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 and WPT

MODEL NUMBER: SM-S921B/DS, SM-S921B

FCC ID: A3LSMS921B

REPORT NUMBER: 4790976555-S1V5

ISSUE DATE: 11/9/2023

Prepared for
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IAS ACCREDITED

Testing Laboratory

TL-637

Revision History

Rev.	Date	Revisions	Revised By
V1	10/20/2023	Initial Issue	--
V2	10/23/2023	Revised table in Sec. 6.3	Hakchul Lee
V3	10/25/2023	Revised simultaneous Tx in Sec. 1 Revised highest reported SAR results in Sec. 1.1 Revise BT Dual (PL10) target power in Sec. 6.4 Revised reference target value in Sec. 8.2 - CLA-13's Cal. Date. Revised measured power and target power data in Sec.9.7 Revised Bluetooth dual target power in Sec. 10.23 Revised Appendices name. - Removed version number. Revised Appendix F - Unused equipment and blank pages.	Hakchul Lee
V4	10/31/2023	Revised Sec. 6.2. - Added Wi-Fi 2.4GHz 802.11ac Revised target power table in Sec. 6.4	Hakchul Lee
V5	11/09/2023	Added Simultaneous transmission analysis for ULCA operation -Revised Highest simultaneous transmission SAR in Sec.1 -Added Property Measurement & System check result in Sec.8 -Added ULCA inter band summation results in Sec.12.2.4. -Added Volume scan results in Sec.12.2.5. -Revised SAR system check plot in App_C. -Added UL CA inter band measured power data in App_G -Added App_H of Volume scan results. -Removed note in Sec.12.	Hakchul Lee

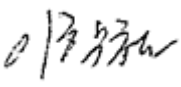
Table of Contents

1. Attestation of Test Results

Applicant Name		SAMSUNG ELECTRONICS CO.,LTD.				
FCC ID		A3LSMS921B				
Model Number		SM-S921B/DS, SM-S921B				
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	DXX
Head		0.93	0.36	0.41	0.34	N/A
Body-worn & Hotspot		0.98	0.16	0.27	0.30	N/A
Product Specific 10g		N/A	N/A	1.07	N/A	0.02
Simultaneous TX	Head	1.54	1.54	1.54	1.54	N/A
	Body-worn & Hotspot	1.58	1.58	1.58	1.58	N/A
	Product Specific 10g	1.07	1.07	1.07	1.07	1.07
Date Tested		8/25/2023 to 11/9/2023				
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	Hakchul Lee Laboratory Engineer UL Korea, Ltd. Suwon Laboratory

1.1. The Highest Reported SAR Results

Equipment Class	Band	Antenna	The Highest Reported SAR (W/kg) of RF exposure conditions		
			1g of tissue		10g of tissue
			Head Exposure	Body-worn & Hotspot Exposure	Product Specific Exposure
PCE	GSM 850	Main.1	0.174	0.391	N/A
	GSM 1900	Main.1	0.051	0.659	N/A
	GSM 850	Sub.1	0.531	0.636	N/A
	WCDMA Band II	Main.1	0.069	0.853	N/A
	WCDMA Band IV	Main.1	0.301	0.926	N/A
	WCDMA Band V	Main.1	0.218	0.470	N/A
	WCDMA Band V	Sub.1	0.715	0.287	N/A
	LTE Band 5	Main.1	0.237	0.660	N/A
	LTE Band 12	Main.1	0.098	0.252	N/A
	LTE Band 13	Main.1	0.136	0.403	N/A
	LTE Band 25	Main.1	0.206	0.835	N/A
	LTE Band 26	Main.1	0.186	0.581	N/A
	LTE Band 66	Main.1	0.354	0.620	N/A
	LTE Band 41	Main.2	0.206	0.372	N/A
	LTE Band 2	Sub.2	0.653	0.426	N/A
	LTE Band 5	Sub.1	0.748	0.196	N/A
	LTE Band 26	Sub.1	0.488	0.142	N/A
	LTE Band 66	Sub.2	0.899	0.301	N/A
	NR Band n5	Main.1	0.237	0.531	N/A
	NR Band n25	Main.1	0.202	0.977	N/A
	NR Band n66	Main.1	0.272	0.925	N/A
	NR Band n5	Sub.1	0.774	0.219	N/A
	NR Band n25	Sub2	0.622	0.355	N/A
	NR Band n66	Sub.2	0.927	0.359	N/A
	NR Band n41 SRS0	Sub.2	0.902	0.360	N/A
	NR Band n41 SRS1	Main.2	0.041	0.228	N/A
	NR Band n41 SRS2	Sub.1	0.612	0.068	N/A
	NR Band n41 SRS3	Main.4	0.000	0.053	N/A
	NR Band n77 SRS0	Sub.2	0.846	0.186	N/A
	NR Band n77 SRS1	Main.3	0.029	0.089	N/A
	NR Band n77 SRS2	Sub.5	0.262	0.030	N/A
	NR Band n77 SRS3	Main.4	0.003	0.197	N/A
DTS	2.4GHz WLAN		0.364	0.163	N/A
NII	5GHz WLAN		0.409	0.271	1.07
DSS	Bluetooth		0.337	0.295	N/A
DXX	NFC		N/A	N/A	0.021

Note(s):

The Highest Reported SAR Results were listed for each RF exposure conditions for each supported bands based on SAR test results of Section.10.

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 D04 Interim General RF Exposure Guidance v01
- 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, 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, 2019; RF Exposure Procedures (Tissue Simulating Liquids (TSL))x
- TCB workshop October, 2020; 5G RFX Policies (Intra-band and Inter-band NSA-EN-DC evaluation)
- TCB workshop April, 2022; RF Exposure Procedures (5G NR FR1 Measurement)
- TCB workshop October, 2022; RF Exposure Policies & Procedures (SAR test frequencies in multi-rule)

3. Facilities and Accreditation

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

Suwon	
SAR 1 Room	SAR 6 Room
SAR 2 Room	SAR 7 Room
SAR 3 Room	SAR 8 Room
SAR 4 Room	SAR 9 Room
SAR 5 Room	

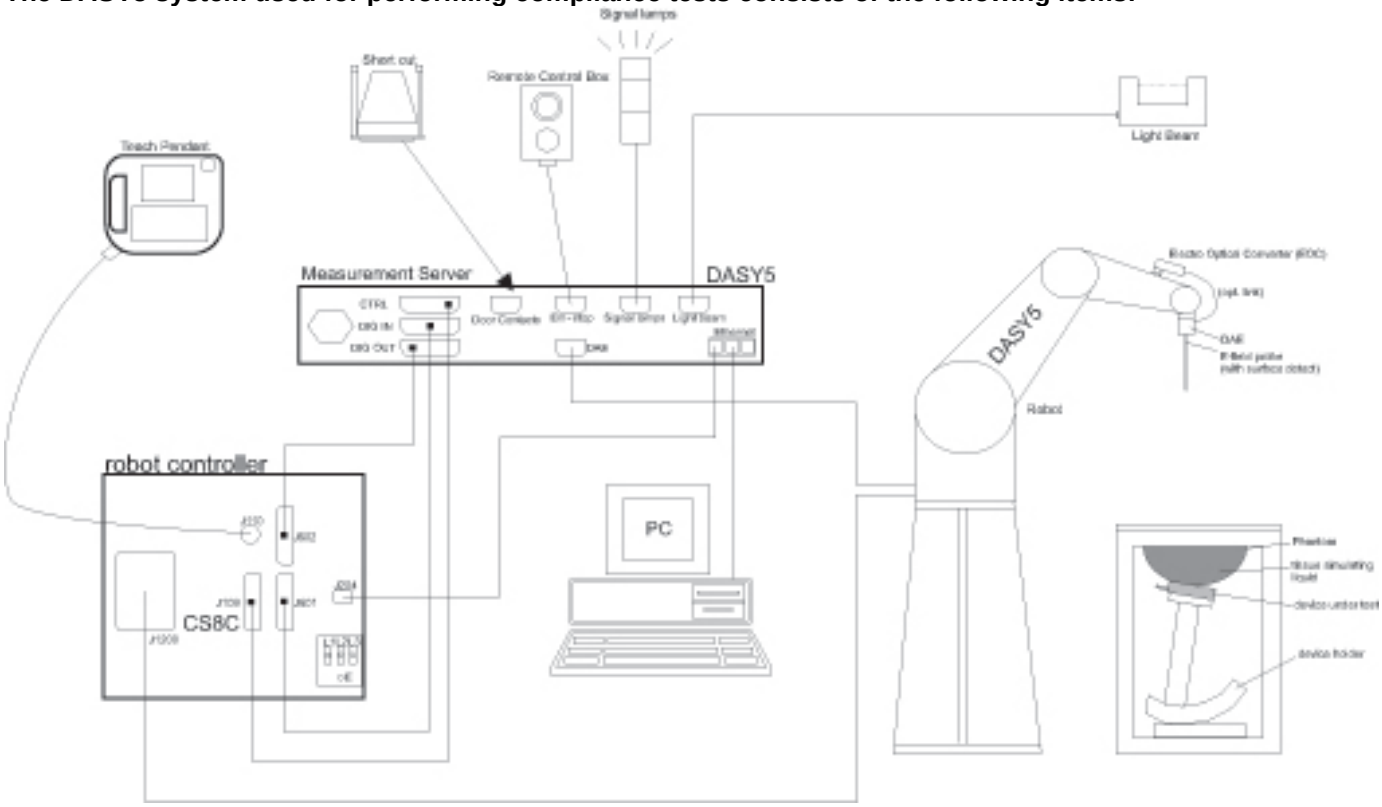
UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637.
The full scope of accreditation can be viewed at;

https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf.

4. SAR Measurement System & Test Equipment

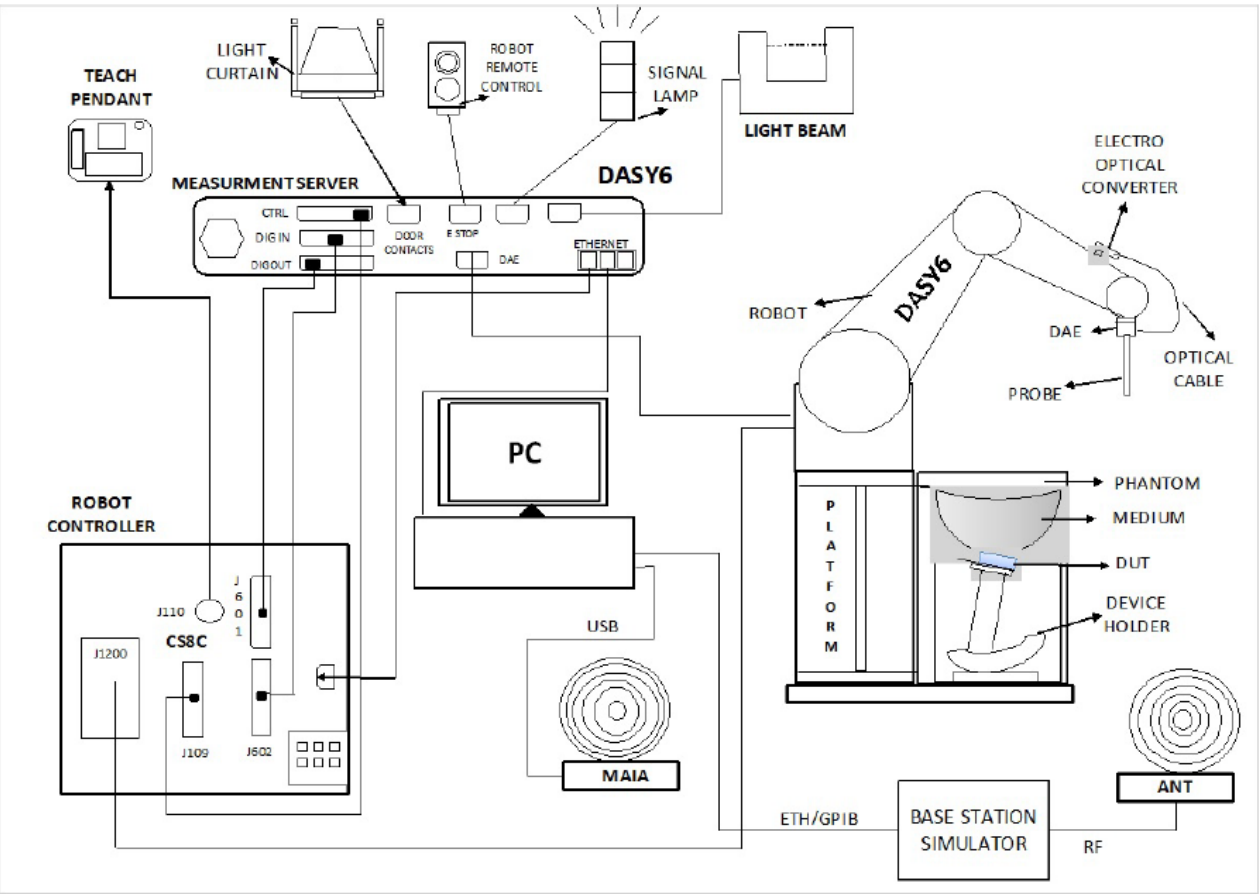
4.1. SAR Measurement System

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.

The DASY6 & 8 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 Win10 and the DASY6 or 8 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	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

Step 3: Zoom Scan

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

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

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

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

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

Step 4: Power drift measurement

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

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	7-24-2024
Network Analyzer	ROHDE & SCHWARZ	ZNB 20	102256	7-24-2024
Dielectric Assessment Kit	SPEAG	DAK-12	1158	11-17-2023
Dielectric Assessment Kit	SPEAG	DAK-3.5	1196	7-17-2024
Shorting block	SPEAG	DAK-3.5 Short	SM DAK 200 BA	N/A
Shorting block	SPEAG	DAK-12 Short	SM DAK 220 AD	N/A
Thermometer	LKM	DTM3000	3851	7-25-2024
Thermometer	LKM	DTM3000	3862	7-25-2024

System Check

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
MXG Analog Signal Generator	Aglient	N5181A	MY50145882	7-26-2024
MXG Analog Signal Generator	Keysight	N5181B	MY59100587	7-26-2024
MXG Analog Signal Generator	Keysight	N5173B	MY59101083	7-27-2024
Power Sensor	KEYSIGHT	U2000A	MY60180020	7-27-2024
Power Sensor	KEYSIGHT	U2000A	MY60490008	7-25-2024
Power Sensor	KEYSIGHT	U2000A	MY60160004	7-25-2024
Power Sensor	KEYSIGHT	U2000A	MY61010010	7-25-2024
Power Amplifier	EXODUS	AMP2027	1410025-AMP2027-10003	11-2-2023
Power Amplifier	MINI-CIRCUITS	TVA-R5-13A+	2111006	1-6-2024
Power Amplifier	EXODUS	AMP2027ADB	10002	1-6-2024
Directional Coupler	Aglient	772D	MY52180193	7-25-2024
Directional Coupler	H.P	778D	16133	7-25-2024
Directional Coupler	NARDA	4216-10	2835	7-25-2024
Directional Coupler	MINI-CIRCUITS	ZMDC-30-1+	SF569102123	7-25-2024
Low Pass Filter	FILTRON	L140012FL	1410003S	7-25-2024
Low Pass Filter	MICROLAB	LA-60N	3942	7-25-2024
Low Pass Filter	MINI-CIRCUITS	VLF-6000+	S0142	7-25-2024
Low Pass Filter	MINI-CIRCUITS	VLF-3000+	S0143	7-25-2024
Low Pass Filter	MINI-CIRCUITS	NLP-1200	VUU19301915	1-5-2024
Attenuator	KEYSIGHT	8491B/003	MY39272276	7-25-2024
Attenuator	KEYSIGHT	8491B/010	MY39271981	7-24-2024
Attenuator	KEYSIGHT	8491B/010	MY39272011	7-25-2024
Attenuator	KEYSIGHT	8491B/020	MY39272301	7-25-2024
Attenuator	KEYSIGHT	8491B/020	MY39272302	7-24-2024
Attenuator	KEYSIGHT	8491B/003	MY39272275	7-25-2024
E-Field Probe	SPEAG	EX3DV4	7313	3-24-2024
E-Field Probe	SPEAG	EX3DV4	7330	1-24-2024
E-Field Probe	SPEAG	EX3DV4	7545	8-25-2024
E-Field Probe	SPEAG	EX3DV4	7651	5-30-2024
E-Field Probe	SPEAG	EX3DV4	7646	3-23-2024
Data Acquisition Electronics	SPEAG	DAE4	1447	3-22-2024
Data Acquisition Electronics	SPEAG	DAE4	1468	8-24-2024
Data Acquisition Electronics	SPEAG	DAE4	1494	7-17-2024
Data Acquisition Electronics	SPEAG	DAE4	1591	3-22-2024
Data Acquisition Electronics	SPEAG	DAE4	1668	4-26-2024
System Validation Dipole	SPEAG	D750V3	1122	2-24-2024

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.

Test Equipment (Continued)

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
System Validation Dipole	SPEAG	D835V2	4d194	3-24-2024
System Validation Dipole	SPEAG	D835V2	4d174	9-21-2024
System Validation Dipole	SPEAG	D1750V2	1125	11-30-2023
System Validation Dipole	SPEAG	D1900V2	5d190	11-16-2023
System Validation Dipole	SPEAG	D1900V2	5d199	3-25-2024
System Validation Dipole	SPEAG	D2450V2	960	3-24-2024
System Validation Dipole	SPEAG	D5GHzV2	1209	2-28-2024
System Validation Dipole	SPEAG	D3700V2	1036	5-19-2024
System Validation Dipole	SPEAG	D3500V2	1075	5-19-2024
System Validation Dipole	SPEAG	D1750V2	1180	9-21-2024
System Validation Dipole	SPEAG	D2600V2	1178	4-23-2023
System Validation Dipole	SPEAG	D3900V2	1069	4-21-2024
System Validation Dipole	SPEAG	CLA -13	1015	8-22-2024
Thermometer	Lutron	MHB-382SD	AH.50215	1-9-2024
Thermometer	Lutron	MHB-382SD	AH.50213	1-11-2024
Thermometer	Lutron	MHB-382SD	AH.91463	1-11-2024
Thermometer	Lutron	MHB-382SD	AJ.45903	1-9-2024
Thermometer	Lutron	MHB-382SD	AJ.42446	7-26-2024
Thermometer	Lutron	MHB-382SD	AK.12102	7-31-2024
Thermometer	Lutron	MHB-382SD	AK.12103	7-31-2024
Thermometer	Lutron	MHB-382SD	AK.12123	1-9-2024
Thermometer	Lutron	MHB-382SD	AK.18789	7-27-2024

Others

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Base Station Simulator	R & S	CMW500	150313	7-27-2024
Base Station Simulator	R & S	CMW500	150314	7-26-2024
Base Station Simulator	R & S	CMW500	162790	7-26-2024
Base Station Simulator	R & S	CMW500	169803	1-5-2024
Base Station Simulator	R & S	CMW500	169801	1-5-2024
Base Station Simulator	R & S	CMW500	169799	7-26-2024
Base Station Simulator	R & S	CMW500	169800	7-27-2024
Base Station Simulator	R & S	CMW500	169798	7-27-2024
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY57510596	7-27-2024
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY59150850	1-9-2024
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY58120110	1-10-2024

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

Measurement Uncertainty of 100MHz to 6GHz

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 ≤ 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.

Measurement Uncertainty of 9MHz to 19MHz

Measurement uncertainty for 9 MHz to 19 MHz

(According to IEEE 62209-1528)

a	b	c		d	e	f	g	h =	l =	k
					f(d,k)			*c×f/e*	*c×g/e*	
Uncertainty component	Reference	Tol. 1 g (±%)	Tol. 10 g (±%)	Prob. Dist.	Div.	*ci* (1 g)	*ci* (10 g)	1 g *ui* (± %)	10 g *ui* (± %)	vi
Measurement System Errors										
Probe Calibration	8.4.1.1	13.3		Normal	2	1	1	6.7	6.7	∞
Probe Calibration Drift	8.4.1.2	1.7		Rectangular	1.732	1	1	1.0	1.0	∞
Probe Linearity	8.4.1.3	4.7		Rectangular	1.732	1	1	2.7	2.7	∞
Broadband Signal	8.4.1.4	0.8		Rectangular	1.732	1	1	0.5	0.5	∞
Probe Isotropy	8.4.1.5	7.6		Rectangular	1.732	1	1	4.4	4.4	∞
Data Acquisition	8.4.1.6	0.3		Normal	1	1	1	0.3	0.3	∞
RF Ambient	8.4.1.7	1.8		Normal	1	1	1	1.8	1.8	∞
Probe Positioning	8.4.1.8	0.006		Normal	1	0.14	0.14	0.10	0.10	∞
Data Processing	8.4.1.9	1.2		Normal	1	1	1	1.2	1.2	∞
Phantom and Device Errors										
Conductivity (meas.)DAK	8.4.2.1	2.5		Normal	1	0.78	0.71	2.0	1.8	∞
Conductivity (temp.)BB	8.4.2.2	5.4		Rectangular	1.732	0.78	0.71	2.4	2.2	∞
Phantom Permittivity	8.4.2.3	14.0		Rectangular	1.732	0	0	0.0	0.0	∞
Distance DUT -TSL	8.4.2.4	2.0		Normal	1	2	2	4.0	4.0	∞
Device Positioning	8.4.2.5	3.3	5.8	Normal	1	1	1	3.3	5.8	40
Device Holder	8.4.2.6	3.6		Normal	1	1	1	3.6	3.6	∞
DUT Modulation	8.4.2.7	2.4		Rectangular	1.732	1	1	1.4	1.4	∞
Time-average SAR	8.4.2.8	1.7		Rectangular	1.732	1	1	1.0	1.0	∞
DUT drift	8.4.2.9	5.0		Normal	1	1	1	5.0	5.0	∞
Correction to the SAR results										
Deviation to Target	8.4.3.1	1.9		Normal	1	1	0.84	1.9	1.6	∞
Combined Standard Uncertainty Uc(y) =				RSS				12.57	13.33	
Expanded Uncertainty U, Coverage Factor = 2, > 95 % Confidence =								**25.13**	**26.66**	

5.1. DECISION RULE

Decision rule for statement(s) of conformity is based on Procedures 2, Clause 4.4.3 in IEC Guide 115:2021.

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

No.	S/N	Notes	No.	S/N	Notes
1	R3CW80FKQ4T	Main Conducted	13	R3CW80R6LCA	SAR
2	R3CW80FKNRY	Main Conducted	14	R3CW80R6M8F	SAR
3	R3CW80FKPJL	Main Conducted	15	R3CW80FLMMK	SAR
4	R3CW80FKPYM	Main Conducted	16	R3CW80FLGYA	SAR
5	R3CW80R6LQF	Main Conducted	17	R3CW80FLMJE	SAR
6	R3CW90D5NAJ	Main Conducted	18	R3CW90M7XWA	SAR
7	R3CW80FKQ6B	Wi-Fi & BT Conducted	19	R3CW90M7X7J	SAR
8	R3CW80FKP9Y	Wi-Fi & BT Conducted	20	R3CW90M71KJM	SAR
9	R3CW80FKNYD	Wi-Fi & BT Conducted	21	R3CW90M7MAT	SAR
10	R3CW80R6M3L	SAR			
11	R3CW80R6JXV	SAR			
12	R3CW80R6KPR	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 14) HSUPA (Category 6) DC-HSDPA (Category 14) 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	QPSK 16QAM 64QAM 256QAM Rel. 16 Carrier Aggregation (2 Uplink and 4 Downlinks) **<u>Uplink Carrier Aggregation(2CC)</u>** CA_2A-4A, CA_4A-5A, CA_4A-12A, CA_5A-66A, CA_12A-66A		100% (FDD) 63.3% (TDD) – PC3 43.3% (TDD) – PC2
	Does this device support SV-LTE (1xRTT-LTE)? ☐ Yes ☒ No			
5G NR (Sub 6)	FDD Band n2 FDD Band n5 FDD Band n25 TDD Band n41 FDD Band n66 TDD Band n77	DFT-s-ODFM: ■ π/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-ODFM: ■QPSK, 16QAM, 64QAM, 256QAM		100%
Wi-Fi	2.4 GHz	802.11b, 802.11g, 802.11n (HT20), 802.11ac (VHT20), 802.11ax (HE20)		98.9% (802.11b-SISO) 98.8% (802.11b-MIMO)
	5 GHz	802.11a / 802.11n (HT20/40) 802.11ac (VHT20/40/80/160) 802.11ax (HE20/40/80/160)		97.1% (802.11ac (VHT80-SISO) 94.5% (802.11ac (VHT80-MIMO)
	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 5.3 LE		76.9%(BT) 85.2%(LE)
NFC	13.56 MHz	Type A/B/F		100%

Notes:

1. The Bluetooth protocol is considered source-based averaging. For duty used in Wi-Fi/BT SAR testing, Please refer to section.9.
2. This device supports Power Class 2(HPUE) and Power Class 3.
3. This device supports UL CA inter band
4. NR TDD Band n41 & n77 has support SRS (Sounding Reference Signal) 0/1/2/3 operates.

6.3. Time-Averaging feature

The equipment under test (EUT) contains both S.LSI TAS supporting WWAN technologies (2G/3G/4G/5G-Sub6) and Qualcomm FastConnect TAS supporting WLAN technologies (2.4GHz/5G/6GHz). Both TAS chipset are enabled with each TAS (Time Average SAR) algorithm has been designed to meet the compliance limits over the required duration, while still allowing dynamic control of transmit power for meeting system performance. And The EUT has also supports to BT/NFC technologies, but There are not support to TAS algorithm.

The TAS (Time Average SAR) algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of *SAR_design_target*, below the predefined time-average power limit, for each characterized technology and band.

TAS (Time Average SAR) algorithm allows the device to transmit at higher power instantaneously as high as P_{max}, when needed, but enforces power limiting to maintain time-averaged transmit power to P_{Limit}. Below table shows P_{Limit} NV settings and maximum tune up output power P_{max} configured for this EUT for various transmit conditions (RSI=Radio SAR Index / DSI=Device State Index).

The purpose of this SAR report is to demonstrate that the EUT meets FCC SAR limits when transmitting in static transmission scenario at maximum allowable time-averaged power levels.

Exposure condition			Head (RCV)	Body worn & Hotspot	Product Specific 10-g SAR	Pmax (Maximum tune-up Power) (dBm)
Spatial-average			1g	1g	10g	
Test distance (mm)			0	10	0	
RSI:			RCV	Free / Hotspot	Free	
RF Air Interface	Antenna	Antenna Group	Plimit corresponding to 0.8 W/kg (SAR_design_target) (1g) / 2.0 W/kg (SAR_design_target) (10g)			
GSM 850	Main 1	AG 0	25.00	25.00	25.00	25.00
GSM 1900	Main 1	AG 0	18.70	18.70	18.70	21.50
GSM 850 Upper	Sub 1	AG 1	20.00	25.00	25.00	25.00
WCDMA 2	Main 1	AG 0	22.00	18.50	18.50	22.00
WCDMA 4	Main 1	AG 0	23.00	19.00	19.00	23.00
WCDMA 5	Main 1	AG 0	24.00	24.00	24.00	24.00
WCDAM 5 Upper	Sub 1	AG 1	18.00	18.00	18.00	23.50
LTE B5	Main 1	AG 0	24.00	24.00	24.00	24.00
LTE B12(17)	Main 1	AG 0	23.50	23.50	23.50	23.50
LTE B13	Main 1	AG 0	23.50	23.50	23.50	23.50
LTE B25(2)	Main 1	AG 0	22.50	18.50	18.50	22.50
LTE B26	Main 1	AG 0	23.50	23.50	23.50	23.50
LTE B41	Main 2	AG 0	20.00	18.50	18.50	22.50
LTE B41(PC2)	Main 2	AG 0	21.40	19.00	19.00	25.00
LTE B66(4)	Main 1	AG 0	22.50	18.00	18.00	22.50
LTE B2 Upper	Sub 2	AG 1	15.50	17.50	17.50	22.50
LTE B5 Upper	Sub 1	AG 1	19.50	19.50	19.50	23.50
LTE B26 Upper	Sub 1	AG 1	18.00	18.00	18.00	23.00
LTE B66(4) Upper	Sub 2	AG 1	17.50	17.50	17.50	22.50
NR Band n5	Main 1	AG 0	24.00	24.00	24.00	24.50
NR Band n25(n2)	Main 1	AG 0	23.50	19.00	19.00	23.50
NR Band n66	Main 1	AG 0	23.50	19.50	19.50	23.50
NR Band n5 Upper	Sub 1	AG 1	19.50	19.50	19.50	24.00
NR Band n25(n2) Upper	Sub 2	AG 1	14.50	19.00	19.00	23.00
NR Band n66 Upper	Sub 2	AG 1	18.00	19.00	19.00	23.00
NR Band n41	Sub 2	AG 1	16.00	16.00	16.00	24.00
NR Band n41 - SRS1 -	Main 2	AG 0	14.50	14.50	14.50	22.00
NR Band n41 - SRS2 -	Sub 1	AG 1	14.00	14.00	14.00	23.00
NR Band n41 - SRS3 -	Main 4	AG 0	15.00	15.00	15.00	20.00
NR Band n77	Sub 2	AG 1	15.00	15.00	15.00	24.50
NR Band n77 - SRS1 -	Main 3	AG 0	9.00	9.00	9.00	23.00
NR Band n77 - SRS2 -	Sub 5	AG 1	9.00	9.00	9.00	20.00
NR Band n77 - SRS3 -	Main4	AG 0	6.50	6.50	6.50	23.00

Notes:

1. All *PLimit* EFS and maximum tune up output *Pmax* levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of TDD modulation schemes (for e.g., GSM/LTE TDD). NR TDD's *Pmax* was listed as burst power.
2. Maximum tune up output power *Pmax* is used to configure EUT during RF tune up procedures. The maximum allowed output power is equal to maximum tune up output power + 1dB device design uncertainty.
3. Measurement Condition : All conducted power and SAR measurements in this SAR report were performed by setting static Power condition.
4. If *PLimit* is higher than *Pmax* for some modes / bands, The modes/bands will operate at a power level up to *Pmax*.

Time-Averaging feature (Continued)

Exposure condition			Head (RCV)	Head (NR + RCV)	Body worn & Hotspot	Body worn & Hotspot (NR active)	Product Specific 10-g	Product Specific 10-g (NR active)	Pmax (Maximum tune-up Power) (dBm)
Spatial-average			1g	1g	1g	1g	10g	10g	
Test distance (mm)			0	0	10	10	0	0	
DSI:			1	9	0	8	0	8	
RF Air Interface	Antenna	Antenna Group	Plimit corresponding to 0.4 W/kg (SAR_design_target) (1g) / 1 W/kg (SAR_design_target) (10g)						
DTS SISO Ant.1	Sub.4	AG 1	11.00		14.50		14.50		18.00
DTS SISO Ant.2	Sub.6	AG 1	11.00		14.50		14.50		18.00
DTS MIMO	Sub4&Sub.6	AG 1	11.00		14.50		14.50		18.00
UNII-2A SISO Ant.1	Sub.4	AG 1	11.00		12.00		12.00		15.00
UNII-2A SISO Ant.2	Sub.1	AG 1	11.00		12.00		12.00		15.00
UNII-2A MIMO	Sub.4&Sub.1	AG 1	11.00		12.00		12.00		15.00
UNII-2C SISO Ant.1	Sub.4	AG 1	11.00		12.00		12.00		15.00
UNII-2C SISO Ant.2	Sub.1	AG 1	11.00		12.00		12.00		15.00
UNII-2C MIMO	Sub.4&Sub.1	AG 1	11.00		12.00		12.00		15.00
UNII-3 SISO Ant.1	Sub.4	AG 1	11.00		12.00		12.00		15.00
UNII-3 SISO Ant.2	Sub.1	AG 1	11.00		12.00		12.00		15.00
UNII-3 MIMO	Sub.4&Sub.1	AG 1	11.00		12.00		12.00		15.00
UNII-4 SISO Ant.1	Sub.4	AG 1	11.00		12.00		12.00		15.00
UNII-4 SISO Ant.2	Sub.1	AG 1	11.00		12.00		12.00		15.00
UNII-4 MIMO	Sub.4&Sub.1	AG 1	11.00		12.00		12.00		15.00
WiFi 6e SISO Ant.1	Sub.4	AG 1	8.00		8.00		8.00		8.00
WiFi 6e SISO Ant.2	Sub.1	AG 1	8.00		8.00		8.00		8.00
WiFi 6e MIMO	Sub.4&Sub.1	AG 1	8.00		8.00		8.00		8.00

Notes:

1. All *PLimit* EFS and maximum tune up output *Pmax* levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of TDD modulation schemes (for e.g., GSM/LTE TDD). NR TDD's *Pmax* was listed as burst power.
2. Maximum tune up output power *Pmax* is used to configure EUT during RF tune up procedures. The maximum allowed output power is equal to maximum tune up output power + 1dB device design uncertainty.
3. Measurement Condition : All conducted power and SAR measurements in this SAR report were performed by setting static Power condition.
4. If *PLimit* is higher than *Pmax* for some modes / bands, The modes/bands will operate at a power level up to *Pmax*.
5. For Wi-Fi 6e data, please refer to above 6GHz report.

6.4. Maximum Allowed Output power

WWAN Bands maximum allowed output power

Maximum allowed output power means that Pmax or PLimit + 1dB device uncertainty for each RSI.

RF Air interface	Antenna	Mode	Time Slots	Maximum allowed output power (dBm)							
				Pmax		Plimit					
						RSI_Free		RSI_RCV		RSI_Hotspot	
				Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM850	Main.1	Voice	1	**33.00**	**23.97**	**33.00**	**23.97**	**33.00**	**23.97**	**33.00**	**23.97**
		GPRS	1	**33.00**	**23.97**	**33.00**	**23.97**	**33.00**	**23.97**	**33.00**	**23.97**
		GPRS	2	**32.00**	**25.98**	**32.00**	**25.98**	**32.00**	**25.98**	**32.00**	**25.98**
		GPRS	3	**29.50**	**25.24**	**29.50**	**25.24**	**29.50**	**25.24**	**29.50**	**25.24**
		GPRS	4	**28.00**	**24.99**	**28.00**	**24.99**	**28.00**	**24.99**	**28.00**	**24.99**
		EGPRS	1	**28.50**	**19.47**	**28.50**	**19.47**	**28.50**	**19.47**	**28.50**	**19.47**
		EGPRS	2	**26.50**	**20.48**	**26.50**	**20.48**	**26.50**	**20.48**	**26.50**	**20.48**
		EGPRS	3	**25.00**	**20.74**	**25.00**	**20.74**	**25.00**	**20.74**	**25.00**	**20.74**
		EGPRS	4	**23.50**	**20.49**	**23.50**	**20.49**	**23.50**	**20.49**	**23.50**	**20.49**
GSM1900	Main.1	Voice	1	**31.00**	**21.97**	**28.00**	**18.97**	**28.00**	**18.97**	**28.00**	**18.97**
		GPRS	1	**31.00**	**21.97**	**28.00**	**18.97**	**28.00**	**18.97**	**28.00**	**18.97**
		GPRS	2	**28.50**	**22.48**	**25.00**	**18.98**	**25.00**	**18.98**	**25.00**	**18.98**
		GPRS	3	**26.50**	**22.24**	**24.00**	**19.74**	**24.00**	**19.74**	**24.00**	**19.74**
		GPRS	4	**24.50**	**21.49**	**22.00**	**18.99**	**22.00**	**18.99**	**22.00**	**18.99**
		EGPRS	1	**26.50**	**17.47**	**26.50**	**17.47**	**26.50**	**17.47**	**26.50**	**17.47**
		EGPRS	2	**24.50**	**18.48**	**24.50**	**18.48**	**24.50**	**18.48**	**24.50**	**18.48**
		EGPRS	3	**23.00**	**18.74**	**23.00**	**18.74**	**23.00**	**18.74**	**23.00**	**18.74**
		EGPRS	4	**21.00**	**17.99**	**21.00**	**17.99**	**21.00**	**17.99**	**21.00**	**17.99**
GSM850	Sub.1	Voice	1	**33.00**	**23.97**	**33.00**	**23.97**	**30.00**	**20.97**	**33.00**	**23.97**
		GPRS	1	**33.00**	**23.97**	**33.00**	**23.97**	**30.00**	**20.97**	**33.00**	**23.97**
		GPRS	2	**32.00**	**25.98**	**32.00**	**25.98**	**26.00**	**19.98**	**32.00**	**25.98**
		GPRS	3	**29.50**	**25.24**	**29.50**	**25.24**	**24.00**	**19.74**	**29.50**	**25.24**
		GPRS	4	**28.00**	**24.99**	**28.00**	**24.99**	**23.00**	**19.99**	**28.00**	**24.99**
		EGPRS	1	**27.50**	**18.47**	**27.50**	**18.47**	**26.00**	**16.97**	**27.50**	**18.47**
		EGPRS	2	**26.00**	**19.98**	**26.00**	**19.98**	**24.00**	**17.98**	**26.00**	**19.98**
		EGPRS	3	**24.50**	**20.24**	**24.50**	**20.24**	**23.00**	**18.74**	**24.50**	**20.24**
		EGPRS	4	**22.50**	**19.49**	**22.50**	**19.49**	**21.50**	**18.49**	**22.50**	**19.49**

Note(s):

1. Detail of RSI(Radio SAR Index) conditions, please refer to Sec.6.5.

WWAN Bands maximum allowed output power (Continued)

Maximum allowed output power means that Pmax or PLimit + 1dB device uncertainty for each RSI.

RF Air interface	Antenna	Mode	Maximum allowed output power (dBm)			
			Pmax	Plimit		
				RSI_Free	RSI_RCV	RSI_Hotspot
W-CDMA Band II	Main.1	R99	23.00	19.50	23.00	19.50
		HSDPA	22.00	18.00	22.00	18.00
		HSUPA	22.00	17.00	22.00	17.00
		DC-HSDPA	22.00	17.50	22.00	17.50
W-CDMA Band IV	Main.1	R99	24.00	20.00	24.00	20.00
		HSDPA	22.00	18.50	22.00	18.50
		HSUPA	22.00	17.00	22.00	17.00
		DC-HSDPA	22.00	18.00	22.00	18.00
W-CDMA Band V	Main.1	R99	25.00	25.00	25.00	25.00
		HSDPA	22.00	22.00	22.00	22.00
		HSUPA	23.00	23.00	23.00	23.00
		DC-HSDPA	23.00	23.00	23.00	23.00
W-CDMA Band V	Sub.1	R99	24.50	19.00	19.00	19.00
		HSDPA	22.50	19.00	19.00	19.00
		HSUPA	22.50	18.00	18.00	18.00
		DC-HSDPA	22.50	19.50	19.50	19.50

RF Air interface	Antenna	Mode	Maximum allowed output power (dBm)			
			Pmax	Plimit		
				RSI_Free	RSI_RCV	RSI_Hotspot
LTE Band 12	Main.1	QPSK	24.50	24.50	24.50	24.50
LTE Band 17	Main.1	QPSK	24.50	24.50	24.50	24.50
LTE Band 13	Main.1	QPSK	24.50	24.50	24.50	24.50
LTE Band 5	Main.1	QPSK	25.00	25.00	25.00	25.00
LTE Band 26	Main.1	QPSK	24.50	24.50	24.50	24.50
LTE Band 66	Main.1	QPSK	23.50	19.00	23.50	19.00
LTE Band 4	Main.1	QPSK	23.50	19.00	23.50	19.00
LTE Band 25	Main.1	QPSK	23.50	19.50	23.50	19.50
LTE Band 2	Main.1	QPSK	23.50	19.50	23.50	19.50
LTE Band 41 (Power Class 3)	Main.2	QPSK	23.50	21.50	23.50	21.50
LTE Band 41 (Power Class 2)	Main.2	QPSK	26.00	23.60	26.00	23.60
LTE Band 26	Sub.2	QPSK	24.00	19.00	19.00	19.00
LTE Band 5	Sub.1	QPSK	24.50	20.50	20.50	20.50
LTE Band 66	Sub.2	QPSK	23.50	18.50	18.50	18.50
LTE Band 4	Sub.2	QPSK	23.50	18.50	18.50	18.50
LTE Band 2	Sub.2	QPSK	23.50	18.50	16.50	18.50

Note(s):

1. Detail of RSI(Radio SAR Index) conditions, please refer to Sec.6.5.
2. LTE Bands has support UL CA operations with same target power in each standalone LTE bands. Details of configuration are refer to Appendix.H.

WWAN Bands maximum allowed output power (Continued)

Maximum allowed output power means that Pmax or PLimit + 1dB device uncertainty for each RSI.

RF Air interface	Antenna	Mode	Maximum allowed output power (dBm)			
			Pmax	Plimit		
				RSI_Free	RSI_RCV	RSI_Hotspot
NR Band n5	Main.1	DFT-s-OFDM	**25.50**	**25.00**	**25.00**	**25.00**
NR Band n66	Main.1	DFT-s-OFDM	**24.50**	**20.50**	**24.50**	**20.50**
NR Band n25	Main.1	DFT-s-OFDM	**24.50**	**20.00**	**24.50**	**20.00**
NR Band n2	Main.1	DFT-s-OFDM	**24.50**	**20.00**	**24.50**	**20.00**
NR Band n5	Sub.1	DFT-s-OFDM	**25.00**	**20.50**	**20.50**	**20.50**
NR Band n66	Sub.2	DFT-s-OFDM	**24.00**	**20.00**	**19.00**	**20.00**
NR Band n25	Sub.2	DFT-s-OFDM	**24.00**	**20.00**	**15.50**	**20.00**
NR Band n2	Sub.2	DFT-s-OFDM	**24.00**	**20.00**	**15.50**	**20.00**
NR Band n41-SRS0	Sub.2	DFT-s-OFDM	**25.00**	**17.00**	**17.00**	**17.00**
NR Band n41-SRS1	Main.2	SRS CW	**23.00**	**15.50**	**15.50**	**15.50**
NR Band n41-SRS2	Sub.1	SRS CW	**24.00**	**15.00**	**15.00**	**15.00**
NR Band n41-SRS3	Main.4	SRS CW	**21.00**	**16.00**	**16.00**	**16.00**
NR Band n77-SRS0	Sub.2	DFT-s-OFDM	**25.50**	**16.00**	**16.00**	**16.00**
NR Band n77-SRS1	Main.3	SRS CW	**24.00**	**10.00**	**10.00**	**10.00**
NR Band n77-SRS2	Sub.5	SRS CW	**21.00**	**10.00**	**10.00**	**10.00**
NR Band n77-SRS3	Main.4	SRS CW	**24.00**	**7.50**	**7.50**	**7.50**

Note(s):

1. Detail of RSI(Radio SAR Index) conditions, please refer to Sec.6.5.
2. NR Bands support SA and NSA mode as same target power.

WLAN Bands maximum allowed output power

Maximum allowed output power means that Pmax or PLimit + 1dB device uncertainty for each DSI.

Maximum Power (Pmax)

RF Air interface	Band	Maximum allowed Output Power (dBm)											
		SISO(Ant 1/2)						MIMO (Ant1 + Ant2)					
		802.11 mode						802.11 mode					
		a	b	g	n	ac	ax	a	b	g	n	ac	ax
WiFi 2.4 GHz	1-10ch		19	17	17 1 ch: 16	17 1 ch: 16	17		22	20	20 1 ch: 19	20 1 ch: 19	20
	11ch		19	17	16	16	16		22	20	19	19	19
	12ch		6	6	6	6	6		9	9	9	9	9
	13ch		0	0	0	0	0		3	3	3	3	3
WiFi 5 GHz (BW : 20MHz)	5200MHz	17.0			17.0	17.0	17.0	20			20	20	20
	5300MHz	17.0			17.0	17.0	17.0	20			20	20	20
	5500MHz	17.0			17.0	17.0	17.0	20			20	20	20
	5800MHz	17.0			17.0	17.0	17.0	20			20	20	20
	5900MHz	17.0			17.0	17.0	17.0	20			20	20	20
WiFi 5 GHz (BW : 40MHz)	5200MHz				16.0	16.0	16.0				19	19	19
	5300MHz				16.0	16.0	16.0				19	19	19
	5500MHz				16.0	16.0	16.0				19	19	19
	5800MHz				16.0	16.0	16.0				19	19	19
	5900MHz				16.0	16.0	16.0				19	19	19
WiFi 5 GHz (BW : 80MHz)	5200MHz					16.0	16.0					19	19
	5300MHz					16.0	16.0					19	19
	5500MHz					16.0	16.0					19	19
	5800MHz					16.0	16.0					19	19
	5900MHz					16.0	16.0					19	19
WiFi 5 GHz (BW : 160MHz)	5200MHz					15.0	15.0					18	18
	5500MHz					15.0	15.0					18	18
	5900MHz					15.0	15.0					18	18

Plimit (DSI= 0 and 8)

RF Air interface	Band	Maximum allowed Output Power (dBm)											
		SISO(Ant 1/2)						MIMO (Ant1 + Ant2)					
		802.11 mode						802.11 mode					
		a	b	g	n	ac	ax	a	b	g	n	ac	ax
WiFi 2.4 GHz	1-11ch		15.5	15.5	15.5	15.5	15.5		18.5	18.5	18.5	18.5	18.5
	12ch		6	6	6	6	6		9	9	9	9	9
	13ch		0	0	0	0	0		3	3	3	3	3
WiFi 5 GHz (BW : 20MHz)	5200MHz	13.0			13.0	13.0	13.0	16.0			16.0	16.0	16.0
	5300MHz	13.0			13.0	13.0	13.0	16.0			16.0	16.0	16.0
	5500MHz	13.0			13.0	13.0	13.0	16.0			16.0	16.0	16.0
	5800MHz	13.0			13.0	13.0	13.0	16.0			16.0	16.0	16.0
	5900MHz	13.0			13.0	13.0	13.0	16.0			16.0	16.0	16.0
WiFi 5 GHz (BW : 40MHz)	5200MHz				13.0	13.0	13.0				16.0	16.0	16.0
	5300MHz				13.0	13.0	13.0				16.0	16.0	16.0
	5500MHz				13.0	13.0	13.0				16.0	16.0	16.0
	5800MHz				13.0	13.0	13.0				16.0	16.0	16.0
	5900MHz				13.0	13.0	13.0				16.0	16.0	16.0
WiFi 5 GHz (BW : 80MHz)	5200MHz					13.0	13.0					16.0	16.0
	5300MHz					13.0	13.0					16.0	16.0
	5500MHz					13.0	13.0					16.0	16.0
	5800MHz					13.0	13.0					16.0	16.0
	5900MHz					13.0	13.0					16.0	16.0
WiFi 5 GHz (BW : 160MHz)	5200MHz					13.0	13.0					16.0	16.0
	5500MHz					13.0	13.0					16.0	16.0
	5900MHz					13.0	13.0					16.0	16.0

Note(s):

1. Detail of DSI(Device State Index) conditions, please refer to Sec.6.5.
2. For both MIMO mode, each Antennas operated same target power.
3. WLAN Band has support RSDB mode. Detail of RSDB combinations refer to Sec.12

Plimit (DSI= 1 and 9)

RF Air interface	Band	Maximum allowed Output Power (dBm)											
		SISO(Ant 1/2)						MIMO (Ant1 + Ant2)					
		802.11 mode						802.11 mode					
		a	b	g	n	ac	ax	a	b	g	n	ac	ax
WiFi 2.4 GHz	1-11ch		12	12	12	12	12		15	15	15	15	15
	12ch		6	6	6	6	6		9	9	9	9	9
	13ch		0	0	0	0	0		3	3	3	3	3
WiFi 5 GHz (BW : 20MHz)	5200MHz	12.0			12.0	12.0	12.0	15			15	15	15
	5300MHz	12.0			12.0	12.0	12.0	15			15	15	15
	5500MHz	12.0			12.0	12.0	12.0	15			15	15	15
	5800MHz	12.0			12.0	12.0	12.0	15			15	15	15
	5900MHz	12.0			12.0	12.0	12.0	15			15	15	15
WiFi 5 GHz (BW : 40MHz)	5200MHz				12.0	12.0	12.0				15	15	15
	5300MHz				12.0	12.0	12.0				15	15	15
	5500MHz				12.0	12.0	12.0				15	15	15
	5800MHz				12.0	12.0	12.0				15	15	15
	5900MHz				12.0	12.0	12.0				15	15	15
WiFi 5 GHz (BW : 80MHz)	5200MHz					12.0	12.0					15	15
	5300MHz					12.0	12.0					15	15
	5500MHz					12.0	12.0					15	15
	5800MHz					12.0	12.0					15	15
	5900MHz					12.0	12.0					15	15
WiFi 5 GHz (BW : 160MHz)	5200MHz					12.0	12.0					15	15
	5500MHz					12.0	12.0					15	15
	5900MHz					12.0	12.0					15	15

BT(Blue tooth) Max / Reduced Output power

RF Air interface	Max. Output Power (dBm)						
	PL11		PL10		PL9		Dual (Conducted) (Only PL10+PL10)
	Ant.1	Ant.2	Ant.1	Ant.2	Ant.1	Ant.2	Dual (Ant.1+Ant.2)
Bluetooth (1Mbps)	19	16	13.5	12.5			16
Bluetooth (EDR)	15	12	10	9			12.5
Bluetooth LE audio (1M/2M)	18	16	13	12	9	8	15.5
Bluetooth LE legacy					9	8	

RF Air interface	Reduced. Output Power (dBm)						
	PL11		PL10		PL9		Dual (Conducted) (Only PL10+PL10)
	Ant.1	Ant.2	Ant.1	Ant.2	Ant.1	Ant.2	Dual (Ant.1+Ant.2)
Bluetooth (1Mbps)	12	12	12	12			15
Bluetooth (EDR)	12	12	10	9			12.5
Bluetooth LE legacy					9	8	

Note(s):

1. Detail of DSI(Device State Index) conditions, please refer to Sec.6.5.
2. For both MIMO mode, each Antennas operated same target power.
3. WLAN Band has support RSDB mode. Detail of RSDB combinations refer to Sec.12
4. This device uses an independent fixed level power reduction mechanism for BT mode operations during RCV operation. Detailed descriptions of the power reduction mechanism are included in the operational description.
5. BT has support to Dual(MIMO) mode in only PL10+PL10 mode.

6.5. RSI (Radio SAR Index) and DSI (Device State Index) Scenarios

RSI (Radio SAR Index) Scenarios in WWAN Bands

RF exposure Conditions	Technologuies Supported	RSI conditions	Description
Head	All WWAN bands	RCV	1. Device positioned next to head. 2. Receiver Active.
Body-worn	All WWAN bands	Free	1. Device being used with a body-worn accessory.
Hotspot	All WWAN bands	Hotspot	1. Device transmits in hotspot mode near body. 2. Hotspot Mode Active.
Phablet-10g	All WWAN bands	Free	1. Device is held with hand.

Note(s):

RSI Scenarios priority: RCV → Free & Hotspot

DSI (Device State Index) Scenarios in WLAN Bands

RF exposure Conditions	Technologuies Supported	DSI No.	Description
Head	All WLAN bands	1	1. Device positioned next to head. 2. Receiver Active.
	All WLAN bands	9	1. Device positioned next to head. 2. Receiver Active. 3. NR Band Active.
Body-worn & Hotspot & Phablet-10g	All WLAN bands	0	1. Device transmits in hotspot mode near body. 2. Hotspot Mode Active. 3. Device being used with a body-worn accessory. 4. Device is held with hand.
	All WLAN bands	8	1. Device transmits in hotspot mode near body. 2. Hotspot Mode Active. 3. Device being used with a body-worn accessory. 4. Device is held with hand. 5. NR Band active.

Note(s):

DSI Scenarios priority: DSI=1, 9 → DSI=0, 8

6.6. General LTE SAR Test and Reporting Considerations

Item	Description						
Frequency range, Channel Bandwidth, Numbers and Frequencues	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: 788 - 798 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low			23780/ 709	23755/ 706.5		
	Mid			23790/ 710	23790/ 710		
	High			23800/ 711	23825/ 713.5		
	Band 25	Frequency range: 1850 - 1915 MHz					
		Channel Bandwidth					
		20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
	Low	26140/ 1860	26115/ 1857.5	26090/ 1855	26065/ 1852.5	26055/ 1851.5	26047/ 1850.7
	Mid	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5
	High	26590/ 1905	26615/ 1907.5	26640/ 1910	26665/ 1912.5	26675/ 1913.5	26683/ 1914.3

General LTE SAR Test and Reporting Considerations (Continued

Frequency range, Channel Bandwidth, Numbers and Frequencues

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.

pectrum plots for RB configuratior

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:

1. 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.
2. LTE Band 41 test channels in accordance with October 2014 TCB workshop for all channels bandwidths.
3. SAR Testing for LTE was performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

6.7. 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 x (T_s) x # of S + # of U

Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:
Calculated Duty Cycle = 5120 x [1/(15000 x 2048)] x 2 + 6 ms = 63.33%
where
T_s = 1/(15000 x 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 in power class 3. Power class 2 was used configuration 1 at 43.3% duty cycle for SAR testing.

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

Item	Description												
Frequency range, Channel Bandwidth, Numbers and Frequencues	Band n2	Frequency range: 1850 - 1910 MHz											
		Channel Bandwidth											
		100 MHz	90 MHz	80 MHz	70 MHz	60 MHz	50 MHz	40 MHz	30 MHz	25 MHz	20 MHz	15 MHz	10 MHz	5 MHz
	Low										372000/ 1860	371500/ 1857.5	371000/ 1855	370500/ 1852.5
	Mid										376000/ 1880	376000/ 1880	376000/ 1880	376000/ 1880
	High										380000/ 1900	380500/ 1902.5	381000/ 1905	381500/ 1907.5
	Band n5	Frequency range: 824 - 849 MHz											
		Channel Bandwidth											
		100 MHz	90 MHz	80 MHz	70 MHz	60 MHz	50 MHz	40 MHz	30 MHz	25 MHz	20 MHz	15 MHz	10 MHz	5 MHz
	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 n25	Frequency range: 1850 - 1915 MHz											
		Channel Bandwidth											
		100 MHz	90 MHz	80 MHz	70 MHz	60 MHz	50 MHz	40 MHz	30 MHz	25 MHz	20 MHz	15 MHz	10 MHz	5 MHz
	Low										372000/ 1860	371500/ 1857.5	371000/ 1855	370500/ 1852.5
	Mid										376500/ 1882.5	376500/ 1882.5	376500/ 1882.5	376500/ 1882.5
	High										381000/ 1905	381500/ 1907.5	382000/ 1910	382500/ 1912.5
	Band n66	Frequency range: 1710 - 1780 MHz											
		Channel Bandwidth											
		100 MHz	90 MHz	80 MHz	70 MHz	60 MHz	50 MHz	40 MHz	30 MHz	25 MHz	20 MHz	15 MHz	10 MHz	5 MHz
	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
	Band n41	Frequency range: 2496 - 2690 MHz											
		Channel Bandwidth											
		100 MHz	90 MHz	80 MHz	70 MHz	60 MHz	50 MHz	40 MHz	30 MHz	25 MHz	20 MHz	15 MHz	10 MHz	5 MHz
	Low	509202/ 2546.01	508200/ 2541	507204/ 2536.02	506202/ 2531.01	505200/ 2526	504204/ 2512.02	503202/ 2516.01	552200/ 2511		501204/ 2506.02	500700/ 2503.5	500202/ 2501.01	
	Low-Mid							516468/ 2567.34	510402/ 2552.01		509898/ 2549.49	509652/ 2548.26	509400/ 2547	
	Mid	518598/ 2592.99				518598/ 2592.99	518598/ 2592.99		518598/ 2592.99		518598/ 2592.99	518598/ 2592.99	518598/ 2592.99	
	Mid-High	528000/ 2640	528996/ 2644.98	529998/ 2649.99	531000/ 2655	529998/ 2649.99	523734/ 2618.67	523734/ 2618.67	526800/ 2634		527298/ 2636.49	527550/ 2637.75	527802/ 2639.01	
	High							534000/ 2670	534996/ 2674.98		535998/ 2679.99	536496/ 2682.48	537000/ 2685	

NR (Sub 6GHz) SAR Test and Reporting Considerations (Continued)

Frequency range, Channel Bandwidth, Numbers and Frequencues	Band n77 -DoD-	Frequency range: 3450 - 3550 MHz											
		Channel Bandwidth											
		100 MHz	90 MHz	80 MHz	70 MHz	60 MHz	50 MHz	40 MHz	30 MHz	25 MHz	20 MHz	15 MHz	10 MHz	5 MHz
	Low						631668/ 3475.02	631334/ 3470.01	631000/ 3465	630866/ 3462.99	630668/ 3460.02	630500/ 3457.5	630334/ 3455.01	
	Mid	633334 /3500.01	633334 /3500.01	633334 /3500.01	633334 /3500.01	633334 /3500.01			633334 /3500.01	633334 /3500.01	633334 /3500.01	633334 /3500.01	633334 /3500.01	
	High						635000/ 3525	635332/ 3529.98	635666/ 3534.99	635800 3537	636000/ 3540	636166/ 3542.49	636332/ 3544.98	
	Band n77	Frequency range: 3700 - 3980 MHz											
		Channel Bandwidth											
		100 MHz	90 MHz	80 MHz	70 MHz	60 MHz	50 MHz	40 MHz	30 MHz	25 MHz	20 MHz	15 MHz	10 MHz	5 MHz
	Low	650000 /3750	649668 /3745.02	649334 /3740.01	649000/ 3735	648668 /3730.02	648334 /3725.01	648000 /3720	647668/ 3715.02	647500/ 3712.5	647334 /3710.01	647168/ 3707.52	647000/ 3705	
	Low-Mid				653666/ 3804.99	653556 /3803.34	652166 /3782.49	651200 /3768	651000/ 3765	650900/ 3763.5	650800 /3762	650700/ 3760.5	650600/ 3759	
	Mid-A		656000 /3840	656000 /3840			656000 /3840	654400 /3816	654334/ 3815.01	654300/ 3814.5	654266 /3813.99	654234/ 3813.51	654200/ 3813	
	Mid-B							657600 /3864	657666/ 3864.99	657700/ 3814.5	657734 /3866.01	657766/ 3866.49	657800/ 3867	
	Mid-High	662000 /3930	662332 /3934.98	662666 /3939.99	658334/ 3875.01	658444 /3876.66	659834 /3897.51	660800 /3912	661000/ 3915	661100/ 3916.5	661200 /3918	661300/ 3919.5	661400/ 3921	
	High				663000/ 3945	663332 /3949.98	663666 /3954.99	664000 /3960	664332/ 3964.98	664500/ 3967.5	664666 /3969.99	664832/ 3972.48	665000/ 3975	

SCS	NR FDD Bands : 15 kHz, NR TDD Bands : 30kHz
Modulations Supported in UL	DFT-s-OFDM: π/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 n2	LTE Band 5/12/13
LTE Anchor Bands for NR Band n5	LTE Band 2/66
LTE Anchor Bands for NR Band n25	LTE Band 12
LTE Anchor Bands for NR Band n41	LTE Band 4/12/66
LTE Anchor Bands for NR Band n66	LTE Band 5/12/13
LTE Anchor Bands for NR Band n77	LTE Band 2/5/12/66

Notes:

1. 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.
2. NR configurations of SAR test were determined according to Section 5.2 of KDB 941225 D05.

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.

WWAN

Wireless technologies	RF Exposure Conditions	Antenna	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	10 mm	Rear	N/A	Yes	
				Front	N/A	Yes	
	Hotspot	Main 1 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	> 25 mm	No	1
				Right	< 25 mm	Yes	
				Bottom	< 25 mm	Yes	
				Left	< 25 mm	Yes	
	Hotspot	Main 2 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	> 25 mm	No	1
				Right	< 25 mm	Yes	
				Bottom	< 25 mm	Yes	
				Left	> 25 mm	No	1
	Hotspot	Main 3 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	> 25 mm	No	1
				Right	< 25 mm	Yes	
				Bottom	< 25 mm	Yes	
				Left	> 25 mm	No	1
	Hotspot	Main 4 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	> 25 mm	No	1
				Right	> 25 mm	No	1
				Bottom	< 25 mm	Yes	
				Left	< 25 mm	Yes	
	Hotspot	Sub.1 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	< 25 mm	Yes	
				Right	> 25 mm	No	1
				Bottom	> 25 mm	No	1
				Left	< 25 mm	Yes	
	Hotspot	Sub.2 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	< 25 mm	Yes	
				Right	< 25 mm	Yes	
				Bottom	> 25 mm	No	1
				Left	> 25 mm	No	1
	Hotspot	Sub.4 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	> 25 mm	No	1
				Right	< 25 mm	Yes	
				Bottom	> 25 mm	No	1
				Left	> 25 mm	No	1

Notes:

1. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hot Spot SAR.
2. 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.
3. 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 and adjusted SAR to maximum power that is > 1.2 W/kg.
4. 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.

WWAN (Continued)

Wireless technologies	RF Exposure Conditions	Antenna	DUT-to-User Separation	Test Position	Antenna-to-edge/surface	SAR Required	Note
WWAN	Hotspot	Sub.5 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	> 25 mm	No	1
				Right	< 25 mm	Yes	
				Bottom	> 25 mm	No	1
				Left	> 25 mm	No	1
	Hotspot	Sub.6 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	< 25 mm	Yes	
				Right	> 25 mm	No	1
				Bottom	> 25 mm	No	1
				Left	< 25 mm	Yes	
	Product Specific 10-g	All Main Antennas	0 mm	Rear	Refer to notes 2 & 3		
				Front			
				Top			
				Right			
				Bottom			
				Left			

Notes:

1. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hot Spot SAR.
2. 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.
3. 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 and adjusted SAR to maximum power that is > 1.2 W/kg.
4. 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.

WLAN&BT

Wireless technologies	RF Exposure Conditions	Antenna	DUT-to-User Separation	Test Position	Antenna-to-edge/surface	SAR Required	Note
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		10 mm	Rear	N/A	Yes	
				Front	N/A	Yes	
	Hotspot	WiFi2.4G (Sub.6) 5G (Sub.1)	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	< 25 mm	Yes	
				Right	> 25 mm	No	1
				Bottom	> 25 mm	No	1
				Left	< 25 mm	Yes	
	Hotspot	WiFi2.4G, 5G (Sub.4)	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	< 25 mm	Yes	
				Right	< 25 mm	Yes	
				Bottom	> 25 mm	No	1
				Left	> 25 mm	No	1
	Product Specific 10-g	All Main Antennas	0 mm	Rear	Refer to notes 2 & 4		
				Front			
				Top			
				Right			
				Bottom			
				Left			

NFC

Wireless technologies	RF Exposure Conditions	Antenna	DUT-to-User Separation	Test Position	Antenna-to-edge/surface	SAR Required	Note
NFC	Product Specific (Hand) 10-g	NFC Ant.	0 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Top	< 25 mm	Yes	
				Right	= 25 mm	Yes	
				Bottom	> 25 mm	No	1
				Left	> 25 mm	No	1

Notes:

1. SAR is not required because the distance from the antenna to the edge is > 25 mm as per KDB 941225 D06 Hot Spot SAR.
2. 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.
3. 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 and adjusted SAR to maximum power that is > 1.2 W/kg.
4. 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.
5. Per manufacturer guide, NFC SAR was considered about only hand held condition (Product Specific 10-g).

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 ± 2°C of the temperature when the tissue parameters are characterized.
The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The Tissue Dielectric parameters (100MHz to 6GHz) should be re-measured after each 3 – 4 days of use; or earlier if the dielectric parameters can become out of tolerance; for example, when the parameters are marginal at the beginning of the measurement series.
Tissue dielectric parameters were measured at the low, middle and high frequency of each operating frequency range of the test device.
For The Tissue Dielectric parameters (9MHz to 19MHz). The parameters must be measured before 24 hours.

1. Tissue Dielectric Parameters (100MHz to 6GHz)
FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz

Target Frequency (MHz)	Head	
	ε_r	σ (S/m)
150	52.3	0.76
300	45.3	0.87
450	43.5	0.87
835	41.5	0.90
900	41.5	0.97
915	41.5	0.98
1450	40.5	1.20
1610	40.3	1.29
1800 – 2000	40.0	1.40
2450	39.2	1.80
3000	38.5	2.40
5000	36.2	4.45
5100	36.1	4.55
5200	36.0	4.66
5300	35.9	4.76
5400	35.8	4.86
5500	35.6	4.96
5600	35.5	5.07
5700	35.4	5.17
5800	35.3	5.27
6000	35.1	5.48

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

2. Tissue Dielectric Parameters (9MHz to 19MHz)

Target Frequency (MHz)	Head	
	ε_r	σ (S/m)
9	55.0	0.75
13	55.0	0.75
19	55.0	0.75

IEC_IEEE Std 62209-1528 : 2020
Refer to Table 2 within the IEC_IEEE Std 62209-1528 : 2020.

Dielectric Property Measurements Results:

SAR 2 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
9-4-2023	Head 2600	e'	39.1600	Relative Permittivity (ε_r):	39.02	39.01	0.02	5
		e''	13.3300	Conductivity (σ):	1.98	1.96	0.91	5
	Head 2495	e'	39.2800	Relative Permittivity (ε_r):	39.11	39.14	-0.08	5
		e''	13.3400	Conductivity (σ):	1.90	1.85	2.83	5
	Head 2700	e'	38.9900	Relative Permittivity (ε_r):	38.90	38.88	0.04	5
		e''	13.3400	Conductivity (σ):	2.07	2.07	-0.01	5
9-7-2023	Head 2450	e'	39.6500	Relative Permittivity (ε_r):	39.65	39.20	1.15	5
		e''	13.5600	Conductivity (σ):	1.85	1.80	2.62	5
	Head 2400	e'	39.7100	Relative Permittivity (ε_r):	39.71	39.30	1.05	5
		e''	13.6000	Conductivity (σ):	1.81	1.75	3.61	5
	Head 2500	e'	39.5800	Relative Permittivity (ε_r):	39.58	39.14	1.13	5
		e''	13.5400	Conductivity (σ):	1.88	1.85	1.52	5
9-12-2023	Head 5250	e'	36.7300	Relative Permittivity (ε_r):	36.73	35.93	2.22	5
		e''	15.7600	Conductivity (σ):	4.60	4.70	-2.16	5
	Head 5260	e'	36.7200	Relative Permittivity (ε_r):	36.72	35.92	2.22	5
		e''	15.7700	Conductivity (σ):	4.61	4.71	-2.12	5
	Head 5600	e'	36.1400	Relative Permittivity (ε_r):	36.14	35.53	1.71	5
		e''	16.0400	Conductivity (σ):	4.99	5.06	-1.30	5
	Head 5800	e'	35.7900	Relative Permittivity (ε_r):	35.79	35.30	1.39	5
		e''	16.2000	Conductivity (σ):	5.22	5.27	-0.86	5
	Head 5925	e'	35.5800	Relative Permittivity (ε_r):	35.58	35.20	1.08	5
		e''	16.2800	Conductivity (σ):	5.36	5.40	-0.68	5
9-18-2023	Head 5250	e'	36.9300	Relative Permittivity (ε_r):	36.93	35.93	2.77	5
		e''	15.6500	Conductivity (σ):	4.57	4.70	-2.84	5
	Head 5260	e'	36.9100	Relative Permittivity (ε_r):	36.91	35.92	2.75	5
		e''	15.6600	Conductivity (σ):	4.58	4.71	-2.81	5
	Head 5600	e'	36.3200	Relative Permittivity (ε_r):	36.32	35.53	2.21	5
		e''	15.9100	Conductivity (σ):	4.95	5.06	-2.10	5
	Head 5800	e'	35.9700	Relative Permittivity (ε_r):	35.97	35.30	1.90	5
		e''	16.0600	Conductivity (σ):	5.18	5.27	-1.72	5
	Head 5925	e'	35.7700	Relative Permittivity (ε_r):	35.77	35.20	1.62	5
		e''	16.1400	Conductivity (σ):	5.32	5.40	-1.53	5
9-22-2023	Head 5250	e'	36.3300	Relative Permittivity (ε_r):	36.33	35.93	1.10	5
		e''	15.7900	Conductivity (σ):	4.61	4.70	-1.97	5
	Head 5260	e'	36.3200	Relative Permittivity (ε_r):	36.32	35.92	1.11	5
		e''	15.8000	Conductivity (σ):	4.62	4.71	-1.94	5
	Head 5600	e'	35.9500	Relative Permittivity (ε_r):	35.95	35.53	1.17	5
		e''	16.0800	Conductivity (σ):	5.01	5.06	-1.05	5
	Head 5800	e'	35.7800	Relative Permittivity (ε_r):	35.78	35.30	1.36	5
		e''	16.3100	Conductivity (σ):	5.26	5.27	-0.19	5
	Head 5925	e'	35.7000	Relative Permittivity (ε_r):	35.70	35.20	1.42	5
		e''	16.4200	Conductivity (σ):	5.41	5.40	0.18	5
9-26-2023	Head 5250	e'	36.5900	Relative Permittivity (ε_r):	36.59	35.93	1.83	5
		e''	15.8500	Conductivity (σ):	4.63	4.70	-1.60	5
	Head 5260	e'	36.5800	Relative Permittivity (ε_r):	36.58	35.92	1.83	5
		e''	15.8600	Conductivity (σ):	4.64	4.71	-1.57	5
	Head 5600	e'	36.0900	Relative Permittivity (ε_r):	36.09	35.53	1.57	5
		e''	16.0600	Conductivity (σ):	5.00	5.06	-1.18	5
	Head 5800	e'	35.8100	Relative Permittivity (ε_r):	35.81	35.30	1.44	5
		e''	16.8900	Conductivity (σ):	5.45	5.27	3.36	5
	Head 5925	e'	35.6500	Relative Permittivity (ε_r):	35.65	35.20	1.28	5
		e''	16.2500	Conductivity (σ):	5.35	5.40	-0.86	5

SAR 2 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
10-2-2023	Head 5250	e'	36.5300	Relative Permittivity (ε_r):	36.53	35.93	1.66	5
		e"	15.9200	Conductivity (σ):	4.65	4.70	-1.17	5
	Head 5260	e'	36.5400	Relative Permittivity (ε_r):	36.54	35.92	1.72	5
		e"	15.9300	Conductivity (σ):	4.66	4.71	-1.13	5
	Head 5600	e'	36.0000	Relative Permittivity (ε_r):	36.00	35.53	1.31	5
		e"	16.1400	Conductivity (σ):	5.03	5.06	-0.68	5
	Head 5800	e'	35.7500	Relative Permittivity (ε_r):	35.75	35.30	1.27	5
		e"	16.2700	Conductivity (σ):	5.25	5.27	-0.44	5
	Head 5925	e'	35.6000	Relative Permittivity (ε_r):	35.60	35.20	1.14	5
		e"	16.2600	Conductivity (σ):	5.36	5.40	-0.80	5
10-4-2023	Head 1900	e'	40.2600	Relative Permittivity (ε_r):	40.26	40.00	0.65	5
		e"	13.0900	Conductivity (σ):	1.38	1.40	-1.22	5
	Head 1850	e'	40.2900	Relative Permittivity (ε_r):	40.29	40.00	0.72	5
		e"	13.2000	Conductivity (σ):	1.36	1.40	-3.01	5
	Head 1915	e'	40.2600	Relative Permittivity (ε_r):	40.26	40.00	0.65	5
		e"	13.0700	Conductivity (σ):	1.39	1.40	-0.59	5
10-4-2023	Head 2450	e'	39.4430	Relative Permittivity (ε_r):	39.44	39.20	0.62	5
		e"	12.9337	Conductivity (σ):	1.76	1.80	-2.12	5
	Head 2400	e'	39.5385	Relative Permittivity (ε_r):	39.54	39.30	0.62	5
		e"	12.9414	Conductivity (σ):	1.73	1.75	-1.41	5
	Head 2500	e'	39.3757	Relative Permittivity (ε_r):	39.38	39.14	0.61	5
		e"	12.9385	Conductivity (σ):	1.80	1.85	-2.99	5
10-8-2023	Head 5250	e'	36.3500	Relative Permittivity (ε_r):	36.35	35.93	1.16	5
		e"	16.0900	Conductivity (σ):	4.70	4.70	-0.11	5
	Head 5260	e'	36.4200	Relative Permittivity (ε_r):	36.42	35.92	1.39	5
		e"	16.0900	Conductivity (σ):	4.71	4.71	-0.14	5
	Head 5600	e'	35.8400	Relative Permittivity (ε_r):	35.84	35.53	0.86	5
		e"	16.2700	Conductivity (σ):	5.07	5.06	0.12	5
	Head 5800	e'	35.5800	Relative Permittivity (ε_r):	35.58	35.30	0.79	5
		e"	16.4100	Conductivity (σ):	5.29	5.27	0.42	5
	Head 5925	e'	35.4600	Relative Permittivity (ε_r):	35.46	35.20	0.74	5
		e"	16.4200	Conductivity (σ):	5.41	5.40	0.18	5
10-9-2023	Head 835	e'	40.4300	Relative Permittivity (ε_r):	40.43	41.50	-2.58	5
		e"	19.9100	Conductivity (σ):	0.92	0.90	2.71	5
	Head 810	e'	40.5200	Relative Permittivity (ε_r):	40.52	41.65	-2.72	5
		e"	20.3400	Conductivity (σ):	0.92	0.90	2.05	5
	Head 850	e'	40.3900	Relative Permittivity (ε_r):	40.39	41.50	-2.67	5
		e"	19.6700	Conductivity (σ):	0.93	0.92	1.60	5
10-9-2023	Head 2450	e'	37.5200	Relative Permittivity (ε_r):	37.52	39.20	-4.29	5
		e"	13.5000	Conductivity (σ):	1.84	1.80	2.17	5
	Head 2400	e'	37.6000	Relative Permittivity (ε_r):	37.60	39.30	-4.32	5
		e"	13.5100	Conductivity (σ):	1.80	1.75	2.92	5
	Head 2500	e'	37.4300	Relative Permittivity (ε_r):	37.43	39.14	-4.36	5
		e"	13.5000	Conductivity (σ):	1.88	1.85	1.22	5
10-10-2023	Head 2600	e'	38.3300	Relative Permittivity (ε_r):	39.02	39.01	0.02	5
		e"	13.4100	Conductivity (σ):	1.98	1.96	0.91	5
	Head 2495	e'	38.4900	Relative Permittivity (ε_r):	39.11	39.14	-0.08	5
		e"	13.3200	Conductivity (σ):	1.90	1.85	2.83	5
	Head 2700	e'	38.1100	Relative Permittivity (ε_r):	38.90	38.88	0.04	5
		e"	13.4700	Conductivity (σ):	2.07	2.07	-0.01	5
10-13-2023	Head 2450	e'	37.8400	Relative Permittivity (ε_r):	37.84	39.20	-3.47	5
		e"	13.7100	Conductivity (σ):	1.87	1.80	3.76	5
	Head 2400	e'	37.9200	Relative Permittivity (ε_r):	37.92	39.30	-3.50	5
		e"	13.6800	Conductivity (σ):	1.83	1.75	4.22	5
	Head 2500	e'	37.7700	Relative Permittivity (ε_r):	37.77	39.14	-3.49	5
		e"	13.7100	Conductivity (σ):	1.91	1.85	2.79	5

SAR 2 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
10-14-2023	Head 2600	e'	37.4100	Relative Permittivity (ε_r):	39.02	39.01	0.02	5
		e"	13.2500	Conductivity (σ):	1.98	1.96	0.91	5
	Head 2495	e'	37.5800	Relative Permittivity (ε_r):	39.11	39.14	-0.08	5
		e"	13.2200	Conductivity (σ):	1.90	1.85	2.83	5
	Head 2700	e'	37.2200	Relative Permittivity (ε_r):	38.90	38.88	0.04	5
		e"	13.2500	Conductivity (σ):	2.07	2.07	-0.01	5
10-16-2023	Head 835	e'	40.2100	Relative Permittivity (ε_r):	40.21	41.50	-3.11	5
		e"	19.6200	Conductivity (σ):	0.91	0.90	1.21	5
	Head 810	e'	40.2800	Relative Permittivity (ε_r):	40.28	41.65	-3.30	5
		e"	20.0700	Conductivity (σ):	0.90	0.90	0.69	5
	Head 850	e'	40.1600	Relative Permittivity (ε_r):	40.16	41.50	-3.23	5
		e"	19.3700	Conductivity (σ):	0.92	0.92	0.05	5

SAR 3 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
8-30-2023	Head 1750	e'	40.9900	Relative Permittivity (ε_r):	40.99	40.08	2.26	5
		e"	13.6200	Conductivity (σ):	1.33	1.37	-3.19	5
	Head 1710	e'	41.0400	Relative Permittivity (ε_r):	41.04	40.15	2.23	5
		e"	13.7600	Conductivity (σ):	1.31	1.35	-2.83	5
	Head 1780	e'	41.0000	Relative Permittivity (ε_r):	41.00	40.04	2.40	5
		e"	13.5100	Conductivity (σ):	1.34	1.39	-3.52	5
8-30-2023	Head 1900	e'	40.9800	Relative Permittivity (ε_r):	40.98	40.00	2.45	5
		e"	13.2900	Conductivity (σ):	1.40	1.40	0.29	5
	Head 1850	e'	40.9800	Relative Permittivity (ε_r):	40.98	40.00	2.45	5
		e"	13.3700	Conductivity (σ):	1.38	1.40	-1.76	5
	Head 1915	e'	40.9800	Relative Permittivity (ε_r):	40.98	40.00	2.45	5
		e"	13.2900	Conductivity (σ):	1.42	1.40	1.08	5
9-4-2023	Head 1750	e'	41.1200	Relative Permittivity (ε_r):	41.12	40.08	2.58	5
		e"	13.8100	Conductivity (σ):	1.34	1.37	-1.84	5
	Head 1710	e'	41.2200	Relative Permittivity (ε_r):	41.22	40.15	2.67	5
		e"	13.9800	Conductivity (σ):	1.33	1.35	-1.28	5
	Head 1780	e'	41.1100	Relative Permittivity (ε_r):	41.11	40.04	2.68	5
		e"	13.6900	Conductivity (σ):	1.35	1.39	-2.23	5
9-4-2023	Head 1900	e'	41.1200	Relative Permittivity (ε_r):	41.12	40.00	2.80	5
		e"	13.3600	Conductivity (σ):	1.41	1.40	0.82	5
	Head 1850	e'	41.0700	Relative Permittivity (ε_r):	41.07	40.00	2.68	5
		e"	13.4500	Conductivity (σ):	1.38	1.40	-1.18	5
	Head 1915	e'	41.1300	Relative Permittivity (ε_r):	41.13	40.00	2.83	5
		e"	13.3400	Conductivity (σ):	1.42	1.40	1.46	5
9-8-2023	Head 1750	e'	40.5700	Relative Permittivity (ε_r):	40.57	40.08	1.21	5
		e"	13.7500	Conductivity (σ):	1.34	1.37	-2.27	5
	Head 1710	e'	40.6700	Relative Permittivity (ε_r):	40.67	40.15	1.30	5
		e"	13.8800	Conductivity (σ):	1.32	1.35	-1.98	5
	Head 1780	e'	40.5200	Relative Permittivity (ε_r):	40.52	40.04	1.20	5
		e"	13.6700	Conductivity (σ):	1.35	1.39	-2.38	5
9-8-2023	Head 1900	e'	40.4200	Relative Permittivity (ε_r):	40.42	40.00	1.05	5
		e"	13.3600	Conductivity (σ):	1.41	1.40	0.82	5
	Head 1850	e'	40.4600	Relative Permittivity (ε_r):	40.46	40.00	1.15	5
		e"	13.4700	Conductivity (σ):	1.39	1.40	-1.03	5
	Head 1915	e'	40.4100	Relative Permittivity (ε_r):	40.41	40.00	1.02	5
		e"	13.3500	Conductivity (σ):	1.42	1.40	1.54	5
9-12-2023	Head 1750	e'	40.1000	Relative Permittivity (ε_r):	40.10	40.08	0.04	5
		e"	13.7600	Conductivity (σ):	1.34	1.37	-2.20	5
	Head 1710	e'	40.1500	Relative Permittivity (ε_r):	40.15	40.15	0.01	5
		e"	13.9000	Conductivity (σ):	1.32	1.35	-1.84	5
	Head 1780	e'	40.0400	Relative Permittivity (ε_r):	40.04	40.04	0.00	5
		e"	13.6500	Conductivity (σ):	1.35	1.39	-2.52	5

SAR 3 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
9-12-2023	Head 1900	e'	40.0100	Relative Permittivity (ϵ_r):	40.01	40.00	0.02	5
		e"	13.2400	Conductivity (σ):	1.40	1.40	-0.09	5
	Head 1850	e'	39.9800	Relative Permittivity (ϵ_r):	39.98	40.00	-0.05	5
		e"	13.3700	Conductivity (σ):	1.38	1.40	-1.76	5
	Head 1915	e'	40.0000	Relative Permittivity (ϵ_r):	40.00	40.00	0.00	5
		e"	13.2200	Conductivity (σ):	1.41	1.40	0.55	5
9-18-2023	Head 1750	e'	39.7100	Relative Permittivity (ϵ_r):	39.71	40.08	-0.93	5
		e"	14.0000	Conductivity (σ):	1.36	1.37	-0.49	5
	Head 1710	e'	39.7600	Relative Permittivity (ϵ_r):	39.76	40.15	-0.96	5
		e"	14.1200	Conductivity (σ):	1.34	1.35	-0.29	5
	Head 1780	e'	39.6600	Relative Permittivity (ϵ_r):	39.66	40.04	-0.95	5
		e"	13.9000	Conductivity (σ):	1.38	1.39	-0.73	5
9-18-2023	Head 1900	e'	39.5700	Relative Permittivity (ϵ_r):	39.57	40.00	-1.08	5
		e"	13.4700	Conductivity (σ):	1.42	1.40	1.65	5
	Head 1850	e'	39.5600	Relative Permittivity (ϵ_r):	39.56	40.00	-1.10	5
		e"	13.6200	Conductivity (σ):	1.40	1.40	0.07	5
	Head 1915	e'	39.5600	Relative Permittivity (ϵ_r):	39.56	40.00	-1.10	5
		e"	13.4400	Conductivity (σ):	1.43	1.40	2.22	5
9-22-2023	Head 1750	e'	39.2300	Relative Permittivity (ϵ_r):	39.23	40.08	-2.13	5
		e"	13.9300	Conductivity (σ):	1.36	1.37	-0.99	5
	Head 1710	e'	39.2900	Relative Permittivity (ϵ_r):	39.29	40.15	-2.13	5
		e"	14.0900	Conductivity (σ):	1.34	1.35	-0.50	5
	Head 1780	e'	39.1800	Relative Permittivity (ϵ_r):	39.18	40.04	-2.14	5
		e"	13.8100	Conductivity (σ):	1.37	1.39	-1.38	5
9-26-2023	Head 3500	e'	37.6500	Relative Permittivity (ϵ_r):	37.65	37.93	-0.74	5
		e"	14.5000	Conductivity (σ):	2.82	2.91	-3.08	5
	Head 3600	e'	37.4100	Relative Permittivity (ϵ_r):	37.41	37.82	-1.07	5
		e"	14.6300	Conductivity (σ):	2.93	3.01	-2.83	5
	Head 3700	e'	37.1900	Relative Permittivity (ϵ_r):	37.19	37.70	-1.36	5
		e"	14.7500	Conductivity (σ):	3.03	3.12	-2.62	5
	Head 3800	e'	36.9800	Relative Permittivity (ϵ_r):	36.98	37.59	-1.62	5
		e"	14.8700	Conductivity (σ):	3.14	3.22	-2.38	5
	Head 3900	e'	36.7800	Relative Permittivity (ϵ_r):	36.78	37.47	-1.85	5
		e"	15.0100	Conductivity (σ):	3.25	3.32	-1.98	5
	Head 3980	e'	36.9000	Relative Permittivity (ϵ_r):	36.90	37.38	-1.29	5
		e"	15.1000	Conductivity (σ):	3.34	3.40	-1.79	5
10-2-2023	Head 3500	e'	38.2200	Relative Permittivity (ϵ_r):	38.22	37.93	0.77	5
		e"	14.8800	Conductivity (σ):	2.90	2.91	-0.54	5
	Head 3600	e'	37.9700	Relative Permittivity (ϵ_r):	37.97	37.82	0.41	5
		e"	15.0400	Conductivity (σ):	3.01	3.01	-0.11	5
	Head 3700	e'	37.8415	Relative Permittivity (ϵ_r):	37.84	37.70	0.37	5
		e"	15.1700	Conductivity (σ):	3.12	3.12	0.15	5
	Head 3800	e'	37.7332	Relative Permittivity (ϵ_r):	37.73	37.59	0.39	5
		e"	15.2200	Conductivity (σ):	3.22	3.22	-0.08	5
	Head 3900	e'	37.4616	Relative Permittivity (ϵ_r):	37.46	37.47	-0.03	5
		e"	15.2100	Conductivity (σ):	3.30	3.32	-0.68	5
	Head 3980	e'	37.2429	Relative Permittivity (ϵ_r):	37.24	37.38	-0.37	5
		e"	15.1400	Conductivity (σ):	3.35	3.40	-1.53	5
10-6-2023	Head 3500	e'	37.8000	Relative Permittivity (ϵ_r):	37.80	37.93	-0.34	5
		e"	14.6600	Conductivity (σ):	2.85	2.91	-2.01	5
	Head 3600	e'	37.5700	Relative Permittivity (ϵ_r):	37.57	37.82	-0.65	5
		e"	14.7900	Conductivity (σ):	2.96	3.01	-1.77	5
	Head 3700	e'	37.3500	Relative Permittivity (ϵ_r):	37.35	37.70	-0.93	5
		e"	14.9200	Conductivity (σ):	3.07	3.12	-1.50	5
	Head 3800	e'	37.1400	Relative Permittivity (ϵ_r):	37.14	37.59	-1.19	5
		e"	15.0500	Conductivity (σ):	3.18	3.22	-1.20	5
	Head 3900	e'	36.9300	Relative Permittivity (ϵ_r):	36.93	37.47	-1.45	5
		e"	15.1900	Conductivity (σ):	3.29	3.32	-0.81	5
	Head 3980	e'	36.7700	Relative Permittivity (ϵ_r):	36.77	37.38	-1.64	5
		e"	15.3000	Conductivity (σ):	3.39	3.40	-0.49	5

SAR 3 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
10-10-2023	Head 2600	e'	39.6600	Relative Permittivity (ε_r):	39.66	39.01	1.66	5
		e"	13.4000	Conductivity (σ):	1.94	1.96	-1.27	5
	Head 2495	e'	39.8900	Relative Permittivity (ε_r):	39.89	39.14	1.91	5
		e"	13.1800	Conductivity (σ):	1.83	1.85	-1.09	5
	Head 2700	e'	39.3800	Relative Permittivity (ε_r):	39.38	38.88	1.27	5
		e"	13.5700	Conductivity (σ):	2.04	2.07	-1.60	5
10-10-2023	Head 3500	e'	37.6100	Relative Permittivity (ε_r):	37.61	37.93	-0.84	5
		e"	14.7600	Conductivity (σ):	2.87	2.91	-1.34	5
	Head 3600	e'	37.3800	Relative Permittivity (ε_r):	37.38	37.82	-1.15	5
		e"	14.8800	Conductivity (σ):	2.98	3.01	-1.17	5
	Head 3700	e'	37.1500	Relative Permittivity (ε_r):	37.15	37.70	-1.46	5
		e"	14.9900	Conductivity (σ):	3.08	3.12	-1.04	5
	Head 3800	e'	36.9500	Relative Permittivity (ε_r):	36.95	37.59	-1.70	5
		e"	15.1100	Conductivity (σ):	3.19	3.22	-0.81	5
	Head 3900	e'	36.7500	Relative Permittivity (ε_r):	36.75	37.47	-1.93	5
		e"	15.2400	Conductivity (σ):	3.30	3.32	-0.48	5
	Head 3980	e'	36.5900	Relative Permittivity (ε_r):	36.59	37.38	-2.12	5
		e"	15.3600	Conductivity (σ):	3.40	3.40	-0.10	5
10-13-2023	Head 1750	e'	41.2100	Relative Permittivity (ε_r):	41.21	40.08	2.81	5
		e"	13.6500	Conductivity (σ):	1.33	1.37	-2.98	5
	Head 1710	e'	41.3000	Relative Permittivity (ε_r):	41.30	40.15	2.87	5
		e"	13.7600	Conductivity (σ):	1.31	1.35	-2.83	5
	Head 1780	e'	41.1500	Relative Permittivity (ε_r):	41.15	40.04	2.78	5
		e"	13.5400	Conductivity (σ):	1.34	1.39	-3.30	5
10-16-2023	Head 1900	e'	40.8700	Relative Permittivity (ε_r):	40.87	40.00	2.17	5
		e"	13.1500	Conductivity (σ):	1.39	1.40	-0.77	5
	Head 1850	e'	40.9000	Relative Permittivity (ε_r):	40.90	40.00	2.25	5
		e"	13.2700	Conductivity (σ):	1.37	1.40	-2.50	5
	Head 1915	e'	40.8700	Relative Permittivity (ε_r):	40.87	40.00	2.17	5
		e"	13.1300	Conductivity (σ):	1.40	1.40	-0.14	5
10-19-2023	Head 1750	e'	39.4100	Relative Permittivity (ε_r):	39.41	40.08	-1.68	5
		e"	13.8700	Conductivity (σ):	1.35	1.37	-1.41	5
	Head 1710	e'	39.4600	Relative Permittivity (ε_r):	39.46	40.15	-1.71	5
		e"	14.0000	Conductivity (σ):	1.33	1.35	-1.13	5
	Head 1780	e'	39.3600	Relative Permittivity (ε_r):	39.36	40.04	-1.69	5
		e"	13.7600	Conductivity (σ):	1.36	1.39	-1.73	5
11-7-2023	Head 1750	e'	39.2700	Relative Permittivity (ε_r):	39.27	40.08	-2.03	5
		e"	13.9900	Conductivity (σ):	1.36	1.37	-0.56	5
	Head 1710	e'	39.3100	Relative Permittivity (ε_r):	39.31	40.15	-2.08	5
		e"	14.1500	Conductivity (σ):	1.35	1.35	-0.07	5
	Head 1780	e'	39.2300	Relative Permittivity (ε_r):	39.23	40.04	-2.02	5
		e"	13.8700	Conductivity (σ):	1.37	1.39	-0.95	5
11-7-2023	Head 1900	e'	39.1800	Relative Permittivity (ε_r):	39.18	40.00	-2.05	5
		e"	13.3800	Conductivity (σ):	1.41	1.40	0.97	5
	Head 1850	e'	39.1500	Relative Permittivity (ε_r):	39.15	40.00	-2.13	5
		e"	13.5500	Conductivity (σ):	1.39	1.40	-0.44	5
	Head 1915	e'	39.1700	Relative Permittivity (ε_r):	39.17	40.00	-2.08	5
		e"	13.3500	Conductivity (σ):	1.42	1.40	1.54	5

SAR 5 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
8-31-2023	Head 750	e'	43.5500	Relative Permittivity (ε_r):	43.55	41.96	3.79	5
		e"	22.1300	Conductivity (σ):	0.92	0.89	3.34	5
	Head 660	e'	43.8300	Relative Permittivity (ε_r):	43.83	42.42	3.32	5
		e"	24.4700	Conductivity (σ):	0.90	0.89	1.34	5
	Head 800	e'	43.4200	Relative Permittivity (ε_r):	43.42	41.71	4.11	5
		e"	21.0600	Conductivity (σ):	0.94	0.90	4.45	5
9-4-2023	Head 835	e'	41.9500	Relative Permittivity (ε_r):	41.95	41.50	1.08	5
		e"	19.5000	Conductivity (σ):	0.91	0.90	0.60	5
	Head 810	e'	41.9900	Relative Permittivity (ε_r):	41.99	41.65	0.81	5
		e"	19.9100	Conductivity (σ):	0.90	0.90	-0.11	5
	Head 850	e'	41.9200	Relative Permittivity (ε_r):	41.92	41.50	1.01	5
		e"	19.2500	Conductivity (σ):	0.91	0.92	-0.57	5
9-8-2023	Head 835	e'	42.0200	Relative Permittivity (ε_r):	42.02	41.50	1.25	5
		e"	18.9500	Conductivity (σ):	0.88	0.90	-2.24	5
	Head 810	e'	41.9400	Relative Permittivity (ε_r):	41.94	41.65	0.69	5
		e"	19.3400	Conductivity (σ):	0.87	0.90	-2.97	5
	Head 850	e'	42.1000	Relative Permittivity (ε_r):	42.10	41.50	1.45	5
		e"	18.7000	Conductivity (σ):	0.88	0.92	-3.41	5
9-12-2023	Head 750	e'	41.6300	Relative Permittivity (ε_r):	41.63	41.96	-0.79	5
		e"	21.9100	Conductivity (σ):	0.91	0.89	2.31	5
	Head 660	e'	41.9100	Relative Permittivity (ε_r):	41.91	42.42	-1.21	5
		e"	24.2000	Conductivity (σ):	0.89	0.89	0.22	5
	Head 800	e'	41.5000	Relative Permittivity (ε_r):	41.50	41.71	-0.49	5
		e"	20.8800	Conductivity (σ):	0.93	0.90	3.55	5
9-12-2023	Head 835	e'	41.4300	Relative Permittivity (ε_r):	41.43	41.50	-0.17	5
		e"	20.2300	Conductivity (σ):	0.94	0.90	4.36	5
	Head 810	e'	41.4900	Relative Permittivity (ε_r):	41.49	41.65	-0.39	5
		e"	20.6900	Conductivity (σ):	0.93	0.90	3.80	5
	Head 850	e'	41.3900	Relative Permittivity (ε_r):	41.39	41.50	-0.27	5
		e"	19.9600	Conductivity (σ):	0.94	0.92	3.10	5
9-15-2023	Head 835	e'	41.6638	Relative Permittivity (ε_r):	41.66	41.50	0.39	5
		e"	19.7800	Conductivity (σ):	0.92	0.90	2.04	5
	Head 810	e'	41.7200	Relative Permittivity (ε_r):	41.72	41.65	0.16	5
		e"	20.2300	Conductivity (σ):	0.91	0.90	1.50	5
	Head 850	e'	41.6200	Relative Permittivity (ε_r):	41.62	41.50	0.29	5
		e"	19.5300	Conductivity (σ):	0.92	0.92	0.88	5
9-19-2023	Head 835	e'	40.7800	Relative Permittivity (ε_r):	40.78	41.50	-1.73	5
		e"	19.8700	Conductivity (σ):	0.92	0.90	2.50	5
	Head 810	e'	40.8600	Relative Permittivity (ε_r):	40.86	41.65	-1.91	5
		e"	20.3300	Conductivity (σ):	0.92	0.90	2.00	5
	Head 850	e'	40.7400	Relative Permittivity (ε_r):	40.74	41.50	-1.83	5
		e"	19.6200	Conductivity (σ):	0.93	0.92	1.34	5
9-19-2023	Head 2450	e'	40.3300	Relative Permittivity (ε_r):	40.33	39.20	2.88	5
		e"	12.8400	Conductivity (σ):	1.75	1.80	-2.82	5
	Head 2400	e'	40.4300	Relative Permittivity (ε_r):	40.43	39.30	2.88	5
		e"	12.8600	Conductivity (σ):	1.72	1.75	-2.03	5
	Head 2500	e'	40.2500	Relative Permittivity (ε_r):	40.25	39.14	2.84	5
		e"	12.8200	Conductivity (σ):	1.78	1.85	-3.88	5
9-24-2023	Head 835	e'	41.6200	Relative Permittivity (ε_r):	41.62	41.50	0.29	5
		e"	19.2800	Conductivity (σ):	0.90	0.90	-0.54	5
	Head 810	e'	41.6800	Relative Permittivity (ε_r):	41.68	41.65	0.06	5
		e"	19.7400	Conductivity (σ):	0.89	0.90	-0.96	5
	Head 850	e'	41.5900	Relative Permittivity (ε_r):	41.59	41.50	0.22	5
		e"	19.0200	Conductivity (σ):	0.90	0.92	-1.76	5

SAR 7 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
10-17-2023	Head 13	e'	55.93	Relative Permittivity (ε_r):	55.93	55.00	1.69	5
		e"	1025.00	Conductivity (σ):	0.74	0.75	-1.21	5
	Head 12	e'	55.85	Relative Permittivity (ε_r):	55.85	55.00	1.55	5
		e"	1112.00	Conductivity (σ):	0.74	0.75	-1.07	5
	Head 14	e'	56.03	Relative Permittivity (ε_r):	56.03	55.00	1.87	5
		e"	950.70	Conductivity (σ):	0.74	0.75	-1.32	5
10-18-2023	Head 13	e'	56.33	Relative Permittivity (ε_r):	56.33	55.00	2.42	5
		e"	1040.00	Conductivity (σ):	0.75	0.75	0.23	5
	Head 12	e'	56.21	Relative Permittivity (ε_r):	56.21	55.00	2.20	5
		e"	1123.00	Conductivity (σ):	0.75	0.75	-0.09	5
	Head 14	e'	56.31	Relative Permittivity (ε_r):	56.31	55.00	2.38	5
		e"	965.60	Conductivity (σ):	0.75	0.75	0.22	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 of 100MHZ to 6GHz frequency range 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. For The System verification of 9MHz to 19MHz frequency range, The System verification must be performed before 24 hours.

System Performance Check Measurement Conditions (100MHz to 6GHz):

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

System Performance Check Measurement Conditions (13MHz):

- The measurements were performed in the flat section of the TWIN SAM or ELI phantom, shell thickness: 2.0 ±0.2 mm (bottom plate) filled with Body or Head simulating liquid of the following parameters.
- The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements
- The DASY system with an E-Field Probe was used for the measurements.
- The CLA(Confined Loop Antennas) was mounted on the small tripod so that the CLA feed point was positioned below the center marking of the flat phantom section and the CLA was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 0 mm separation distance from CLA center to the Phantom surface.
- The CLA 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	Target SAR Values (W/kg)	
				1g/10g	Head
D750V3	1122	2-24-2022	2-24-2024	1g	8.58
				10g	5.65
D835V2	4d174	9-21-2022	9-21-2024	1g	9.63
				10g	6.29
D835V2	4d194	3-24-2022	3-24-2024	1g	9.77
				10g	6.39
D1750V2	1125	11-30-2022	11-30-2023	1g	35.60
				10g	18.90
D1750V2	1180	9-21-2022	9-21-2024	1g	37.40
				10g	19.70
D1900V2	5d190	11-16-2022	11-16-2023	1g	39.70
				10g	20.70
D1900V2	5d199	3-25-2022	3-25-2024	1g	39.40
				10g	20.50
D2450V2	960	3-24-2022	3-24-2024	1g	51.90
				10g	24.00
D2600V2	1178	4-25-2023	4-25-2024	1g	57.40
				10g	25.70
D3500V2	1075	5-19-2023	5-19-2024	1g	65.50
				10g	24.70
D3700V2	1036	5-19-2023	5-19-2024	1g	67.80
				10g	24.50
D3900V2	1069	4-21-2023	4-21-2024	1g	69.40
				10g	24.00
D5GHzV2 (5250)	1209	2-28-2023	2-28-2024	1g	80.40
				10g	22.90
D5GHzV2 (5600)				1g	83.10
				10g	23.60
D5GHzV2 (5750)				1g	81.20
				10g	22.90
CLA-13	1015	8-22-2023	8-22-2024	1g	0.55
				10g	0.34

Note(s):

1. For System Validation Dipole, Calibration interval applied every 2 years according to referencing KDB 865664 guidance.
2. For CLA, Calibration interval applied every year.
3. Refer to Appendix F that mentioned about justification

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 2 Room

Date Tested	System Dipole		T.S. Liquid		Measured		Target (Ref. Value)	Delta ±10 %	Plot No.
	Type	Serial #			Zoom Scan to 100 mW	Normalize to 1 W			
9-4-2023	D1750V2	1125	Head	1g	3.59	35.9	37.40	-4.01	
				10g	1.91	19.1	19.70	-3.05	
9-7-2023	D2450V2	960	Head	1g	5.20	52.0	51.90	0.19	
				10g	2.42	24.2	24.00	0.83	
9-12-2023	D5GHzV2(5250)	1209	Head	1g	8.58	85.8	80.40	6.72	1
				10g	2.47	24.7	22.90	7.86	
9-12-2023	D5GHzV2(5600)	1209	Head	1g	8.40	84.0	83.10	1.08	
				10g	2.39	23.9	23.60	1.27	
9-12-2023	D5GHzV2(5800)	1209	Head	1g	8.35	83.5	81.20	2.83	
				10g	2.38	23.8	22.90	3.93	
9-18-2023	D5GHzV2(5250)	1209	Head	1g	8.20	82.0	80.40	1.99	
				10g	2.35	23.5	22.90	2.62	
9-18-2023	D5GHzV2(5600)	1209	Head	1g	8.58	85.8	83.10	3.25	
				10g	2.44	24.4	23.60	3.39	
9-18-2023	D5GHzV2(5800)	1209	Head	1g	8.34	83.4	81.20	2.71	
				10g	2.37	23.7	22.90	3.49	
9-22-2023	D5GHzV2(5250)	1209	Head	1g	7.80	78.0	80.40	-2.99	
				10g	2.26	22.6	22.90	-1.31	
9-22-2023	D5GHzV2(5600)	1209	Head	1g	8.45	84.5	83.10	1.68	
				10g	2.42	24.2	23.60	2.54	
9-22-2023	D5GHzV2(5800)	1209	Head	1g	7.78	77.8	81.20	-4.19	
				10g	2.23	22.3	22.90	-2.62	
9-26-2023	D5GHzV2(5250)	1209	Head	1g	8.04	80.4	80.40	0.00	
				10g	2.36	23.6	22.90	3.06	
9-26-2023	D5GHzV2(5600)	1209	Head	1g	8.63	86.3	83.10	3.85	
				10g	2.50	25.0	23.60	5.93	
9-26-2023	D5GHzV2(5800)	1209	Head	1g	8.41	84.1	81.20	3.57	
				10g	2.42	24.2	22.90	5.68	
10-2-2023	D5GHzV2(5250)	1209	Head	1g	7.98	79.8	80.40	-0.75	
				10g	2.32	23.2	22.90	1.31	
10-2-2023	D5GHzV2(5600)	1209	Head	1g	8.41	84.1	83.10	1.20	
				10g	2.41	24.1	23.60	2.12	
10-2-2023	D5GHzV2(5800)	1209	Head	1g	8.06	80.6	81.20	-0.74	
				10g	2.31	23.1	22.90	0.87	
10-4-2023	D1900V2	5d199	Head	1g	4.07	40.7	39.40	3.30	2
				10g	2.13	21.3	20.50	3.90	
10-8-2023	D5GHzV2(5250)	1209	Head	1g	7.68	76.8	80.40	-4.48	
				10g	2.25	22.5	22.90	-1.75	
10-8-2023	D5GHzV2(5600)	1209	Head	1g	8.80	88.0	83.10	5.90	
				10g	2.55	25.5	23.60	8.05	
10-8-2023	D5GHzV2(5800)	1209	Head	1g	8.08	80.8	81.20	-0.49	
				10g	2.35	23.5	22.90	2.62	
10-9-2023	D835V2	4d194	Head	1g	1.02	10.2	9.77	4.40	
				10g	0.68	6.8	6.39	5.95	
10-9-2023	D2450V2	960	Head	1g	5.19	51.9	51.90	0.00	
				10g	2.47	24.7	24.00	2.92	
10-10-2023	D2600V2	1178	Head	1g	5.34	53.4	57.40	-6.97	3
				10g	2.45	24.5	25.70	-4.67	
10-13-2023	D2450V2	960	Head	1g	5.40	54.0	51.90	4.05	4
				10g	2.58	25.8	24.00	7.50	
10-14-2023	D2600V2	1097	Head	1g	5.72	57.2	57.30	-0.17	
				10g	2.65	26.5	25.70	3.11	
10-16-2023	D835V2	4d194	Head	1g	1.04	10.4	9.77	6.45	
				10g	0.69	6.9	6.39	7.36	

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			
8-30-2023	D1750V2	1125	Head	1g	3.57	35.7	37.40	-4.55	
				10g	1.95	19.5	19.70	-1.02	
8-30-2023	D1900V2	5d190	Head	1g	3.78	37.8	39.70	-4.79	
				10g	2.05	20.5	20.70	-0.97	
9-4-2023	D1750V2	1125	Head	1g	3.61	36.1	37.40	-3.48	
				10g	1.98	19.8	19.70	0.51	
9-4-2023	D1900V2	5d190	Head	1g	3.77	37.7	39.70	-5.04	5
				10g	2.05	20.5	20.70	-0.97	
9-8-2023	D1750V2	1125	Head	1g	3.54	35.4	37.40	-5.35	6
				10g	1.93	19.3	19.70	-2.03	
9-8-2023	D1900V2	5d190	Head	1g	3.84	38.4	39.70	-3.27	
				10g	2.05	20.5	20.70	-0.97	
9-12-2023	D1750V2	1180	Head	1g	3.59	35.9	35.60	0.84	7
				10g	1.99	19.9	18.90	5.29	
9-12-2023	D1900V2	5d199	Head	1g	3.94	39.4	39.40	0.00	
				10g	2.12	21.2	20.50	3.41	
9-18-2023	D1750V2	1180	Head	1g	3.59	35.9	35.60	0.84	
				10g	1.97	19.7	18.90	4.23	
9-18-2023	D1900V2	5d199	Head	1g	4.05	40.5	39.40	2.79	
				10g	2.16	21.6	20.50	5.37	
9-22-2023	D1750V2	1125	Head	1g	3.72	37.2	37.40	-0.53	
				10g	2.03	20.3	19.70	3.05	
9-26-2023	D3500V2	1075	Head	1g	6.75	67.5	65.50	3.05	8
				10g	2.67	26.7	24.70	8.10	
9-26-2023	D3700V2	1036	Head	1g	6.91	69.1	67.80	1.92	9
				10g	2.63	26.3	24.50	7.35	
9-26-2023	D3900V2	1069	Head	1g	6.84	68.4	69.40	-1.44	
				10g	2.49	24.9	24.00	3.75	
10-2-2023	D3500V2	1075	Head	1g	6.73	67.3	65.50	2.75	
				10g	2.66	26.6	24.70	7.69	
10-2-2023	D3700V2	1036	Head	1g	6.89	68.9	67.80	1.62	
				10g	2.61	26.1	24.50	6.53	
10-2-2023	D3900V2	1069	Head	1g	6.87	68.7	69.40	-1.01	
				10g	2.50	25.0	24.00	4.17	
10-6-2023	D3500V2	1075	Head	1g	6.70	67.0	65.50	2.29	
				10g	2.66	26.6	24.70	7.69	
10-6-2023	D3700V2	1036	Head	1g	6.88	68.8	67.80	1.47	
				10g	2.60	26.0	24.50	6.12	
10-6-2023	D3900V2	1069	Head	1g	7.05	70.5	69.40	1.59	
				10g	2.58	25.8	24.00	7.50	
10-10-2023	D3500V2	1075	Head	1g	6.39	63.9	65.50	-2.44	
				10g	2.54	25.4	24.70	2.83	
10-10-2023	D3700V2	1036	Head	1g	6.71	67.1	67.80	-1.03	
				10g	2.56	25.6	24.50	4.49	
10-10-2023	D3900V2	1069	Head	1g	6.78	67.8	69.40	-2.31	10
				10g	2.47	24.7	24.00	2.92	
10-10-2023	D2600V2	1178	Head	1g	5.34	53.4	57.40	-6.97	11
				10g	2.48	24.8	25.70	-3.50	
10-13-2023	D1750V2	1125	Head	1g	3.70	37.0	37.40	-1.07	
				10g	2.04	20.4	19.70	3.55	
10-16-2023	D1900V2	5d190	Head	1g	4.04	40.4	39.70	1.76	
				10g	2.17	21.7	20.70	4.83	
10-19-2023	D1750V2	1125	Head	1g	3.71	37.1	37.40	-0.80	
				10g	2.04	20.4	19.70	3.55	
11-7-2023	D1750V2	1125	Head	1g	3.42	34.6	37.40	-7.49	12
				10g	1.86	19.2	19.70	-2.54	
11-7-2023	D1900V2	5d190	Head	1g	3.95	40.7	39.70	2.52	
				10g	2.08	22.1	20.70	6.76	

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			
8-31-2023	D750V3	1122	Head	1g	0.85	8.5	8.58	-1.40	
				10g	0.58	5.8	5.65	3.01	
9-4-2023	D835V2	4d174	Head	1g	0.93	9.3	9.63	-3.53	13
				10g	0.63	6.3	6.29	0.48	
9-8-2023	D835V2	4d194	Head	1g	0.90	9.0	9.77	-8.19	14
				10g	0.60	6.0	6.39	-5.79	
9-12-2023	D750V3	1122	Head	1g	0.81	8.1	8.58	-5.83	15
				10g	0.57	5.7	5.65	0.53	
9-12-2023	D835V2	4d194	Head	1g	0.92	9.2	9.77	-6.14	
				10g	0.63	6.3	6.39	-1.41	
9-15-2023	D835V2	4d194	Head	1g	0.99	9.9	9.77	1.02	
				10g	0.67	6.7	6.39	5.16	
9-19-2023	D835V2	4d194	Head	1g	1.02	10.2	9.77	4.40	
				10g	0.69	6.9	6.39	8.61	
9-19-2023	D2450V2	960	Head	1g	5.02	50.2	51.90	-3.28	
				10g	2.40	24.0	24.00	0.00	
9-24-2023	D835V2	4d194	Head	1g	1.02	10.2	9.77	4.40	
				10g	0.69	6.9	6.39	8.61	

SAR 7 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			
10-17-2023	CLA-13	1015	Head	1g	0.05	0.5	0.55	-5.11	16
				10g	0.03	0.3	0.34	-5.88	
10-18-2023	CLA-13	1015	Head	1g	0.05	0.5	0.55	-3.28	
				10g	0.03	0.3	0.34	-5.88	

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 (Main.1) Measured Results

Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)			
					RSI=Free, Rcv, Hotspot			
					Measured		Tune-up Limit	
					Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM (Voice)	CS1	1	128	824.2	31.84	22.81	33.0	24.0
			190	836.6	31.91	22.88		
			251	848.8	32.04	23.01		
GPRS (GMSK)	CS1	1	128	824.2	31.82	22.79	33.0	24.0
			190	836.6	31.91	22.88		
			251	848.8	31.87	22.84		
		2	128	824.2	29.88	23.86	32.0	26.0
			190	836.6	30.99	24.97		
			251	848.8	30.38	24.36		
		3	128	824.2	28.70	24.44	29.5	25.2
			190	836.6	28.46	24.20		
			251	848.8	28.80	24.54		
		4	128	824.2	26.94	23.93	28.0	25.0
			190	836.6	27.10	24.09		
			251	848.8	27.20	24.19		
EGPRS (8PSK)	MCS5	1	128	824.2	26.15	17.12	28.5	19.5
			190	836.6	26.21	17.18		
			251	848.8	26.25	17.22		
		2	128	824.2	24.32	18.30	26.5	20.5
			190	836.6	26.19	20.17		
			251	848.8	24.35	18.33		
		3	128	824.2	23.09	18.83	25.0	20.7
			190	836.6	23.05	18.79		
			251	848.8	23.02	18.76		
		4	128	824.2	21.95	18.94	23.5	20.5
			190	836.6	23.08	20.07		
			251	848.8	21.34	18.33		

Notes:

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

- GMSK (GPRS) mode with 2 time slots for RSI Free, RCV, Hotspot, 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 ≤ 1/4dB higher than GMSK GPRS or the adjusted SAR of the highest reported SAR of GMSK GPRS is ≤ 1.2W/kg.

GSM850 (Sub.1) Measured Results

Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)							
					RSI=Free, Hotspot				RSI=Rcv			
					Measured		Tune-up Limit		Measured		Tune-up Limit	
					Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM (Voice)	CS1	1	128	824.2	32.40	23.37	33.0	24.0	28.76	19.73	30.0	21.0
			190	836.6	32.21	23.18			28.69	19.66		
			251	848.8	32.09	22.50			27.83	18.80		
GPRS (GMSK)	CS1	1	128	824.2	32.55	26.53	33.0	24.0	29.08	20.05	30.0	21.0
			190	836.6	32.36	26.34			28.64	19.61		
			251	848.8	32.18	23.15			28.38	19.35		
		2	128	824.2	30.49	24.47	32.0	26.0	25.58	19.56	26.0	20.0
			190	836.6	30.24	24.22			25.36	19.34		
			251	848.8	30.04	24.02			25.05	19.03		
		3	128	824.2	29.08	24.82	29.5	25.2	23.63	19.37	24.0	19.7
			190	21.2	29.08	24.82			23.51	19.25		
			251	848.8	28.89	24.63			23.14	18.88		
		4	128	824.2	27.96	24.95	28.0	25.0	22.81	19.80	23.0	20.0
			190	836.6	27.93	24.92			22.77	19.76		
			251	848.8	27.70	24.69			22.34	19.33		
EGPRS (8PSK)	MCS5	1	128	824.2	26.28	17.25	27.5	18.5	25.91	16.88	26.0	17.0
			190	836.6	26.00	16.97			25.60	16.57		
			251	848.8	25.66	16.63			25.38	16.35		
		2	128	824.2	24.18	18.16	26.0	20.0	23.98	17.96	24.0	18.0
			190	836.6	24.01	17.99			23.67	17.65		
			251	848.8	23.50	17.48			23.23	17.21		
		3	128	824.2	23.11	18.85	24.5	20.2	22.60	18.34	23.0	18.7
			190	836.6	23.28	19.02			22.29	18.03		
			251	848.8	23.15	18.89			21.84	17.58		
		4	128	824.2	21.88	18.87	22.5	19.5	21.14	18.13	21.5	18.5
			190	836.6	21.50	18.49			20.84	17.83		
			251	848.8	20.96	17.95			20.65	17.64		

Notes:

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

- GMSK (GPRS) mode with 2 time slots for RSI Free, Hotspot, GMSK (GPRS) mode with 1 time slot for RSI RCV 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 ≤ 1/4dB higher than GMSK GPRS or the adjusted SAR of the highest reported SAR of GMSK GPRS is ≤ 1.2W/kg.

GSM1900 (Main.1) Measured Results

Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Average Power (dBm)			
					RSI=Free, Rcv, Hotspot			
					Measured		Tune-up Limit	
					Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM (Voice)	CS1	1	512	1850.2	27.64	18.61	28.0	19.0
			661	1880.0	27.54	18.51		
			810	1909.8	27.67	18.64		
GPRS (GMSK)	CS1	1	512	1850.2	25.68	16.65	28.0	19.0
			661	1880.0	27.71	18.68		
			810	1909.8	27.98	18.95		
		2	512	1850.2	24.71	18.69	25.0	19.0
			661	1880.0	24.45	18.43		
			810	1909.8	24.64	18.62		
		3	512	1850.2	23.19	18.93	24.0	19.7
			661	1880.0	22.91	18.65		
			810	1909.8	22.81	18.55		
		4	512	1850.2	21.56	18.55	22.0	19.0
			661	1880.0	20.23	17.22		
			810	1909.8	21.22	18.21		
EGPRS (8PSK)	MCS5	1	512	1850.2	25.00	15.97	26.5	17.5
			661	1880.0	25.08	16.05		
			810	1909.8	25.20	16.17		
		2	512	1850.2	23.24	17.22	24.5	18.5
			661	1880.0	23.11	17.09		
			810	1909.8	23.34	17.32		
		3	512	1850.2	21.93	17.67	23.0	18.7
			661	1880.0	21.74	17.48		
			810	1909.8	21.66	17.40		
		4	512	1850.2	20.39	17.38	21.0	18.0
			661	1880.0	19.94	16.93		
			810	1909.8	20.12	17.11		

Notes:

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

- GMSK (GPRS) mode with 2 time slots for RSI GMSK (GPRS) mode with 3 time slots for RSI Free, RCV, Hotspot 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 ≤ 1/4dB higher than GMSK GPRS or the adjusted SAR of the highest reported SAR of GMSK GPRS is ≤ 1.2W/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
	βc/βd	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			
	βc	2/15	11/15	15/15	15/15
	βd	15/15	15/15	8/15	4/15
	Bd (SF)	64			
	βc/βd	2/15	11/15	15/8	15/4
	βhs	4/15	24/15	30/15	30/15
	MPR (dB)	0	0	0.5	0.5
HSDPA Specific Settings	D_{ACK}	8			
	D_{NAK}	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback (Table 5.2B.4)	4ms			
	CQI Repetition Factor (Table 5.2B.4)	2			
	Ahs=βhs/βc	30/15			

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
	βc	11/15	6/15	15/15	2/15	15/15
	βd	15/15	15/15	9/15	15/15	0
	βec	209/225	12/15	30/15	2/15	5/15
	βc/βd	11/15	6/15	15/9	2/15	-
	βhs	22/15	12/15	30/15	4/15	5/15
	βed	1309/225	94/75	47/15	56/75	47/15
	CM (dB)	1	3	2	3	1
	MPR (dB)	0	2	1	2	0
HSDPA Specific Settings	DACK	8				0
	DNAK	8				0
	DCQI	8				0
	Ack-Nack repetition factor	3				
	CQI Feedback (Table 5.2B.4)	4ms				
	CQI Repetition Factor (Table 5.2B.4)	2				
	Ahs = βhs/βc	30/15				
HSUPA Specific Settings	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_Ec/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH _Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

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

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

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

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	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.		

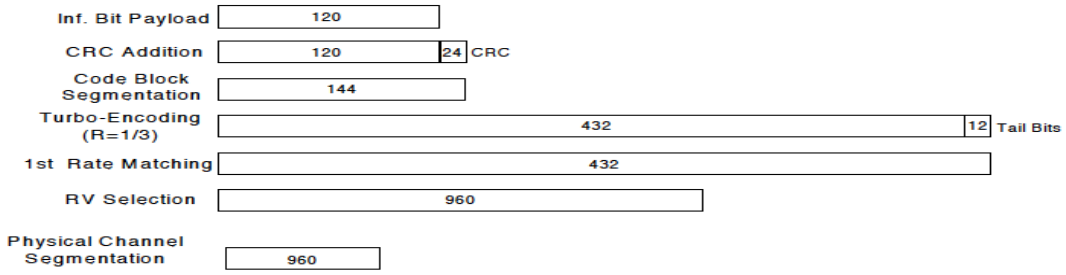


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

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			
	βc	2/15	11/15	15/15	15/15
	βd	15/15	15/15	8/15	4/15
	βd (SF)	64			
	βc/βd	2/15	11/15	15/8	15/4
	βhs	4/15	24/15	30/15	30/15
	MPR (dB)	0	0	0.5	0.5
HSDPA Specific Settings	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack Repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	Ahs = βhs/ βc	30/15			

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)					
				RSI=Rcv			RSI=Free, Hotspot		
				Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	9262	1852.4	22.57	N/A	23.0	18.99	N/A	19.5
		9400	1880.0	22.37			18.77		
		9538	1907.6	22.57			18.97		
HSDPA	Subtest 1	9262	1852.4	21.52	0	22.0	17.04	0	18.0
		9400	1880.0	21.33			16.82		
		9538	1907.6	21.49			16.97		
	Subtest 2	9262	1852.4	20.53	0	22.0	17.06	0	18.0
		9400	1880.0	20.32			16.84		
		9538	1907.6	20.46			16.97		
	Subtest 3	9262	1852.4	20.56	0.5	21.5	17.98	0.0	18.0
		9400	1880.0	20.34			17.76		
		9538	1907.6	20.46			17.96		
	Subtest 4	9262	1852.4	19.61	0.5	21.5	17.09	0.5	17.5
		9400	1880.0	19.37			16.83		
		9538	1907.6	19.56			17.00		
HSUPA	Subtest 1	9262	1852.4	20.50	0	22.0	14.97	0	17.0
		9400	1880.0	20.27			14.71		
		9538	1907.6	20.39			14.90		
	Subtest 2	9262	1852.4	18.49	2	20.0	14.95	0	17.0
		9400	1880.0	18.25			14.69		
		9538	1907.6	18.39			14.87		
	Subtest 3	9262	1852.4	19.52	1	21.0	14.94	0	17.0
		9400	1880.0	19.27			14.70		
		9538	1907.6	19.45			14.89		
	Subtest 4	9262	1852.4	18.46	2	20.0	14.93	0	17.0
		9400	1880.0	18.21			14.69		
		9538	1907.6	18.36			14.87		
	Subtest 5	9262	1852.4	21.66	0	22.0	16.11	0	17.0
		9400	1880.0	21.37			15.80		
		9538	1907.6	21.48			15.93		
DC-HSDPA	Subtest 1	9262	1852.4	21.44	0	22.0	17.05	0	17.5
		9400	1880.0	21.43			16.94		
		9538	1907.6	21.51			17.00		
	Subtest 2	9262	1852.4	20.48	0	22.0	16.99	0	17.5
		9400	1880.0	20.40			16.94		
		9538	1907.6	20.49			17.00		
	Subtest 3	9262	1852.4	19.56	0.5	21.5	17.03	0.0	17.5
		9400	1880.0	19.47			16.94		
		9538	1907.6	19.58			17.00		
	Subtest 4	9262	1852.4	19.54	0.5	21.5	17.03	0.0	17.5
		9400	1880.0	19.48			16.95		
		9538	1907.6	19.57			17.03		

W-CDMA Band IV Measured Results

Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)					
				RSI=Rcv			RSI=Free, Hotspot		
				Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	1312	1712.4	23.02	N/A	24.0	19.40	N/A	20.0
		1413	1732.6	22.76			19.17		
		1513	1752.6	22.84			19.21		
HSDPA	Subtest 1	1312	1712.4	21.99	0	22.0	17.44	0	18.5
		1413	1732.6	21.76			17.20		
		1513	1752.6	21.80			17.26		
	Subtest 2	1312	1712.4	20.97	0	22.0	17.45	0	18.5
		1413	1732.6	20.74			17.20		
		1513	1752.6	20.78			17.25		
	Subtest 3	1312	1712.4	21.01	0.5	21.5	18.38	0.0	18.5
		1413	1732.6	20.80			18.18		
		1513	1752.6	20.83			18.19		
	Subtest 4	1312	1712.4	19.97	0.5	21.5	17.47	0.5	18.0
		1413	1732.6	19.70			17.23		
		1513	1752.6	19.74			17.28		
HSUPA	Subtest 1	1312	1712.4	20.95	0	22.0	15.36	0	17.0
		1413	1732.6	20.69			15.09		
		1513	1752.6	20.71			15.13		
	Subtest 2	1312	1712.4	18.90	2	20.0	15.35	0	17.0
		1413	1732.6	18.63			15.10		
		1513	1752.6	18.67			15.13		
	Subtest 3	1312	1712.4	19.93	1	21.0	15.34	0	17.0
		1413	1732.6	19.63			15.09		
		1513	1752.6	19.68			15.12		
	Subtest 4	1312	1712.4	18.89	2	20.0	15.34	0	17.0
		1413	1732.6	18.62			16.74		
		1513	1752.6	18.65			16.58		
	Subtest 5	1312	1712.4	22.00	0	22.0	16.46	0	17.0
		1413	1732.6	21.74			16.18		
		1513	1752.6	21.75			16.20		
DC-HSDPA	Subtest 1	1312	1712.4	21.87	0	22.0	17.28	0	18.0
		1413	1732.6	21.71			17.13		
		1513	1752.6	21.76			17.20		
	Subtest 2	1312	1712.4	20.93	0	22.0	17.39	0	18.0
		1413	1732.6	20.70			17.14		
		1513	1752.6	20.75			17.18		
	Subtest 3	1312	1712.4	19.93	0.5	21.5	17.38	0.0	18.0
		1413	1732.6	19.67			17.16		
		1513	1752.6	19.73			17.21		
	Subtest 4	1312	1712.4	19.93	0.5	21.5	17.42	0.0	18.0
		1413	1732.6	19.71			17.16		
		1513	1752.6	19.77			17.20		

W-CDMA Band V (Main.1) Measured Results

Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)		
				RSI=Free, Rcv, Hotspot		
				Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	4132	826.4	23.98	N/A	25.0
		4183	836.6	23.91		
		4233	846.6	24.02		
HSDPA	Subtest 1	4132	826.4	21.89	0	22.0
		4183	836.6	21.83		
		4233	846.6	21.93		
	Subtest 2	4132	826.4	20.90	0	22.0
		4183	836.6	20.83		
		4233	846.6	20.91		
	Subtest 3	4132	826.4	20.88	0.5	21.5
		4183	836.6	20.83		
		4233	846.6	20.94		
	Subtest 4	4132	826.4	19.94	0.5	21.5
		4183	836.6	19.90		
		4233	846.6	19.94		
HSUPA	Subtest 1	4132	826.4	21.07	0	23.0
		4183	836.6	20.98		
		4233	846.6	21.09		
	Subtest 2	4132	826.4	19.03	2	21.0
		4183	836.6	18.95		
		4233	846.6	19.06		
	Subtest 3	4132	826.4	20.15	1	22.0
		4183	836.6	20.04		
		4233	846.6	20.12		
	Subtest 4	4132	826.4	19.09	2	21.0
		4183	836.6	18.99		
		4233	846.6	19.10		
	Subtest 5	4132	826.4	22.19	0	23.0
		4183	836.6	22.08		
		4233	846.6	22.14		
DC-HSDPA	Subtest 1	4132	826.4	22.11	0	23.0
		4183	836.6	22.38		
		4233	846.6	22.28		
	Subtest 2	4132	826.4	21.20	0	23.0
		4183	836.6	21.37		
		4233	846.6	21.28		
	Subtest 3	4132	826.4	20.28	0.5	22.5
		4183	836.6	20.42		
		4233	846.6	20.28		
	Subtest 4	4132	826.4	20.21	0.5	22.5
		4183	836.6	20.37		
		4233	846.6	20.24		

W-CDMA Band V (Sub.1) Measured Results

Mode		UL Ch No.	Freq. (MHz)	Maximum Average Power (dBm)		
				RSI=Free, Rcv, Hotspot		
				Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	4132	826.4	18.41	N/A	19.0
		4183	836.6	18.42		
		4233	846.6	18.42		
HSDPA	Subtest 1	4132	826.4	17.40	0	19.0
		4183	836.6	17.36		
		4233	846.6	17.42		
	Subtest 2	4132	826.4	17.92	0	19.0
		4183	836.6	17.87		
		4233	846.6	17.97		
	Subtest 3	4132	826.4	18.50	0.0	19.0
		4183	836.6	18.44		
		4233	846.6	18.51		
	Subtest 4	4132	826.4	17.97	0.0	19.0
		4183	836.6	17.90		
		4233	846.6	18.01		
HSUPA	Subtest 1	4132	826.4	16.47	0	18.0
		4183	836.6	16.36		
		4233	846.6	16.45		
	Subtest 2	4132	826.4	16.45	0	18.0
		4183	836.6	16.34		
		4233	846.6	16.45		
	Subtest 3	4132	826.4	16.45	0	18.0
		4183	836.6	16.35		
		4233	846.6	16.45		
	Subtest 4	4132	826.4	16.48	0	18.0
		4183	836.6	16.38		
		4233	846.6	16.46		
	Subtest 5	4132	826.4	17.50	0	18.0
		4183	836.6	17.39		
		4233	846.6	17.44		
DC-HSDPA	Subtest 1	4132	826.4	17.35	0	19.5
		4183	836.6	17.49		
		4233	846.6	17.32		
	Subtest 2	4132	826.4	17.90	0	19.5
		4183	836.6	18.05		
		4233	846.6	17.99		
	Subtest 3	4132	826.4	17.42	0.0	19.5
		4183	836.6	17.55		
		4233	846.6	17.46		
	Subtest 4	4132	826.4	17.92	0.0	19.5
		4183	836.6	18.07		
		4233	846.6	18.01		

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
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

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:

a) The maximum output power, including tolerance, for the smaller band must be ≤ the larger band to qualify for the SAR test exclusion.
b) 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)
- 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.

LTE Band 2 (Sub.2) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)									
				RSI=Free, Hotspot					RSI=Rcv				
				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	16.60	16.55	16.65	0.0	18.5	14.52	14.48	14.55	0.0	16.5
		1	49	16.71	16.35	16.72	0.0	18.5	14.60	14.15	14.68	0.0	16.5
		1	99	16.55	16.55	16.62	0.0	18.5	14.50	14.46	14.49	0.0	16.5
		50	0	16.61	16.54	16.65	0.0	18.5	14.47	14.48	14.52	0.0	16.5
		50	24	16.61	16.55	16.62	0.0	18.5	14.47	14.47	14.50	0.0	16.5
		50	50	16.60	16.53	16.64	0.0	18.5	14.47	14.47	14.48	0.0	16.5
		100	0	16.61	16.54	16.63	0.0	18.5	14.47	14.48	14.49	0.0	16.5
	16QAM	1	0	17.03	16.90	16.92	0.0	18.5	14.72	14.76	14.62	0.0	16.5
		1	49	17.01	16.80	17.10	0.0	18.5	14.74	14.68	14.78	0.0	16.5
		1	99	17.00	16.89	16.83	0.0	18.5	14.71	14.75	14.56	0.0	16.5
		50	0	16.61	16.58	16.66	0.0	18.5	14.42	14.52	14.50	0.0	16.5
		50	24	16.60	16.56	16.68	0.0	18.5	14.43	14.46	14.48	0.0	16.5
		50	50	16.58	16.55	16.65	0.0	18.5	14.43	14.45	14.47	0.0	16.5
		100	0	16.63	16.57	16.63	0.0	18.5	14.46	14.47	14.45	0.0	16.5
	64QAM	1	0	16.78	16.95	17.09	0.0	18.5	14.66	14.91	14.77	0.0	16.5
		1	49	16.68	16.88	17.24	0.0	18.5	14.79	15.02	14.89	0.0	16.5
		1	99	16.72	16.93	17.00	0.0	18.5	14.64	14.87	14.70	0.0	16.5
		50	0	16.69	16.65	16.70	0.0	18.5	14.49	14.53	14.52	0.0	16.5
		50	24	16.69	16.62	16.69	0.0	18.5	14.49	14.50	14.52	0.0	16.5
		50	50	16.69	16.60	16.68	0.0	18.5	14.51	14.49	14.50	0.0	16.5
		100	0	16.67	16.58	16.64	0.0	18.5	14.49	14.50	14.47	0.0	16.5
	256QAM	1	0	16.81	16.97	16.82	0.0	18.5	14.74	14.93	14.91	0.0	16.5
		1	49	16.73	17.06	16.86	0.0	18.5	14.88	14.80	15.12	0.0	16.5
		1	99	16.78	16.96	16.81	0.0	18.5	14.73	14.96	14.92	0.0	16.5
		50	0	16.66	16.59	16.71	0.0	18.5	14.54	14.53	14.58	0.0	16.5
		50	24	16.64	16.58	16.65	0.0	18.5	14.52	14.52	14.58	0.0	16.5
		50	50	16.62	16.58	16.64	0.0	18.5	14.54	14.52	14.56	0.0	16.5
		100	0	16.66	16.56	16.65	0.0	18.5	14.56	14.52	14.57	0.0	16.5
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	16.61	16.50	16.65	0.0	18.5	14.49	14.50	14.56	0.0	16.5
		1	37	16.35	16.46	16.60	0.0	18.5	14.38	14.52	14.57	0.0	16.5
		1	74	16.56	16.53	16.61	0.0	18.5	14.44	14.51	14.50	0.0	16.5
		36	0	16.62	16.54	16.63	0.0	18.5	14.52	14.51	14.55	0.0	16.5
		36	20	16.60	16.54	16.65	0.0	18.5	14.50	14.51	14.54	0.0	16.5
		36	39	16.60	16.55	16.67	0.0	18.5	14.49	14.52	14.56	0.0	16.5
		75	0	16.57	16.54	16.65	0.0	18.5	14.49	14.53	14.56	0.0	16.5
	16QAM	1	0	16.80	16.90	17.04	0.0	18.5	14.68	14.71	14.77	0.0	16.5
		1	37	16.69	16.82	16.97	0.0	18.5	14.65	14.69	14.77	0.0	16.5
		1	74	16.77	16.84	17.02	0.0	18.5	14.68	14.64	14.73	0.0	16.5
		36	0	16.60	16.54	16.70	0.0	18.5	14.46	14.51	14.56	0.0	16.5
		36	20	16.58	16.54	16.70	0.0	18.5	14.45	14.50	14.56	0.0	16.5
		36	39	16.58	16.55	16.69	0.0	18.5	14.44	14.51	14.54	0.0	16.5
		75	0	16.58	16.55	16.67	0.0	18.5	14.46	14.49	14.54	0.0	16.5
	64QAM	1	0	16.62	16.89	16.76	0.0	18.5	14.65	14.72	14.70	0.0	16.5
		1	37	16.52	16.85	16.74	0.0	18.5	14.42	14.64	14.72	0.0	16.5
		1	74	16.64	16.80	16.66	0.0	18.5	14.70	14.63	14.60	0.0	16.5
		36	0	16.62	16.58	16.74	0.0	18.5	14.47	14.55	14.61	0.0	16.5
		36	20	16.61	16.59	16.74	0.0	18.5	14.46	14.54	14.60	0.0	16.5
		36	39	16.61	16.58	16.72	0.0	18.5	14.45	14.53	14.60	0.0	16.5
		75	0	16.64	16.58	16.67	0.0	18.5	14.49	14.51	14.55	0.0	16.5
	256QAM	1	0	16.76	16.71	16.55	0.0	18.5	14.71	14.83	14.57	0.0	16.5
		1	37	16.75	16.54	16.58	0.0	18.5	14.71	14.72	14.52	0.0	16.5
		1	74	16.75	16.74	16.50	0.0	18.5	14.70	14.82	14.56	0.0	16.5
		36	0	16.68	16.65	16.67	0.0	18.5	14.51	14.58	14.59	0.0	16.5
		36	20	16.66	16.63	16.66	0.0	18.5	14.50	14.57	14.57	0.0	16.5
		36	39	16.63	16.60	16.67	0.0	18.5	14.51	14.56	14.57	0.0	16.5
		75	0	16.62	16.61	16.61	0.0	18.5	14.50	14.58	14.56	0.0	16.5

LTE Band 2 (Sub.2) 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	16.54	16.54	16.66	0.0	18.5	14.42	14.51	14.56	0.0	16.5
		1	25	16.49	16.58	16.54	0.0	18.5	14.49	14.63	14.35	0.0	16.5
		1	49	16.54	16.51	16.67	0.0	18.5	14.43	14.47	14.54	0.0	16.5
		25	0	16.54	16.50	16.66	0.0	18.5	14.40	14.46	14.52	0.0	16.5
		25	12	16.54	16.50	16.66	0.0	18.5	14.41	14.46	14.51	0.0	16.5
		25	25	16.51	16.49	16.65	0.0	18.5	14.39	14.43	14.49	0.0	16.5
		50	0	16.56	16.51	16.67	0.0	18.5	14.40	14.46	14.51	0.0	16.5
	16QAM	1	0	16.77	16.86	17.12	0.0	18.5	14.65	14.68	14.91	0.0	16.5
		1	25	16.86	16.97	17.12	0.0	18.5	14.79	14.77	14.83	0.0	16.5
		1	49	16.71	16.85	17.03	0.0	18.5	14.60	14.67	14.84	0.0	16.5
		25	0	16.60	16.57	16.74	0.0	18.5	14.39	14.49	14.53	0.0	16.5
		25	12	16.61	16.56	16.72	0.0	18.5	14.40	14.48	14.52	0.0	16.5
		25	25	16.59	16.56	16.70	0.0	18.5	14.39	14.47	14.51	0.0	16.5
		50	0	16.56	16.51	16.67	0.0	18.5	14.37	14.42	14.48	0.0	16.5
	64QAM	1	0	16.66	16.81	16.75	0.0	18.5	14.57	14.64	14.59	0.0	16.5
		1	25	16.69	16.85	16.56	0.0	18.5	14.75	14.70	14.37	0.0	16.5
		1	49	16.59	16.80	16.74	0.0	18.5	14.52	14.62	14.56	0.0	16.5
		25	0	16.65	16.57	16.77	0.0	18.5	14.41	14.46	14.57	0.0	16.5
		25	12	16.63	16.55	16.76	0.0	18.5	14.37	14.44	14.55	0.0	16.5
		25	25	16.64	16.57	16.73	0.0	18.5	14.39	14.44	14.53	0.0	16.5
		50	0	16.61	16.57	16.71	0.0	18.5	14.39	14.42	14.51	0.0	16.5
	256QAM	1	0	16.64	16.96	16.60	0.0	18.5	14.62	14.86	14.49	0.0	16.5
		1	25	16.80	16.98	16.59	0.0	18.5	14.65	15.02	14.63	0.0	16.5
		1	49	16.69	16.95	16.61	0.0	18.5	14.63	14.92	14.50	0.0	16.5
		25	0	16.74	16.65	16.77	0.0	18.5	14.55	14.57	14.58	0.0	16.5
		25	12	16.73	16.63	16.73	0.0	18.5	14.54	14.54	14.58	0.0	16.5
		25	25	16.73	16.63	16.72	0.0	18.5	14.53	14.55	14.57	0.0	16.5
		50	0	16.68	16.61	16.69	0.0	18.5	14.48	14.53	14.56	0.0	16.5
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	16.48	16.45	16.67	0.0	18.5	14.37	14.41	14.52	0.0	16.5
		1	12	16.34	16.43	16.69	0.0	18.5	14.44	14.48	14.44	0.0	16.5
		1	24	16.50	16.48	16.69	0.0	18.5	14.41	14.44	14.53	0.0	16.5
		12	0	16.56	16.47	16.69	0.0	18.5	14.40	14.45	14.53	0.0	16.5
		12	7	16.56	16.47	16.68	0.0	18.5	14.42	14.44	14.54	0.0	16.5
		12	13	16.55	16.47	16.67	0.0	18.5	14.39	14.43	14.53	0.0	16.5
		25	0	16.56	16.47	16.69	0.0	18.5	14.42	14.45	14.53	0.0	16.5
	16QAM	1	0	16.99	16.73	16.96	0.0	18.5	14.47	14.66	14.98	0.0	16.5
		1	12	16.83	16.73	16.84	0.0	18.5	14.53	14.64	14.96	0.0	16.5
		1	24	16.95	16.75	16.90	0.0	18.5	14.49	14.62	14.92	0.0	16.5
		12	0	16.66	16.48	16.76	0.0	18.5	14.38	14.45	14.56	0.0	16.5
		12	7	16.66	16.46	16.74	0.0	18.5	14.38	14.43	14.57	0.0	16.5
		12	13	16.64	16.48	16.74	0.0	18.5	14.37	14.43	14.56	0.0	16.5
		25	0	16.57	16.49	16.68	0.0	18.5	14.38	14.41	14.51	0.0	16.5
	64QAM	1	0	17.05	16.65	17.16	0.0	18.5	14.33	14.84	14.84	0.0	16.5
		1	12	16.92	16.51	17.13	0.0	18.5	14.35	14.83	14.85	0.0	16.5
		1	24	16.99	16.66	17.17	0.0	18.5	14.34	14.76	14.85	0.0	16.5
		12	0	16.57	16.55	16.68	0.0	18.5	14.34	14.46	14.57	0.0	16.5
		12	7	16.58	16.54	16.67	0.0	18.5	14.35	14.45	14.57	0.0	16.5
		12	13	16.54	16.57	16.66	0.0	18.5	14.34	14.45	14.56	0.0	16.5
		25	0	16.60	16.52	16.69	0.0	18.5	14.37	14.41	14.50	0.0	16.5
	256QAM	1	0	16.92	16.61	16.75	0.0	18.5	14.32	14.85	14.56	0.0	16.5
		1	12	16.77	16.53	16.57	0.0	18.5	14.14	14.84	14.59	0.0	16.5
		1	24	16.94	16.65	16.75	0.0	18.5	14.29	14.86	14.57	0.0	16.5
		12	0	16.69	16.60	16.74	0.0	18.5	14.43	14.55	14.63	0.0	16.5
		12	7	16.69	16.61	16.75	0.0	18.5	14.43	14.54	14.62	0.0	16.5
		12	13	16.66	16.62	16.71	0.0	18.5	14.42	14.53	14.64	0.0	16.5
		25	0	16.63	16.62	16.73	0.0	18.5	14.45	14.47	14.62	0.0	16.5

LTE Band 2 (Sub.2) 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	16.62	16.57	16.64	0.0	18.5	14.5	14.4	14.6	0.0	16.5
		1	8	16.58	16.33	16.53	0.0	18.5	14.3	14.5	14.7	0.0	16.5
		1	14	16.67	16.59	16.60	0.0	18.5	14.6	14.4	14.6	0.0	16.5
		8	0	16.58	16.47	16.66	0.0	18.5	14.5	14.4	14.6	0.0	16.5
		8	4	16.59	16.50	16.70	0.0	18.5	14.5	14.5	14.6	0.0	16.5
		8	7	16.58	16.50	16.65	0.0	18.5	14.4	14.5	14.6	0.0	16.5
		15	0	16.55	16.52	16.68	0.0	18.5	14.4	14.5	14.5	0.0	16.5
	16QAM	1	0	16.95	16.49	17.04	0.0	18.5	14.6	14.8	14.9	0.0	16.5
		1	8	16.88	16.42	16.99	0.0	18.5	14.6	14.8	14.9	0.0	16.5
		1	14	16.90	16.41	17.06	0.0	18.5	14.5	14.8	14.9	0.0	16.5
		8	0	16.62	16.49	16.77	0.0	18.5	14.4	14.5	14.6	0.0	16.5
		8	4	16.63	16.54	16.74	0.0	18.5	14.5	14.5	14.6	0.0	16.5
		8	7	16.61	16.48	16.74	0.0	18.5	14.4	14.5	14.6	0.0	16.5
		15	0	16.60	16.52	16.74	0.0	18.5	14.4	14.4	14.5	0.0	16.5
	64QAM	1	0	16.36	16.87	16.70	0.0	18.5	14.6	14.6	14.6	0.0	16.5
		1	8	16.30	16.83	16.68	0.0	18.5	14.5	14.7	14.6	0.0	16.5
		1	14	16.29	16.91	16.73	0.0	18.5	14.5	14.7	14.6	0.0	16.5
		8	0	16.58	16.58	16.71	0.0	18.5	14.4	14.5	14.6	0.0	16.5
		8	4	16.55	16.58	16.75	0.0	18.5	14.3	14.4	14.5	0.0	16.5
		8	7	16.60	16.64	16.78	0.0	18.5	14.4	14.4	14.6	0.0	16.5
		15	0	16.63	16.49	16.81	0.0	18.5	14.4	14.4	14.6	0.0	16.5
	256QAM	1	0	16.75	16.83	16.81	0.0	18.5	14.5	14.7	14.6	0.0	16.5
		1	8	16.77	16.73	16.81	0.0	18.5	14.6	14.7	14.6	0.0	16.5
		1	14	16.79	16.80	16.80	0.0	18.5	14.5	14.8	14.6	0.0	16.5
		8	0	16.72	16.66	16.82	0.0	18.5	14.5	14.6	14.7	0.0	16.5
		8	4	16.71	16.62	16.77	0.0	18.5	14.6	14.6	14.7	0.0	16.5
		8	7	16.67	16.62	16.82	0.0	18.5	14.5	14.6	14.7	0.0	16.5
		15	0	16.71	16.63	16.88	0.0	18.5	14.6	14.6	14.7	0.0	16.5

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	16.60	16.52	16.73	0.0	18.5	14.5	14.5	14.6	0.0	16.5
		1	3	16.50	16.58	16.47	0.0	18.5	14.5	14.5	14.4	0.0	16.5
		1	5	16.59	16.50	16.74	0.0	18.5	14.5	14.5	14.6	0.0	16.5
		3	0	16.58	16.49	16.68	0.0	18.5	14.4	14.4	14.6	0.0	16.5
		3	1	16.54	16.49	16.71	0.0	18.5	14.4	14.4	14.5	0.0	16.5
		3	3	16.55	16.41	16.56	0.0	18.5	14.4	14.4	14.4	0.0	16.5
		6	0	16.56	16.50	16.69	0.0	18.5	14.4	14.5	14.6	0.0	16.5
	16QAM	1	0	16.54	16.57	16.99	0.0	18.5	14.4	14.6	14.7	0.0	16.5
		1	3	16.68	16.51	17.03	0.0	18.5	14.7	14.4	14.7	0.0	16.5
		1	5	16.59	16.62	17.03	0.0	18.5	14.5	14.6	14.7	0.0	16.5
		3	0	16.77	16.63	16.65	0.0	18.5	14.6	14.5	14.5	0.0	16.5
		3	1	16.58	16.43	16.74	0.0	18.5	14.5	14.4	14.5	0.0	16.5
		3	3	16.65	16.60	16.68	0.0	18.5	14.5	14.4	14.4	0.0	16.5
		6	0	16.62	16.59	16.66	0.0	18.5	14.4	14.5	14.5	0.0	16.5
	64QAM	1	0	16.79	16.53	16.54	0.0	18.5	14.3	14.7	14.7	0.0	16.5
		1	3	16.66	16.29	16.70	0.0	18.5	14.5	14.7	14.7	0.0	16.5
		1	5	16.75	16.46	16.60	0.0	18.5	14.4	14.6	14.6	0.0	16.5
		3	0	16.65	16.59	16.61	0.0	18.5	14.4	14.6	14.6	0.0	16.5
		3	1	16.57	16.57	16.64	0.0	18.5	14.4	14.6	14.5	0.0	16.5
		3	3	16.57	16.61	16.55	0.0	18.5	14.3	14.5	14.5	0.0	16.5
		6	0	16.59	16.51	16.67	0.0	18.5	14.4	14.5	14.7	0.0	16.5
	256QAM	1	0	16.72	16.68	16.72	0.0	18.5	14.5	14.6	14.7	0.0	16.5
		1	3	16.85	16.64	16.79	0.0	18.5	14.5	14.8	14.8	0.0	16.5
		1	5	16.69	16.78	16.75	0.0	18.5	14.6	14.6	14.7	0.0	16.5
		3	0	16.65	16.42	16.82	0.0	18.5	14.6	14.5	14.5	0.0	16.5
		3	1	16.56	16.39	16.76	0.0	18.5	14.6	14.4	14.5	0.0	16.5
		3	3	16.50	16.38	16.67	0.0	18.5	14.4	14.3	14.4	0.0	16.5
		6	0	16.63	16.54	16.74	0.0	18.5	14.4	14.5	14.6	0.0	16.5

LTE Band 5 (Main.1) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				RSI=Free, Rcv, Hotspot				
				Measured Pwr (dBm)				
				20450	20525	20600		
				829 MHz	836.5 MHz	844 MHz		
10 MHz	QPSK	1	0		23.73		0.0	25.0
		1	25		23.59		0.0	25.0
		1	49		23.72		0.0	25.0
		25	0		22.79		1.0	24.0
		25	12		22.76		1.0	24.0
		25	25		22.75		1.0	24.0
		50	0		22.78		1.0	24.0
	16QAM	1	0		22.88		1.0	24.0
		1	25		22.72		1.0	24.0
		1	49		22.77		1.0	24.0
		25	0		21.84		1.0	24.0
		25	12		21.79		1.0	24.0
		25	25		21.78		1.0	24.0
		50	0		21.77		1.0	24.0
	64QAM	1	0		22.21		1.0	24.0
		1	25		22.24		1.0	24.0
		1	49		22.20		1.0	24.0
		25	0		20.84		2.0	23.0
		25	12		20.81		2.0	23.0
		25	25		20.80		2.0	23.0
		50	0		20.81		2.0	23.0
	256QAM	1	0		21.14		2.0	23.0
		1	25		21.10		2.0	23.0
		1	49		21.01		2.0	23.0
		25	0		18.89		5.0	20.0
		25	12		18.84		5.0	20.0
		25	25		18.81		5.0	20.0
		50	0		18.79		5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20425	20525	20625		
				826.5 MHz	836.5 MHz	846.5 MHz		
5 MHz	QPSK	1	0	23.70	23.63	23.51	0.0	25.0
		1	12	23.72	23.51	23.52	0.0	25.0
		1	24	23.65	23.62	23.49	0.0	25.0
		12	0	22.68	22.69	22.52	1.0	24.0
		12	7	22.64	22.69	22.52	1.0	24.0
		12	13	22.63	22.67	22.46	1.0	24.0
		25	0	22.65	22.67	22.52	1.0	24.0
	16QAM	1	0	22.86	22.85	22.74	1.0	24.0
		1	12	22.74	22.66	22.67	1.0	24.0
		1	24	22.78	22.76	22.71	1.0	24.0
		12	0	21.64	21.72	21.53	2.0	23.0
		12	7	21.63	21.72	21.54	2.0	23.0
		12	13	21.61	21.70	21.54	2.0	23.0
		25	0	21.64	21.68	21.57	2.0	23.0
	64QAM	1	0	21.98	21.90	22.00	2.0	23.0
		1	12	21.92	21.75	21.79	2.0	23.0
		1	24	21.95	21.86	21.76	2.0	23.0
		12	0	20.70	20.86	20.65	3.0	22.0
		12	7	20.68	20.85	20.65	3.0	22.0
		12	13	20.64	20.84	20.64	3.0	22.0
		25	0	20.72	20.80	20.70	3.0	22.0
	256QAM	1	0	20.79	20.81	20.98	3.0	22.0
		1	12	20.58	20.85	20.87	3.0	22.0
		1	24	20.75	20.82	20.98	3.0	22.0
		12	0	18.75	18.87	18.81	5.0	20.0
		12	7	18.77	18.89	18.84	5.0	20.0
		12	13	18.78	18.92	18.81	5.0	20.0
		25	0	18.80	18.92	18.74	5.0	20.0

LTE Band 5 (Main.1) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20415	20525	20635		
				825.5 MHz	836.5 MHz	847.5 MHz		
3 MHz	QPSK	1	0	23.69	23.67	23.62	0.0	25.0
		1	8	23.36	23.59	23.55	0.0	25.0
		1	14	23.66	23.61	23.60	0.0	25.0
		8	0	22.59	22.68	22.52	1.0	24.0
		8	4	22.57	22.70	22.55	1.0	24.0
		8	7	22.61	22.68	22.59	1.0	24.0
		15	0	22.62	22.72	22.54	1.0	24.0
	16QAM	1	0	22.73	22.90	22.70	1.0	24.0
		1	8	22.68	22.80	22.70	1.0	24.0
		1	14	22.66	22.92	22.60	1.0	24.0
		8	0	21.69	21.83	21.58	2.0	23.0
		8	4	21.65	21.82	21.54	2.0	23.0
		8	7	21.68	21.83	21.57	2.0	23.0
		15	0	21.60	21.76	21.59	2.0	23.0
	64QAM	1	0	21.92	21.87	21.64	2.0	23.0
		1	8	21.84	21.73	21.56	2.0	23.0
		1	14	21.92	21.73	21.60	2.0	23.0
		8	0	20.83	20.86	20.73	2.0	23.0
		8	4	20.80	20.82	20.74	2.0	23.0
		8	7	20.83	20.86	20.80	2.0	23.0
		15	0	20.66	20.83	20.73	2.0	23.0
	256QAM	1	0	21.11	20.85	20.93	2.0	23.0
		1	8	20.98	20.73	20.85	2.0	23.0
		1	14	21.12	20.83	20.85	2.0	23.0
		8	0	18.82	18.82	18.77	5.0	20.0
		8	4	18.80	18.88	18.76	5.0	20.0
		8	7	18.82	18.86	18.79	5.0	20.0
		15	0	18.84	18.98	18.85	5.0	20.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20407	20525	20643		
				824.7 MHz	836.5 MHz	848.3 MHz		
1.4 MHz	QPSK	1	0	23.67	23.82	23.62	0.0	25.0
		1	3	23.76	23.63	23.60	0.0	25.0
		1	5	23.69	23.78	23.58	0.0	25.0
		3	0	23.76	23.76	23.52	0.0	25.0
		3	1	23.69	23.76	23.49	0.0	25.0
		3	3	23.61	23.61	23.51	0.0	25.0
		6	0	22.65	22.75	22.47	1.0	24.0
	16QAM	1	0	22.63	22.78	22.53	1.0	24.0
		1	3	22.74	22.79	22.51	1.0	24.0
		1	5	22.63	22.85	22.56	1.0	24.0
		3	0	22.72	22.76	22.63	1.0	24.0
		3	1	22.65	22.78	22.56	1.0	24.0
		3	3	22.68	22.66	22.54	1.0	24.0
		6	0	21.56	21.85	21.57	2.0	23.0
	64QAM	1	0	21.57	22.14	21.70	2.0	23.0
		1	3	21.31	21.92	21.84	2.0	23.0
		1	5	21.46	22.03	21.67	2.0	23.0
		3	0	21.87	21.83	21.58	2.0	23.0
		3	1	21.80	21.78	21.55	2.0	23.0
		3	3	21.83	21.72	21.47	2.0	23.0
		6	0	20.74	20.81	20.57	3.0	22.0
	256QAM	1	0	20.73	20.91	20.69	3.0	22.0
		1	3	20.79	20.81	20.55	3.0	22.0
		1	5	20.73	20.74	20.62	3.0	22.0
		3	0	20.54	20.89	20.61	3.0	22.0
		3	1	20.50	20.80	20.65	3.0	22.0
		3	3	20.54	20.71	20.57	3.0	22.0
		6	0	18.70	18.79	18.57	5.0	20.0

LTE Band 5 (Sub.1) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				RSI=Free, Rcv, Hotspot				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				20450	20525	20600		
				829 MHz	836.5 MHz	844 MHz		
10 MHz	QPSK	1	0		**19.40**		0.0	20.5
		1	25		19.37		0.0	20.5
		1	49		19.35		0.0	20.5
		25	0		**19.39**		0.0	20.5
		25	12		19.38		0.0	20.5
		25	25		19.36		0.0	20.5
		50	0		19.39		0.0	20.5
	16QAM	1	0		19.52		0.0	20.5
		1	25		19.49		0.0	20.5
		1	49		19.43		0.0	20.5
		25	0		19.43		0.0	20.5
		25	12		19.41		0.0	20.5
		25	25		19.41		0.0	20.5
		50	0		19.44		0.0	20.5
	64QAM	1	0		19.40		0.0	20.5
		1	25		19.80		0.0	20.5
		1	49		19.73		0.0	20.5
		25	0		19.45		0.0	20.5
		25	12		19.44		0.0	20.5
		25	25		19.43		0.0	20.5
		50	0		19.43		0.0	20.5
	256QAM	1	0		19.65		0.0	20.5
		1	25		19.64		0.0	20.5
		1	49		19.62		0.0	20.5
		25	0		19.49		0.0	20.5
		25	12		19.46		0.0	20.5
		25	25		19.45		0.0	20.5
		50	0		19.42		0.0	20.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20425	20525	20625		
				826.5 MHz	836.5 MHz	846.5 MHz		
5 MHz	QPSK	1	0	19.39	19.37	19.44	0.0	20.5
		1	12	19.37	19.21	19.44	0.0	20.5
		1	24	19.35	19.38	19.40	0.0	20.5
		12	0	19.45	19.37	19.44	0.0	20.5
		12	7	19.43	19.37	19.42	0.0	20.5
		12	13	19.42	19.36	19.41	0.0	20.5
		25	0	19.44	19.36	19.43	0.0	20.5
	16QAM	1	0	19.68	19.54	19.59	0.0	20.5
		1	12	19.60	19.40	19.44	0.0	20.5
		1	24	19.64	19.49	19.48	0.0	20.5
		12	0	19.48	19.33	19.43	0.0	20.5
		12	7	19.46	19.33	19.40	0.0	20.5
		12	13	19.43	19.33	19.38	0.0	20.5
		25	0	19.46	19.36	19.48	0.0	20.5
	64QAM	1	0	19.82	19.43	19.51	0.0	20.5
		1	12	19.71	19.32	19.40	0.0	20.5
		1	24	19.69	19.47	19.49	0.0	20.5
		12	0	19.43	19.42	19.43	0.0	20.5
		12	7	19.42	19.39	19.40	0.0	20.5
		12	13	19.41	19.40	19.35	0.0	20.5
		25	0	19.48	19.38	19.41	0.0	20.5
	256QAM	1	0	19.71	19.40	19.74	0.0	20.5
		1	12	19.66	19.26	19.64	0.0	20.5
		1	24	19.66	19.43	19.64	0.0	20.5
		12	0	19.52	19.35	19.42	0.0	20.5
		12	7	19.51	19.36	19.41	0.0	20.5
		12	13	19.45	19.34	19.38	0.0	20.5
		25	0	19.45	19.42	19.44	0.0	20.5

LTE Band 5 (Sub.1) Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20415	20525	20635		
				825.5 MHz	836.5 MHz	847.5 MHz		
3 MHz	QPSK	1	0	19.52	19.36	19.47	0.0	20.5
		1	8	19.47	19.26	19.20	0.0	20.5
		1	14	19.51	19.30	19.48	0.0	20.5
		8	0	19.45	19.38	19.43	0.0	20.5
		8	4	19.45	19.37	19.41	0.0	20.5
		8	7	19.49	19.38	19.41	0.0	20.5
		15	0	19.44	19.39	19.41	0.0	20.5
	16QAM	1	0	19.60	19.63	19.55	0.0	20.5
		1	8	19.55	19.45	19.44	0.0	20.5
		1	14	19.50	19.64	19.45	0.0	20.5
		8	0	19.47	19.42	19.53	0.0	20.5
		8	4	19.43	19.38	19.48	0.0	20.5
		8	7	19.43	19.43	19.50	0.0	20.5
		15	0	19.45	19.39	19.44	0.0	20.5
	64QAM	1	0	19.91	19.63	19.35	0.0	20.5
		1	8	19.80	19.60	19.26	0.0	20.5
		1	14	19.88	19.68	19.25	0.0	20.5
		8	0	19.57	19.43	19.48	0.0	20.5
		8	4	19.56	19.38	19.41	0.0	20.5
		8	7	19.56	19.42	19.44	0.0	20.5
		15	0	19.46	19.47	19.47	0.0	20.5
	256QAM	1	0	19.56	19.51	19.54	0.0	20.5
		1	8	19.49	19.43	19.52	0.0	20.5
		1	14	19.54	19.48	19.50	0.0	20.5
		8	0	19.57	19.53	19.50	0.0	20.5
		8	4	19.53	19.46	19.47	0.0	20.5
		8	7	19.56	19.51	19.46	0.0	20.5
		15	0	19.53	19.46	19.45	0.0	20.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				20407	20525	20643		
				824.7 MHz	836.5 MHz	848.3 MHz		
1.4 MHz	QPSK	1	0	19.47	19.41	19.39	0.0	20.5
		1	3	19.34	19.15	19.44	0.0	20.5
		1	5	19.43	19.39	19.38	0.0	20.5
		3	0	19.43	19.36	19.42	0.0	20.5
		3	1	19.41	19.39	19.40	0.0	20.5
		3	3	19.40	19.22	19.35	0.0	20.5
		6	0	19.39	19.34	19.39	0.0	20.5
	16QAM	1	0	19.56	19.50	19.32	0.0	20.5
		1	3	19.63	19.46	19.42	0.0	20.5
		1	5	19.60	19.54	19.36	0.0	20.5
		3	0	19.55	19.46	19.44	0.0	20.5
		3	1	19.50	19.46	19.38	0.0	20.5
		3	3	19.45	19.38	19.35	0.0	20.5
		6	0	19.51	19.39	19.40	0.0	20.5
	64QAM	1	0	19.83	19.68	19.21	0.0	20.5
		1	3	19.68	19.45	19.37	0.0	20.5
		1	5	19.76	19.60	19.26	0.0	20.5
		3	0	19.61	19.61	19.44	0.0	20.5
		3	1	19.47	19.51	19.44	0.0	20.5
		3	3	19.50	19.61	19.38	0.0	20.5
		6	0	19.46	19.52	19.35	0.0	20.5
	256QAM	1	0	19.56	19.43	19.57	0.0	20.5
		1	3	19.58	19.46	19.46	0.0	20.5
		1	5	19.58	19.44	19.55	0.0	20.5
		3	0	19.43	19.45	19.48	0.0	20.5
		3	1	19.38	19.37	19.48	0.0	20.5
		3	3	19.35	19.37	19.44	0.0	20.5
		6	0	19.50	19.46	19.38	0.0	20.5

LTE Band 12 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
				RSI=Free, Rcv, Hotspot				
				Measured Pwr (dBm)				
				23060	23095	23130		
				704 MHz	707.5 MHz	711 MHz		
10 MHz	QPSK	1	0		24.11		0.0	24.5
		1	25		23.97		0.0	24.5
		1	49		24.00		0.0	24.5
		25	0		23.05		1.0	23.5
		25	12		23.04		1.0	23.5
		25	25		23.04		1.0	23.5
		50	0		23.06		1.0	23.5
	16QAM	1	0		23.26		1.0	23.5
		1	25		23.12		1.0	23.5
		1	49		23.11		1.0	23.5
		25	0		22.07		2.0	22.5
		25	12		22.06		2.0	22.5
		25	25		22.06		2.0	22.5
		50	0		22.05		2.0	22.5
	64QAM	1	0		22.10		2.0	22.5
		1	25		22.11		2.0	22.5
		1	49		21.99		2.0	22.5
		25	0		21.09		3.0	21.5
		25	12		21.08		3.0	21.5
		25	25		21.04		3.0	21.5
		50	0		21.05		3.0	21.5
	256QAM	1	0		21.14		3.0	21.5
		1	25		21.12		3.0	21.5
		1	49		21.01		3.0	21.5
		25	0		19.16		5.0	19.5
		25	12		19.13		5.0	19.5
		25	25		19.07		5.0	19.5
		50	0		19.02		5.0	19.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				23035	23095	23155		
				701.5 MHz	707.5 MHz	713.5 MHz		
5 MHz	QPSK	1	0	23.89	23.92	23.89	0.0	24.5
		1	12	23.88	23.93	23.71	0.0	24.5
		1	24	23.83	23.89	23.88	0.0	24.5
		12	0	22.87	22.94	22.90	1.0	23.5
		12	7	22.86	22.92	22.89	1.0	23.5
		12	13	22.83	22.91	22.87	1.0	23.5
		25	0	22.86	22.92	22.87	1.0	23.5
	16QAM	1	0	23.07	22.95	23.13	1.0	23.5
		1	12	22.89	22.91	23.01	1.0	23.5
		1	24	22.98	22.98	23.04	1.0	23.5
		12	0	21.81	21.91	21.86	2.0	22.5
		12	7	21.77	21.90	21.85	2.0	22.5
		12	13	21.75	21.89	21.81	2.0	22.5
		25	0	21.83	21.96	21.83	2.0	22.5
	64QAM	1	0	22.16	22.28	21.99	2.0	22.5
		1	12	22.04	22.12	21.90	2.0	22.5
		1	24	22.10	22.21	21.92	2.0	22.5
		12	0	20.93	20.95	20.97	3.0	21.5
		12	7	20.91	20.97	20.94	3.0	21.5
		12	13	20.85	20.98	20.95	3.0	21.5
		25	0	20.92	21.04	20.93	3.0	21.5
	256QAM	1	0	20.98	21.23	20.91	3.0	21.5
		1	12	20.81	21.13	20.81	3.0	21.5
		1	24	20.87	21.23	20.89	3.0	21.5
		12	0	18.98	19.08	18.96	5.0	19.5
		12	7	18.96	19.10	18.98	5.0	19.5
		12	13	18.94	19.06	18.98	5.0	19.5
		25	0	19.03	18.99	19.00	5.0	19.5

LTE Band 12 Measured Results

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	23.90	24.03	23.91	0.0	24.5
		1	8	23.81	23.78	23.87	0.0	24.5
		1	14	23.81	24.00	23.94	0.0	24.5
		8	0	22.87	22.92	22.90	1.0	23.5
		8	4	22.87	22.91	22.89	1.0	23.5
		8	7	22.87	22.90	22.89	1.0	23.5
		15	0	22.88	22.92	22.84	1.0	23.5
	16QAM	1	0	23.04	22.99	22.97	1.0	23.5
		1	8	22.93	22.94	22.95	1.0	23.5
		1	14	23.00	22.92	22.88	1.0	23.5
		8	0	22.01	22.04	21.87	2.0	22.5
		8	4	21.98	21.96	21.80	2.0	22.5
		8	7	21.98	21.98	21.84	2.0	22.5
		15	0	21.88	21.93	21.87	2.0	22.5
	64QAM	1	0	21.92	22.34	21.83	2.0	22.5
		1	8	21.81	22.25	21.76	2.0	22.5
		1	14	21.74	22.34	21.84	2.0	22.5
		8	0	20.99	21.04	20.91	3.0	21.5
		8	4	20.94	21.00	20.93	3.0	21.5
		8	7	20.99	21.03	20.96	3.0	21.5
		15	0	20.95	20.91	20.93	3.0	21.5
	256QAM	1	0	20.98	21.36	20.93	3.0	21.5
		1	8	20.88	21.28	20.92	3.0	21.5
		1	14	20.94	21.33	20.89	3.0	21.5
		8	0	18.96	19.11	18.99	5.0	19.5
		8	4	18.97	19.10	18.96	5.0	19.5
		8	7	18.90	19.11	19.05	5.0	19.5
		15	0	19.06	19.04	19.03	5.0	19.5

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	23.98	24.02	24.00	0.0	24.5
		1	3	23.82	23.89	24.02	0.0	24.5
		1	5	23.92	24.00	23.91	0.0	24.5
		3	0	23.90	23.96	23.91	0.0	24.5
		3	1	23.84	23.95	23.86	0.0	24.5
		3	3	23.87	23.81	23.79	0.0	24.5
		6	0	22.86	22.99	22.88	1.0	23.5
	16QAM	1	0	22.82	23.01	22.79	1.0	23.5
		1	3	22.86	23.03	22.96	1.0	23.5
		1	5	22.83	23.08	22.84	1.0	23.5
		3	0	22.94	22.90	22.92	1.0	23.5
		3	1	22.87	22.93	22.88	1.0	23.5
		3	3	22.79	22.87	22.89	1.0	23.5
		6	0	21.93	22.07	21.88	2.0	22.5
	64QAM	1	0	22.17	21.98	21.86	2.0	22.5
		1	3	22.07	21.75	22.02	2.0	22.5
		1	5	22.10	21.89	21.89	2.0	22.5
		3	0	21.97	22.18	21.81	2.0	22.5
		3	1	21.90	22.13	21.71	2.0	22.5
		3	3	21.88	22.14	21.72	2.0	22.5
		6	0	21.00	21.15	20.88	3.0	21.5
	256QAM	1	0	20.89	21.03	20.98	3.0	21.5
		1	3	20.98	21.12	20.86	3.0	21.5
		1	5	20.90	21.00	20.92	3.0	21.5
		3	0	21.05	20.88	20.92	3.0	21.5
		3	1	20.96	20.85	20.91	3.0	21.5
		3	3	20.89	20.86	20.83	3.0	21.5
		6	0	18.92	18.95	18.85	5.0	19.5

LTE Band 13 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				RSI=Free, Rcv, Hotspot				
				Measured Pwr (dBm)			MPR	Tune-up Limit
					23230			
					782 MHz			
10 MHz	QPSK	1	0		23.87		0.0	24.5
		1	25		23.86		0.0	24.5
		1	49		23.76		0.0	24.5
		25	0		22.82		1.0	23.5
		25	12		22.80		1.0	23.5
		25	25		22.78		1.0	23.5
		50	0		22.81		1.0	23.5
	16QAM	1	0		22.95		1.0	23.5
		1	25		22.79		1.0	23.5
		1	49		22.88		1.0	23.5
		25	0		21.86		2.0	22.5
		25	12		21.82		2.0	22.5
		25	25		21.79		2.0	22.5
		50	0		21.85		2.0	22.5
	64QAM	1	0		21.85		2.0	22.5
		1	25		21.80		2.0	22.5
		1	49		21.74		2.0	22.5
		25	0		20.84		3.0	21.5
		25	12		20.82		3.0	21.5
		25	25		20.78		3.0	21.5
		50	0		20.80		3.0	21.5
	256QAM	1	0		20.85		3.0	21.5
		1	25		20.83		3.0	21.5
		1	49		20.75		3.0	21.5
		25	0		18.89		5.0	19.5
		25	12		18.87		5.0	19.5
		25	25		18.82		5.0	19.5
		50	0		18.77		5.0	19.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				23205	23230	23255		
				779.5 MHz	782 MHz	784.5 MHz		
5 MHz	QPSK	1	0	23.51	23.73	23.50	0.0	24.5
		1	12	23.53	23.75	23.51	0.0	24.5
		1	24	23.48	23.74	23.50	0.0	24.5
		12	0	22.50	22.70	22.49	1.0	23.5
		12	7	22.50	22.67	22.50	1.0	23.5
		12	13	22.48	22.68	22.48	1.0	23.5
		25	0	22.49	22.70	22.48	1.0	23.5
	16QAM	1	0	22.75	22.89	22.74	1.0	23.5
		1	12	22.67	22.82	22.75	1.0	23.5
		1	24	22.69	22.81	22.72	1.0	23.5
		12	0	21.54	21.62	21.56	2.0	22.5
		12	7	21.51	21.62	21.56	2.0	22.5
		12	13	21.52	21.62	21.56	2.0	22.5
		25	0	21.46	21.70	21.51	2.0	22.5
	64QAM	1	0	21.87	22.01	22.07	2.0	22.5
		1	12	21.80	21.96	21.97	2.0	22.5
		1	24	21.87	21.94	21.92	2.0	22.5
		12	0	20.65	20.73	20.60	3.0	21.5
		12	7	20.64	20.71	20.60	3.0	21.5
		12	13	20.63	20.69	20.55	3.0	21.5
		25	0	20.65	20.73	20.63	3.0	21.5
	256QAM	1	0	20.73	20.84	21.01	3.0	21.5
		1	12	20.61	20.74	20.88	3.0	21.5
		1	24	20.69	20.79	20.94	3.0	21.5
		12	0	18.71	18.79	18.68	5.0	19.5
		12	7	18.72	18.79	18.69	5.0	19.5
		12	13	18.66	18.79	18.64	5.0	19.5
		25	0	18.66	18.84	18.61	5.0	19.5

LTE Band 25 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)									
				RSI=Rcv					RSI=Free, Hotspot				
				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	22.07	22.15	22.32	0.0	23.5	18.68	18.79	18.84	0.0	19.5
		1	49	22.07	22.21	**22.51**	0.0	23.5	18.28	18.79	**19.03**	0.0	19.5
		1	99	22.00	22.04	22.16	0.0	23.5	18.59	18.69	18.75	0.0	19.5
		50	0	21.10	21.19	**21.28**	1.0	22.5	18.67	18.77	**18.83**	0.0	19.5
		50	24	21.08	21.17	21.23	1.0	22.5	18.65	18.74	18.77	0.0	19.5
		50	50	21.06	21.14	21.23	1.0	22.5	18.63	18.71	18.78	0.0	19.5
		100	0	21.08	21.16	21.26	1.0	22.5	18.66	18.73	18.79	0.0	19.5
	16QAM	1	0	21.30	21.29	21.66	1.0	22.5	18.75	18.89	19.25	0.0	19.5
		1	49	21.18	21.11	21.70	1.0	22.5	18.67	18.74	19.32	0.0	19.5
		1	99	21.24	21.22	21.49	1.0	22.5	18.74	18.76	19.13	0.0	19.5
		50	0	20.12	20.21	20.27	2.0	21.5	18.67	18.75	18.83	0.0	19.5
		50	24	20.07	20.19	20.24	2.0	21.5	18.65	18.71	18.79	0.0	19.5
		50	50	20.12	20.20	20.24	2.0	21.5	18.66	18.68	18.79	0.0	19.5
		100	0	20.14	20.24	20.27	2.0	21.5	18.68	18.74	18.84	0.0	19.5
	64QAM	1	0	20.58	20.78	20.35	2.0	21.5	18.73	19.06	19.20	0.0	19.5
		1	49	20.71	20.73	20.16	2.0	21.5	18.64	19.08	19.34	0.0	19.5
		1	99	20.59	20.65	20.20	2.0	21.5	18.63	18.91	19.15	0.0	19.5
		50	0	19.22	19.28	19.40	3.0	20.5	18.79	18.83	18.89	0.0	19.5
		50	24	19.20	19.26	19.36	3.0	20.5	18.77	18.79	18.86	0.0	19.5
		50	50	19.20	19.23	19.33	3.0	20.5	18.76	18.75	18.83	0.0	19.5
		100	0	19.19	19.20	19.33	3.0	20.5	18.76	18.75	18.83	0.0	19.5
	256QAM	1	0	19.51	19.56	19.51	3.0	20.5	18.84	19.10	19.22	0.0	19.5
		1	49	19.36	19.70	19.67	3.0	20.5	18.99	19.24	18.99	0.0	19.5
		1	99	19.47	19.43	19.40	3.0	20.5	18.78	19.00	19.15	0.0	19.5
		50	0	17.16	17.27	17.34	5.0	18.5	17.27	17.33	17.33	1.0	18.5
		50	24	17.14	17.24	17.30	5.0	18.5	17.25	17.29	17.32	1.0	18.5
		50	50	17.12	17.20	17.28	5.0	18.5	17.23	17.25	17.29	1.0	18.5
		100	0	17.12	17.23	17.29	5.0	18.5	17.24	17.28	17.29	1.0	18.5
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	22.15	22.24	22.30	0.0	23.5	18.60	18.59	18.70	0.0	19.5
		1	37	22.06	22.34	22.39	0.0	23.5	18.42	18.65	18.73	0.0	19.5
		1	74	22.08	22.20	22.19	0.0	23.5	18.55	18.55	18.61	0.0	19.5
		36	0	21.15	21.25	21.24	1.0	22.5	18.56	18.61	18.66	0.0	19.5
		36	20	21.17	21.23	21.24	1.0	22.5	18.55	18.59	18.63	0.0	19.5
		36	39	21.17	21.21	21.23	1.0	22.5	18.55	18.59	18.64	0.0	19.5
		75	0	21.18	21.23	21.25	1.0	22.5	18.56	18.61	18.66	0.0	19.5
	16QAM	1	0	21.27	21.39	21.34	1.0	22.5	18.64	18.93	18.83	0.0	19.5
		1	37	21.39	21.44	21.39	1.0	22.5	18.65	18.91	18.83	0.0	19.5
		1	74	21.27	21.33	21.30	1.0	22.5	18.57	18.81	18.78	0.0	19.5
		36	0	20.15	20.31	20.31	2.0	21.5	18.57	18.62	18.70	0.0	19.5
		36	20	20.15	20.27	20.32	2.0	21.5	18.55	18.60	18.65	0.0	19.5
		36	39	20.17	20.27	20.30	2.0	21.5	18.55	18.59	18.63	0.0	19.5
		75	0	20.15	20.27	20.30	2.0	21.5	18.53	18.63	18.66	0.0	19.5
	64QAM	1	0	20.25	20.17	20.51	2.0	21.5	18.74	19.08	18.92	0.0	19.5
		1	37	20.25	20.09	20.49	2.0	21.5	18.69	19.12	18.91	0.0	19.5
		1	74	20.25	20.09	20.40	2.0	21.5	18.67	18.95	18.87	0.0	19.5
		36	0	19.04	19.17	19.17	3.0	20.5	18.69	18.73	18.67	0.0	19.5
		36	20	19.00	19.15	19.14	3.0	20.5	18.68	18.72	18.66	0.0	19.5
		36	39	18.98	19.13	19.10	3.0	20.5	18.66	18.68	18.63	0.0	19.5
		75	0	19.06	19.08	19.10	3.0	20.5	18.62	18.67	18.71	0.0	19.5
	256QAM	1	0	19.21	19.17	19.30	3.0	20.5	18.59	18.97	18.91	0.0	19.5
		1	37	19.20	19.04	19.00	3.0	20.5	18.43	18.75	18.92	0.0	19.5
		1	74	19.14	19.05	19.22	3.0	20.5	18.54	18.87	18.82	0.0	19.5
		36	0	17.03	17.11	17.16	5.0	18.5	17.11	17.22	17.19	1.0	18.5
		36	20	17.01	17.08	17.12	5.0	18.5	17.09	17.20	17.17	1.0	18.5
		36	39	16.99	17.06	17.08	5.0	18.5	17.09	17.16	17.13	1.0	18.5
		75	0	17.00	17.04	17.11	5.0	18.5	17.07	17.17	17.18	1.0	18.5

LTE Band 25 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	22.20	22.30	22.21	0.0	23.5	18.55	18.60	18.57	0.0	19.5
		1	25	22.23	22.23	22.09	0.0	23.5	18.47	18.61	18.48	0.0	19.5
		1	49	22.20	22.20	22.17	0.0	23.5	18.55	18.54	18.55	0.0	19.5
		25	0	21.23	21.25	21.20	1.0	22.5	18.59	18.59	18.59	0.0	19.5
		25	12	21.23	21.23	21.19	1.0	22.5	18.59	18.60	18.58	0.0	19.5
		25	25	21.19	21.21	21.18	1.0	22.5	18.56	18.56	18.56	0.0	19.5
		50	0	21.23	21.25	21.21	1.0	22.5	18.59	18.60	18.59	0.0	19.5
	16QAM	1	0	21.41	21.47	21.30	1.0	22.5	18.86	18.90	18.79	0.0	19.5
		1	25	21.28	21.37	21.27	1.0	22.5	18.58	18.49	18.66	0.0	19.5
		1	49	21.32	21.44	21.15	1.0	22.5	18.79	18.84	18.68	0.0	19.5
		25	0	20.32	20.33	20.25	2.0	21.5	18.62	18.63	18.63	0.0	19.5
		25	12	20.30	20.31	20.24	2.0	21.5	18.62	18.61	18.62	0.0	19.5
		25	25	20.32	20.28	20.24	2.0	21.5	18.59	18.58	18.60	0.0	19.5
		50	0	20.32	20.28	20.22	2.0	21.5	18.64	18.62	18.60	0.0	19.5
	64QAM	1	0	19.98	20.40	20.08	2.0	21.5	18.60	18.94	18.59	0.0	19.5
		1	25	19.85	20.33	20.12	2.0	21.5	18.59	18.83	18.65	0.0	19.5
		1	49	19.99	20.39	19.98	2.0	21.5	18.65	18.90	18.48	0.0	19.5
		25	0	19.17	19.13	19.13	3.0	20.5	18.72	18.72	18.67	0.0	19.5
		25	12	19.17	19.12	19.10	3.0	20.5	18.72	18.71	18.64	0.0	19.5
		25	25	19.14	19.10	19.09	3.0	20.5	18.70	18.68	18.63	0.0	19.5
		50	0	19.12	19.12	19.09	3.0	20.5	18.68	18.69	18.62	0.0	19.5
	256QAM	1	0	19.33	19.39	19.13	3.0	20.5	18.64	18.97	18.63	0.0	19.5
		1	25	19.45	19.45	19.00	3.0	20.5	18.78	19.06	18.41	0.0	19.5
		1	49	19.29	19.31	19.06	3.0	20.5	18.62	18.88	18.59	0.0	19.5
		25	0	17.14	17.13	17.18	5.0	18.5	17.20	17.23	17.23	1.0	18.5
		25	12	17.12	17.10	17.15	5.0	18.5	17.18	17.21	17.21	1.0	18.5
		25	25	17.10	17.08	17.14	5.0	18.5	17.14	17.19	17.19	1.0	18.5
		50	0	17.07	17.08	17.08	5.0	18.5	17.15	17.17	17.13	1.0	18.5

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	22.29	22.16	22.20	0.0	23.5	18.55	18.54	18.51	0.0	19.5
		1	12	22.37	22.23	22.28	0.0	23.5	18.62	18.45	18.60	0.0	19.5
		1	24	22.31	22.17	22.19	0.0	23.5	18.57	18.55	18.53	0.0	19.5
		12	0	21.34	21.20	21.25	1.0	22.5	18.62	18.56	18.56	0.0	19.5
		12	7	21.35	21.21	21.26	1.0	22.5	18.63	18.58	18.57	0.0	19.5
		12	13	21.32	21.21	21.24	1.0	22.5	18.62	18.55	18.57	0.0	19.5
		25	0	21.34	21.23	21.26	1.0	22.5	18.62	18.57	18.57	0.0	19.5
	16QAM	1	0	21.53	21.49	21.32	1.0	22.5	18.70	18.79	18.57	0.0	19.5
		1	12	21.58	21.47	21.44	1.0	22.5	18.66	18.79	18.64	0.0	19.5
		1	24	21.47	21.42	21.31	1.0	22.5	18.67	18.71	18.61	0.0	19.5
		12	0	20.33	20.28	20.23	2.0	21.5	18.61	18.57	18.57	0.0	19.5
		12	7	20.31	20.28	20.26	2.0	21.5	18.60	18.56	18.56	0.0	19.5
		12	13	20.28	20.25	20.25	2.0	21.5	18.63	18.56	18.56	0.0	19.5
		25	0	20.37	20.25	20.26	2.0	21.5	18.67	18.55	18.59	0.0	19.5
	64QAM	1	0	20.33	20.16	20.37	2.0	21.5	18.54	18.97	18.73	0.0	19.5
		1	12	20.37	20.17	20.26	2.0	21.5	18.55	18.92	18.81	0.0	19.5
		1	24	20.39	20.18	20.32	2.0	21.5	18.61	18.88	18.77	0.0	19.5
		12	0	19.11	19.14	19.01	3.0	20.5	18.72	18.64	18.55	0.0	19.5
		12	7	19.12	19.11	19.01	3.0	20.5	18.72	18.63	18.56	0.0	19.5
		12	13	19.08	19.11	19.02	3.0	20.5	18.72	18.63	18.52	0.0	19.5
		25	0	19.13	19.10	19.08	3.0	20.5	18.70	18.68	18.58	0.0	19.5
	256QAM	1	0	19.07	18.93	19.31	3.0	20.5	18.49	18.88	18.57	0.0	19.5
		1	12	18.98	18.84	19.29	3.0	20.5	18.54	18.91	18.54	0.0	19.5
		1	24	19.07	18.88	19.29	3.0	20.5	18.52	18.91	18.54	0.0	19.5
		12	0	17.18	17.14	17.09	5.0	18.5	17.26	17.18	17.09	1.0	18.5
		12	7	17.18	17.13	17.10	5.0	18.5	17.26	17.17	17.10	1.0	18.5
		12	13	17.14	17.12	17.06	5.0	18.5	17.25	17.16	17.07	1.0	18.5
		25	0	17.13	17.08	17.02	5.0	18.5	17.25	17.12	17.11	1.0	18.5

LTE Band 25 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	22.2	22.1	22.2	0.0	23.5	18.5	18.6	18.6	0.0	19.5
		1	8	22.1	22.2	22.3	0.0	23.5	18.6	18.6	18.4	0.0	19.5
		1	14	22.3	22.1	22.2	0.0	23.5	18.5	18.6	18.6	0.0	19.5
		8	0	21.2	21.2	21.1	1.0	22.5	18.6	18.5	18.6	0.0	19.5
		8	4	21.2	21.2	21.1	1.0	22.5	18.6	18.6	18.5	0.0	19.5
		8	7	21.2	21.2	21.1	1.0	22.5	18.6	18.6	18.5	0.0	19.5
		15	0	21.2	21.2	21.1	1.0	22.5	18.6	18.5	18.6	0.0	19.5
	16QAM	1	0	21.1	21.4	21.2	1.0	22.5	18.8	18.9	18.7	0.0	19.5
		1	8	21.2	21.5	21.3	1.0	22.5	18.8	18.9	18.7	0.0	19.5
		1	14	21.1	21.4	21.1	1.0	22.5	18.8	18.8	18.6	0.0	19.5
		8	0	20.3	20.4	20.2	2.0	21.5	18.8	18.6	18.6	0.0	19.5
		8	4	20.2	20.4	20.2	2.0	21.5	18.7	18.6	18.6	0.0	19.5
		8	7	20.3	20.4	20.2	2.0	21.5	18.8	18.6	18.6	0.0	19.5
		15	0	20.2	20.3	20.2	2.0	21.5	18.6	18.6	18.6	0.0	19.5
	64QAM	1	0	20.1	19.9	20.5	2.0	21.5	18.6	19.0	18.5	0.0	19.5
		1	8	20.0	20.0	20.6	2.0	21.5	18.6	19.1	18.4	0.0	19.5
		1	14	20.0	20.0	20.6	2.0	21.5	18.7	19.1	18.4	0.0	19.5
		8	0	19.2	19.1	19.2	3.0	20.5	18.7	18.8	18.6	0.0	19.5
		8	4	19.2	19.1	19.1	3.0	20.5	18.7	18.7	18.6	0.0	19.5
		8	7	19.2	19.1	19.1	3.0	20.5	18.7	18.7	18.6	0.0	19.5
		15	0	19.2	19.1	19.0	3.0	20.5	18.8	18.6	18.6	0.0	19.5
	256QAM	1	0	19.2	19.1	19.3	3.0	20.5	18.7	18.8	18.7	0.0	19.5
		1	8	19.2	19.2	19.1	3.0	20.5	18.6	18.5	18.8	0.0	19.5
		1	14	19.2	19.1	19.2	3.0	20.5	18.7	18.8	18.8	0.0	19.5
		8	0	17.2	17.1	17.1	5.0	18.5	17.3	17.2	17.1	1.0	18.5
		8	4	17.2	17.1	17.1	5.0	18.5	17.3	17.2	17.1	1.0	18.5
		8	7	17.2	17.1	17.1	5.0	18.5	17.3	17.2	17.1	1.0	18.5
		15	0	17.2	17.1	17.1	5.0	18.5	17.3	17.2	17.2	1.0	18.5

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	22.3	22.2	22.2	0.0	23.5	18.6	18.5	18.6	0.0	19.5
		1	3	22.2	22.2	22.2	0.0	23.5	18.4	18.4	18.6	0.0	19.5
		1	5	22.2	22.2	22.1	0.0	23.5	18.6	18.5	18.5	0.0	19.5
		3	0	22.3	22.3	22.1	0.0	23.5	18.6	18.5	18.5	0.0	19.5
		3	1	22.2	22.2	22.1	0.0	23.5	18.6	18.5	18.5	0.0	19.5
		3	3	22.2	22.1	22.0	0.0	23.5	18.5	18.5	18.5	0.0	19.5
		6	0	21.1	21.2	21.0	1.0	22.5	18.6	18.4	18.5	0.0	19.5
	16QAM	1	0	21.2	21.2	21.2	1.0	22.5	18.8	18.7	18.7	0.0	19.5
		1	3	21.3	21.3	21.3	1.0	22.5	18.8	18.6	18.8	0.0	19.5
		1	5	21.2	21.2	21.3	1.0	22.5	18.9	18.7	18.8	0.0	19.5
		3	0	21.3	21.3	21.1	1.0	22.5	18.6	18.5	18.6	0.0	19.5
		3	1	21.3	21.2	21.1	1.0	22.5	18.7	18.5	18.6	0.0	19.5
		3	3	21.3	21.3	21.0	1.0	22.5	18.5	18.4	18.6	0.0	19.5
		6	0	20.2	20.2	20.1	2.0	21.5	18.6	18.6	18.5	0.0	19.5
	64QAM	1	0	20.4	19.9	20.0	2.0	21.5	19.0	18.7	18.6	0.0	19.5
		1	3	20.4	20.2	19.7	2.0	21.5	19.0	18.9	18.3	0.0	19.5
		1	5	20.4	19.9	19.9	2.0	21.5	18.9	18.7	18.6	0.0	19.5
		3	0	20.2	20.0	20.3	2.0	21.5	18.8	18.6	18.8	0.0	19.5
		3	1	20.2	20.0	20.1	2.0	21.5	18.8	18.5	18.7	0.0	19.5
		3	3	20.2	19.9	20.2	2.0	21.5	18.7	18.4	18.8	0.0	19.5
		6	0	19.1	19.0	19.0	3.0	20.5	18.6	18.6	18.6	0.0	19.5
	256QAM	1	0	19.0	18.9	19.1	3.0	20.5	18.6	18.7	18.7	0.0	19.5
		1	3	19.3	18.9	19.2	3.0	20.5	18.8	18.6	18.8	0.0	19.5
		1	5	19.0	18.8	19.1	3.0	20.5	18.6	18.7	18.7	0.0	19.5
		3	0	19.0	19.1	19.0	3.0	20.5	18.7	18.8	18.6	0.0	19.5
		3	1	18.9	19.0	18.9	3.0	20.5	18.6	18.7	18.5	0.0	19.5
		3	3	18.9	19.0	18.8	3.0	20.5	18.6	18.6	18.5	0.5	19.0
		6	0	17.1	17.0	17.0	5.0	18.5	17.2	17.0	17.1	1.0	18.5

LTE Band 26 (Main.1) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				RSI=Free, Rcv, Hotspot				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				26765	26865	26965		
				821.5 MHz	831.5 MHz	841.5 MHz		
15 MHz	QPSK	1	0		23.84		0.0	24.5
		1	37		23.52		0.0	24.5
		1	74		23.70		0.0	24.5
		36	0		22.84		1.0	23.5
		36	20		22.81		1.0	23.5
		36	39		22.76		1.0	23.5
		75	0		22.81		1.0	23.5
	16QAM	1	0		23.09		1.0	23.5
		1	37		22.81		1.0	23.5
		1	74		22.91		1.0	23.5
		36	0		21.80		2.0	22.5
		36	20		21.77		2.0	22.5
		36	39		21.73		2.0	22.5
		75	0		21.77		2.0	22.5
	64QAM	1	0		22.04		2.0	22.5
		1	37		21.80		2.0	22.5
		1	74		21.88		2.0	22.5
		36	0		20.86		3.0	21.5
		36	20		20.81		3.0	21.5
		36	39		20.78		3.0	21.5
		75	0		20.75		3.0	21.5
	256QAM	1	0		20.95		3.0	21.5
		1	37		20.74		3.0	21.5
		1	74		20.79		3.0	21.5
		36	0		18.80		5.0	19.5
		36	20		18.75		5.0	19.5
		36	39		18.69		5.0	19.5
		75	0		18.74		5.0	19.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26740	26865	26990		
				819 MHz	831.5 MHz	844 MHz		
10 MHz	QPSK	1	0	23.63	23.84	23.69	0.0	24.5
		1	25	23.63	23.85	23.49	0.0	24.5
		1	49	23.55	23.72	23.64	0.0	24.5
		25	0	22.65	22.80	22.70	1.0	23.5
		25	12	22.64	22.77	22.66	1.0	23.5
		25	25	22.57	22.74	22.63	1.0	23.5
		50	0	22.60	22.78	22.67	1.0	23.5
	16QAM	1	0	22.87	23.14	23.08	1.0	23.5
		1	25	22.90	23.15	23.03	1.0	23.5
		1	49	22.74	23.05	22.93	1.0	23.5
		25	0	21.65	21.86	21.75	2.0	22.5
		25	12	21.63	21.87	21.72	2.0	22.5
		25	25	21.60	21.83	21.73	2.0	22.5
		50	0	21.65	21.81	21.69	2.0	22.5
	64QAM	1	0	22.07	22.12	22.14	2.0	22.5
		1	25	22.11	22.13	22.12	2.0	22.5
		1	49	21.98	22.02	21.94	2.0	22.5
		25	0	20.77	20.97	20.87	3.0	21.5
		25	12	20.77	20.93	20.83	3.0	21.5
		25	25	20.73	20.90	20.81	3.0	21.5
		50	0	20.74	20.90	20.82	3.0	21.5
	256QAM	1	0	20.73	21.16	21.02	3.0	21.5
		1	25	20.85	21.27	20.99	3.0	21.5
		1	49	20.65	21.06	20.91	3.0	21.5
		25	0	18.79	19.01	18.93	5.0	19.5
		25	12	18.82	19.00	18.96	5.0	19.5
		25	25	18.80	18.96	18.94	5.0	19.5
		50	0	18.80	18.95	18.90	5.0	19.5

LTE Band 26 (Main.1) 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	23.52	23.73	23.70	0.0	24.5
		1	12	23.38	23.72	23.71	0.0	24.5
		1	24	23.53	23.70	23.68	0.0	24.5
		12	0	22.57	22.77	22.67	1.0	23.5
		12	7	22.57	22.76	22.67	1.0	23.5
		12	13	22.57	22.74	22.63	1.0	23.5
		25	0	22.58	22.79	22.66	1.0	23.5
	16QAM	1	0	22.94	23.03	23.08	1.0	23.5
		1	12	22.75	23.01	22.98	1.0	23.5
		1	24	22.87	23.04	22.96	1.0	23.5
		12	0	21.63	21.85	21.71	2.0	22.5
		12	7	21.63	21.83	21.72	2.0	22.5
		12	13	21.60	21.81	21.71	2.0	22.5
		25	0	21.63	21.79	21.70	2.0	22.5
	64QAM	1	0	21.86	22.43	21.99	2.0	22.5
		1	12	21.86	22.27	21.95	2.0	22.5
		1	24	21.82	22.31	21.96	2.0	22.5
		12	0	20.72	20.91	20.85	3.0	21.5
		12	7	20.70	20.92	20.85	3.0	21.5
		12	13	20.70	20.90	20.81	3.0	21.5
		25	0	20.71	20.87	20.83	3.0	21.5
	256QAM	1	0	20.85	21.19	20.92	3.0	21.5
		1	12	20.83	21.17	20.65	3.0	21.5
		1	24	20.81	21.18	20.85	3.0	21.5
		12	0	18.75	18.98	18.86	5.0	19.5
		12	7	18.77	18.95	18.88	5.0	19.5
		12	13	18.76	18.91	18.83	5.0	19.5
		25	0	18.76	18.91	18.90	5.0	19.5

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	23.63	23.71	23.76	0.0	24.5
		1	8	23.48	23.64	23.72	0.0	24.5
		1	14	23.67	23.66	23.75	0.0	24.5
		8	0	22.62	22.77	22.70	1.0	23.5
		8	4	22.57	22.78	22.70	1.0	23.5
		8	7	22.56	22.75	22.72	1.0	23.5
		15	0	22.60	22.77	22.67	1.0	23.5
	16QAM	1	0	22.66	23.04	23.04	1.0	23.5
		1	8	22.64	23.04	22.99	1.0	23.5
		1	14	22.58	23.06	22.95	1.0	23.5
		8	0	21.62	21.89	21.74	2.0	22.5
		8	4	21.69	21.91	21.70	2.0	22.5
		8	7	21.63	21.95	21.69	2.0	22.5
		15	0	21.62	21.88	21.73	2.0	22.5
	64QAM	1	0	21.94	22.18	21.90	2.0	22.5
		1	8	21.83	22.10	21.83	2.0	22.5
		1	14	21.98	22.18	21.75	2.0	22.5
		8	0	20.71	21.01	20.87	3.0	21.5
		8	4	20.71	20.96	20.88	3.0	21.5
		8	7	20.70	20.98	20.88	3.0	21.5
		15	0	20.75	20.86	20.77	3.0	21.5
	256QAM	1	0	20.81	21.16	20.89	3.0	21.5
		1	8	20.79	21.04	20.89	3.0	21.5
		1	14	20.77	21.14	20.87	3.0	21.5
		8	0	18.79	19.00	18.85	5.0	19.5
		8	4	18.71	18.98	18.83	5.0	19.5
		8	7	18.74	18.96	18.75	5.0	19.5
		15	0	18.80	18.92	18.85	5.0	19.5

LTE Band 26 (Main.1) 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	23.7	23.8	23.8	0.0	24.5
		1	3	23.5	23.9	23.6	0.0	24.5
		1	5	23.7	23.8	23.7	0.0	24.5
		3	0	23.6	23.8	23.7	0.0	24.5
		3	1	23.6	23.9	23.7	0.0	24.5
		3	3	23.6	23.8	23.6	0.0	24.5
		6	0	22.6	22.8	22.7	1.0	23.5
	16QAM	1	0	22.7	23.0	22.9	1.0	23.5
		1	3	23.0	22.8	23.0	1.0	23.5
		1	5	22.8	23.0	23.0	1.0	23.5
		3	0	22.8	22.9	22.7	1.0	23.5
		3	1	22.6	22.8	22.7	1.0	23.5
		3	3	22.7	22.8	22.7	1.0	23.5
		6	0	21.7	21.9	21.7	2.0	22.5
	64QAM	1	0	21.7	22.1	22.1	2.0	22.5
		1	3	21.8	22.1	22.1	2.0	22.5
		1	5	21.8	22.1	22.0	2.0	22.5
		3	0	21.7	22.1	21.9	2.0	22.5
		3	1	21.7	22.1	21.8	2.0	22.5
		3	3	21.6	22.0	21.8	2.0	22.5
		6	0	20.7	20.9	20.8	3.0	21.5
	256QAM	1	0	20.8	20.8	20.9	3.0	21.5
		1	3	20.9	20.9	20.9	3.0	21.5
		1	5	20.8	20.9	20.9	3.0	21.5
		3	0	20.8	20.9	20.9	3.0	21.5
		3	1	20.7	20.9	20.8	3.0	21.5
		3	3	20.7	20.8	20.7	3.0	21.5
		6	0	18.6	18.8	18.9	5.0	19.5

LTE Band 26 (Sub.1) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Reduced Average Power (dBm) RCV back-off			MPR	Tune-up Limit
				RSI=Free, Rcv, Hotspot				
				Measured Pwr (dBm)				
				26765	26865	26965		
				821.5 MHz	831.5 MHz	841.5 MHz		
15 MHz	QPSK	1	0		17.96		0.0	19.0
		1	37		17.85		0.0	19.0
		1	74		17.79		0.0	19.0
		36	0		17.91		0.0	19.0
		36	20		17.87		0.0	19.0
		36	39		17.86		0.0	19.0
		75	0		17.87		0.0	19.0
	16QAM	1	0		18.00		0.0	19.0
		1	37		17.95		0.0	19.0
		1	74		17.89		0.0	19.0
		36	0		17.94		0.0	19.0
		36	20		17.89		0.0	19.0
		36	39		17.86		0.0	19.0
		75	0		17.86		0.0	19.0
	64QAM	1	0		17.96		0.0	19.0
		1	37		17.84		0.0	19.0
		1	74		17.80		0.0	19.0
		36	0		17.96		0.0	19.0
		36	20		17.93		0.0	19.0
		36	39		17.89		0.0	19.0
		75	0		17.84		0.0	19.0
	256QAM	1	0		18.03		0.0	19.0
		1	37		17.94		0.0	19.0
		1	74		17.89		0.0	19.0
		36	0		17.84		0.0	19.0
		36	20		17.80		0.0	19.0
		36	39		17.77		0.0	19.0
		75	0		17.81		0.0	19.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26740	26865	26990		
				819 MHz	831.5 MHz	844 MHz		
10 MHz	QPSK	1	0	17.91	17.85	17.81	0.0	19.0
		1	25	17.88	17.69	17.80	0.0	19.0
		1	49	17.80	17.78	17.75	0.0	19.0
		25	0	17.87	17.84	17.81	0.0	19.0
		25	12	17.85	17.83	17.79	0.0	19.0
		25	25	17.81	17.79	17.75	0.0	19.0
		50	0	17.84	17.83	17.79	0.0	19.0
	16QAM	1	0	18.17	18.20	18.25	0.0	19.0
		1	25	18.18	18.16	18.30	0.0	19.0
		1	49	18.12	18.08	18.10	0.0	19.0
		25	0	17.90	17.85	17.83	0.0	19.0
		25	12	17.88	17.82	17.80	0.0	19.0
		25	25	17.86	17.79	17.78	0.0	19.0
		50	0	17.84	17.81	17.81	0.0	19.0
	64QAM	1	0	17.86	18.35	17.99	0.0	19.0
		1	25	17.77	18.21	17.83	0.0	19.0
		1	49	17.72	18.28	17.97	0.0	19.0
		25	0	17.91	17.87	17.90	0.0	19.0
		25	12	17.90	17.85	17.90	0.0	19.0
		25	25	17.86	17.82	17.85	0.0	19.0
		50	0	17.85	17.83	17.83	0.0	19.0
	256QAM	1	0	18.15	18.14	17.99	0.0	19.0
		1	25	17.93	18.12	17.98	0.0	19.0
		1	49	18.05	18.06	17.86	0.0	19.0
		25	0	17.95	17.90	17.86	0.0	19.0
		25	12	17.92	17.88	17.84	0.0	19.0
		25	25	17.88	17.83	17.79	0.0	19.0
		50	0	17.85	17.84	17.79	0.0	19.0

LTE Band 26(Sub.1) 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	17.79	17.80	17.78	0.0	19.0
		1	12	17.75	17.62	17.76	0.0	19.0
		1	24	17.76	17.78	17.78	0.0	19.0
		12	0	17.77	17.81	17.80	0.0	19.0
		12	7	17.75	17.80	17.78	0.0	19.0
		12	13	17.74	17.79	17.78	0.0	19.0
		25	0	17.76	17.81	17.79	0.0	19.0
	16QAM	1	0	18.08	18.21	18.19	0.0	19.0
		1	12	17.99	18.01	18.15	0.0	19.0
		1	24	18.00	18.13	18.21	0.0	19.0
		12	0	17.79	17.86	17.83	0.0	19.0
		12	7	17.78	17.86	17.81	0.0	19.0
		12	13	17.79	17.84	17.80	0.0	19.0
		25	0	17.76	17.82	17.79	0.0	19.0
	64QAM	1	0	17.84	18.10	18.16	0.0	19.0
		1	12	17.79	18.12	18.09	0.0	19.0
		1	24	17.84	18.12	18.08	0.0	19.0
		12	0	17.84	17.80	17.83	0.0	19.0
		12	7	17.82	17.79	17.82	0.0	19.0
		12	13	17.83	17.77	17.80	0.0	19.0
		25	0	17.80	17.79	17.87	0.0	19.0
	256QAM	1	0	17.83	17.91	18.25	0.0	19.0
		1	12	17.73	17.72	18.13	0.0	19.0
		1	24	17.81	17.86	18.19	0.0	19.0
		12	0	17.78	17.78	17.88	0.0	19.0
		12	7	17.77	17.78	17.88	0.0	19.0
		12	13	17.77	17.75	17.82	0.0	19.0
		25	0	17.81	17.82	17.79	0.0	19.0

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	17.80	17.78	17.89	0.0	19.0
		1	8	17.58	17.67	17.87	0.0	19.0
		1	14	17.79	17.73	17.90	0.0	19.0
		8	0	17.73	17.81	17.83	0.0	19.0
		8	4	17.71	17.79	17.81	0.0	19.0
		8	7	17.74	17.79	17.81	0.0	19.0
		15	0	17.74	17.82	17.80	0.0	19.0
	16QAM	1	0	17.88	18.10	18.19	0.0	19.0
		1	8	17.79	18.06	18.12	0.0	19.0
		1	14	17.79	18.12	18.15	0.0	19.0
		8	0	17.82	17.92	17.81	0.0	19.0
		8	4	17.86	17.92	17.78	0.0	19.0
		8	7	17.82	17.91	17.75	0.0	19.0
		15	0	17.78	17.86	17.79	0.0	19.0
	64QAM	1	0	17.81	18.24	17.98	0.0	19.0
		1	8	17.70	18.13	17.85	0.0	19.0
		1	14	17.73	18.26	18.03	0.0	19.0
		8	0	17.79	17.96	17.83	0.0	19.0
		8	4	17.78	17.91	17.76	0.0	19.0
		8	7	17.78	17.92	17.81	0.0	19.0
		15	0	17.82	17.78	17.87	0.0	19.0
	256QAM	1	0	17.88	17.97	17.89	0.0	19.0
		1	8	17.85	17.85	17.71	0.0	19.0
		1	14	17.88	17.93	17.83	0.0	19.0
		8	0	17.84	17.90	17.95	0.0	19.0
		8	4	17.81	17.88	17.90	0.0	19.0
		8	7	17.79	17.85	17.95	0.0	19.0
		15	0	17.75	17.84	17.86	0.0	19.0

LTE Band 26(Sub.1) 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	17.7	17.8	17.8	0.0	19.0
		1	3	17.8	17.8	17.7	0.0	19.0
		1	5	17.7	17.8	17.8	0.0	19.0
		3	0	17.8	17.8	17.7	0.0	19.0
		3	1	17.76	17.8	17.7	0.0	19.0
		3	3	17.8	17.7	17.6	0.0	19.0
		6	0	17.8	17.8	17.8	0.0	19.0
	16QAM	1	0	17.9	17.9	18.1	0.0	19.0
		1	3	17.8	17.8	18.1	0.0	19.0
		1	5	18.0	17.9	18.1	0.0	19.0
		3	0	17.9	17.9	17.8	0.0	19.0
		3	1	17.9	17.9	17.9	0.0	19.0
		3	3	17.9	17.9	17.8	0.0	19.0
		6	0	17.9	17.9	17.8	0.0	19.0
	64QAM	1	0	18.0	17.6	18.0	0.0	19.0
		1	3	17.9	17.7	17.7	0.0	19.0
		1	5	17.9	17.7	17.7	0.0	19.0
		3	0	18.0	17.7	17.8	0.0	19.0
		3	1	17.9	17.7	17.8	0.0	19.0
		3	3	18.0	17.7	17.8	0.0	19.0
		6	0	17.8	17.8	17.7	0.0	19.0
	256QAM	1	0	17.9	18.0	17.9	0.0	19.0
		1	3	17.9	17.8	17.7	0.0	19.0
		1	5	17.9	17.9	17.9	0.0	19.0
		3	0	17.7	17.9	17.8	0.0	19.0
		3	1	17.7	17.9	17.8	0.0	19.0
		3	3	17.6	17.9	17.8	0.0	19.0
		6	0	17.7	17.8	17.8	0.0	19.0

LTE Band 41 (Power Class 3) (Main.2) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)							Reduced Average Power (dBm)						
				RSI=RCV							RSI=Free, Hotspot						
				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	22.55	22.53	22.83	22.75	22.56	0.0	23.5	20.96	21.11	21.31	21.28	20.90	0.0	21.5
		1	49	22.35	22.53	22.66	22.74	22.66	0.0	23.5	20.93	20.86	21.16	21.16	20.86	0.0	21.5
		1	99	22.63	22.61	22.78	22.72	22.53	0.0	23.5	20.99	21.05	21.15	21.30	20.89	0.0	21.5
		50	0	20.52	20.50	20.76	20.77	20.56	1.0	22.5	20.37	20.46	20.62	20.61	20.34	0.0	21.5
		50	24	20.54	20.58	20.81	20.80	20.51	1.0	22.5	20.33	20.44	20.63	20.59	20.32	0.0	21.5
		50	50	20.53	20.51	20.57	20.77	20.58	1.0	22.5	20.33	20.43	20.58	20.61	20.31	0.0	21.5
		100	0	20.52	20.61	20.72	20.64	20.55	1.0	22.5	20.35	20.43	20.58	20.62	20.32	0.0	21.5
	16QAM	1	0	20.91	20.61	20.53	20.77	20.74	1.0	22.5	20.75	20.70	20.68	20.40	20.49	0.0	21.5
		1	49	20.68	21.13	20.71	20.90	20.68	1.0	22.5	20.45	20.60	20.76	20.72	20.29	0.0	21.5
		1	99	20.78	20.61	20.87	20.77	20.73	1.0	22.5	20.36	20.40	20.52	20.78	20.45	0.0	21.5
		50	0	20.04	20.13	20.22	20.18	19.98	2.0	21.5	19.90	20.00	20.16	20.11	19.83	0.0	21.5
		50	24	20.00	20.10	20.20	20.19	19.98	2.0	21.5	19.88	19.93	20.14	20.08	19.85	0.0	21.5
		50	50	20.02	20.10	20.18	20.19	19.98	2.0	21.5	19.85	19.94	20.12	20.08	19.83	0.0	21.5
		100	0	20.01	20.11	20.21	20.16	20.02	2.0	21.5	19.85	19.97	20.11	20.09	19.83	0.0	21.5
	64QAM	1	0	20.24	20.16	20.20	20.08	19.99	2.0	21.5	19.47	20.07	20.28	20.03	19.73	0.0	21.5
		1	49	20.03	20.15	20.04	20.02	19.78	2.0	21.5	19.84	19.57	20.07	19.92	19.46	0.0	21.5
		1	99	19.92	20.05	20.13	19.98	19.68	2.0	21.5	19.44	20.00	20.06	20.33	19.38	0.0	21.5
		50	0	19.52	19.61	19.75	19.65	19.50	3.0	20.5	19.37	19.42	19.59	19.56	19.24	1.0	20.5
		50	24	19.57	19.54	19.66	19.64	19.47	3.0	20.5	19.30	19.40	19.58	19.54	19.22	1.0	20.5
		50	50	19.53	19.56	19.69	19.66	19.48	3.0	20.5	19.32	19.41	19.58	19.55	19.21	1.0	20.5
		100	0	19.51	19.56	19.64	19.61	19.44	3.0	20.5	19.35	19.37	19.59	19.55	19.24	1.0	20.5
	256QAM	1	0	19.65	19.94	19.79	19.81	19.70	3.0	20.5	19.45	19.33	19.87	19.57	19.28	1.0	20.5
		1	49	19.51	19.54	19.75	19.63	19.70	3.0	20.5	19.26	19.39	19.39	19.40	19.16	1.0	20.5
		1	99	19.53	19.84	20.04	19.39	19.45	3.0	20.5	19.25	19.27	19.51	19.58	19.38	1.0	20.5
		50	0	17.52	17.59	17.66	17.65	17.46	5.0	18.5	17.38	17.40	17.58	17.58	17.23	3.0	18.5
		50	24	17.51	17.55	17.65	17.62	17.45	5.0	18.5	17.36	17.35	17.51	17.53	17.20	3.0	18.5
		50	50	17.53	17.54	17.62	17.64	17.44	5.0	18.5	17.32	17.35	17.52	17.53	17.21	3.0	18.5
		100	0	17.50	17.59	17.65	17.66	17.45	5.0	18.5	17.35	17.36	17.51	17.55	17.21	3.0	18.5
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		
15 MHz	QPSK	1	0	22.42	22.59	22.69	22.71	22.49	0.0	23.5	21.15	21.23	21.35	21.41	21.14	0.0	21.5
		1	37	22.52	22.77	23.09	23.04	22.67	0.0	23.5	21.17	21.28	21.39	21.48	21.18	0.0	21.5
		1	74	22.37	22.43	22.62	22.75	22.46	0.0	23.5	21.07	21.19	21.38	21.44	21.11	0.0	21.5
		36	0	20.53	20.60	20.66	20.60	20.52	1.0	22.5	20.51	20.61	20.76	20.83	20.53	0.0	21.5
		36	20	20.51	20.56	20.70	20.65	20.50	1.0	22.5	20.52	20.60	20.74	20.83	20.54	0.0	21.5
		36	39	20.52	20.59	20.69	20.57	20.50	1.0	22.5	20.48	20.56	20.71	20.79	20.52	0.0	21.5
		75	0	20.50	20.55	20.63	20.69	20.51	1.0	22.5	20.50	20.59	20.77	20.83	20.53	0.0	21.5
	16QAM	1	0	20.73	20.54	20.51	20.55	20.53	1.0	22.5	20.80	20.26	20.83	20.78	20.58	0.0	21.5
		1	37	20.56	20.75	20.94	20.57	20.51	1.0	22.5	20.79	20.21	20.50	20.81	19.70	0.0	21.5
		1	74	20.57	20.58	20.75	20.98	20.57	1.0	22.5	20.80	20.36	20.73	20.80	20.36	0.0	21.5
		36	0	19.96	20.00	20.23	20.20	19.95	2.0	21.5	20.26	20.10	20.28	20.34	20.06	0.0	21.5
		36	20	19.96	19.98	20.22	20.15	19.94	2.0	21.5	20.28	20.08	20.25	20.29	20.05	0.0	21.5
		36	39	19.97	20.01	20.15	20.16	19.95	2.0	21.5	20.28	20.05	20.27	20.27	20.02	0.0	21.5
		75	0	19.93	20.01	20.20	20.21	20.01	2.0	21.5	20.27	20.09	20.28	20.33	20.04	0.0	21.5
	64QAM	1	0	20.24	20.28	20.07	20.18	19.54	2.0	21.5	20.20	20.34	20.07	20.56	20.12	0.0	21.5
		1	37	20.51	20.20	20.31	19.94	19.66	2.0	21.5	19.93	20.39	19.88	20.40	20.13	0.0	21.5
		1	74	19.62	19.97	19.93	19.73	19.54	2.0	21.5	20.19	19.54	20.23	20.26	19.93	0.0	21.5
		36	0	19.43	19.49	19.67	19.75	19.49	3.0	20.5	19.50	19.61	19.80	19.78	19.51	1.0	20.5
		36	20	19.46	19.56	19.67	19.68	19.49	3.0	20.5	19.43	19.63	19.76	19.80	19.51	1.0	20.5
		36	39	19.46	19.59	19.64	19.65	19.54	3.0	20.5	19.47	19.56	19.80	19.75	19.54	1.0	20.5
		75	0	19.43	19.54	19.67	19.65	19.45	3.0	20.5	19.51	19.55	19.72	19.79	19.48	1.0	20.5
	256QAM	1	0	19.51	19.39	19.66	19.68	19.38	3.0	20.5	19.73	19.31	19.77	19.90	19.36	1.0	20.5
		1	37	19.04	19.41	19.93	19.78	19.41	3.0	20.5	19.65	19.49	19.76	19.65	19.48	1.0	20.5
		1	74	19.37	19.37	19.33	19.61	19.17	3.0	20.5	19.04	19.04	20.02	19.46	19.41	1.0	20.5
		36	0	17.45	17.57	17.76	17.62	17.45	5.0	18.5	17.48	17.59	17.79	17.83	17.47	3.0	18.5
		36	20	17.51	17.58	17.73	17.63	17.41	5.0	18.5	17.43	17.57	17.77	17.76	17.48	3.0	18.5
		36	39	17.49	17.56	17.68	17.64	17.38	5.0	18.5	17.46	17.55	17.72	17.75	17.42	3.0	18.5
		75	0	17.49	17.57	17.73	17.63	17.38	5.0	18.5	17.47	17.53	17.75	17.80	17.43	3.0	18.5

LTE Band 41 (Power Class 3) (Main.2) 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	22.40	22.55	22.63	22.66	22.46	0.0	23.5	21.08	21.22	21.38	21.37	21.12	0.0	21.5
		1	25	22.36	22.57	22.69	22.67	22.45	0.0	23.5	20.97	21.20	21.40	21.31	21.14	0.0	21.5
		1	49	22.34	22.48	22.64	22.58	22.33	0.0	23.5	21.01	21.20	21.32	21.31	21.14	0.0	21.5
		25	0	20.53	20.53	20.56	20.57	20.73	1.0	22.5	20.49	20.59	20.76	20.78	20.54	0.0	21.5
		25	12	20.55	20.52	20.59	20.57	20.51	1.0	22.5	20.49	20.58	20.76	20.79	20.54	0.0	21.5
		25	25	20.54	20.50	20.59	20.58	20.50	1.0	22.5	20.46	20.57	20.73	20.76	20.52	0.0	21.5
		50	0	20.52	20.56	20.58	20.63	20.53	1.0	22.5	20.48	20.57	20.75	20.79	20.54	0.0	21.5
	16QAM	1	0	20.52	20.50	20.56	20.65	20.68	1.0	22.5	20.60	20.57	20.76	20.90	20.50	0.0	21.5
		1	25	20.71	20.62	20.74	20.54	20.76	1.0	22.5	20.85	20.76	20.99	21.17	20.72	0.0	21.5
		1	49	20.50	20.57	20.55	20.50	20.61	1.0	22.5	20.63	20.50	20.76	20.94	20.45	0.0	21.5
		25	0	19.85	19.94	20.10	20.05	19.81	2.0	21.5	20.04	20.10	20.25	20.29	20.05	0.0	21.5
		25	12	19.90	19.96	20.10	20.07	19.83	2.0	21.5	20.04	20.08	20.24	20.29	20.03	0.0	21.5
		25	25	19.87	19.96	20.10	20.06	19.84	2.0	21.5	20.02	20.06	20.21	20.27	20.01	0.0	21.5
		50	0	19.90	19.98	20.14	20.11	19.91	2.0	21.5	20.03	20.07	20.23	20.26	20.04	0.0	21.5
	64QAM	1	0	19.99	20.02	20.21	20.23	19.92	2.0	21.5	20.13	19.91	20.21	20.38	19.78	0.0	21.5
		1	25	19.98	20.02	20.35	20.17	20.00	2.0	21.5	20.30	20.03	20.22	20.50	19.90	0.0	21.5
		1	49	19.78	19.92	20.21	20.08	19.78	2.0	21.5	20.07	19.81	20.23	20.32	19.76	0.0	21.5
		25	0	19.40	19.50	19.69	19.64	19.38	3.0	20.5	19.55	19.63	19.73	19.78	19.56	1.0	20.5
		25	12	19.40	19.50	19.67	19.65	19.35	3.0	20.5	19.54	19.60	19.69	19.77	19.52	1.0	20.5
		25	25	19.36	19.48	19.68	19.64	19.37	3.0	20.5	19.53	19.60	19.69	19.77	19.54	1.0	20.5
		50	0	19.37	19.52	19.66	19.59	19.34	3.0	20.5	19.53	19.60	19.73	19.76	19.53	1.0	20.5
	256QAM	1	0	19.24	19.31	19.61	19.68	19.34	3.0	20.5	19.39	19.73	19.71	19.64	19.65	1.0	20.5
		1	25	19.37	19.43	19.60	19.54	19.39	3.0	20.5	19.43	19.85	19.89	19.67	19.83	1.0	20.5
		1	49	19.21	19.21	19.47	19.47	19.27	3.0	20.5	19.37	19.68	19.67	19.62	19.61	1.0	20.5
		25	0	17.42	17.50	17.64	17.65	17.37	5.0	18.5	17.54	17.59	17.78	17.77	17.51	3.0	18.5
		25	12	17.42	17.50	17.66	17.63	17.37	5.0	18.5	17.52	17.54	17.76	17.76	17.47	3.0	18.5
		25	25	17.42	17.52	17.65	17.67	17.35	5.0	18.5	17.50	17.55	17.74	17.76	17.48	3.0	18.5
		50	0	17.41	17.55	17.67	17.67	17.38	5.0	18.5	17.50	17.59	17.71	17.71	17.52	3.0	18.5
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		
5 MHz	QPSK	1	0	22.55	22.67	22.68	22.81	22.45	0.0	23.5	21.02	21.13	21.31	21.36	21.09	0.0	21.5
		1	12	22.59	22.75	22.81	22.98	22.57	0.0	23.5	20.92	21.06	21.32	21.29	21.21	0.0	21.5
		1	24	22.49	22.51	22.66	22.71	22.36	0.0	23.5	20.98	21.06	21.26	21.31	21.05	0.0	21.5
		12	0	20.53	20.56	20.57	20.58	20.51	1.0	22.5	20.41	20.51	20.69	20.73	20.48	0.0	21.5
		12	7	20.58	20.57	20.60	20.60	20.53	1.0	22.5	20.43	20.53	20.67	20.74	20.47	0.0	21.5
		12	13	20.55	20.58	20.58	20.59	20.50	1.0	22.5	20.41	20.49	20.67	20.73	20.47	0.0	21.5
		25	0	20.50	20.54	20.65	20.71	20.57	1.0	22.5	20.45	20.52	20.71	20.72	20.51	0.0	21.5
	16QAM	1	0	20.53	20.72	20.55	20.54	20.90	1.0	22.5	20.39	20.58	20.73	20.67	20.64	0.0	21.5
		1	12	20.64	20.98	20.53	20.64	20.57	1.0	22.5	20.22	20.55	20.66	20.69	20.62	0.0	21.5
		1	24	20.50	20.85	20.69	20.57	20.92	1.0	22.5	20.44	20.60	20.69	20.73	20.67	0.0	21.5
		12	0	19.95	20.10	20.15	20.15	20.68	2.0	21.5	19.89	20.02	20.20	20.19	19.96	0.0	21.5
		12	7	19.99	20.09	20.16	20.20	19.87	2.0	21.5	19.86	20.01	20.19	20.19	20.00	0.0	21.5
		12	13	19.92	20.02	20.13	20.16	19.82	2.0	21.5	19.87	20.00	20.18	20.16	19.96	0.0	21.5
		25	0	19.91	20.02	20.13	20.16	19.86	2.0	21.5	19.95	20.03	20.25	20.18	20.04	0.0	21.5
	64QAM	1	0	19.88	20.13	20.17	20.43	19.82	2.0	21.5	19.91	20.02	20.21	20.22	20.05	0.0	21.5
		1	12	20.05	20.17	20.30	20.10	20.16	2.0	21.5	19.91	20.02	20.05	20.32	20.07	0.0	21.5
		1	24	19.96	20.05	20.13	20.26	19.60	2.0	21.5	19.98	19.94	20.09	20.29	19.97	0.0	21.5
		12	0	19.40	19.48	19.57	19.72	19.30	3.0	20.5	19.52	19.51	19.69	19.80	19.47	1.0	20.5
		12	7	19.35	19.49	19.59	19.70	19.30	3.0	20.5	19.53	19.52	19.72	19.80	19.48	1.0	20.5
		12	13	19.38	19.47	19.57	19.68	19.28	3.0	20.5	19.52	19.52	19.70	19.79	19.44	1.0	20.5
		25	0	19.44	19.52	19.66	19.72	19.37	3.0	20.5	19.46	19.64	19.63	19.72	19.54	1.0	20.5
	256QAM	1	0	19.51	19.67	19.75	19.72	19.43	3.0	20.5	19.51	19.72	19.90	19.76	19.49	1.0	20.5
		1	12	19.59	19.83	19.94	19.89	19.74	3.0	20.5	19.33	19.78	19.93	19.61	19.48	1.0	20.5
		1	24	19.52	19.65	19.76	19.71	19.40	3.0	20.5	19.51	19.71	19.85	19.74	19.52	1.0	20.5
		12	0	17.40	17.48	17.60	17.71	17.30	5.0	18.5	17.50	17.55	17.70	17.78	17.45	3.0	18.5
		12	7	17.44	17.47	17.63	17.66	17.31	5.0	18.5	17.48	17.57	17.68	17.76	17.45	3.0	18.5
		12	13	17.39	17.46	17.56	17.69	17.30	5.0	18.5	17.46	17.52	17.68	17.73	17.44	3.0	18.5
		25	0	17.38	17.44	17.59	17.67	17.28	5.0	18.5	17.44	17.54	17.65	17.69	17.45	3.0	18.5

LTE Band 41 (Power Class 2) (Main.2) Measured Results (Continued)

RSI	Modulation	BW (MHz)	Channel	Freq. (MHz)	RB/Offset	Output Power (dBm)	
						Tune-up Limit	Meas. Power
RCV	QPSK	20	40620	2593.0	1/0	26.00	24.96
Free, Hotspot	QPSK	20	40620	2593.0	1/0	23.60	22.95

LTE Band 66 (Main.1) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)									
				RSI=Rcv					RSI=Free, Hotspot				
				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	22.63	22.37	22.35	0.0	23.5	17.49	17.33	17.23	0.0	19.0
		1	49	22.46	21.90	22.38	0.0	23.5	17.43	16.98	17.17	0.0	19.0
		1	99	22.31	22.19	22.13	0.0	23.5	17.24	17.20	17.05	0.0	19.0
		50	0	21.46	21.32	21.25	1.0	22.5	17.33	17.32	17.23	0.0	19.0
		50	24	21.42	21.27	21.19	1.0	22.5	17.30	17.29	17.18	0.0	19.0
		50	50	21.34	21.27	21.14	1.0	22.5	17.29	17.26	17.17	0.0	19.0
		100	0	21.38	21.28	21.19	1.0	22.5	17.30	17.29	17.20	0.0	19.0
	16QAM	1	0	21.87	21.62	21.65	1.0	22.5	17.73	17.80	17.52	0.0	19.0
		1	49	21.69	21.51	21.39	1.0	22.5	17.62	17.61	17.49	0.0	19.0
		1	99	21.71	21.50	21.44	1.0	22.5	17.64	17.68	17.32	0.0	19.0
		50	0	20.44	20.36	20.28	2.0	21.5	17.30	17.34	17.23	0.0	19.0
		50	24	20.43	20.35	20.22	2.0	21.5	17.27	17.31	17.17	0.0	19.0
		50	50	20.35	20.30	20.20	2.0	21.5	17.25	17.26	17.19	0.0	19.0
		100	0	20.43	20.37	20.26	2.0	21.5	17.31	17.29	17.19	0.0	19.0
	64QAM	1	0	20.90	20.60	20.51	2.0	21.5	17.57	17.61	17.39	0.0	19.0
		1	49	20.98	20.53	20.45	2.0	21.5	17.52	17.73	17.58	0.0	19.0
		1	99	20.72	20.47	20.41	2.0	21.5	17.48	17.54	17.27	0.0	19.0
		50	0	19.57	20.50	20.42	3.0	20.5	17.41	17.41	17.29	0.0	19.0
		50	24	19.55	20.49	20.46	3.0	20.5	17.36	17.39	17.27	0.0	19.0
		50	50	19.54	20.49	20.42	3.0	20.5	17.39	17.34	17.24	0.0	19.0
		100	0	19.53	20.50	20.44	3.0	20.5	17.40	17.38	17.23	0.0	19.0
	256QAM	1	0	19.84	19.69	19.57	3.0	20.5	17.60	17.69	17.56	0.0	19.0
		1	49	19.73	19.82	19.68	3.0	20.5	17.60	17.48	17.68	0.0	19.0
		1	99	19.75	19.59	19.38	3.0	20.5	17.48	17.55	17.38	0.0	19.0
		50	0	17.50	17.45	17.34	4.5	19.0	17.33	17.29	17.20	0.0	19.0
		50	24	17.47	17.40	17.32	4.5	19.0	17.29	17.24	17.19	0.0	19.0
		50	50	17.43	17.39	17.29	4.5	19.0	17.27	17.23	17.12	0.0	19.0
		100	0	17.46	17.42	17.33	4.5	19.0	17.30	17.24	17.17	0.0	19.0
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				132047	132322	132597			132047	132322	132597		
				1717.5 MHz	1745 MHz	1772.5 MHz			1717.5 MHz	1745 MHz	1772.5 MHz		
15 MHz	QPSK	1	0	22.71	22.65	22.53	0.0	23.5	17.32	17.26	17.22	0.0	19.0
		1	37	22.65	22.70	22.57	0.0	23.5	17.18	17.30	17.23	0.0	19.0
		1	74	22.62	22.57	22.41	0.0	23.5	17.25	17.17	17.09	0.0	19.0
		36	0	21.74	21.63	21.52	1.0	22.5	17.34	17.26	17.15	0.0	19.0
		36	20	21.71	21.61	21.47	1.0	22.5	17.32	17.24	17.13	0.0	19.0
		36	39	21.68	21.64	21.49	1.0	22.5	17.30	17.22	17.13	0.0	19.0
		75	0	21.71	21.66	21.51	1.0	22.5	17.33	17.26	17.18	0.0	19.0
	16QAM	1	0	21.74	21.82	21.59	1.0	22.5	17.61	17.72	17.49	0.0	19.0
		1	37	21.79	21.87	21.62	1.0	22.5	17.62	17.71	17.53	0.0	19.0
		1	74	21.67	21.74	21.49	1.0	22.5	17.56	17.60	17.38	0.0	19.0
		36	0	20.73	20.68	20.54	2.0	21.5	17.34	17.28	17.22	0.0	19.0
		36	20	20.71	20.67	20.52	2.0	21.5	17.32	17.26	17.18	0.0	19.0
		36	39	20.69	20.66	20.53	2.0	21.5	17.31	17.23	17.18	0.0	19.0
		75	0	20.69	20.69	20.54	2.0	21.5	17.36	17.24	17.19	0.0	19.0
	64QAM	1	0	20.77	21.06	20.83	2.0	21.5	17.61	17.47	17.33	0.0	19.0
		1	37	20.78	21.03	20.78	2.0	21.5	17.40	17.45	17.33	0.0	19.0
		1	74	20.62	20.93	20.73	2.0	21.5	17.63	17.36	17.19	0.0	19.0
		36	0	19.92	19.84	19.63	3.0	20.5	17.33	17.38	17.29	0.0	19.0
		36	20	19.97	19.84	19.60	3.0	20.5	17.33	17.34	17.29	0.0	19.0
		36	39	19.92	19.80	19.61	3.0	20.5	17.32	17.31	17.25	0.0	19.0
		75	0	19.88	19.84	19.69	3.0	20.5	17.39	17.36	17.21	0.0	19.0
	256QAM	1	0	19.99	19.97	19.86	3.0	20.5	17.58	17.53	17.20	0.0	19.0
		1	37	19.86	19.83	19.85	3.0	20.5	17.55	17.43	17.08	0.0	19.0
		1	74	19.88	19.85	19.72	3.0	20.5	17.48	17.41	17.09	0.0	19.0
		36	0	17.86	17.82	17.60	4.5	19.0	17.27	17.29	17.13	0.0	19.0
		36	20	17.83	17.81	17.59	4.5	19.0	17.26	17.27	17.10	0.0	19.0
		36	39	17.81	17.79	17.60	4.5	19.0	17.25	17.25	17.07	0.0	19.0
		75	0	17.81	17.80	17.64	4.5	19.0	17.28	17.26	17.09	0.0	19.0

LTE Band 66 (Main.1) 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	22.77	22.73	22.51	0.0	23.5	17.31	17.30	17.14	0.0	19.0
		1	25	22.81	22.63	22.30	0.0	23.5	17.36	17.39	17.05	0.0	19.0
		1	49	22.73	22.62	22.44	0.0	23.5	17.29	17.24	17.09	0.0	19.0
		25	0	21.75	21.69	21.51	1.0	22.5	17.32	17.35	17.15	0.0	19.0
		25	12	21.74	21.66	21.50	1.0	22.5	17.32	17.30	17.12	0.0	19.0
		25	25	21.72	21.65	21.50	1.0	22.5	17.29	17.30	17.08	0.0	19.0
		50	0	21.75	21.67	21.51	1.0	22.5	17.31	17.29	17.13	0.0	19.0
	16QAM	1	0	21.85	21.82	21.63	1.0	22.5	17.48	17.62	17.53	0.0	19.0
		1	25	21.77	21.69	21.40	1.0	22.5	17.56	17.74	17.48	0.0	19.0
		1	49	21.76	21.80	21.53	1.0	22.5	17.39	17.60	17.38	0.0	19.0
		25	0	20.81	20.75	20.62	2.0	21.5	17.37	17.35	17.20	0.0	19.0
		25	12	20.80	20.73	20.59	2.0	21.5	17.37	17.33	17.17	0.0	19.0
		25	25	20.80	20.71	20.58	2.0	21.5	17.34	17.31	17.15	0.0	19.0
		50	0	20.82	20.74	20.56	2.0	21.5	17.33	17.32	17.15	0.0	19.0
	64QAM	1	0	20.87	20.96	20.77	2.0	21.5	17.45	17.55	17.16	0.0	19.0
		1	25	20.62	20.75	20.90	2.0	21.5	17.62	17.46	17.07	0.0	19.0
		1	49	20.83	20.96	20.63	2.0	21.5	17.34	17.55	17.16	0.0	19.0
		25	0	19.94	19.85	19.75	3.0	20.5	17.40	17.35	17.21	0.0	19.0
		25	12	19.95	19.85	19.74	3.0	20.5	17.39	17.32	17.20	0.0	19.0
		25	25	19.93	19.88	19.72	3.0	20.5	17.39	17.34	17.17	0.0	19.0
		50	0	19.97	19.88	19.71	3.0	20.5	17.37	17.37	17.21	0.0	19.0
	256QAM	1	0	19.92	19.98	19.67	3.0	20.5	17.58	17.53	17.12	0.0	19.0
		1	25	20.09	20.13	19.45	3.0	20.5	17.55	17.45	17.26	0.0	19.0
		1	49	19.84	19.93	19.57	3.0	20.5	17.52	17.36	17.06	0.0	19.0
		25	0	17.97	17.90	17.80	4.5	19.0	17.40	17.33	17.14	0.0	19.0
		25	12	17.95	17.86	17.77	4.5	19.0	17.41	17.31	17.12	0.0	19.0
		25	25	17.93	17.85	17.75	4.5	19.0	17.35	17.26	17.08	0.0	19.0
		50	0	17.89	17.82	17.69	4.5	19.0	17.28	17.24	17.06	0.0	19.0
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	22.71	22.71	22.53	0.0	23.5	17.35	17.30	17.13	0.0	19.0
		1	12	22.77	22.76	22.56	0.0	23.5	17.40	17.28	17.11	0.0	19.0
		1	24	22.77	22.71	22.51	0.0	23.5	17.33	17.28	17.11	0.0	19.0
		12	0	21.81	21.75	21.56	1.0	22.5	17.35	17.33	17.16	0.0	19.0
		12	7	21.82	21.76	21.57	1.0	22.5	17.37	17.33	17.15	0.0	19.0
		12	13	21.81	21.74	21.56	1.0	22.5	17.37	17.32	17.13	0.0	19.0
		25	0	21.84	21.76	21.58	1.0	22.5	17.35	17.34	17.16	0.0	19.0
	16QAM	1	0	21.95	21.84	21.71	1.0	22.5	17.63	17.71	17.52	0.0	19.0
		1	12	21.98	21.88	21.84	1.0	22.5	17.60	17.69	17.50	0.0	19.0
		1	24	21.90	21.78	21.72	1.0	22.5	17.60	17.69	17.51	0.0	19.0
		12	0	20.88	20.77	20.57	2.0	21.5	17.39	17.39	17.25	0.0	19.0
		12	7	20.87	20.79	20.56	2.0	21.5	17.37	17.37	17.25	0.0	19.0
		12	13	20.89	20.76	20.54	2.0	21.5	17.36	17.37	17.24	0.0	19.0
		25	0	20.91	20.78	20.61	2.0	21.5	17.36	17.35	17.19	0.0	19.0
	64QAM	1	0	21.16	20.96	20.79	2.0	21.5	17.55	17.69	17.38	0.0	19.0
		1	12	21.06	21.03	20.84	2.0	21.5	17.62	17.72	17.35	0.0	19.0
		1	24	21.08	20.96	20.82	2.0	21.5	17.56	17.64	17.37	0.0	19.0
		12	0	19.90	19.76	19.76	3.0	20.5	17.37	17.31	17.18	0.0	19.0
		12	7	19.91	19.81	19.73	3.0	20.5	17.38	17.35	17.15	0.0	19.0
		12	13	19.92	19.73	19.74	3.0	20.5	17.34	17.32	17.13	0.0	19.0
		25	0	19.99	19.84	19.70	3.0	20.5	17.41	17.36	17.17	0.0	19.0
	256QAM	1	0	20.29	19.96	19.67	3.0	20.5	17.62	17.59	17.02	0.0	19.0
		1	12	20.19	19.88	19.68	3.0	20.5	17.56	17.65	17.05	0.0	19.0
		1	24	20.22	19.91	19.63	3.0	20.5	17.54	17.58	17.01	0.0	19.0
		12	0	17.99	17.84	17.74	4.5	19.0	17.33	17.33	17.14	0.0	19.0
		12	7	17.98	17.89	17.73	4.5	19.0	17.35	17.32	17.14	0.0	19.0
		12	13	18.00	17.83	17.73	4.5	19.0	17.32	17.30	17.13	0.0	19.0
		25	0	17.95	17.87	17.69	4.5	19.0	17.33	17.26	17.12	0.0	19.0

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

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up 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	22.84	22.64	22.58	0.0	23.5	17.37	17.42	17.25	0.0	19.0
		1	8	22.66	22.70	22.63	0.0	23.5	17.44	17.14	17.29	0.0	19.0
		1	14	22.88	22.57	22.57	0.0	23.5	17.34	17.44	17.27	0.0	19.0
		8	0	21.80	21.68	21.52	1.0	22.5	17.43	17.37	17.19	0.0	19.0
		8	4	21.80	21.68	21.52	1.0	22.5	17.40	17.34	17.19	0.0	19.0
		8	7	21.79	21.65	21.54	1.0	22.5	17.39	17.30	17.23	0.0	19.0
		15	0	21.79	21.68	21.52	1.0	22.5	17.43	17.35	17.19	0.0	19.0
	16QAM	1	0	21.87	21.99	21.56	1.0	22.5	17.71	17.40	17.51	0.0	19.0
		1	8	21.91	22.00	21.63	1.0	22.5	17.72	17.44	17.54	0.0	19.0
		1	14	21.78	22.01	21.46	1.0	22.5	17.74	17.30	17.41	0.0	19.0
		8	0	20.85	20.85	20.53	2.0	21.5	17.46	17.42	17.25	0.0	19.0
		8	4	20.86	20.80	20.48	2.0	21.5	17.43	17.40	17.20	0.0	19.0
		8	7	20.89	20.83	20.53	2.0	21.5	17.42	17.38	17.18	0.0	19.0
		15	0	20.81	20.70	20.61	2.0	21.5	17.43	17.34	17.24	0.0	19.0
	64QAM	1	0	21.35	20.80	20.68	2.0	21.5	17.58	17.56	17.36	0.0	19.0
		1	8	21.36	20.77	20.71	2.0	21.5	17.62	17.72	17.48	0.0	19.0
		1	14	21.35	20.67	20.65	2.0	21.5	17.49	17.65	17.43	0.0	19.0
		8	0	20.07	19.86	19.68	3.0	20.5	17.52	17.47	17.30	0.0	19.0
		8	4	20.06	19.86	19.71	3.0	20.5	17.51	17.40	17.27	0.0	19.0
		8	7	20.11	19.84	19.73	3.0	20.5	17.48	17.45	17.26	0.0	19.0
		15	0	19.94	19.85	19.79	3.0	20.5	17.46	17.44	17.24	0.0	19.0
	256QAM	1	0	20.17	19.86	19.84	3.0	20.5	17.63	17.52	17.58	0.0	19.0
		1	8	20.08	19.89	19.76	3.0	20.5	17.70	17.33	17.43	0.0	19.0
		1	14	20.15	19.80	19.77	3.0	20.5	17.58	17.40	17.54	0.0	19.0
		8	0	17.99	17.85	17.71	4.5	19.0	17.48	17.44	17.27	0.0	19.0
		8	4	18.02	17.89	17.72	4.5	19.0	17.46	17.38	17.20	0.0	19.0
		8	7	17.99	17.92	17.74	4.5	19.0	17.44	17.37	17.18	0.0	19.0
		15	0	18.02	17.96	17.79	4.5	19.0	17.42	17.34	17.26	0.0	19.0

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up 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	22.79	22.79	22.66	0.0	23.5	17.46	17.41	17.16	0.0	19.0
		1	3	22.89	22.59	22.54	0.0	23.5	17.34	17.36	17.23	0.0	19.0
		1	5	22.79	22.79	22.59	0.0	23.5	17.44	17.39	17.15	0.0	19.0
		3	0	22.86	22.84	22.56	0.0	23.5	17.47	17.38	17.27	0.0	19.0
		3	1	22.83	22.76	22.48	0.0	23.5	17.39	17.36	17.19	0.0	19.0
		3	3	22.80	22.66	22.49	0.0	23.5	17.40	17.26	17.14	0.0	19.0
		6	0	21.80	21.73	21.46	1.0	22.5	17.38	17.32	17.15	0.0	19.0
	16QAM	1	0	21.74	21.97	21.54	1.0	22.5	17.53	17.58	17.27	0.0	19.0
		1	3	21.84	22.00	21.48	1.0	22.5	17.69	17.55	17.07	0.0	19.0
		1	5	21.80	22.03	21.59	1.0	22.5	17.60	17.60	17.30	0.0	19.0
		3	0	21.93	21.81	21.59	1.0	22.5	17.59	17.56	17.36	0.0	19.0
		3	1	21.88	21.71	21.50	1.0	22.5	17.49	17.53	17.23	0.0	19.0
		3	3	21.88	21.64	21.52	1.0	22.5	17.46	17.47	17.31	0.0	19.0
		6	0	20.85	20.73	20.55	2.0	21.5	17.49	17.31	17.22	0.0	19.0
	64QAM	1	0	21.23	20.74	20.47	2.0	21.5	17.63	17.69	17.16	0.0	19.0
		1	3	21.28	21.00	20.30	2.0	21.5	17.95	17.74	17.07	0.0	19.0
		1	5	21.14	20.82	20.42	2.0	21.5	17.71	17.69	17.12	0.0	19.0
		3	0	21.04	20.82	20.84	2.0	21.5	17.54	17.61	17.37	0.0	19.0
		3	1	20.97	20.79	20.73	2.0	21.5	17.53	17.55	17.28	0.0	19.0
		3	3	20.89	20.72	20.78	2.0	21.5	17.40	17.50	17.27	0.0	19.0
		6	0	19.86	19.82	19.67	3.0	20.5	17.48	17.43	17.15	0.0	19.0
	256QAM	1	0	19.85	19.80	19.85	3.0	20.5	17.61	17.40	17.35	0.0	19.0
		1	3	20.02	19.71	19.97	3.0	20.5	17.58	17.64	17.46	0.0	19.0
		1	5	19.83	19.75	19.83	3.0	20.5	17.52	17.32	17.27	0.0	19.0
		3	0	19.90	19.94	19.69	3.0	20.5	17.56	17.26	17.16	0.0	19.0
		3	1	19.81	19.88	19.58	3.0	20.5	17.49	17.15	17.17	0.0	19.0
		3	3	19.69	19.72	19.48	3.0	20.5	17.46	17.13	17.13	0.0	19.0
		6	0	17.8	17.7	17.7	4.5	19.0	17.39	17.30	17.13	0.0	19.0

LTE Band 66 (Sub.2) Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
				RSI=Free, Rcv, Hotsport				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				132072	132322	132572		
				1720 MHz	1745 MHz	1770 MHz		
20 MHz	QPSK	1	0	16.70	16.79	16.71	0.0	18.5
		1	49	16.78	16.52	16.71	0.0	18.5
		1	99	16.61	16.62	16.64	0.0	18.5
		50	0	16.67	16.73	16.72	0.0	18.5
		50	24	16.64	16.67	16.71	0.0	18.5
		50	50	16.63	16.65	16.69	0.0	18.5
		100	0	16.63	16.67	16.66	0.0	18.5
	16QAM	1	0	17.01	17.12	16.99	0.0	18.5
		1	49	16.98	17.04	17.08	0.0	18.5
		1	99	16.91	17.01	16.90	0.0	18.5
		50	0	16.70	16.75	16.73	0.0	18.5
		50	24	16.67	16.71	16.73	0.0	18.5
		50	50	16.64	16.68	16.70	0.0	18.5
		100	0	16.67	16.70	16.71	0.0	18.5
	64QAM	1	0	16.97	17.16	16.99	0.0	18.5
		1	49	17.04	17.12	16.95	0.0	18.5
		1	99	16.83	17.05	16.89	0.0	18.5
		50	0	16.75	16.77	16.79	0.0	18.5
		50	24	16.72	16.75	16.76	0.0	18.5
		50	50	16.69	16.72	16.75	0.0	18.5
		100	0	16.71	16.76	16.72	0.0	18.5
BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				132047	132322	132597		
				1717.5 MHz	1745 MHz	1772.5 MHz		
15 MHz	QPSK	1	0	16.71	16.66	16.67	0.0	18.5
		1	37	16.53	16.51	16.56	0.0	18.5
		1	74	16.64	16.58	16.60	0.0	18.5
		36	0	16.69	16.67	16.65	0.0	18.5
		36	20	16.69	16.64	16.64	0.0	18.5
		36	39	16.68	16.62	16.65	0.0	18.5
		75	0	16.68	16.64	16.63	0.0	18.5
	16QAM	1	0	16.77	16.95	17.17	0.0	18.5
		1	37	16.62	16.84	17.10	0.0	18.5
		1	74	16.71	16.84	17.13	0.0	18.5
		36	0	16.72	16.69	16.74	0.0	18.5
		36	20	16.69	16.67	16.72	0.0	18.5
		36	39	16.68	16.65	16.71	0.0	18.5
		75	0	16.68	16.65	16.67	0.0	18.5
	64QAM	1	0	17.01	17.02	16.87	0.0	18.5
		1	37	16.81	16.91	16.80	0.0	18.5
		1	74	16.97	16.87	16.81	0.0	18.5
		36	0	16.74	16.77	16.81	0.0	18.5
		36	20	16.72	16.73	16.80	0.0	18.5
		36	39	16.71	16.72	16.79	0.0	18.5
		75	0	16.74	16.68	16.70	0.0	18.5

LTE Band 66 (Sub.2) 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	16.67	16.69	16.74	0.0	18.5
		1	25	16.67	16.65	16.61	0.0	18.5
		1	49	16.69	16.61	16.75	0.0	18.5
		25	0	16.73	16.65	16.73	0.0	18.5
		25	12	16.70	16.63	16.71	0.0	18.5
		25	25	16.70	16.62	16.72	0.0	18.5
		50	0	16.74	16.67	16.71	0.0	18.5
	16QAM	1	0	17.04	17.02	17.06	0.0	18.5
		1	25	17.10	17.06	17.11	0.0	18.5
		1	49	16.94	16.98	17.00	0.0	18.5
		25	0	16.75	16.73	16.77	0.0	18.5
		25	12	16.75	16.69	16.75	0.0	18.5
		25	25	16.76	16.71	16.76	0.0	18.5
		50	0	16.76	16.68	16.74	0.0	18.5
	64QAM	1	0	16.90	16.95	16.91	0.0	18.5
		1	25	16.91	17.04	16.92	0.0	18.5
		1	49	16.80	16.92	16.89	0.0	18.5
		25	0	16.86	16.76	16.79	0.0	18.5
		25	12	16.83	16.73	16.78	0.0	18.5
		25	25	16.83	16.72	16.78	0.0	18.5
		50	0	16.82	16.72	16.78	0.0	18.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				131997	132322	132647		
				1712.5 MHz	1745 MHz	1777.5 MHz		
5 MHz	QPSK	1	0	16.69	16.58	16.68	0.0	18.5
		1	12	16.52	16.59	16.67	0.0	18.5
		1	24	16.71	16.61	16.71	0.0	18.5
		12	0	16.70	16.63	16.69	0.0	18.5
		12	7	16.73	16.62	16.69	0.0	18.5
		12	13	16.73	16.61	16.69	0.0	18.5
		25	0	16.72	16.63	16.72	0.0	18.5
	16QAM	1	0	17.20	17.06	17.09	0.0	18.5
		1	12	16.84	17.01	17.01	0.0	18.5
		1	24	17.12	17.07	17.02	0.0	18.5
		12	0	16.83	16.68	16.74	0.0	18.5
		12	7	16.83	16.68	16.73	0.0	18.5
		12	13	16.82	16.66	16.75	0.0	18.5
		25	0	16.74	16.67	16.74	0.0	18.5
	64QAM	1	0	16.87	17.18	17.00	0.0	18.5
		1	12	16.82	17.09	16.98	0.0	18.5
		1	24	16.89	17.08	17.04	0.0	18.5
		12	0	16.77	16.70	16.82	0.0	18.5
		12	7	16.76	16.69	16.81	0.0	18.5
		12	13	16.77	16.67	16.82	0.0	18.5
		25	0	16.78	16.71	16.80	0.0	18.5

LTE Band 66 (Sub.2) 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	16.81	16.70	16.92	0.0	18.5
		1	8	16.51	16.61	16.91	0.0	18.5
		1	14	16.83	16.65	16.94	0.0	18.5
		8	0	16.77	16.72	16.90	0.0	18.5
		8	4	16.77	16.70	16.84	0.0	18.5
		8	7	16.75	16.68	16.89	0.0	18.5
		15	0	16.79	16.74	16.84	0.0	18.5
	16QAM	1	0	16.94	17.14	17.30	0.0	18.5
		1	8	16.91	17.13	17.28	0.0	18.5
		1	14	16.85	17.18	17.24	0.0	18.5
		8	0	16.83	16.83	17.02	0.0	18.5
		8	4	16.86	16.81	16.99	0.0	18.5
		8	7	16.83	16.82	17.00	0.0	18.5
		15	0	16.78	16.77	16.94	0.0	18.5
	64QAM	1	0	17.00	17.02	16.93	0.0	18.5
		1	8	16.96	17.00	16.91	0.0	18.5
		1	14	16.90	17.05	16.96	0.0	18.5
		8	0	16.91	16.74	16.76	0.0	18.5
		8	4	16.88	16.69	16.77	0.0	18.5
		8	7	16.88	16.70	16.75	0.0	18.5
		15	0	16.89	16.69	16.87	0.0	18.5
	256QAM	1	0	17.07	16.95	16.85	0.0	18.5
		1	8	16.93	16.66	16.87	0.0	18.5
		1	14	17.01	16.82	16.87	0.0	18.5
		8	0	16.90	16.78	16.79	0.0	18.5
		8	4	16.87	16.72	16.77	0.0	18.5
		8	7	16.83	16.72	16.81	0.0	18.5
		15	0	16.88	16.74	16.84	0.0	18.5

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				131979	132322	132665		
				1710.7 MHz	1745 MHz	1779.3 MHz		
1.4 MHz	QPSK	1	0	16.77	16.78	16.94	0.0	18.5
		1	3	16.77	16.48	16.85	0.0	18.5
		1	5	16.75	16.75	16.91	0.0	18.5
		3	0	16.75	16.73	16.86	0.0	18.5
		3	1	16.72	16.72	16.83	0.0	18.5
		3	3	16.65	16.63	16.82	0.0	18.5
		6	0	16.71	16.71	16.81	0.0	18.5
	16QAM	1	0	16.92	17.11	17.05	0.0	18.5
		1	3	16.88	17.18	17.28	0.0	18.5
		1	5	16.95	17.15	17.11	0.0	18.5
		3	0	16.89	16.75	17.07	0.0	18.5
		3	1	16.81	16.81	16.92	0.0	18.5
		3	3	16.87	16.73	16.95	0.0	18.5
		6	0	16.87	16.72	16.92	0.0	18.5
	64QAM	1	0	16.66	17.00	17.29	0.0	18.5
		1	3	16.90	16.94	17.30	0.0	18.5
		1	5	16.93	16.97	17.27	0.0	18.5
		3	0	16.92	16.87	16.91	0.0	18.5
		3	1	16.91	16.85	16.92	0.0	18.5
		3	3	16.90	16.85	16.93	0.0	18.5
		6	0	16.83	16.82	16.83	0.0	18.5
	256QAM	1	0	16.89	16.90	17.14	0.0	18.5
		1	3	16.92	16.87	17.12	0.0	18.5
		1	5	16.91	16.85	17.10	0.0	18.5
		3	0	16.84	16.82	16.89	0.0	18.5
		3	1	16.82	16.83	16.90	0.0	18.5
		3	3	16.83	16.79	16.86	0.0	18.5
		6	0	16.71	16.66	16.82	0.0	18.5

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 6.2.2.3-1: 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	≤ 3.5[1]	≤ 1.2[1]	≤ 0.2[1]
	≤ 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 *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* 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 *powerBoostPi2BPSK* 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

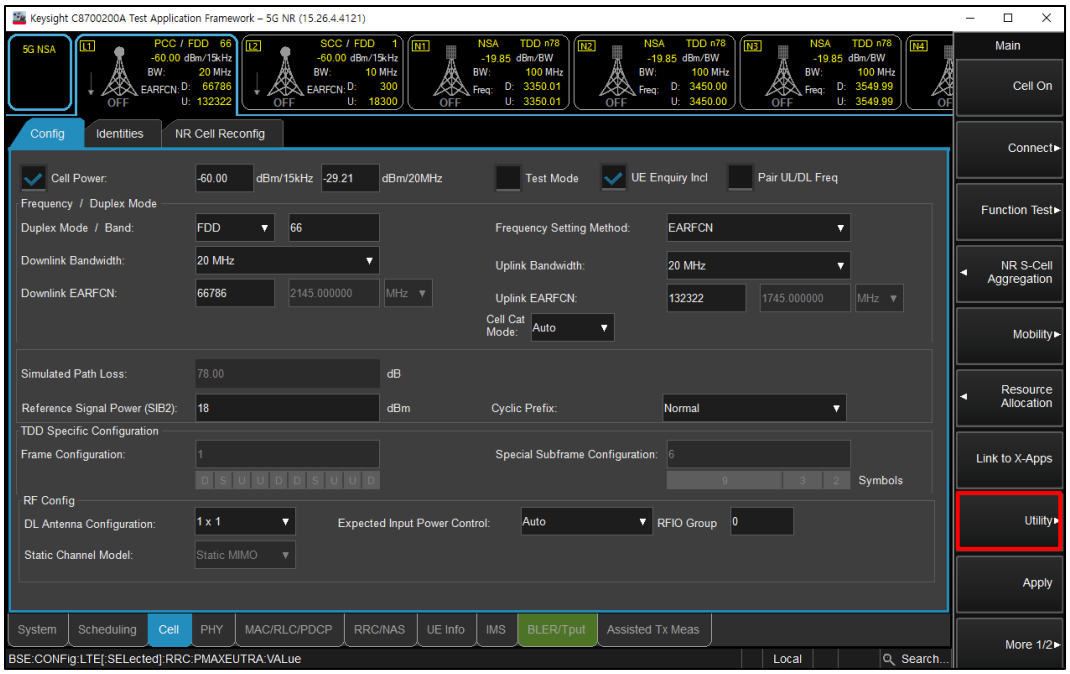
Uplink RB allocations were used to Table 6.1-1 of the 3GPP TS 138.521-1.

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	36@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

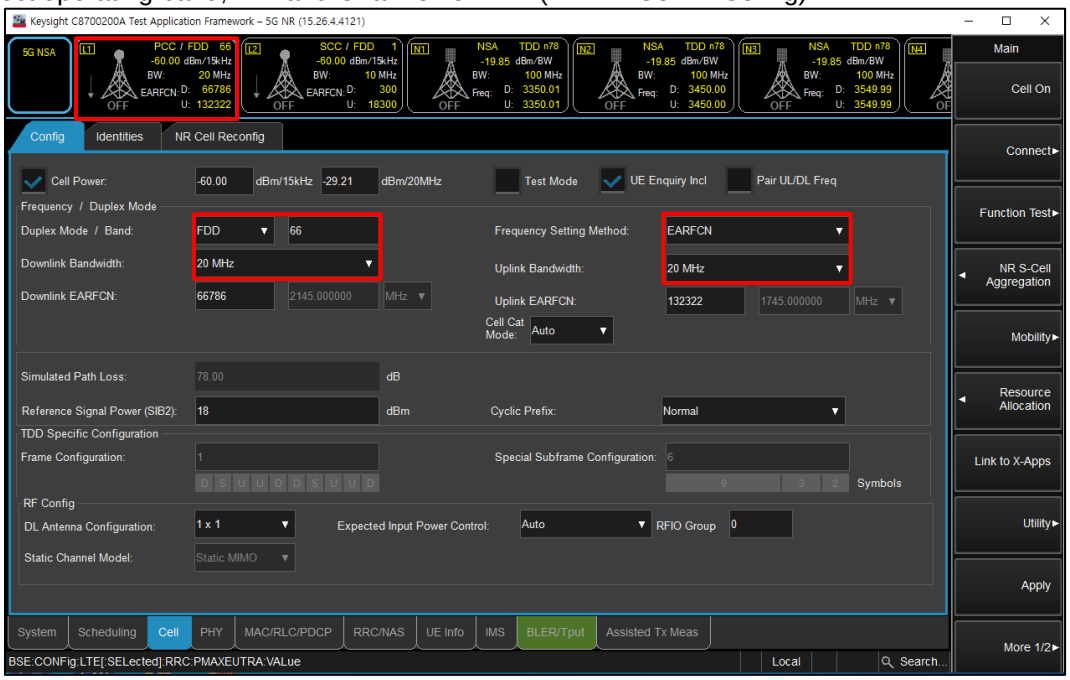


(Figure 1-1)

(Figure 1-2)

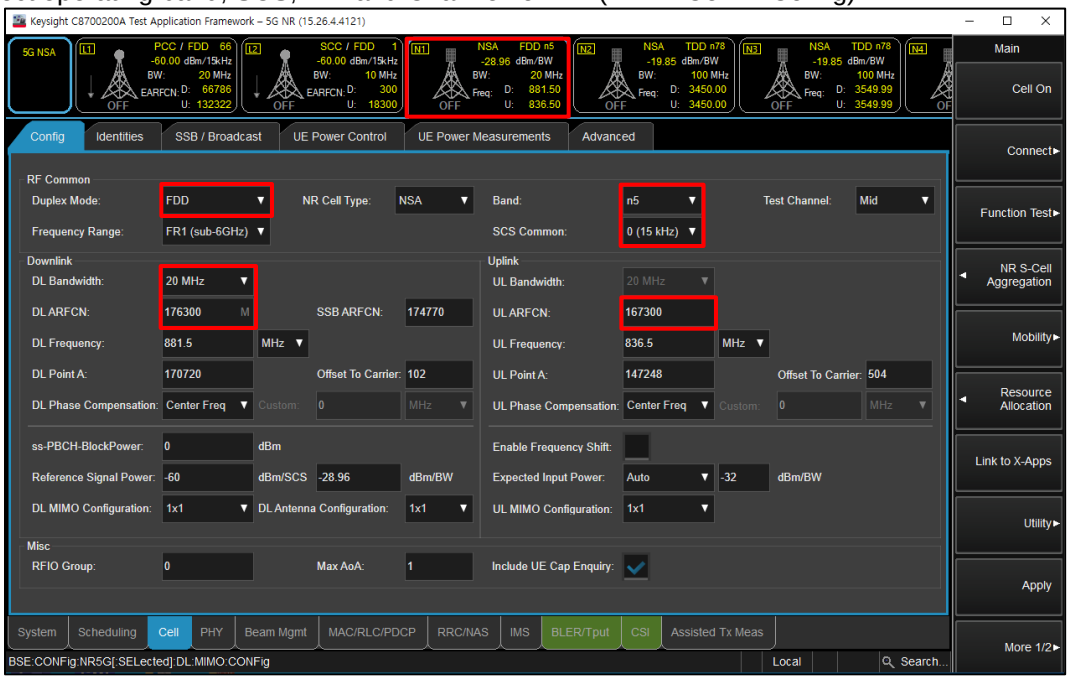
NSA Mode

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



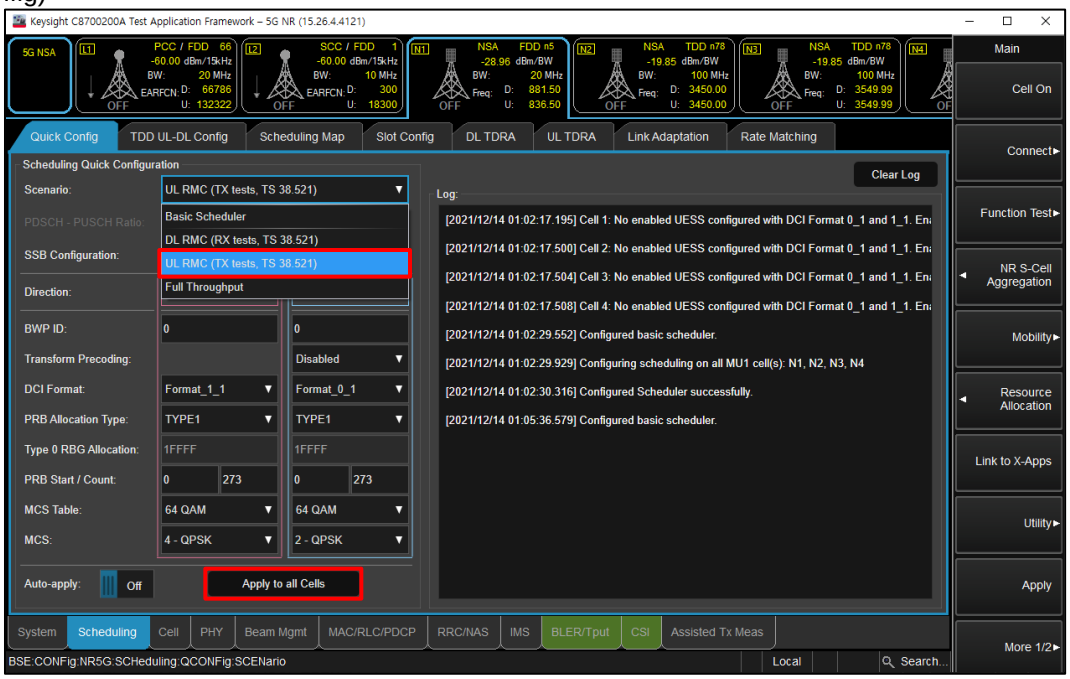
(Figure 2-1)

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



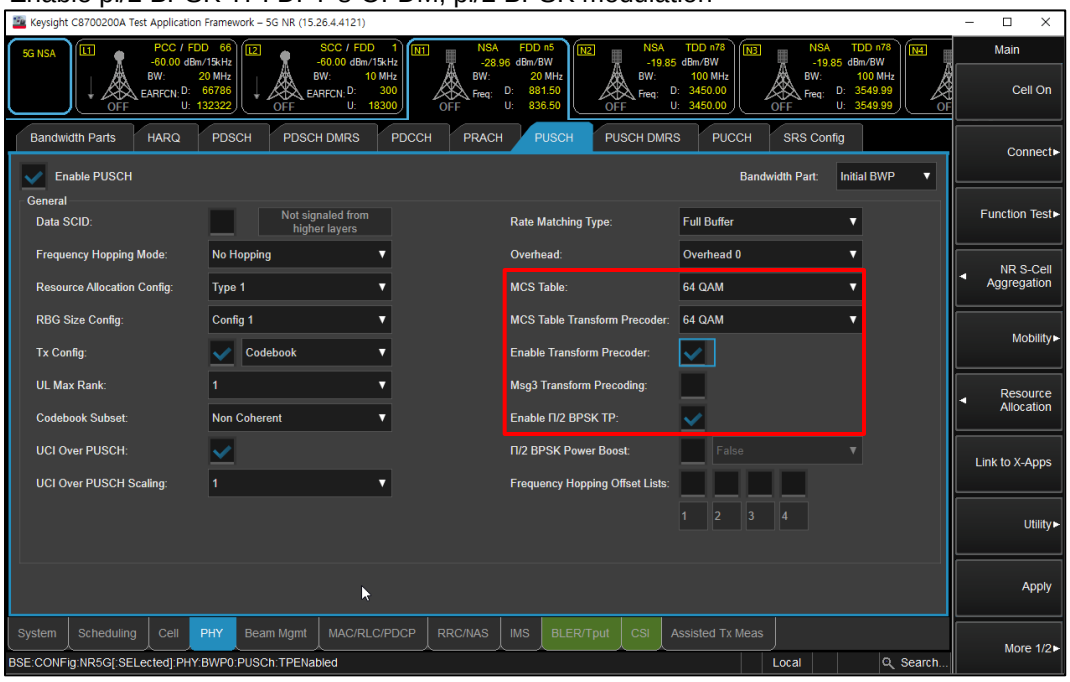
(Figure 2-2)

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



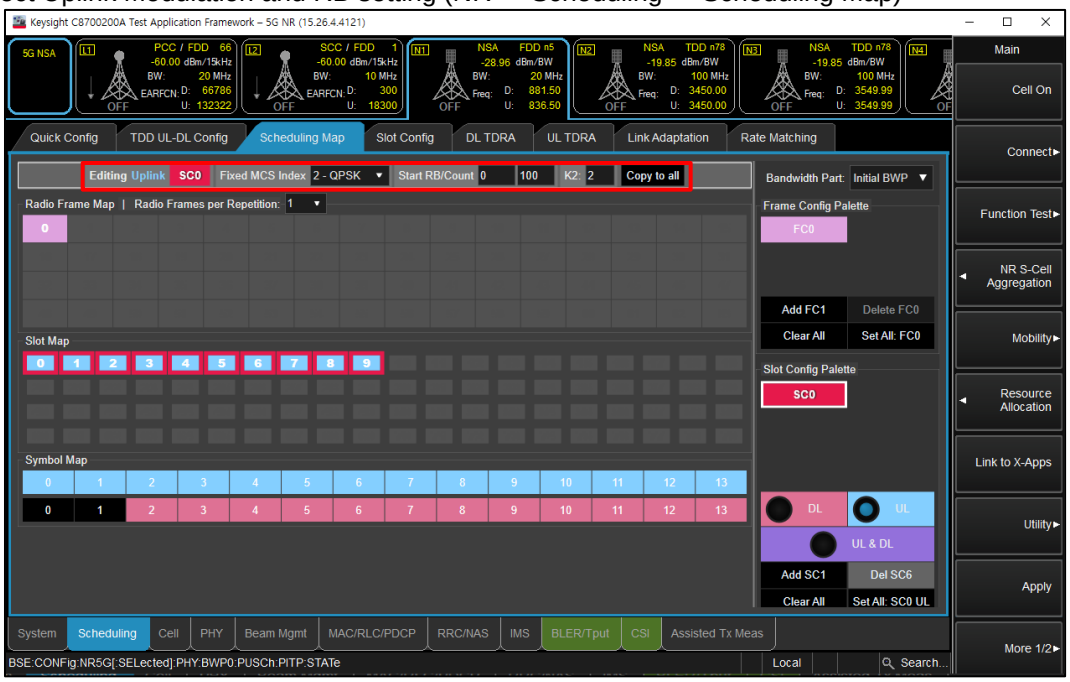
(Figure 2-3)

- 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



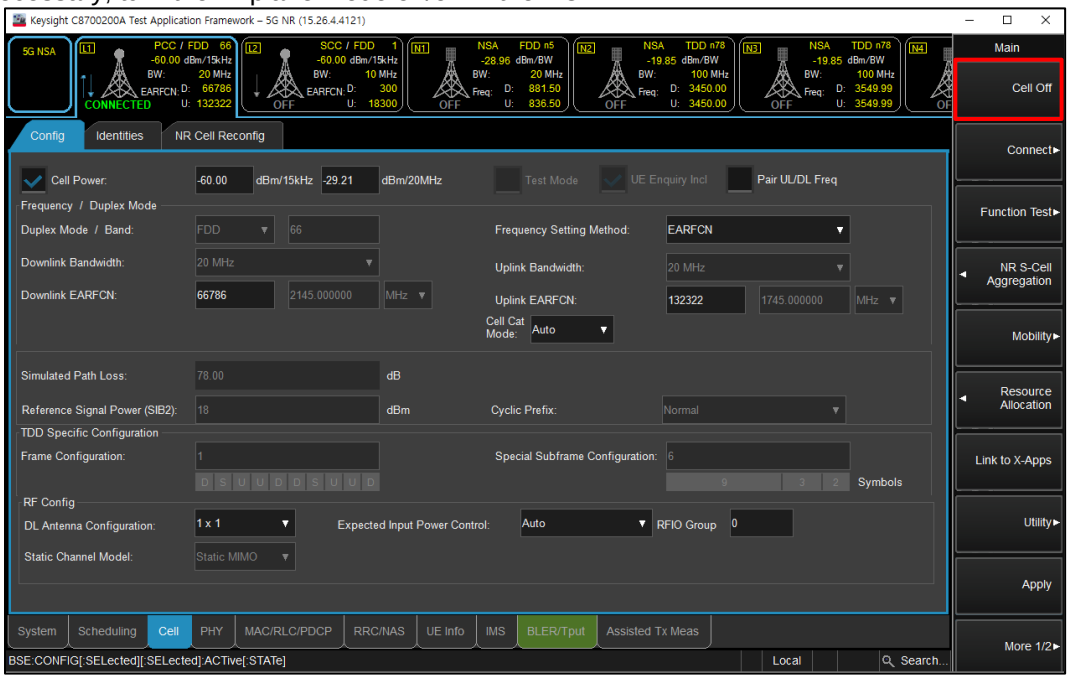
(Figure 2-4)

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



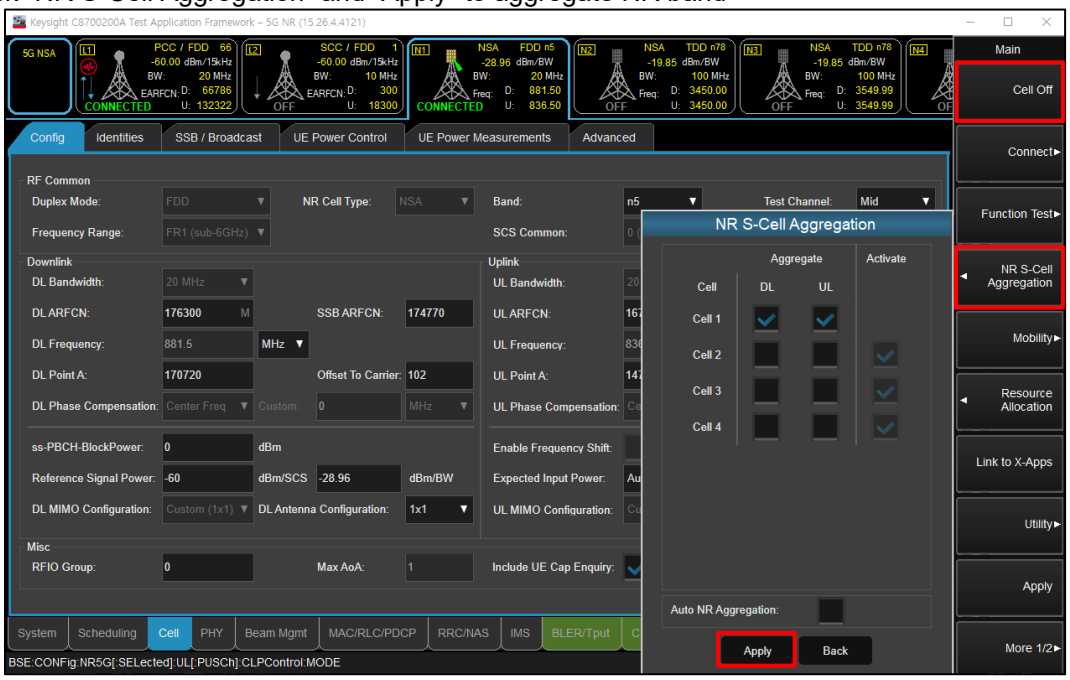
(Figure 2-5)

- 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



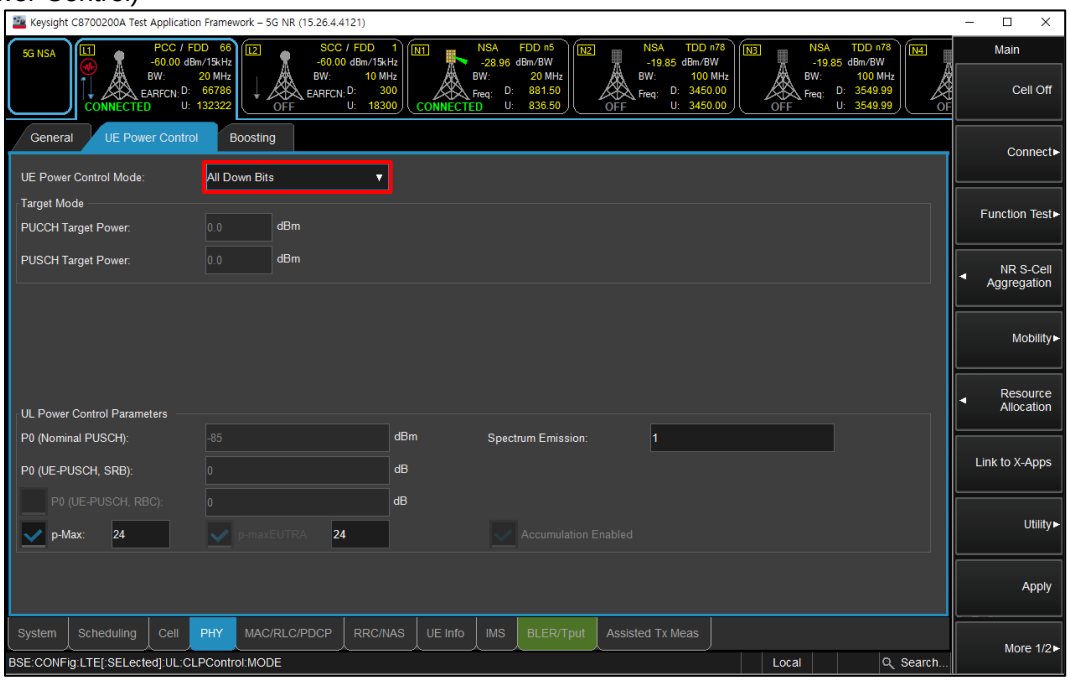
(Figure 2-6)

- 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



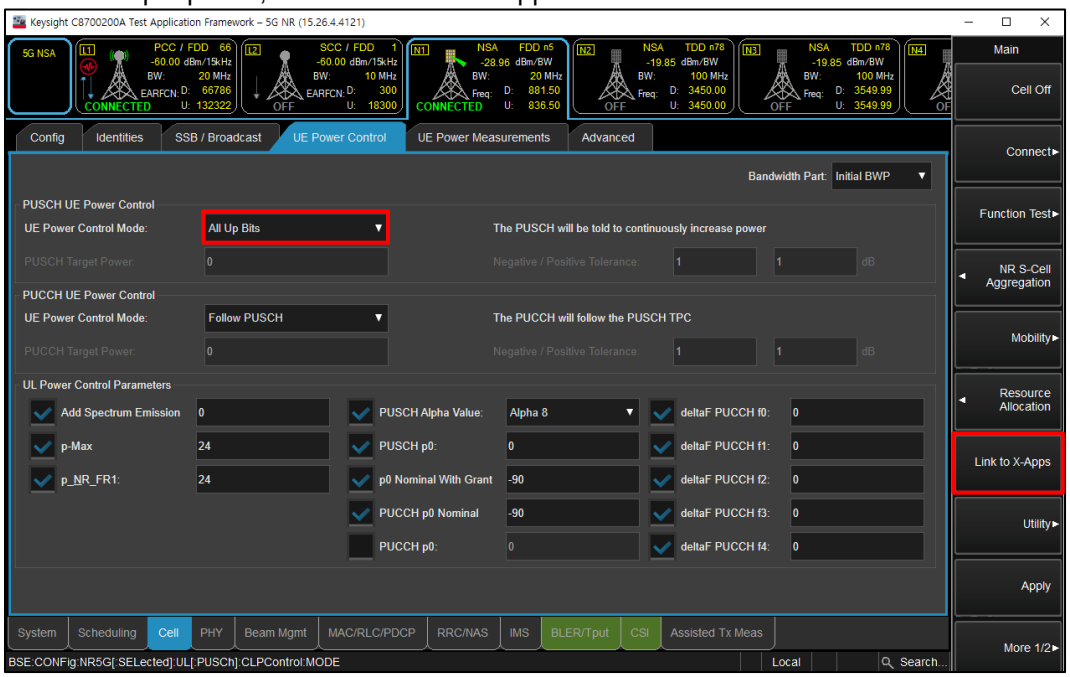
(Figure 2-7)

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



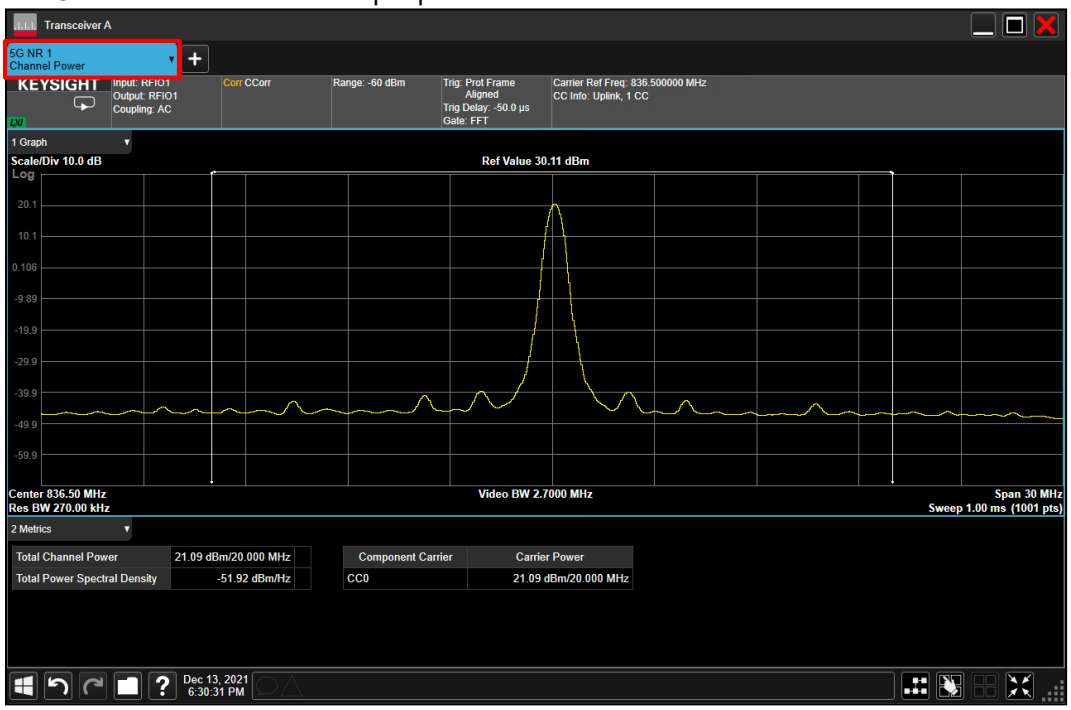
(Figure 2-8)

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



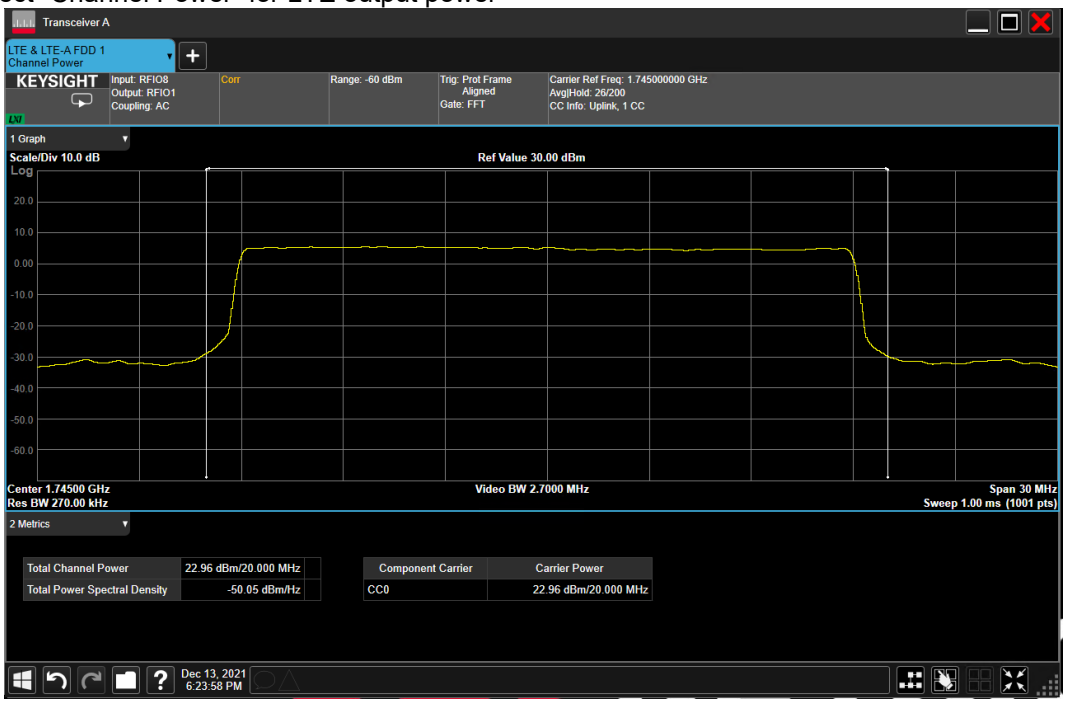
(Figure 2-9)

- Select “Channel Power” for NR output power



(Figure 2-10)

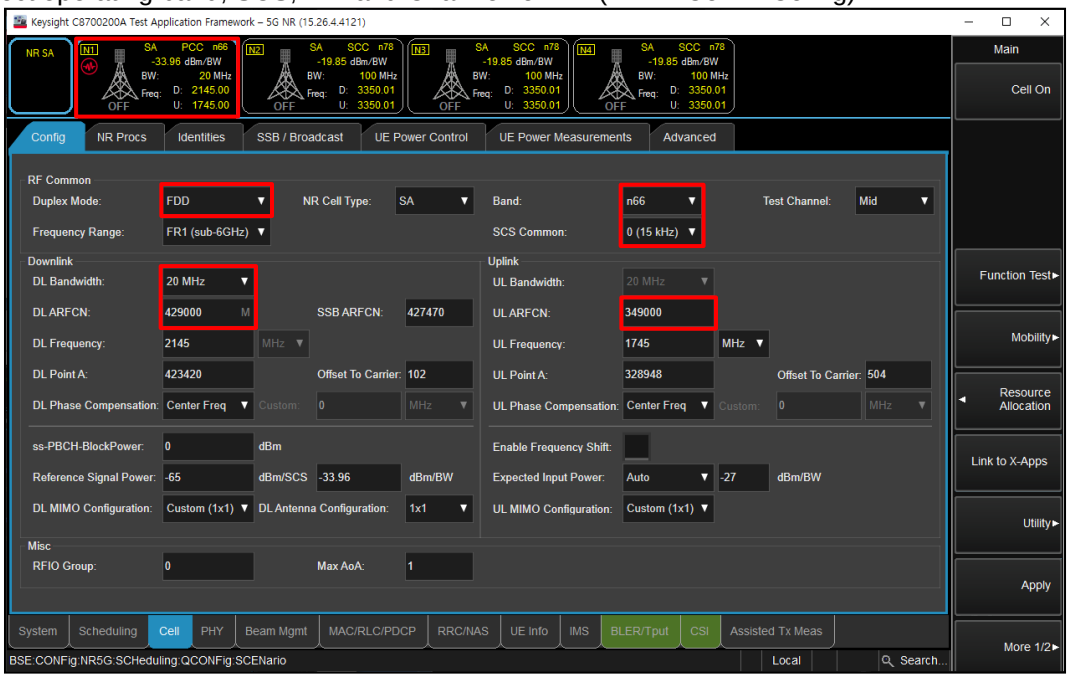
- Select “Channel Power” for LTE output power



(Figure 2-11)

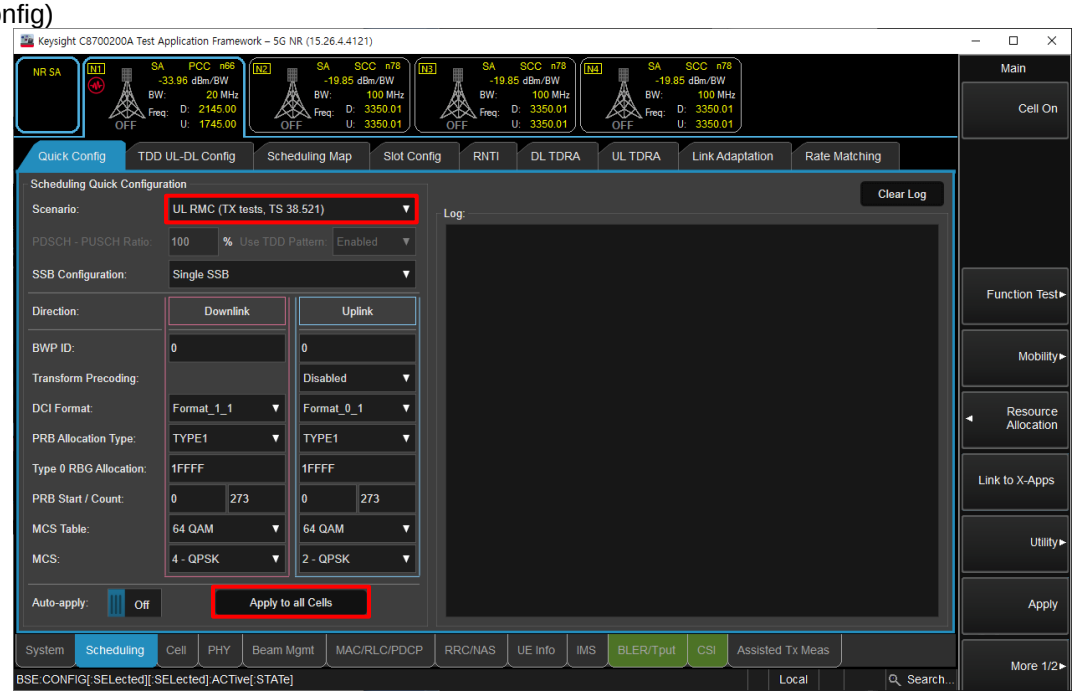
SA Mode

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



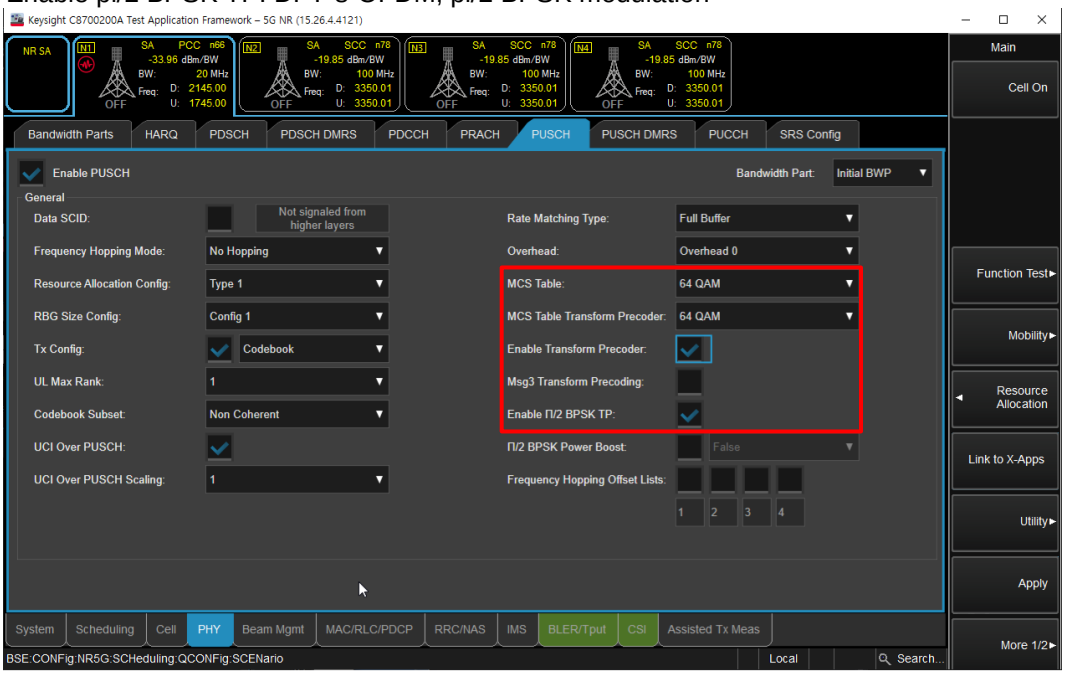
(Figure 3-1)

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



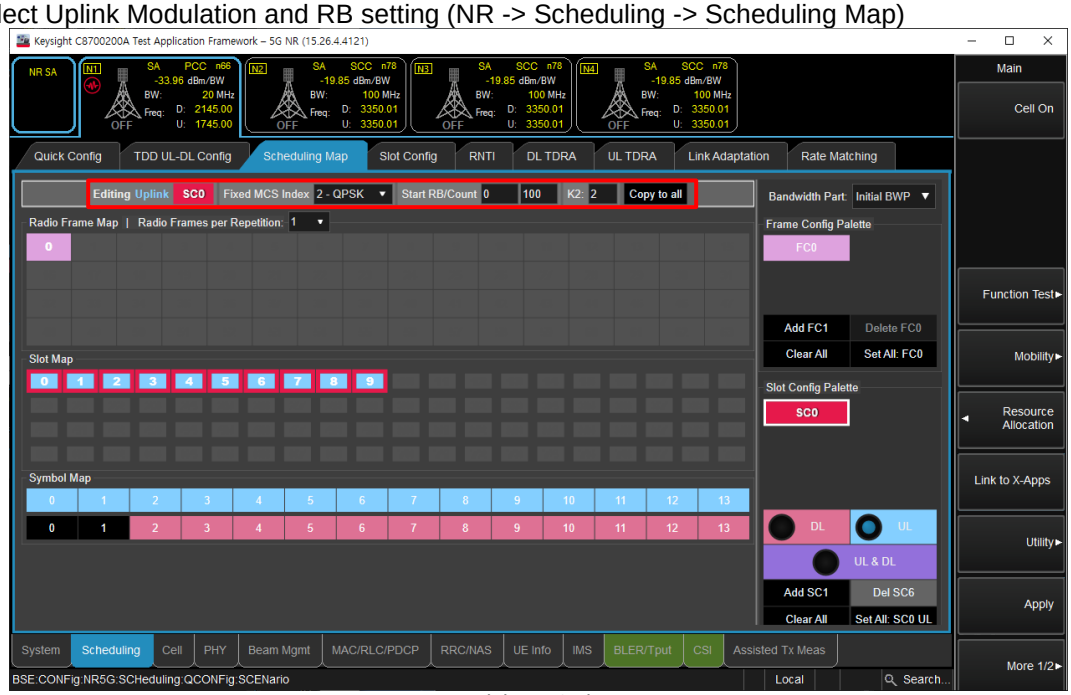
(Figure 3-2)

- 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



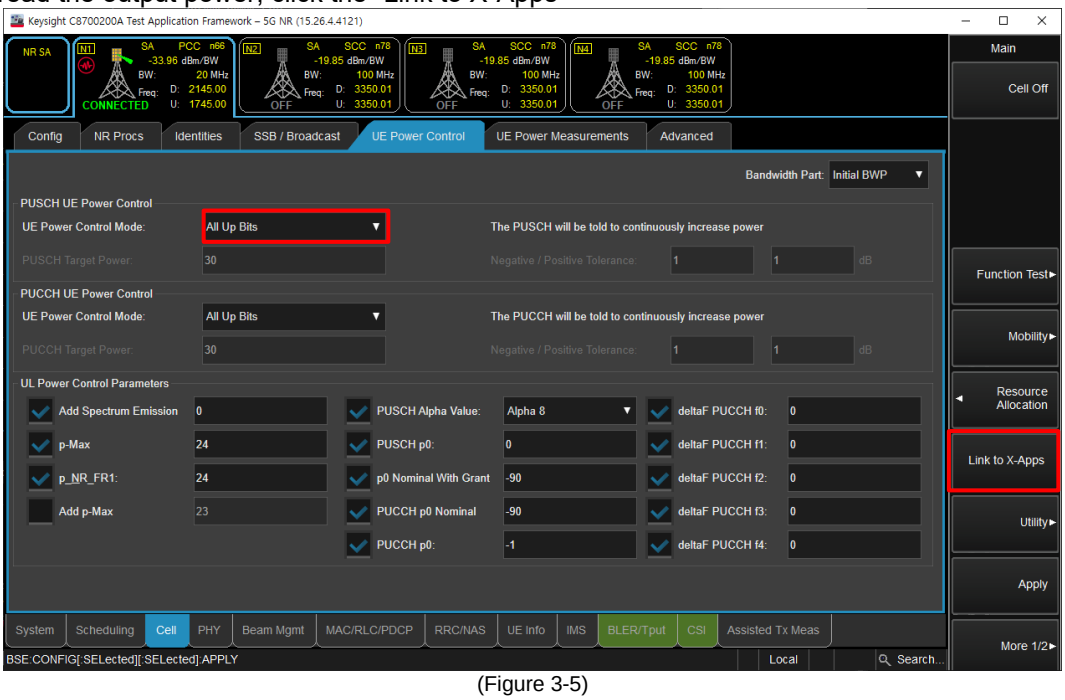
(Figure 3-3)

- 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)

NR Band n5 (Main.1) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					RSI=Free, RCV, Hotspot				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					166800	167300	167800		
					834.00 MHz	836.50 MHz	839.00 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1		23.91		0.0	25.0
			1	52		23.84		0.0	25.0
			1	104		23.81		0.0	25.0
			50	0		22.94		0.5	24.5
			50	28		23.93		0.0	25.0
			50	56		22.87		0.5	24.5
			100	0		22.94		0.5	24.5
		QPSK	1	1		23.80		0.0	25.0
			1	52		23.87		0.0	25.0
			1	104		23.76		0.0	25.0
			50	0		22.94		1.0	24.0
			50	28		23.92		0.0	25.0
			50	56		22.89		1.0	24.0
			100	0		22.95		1.0	24.0
		16QAM	1	1		22.86		1.0	24.0
			1	52		22.77		1.0	24.0
			1	104		22.69		1.0	24.0
		64QAM	1	1		21.42		2.5	22.5
		256QAM	1	1		19.41		4.5	20.5
	CP-OFDM	QPSK	1	1		22.46		1.5	23.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					166300	167300	168300		
					831.50 MHz	836.50 MHz	841.50 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1		23.95		0.0	25.0
			1	39		24.07		0.0	25.0
			1	77		23.88		0.0	25.0
			36	0		22.94		0.5	24.5
			36	21		23.93		0.0	25.0
			36	43		22.88		0.5	24.5
			75	0		22.93		0.5	24.5
		QPSK	1	1		23.91		0.0	25.0
			1	39		24.00		0.0	25.0
			1	77		23.86		0.0	25.0
			36	0		22.93		1.0	24.0
			36	21		23.94		0.0	25.0
			36	43		22.88		1.0	24.0
			75	0		22.95		1.0	24.0
		16QAM	1	1		22.86		1.0	24.0
		64QAM	1	1		21.42		2.5	22.5
		256QAM	1	1		19.45		4.5	20.5
	CP-OFDM	QPSK	1	1		22.49		1.5	23.5

NR Band n5 (Main.1) Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					165800	167300	168800		
					829.00 MHz	836.50 MHz	844.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.89		23.87	0.0	25.0
			1	25	23.84		23.77	0.0	25.0
			1	50	23.91		23.82	0.0	25.0
			25	0	22.90		22.88	0.5	24.5
			25	13	23.90		23.84	0.0	25.0
			25	27	22.92		22.84	0.5	24.5
			50	0	22.93		22.86	0.5	24.5
		QPSK	1	1	23.85		23.85	0.0	25.0
			1	25	23.79		23.75	0.0	25.0
			1	50	23.90		23.80	0.0	25.0
			25	0	22.90		22.87	1.0	24.0
			25	13	23.91		23.83	0.0	25.0
			25	27	22.93		22.83	1.0	24.0
			50	0	22.94		22.86	1.0	24.0
		16QAM	1	1	22.76		22.90	1.0	24.0
		64QAM	1	1	21.36		21.35	2.5	22.5
		256QAM	1	1	19.42		19.41	4.5	20.5
	CP-OFDM	QPSK	1	1	22.39		22.38	1.5	23.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					165300	167300	169300		
					826.50 MHz	836.50 MHz	846.50 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.90	23.98	23.92	0.0	25.0
			1	12	23.89	24.02	23.62	0.0	25.0
			1	23	23.93	23.76	23.78	0.0	25.0
			12	0	22.77	22.81	22.90	0.5	24.5
			12	6	23.87	24.03	23.79	0.0	25.0
			12	13	22.78	22.90	22.84	0.5	24.5
			25	0	22.97	22.99	22.89	0.5	24.5
		QPSK	1	1	23.85	23.96	23.91	0.0	25.0
			1	12	23.68	23.95	23.66	0.0	25.0
			1	23	23.92	23.84	23.82	0.0	25.0
			12	0	22.76	22.99	22.97	1.0	24.0
			12	6	23.80	24.09	23.76	0.0	25.0
			12	13	22.92	22.80	22.72	1.0	24.0
			25	0	22.97	22.94	22.99	1.0	24.0
		16QAM	1	1	22.70	22.93	22.91	1.0	24.0
		64QAM	1	1	21.22	21.48	21.48	2.5	22.5
		256QAM	1	1	19.30	19.41	19.26	4.5	20.5
	CP-OFDM	QPSK	1	1	22.46	22.39	22.47	1.5	23.5

NR Band n5 (Sub.1) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)				
					RSI=Free, Rcv, Hotspot				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					166800	167300	167800		
					834.00 MHz	836.50 MHz	839.00 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1		19.37		0.0	20.5
			1	52		19.30		0.0	20.5
			1	104		18.96		0.0	20.5
			50	0		19.18		0.0	20.5
			50	28		19.14		0.0	20.5
			50	56		19.00		0.0	20.5
			100	0		19.22		0.0	20.5
		QPSK	1	1		19.34		0.0	20.5
			1	52		**19.41**		0.0	20.5
			1	104		19.07		0.0	20.5
			50	0		19.26		0.0	20.5
			50	28		**19.30**		0.0	20.5
			50	56		19.11		0.0	20.5
			100	0		19.11		0.0	20.5
		16QAM	1	1		19.36		0.0	20.5
			1	52		19.34		0.0	20.5
			1	104		19.05		0.0	20.5
		64QAM	1	1		19.42		0.0	20.5
		256QAM	1	1		17.51		2.0	18.5
	CP-OFDM	QPSK	1	1		19.30		0.0	20.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					166300	167300	168300		
					831.50 MHz	836.50 MHz	841.50 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1		19.32		0.0	20.5
			1	39		19.10		0.0	20.5
			1	77		19.06		0.0	20.5
			36	0		19.28		0.0	20.5
			36	21		19.22		0.0	20.5
			36	43		19.06		0.0	20.5
			75	0		19.15		0.0	20.5
		QPSK	1	1		19.19		0.0	20.5
			1	39		19.14		0.0	20.5
			1	77		18.99		0.0	20.5
			36	0		19.15		0.0	20.5
			36	21		19.17		0.0	20.5
			36	43		19.06		0.0	20.5
			75	0		19.15		0.0	20.5
		16QAM	1	1		19.28		0.0	20.5
		64QAM	1	1		19.36		0.0	20.5
		256QAM	1	1		17.42		2.0	18.5
	CP-OFDM	QPSK	1	1		19.26		0.0	20.5

NR Band n5 (Sub.1) Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					165800	167300	168800		
					829.00 MHz	836.50 MHz	844.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	19.28		19.08	0.0	20.5
			1	25	19.38		19.08	0.0	20.5
			1	50	19.20		19.02	0.0	20.5
			25	0	19.30		19.13	0.0	20.5
			25	13	19.28		18.99	0.0	20.5
			25	27	19.19		19.07	0.0	20.5
			50	0	19.26		19.03	0.0	20.5
		QPSK	1	1	19.31		18.99	0.0	20.5
			1	25	19.23		19.05	0.0	20.5
			1	50	19.26		18.94	0.0	20.5
			25	0	19.31		19.04	0.0	20.5
			25	13	19.24		19.00	0.0	20.5
			25	27	19.19		19.05	0.0	20.5
			50	0	19.24		18.99	0.0	20.5
		16QAM	1	1	19.22		19.03	0.0	20.5
		64QAM	1	1	19.37		19.12	0.0	20.5
		256QAM	1	1	17.37		17.15	2.0	18.5
	CP-OFDM	QPSK	1	1	19.33		19.23	0.0	20.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					165300	167300	169300		
					826.50 MHz	836.50 MHz	846.50 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	21.33	21.21	21.05	0.0	20.5
			1	12	21.22	21.08	20.92	0.0	20.5
			1	23	21.28	21.17	20.98	0.0	20.5
			12	0	21.32	21.19	21.04	0.0	20.5
			12	6	21.31	21.15	21.02	0.0	20.5
			12	13	21.29	21.14	21.01	0.0	20.5
			25	0	21.31	21.18	21.02	0.0	20.5
		QPSK	1	1	21.32	21.21	21.03	0.0	20.5
			1	12	21.22	21.07	20.91	0.0	20.5
			1	23	21.27	21.16	20.97	0.0	20.5
			12	0	21.33	21.19	21.06	0.0	20.5
			12	6	21.31	21.16	21.02	0.0	20.5
			12	13	21.30	21.14	21.01	0.0	20.5
			25	0	21.31	21.17	21.04	0.0	20.5
		16QAM	1	1	21.32	21.22	21.09	0.0	20.5
		64QAM	1	1	21.34	21.27	21.16	0.0	20.5
		256QAM	1	1	19.51	19.34	19.17	2.0	18.5
	CP-OFDM	QPSK	1	1	21.34	21.21	21.11	0.0	20.5

NR Band n25 (Main.1) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)									
					RSI=Rcv					RSI=Free, Hotspot				
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					372000	376500	381000			372000	376500	381000		
					1860.00 MHz	1882.50 MHz	1905.00 MHz			1860.00 MHz	1882.50 MHz	1905.00 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.85	22.85	22.99	0.0	24.5	18.99	19.00	19.11	0.0	20.0
			1	52	22.94	22.82	23.03	0.0	24.5	19.12	19.00	19.28	0.0	20.0
			1	104	22.88	22.84	22.98	0.0	24.5	19.01	18.99	19.13	0.0	20.0
			50	0	21.85	21.83	21.97	0.5	24.0	18.97	19.00	19.12	0.0	20.0
			50	28	22.86	22.81	22.98	0.0	24.5	18.97	18.96	19.14	0.0	20.0
			50	56	21.84	21.84	22.00	0.5	24.0	18.97	18.99	19.17	0.0	20.0
			100	0	21.83	21.80	21.98	0.5	24.0	18.95	18.97	19.14	0.0	20.0
		QPSK	1	1	22.83	22.81	22.94	0.0	24.5	18.95	18.98	19.08	0.0	20.0
			1	52	22.92	22.82	23.04	0.0	24.5	19.03	19.00	19.16	0.0	20.0
			1	104	22.85	22.83	22.95	0.0	24.5	19.01	18.98	19.07	0.0	20.0
			50	0	21.84	21.84	21.97	1.0	23.5	18.96	18.99	19.10	0.0	20.0
			50	28	22.83	22.79	22.99	0.0	24.5	18.94	18.95	19.26	0.0	20.0
			50	56	21.83	21.82	22.02	1.0	23.5	18.97	18.99	19.11	0.0	20.0
			100	0	21.83	21.78	22.00	1.0	23.5	18.94	18.94	19.23	0.0	20.0
		16QAM	1	1	21.74	21.86	22.01	1.0	23.5	18.98	19.06	19.15	0.0	20.0
			1	52	21.78	21.84	22.14	1.0	23.5	19.07	19.14	19.25	0.0	20.0
			1	104	21.75	21.86	22.01	1.0	23.5	19.03	19.11	19.13	0.0	20.0
		64QAM	1	1	20.30	20.40	20.47	2.5	22.0	18.99	19.05	19.11	0.0	20.0
		256QAM	1	1	18.47	18.29	18.50	4.5	20.0	18.61	18.61	18.61	0.0	20.0
	CP-OFDM	QPSK	1	1	21.37	21.36	21.54	1.5	23.0	19.10	19.07	19.23	0.0	20.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					371500	376500	381500			371500	376500	381500		
					1857.50 MHz	1882.50 MHz	1907.50 MHz			1857.50 MHz	1882.50 MHz	1907.50 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.89	22.85	22.94	0.0	24.5	19.01	18.97	19.09	0.0	20.0
			1	39	22.78	22.71	22.88	0.0	24.5	18.93	18.89	19.08	0.0	20.0
			1	77	22.86	22.82	22.95	0.0	24.5	19.02	19.01	19.13	0.0	20.0
			36	0	21.87	21.8	21.96	0.5	24.0	19.02	18.98	19.12	0.0	20.0
			36	21	22.87	22.78	22.97	0.0	24.5	19.02	18.96	19.16	0.0	20.0
			36	43	21.87	21.77	21.96	0.5	24.0	19.00	18.98	19.14	0.0	20.0
			75	0	21.86	21.79	21.97	0.5	24.0	19.02	18.97	19.14	0.0	20.0
		QPSK	1	1	22.84	22.81	22.93	0.0	24.5	19.01	19.02	19.07	0.0	20.0
			1	39	22.73	22.69	22.88	0.0	24.5	18.90	18.88	19.07	0.0	20.0
			1	77	22.8	22.81	22.92	0.0	24.5	18.97	19.03	19.08	0.0	20.0
			36	0	21.88	21.8	21.94	1.0	23.5	19.04	19.00	19.10	0.0	20.0
			36	21	22.88	22.8	22.97	0.0	24.5	19.00	18.97	19.13	0.0	20.0
			36	43	21.87	21.78	21.97	1.0	23.5	18.99	18.98	19.11	0.0	20.0
			75	0	21.87	21.79	21.95	1.0	23.5	18.99	18.97	19.13	0.0	20.0
		16QAM	1	1	21.95	21.8	21.9	1.0	23.5	18.95	19.02	19.14	0.0	20.0
		64QAM	1	1	20.19	20.2	20.55	2.5	22.0	19.07	19.09	19.13	0.0	20.0
		256QAM	1	1	18.42	18.39	18.54	4.5	20.0	18.63	18.68	18.72	0.0	20.0
	CP-OFDM	QPSK	1	1	21.45	21.35	21.38	1.5	23.0	19.03	18.98	19.08	0.0	20.0

NR Band n25 (Main.1) Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					371000	376500	382000			371000	376500	382000		
					1855.00 MHz	1882.50 MHz	1910.00 MHz			1855.00 MHz	1882.50 MHz	1910.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.92	22.81	22.93	0.0	24.5	19.02	18.99	19.08	0.0	20.0
			1	25	22.99	22.81	23.01	0.0	24.5	19.10	18.99	19.18	0.0	20.0
			1	50	22.86	22.78	22.91	0.0	24.5	19.02	18.99	19.09	0.0	20.0
			25	0	21.89	21.81	21.94	0.5	24.0	19.01	18.97	19.10	0.0	20.0
			25	13	22.89	22.78	22.95	0.0	24.5	19.03	18.97	19.10	0.0	20.0
			25	27	21.87	21.81	21.92	0.5	24.0	19.01	18.93	19.06	0.0	20.0
			50	0	21.90	21.79	21.96	0.5	24.0	19.02	18.95	19.10	0.0	20.0
		QPSK	1	1	22.93	22.81	22.87	0.0	24.5	19.06	18.97	19.04	0.0	20.0
			1	25	22.93	22.86	22.96	0.0	24.5	19.06	19.00	19.17	0.0	20.0
			1	50	22.87	22.80	22.86	0.0	24.5	19.05	18.97	19.03	0.0	20.0
			25	0	21.89	21.81	21.94	1.0	23.5	19.01	18.97	19.12	0.0	20.0
			25	13	22.90	22.79	22.94	0.0	24.5	19.03	18.95	19.09	0.0	20.0
			25	27	21.89	21.79	21.91	1.0	23.5	19.02	18.95	19.07	0.0	20.0
			50	0	21.91	21.79	21.94	1.0	23.5	19.02	18.95	19.11	0.0	20.0
		16QAM	1	1	21.83	21.80	21.88	1.0	23.5	19.10	19.02	19.08	0.0	20.0
		64QAM	1	1	20.37	20.35	20.31	2.5	22.0	19.23	19.04	19.12	0.0	20.0
		256QAM	1	1	18.35	18.37	18.43	4.5	20.0	18.57	18.58	18.68	0.0	20.0
	CP-OFDM	QPSK	1	1	21.40	21.37	21.42	1.5	23.0	18.92	19.00	19.04	0.0	20.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					370500	376500	382500			370500	376500	382500		
					1852.50 MHz	1882.50 MHz	1912.50 MHz			1852.50 MHz	1882.50 MHz	1912.50 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.96	22.81	22.94	0.0	24.5	18.98	18.94	19.07	0.0	20.0
			1	12	22.77	22.71	22.82	0.0	24.5	18.89	18.84	18.97	0.0	20.0
			1	23	22.78	22.80	22.90	0.0	24.5	18.96	18.94	19.05	0.0	20.0
			12	0	21.69	21.79	21.90	0.5	24.0	18.96	18.95	19.06	0.0	20.0
			12	6	22.99	22.79	22.89	0.0	24.5	18.96	18.92	19.04	0.0	20.0
			12	13	21.98	21.79	21.87	0.5	24.0	18.97	18.93	19.05	0.0	20.0
			25	0	21.85	21.80	21.88	0.5	24.0	18.96	18.94	19.05	0.0	20.0
		QPSK	1	1	22.84	22.80	22.89	0.0	24.5	18.95	18.92	19.03	0.0	20.0
			1	12	22.73	22.71	22.79	0.0	24.5	18.86	18.83	18.93	0.0	20.0
			1	23	22.85	22.79	22.84	0.0	24.5	18.96	18.90	19.01	0.0	20.0
			12	0	21.84	21.79	21.91	1.0	23.5	18.87	18.94	19.06	0.0	20.0
			12	6	22.84	22.80	22.90	0.0	24.5	18.93	18.92	19.06	0.0	20.0
			12	13	21.83	21.78	21.91	1.0	23.5	18.93	18.95	19.05	0.0	20.0
			25	0	21.83	21.79	21.88	1.0	23.5	18.93	18.94	19.07	0.0	20.0
		16QAM	1	1	21.85	21.80	21.89	1.0	23.5	18.90	18.97	19.11	0.0	20.0
		64QAM	1	1	20.43	20.31	20.37	2.5	22.0	18.91	19.00	19.14	0.0	20.0
		256QAM	1	1	18.37	18.36	18.48	4.5	20.0	18.54	18.55	18.65	0.0	20.0
	CP-OFDM	QPSK	1	1	21.33	21.33	21.46	1.5	23.0	18.99	18.91	19.06	0.0	20.0

NR Band n25 (Sub.2) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)									
					RSI=Rcv					RSI=Free, Hotspot				
					Measured Pwr (dBm)			MPR	Tune-up Limit				MPR	Tune-up Limit
					372000	376500	381000			372000	376500	381000		
					1860.00 MHz	1882.50 MHz	1905.00 MHz			1860.00 MHz	1882.50 MHz	1905.00 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.64	14.65	14.80	0.0	15.5	19.13	19.11	19.24	0.0	20.0
			1	52	14.82	14.67	14.91	0.0	15.5	19.30	19.11	19.44	0.0	20.0
			1	104	14.76	14.68	14.76	0.0	15.5	19.14	19.12	19.25	0.0	20.0
			50	0	14.67	14.67	14.76	0.0	15.5	19.13	19.11	19.27	0.0	20.0
			50	28	14.72	14.62	14.87	0.0	15.5	19.15	19.09	19.31	0.0	20.0
			50	56	14.69	14.71	14.86	0.0	15.5	19.17	19.12	19.34	0.0	20.0
			100	0	14.72	14.60	14.80	0.0	15.5	19.13	19.11	19.27	0.0	20.0
		QPSK	1	1	14.64	14.64	14.69	0.0	15.5	19.11	19.15	19.20	0.0	20.0
			1	52	14.82	14.64	14.90	0.0	15.5	19.19	19.24	19.33	0.0	20.0
			1	104	14.67	14.73	14.76	0.0	15.5	19.11	19.15	19.20	0.0	20.0
			50	0	14.67	14.66	14.73	0.0	15.5	19.13	19.10	19.27	0.0	20.0
			50	28	14.74	14.62	14.79	0.0	15.5	19.15	19.08	19.30	0.0	20.0
			50	56	14.76	14.74	14.80	0.0	15.5	19.16	19.12	19.33	0.0	20.0
			100	0	14.76	14.74	14.83	0.0	15.5	19.16	19.11	19.29	0.0	20.0
		16QAM	1	1	14.70	14.60	14.90	0.0	15.5	19.10	19.19	19.16	0.0	20.0
			1	52	14.81	14.70	15.03	0.0	15.5	19.17	19.26	19.28	0.0	20.0
			1	104	14.58	14.68	14.82	0.0	15.5	19.07	19.21	19.19	0.0	20.0
		64QAM	1	1	14.56	14.80	14.73	0.0	15.5	19.10	19.26	19.21	0.0	20.0
		256QAM	1	1	14.58	14.65	14.78	0.0	15.5	18.26	18.25	18.36	0.0	20.0
	CP-OFDM	QPSK	1	1	14.55	14.65	14.85	0.0	15.5	19.16	19.13	19.24	0.0	20.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					371500	376500	381500			371500	376500	381500		
					1857.50 MHz	1882.50 MHz	1907.50 MHz			1857.50 MHz	1882.50 MHz	1907.50 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.47	14.53	14.62	0.0	15.5	19.13	19.06	19.17	0.0	20.0
			1	39	14.34	14.29	14.61	0.0	15.5	19.03	18.95	19.17	0.0	20.0
			1	77	14.55	14.47	14.61	0.0	15.5	19.12	19.07	19.17	0.0	20.0
			36	0	14.50	14.43	14.53	0.0	15.5	19.12	19.05	19.21	0.0	20.0
			36	21	14.48	14.41	14.68	0.0	15.5	19.10	19.05	19.25	0.0	20.0
			36	43	14.48	14.41	14.57	0.0	15.5	19.14	19.09	19.20	0.0	20.0
			75	0	14.43	14.39	14.66	0.0	15.5	19.10	19.04	19.25	0.0	20.0
		QPSK	1	1	14.48	14.41	14.61	0.0	15.5	19.09	19.05	19.19	0.0	20.0
			1	39	14.44	14.43	14.58	0.0	15.5	19.01	18.95	19.18	0.0	20.0
			1	77	14.47	14.49	14.51	0.0	15.5	19.10	19.07	19.18	0.0	20.0
			36	0	14.52	14.39	14.48	0.0	15.5	19.11	19.05	19.19	0.0	20.0
			36	21	14.43	14.44	14.59	0.0	15.5	19.11	19.05	19.23	0.0	20.0
			36	43	14.44	14.46	14.53	0.0	15.5	19.12	19.09	19.20	0.0	20.0
			75	0	14.44	14.47	14.64	0.0	15.5	19.10	19.07	19.25	0.0	20.0
		16QAM	1	1	14.53	14.35	14.53	0.0	15.5	19.19	19.13	19.17	0.0	20.0
			1	39	14.46	14.33	14.52	0.0	15.5	19.11	19.02	19.18	0.0	20.0
			1	77	14.50	14.44	14.58	0.0	15.5	19.20	19.17	19.16	0.0	20.0
		64QAM	1	1	14.40	14.34	14.54	0.0	15.5	19.17	19.12	19.29	0.0	20.0
		256QAM	1	1	14.54	14.39	14.61	0.0	15.5	18.21	18.28	18.25	0.0	20.0
	CP-OFDM	QPSK	1	1	14.50	14.42	14.51	0.0	15.5	19.16	19.12	19.23	0.0	20.0

NR Band n25 (Sub.2) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					371000	376500	382000			371000	376500	382000		
					1855.00 MHz	1882.50 MHz	1910.00 MHz			1855.00 MHz	1882.50 MHz	1910.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.60	14.40	14.50	0.0	15.5	19.15	19.18	19.23	0.0	20.0
			1	25	14.66	14.36	14.60	0.0	15.5	19.23	19.27	19.31	0.0	20.0
			1	50	14.57	14.47	14.57	0.0	15.5	19.15	19.22	19.21	0.0	20.0
			25	0	14.55	14.46	14.66	0.0	15.5	19.18	19.08	19.29	0.0	20.0
			25	13	14.54	14.38	14.54	0.0	15.5	19.18	19.08	19.25	0.0	20.0
			25	27	14.45	14.47	14.50	0.0	15.5	19.14	19.07	19.22	0.0	20.0
			50	0	14.59	14.50	14.54	0.0	15.5	19.15	19.06	19.27	0.0	20.0
		QPSK	1	1	14.46	14.39	14.58	0.0	15.5	19.13	19.04	19.21	0.0	20.0
			1	25	14.48	14.54	14.66	0.0	15.5	19.15	19.08	19.31	0.0	20.0
			1	50	14.55	14.50	14.57	0.0	15.5	19.14	19.06	19.19	0.0	20.0
			25	0	14.47	14.42	14.62	0.0	15.5	19.16	19.06	19.29	0.0	20.0
			25	13	14.47	14.40	14.59	0.0	15.5	19.17	19.07	19.27	0.0	20.0
			25	27	14.44	14.40	14.50	0.0	15.5	19.17	19.07	19.23	0.0	20.0
			50	0	14.53	14.49	14.62	0.0	15.5	19.17	19.07	19.28	0.0	20.0
		16QAM	1	1	14.56	14.58	14.59	0.0	15.5	19.18	19.12	19.22	0.0	20.0
			1	25	14.53	14.56	14.60	0.0	15.5	19.23	19.18	19.33	0.0	20.0
			1	50	14.54	14.55	14.55	0.0	15.5	19.16	19.15	19.14	0.0	20.0
		64QAM	1	1	14.45	14.49	14.62	0.0	15.5	19.27	19.10	19.33	0.0	20.0
		256QAM	1	1	14.51	14.40	14.63	0.0	15.5	18.28	18.17	18.30	0.0	20.0
	CP-OFDM	QPSK	1	1	14.51	14.40	14.56	0.0	15.5	19.15	19.11	19.23	0.0	20.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					370500	376500	382500			370500	376500	382500		
					1852.50 MHz	1882.50 MHz	1912.50 MHz			1852.50 MHz	1882.50 MHz	1912.50 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.46	14.43	14.62	0.0	15.5	19.15	19.09	19.20	0.0	20.0
			1	12	14.41	14.42	14.41	0.0	15.5	19.07	19.01	19.11	0.0	20.0
			1	23	14.43	14.44	14.50	0.0	15.5	19.15	19.10	19.20	0.0	20.0
			12	0	14.51	14.53	14.54	0.0	15.5	19.12	19.09	19.20	0.0	20.0
			12	6	14.56	14.53	14.47	0.0	15.5	19.12	19.08	19.18	0.0	20.0
			12	13	14.52	14.44	14.45	0.0	15.5	19.12	19.09	19.18	0.0	20.0
			25	0	14.55	14.55	14.51	0.0	15.5	19.13	19.10	19.19	0.0	20.0
		QPSK	1	1	14.47	14.44	14.47	0.0	15.5	19.14	19.08	19.17	0.0	20.0
			1	12	14.46	14.42	14.48	0.0	15.5	19.04	18.99	19.06	0.0	20.0
			1	23	14.41	14.51	14.43	0.0	15.5	19.11	19.08	19.13	0.0	20.0
			12	0	14.55	14.57	14.49	0.0	15.5	19.13	19.09	19.21	0.0	20.0
			12	6	14.55	14.43	14.56	0.0	15.5	19.13	19.09	19.19	0.0	20.0
			12	13	14.50	14.44	14.45	0.0	15.5	19.12	19.09	19.18	0.0	20.0
			25	0	14.57	14.53	14.50	0.0	15.5	19.13	19.08	19.21	0.0	20.0
		16QAM	1	1	14.48	14.50	14.44	0.0	15.5	19.16	19.12	19.19	0.0	20.0
			1	12	14.36	14.35	14.33	0.0	15.5	19.10	19.03	19.06	0.0	20.0
			1	23	14.45	14.52	14.51	0.0	15.5	19.17	19.12	19.15	0.0	20.0
		64QAM	1	1	14.57	14.48	14.41	0.0	15.5	19.20	19.19	19.23	0.0	20.0
		256QAM	1	1	14.53	14.44	14.47	0.0	15.5	18.22	18.12	18.29	0.0	20.0
	CP-OFDM	QPSK	1	1	14.50	14.52	14.57	0.0	15.5	19.11	19.08	19.20	0.0	20.0

NR Band n41(Voice/data/SRS0) (Sub.2) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)						
					DSI=Free, Rcv, Hotspot						
					Measured Pwr (dBm)					MPR	Tune-up Limit
							518598				
							2592.99 MHz				
100 MHz	DFT-s-OFDM	π/2 BPSK	1	1			16.30			0.0	17.0
			1	136			16.29			0.0	17.0
			1	271			16.48			0.0	17.0
			135	0			16.07			0.0	17.0
			135	69			16.31			0.0	17.0
			135	138			16.33			0.0	17.0
			270	0			16.32			0.0	17.0
		QPSK	1	1			**16.51**			0.0	17.0
			1	136			16.22			0.0	17.0
			1	271			16.46			0.0	17.0
			135	0			16.03			0.0	17.0
			135	69			16.27			0.0	17.0
			135	138			**16.38**			0.0	17.0
			270	0			16.28			0.0	17.0
		16QAM	1	1			16.47			0.0	17.0
			1	136			16.25			0.0	17.0
			1	271			16.20			0.0	17.0
		64QAM	1	1			16.34			0.0	17.0
		256QAM	1	1			15.87			0.0	17.0
	CP-OFDM	QPSK	1	1			16.37			0.0	17.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
					508200				528996		
					2541.00 MHz				2644.98 MHz		
90 MHz	DFT-s-OFDM	π/2 BPSK	1	1	16.26				16.36	0.0	17.0
			1	122	16.55				16.37	0.0	17.0
			1	243	16.45				16.31	0.0	17.0
			120	0	16.41				16.36	0.0	17.0
			120	62	16.34				16.32	0.0	17.0
			120	125	16.46				16.33	0.0	17.0
			243	0	16.29				16.27	0.0	17.0
		QPSK	1	1	16.52				16.53	0.0	17.0
			1	122	16.32				16.28	0.0	17.0
			1	243	16.42				16.25	0.0	17.0
			120	0	16.31				16.48	0.0	17.0
			120	62	16.35				16.39	0.0	17.0
			120	125	16.36				16.34	0.0	17.0
			243	0	16.27				16.23	0.0	17.0
		16QAM	1	1	16.36				16.24	0.0	17.0
			1	122	16.36				16.33	0.0	17.0
			1	243	16.40				16.44	0.0	17.0
		64QAM	1	1	16.03				16.14	0.0	17.0
		256QAM	1	1	15.77				15.78	0.0	17.0
	CP-OFDM	QPSK	1	1	16.23				16.14	0.0	17.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
					507204				529998		
					2536.02 MHz				2649.99 MHz		
80 MHz	DFT-s-OFDM	π/2 BPSK	1	1	16.39				16.42	0.0	17.0
			1	108	16.47				16.33	0.0	17.0
			1	215	16.53				16.32	0.0	17.0
			108	0	16.30				16.36	0.0	17.0
			108	54	16.25				16.24	0.0	17.0
			108	109	16.40				16.20	0.0	17.0
			216	0	16.40				16.32	0.0	17.0
		QPSK	1	1	16.50				16.51	0.0	17.0
			1	108	16.27				16.37	0.0	17.0
			1	215	16.48				16.33	0.0	17.0
			108	0	16.36				16.36	0.0	17.0
			108	54	16.33				16.36	0.0	17.0
			108	109	16.33				16.27	0.0	17.0
			216	0	16.46				16.36	0.0	17.0
		16QAM	1	1	16.39				16.21	0.0	17.0
			1	108	16.48				16.37	0.0	17.0
			1	215	16.36				16.42	0.0	17.0
		64QAM	1	1	16.16				16.20	0.0	17.0
		256QAM	1	1	15.71				15.76	0.0	17.0
	CP-OFDM	QPSK	1	1	16.24				16.16	0.0	17.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer.

NR Band n41(Voice/data/SRS0) (Sub.2) Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
					506202				531000		
					2531.01 MHz				2655.00 MHz		
70 MHz	DFT-s-OFDM	π/2 BPSK	1	1	16.30				16.37	0.0	17.0
			1	94	16.51				16.37	0.0	17.0
			1	187	16.42				16.32	0.0	17.0
			90	0	16.38				16.33	0.0	17.0
			90	49	16.31				16.29	0.0	17.0
			90	99	16.36				16.29	0.0	17.0
			180	0	16.20				16.28	0.0	17.0
		QPSK	1	1	16.51				16.52	0.0	17.0
			1	94	16.30				16.34	0.0	17.0
			1	187	16.47				16.31	0.0	17.0
			90	0	16.35				16.44	0.0	17.0
			90	49	16.26				16.43	0.0	17.0
			90	99	16.38				16.21	0.0	17.0
			180	0	16.32				16.30	0.0	17.0
		16QAM	1	1	16.42				16.27	0.0	17.0
			1	94	16.49				16.28	0.0	17.0
			1	187	16.37				16.41	0.0	17.0
		64QAM	1	1	16.09				16.20	0.0	17.0
		256QAM	1	1	15.74				15.67	0.0	17.0
	CP-OFDM	QPSK	1	1	16.35				16.12	0.0	17.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
					505200		518598		531996		
					2526.00 MHz		2592.99 MHz		2659.98 MHz		
60 MHz	DFT-s-OFDM	π/2 BPSK	1	1	16.28		16.56		16.26	0.0	17.0
			1	80	16.48		16.43		16.44	0.0	17.0
			1	160	16.47		16.62		16.38	0.0	17.0
			81	0	16.39		16.39		16.33	0.0	17.0
			81	40	16.35		16.42		16.22	0.0	17.0
			81	81	16.45		16.44		16.22	0.0	17.0
			162	0	16.25		16.41		16.25	0.0	17.0
		QPSK	1	1	16.50		16.32		16.47	0.0	17.0
			1	80	16.22		16.56		16.35	0.0	17.0
			1	160	16.50		16.59		16.25	0.0	17.0
			81	0	16.30		16.42		16.43	0.0	17.0
			81	40	16.22		16.50		16.37	0.0	17.0
			81	81	16.35		16.37		16.31	0.0	17.0
			162	0	16.38		16.31		16.24	0.0	17.0
		16QAM	1	1	16.37		16.41		16.34	0.0	17.0
			1	80	16.49		16.52		16.40	0.0	17.0
			1	160	16.29		16.40		16.40	0.0	17.0
		64QAM	1	1	16.11		16.25		16.16	0.0	17.0
		256QAM	1	1	15.82		15.79		15.71	0.0	17.0
	CP-OFDM	QPSK	1	1	16.25		16.37		16.21	0.0	17.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
					504204		518598		532998		
					2521.02 MHz		2592.99 MHz		2664.99 MHz		
50 MHz	DFT-s-OFDM	π/2 BPSK	1	1	16.29		16.44		16.39	0.0	17.0
			1	66	16.47		16.49		16.41	0.0	17.0
			1	131	16.52		16.57		16.41	0.0	17.0
			64	0	16.31		16.33		16.42	0.0	17.0
			64	34	16.32		16.53		16.29	0.0	17.0
			64	69	16.41		16.44		16.27	0.0	17.0
			128	0	16.20		16.35		16.22	0.0	17.0
		QPSK	1	1	16.55		16.36		16.44	0.0	17.0
			1	66	16.33		16.46		16.39	0.0	17.0
			1	131	16.41		16.51		16.30	0.0	17.0
			64	0	16.40		16.41		16.45	0.0	17.0
			64	34	16.31		16.42		16.29	0.0	17.0
			64	69	16.47		16.40		16.30	0.0	17.0
			128	0	16.34		16.35		16.23	0.0	17.0
		16QAM	1	1	16.48		16.43		16.23	0.0	17.0
			1	66	16.35		16.51		16.29	0.0	17.0
			1	131	16.31		16.48		16.39	0.0	17.0
		64QAM	1	1	16.02		16.22		16.17	0.0	17.0
		256QAM	1	1	15.73		15.92		15.72	0.0	17.0
	CP-OFDM	QPSK	1	1	16.33		16.37		16.13	0.0	17.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer.

NR Band n41(Voice/data/SRS0) (Sub.2) Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
					503202	513468		523734	534000		
					2516.01 MHz	2567.34 MHz		2618.67 MHz	2670.00 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	16.37	16.40		16.47	16.35	0.0	17.0
			1	52	16.40	16.53		16.54	16.39	0.0	17.0
			1	104	16.51	16.25		16.60	16.27	0.0	17.0
			50	0	16.33	16.37		16.52	16.38	0.0	17.0
			50	28	16.37	16.32		16.53	16.25	0.0	17.0
			50	56	16.46	16.43		16.55	16.32	0.0	17.0
			100	0	16.35	16.43		16.51	16.28	0.0	17.0
		QPSK	1	1	16.52	16.42		16.61	16.54	0.0	17.0
			1	52	16.25	16.42		16.55	16.34	0.0	17.0
			1	104	16.40	16.43		16.39	16.38	0.0	17.0
			50	0	16.43	16.26		16.55	16.31	0.0	17.0
			50	28	16.34	16.49		16.43	16.39	0.0	17.0
			50	56	16.39	16.35		16.47	16.21	0.0	17.0
			100	0	16.43	16.52		16.57	16.26	0.0	17.0
		16QAM	1	1	16.41	16.32		16.58	16.29	0.0	17.0
			1	52	16.37	16.46		16.45	16.32	0.0	17.0
			1	104	16.42	16.52		16.46	16.43	0.0	17.0
		64QAM	1	1	16.12	16.44		16.33	16.16	0.0	17.0
		256QAM	1	1	15.74	16.04		16.89	15.69	0.0	17.0
	CP-OFDM	QPSK	1	1	16.25	16.39		16.46	16.25	0.0	17.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
					502200	510402	518598	526800	534996		
					2511.00 MHz	2552.01 MHz	2592.99 MHz	2634.00 MHz	2674.98 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	16.27	16.48	16.46	16.56	16.33	0.0	17.0
			1	39	16.49	16.53	16.48	16.49	16.33	0.0	17.0
			1	76	16.39	16.41	16.58	16.48	16.28	0.0	17.0
			36	0	16.40	16.38	16.33	16.45	16.30	0.0	17.0
			36	21	16.33	16.30	16.49	16.56	16.33	0.0	17.0
			36	42	16.38	16.50	16.37	16.45	16.30	0.0	17.0
			75	0	16.28	16.30	16.45	16.49	16.33	0.0	17.0
		QPSK	1	1	16.51	16.43	16.45	16.66	16.46	0.0	17.0
			1	39	16.32	16.37	16.52	16.52	16.29	0.0	17.0
			1	76	16.40	16.40	16.54	16.51	16.37	0.0	17.0
			36	0	16.37	16.30	16.41	16.60	16.46	0.0	17.0
			36	21	16.31	16.47	16.43	16.47	16.32	0.0	17.0
			36	42	16.27	16.47	16.47	16.55	16.26	0.0	17.0
			75	0	16.37	16.49	16.38	16.56	16.29	0.0	17.0
		16QAM	1	1	16.35	16.41	16.43	16.48	16.20	0.0	17.0
			1	39	16.45	16.48	16.45	16.50	16.28	0.0	17.0
			1	76	16.27	16.49	16.51	16.52	16.37	0.0	17.0
		64QAM	1	1	16.02	16.47	16.36	16.46	16.25	0.0	17.0
		256QAM	1	1	15.81	16.03	15.83	16.03	15.61	0.0	17.0
	CP-OFDM	QPSK	1	1	16.20	16.32	16.26	16.43	16.19	0.0	17.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
					501204	509904	518598	527298	535998		
					2506.02 MHz	2549.52 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	16.29	16.47	16.49	16.55	16.30	0.0	17.0
			1	25	16.46	16.63	16.39	16.51	16.45	0.0	17.0
			1	49	16.43	16.36	16.48	16.46	16.29	0.0	17.0
			25	0	16.29	16.48	16.39	16.40	16.37	0.0	17.0
			25	13	16.33	16.42	16.46	16.52	16.24	0.0	17.0
			25	26	16.33	16.47	16.34	16.48	16.25	0.0	17.0
			50	0	16.34	16.43	16.40	16.41	16.31	0.0	17.0
		QPSK	1	1	16.59	16.45	16.40	16.64	16.41	0.0	17.0
			1	25	16.31	16.48	16.43	16.44	16.27	0.0	17.0
			1	49	16.43	16.37	16.50	16.49	16.26	0.0	17.0
			25	0	16.33	16.45	16.39	16.61	16.36	0.0	17.0
			25	13	16.26	16.41	16.57	16.31	16.25	0.0	17.0
			25	26	16.28	16.36	16.38	16.49	16.34	0.0	17.0
			50	0	16.29	16.52	16.41	16.54	16.21	0.0	17.0
		16QAM	1	1	16.38	16.37	16.45	16.52	16.24	0.0	17.0
			1	25	16.34	16.34	16.48	16.57	16.27	0.0	17.0
			1	49	16.44	16.43	16.42	16.51	16.32	0.0	17.0
		64QAM	1	1	16.08	16.47	16.26	16.39	16.23	0.0	17.0
		256QAM	1	1	15.86	15.91	15.94	15.91	15.60	0.0	17.0
	CP-OFDM	QPSK	1	1	16.29	16.30	16.38	16.44	16.20	0.0	17.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer.

NR Band n41(Voice/data/SRS0) (Sub.2) Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
					500700	509652	518598	527550	536496		
					2503.50 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	16.41	16.47	16.48	16.53	16.40	0.0	17.0
			1	18	16.43	16.63	16.50	16.43	16.39	0.0	17.0
			1	36	16.43	16.30	16.52	16.48	16.37	0.0	17.0
			18	0	16.43	16.35	16.31	16.47	16.31	0.0	17.0
			18	10	16.37	16.47	16.39	16.49	16.35	0.0	17.0
			18	20	16.44	16.34	16.40	16.45	16.30	0.0	17.0
			36	0	16.38	16.39	16.36	16.40	16.31	0.0	17.0
		QPSK	1	1	16.57	16.41	16.29	16.60	16.38	0.0	17.0
			1	18	16.36	16.36	16.50	16.38	16.47	0.0	17.0
			1	36	16.35	16.37	16.51	16.47	16.31	0.0	17.0
			18	0	16.37	16.31	16.37	16.47	16.46	0.0	17.0
			18	10	16.22	16.43	16.40	16.46	16.31	0.0	17.0
			18	20	16.39	16.39	16.39	16.52	16.29	0.0	17.0
			36	0	16.38	16.48	16.37	16.58	16.32	0.0	17.0
		16QAM	1	1	16.35	16.42	16.46	16.57	16.26	0.0	17.0
			1	18	16.48	16.51	16.43	16.54	16.26	0.0	17.0
			1	36	16.31	16.54	16.48	16.56	16.30	0.0	17.0
		64QAM	1	1	16.02	16.40	16.39	16.39	16.09	0.0	17.0
		256QAM	1	1	15.70	15.99	15.86	15.97	15.65	0.0	17.0
	CP-OFDM	QPSK	1	1	16.26	16.33	16.29	16.47	16.09	0.0	17.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit
					500202	509400	518598	527802	537000		
					2501.01 MHz	2547.00 MHz	2592.99 MHz	2639.01 MHz	2685.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	16.34	16.42	16.45	16.58	16.30	0.0	17.0
			1	12	16.47	16.53	16.47	16.48	16.37	0.0	17.0
			1	22	16.43	16.37	16.54	16.50	16.29	0.0	17.0
			12	0	16.39	16.37	16.36	16.39	16.33	0.0	17.0
			12	6	16.31	16.40	16.49	16.51	16.30	0.0	17.0
			12	12	16.39	16.40	16.40	16.46	16.26	0.0	17.0
			24	0	16.31	16.44	16.46	16.42	16.29	0.0	17.0
		QPSK	1	1	16.51	16.42	16.43	16.61	16.50	0.0	17.0
			1	12	16.27	16.41	16.51	16.47	16.40	0.0	17.0
			1	22	16.38	16.35	16.54	16.39	16.33	0.0	17.0
			12	0	16.40	16.33	16.30	16.51	16.44	0.0	17.0
			12	6	16.33	16.52	16.49	16.40	16.32	0.0	17.0
			12	12	16.33	16.44	16.40	16.48	16.32	0.0	17.0
			24	0	16.35	16.47	16.40	16.54	16.29	0.0	17.0
		16QAM	1	1	16.45	16.38	16.44	16.54	16.24	0.0	17.0
			1	12	16.44	16.43	16.44	16.51	16.30	0.0	17.0
			1	22	16.36	16.45	16.47	16.51	16.34	0.0	17.0
		64QAM	1	1	16.08	16.40	16.28	16.37	16.22	0.0	17.0
		256QAM	1	1	15.76	16.01	15.83	15.93	15.65	0.0	17.0
	CP-OFDM	QPSK	1	1	16.30	16.34	16.28	16.46	16.18	0.0	17.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer.

NR Band n41(SRS1) (Main.2) Measured Results

BW (MHz)	Mode	Maximum Average Power (dBm)					
		DSI=Free, Rcv, Hotspot					
		Measured Pwr (dBm)					Tune-up Limit
				518598			
				2592.99 MHz			
100 MHz	SRS CW			14.56			15.5
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		508200				528996	
		2541.00 MHz				2644.98 MHz	
90 MHz	SRS CW	14.36				14.61	15.5
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		507204				529998	
		2536.02 MHz				2649.99 MHz	
80 MHz	SRS CW	14.42				14.65	15.5
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		506202				531000	
		2531.01 MHz				2655.00 MHz	
70 MHz	SRS CW	14.43				14.58	15.5
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		505200		518598		531996	
		2526.00 MHz		2592.99 MHz		2659.98 MHz	
60 MHz	SRS CW	14.44		14.44		14.56	15.5
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		504204		518598		532998	
		2521.02 MHz		2592.99 MHz		2664.99 MHz	
50 MHz	SRS CW	14.36		14.45		14.59	15.5
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		503202	513468		523734	534000	
		2516.01 MHz	2567.34 MHz		2618.67 MHz	2670.00 MHz	
40 MHz	SRS CW	14.40	14.50		14.64	14.60	15.5
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		502704	510654	518598	526548	534498	
		2513.52 MHz	2553.27 MHz	2592.99 MHz	2632.74 MHz	2672.49 MHz	
35 MHz	SRS CW	14.45	14.41	14.47	14.61	14.62	15.5
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		501204	509904	518598	527298	535998	
		2506.02 MHz	2549.52 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz	
20 MHz	SRS CW	14.42	14.44	14.42	14.56	14.63	15.5
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		500700	509652	518598	527550	536496	
		2503.50 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz	
15 MHz	SRS CW	14.45	14.43	14.48	14.58	14.55	15.5
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		500202	509400	518598	527802	537000	
		2501.01 MHz	2547.00 MHz	2592.99 MHz	2639.01 MHz	2685.00 MHz	
10 MHz	SRS CW	14.40	14.46	14.43	14.59	14.60	15.5

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer

NR Band n41(SRS2) (Sub.1) Measured Results

BW (MHz)	Mode	Maximum Average Power (dBm)					
		DSI=Free, Rcv, Hotspot					
		Measured Pwr (dBm)					Tune-up Limit
				518598			
				2592.99 MHz			
100 MHz	SRS CW			13.85			15.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		508200				528996	
		2541.00 MHz				2644.98 MHz	
90 MHz	SRS CW	14.25				13.47	15.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		507204				529998	
		2536.02 MHz				2649.99 MHz	
80 MHz	SRS CW	14.29				13.42	15.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		506202				531000	
		2531.01 MHz				2655.00 MHz	
70 MHz	SRS CW	14.24				13.40	15.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		505200		518598		531996	
		2526.00 MHz		2592.99 MHz		2659.98 MHz	
60 MHz	SRS CW	14.23		13.70		13.42	15.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		504204		518598		532998	
		2521.02 MHz		2592.99 MHz		2664.99 MHz	
50 MHz	SRS CW	14.32		13.71		13.39	15.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		503202	513468		523734	534000	
		2516.01 MHz	2567.34 MHz		2618.67 MHz	2670.00 MHz	
40 MHz	SRS CW	14.23	14.04		13.61	13.41	15.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		502200	510402	518598	526800	534996	
		2511.00 MHz	2552.01 MHz	2592.99 MHz	2634.00 MHz	2674.98 MHz	
30 MHz	SRS CW	14.30	14.06	13.71	13.65	13.45	15.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		501204	509904	518598	527298	535998	
		2506.02 MHz	2549.52 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz	
20 MHz	SRS CW	14.25	14.00	13.71	13.67	13.41	15.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		500700	509652	518598	527550	536496	
		2503.50 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz	
15 MHz	SRS CW	14.31	14.08	13.70	13.67	13.39	15.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		500202	509400	518598	527802	537000	
		2501.01 MHz	2547.00 MHz	2592.99 MHz	2639.01 MHz	2685.00 MHz	
10 MHz	SRS CW	14.27	14.04	13.72	13.66	13.44	15.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer

NR Band n41(SRS3) (Main.4) Measured Results

BW (MHz)	Mode	Maximum Average Power (dBm)					
		DSI=Free, Rcv, Hotspot					
		Measured Pwr (dBm)					Tune-up Limit
				518598			
				2592.99 MHz			
100 MHz	SRS CW			15.21			16.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		508200				528996	
		2541.00 MHz				2644.98 MHz	
90 MHz	SRS CW	15.26				15.24	16.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		507204				529998	
		2536.02 MHz				2649.99 MHz	
80 MHz	SRS CW	15.22				15.24	16.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		506202				531000	
		2531.01 MHz				2655.00 MHz	
70 MHz	SRS CW	15.22				15.24	16.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		505200		518598		531996	
		2526.00 MHz		2592.99 MHz		2659.98 MHz	
60 MHz	SRS CW	15.19		15.87		15.15	16.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		504204		518598		532998	
		2521.02 MHz		2592.99 MHz		2664.99 MHz	
50 MHz	SRS CW	15.18		15.79		15.22	16.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		503202	513468		523734	534000	
		2516.01 MHz	2567.34 MHz		2618.67 MHz	2670.00 MHz	
40 MHz	SRS CW	15.25	15.25		15.19	15.19	16.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		502200	510402	518598	526800	534996	
		2511.00 MHz	2552.01 MHz	2592.99 MHz	2634.00 MHz	2674.98 MHz	
30 MHz	SRS CW	15.18	15.26	15.87	15.22	15.15	16.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		501204	509904	518598	527298	535998	
		2506.02 MHz	2549.52 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz	
20 MHz	SRS CW	15.25	15.25	15.77	15.20	15.25	16.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		500700	509652	518598	527550	536496	
		2503.50 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz	
15 MHz	SRS CW	15.19	15.27	15.79	15.16	15.24	16.0
BW (MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit
		500202	509400	518598	527802	537000	
		2501.01 MHz	2547.00 MHz	2592.99 MHz	2639.01 MHz	2685.00 MHz	
10 MHz	SRS CW	15.22	15.30	15.82	15.21	15.20	16.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer

NR Band n66 (Main.1) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					Maximum Average Power (dBm)				
					RSI=Rcv					RSI=Free, Hotspot				
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					344000	349000	354000			344000	349000	354000		
					1720.00 MHz	1745.00 MHz	1770.00 MHz			1720.00 MHz	1745.00 MHz	1770.00 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.39	23.33	23.18	0.0	24.5	19.39	19.42	19.18	0.0	20.5
			1	52	23.35	23.36	23.25	0.0	24.5	19.35	19.40	19.30	0.0	20.5
			1	104	23.27	23.19	23.08	0.0	24.5	19.29	19.18	19.10	0.0	20.5
			50	0	22.36	22.35	22.13	0.5	24.0	19.37	19.38	19.19	0.0	20.5
			50	28	23.33	23.29	23.15	0.0	24.5	19.33	19.32	19.21	0.0	20.5
			50	56	22.28	22.23	22.06	0.5	24.0	19.30	19.27	19.12	0.0	20.5
			100	0	22.33	22.28	22.14	0.5	24.0	19.34	19.31	19.21	0.0	20.5
		QPSK	1	1	23.38	23.26	23.12	0.0	24.5	19.38	19.34	19.39	0.0	20.5
			1	52	23.32	23.26	23.13	0.0	24.5	19.35	19.31	19.32	0.0	20.5
			1	104	23.26	23.15	23.02	0.0	24.5	19.28	19.19	19.20	0.0	20.5
			50	0	22.36	22.33	22.11	1.0	23.5	19.38	19.34	19.31	0.0	20.5
			50	28	23.31	23.29	23.12	0.0	24.5	19.34	19.32	19.39	0.0	20.5
			50	56	22.28	22.22	22.08	1.0	23.5	19.29	19.27	19.24	0.0	20.5
			100	0	22.32	22.29	22.16	1.0	23.5	19.32	19.31	19.19	0.0	20.5
		16QAM	1	1	22.43	22.23	22.17	1.0	23.5	19.39	19.39	19.11	0.0	20.5
			1	52	22.42	22.25	22.18	1.0	23.5	19.33	19.38	19.16	0.0	20.5
			1	104	22.33	22.08	22.05	1.0	23.5	19.26	19.24	19.03	0.0	20.5
		64QAM	1	1	20.87	20.96	20.65	2.5	22.0	19.42	19.35	19.26	0.0	20.5
		256QAM	1	1	18.93	18.83	18.66	4.5	20.0	18.44	18.38	18.30	1.0	19.5
	CP-OFDM	QPSK	1	1	21.96	21.86	21.71	1.5	23.0	19.40	19.37	19.24	0.0	20.5
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					343500	349000	354500			343500	349000	354500		
					1717.50 MHz	1745.00 MHz	1772.50 MHz			1717.50 MHz	1745.00 MHz	1772.50 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.30	23.37	23.29	0.0	24.5	19.44	19.33	19.16	0.0	20.5
			1	39	23.26	23.47	23.44	0.0	24.5	19.28	19.22	19.05	0.0	20.5
			1	77	23.44	23.38	23.29	0.0	24.5	19.32	19.21	19.09	0.0	20.5
			36	0	22.50	22.71	22.30	0.5	24.0	19.41	19.36	19.15	0.0	20.5
			36	21	23.44	23.47	23.22	0.0	24.5	19.38	19.32	19.12	0.0	20.5
			36	43	22.40	22.36	22.16	0.5	24.0	19.37	19.27	19.09	0.0	20.5
			75	0	22.43	22.38	22.20	0.5	24.0	19.38	19.30	19.14	0.0	20.5
		QPSK	1	1	23.44	23.40	23.24	0.0	24.5	19.41	19.33	19.12	0.0	20.5
			1	39	23.48	23.26	23.11	0.0	24.5	19.25	19.23	18.99	0.0	20.5
			1	77	23.32	23.24	23.15	0.0	24.5	19.28	19.22	19.03	0.0	20.5
			36	0	22.42	22.36	22.21	1.0	23.5	19.40	19.34	19.15	0.0	20.5
			36	21	23.37	23.32	23.19	0.0	24.5	19.37	19.30	19.12	0.0	20.5
			36	43	22.37	22.29	22.15	1.0	23.5	19.37	19.27	19.09	0.0	20.5
			75	0	22.41	22.34	22.19	1.0	23.5	19.39	19.32	19.13	0.0	20.5
		16QAM	1	1	22.46	22.32	22.27	1.0	23.5	19.43	19.40	19.13	0.0	20.5
			1	39	22.34	22.23	22.17	1.0	23.5	19.27	19.26	19.00	0.0	20.5
			1	77	22.39	22.23	22.21	1.0	23.5	19.33	19.27	19.04	0.0	20.5
		64QAM	1	1	20.84	20.92	20.62	2.5	22.0	19.35	19.34	19.06	0.0	20.5
		256QAM	1	1	18.96	18.89	18.66	4.5	20.0	18.50	18.37	18.24	1.0	19.5
	CP-OFDM	QPSK	1	1	21.94	21.89	21.74	1.5	23.0	19.43	19.35	19.18	0.0	20.5

NR Band n66 (Main.1) Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					343000	349000	355000			343000	349000	355000		
					1715.00 MHz	1745.00 MHz	1775.00 MHz			1715.00 MHz	1745.00 MHz	1775.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.37	23.42	23.28	0.0	24.5	19.44	19.36	19.34	0.0	20.5
			1	25	23.34	23.43	23.34	0.0	24.5	19.44	19.38	19.48	0.0	20.5
			1	50	23.37	23.32	23.2	0.0	24.5	19.39	19.27	19.17	0.0	20.5
			25	0	22.32	22.38	22.24	0.5	24.0	19.46	19.34	19.24	0.0	20.5
			25	13	23.33	23.35	23.23	0.0	24.5	19.42	19.31	19.37	0.0	20.5
			25	27	22.34	22.33	22.2	0.5	24.0	19.41	19.29	19.34	0.0	20.5
			50	0	22.35	22.38	22.22	0.5	24.0	19.44	19.3	19.32	0.0	20.5
		QPSK	1	1	23.39	23.36	23.24	0.0	24.5	19.43	19.32	19.31	0.0	20.5
			1	25	23.32	23.35	23.28	0.0	24.5	19.44	19.3	19.25	0.0	20.5
			1	50	23.32	23.28	23.17	0.0	24.5	19.34	19.26	19.13	0.0	20.5
			25	0	22.42	22.39	22.26	1.0	23.5	19.45	19.35	19.18	0.0	20.5
			25	13	23.31	23.36	23.21	0.0	24.5	19.44	19.3	19.16	0.0	20.5
			25	27	22.3	22.33	22.21	1.0	23.5	19.39	19.28	19.14	0.0	20.5
			50	0	22.3	22.38	22.22	1.0	23.5	19.43	19.32	19.16	0.0	20.5
		16QAM	1	1	22.38	22.45	22.21	1.0	23.5	19.45	19.37	19.29	0.0	20.5
			1	25	22.41	22.47	22.21	1.0	23.5	19.48	19.36	19.32	0.0	20.5
			1	50	22.33	22.35	22.11	1.0	23.5	19.36	19.31	19.19	0.0	20.5
		64QAM	1	1	20.86	20.9	20.74	2.5	22.0	19.5	19.53	19.43	0.0	20.5
		256QAM	1	1	18.89	18.93	18.8	4.5	20.0	18.45	18.4	18.27	1.0	19.5
	CP-OFDM	QPSK	1	1	21.91	21.93	21.8	1.5	23.0	19.48	19.26	19.25	0.0	20.5

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					342500	349000	355500			342500	349000	355500		
					1712.50 MHz	1745.00 MHz	1777.50 MHz			1712.50 MHz	1745.00 MHz	1777.50 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	23.34	23.40	23.20	0.0	24.5	19.40	19.32	19.12	0.0	20.5
			1	12	23.24	23.28	23.09	0.0	24.5	19.30	19.22	19.02	0.0	20.5
			1	23	23.42	23.34	23.19	0.0	24.5	19.35	19.28	19.10	0.0	20.5
			12	0	22.55	22.39	22.18	0.5	24.0	19.40	19.31	19.12	0.0	20.5
			12	6	23.42	23.36	23.19	0.0	24.5	19.39	19.30	19.11	0.0	20.5
			12	13	22.47	22.36	22.18	0.5	24.0	19.39	19.29	19.11	0.0	20.5
			25	0	22.48	22.38	22.19	0.5	24.0	19.39	19.33	19.12	0.0	20.5
		QPSK	1	1	23.47	23.35	23.23	0.0	24.5	19.39	19.32	19.11	0.0	20.5
			1	12	23.36	23.25	23.15	0.0	24.5	19.32	19.24	19.05	0.0	20.5
			1	23	23.42	23.31	23.22	0.0	24.5	19.38	19.30	19.12	0.0	20.5
			12	0	22.43	22.38	22.20	1.0	23.5	19.39	19.33	19.11	0.0	20.5
			12	6	23.44	23.38	23.18	0.0	24.5	19.38	19.32	19.11	0.0	20.5
			12	13	22.42	22.35	22.18	1.0	23.5	19.38	19.29	19.11	0.0	20.5
			25	0	22.45	22.36	22.20	1.0	23.5	19.38	19.31	19.12	0.0	20.5
		16QAM	1	1	22.47	22.31	22.39	1.0	23.5	19.36	19.34	19.05	0.0	20.5
			1	12	22.40	22.23	22.32	1.0	23.5	19.27	19.26	18.96	0.0	20.5
			1	23	22.47	22.28	22.36	1.0	23.5	19.37	19.30	19.04	0.0	20.5
		64QAM	1	1	20.91	20.94	20.62	2.5	22.0	19.41	19.18	18.95	0.0	20.5
		256QAM	1	1	18.98	18.86	18.74	4.5	20.0	18.33	18.38	18.26	1.0	19.5
	CP-OFDM	QPSK	1	1	21.99	21.95	21.72	1.5	23.0	19.43	19.33	19.05	0.0	20.5

NR Band n66 (Sub.2) Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)								
					RSI=Rcv					RSI=Free, Hotspot			
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					344000	349000	354000			344000	349000	354000		
					1720.00 MHz	1745.00 MHz	1770.00 MHz			1720.00 MHz	1745.00 MHz	1770.00 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.08	17.89	17.85	0.0	19.0	19.13	18.93	18.84	0.0	20.0
			1	52	17.94	17.97	18.03	0.0	19.0	19.00	18.97	19.01	0.0	20.0
			1	104	17.84	17.80	17.94	0.0	19.0	18.89	18.83	18.88	0.0	20.0
			50	0	18.03	17.91	17.85	0.0	19.0	19.09	18.96	18.85	0.0	20.0
			50	28	17.89	17.88	17.92	0.0	19.0	18.99	18.93	18.89	0.0	20.0
			50	56	17.86	17.86	17.91	0.0	19.0	18.92	18.89	18.87	0.0	20.0
			100	0	17.92	17.87	17.91	0.0	19.0	18.98	18.91	18.91	0.0	20.0
		QPSK	1	1	18.05	17.85	17.82	0.0	19.0	19.13	18.91	18.82	0.0	20.0
			1	52	17.90	17.86	17.91	0.0	19.0	19.01	18.93	18.94	0.0	20.0
			1	104	17.81	17.76	17.90	0.0	19.0	18.86	18.83	18.90	0.0	20.0
			50	0	18.01	17.90	17.87	0.0	19.0	19.07	18.97	18.84	0.0	20.0
			50	28	17.89	17.87	17.92	0.0	19.0	18.98	18.91	18.88	0.0	20.0
			50	56	17.85	17.85	17.91	0.0	19.0	18.94	18.89	18.88	0.0	20.0
			100	0	17.93	17.88	17.90	0.0	19.0	18.97	18.91	18.88	0.0	20.0
		16QAM	1	1	18.07	17.98	17.97	0.0	19.0	19.18	18.95	18.82	0.0	20.0
			1	52	17.97	18.05	18.10	0.0	19.0	19.12	19.00	18.94	0.0	20.0
			1	104	17.77	17.93	18.03	0.0	19.0	18.93	18.85	18.90	0.0	20.0
		64QAM	1	1	18.14	17.94	17.95	0.0	19.0	19.20	19.06	18.80	0.0	20.0
		256QAM	1	1	18.00	17.69	17.77	0.0	19.0	18.20	18.06	17.91	0.0	20.0
	CP-OFDM	QPSK	1	1	18.11	17.82	17.81	0.0	19.0	19.11	18.93	18.86	0.0	20.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					343500	349000	354500			343500	349000	354500		
					1717.50 MHz	1745.00 MHz	1772.50 MHz			1717.50 MHz	1745.00 MHz	1772.50 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	17.89	17.68	17.56	0.0	19.0	19.12	18.90	18.76	0.0	20.0
			1	39	17.67	17.54	17.49	0.0	19.0	18.89	18.77	18.69	0.0	20.0
			1	77	17.65	17.58	17.61	0.0	19.0	18.88	18.78	18.82	0.0	20.0
			36	0	17.88	17.68	17.60	0.0	19.0	19.09	18.90	18.79	0.0	20.0
			36	21	17.76	17.63	17.55	0.0	19.0	19.00	18.85	18.76	0.0	20.0
			36	43	17.71	17.62	17.61	0.0	19.0	18.94	18.82	18.79	0.0	20.0
			75	0	17.78	17.64	17.56	0.0	19.0	19.01	18.84	18.73	0.0	20.0
		QPSK	1	1	17.87	17.69	17.55	0.0	19.0	19.13	18.85	18.73	0.0	20.0
			1	39	17.67	17.57	17.46	0.0	19.0	18.93	18.76	18.66	0.0	20.0
			1	77	17.65	17.61	17.61	0.0	19.0	18.93	18.77	18.79	0.0	20.0
			36	0	17.85	17.68	17.60	0.0	19.0	19.09	18.88	18.80	0.0	20.0
			36	21	17.76	17.61	17.57	0.0	19.0	18.99	18.84	18.75	0.0	20.0
			36	43	17.73	17.59	17.59	0.0	19.0	18.93	18.82	18.78	0.0	20.0
			75	0	17.80	17.62	17.52	0.0	19.0	18.99	18.85	18.74	0.0	20.0
		16QAM	1	1	17.96	17.50	17.52	0.0	19.0	19.24	18.88	18.74	0.0	20.0
			1	39	17.72	17.34	17.45	0.0	19.0	19.05	18.75	18.66	0.0	20.0
			1	77	17.71	17.36	17.62	0.0	19.0	19.02	18.77	18.79	0.0	20.0
		64QAM	1	1	17.92	17.82	17.51	0.0	19.0	19.20	19.00	18.88	0.0	20.0
		256QAM	1	1	17.87	17.57	17.51	0.0	19.0	18.14	18.00	17.92	0.0	20.0
	CP-OFDM	QPSK	1	1	17.88	17.67	17.55	0.0	19.0	19.17	18.91	18.80	0.0	20.0

NR Band n66 (Sub.2) Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					343000	349000	355000			343000	349000	355000		
					1715.00 MHz	1745.00 MHz	1775.00 MHz			1715.00 MHz	1745.00 MHz	1775.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	17.95	17.70	17.66	0.0	19.0	19.19	18.92	18.88	0.0	20.0
			1	25	17.92	17.74	17.75	0.0	19.0	19.18	18.98	19.04	0.0	20.0
			1	50	17.79	17.61	17.67	0.0	19.0	19.06	18.89	18.94	0.0	20.0
			25	0	17.93	17.68	17.62	0.0	19.0	19.23	18.96	18.90	0.0	20.0
			25	13	17.86	17.64	17.64	0.0	19.0	19.18	18.94	18.92	0.0	20.0
			25	27	17.81	17.63	17.67	0.0	19.0	19.12	18.93	18.95	0.0	20.0
			50	0	17.89	17.65	17.64	0.0	19.0	19.17	18.94	18.95	0.0	20.0
		QPSK	1	1	17.93	17.65	17.62	0.0	19.0	19.19	18.94	18.90	0.0	20.0
			1	25	17.96	17.74	17.68	0.0	19.0	19.24	18.97	18.96	0.0	20.0
			1	50	17.74	17.61	17.66	0.0	19.0	19.04	18.90	18.93	0.0	20.0
			25	0	17.91	17.68	17.63	0.0	19.0	19.21	18.98	18.89	0.0	20.0
			25	13	17.86	17.63	17.62	0.0	19.0	19.14	18.96	18.91	0.0	20.0
			25	27	17.80	17.62	17.67	0.0	19.0	19.10	18.93	18.94	0.0	20.0
			50	0	17.87	17.63	17.63	0.0	19.0	19.19	18.95	18.92	0.0	20.0
		16QAM	1	1	17.91	17.67	17.66	0.0	19.0	19.33	18.99	18.94	0.0	20.0
			1	25	17.92	17.71	17.79	0.0	19.0	19.35	18.99	19.07	0.0	20.0
			1	50	17.75	17.63	17.70	0.0	19.0	19.20	18.89	18.95	0.0	20.0
		64QAM	1	1	17.94	17.68	17.67	0.0	19.0	19.25	19.06	18.79	0.0	20.0
		256QAM	1	1	17.87	17.63	17.65	0.0	19.0	18.31	17.96	17.94	0.0	20.0
	CP-OFDM	QPSK	1	1	17.91	17.67	17.61	0.0	19.0	19.19	18.93	18.81	0.0	20.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					342500	349000	355500			342500	349000	355500		
					1712.50 MHz	1745.00 MHz	1777.50 MHz			1712.50 MHz	1745.00 MHz	1777.50 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	17.92	17.69	17.63	0.0	19.0	19.12	18.94	18.87	0.0	20.0
			1	12	17.81	17.57	17.56	0.0	19.0	18.98	18.86	18.81	0.0	20.0
			1	23	17.86	17.63	17.66	0.0	19.0	19.06	18.93	18.91	0.0	20.0
			12	0	17.89	17.67	17.63	0.0	19.0	19.09	18.98	18.88	0.0	20.0
			12	6	17.88	17.66	17.65	0.0	19.0	19.08	18.96	18.92	0.0	20.0
			12	13	17.85	17.64	17.64	0.0	19.0	19.06	18.93	18.89	0.0	20.0
			25	0	17.88	17.66	17.65	0.0	19.0	19.07	18.94	18.90	0.0	20.0
		QPSK	1	1	17.94	17.63	17.57	0.0	19.0	19.08	18.96	18.89	0.0	20.0
			1	12	17.86	17.52	17.55	0.0	19.0	18.96	18.89	18.83	0.0	20.0
			1	23	17.90	17.58	17.62	0.0	19.0	19.01	18.94	18.91	0.0	20.0
			12	0	17.88	17.62	17.62	0.0	19.0	19.09	18.99	18.88	0.0	20.0
			12	6	17.87	17.63	17.64	0.0	19.0	19.07	18.97	18.90	0.0	20.0
			12	13	17.85	17.61	17.62	0.0	19.0	19.06	18.96	18.90	0.0	20.0
			25	0	17.87	17.64	17.62	0.0	19.0	19.08	18.98	18.89	0.0	20.0
		16QAM	1	1	17.95	17.75	17.49	0.0	19.0	19.08	18.99	18.79	0.0	20.0
			1	12	17.81	17.60	17.43	0.0	19.0	18.98	18.88	18.73	0.0	20.0
			1	23	17.87	17.65	17.54	0.0	19.0	19.11	18.98	18.81	0.0	20.0
		64QAM	1	1	17.83	17.58	17.56	0.0	19.0	19.08	18.98	18.83	0.0	20.0
		256QAM	1	1	17.84	17.71	17.57	0.0	19.0	18.17	17.94	17.87	0.0	20.0
	CP-OFDM	QPSK	1	1	17.87	17.67	17.64	0.0	19.0	19.14	18.81	18.86	0.0	20.0

NR Band n77 (Voice/Data/SRS0) (Sub.2) DoD Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)			MPR	Tune-up Limit
					RSI=Free, Rcv, Hotspot				
					Measured Pwr (dBm)				
						633332			
						3499.98 MHz			
100 MHz	DFT-s-OFDM	π/2 BPSK	1	1		15.25		0.0	16.0
			1	136		15.12		0.0	16.0
			1	271		15.22		0.0	16.0
			135	0		14.92		0.0	16.0
			135	69		15.13		0.0	16.0
			135	138		15.23		0.0	16.0
			270	0		15.16		0.0	16.0
		QPSK	1	1		15.05		0.0	16.0
			1	136		15.20		0.0	16.0
			1	271		15.10		0.0	16.0
			135	0		14.87		0.0	16.0
			135	69		15.09		0.0	16.0
			135	138		15.21		0.0	16.0
			270	0		15.15		0.0	16.0
		16QAM	1	1		15.03		0.0	16.0
			1	136		15.03		0.0	16.0
			1	271		15.15		0.0	16.0
		64QAM	1	1		14.86		0.0	16.0
		256QAM	1	1		14.45		0.0	16.0
	CP-OFDM	QPSK	1	1		15.09		0.0	16.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
						633332			
						3499.98 MHz			
90 MHz	DFT-s-OFDM	π/2 BPSK	1	1		15.12		0.0	16.0
			1	122		15.17		0.0	16.0
			1	243		15.19		0.0	16.0
			120	0		15.04		0.0	16.0
			120	62		15.14		0.0	16.0
			120	125		15.10		0.0	16.0
			243	0		15.08		0.0	16.0
		QPSK	1	1		15.09		0.0	16.0
			1	122		15.04		0.0	16.0
			1	243		15.13		0.0	16.0
			120	0		15.13		0.0	16.0
			120	62		15.10		0.0	16.0
			120	125		15.15		0.0	16.0
			243	0		15.08		0.0	16.0
		16QAM	1	1		15.04		0.0	16.0
			1	122		15.07		0.0	16.0
			1	243		15.03		0.0	16.0
		64QAM	1	1		14.97		0.0	16.0
		256QAM	1	1		14.48		0.0	16.0
	CP-OFDM	QPSK	1	1		14.97		0.0	16.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
						633332			
						3499.98 MHz			
80 MHz	DFT-s-OFDM	π/2 BPSK	1	1		15.12		0.0	16.0
			1	108		15.14		0.0	16.0
			1	215		15.18		0.0	16.0
			108	0		15.12		0.0	16.0
			108	54		15.14		0.0	16.0
			108	109		15.15		0.0	16.0
			216	0		15.15		0.0	16.0
		QPSK	1	1		15.16		0.0	16.0
			1	108		15.05		0.0	16.0
			1	215		15.07		0.0	16.0
			108	0		15.11		0.0	16.0
			108	54		15.07		0.0	16.0
			108	109		15.11		0.0	16.0
			216	0		15.11		0.0	16.0
		16QAM	1	1		15.04		0.0	16.0
			1	108		15.16		0.0	16.0
			1	215		15.03		0.0	16.0
		64QAM	1	1		14.97		0.0	16.0
		256QAM	1	1		14.45		0.0	16.0
	CP-OFDM	QPSK	1	1		14.93		0.0	16.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer

NR Band n77 (Voice/Data/SRS0) (Sub.2) - DoD Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
						633332			
						3499.98 MHz			
70 MHz	DFT-s-OFDM	π/2 BPSK	1	1		15.04		0.0	16.0
			1	94		15.07		0.0	16.0
			1	187		15.14		0.0	16.0
			90	0		15.13		0.0	16.0
			90	49		15.13		0.0	16.0
			90	99		15.19		0.0	16.0
			180	0		15.16		0.0	16.0
		QPSK	1	1		15.15		0.0	16.0
			1	94		15.12		0.0	16.0
			1	187		15.11		0.0	16.0
			90	0		15.13		0.0	16.0
			90	49		15.09		0.0	16.0
			90	99		15.10		0.0	16.0
			180	0		15.09		0.0	16.0
		16QAM	1	1		15.11		0.0	16.0
			1	94		15.10		0.0	16.0
			1	187		15.03		0.0	16.0
		64QAM	1	1		14.90		0.0	16.0
		256QAM	1	1		14.49		0.0	16.0
	CP-OFDM	QPSK	1	1		14.98		0.0	16.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
						633332			
						3499.98 MHz			
60 MHz	DFT-s-OFDM	π/2 BPSK	1	1		15.07		0.0	16.0
			1	80		15.13		0.0	16.0
			1	160		15.17		0.0	16.0
			81	0		15.06		0.0	16.0
			81	40		15.14		0.0	16.0
			81	81		15.16		0.0	16.0
			162	0		15.10		0.0	16.0
		QPSK	1	1		15.07		0.0	16.0
			1	80		15.12		0.0	16.0
			1	160		15.08		0.0	16.0
			81	0		15.07		0.0	16.0
			81	40		15.12		0.0	16.0
			81	81		15.12		0.0	16.0
			162	0		15.11		0.0	16.0
		16QAM	1	1		15.04		0.0	16.0
			1	80		15.08		0.0	16.0
			1	160		15.12		0.0	16.0
		64QAM	1	1		14.92		0.0	16.0
		256QAM	1	1		14.46		0.0	16.0
	CP-OFDM	QPSK	1	1		14.98		0.0	16.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					631668		635000		
					3475.02 MHz		3525.00 MHz		
50 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.97		15.00	0.0	16.0
			1	66	14.84		14.97	0.0	16.0
			1	131	14.80		14.99	0.0	16.0
			64	0	14.86		14.97	0.0	16.0
			64	34	14.85		14.99	0.0	16.0
			64	69	14.79		14.96	0.0	16.0
			128	0	14.80		15.00	0.0	16.0
		QPSK	1	1	14.89		15.06	0.0	16.0
			1	66	14.81		14.97	0.0	16.0
			1	131	14.83		14.89	0.0	16.0
			64	0	14.84		15.00	0.0	16.0
			64	34	14.81		14.96	0.0	16.0
			64	69	14.78		14.93	0.0	16.0
			128	0	14.82		14.92	0.0	16.0
		16QAM	1	1	14.81		14.85	0.0	16.0
			1	66	14.90		14.94	0.0	16.0
			1	131	14.77		14.87	0.0	16.0
		64QAM	1	1	14.75		14.75	0.0	16.0
		256QAM	1	1	14.21		14.37	0.0	16.0
	CP-OFDM	QPSK	1	1	14.63		14.87	0.0	16.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer

NR Band n77 (Voice/Data/SRS0) (Sub.2) - DoD Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					631334		635332		
					3470.01 MHz		3529.98 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.98		15.02	0.0	16.0
			1	52	14.89		15.01	0.0	16.0
			1	104	14.79		15.02	0.0	16.0
			50	0	14.81		14.97	0.0	16.0
			50	28	14.87		14.92	0.0	16.0
			50	56	14.82		14.92	0.0	16.0
			100	0	14.82		15.03	0.0	16.0
		QPSK	1	1	14.84		14.99	0.0	16.0
			1	52	14.86		14.92	0.0	16.0
			1	104	14.79		14.92	0.0	16.0
			50	0	14.85		15.03	0.0	16.0
			50	28	14.79		14.99	0.0	16.0
			50	56	14.86		14.93	0.0	16.0
			100	0	14.85		15.01	0.0	16.0
		16QAM	1	1	14.88		14.94	0.0	16.0
			1	52	14.91		14.94	0.0	16.0
			1	104	14.86		14.82	0.0	16.0
		64QAM	1	1	14.77		14.75	0.0	16.0
		256QAM	1	1	14.17		14.39	0.0	16.0
	CP-OFDM	QPSK	1	1	14.68		14.95	0.0	16.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					631000	633332	635666		
					3465.00 MHz	3499.98 MHz	3534.99 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.88	15.04	15.09	0.0	16.0
			1	39	14.85	15.17	14.98	0.0	16.0
			1	76	14.80	15.12	15.00	0.0	16.0
			36	0	14.83	15.04	14.98	0.0	16.0
			36	21	14.86	15.13	15.02	0.0	16.0
			36	42	14.83	15.12	14.99	0.0	16.0
			75	0	14.78	15.14	15.03	0.0	16.0
		QPSK	1	1	14.89	15.12	14.99	0.0	16.0
			1	39	14.80	15.14	14.90	0.0	16.0
			1	76	14.80	15.09	14.89	0.0	16.0
			36	0	14.83	15.05	15.01	0.0	16.0
			36	21	14.75	15.08	14.95	0.0	16.0
			36	42	14.76	15.12	14.99	0.0	16.0
			75	0	14.78	15.06	14.99	0.0	16.0
		16QAM	1	1	14.80	15.11	14.91	0.0	16.0
			1	39	14.83	15.13	14.91	0.0	16.0
			1	76	14.79	15.08	14.89	0.0	16.0
		64QAM	1	1	14.75	15.00	14.74	0.0	16.0
		256QAM	1	1	14.24	14.46	14.38	0.0	16.0
	CP-OFDM	QPSK	1	1	14.71	14.99	14.95	0.0	16.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					630668	633332	636000		
					3460.02 MHz	3499.98 MHz	3540.00 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.98	15.04	15.03	0.0	16.0
			1	25	14.83	15.16	15.02	0.0	16.0
			1	49	14.79	15.14	14.92	0.0	16.0
			25	0	14.88	15.11	14.97	0.0	16.0
			25	13	14.79	15.11	14.93	0.0	16.0
			25	26	14.87	15.11	14.93	0.0	16.0
			50	0	14.79	15.07	14.97	0.0	16.0
		QPSK	1	1	14.90	15.14	15.02	0.0	16.0
			1	25	14.85	15.08	14.96	0.0	16.0
			1	49	14.85	15.09	14.93	0.0	16.0
			25	0	14.78	15.05	15.00	0.0	16.0
			25	13	14.82	15.11	14.92	0.0	16.0
			25	26	14.79	15.15	15.00	0.0	16.0
			50	0	14.83	15.13	15.01	0.0	16.0
		16QAM	1	1	14.79	15.08	14.85	0.0	16.0
			1	25	14.81	15.14	14.93	0.0	16.0
			1	49	14.82	15.13	14.88	0.0	16.0
		64QAM	1	1	14.75	14.96	14.75	0.0	16.0
		256QAM	1	1	14.19	14.45	14.29	0.0	16.0
	CP-OFDM	QPSK	1	1	14.70	14.91	14.91	0.0	16.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer

NR Band n77 (Voice/Data/SRS0) (Sub.2) - DoD Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					630500	633332	636166		
					3457.50 MHz	3499.98 MHz	3542.49 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.95	15.08	15.00	0.0	16.0
			1	18	14.87	15.13	15.06	0.0	16.0
			1	36	14.84	15.11	15.01	0.0	16.0
			18	0	14.85	15.10	15.02	0.0	16.0
			18	10	14.82	15.10	15.00	0.0	16.0
			18	20	14.88	15.10	15.01	0.0	16.0
			36	0	14.87	15.16	14.98	0.0	16.0
		QPSK	1	1	14.86	15.09	15.03	0.0	16.0
			1	18	14.78	15.12	14.89	0.0	16.0
			1	36	14.76	15.17	14.95	0.0	16.0
			18	0	14.87	15.10	14.99	0.0	16.0
			18	10	14.79	15.04	14.96	0.0	16.0
			18	20	14.77	15.11	14.92	0.0	16.0
			36	0	14.76	15.15	15.01	0.0	16.0
		16QAM	1	1	14.87	15.10	14.87	0.0	16.0
			1	18	14.82	15.13	14.88	0.0	16.0
			1	36	14.85	15.11	14.82	0.0	16.0
		64QAM	1	1	14.71	14.95	14.73	0.0	16.0
		256QAM	1	1	14.17	14.47	14.34	0.0	16.0
	CP-OFDM	QPSK	1	1	14.64	14.91	14.88	0.0	16.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					630334	633332	636332		
					3455.01 MHz	3499.98 MHz	3544.98 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.93	15.07	15.05	0.0	16.0
			1	12	14.85	15.12	15.02	0.0	16.0
			1	22	14.82	15.14	14.97	0.0	16.0
			12	0	14.84	15.08	15.00	0.0	16.0
			12	6	14.84	15.11	14.97	0.0	16.0
			12	12	14.84	15.14	14.96	0.0	16.0
			24	0	14.82	15.12	14.99	0.0	16.0
		QPSK	1	1	14.86	15.11	15.03	0.0	16.0
			1	12	14.81	15.09	14.92	0.0	16.0
			1	22	14.81	15.12	14.93	0.0	16.0
			12	0	14.83	15.08	14.98	0.0	16.0
			12	6	14.80	15.09	14.96	0.0	16.0
			12	12	14.81	15.10	14.97	0.0	16.0
			24	0	14.81	15.11	14.96	0.0	16.0
		16QAM	1	1	14.84	15.08	14.90	0.0	16.0
			1	12	14.86	15.11	14.92	0.0	16.0
			1	22	14.82	15.08	14.86	0.0	16.0
		64QAM	1	1	14.72	14.95	14.78	0.0	16.0
		256QAM	1	1	14.20	14.49	14.34	0.0	16.0
	CP-OFDM	QPSK	1	1	14.67	14.94	14.92	0.0	16.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer

NR Band n77 (Voice/Data/SRS0) (Sub.2) - Measured Results

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)							
					RSI=Free, Rcv, Hotspot							
					Measured Pwr (dBm)						MPR	Tune-up Limit
					650000					662000		
					3750.00 MHz					3930.00 MHz		
100 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.92					14.92	0.0	16.0
			1	136	14.94					14.85	0.0	16.0
			1	271	15.12					15.06	0.0	16.0
			135	0	14.76					14.87	0.0	16.0
			135	69	14.77					14.86	0.0	16.0
			135	138	14.87					14.81	0.0	16.0
			270	0	14.82					14.94	0.0	16.0
		QPSK	1	1	14.81					14.83	0.0	16.0
			1	136	14.96					14.82	0.0	16.0
			1	271	14.94					14.94	0.0	16.0
			135	0	14.73					14.85	0.0	16.0
			135	69	14.75					14.83	0.0	16.0
			135	138	14.86					14.85	0.0	16.0
			270	0	14.82					14.87	0.0	16.0
		16QAM	1	1	14.82					14.91	0.0	16.0
			1	136	14.73					14.77	0.0	16.0
			1	271	14.99					15.05	0.0	16.0
		64QAM	1	1	14.74					14.81	0.0	16.0
		256QAM	1	1	14.35					14.34	0.0	16.0
	CP-OFDM	QPSK	1	1	14.84					14.77	0.0	16.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					649668			656000		662332		
					3745.02 MHz			3840.00 MHz		3934.98 MHz		
90 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.91			14.67		14.77	0.0	16.0
			1	122	14.83			14.71		14.83	0.0	16.0
			1	243	14.75			14.73		14.78	0.0	16.0
			120	0	14.75			14.74		14.75	0.0	16.0
			120	62	14.71			14.73		14.82	0.0	16.0
			120	125	14.75			14.65		14.78	0.0	16.0
			243	0	14.76			14.71		14.80	0.0	16.0
		QPSK	1	1	14.73			14.73		14.76	0.0	16.0
			1	122	14.74			14.73		14.72	0.0	16.0
			1	243	14.71			14.72		14.74	0.0	16.0
			120	0	14.74			14.68		14.72	0.0	16.0
			120	62	14.78			14.76		14.71	0.0	16.0
			120	125	14.71			14.72		14.81	0.0	16.0
			243	0	14.74			14.64		14.75	0.0	16.0
		16QAM	1	1	14.77			14.71		14.77	0.0	16.0
			1	122	14.70			14.90		14.80	0.0	16.0
			1	243	14.71			14.63		14.76	0.0	16.0
		64QAM	1	1	14.64			14.67		14.70	0.0	16.0
		256QAM	1	1	14.13			14.72		14.46	0.0	16.0
	CP-OFDM	QPSK	1	1	14.62			14.47		14.56	0.0	16.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					649334			656000		662666		
					3740.01 MHz			3840.00 MHz		3939.99 MHz		
80 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.92			14.75		14.70	0.0	16.0
			1	108	14.83			14.65		14.82	0.0	16.0
			1	215	14.77			14.69		14.75	0.0	16.0
			108	0	14.74			14.75		14.73	0.0	16.0
			108	54	14.80			14.70		14.79	0.0	16.0
			108	109	14.74			14.67		14.74	0.0	16.0
			216	0	14.78			14.73		14.79	0.0	16.0
		QPSK	1	1	14.81			14.70		14.79	0.0	16.0
			1	108	14.68			14.69		14.77	0.0	16.0
			1	215	14.73			14.73		14.80	0.0	16.0
			108	0	14.75			14.69		14.72	0.0	16.0
			108	54	14.70			14.68		14.71	0.0	16.0
			108	109	14.80			14.68		14.75	0.0	16.0
			216	0	14.75			14.66		14.72	0.0	16.0
		16QAM	1	1	14.78			14.69		14.83	0.0	16.0
			1	108	14.78			14.93		14.81	0.0	16.0
			1	215	14.78			14.73		14.79	0.0	16.0
		64QAM	1	1	14.64			14.59		14.66	0.0	16.0
		256QAM	1	1	14.12			14.64		14.54	0.0	16.0
	CP-OFDM	QPSK	1	1	14.68			14.44		14.54	0.0	16.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer

NR Band n77 (Voice/Data/SRS0) (Sub.2) - Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					649000	653666			658334	663000		
					3735.00 MHz	3804.99 MHz			3875.01 MHz	3945.00 MHz		
70 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.90	14.88			14.89	14.73	0.0	16.0
			1	94	14.78	14.94			15.01	14.77	0.0	16.0
			1	187	14.83	14.95			14.98	14.76	0.0	16.0
			90	0	14.84	14.96			14.94	14.77	0.0	16.0
			90	49	14.76	14.88			14.94	14.79	0.0	16.0
			90	99	14.74	14.94			14.92	14.74	0.0	16.0
			180	0	14.81	14.93			14.86	14.79	0.0	16.0
		QPSK	1	1	14.76	14.97			14.83	14.80	0.0	16.0
			1	94	14.70	14.90			14.83	14.78	0.0	16.0
			1	187	14.78	14.96			14.92	14.73	0.0	16.0
			90	0	14.78	14.92			14.83	14.81	0.0	16.0
			90	49	14.79	14.92			14.93	14.74	0.0	16.0
			90	99	14.73	14.93			14.78	14.72	0.0	16.0
			180	0	14.70	14.86			14.92	14.77	0.0	16.0
		16QAM	1	1	14.82	15.00			14.90	14.80	0.0	16.0
			1	94	14.73	14.95			14.95	14.74	0.0	16.0
			1	187	14.70	14.94			14.91	14.81	0.0	16.0
		64QAM	1	1	14.64	14.85			14.78	14.62	0.0	16.0
		256QAM	1	1	14.09	14.28			14.67	14.51	0.0	16.0
	CP-OFDM	QPSK	1	1	14.66	14.94			14.83	14.63	0.0	16.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					648668	653556			658444	663332		
					3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz		
60 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.92	14.89			14.87	14.69	0.0	16.0
			1	80	14.79	14.98			15.04	14.85	0.0	16.0
			1	160	14.80	14.95			14.92	14.81	0.0	16.0
			81	0	14.78	14.90			14.96	14.80	0.0	16.0
			81	40	14.74	14.92			14.94	14.78	0.0	16.0
			81	81	14.77	14.91			14.98	14.78	0.0	16.0
			162	0	14.77	14.94			14.95	14.81	0.0	16.0
		QPSK	1	1	14.77	14.90			14.89	14.81	0.0	16.0
			1	80	14.70	14.93			14.84	14.79	0.0	16.0
			1	160	14.78	14.98			14.91	14.74	0.0	16.0
			81	0	14.74	14.90			14.92	14.76	0.0	16.0
			81	40	14.73	14.94			14.89	14.75	0.0	16.0
			81	81	14.80	14.94			14.80	14.80	0.0	16.0
			162	0	14.78	14.86			14.85	14.71	0.0	16.0
		16QAM	1	1	14.81	14.90			14.85	14.86	0.0	16.0
			1	80	14.78	14.92			14.92	14.84	0.0	16.0
			1	160	14.76	14.95			14.92	14.79	0.0	16.0
		64QAM	1	1	14.61	14.76			14.81	14.60	0.0	16.0
		256QAM	1	1	14.15	14.28			14.63	14.51	0.0	16.0
	CP-OFDM	QPSK	1	1	14.62	14.92			14.78	14.54	0.0	16.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					648334	652168		656000	659834	663666		
					3725.01 MHz	3782.52 MHz		3840.00 MHz	3897.51 MHz	3954.99 MHz		
50 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.85	14.96		14.76	14.91	14.74	0.0	16.0
			1	66	14.87	14.94		14.62	15.00	14.87	0.0	16.0
			1	131	14.81	15.00		14.75	14.89	14.77	0.0	16.0
			64	0	14.82	14.88		14.66	14.96	14.82	0.0	16.0
			64	34	14.76	14.96		14.71	14.95	14.77	0.0	16.0
			64	69	14.75	14.94		14.66	14.99	14.76	0.0	16.0
			128	0	14.78	14.92		14.72	14.87	14.75	0.0	16.0
		QPSK	1	1	14.74	15.00		14.79	14.86	14.82	0.0	16.0
			1	66	14.72	14.94		14.67	14.91	14.73	0.0	16.0
			1	131	14.69	14.99		14.69	14.86	14.79	0.0	16.0
			64	0	14.71	14.91		14.71	14.90	14.72	0.0	16.0
			64	34	14.78	14.89		14.73	14.91	14.75	0.0	16.0
			64	69	14.79	14.95		14.73	14.85	14.72	0.0	16.0
			128	0	14.79	14.87		14.69	14.86	14.77	0.0	16.0
		16QAM	1	1	14.73	14.97		14.73	14.92	14.77	0.0	16.0
			1	66	14.68	14.89		14.99	15.00	14.81	0.0	16.0
			1	131	14.79	14.96		14.73	14.87	14.76	0.0	16.0
		64QAM	1	1	14.61	14.84		14.62	14.76	14.70	0.0	16.0
		256QAM	1	1	14.09	14.31		14.68	14.65	14.46	0.0	16.0
	CP-OFDM	QPSK	1	1	14.70	14.92		14.45	14.75	14.53	0.0	16.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer

NR Band n77 (Voice/Data/SRS0) (Sub.2) - Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					648000	651200	654400	657600	660800	664000		
					3720.00 MHz	3768.00 MHz	3816.00 MHz	3864.00 MHz	3912.00 MHz	3960.00 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.90	14.94	14.73	14.73	14.86	14.69	0.0	16.0
			1	52	14.83	14.99	14.85	14.61	15.00	14.78	0.0	16.0
			1	104	14.73	14.92	14.93	14.72	14.93	14.74	0.0	16.0
			50	0	14.79	14.94	14.88	14.65	14.95	14.76	0.0	16.0
			50	28	14.78	14.97	14.93	14.66	14.89	14.81	0.0	16.0
			50	56	14.75	14.91	14.90	14.64	14.93	14.79	0.0	16.0
			100	0	14.81	14.96	14.85	14.65	14.89	14.84	0.0	16.0
		QPSK	1	1	14.79	14.95	14.82	14.75	14.82	14.75	0.0	16.0
			1	52	14.73	14.86	14.86	14.71	14.91	14.70	0.0	16.0
			1	104	14.73	14.99	14.90	14.75	14.89	14.72	0.0	16.0
			50	0	14.72	14.89	14.82	14.70	14.85	14.77	0.0	16.0
			50	28	14.75	14.89	14.79	14.69	14.83	14.71	0.0	16.0
			50	56	14.78	14.89	14.88	14.73	14.79	14.74	0.0	16.0
			100	0	14.80	14.91	14.85	14.67	14.89	14.73	0.0	16.0
		16QAM	1	1	14.79	14.99	14.81	14.74	14.84	14.86	0.0	16.0
			1	52	14.76	14.94	14.89	15.00	14.96	14.79	0.0	16.0
			1	104	14.72	14.95	14.93	14.64	14.94	14.80	0.0	16.0
		64QAM	1	1	14.71	14.78	14.72	14.65	14.75	14.67	0.0	16.0
		256QAM	1	1	14.06	14.27	14.19	14.67	14.64	14.46	0.0	16.0
	CP-OFDM	QPSK	1	1	14.68	15.00	14.62	14.46	14.78	14.55	0.0	16.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					647668	651000	654334	657666	661000	664332		
					3715.02 MHz	3765.00 MHz	3815.01 MHz	3864.99 MHz	3915.00 MHz	3964.98 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.85	14.95	14.76	14.67	14.85	14.79	0.0	16.0
			1	39	14.84	14.99	14.84	14.71	14.99	14.87	0.0	16.0
			1	76	14.80	14.97	14.98	14.70	14.94	14.77	0.0	16.0
			36	0	14.81	14.92	14.85	14.74	14.90	14.75	0.0	16.0
			36	21	14.78	14.97	14.92	14.69	14.98	14.81	0.0	16.0
			36	42	14.77	14.97	14.92	14.72	14.94	14.75	0.0	16.0
			75	0	14.79	14.93	14.91	14.75	14.91	14.82	0.0	16.0
		QPSK	1	1	14.78	14.93	14.84	14.74	14.91	14.75	0.0	16.0
			1	39	14.69	14.95	14.83	14.63	14.90	14.70	0.0	16.0
			1	76	14.79	14.91	14.89	14.75	14.96	14.77	0.0	16.0
			36	0	14.72	14.92	14.87	14.70	14.88	14.74	0.0	16.0
			36	21	14.72	14.93	14.87	14.69	14.93	14.78	0.0	16.0
			36	42	14.81	14.88	14.90	14.65	14.80	14.79	0.0	16.0
			75	0	14.72	14.89	14.84	14.69	14.83	14.81	0.0	16.0
		16QAM	1	1	14.77	14.99	14.79	14.69	14.87	14.84	0.0	16.0
			1	39	14.78	14.93	14.91	14.95	14.96	14.80	0.0	16.0
			1	76	14.72	14.92	14.91	14.64	14.87	14.83	0.0	16.0
		64QAM	1	1	14.69	14.82	14.68	14.64	14.82	14.63	0.0	16.0
		256QAM	1	1	14.10	14.35	14.18	14.65	14.62	14.47	0.0	16.0
	CP-OFDM	QPSK	1	1	14.66	15.01	14.66	14.54	14.78	14.55	0.0	16.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					647334	650800	654266	657734	661200	664666		
					3710.01 MHz	3762.00 MHz	3813.99 MHz	3866.01 MHz	3918.00 MHz	3969.99 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.89	14.89	14.79	14.67	14.90	14.79	0.0	16.0
			1	25	14.84	14.99	14.88	14.62	14.98	14.82	0.0	16.0
			1	49	14.73	14.93	14.91	14.68	14.89	14.73	0.0	16.0
			25	0	14.77	14.91	14.86	14.72	14.92	14.77	0.0	16.0
			25	13	14.76	14.94	14.89	14.68	14.89	14.78	0.0	16.0
			25	26	14.78	14.91	14.89	14.72	14.96	14.73	0.0	16.0
			50	0	14.74	14.94	14.90	14.66	14.87	14.82	0.0	16.0
		QPSK	1	1	14.83	14.99	14.88	14.77	14.88	14.81	0.0	16.0
			1	25	14.71	14.95	14.85	14.73	14.82	14.77	0.0	16.0
			1	49	14.70	15.01	14.88	14.68	14.94	14.75	0.0	16.0
			25	0	14.78	14.86	14.78	14.65	14.92	14.76	0.0	16.0
			25	13	14.78	14.92	14.87	14.67	14.90	14.80	0.0	16.0
			25	26	14.75	14.88	14.89	14.73	14.81	14.74	0.0	16.0
			50	0	14.78	14.92	14.87	14.67	14.92	14.79	0.0	16.0
		16QAM	1	1	14.78	14.93	14.87	14.77	14.90	14.79	0.0	16.0
			1	25	14.69	14.92	14.83	14.96	14.98	14.81	0.0	16.0
			1	49	14.75	14.92	14.92	14.63	14.95	14.80	0.0	16.0
		64QAM	1	1	14.62	14.85	14.78	14.62	14.76	14.70	0.0	16.0
		256QAM	1	1	14.06	14.33	14.18	14.64	14.62	14.53	0.0	16.0
	CP-OFDM	QPSK	1	1	14.67	14.93	14.66	14.45	14.76	14.55	0.0	16.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacture

NR Band n77 (Voice/Data/SRS0) (Sub.2) - Measured Results (Continued)

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					647168	650700	654234	657766	661300	664832		
					3707.52 MHz	3760.50 MHz	3813.51 MHz	3866.49 MHz	3919.50 MHz	3972.48 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.87	14.96	14.75	14.72	14.91	14.79	0.0	16.0
			1	18	14.85	14.99	14.82	14.65	14.94	14.80	0.0	16.0
			1	36	14.82	14.99	14.98	14.72	14.97	14.76	0.0	16.0
			18	0	14.83	14.91	14.81	14.74	14.92	14.72	0.0	16.0
			18	10	14.73	14.98	14.88	14.64	14.95	14.81	0.0	16.0
			18	20	14.72	14.98	14.89	14.71	14.91	14.79	0.0	16.0
			36	0	14.73	14.99	14.83	14.68	14.93	14.84	0.0	16.0
		QPSK	1	1	14.80	14.95	14.88	14.77	14.86	14.78	0.0	16.0
			1	18	14.75	14.92	14.85	14.63	14.92	14.70	0.0	16.0
			1	36	14.72	14.98	14.91	14.70	14.96	14.82	0.0	16.0
			18	0	14.73	14.86	14.88	14.74	14.84	14.81	0.0	16.0
			18	10	14.70	14.86	14.79	14.74	14.85	14.79	0.0	16.0
			18	20	14.71	14.88	14.90	14.73	14.85	14.71	0.0	16.0
			36	0	14.76	14.90	14.79	14.71	14.86	14.71	0.0	16.0
		16QAM	1	1	14.79	14.93	14.81	14.78	14.84	14.87	0.0	16.0
			1	18	14.72	14.91	14.89	14.98	14.93	14.80	0.0	16.0
			1	36	14.77	14.93	14.93	14.65	14.89	14.76	0.0	16.0
		64QAM	1	1	14.68	14.76	14.75	14.59	14.79	14.68	0.0	16.0
		256QAM	1	1	14.13	14.30	14.13	14.71	14.59	14.46	0.0	16.0
	CP-OFDM	QPSK	1	1	14.69	14.91	14.67	14.48	14.80	14.58	0.0	16.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit
					647000	650600	654200	657800	661400	665000		
					3705.00 MHz	3759.00 MHz	3813.00 MHz	3867.00 MHz	3921.00 MHz	3975.00 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	14.88	14.91	14.75	14.72	14.86	14.74	0.0	16.0
			1	12	14.82	14.95	14.86	14.66	14.99	14.82	0.0	16.0
			1	22	14.78	14.97	14.93	14.72	14.93	14.76	0.0	16.0
			12	0	14.79	14.92	14.83	14.70	14.91	14.77	0.0	16.0
			12	6	14.76	14.93	14.89	14.69	14.93	14.77	0.0	16.0
			12	12	14.76	14.94	14.91	14.69	14.96	14.78	0.0	16.0
			24	0	14.77	14.95	14.86	14.70	14.91	14.80	0.0	16.0
		QPSK	1	1	14.78	14.95	14.85	14.74	14.87	14.80	0.0	16.0
			1	12	14.71	14.90	14.84	14.68	14.87	14.74	0.0	16.0
			1	22	14.74	14.96	14.91	14.72	14.91	14.77	0.0	16.0
			12	0	14.76	14.91	14.83	14.70	14.87	14.76	0.0	16.0
			12	6	14.75	14.91	14.84	14.71	14.88	14.75	0.0	16.0
			12	12	14.76	14.93	14.89	14.70	14.81	14.76	0.0	16.0
			24	0	14.75	14.91	14.83	14.69	14.88	14.76	0.0	16.0
		16QAM	1	1	14.78	14.95	14.84	14.74	14.89	14.82	0.0	16.0
			1	12	14.73	14.92	14.86	14.95	14.95	14.79	0.0	16.0
			1	22	14.74	14.95	14.91	14.68	14.91	14.78	0.0	16.0
		64QAM	1	1	14.66	14.81	14.73	14.64	14.78	14.65	0.0	16.0
		256QAM	1	1	14.11	14.32	14.18	14.68	14.64	14.51	0.0	16.0
	CP-OFDM	QPSK	1	1	14.66	14.96	14.62	14.49	14.80	14.58	0.0	16.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacturer

NR Band n77 (SRS1) (Main.3) - DoD Measured Results

BW (MHz)	Mode	Maximum Average Power (dBm)			
		RSI=Free, Rcv, Hotspot			
		Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
100 MHz	SRS CW		8.60		10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
90 MHz	SRS CW		8.61		10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
80 MHz	SRS CW		8.62		10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
70 MHz	SRS CW		8.61		10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
60 MHz	SRS CW		8.57		10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		631668		635000	
		3475.02 MHz		3525.00 MHz	
50 MHz	SRS CW	8.56		8.69	10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		631334		635332	
		3470.01 MHz		3529.98 MHz	
40 MHz	SRS CW	8.11		8.32	10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		631000	633332	635666	
		3465.00 MHz	3499.98 MHz	3534.99 MHz	
30 MHz	SRS CW	8.39	8.46	8.81	10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		630668	633332	636000	
		3460.02 MHz	3499.98 MHz	3540.00 MHz	
20 MHz	SRS CW	8.46	8.56	8.84	10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		630500	633332	636166	
		3457.50 MHz	3499.98 MHz	3542.49 MHz	
15 MHz	SRS CW	8.44	8.56	8.82	10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		630334	633332	636332	
		3455.01 MHz	3499.98 MHz	3544.98 MHz	
10 MHz	SRS CW	8.55	8.64	8.57	10.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacture

NR Band n77 (SRS1) (Main.3) - Measured Results

BW (MHz)	Mode	Maximum Average Power (dBm)						
		RSI=Free, Rcv, Hotspot						
		Measured Pwr (dBm)						Tune-up Limit
		650000					662000	
		3750.00 MHz					3930.00 MHz	
100 MHz	SRS CW	9.12					8.53	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		649668			656000		662332	
		3745.02 MHz			3840.00 MHz		3934.98 MHz	
90 MHz	SRS CW	9.15			8.37		8.20	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		649334			656000		662666	
		3740.01 MHz			3840.00 MHz		3939.99 MHz	
80 MHz	SRS CW	9.11			8.32		8.16	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		649000	653666			658334	663000	
		3735.00 MHz	3804.99 MHz			3875.01 MHz	3945.00 MHz	
70 MHz	SRS CW	9.15	8.95			8.07	8.19	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		648668	653556			658444	663332	
		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz	
60 MHz	SRS CW	9.11	8.95			8.17	8.19	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		648334	652168		656000	659834	663666	
		3725.01 MHz	3782.52 MHz		3840.00 MHz	3897.51 MHz	3954.99 MHz	
50 MHz	SRS CW	9.11	8.98		8.32	8.15	8.14	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		648000	651200	654400	657600	660800	664000	
		3720.00 MHz	3768.00 MHz	3816.00 MHz	3864.00 MHz	3912.00 MHz	3960.00 MHz	
40 MHz	SRS CW	9.17	8.94	8.66	8.35	8.13	8.15	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647668	651000	654334	657666	661000	664332	
		3715.02 MHz	3765.00 MHz	3815.01 MHz	3864.99 MHz	3915.00 MHz	3964.98 MHz	
30 MHz	SRS CW	8.90	8.94	8.65	8.34	8.14	8.13	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647334	650800	654266	657734	661200	664666	
		3710.01 MHz	3762.00 MHz	3813.99 MHz	3866.01 MHz	3918.00 MHz	3969.99 MHz	
20 MHz	SRS CW	8.99	9.02	8.72	8.36	8.23	8.11	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647168	650700	654234	657766	661300	664832	
		3707.52 MHz	3760.50 MHz	3813.51 MHz	3866.49 MHz	3919.50 MHz	3972.48 MHz	
15 MHz	SRS CW	8.86	8.95	8.64	8.31	8.55	8.02	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647000	650600	654200	657800	661400	665000	
		3705.00 MHz	3759.00 MHz	3813.00 MHz	3867.00 MHz	3921.00 MHz	3975.00 MHz	
10 MHz	SRS CW	8.94	9.07	8.75	8.40	8.26	8.13	10.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacture

NR Band n77 (SRS2) (Sub.5) - DoD Measured Results

BW (MHz)	Mode	Maximum Average Power (dBm)			
		RSI=Free, Rcv, Hotspot			
		Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
100 MHz	SRS CW		9.20		10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
90 MHz	SRS CW		9.33		10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
80 MHz	SRS CW		8.91		10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
70 MHz	SRS CW		9.35		10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
60 MHz	SRS CW		8.90		10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		631668		635000	
		3475.02 MHz		3525.00 MHz	
50 MHz	SRS CW	9.44		9.21	10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		631334		635332	
		3470.01 MHz		3529.98 MHz	
40 MHz	SRS CW	8.93		8.44	10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		631000	633332	635666	
		3465.00 MHz	3499.98 MHz	3534.99 MHz	
30 MHz	SRS CW	9.40	9.27	8.90	10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		630668	633332	636000	
		3460.02 MHz	3499.98 MHz	3540.00 MHz	
20 MHz	SRS CW	9.03	8.90	8.56	10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		630500	633332	636166	
		3457.50 MHz	3499.98 MHz	3542.49 MHz	
15 MHz	SRS CW	9.37	9.21	8.92	10.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		630334	633332	636332	
		3455.01 MHz	3499.98 MHz	3544.98 MHz	
10 MHz	SRS CW	9.32	9.17	9.25	10.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacture

NR Band n77 (SRS2) (Sub.5) - Measured Results

BW (MHz)	Mode	Maximum Average Power (dBm)						
		RSI=Free, Rcv, Hotspot						
		Measured Pwr (dBm)						Tune-up Limit
		650000					662000	
		3750.00 MHz					3930.00 MHz	
100 MHz	SRS CW	9.37					9.23	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		649668			656000		662332	
		3745.02 MHz			3840.00 MHz		3934.98 MHz	
90 MHz	SRS CW	9.44			9.44		9.32	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		649334			656000		662666	
		3740.01 MHz			3840.00 MHz		3939.99 MHz	
80 MHz	SRS CW	9.05			9.02		8.94	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		649000	653666			658334	663000	
		3735.00 MHz	3804.99 MHz			3875.01 MHz	3945.00 MHz	
70 MHz	SRS CW	9.40	8.26			9.21	9.29	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		648668	653556			658444	663332	
		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz	
60 MHz	SRS CW	8.88	8.77			8.72	8.81	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		648334	652168		656000	659834	663666	
		3725.01 MHz	3782.52 MHz		3840.00 MHz	3897.51 MHz	3954.99 MHz	
50 MHz	SRS CW	9.32	9.21		9.42	9.17	9.20	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		648000	651200	654400	657600	660800	664000	
		3720.00 MHz	3768.00 MHz	3816.00 MHz	3864.00 MHz	3912.00 MHz	3960.00 MHz	
40 MHz	SRS CW	8.81	8.91	8.83	8.81	8.80	8.70	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647668	651000	654334	657666	661000	664332	
		3715.02 MHz	3765.00 MHz	3815.01 MHz	3864.99 MHz	3915.00 MHz	3964.98 MHz	
30 MHz	SRS CW	9.20	9.37	9.26	9.21	9.27	9.05	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647334	650800	654266	657734	661200	664666	
		3710.01 MHz	3762.00 MHz	3813.99 MHz	3866.01 MHz	3918.00 MHz	3969.99 MHz	
20 MHz	SRS CW	8.86	9.01	8.89	8.85	8.90	8.68	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647168	650700	654234	657766	661300	664832	
		3707.52 MHz	3760.50 MHz	3813.51 MHz	3866.49 MHz	3919.50 MHz	3972.48 MHz	
15 MHz	SRS CW	9.16	9.35	9.21	9.14	9.26	8.96	10.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647000	650600	654200	657800	661400	665000	
		3705.00 MHz	3759.00 MHz	3813.00 MHz	3867.00 MHz	3921.00 MHz	3975.00 MHz	
10 MHz	SRS CW	9.08	9.26	9.12	9.06	9.20	8.89	10.0

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacture

NR Band n77 (SRS3) (Main.4) - DoD Measured Results

BW (MHz)	Mode	Maximum Average Power (dBm)			
		RSI=Free, Rcv, Hotspot			
		Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
100 MHz	SRS CW		6.46		7.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
90 MHz	SRS CW		6.42		7.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
80 MHz	SRS CW		6.46		7.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
70 MHz	SRS CW		6.16		7.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
			633332		
			3499.98 MHz		
60 MHz	SRS CW		6.20		7.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		631668		635000	
		3475.02 MHz		3525.00 MHz	
50 MHz	SRS CW	6.95		6.77	7.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		631334		635332	
		3470.01 MHz		3529.98 MHz	
40 MHz	SRS CW	6.40		6.36	7.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		631000	633332	635666	
		3465.00 MHz	3499.98 MHz	3534.99 MHz	
30 MHz	SRS CW	6.37	6.35	6.33	7.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		630668	633332	636000	
		3460.02 MHz	3499.98 MHz	3540.00 MHz	
20 MHz	SRS CW	6.39	6.41	6.41	7.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		630500	633332	636166	
		3457.50 MHz	3499.98 MHz	3542.49 MHz	
15 MHz	SRS CW	6.46	6.37	6.46	7.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit
		630334	633332	636332	
		3455.01 MHz	3499.98 MHz	3544.98 MHz	
10 MHz	SRS CW	6.30	6.36	6.39	7.5

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacture

NR Band n77 (SRS3) (Main.4) - Measured Results

BW (MHz)	Mode	Maximum Average Power (dBm)						
		RSI=Free, RCV, Hotspot						
		Measured Pwr (dBm)						Tune-up Limit
		650000					662000	
		3750.00 MHz					3930.00 MHz	
100 MHz	SRS CW	6.03					6.38	7.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		649668			656000		662332	
		3745.02 MHz			3840.00 MHz		3934.98 MHz	
90 MHz	SRS CW	5.97			6.26		6.32	7.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		649334			656000		662666	
		3740.01 MHz			3840.00 MHz		3939.99 MHz	
80 MHz	SRS CW	5.94			6.22		6.30	7.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		649000	653666			658334	663000	
		3735.00 MHz	3804.99 MHz			3875.01 MHz	3945.00 MHz	
70 MHz	SRS CW	5.69	5.74			5.98	6.17	7.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		648668	653556			658444	663332	
		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz	
60 MHz	SRS CW	5.60	5.44			5.90	6.04	7.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		648334	652168		656000	659834	663666	
		3725.01 MHz	3782.52 MHz		3840.00 MHz	3897.51 MHz	3954.99 MHz	
50 MHz	SRS CW	5.87	5.86		6.26	6.17	6.18	7.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		648000	651200	654400	657600	660800	664000	
		3720.00 MHz	3768.00 MHz	3816.00 MHz	3864.00 MHz	3912.00 MHz	3960.00 MHz	
40 MHz	SRS CW	5.75	5.87	6.00	6.16	6.15	6.11	7.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647668	651000	654334	657666	661000	664332	
		3715.02 MHz	3765.00 MHz	3815.01 MHz	3864.99 MHz	3915.00 MHz	3964.98 MHz	
30 MHz	SRS CW	5.55	5.70	5.83	6.00	6.05	5.98	7.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647334	650800	654266	657734	661200	664666	
		3710.01 MHz	3762.00 MHz	3813.99 MHz	3866.01 MHz	3918.00 MHz	3969.99 MHz	
20 MHz	SRS CW	5.75	5.61	5.85	6.22	6.29	6.12	7.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647168	650700	654234	657766	661300	664832	
		3707.52 MHz	3760.50 MHz	3813.51 MHz	3866.49 MHz	3919.50 MHz	3972.48 MHz	
15 MHz	SRS CW	5.56	5.76	5.83	6.01	6.14	5.96	7.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit
		647000	650600	654200	657800	661400	665000	
		3705.00 MHz	3759.00 MHz	3813.00 MHz	3867.00 MHz	3921.00 MHz	3975.00 MHz	
10 MHz	SRS CW	5.53	5.74	5.81	5.99	6.13	5.94	7.5

Notes:

NR TDD Bands were measured output power through FTM mode provided by manufacture

9.5. Wi-Fi 2.4 GHz (DTS Band)

WLAN SISO mode output power results

Antenna	Mode	Data Rate	Ch #	Freq. (MHz)	Maximum Allowed Average Power (dBm)					
					DSI = 0, 8			DSI = 1, 9		
					Meas. Avg Pwr	Tune-up Limit	SAR Test (Yes/No)	Meas. Avg Pwr	Max. Tune-up Limit	SAR Test (Yes/No)
WiFi 2.4G SISO Ant.1	802.11b	1 Mbps	1	2412.0	14.74	15.5	Yes	11.16	12.0	Yes
			6	2437.0	15.13			11.44		
			11	2462.0	14.66			11.23		
			12	2467.0	Not Required	6.0	No	Not Required	6.0	No
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	6 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	6.5 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	7.3 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	
WiFi 2.4G SISO Ant.2	802.11b	1 Mbps	1	2412.0	14.88	15.5	Yes	11.17	12.0	Yes
			6	2437.0	14.87			11.17		
			11	2462.0	14.61			11.33		
			12	2467.0	Not Required	6.0	No	Not Required	6.0	No
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	6 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	6.5 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	7.3 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	

Note(s):

1. SAR is not required for 802.11g/n modes when the adjusted SAR for 802.11b is < 1.2 W/kg.
2. 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.
3. 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.

WLAN MIMO mode output power results

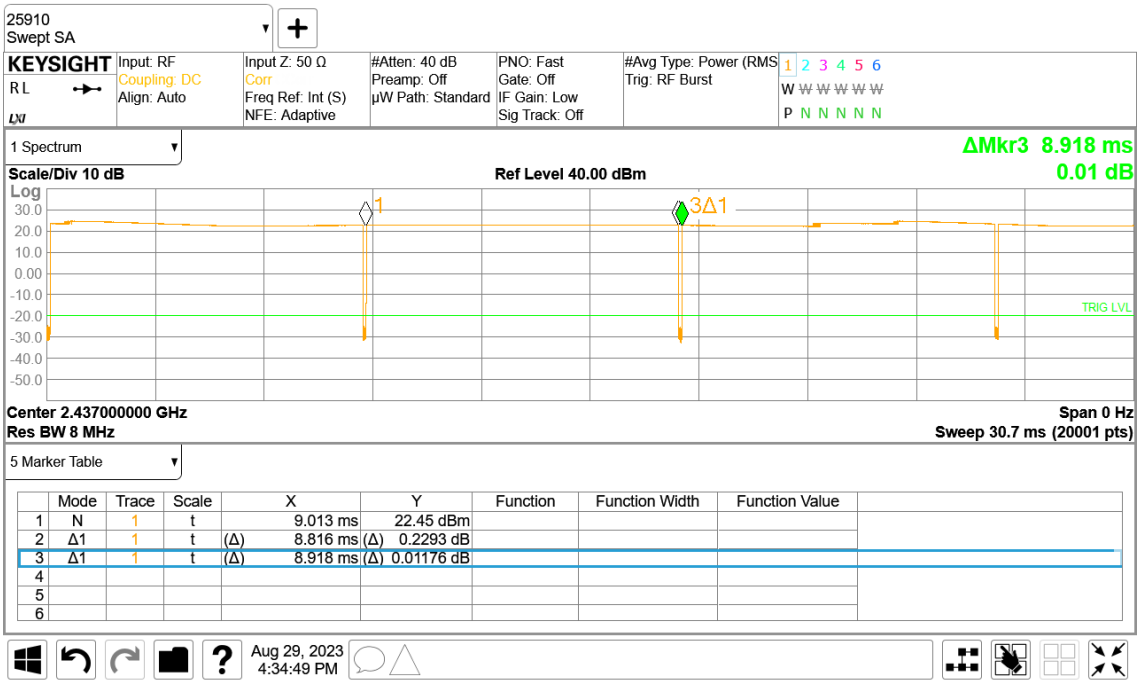
Antenna	Mode	Data Rate	Ch #	Freq. (MHz)	Maximum Allowed Average Power (dBm)					
					DSI = 0, 8			DSI = 1, 9		
					Meas. Avg Pwr	Tune-up Limit	SAR Test (Yes/No)	Meas. Avg Pwr	Max. Tune-up Limit	SAR Test (Yes/No)
WiFi 2.4G MIMO Ant.1	802.11b	1 Mbps	1	2412.0	14.57	15.5	Yes	11.68	12.0	Yes
			6	2437.0	14.91			11.59		
			11	2462.0	14.64			11.67		
			12	2467.0	Not Required	6.0	No	Not Required	6.0	No
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	6 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	6.5 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	7.3 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	
WiFi 2.4G MIMO Ant.2	802.11b	1 Mbps	1	2412.0	13.60	15.5	Yes	11.18	12.0	Yes
			6	2437.0	13.65			10.64		
			11	2462.0	13.38			11.00		
			12	2467.0	Not Required	6.0	No	Not Required	6.0	No
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	6 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	6.5 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	
	802.11g	7.3 Mbps	1-11	2462.0	Not Required	12.0	No	Not Required	12.0	No
			12	2467.0	Not Required	6.0		Not Required	6.0	
			13	2474.0	Not Required	0.0		Not Required	0.0	

Note(s):

1. SAR is not required for 802.11g/n modes when the adjusted SAR for 802.11b is < 1.2 W/kg.
2. 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.
3. 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.

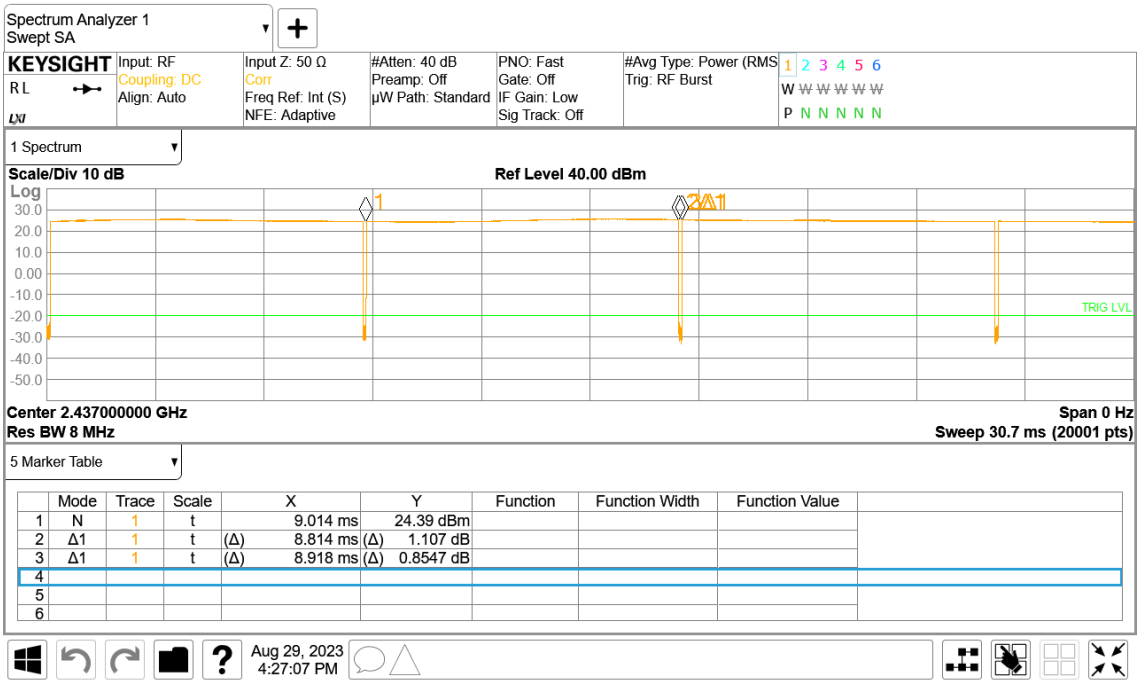
Duty Factor Measured Results (SISO mode)

Mode	Data Rate	T on (ms)	Period (ms)	Duty Cycle	Crest Factor (1/duty cycle)
802.11b	1 Mbps	8.816	8.918	98.9%	1.01



Duty Factor Measured Results (MIMO mode)

Mode	Data Rate	T on (ms)	Period (ms)	Duty Cycle	Crest Factor (1/duty cycle)
802.11b	1 Mbps	8.814	8.918	98.8%	1.01



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

WLAN SISO Ant.1 output power Results

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Maximum Allowed Averag power (dBm)					
						DSI = 0,8			DSI = 1,9		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz SISO Ant.1	5.3 (UNII 2A)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	58	5290.0	12.35	13.0	Yes	10.93	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	UNII 1 & UNII 2A	802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.5 (U-NII 2C)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	106	5530.0	12.41	13.0	Yes	11.72	12.0	Yes
				122	5610.0	12.44			11.79		
				138	5690.0	12.31			11.66		
		802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.8 (UNII 3)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	155	5775.0	12.20	13.0	Yes	11.34	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	NO
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.9 (U-NII 4)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	171	5855.0	11.70	13.0	Yes	10.95	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	30.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
	UNII 3 & UNII 4	802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No

Note(s):

1. 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/ax mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
2. 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.
3. 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.

WLAN SISO Ant.2 output power Results

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Maximum Allowed Averag power (dBm)					
						DSI = 0,8			DSI = 1,9		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz SISO Ant.2	5.3 (UNII 2A)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	58	5290.0	13.33	13.0	Yes	11.39	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	UNII 1 & UNII 2A	802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.5 (U-NII 2C)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	106	5530.0	13.33	13.0	Yes	10.64	12.0	Yes
				122	5610.0	13.33			10.55		
				138	5690.0	13.33			10.37		
		802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.8 (UNII 3)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	155	5775.0	12.50	13.0	Yes	10.54	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	NO
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.9 (U-NII 4)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	171	5855.0	12.90	13.0	Yes	10.58	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	30.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
	UNII 3 & UNII 4	802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No

Note(s):

1. 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/ax mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
2. 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.
3. 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.

WLAN MIMO Ant.1 output power Results

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Maximum Allowed Averag power (dBm)					
						DSI = 0,8			DSI = 1,9		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.1	5.3 (UNII 2A)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	58	5290.0	11.48	13.0	Yes	10.86	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	UNII 1 & UNII 2A	802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.5 (U-NII 2C)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	106	5530.0	12.21	13.0	Yes	11.61	12.0	Yes
				122	5610.0	12.28			11.66		
				138	5690.0	12.14			11.55		
		802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.8 (UNII 3)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	155	5775.0	12.23	13.0	Yes	11.23	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	NO
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.9 (U-NII 4)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	171	5855.0	12.32	13.0	Yes	10.81	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	30.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
	UNII 3 & UNII 4	802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No

Note(s):

1. 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/ax mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
2. 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.
3. 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.

WLAN MIMO Ant.2 output power Results

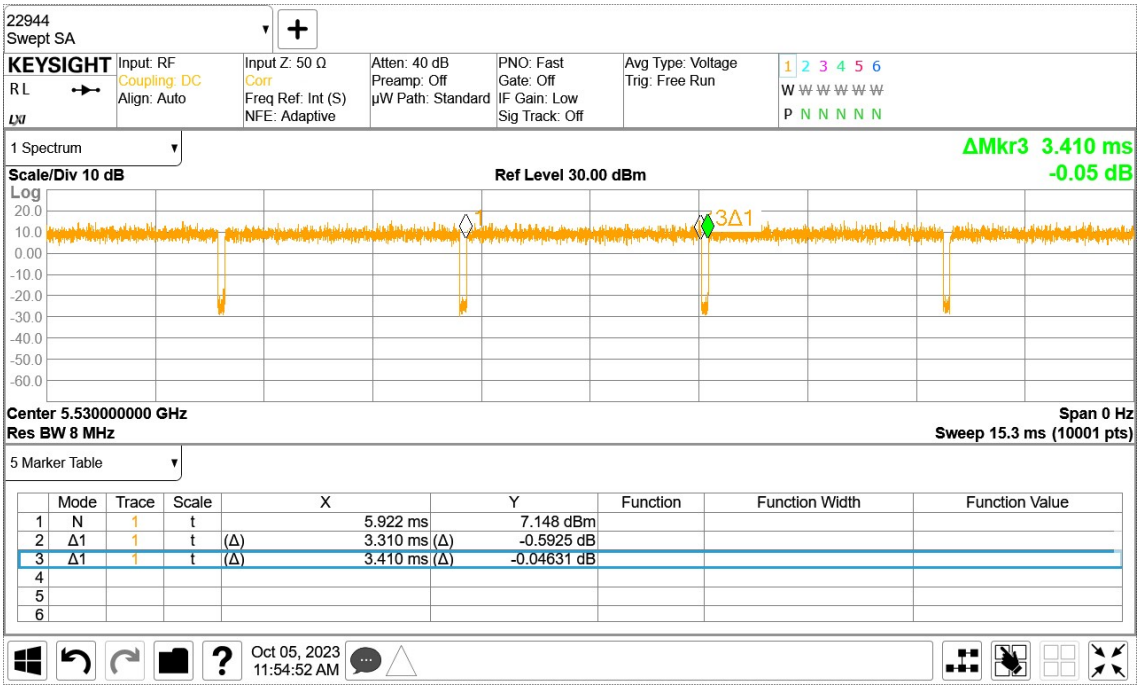
Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Maximum Allowed Averag power (dBm)					
						DSI = 0,8			DSI = 1,9		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.2	5.3 (UNII 2A)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	58	5290.0	12.17	13.0	Yes	11.22	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	UNII 1 & UNII 2A	802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.5 (U-NII 2C)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	106	5530.0	11.85	13.0	Yes	10.53	12.0	Yes
				122	5610.0	11.93			10.42		
				138	5690.0	12.08			10.45		
		802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.8 (UNII 3)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	155	5775.0	12.03	13.0	Yes	10.41	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	NO
		802.11ax (HE80)	36.0 Mbps	Not Required			13.0	No	Not Required	12.0	No
	5.9 (U-NII 4)	802.11a	6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11n (HT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT20)	6.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT40)	13.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ac (VHT80)	29.3 Mbps	171	5855.0	12.38	13.0	Yes	10.53	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE40)	14.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE80)	30.6 Mbps	Not Required			13.0	No	Not Required	12.0	No
	UNII 3 & UNII 4	802.11ac (VHT160)	58.5 Mbps	Not Required			13.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	Not Required			13.0	No	Not Required	12.0	No

Note(s):

1. 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/ax mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
2. 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.
3. 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.

Duty Factor Measured Results (SISO mode)

Mode	Data Rate	T on (ms)	Period (ms)	Duty Cycle	Crest Factor (1/duty cycle)
802.11ac (VHT 80)	29.3 Mbps	3.310	3.410	97.1%	1.03



Duty Factor Measured Results (MIMO mode)

Mode	Data Rate	T on (ms)	Period (ms)	Duty Cycle	Crest Factor (1/duty cycle)
802.11ac (VHT 80)	29.3 Mbps	1.680	1.778	94.5%	1.06

9.7. Bluetooth

Bluetooth SISO output power Results

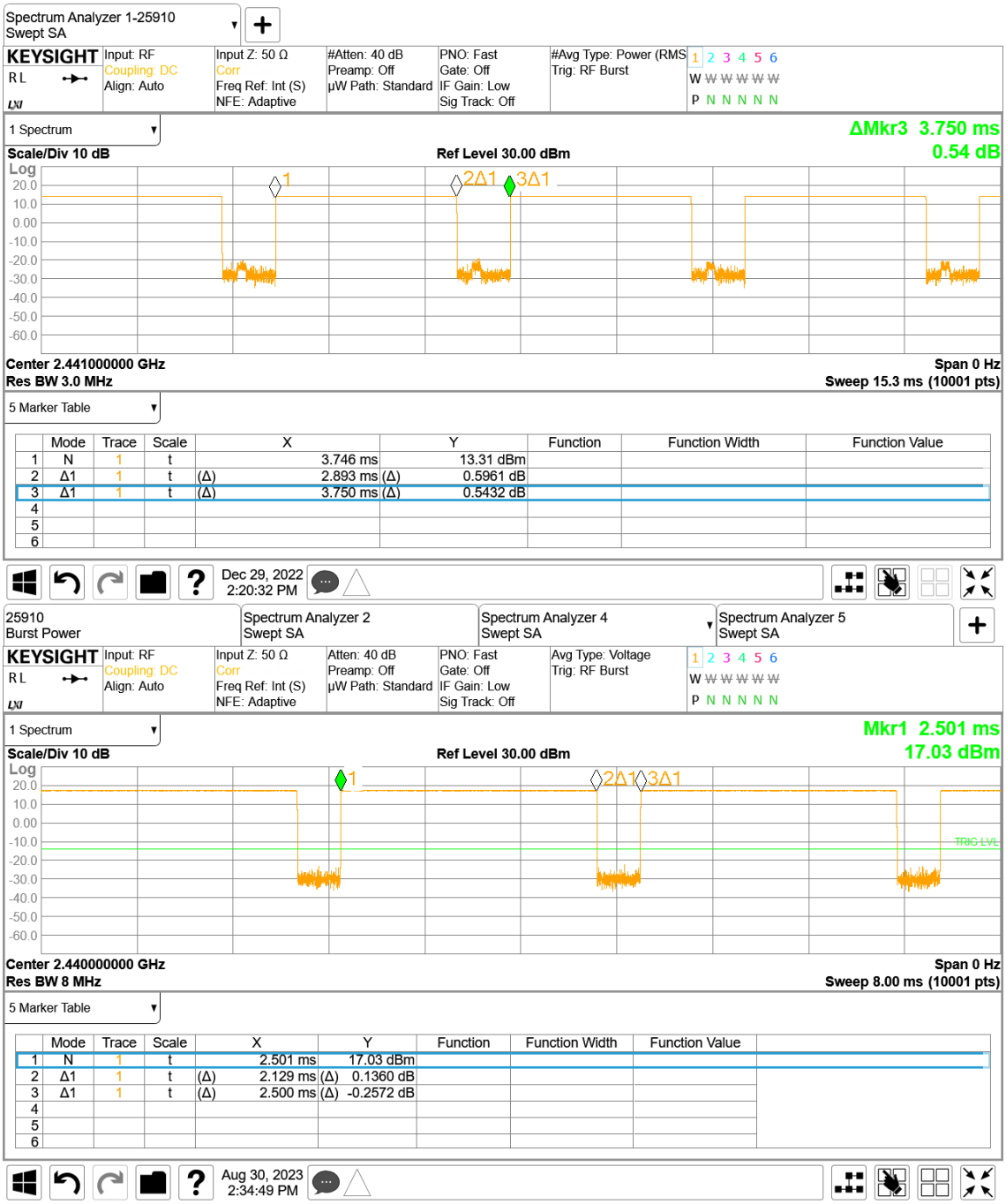
Band (GHz)	Antenna	Mode		Ch #	Freq. (MHz)	Max. Average Power (dBm)		Reduced. Average Power (dBm)	
						Meas Pwr	Tune-up Limit	Meas Pwr	Tune-up Limit
2.4	BT SISO Ant.1	PL11	GFSK (1Mbps)	0	2402	18.42	19.0	11.49	12.0
				39	2441	18.40		11.30	
				78	2480	18.72		10.56	
		PL11	EDR	0	2402	13.92	15.0	10.78	12.0
				39	2441	14.15		10.80	
				78	2480	14.34		10.28	
		PL11	LE (1M/2M)	0	2402	17.06	18.0		
				19	2440	17.25			
				39	2480	17.35			
	BT SISO Ant.2	PL11	GFSK (1Mbps)	0	2402	15.36	16.0	10.49	12.0
				39	2441	15.06		10.46	
				78	2480	15.64		10.29	
		PL11	EDR	0	2402	11.66	12.0	10.63	12.0
				39	2441	11.41		10.54	
				78	2480	11.34		10.21	
		PL11	LE (1M/2M)	0	2402	14.79	16.0		
				19	2440	14.68			
				39	2480	14.74			

Bluetooth Dual(MIMO) output power Results

Band (GHz)	Antenna	Mode		Ch #	Freq. (MHz)	Max. Average Power (dBm)		Reduced. Average Power (dBm)	
						Meas Pwr	Tune-up Limit	Meas Pwr	Tune-up Limit
2.4	BT Dual(MIMO) Ant.1	PL10	GFSK (1Mbps)	0	2402	12.65	13.5	11.04	12.0
				39	2441	12.29		10.46	
				78	2480	11.41		9.67	
		PL10	EDR	0	2402	9.20	10.0	9.26	10.0
				39	2441	8.59		8.57	
				78	2480	8.02		7.75	
		PL10	LE (1M/2M)	0	2402	12.08	13.0		
				19	2440	11.38			
				39	2480	11.30			
	BT Dual(MIMO) Ant.2	PL10	GFSK (1Mbps)	0	2402	11.55	12.5	10.01	12.0
				39	2441	11.23		9.73	
				78	2480	10.80		9.11	
		PL10	EDR	0	2402	8.14	9.0	7.96	9.0
				39	2441	7.59		7.56	
				78	2480	7.01		7.04	
		PL10	LE (1M/2M)	0	2402	10.58	12.0		
				19	2440	10.27			
				39	2480	9.50			

Duty Factor Measured Results (SISO mode)

Mode	Type	T on (ms)	Period (ms)	Maximum Duty Cyle	Measured Duty Cycle	Crest Factor (maximum duty/ measured duty cycle)
GFSK(1Mbps)	DH5	2.883	3.751	79.00%	76.86%	1.03
LE	1M 255pkt	2.129	2.500	87.00%	85.16%	1.02

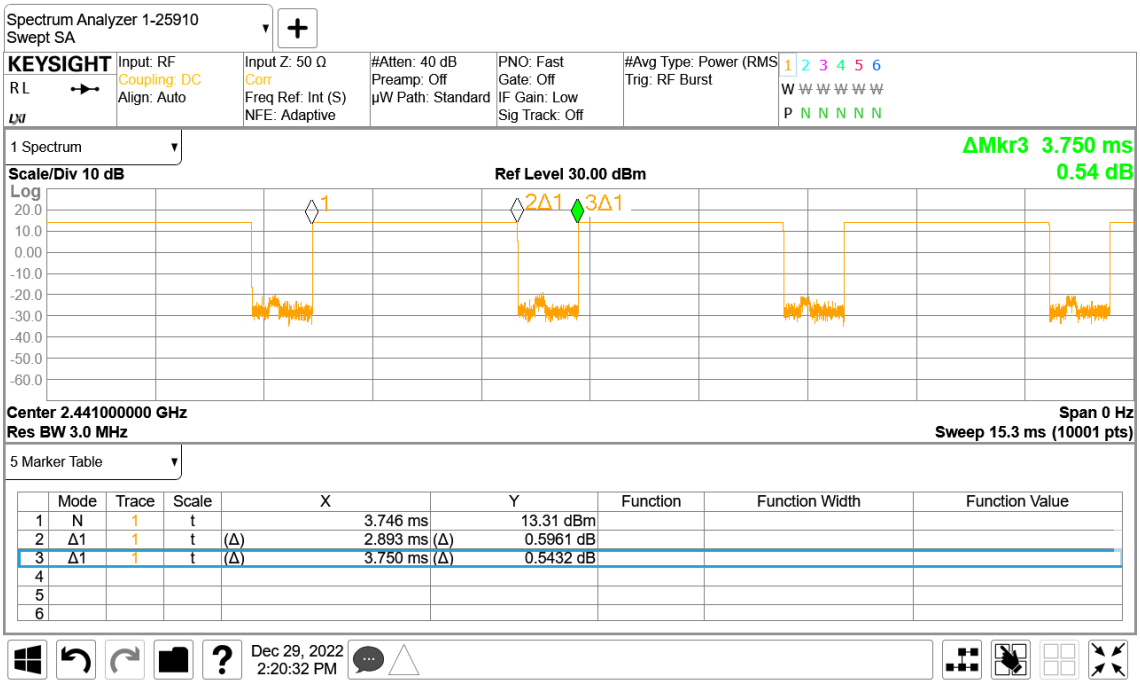


Note(s):

Maximum Duty Cycle is mentioned in Operational description. Detail of BT Duty Cycle refer to Operational description.

Duty Factor Measured Results (Dual(MIMO) mode)

Mode	Type	T on (ms)	Period (ms)	Maximum Duty Cyle	Measured Duty Cycle	Crest Factor (maximum duty/ measured duty cycle)
BDR(1Mbps)	DH5	2.883	3.751	79.00%	76.86%	1.03



Note(s):

Maximum Duty Cycle is mentioned in Operational description. Detail of BT Duty Cycle refer to Operational description.

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
- Wi-Fi Duty Cycle scaling factor = 1 / Duty cycle (%)
- BT Duty Cycle scaling factor = Maximum Duty cycle / 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 ≤ 25mm
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 ≤ ¼ 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

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	GPRS 2 Slots	0	Left Touch	190	836.6	32.00	31.89	0.131	0.134	
				Left Tilt	190	836.6	32.00	31.89	0.092	0.094	
				Right Touch	190	836.6	32.00	31.89	0.170	0.174	1
				Right Tilt	190	836.6	32.00	31.89	0.088	0.090	
	Body-worn & Hotspot	GPRS 2 Slots	10	Rear	190	836.6	32.00	31.89	0.381	0.391	2
				Front	190	836.6	32.00	31.89	0.202	0.207	
	Hotspot	GPRS 2 Slots	10	Left	190	836.6	32.00	31.89	0.205	0.210	
				Bottom	190	836.6	32.00	31.89	0.173	0.177	
				Right	190	836.6	32.00	31.89	0.138	0.142	

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Sub.1	Head	GPRS 1 Slots	0	Left Touch	128	824.4	30.00	29.08	0.430	0.531	3
				Left Tilt	128	824.4	30.00	29.08	0.404	0.499	
				Right Touch	128	824.4	30.00	29.08	0.281	0.347	
				Right Tilt	128	824.4	30.00	29.08	0.239	0.295	
	Body-worn & Hotspot	GPRS 2 Slots	10	Rear	190	836.6	32.00	30.24	0.424	0.636	4
				Front	190	836.6	32.00	30.24	0.403	0.604	
	Hotspot	GPRS 2 Slots	10	Top	190	836.6	32.00	30.24	0.356	0.533	
				Left	190	836.6	32.00	30.24	0.299	0.448	

10.2. GSM 1900

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	GPRS 3 Slots	0	Left Touch	661	1880.0	24.00	22.91	0.040	0.051	5
				Left Tilt	661	1880.0	24.00	22.91	0.015	0.019	
				Right Touch	661	1880.0	24.00	22.91	0.023	0.029	
				Right Tilt	661	1880.0	24.00	22.91	0.015	0.019	
	Body-worn & Hotspot	GPRS 3 Slots	10	Rear	661	1880.0	24.00	22.91	0.203	0.261	
				Front	661	1880.0	24.00	22.91	0.188	0.242	
	Hotspot	GPRS 3 Slots	10	Left	661	1880.0	24.00	22.91	0.045	0.057	
				Bottom	661	1880.0	24.00	22.91	0.513	0.659	6
				Right	661	1880.0	24.00	22.91	0.048	0.062	

10.3. WCDMA Band II

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	Rel 99 RMC	0	Left Touch	9400	1880.0	23.00	22.37	0.059	0.069	7
				Left Tilt	9400	1880.0	23.00	22.37	0.031	0.035	
				Right Touch	9400	1880.0	23.00	22.37	0.039	0.045	
				Rightt Tilt	9400	1880.0	23.00	22.37	0.021	0.025	
	Body-worn & Hotspot	Rel 99 RMC	10	Rear	9400	1880.0	19.50	18.77	0.313	0.370	
				Front	9400	1880.0	19.50	18.77	0.310	0.367	
	Hotspot	Rel 99 RMC	10	Left	9400	1880.0	19.50	18.77	0.065	0.076	
				Bottom	9262	1852.4	19.50	18.99	0.735	0.827	
					9400	1880.0	19.50	18.77	0.692	0.819	
					9538	1907.6	19.50	18.97	0.755	0.853	8
				Right	9400	1880.0	19.50	18.77	0.084	0.099	

10.4. WCDMA Band IV

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	Rel 99 RMC	0	Left Touch	1413	1732.6	24.00	22.76	0.226	0.301	9
				Left Tilt	1413	1732.6	24.00	22.76	0.045	0.060	
				Right Touch	1413	1732.6	24.00	22.76	0.120	0.160	
				Rightt Tilt	1413	1732.6	24.00	22.76	0.058	0.077	
	Body-worn & Hotspot	Rel 99 RMC	10	Rear	1413	1732.6	20.00	19.17	0.429	0.519	
				Front	1413	1732.6	20.00	19.17	0.412	0.499	
	Hotspot	Rel 99 RMC	10	Left	1413	1732.6	20.00	19.17	0.072	0.087	
				Bottom	1312	1712.4	20.00	19.40	0.739	0.848	
					1413	1732.6	20.00	19.17	0.763	0.924	
					1513	1752.6	20.00	19.21	0.772	0.926	10
				Right	1413	1732.6	20.00	19.17	0.126	0.153	

10.5. WCDMA Band V

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	Rel 99 RMC	0	Left Touch	4183	836.6	25.00	23.91	0.127	0.163	
				Left Tilt	4183	836.6	25.00	23.91	0.080	0.102	
				Right Touch	4183	836.6	25.00	23.91	0.170	0.218	11
				Rightt Tilt	4183	836.6	25.00	23.91	0.093	0.119	
	Body-worn & Hotspot	Rel 99 RMC	10	Rear	4183	836.6	25.00	23.91	0.366	0.470	12
				Front	4183	836.6	25.00	23.91	0.242	0.311	
	Hotspot	Rel 99 RMC	10	Left	4183	836.6	25.00	23.91	0.238	0.306	
				Bottom	4183	836.6	25.00	23.91	0.139	0.179	
				Right	4183	836.6	25.00	23.91	0.168	0.216	

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Sub.1	Head	Rel 99 RMC	0	Left Touch	4183	836.6	19.00	18.42	0.620	0.709	
				Left Tilt	4183	836.6	19.00	18.42	0.626	0.715	13
				Right Touch	4183	836.6	19.00	18.42	0.368	0.421	
				Rightt Tilt	4183	836.6	19.00	18.42	0.320	0.366	
	Body-worn & Hotspot	Rel 99 RMC	10	Rear	4183	836.6	19.00	18.42	0.251	0.287	14
				Front	4183	836.6	19.00	18.42	0.167	0.191	
	Hotspot	Rel 99 RMC	10	Top	4183	836.6	19.00	18.42	0.180	0.206	
				Left	4183	836.6	19.00	18.42	0.179	0.205	

10.6. LTE Band 2 (20MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Sub.2	Head	QPSK	0	Left Touch	19100	1900.0	1	49	16.50	14.68	0.231	0.351	
							50	0	16.50	14.52	0.238	0.375	
				Left Tilt	19100	1900.0	1	49	16.50	14.68	0.296	0.450	
							50	0	16.50	14.52	0.321	0.506	
				Right Touch	19100	1900.0	1	49	16.50	14.68	0.398	0.605	
							50	0	16.50	14.52	0.409	0.645	
				Right Tilt	19100	1900.0	1	49	16.50	14.68	0.408	0.620	
							50	0	16.50	14.52	0.414	0.653	15
	Body-worn & Hotspot	QPSK	10	Rear	19100	1900.0	1	49	18.50	16.72	0.158	0.238	
							50	0	18.50	16.65	0.151	0.231	
				Front	19100	1900.0	1	49	18.50	16.72	0.097	0.146	
							50	0	18.50	16.65	0.108	0.165	
	Hotspot	QPSK	10	Top	19100	1900.0	1	49	18.50	16.72	0.273	0.411	
							50	0	18.50	16.65	0.278	0.426	16
				Right	19100	1900.0	1	49	18.50	16.72	0.074	0.111	
							50	0	18.50	16.65	0.082	0.126	

10.7. LTE Band 5 (10MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	QPSK	0	Left Touch	20525	836.5	1	0	25.00	23.73	0.150	0.201	
							25	0	24.00	22.79	0.115	0.152	
				Left Tilt	20525	836.5	1	0	25.00	23.73	0.111	0.149	
							25	0	24.00	22.79	0.090	0.119	
				Right Touch	20525	836.5	1	0	25.00	23.73	0.177	0.237	17
							25	0	24.00	22.79	0.139	0.184	
				Right Tilt	20525	836.5	1	0	25.00	23.73	0.091	0.122	
							25	0	24.00	22.79	0.072	0.095	
	Body-worn & Hotspot	QPSK	10	Rear	20525	836.5	1	0	25.00	23.73	0.493	0.660	18
							25	0	24.00	22.79	0.403	0.532	
				Front	20525	836.5	1	0	25.00	23.73	0.223	0.299	
							25	0	24.00	22.79	0.182	0.240	
	Hotspot	QPSK	10	Left	20525	836.5	1	0	25.00	23.73	0.193	0.259	
							25	0	24.00	22.79	0.146	0.193	
				Bottom	20525	836.5	1	0	25.00	23.73	0.160	0.214	
							25	0	24.00	22.79	0.131	0.173	
				Right	20525	836.5	1	0	25.00	23.73	0.154	0.206	
							25	0	24.00	22.79	0.113	0.149	

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Sub.1	Head	QPSK	0	Left Touch	20525	836.5	1	0	20.50	19.40	0.555	0.715	
							25	0	20.50	19.39	0.579	0.748	19
				Left Tilt	20525	836.5	1	0	20.50	19.40	0.458	0.590	
							25	0	20.50	19.39	0.472	0.609	
				Right Touch	20525	836.5	1	0	20.50	19.40	0.491	0.633	
							25	0	20.50	19.39	0.509	0.657	
				Right Tilt	20525	836.5	1	0	20.50	19.40	0.421	0.542	
							25	0	20.50	19.39	0.460	0.594	
	Body-worn & Hotspot	QPSK	10	Rear	20525	836.5	1	0	20.50	19.40	0.150	0.193	
							25	0	20.50	19.39	0.152	0.196	20
				Front	20525	836.5	1	0	20.50	19.40	0.128	0.165	
							25	0	20.50	19.39	0.127	0.164	
	Hotspot	QPSK	10	Top	20525	836.5	1	0	20.50	19.40	0.109	0.140	
							25	0	20.50	19.39	0.117	0.151	
				Right	20525	836.5	1	0	20.50	19.40	0.039	0.050	
							25	0	20.50	19.39	0.041	0.052	

10.8. LTE Band 12 (10MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	QPSK	0	Left Touch	23095	707.5	1	0	24.50	24.11	0.086	0.094	
							25	0	23.50	23.05	0.066	0.073	
				Left Tilt	23095	707.5	1	0	24.50	24.11	0.066	0.072	
							25	0	23.50	23.05	0.051	0.057	
				Right Touch	23095	707.5	1	0	24.50	24.11	0.090	0.098	21
							25	0	23.50	23.05	0.074	0.082	
				Right Tilt	23095	707.5	1	0	24.50	24.11	0.065	0.071	
							25	0	23.50	23.05	0.053	0.059	
	Body-worn & Hotspot	QPSK	10	Rear	23095	707.5	1	0	24.50	24.11	0.230	0.252	22
							25	0	23.50	23.05	0.189	0.210	
				Front	23095	707.5	1	0	24.50	24.11	0.150	0.164	
							25	0	23.50	23.05	0.125	0.139	
	Hotspot	QPSK	10	Left	23095	707.5	1	0	24.50	24.11	0.119	0.130	
							25	0	23.50	23.05	0.103	0.114	
				Bottom	23095	707.5	1	0	24.50	24.11	0.046	0.050	
							25	0	23.50	23.05	0.041	0.045	
				Right	23095	707.5	1	0	24.50	24.11	0.162	0.177	
							25	0	23.50	23.05	0.139	0.154	

10.9. LTE Band 13 (10MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	QPSK	0	Left Touch	23230	782.0	1	0	24.50	23.87	0.112	0.129	
							25	0	23.50	22.82	0.095	0.111	
				Left Tilt	23230	782.0	1	0	24.50	23.87	0.062	0.071	
							25	0	23.50	22.82	0.048	0.056	
				Right Touch	23230	782.0	1	0	24.50	23.87	0.118	0.136	23
							25	0	23.50	22.82	0.104	0.122	
				Right Tilt	23230	782.0	1	0	24.50	23.87	0.057	0.065	
							25	0	23.50	22.82	0.046	0.054	
	Body-worn & Hotspot	QPSK	10	Rear	23230	782.0	1	0	24.50	23.87	0.349	0.403	24
							25	0	23.50	22.82	0.279	0.326	
				Front	23230	782.0	1	0	24.50	23.87	0.281	0.325	
							25	0	23.50	22.82	0.231	0.270	
	Hotspot	QPSK	10	Left	23230	782.0	1	0	24.50	23.87	0.107	0.124	
							25	0	23.50	22.82	0.089	0.104	
				Bottom	23230	782.0	1	0	24.50	23.87	0.111	0.128	
							25	0	23.50	22.82	0.089	0.104	
				Right	23230	782.0	1	0	24.50	23.87	0.171	0.198	
							25	0	23.50	22.82	0.136	0.159	

10.10. LTE Band 25 (20MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	QPSK	0	Left Touch	26590	1905.0	1	49	23.50	22.51	0.164	0.206	25
							50	0	22.50	21.28	0.136	0.180	
				Left Tilt	26590	1905.0	1	49	23.50	22.51	0.046	0.057	
							50	0	22.50	21.28	0.048	0.063	
				Right Touch	26590	1905.0	1	49	23.50	22.51	0.089	0.112	
							50	0	22.50	21.28	0.077	0.101	
				Right Tilt	26590	1905.0	1	49	23.50	22.51	0.060	0.076	
							50	0	22.50	21.28	0.054	0.071	
	Body-worn & Hotspot	QPSK	10	Rear	26590	1905.0	1	49	19.50	19.03	0.371	0.413	
							50	0	19.50	18.83	0.410	0.478	
				Front	26590	1905.0	1	49	19.50	19.03	0.309	0.344	
							50	0	19.50	18.83	0.322	0.376	
	Hotspot	QPSK	10	Left	26590	1905.0	1	49	19.50	19.03	0.060	0.067	
							50	0	19.50	18.83	0.061	0.071	
				Bottom	26140	1860.0	50	0	19.50	18.67	0.627	0.759	
					26365	1882.5	50	0	19.50	18.77	0.674	0.797	
					26590	1905.0	1	49	19.50	19.03	0.662	0.738	
							50	0	19.50	18.83	0.716	0.835	26
				Right	26590	1905.0	1	49	19.50	19.03	0.073	0.081	
							50	0	19.50	18.83	0.074	0.087	

10.11. LTE Band 26 (15MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	QPSK	0	Left Touch	26865	831.5	1	0	24.50	23.84	0.134	0.156	
							36	0	23.50	22.84	0.099	0.116	
				Left Tilt	26865	831.5	1	0	24.50	23.84	0.084	0.098	
							36	0	23.50	22.84	0.065	0.076	
				Right Touch	26865	831.5	1	0	24.50	23.84	0.160	0.186	27
							36	0	23.50	22.84	0.130	0.151	
				Right Tilt	26865	831.5	1	0	24.50	23.84	0.093	0.108	
							36	0	23.50	22.84	0.073	0.085	
	Body-worn & Hotspot	QPSK	10	Rear	26865	831.5	1	0	24.50	23.84	0.499	0.581	28
							36	0	23.50	22.84	0.417	0.485	
				Front	26865	831.5	1	0	24.50	23.84	0.464	0.540	
							36	0	23.50	22.84	0.387	0.451	
	Hotspot	QPSK	10	Left	26865	831.5	1	0	24.50	23.84	0.239	0.278	
							36	0	23.50	22.84	0.178	0.207	
				Bottom	26865	831.5	1	0	24.50	23.84	0.126	0.147	
							36	0	23.50	22.84	0.101	0.118	
				Right	26865	831.5	1	0	24.50	23.84	0.197	0.229	
							36	0	23.50	22.84	0.153	0.178	

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Sub.1	Head	QPSK	0	Left Touch	26865	831.5	1	0	19.00	17.96	0.384	0.488	29
							36	0	19.00	17.96	0.305	0.388	
				Left Tilt	26865	831.5	1	0	19.00	17.96	0.301	0.382	
							36	0	19.00	17.96	0.234	0.297	
				Right touch	26865	831.5	1	0	19.00	17.96	0.296	0.376	
							36	0	19.00	17.96	0.222	0.282	
				Right tilt	26865	831.5	1	0	19.00	17.96	0.231	0.294	
							36	0	19.00	17.96	0.178	0.226	
	Body-worn & Hotspot	QPSK	10	Rear	26865	831.5	1	0	19.00	17.96	0.112	0.142	30
							36	0	19.00	17.96	0.086	0.110	
				Front	26865	831.5	1	0	19.00	17.96	0.083	0.106	
							36	0	19.00	17.96	0.065	0.082	
	Hotspot	QPSK	10	Top	26865	831.5	1	0	19.00	17.96	0.070	0.089	
							36	0	19.00	17.96	0.053	0.067	
				Left	26865	831.5	1	0	19.00	17.96	0.086	0.109	
							36	0	19.00	17.96	0.065	0.082	

10.12. LTE Band 41 (20MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Main.2	Head	QPSK	0	Left Touch	40620	2593.0	1	0	23.50	22.83	0.152	0.177	
							50	24	22.50	20.81	0.092	0.136	
				Left Tilt	40620	2593.0	1	0	23.50	22.83	0.055	0.064	
							50	24	22.50	20.81	0.028	0.041	
				Right Touch	40620	2593.0	1	0	23.50	22.83	0.059	0.068	
							50	24	22.50	20.81	0.035	0.051	
				Right Tilt	40620	2593.0	1	0	23.50	22.83	0.044	0.051	
							50	24	22.50	20.81	0.020	0.030	
	Body-worn & Hotspot	QPSK	10	Rear	40620	2593.0	1	0	21.50	21.31	0.248	0.259	
							50	24	21.50	20.63	0.200	0.244	
				Front	40620	2593.0	1	0	21.50	21.31	0.200	0.209	
							50	24	21.50	20.63	0.167	0.204	
	Hotspot	QPSK	10	Bottom	40620	2593.0	1	0	21.50	21.31	0.330	0.345	
							50	24	21.50	20.63	0.275	0.336	
				Right	40620	2593.0	1	0	21.50	21.31	0.298	0.311	
							50	24	21.50	20.63	0.250	0.305	

LTE Band 41 Power Class 2

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Main.2	Head	QPSK	0	Left Touch	40620	2593.0	1	0	26.00	24.96	0.162	0.206	31
	Hotspot	QPSK	10	Bottom	40620	2593.0	1	0	23.60	22.95	0.320	0.372	32

Note(s):

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.

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	Head	43.3	26.0	172.4	0.206	63.3	23.5	141.7	0.177	0.215	-4.3
	Body-worn & Hotspot	43.3	23.6	99.2	0.372	63.3	21.5	89.4	0.345	0.383	-2.8

Note(s):

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)

10.13. LTE Band 66 (20MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	QPSK	0	Left Touch	132072	1720.0	1	0	23.50	22.63	0.290	0.354	33
							50	0	22.50	21.46	0.233	0.296	
				Left Tilt	132072	1720.0	1	0	23.50	22.63	0.086	0.105	
							50	0	22.50	21.46	0.059	0.074	
				Right Touch	132072	1720.0	1	0	23.50	22.63	0.127	0.155	
							50	0	22.50	21.46	0.103	0.131	
				Right Tilt	132072	1720.0	1	0	23.50	22.63	0.100	0.122	
							50	0	22.50	21.46	0.079	0.101	
	Body-worn & Hotspot	QPSK	10	Rear	132072	1720.0	1	0	19.00	17.49	0.239	0.338	
							50	0	19.00	17.33	0.244	0.358	
				Front	132072	1720.0	1	0	19.00	17.49	0.224	0.317	
							50	0	19.00	17.33	0.228	0.335	
	Hotspot	QPSK	10	Left	132072	1720.0	1	0	19.00	17.49	0.064	0.091	
							50	0	19.00	17.33	0.066	0.096	
				Bottom	132072	1720.0	1	0	19.00	17.49	0.424	0.600	
							50	0	19.00	17.33	0.422	0.620	34
				Right	132072	1720.0	1	0	19.00	17.49	0.130	0.184	
							50	0	19.00	17.33	0.132	0.194	

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Sub.2	Head	QPSK	0	Left Touch	132072	1720.0	1	0	18.50	16.79	0.256	0.380	
							50	0	18.50	16.73	0.255	0.383	
				Left Tilt	132072	1720.0	1	0	18.50	16.79	0.371	0.550	
							50	0	18.50	16.73	0.364	0.547	
				Right Touch	132072	1720.0	1	0	18.50	16.70	0.436	0.660	
							50	0	18.50	16.67	0.436	0.664	
					132322	1745.0	1	0	18.50	16.79	0.554	0.821	
							50	0	18.50	16.73	0.551	0.828	
							100	0	18.50	16.67	0.497	0.757	
					132572	1770.0	1	0	18.50	16.71	0.490	0.740	
							50	0	18.50	16.72	0.487	0.734	
				Right Tilt	132072	1720.0	1	0	18.50	16.70	0.554	0.839	
							50	0	18.50	16.67	0.558	0.850	
					132322	1745.0	1	0	18.50	16.79	0.606	0.898	
							50	0	18.50	16.73	0.598	0.899	35
							100	0	18.50	16.67	0.578	0.881	
					132572	1770.0	1	0	18.50	16.71	0.592	0.894	
							50	0	18.50	16.72	0.591	0.890	
	Body-worn & Hotspot	QPSK	10	Rear	132072	1720.0	1	0	18.50	16.79	0.105	0.156	
							50	0	18.50	16.73	0.102	0.153	
				Front	132072	1720.0	1	0	18.50	16.79	0.086	0.127	
							50	0	18.50	16.73	0.075	0.113	
	Hotspot	QPSK	10	Top	132072	1720.0	1	0	18.50	16.79	0.202	0.299	
							50	0	18.50	16.73	0.200	0.301	36
				Right	132072	1720.0	1	0	18.50	16.79	0.042	0.062	
							50	0	18.50	16.73	0.042	0.062	

10.14. NR Band n5 (20MHz Bandwidth)

Antenna	RF Exposure Conditions	Modulation	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	DFT-s-OFDM	QPSK	0	Left Touch	167300	836.5	1	52	25.00	23.87	0.109	0.141	
								50	28	25.00	23.92	0.116	0.149	
					Left Tilt	167300	836.5	1	52	25.00	23.87	0.084	0.109	
								50	28	25.00	23.92	0.098	0.125	
					Right Touch	167300	836.5	1	52	25.00	23.87	0.183	0.237	37
								50	28	25.00	23.92	0.177	0.227	
					Right Tilt	167300	836.5	1	52	25.00	23.87	0.088	0.114	
								50	28	25.00	23.92	0.087	0.111	
		CP-OFDM	QPSK	0	Right Touch	167300	836.5	1	1	23.50	22.46	0.111	0.141	
	Body-worn & Hotspot	DFT-s-OFDM	QPSK	10	Rear	167300	836.5	1	52	25.00	23.87	0.409	0.531	38
								50	28	25.00	23.92	0.274	0.351	
					Front	167300	836.5	1	52	25.00	23.87	0.220	0.285	
								50	28	25.00	23.92	0.195	0.250	
	Hotspot	DFT-s-OFDM	QPSK	10	Right	167300	836.5	1	52	25.00	23.87	0.199	0.258	
								50	28	25.00	23.92	0.179	0.230	
					Left	167300	836.5	1	52	25.00	23.87	0.163	0.211	
								50	28	25.00	23.92	0.159	0.204	
					Bottom	167300	836.5	1	52	25.00	23.87	0.167	0.217	
								50	28	25.00	23.92	0.172	0.221	
		CP-OFDM	QPSK	10	Rear	167300	836.5	1	1	23.50	22.46	0.260	0.330	

Antenna	RF Exposure Conditions	Modulation	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Sub.1	Head	DFT-s-OFDM	QPSK	0	Left Touch	167300	836.5	1	52	20.50	19.41	0.564	0.725	
								50	28	20.50	19.30	0.587	0.774	39
					Left Tilt	167300	836.5	1	52	20.50	19.41	0.451	0.580	
								50	28	20.50	19.30	0.477	0.629	
					Right Touch	167300	836.5	1	52	20.50	19.41	0.424	0.545	
								50	28	20.50	19.30	0.427	0.563	
					Right Tilt	167300	836.5	1	52	20.50	19.41	0.340	0.437	
								50	28	20.50	19.30	0.349	0.460	
		CP-OFDM	QPSK	0	Left Touch	167300	836.5	1	1	20.50	19.30	0.442	0.583	
	Body-worn & Hotspot	DFT-s-OFDM	QPSK	10	Rear	167300	836.5	1	52	20.50	19.41	0.138	0.177	
								50	28	20.50	19.30	0.166	0.219	40
					Front	167300	836.5	1	52	20.50	19.41	0.146	0.188	
								50	28	20.50	19.30	0.149	0.196	
	Hotspot	DFT-s-OFDM	QPSK	10	Top	167300	836.5	1	52	20.50	19.41	0.122	0.157	
								50	28	20.50	19.30	0.124	0.163	
					Left	167300	836.5	1	52	20.50	19.41	0.126	0.162	
								50	28	20.50	19.30	0.128	0.169	
		CP-OFDM	QPSK	10	Rear	167300	836.5	1	1	20.50	19.30	0.115	0.152	

Note(s):

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

10.15. NR Band n25 (20MHz Bandwidth)

Antenna	RF Exposure Conditions	Modulation	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	DFT-s-OFDM	QPSK	0	Left Touch	381000	1905.0	1	52	24.50	23.04	0.136	0.190	
								50	28	24.50	22.99	0.143	0.202	41
					Left Tilt	381000	1905.0	1	52	24.50	23.04	0.041	0.057	
								50	28	24.50	22.99	0.042	0.060	
					Right Touch	381000	1905.0	1	52	24.50	23.04	0.056	0.079	
								50	28	24.50	22.99	0.059	0.083	
					Right Tilt	381000	1905.0	1	52	24.50	23.04	0.040	0.056	
								50	28	24.50	22.99	0.059	0.083	
		CP-OFDM	QPSK	0	Left Touch	381000	1905.0	1	1	23.00	21.54	0.106	0.148	
	Body-worn & Hotspot	DFT-s-OFDM	QPSK	10	Rear	381000	1905.0	1	52	20.00	19.16	0.388	0.471	
								50	28	20.00	19.26	0.394	0.467	
					Front	381000	1905.0	1	52	20.00	19.16	0.277	0.336	
								50	28	20.00	19.26	0.283	0.336	
	Hotspot	DFT-s-OFDM	QPSK	10	Left	381000	1905.0	1	52	20.00	19.16	0.078	0.095	
								50	28	20.00	19.26	0.079	0.094	
					Bottom	372000	1860.0	1	52	20.00	19.03	0.662	0.828	
								50	28	20.00	18.94	0.674	0.860	
						376500	1882.5	1	52	20.00	19.00	0.736	0.927	
								50	28	20.00	18.95	0.743	0.946	
						381000	1905.5	1	52	20.00	19.16	0.797	0.967	
								50	28	20.00	19.26	0.817	0.969	
								100	0	20.00	19.23	0.818	0.977	42
					Right	381000	1905.0	1	52	20.00	19.16	0.070	0.085	
								50	28	20.00	19.26	0.071	0.084	
		CP-OFDM	QPSK	10	Bottom	381000	1905	1	1	20.00	18.83	0.526	0.689	

Antenna	RF Exposure Conditions	Modulation	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Sub.2	Head	DFT-s-OFDM	QPSK	0	Left Touch	381000	1905.0	1	52	15.50	14.90	0.254	0.292	
								50	56	15.50	14.80	0.257	0.302	
					Left Tilt	381000	1905.0	1	52	15.50	14.90	0.370	0.425	
								50	56	15.50	14.80	0.376	0.442	
					Right Touch	381000	1905.0	1	52	15.50	14.90	0.500	0.574	
								50	56	15.50	14.80	0.508	0.597	
					Right Tilt	381000	1905.0	1	52	15.50	14.90	0.542	0.622	43
								50	56	15.50	14.80	0.528	0.620	
		CP-OFDM	QPSK	0	Right Tillt	381000	1905.0	1	1	15.50	14.85	0.533	0.619	
	Body-worn & Hotspot	DFT-s-OFDM	QPSK	10	Rear	381000	1905.0	1	52	20.00	19.33	0.134	0.156	
								50	56	20.00	19.33	0.137	0.160	
					Front	381000	1905.0	1	52	20.00	19.33	0.108	0.126	
								50	56	20.00	19.33	0.107	0.125	
	Hotspot	DFT-s-OFDM	QPSK	10	Top	381000	1905.0	1	52	20.00	19.33	0.258	0.301	
								50	56	20.00	19.33	0.304	0.355	44
					Right	381000	1905.0	1	52	20.00	19.33	0.072	0.084	
								50	56	20.00	19.33	0.072	0.083	
		CP-OFDM	QPSK	10	Top	381000	1905	1	1	20.00	19.24	0.254	0.303	

Note(s):

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

10.16. NR Band n41 (Voice/data/SRS0) (100MHz Bandwidth)

Antenna	RF Exposure Conditions	Modulation	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Sub.2	Head	DFT-s-OFDM	QPSK	0	Left Touch	518598	2593.0	1	1	17.00	16.51	0.472	0.528	
								135	138	17.00	16.38	0.387	0.446	
					Left Tilt	518598	2593.0	1	1	17.00	16.51	0.568	0.636	
								135	138	17.00	16.38	0.584	0.674	
					Right Touch	518598	2593.0	1	1	17.00	16.51	0.644	0.721	
								135	138	17.00	16.38	0.690	0.796	
					Right Tilt	518598	2593.0	1	1	17.00	16.51	0.690	0.772	
								135	138	17.00	16.38	0.782	0.902	45
		CP-OFDM	QPSK	0	Right Tilt	518598	5293.0	1	1	17.00	16.37	0.747	0.864	
	Body-worn & Hotspot	DFT-s-OFDM	QPSK	10	Rear	518598	2593.0	1	1	17.00	16.51	0.270	0.302	
								135	138	17.00	16.38	0.198	0.228	
					Front	518598	2593.0	1	1	17.00	16.51	0.121	0.135	
								135	138	17.00	16.38	0.122	0.141	
	Hotspot	DFT-s-OFDM	QPSK	10	Top	518598	2593.0	1	1	17.00	16.51	0.322	0.360	46
								135	138	17.00	16.38	0.272	0.314	
					Right	518598	2593.0	1	1	17.00	16.51	0.030	0.034	
								135	138	17.00	16.38	0.030	0.035	
		CP-OFDM	QPSK	10	Top	518598	2593	1	1	18.00	17.29	0.287	0.338	

Note(s):

1. CP-OFDM mode were evaluated at worst configuration of DFT-s-OFDM in standalone exposure conditions.
2. NR Band n41(Voice/data/SRS0) tested using FTM mode.

10.17. NR Band n41 (SRS1/SRS2/SRS3) (100MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main.2 -SRS1-	Head	SRS CW	0	Left Touch	518598	2593.0	15.50	14.56	0.033	0.041	
				Left Tilt	518598	2593.0	15.50	14.56	0.003	0.004	
				Right Touch	518598	2593.0	15.50	14.56	0.000	0.000	
				Right Tilt	518598	2593.0	15.50	14.56	0.006	0.007	
	Body-worn & Hotspot	SRS CW	10	Rear	518598	2593.0	15.50	14.56	0.099	0.123	
				Front	518598	2593.0	15.50	14.56	0.067	0.083	
	Hotspot	SRS CW	10	Bottom	518598	2593.0	15.50	14.56	0.184	0.228	47
				Right	518598	2593.0	15.50	14.56	0.113	0.140	
Sub.1 -SRS2-	Head	SRS CW	0	Left Touch	518598	2593.0	15.00	13.85	0.470	0.612	48
				Left Tilt	518598	2593.0	15.00	13.85	0.432	0.563	
				Right Touch	518598	2593.0	15.00	13.85	0.138	0.180	
				Right Tilt	518598	2593.0	15.00	13.85	0.132	0.172	
	Body-worn & Hotspot	SRS CW	10	Rear	518598	2593.0	15.00	13.85	0.052	0.068	
				Front	518598	2593.0	15.00	13.85	0.030	0.039	
	Hotspot	SRS CW	10	Top	518598	2593.0	15.00	13.85	0.034	0.044	
				Left	518598	2593.0	15.00	13.85	0.034	0.044	
Main.4 -SRS3-	Head	SRS CW	0	Left Touch	518598	2593.0	16.00	15.21	0.000	0.000	
				Left Tilt	518598	2593.0	16.00	15.21	0.000	0.000	
				Right Touch	518598	2593.0	16.00	15.21	0.000	0.000	
				Right Tilt	518598	2593.0	16.00	15.21	0.000	0.000	
	Body-worn & Hotspot	SRS CW	10	Rear	518598	2593.0	16.00	15.21	0.044	0.053	
				Front	518598	2593.0	16.00	15.21	0.005	0.006	
	Hotspot	SRS CW	10	Left	518598	2593.0	16.00	15.21	0.000	0.000	
				Bottom	518598	2593.0	16.00	15.21	0.031	0.037	

Note(s):

1. NR Band n41(SRS1/SRS2/SRS3) tested using FTM mode.

10.18. NR Band n66 (20MHz Bandwidth)

Antenna	RF Exposure Conditions	Modulation	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main.1	Head	DFT-s-OFDM	QPSK	0	Left Touch	344000	1720.0	1	1	24.50	23.38	0.210	0.272	49
								50	28	24.50	23.31	0.203	0.267	
					Left Tilt	344000	1720.0	1	1	24.50	23.38	0.038	0.049	
								50	28	24.50	23.31	0.026	0.034	
					Right Touch	344000	1720.0	1	1	24.50	23.38	0.128	0.166	
								50	28	24.50	23.31	0.115	0.151	
					Right Tilt	344000	1720.0	1	1	24.50	23.38	0.087	0.113	
								50	28	24.50	23.31	0.075	0.099	
		CP-OFDM	QPSK	0	Left Touch	344000	1720.0	1	1	23.00	21.96	0.148	0.188	
	Body-worn & Hotspot	DFT-s-OFDM	QPSK	10	Rear	354000	1770.0	1	1	20.50	19.39	0.400	0.516	
								50	28	20.50	19.39	0.394	0.509	
					Front	354000	1770.0	1	1	20.50	19.39	0.334	0.431	
								50	28	20.50	19.39	0.326	0.421	
	Hotspot	DFT-s-OFDM	QPSK	10	Left	354000	1770.0	1	1	20.50	19.39	0.055	0.071	
								50	28	20.50	19.39	0.057	0.074	
					Bottom	344000	1720.0	1	1	20.50	19.38	0.627	0.811	
								50	28	20.50	19.34	0.628	0.820	
						349000	1745.0	100	0	20.50	19.34	0.647	0.845	
								1	1	20.50	19.34	0.687	0.897	
								50	28	20.50	19.32	0.705	0.925	50
						354000	1770.0	1	1	20.50	19.39	0.702	0.906	
								50	28	20.50	19.39	0.705	0.910	
					Right	354000	1770.0	1	1	20.50	19.39	0.101	0.130	
								50	28	20.50	19.39	0.096	0.124	
		CP-OFDM	QPSK	10	Bottom	349000	1745	1	1	20.50	19.24	0.649	0.867	

Antenna	RF Exposure Conditions	Modulation	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Sub.2	Head	DFT-s-OFDM	QPSK	0	Left Touch	344000	1720.0	1	1	19.00	18.05	0.386	0.480	
								50	0	19.00	18.01	0.402	0.505	
					Left Tilt	344000	1720.0	1	1	19.00	18.05	0.573	0.713	
								50	0	19.00	18.01	0.566	0.711	
					Right Touch	344000	1720.0	1	1	19.00	18.05	0.569	0.708	
								50	0	19.00	18.01	0.634	0.796	
					Right Tilt	344000	1720.0	1	1	19.00	18.05	0.669	0.833	
								50	0	19.00	18.01	0.687	0.863	
								100	0	19.00	17.93	0.675	0.864	
						349000	1745.0	1	1	19.00	17.85	0.711	0.927	51
								50	0	19.00	17.90	0.634	0.817	
						354000	1770.0	1	1	19.00	17.82	0.642	0.842	
								50	0	19.00	17.87	0.648	0.841	
		CP-OFDM	QPSK	0	RightTilt	349000	1745.0	1	1	19.00	17.82	0.615	0.807	
	Body-worn & Hotspot	DFT-s-OFDM	QPSK	10	Rear	344000	1720.0	1	1	20.00	19.13	0.217	0.265	
								50	0	20.00	19.07	0.210	0.260	
					Front	344000	1720.0	1	1	20.00	19.13	0.167	0.204	
								50	0	20.00	19.07	0.167	0.207	
	Hotspot	DFT-s-OFDM	QPSK	10	Top	344000	1720.0	1	1	20.00	19.13	0.290	0.354	
								50	0	20.00	19.07	0.290	0.359	52
					Right	344000	1720.0	1	1	20.00	19.13	0.074	0.091	
								50	0	20.00	19.07	0.072	0.090	
		CP-OFDM	QPSK	10	Top	344000	1720.0	1	1	20.00	19.11	0.262	0.322	

10.19. NR Band n77 (Voice/data/SRS0) (100MHz Bandwidth)

Antenna	RF Exposure Conditions	Modulation	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Sub.2	Head	DFT-s-OFDM	QPSK	0	Left Touch	650000	3750.0	1	136	16.00	14.96	0.187	0.238	
								135	138	16.00	14.86	0.202	0.263	
					Left Tilt	650000	3750.0	1	136	16.00	14.96	0.198	0.252	
								135	138	16.00	14.86	0.250	0.325	
					Right Touch	633334	3500.0	1	136	16.00	15.20	0.590	0.709	
								135	138	16.00	15.21	0.547	0.656	
						650000	3750.0	1	136	16.00	14.96	0.448	0.569	
								135	138	16.00	14.86	0.450	0.585	
						662000	3930.0	1	136	16.00	14.82	0.431	0.566	
								135	138	16.00	14.85	0.409	0.533	
					Right Tilt	633334	3500.0	1	136	16.00	15.20	0.688	0.827	
								135	138	16.00	15.21	0.682	0.818	
								270	0	16.00	15.16	0.697	0.846	53
						650000	3750.0	1	136	16.00	14.96	0.488	0.620	
								135	138	16.00	14.86	0.336	0.437	
						662000	3930.0	1	136	16.00	14.82	0.450	0.590	
								135	138	16.00	14.85	0.591	0.770	
		CP-OFDM	QPSK	0	Right Tilt	633334	3500.0	1	1	16.00	15.09	0.674	0.831	
	Body-worn & Hotspot	DFT-s-OFDM	QPSK	10	Rear	633334	3500.0	1	136	16.00	15.20	0.099	0.119	
								135	138	16.00	15.21	0.087	0.105	
						650000	3750.0	1	136	16.00	14.96	0.110	0.140	
								135	138	16.00	14.86	0.143	0.186	54
					Front	650000	3750.0	1	136	16.00	14.96	0.052	0.066	
								135	138	16.00	14.86	0.052	0.068	
	Hotspot	DFT-s-OFDM	QPSK	10	Top	650000	3750.0	1	136	16.00	14.96	0.105	0.133	
								135	138	16.00	14.86	0.117	0.152	
					Right	650000	3750.0	1	136	16.00	14.96	0.019	0.024	
								135	138	16.00	14.86	0.018	0.023	
		CP-OFDM	QPSK	10	Rear	650000	3750	1	1	16.00	14.84	0.094	0.122	

Note(s):

1. NR Band n77-DoD are tested at worst configuration of NR Band n77 band.
2. CP-OFDM mode were evaluated at worst configuration of DFT-s-OFDM in standalone exposure conditions.
3. NR Band n77(Voice/data/SRS0) tested using FTM mode.

10.20. NR Band n77 (SRS1/SRS2/SRS3) (100MHz Bandwidth)

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main.3 -SRS1-	Head	SRS CW	0	Left Touch	633334	3500.0	10.00	8.60	0.016	0.022	
					650000	3750.0	10.00	9.12	0.024	0.029	
				Left Tilt	650000	3750.0	10.00	9.12	<0.001	<0.001	
				Right Touch	650000	3750.0	10.00	9.12	0.000	0.000	
				Right Tilt	650000	3750.0	10.00	9.12	0.007	0.008	
	Body-worn & Hotspot	SRS CW	10	Rear	650000	3750.0	10.00	9.12	0.031	0.038	
				Front	650000	3750.0	10.00	9.12	0.025	0.030	
	Hotspot	SRS CW	10	Bottom	650000	3750.0	10.00	9.12	0.006	0.007	
				Right	633334	3500.0	10.00	8.60	0.047	0.065	
					650000	3750.0	10.00	9.12	0.072	0.089	
Sub.5 -SRS2-	Head	SRS CW	0	Left Touch	650000	3750.0	10.00	9.37	0.128	0.148	
				Left Tilt	650000	3750.0	10.00	9.37	<0.001	<0.001	
				Right Touch	633332	3500.0	10.00	9.20	0.218	0.262	55
					650000	3750.0	10.00	9.37	0.180	0.208	
				Right Tilt	650000	3750.0	10.00	9.37	0.003	0.004	
	Body-worn & Hotspot	SRS CW	10	Rear	633332	3500.0	10.00	9.20	0.025	0.030	
					650000	3750.0	10.00	9.37	0.018	0.021	
				Front	650000	3750.0	10.00	9.37	0.005	0.005	
	Hotspot	SRS CW	10	Right	650000	3750.0	10.00	9.37	0.003	0.003	
Main.4 -SRS3-	Head	SRS CW	0	Left Touch	633332	3500.0	7.50	6.46	0.002	0.003	
					662000	3930.0	7.50	6.38	0.001	0.001	
				Left Tilt	662000	3930.0	7.50	6.38	0.000	0.000	
				Right Touch	662000	3930.0	7.50	6.38	0.000	0.000	
				Right Tilt	662000	3930.0	7.50	6.38	0.000	0.000	
	Body-worn & Hotspot	SRS CW	10	Rear	633332	3500.0	7.50	6.46	0.103	0.131	
					662000	3930.0	7.50	6.38	0.152	0.197	56
				Front	662000	3930.0	7.50	6.38	<0.001	<0.001	
	Hotspot	SRS CW	10	Left	662000	3930.0	7.50	6.38	0.006	0.008	
				Bottom	662000	3930.0	7.50	6.38	0.008	0.011	

Note(s):
1. NR Band n77-DoD are tested at worst configuration of NR Band n77 band.
2. NR Band n77(SRS1/SRS2/SRS3) tested using FTM mode.

10.21. Wi-Fi (DTS Band)

DTS SISO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	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	0	Left Touch	6	2437.0	98.9%	12.0	11.44	0.045	0.051		
					Left Tilt	6	2437.0	98.9%	12.0	11.44	0.025	0.029		
					Right Touch	6	2437.0	98.9%	12.0	11.44	0.161	0.185		
					Rightt Tilt	6	2437.0	98.9%	12.0	11.44	0.064	0.074		
			Body-worn & Hotspot	10	Rear	6	2437.0	98.9%	15.5	15.13	0.105	0.116		
					Front	6	2437.0	98.9%	15.5	15.13	0.069	0.076		
			Hotspot	10	Top	6	2437.0	98.9%	15.5	15.13	0.016	0.017		
					Right	6	2437.0	98.9%	15.5	15.13	0.148	0.163		57
WLAN SISO Ant.2	2.4GHz	802.11b 1 Mbps	Head	0	Left Touch	11	2462.0	98.9%	12.0	11.33	0.308	0.364		58
					Left Tilt	11	2462.0	98.9%	12.0	11.33	0.039	0.046		
					Right Touch	11	2462.0	98.9%	12.0	11.33	0.152	0.179		
					Rightt Tilt	11	2462.0	98.9%	12.0	11.33	0.014	0.016		
			Body-worn & Hotspot	10	Rear	1	2412.0	98.9%	15.5	14.88	0.079	0.092		
					Front	1	2412.0	98.9%	15.5	14.88	0.078	0.091		
			Hotspot	10	Top	1	2412.0	98.9%	15.5	14.88	0.000	0.000		
					Left	1	2412.0	98.9%	15.5	14.88	0.018	0.021		

DTS MIMO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
									Tune-up limit	Meas.	Meas.	Scaled		
WLAN MIMO Ant.1	2.4GHz	802.11b 1 Mbps	Head	0	Left Touch	1	2412.0	98.8%	12.0	11.68				
					Left Tilt	1	2412.0	98.8%	12.0	11.68				
					Right Touch	1	2412.0	98.8%	12.0	11.68	0.214	0.233		
					Rightt Tilt	1	2412.0	98.8%	12.0	11.68	0.149	0.162		
			Body-worn & Hotspot	10	Rear	6	2437.0	98.8%	15.5	14.91	0.050	0.058		
					Front	6	2437.0	98.8%	15.5	14.91	0.058	0.067		
			Hotspot	10	Top	6	2437.0	98.8%	15.5	14.91	0.048	0.056		
					Left	6	2437.0	98.8%	15.5	14.91				
					Right	6	2437.0	98.8%	15.5	14.91	0.128	0.148		59
WLAN MIMO Ant.2	2.4GHz	802.11b 1 Mbps	Head	0	Left Touch	1	2412.0	98.8%	12.0	11.18	0.217	0.265		60
					Left Tilt	1	2412.0	98.8%	12.0	11.18	0.032	0.039		
					Right Touch	1	2412.0	98.8%	12.0	11.18	0.131	0.160		
					Rightt Tilt	1	2412.0	98.8%	12.0	11.18				
			Body-worn & Hotspot	10	Rear	6	2437.0	98.8%	15.5	13.65	0.069	0.106		
					Front	6	2437.0	98.8%	15.5	13.65	0.044	0.068		
			Hotspot	10	Top	6	2437.0	98.8%	15.5	13.65				
					Left	6	2437.0	98.8%	15.5	13.65	0.026	0.040		
					Right	6	2437.0	98.8%	15.5	13.65				

Note(s):

1. 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).
2. 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.

10.22. Wi-Fi (U-NII Bands)

U-NII 2A SISO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	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 SISO Ant.1	5.3 GHz U-NII 2A	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	58	5290.0	97.1%	12.0	10.93	0.076	0.100				
					Left Tilt	58	5290.0	97.1%	12.0	10.93	0.074	0.098				
					Right Touch	58	5290.0	97.1%	12.0	10.93	0.284	0.374				61
					Right Tilt	58	5290.0	97.1%	12.0	10.93	0.163	0.215				
			Body-worn	10	Rear	58	5290.0	97.1%	13.0	12.35	0.136	0.163				62
					Front	58	5290.0	97.1%	13.0	12.35	0.031	0.037				
			Product Specific 10-g	0	Rear	58	5290.0	97.1%	13.0	12.35			0.400	0.479		
					Front	58	5290.0	97.1%	13.0	12.35			0.286	0.342		
					Top	58	5290.0	97.1%	13.0	12.35			0.153	0.183		
					Right	58	5290.0	97.1%	13.0	12.35			0.456	0.546		63
WLAN SISO Ant.2	5.3 GHz U-NII 2A	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	58	5290.0	97.1%	12.0	11.39	0.095	0.113				
					Left Tilt	58	5290.0	97.1%	12.0	11.39	0.074	0.088				
					Right Touch	58	5290.0	97.1%	12.0	11.39	0.078	0.093				
					Right Tilt	58	5290.0	97.1%	12.0	11.39	0.079	0.094				
			Body-worn	10	Rear	58	5290.0	97.1%	13.0	12.33	0.000	0.000				
					Front	58	5290.0	97.1%	13.0	12.33	0.003	0.004				
			Product Specific 10-g	0	Rear	58	5290.0	97.1%	13.0	12.33			0.132	0.159		
					Front	58	5290.0	97.1%	13.0	12.33			0.102	0.123		
					Top	58	5290.0	97.1%	13.0	12.33			0.038	0.045		
					Left	58	5290.0	97.1%	13.0	12.33			0.005	0.006		

U-NII 2A MIMO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	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	0	Left Touch	58	5290.0	94.5%	12.0	10.86						
					Left Tilt	58	5290.0	94.5%	12.0	10.86	0.057	0.078				
					Right Touch	58	5290.0	94.5%	12.0	10.86	0.185	0.255				
					Right Tilt	58	5290.0	94.5%	12.0	10.86						
			Body-worn	10	Rear	58	5290.0	94.5%	13.0	11.48	0.104	0.156				64
					Front	58	5290.0	94.5%	13.0	11.48	0.017	0.026				
			Product Specific 10-g	0	Rear	58	5290.0	94.5%	13.0	11.48			0.283	0.425		
					Front	58	5290.0	94.5%	13.0	11.48			0.198	0.297		
					Top	58	5290.0	94.5%	13.0	11.48			0.132	0.198		
					Left	58	5290.0	94.5%	13.0	11.48						
					Right	58	5290.0	94.5%	13.0	11.48			0.431	0.647		65
WLAN MIMO Ant.2	5.3 GHz U-NII 2A	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	58	5290.0	94.5%	12.0	11.22	0.067	0.085				
					Left Tilt	58	5290.0	94.5%	12.0	11.22	0.055	0.070				
					Right Touch	58	5290.0	94.5%	12.0	11.22	0.207	0.262				66
					Right Tilt	58	5290.0	94.5%	12.0	11.22	0.140	0.177				
			Body-worn	10	Rear	58	5290.0	94.5%	13.0	12.17						
					Front	58	5290.0	94.5%	13.0	12.17						
			Product Specific 10-g	0	Rear	58	5290.0	94.5%	13.0	12.17			0.115	0.147		
					Front	58	5290.0	94.5%	13.0	12.17			0.145	0.186		
					Top	58	5290.0	94.5%	13.0	12.17						
					Left	58	5290.0	94.5%	13.0	12.17			0.018	0.024		
					Right	58	5290.0	94.5%	13.0	12.17						

Note(s):

1. 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).

U-NII 2C SISO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	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 SISO Ant.1	5.5 GHz U-NII 2C	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	122	5610.0	97.1%	12.0	11.79	0.111	0.120				
					Left Tilt	122	5610.0	97.1%	12.0	11.79	0.118	0.128				
					Right Touch	122	5610.0	97.1%	12.0	11.79	0.325	0.351				67
					Right Tilt	122	5610.0	97.1%	12.0	11.79	0.258	0.279				
			Body-worn	10	Rear	122	5610.0	97.1%	13.0	12.44	0.185	0.217				68
					Front	122	5610.0	97.1%	13.0	12.44	0.055	0.065				
			Product Specific 10-g	0	Rear	122	5610.0	97.1%	13.0	12.44			0.454	0.532		
					Front	122	5610.0	97.1%	13.0	12.44			0.271	0.318		
					Top	122	5610.0	97.1%	13.0	12.44			0.171	0.200		
					Right	122	5610.0	97.1%	13.0	12.44			0.634	0.743		69
WLAN SISO Ant.2	5.5 GHz U-NII 2C	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	106	5530.0	97.1%	12.0	10.64	0.065	0.092				
					Left Tilt	106	5530.0	97.1%	12.0	10.64	0.060	0.084				
					Right Touch	106	5530.0	97.1%	12.0	10.64	0.082	0.116				
					Right Tilt	106	5530.0	97.1%	12.0	10.64	0.069	0.097				
			Body-worn	10	Rear	138	5690.0	97.1%	13.0	12.95	0.043	0.045				
					Front	138	5690.0	97.1%	13.0	12.95	0.000	0.000				
			Product Specific 10-g	0	Rear	138	5690.0	97.1%	13.0	12.95			0.154	0.160		
					Front	138	5690.0	97.1%	13.0	12.95			0.131	0.137		
					Top	138	5690.0	97.1%	13.0	12.95			0.077	0.081		
					Left	138	5690.0	97.1%	13.0	12.95			0.000	0.000		

U-NII 2C MIMO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	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	5.5 GHz U-NII 2C	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	122	5610.0	94.5%	12.0	11.66						
					Left Tilt	122	5610.0	94.5%	12.0	11.66	0.090	0.103				
					Right Touch	122	5610.0	94.5%	12.0	11.66	0.264	0.302				70
					Right Tilt	122	5610.0	94.5%	12.0	11.66						
			Body-worn	10	Rear	122	5610.0	94.5%	13.0	12.28	0.134	0.167				71
					Front	122	5610.0	94.5%	13.0	12.28	0.042	0.053				
			Product Specific 10-g	0	Rear	122	5610.0	94.5%	13.0	12.28			0.363	0.453		
					Front	122	5610.0	94.5%	13.0	12.28			0.225	0.281		
					Top	122	5610.0	94.5%	13.0	12.28						
					Left	122	5610.0	94.5%	13.0	12.28						
					Right	122	5610.0	94.5%	13.0	12.28			0.567	0.708		72
WLAN MIMO Ant.2	5.5 GHz U-NII 2C	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	122	5610.0	94.5%	12.0	10.42	0.103	0.157				
					Left Tilt	122	5610.0	94.5%	12.0	10.42	0.088	0.133				
					Right Touch	122	5610.0	94.5%	12.0	10.42	0.153	0.233				
					Right Tilt	122	5610.0	94.5%	12.0	10.42	0.190	0.289				
			Body-worn	10	Rear	122	5610.0	94.5%	13.0	11.93	0.059	0.080				
					Front	122	5610.0	94.5%	13.0	11.93						
			Product Specific 10-g	0	Rear	122	5610.0	94.5%	13.0	11.93			0.162	0.219		
					Front	122	5610.0	94.5%	13.0	11.93			0.135	0.183		
					Top	122	5610.0	94.5%	13.0	11.93			0.172	0.233		
					Left	122	5610.0	94.5%	13.0	11.93			0.012	0.017		
					Right	122	5610.0	94.5%	13.0	11.93						

Note(s):

1. 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).

U-NII 3 SISO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	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 SISO Ant.1	5.8 GHz U-NII 3	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	155	5775.0	97.1%	12.0	11.34	0.000	0.000				
					Left Tilt	155	5775.0	97.1%	12.0	11.34	0.067	0.080				
					Right Touch	155	5775.0	97.1%	12.0	11.34	0.317	0.380				73
					Right Tilt	155	5775.0	97.1%	12.0	11.34	0.123	0.148				
			Body-worn & Hotspot	10	Rear	155	5775.0	97.1%	13.0	12.20	0.209	0.259				74
					Front	155	5775.0	97.1%	13.0	12.20	0.059	0.073				
			Hotspot	10	Top	155	5775.0	97.1%	13.0	12.20	0.039	0.048				
					Right	155	5775.0	97.1%	13.0	12.20	0.194	0.240				
WLAN SISO Ant.2	5.8 GHz U-NII 3	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	155	5775.0	97.1%	12.0	10.54	0.000	0.000				
					Left Tilt	155	5775.0	97.1%	12.0	10.54	0.036	0.052				
					Right Touch	155	5775.0	97.1%	12.0	10.54	0.000	0.000				
					Right Tilt	155	5775.0	97.1%	12.0	10.54	0.048	0.069				
			Body-worn & Hotspot	10	Rear	155	5775.0	97.1%	13.0	12.50	0.039	0.045				
					Front	155	5775.0	97.1%	13.0	12.50	0.000	0.000				
			Hotspot	10	Top	155	5775.0	97.1%	13.0	12.50	0.033	0.038				
					Left	155	5775.0	97.1%	13.0	12.50	0.000	0.000				

U-NII 3 MIMO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	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	0	Left Touch	155	5775.0	94.5%	12.0	11.23						
					Left Tilt	155	5775.0	94.5%	12.0	11.23						
					Right Touch	155	5775.0	94.5%	12.0	11.23	0.324	0.409				75
					Right Tilt	155	5775.0	94.5%	12.0	11.23						
			Body-worn & Hotspot	10	Rear	155	5775.0	94.5%	13.0	12.23	0.122	0.154				
					Front	155	5775.0	94.5%	13.0	12.23	0.036	0.046				
			Hotspot	10	Top	155	5775.0	94.5%	13.0	12.23						
					Left	155	5775.0	94.5%	13.0	12.23						
					Right	155	5775.0	94.5%	13.0	12.23	0.167	0.211				76
WLAN MIMO Ant.2	5.8 GHz U-NII 3	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	155	5775.0	94.5%	12.0	10.41	0.070	0.107				
					Left Tilt	155	5775.0	94.5%	12.0	10.41	0.067	0.103				
					Right Touch	155	5775.0	94.5%	12.0	10.41	0.239	0.365				
					Right Tilt	155	5775.0	94.5%	12.0	10.41	0.201	0.307				
			Body-worn & Hotspot	10	Rear	155	5775.0	94.5%	13.0	12.03						
					Front	155	5775.0	94.5%	13.0	12.03	0.000	0.000				
			Hotspot	10	Top	155	5775.0	94.5%	13.0	12.03	0.053	0.070				
					Left	155	5775.0	94.5%	13.0	12.03	0.000	0.000				
					Right	155	5775.0	94.5%	13.0	12.03						

Note(s):

1. 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).

U-NII 4 SISO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	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 SISO Ant.1	5.9 GHz U-NII 4	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	171	5855.0	97.1%	12.0	10.95	0.045	0.059				
					Left Tilt	171	5855.0	97.1%	12.0	10.95	0.052	0.068				
					Right Touch	171	5855.0	97.1%	12.0	10.95	0.306	0.401				77
					Right Tilt	171	5855.0	97.1%	12.0	10.95	0.132	0.173				
			Body-worn	10	Rear	171	5855.0	97.1%	13.0	11.70	0.195	0.271				78
					Front	171	5855.0	97.1%	13.0	11.70	0.059	0.082				
			Product Specific 10-g	0	Rear	171	5855.0	97.1%	13.0	11.70			0.518	0.720		
					Front	171	5855.0	97.1%	13.0	11.70			0.335	0.466		
					Top	171	5855.0	97.1%	13.0	11.70			0.173	0.240		
					Right	171	5855.0	97.1%	13.0	11.70			0.770	1.070		79
WLAN SISO Ant.2	5.9 GHz U-NII 4	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	173	5865.0	97.1%	12.0	10.58	0.035	0.050				
					Left Tilt	173	5865.0	97.1%	12.0	10.58	0.034	0.048				
					Right Touch	173	5865.0	97.1%	12.0	10.58	0.000	0.000				
					Right Tilt	173	5865.0	97.1%	12.0	10.58	0.034	0.049				
			Body-worn	10	Rear	171	5855.0	97.1%	13.0	12.90	0.080	0.084				
					Front	171	5855.0	97.1%	13.0	12.90	0.000	0.000				
			Product Specific 10-g	0	Rear	171	5855.0	97.1%	13.0	12.90			0.240	0.253		
					Front	171	5855.0	97.1%	13.0	12.90			0.111	0.117		
					Top	171	5855.0	97.1%	13.0	12.90			0.069	0.073		
					Left	171	5855.0	97.1%	13.0	12.90			0.000	0.000		

U-NII 4 MIMO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	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	5.9 GHz U-NII 4	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	171	5855.0	94.5%	12.0	10.81						
					Left Tilt	171	5855.0	94.5%	12.0	10.81						
					Right Touch	171	5855.0	94.5%	12.0	10.81	0.286	0.398				80
					Right Tilt	171	5855.0	94.5%	12.0	10.81						
			Body-worn	10	Rear	171	5855.0	94.5%	13.0	12.32	0.202	0.250				81
					Front	171	5855.0	94.5%	13.0	12.32	0.057	0.071				
			Product Specific 10-g	0	Rear	171	5855.0	94.5%	13.0	12.32			0.536	0.663		
					Front	171	5855.0	94.5%	13.0	12.32			0.356	0.441		
					Top	171	5855.0	94.5%	13.0	12.32			0.172	0.213		
					Left	171	5855.0	94.5%	13.0	12.32						
					Right	171	5855.0	94.5%	13.0	12.32			0.719	0.890		82
WLAN MIMO Ant.2	5.9 GHz U-NII 4	802.11ac VHT 80 29.3 Mbps	Head	0	Left Touch	171	5855.0	94.5%	12.0	10.53	0.087	0.129				
					Left Tilt	171	5855.0	94.5%	12.0	10.53	0.079	0.117				
					Right Touch	171	5855.0	94.5%	12.0	10.53						
					Right Tilt	171	5855.0	94.5%	12.0	10.53	0.205	0.304				
			Body-worn	10	Rear	171	5855.0	94.5%	13.0	12.38						
					Front	171	5855.0	94.5%	13.0	12.38						
			Product Specific 10-g	0	Rear	171	5855.0	94.5%	13.0	12.38			0.227	0.277		
					Front	171	5855.0	94.5%	13.0	12.38			0.161	0.197		
					Top	171	5855.0	94.5%	13.0	12.38						
					Left	171	5855.0	94.5%	13.0	12.38			0.011	0.013		
					Right	171	5855.0	94.5%	13.0	12.38						

Note(s):

1. 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).

10.23. Bluetooth

Bluetooth SISO SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	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	0	Left Touch	0	2402.0	76.9%	12.00	11.49	0.065	0.076	
					Left Tilt	0	2402.0	76.9%	12.00	11.49	0.030	0.035	
					Right Touch	0	2402.0	76.9%	12.00	11.49	0.175	0.202	83
					Rightt Tilt	0	2402.0	76.9%	12.00	11.49	0.102	0.118	
			Body-worn & Hotspot	10	Rear	78	2480.0	76.9%	19.00	18.72	0.181	0.199	
					Front	78	2480.0	76.9%	19.00	18.72	0.172	0.189	
			Hotspot	10	Top	78	2480.0	76.9%	19.00	18.72	0.089	0.098	
					Right	78	2480.0	76.9%	19.00	18.72	0.272	0.299	84
BT SISO Ant.2	2.4GHz	GFSK	Head	0	Left Touch	0	2402.0	76.9%	12.00	10.49	0.234	0.341	85
					Left Tilt	0	2402.0	76.9%	12.00	10.49	0.041	0.060	
					Right Touch	0	2402.0	76.9%	12.00	10.49	0.122	0.178	
					Rightt Tilt	0	2402.0	76.9%	12.00	10.49	0.015	0.022	
		LE (1M)	Body-worn & Hotspot	10	Rear	0	2402.0	85.2%	16.00	15.15	0.001	0.001	
					Front	0	2402.0	85.2%	16.00	15.15	0.001	0.002	
			Hotspot	10	Top	0	2402.0	85.2%	16.00	15.15	<0.001	<0.001	
					Left	0	2402.0	85.2%	16.00	15.15	0.018	0.022	86

Bluetooth Dual(MIMO) SAR results

Antenna	Frequency Band	Mode	RF Exposure Conditions	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 Dual(MIMO) Ant.1	2.4GHz	GFSK	Head	0	Left Touch	0	2402.0	76.9%	12.00	10.24			
					Left Tilt	0	2402.0	76.9%	12.00	10.24			
					Right Touch	0	2402.0	76.9%	12.00	10.24	0.094	0.144	87
					Rightt Tilt	0	2402.0	76.9%	12.00	10.24	0.030	0.046	
			Body-worn & Hotspot	10	Rear	0	2402.0	76.9%	13.50	13.11	0.022	0.024	
					Front	0	2402.0	76.9%	13.50	13.11	0.027	0.030	88
			Hotspot	10	Top	0	2402.0	76.9%	13.50	13.11	0.017	0.019	
					Left	0	2402.0	76.9%	13.50	13.11	<0.001	<0.001	
					Right	0	2402.0	76.9%	13.50	13.11			
BT Dual(MIMO) Ant.2	2.4GHz	GFSK	Head	0	Left Touch	0	2402.0	76.9%	12.00	10.03	0.084	0.137	
					Left Tilt	0	2402.0	76.9%	12.00	10.03	0.025	0.041	
					Right Touch	0	2402.0	76.9%	12.00	10.03			
					Rightt Tilt	0	2402.0	76.9%	12.00	10.03			
			Body-worn & Hotspot	10	Rear	0	2402.0	76.9%	12.50	11.55	0.006	0.007	
					Front	0	2402.0	76.9%	12.50	11.55			
			Hotspot	10	Top	0	2402.0	76.9%	12.50	11.55	0.011	0.014	
					Left	0	2402.0	76.9%	12.50	11.55			
					Right	0	2402.0	76.9%	12.50	11.55	0.045	0.057	

10.24. NFC

Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Test setup		Freq. (MHz)	10-g SAR (W/kg)	Plot No.
				Type	Bitrate		Meas.	
PBRS	Product Specific 10-g	0	Rear	A	106	13.6	0.021	89
			Front	A	106	13.6	0.000	
			Top	A	106	13.6	0.000	
			Right	A	106	13.6	0.000	

Note(s):

NFC SAR tested using worst configuration in all test positions.

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	Antenna	RF Exposure Conditions	Test Position	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Repeated Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1900	NR Band n25	Main.1	Hotspot	Bottom	Yes	0.818	0.818	1.00

Peak spatial-average (10g of tissue)

Note(s):

1. In above table, Only some bands above 0.8 or 2.0 W/kg (1-g or 10-g Measured SAR) were listed.
2. 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	Simultaneous transmission scenarios									
Head & Body-worn & Hotspot & Phablet-10g	1	WWAN (2G/3G/LTE/NR)	+	(DTS Ant.1	and/or	DTS Ant.2)					
	2	WWAN (2G/3G/LTE/NR)	+	(UNII Ant.1	and/or	UNII Ant.2)					
	3	WWAN (2G/3G/LTE/NR)	+	(BT Ant.1	and/or	BT Ant.2)					
	4	WWAN (2G/3G/LTE/NR)	+	(BT Ant.1	+	DTS Ant.2)					
	5	WWAN (2G/3G/LTE/NR)	+	(UNII Ant.1	and/or	UNII Ant.2)	+	(BT Ant.1	and/or	BT Ant.2)	
	6	WWAN (2G/3G/LTE/NR)	+	(UNII Ant.1	and/or	UNII Ant.2)	+	(DTS Ant.1	and/or	DTS Ant.2)	
	7	WWAN (2G/3G/LTE/NR)	+	(UNII Ant.1	+	DTS Ant.2)	+	(BT Ant.1)			
	8	WWAN (2G/3G/LTE/NR)	+	(UNII Ant.2	+	DTS Ant.2)	+	(BT Ant.1)			
	9	WWAN (2G/3G/LTE/NR)	+	(UNII MIMO	+	DTS Ant.2)	+	(BT Ant.1)			
	10	WWAN (ENDC/ULCA)	+	(DTS Ant.1	and/or	DTS Ant.2)					
	11	WWAN (ENDC/ULCA)	+	(UNII Ant.1	and/or	UNII Ant.2)					
	12	WWAN (ENDC/ULCA)	+	(BT Ant.1	and/or	BT Ant.2)					
	13	WWAN (ENDC/ULCA)	+	(BT Ant.1	and/or	DTS Ant.2)					
	14	WWAN (ENDC/ULCA)	+	(UNII Ant.1	and/or	UNII Ant.2)	+	(BT Ant.1	and/or	BT Ant.2)	
	15	WWAN (ENDC/ULCA)	+	(UNII Ant.1	and/or	UNII Ant.2)	+	(DTS Ant.1	and/or	DTS Ant.2)	
	16	WWAN (ENDC/ULCA)	+	(UNII Ant.1	+	DTS Ant.2)	+	(BT Ant.1)			
	17	WWAN (ENDC/ULCA)	+	(UNII Ant.2	+	DTS Ant.2)	+	(BT Ant.1)			
	18	WWAN (ENDC/ULCA)	+	(UNII MIMO	+	DTS Ant.2)	+	(BT Ant.1)			
Phablet-10g	19	Scenatios item (1-18)	+	NFC							

Notes:

1. DTS supports Wi-Fi Direct, Hotspot and VoIP.
2. U-NII supports Wi-Fi Direct, Hotspot and VoIP.
3. GPRS, W-CDMA, LTE, NR supports Hotspot and VoIP
4. U-NII Radio can transmit simultaneously with Bluetooth Radio.
5. Orange box means RSDB operations. (RSDB mode operates up to 4Tx.)
6. DTS Radio can transmit simultaneously with Bluetooth Radio in only RSDB operations
7. NR Radio support to both SA and NSA(ENDC) Radio.
8. LTE Radio support to ULCA Radio.
9. BT tethering is considered about each RF exposure conditions.
10. NFC can transmit simultaneously with other Radios in Phablet-10g condition.

Note(s):

For EN-DC mode, LSI TAS algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. LSI TAS algorithm controls the total RF exposure from both 4G and 5G NR to not exceed the RF exposure from each 4G or 5G individually. Therefore, simultaneous transmission compliance between 4G+5G NR operation is demonstrated in the TAS validation Report during algorithm validation.

For RDSB mode, Qualcomm FastConnect TAS algorithm in WLAN adds directly the time-averaged RF exposure from DTS bands and time-averaged RF exposure from UNII Bands. Qualcomm FastConnect TAS algorithm controls the total RF exposure from both DTS bands and UNII Bands to not exceed the RF exposure from SAR design target + device uncertainty. Therefore, simultaneous transmission compliance between DTS Bands+ UNII Bands operation is demonstrated in the TAS validation Report during algorithm validation.

In this SAR Report, simultaneous transmission compliance was evaluated individually with WLAN and/or other radios using one of 4G or 5G NR.

12.1. Antenna group consideration

In WWAN TAS algorithm, it was assumed that all antennas are correlated regardless of their direction of transmission in space. Thus, the main concept was to split the SAR/TER on the transmitting RATs even they are transmitting on different antennas. Such approach is considered as a worst case scenario in terms of transmitting power. Thus, to enhance the performance of the transmission power RATs, we should consider the spatial properties of each antenna and the correlations between the antennas transmissions.

For a DUT with N antennas, a spatial correlation matrix (R) can be constructed to map the correlation between each two antennas when they transmit simultaneously. Thus this correlation matrix is given as

$$R = \begin{bmatrix} r_{11} & r_{12} & \cdots & r_{1N} \\ r_{21} & r_{22} & \cdots & r_{2N} \\ \vdots & \vdots & \ddots & \vdots \\ r_{N1} & r_{N2} & \cdots & r_{NN} \end{bmatrix}$$

And it has the following characteristics

a) r_{ij} is the correlation between antenna i and antenna j

b) The value of r_{ij} is either 0 or 1, where 1 means fully correlated and 0 means fully uncorrelated.

c) r_{ii} is the self-correlation of each antenna and it is always 1.

Since the R matrix entries depends on the antenna distribution of each DUT, then our spatial TAS algorithm is implemented to operate with any R matrix (antenna distribution agnostic).
The values of the R matrix entries should be determined by the OEM based on the DUT used. One way to determine the values of the R matrix entries is to use the SPLSR test mentioned in FCC KDB 447498 guide.

The table below shows the antenna groups and R matrix declared by manufacturer:

Antenna Group	Antenna	Band list
AG0	Main.1	GSM 850, 1900 WCDMA B2, B4, B5 LTE B2, B4, B5, B12, B13, B17, B25, B26, B66 NR Bn5, Bn25, Bn66
	Main.2	LTE B41, NR Bn 41 SRS1
	Main.3	NR Bn77 SRS1
	Main.4	NR Bn41 SRS3, Bn77 SRS3
AG1	Sub.1	GSM850, WCDMA B5, LTE B5, B26, NR Bn5
	Sub.2	LTE B2, B66, NR Bn2, n25, NR Bn66, Bn41 SRS0, Bn77 SRS0
	Sub.5	NR Bn77 SRS2

R =

Antenna Group		AG0				AG1		
	Antenna	Main.1	Main.2	Main.3	Main.4	Sub.1	Sub.2	Sub.5
AG0	Main.1	1	1	1	1	0	0	0
	Main.2	1	1	1	1	0	0	0
	Main.3	1	1	1	1	0	0	0
	Main.4	1	1	1	1	0	0	0
AG1	Sub.1	0	0	0	0	1	1	1
	Sub.2	0	0	0	0	1	1	1
	Sub.5	0	0	0	0	1	1	1

SPLSR criteria verification according to matrix (R) verifies only RF exposure configurations where AG0+AG1 or AG0+AG1+other radios(WLAN/BT/NFC) exceeds the FCC limit.

12.1.1 Head/ Body-worn & Hotspot/ Product Specific 10-g exposure Antenna group analysis

Antenna Group : AG0 Main.1

Antenna Group		AG 0														Highest SAR
Antenna		Main.1	Main.1	Main.1	Main.1	Main.1	Main.1	Main.1	Main.1	Main.1	Main.1	Main.1	Main.1	Main.1	Main.1	
RF exposure	Test position	GSM 850	GSM 1900	WCDMA B2	WCDMA B4	WCDMA B5	LTE B5	LTE B12	LTE B13	LTE B25	LTE B26	LTE B66	NR Bn5	NR Bn25	NR Bn66	
Head	Left Touch	0.134	0.051	0.069	0.301	0.163	0.201	0.094	0.129	0.206	0.156	0.354	0.149	0.202	0.272	0.354
	Left Tilt	0.094	0.019	0.035	0.060	0.102	0.149	0.072	0.071	0.063	0.098	0.105	0.125	0.060	0.049	0.149
	Right Touch	0.174	0.029	0.045	0.160	0.218	0.237	0.098	0.136	0.112	0.186	0.155	0.237	0.083	0.166	0.237
	Right Tilt	0.090	0.019	0.025	0.077	0.119	0.122	0.071	0.065	0.076	0.108	0.122	0.114	0.083	0.113	0.122
Body-worn & Hotspot	Rear	0.391	0.261	0.370	0.519	0.470	0.660	0.252	0.403	0.478	0.581	0.358	0.531	0.471	0.516	0.660
	Front	0.207	0.242	0.367	0.499	0.311	0.299	0.164	0.325	0.376	0.540	0.335	0.351	0.336	0.431	0.540
Hotspot	Top															0.000
	R-Left	0.210	0.057	0.076	0.087	0.306	0.259	0.130	0.124	0.071	0.278	0.096	0.258	0.095	0.074	0.306
	Bottom	0.177	0.659	0.853	0.926	0.179	0.214	0.050	0.128	0.835	0.147	0.620	0.211	0.977	0.925	0.977
	R-Right	0.142	0.062	0.099	0.153	0.216	0.206	0.177	0.198	0.087	0.229	0.194	0.221	0.084	0.130	0.229
Product Specific 10-g	Rear															0.000
	Front															0.000
	Top															0.000
	R-Left															0.000
	Bottom															0.000
	R-Right															0.000

Antenna Group : AG0 Main.2 & Main.3 & Main.4

Antenna Group		AG 0		Highest SAR	AG0	Highest SAR	AG0		Max
Antenna		Main.2	Main.2		Main.3		Main.4	Main.4	
RF exposure	Test position	LTE B41	NR Bn41 SRS1		NR Bn77 SRS1		NR Bn41 SRS3	NR Bn77 SRS3	
Head	Left Touch	0.206	0.041	0.206	0.029	0.029	0.000	0.003	0.003
	Left Tilt	0.064	0.004	0.064	0.000	0.000	0.000	0.000	0.000
	Right Touch	0.068	0.000	0.068	0.000	0.000	0.000	0.000	0.000
	Right Tilt	0.051	0.007	0.051	0.008	0.008	0.000	0.000	0.000
Body-worn & Hotspot	Rear	0.259	0.123	0.259	0.038	0.038	0.053	0.197	0.197
	Front	0.209	0.083	0.209	0.030	0.030	0.006	0.000	0.006
Hotspot	Top			0.000		0.000			0.000
	R-Left			0.000		0.000	0.000	0.008	0.008
	Bottom	0.372	0.228	0.372	0.007	0.007	0.037	0.011	0.037
	R-Right	0.311	0.140	0.311	0.089	0.089			0.000
Product Specific 10-g	Rear			0.000		0.000			0.000
	Front			0.000		0.000			0.000
	Top			0.000		0.000			0.000
	R-Left			0.000		0.000			0.000
	Bottom			0.000		0.000			0.000
	R-Right			0.000		0.000			0.000

AG0's Highest SAR Results

Antenna Group		AG 0				Worst SAR
Antenna		Main.1	Main.2	Main.3	Main.4	
RF exposure	Test position					
Head	Left Touch	0.354	0.206	0.029	0.003	0.354
	Left Tilt	0.149	0.064	0.000	0.000	0.149
	Right Touch	0.237	0.068	0.000	0.000	0.237
	Right Tilt	0.122	0.051	0.008	0.000	0.122
Body-worn & Hotspot	Rear	0.660	0.259	0.038	0.197	0.660
	Front	0.540	0.209	0.030	0.006	0.540
Hotspot	Top	0.000	0.000	0.000	0.000	0.000
	R-Left	0.306	0.000	0.000	0.008	0.306
	Bottom	0.977	0.372	0.007	0.037	0.977
	R-Right	0.229	0.311	0.089	0.000	0.311
Product Specific 10-g	Rear	0.000	0.000	0.000	0.000	0.000
	Front	0.000	0.000	0.000	0.000	0.000
	Top	0.000	0.000	0.000	0.000	0.000
	R-Left	0.000	0.000	0.000	0.000	0.000
	Bottom	0.000	0.000	0.000	0.000	0.000
	R-Right	0.000	0.000	0.000	0.000	0.000

Antenna Group : AG1 Sub.1 & Sub.2 & Sub.5

RF exposure	Test position	AG 1							AG 1							AG 1	
		Sub.1	Sub.1	Sub.1	Sub.1	Sub.1	Sub.1	Highest SAR	Sub.2	Sub.2	Sub.2	Sub.2	Sub.2	Sub.2	Highest SAR	Sub.5	Highest SAR
		GSM 850	WCDMA B5	LTE B5	LTE B26	NR Bn5	NR Bn41 SRS 2		LTE B2	LTE B66	NR Bn25	NR Bn66	NR Bn41 SRS 0	NR Bn77 SRS 0		NR Bn77 SRS 2	
Head	Left Touch	0.531	0.709	0.748	0.488	0.774	0.612	0.774	0.375	0.364	0.302	0.505	0.528	0.263	0.528	0.148	0.148
	Left Tilt	0.499	0.715	0.609	0.382	0.629	0.563	0.715	0.506	0.491	0.442	0.713	0.674	0.325	0.713	0.000	0.000
	Right Touch	0.347	0.421	0.657	0.376	0.563	0.180	0.657	0.645	0.626	0.597	0.796	0.796	0.709	0.796	0.262	0.262
	Right Tilt	0.295	0.366	0.594	0.294	0.460	0.172	0.594	0.653	0.634	0.622	0.927	0.902	0.846	0.927	0.004	0.004
Body-worn & Hotspot	Rear	0.636	0.287	0.196	0.142	0.219	0.068	0.636	0.156	0.238	0.160	0.260	0.302	0.186	0.302	0.030	0.030
	Front	0.604	0.191	0.165	0.106	0.196	0.039	0.604	0.127	0.165	0.126	0.207	0.141	0.068	0.207	0.005	0.005
Hotspot	Top	0.533	0.206	0.151	0.089	0.163	0.044	0.533	0.301	0.426	0.355	0.359	0.360	0.152	0.426		0.000
	R-Left	0.448	0.205	0.052	0.109	0.169	0.044	0.448							0.000		0.000
	Bottom							0.000							0.000		0.000
	R-Right							0.000	0.062	0.126	0.084	0.091	0.035	0.023	0.126	0.003	0.003
Product Specific 10-g	Rear							0.000							0.000		0.000
	Front							0.000							0.000		0.000
	Top							0.000							0.000		0.000
	R-Left							0.000							0.000		0.000
	Bottom							0.000							0.000		0.000
	R-Right							0.000							0.000		0.000

AG1's Highest SAR Results

Antenna Group		AG 1			Worst SAR
Antenna		Sub.1	Sub.2	Sub.5	
RF exposure	Test position				
Head	Left Touch	0.774	0.528	0.148	0.774
	Left Tilt	0.715	0.713	0.000	0.715
	Right Touch	0.657	0.796	0.262	0.796
	Right Tilt	0.594	0.927	0.004	0.927
Body-worn & Hotspot	Rear	0.636	0.302	0.030	0.636
	Front	0.604	0.207	0.005	0.604
Hotspot	Top	0.533	0.426	0.000	0.533
	R-Left	0.448	0.000	0.000	0.448
	Bottom	0.000	0.000	0.000	0.000
	R-Right	0.000	0.126	0.003	0.126
Product Specific 10-g	Rear	0.000	0.000	0.000	0.000
	Front	0.000	0.000	0.000	0.000
	Top	0.000	0.000	0.000	0.000
	R-Left	0.000	0.000	0.000	0.000
	Bottom	0.000	0.000	0.000	0.000
	R-Right	0.000	0.000	0.000	0.000

Condition#1

Summation of AG0 and AG1

Antenna Group		AG 0					AG 1				SUM	FCC Limit
Antenna		Main.1	Main.2	Main.3	Main.4	Worst SAR	Sub.1	Sub.2	Sub.5	Worst SAR		
RF exposure	Test position											
Head	Left Touch	0.354	0.206	0.029	0.003	0.354	0.774	0.528	0.148	0.774	1.128	1.6
	Left Tilt	0.149	0.064	0.000	0.000	0.149	0.715	0.713	0.000	0.715	0.864	
	Right Touch	0.237	0.068	0.000	0.000	0.237	0.657	0.796	0.262	0.796	1.033	
	Right Tilt	0.122	0.051	0.008	0.000	0.122	0.594	0.927	0.004	0.927	1.049	
Body-worn & Hotspot	Rear	0.660	0.259	0.038	0.197	0.660	0.636	0.302	0.030	0.636	1.296	1.6
	Front	0.540	0.209	0.030	0.006	0.540	0.604	0.207	0.005	0.604	1.144	
Hotspot	Top	0.000	0.000	0.000	0.000	0.000	0.533	0.426	0.000	0.533	0.533	1.6
	R-Left	0.306	0.000	0.000	0.008	0.306	0.448	0.000	0.000	0.448	0.754	
	Bottom	0.977	0.372	0.007	0.037	0.977	0.000	0.000	0.000	0.000	0.977	
	R-Right	0.229	0.311	0.089	0.000	0.311	0.000	0.126	0.003	0.126	0.437	
Product Specific 10-g	Rear	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.0
	Front	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	Top	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	R-Left	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	Bottom	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	R-Right	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Note(s):

Summation of AG0 and AG1 is not over FCC limit. But some test position has over FCC limit with WLAN/BT ratios.
So Additional SPSLR criteria is required in some positions.

Condition#2 Left Touch in Head exposure

Calculated Distance (mm)

Band		(AG1)	GSM 850	WCDMA B5	LTE B2	LTE B5	LTE B26	LTE B66	NR Bn5	NR Bn25	NR Bn66	NR Bn41 SRS0	NR Bn41 SRS2	NR Bn77 SRS0	NR Bn77 SRS2
	x		28.1	28.5	9.79	15.6	14.8	-7.43	5.6	-2.22	-1.51	6.3	20.4	-6.2	27.7
(AG0)		y	328	332	311	333	332	298	321	305	310	299	330	300	261
GSM 850	56.1	277	58.18	61.54	57.45	69.11	68.78	66.91	66.98	64.69	66.39	54.44	63.90	66.41	32.60
GSM 1900	55.5	252	80.79	84.43	74.64	90.29	89.76	77.95	85.15	78.36	81.33	68.04	85.53	78.17	29.22
WCDMA B2	54.4	254	78.53	82.19	72.38	88.01	87.48	75.89	82.89	76.20	79.13	65.87	83.26	76.08	27.60
WCDMA B4	53.6	246	85.87	89.59	78.39	94.94	94.35	80.18	89.04	81.22	84.46	71.04	90.32	80.57	29.93
WCDMA B5	60.3	281	56.97	60.10	58.75	68.57	68.35	69.83	67.76	66.97	68.28	56.92	63.19	69.16	38.25
LTE B5	56.2	283	53.05	56.29	54.20	64.41	64.15	65.37	63.28	62.43	63.71	52.40	59.08	64.67	36.00
LTE B12	53	262	70.54	74.16	65.33	80.25	79.74	70.34	75.68	69.99	72.63	59.58	75.41	70.35	25.32
LTE B13	61.1	260	75.58	79.04	72.34	86.02	85.60	78.36	82.47	77.68	80.12	67.26	80.97	78.29	33.41
LTE B25	53.5	245	86.80	90.52	79.16	95.81	95.22	80.76	89.84	81.88	85.15	71.72	91.22	81.17	30.36
LTE B26	54.7	284	51.42	54.68	52.40	62.69	62.42	63.69	61.48	60.67	61.93	50.67	57.38	62.97	35.47
LTE B41	60.3	249	85.31	88.88	79.97	95.15	94.65	83.60	90.42	83.93	86.84	73.59	90.29	83.80	34.74
LTE B66	73.6	260	81.82	84.96	81.69	93.24	92.96	89.50	91.35	88.17	90.23	77.78	87.92	89.26	45.91
NR Bn5	59.9	274	62.67	65.95	62.29	73.78	73.47	71.48	71.82	69.43	71.18	59.14	68.53	71.03	34.73
NR Bn25	55.3	249	83.55	87.22	76.91	92.91	92.35	79.60	87.49	80.28	83.36	70.01	88.20	79.90	30.10
NR Bn41 SRS1	65.8	242	93.90	97.42	88.87	103.93	103.45	92.19	99.32	92.71	95.68	82.40	99.02	92.46	42.57
NR Bn41 SRS3	N/A	N/A													
NR Bn66	52.3	249	82.62	86.34	75.17	91.67	91.08	77.26	85.82	78.16	81.34	67.94	87.06	77.61	27.37
NR Bn77 SRS1	46.9	244	86.08	89.90	76.59	94.34	93.67	76.60	87.38	78.32	81.85	68.36	89.99	77.17	25.64
NR Bn77 SRS3	25.8	264	64.04	68.05	49.65	69.75	68.88	47.54	60.47	49.66	53.50	40.07	66.22	48.17	3.55

SPLSR Results

Band	(AG 1)	GSM 850	WCDMA B5	LTE B2	LTE B5	LTE B26	LTE B66	NR Bn5	NR Bn25	NR Bn66	NR Bn41 SRS0	NR Bn41 SRS2	NR Bn77 SRS0	NR Bn77 SRS2
(AG 0)	SAR (W/kg)	0.531	0.709	0.375	0.715	0.488	0.38	0.725	0.293	0.48	0.528	0.612	0.238	0.148
GSM 850	0.134	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.00
GSM 1900	0.051	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00
WCDMA B2	0.069	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.00
WCDMA B4	0.301	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
WCDMA B5	0.163	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.00
LTE B5	0.201	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
LTE B12	0.094	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.00
LTE B13	0.129	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.00
LTE B25	0.206	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01
LTE B26	0.156	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.00
LTE B41	0.206	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01
LTE B66	0.354	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NR Bn5	0.141	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.00
NR Bn25	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01
NR Bn41 SRS1	0.041	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00
NR Bn41 SRS3	N/A													
NR Bn66	0.272	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01
NR Bn77 SRS1	0.022	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00
NR Bn77 SRS3	0.003	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.02

Note(s):

1. SPLSR criteria results are not over 0.04 in All combinations in Left touch of Head exposure.

Condition#2 Right Touch in Head exposure

Calculated Distance (mm)

Band		(AG1)	GSM 850	WCDMA B5	LTE B2	LTE B5	LTE B26	LTE B66	NR Bn5	NR Bn25	NR Bn66	NR Bn41 SRS0	NR Bn41 SRS2	NR Bn77 SRS0	NR Bn77 SRS2
	x		3.17	3.82	25.8	-3.94	2.12	12.1	-0.185	11.8	15.5	14.7	6.61	12.1	60.4
(AG0)		y	-309	-314	-329	-309	-312	-327	-315	-326	-328	-330	-300	-322	-313
GSM 850	50.8	-262	66.91	70.08	71.51	72.15	69.78	75.65	73.54	74.95	74.85	76.99	58.28	71.40	51.90
GSM 1900	69.2	-236	98.43	101.78	102.63	103.34	101.37	107.43	105.14	106.75	106.53	108.66	89.52	103.23	77.50
WCDMA B2	59.6	-243	86.84	90.29	92.40	91.62	89.81	96.50	93.59	95.78	95.76	97.90	77.83	92.18	70.00
WCDMA B4	64.3	-309	61.13	60.69	43.38	68.24	62.25	55.22	64.76	55.18	52.37	53.86	58.39	53.79	5.59
WCDMA B5	48.7	-261	66.16	69.45	71.75	71.24	69.07	75.47	72.84	74.74	74.77	76.92	57.38	71.14	53.30
LTE B5	50.5	-257	70.31	73.68	76.12	75.28	73.25	79.84	77.03	79.11	79.16	81.31	61.44	75.50	56.87
LTE B12	50.7	-263	66.14	69.27	70.54	71.42	69.00	74.74	72.75	74.04	73.92	76.06	57.56	70.51	50.93
LTE B13	52.3	-257	71.54	74.83	76.72	76.60	74.45	80.72	78.22	80.01	79.97	82.11	62.74	76.43	56.58
LTE B25	60.5	-241	88.94	92.42	94.59	93.68	91.92	98.68	95.70	97.96	97.95	100.09	79.91	94.36	72.00
LTE B26	51.8	-259	69.75	72.99	74.67	74.88	72.64	78.74	76.41	78.03	77.97	80.11	61.02	74.47	54.68
LTE B41	76.3	-303	73.38	73.31	56.80	80.46	74.72	68.54	77.42	68.48	65.74	67.26	69.75	66.95	18.78
LTE B66	60.8	-240	89.90	93.40	95.63	94.62	92.88	99.70	96.67	98.98	98.98	101.12	80.85	95.37	73.00
NR Bn5	40.6	-253	67.36	71.23	77.43	71.55	70.44	79.30	74.21	78.48	79.09	81.24	58.00	74.65	63.18
NR Bn25	59.2	-240	88.88	92.43	95.06	93.53	91.88	98.93	95.66	98.20	98.25	100.40	79.79	94.56	73.01
NR Bn41 SRS1	N/A	N/A													
NR Bn41 SRS3	N/A	N/A													
NR Bn66	68.2	-300	65.65	65.88	51.37	72.70	67.16	62.26	70.01	62.10	59.68	61.34	61.59	60.26	15.16
NR Bn77 SRS1	N/A	N/A													
NR Bn77 SRS3	N/A	N/A													

SPLSR Results

Band	(AG 1)	GSM 850	WCDMA B5	LTE B2	LTE B5	LTE B26	LTE B66	NR Bn5	NR Bn25	NR Bn66	NR Bn41 SRS0	NR Bn41 SRS2	NR Bn77 SRS0	NR Bn77 SRS2
(AG 0)	SAR (W/kg)	0.347	0.421	0.645	0.657	0.396	0.828	0.563	0.593	0.796	0.796	0.18	0.846	0.208
GSM 850	0.174	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00
GSM 1900	0.029	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.01	0.00
WCDMA B2	0.045	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00
WCDMA B4	0.16	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.00	0.02	0.04
WCDMA B5	0.218	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.01
LTE B5	0.237	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
LTE B12	0.098	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00
LTE B13	0.136	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00
LTE B25	0.112	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00
LTE B26	0.186	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00
LTE B41	0.068	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
LTE B66	0.155	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00
NR Bn5	0.237	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.00
NR Bn25	0.083	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00
NR Bn41 SRS1	N/A													
NR Bn41 SRS3	N/A													
NR Bn66	0.166	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.00	0.02	0.02
NR Bn77 SRS1	N/A													
NR Bn77 SRS3	N/A													

Note(s):

1. SPLSR criteria results are not over 0.04 in All combinations in Right touch of Head exposure.

CONDITION#2 Rear in Body-worn & Hotspot exposure

Calculated Distance (mm)

Band		(AG1)	GSM 850	WCDMA B5	LTE B2	LTE B5	LTE B26	LTE B66	NR Bn5	NR Bn25	NR Bn66	NR Bn41 SRS0	NR Bn41 SRS2	NR Bn77 SRS0	NR Bn77 SRS2
	x		-34.5	-38.5	-18.5	-33.5	-33	-18	-33	-15	-26	-30.4	-32	-5.2	-0.6
(AG0)		y	74.5	82	51.5	83.5	73	65.5	81.5	56.5	54.5	68.6	71.2	61.4	29.4
GSM 850	-10.5	-60	136.62	144.73	111.79	145.33	134.89	125.72	143.28	116.59	115.54	130.13	132.95	121.52	89.95
GSM 1900	-24	-76.5	151.36	159.16	128.12	160.28	149.77	142.13	158.26	133.30	131.02	145.24	147.92	139.18	108.45
WCDMA B2	-32	-75.5	150.02	157.63	127.72	159.01	148.50	141.69	157.00	133.09	130.14	144.11	146.70	139.50	109.50
WCDMA B4	-27.5	-70	144.67	152.40	121.83	153.62	143.11	135.83	151.60	127.12	124.51	138.63	141.27	133.28	102.98
WCDMA B5	-11	-62	138.51	146.60	113.75	147.23	136.78	127.69	145.18	118.57	117.46	132.03	134.85	123.54	91.99
LTE B5	-15	-60	135.91	143.93	111.55	144.69	134.21	125.54	142.64	116.50	115.03	129.52	132.30	121.79	90.55
LTE B12	-7.5	-57	134.24	142.41	109.06	142.89	132.48	122.95	140.83	113.75	113.02	127.67	130.52	118.42	86.68
LTE B13	-15	-67.5	143.33	151.34	119.05	152.13	141.65	133.03	150.08	124.00	122.49	136.97	139.74	129.27	97.96
LTE B25	-28.5	-75	149.62	157.32	126.89	158.58	148.07	140.89	156.56	132.19	129.52	143.61	146.24	138.38	108.06
LTE B26	-16.5	-60	135.70	143.69	111.52	144.50	134.02	125.51	142.46	116.51	114.89	129.35	132.11	121.92	90.80
LTE B41	12.8	-47.2	130.57	139.01	103.54	138.66	128.63	116.83	136.61	107.36	108.85	123.60	126.59	110.08	77.76
LTE B66	-30.5	-75	149.55	157.20	127.07	158.53	148.02	141.05	156.52	132.41	129.58	143.60	146.21	138.73	108.60
NR Bn5	-16.5	-60	135.70	143.69	111.52	144.50	134.02	125.51	142.46	116.51	114.89	129.35	132.11	121.92	90.80
NR Bn25	-28.5	-73.5	148.12	155.82	125.40	157.08	146.57	139.40	155.07	130.70	128.02	142.11	144.74	136.90	106.62
NR Bn41 SRS1	-16.8	-67.4	143.00	150.97	118.91	151.82	141.33	132.91	149.78	123.91	122.25	136.68	139.43	129.32	98.15
NR Bn41 SRS3	-20.6	-65.8	140.99	148.88	117.32	149.86	139.35	131.33	147.82	122.43	120.42	134.76	137.47	128.13	97.28
NR Bn66	-24	-76.5	151.36	159.16	128.12	160.28	149.77	142.13	158.26	133.30	131.02	145.24	147.92	139.18	108.45
NR Bn77 SRS1	6.8	-52.8	133.83	142.21	107.32	142.13	131.95	120.87	140.07	111.45	112.20	126.97	129.93	114.83	82.53
NR Bn77 SRS3	-48.4	-57.2	132.43	139.55	112.74	141.49	131.11	126.41	139.55	118.50	113.92	127.08	129.44	126.22	98.92

SPLSR Results

Band	(AG 1)	GSM 850	WCDMA B5	LTE B2	LTE B5	LTE B26	LTE B66	NR Bn5	NR Bn25	NR Bn66	NR Bn41 SRS0	NR Bn41 SRS2	NR Bn77 SRS0	NR Bn77 SRS2
(AG 0)	SAR (W/kg)	0.636	0.287	0.238	0.196	0.142	0.156	0.219	0.16	0.265	0.302	0.068	0.186	0.03
GSM 850	0.391	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
GSM 1900	0.261	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
WCDMA B2	0.37	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
WCDMA B4	0.519	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
WCDMA B5	0.47	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
LTE B5	0.66	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02
LTE B12	0.252	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01
LTE B13	0.403	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
LTE B25	0.478	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
LTE B26	0.581	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01
LTE B41	0.259	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
LTE B66	0.358	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01
NR Bn5	0.531	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NR Bn25	0.471	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
NR Bn41 SRS1	0.123	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR Bn41 SRS3	0.053	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR Bn66	0.516	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
NR Bn77 SRS1	0.038	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR Bn77 SRS3	0.197	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.03

Note(s):

1. SPLSR criteria results are not over 0.04 in All combinations in Rear of Body-worn & Hotspot exposure.

CONDITION#2 Front in Body-worn & Hotspot exposure

Calculated Distance (mm)

Band		(AG1)	GSM 850	WCDMA B5	LTE B2	LTE B5	LTE B26	LTE B66	NR Bn5	NR Bn25	NR Bn66	NR Bn41 SRS0	NR Bn41 SRS2	NR Bn77 SRS0	NR Bn77 SRS2
	x		-15	-18.5	-53	-20	-18	-42	-23.5	-54.5	-43.5	-17	-5.2	-49	-54
(AG0)		y	82	85	72	82	80.5	76	88.5	64	81.5	70.4	73	72	30
GSM 850	-25	-48	130.38	133.16	123.22	130.10	128.69	125.16	136.51	115.82	130.81	118.67	122.61	122.38	83.22
GSM 1900	-31.5	-78	160.85	163.52	151.53	160.41	159.07	154.36	166.69	143.85	159.95	149.11	153.27	151.02	110.32
WCDMA B2	-30.5	-77	159.75	162.44	150.69	159.35	158.00	153.43	165.65	143.03	159.03	148.02	152.12	150.14	109.55
WCDMA B4	-30.5	-77	159.75	162.44	150.69	159.35	158.00	153.43	165.65	143.03	159.03	148.02	152.12	150.14	109.55
WCDMA B5	-31	-47	129.99	132.59	121.02	129.47	128.16	123.49	135.71	113.46	129.11	118.23	122.74	120.35	80.36
LTE B5	-21	-42	124.15	127.02	118.41	124.00	122.54	119.85	130.52	111.17	125.53	112.47	116.08	117.39	79.20
LTE B12	-46.5	-42	127.94	130.05	114.19	126.80	125.77	118.09	132.51	106.30	123.54	116.21	122.19	114.03	72.39
LTE B13	-45	-53	138.29	140.52	125.26	137.30	136.20	129.03	143.12	117.39	134.51	126.54	132.14	125.06	83.49
LTE B25	-30	-78	160.70	163.41	151.75	160.31	158.95	154.47	166.63	144.10	160.07	148.97	153.02	151.20	110.63
LTE B26	-16.5	-58.5	140.51	143.51	135.51	140.54	139.01	136.90	147.17	128.26	142.58	128.90	131.98	134.49	96.12
LTE B41	-56.2	-46	134.47	136.32	118.04	133.02	132.14	122.82	138.42	110.01	128.13	122.82	129.47	118.22	76.03
LTE B66	-30	-76.5	159.21	161.91	150.27	158.82	157.46	152.97	165.13	142.62	158.58	147.47	151.54	149.71	109.17
NR Bn5	-38.5	-50.5	134.57	136.97	123.36	133.79	132.59	126.55	139.81	115.61	132.09	122.80	127.91	122.95	81.98
NR Bn25	-28.5	-88.5	171.03	173.79	162.36	170.71	169.33	165.05	177.07	154.70	170.66	159.32	163.17	161.80	121.21
NR Bn41 SRS1	-66.2	-45	136.93	138.47	117.74	135.14	134.44	123.40	140.16	109.63	128.52	125.45	132.83	118.26	75.99
NR Bn41 SRS3	-44.4	-51.6	136.80	139.03	123.90	135.81	134.71	127.62	141.65	116.04	133.10	125.04	130.62	123.69	82.16
NR Bn66	-27	-81	163.44	166.22	155.19	163.15	161.75	157.71	169.54	147.58	163.34	151.73	155.54	154.57	114.24
NR Bn77 SRS1	-66	-49.6	141.14	142.74	122.29	139.41	138.67	127.87	144.49	114.18	133.02	129.62	136.85	122.78	80.50
NR Bn77 SRS3	N/A	N/A													

SPLSR Results

Band	(AG 1)	GSM 850	WCDMA B5	LTE B2	LTE B5	LTE B26	LTE B66	NR Bn5	NR Bn25	NR Bn66	NR Bn41 SRS0	NR Bn41 SRS2	NR Bn77 SRS0	NR Bn77 SRS2
(AG 0)	SAR (W/kg)	0.604	0.191	0.165	0.165	0.106	0.127	0.285	0.126	0.207	0.141	0.039	0.068	0.005
GSM 850	0.207	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GSM 1900	0.242	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WCDMA B2	0.367	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WCDMA B4	0.499	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WCDMA B5	0.311	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LTE B5	0.299	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LTE B12	0.164	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LTE B13	0.325	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LTE B25	0.376	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LTE B26	0.54	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
LTE B41	0.209	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR Bn5	0.196	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR Bn25	0.336	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR Bn41 SRS1	0.083	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR Bn41 SRS3	0.006	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR Bn66	0.431	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR Bn77 SRS1	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NR Bn77 SRS3														

Note(s):

1. SPLSR criteria results are not over 0.04 in All combinations in Front of Body-worn & Hotspot exposure

Conclusion:

For AG0 and AG1. Some positions are mutually exclusive according to SPLSR criteria results;

Head exposure : Left Touch, Right Touch

Body-worn & Hotspot exposure : Rear, Front

That is apply to simultaneous transmission analysis with WLAN/BT in RF exposure conditions.

12.2. Simultaneous transmission analysis

Simultaneous transmission SAR test exclusion considerations

KDB 447498 D04 Interim General RF Exposure Guidance provides two procedures for determining simultaneous transmission SAR test exclusion: Sum of SAR

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:

SAR_1 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

SAR_2 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 SAR_1.or SAR_2. 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 SPSLR 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 SPSLR calculation.

12.2.1 Head exposure simultaneous transmission analysis

Condition#1

SAR (DTS & BT & UNII)

RF Exposure	Test Position	WLAN/BT's SAR (W/kg)											
		BT Ant.1	BT Ant.2	BT Dual(MIMO)	2.4G Ant.1	2.4G Ant.2	2.4G MIMO	5GHz Ant.1	5GHz Ant.2	5G MIMO	6GHz Ant.1	6GHz Ant.2	6GHz MIMO
		1	2	3	4	5	6	7	8	9	10	11	12
Head (1-g SAR)	Left Touch	0.076	0.341	0.137	0.051	0.364	0.265	0.120	0.113	0.157	0.199	0.047	0.173
	Left Tilt	0.035	0.060	0.041	0.029	0.046	0.039	0.128	0.088	0.133	0.199	0.047	0.173
	Right Touch	0.202	0.178	0.144	0.185	0.179	0.233	0.401	0.116	0.409	0.199	0.047	0.173
	Right Tilt	0.118	0.022	0.046	0.074	0.016	0.162	0.279	0.097	0.307	0.199	0.047	0.173

Test Position	WLAN/BT's SAR (W/kg)													
	BT Ant.1 + 2.4G Ant.2	5GHz Ant.1 + BT Ant.1	5GHz Ant.1 + BT Ant.2	5GHz Ant.1 + BT dual	5GHz Ant.2 + BT Ant.1	5GHz Ant.2 + BT Ant.2	5GHz Ant.2 + BT dual	5GHz MIMO + BT Ant.1	5GHz MIMO + BT Ant.2	5GHz MIMO + BT dual	5GHz RSDB (2.4GHz + 5GHz)	5GHz RSDB (U.A1 + D.A2) BT Ant.1	5GHz RSDB (U.A2 + D.A2) BT Ant.1	5GHz RSDB (U.AM + D.A2) BT Ant.1
	1 + 5	1 + 7	2 + 7	3 + 7	1 + 8	2 + 8	3 + 8	1 + 9	2 + 9	3 + 9		1 + 5 + 7	1 + 5 + 8	1 + 5 + 9
Left Touch	0.440	0.196	0.461	0.257	0.189	0.454	0.250	0.233	0.498	0.294	0.504	0.560	0.553	0.580
Left Tilt	0.081	0.163	0.188	0.169	0.123	0.148	0.129	0.168	0.193	0.174	0.179	0.209	0.169	0.214
Right Touch	0.381	0.603	0.579	0.545	0.318	0.294	0.260	0.611	0.587	0.553	0.504	0.706	0.497	0.706
Right Tilt	0.134	0.397	0.301	0.325	0.215	0.119	0.143	0.425	0.329	0.353	0.469	0.413	0.231	0.441

Test Position	WLAN/BT's SAR (W/kg)													Worst case Combination
	6GHz Ant.1 + BT Ant.1	6GHz Ant.1 + BT Ant.2	6GHz Ant.1 + BT dual	6GHz Ant.2 + BT Ant.1	6GHz Ant.2 + BT Ant.2	6GHz Ant.2 + BT dual	6GHz MIMO + BT Ant.1	6GHz MIMO + BT Ant.2	6GHz MIMO + BT dual	6GHz RSDB (2.4GHz + 5GHz)	6GHz RSDB (U.A1 + D.A2) BT Ant.1	6GHz RSDB (U.A2 + D.A2) BT Ant.1	6GHz RSDB (U.AM + D.A2) BT Ant.1	
	1 + 10	2 + 10	3 + 10	1 + 11	2 + 11	3 + 11	1 + 12	2 + 12	3 + 12		1 + 5 + 10	1 + 5 + 11	1 + 5 + 12	
Left Touch	0.275	0.540	0.336	0.123	0.388	0.184	0.249	0.514	0.310	0.504	0.580	0.487	0.580	0.580
Left Tilt	0.234	0.259	0.240	0.082	0.107	0.088	0.208	0.233	0.214	0.245	0.280	0.128	0.254	0.280
Right Touch	0.401	0.377	0.343	0.249	0.225	0.191	0.375	0.351	0.317	0.504	0.580	0.428	0.554	0.706
Right Tilt	0.317	0.221	0.245	0.165	0.069	0.093	0.291	0.195	0.219	0.361	0.333	0.181	0.307	0.469

WWAN(AG0+AG1) + WLAN + BT summation results

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)			
		AG0	AG1	WLAN	AG0+WLAN	AG1+WLAN	AG0+AG1 +WLAN	
Head (1-g SAR)	Left Touch	0.354	0.774	0.580	0.934	1.354	**1.708**	Note.3
	Left Tilt	0.149	0.715	0.280			1.144	
	Right Touch	0.237	0.796	0.706	0.943	1.502	**1.739**	Note.3
	Right Tilt	0.122	0.927	0.469			1.518	

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)			
		AG0	AG1	WLAN (for UNII 6e)	AG0+WLAN (for UNII 6e)	AG1+WLAN (for UNII 6e)	AG0+AG1 +WLAN (for UNII 6e)	
Head (1-g SAR)	Left Touch	0.354	0.774	0.580	0.934	1.354	**1.708**	Note.3
	Left Tilt	0.149	0.715	0.280			1.144	
	Right Touch	0.237	0.796	0.580	0.817	1.376	**1.613**	Note.3
	Right Tilt	0.122	0.927	0.361			1.410	

Note(s):

1. Blue value is estimated SAR value.
2. For Green values of RSDB configurations (including BT summation) in above table, If RSDB summation results are over SAR design target + device uncertainty (1.0dB), then we used SAR value (0.504 W/kg) of SAR design target + device uncertainty (1.0dB) for simultaneous transmission analysis according to verify SAR exposure switching test in SAR validation report.
3. If some simultaneous transmission scenarios are over FCC limit(Red values in table), SPLSR criteria was performed in Condition#2 in Section.12.1.1. AG0+AG1+WLAN/BT were considered separately into AG0+WLAN/BT and AG1+WLAN/BT according to the results of Condition#2.

12.2.2 Body-worn & Hotspot exposure simultaneous transmission analysis

CONDITION#1

SAR (DTS & BT & UNII)

RF Exposure	Test Position	WLAN/BT's SAR (W/kg)											
		BT Ant.1	BT Ant.2	BT Dual(MIMO)	2.4G Ant.1	2.4G Ant.2	2.4G MIMO	5GHz Ant.1	5GHz Ant.2	5G MIMO	6GHz Ant.1	6GHz Ant.2	6GHz MIMO
		1	2	3	4	5	6	7	8	9	10	11	12
Body-worn & Hotspot (1-g SAR)	Rear	0.199	0.001	0.024	0.116	0.092	0.106	0.271	0.084	0.250	0.093	0.148	0.272
	Front	0.189	0.002	0.030	0.076	0.091	0.068	0.082	0.004	0.071	0.093	0.148	0.272
	Top	0.098	0.001	0.019	0.017	0.000	0.044	0.048	0.038	0.069			
	Left		0.022	0.001			0.040		0.000	0.000			
	Bottom												
	Right	0.299		0.072	0.163	0.021	0.148	0.240		0.211			

RF Exposure	Test Position	WLAN/BT's SAR (W/kg)													
		BT Ant.1 + 2.4G Ant.2	5GHz Ant.1 + BT Ant.1	5GHz Ant.1 + BT Ant.2	5GHz Ant.1 + BT dual	5GHz Ant.2 + BT Ant.1	5GHz Ant.2 + BT Ant.2	5GHz Ant.2 + BT dual	5GHz MIMO + BT Ant.1	5GHz MIMO + BT Ant.2	5GHz MIMO + BT dual	5GHz RSDB (2.4GHz + 5GHz)	5GHz RSDB (U.A1 + D.A2) BT Ant.1	5GHz RSDB (U.A2 + D.A2) BT Ant.1	5GHz RSDB (U.AM + D.A2) BT Ant.1
		1 + 5	1 + 7	2 + 7	3 + 7	1 + 8	2 + 8	3 + 8	1 + 9	2 + 9	3 + 9		1 + 5 + 7	1 + 5 + 8	1 + 5 + 9
Body-worn & Hotspot (1-g SAR)	Rear	0.291	0.470	0.272	0.295	0.283	0.085	0.108	0.449	0.251	0.274	0.387	0.562	0.375	0.541
	Front	0.280	0.271	0.084	0.112	0.193	0.006	0.034	0.260	0.073	0.101	0.173	0.362	0.284	0.351
	Top	0.098	0.146	0.049	0.067	0.136	0.039	0.057	0.167	0.070	0.088	0.113	0.146	0.136	0.167
	Left	0.000	0.000	0.022	0.001	0.000	0.022	0.001	0.000	0.022	0.001	0.040	0.000	0.000	0.000
	Bottom	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right	0.320	0.539	0.240	0.312	0.299	0.000	0.072	0.510	0.211	0.283	0.403	0.560	0.320	0.531

RF Exposure	Test Position	WLAN/BT's SAR (W/kg)													Worst case Combination
		6GHz Ant.1 + BT Ant.1	6GHz Ant.1 + BT Ant.2	6GHz Ant.1 + BT dual	6GHz Ant.2 + BT Ant.1	6GHz Ant.2 + BT Ant.2	6GHz Ant.2 + BT dual	6GHz MIMO + BT Ant.1	6GHz MIMO + BT Ant.2	6GHz MIMO + BT dual	6GHz RSDB (2.4GHz + 5GHz)	6GHz RSDB (U.A1 + D.A2) BT Ant.1	6GHz RSDB (U.A2 + D.A2) BT Ant.1	6GHz RSDB (U.AM + D.A2) BT Ant.1	
		1 + 10	2 + 10	3 + 10	1 + 11	2 + 11	3 + 11	1 + 12	2 + 12	3 + 12		1 + 5 + 10	1 + 5 + 11	1 + 5 + 12	
Body-worn & Hotspot (1-g SAR)	Rear	0.292	0.094	0.117	0.347	0.149	0.172	0.471	0.273	0.296	0.388	0.384	0.439	0.563	0.563
	Front	0.282	0.095	0.123	0.337	0.150	0.178	0.461	0.274	0.302	0.363	0.373	0.428	0.552	0.552
	Top	0.098	0.001	0.019	0.098	0.001	0.019	0.098	0.001	0.019	0.044	0.098	0.098	0.098	0.167
	Left	0.000	0.022	0.001	0.000	0.022	0.001	0.000	0.022	0.001	0.040	0.000	0.000	0.000	0.040
	Bottom	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right	0.299	0.000	0.072	0.299	0.000	0.072	0.299	0.000	0.072	0.163	0.320	0.320	0.320	0.560

WWAN(AG0+AG1) + WLAN + BT summation results

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)			
		AG0	AG1	WLAN	AG0+WLAN	AG1+WLAN	AG0+AG1 +WLAN	
Body-worn & Hotspot (1-g SAR)	Rear	0.660	0.636	0.563	1.223	1.199	1.859	Note.3
	Front	0.540	0.604	0.552	1.092	1.156	1.696	Note.3
	Top	0.000	0.533	0.167			0.700	
	Left	0.306	0.448	0.040			0.794	
	Bottom	0.977	0.000	0.000			0.977	
	Right	0.311	0.126	0.560			0.997	

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)			
		AG0	AG1	WLAN (for UNII 6e)	AG0+WLAN (for UNII 6e)	AG1+WLAN (for UNII 6e)	AG0+AG1 +WLAN (for UNII 6e)	
Body-worn & Hotspot (1-g SAR)	Rear	0.660	0.636	0.563	1.223	1.199	1.859	Note.3
	Front	0.540	0.604	0.552	1.092	1.156	1.696	Note.3

Note(s):

1. Blue value is estimated SAR value.
2. For Green values of RSDB configurations (including BT summation) in above table, If RSDB summation results are over SAR design target + device uncertainty (1.0dB), then we used SAR value (0.504 W/kg) of SAR design target + device uncertainty (1.0dB) for simultaneous transmission analysis according to verify SAR exposure switching test in SAR validation report.
3. If some simultaneous transmission scenarios are over FCC limit(Red values in table), SPLSR criteria was performed in Condition#2 in Section.12.1.1. AG0+AG1+WLAN/BT were considered separately into AG0+WLAN/BT and AG1+WLAN/BT according to the results of Condition#2.

12.2.3 Product Specific 10-g exposure simultaneous transmission analysis

SAR (DTS & BT & UNII)

RF Exposure	Test Position	WLAN/BT's SAR (W/kg)											
		BT Ant.1	BT Ant.2	BT Dual(MIMO)	2.4G Ant.1	2.4G Ant.2	2.4G MIMO	5GHz Ant.1	5GHz Ant.2	5G MIMO	6GHz Ant.1	6GHz Ant.2	6GHz MIMO
		1	2	3	4	5	6	7	8	9	10	11	12
Product Specific 10-g (10-g SAR)	Rear							0.720	0.253	0.663	0.331	0.281	0.528
	Front							0.466	0.137	0.441	0.331	0.281	0.528
	Top							0.240	0.081	0.233	0.331	0.281	0.528
	Left								0.006	0.024		0.281	0.528
	Bottom												
	Right							1.070		0.890	0.331		0.528

Test Position	WLAN/BT's SAR (W/kg)													
	BT Ant.1 + 2.4G Ant.2	5GHz Ant.1 + BT Ant.1	5GHz Ant.1 + BT Ant.2	5GHz Ant.1 + BT dual	5GHz Ant.2 + BT Ant.1	5GHz Ant.2 + BT Ant.2	5GHz Ant.2 + BT dual	5GHz MIMO + BT Ant.1	5GHz MIMO + BT Ant.2	5GHz MIMO + BT dual	5GHz RSDB (2.4GHz + 5GHz)	5GHz RSDB (U.A1 + D.A2) BT Ant.1	5GHz RSDB (U.A2 + D.A2) BT Ant.1	5GHz RSDB (U.AM + D.A2) BT Ant.1
	1 + 5	1 + 7	2 + 7	3 + 7	1 + 8	2 + 8	3 + 8	1 + 9	2 + 9	3 + 9		1 + 5 + 7	1 + 5 + 8	1 + 5 + 9
Rear	0.000	0.720	0.720	0.720	0.253	0.253	0.253	0.663	0.663	0.663	0.720	0.720	0.253	0.663
Front	0.000	0.466	0.466	0.466	0.137	0.137	0.137	0.441	0.441	0.441	0.466	0.466	0.137	0.441
Top	0.000	0.240	0.240	0.240	0.081	0.081	0.081	0.233	0.233	0.233	0.240	0.240	0.081	0.233
Left	0.000	0.000	0.000	0.000	0.006	0.006	0.006	0.024	0.024	0.024	0.024	0.000	0.006	0.024
Bottom	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Right	0.000	1.070	1.070	1.070	0.000	0.000	0.000	0.890	0.890	0.890	1.070	1.070	0.000	0.890

Test Position	WLAN/BT's SAR (W/kg)													Worst case Combination
	6GHz Ant.1 + BT Ant.1	6GHz Ant.1 + BT Ant.2	6GHz Ant.1 + BT dual	6GHz Ant.2 + BT Ant.1	6GHz Ant.2 + BT Ant.2	6GHz Ant.2 + BT dual	6GHz MIMO + BT Ant.1	6GHz MIMO + BT Ant.2	6GHz MIMO + BT dual	6GHz RSDB (2.4GHz + 5GHz)	6GHz RSDB (U.A1 + D.A2) BT Ant.1	6GHz RSDB (U.A2 + D.A2) BT Ant.1	6GHz RSDB (U.AM + D.A2) BT Ant.1	
	1 + 10	2 + 10	3 + 10	1 + 11	2 + 11	3 + 11	1 + 12	2 + 12	3 + 12		1 + 5 + 10	1 + 5 + 11	1 + 5 + 12	
Rear	0.331	0.331	0.331	0.281	0.281	0.281	0.528	0.528	0.528	0.528	0.331	0.281	0.528	0.720
Front	0.331	0.331	0.331	0.281	0.281	0.281	0.528	0.528	0.528	0.528	0.331	0.281	0.528	0.528
Top	0.331	0.331	0.331	0.281	0.281	0.281	0.528	0.528	0.528	0.528	0.331	0.281	0.528	0.528
Left	0.000	0.000	0.000	0.281	0.281	0.281	0.528	0.528	0.528	0.528	0.000	0.281	0.528	0.528
Bottom	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Right	0.331	0.331	0.331	0.000	0.000	0.000	0.528	0.528	0.528	0.528	0.331	0.000	0.528	1.070

WWAN(AG0+AG1) + WLAN + BT + NFC summation results

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)			
		AG0	AG1	WLAN	AG0+WLAN	AG1+WLAN	AG0+AG1 +WLAN	AG0+AG1 +WLAN (for UNII 6e)
Product Specific 10-g (10-g SAR)	Rear	0.000	0.000	0.720			0.720	0.528
	Front	0.000	0.000	0.466			0.466	0.528
	Top	0.000	0.000	0.240			0.240	0.528
	Left	0.000	0.000	0.029			0.029	0.528
	Bottom	0.000	0.000	0.000			0.000	0.528
	Right	0.000	0.000	1.070			1.070	0.528

Note(s):

1. Blue value is estimated SAR value.

12.2.4 Simultaneous transmission analysis for ULCA inter band operation

ULCA inter band summation results

RF exposure	Test position	AG0				AG1		SUM SAR(W/kg) result of UL CA combinations					
		LTE B5	LTE B12	LTE B25(2)	LTE B66(4)	LTE B66(4)	LTE B2	2A-4A		4A-5A in AG0	4A-12A in AG0	5A-66A in AG0	12A-66A in AG0
		Main.1 Ant.'s Reported SAR(W/kg)				Sub.2 Ant.'s Reported SAR(W/kg)		2A(AG0)-4A(AG1)	4A(AG0)-2A(AG1)				
Head	Left Touch	0.201	0.094	0.206	0.354	0.383	0.375	0.589	0.729	0.555	0.448	0.555	0.448
	Left Tilt	0.149	0.072	0.063	0.105	0.550	0.506	0.613	0.611	0.254	0.177	0.254	0.177
	Right Touch	0.237	0.098	0.112	0.155	0.828	0.645	0.940	0.800	0.392	0.253	0.392	0.253
	Right Tilt	0.122	0.071	0.076	0.122	0.899	0.653	0.975	0.775	0.244	0.193	0.244	0.193
Body-worn &	Rear	0.660	0.252	0.478	0.358	0.156	0.238	0.634	0.596	1.018	0.610	1.018	0.610
	Front	0.299	0.164	0.376	0.335	0.127	0.165	0.503	0.500	0.634	0.499	0.634	0.499
Hotspot	Top					0.301	0.426	0.301	0.426	0.000	0.000	0.000	0.000
	R-Left	0.259	0.130	0.071	0.096			0.071	0.096	0.355	0.226	0.355	0.226
	Bottom	0.214	0.050	0.835	0.620			0.835	0.620	0.834	0.670	0.834	0.670
	R-Right	0.206	0.177	0.087	0.194	0.062	0.126	0.149	0.320	0.400	0.371	0.400	0.371

ULCA inter band with WLAN/BT summation results

RF exposure	Test position	SUM SAR(W/kg) result of UL CA combinations						WLAN/BT Worst Combination	ULCA+WLAN+BT Sumultaneous transmission Results (W/kg)					
		2A-4A		4A-5A in AG0	4A-12A in AG0	5A-66A in AG0	12A-66A in AG0							
		2A(AG0)-4A(AG1)	4A(AG0)-2A(AG1)											
Head	Left Touch	0.589	0.729	0.555	0.448	0.555	0.448	0.580	1.169	1.309	1.135	1.028	1.135	1.028
	Left Tilt	0.613	0.611	0.254	0.177	0.254	0.177	0.280	0.893	0.891	0.534	0.457	0.534	0.457
	Right Touch	0.831	0.800	0.392	0.253	0.392	0.253	0.706	1.537	1.506	1.098	0.959	1.098	0.959
	Right Tilt	0.921	0.775	0.244	0.193	0.244	0.193	0.469	1.390	1.244	0.713	0.662	0.713	0.662
Body-worn &	Rear	0.634	0.596	1.018	0.610	1.018	0.610	0.563	1.197	1.159	1.581	1.173	1.581	1.173
	Front	0.503	0.500	0.634	0.499	0.634	0.499	0.552	1.055	1.052	1.186	1.051	1.186	1.051
Hotspot	Top	0.301	0.426	0.000	0.000	0.000	0.000	0.167	0.468	0.593	0.167	0.167	0.167	0.167
	R-Left	0.071	0.096	0.355	0.226	0.355	0.226	0.040	0.111	0.136	0.395	0.266	0.395	0.266
	Bottom	0.835	0.620	0.834	0.670	0.834	0.670	0.000	0.835	0.620	0.834	0.670	0.834	0.670
	R-Right	0.149	0.320	0.400	0.371	0.400	0.371	0.560	0.709	0.880	0.960	0.931	0.960	0.931

Note(s):

1. All ULCA inter band summation results is not over 1.45 W/kg. So additional guide is not required.
2. For SAR value of Green box, Single band is over 0.8 W/kg, So Volume scan is required.
3. For SAR value Blue box, That are Volume scan combine results form Sec.12.2.5. And the results were used to analysis simultaneous transmission with WLAN/BT.

12.2.5 Volume scan results

RF exposure	Test position	Configuration	Band	Original Measured SAR (W/kg)	Volume scan Result (W/kg)	Plot No.	Multi-Band Combined factor	Multi-Band Combined Result (W/kg)	Plot No.
Head	Right Touch	2A-4A	LTE Band 25(2)	0.089	0.109	1	1.258	0.831	5-6
			LTE Band 66(4)	0.551	0.604	2	1.371		
	Right Tilt	2A-4A	LTE Band 25(2)	0.060	0.069	3	1.267	0.921	7-8
			LTE Band 66(4)	0.598	0.654	4	1.371		

Note(s):
1. Multi-band Combined factor is the compensation value of power.
2. For Volume scan plot number in this section, Please refer to Appendix H.

Conclusion:

Simultaneous Transmission SAR analysis results is satisfied the FCC Limit requirement according to follow procedures with "Sum of SAR" or "SPLSR" or "Volume scan".

Appendixes

Refer to separated files for the following appendixes.

4790976555-S1 FCC Report SAR_App A_Photos & Ant. Locations

4790976555-S1 FCC Report SAR_App B_Highest SAR Test Plots

4790976555-S1 FCC Report SAR_App C_System Check Plots

4790976555-S1 FCC Report SAR_App D_SAR Tissue Ingredients

4790976555-S1 FCC Report SAR_App E_Probe Cal. Certificates

4790976555-S1 FCC Report SAR_App F_Dipole Cal. Certificates

4790976555-S1 FCC Report SAR_App G_LTE Carrier Aggregation

4790976555-S1 FCC Report SAR_App H_Volume Scan Results

END OF REPORT