	DTS Ant. 2	DTS MIMO	UNII MIMO (5GHz)	BT Ant. 1	BT Ant. 2	BT MIMO	UNII MIMO (6GHz)	WWAN+ DTS Ant. 1	WWAN+ DTS Ant. 2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Ant. 1	WWAN+ BT Ant. 2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Ant. 1	WWAN+ UNII MIMO+ BT Ant. 2	WWAN+ UNII MIMO+ BT MIMO					
Head (1-g SAR)	Left Touch	0.170	0.158	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	1.432	1.413	1.444	1.165	1.148	1.177	1.118	1.4546	1.4547	1.4548				
	Left Tilt	0.070	0.102	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.273	0.250	0.345	0.239	0.173	0.191	0.217	0.240	0.258	0.284				
	Right Touch	0.102	0.236	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.433	0.691	0.967	0.991	0.409	0.621	0.402	1.062	1.274	1.055				
	Right Tilt	0.072	0.084	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.236	0.242	0.394	0.273	0.204	0.213	0.202	0.321	0.330	0.319				
Body-Worn (1-g SAR)	Rear	0.606	0.238	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	1.001	1.031	0.999	1.372	1.000	0.984	0.874	1.528	1.512	1.402				
	Front	0.538	0.179	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.536	0.704	0.672	0.909	0.538	0.597	0.547	0.930	0.989	0.939				
	Rear	0.452	0.547	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.422	1.342	1.280	1.529	1.452	1.317	1.105	1.962	1.847	1.635				
	Front	0.454	0.335	0.423	0.343	0.202	0.111	0.042	0.198	0.061		1.212	1.132	0.991	0.900	0.831	0.987	0.850	0.942	1.098	0.961				
Hotspot (1-g SAR)	Edge 1			0.044		0.053		0.077		0.026															
	Edge 2	0.041	0.273																						
	Edge 3	1.285	0.216																						
	Edge 4	0.062	0.080	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.585	0.588	0.493	0.314	0.165	0.473	0.264	0.317	0.625	0.416				
Product Specific 10-g (10-g SAR)	Rear											0.304													
	Front											0.062													
	Edge 1											0.019													
	Edge 2																								
	Edge 3	2.236																							
	Edge 4						1.437				0.059														

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)							
		WWAN		Non-RSDB scenarios															
				DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (SCH)	UNII MIMO (SCH)	UNII MIMO (SCH)	UNII MIMO (SCH)	UNII MIMO (SCH)	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO
		1a	1b	2	3	4	5	6	7	8	9	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5
Head (1-g SAR)	Left Touch	0.170	0.158	0.027	0.145	0.135	0.241	0.019	0.596	0.714	0.704	0.376	0.374	0.492	0.482	0.154			
	Left Tilt	0.070	0.102	0.026	0.027	0.038	0.067	0.020	0.265	0.266	0.277	0.105	0.218	0.219	0.230	0.058			
	Right Touch	0.102	0.236	0.066	0.211	0.223	0.653	0.121	1.057	1.202	1.214	0.876	0.525	0.670	0.682	0.344			
	Right Tilt	0.072	0.084	0.056	0.067	0.063	0.117	0.017	0.329	0.330	0.336	0.180	0.229	0.230	0.236	0.080			
Body-Worn (1-g SAR)	Rear	0.606	0.238	0.095	0.097	0.147	0.244	0.144	1.183	1.185	1.235	0.391	1.083	1.085	1.135	0.291			
	Front	0.338	0.179	0.095	0.097	0.147	0.244	0.144	0.856	0.858	0.908	0.391	0.756	0.758	0.808	0.291			
	Rear	0.452	0.547	0.247	0.210	0.315	0.214		1.460	1.423	1.528	0.529							
	Front	0.454	0.335	0.023	0.217	0.323	0.214		1.026	1.220	1.326	0.537							
Hotspot (1-g SAR)	Edge 1			0.023				0.012				0.335							
	Edge 2	0.041	0.273																
	Edge 3	1.298	0.216																
	Edge 4	0.082	0.080	0.002	0.217	0.323	0.214		0.378	0.593	0.699	0.537							

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- For the Blue box, Enlarged zoom scan were evaluated for each LTE and NR by TCB workshop guide. Please refer to Section 12.24.

12.15. Sum of the SAR for ENDC(LTE B66 + NR Bn5) & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)													
		WWAN		Non-RSDB scenarios																					
				DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (SCH)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (SCH)	WWAN+ DTS Ant.1	WWAN+ DTS Ant.2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Ant.1	WWAN+ BT Ant.2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Ant.1	WWAN+ UNII MIMO+ BT Ant.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT Ant.1	WWAN+ UNII MIMO+ BT Ant.2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO+ BT MIMO
		1a	1b	2	3	4	5	6	7	8	9	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5
Head (1-g SAR)	Left Touch	0.169	0.158	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.434	0.733	0.778	0.568	0.367	0.477	0.416	0.608	0.716	0.657	0.346	0.386	0.496	0.435
	Left Tilt	0.068	0.102	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.271	0.248	0.343	0.237	0.171	0.189	0.215	0.238	0.256	0.282	0.190	0.191	0.209	0.235
	Right Touch	0.097	0.236	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.428	0.686	0.962	0.986	0.404	0.616	0.397	1.057	1.269	1.050	0.454	0.525	0.737	0.518
	Right Tilt	0.066	0.084	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.230	0.236	0.388	0.267	0.198	0.207	0.196	0.315	0.324	0.313	0.167	0.215	0.224	0.213
Body-Worn (1-g SAR)	Rear	0.751	0.238	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	1.146	1.176	1.144	1.517	1.145	1.129	1.019	1.673	1.657	1.547	1.133	1.289	1.273	1.163
	Front	0.450	0.179	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.648	0.816	0.784	1.021	0.650	0.709	0.659	1.042	1.101	1.051	0.773	0.794	0.853	0.803
	Rear	0.686	0.547	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.656	1.576	1.514	1.763	1.686	1.551	1.339	2.216	2.081	1.869				
	Front	0.418	0.335	0.423	0.343	0.202	0.111	0.042	0.196	0.061		1.176	1.096	0.955	0.864	0.795	0.951	0.814	0.906	1.062	0.925				
Hotspot (1-g SAR)	Edge 1		0.049	0.273		0.053	0.077	0.026		0.017															
	Edge 2	1.087	0.216																						
	Edge 3	0.095	0.080	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.598	0.601	0.506	0.327	0.178	0.486	0.277	0.330	0.638	0.429				
	Edge 4																								
Product Specific 10-g (10-g SAR)	Rear	1.547				2.286				0.304					3.833								1.851		
	Front					1.270				0.062															
	Edge 1					0.262				0.019															
	Edge 2																								
	Edge 3	1.952																							
	Edge 4					1.437				0.059															

SAR to Peak Location Separation Ratio (SPLSR)

Standalone SAR (W/kg)																		Sum of SAR (W/kg)		Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.18)	Volume Scan (Yes/No) Note.2	Volume Scan SAR (W/kg)	Figure
RF Exposure	Test Position	WWAN		DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (SCH)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (SCH)													
		1a	1b	2	3	4	5	6	7	8	9													
		1a	1b	2	3	4	5	6	7	8	9													
Body-Worn (1-g SAR)	Rear	0.751	0.238				0.528	0.156				1a+1b+5+6	1.673			No		9						
		0.751	0.238				0.528	0.156				1a+1b	0.989	37.0	0.03	No								
							0.528	0.156				1a+1b	0.684	11.6	0.05	Yes	0.590							
							0.590					1a+(5+6)	1.341	143.6	0.01	No								
Hybrid SPLSR Note.3			0.238				0.590					1b+(5+6)	0.828	120.1	0.01	No		10						
		0.751	0.238				0.528		0.140			1a+1b+5+7	1.657			No								
		0.751	0.238				0.528		0.140			1a+1b	0.989	37.0	0.03	No	0.588							
							0.588					1a+(5+7)	1.339	143.6	0.01	No								
Hybrid SPLSR Note.3			0.238				0.588					1b+(5+7)	0.826	120.1	0.01	No		11						
		0.686	0.547	0.423								1a+1b+2	1.656			No	1.040							
		0.686	0.547									1a+1b	1.233	37.0	0.04	No								
				0.423								(1a+1b)+2	1.463	141.7	0.01	No								
Hotspot (1-g SAR)	Rear	0.686	0.547				0.530	0.453				1a+1b+5+6	2.216			Yes	1.040	12						
		0.686	0.547				0.530	0.453				1a+1b	1.233	31.1	0.04	Yes	0.717							
							0.530	0.453				5+6	0.983	18.8	0.05	Yes								
							0.717					(1a+1b)+(5+6)	1.757	147.2	0.02	No								
Hybrid SPLSR Note.3			0.547				0.530		0.318			1a+(5+7)	2.081			No		13						
		0.686	0.547				0.530		0.318			1a+1b	1.233	31.1	0.04	Yes	1.040							
							0.530		0.318			5+7	0.848	34.5	0.02	No	0.622							
							0.622					(1a+1b)+(5+7)	1.662	147.2	0.01	No								
Hotspot (1-g SAR)	Rear	0.686	0.547				0.530		0.106			1a+1b+5+8	1.869			No		14						
		0.686	0.547				0.530		0.106			1a+1b	1.233	31.1	0.04	Yes	1.040							
							0.530		0.106			5+8	0.636	17.2	0.03	No	0.533							
							0.533					(1a+1b)+(5+8)	1.573	147.2	0.01	No								
Hybrid SPLSR		1.040					0.533					1.573	147.2	0.01	No									

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)													
		W/WAN		Non-RSDB scenarios								W/WAN+		W/WAN+		W/WAN+		DTS MMIO+		W/WAN+		W/WAN+		DTS MMIO	
				DTS Ant.1	DTS Ant.2	DTS MMIO	DTS MMIO (GHz)	UNI MMIO (GHz)	UNI MMIO (GHz)	W/WAN+ DTS Ant.1+ UNI MMIO	W/WAN+ DTS Ant.2+ UNI MMIO	W/WAN+ DTS MMIO+ UNI MMIO	DTS MMIO+ W/WAN+ DTS Ant.1+ UNI MMIO	W/WAN+ DTS Ant.2+ UNI MMIO	W/WAN+ DTS MMIO+ UNI MMIO	W/WAN+ DTS MMIO+ UNI MMIO	W/WAN+ DTS MMIO								
		1a	1b	2	3	4	5	6	1+2+5	1+3+5	1+4+5	4+5	1+2+6	1+3+6	4+1	4+1	4+1	4+1							
Head (1-g SAR)	Left Touch	0.169	0.158	0.027	0.145	0.135	0.241	0.019	0.595	0.713	0.703	0.376	0.373	0.491	0.481	0.416	0.154								
	Left Tilt	0.068	0.102	0.026	0.028	0.067	0.020	0.263	0.264	0.275	0.105	0.216	0.217	0.228	0.058	0.058	0.058								
	Right Touch	0.097	0.236	0.066	0.211	0.232	0.653	0.121	1.052	1.052	1.209	0.876	0.520	0.665	0.677	0.344	0.344								
Body-Worn (1-g SAR)	Right Tilt	0.066	0.084	0.056	0.067	0.063	0.117	0.017	0.323	0.324	0.339	0.149	0.223	0.224	0.230	0.080	0.080								
	Rear	0.751	0.238	0.095	0.097	0.147	0.244	0.144	1.328	1.330	1.380	0.391	1.228	1.230	1.280	0.291	0.291								
	Front	0.450	0.179	0.095	0.097	0.147	0.244	0.144	0.968	0.970	1.020	0.391	0.868	0.870	0.920	0.291	0.291								
Hotspot (1-g SAR)	Rear	0.686	0.547	0.247	0.210	0.315	0.214	1.694	1.657	1.762	1.529	0.529	0.529	0.529	0.529	0.529	0.529								
	Front	0.418	0.335	0.023	0.217	0.323	0.214	0.990	1.184	1.290	0.537	0.537	0.537	0.537	0.537	0.537	0.537								
	Edge 1	0.049	0.273	0.023	0.323	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012								
	Edge 2	0.049	0.273	0.023	0.323	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012								
	Edge 3	1.087	0.216	0.023	0.323	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012								
	Edge 4	0.095	0.080	0.002	0.217	0.323	0.214	0.391	0.606	0.712	0.537	0.537	0.537	0.537	0.537	0.537	0.537								

Note(s):

1. Green value is estimated SAR value.
2. SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
3. SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
4. Simultaneous transmission scenarios (1+5 & 1+6) are a subset of (1+5+6) scenario.
5. For the Blue box, Enlarged zoom scan were evaluated for each LTE and NR by TCB workshop guide. Please refer to Section 12.24.

Non-RSDB scenarios

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RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)							
		WWAN		Non-RSDB scenarios															
				DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	UNII MIMO (6GHz)	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO
		1a	1b	2	3	4	5	6	1+2+5	1+3+5	1+4+5	4+5	1+2+6	1+3+6	1+4+6	1+5+6	1+2+5	1+3+5	1+4+5
Head (1-g SAR)	Left Touch	0.238	0.178	0.027	0.145	0.135	0.241	0.019	0.684	0.802	0.792	0.376	0.462	0.580	0.570	0.154			
	Left Tilt	0.145	0.084	0.026	0.027	0.038	0.067	0.020	0.322	0.323	0.334	0.105	0.275	0.276	0.287	0.058			
	Right Touch	0.266	0.117	0.066	0.211	0.223	0.653	0.121	1.102	1.247	1.259	0.876	0.570	0.715	0.727	0.344			
Body-Worn (1-g SAR)	Right Tilt	0.134	0.081	0.056	0.057	0.063	0.117	0.017	0.388	0.389	0.395	0.180	0.288	0.289	0.295	0.080			
	Rear	0.301	0.684	0.095	0.097	0.147	0.244	0.144	1.324	1.326	1.376	0.391	1.224	1.226	1.276	0.291			
	Front	0.291	0.549	0.095	0.097	0.147	0.244	0.144	1.179	1.181	1.231	0.391	1.079	1.081	1.131	0.291			
Hotspot (1-g SAR)	Rear	0.609	0.654	0.247	0.210	0.315	0.214		1.724	1.687	1.792	0.529							
	Front	0.344	0.555	0.023	0.217	0.323	0.214		1.136	1.330	1.436	0.537							
	Edge 1			0.023		0.323	0.012					0.335							
	Edge 2	0.454	0.053																
	Edge 3	0.285	1.064																
	Edge 4	0.183	0.112	0.002	0.217	0.323	0.214		0.511	0.726	0.832	0.537							

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≥0.04) or 10-g SPLSR (≥0.18)	Volume Scan (Yes/No) Note.3	Volume Scan SAR (W/kg)	Figure		
		WWAN		DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
		1a	1b	2	3	4	5	6								
Hotspot (1-g SAR)	Rear	0.609	0.654	0.247				0.214		1a+1b+2+5	1.724				25	
		0.609	0.654							1a+1b	1.263	30.8	0.05	Yes		1.030
Hybrid SPLSR Note.4		1.030		0.247				0.214		2+5	0.461	14.8	0.02	No		0.335
Hybrid SPLSR Note.4		1.030			0.335				(1a+1b)+(2+5)	1.365	139.1	0.01	No			
Hotspot (1-g SAR)	Rear	0.609	0.654		0.210			0.214		1a+1b+3+5	1.687					26
		0.609	0.654							1a+1b	1.263	30.8	0.05	Yes	1.030	
Hybrid SPLSR Note.4		1.030			0.210			0.214		3+5	0.424	31.3	0.01	No	0.302	
Hybrid SPLSR Note.4		1.030				0.302			(1a+1b)+(3+5)	1.332	139.1	0.01	No			
Hotspot (1-g SAR)	Rear	0.609	0.654			0.315	0.214			1a+1b+4+5	1.792				27	
		0.609	0.654							1a+1b	1.263	30.8	0.05	Yes		1.030
Hybrid SPLSR Note.4		1.030				0.315	0.214			4+5	0.529	22	0.02	No		0.441
Hybrid SPLSR Note.4		1.030					0.441		(1a+1b)+(4+5)	1.471	139.1	0.01	No			

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- Simultaneous transmission scenarios (1+5 & 1+6) are a subset of (1+5+6) scenario.
- For the Blue box, Enlarged zoom scan were evaluated for each LTE and NR by TCB workshop guide. Please refer to Section 12.24.

12.17. Sum of the SAR for ENDC(LTE B12 + NR Bn66(Main Ant.1)) & Wi-Fi & BT**Non-RSDB scenarios**

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)																						
		WWAN		Non-RSDB scenarios								WWAN+ DTS Ant. 1		WWAN+ DTS Ant. 2	WWAN+ DTS MIMO	WWAN+ UNII MIMO	WWAN+ BT Ant. 1	WWAN+ BT Ant. 2	WWAN+ BT MIMO	WWAN+ UNII MIMO+ BT Ant. 1	WWAN+ UNII MIMO+ BT Ant. 2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO	WWAN+ UNII MIMO+ BT Ant. 1	WWAN+ UNII MIMO+ BT Ant. 2	WWAN+ UNII MIMO+ BT MIMO	WWAN+ UNII MIMO							
				DTS Ant. 1	DTS Ant. 2	DTS MIMO	UNII MIMO (5GHz)	BT Ant. 1	BT Ant. 2	BT MIMO	UNII MIMO (5GHz)																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
Head (1-g SAR)	Left Touch	0.159	0.178	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.444	0.743	0.788	0.578	0.377	0.487	0.426	0.618	0.728	0.667	0.356	0.436	0.506	0.445									
	Left Tilt	0.100	0.084	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.285	0.262	0.357	0.251	0.185	0.203	0.229	0.252	0.270	0.296	0.204	0.205	0.223	0.249									
	Right Touch	0.171	0.117	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.383	0.641	0.917	0.941	0.359	0.571	0.352	1.012	1.224	1.005	0.409	0.480	0.692	0.473									
	Right Tilt	0.089	0.081	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.250	0.256	0.408	0.287	0.218	0.227	0.216	0.335	0.344	0.333	0.187	0.235	0.244	0.233									
Body-Worn (1-g SAR)	Rear	0.308	0.684	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	1.149	1.179	1.147	1.520	1.148	1.132	1.022	1.676	1.660	1.550	1.136	1.292	1.276	1.166									
	Front	0.277	0.549	0.019	0.187	0.155	0.252	0.021	0.080	0.030	0.144	0.845	1.013	0.961	1.218	0.847	0.906	0.856	1.239	1.298	1.248	0.970	0.991	1.050	1.000									
	Rear	0.418	0.654	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.495	1.415	1.353	1.602	1.525	1.390	1.178	2.055	1.920	1.708													
	Front	0.303	0.555	0.423	0.343	0.202	0.111	0.042	0.198	0.061		1.281	1.201	1.060	0.969	0.900	1.056	0.919	1.011	1.167	1.030													
Hotspot (1-g SAR)	Edge 1				0.044		0.053	0.077	0.026		0.017																							
	Edge 2	0.296	0.053																															
	Edge 3	0.125	1.064																															
	Edge 4	0.248	0.112	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.783	0.786	0.691	0.512	0.363	0.671	0.462	0.515	0.823	0.614													
Product Specific 10-g (10-g SAR)	Rear		1.300						2.296			0.304													1.604									
	Front		1.183						1.270			0.062												1.245										
	Edge 1								0.262			0.019																						
	Edge 2																																	
	Edge 3		1.819																															
	Edge 4								1.137			0.059																						

SAR to Peak Location Separation Ratio (SPLSR)

RF to Peak Location separation ratio (SPSR)																	
RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.18)	Volume Scan (Yes/No) Note.2	Volume Scan SAR (W/kg)	Figure
		WWAN		DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (6GHz)						
		1a	1b	2	3	4	5	6	7	8	9						
Body-Worn (1-g SAR)	Rear	0.308	0.684				0.528	0.156				1a+1b+5+6	1.676				28
		0.308	0.684									1a+1b	0.992	25.0	0.04	No	
							0.528	0.156				1a+1b	0.684	11.6	0.05	Yes	
Hybrid SPLSR Note.3		0.308					0.590					1a+(5+6)	0.898	118.5	0.01	No	29
			0.684									1b+(5+6)	1.274	139.7	0.01	No	
		0.308	0.684				0.528		0.140			1a+1b+5+7	1.660				
Body-Worn (1-g SAR)	Rear	0.308	0.684									1a+1b	0.992	25.0	0.04	No	30
		0.308	0.684									1a+1b	0.668	39.0	0.01	No	
							0.528		0.140			1a+1b	0.668	39.0	0.01	No	
Hybrid SPLSR Note.3		0.308					0.588					1a+(5+7)	0.896	118.5	0.01	No	31
			0.684					0.588				1b+(5+7)	1.272	139.7	0.01	No	
		0.418	0.654				0.530	0.453				1a+1b+5+6	2.055				
Hotspot (1-g SAR)	Rear	0.418	0.654									1a+1b	1.072	37.5	0.03	No	32
		0.418	0.654									1a+1b	0.983	18.8	0.05	Yes	
							0.530	0.453				1a+1b	0.983	18.8	0.05	Yes	
Hybrid SPLSR Note.3		0.838					0.717					1a+(5+6)	1.555	147.1	0.01	No	33
		0.418	0.654				0.530		0.318			1a+1b+5+7	1.920				
		0.418	0.654						0.318			1a+1b	1.072	37.5	0.03	No	
Hotspot (1-g SAR)	Rear	0.418	0.654				0.530				0.106	1a+1b+5+8	1.708				34
		0.418	0.654									1a+1b	1.072	37.5	0.03	No	
							0.530				0.106	1a+1b	0.636	17.2	0.03	No	
Hybrid SPLSR Note.3		0.838						0.533				1a+(5+8)	1.371	147.1	0.01	No	35
		0.418	0.654														
		0.418	0.654														

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)							
		WWAN		Non-RSDB scenarios						WWAN+ DTS Ant.1+ UNI MIMO		WWAN+ DTS Ant.2+ UNI MIMO		WWAN+ DTS MIMO+ UNI MIMO		WWAN+ DTS Ant.1+ UNI MIMO		WWAN+ DTS Ant.2+ UNI MIMO	
		DTS Ant.1		DTS Ant.2		DTS MIMO		UNI MIMO (5GHz)		1+2+5		1+3+5		1+4+5		4+5		1+2+6	
		1a	1b	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Head (1-g SAR)	Left Touch	0.159	0.178	0.027	0.145	0.135	0.241	0.019	0.605	0.723	0.713	0.376	0.383	0.501	0.491	0.154			
	Left Tilt	0.100	0.084	0.026	0.027	0.038	0.067	0.020	0.277	0.278	0.289	0.105	0.230	0.231	0.242	0.058			
	Right Touch	0.171	0.117	0.066	0.211	0.223	0.653	0.121	1.007	1.152	1.164	0.876	0.475	0.620	0.632	0.344			
Body-Worn (1-g SAR)	Right Tilt	0.089	0.081	0.056	0.057	0.063	0.117	0.017	0.343	0.344	0.350	0.180	0.243	0.244	0.250	0.080			
	Rear	0.308	0.684	0.095	0.097	0.147	0.244	0.144	1.331	1.333	1.383	0.391	1.231	1.233	1.283	0.291			
	Front	0.277	0.549	0.095	0.097	0.147	0.244	0.144	1.165	1.167	1.217	0.391	1.065	1.067	1.117	0.291			
Hotspot (1-g SAR)	Rear	0.418	0.654	0.247	0.210	0.315	0.214		1.533	1.496	1.601	0.529							
	Front	0.303	0.555	0.023	0.217	0.323	0.214		1.095	1.289	1.395	0.537							
	Edge 1			0.023		0.323	0.012					0.335							
	Edge 2	0.296	0.053																
	Edge 3	0.125	1.064																
	Edge 4	0.248	0.112	0.002	0.217	0.323	0.214		0.576	0.791	0.897	0.537							
	Hybrid SPLSR Note.4	0.838				0.441			1.279	1.39.1	0.01	No	0.838						

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04 or 10-g SPLSR (=0.10))	Volume Scan (Yes/No) <i>Note.2</i>	Volume Scan SAR (W/kg)	Figure		
		WWAN		DTS Ant.1		DTS Ant.2		DTS MIMO		UNI MIMO (5GHz)								UNI MIMO (600MHz)	
		1a	1b	2	3	4	5	6	7	8	9								
Hotspot (1-g SAR)	Rear	0.418	0.654			0.315	0.214			1a+1b+4+5	1.601								
		0.418	0.654							1a+1b	1.072	37.5	0.03	No	0.838				
						0.315	0.214			4+5	0.529	22.0	0.02	No	0.441				
Hybrid SPLSR <i>Note.4</i>		0.838				0.441				(1a+1b)+(4+5)	1.279	139.1	0.01	No					

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- Simultaneous transmission scenarios (1+5 & 1+6) are a subset of (1+5+6) scenario.
- For the Blue box, Enlarged zoom scan were evaluated for each LTE and NR by TCB workshop guide. Please refer to Section 12.24.

12.18. Sum of the SAR for ENDC(LTE B13 + NR Bn66(Main Ant.1)) & Wi-Fi & BT**Non-RSDB scenarios**

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)													
		WWAN		Non-RSDB scenarios						WWAN+ DTS Ant.1+ UNI MIMO		WWAN+ DTS Ant.2+ UNI MIMO		WWAN+ DTS MIMO+ UNI MIMO		WWAN+ DTS Ant.1+ UNI MIMO		WWAN+ DTS Ant.2+ UNI MIMO		WWAN+ DTS MIMO+ UNI MIMO		WWAN+ DTS Ant.1+ UNI MIMO		WWAN+ DTS Ant.2+ UNI MIMO	
		DTS Ant.1		DTS Ant.2		DTS MIMO		UNI MIMO (5GHz)		1+2		1+3		1+4		1+5		1+6		1+7		1+8		1+9	
		1a	1b	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Head (1-g SAR)	Left Touch	0.189	0.178	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.474	0.773	0.818	0.608	0.407	0.517	0.456	0.648	0.758	0.697	0.386	0.426	0.536	0.475
	Left Tilt	0.105	0.084	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.290	0.267	0.362	0.256	0.190	0.208	0.234	0.257	0.275	0.301	0.209	0.210	0.228	0.254
	Right Touch	0.204	0.117	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.416	0.674	0.950	0.974	0.392	0.604	0.385	1.045	1.257	1.038	0.442	0.513	0.725	0.506
Body-Worn (1-g SAR)	Right Tilt	0.092	0.081	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.253	0.259	0.411	0.290	0.221	0.230	0.219	0.338	0.347	0.336	0.190	0.238	0.247	0.236
	Rear	0.308	0.684	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	1.149	1.179	1.147	1.520	1.148	1.132	1.022	1.676	1.660	1.550	1.136	1.292	1.276	1.166
	Front	0.265	0.549	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.833	1.001	0.969	1.206	0.835	0.894	0.844	1.227	1.286	1.236	0.958	0.979	1.038	0.988
Hotspot (1-g SAR)	Rear	0.657	0.654	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.734	1.654	1.592	1.841	1.764	1.629	1.417	2.294	2.159	1.947				
	Front	0.322	0.555	0.423	0.343	0.202	0.111	0.042	0.198	0.061		1.300	1.220	1.079	0.988	0.919	1.075	0.938	1.030	1.186	1.049				
	Edge 1			0.044		0.053	0.077	0.026		0.017															
	Edge 2	0.363	0.053																						
	Edge 3	0.227	1.264																						
	Edge 4	0.178	0.112	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.713	0.716	0.621	0.442	0.293	0.601	0.392	0.445	0.753	0.544				
	Hybrid SPLSR Note.3	0.839				0.590						1.429	139.5	0.01	No										
Product Specific 10-g (10-g SAR)	Rear	1.300				2.286					0.304				3.586							1.604			
	Front	1.183				1.270					0.062				2.453							1.245			
	Edge 1					0.262					0.019														
	Edge 2																								
	Edge 3		1.819																						
	Edge 4										0.059														
	Hybrid SPLSR Note.3	0.839				0.588						1.427	139.5	0.01	No										

SAR to Peak Location Separation Ratio (SPLSR)

Antenna Peak Location Separation from the Body																			
RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.18)	Volume Scan (Yes/No) Note.2	Volume Scan SAR (W/kg)	Figure		
		WWAN		DTS Ant.1	DTS Ant.2	DTS MIMO	UNI MIMO (5GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNI MIMO (2.4GHz)								
		1a	1b	2	3	4	5	6	7	8	9								
Body-Worn (1-g SAR)	Rear	0.308	0.684				0.528	0.156					1a+1b+5+6	1.676				34	
		0.308	0.684										1a+1b	0.992	17.1	0.06	Yes		0.839
							0.528	0.156					5+6	0.684	11.6	0.05	Yes		0.590
Hybrid SPLSR Note.3		0.839					0.590						(1a+1b)+(5+6)	1.429	139.5	0.01	No		
Body-Worn (1-g SAR)	Rear	0.308	0.684				0.528		0.140				1a+1b+5+7	1.660				35	
		0.308	0.684							0.140			1a+1b	0.992	17.1	0.06	Yes		0.839
							0.528						5+7	0.668	39.0	0.01	No		0.588
Hybrid SPLSR Note.3		0.839					0.588						(1a+1b)+(5+7)	1.427	139.5	0.01	No		
Hotspot (1-g SAR)	Rear	0.657	0.654	0.423									1a+1b+2	1.734				36	
		0.657	0.654										1a+1b	1.311	27.3	0.05	Yes		0.966
Hybrid SPLSR Note.3		0.966		0.423									(1a+1b)+2	1.389	141.7	0.01	No		
Hotspot (1-g SAR)	Rear	0.657	0.654		0.343								1a+1b+3	1.654				37	
		0.657	0.654										1a+1b	1.311	27.3	0.05	Yes		0.966
Hybrid SPLSR Note.3		0.966			0.343								(1a+1b)+3	1.309	107.3	0.01	No		
Hotspot (1-g SAR)	Rear	0.657	0.654				0.530	0.453					1a+1b+5+6	2.294				38	
		0.657	0.654							0.530	0.453		1a+1b	1.311	27.3	0.05	Yes		0.966
										0.530			5+6	0.983	18.8	0.05	Yes		0.717
Hybrid SPLSR Note.3		0.966					0.717						(1a+1b)+(5+6)	1.683	147.2	0.01	No		
Hotspot (1-g SAR)	Rear	0.657	0.654				0.530		0.318				1a+1b+5+7	2.159				39	
		0.657	0.654							0.318			1a+1b	1.311	27.3	0.05	Yes		0.966
							0.530						5+7	0.848	34.5	0.02	No		0.622
Hybrid SPLSR Note.3		0.966					0.622						(1a+1b)+(5+7)	1.588	147.2	0.01	No		
Hotspot (1-g SAR)	Rear	0.657	0.654				0.530				0.106		1a+1b+5+8	1.947				40	
		0.657	0.654									0.106	1a+1b	1.311	27.3	0.05	Yes		0.966
							0.530						5+8	0.636	17.2	0.03	No		0.533
Hybrid SPLSR Note.3		0.966					0.533						(1a+1b)+(5+8)	1.499	147.2	0.01	No		

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)							
		WWAN		Non-RSDB scenarios						WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO
		1a 1b		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		1a	1b	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Head (1-g SAR)	Left Touch	0.189	0.178	0.027	0.145	0.135	0.241	0.019	0.635	0.753	0.743	0.376	0.413	0.531	0.521	0.154			
	Left Tilt	0.105	0.084	0.026	0.027	0.038	0.067	0.020	0.282	0.283	0.294	0.105	0.235	0.236	0.247	0.058			
	Right Touch	0.204	0.117	0.066	0.211	0.223	0.653	0.121	1.040	1.185	1.197	0.876	0.508	0.653	0.665	0.344			
Body-Worn (1-g SAR)	Right Tilt	0.092	0.081	0.056	0.057	0.063	0.117	0.017	0.346	0.347	0.353	0.180	0.246	0.247	0.253	0.080			
	Rear	0.308	0.684	0.095	0.097	0.147	0.244	0.144	1.331	1.333	1.383	0.391	1.231	1.233	1.283	0.291			
	Front	0.265	0.549	0.095	0.097	0.147	0.244	0.144	1.153	1.155	1.205	0.391	1.053	1.055	1.105	0.291			
Hotspot (1-g SAR)	Rear	0.657	0.654	0.247	0.210	0.315	0.214		1.772	1.735	1.840	0.529							
	Front	0.322	0.555	0.023	0.217	0.323	0.214		1.114	1.308	1.414	0.537							
	Edge 1			0.023		0.323	0.012					0.335							
	Edge 2	0.363	0.053																
	Edge 3	0.227	1.064																
	Edge 4	0.178	0.112	0.002	0.217	0.323	0.214		0.506	0.721	0.827	0.537							
	Hybrid SPLSR Note.4																		

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR(W/kg)								Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.18)	Volume Scan (Yes/No) <i>Note.3</i>	Volume Scan SAR (W/kg)	Figure	
		WWAN		DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	UNII MIMO (6GHz)								
		1a	1b	2	3	4	5	6								
Hotspot (1-g SAR)	Rear	0.657	0.654	0.247				0.214		1a+1b+2+5	1.772				41	
		0.657	0.654							1a+1b	1.311	27.3	0.05	Yes		0.966
				0.247				0.214		2+5	0.461	14.8	0.02	No		0.335
Hybrid SPLSR <i>Note.4</i>		0.966			0.335				(1a+1b)+(2+5)	1.301	139.2	0.01	No			
Hotspot (1-g SAR)	Rear	0.657	0.654		0.210			0.214		1a+1b+3+5	1.735				42	
		0.657	0.654							1a+1b	1.311	27.3	0.05	Yes		0.966
				0.210				0.214		3+5	0.424	31.3	0.01	No		0.302
Hybrid SPLSR <i>Note.4</i>		0.966			0.302				(1a+1b)+(3+5)	1.268	139.2	0.01	No			
Hotspot (1-g SAR)	Rear	0.657	0.654			0.315	0.214			1a+1b+4+5	1.840				43	
		0.657	0.654							1a+1b	1.311	27.3	0.05	Yes		0.966
					0.315	0.214				4+5	0.529	22.0	0.02	No		0.441
Hybrid SPLSR <i>Note.4</i>		0.966			0.441				(1a+1b)+(4+5)	1.407	139.2	0.01	No			

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- Simultaneous transmission scenarios (1+5 & 1+6) are a subset of (1+5+6) scenario.
- Simultaneous transmission scenarios (1+5 & 1+7) are a subset of (1+5+7) scenario.
- For the Blue box, Enlarged zoom scan were evaluated for each LTE and NR by TCB workshop guide. Please refer to Section 12.24.

12.19. Sum of the SAR for ENDC(LTE B2 + NR Bn66(Main Ant.3)) & Wi-Fi & BT**Non-RSDB scenarios**

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)													
		WWAN		DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (6GHz)	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS Ant.1+ UNII MIMO	WWAN+ DTS Ant.2+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO	WWAN+ DTS MIMO+ UNII MIMO
		1a	1b	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
		1a	1b	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Head (1-g SAR)	Left Touch	0.170	0.959	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	1.236	1.535	1.580	1.370	1.169	1.279	1.218	1.410	1.520	1.459	1.148	1.168	1.298	1.237
	Left Tilt	0.070	0.159	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	1.330	1.307	1.402	1.296	1.230	1.248	1.274	1.297	1.315	1.341	1.249	1.250	1.268	1.294
	Right Touch	0.102	0.538	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.735	0.993	1.269	1.293	0.711	0.923	0.704	1.364	1.576	1.357	0.761	0.832	1.044	0.825
Body-Worn (1-g SAR)	Right Tilt	0.072	0.922	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	1.074	1.080	1.232	1.111	1.042	1.061	1.040	1.159	1.168	1.157	1.011	1.059	1.068	1.057
	Rear	0.606	0.364	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	1.127	1.157	1.125	1.498	1.126	1.110	1.000	1.654	1.638	1.528	1.114	1.270	1.254	1.144
	Front	0.338	0.285	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.642	0.810	0.778	1.015	0.644	0.703	0.653	1.036	1.095	1.045	0.767	0.788	0.847	0.797
Hotspot (1-g SAR)	Rear	0.452	0.823	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.698	1.618	1.556	1.805	1.728	1.593	1.381	2.258	2.123	1.911				
	Front	0.454	0.471	0.423	0.343	0.202	0.111	0.042	0.198	0.061		1.348	1.268	1.127	1.036	0.967	1.123	0.986	1.078	1.234	1.097				
	Edge 1	0.041	1.099	0.044		0.053	0.077	0.026		0.017															
	Edge 2	0.220																							
	Edge 3	1.285																							
	Edge 4	0.082		0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.505	0.508	0.413	0.234	0.085	0.393	0.184	0.237	0.545	0.336				
	Rear																								
Product Specific 10-g (10-g SAR)	Front																								
	Edge 1																								
	Edge 2																								
	Edge 3	2.236																							
	Edge 4																								

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.18)	Volume Scan (Yes/No) Note.2	Volume Scan SAR (W/kg)	Figure	
		WWAN		DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (5GHz)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (6GHz)							
		1a	1b	2	3	4	5	6	7	8	9							
Body-Worn (1-g SAR)	Rear	0.606	0.364				0.528	0.156				1a+1b+5+6	1.654				44	
			0.364				0.528					1b+5	0.892	36.9	0.02	No		
							0.528	0.156				5+6	0.684	11.6	0.05	Yes		
Hybrid SPLSR Note.3		0.606				0.775						1a+(1b+5+6)	1.381	142.6	0.01	No		
Body-Worn (1-g SAR)	Rear	0.606	0.364				0.528		0.140			1a+1b+5+7	1.638				45	
			0.364				0.528			0.140		1b+5	0.892	36.9	0.02	No		
							0.528				0.140	5+7	0.668	39.0	0.01	No		
Hybrid SPLSR Note.3		0.606				0.768						1a+(1b+5+7)	1.374	142.6	0.01	No		
Hotspot (1-g SAR)	Rear	0.452	0.823	0.423								1a+1b+2	1.698				46	
			0.823	0.423								1b+2	1.246	19.0	0.07	Yes		0.853
		Hybrid SPLSR Note.3		0.452	0.853								1a+(1b+2)	1.305	160.0	0.01		No
Hotspot (1-g SAR)	Rear	0.452	0.823		0.343							1a+1b+3	1.618				47	
		0.452	0.823					1a+1b	1.275	159.6	0.01	No						
		0.452			0.343			1a+3	0.795	113.8	0.01	No						
			0.823		0.343			1b+3	1.166	62.6	0.02	No						
		0.452	0.823				0.530	0.453			1a+1b+5+6	2.258						
Hotspot (1-g SAR)	Rear		0.823				0.530				1b+5	1.353	30.3	0.05	Yes	1.200		
							0.530	0.453			5+6	0.983	18.8	0.05	Yes			
		Hybrid SPLSR Note.3		0.452				1.200				1a+(5+6)	1.652	150.8	0.01		No	
Hotspot (1-g SAR)	Rear	0.452	0.823				0.530		0.318			1a+1b+5+7	2.123				49	
			0.823				0.530			0.318		1b+5	1.353	30.3	0.05	Yes		
		Hybrid SPLSR Note.3		0.452				1.070					5+7	0.848	34.5	0.02		No
Hotspot (1-g SAR)	Rear	0.452	0.823				0.530			0.106		1a+1b+5+8	1.911				50	
			0.823				0.530				0.106	1b+5	1.353	30.3	0.05	Yes		
		Hybrid SPLSR		0.452				0.993					5+8	0.636	17.2	0.03		No
Hybrid SPLSR												1a+(5+8)	1.445	150.8	0.01	No		

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		WWAN		Non-RSDB scenarios								Sum of SAR (W/kg)									
		DTS Ant.1		DTS Ant.2		DTS Ant.3		DTS Ant.4		DTS Ant.5		Sum of SAR (W/kg)									
		1a	1b	2	3	4	5	6	7	8	9	1+2+5	1+3+5	1+4+5	4+5	1+2+6	1+3+6	1+4+6	4+6	1+5+6	2+5+6
Head (1-g SAR)	Left Touch	0.170	0.959	0.027	0.145	0.135	0.241	0.019	1.397	1.515	1.505	0.376	1.175	1.293	1.283	0.154					
	Left Tilt	0.070	0.159	0.026	0.027	0.038	0.067	0.020	1.322	1.323	1.334	0.105	1.275	1.276	1.287	0.058					
	Right Touch	0.102	0.538	0.066	0.211	0.223	0.653	0.121	1.359	1.504	1.516	0.876	0.827	0.972	0.984	0.344					
Body-Worn (1-g SAR)	Right Tilt	0.072	0.922	0.056	0.057	0.063	0.117	0.017	1.167	1.168	1.174	0.180	1.067	1.068	1.074	0.080					
	Rear	0.606	0.364	0.095	0.097	0.147	0.244	0.144	1.309	1.311	1.361	0.391	1.209	1.211	1.261	0.291					
	Front	0.338	0.285	0.095	0.097	0.147	0.244	0.144	0.962	0.964	1.014	0.391	0.862	0.864	0.914	0.291					
Hotspot (1-g SAR)	Rear	0.452	0.823	0.247	0.210	0.315	0.214		1.736	1.699	1.804	0.529									
	Front	0.454	0.471	0.023	0.217	0.323	0.214		1.162	1.356	1.462	0.537									
	Edge 1		1.099	0.023		0.323	0.012					0.335									
	Edge 2	0.041	0.220																		
	Edge 3	1.285																			
	Edge 4	0.082			0.002	0.217	0.323	0.214	0.298	0.513	0.619	0.537									

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.18)	Volume Scan (Yes/No) Note.3	Volume Scan SAR (W/kg)	Figure
		WWAN		DTS Ant.1	DTS Ant.2	DTS Ant.3	DTS Ant.4	DTS Ant.5	UNIT MIMO (5GHz)	UNIT MIMO (6GHz)							
		1a	1b	2	3	4	5	6									
Hotspot (1-g SAR)	Rear	0.452	0.823	0.247			0.214			1a+1b+2+5	1.736						
			0.823				0.214			1b+5	1.037	33.6	0.03	No			
				0.247			0.214			2+5	0.461	14.8	0.02	No	0.844		
Hybrid SPLSR Note.4		0.452			0.844				(1a+1b)+(2+5)	1.296	143.0	0.01	No				
Hotspot (1-g SAR)	Rear	0.452	0.823		0.210		0.214			1a+1b+3+5	1.699						
			0.823				0.214			1b+5	1.037	33.6	0.03	No			
					0.210		0.214			3+5	0.424	31.3	0.01	No	0.833		
Hybrid SPLSR Note.4		0.452			0.833				(1a+1b)+(3+5)	1.285	143.0	0.01	No				
Hotspot (1-g SAR)	Rear	0.452	0.823			0.315	0.214			1a+1b+4+5	1.804						
			0.823				0.214			1b+5	1.037	33.6	0.03	No			
						0.315	0.214			4+5	0.529	22.0	0.02	No	0.867		
Hybrid SPLSR Note.4		0.452			0.867				(1a+1b)+(4+5)	1.319	143.0	0.01	No				

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- Simultaneous transmission scenarios (1+5 & 1+6) are a subset of (1+5+6) scenario.
- For the Blue box, Enlarged zoom scan were evaluated for each LTE and NR by TCB workshop guide. Please refer to Section 12.24.

12.20. Sum of the SAR for ULCA(LTE B2 + LTE B4 (Main Ant.3)) & Wi-Fi & BT**Non-RSDB scenarios**

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		WWAN		Non-RSDB scenarios								Sum of SAR (W/kg)									
		DTS Ant.1		DTS Ant.2		DTS Ant.3		DTS Ant.4		DTS Ant.5		Sum of SAR (W/kg)									
		1a	1b	2	3	4	5	6	7	8	9	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	1+10	1+11
Head (1-g SAR)	Left Touch	0.170	0.663	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.940	1.239	1.284	1.074	0.873	0.983	0.922	1.114	1.224	1.163
	Left Tilt	0.070	0.796	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.967	0.944	1.039	0.933	0.867	0.885	0.911	0.934	0.952	0.978
	Right Touch	0.102	0.352	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.549	0.807	1.083	1.107	0.525	0.737	0.518	1.178	1.390	1.171
Body-Worn (1-g SAR)	Right Tilt	0.072	0.511	0.060	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.853	0.669	0.921	0.700	0.631	0.640	0.629	0.748	0.757	0.746
	Rear	0.606	0.342	0.157	0.187	0.355	0.528	0.155	0.140	0.030	0.144	1.105	1.135	1.103	1.476	1.104	1.088	0.978	1.639	1.616	1.508
	Front	0.338	0.272	0.019	0.137	0.155	0.352	0.021	0.080	0.030	0.144	0.825	0.797	0.765	1.002	0.633	0.690	0.640	1.023	1.082	1.032
Hotspot (1-g SAR)	Rear	0.452	0.361	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.236	1.156	1.094	1.343	1.266	1.131	0.919	1.798	1.561	1.449
	Front	0.454	0.276	0.423	0.343	0.202	0.111	0.042	0.198	0.061		1.153	1.073	0.932	0.841	0.772	0.928	0.791	0.883	1.039	0.902
	Edge 1		0.574	0.044		0.053	0.077	0.026		0.017											
	Edge 2	0.041	0.093																		
	Edge 3	1.285																			
	Edge 4	0.082		0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.505	0.508	0.413	0.234	0.085	0.393	0.184	0.237	0.545	0.336
Product Specific 10-g (10-g SAR)	Rear																				
	Front																				
	Edge 1																				
	Edge 2																				
	Edge 3	2.236																			
	Edge 4																				

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure		Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (=0.04) or 10-g SPLSR (=0.18)	Volume Scan (Yes/No) Note.2	Volume Scan SAR (W/kg)	Figure
			WWAN		DTS Ant.1	DTS Ant.2	DTS Ant.3		BT Ant.1	BT Ant.2	UNI MMIO (SPLSR)							
			1a	1b	2	3	4	5	6	7	8	9						
Body-Worn (1-g SAR)	Rear		0.606	0.342				0.528	0.156			1a+1b+5+6	1.632				54	
			0.606	0.342				0.528	0.156			1a+1b	0.948	141.4	0.01	No		
												5+6	0.684	11.6	0.05	Yes		0.590
												1a+(5+6)	1.196	119.1	0.01	No		
		Hybrid SPLSR Note.3	0.606					0.590				1b+(5+6)	0.932	38.3	0.02	No		
Body-Worn (1-g SAR)	Rear		0.606	0.342				0.528		0.140		1a+1b+5+7	1.616				55	
			0.606	0.342				0.528		0.140		1a+1b	0.948	141.4	0.01	No		
								0.528		0.140		5+7	0.668	39.1	0.01	No		0.588
				Hybrid SPLSR Note.3	0.452					0.588			1a+(5+7)	1.040	119.1	0.01		No
		Hybrid SPLSR Note.3		0.342				0.588			1b+(5+7)	0.930	38.3	0.02	No			
Hotspot (1-g SAR)	Rear		0.452	0.361				0.530	0.453			1a+1b+5+6	1.796				56	
				0.361				0.530				1b+5	0.891	47.9	0.02	No		0.959
								0.530	0.453			5+6	0.983	18.8	0.05	Yes		
				Hybrid SPLSR Note.3	0.452			0.959				1a+(1b+5+6)	1.411	150.8	0.01	No		
Hotspot (1-g SAR)	Rear		0.452	0.361				0.530		0.318		1a+1b+5+7	1.601				57	
				0.361				0.530				1b+5	0.891	47.9	0.02	No		0.830
								0.530		0.318		5+7	0.948	34.5	0.02	No		
				Hybrid SPLSR Note.3	0.452			0.830				1a+(1b+5+7)	1.282	150.8	0.01	No		

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)																	
		WWAN		Non-RSDB scenarios								Sum of SAR (W/kg)																	
				DTS Ant.1		DTS Ant.2		DTS MIMO		UNII MIMO (5GHz)		UNII MIMO (5GHz)		WWAN+DTS Ant.1		WWAN+DTS Ant.2		WWAN+DTS MIMO		DTS MIMO+UNII MIMO		WWAN+DTS Ant.1+UNII MIMO		WWAN+DTS Ant.2+UNII MIMO		WWAN+DTS MIMO+UNII MIMO		DTS MIMO+UNII MIMO	
				1a	1b	2	3	4	5	6	7	8	9	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5
Head (1-g SAR)	Left Touch	0.170	0.663	0.027	0.145	0.135	0.241	0.019	1.101	1.219	1.209	0.376	0.879	0.997	0.987	0.154													
	Left Tilt	0.070	0.796	0.026	0.027	0.038	0.067	0.020	0.959	0.960	0.971	0.105	0.912	0.913	0.924	0.058													
	Right Touch	0.102	0.352	0.066	0.211	0.223	0.653	0.121	1.173	1.318	1.330	0.876	0.641	0.786	0.798	0.344													
	Right Tilt	0.072	0.511	0.056	0.057	0.063	0.117	0.017	0.756	0.757	0.763	0.180	0.656	0.657	0.663	0.080													
Body-Worn (1-g SAR)	Rear	0.606	0.342	0.095	0.097	0.147	0.244	0.144	1.287	1.289	1.339	0.391	1.187	1.189	1.239	0.291													
	Front	0.338	0.272	0.096	0.097	0.147	0.244	0.144	0.949	0.951	1.001	0.391	0.849	0.851	0.901	0.291													
	Rear	0.452	0.361	0.247	0.210	0.315	0.214		1.274	1.237	1.342	0.529																	
	Front	0.454	0.276	0.023	0.217	0.323	0.214		0.967	1.161	1.267	0.537																	
Hotspot (1-g SAR)	Edge 1		0.574	0.023		0.323	0.012					0.335																	
	Edge 2	0.041	0.093																										
	Edge 3	1.285																											
	Edge 4	0.082		0.002	0.217	0.323	0.214	0.298	0.513	0.619	0.537																		

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.

12.21. Sum of the SAR for ULCA(LTE B4 + LTE B2 (Main Ant.3)) & Wi-Fi & BT**Non-RSDB scenarios**

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)													
		WWAN		Non-RSDB scenarios								Sum of SAR (W/kg)													
		DTS Ant.1		DTS Ant.2		DTS MIMO		UNII MIMO (SCH)		UNII MIMO (SCH)		WWAN+DTS Ant.1		WWAN+DTS Ant.2		WWAN+DTS MIMO		WWAN+UNII MIMO (SCH)		WWAN+UNII MIMO (SCH)		WWAN+UNII MIMO (SCH)		WWAN+UNII MIMO (SCH)	
		1a	1b	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Head (1-g SAR)	Left Touch	0.169	0.480	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.756	1.055	1.100	0.890	0.689	0.799	0.738	0.930	1.040	0.979	0.668	0.708	0.818	0.757
	Left Tilt	0.068	0.634	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.803	0.780	0.875	0.769	0.703	0.721	0.747	0.770	0.788	0.814	0.722	0.723	0.741	0.767
	Right Touch	0.097	0.293	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.485	0.743	1.019	1.043	0.461	0.673	0.454	1.114	1.326	1.107	0.511	0.582	0.794	0.575
	Right Tilt	0.056	0.388	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.534	0.540	0.692	0.571	0.502	0.511	0.500	0.619	0.628	0.617	0.471	0.519	0.528	0.517
Body-Worn (1-g SAR)	Rear	0.751	0.196	0.157	0.187	0.558	0.156	0.140	0.030	0.144	0.104	1.134	1.102	1.475	1.103	1.087	0.977	1.631	1.615	1.505	1.091	1.247	1.231	1.121	
	Front	0.450	0.106	0.019	0.167	0.155	0.320	0.021	0.080	0.020	0.144	0.575	0.743	0.711	0.548	0.577	0.636	0.586	0.969	1.028	0.978	0.700	0.721	0.780	0.730
	Rear	0.686	0.193	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.302	1.222	1.160	1.409	1.332	1.197	0.985	1.962	1.727	1.515				
	Front	0.418	0.146	0.423	0.343	0.202	0.111	0.042	0.198	0.061		0.987	0.907	0.766	0.675	0.606	0.762	0.625	0.717	0.873	0.736				
Hotspot (1-g SAR)	Edge 1		0.434	0.044		0.053	0.077	0.026			0.017														
	Edge 2		0.049	0.072																					
	Edge 3		1.087																						
	Edge 4		0.095		0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.518	0.521	0.426	0.247	0.098	0.406	0.197	0.750	0.558	0.349			
Product Specific 10-g (10-g SAR)	Rear		1.547									0.304				3.833						1.851			
	Front											0.062													
	Edge 1											0.019													
	Edge 2																								
	Edge 3		1.952																						
	Edge 4						1.437					0.059													

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.04) or 10-g SPLSR (≤0.18)	Volume Scan (Yes/No) Note-2	Volume Scan SAR (W/kg)	Figure		
		WWAN		DTS Ant.1	DTS Ant.2	DTS MIMO	UNII MIMO (SCH)	BT Ant.1	BT Ant.2	BT MIMO	UNII MIMO (SCH)								
		1a	1b	2	3	4	5	6	7	8	9								
Body-Worn (1-g SAR)	Rear	0.751	0.196				0.528	0.156				1a+1b+5+6	1.631					0.709	58
		0.196					0.528					1a+1b	0.724	38.3	0.02	No			
							0.528	0.156				5+6	0.684	11.6	0.05	Yes			
Hybrid SPLSR Note.3		0.751			0.709							1a+(1b+5+6)	1.460	143.6	0.01	No			
Body-Worn (1-g SAR)	Rear	0.751	0.196				0.528		0.140			1a+1b+5+7	1.615					0.706	59
		0.196					0.528		0.140			1a+1b	0.724	38.3	0.02	No			
							0.528		0.140			5+7	0.668	39.0	0.01	No			
Hybrid SPLSR Note.3		0.751			0.706							1a+(1b+5+7)	1.457	143.6	0.01	No			
Hotspot (1-g SAR)	Rear	0.686	0.193				0.530	0.453				1a+1b+5+6	1.862					0.888	60
		0.193					0.530					1b+5	0.723	45.4	0.01	No			
							0.530	0.453				5+6	0.983	18.8	0.05	Yes			
Hybrid SPLSR Note.3		0.686			0.888							1a+(5+6)	1.574	151.4	0.01	No			
Hotspot (1-g SAR)	Rear	0.686	0.193				0.530		0.318			1a+1b+5+7	1.727					0.788	61
		0.193					0.530					1b+5	0.723	45.4	0.01	No			
							0.530		0.318			5+7	0.848	34.5	0.02	No			
Hybrid SPLSR Note.3		0.686			0.788							1a+(5+7)	1.474	151.4	0.01	No			

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)									
		WWAN	Non-RSDB scenarios								WWAN+DTS Ant.1+Uni MIMO	WWAN+DTS Ant.2+Uni MIMO	WWAN+DTS MIMO+Uni MIMO	DTS MIMO+Uni MIMO	WWAN+DTS Ant.1+Uni MIMO	WWAN+DTS Ant.2+Uni MIMO	WWAN+DTS MIMO+Uni MIMO	DTS MIMO+Uni MIMO			
			DTS Ant.1DTS Ant.2DTS MIMOUNI MIMO (SCH)UNI MIMO (SCH)																		
			1a	1b	2	3	4	5	6	7	8	9	1+2+5	1+3+5	1+4+5	4+5	1+2+5	1+3+5	1+4+5	4+5	
Head (1-g SAR)	Left Touch	0.169	0.480	0.027	0.145	0.135	0.241	0.019	0.917	1.035	1.025	0.376	0.695	0.813	0.803	0.154					
	Left Tilt	0.068	0.634	0.026	0.027	0.038	0.067	0.020	0.795	0.796	0.807	0.105	0.748	0.749	0.760	0.058					
	Right Touch	0.097	0.293	0.066	0.211	0.223	0.653	0.121	1.109	1.254	1.266	0.876	0.577	0.722	0.734	0.344					
	Right Tilt	0.066	0.388	0.056	0.057	0.063	0.117	0.017	0.627	0.628	0.634	0.180	0.527	0.528	0.534	0.080					
Body-Worn (1-g SAR)	Rear	0.751	0.196	0.095	0.097	0.147	0.244	0.144	1.286	1.288	1.338	0.391	1.186	1.188	1.238	0.291					
	Front	0.450	0.106	0.095	0.097	0.147	0.244	0.144	0.895	0.897	0.947	0.391	0.795	0.797	0.847	0.291					
	Rear	0.686	0.193	0.247	0.210	0.315	0.214		1.340	1.303	1.408	0.529									
	Front	0.418	0.146	0.023	0.217	0.323	0.212		0.801	0.995	1.101	0.537									
Hotspot (1-g SAR)	Edge 1	0.434	0.023		0.323	0.014						0.335									
	Edge 2	0.049	0.072																		
	Edge 3	1.087																			
	Edge 4	0.066		0.002	0.217	0.323	0.214		0.311	0.526	0.632	0.537									

Non-RSDB scenarios

[illegible]

SAR to Peak Location Separation Ratio (SPLSR)																	
RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (m)	1-g SPLSR = (1 SAR / 10-g SPLSR) (=6.18)	Volume Scan (Yes/No) Note-2	Volume Scan SAR (W/kg)	Figure
		WWAN		DTLS Ant.1	DTLS Ant.2	DTLS MIMO	LWA MIMO (6GHz)	BT Ant.1	BT Ant.2	BT MIMO	LWA MIMO (6GHz)						
		1a	1b	2	3	4	5	6	7	8	9						
Body-Worn (1-g SAR)	Rear	0.308	0.751				0.528	0.156				1a+1b+5+6	1.743	40.3	0.03	No	
		0.308	0.751				0.528	0.156				1a+1b	1.069	40.3	0.03	No	0.590
	Hybrid SPLSR Note.3	0.308					0.530					1a+(5+6)	0.898	118.5	0.01	No	
			0.751				0.590					1b+(5+6)	1.341	143.6	0.01	No	
Body-Worn (1-g SAR)	Rear	0.308	0.751				0.528		0.140			1a+1b+5+7	1.727	40.3	0.03	No	
		0.308	0.751				0.528		0.140			1a+1b	1.069	40.3	0.03	No	0.588
	Hybrid SPLSR Note.3	0.308					0.528		0.588			5+7	0.668	39.0	0.01	No	0.588
			0.751				0.588		0.588			1a+(5+7)	0.896	118.5	0.01	No	
Body-Worn (1-g SAR)	Rear	0.308	0.751				0.528			0.030		1a+1b+5+7	1.817	143.6	0.01	No	
		0.308	0.751				0.528			0.030		1a+1b	1.069	40.3	0.03	No	
	Hybrid SPLSR Note.3	0.308					0.528		0.542			5+8	0.558	15.7	0.03	No	0.542
			0.751				0.542		0.542			1a+(5+7)	0.850	118.5	0.01	No	
Hotspot (1-g SAR)	Rear	0.418	0.686				0.530	0.453				1b+(5+7)	1.293	143.6	0.01	No	
		0.418	0.686				0.530	0.453				1a+1b+5+6	2.067	37.6	0.03	No	0.898
	Hybrid SPLSR Note.3	0.418	0.686				0.530	0.453				5+6	0.983	18.8	0.05	Yes	0.717
			0.898				0.717					1a+1b+(5+6)	1.615	147.1	0.01	No	
Hotspot (1-g SAR)	Rear	0.418	0.686				0.530		0.318			1a+1b+5+7	1.952	37.6	0.03	No	0.888
		0.418	0.686				0.530		0.318			1a+1b	1.104	37.6	0.03	No	0.622
	Hybrid SPLSR Note.3	0.418	0.686				0.530		0.318			5+7	0.848	34.5	0.02	No	0.622
			0.898				0.898		0.622			1a+1b+(5+7)	1.520	147.1	0.01	No	
Hotspot (1-g SAR)	Rear	0.418	0.686				0.530			0.106		1a+1b+5+8	1.740	147.1	0.01	No	
		0.418	0.686				0.530			0.106		1a+1b	1.104	37.6	0.03	No	0.898
	Hybrid SPLSR Note.3	0.418	0.686				0.530			0.106		5+8	0.636	17.2	0.03	No	0.533
			0.898				0.898		0.533			1a+1b+(5+8)	1.431	147.1	0.01	No	

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)							
		WWAN	Non-RSDB scenarios						WWAN+ DTS A1.1-1 UNI MIMO	WWAN+ DTS A1.2-1 UNI MIMO	WWAN+ DTS MIMO-1 UNI MIMO	DTS MIMO-1 UNI MIMO	WWAN+ DTS A1.1-1 UNI MIMO	WWAN+ DTS A1.2-1 UNI MIMO	WWAN+ DTS MIMO-1 UNI MIMO	DTS MIMO-1 UNI MIMO			
			Non-RSDB scenarios																
			DTS A1.1	DTS A1.2	DTS MIMO	UNI MIMO (S24)	UNI MIMO (S24)	UNI MIMO (S24)											
			1a	1b	2	3	4	5									6	1+2+5	1+3+5
Head (1-g SAR)	Left Touch	0.159	0.169	0.027	0.145	0.135	0.241	0.019	0.596	0.714	0.704	0.376	0.374	0.492	0.482	0.154			
	Left Tilt	0.100	0.068	0.026	0.027	0.038	0.067	0.020	0.261	0.262	0.273	0.105	0.214	0.215	0.226	0.058			
	Right Touch	0.171	0.097	0.066	0.211	0.023	0.653	0.121	0.987	1.132	1.144	0.876	0.455	0.600	0.612	0.344			
Body-Worn (1-g SAR)	Right Tilt	0.089	0.066	0.056	0.057	0.063	0.117	0.017	0.328	0.329	0.335	0.180	0.228	0.229	0.235	0.080			
	Rear	0.308	0.751	0.095	0.097	0.147	0.244	0.144	1.398	1.400	1.450	0.391	1.298	1.300	1.350	0.291			
	Front	0.277	0.450	0.095	0.097	0.147	0.244	0.144	1.066	1.068	1.118	0.391	0.966	0.968	1.018	0.291			
	Front	0.418	0.636	0.096	0.210	0.315	0.214	0.114	1.565	1.568	1.633	0.529							
	Rear	0.303	0.418	0.023	0.217	0.323	0.214	0.114	0.958	1.152	1.258	0.537							
Hotspot (1-g SAR)	Edge 1			0.023		0.323	0.012					0.335							
	Edge 2	0.296	0.049																
	Edge 3	0.125	1.057																
	Edge 4	0.248	0.095	0.002	0.217	0.323	0.214		0.559	0.774	0.880	0.537							

SAR to Peak Location Separation Ratio (SPLSR)															Figure		
RF Exposure	Test Position	Standalone SAR (W/kg)								Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≈ 0.04 or 10-g SPLSR (≈ 0.10))	Volume Scan (Yes/No) <i>Note 3</i>	Volume Scan SAR (W/kg)			
		WWAN		DTS Ant.1		DTS Ant.2		DTS MIMO								UNS MIMO (SAR)	UNS MIMO (SPLSR)
		1a	1b	2	3	4	5	6	7								
Headset (1-g SAR)	Rear	0.418	0.686			0.315	0.214			1a+1b+4+5	1.633						
		0.418	0.686					1a+1b	1.104	37.6	0.03	No	0.898				
						0.315	0.214			4+5	0.529	22.0	0.02	No			
Hybrid SPLSR			0.898				0.441			1a+1b+(4+5)	1.339	139.1	0.01	No			

1. Green value is estimated SAR value.
2. SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
3. SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
4. Simultaneous transmission scenarios (1+5 & 1+6) are a subset of (1+5+6) scenario.
5. For the Blue box, Enlarged zoom scan were evaluated for each LTE inter-band UL CA PCC and SCC by TCB workshop guide. Please refer to Section 12.24.

12.23. Sum of the SAR for ULCA(LTE B5 + LTE B66) & Wi-Fi & BT

Non-RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg)																	
		WWAN		Non-RSDB scenarios																									
				DTTS Ant.1		DTTS Ant.2		DTTS MIMO		WLAN MIMO (SISO)		BT Ant.1		BT Ant.2		BT MIMO		WWAN+DTTS Ant.1	WWAN+DTTS Ant.2	WWAN+DTTS MIMO	WWAN+WLAN MIMO	WWAN+BT Ant.1	WWAN+BT Ant.2	WWAN+BT MIMO	WWAN+WLAN+BT Ant.1	WWAN+WLAN+BT Ant.2	WWAN+WLAN+BT MIMO		
		1a	1b	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
Head (1-g SAR)	Left Touch	0.238	0.169	0.107	0.406	0.451	0.241	0.040	0.150	0.089	0.019	0.514	0.913	0.858	0.648	0.447	0.557	0.496	0.688	0.798	0.737	0.426	0.466	0.576	0.515				
	Left Tilt	0.145	0.068	0.101	0.078	0.173	0.067	0.001	0.019	0.045	0.020	0.314	0.291	0.386	0.280	0.214	0.232	0.258	0.281	0.299	0.325	0.233	0.234	0.252	0.278				
	Right Touch	0.266	0.097	0.095	0.353	0.629	0.653	0.071	0.283	0.064	0.121	0.458	0.716	0.992	1.016	0.434	0.646	0.427	1.087	1.299	1.080	0.484	0.555	0.767	0.548				
	Right Tilt	0.134	0.066	0.080	0.086	0.238	0.117	0.048	0.057	0.046	0.017	0.280	0.286	0.438	0.317	0.248	0.257	0.246	0.365	0.374	0.363	0.217	0.265	0.274	0.263				
Body-Worn (1-g SAR)	Rear	0.301	0.751	0.157	0.187	0.155	0.528	0.156	0.140	0.030	0.144	1.209	1.239	1.207	1.580	1.208	1.192	1.082	1.736	1.720	1.610	1.196	1.352	1.336	1.226				
	Front	0.291	0.450	0.019	0.187	0.155	0.392	0.021	0.080	0.030	0.144	0.760	0.928	0.896	1.133	0.762	0.821	0.771	1.154	1.213	1.163	0.885	0.906	0.965	0.915				
	Rear	0.609	0.686	0.423	0.343	0.281	0.530	0.453	0.318	0.106		1.185	1.106	0.964	0.873	0.804	0.960	0.823	0.915	1.071	0.934								
	Front	0.344	0.418	0.423	0.343	0.282	0.531	0.453	0.318	0.106		1.185	1.106	0.964	0.873	0.804	0.960	0.823	0.915	1.071	0.934								
Hotspot (1-g SAR)	Edge 1			0.044		0.053	0.077	0.026		0.017																			
	Edge 2	0.454	0.049																										
	Edge 3	0.285	1.067																										
	Edge 4	0.183	0.095	0.423	0.426	0.331	0.152	0.003	0.311	0.102		0.701	0.704	0.609	0.430	0.281	0.589	0.380	0.433	0.741	0.532								
Product Specific 10-g (10-g SAR)	Rear			1.547				2.286			0.304																		
	Front							1.270			0.062																		
	Edge 1							0.262			0.019																		
	Edge 2																												
	Edge 3			1.952																									
	Edge 4						1.437				0.059																		

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)										Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≤0.84) or 10-g SPLSR (≤0.18)	Volume Scan (Yes/No) Note-2	Volume Scan SAR (W/kg)	Figure
		WWAN		DTS Ant.1	DTS Ant.2	DTS MIMO	UNI MIMO (50MHz)	BT Ant.1	BT Ant.2	BT MIMO	UNI MIMO (50MHz)						
		1a	1b	2	3	4	5	6	7	8	9						
Body-Worn (1-g SAR)	Rear	0.301	0.751				0.528	0.156				1a+1b+5+6	1.736		No	0.854	69
		0.301	0.751				0.528	0.156				1a+1b	1.052	38.8	0.03	No	
												5+6	0.684	11.6	0.05	Yes	
Hybrid SPLSR Note.3		0.854					0.590					1a+1b+5+6	1.444	139.5	0.01	No	
Body-Worn (1-g SAR)	Rear	0.301	0.751				0.528		0.140			1a+1b+5+7	1.720		No	0.854	70
		0.301	0.751				0.528		0.140			1a+1b	1.052	38.8	0.03	No	
												5+7	0.668	39.0	0.01	No	
Hybrid SPLSR Note.3		0.854					0.588					1a+1b+5+7	1.442	139.5	0.01	No	
Body-Worn (1-g SAR)	Rear	0.301	0.751				0.528			0.030		1a+1b+5+8	1.610		No	0.854	71
		0.301	0.751				0.528			0.030		1a+1b	1.052	38.8	0.03	No	
												5+8	0.558	15.7	0.03	No	
Hybrid SPLSR Note.3		0.854					0.542					1a+1b+5+8	1.396	139.5	0.01	No	
Hotspot (1-g SAR)	Rear	0.609	0.686	0.423								1a+1b+2	1.718		No	1.090	72
		0.609	0.686									1a+1b	1.295	31.3	0.05	Yes	
												1a+1b+2	1.513	142.0	0.01	No	
Hybrid SPLSR Note.3		1.090		0.423								1a+1b+3	1.638		No	1.090	
Hotspot (1-g SAR)	Rear	0.609	0.686		0.343							1a+1b	1.295	31.3	0.05	Yes	73
		0.609	0.686									1a+1b	1.295	31.3	0.05	Yes	
					0.343							1a+1b+3	1.433	106.6	0.02	No	
Hotspot (1-g SAR)	Rear	0.609	0.686				0.530	0.453				1a+1b+5+6	2.278		No	1.090	74
		0.609	0.686				0.530	0.453				1a+1b	1.295	31.3	0.05	Yes	
							0.530	0.453				5+6	0.983	18.8	0.05	Yes	
Hybrid SPLSR Note.3		1.090					0.717					1a+1b+5+6	1.807	147.1	0.02	No	
Hotspot (1-g SAR)	Rear	0.609	0.686				0.530		0.318			1a+1b+5+7	2.143		No	1.090	75
		0.609	0.686				0.530		0.318			1a+1b	1.295	31.3	0.05	Yes	
												5+7	0.848	34.5	0.02	No	
Hybrid SPLSR Note.3		1.090					0.622					1a+1b+5+7	1.712	147.1	0.02	No	
Hotspot (1-g SAR)	Rear	0.609	0.686				0.530			0.106		1a+1b+5+8	1.931		No	1.090	76
		0.609	0.686				0.530			0.106		1a+1b	1.295	31.3	0.05	Yes	
												5+8	0.636	17.2	0.03	No	
Hybrid SPLSR Note.3		1.090					0.533					1a+1b+5+8	1.623	147.1	0.01	No	

RSDB scenarios

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg)									
		WWAN		Non-RSDB scenarios						WWAN+ DTS Airt.1+ UNI MIMO	WWAN+ DTS Airt.2+ UNI MIMO	WWAN+ DTS MIMO+ UNI MIMO	DTS MIMO+ UNI MIMO	WWAN+ DTS Airt.1+ UNI MIMO	WWAN+ DTS Airt.2+ UNI MIMO	WWAN+ DTS MIMO+ UNI MIMO	DTS MIMO+ UNI MIMO	
				DTS Airt.1	DTS Airt.2	DTS MIMO	UNI MIMO (5GHz)	UNI MIMO (6GHz)	UNI MIMO (60GHz)									
		1a	1b	2	3	4	5	6	1+2+5	1+3+5	1+4+5	4+5	1+2+6	1+3+6	1+4+6	4+6		
Head (1-g SAR)	Left Touch	0.238	0.169	0.027	0.145	0.135	0.241	0.019	0.675	0.793	0.783	0.376	0.453	0.571	0.561	0.154		
	Left Tilt	0.145	0.068	0.026	0.027	0.038	0.067	0.020	0.306	0.307	0.318	0.105	0.259	0.260	0.271	0.058		
	Right Touch	0.266	0.097	0.066	0.211	0.223	0.653	0.121	1.082	1.227	1.239	0.876	0.550	0.695	0.707	0.344		
Body-Worn (1-g SAR)	Right Tilt	0.134	0.066	0.056	0.057	0.063	0.117	0.017	0.373	0.374	0.380	0.180	0.273	0.274	0.280	0.080		
	Rear	0.301	0.751	0.095	0.097	0.147	0.244	0.144	1.391	1.393	1.443	0.391	1.291	1.293	1.343	0.291		
	Front	0.291	0.450	0.095	0.097	0.147	0.244	0.144	1.080	1.082	1.132	0.391	0.980	0.982	1.032	0.291		
	Rear	0.609	0.686	0.247	0.210	0.315	0.214	1.756	1.719	1.824	0.529							
	Front	0.344	0.418	0.023	0.217	0.323	0.214	0.999	1.193	1.299	0.537							
Hotspot (1-g SAR)	Edge 1			0.023		0.323	0.012					0.335						
	Edge 2	0.454	0.049															
	Edge 3	0.285	1.087															
	Edge 4	0.183	0.095	0.002	0.217	0.323	0.214	0.494	0.709	0.815	0.537							

SAR to Peak Location Separation Ratio (SPLSR)

RF Exposure	Test Position	Standalone SAR (W/kg)							Sum of SAR (W/kg) (1-g or 10-g)	Calculated Distance (mm)	1-g SPLSR (≥0.94) or 10-g SPLSR (≥0.18)	Volume Scan (Yes/No) <i>Note.3</i>	Volume Scan SAR (W/kg)	Figure
		WWAN		DTS Airt.1	DTS Airt.2	DTS MIMO	UNI MIMO (SCH)	UNI MIMO (SCH)						
		1a	1b	2	3	4	5	6						
		1a	1b	2	3	4	5	6						
Hotspot (1-g SAR)	Rear	0.609	0.686	0.247			0.214		1a+1b+2+5	1.756				
		0.609	0.686				0.214		1a+1b	1.295	31.3	0.05	Yes	1.090
				0.247					2+5	0.461	14.8	0.02	No	0.335
Hybrid SPLSR <i>Note.4</i>		1.090			0.335				1a+1b)+(2+5)	1.425	139.1	0.01	No	
Hotspot (1-g SAR)	Rear	0.609	0.686		0.210		0.214		1a+1b+3+5	1.719				
		0.609	0.686				0.214		1a+1b	1.295	31.3	0.05	Yes	1.090
					0.210		0.214		3+5	0.424	31.3	0.01	No	0.302
Hybrid SPLSR <i>Note.4</i>		1.090				0.302			1a+1b)+(3+5)	1.392	139.1	0.01	No	
Hotspot (1-g SAR)	Rear	0.609	0.686			0.315	0.214		1a+1b+4+5	1.824				
		0.609	0.686						1a+1b	1.295	31.3	0.05	Yes	1.090
						0.315	0.214		4+5	0.529	22.0	0.02	No	0.441
Hybrid SPLSR <i>Note.4</i>		1.090				0.441			1a+1b)+(4+5)	1.531	139.1	0.01	No	

Note(s):

- Green value is estimated SAR value.
- SPLSR Hotspot Combination Step.1) Perform enlarged zoom scan (Volume scan) on the co-located antenna pair to determine 1g/10g aggregate SAR. Refer to the Sec.12.21 for detailed Volume Scan Result.
- SPLSR Hotspot Combination Step.2) Apply SPLSR procedure for the spatially separated antenna and aggregate SAR distribution of the co-located antenna pair. Hybrid SPLSR procedure was applied for the spatially separated main bands and unlicensed bands for Multi-band Combined results.
- Simultaneous transmission scenarios (1+5 & 1+6) are a subset of (1+5+6) scenario.
- Simultaneous transmission scenarios (1+5 & 1+7) are a subset of (1+5+7) scenario.
- For the Blue box, Enlarged zoom scan were evaluated for each LTE inter-band UL CA PCC and SCC by TCB workshop guide. Please refer to Section 12.24.

12.24. Volume Scan Results

Volume Scan Results

RF Exposure	Test Position	Configuration	Band	Original Measured SAR (W/kg)	Volume Scan Result	Plot No.	Multi-Band Combined factor	Multi-Band Combined Result	Plot No.
Standalone	Rear 15mm	UNII MIMO + Bluetooth Ant 1	UNII MIMO	0.400	0.390	1	1.320	0.590	42
			Bluetooth Ant 1	0.089	0.084	2	1.750		
		UNII MIMO + Bluetooth Ant 2	UNII MIMO	0.400	0.390		1.320	0.588	43
			Bluetooth Ant 2	0.081	0.084	3	1.740		
		UNII MIMO + Bluetooth MIMO	UNII MIMO	0.400	0.390		1.320	0.542	44
			Bluetooth MIMO	0.030	0.029	4	1.540		
		UNII MIMO + Bluetooth Ant 1 + LTE Band 2 (Main Ant.3)	UNII MIMO	0.400	0.390		1.320	0.709	45
			Bluetooth Ant 1	0.089	0.084		1.750		
			LTE Band 2	0.184	0.166	5	1.067		
		UNII MIMO + Bluetooth Ant 2 + LTE Band 2 (Main Ant.3)	UNII MIMO	0.400	0.390		1.320	0.706	46
			Bluetooth Ant 2	0.081	0.084		1.740		
			LTE Band 2	0.184	0.166		1.067		
		UNII MIMO + Bluetooth Ant 1 + NR Band n66 (Main Ant.3)	UNII MIMO	0.400	0.390		1.320	0.775	47
			Bluetooth Ant 1	0.089	0.084		1.750		
			NR Band n66	0.283	0.257	6	1.151		
		UNII MIMO + Bluetooth Ant 2 + NR Band n66 (Main Ant.3)	UNII MIMO	0.400	0.390		1.320	0.768	48
			Bluetooth Ant 2	0.081	0.084		1.740		
			NR Band n66	0.283	0.257		1.151		
		LTE Band 26(5) + LTE Band 66	LTE Band 26(5)	0.245	0.229	7	1.227	0.854	49
			LTE Band 66	0.605	0.532	8	1.242		
		LTE Band 13 + NR Band n66	LTE Band 13	0.265	0.241	9	1.164	0.839	50
			NR Band n66	0.530	0.555		1.291		
		LTE Band 26(5) + NR Band n66	LTE Band 26(5)	0.245	0.229		1.227	0.915	51
			NR Band n66	0.530	0.555		1.291		
	Rear 10mm	DTS Ant 1 + NR Band n66 (Main Ant.3)	DTS Ant 1	0.389	0.340	10	1.089	0.853	52
			NR Band n66	0.715	0.707	11	1.151		
		UNII MIMO + Bluetooth Ant 1	UNII MIMO	0.389	0.362	12	1.361	0.717	53
			Bluetooth Ant 1	0.258	0.257	13	1.754		
		UNII MIMO + Bluetooth Ant 2	UNII MIMO	0.389	0.362		1.361	0.622	54
			Bluetooth Ant 2	0.183	0.170	14	1.737		
		UNII MIMO + Bluetooth MIMO	UNII MIMO	0.389	0.362		1.361	0.533	55
			Bluetooth MIMO	0.069	0.066	15	1.536		
		UNII MIMO + Bluetooth Ant 1 + NR Band n66 (Main Ant.3)	UNII MIMO	0.389	0.362		1.361	1.200	56
			Bluetooth Ant 1	0.258	0.257		1.754		
			NR Band n66	0.715	0.707		1.151		
		UNII MIMO + Bluetooth Ant 2 + NR Band n66 (Main Ant.3)	UNII MIMO	0.389	0.362		1.361	1.070	57
			Bluetooth Ant 2	0.183	0.170		1.737		
			NR Band n66	0.715	0.707		1.151		
		UNII MIMO + Bluetooth MIMO + NR Band n66 (Main Ant.3)	UNII MIMO	0.389	0.362		1.361	0.993	58
			Bluetooth MIMO	0.069	0.066		1.536		
			NR Band n66	0.715	0.707		1.151		
		UNII MIMO + Bluetooth Ant 1 + LTE Band 2 (Main Ant.3)	UNII MIMO	0.389	0.362		1.361	0.888	59
			Bluetooth Ant 1	0.258	0.257		1.754		
			LTE Band 2	0.151	0.150	16	1.279		
		UNII MIMO + Bluetooth Ant 2 + LTE Band 2 (Main Ant.3)	UNII MIMO	0.389	0.362		1.361	0.788	60
			Bluetooth Ant 2	0.183	0.170		1.737		
			LTE Band 2	0.151	0.150		1.279		
		UNII MIMO + Bluetooth Ant 1 + LTE Band 4 (Main Ant.3)	UNII MIMO	0.389	0.362		1.361	0.956	61
			Bluetooth Ant 1	0.258	0.257		1.754		
			LTE Band 4	0.302	0.275	17	1.194		
		UNII MIMO + Bluetooth Ant 2 + LTE Band 4 (Main Ant.3)	UNII MIMO	0.389	0.362		1.361	0.830	62
			Bluetooth Ant 2	0.183	0.170		1.737		
			LTE Band 4	0.302	0.275		1.194		
		UNII RSDB MIMO + DTS RSDB Ant 1	UNII RSDB MIMO	0.184	0.175	18	1.161	0.335	63
			DTS RSDB Ant 1	0.199	0.158	19	1.241		
		UNII RSDB MIMO + DTS RSDB Ant 2	UNII RSDB MIMO	0.184	0.175		1.161	0.302	64
			DTS RSDB Ant 2	0.187	0.194	20	1.122		
		UNII RSDB MIMO + DTS RSDB MIMO	UNII RSDB MIMO	0.184	0.175		1.161	0.441	65
			DTS RSDB MIMO	0.217	0.194	21	1.451		

RF Exposure	Test Position	Configuration	Band	Original Measured SAR (W/kg)	Volume Scan Result	Plot No.	Multi-Band Combined factor	Multi-Band Combined Result	Plot No.
Standalone	Rear 10mm	UNII RSDB MIMO + DTS RSDB Ant 1 + NR Band n66 (Main Ant.3)	UNII RSDB MIMO	0.184	0.175		1.161	0.844	66
			DTS RSDB Ant 1	0.199	0.158		1.241		
			NR Band n66	0.715	0.707		1.151		
		UNII RSDB MIMO + DTS RSDB Ant 2 + NR Band n66 (Main Ant.3)	UNII RSDB MIMO	0.184	0.175		1.161	0.833	67
			DTS RSDB Ant 2	0.187	0.194		1.122		
			NR Band n66	0.715	0.707		1.151		
		UNII RSDB MIMO + DTS RSDB MIMO + NR Band n66 (Main Ant.3)	UNII RSDB MIMO	0.184	0.175		1.161	0.867	68
			DTS RSDB MIMO	0.217	0.194		1.451		
			NR Band n66	0.715	0.707		1.151		
		LTE Band 26(5) + LTE Band 66(4)	LTE Band 26(5)	0.496	0.486	22	1.227	1.090	69
			LTE Band 66(4)	0.566	0.525	23	1.212		
		LTE Band 12 + LTE Band 66(4)	LTE Band 12	0.317	0.312	24	1.317	0.898	70
			LTE Band 66(4)	0.566	0.525		1.212		
		LTE Band 25(2) + NR Band n5	LTE Band 25(2)	0.362	0.323	25	1.321	0.837	71
			NR Band n5	0.499	0.439	26	1.096		
		LTE Band 66(4) + NR Band n5	LTE Band 66(4)	0.566	0.525		1.212	1.040	72
			NR Band n5	0.499	0.439		1.096		
		LTE Band 26(5) + NR Band n66	LTE Band 26(5)	0.496	0.486		1.227	1.030	73
			NR Band n66	0.580	0.519	27	1.128		
		LTE Band 12 + NR Band n66	LTE Band 12	0.317	0.312		1.317	0.838	74
			NR Band n66	0.580	0.519		1.128		
		LTE Band 13 + NR Band n66	LTE Band 13	0.564	0.476	28	1.164	0.966	75
			NR Band n66	0.580	0.519		1.128		
	Left Touch	LTE B25(2) + NR Band n66 (Main Ant.3)	LTE Band 25(2)	0.129	0.115	29	1.321	0.866	76
			NR Band n66	0.748	0.667	30	1.282		
	Left Tilt	LTE B25(2) + NR Band n66 (Main Ant.3)	LTE Band 25(2)	0.053	0.035	31	1.321	1.190	77
			NR Band n66	0.904	0.893	32	1.282		
	Right Tilt	LTE B25(2) + NR Band n66 (Main Ant.3)	LTE Band 25(2)	0.055	0.054	33	1.321	0.893	78
			NR Band n66	0.818	0.760	34	1.282		
	Edge 3 10mm	LTE Band 26(5) + LTE Band 66(4)	LTE Band 26(5)	0.232	0.231	35	1.227	1.290	79
			LTE Band 66(4)	0.872	0.824	36	1.246		
		LTE Band 12 + LTE Band 66(4)	LTE Band 12	0.095	0.083	37	1.317	1.130	80
			LTE Band 66(4)	0.872	0.824		1.246		
		LTE B25(2) + NR Band n5	LTE Band 25(2)	1.030	0.954	38	1.248	1.400	81
			NR Band n5	0.197	0.195	39	1.096		
		LTE Band 66(4) + NR Band n5	LTE Band 66(4)	0.872	0.824		1.246	1.230	82
			NR Band n5	0.197	0.195		1.096		
		LTE Band 26(5) + NR Band n66	LTE Band 26(5)	0.232	0.231		1.227	1.260	83
			NR Band n66	0.944	0.871	40	1.128		
		LTE Band 12 + NR Band n66	LTE Band 12	0.095	0.083		1.317	1.080	84
			NR Band n66	0.944	0.871		1.128		
		LTE Band 13 + NR Band n66	LTE Band 13	0.195	0.172	41	1.164	1.180	85
			NR Band n66	0.944	0.871		1.128		

Note(s):

1. Multi-band Combined factor is the compensation value of power and duty.
2. For Volume Scan plot number in this section, please refer to the Appendix J.

Conclusion:

Simultaneous Transmission SAR analysis results is satisfied the FCC Limit requirement according to follow procedures with "Sum of SAR" or "SPLSR" or "SPLSR Hotspot combination (including Volume Scan)".

Appendixes

Refer to separated files for the following appendixes.

4790089626-S1 FCC Report SAR_App A_Photos & Ant. Locations

4790089626-S1 FCC Report SAR_App B_Highest SAR Test Plots

4790089626-S1 FCC Report SAR_App C_System Check Plots

4790089626-S1 FCC Report SAR_App D_SAR Tissue Ingredients

4790089626-S1 FCC Report SAR_App E_Probe Cal. Certificates

4790089626-S1 FCC Report SAR_App F_Dipole Cal. Certificates

4790089626-S1 FCC Report SAR_App G_Proximity Sensor feature

4790089626-S1 FCC Report SAR_App H_LTE Carrier Aggregation

4790089626-S1 FCC Report SAR_App I_SPLSR criteria plots

4790089626-S1 FCC Report SAR_App J_Volume Scan Results

END OF REPORT