FCC 47 CFR § 2.1093
IEEE Std 1528-2013

SAR EVALUATION REPORT
(Part 1 : Test in Static Transmission Condition)

FOR

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

MODEL NUMBER: SM-S916B/DS, SM-S916B

FCC ID: A3LSMS916B

REPORT NUMBER: 4790541040-S1V4

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Prepared for
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Testing Laboratory

TL-637

Revision History

Rev.	Date	Revisions	Revised By
V1	10/26/2022	Initial Issue	-
V2	11/2/2022	Revised items - Updated KDB procedure in Sec.2 - Corrected BLE Version in Sec.6.2 - Corrected Title in Sec.6.9 - Corrected Antenna/Band information in Appendix A - Removed Note in Appendix I	Eunji Choi
V3	11/4/2022	Revised items - Corrected a typo in Sec.1.1 - Added LTE Band 41 PC2 power measurement data in Sec.9.3 - Added NR Band n66(Sub 2 Ant.) power measurement data in Sec.9.4 - Updated Wi-Fi 6e Duty Cycle in Sec.6.2 and Wi-Fi 6e SAR values in Sec.12.2	Eunji Choi
V4	11/28/2022	Revised items - Updated DSI Scenarios priority in Sec.6.5	Eunji Choi

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1. Attestation of Test Results

Applicant Name		SAMSUNG ELECTRONICS CO.,LTD.				
FCC ID		A3LSMS916B				
Model Number		SM-S916B/DS, SM-S916B				
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		0.72	0.53	0.50	0.28	N/A
Body-worn		1.01	0.27	0.30	0.01	N/A
Hotspot		1.13	0.51	0.51	0.03	N/A
Product Specific 10g		2.81	N/A	2.83	N/A	0.02
Simultaneous TX	Head	1.59	1.47	1.59	1.59	N/A
	Body-worn	1.37	1.37	1.37	1.37	N/A
	Hotspot	1.28	1.28	1.28	1.28	N/A
	Product Specific 10g	3.83	N/A	3.83	N/A	3.83
Date Tested		8/31/2022 to 10/25/2022				
Test Results		Pass				

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

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Korea, Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Korea, Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released By:	Prepared By:
Justin Park Operations Leader UL Korea, Ltd. Suwon Laboratory	Eunji Choi Laboratory Test Engineer UL Korea, Ltd. Suwon Laboratory

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

Equipment Class	Band	Antenna	The Highest Reported SAR (W/kg)			
			1g of tissue			10g of tissue
			Head Exposure condition	Body-worn Exposure condition	Hotspot Exposure condition	Product Specific Exposure condition
PCE	GSM 850	Main 1	0.207	0.292	0.551	N/A
	GSM 1900	Main 1	0.118	0.475	0.869	1.292
	WCDMA Band II	Main 1	0.180	0.819	1.056	2.745
	WCDMA Band IV	Main 1	0.234	0.760	1.019	**2.807**
	WCDMA Band V	Main 1	0.340	0.330	0.608	N/A
	LTE Band 4	Sub 2	0.639	0.184	0.522	N/A
	LTE Band 5	Main 1	0.304	0.392	0.685	N/A
	LTE Band 12 / 17	Main 1	0.225	0.284	0.372	N/A
	LTE Band 13	Main 1	0.237	0.373	0.626	N/A
	LTE Band 25 / 2	Main 1	0.170	0.656	**1.126**	1.841
	LTE Band 26	Main 1	0.259	0.320	0.588	N/A
	LTE Band 41	Main 2	0.167	0.399	0.510	N/A
	LTE Band 66	Main 1	0.192	0.797	1.098	1.735
	NR Band n5	Main 1	0.245	0.381	0.774	N/A
	NR Band n25 / 2	Main 1	0.157	0.730	1.011	2.262
	NR Band n66	Main 1	0.241	**1.007**	1.035	1.889
	NR Band n66	Sub 2	0.695	0.151	0.470	N/A
	NR Band n41	SRS 0 / Sub 2	**0.719**	0.186	0.220	N/A
		SRS 1 / Main 2	0.010	0.081	0.089	N/A
		SRS 2 / Sub 1	0.328	0.063	0.050	N/A
		SRS 3 / Main 4	0.001	0.009	0.013	N/A
	NR Band n77	SRS0 / Sub 2	0.535	0.354	0.613	N/A
		SRS 1 / Main 3	0.011	0.048	0.097	N/A
		SRS 2 / Sub 5	0.075	0.006	0.023	N/A
		SRS 3 / Main 4	<0.001	0.181	0.306	N/A
DTS	2.4GHz WLAN	All	**0.529**	**0.270**	**0.505**	N/A
UNII	5GHz WLAN	All	**0.502**	**0.295**	**0.505**	**2.831**
DSS	Bluetooth	All	**0.275**	**0.007**	**0.027**	N/A
DXX	NFC	NFC Ant.	N/A	N/A	N/A	**0.024**

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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, 2014; RF Exposure Procedures Update (Other LTE Considerations)
- 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))
- 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)

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.

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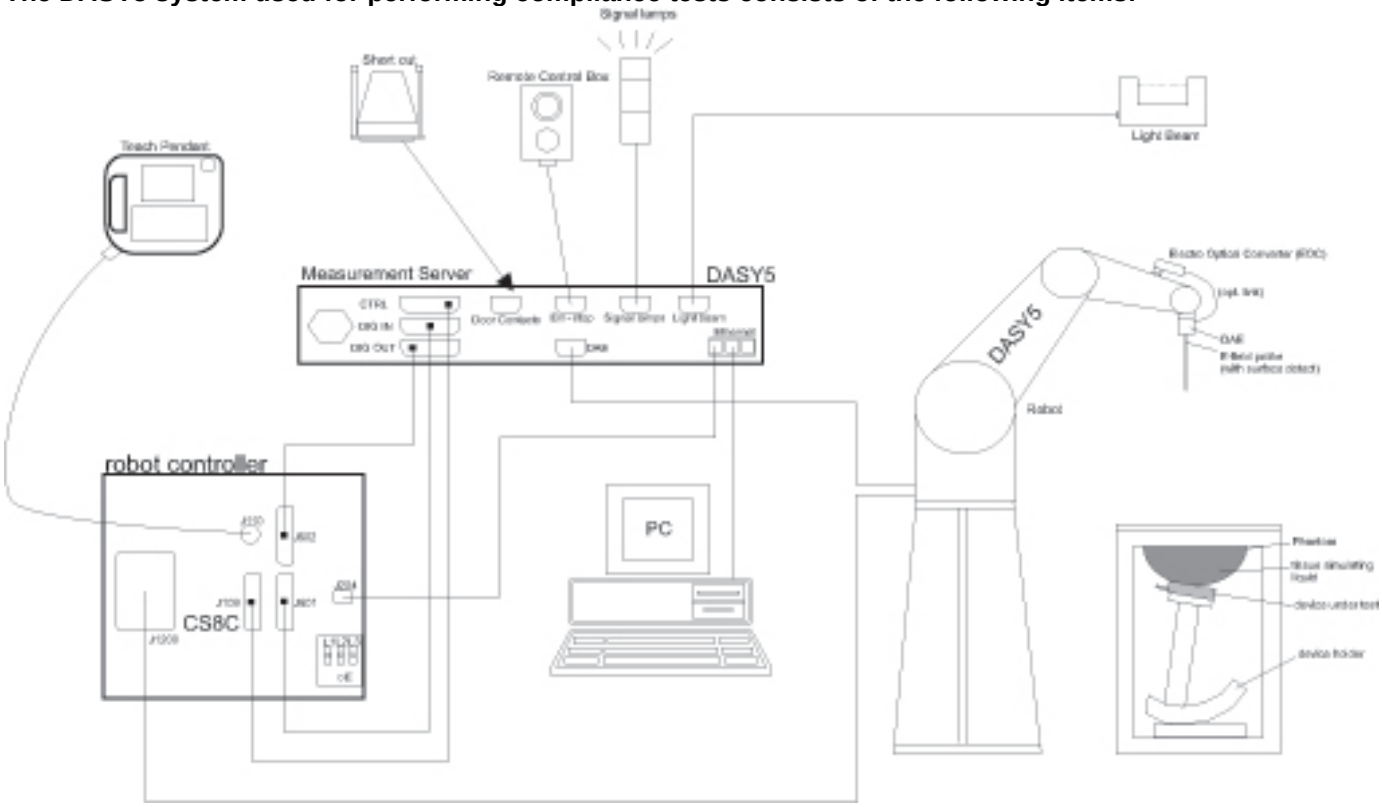
4. SAR Measurement System & Test Equipment

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.

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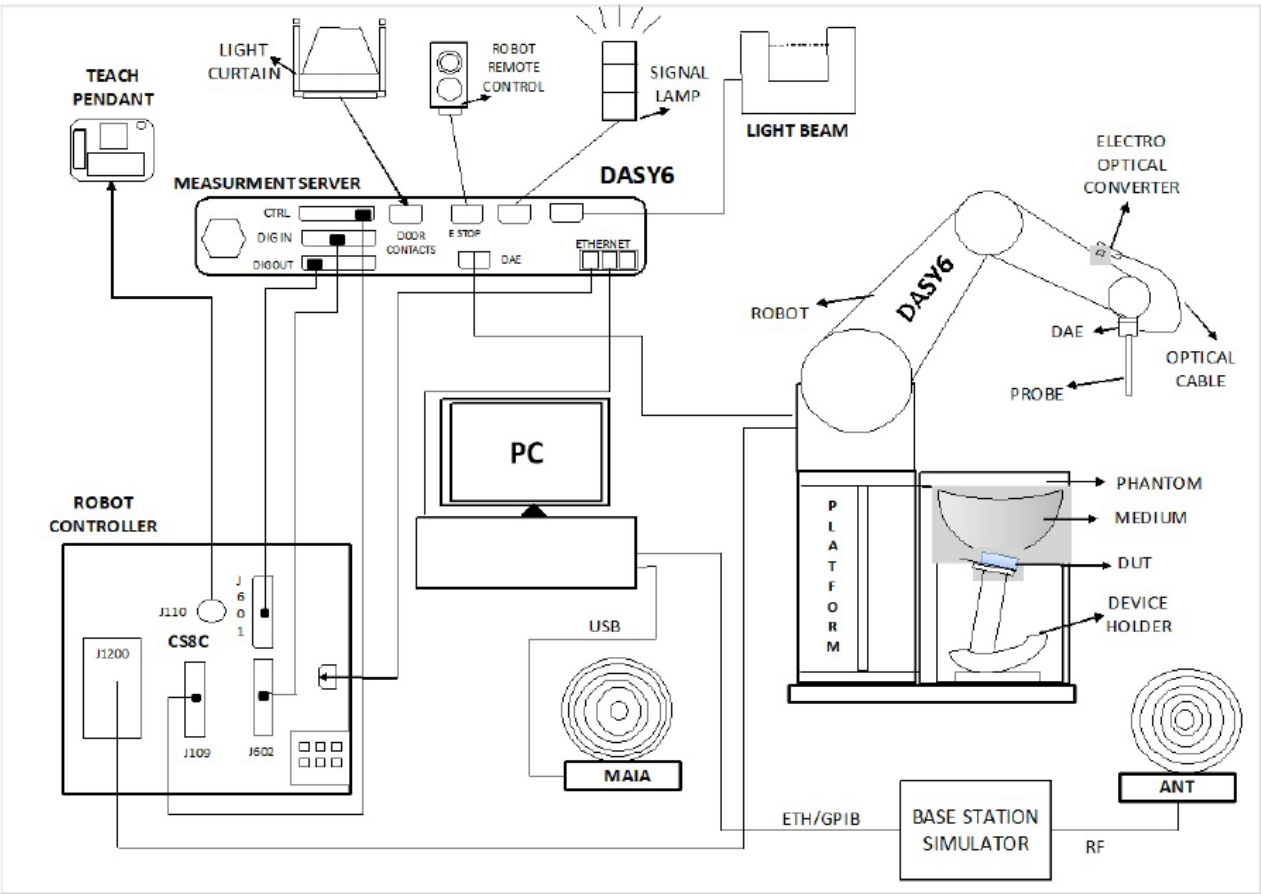
The DASY6 & 8 system used for performing compliance tests consists of the following items:



- 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.

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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.	

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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	$\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

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

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

Step 4: Power drift measurement

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

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4.3. Test Equipment

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

Dielectric Property Measurements

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Network Analyzer	Agilent	E5071C	MY46522054	8/5/2023
Network Analyzer	ROHDE & SCHWARZ	ZNB 20	102256	8/5/2023
Dielectric Assessment Kit	SPEAG	DAK-12	1158	**10/20/2022**
Dielectric Assessment Kit	SPEAG	DAK-3.5	1196	7/25/2023
Shorting block	SPEAG	DAK-3.5 Short	SMDAK 200 BA	N/A
Thermometer	LKM	DTM3000	3851	8/3/2023
Thermometer	LKM	DTM3000	3862	8/3/2023

System Check

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
MXG Analog Signal Generator	Agilent	N5181A	MY50145882	8/4/2023
MXG Analog Signal Generator	Keysight	N5181B	MY59100587	8/4/2023
MXG Analog Signal Generator	Keysight	N5173B	MY59101083	8/4/2023
Power Sensor	Keysight	U2000A	MY60180020	8/3/2023
Power Sensor	Agilent	U2000A	MY54260007	8/3/2023
Power Sensor	Keysight	U2000A	MY60490008	8/3/2023
Power Sensor	Keysight	U2000A	MY61060004	8/3/2023
Power Sensor	Keysight	U2000A	MY61010006	8/3/2023
Power Sensor	Keysight	U2000A	MY61010010	8/3/2023
Power Amplifier	MINI-CIRCUITS	ZVE-3W-183+	311602009	8/4/2023
Power Amplifier	EXODUS	AMP2027ADB	10002	3/30/2023
Directional Coupler	Agilent	772D	MY52180193	8/3/2023
Directional Coupler	H.P	778D	16133	8/3/2023
Directional Coupler	MINI-CIRCUITS	ZUDC20-183+	N/A	8/3/2023
Directional Coupler	MINI-CIRCUITS	ZUDC20-183+	N/A	8/3/2023
Low Pass Filter	FILTRON	L14012FL	1410003S	8/3/2023
Low Pass Filter	MICROLAB	LA-60N	3942	8/3/2023
Low Pass Filter	MINI-CIRCUITS	NLP-1200	VUU19301915	8/2/2023
Attenuator	KEYSIGHT	8491B/003	VE2017A0283	8/3/2023
Attenuator	KEYSIGHT	8491B/010	MY39271981	8/3/2023
Attenuator	KEYSIGHT	8491B/010	MY39272011	8/2/2023
Attenuator	KEYSIGHT	8491B/020	MY39271973	8/3/2023
Attenuator	MINI-CIRCUITS	BW-S3W10+	N/A	4/7/2023
E-Field Probe	SPEAG	EX3DV4	7313	3/2/2023
E-Field Probe	SPEAG	EX3DV4	7314	5/31/2023
E-Field Probe	SPEAG	EX3DV4	7330	1/28/2023
E-Field Probe	SPEAG	EX3DV4	7376	7/27/2023
E-Field Probe	SPEAG	EX3DV4	7545	8/19/2023
E-Field Probe	SPEAG	EX3DV4	7651	5/30/2023
E-Field Probe	SPEAG	EX3DV4	7646	3/29/2023
Data Acquisition Electronics	SPEAG	DAE4	1343	8/18/2023
Data Acquisition Electronics	SPEAG	DAE4	1447	3/25/2023
Data Acquisition Electronics	SPEAG	DAE4	1468	8/18/2023
Data Acquisition Electronics	SPEAG	DAE4	1494	7/18/2023
Data Acquisition Electronics	SPEAG	DAE4	1591	3/24/2023
Data Acquisition Electronics	SPEAG	DAE4	1670	6/7/2023
Data Acquisition Electronics	SPEAG	DAE4	1671	5/31/2023
Data Acquisition Electronics	SPEAG	DAE4	1667	4/27/2023

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Test Equipment (Continued)

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
System Validation Dipole	SPEAG	D750V3	1122	2/24/2023
System Validation Dipole	SPEAG	D750V3	1205	4/27/2023
System Validation Dipole	SPEAG	D835V2	4d194	3/24/2023
System Validation Dipole	SPEAG	D1750V2	1125	2/24/2023
System Validation Dipole	SPEAG	D1900V2	5d190	11/24/2022
System Validation Dipole	SPEAG	D1900V2	5d199	3/25/2023
System Validation Dipole	SPEAG	D2450V2	960	3/24/2023
System Validation Dipole	SPEAG	D2600V2	1097	9/29/2023
System Validation Dipole	SPEAG	D3500V2	1121	4/21/2023
System Validation Dipole	SPEAG	D3700V2	1036	5/21/2023
System Validation Dipole	SPEAG	D3900V2	1069	4/21/2023
System Validation Dipole	SPEAG	D5GHzV2	1209	11/24/2023
System Validation Dipole	SPEAG	CLA-13	1015	8/23/2023
Thermometer	Lutron	MHB-382SD	AH.91463	8/4/2023
Thermometer	Lutron	MHB-382SD	AH.50215	8/9/2023
Thermometer	Lutron	MHB-382SD	AH.50213	8/4/2023
Thermometer	Lutron	MHB-382SD	AH.45903	8/9/2023
Thermometer	Lutron	MHB-382SD	AK.18789	8/9/2023
Thermometer	Lutron	MHB-382SD	AK.12102	8/9/2023

Others

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
Base Station Simulator	R & S	CMW500	150313	8/2/2023
Base Station Simulator	R & S	CMW500	150314	8/2/2023
Base Station Simulator	R & S	CMW500	162790	8/2/2023
Base Station Simulator	R & S	CMW500	169803	5/27/2023
Base Station Simulator	R & S	CMW500	169799	8/2/2023
Base Station Simulator	R & S	CMW500	169800	8/2/2023
Base Station Simulator	R & S	CMW500	169798	8/2/2023
UXM 5G Wireless Test Platform	Keysight	E7515B	MY59150850	12/13/2022
UXM 5G Wireless Test Platform	Keysight	E7515B	MY58120110	1/7/2023
UXM 5G Wireless Test Platform	Keysight	E7515B	MY57510596	8/5/2023
Radio Communication Test Station	Anritsu	MT8000A	6272466165	9/8/2023
Radio Communication Analyzer	Anritsu	MT8821C	6161094351	9/8/2023

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.

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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 4MHz to 30MHz

Measurement uncertainty for 4 MHz to 30 MHz
(According to IEEE 62209-1528)

a	b	c		d	e f(d,k)	f	g	h = *c×f/e*	I = *c×g/e*	k
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	0.5	0.6	Normal	1	1	1	0.5	0.6	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				12.13	12.02	
Expanded Uncertainty U, Coverage Factor = 2, > 95 % Confidence =								**24.26**	**24.05**	

5.1. DECISION RULE

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

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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	R3CT8056FDY	Main Conducted	13	R3CT90EXXTK	SAR
2	R3CT8056EAY	Main Conducted	14	R3CT90EXVHJ	SAR
3	R3CT8056GDR	Main Conducted	15	R3CT8056RWY	SAR
4	R3CT8056EFW	Main Conducted	16	R3CT90EXXCN	SAR
5	R3CT8056G5X	Wi-Fi & BT Conducted	17	R3CT90EY0BV	SAR
6	R3CT8056GMW	Wi-Fi & BT Conducted	18	R3CT90EXV5R	SAR
7	R3CT8056G8T	Wi-Fi & BT Conducted	19	R3CT90EXWPA	SAR
8	R3CT8056DNK	SAR			
9	R3CT8056G0M	SAR			
10	R3CT8056EMT	SAR			
11	R3CT8056G6L	SAR			
12	R3CT90EXXGW	SAR			

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6.2. Wireless Technologies

Wireless technologies	Frequency bands	Operating mode		Duty Cycle used for SAR testing
GSM	850 1900	Voice (GMSK) GPRS (GMSK) EGPRS (8PSK)	GPRS Multi-Slot Class: ☐ Class 8 - 1 Up, 4 Down ☐ Class 10 - 2 Up, 4 Down ☐ Class 12 - 4 Up, 4 Down ☒ Class 33 - 4 Up, 5 Down	GSM Voice: 12.5% (E)GPRS: 1 Slot: 12.5% 2 Slots: 25% 3 Slots: 37.5% 4 Slots: 50%
	Does this device support DTM (Dual Transfer Mode)? ☐ Yes ☒ No			
W-CDMA (UMTS)	Band II Band IV Band V	UMTS Rel. 99 (Voice & Data) HSDPA (Category 24) HSUPA (Category 6) DC-HSDPA (Category 24) HSPA+ (DL only)		100%
LTE	FDD Band 2 FDD Band 4 FDD Band 5 FDD Band 12 FDD Band 13 FDD Band 17 FDD Band 25 FDD Band 26 TDD Band 41 Power Class 3 & 2 FDD Band 66	QPSK 16QAM 64QAM 256QAM Rel. 15 Carrier Aggregation (2 Uplink and 5 Downlinks) **<u>Uplink inter-band Carrier Aggregation(2CC)</u>** CA_2A-4A, CA_4A-5A, CA_4A-12A, CA_5A-66A, CA_12A-66A		100% (FDD) 63.3% (TDD) Power Class 3 43.3% (TDD) Power Class 2
	Does this device support SV-LTE (1xRTT-LTE)? ☐ Yes ☒ No			
NR (Sub6)	FDD Band n2 FDD Band n5 FDD Band n25 FDD Band n66 TDD Band n41 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) / 802.11ax (HE20)		98.9% (802.11b)
	5 GHz	802.11a / 802.11n (HT20) & (HT40) 802.11ac (VHT20) & (VHT40) & (VHT80) & (VHT160) 802.11ax (HE20) & (HE40) & (HE80) & (HE160)		96.2% (802.11a) 94.6% (802.11n (HT40)) 94.5% (802.11ac (VHT80))
	6 GHz	802.11a 802.11ax (HE20) & (HE40) & (HE80) & (HE160)		99.5% (802.11ax (HE160) 99.3% (802.11ax (HE40)
	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		76.7% (BDR, DH5) 85.2% (BLE 1Mbps 255pkt)
NFC	13.56 MHz	Type A/B/F		N/A
UWB	6489.6 – 7987.2 MHz	Signal Configurations(0/1/3), PRF modes(BPRF/HPRF)		N/A

Notes:

1. The Bluetooth protocol is considered source-based averaging.
   BDR GFSK(DH5) was verified to have the highest duty cycle of 77.4% and used for Head SAR Testing.
   BLE 1M 255pkt was verified to have the highest duty cycle of 85.2% and used for Body-worn & Hotspot SAR Testing.
2. Duty cycle for Wi-Fi is referenced from the DTS and UNII report.
3. This device supports Power Class 2(HPUE) and Power Class 3 for LTE Band 41.
4. This device supports UL CA inter-band in LTE Band.
5. NR TDD Band n41 & n77 has support SRS(0,1,2,3) modes.
6. 6GHz RF Exposure report has test results of WiFi 6GHz and UWB.

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6.3. Time-Averaging feature

The equipment under test (EUT) contains the Qualcomm modems supporting 2G/3G/4G technologies and 5G NR bands. these modem is enabled with Qualcomm Smart Transmit feature to control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is in compliance with the FCC requirement. Refer to Compliance Summary document for detailed description of Qualcomm Smart Transmit feature.

The Smart Transmit 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.

Smart Transmit 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} EFS settings and maximum tune up output power P_{max} configured for this EUT for various transmit conditions (DSI Device State Index).

The maximum time-averaged output power (dBm) for any 2G/3G/4G/5G NR WWAN technology band, and DSI = minimum of " P_{Limit} EFS" and "Maximum tune up output power P_{max}" + 1 dB device uncertainty. SAR values in this report were scaled to this maximum time-averaged output power to determine compliance per KDB 447498 D01.

The purpose of this report (Part 1 test) is to demonstrate that the EUT meets FCC SAR limits when transmitting in static transmission scenario at maximum allowable time-averaged power levels.

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SAR Characterizations

Exposure condition			Body-Worn	Product Specific 10-g Without triggering sensor	Product Specific 10-g With triggering sensor	Head (RCV)	Hotspot	Ear-jack	Pmax (Maximum tune-up Power) (dBm)
Spatial-average			1g	10g	10g	1g	1g	10g	
Test distance (mm)			15	8 / 7 / 0 / 12	0	0	10	0	
DSI:			0	0	1	2	3	4	
RF Air Interface	Antenna	Antenna Group	P_{limit} corresponding to 1.0 W/kg (SAR_design_target) (1g) / 2.5 W/kg (SAR_design_target) (10g)						
GSM 850	Main 1	AG0	31.33	30.02	27.25	31.05	28.57	27.25	24.98
GSM 1900	Main 1	AG0	26.21	27.75	18.99	32.25	18.99	18.99	21.98
WCDMA Band II	Main 1	AG0	24.87	26.72	21.00	31.44	18.00	21.00	23.00
WCDMA Band IV	Main 1	AG0	25.19	27.73	21.00	30.32	18.00	21.00	23.00
WCDMA Band V	Main 1	AG0	29.98	30.40	26.51	29.85	27.33	26.51	24.50
LTE Band 12(17)	Main 1	AG0	30.47	30.03	26.52	31.48	29.29	26.52	24.00
LTE Band 13	Main 1	AG0	29.28	31.33	27.29	31.26	27.03	27.29	24.00
LTE Band 5	Main 1	AG0	29.57	31.31	25.84	30.68	27.14	25.84	24.50
LTE Band 26	Main 1	AG0	29.95	31.02	26.81	30.87	27.31	26.81	24.00
LTE Band 66(4)	Main 1	AG0	24.98	26.61	20.00	31.18	19.00	20.00	23.00
LTE Band 4	Sub 2	AG1	20.00	20.00	20.00	16.50	19.00	20.00	23.00
LTE Band 25(2)	Main 1	AG0	25.83	27.05	20.00	31.69	18.00	20.00	23.00
LTE Band 41 -PC3-	Main 2	AG0	26.99	25.34	20.00	31.03	20.00	20.00	22.00
LTE Band 41 -PC2-	Main 2	AG0	28.41	25.65	20.40	30.68	20.40	20.40	21.90
NR Band n5	Main 1	AG0	29.19	31.56	26.79	31.11	26.11	26.79	24.00
NR Band n66	Main 1	AG0	24.03	26.78	20.00	30.18	19.00	20.00	23.00
NR Band n66	Sub 2	AG1	19.00	19.00	19.00	17.00	19.00	19.00	23.00
NR Band n25(n2)	Main 1	AG0	25.36	27.46	20.00	32.04	18.00	20.00	23.00
NR Band n41 -SRS0-	Sub 2	AG1	18.00	18.00	18.00	14.00	15.00	18.00	24.00
NR Band n41 -SRS1-	Main 2	AG0	15.00	15.00	15.00	12.00	12.00	15.00	21.00
NR Band n41 -SRS2-	Sub 1	AG1	15.00	15.00	15.00	12.00	12.00	15.00	19.50
NR Band n41 -SRS3-	Main 4	AG0	12.00	12.00	12.00	9.00	9.00	12.00	18.00
NR Band n77 -SRS0-	Sub 2	AG1	18.00	18.00	18.00	14.00	17.00	18.00	24.50
NR Band n77 -SRS1-	Main 3	AG1	15.00	15.00	15.00	10.00	14.00	15.00	21.50
NR Band n77 -SRS2-	Sub 5	AG1	14.00	14.00	14.00	10.00	13.00	14.00	20.50
NR Band n77 -SRS3-	Main 4	AG0	14.00	14.00	14.00	10.50	13.00	14.00	21.00

Notes:

1. All P_{Limit} EFS and maximum tune up output P_{max} levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of LTE TDD modulation schemes.
2. Maximum tune up output power P_{max} 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 report (Part 1 test) were performed by setting *Reserve_power_margin* (Smart Transmit EFS entry) to 0 dB.
4. If P_{Limit} is higher than P_{max} for some modes / bands, The modes/bands will operate at a power level up to P_{max}.

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6.4. Maximum Allowed Output power

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

RF Air-interface	Antenna	Mode	Time Slots	Maximum allowed output power (dBm)											
				Pmax		Plimit									
						DSI = 0 (Body-worn&Sensor Off)		DSI = 1 (Proximity sensor On)		DSI = 2 (Head-RCV On)		DSI = 3 (Hotspot)		DSI = 4 (Earjack)	
				Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM850	Main1	Voice	1	**33.70**	**24.67**	**33.70**	**24.67**	**33.70**	**24.67**	**33.70**	**24.67**	**33.70**	**24.67**	**33.70**	**24.67**
		GPRS	1	**33.70**	**24.67**	**33.70**	**24.67**	**33.70**	**24.67**	**33.70**	**24.67**	**33.70**	**24.67**	**33.70**	**24.67**
		GPRS	2	**32.00**	**25.98**	**32.00**	**25.98**	**32.00**	**25.98**	**32.00**	**25.98**	**32.00**	**25.98**	**32.00**	**25.98**
		GPRS	3	**30.00**	**25.74**	**30.00**	**25.74**	**30.00**	**25.74**	**30.00**	**25.74**	**30.00**	**25.74**	**30.00**	**25.74**
		GPRS	4	**27.50**	**24.49**	**27.50**	**24.49**	**27.50**	**24.49**	**27.50**	**24.49**	**27.50**	**24.49**	**27.50**	**24.49**
		EGPRS	1	**27.50**	**18.47**	**27.50**	**18.47**	**27.50**	**18.47**	**27.50**	**18.47**	**27.50**	**18.47**	**27.50**	**18.47**
		EGPRS	2	**25.70**	**19.68**	**25.70**	**19.68**	**25.70**	**19.68**	**25.70**	**19.68**	**25.70**	**19.68**	**25.70**	**19.68**
		EGPRS	3	**23.70**	**19.44**	**23.70**	**19.44**	**23.70**	**19.44**	**23.70**	**19.44**	**23.70**	**19.44**	**23.70**	**19.44**
		EGPRS	4	**22.50**	**19.49**	**22.50**	**19.49**	**22.50**	**19.49**	**22.50**	**19.49**	**22.50**	**19.49**	**22.50**	**19.49**
GSM1900	Main1	Voice	1	**31.00**	**21.97**	**31.00**	**21.97**	**29.00**	**19.97**	**31.00**	**21.97**	**29.00**	**19.97**	**29.00**	**19.97**
		GPRS	1	**31.00**	**21.97**	**31.00**	**21.97**	**29.00**	**19.97**	**31.00**	**21.97**	**29.00**	**19.97**	**29.00**	**19.97**
		GPRS	2	**29.00**	**22.98**	**29.00**	**22.98**	**26.00**	**19.98**	**29.00**	**22.98**	**26.00**	**19.98**	**26.00**	**19.98**
		GPRS	3	**27.00**	**22.74**	**27.00**	**22.74**	**24.20**	**19.94**	**27.00**	**22.74**	**24.20**	**19.94**	**24.20**	**19.94**
		GPRS	4	**25.50**	**22.49**	**25.50**	**22.49**	**23.00**	**19.99**	**25.50**	**22.49**	**23.00**	**19.99**	**23.00**	**19.99**
		EGPRS	1	**26.50**	**17.47**	**26.50**	**17.47**	**26.50**	**17.47**	**26.50**	**17.47**	**26.50**	**17.47**	**26.50**	**17.47**
		EGPRS	2	**24.70**	**18.68**	**24.70**	**18.68**	**24.70**	**18.68**	**24.70**	**18.68**	**24.70**	**18.68**	**24.70**	**18.68**
		EGPRS	3	**22.70**	**18.44**	**22.70**	**18.44**	**22.70**	**18.44**	**22.70**	**18.44**	**22.70**	**18.44**	**22.70**	**18.44**
		EGPRS	4	**21.70**	**18.69**	**21.70**	**18.69**	**21.70**	**18.69**	**21.70**	**18.69**	**21.70**	**18.69**	**21.70**	**18.69**

RF Air interface	Antenna	Mode	Maximum allowed output power (dBm)					
			Pmax	Plimit				
				DSI = 0 (Body-worn & Sensor Off)	DSI = 1 (Proximity sensor On)	DSI = 2 (Head-RCV On)	DSI = 3 (Hotspot)	DSI = 4 (Earjack)
W-CDMA Band II	Main1	R99	**24.00**	**24.00**	**22.00**	**24.00**	**19.00**	**22.00**
		HSDPA	**24.00**	**24.00**	**22.00**	**24.00**	**19.00**	**22.00**
		HSUPA	**24.00**	**24.00**	**22.00**	**24.00**	**19.00**	**22.00**
		DC-HSDPA	**24.00**	**24.00**	**22.00**	**24.00**	**19.00**	**22.00**
W-CDMA Band IV	Main1	R99	**24.00**	**24.00**	**22.00**	**24.00**	**19.00**	**22.00**
		HSDPA	**24.00**	**24.00**	**22.00**	**24.00**	**19.00**	**22.00**
		HSUPA	**24.00**	**24.00**	**22.00**	**24.00**	**19.00**	**22.00**
		DC-HSDPA	**24.00**	**24.00**	**22.00**	**24.00**	**19.00**	**22.00**
W-CDMA Band V	Main1	R99	**25.50**	**25.50**	**25.50**	**25.50**	**25.50**	**25.50**
		HSDPA	**24.50**	**24.50**	**24.50**	**24.50**	**24.50**	**24.50**
		HSUPA	**24.50**	**24.50**	**24.50**	**24.50**	**24.50**	**24.50**
		DC-HSDPA	**24.50**	**24.50**	**24.50**	**24.50**	**24.50**	**24.50**

Note(s):

1. Detail of DSI(Device State Index) conditions, please refer to Sec.6.5.

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RF Air interface	Antenna	Mode	Maximum allowed output power (dBm)					
			Pmax	Plimit				
				DSI = 0 (Body-worn & Sensor Off)	DSI = 1 (Proximity sensor On)	DSI = 2 (Head-RCV On)	DSI = 3 (Hotspot)	DSI = 4 (Earjack)
LTE Band 12	Main 1	QPSK	**25.00**	**25.00**	**25.00**	**25.00**	**25.00**	**25.00**
LTE Band 17	Main 1	QPSK	**25.00**	**25.00**	**25.00**	**25.00**	**25.00**	**25.00**
LTE Band 13	Main 1	QPSK	**25.00**	**25.00**	**25.00**	**25.00**	**25.00**	**25.00**
LTE Band 26	Main 1	QPSK	**25.00**	**25.00**	**25.00**	**25.00**	**25.00**	**25.00**
LTE Band 5	Main 1	QPSK	**25.50**	**25.50**	**25.50**	**25.50**	**25.50**	**25.50**
LTE Band 66	Main 1	QPSK	**24.00**	**24.00**	**21.00**	**24.00**	**20.00**	**21.00**
LTE Band 4	Main 1	QPSK	**24.00**	**24.00**	**21.00**	**24.00**	**20.00**	**21.00**
LTE Band 4	Sub 2	QPSK	**24.00**	**21.00**	**21.00**	**17.50**	**20.00**	**21.00**
LTE Band 25	Main 1	QPSK	**24.00**	**24.00**	**21.00**	**24.00**	**19.00**	**21.00**
LTE Band 2	Main 1	QPSK	**24.00**	**24.00**	**21.00**	**24.00**	**19.00**	**21.00**
LTE Band 41-PC3	Main 2	QPSK	**25.00**	**25.00**	**23.00**	**25.00**	**23.00**	**23.00**
LTE Band 41-PC2	Main 2	QPSK	**26.50**	**26.50**	**25.00**	**26.50**	**25.00**	**25.00**
NR Band n5	Main 1	DFT-s-OFDM QPSK	**25.00**	**25.00**	**25.00**	**25.00**	**25.00**	**25.00**
NR Band n66	Main 1	DFT-s-OFDM QPSK	**24.00**	**24.00**	**21.00**	**24.00**	**20.00**	**21.00**
NR Band n66	Sub 2	DFT-s-OFDM QPSK	**24.00**	**20.00**	**20.00**	**18.00**	**20.00**	**20.00**
NR Band n25	Main 1	DFT-s-OFDM QPSK	**24.00**	**24.00**	**21.00**	**24.00**	**19.00**	**21.00**
NR Band n2	Main 1	DFT-s-OFDM QPSK	**24.00**	**24.00**	**21.00**	**24.00**	**19.00**	**21.00**
NR Band n41-SRS0	Sub 2	DFT-s-OFDM QPSK	**25.00**	**19.00**	**19.00**	**15.00**	**16.00**	**19.00**
NR Band n41-SRS1	Main 2	SRS CW	**22.00**	**16.00**	**16.00**	**13.00**	**13.00**	**16.00**
NR Band n41-SRS2	Sub 1	SRS CW	**20.50**	**16.00**	**16.00**	**13.00**	**13.00**	**16.00**
NR Band n41-SRS3	Main 4	SRS CW	**19.00**	**13.00**	**13.00**	**10.00**	**10.00**	**13.00**
NR Band n77-SRS0	Sub 2	DFT-s-OFDM QPSK	**25.50**	**19.00**	**19.00**	**15.00**	**18.00**	**19.00**
NR Band n77-SRS1	Main 3	SRS CW	**22.50**	**16.00**	**16.00**	**11.00**	**15.00**	**16.00**
NR Band n77-SRS2	Sub 5	SRS CW	**21.50**	**15.00**	**15.00**	**11.00**	**14.00**	**15.00**
NR Band n77-SRS3	Main 4	SRS CW	**22.00**	**15.00**	**15.00**	**11.50**	**14.00**	**15.00**

Note(s):

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

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WLAN Maximum output power – Normal mode / SISO

RF Air interface	Band	SISO Max. RF Output Power (dBm) 2.4G Ant.2 / 5G Ant.1 only						SISO Reduced(RCV) RF Output Power (dBm) 2.4G Ant.2 / 5G Ant.1 only					
		802.11 mode						802.11 mode					
		a	b	g	n	ac	ax	a	b	g	n	ac	ax
WiFi 2.4 GHz	DTS		18 ch12: 9 ch13: 3	17 ch12: 9 ch13: 3	17 ch12: 9 ch13: 3		17 ch12: 9 ch13: 3		14 ch12: 9 ch13: 3	14 ch12: 9 ch13: 3	14 ch12: 9 ch13: 3		14 ch12: 9 ch13: 3
WiFi 5 GHz (BW : 20MHz)	UNII-1 & 2A	16.0						12.0					
	UNII-2C	16.0						12.0					
	UNII-3	16.0						12.0					
	UNII-4	16.0						12.0					

WLAN Maximum output power – Normal mode / MIMO (Ant.1 + Ant.2)

RF Air interface	Band	MIMO Max. RF Output Power (dBm)						MIMO Reduced(RCV) RF Output Power (dBm)					
		802.11 mode						802.11 mode					
		a	b	g	n	ac	ax	a	b	g	n	ac	ax
WiFi 2.4 GHz	DTS		21 ch12: 9 ch13: 3	20 ch12: 9 ch13: 3	20 ch12: 9 ch13: 3		20 ch12: 9 ch13: 3		17 ch12: 9 ch13: 3	17 ch12: 9 ch13: 3	17 ch12: 9 ch13: 3		17 ch12: 9 ch13: 3
WiFi 5 GHz (BW : 20MHz)	UNII-1 & 2A	19.0			19.0	19.0	19.0	15.0			15.0	15.0	15.0
	UNII-2C	19.0			18.0	18.0	18.0	15.0			15.0	15.0	15.0
	UNII-3	19.0			19.0	19.0	19.0	15.0			15.0	15.0	15.0
	UNII-4	19.0			19.0	19.0	19.0	15.0			15.0	15.0	15.0
WiFi 5 GHz (BW : 40MHz)	UNII-1 & 2A				19.0	19.0	19.0				15.0	15.0	15.0
	UNII-2C				19.0	19.0	19.0				15.0	15.0	15.0
	UNII-3				19.0	19.0	19.0				15.0	15.0	15.0
	UNII-4				19.0	19.0	19.0				15.0	15.0	15.0
WiFi 5 GHz (BW : 80MHz)	UNII-1 & 2A					18.0	18.0					15.0	15.0
	UNII-2C					18.0	18.0					15.0	15.0
	UNII-3					18.0	18.0					15.0	15.0
	UNII-4					18.0	18.0					15.0	15.0
WiFi 5 GHz (BW : 160MHz)	UNII-1 & 2A					17.0	17.0					15.0	15.0
	UNII-2C					17.0	17.0					15.0	15.0
	UNII-3 & 4					17.0	17.0					15.0	15.0

Notes:

This device uses an independent fixed level power reduction mechanism for WLAN mode operations during RCV operation. Detailed descriptions of the power reduction mechanism are included in the operational description.

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WLAN Maximum output power – RSDB mode / SISO

RF Air interface	Band	RSDB - SISO Max. RF Output Power (dBm) 2.4G Ant.2 only					
		802.11 mode					
		a	b	g	n	ac	ax
WiFi 2.4 GHz	DTS		5	5	5		5

WLAN Maximum output power – RSDB mode / MIMO (Ant.1 + Ant.2)

RF Air interface	Band	RSDB - MIMO Max. RF Output Power (dBm)					
		802.11 mode					
		a	b	g	n	ac	ax
WiFi 2.4 GHz	DTS		5	5	5		5
WiFi 5 GHz (BW : 20MHz)	UNII-1 & 2A	12.0			12.0	12.0	12.0
	UNII-2C	12.0			12.0	12.0	12.0
	UNII-3	12.0			12.0	12.0	12.0
	UNII-4	12.0			12.0	12.0	12.0
WiFi 5 GHz (BW : 40MHz)	UNII-1 UNII-2A				12.0	12.0	12.0
	UNII-2C				12.0	12.0	12.0
	UNII-3				12.0	12.0	12.0
	UNII-4				12.0	12.0	12.0
WiFi 5 GHz (BW : 80MHz)	UNII-1 & 2A					12.0	12.0
	UNII-2C					12.0	12.0
	UNII-3					12.0	12.0
	UNII-4					12.0	12.0
WiFi 5 GHz (BW : 160MHz)	UNII-1 & 2A					12.0	12.0
	UNII-2C					12.0	12.0
	UNII-3 & 4					12.0	12.0

Bluetooth Maximum output power

RF Air interface	Band	Mode	Max. RF Output Power (dBm)		Reduced(RCV) RF Output Power (dBm)	
			Ant.1	Ant.2	Ant.1	Ant.2
Bluetooth	DSS	BDR	14.0	14.0	12.0	12.5
		EDR	11.0	11.0	11.0	11.0
		BLE-1Mbps	14.5	14.5		
		BLE-2Mbps				

Notes:

This device uses an independent fixed level power reduction mechanism for WLAN mode operations during RCV operation. Detailed descriptions of the power reduction mechanism are included in the operational description.

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6.5. DSI (Device State Index) Scenarios

This device supports multiple DSI Scenarios and Each DSIs operate to each RF exposure Conditions.
Please below table;

RF exposure Conditions	Technologuies Supported	DSI conditions	Description
Head	All WWAN bands	DSI = 2	Next to the ear exposure condition. Handset's Receiver(ear piece) is active during Voice or VoIP call.
Body-worn	All WWAN bands	DSI = 0	Handset are used with body-worn accessories
Hotspot	All WWAN bands	DSI = 3	SAR test requirements for Handset wit wireless router or hotspot mode capabilities.
Product Specific 10-g	All WWAN bands	DSI = 0	Hand use conditions for Handset and proximity sensor is not active.
	All WWAN bands	DSI = 1	Hand use conditions for Handset and proximity sensor is active.
	All WWAN bands	DSI = 4	Connected ear-jack

Note(s):

DSI Scenarios priority: DSI=2 → DSI=3 → DSI=4 → DSI=1 → DSI=0

Product Specific 10g Adjusted SAR Calculation

Wireless technologies	Worst DSI's Maximum tune-up limit (dBm)	DSI = 3 Maximum tune-up limit (dBm)	Pow er Factor	Reported SAR Limit (W/kg)
GSM 1900	22.49	19.99	1.78	0.675
WCDMA Band II	24.00	22.00	1.58	0.757
WCDMA Band IV	24.00	22.00	1.58	0.757
LTE Band 66 / 4 - Main 1	24.00	21.00	2.00	0.601
LTE Band 25 / 2 - Main 1	24.00	21.00	2.00	0.601
LTE Band 41 (PC3)	25.00	23.00	1.58	0.757
NR Band n66 - Main 1	24.00	21.00	2.00	0.601
NR Band n25 - Main 1	24.00	21.00	2.00	0.601

Note(s):

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

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6.6. General LTE SAR Test and Reporting Considerations

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

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General LTE SAR Test and Reporting Considerations (Continued)

Frequency range, Channel Bandwidth, Numbers and Frequencies

Band 25	Frequency range: 1850 - 1915 MHz					
	Channel Bandwidth					
	20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
Low	26140/ 1860	26115/ 1857.5	26090/ 1855	26065/ 1852.5	26055/ 1851.5	26047/ 1850.7
Mid	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5	26365/ 1882.5
High	26590/ 1905	26615/ 1907.5	26640/ 1910	26665/ 1912.5	26675/ 1913.5	26683/ 1914.3

Band 26	Frequency range: 814 - 849 MHz					
	Channel Bandwidth					
	20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
Low		26765/ 821.5	26740/ 819	26715/ 816.5	26705/ 815.5	26697/ 814.7
Mid		26865/ 831.5	26865/ 831.5	26865/ 831.5	26865/ 831.5	26865/ 831.5
High		26965/ 841.5	26990/ 844	27015/ 846.5	27025/ 847.5	27033/ 848.3

Band 41	Frequency range: 2496 - 2690 MHz					
	Channel Bandwidth					
	20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
Low	39750 / 2506.0					
Low-Mid	40185 / 2549.5					
Mid	40620 / 2593.0					
Mid-High	41055 / 2636.5					
High	41490 / 2680.0					

Band 66	Frequency range: 1710 - 1780 MHz					
	Channel Bandwidth					
	20 MHz	15 MHz	10 MHz	5 MHz	3 MHz	1.4 MHz
Low	132072/ 1720	132047/ 1717.5	132022/ 1715	131997/ 1712.5	131987/ 1711.5	131979/ 1710.7
Mid	132322/ 1745	132322/ 1745	132322/ 1745	132322/ 1745	132322/ 1745	132322/ 1745
High	132572/ 1770	132597/ 1772.5	132622/ 1775	132647/ 1777.5	132657/ 1778.5	132665/ 1779.3

LTE transmitter and antenna implementation

Refer to Appendix A.

Maximum power reduction (MPR)

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

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

MPR Built-in by design

The manufacturer MPR values are always within the 3GPP maximum MPR allowance but may not follow the default MPR values.

A-MPR (additional MPR) was disabled during SAR testing

Power reduction

Yes

Spectrum plots for RB configurations

A properly configured base station simulator was used for the SAR and power measurements; therefore, spectrum plots for each RB allocation and offset configuration are not included in the SAR report.

Notes:

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).

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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

<u>Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:</u>
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. Only LTE Band 41 $_{\text{Power Class 2}}$ was used configuration 1 at 43.3% duty cycle for SAR testing.

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

Item	Description													
Frequency range, Channel Bandwidth, Numbers and Frequencies	Band n2	Frequency range: 1850 - 1910 MHz												
		Channel Bandwidth (MHz)												
		100	90	80	70	60	50	40	30	25	20	15	10	5
	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 (MHz)												
		100	90	80	70	60	50	40	30	25	20	15	10	5
	Low										166800 834	166300 831.5	165800 829	165300 826.5
	Mid										167300 836.5	167300 836.5	167300 836.5	167300 836.5
	High										167800 839	168300 841.5	168800 844	169300 846.5
	Band n25	Frequency range: 1850 - 1915 MHz												
		Channel Bandwidth (MHz)												
		100	90	80	70	60	50	40	30	25	20	15	10	5
	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 n41	Frequency range: 2496 - 2690 MHz												
		Channel Bandwidth (MHz)												
		100	90	80	70	60	50	40	30	25	20	15	10	5
	Low	509202 2546.01	508200 2541	507204 2536.02	526202 2631.01	505200 2526	504204 2512.02	503202 2516.01	502200 2511		501204 2506.02	500700 2503.5	500202 2501.01	
	Low-Mid							513468 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							523734 2618.67	526800 2634		527298 2636.49	527550 2637.75	527802 2639.01	
	High	528000 2640	528996 2644.98	529998 2649.99	531000 2655	531996 2659.98	532998 2664.99	534000 2670	534996 2674.98		535998 2679.99	536496 2682.48	537000 2685	
	Band n66	Frequency range: 1710 - 1780 MHz												
		Channel Bandwidth (MHz)												
		100	90	80	70	60	50	40	30	25	20	15	10	5
	Low										344000 1720	343500 1717.5	343000 1715	342500 1712.5
	Mid										349000 1745	349000 1745	349000 1745	349000 1745
	High										354000 1770	354500 1772.5	355000 1775	355500 1777.5
	Band n77-DoD -Lower Band-	Frequency range: 3450 - 3550 MHz												
		Channel Bandwidth (MHz)												
		100	90	80	70	60	50	40	30	25	20	15	10	5
	Low						631668 3475.02	631334 3470.01	631000 3465		630668 3460.02	630500 3457.5	630334 3445.01	
	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	
	High						635000 3525	635332 3529.98	635666 3534.99		636000 3540	636166 3542.49	636322 3544.98	
	Band n77 -Upper Band-	Frequency range: 3700 - 3980 MHz												
		Channel Bandwidth (MHz)												
		100	90	80	70	60	50	40	30	25	20	15	10	5
	Low	650000 3750	649668 3745.02	649334 3740.01	649000 3735	648668 3730.02	648334 3725.01	648000 3720	647668 3715.02		647334 3710.01	647168 3707.52	647000 3705	
	Low-Mid				653666 3804.99	653556 3803.34	652166 3782.49	651200 3768	651000 3765		650800 3762	650700 3760.5	650600 3759	
	Mid-A		656000 3840	656000 3840			656000 3840	654400 3816	654334 3815.01		654266 3813.99	654234 3813.51	654200 3813	
	Mid-B							657600 3864	657666 3864.99		657734 3866.01	657766 3866.49	657800 3867	
	Mid-High				658334 3875.01	658444 3876.66	659834 3897.51	660800 3912	661000 3915		661200 3918	661300 3919.5	661400 3921	
	High	662000 3930	662332 3934.98	662666 3939.99	663000 3945	663332 3949.98	663666 3954.99	664000 3960	664332 3964.98		664666 3969.99	664832 3972.48	665000 3975	

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Item	Description
SCS	NR FDD Bands : 15 kHz, NR TDD Bands : 30 kHz
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 / 13
LTE Anchor Bands for NR Band n41	LTE Band 4 / 12 / 66
LTE Anchor Bands for NR Band n66	LTE Band 2 / 5 / 12 / 13
LTE Anchor Bands for NR Band n77	LTE Band 2 / 5 / 12 / 13 / 25 / 66

Notes:

1. SAR test for NR bands and LTE anchor Bands were performed separately due to limitations in SAR probe calibration factors.
2. NR configurations of SAR test were determined according to Section 5.2 of KDB 941225 D05.

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6.9. Dynamic Antenna tuner testing

This Device applies Qualcomm chipset solution's Dynamic Antenna tuning technology to some 3G / 4G / 5G sub6 bands. (WCDMA Band II/IV/V, LTE B2/B4/B5/B12/B13/B17/B25/B26/B66 and NR Band n2/n5/n25/n66) Dynamic Antenna tuning was tested in accordance with the April 2019 FCC TCBC Workshop notes.

Per 2019, April TCBC Workshop document

- SAR is measured according to required procedures with dynamic tuner active allowing device to automatically tune. Auto-tune state determined by device during normal SAR measurement verified and listed alongside the reported SAR results.
- Additional single point SAR (time-sweep) measurements were evaluated for other tuner states to determine that the other configurations would result in equivalent or lower SAR values.
- Single point measurements performed at the peak SAR location of the highest measured SAR configuration for each combination. SAR probe remains stationary throughout the entire series of single point measurements for each combination.
- Total number tuner states divided evenly among each supported band / air interface and exposure condition combination. If any single point SAR measurement result is > 1.2 W/kg for a band / exposure condition combination set, all supported tuner states are evaluated with single point SAR measurements for the combination. Tuner state is established remotely so that the device is not moved for the entire series of single point SAR measurements for the tuner states in each combination.

The following test procedures were followed to demonstrate that the SAR results in Section 10 represented the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR was measured according to the required FCC SAR test procedures with the dynamic tuning active to allow the device to automatically to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements were evaluated for other tuner states to determine that the other configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence on the antenna characteristics, other impedance matching.

To evaluate all the tuner states, the 144 tuner states were divided among the aggregate band, mode and exposure combinations so that each combination was evaluated for at least 26 tuner states and also so that at least 2 single point SAR measurements were made for every available tuner state. Single point time-sweep measurements were performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination. When the single point SAR or 1g SAR was > 1.2 W/kg for a particular band / mode / exposure condition, point SAR measurements were made for all 144 tuner states.

This Device supports LTE/NR capabilities with overlapping transmission frequency ranges.

LTE Band 2 (1850 MHz – 1910 MHz) is covered by LTE Band 25 (1850 MHz – 1915 MHz)

LTE Band 4 (1710 MHz – 1755 MHz) is covered by LTE Band 66 (1710 MHz – 1780 MHz)

LTE Band 17 (704 MHz – 716 MHz) is covered by LTE Band 12 (699 MHz – 716 MHz)

NR Band n2 (1850 MHz – 1910 MHz) is covered by NR Band n25 (1850 MHz – 1915 MHz)

Each both LTE/NR bands share the same transmission path and signal characteristics. The Evaluation of Dynamic antenna tuner was only evaluated for the band with the larger transmission frequency range. The operational description contains more information about the design and implementation of the dynamic antenna tuning.

Note(s):

All test results are refer to Appendix I "Dynamic Antenna tuner testing".

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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 Bands

Wireless technologies	RF Exposure Conditions	Antenaa	DUT-to-User Separation	Test Position	Antenna-to-edge/surface	SAR Required	Note
WWAN	Head	All 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 Antennas	15 mm	Rear	N/A	Yes	
				Front	N/A	Yes	
	Hotspot	Main 1 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	> 25 mm	No	1
				Edge 2 (Right)	< 25 mm	Yes	
				Edge 3 (Bottom)	< 25 mm	Yes	
				Edge 4 (Left)	< 25 mm	Yes	
	Hotspot	Main 2 & 3 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	> 25 mm	No	1
				Edge 2 (Right)	> 25 mm	No	1
				Edge 3 (Bottom)	< 25 mm	Yes	
				Edge 4 (Left)	< 25 mm	Yes	
	Hotspot	Main 4 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	> 25 mm	No	1
				Edge 2 (Right)	< 25 mm	Yes	
				Edge 3 (Bottom)	< 25 mm	Yes	
				Edge 4 (Left)	> 25 mm	No	1
	Hotspot	Sub 1 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	< 25 mm	Yes	
				Edge 2 (Right)	< 25 mm	Yes	
				Edge 3 (Bottom)	> 25 mm	No	1
				Edge 4 (Left)	> 25 mm	No	1
	Hotspot	Sub 2 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	< 25 mm	Yes	
				Edge 2 (Right)	> 25 mm	No	1
				Edge 3 (Bottom)	> 25 mm	No	1
				Edge 4 (Left)	< 25 mm	Yes	
	Hotspot	Sub 5 Ant.	10 mm	Rear	< 25 mm	Yes	
				Front	< 25 mm	Yes	
				Edge 1 (Top)	> 25 mm	No	1
				Edge 2 (Right)	> 25 mm	No	1
				Edge 3 (Bottom)	> 25 mm	No	1
				Edge 4 (Left)	< 25 mm	Yes	
	Product Specific 10-g	All Main Antennas	0 mm	Rear	Refer to notes 2 & 3		
				Front			
				Edge 1 (Top)			
				Edge 2 (Right)			
				Edge 3 (Bottom)			
				Edge 4 (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.

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WLAN & BT Bands

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

NFC

Wireless technologies	RF Exposure Conditions	Antenaa	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	
				Edge 1 (Top)	> 25 mm	No	1
				Edge 2 (Right)	< 25 mm	Yes	
				Edge 3 (Bottom)	> 25 mm	No	1
				Edge 4 (Left)	< 25 mm	Yes	

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).

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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 (4MHz to 30MHz). 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		Body	
	ε_r	σ (S/m)	ε_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5000	36.2	4.45	49.3	5.07
5100	36.1	4.55	49.1	5.18
5200	36.0	4.66	49.0	5.30
5300	35.9	4.76	48.9	5.42
5400	35.8	4.86	48.7	5.53
5500	35.6	4.96	48.6	5.65
5600	35.5	5.07	48.5	5.77
5700	35.4	5.17	48.3	5.88
5800	35.3	5.27	48.2	6.00

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

IEEE Std 1528-2013

Refer to Table 3 within the IEEE Std 1528-2013

2. Tissue Dielectric Parameters (4MHz to 30MHz)

Target Frequency (MHz)	Head	
	ε_r	σ (S/m)
4	55.0	0.75
13	55.0	0.75
30	55.0	0.75

IEC_IEEE Std 62209-1528 : 2020

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

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Dielectric Property Measurements Results:
SAR 1 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
09/27/2022	Head 5250	e'	36.7100	Relative Permittivity (ε_r):	36.71	35.95	2.11	5
		e''	15.7200	Conductivity (σ):	4.59	4.71	-2.57	5
	Head 5260	e'	36.6800	Relative Permittivity (ε_r):	36.68	35.94	2.06	5
		e''	15.7300	Conductivity (σ):	4.60	4.72	-2.53	5
	Head 5600	e'	36.1800	Relative Permittivity (ε_r):	36.18	35.50	1.92	5
		e''	16.1000	Conductivity (σ):	5.01	5.07	-1.12	5
	Head 5750	e'	35.9400	Relative Permittivity (ε_r):	35.94	35.35	1.67	5
		e''	16.2400	Conductivity (σ):	5.19	5.22	-0.53	5
	Head 5800	e'	35.8300	Relative Permittivity (ε_r):	35.83	35.30	1.50	5
		e''	16.2800	Conductivity (σ):	5.25	5.27	-0.37	5
	Head 5925	e'	35.6500	Relative Permittivity (ε_r):	35.65	35.18	1.35	5
		e''	16.4300	Conductivity (σ):	5.41	5.40	0.21	5
10/18/2022	Head 5250	e'	36.4000	Relative Permittivity (ε_r):	36.40	35.95	1.25	5
		e''	16.3600	Conductivity (σ):	4.78	4.71	1.40	5
	Head 5260	e'	36.3800	Relative Permittivity (ε_r):	36.38	35.94	1.22	5
		e''	16.3300	Conductivity (σ):	4.78	4.72	1.19	5
	Head 5600	e'	35.6600	Relative Permittivity (ε_r):	35.66	35.50	0.45	5
		e''	16.4600	Conductivity (σ):	5.13	5.07	1.09	5
	Head 5750	e'	35.4800	Relative Permittivity (ε_r):	35.48	35.35	0.37	5
		e''	16.5600	Conductivity (σ):	5.29	5.22	1.43	5
	Head 5800	e'	35.4500	Relative Permittivity (ε_r):	35.45	35.30	0.42	5
		e''	16.6100	Conductivity (σ):	5.36	5.27	1.65	5
	Head 5925	e'	35.2300	Relative Permittivity (ε_r):	35.23	35.18	0.16	5
		e''	16.5500	Conductivity (σ):	5.45	5.40	0.95	5
10/22/2022	Head 5250	e'	35.3800	Relative Permittivity (ε_r):	35.38	35.95	-1.59	5
		e''	15.6700	Conductivity (σ):	4.57	4.71	-2.88	5
	Head 5260	e'	35.3700	Relative Permittivity (ε_r):	35.37	35.94	-1.59	5
		e''	15.6800	Conductivity (σ):	4.59	4.72	-2.84	5
	Head 5600	e'	34.8400	Relative Permittivity (ε_r):	34.84	35.50	-1.86	5
		e''	15.8800	Conductivity (σ):	4.94	5.07	-2.47	5
	Head 5750	e'	34.5400	Relative Permittivity (ε_r):	34.54	35.35	-2.29	5
		e''	15.9900	Conductivity (σ):	5.11	5.22	-2.06	5
	Head 5800	e'	34.4800	Relative Permittivity (ε_r):	34.48	35.30	-2.32	5
		e''	16.0500	Conductivity (σ):	5.18	5.27	-1.78	5
	Head 5925	e'	34.2700	Relative Permittivity (ε_r):	34.27	35.18	-2.57	5
		e''	16.1100	Conductivity (σ):	5.31	5.40	-1.74	5
10/23/2022	Head 2450	e'	39.0900	Relative Permittivity (ε_r):	39.09	39.20	-0.28	5
		e''	13.5000	Conductivity (σ):	1.84	1.80	2.17	5
	Head 2400	e'	39.1700	Relative Permittivity (ε_r):	39.17	39.29	-0.29	5
		e''	13.4800	Conductivity (σ):	1.80	1.76	2.46	5
	Head 2480	e'	39.0500	Relative Permittivity (ε_r):	39.05	39.16	-0.28	5
		e''	13.4700	Conductivity (σ):	1.86	1.83	1.39	5

SAR 2 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
10/17/2022	Head 2450	e'	38.1900	Relative Permittivity (ε_r):	38.19	39.20	-2.58	5
		e''	13.1600	Conductivity (σ):	1.79	1.80	-0.40	5
	Head 2400	e'	38.3600	Relative Permittivity (ε_r):	38.36	39.29	-2.36	5
		e''	13.3000	Conductivity (σ):	1.77	1.76	1.09	5
	Head 2480	e'	37.9100	Relative Permittivity (ε_r):	37.91	39.16	-3.19	5
		e''	13.1100	Conductivity (σ):	1.81	1.83	-1.32	5
10/21/2022	Head 2450	e'	40.7100	Relative Permittivity (ε_r):	40.71	39.20	3.85	5
		e''	12.8600	Conductivity (σ):	1.75	1.80	-2.67	5
	Head 2400	e'	40.7900	Relative Permittivity (ε_r):	40.79	39.29	3.83	5
		e''	12.7100	Conductivity (σ):	1.70	1.76	-3.39	5
	Head 2480	e'	40.6600	Relative Permittivity (ε_r):	40.66	39.16	3.83	5
		e''	12.9600	Conductivity (σ):	1.79	1.83	-2.45	5

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SAR 3 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
08/31/2022	Head 1750	e'	40.8800	Relative Permittivity (ε_r):	40.88	40.07	2.02	5
		e''	14.2300	Conductivity (σ):	1.38	1.37	0.96	5
	Head 1710	e'	41.0000	Relative Permittivity (ε_r):	41.00	40.13	2.17	5
		e''	14.3300	Conductivity (σ):	1.36	1.35	1.03	5
	Head 1755	e'	40.8700	Relative Permittivity (ε_r):	40.87	40.06	2.01	5
		e''	14.2200	Conductivity (σ):	1.39	1.37	0.97	5
08/31/2022	Head 1900	e'	40.4400	Relative Permittivity (ε_r):	40.44	40.00	1.10	5
		e''	13.1400	Conductivity (σ):	1.39	1.40	-0.84	5
	Head 1850	e'	40.4900	Relative Permittivity (ε_r):	40.49	40.00	1.23	5
		e''	13.1600	Conductivity (σ):	1.35	1.40	-3.31	5
	Head 1910	e'	40.4400	Relative Permittivity (ε_r):	40.44	40.00	1.10	5
		e''	13.1300	Conductivity (σ):	1.39	1.40	-0.40	5
09/05/2022	Head 1750	e'	39.0300	Relative Permittivity (ε_r):	39.03	40.07	-2.60	5
		e''	14.3900	Conductivity (σ):	1.40	1.37	2.10	5
	Head 1710	e'	39.1300	Relative Permittivity (ε_r):	39.13	40.13	-2.49	5
		e''	14.4900	Conductivity (σ):	1.38	1.35	2.16	5
	Head 1755	e'	39.0200	Relative Permittivity (ε_r):	39.02	40.06	-2.61	5
		e''	14.3700	Conductivity (σ):	1.40	1.37	2.04	5
09/05/2022	Head 1900	e'	38.8800	Relative Permittivity (ε_r):	38.88	40.00	-2.80	5
		e''	13.7800	Conductivity (σ):	1.46	1.40	3.99	5
	Head 1850	e'	38.8500	Relative Permittivity (ε_r):	38.85	40.00	-2.88	5
		e''	13.9700	Conductivity (σ):	1.44	1.40	2.65	5
	Head 1910	e'	38.8900	Relative Permittivity (ε_r):	38.89	40.00	-2.78	5
		e''	13.7500	Conductivity (σ):	1.46	1.40	4.31	5
09/13/2022	Head 2600	e'	40.2200	Relative Permittivity (ε_r):	40.22	39.00	3.13	5
		e''	13.1500	Conductivity (σ):	1.90	1.96	-3.01	5
	Head 2500	e'	40.3600	Relative Permittivity (ε_r):	40.36	39.13	3.13	5
		e''	12.9900	Conductivity (σ):	1.81	1.85	-2.57	5
	Head 2700	e'	40.0500	Relative Permittivity (ε_r):	40.05	38.88	3.02	5
		e''	13.1700	Conductivity (σ):	1.98	2.07	-4.48	5
09/14/2022	Head 1750	e'	40.8000	Relative Permittivity (ε_r):	40.80	40.07	1.82	5
		e''	14.0300	Conductivity (σ):	1.37	1.37	-0.45	5
	Head 1710	e'	40.9100	Relative Permittivity (ε_r):	40.91	40.13	1.95	5
		e''	14.0500	Conductivity (σ):	1.34	1.35	-0.94	5
	Head 1755	e'	40.7800	Relative Permittivity (ε_r):	40.78	40.06	1.79	5
		e''	14.0200	Conductivity (σ):	1.37	1.37	-0.45	5
09/14/2022	Head 2450	e'	40.2600	Relative Permittivity (ε_r):	40.26	39.20	2.70	5
		e''	12.8400	Conductivity (σ):	1.75	1.80	-2.82	5
	Head 2400	e'	40.3300	Relative Permittivity (ε_r):	40.33	39.29	2.66	5
		e''	12.9000	Conductivity (σ):	1.72	1.76	-1.95	5
	Head 2480	e'	40.2200	Relative Permittivity (ε_r):	40.22	39.16	2.71	5
		e''	12.8300	Conductivity (σ):	1.77	1.83	-3.43	5
09/19/2022	Head 2450	e'	38.8600	Relative Permittivity (ε_r):	38.86	39.20	-0.87	5
		e''	13.2800	Conductivity (σ):	1.81	1.80	0.51	5
	Head 2400	e'	38.9200	Relative Permittivity (ε_r):	38.92	39.29	-0.93	5
		e''	13.3300	Conductivity (σ):	1.78	1.76	1.32	5
	Head 2480	e'	38.8400	Relative Permittivity (ε_r):	38.84	39.16	-0.82	5
		e''	13.2500	Conductivity (σ):	1.83	1.83	-0.27	5
10/03/2022	Head 3500	e'	39.2200	Relative Permittivity (ε_r):	39.22	37.90	3.48	5
		e''	15.1500	Conductivity (σ):	2.95	2.91	1.32	5
	Head 3560	e'	39.0600	Relative Permittivity (ε_r):	39.06	37.84	3.22	5
		e''	15.1900	Conductivity (σ):	3.01	2.97	1.16	5
	Head 3600	e'	39.0200	Relative Permittivity (ε_r):	39.02	37.80	3.23	5
		e''	15.2200	Conductivity (σ):	3.05	3.01	1.08	5
	Head 3690	e'	38.8900	Relative Permittivity (ε_r):	38.89	37.71	3.13	5
		e''	15.2400	Conductivity (σ):	3.13	3.11	0.62	5
	Head 3700	e'	38.8500	Relative Permittivity (ε_r):	38.85	37.70	3.05	5
		e''	15.2400	Conductivity (σ):	3.14	3.12	0.56	5

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SAR 3 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
10/03/2022	Head 3600	e'	39.0200	Relative Permittivity (ε_r):	39.02	37.80	3.23	5
		e''	15.2200	Conductivity (σ):	3.05	3.01	1.08	5
	Head 3650	e'	38.9900	Relative Permittivity (ε_r):	38.99	37.75	3.28	5
		e''	15.2300	Conductivity (σ):	3.09	3.07	0.81	5
	Head 3700	e'	38.8500	Relative Permittivity (ε_r):	38.85	37.70	3.05	5
		e''	15.2400	Conductivity (σ):	3.14	3.12	0.56	5
	Head 3750	e'	38.7400	Relative Permittivity (ε_r):	38.74	37.65	2.90	5
		e''	15.2200	Conductivity (σ):	3.17	3.17	0.11	5
	Head 3800	e'	38.5700	Relative Permittivity (ε_r):	38.57	37.60	2.58	5
		e''	15.1900	Conductivity (σ):	3.21	3.22	-0.39	5
10/03/2022	Head 3750	e'	38.7400	Relative Permittivity (ε_r):	38.74	37.65	2.90	5
		e''	15.2200	Conductivity (σ):	3.17	3.17	0.11	5
	Head 3800	e'	38.5700	Relative Permittivity (ε_r):	38.57	37.60	2.58	5
		e''	15.1900	Conductivity (σ):	3.21	3.22	-0.39	5
	Head 3900	e'	38.4900	Relative Permittivity (ε_r):	38.49	37.50	2.64	5
		e''	15.3200	Conductivity (σ):	3.32	3.33	-0.11	5
	Head 3930	e'	38.4400	Relative Permittivity (ε_r):	38.44	37.47	2.59	5
		e''	15.2800	Conductivity (σ):	3.34	3.36	-0.54	5
	Head 3950	e'	38.3700	Relative Permittivity (ε_r):	38.37	37.45	2.46	5
		e''	15.2900	Conductivity (σ):	3.36	3.38	-0.59	5
10/05/2022	Head 2450	e'	39.3700	Relative Permittivity (ε_r):	39.37	39.20	0.43	5
		e''	13.0000	Conductivity (σ):	1.77	1.80	-1.61	5
	Head 2400	e'	39.5400	Relative Permittivity (ε_r):	39.54	39.29	0.65	5
		e''	13.0300	Conductivity (σ):	1.74	1.76	-0.96	5
	Head 2480	e'	39.3000	Relative Permittivity (ε_r):	39.30	39.16	0.36	5
		e''	12.9800	Conductivity (σ):	1.79	1.83	-2.30	5
10/14/2022	Head 3500	e'	39.0100	Relative Permittivity (ε_r):	39.01	37.90	2.93	5
		e''	14.7500	Conductivity (σ):	2.87	2.91	-1.36	5
	Head 3560	e'	38.8400	Relative Permittivity (ε_r):	38.84	37.84	2.64	5
		e''	15.0000	Conductivity (σ):	2.97	2.97	-0.11	5
	Head 3600	e'	38.8300	Relative Permittivity (ε_r):	38.83	37.80	2.72	5
		e''	14.9700	Conductivity (σ):	3.00	3.01	-0.58	5
	Head 3690	e'	38.5700	Relative Permittivity (ε_r):	38.57	37.71	2.28	5
		e''	15.0900	Conductivity (σ):	3.10	3.11	-0.37	5
	Head 3700	e'	38.5700	Relative Permittivity (ε_r):	38.57	37.70	2.31	5
		e''	15.1100	Conductivity (σ):	3.11	3.12	-0.30	5
10/14/2022	Head 3600	e'	38.8300	Relative Permittivity (ε_r):	38.83	37.80	2.72	5
		e''	14.9700	Conductivity (σ):	3.00	3.01	-0.58	5
	Head 3650	e'	38.6500	Relative Permittivity (ε_r):	38.65	37.75	2.38	5
		e''	14.8900	Conductivity (σ):	3.02	3.07	-1.44	5
	Head 3700	e'	38.5700	Relative Permittivity (ε_r):	38.57	37.70	2.31	5
		e''	15.1100	Conductivity (σ):	3.11	3.12	-0.30	5
	Head 3750	e'	38.5200	Relative Permittivity (ε_r):	38.52	37.65	2.31	5
		e''	14.9900	Conductivity (σ):	3.13	3.17	-1.40	5
	Head 3800	e'	38.4200	Relative Permittivity (ε_r):	38.42	37.60	2.18	5
		e''	15.0400	Conductivity (σ):	3.18	3.22	-1.37	5
10/14/2022	Head 3750	e'	38.5200	Relative Permittivity (ε_r):	38.52	37.65	2.31	5
		e''	14.9900	Conductivity (σ):	3.13	3.17	-1.40	5
	Head 3800	e'	38.4200	Relative Permittivity (ε_r):	38.42	37.60	2.18	5
		e''	15.0400	Conductivity (σ):	3.18	3.22	-1.37	5
	Head 3900	e'	38.2200	Relative Permittivity (ε_r):	38.22	37.50	1.92	5
		e''	14.9900	Conductivity (σ):	3.25	3.33	-2.27	5
	Head 3930	e'	38.2500	Relative Permittivity (ε_r):	38.25	37.47	2.08	5
		e''	15.0900	Conductivity (σ):	3.30	3.36	-1.78	5
	Head 3950	e'	38.2300	Relative Permittivity (ε_r):	38.23	37.45	2.08	5
		e''	15.2000	Conductivity (σ):	3.34	3.38	-1.17	5
10/19/2022	Head 1900	e'	41.2500	Relative Permittivity (ε_r):	41.25	40.00	3.13	5
		e''	13.2000	Conductivity (σ):	1.39	1.40	-0.39	5
	Head 1850	e'	41.3100	Relative Permittivity (ε_r):	41.31	40.00	3.28	5
		e''	13.3200	Conductivity (σ):	1.37	1.40	-2.13	5
	Head 1910	e'	41.2500	Relative Permittivity (ε_r):	41.25	40.00	3.13	5
		e''	13.1900	Conductivity (σ):	1.40	1.40	0.06	5

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SAR 3 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
10/23/2022	Head 3500	e'	37.3500	Relative Permittivity (ε_r):	37.35	37.90	-1.45	5
		e''	14.8800	Conductivity (σ):	2.90	2.91	-0.49	5
	Head 3560	e'	37.1500	Relative Permittivity (ε_r):	37.15	37.84	-1.82	5
		e''	14.7700	Conductivity (σ):	2.92	2.97	-1.64	5
	Head 3600	e'	37.0400	Relative Permittivity (ε_r):	37.04	37.80	-2.01	5
		e''	14.9300	Conductivity (σ):	2.99	3.01	-0.84	5
	Head 3690	e'	37.0800	Relative Permittivity (ε_r):	37.08	37.71	-1.67	5
		e''	14.7900	Conductivity (σ):	3.03	3.11	-2.35	5
	Head 3700	e'	36.9800	Relative Permittivity (ε_r):	36.98	37.70	-1.91	5
		e''	14.7900	Conductivity (σ):	3.04	3.12	-2.41	5
10/23/2022	Head 3600	e'	37.0400	Relative Permittivity (ε_r):	37.04	37.80	-2.01	5
		e''	14.9300	Conductivity (σ):	2.99	3.01	-0.84	5
	Head 3650	e'	37.2900	Relative Permittivity (ε_r):	37.29	37.75	-1.22	5
		e''	14.9700	Conductivity (σ):	3.04	3.07	-0.91	5
	Head 3700	e'	36.9800	Relative Permittivity (ε_r):	36.98	37.70	-1.91	5
		e''	14.7900	Conductivity (σ):	3.04	3.12	-2.41	5
	Head 3750	e'	36.7900	Relative Permittivity (ε_r):	36.79	37.65	-2.28	5
		e''	15.1100	Conductivity (σ):	3.15	3.17	-0.61	5
	Head 3800	e'	36.9100	Relative Permittivity (ε_r):	36.91	37.60	-1.84	5
		e''	15.0700	Conductivity (σ):	3.18	3.22	-1.17	5
10/23/2022	Head 3750	e'	36.7900	Relative Permittivity (ε_r):	36.79	37.65	-2.28	5
		e''	15.1100	Conductivity (σ):	3.15	3.17	-0.61	5
	Head 3800	e'	36.9100	Relative Permittivity (ε_r):	36.91	37.60	-1.84	5
		e''	15.0700	Conductivity (σ):	3.18	3.22	-1.17	5
	Head 3900	e'	36.6100	Relative Permittivity (ε_r):	36.61	37.50	-2.37	5
		e''	15.4500	Conductivity (σ):	3.35	3.33	0.73	5
	Head 3930	e'	36.6800	Relative Permittivity (ε_r):	36.68	37.47	-2.11	5
		e''	15.3700	Conductivity (σ):	3.36	3.36	0.04	5
	Head 3950	e'	36.6100	Relative Permittivity (ε_r):	36.61	37.45	-2.24	5
		e''	15.2500	Conductivity (σ):	3.35	3.38	-0.85	5

SAR 4 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
09/05/2022	Head 2600	e'	37.3600	Relative Permittivity (ε_r):	37.36	39.00	-4.21	5
		e''	13.6500	Conductivity (σ):	1.97	1.96	0.68	5
	Head 2500	e'	37.5300	Relative Permittivity (ε_r):	37.53	39.13	-4.10	5
		e''	13.6200	Conductivity (σ):	1.89	1.85	2.16	5
	Head 2700	e'	37.2200	Relative Permittivity (ε_r):	37.22	38.88	-4.26	5
		e''	13.7100	Conductivity (σ):	2.06	2.07	-0.57	5
09/13/2022	Head 1750	e'	41.2900	Relative Permittivity (ε_r):	41.29	40.07	3.04	5
		e''	13.7400	Conductivity (σ):	1.34	1.37	-2.51	5
	Head 1710	e'	41.3500	Relative Permittivity (ε_r):	41.35	40.13	3.04	5
		e''	13.7900	Conductivity (σ):	1.31	1.35	-2.77	5
	Head 1755	e'	41.2800	Relative Permittivity (ε_r):	41.28	40.06	3.03	5
		e''	13.7400	Conductivity (σ):	1.34	1.37	-2.44	5
09/13/2022	Head 1900	e'	41.0800	Relative Permittivity (ε_r):	41.08	40.00	2.70	5
		e''	13.3200	Conductivity (σ):	1.41	1.40	0.51	5
	Head 1850	e'	41.1400	Relative Permittivity (ε_r):	41.14	40.00	2.85	5
		e''	13.4600	Conductivity (σ):	1.38	1.40	-1.10	5
	Head 1910	e'	41.0800	Relative Permittivity (ε_r):	41.08	40.00	2.70	5
		e''	13.3000	Conductivity (σ):	1.41	1.40	0.89	5
09/19/2022	Head 1750	e'	41.2300	Relative Permittivity (ε_r):	41.23	40.07	2.89	5
		e''	13.6800	Conductivity (σ):	1.33	1.37	-2.94	5
	Head 1710	e'	41.3200	Relative Permittivity (ε_r):	41.32	40.13	2.97	5
		e''	13.8600	Conductivity (σ):	1.32	1.35	-2.28	5
	Head 1755	e'	41.2200	Relative Permittivity (ε_r):	41.22	40.06	2.88	5
		e''	13.6600	Conductivity (σ):	1.33	1.37	-3.00	5

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SAR 4 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
09/23/2022	Head 1750	e'	40.5200	Relative Permittivity (ε_r):	40.52	40.07	1.12	5
		e''	13.7400	Conductivity (σ):	1.34	1.37	-2.51	5
	Head 1710	e'	40.6100	Relative Permittivity (ε_r):	40.61	40.13	1.20	5
		e''	13.8100	Conductivity (σ):	1.31	1.35	-2.63	5
	Head 1755	e'	40.5100	Relative Permittivity (ε_r):	40.51	40.06	1.11	5
		e''	13.7300	Conductivity (σ):	1.34	1.37	-2.51	5
09/26/2022	Head 1750	e'	40.0100	Relative Permittivity (ε_r):	40.01	40.07	-0.15	5
		e''	14.3500	Conductivity (σ):	1.40	1.37	1.82	5
	Head 1710	e'	40.1200	Relative Permittivity (ε_r):	40.12	40.13	-0.02	5
		e''	14.3500	Conductivity (σ):	1.36	1.35	1.18	5
	Head 1755	e'	40.0000	Relative Permittivity (ε_r):	40.00	40.06	-0.16	5
		e''	14.3400	Conductivity (σ):	1.40	1.37	1.82	5
09/27/2022	Head 5250	e'	36.6900	Relative Permittivity (ε_r):	36.69	35.95	2.06	5
		e''	15.3900	Conductivity (σ):	4.49	4.71	-4.62	5
	Head 5260	e'	36.6700	Relative Permittivity (ε_r):	36.67	35.94	2.03	5
		e''	15.4000	Conductivity (σ):	4.50	4.72	-4.57	5
	Head 5600	e'	36.1100	Relative Permittivity (ε_r):	36.11	35.50	1.72	5
		e''	15.7000	Conductivity (σ):	4.89	5.07	-3.58	5
	Head 5750	e'	35.8900	Relative Permittivity (ε_r):	35.89	35.35	1.53	5
		e''	15.8700	Conductivity (σ):	5.07	5.22	-2.80	5
	Head 5800	e'	35.7700	Relative Permittivity (ε_r):	35.77	35.30	1.33	5
		e''	15.9400	Conductivity (σ):	5.14	5.27	-2.46	5
	Head 5925	e'	35.6200	Relative Permittivity (ε_r):	35.62	35.18	1.27	5
		e''	16.0300	Conductivity (σ):	5.28	5.40	-2.23	5
10/03/2022	Head 5250	e'	36.7800	Relative Permittivity (ε_r):	36.78	35.95	2.31	5
		e''	15.8000	Conductivity (σ):	4.61	4.71	-2.07	5
	Head 5260	e'	36.7700	Relative Permittivity (ε_r):	36.77	35.94	2.31	5
		e''	15.8000	Conductivity (σ):	4.62	4.72	-2.10	5
	Head 5600	e'	36.2600	Relative Permittivity (ε_r):	36.26	35.50	2.14	5
		e''	15.9300	Conductivity (σ):	4.96	5.07	-2.16	5
	Head 5800	e'	35.9800	Relative Permittivity (ε_r):	35.98	35.30	1.93	5
		e''	16.0900	Conductivity (σ):	5.19	5.27	-1.54	5
	Head 5825	e'	35.9700	Relative Permittivity (ε_r):	35.97	35.28	1.97	5
		e''	16.1100	Conductivity (σ):	5.22	5.30	-1.48	5
	Head 5925	e'	35.7500	Relative Permittivity (ε_r):	35.75	35.18	1.63	5
		e''	16.1100	Conductivity (σ):	5.31	5.40	-1.74	5
10/04/2022	Head 1750	e'	39.5100	Relative Permittivity (ε_r):	39.51	40.07	-1.40	5
		e''	14.0200	Conductivity (σ):	1.36	1.37	-0.53	5
	Head 1710	e'	39.6600	Relative Permittivity (ε_r):	39.66	40.13	-1.17	5
		e''	14.1800	Conductivity (σ):	1.35	1.35	-0.02	5
	Head 1755	e'	39.4900	Relative Permittivity (ε_r):	39.49	40.06	-1.43	5
		e''	14.0000	Conductivity (σ):	1.37	1.37	-0.59	5

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SAR 5 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
08/31/2022	Head 835	e'	43.1900	Relative Permittivity (ε_r):	43.19	41.50	4.07	5
		e''	19.1200	Conductivity (σ):	0.89	0.90	-1.37	5
	Head 820	e'	43.1900	Relative Permittivity (ε_r):	43.19	41.57	3.90	5
		e''	19.3700	Conductivity (σ):	0.88	0.90	-1.68	5
	Head 850	e'	43.2200	Relative Permittivity (ε_r):	43.22	41.50	4.14	5
		e''	18.8800	Conductivity (σ):	0.89	0.92	-2.60	5
09/05/2022	Head 750	e'	41.3200	Relative Permittivity (ε_r):	41.32	41.90	-1.38	5
		e''	21.9600	Conductivity (σ):	0.92	0.89	2.90	5
	Head 700	e'	41.3700	Relative Permittivity (ε_r):	41.37	42.17	-1.89	5
		e''	23.2100	Conductivity (σ):	0.90	0.89	1.89	5
	Head 790	e'	41.2800	Relative Permittivity (ε_r):	41.28	41.71	-1.04	5
		e''	21.0700	Conductivity (σ):	0.93	0.89	3.45	5
09/05/2022	Head 835	e'	41.2300	Relative Permittivity (ε_r):	41.23	41.50	-0.65	5
		e''	20.1700	Conductivity (σ):	0.94	0.90	4.05	5
	Head 820	e'	41.2500	Relative Permittivity (ε_r):	41.25	41.57	-0.77	5
		e''	20.4600	Conductivity (σ):	0.93	0.90	3.86	5
	Head 850	e'	41.2200	Relative Permittivity (ε_r):	41.22	41.50	-0.67	5
		e''	19.8800	Conductivity (σ):	0.94	0.92	2.56	5
09/13/2022	Head 750	e'	42.1300	Relative Permittivity (ε_r):	42.13	41.90	0.55	5
		e''	21.1400	Conductivity (σ):	0.88	0.89	-0.95	5
	Head 700	e'	42.2100	Relative Permittivity (ε_r):	42.21	42.17	0.10	5
		e''	22.1400	Conductivity (σ):	0.86	0.89	-2.81	5
	Head 790	e'	42.0100	Relative Permittivity (ε_r):	42.01	41.71	0.71	5
		e''	20.3700	Conductivity (σ):	0.89	0.89	0.01	5
09/13/2022	Head 835	e'	41.8700	Relative Permittivity (ε_r):	41.87	41.50	0.89	5
		e''	19.5900	Conductivity (σ):	0.91	0.90	1.06	5
	Head 820	e'	41.9000	Relative Permittivity (ε_r):	41.90	41.57	0.79	5
		e''	19.7600	Conductivity (σ):	0.90	0.90	0.30	5
	Head 850	e'	41.8300	Relative Permittivity (ε_r):	41.83	41.50	0.80	5
		e''	19.3400	Conductivity (σ):	0.91	0.92	-0.23	5
09/20/2022	Head 3500	e'	37.8000	Relative Permittivity (ε_r):	37.80	37.90	-0.26	5
		e''	14.6900	Conductivity (σ):	2.86	2.91	-1.76	5
	Head 3560	e'	37.8200	Relative Permittivity (ε_r):	37.82	37.84	-0.05	5
		e''	14.7800	Conductivity (σ):	2.93	2.97	-1.57	5
	Head 3600	e'	37.7800	Relative Permittivity (ε_r):	37.78	37.80	-0.05	5
		e''	14.8200	Conductivity (σ):	2.97	3.01	-1.57	5
	Head 3690	e'	37.4400	Relative Permittivity (ε_r):	37.44	37.71	-0.72	5
		e''	14.9200	Conductivity (σ):	3.06	3.11	-1.49	5
	Head 3700	e'	37.4100	Relative Permittivity (ε_r):	37.41	37.70	-0.77	5
		e''	14.9200	Conductivity (σ):	3.07	3.12	-1.56	5
09/20/2022	Head 3600	e'	37.7800	Relative Permittivity (ε_r):	37.78	37.80	-0.05	5
		e''	14.8600	Conductivity (σ):	2.97	3.01	-1.31	5
	Head 3650	e'	37.6200	Relative Permittivity (ε_r):	37.62	37.75	-0.34	5
		e''	14.9000	Conductivity (σ):	3.02	3.07	-1.37	5
	Head 3700	e'	37.4100	Relative Permittivity (ε_r):	37.41	37.70	-0.77	5
		e''	14.9200	Conductivity (σ):	3.07	3.12	-1.56	5
	Head 3750	e'	37.2600	Relative Permittivity (ε_r):	37.26	37.65	-1.04	5
		e''	14.9300	Conductivity (σ):	3.11	3.17	-1.80	5
	Head 3800	e'	37.1000	Relative Permittivity (ε_r):	37.10	37.60	-1.33	5
		e''	14.9800	Conductivity (σ):	3.17	3.22	-1.76	5
09/20/2022	Head 3750	e'	37.2600	Relative Permittivity (ε_r):	37.26	37.65	-1.04	5
		e''	14.9300	Conductivity (σ):	3.11	3.17	-1.80	5
	Head 3800	e'	37.1000	Relative Permittivity (ε_r):	37.10	37.60	-1.33	5
		e''	14.9800	Conductivity (σ):	3.17	3.22	-1.76	5
	Head 3900	e'	36.9600	Relative Permittivity (ε_r):	36.96	37.50	-1.44	5
		e''	15.0900	Conductivity (σ):	3.27	3.33	-1.61	5
	Head 3930	e'	37.0200	Relative Permittivity (ε_r):	37.02	37.47	-1.20	5
		e''	15.1700	Conductivity (σ):	3.31	3.36	-1.26	5
	Head 3950	e'	37.0300	Relative Permittivity (ε_r):	37.03	37.45	-1.12	5
		e''	15.2200	Conductivity (σ):	3.34	3.38	-1.04	5

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SAR 5 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
09/26/2022	Head 3500	e'	39.1500	Relative Permittivity (ε_r):	39.15	37.90	3.30	5
		e''	14.7700	Conductivity (σ):	2.87	2.91	-1.22	5
	Head 3560	e'	39.0600	Relative Permittivity (ε_r):	39.06	37.84	3.22	5
		e''	14.9200	Conductivity (σ):	2.95	2.97	-0.64	5
	Head 3600	e'	39.0600	Relative Permittivity (ε_r):	39.06	37.80	3.33	5
		e''	14.9300	Conductivity (σ):	2.99	3.01	-0.84	5
	Head 3690	e'	38.8800	Relative Permittivity (ε_r):	38.88	37.71	3.10	5
		e''	15.0200	Conductivity (σ):	3.08	3.11	-0.83	5
	Head 3700	e'	38.8700	Relative Permittivity (ε_r):	38.87	37.70	3.10	5
		e''	15.0400	Conductivity (σ):	3.09	3.12	-0.76	5
09/26/2022	Head 3600	e'	39.0600	Relative Permittivity (ε_r):	39.06	37.80	3.33	5
		e''	14.9300	Conductivity (σ):	2.99	3.01	-0.84	5
	Head 3650	e'	38.9800	Relative Permittivity (ε_r):	38.98	37.75	3.26	5
		e''	14.9600	Conductivity (σ):	3.04	3.07	-0.97	5
	Head 3700	e'	38.8700	Relative Permittivity (ε_r):	38.87	37.70	3.10	5
		e''	15.0400	Conductivity (σ):	3.09	3.12	-0.76	5
	Head 3750	e'	38.7900	Relative Permittivity (ε_r):	38.79	37.65	3.03	5
		e''	15.1200	Conductivity (σ):	3.15	3.17	-0.55	5
	Head 3800	e'	38.7100	Relative Permittivity (ε_r):	38.71	37.60	2.95	5
		e''	15.2000	Conductivity (σ):	3.21	3.22	-0.32	5
09/26/2022	Head 3750	e'	38.7900	Relative Permittivity (ε_r):	38.79	37.65	3.03	5
		e''	15.1200	Conductivity (σ):	3.15	3.17	-0.55	5
	Head 3800	e'	38.7100	Relative Permittivity (ε_r):	38.71	37.60	2.95	5
		e''	15.2000	Conductivity (σ):	3.21	3.22	-0.32	5
	Head 3900	e'	38.5400	Relative Permittivity (ε_r):	38.54	37.50	2.77	5
		e''	15.3900	Conductivity (σ):	3.34	3.33	0.34	5
	Head 3930	e'	38.4700	Relative Permittivity (ε_r):	38.47	37.47	2.67	5
		e''	15.4600	Conductivity (σ):	3.38	3.36	0.63	5
	Head 3950	e'	38.4800	Relative Permittivity (ε_r):	38.48	37.45	2.75	5
		e''	15.5200	Conductivity (σ):	3.41	3.38	0.91	5
09/27/2022	Head 2450	e'	38.1300	Relative Permittivity (ε_r):	38.13	39.20	-2.73	5
		e''	13.5200	Conductivity (σ):	1.84	1.80	2.32	5
	Head 2400	e'	38.2000	Relative Permittivity (ε_r):	38.20	39.29	-2.76	5
		e''	13.5200	Conductivity (σ):	1.80	1.76	2.76	5
	Head 2480	e'	38.0800	Relative Permittivity (ε_r):	38.08	39.16	-2.76	5
		e''	13.5100	Conductivity (σ):	1.86	1.83	1.69	5
09/30/2022	Head 3500	e'	38.2300	Relative Permittivity (ε_r):	38.23	37.90	0.87	5
		e''	14.8400	Conductivity (σ):	2.89	2.91	-0.76	5
	Head 3560	e'	38.1600	Relative Permittivity (ε_r):	38.16	37.84	0.85	5
		e''	14.9500	Conductivity (σ):	2.96	2.97	-0.44	5
	Head 3600	e'	38.0500	Relative Permittivity (ε_r):	38.05	37.80	0.66	5
		e''	14.9600	Conductivity (σ):	2.99	3.01	-0.64	5
	Head 3690	e'	37.8400	Relative Permittivity (ε_r):	37.84	37.71	0.34	5
		e''	15.0300	Conductivity (σ):	3.08	3.11	-0.77	5
	Head 3700	e'	37.8200	Relative Permittivity (ε_r):	37.82	37.70	0.32	5
		e''	15.0400	Conductivity (σ):	3.09	3.12	-0.76	5
09/30/2022	Head 3600	e'	38.0500	Relative Permittivity (ε_r):	38.05	37.80	0.66	5
		e''	14.9600	Conductivity (σ):	2.99	3.01	-0.64	5
	Head 3650	e'	37.9100	Relative Permittivity (ε_r):	37.91	37.75	0.42	5
		e''	14.9700	Conductivity (σ):	3.04	3.07	-0.91	5
	Head 3700	e'	37.8200	Relative Permittivity (ε_r):	37.82	37.70	0.32	5
		e''	15.0400	Conductivity (σ):	3.09	3.12	-0.76	5
	Head 3750	e'	37.6500	Relative Permittivity (ε_r):	37.65	37.65	0.00	5
		e''	15.0300	Conductivity (σ):	3.13	3.17	-1.14	5
	Head 3800	e'	37.5400	Relative Permittivity (ε_r):	37.54	37.60	-0.16	5
		e''	15.1100	Conductivity (σ):	3.19	3.22	-0.91	5

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SAR 5 Room (Continued)

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
09/30/2022	Head 3750	e'	37.6500	Relative Permittivity (ε_r):	37.65	37.65	0.00	5
		e''	15.0300	Conductivity (σ):	3.13	3.17	-1.14	5
	Head 3800	e'	37.5400	Relative Permittivity (ε_r):	37.54	37.60	-0.16	5
		e''	15.1100	Conductivity (σ):	3.19	3.22	-0.91	5
	Head 3900	e'	37.5200	Relative Permittivity (ε_r):	37.52	37.50	0.05	5
		e''	15.2000	Conductivity (σ):	3.30	3.33	-0.90	5
	Head 3930	e'	37.4700	Relative Permittivity (ε_r):	37.47	37.47	0.00	5
		e''	15.2800	Conductivity (σ):	3.34	3.36	-0.54	5
	Head 3950	e'	37.4500	Relative Permittivity (ε_r):	37.45	37.45	0.00	5
		e''	15.3600	Conductivity (σ):	3.37	3.38	-0.13	5
10/03/2022	Head 2600	e'	38.4700	Relative Permittivity (ε_r):	38.47	39.00	-1.36	5
		e''	13.4100	Conductivity (σ):	1.94	1.96	-1.09	5
	Head 2500	e'	38.7000	Relative Permittivity (ε_r):	38.70	39.13	-1.11	5
		e''	13.3400	Conductivity (σ):	1.85	1.85	0.06	5
	Head 2700	e'	38.2300	Relative Permittivity (ε_r):	38.23	38.88	-1.66	5
		e''	13.4600	Conductivity (σ):	2.02	2.07	-2.38	5
10/12/2022	Head 2450	e'	37.7200	Relative Permittivity (ε_r):	37.72	39.20	-3.78	5
		e''	12.6900	Conductivity (σ):	1.73	1.80	-3.96	5
	Head 2400	e'	37.7600	Relative Permittivity (ε_r):	37.76	39.29	-3.88	5
		e''	12.7000	Conductivity (σ):	1.69	1.76	-3.47	5
	Head 2480	e'	37.6900	Relative Permittivity (ε_r):	37.69	39.16	-3.75	5
		e''	12.6400	Conductivity (σ):	1.74	1.83	-4.86	5

SAR 6 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
10/19/2022	Head 1900	e'	38.4600	Relative Permittivity (ε_r):	38.46	40.00	-3.85	5
		e''	13.5900	Conductivity (σ):	1.44	1.40	2.55	5
	Head 1850	e'	38.1300	Relative Permittivity (ε_r):	38.13	40.00	-4.67	5
		e''	13.4200	Conductivity (σ):	1.38	1.40	-1.40	5
	Head 1910	e'	38.5800	Relative Permittivity (ε_r):	38.58	40.00	-3.55	5
		e''	13.6200	Conductivity (σ):	1.45	1.40	3.32	5

SAR 7 Room

Date	Freq. (MHz)	Liquid Parameters			Measured	Target	Delta (%)	Limit ±(%)
09/13/2022	Head 13	e'	53.95	Relative Permittivity (ε_r):	53.95	55.00	-1.91	5
		e''	994.04	Conductivity (σ):	0.72	0.75	-4.20	5
	Head 12	e'	54.01	Relative Permittivity (ε_r):	54.01	55.00	-1.80	5
		e''	1077.48	Conductivity (σ):	0.72	0.75	-4.14	5
	Head 14	e'	53.82	Relative Permittivity (ε_r):	53.82	55.00	-2.15	5
		e''	921.05	Conductivity (σ):	0.72	0.75	-4.40	5
09/14/2022	Head 750	e'	42.6000	Relative Permittivity (ε_r):	42.60	41.90	1.67	5
		e''	20.8000	Conductivity (σ):	0.87	0.89	-2.54	5
	Head 700	e'	42.7200	Relative Permittivity (ε_r):	42.72	42.17	1.31	5
		e''	21.9800	Conductivity (σ):	0.86	0.89	-3.51	5
	Head 790	e'	42.4300	Relative Permittivity (ε_r):	42.43	41.71	1.72	5
		e''	19.9500	Conductivity (σ):	0.88	0.89	-2.05	5
09/21/2022	Head 2600	e'	38.1100	Relative Permittivity (ε_r):	38.11	39.00	-2.28	5
		e''	13.1800	Conductivity (σ):	1.91	1.96	-2.79	5
	Head 2500	e'	38.2400	Relative Permittivity (ε_r):	38.24	39.13	-2.28	5
		e''	13.1700	Conductivity (σ):	1.83	1.85	-1.22	5
	Head 2700	e'	37.9300	Relative Permittivity (ε_r):	37.93	38.88	-2.43	5
		e''	13.2100	Conductivity (σ):	1.98	2.07	-4.19	5
09/26/2022	Head 2600	e'	39.6800	Relative Permittivity (ε_r):	39.68	39.00	1.74	5
		e''	13.4100	Conductivity (σ):	1.94	1.96	-1.09	5
	Head 2500	e'	39.4900	Relative Permittivity (ε_r):	39.49	39.13	0.91	5
		e''	13.4200	Conductivity (σ):	1.87	1.85	0.66	5
	Head 2700	e'	39.1400	Relative Permittivity (ε_r):	39.14	38.88	0.68	5
		e''	13.4300	Conductivity (σ):	2.02	2.07	-2.60	5

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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 4MHz to 30MHz 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 (4MHz to 30MHz):

- 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.

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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	2/24/2023	1g	8.58
				10g	5.65
D750V3	1205	4/27/2021	4/27/2023	1g	8.66
				10g	5.65
D835V2	4d194	3/24/2022	3/24/2023	1g	9.77
				10g	6.39
D1750V2	1125	2/24/2022	2/24/2023	1g	36.80
				10g	19.40
D1900V2	5d190	11/24/2020	11/24/2022	1g	40.10
				10g	20.70
D1900V2	5d199	3/25/2022	3/25/2023	1g	39.40
				10g	20.50
D2450V2	960	3/24/2022	3/24/2023	1g	51.90
				10g	24.00
D2600V2	1097	9/29/2021	9/29/2023	1g	57.10
				10g	25.50
D3500V2	1121	4/21/2021	4/21/2023	1g	66.30
				10g	25.00
D3700V2	1036	5/21/2021	5/21/2023	1g	67.90
				10g	24.30
D3900V2	1069	4/21/2021	4/21/2023	1g	70.10
				10g	24.30
D5GHzV2 (5250)	1209	11/24/2021	11/24/2023	1g	78.00
				10g	22.40
D5GHzV2 (5600)	1209	11/24/2021	11/24/2023	1g	80.90
				10g	23.10
D5GHzV2 (5800)	1209	11/24/2021	11/24/2023	1g	79.00
				10g	22.40
CLA-13	1015	8/23/2022	8/23/2023	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

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System Check Results

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

SAR 1 Room

Date Tested	System Dipole		T.S. Liquid		Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.
	Type	Serial #			Zoom Scan to 100 mW	Normalize to 1 W			
9-27-2022	D5GHzV2 (5250)	1209	Head	1g	7.77	77.7	78.00	-0.38	
				10g	2.27	22.7	22.40	1.34	
9-27-2022	D5GHzV2 (5600)	1209	Head	1g	8.55	85.5	80.90	5.69	
				10g	2.47	24.7	23.10	6.93	
9-27-2022	D5GHzV2 (5800)	1209	Head	1g	8.30	83.0	79.00	5.06	
				10g	2.40	24.0	22.40	7.14	
10-18-2022	D5GHzV2 (5250)	1209	Head	1g	8.02	80.2	78.00	2.82	
				10g	2.37	23.7	22.40	5.80	
10-18-2022	D5GHzV2 (5600)	1209	Head	1g	8.15	81.5	80.90	0.74	
				10g	2.37	23.7	23.10	2.60	
10-18-2022	D5GHzV2 (5800)	1209	Head	1g	8.23	82.3	79.00	4.18	
				10g	2.41	24.1	22.40	7.59	
10-22-2022	D5GHzV2 (5600)	1209	Head	1g	7.52	75.2	80.90	-7.05	1
				10g	2.19	21.9	23.10	-5.19	
10-22-2022	D5GHzV2 (5800)	1209	Head	1g	8.35	83.5	79.00	5.70	
				10g	2.44	24.4	22.40	8.93	
10-23-2022	D2450V2	960	Head	1g	5.16	51.6	51.90	-0.58	
				10g	2.43	24.3	24.00	1.25	

SAR 2 Room

Date Tested	System Dipole		T.S. Liquid		Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.
	Type	Serial #			Zoom Scan to 100 mW	Normalize to 1 W			
10-17-2022	D2450V2	960	Head	1g	4.94	49.4	51.90	-4.82	
				10g	2.31	23.1	24.00	-3.75	
10-21-2022	D2450V2	960	Head	1g	4.90	49.0	51.90	-5.59	2
				10g	2.31	23.1	24.00	-3.75	

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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			
8-31-2022	D1750V2	1125	Head	1g	3.58	35.8	36.80	-2.72	
				10g	1.92	19.2	19.40	-1.03	
8-31-2022	D1900V2	5d190	Head	1g	4.04	40.4	40.10	0.75	
				10g	2.12	21.2	20.70	2.42	
9-5-2022	D1750V2	1125	Head	1g	3.55	35.5	36.80	-3.53	
				10g	1.88	18.8	19.40	-3.09	
9-5-2022	D1900V2	5d190	Head	1g	3.85	38.5	40.10	-3.99	
				10g	1.99	19.9	20.70	-3.86	
9-13-2022	D2600V2	1097	Head	1g	5.37	53.7	57.10	-5.95	
				10g	2.45	24.5	25.50	-3.92	
9-14-2022	D2450V2	960	Head	1g	4.81	48.1	51.90	-7.32	
				10g	2.25	22.5	24.00	-6.25	
9-14-2022	D1750V2	1125	Head	1g	3.39	33.9	36.80	-7.88	
				10g	1.82	18.2	19.40	-6.19	
9-19-2022	D2450V2	960	Head	1g	5.24	52.4	51.90	0.96	
				10g	2.51	25.1	24.00	4.58	
10-3-2022	D3500V2	1121	Head	1g	6.16	61.6	66.30	-7.09	3
				10g	2.35	23.5	25.00	-6.00	
10-3-2022	D3700V2	1036	Head	1g	6.43	64.3	67.90	-5.30	
				10g	2.36	23.6	24.30	-2.88	
10-3-2022	D3900V2	1069	Head	1g	6.80	68.0	70.10	-3.00	
				10g	2.40	24.0	24.30	-1.23	
10-5-2022	D2450V2	960	Head	1g	5.34	53.4	51.90	2.89	
				10g	2.46	24.6	24.00	2.50	
10-14-2022	D3500V2	1121	Head	1g	6.22	62.2	66.30	-6.18	
				10g	2.38	23.8	25.00	-4.80	
10-14-2022	D3700V2	1036	Head	1g	6.63	66.3	67.90	-2.36	
				10g	2.43	24.3	24.30	0.00	
10-14-2022	D3900V2	1069	Head	1g	7.04	70.4	70.10	0.43	
				10g	2.59	25.9	24.30	6.58	
10-19-2022	D1900V2	5d199	Head	1g	3.73	37.3	39.40	-5.33	4
				10g	1.98	19.8	20.50	-3.41	
10-23-2022	D3500V2	1121	Head	1g	6.62	66.2	66.30	-0.15	
				10g	2.64	26.4	25.00	5.60	
10-23-2022	D3700V2	1036	Head	1g	6.89	66.3	67.90	-2.36	
				10g	2.64	24.3	24.30	0.00	
10-23-2022	D3900V2	1069	Head	1g	6.76	70.4	70.10	0.43	
				10g	2.50	25.9	24.30	6.58	

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SAR 4 Room

Date Tested	System Dipole		T.S. Liquid		Measured Results		Target (Ref. Value)	Delta ±10 %	Plot No.
	Type	Serial #			Zoom Scan to 100 mW	Normalize to 1 W			
9-5-2022	D2600V2	1097	Head	1g	5.54	55.4	57.10	-2.98	
				10g	2.49	24.9	25.50	-2.35	
9-13-2022	D1750V2	1125	Head	1g	3.43	34.3	36.80	-6.79	
				10g	1.81	18.1	19.40	-6.70	
9-13-2022	D1900V2	5d190	Head	1g	3.82	38.2	40.10	-4.74	5
				10g	1.95	19.5	20.70	-5.80	
9-19-2022	D1750V2	1125	Head	1g	3.45	34.5	36.80	-6.25	
				10g	1.81	18.1	19.40	-6.70	
9-23-2022	D1750V2	1125	Head	1g	3.55	35.5	36.80	-3.53	
				10g	1.87	18.7	19.40	-3.61	
9-26-2022	D1750V2	1125	Head	1g	3.44	34.4	36.80	-6.52	
				10g	1.81	18.1	19.40	-6.70	
9-27-2022	D5GHzV2 (5250)	1209	Head	1g	8.02	80.2	78.00	2.82	
				10g	2.30	23.0	22.40	2.68	
9-27-2022	D5GHzV2 (5600)	1209	Head	1g	8.63	86.3	80.90	6.67	
				10g	2.45	24.5	23.10	6.06	
9-27-2022	D5GHzV2 (5800)	1209	Head	1g	8.29	82.9	79.00	4.94	
				10g	2.36	23.6	22.40	5.36	
10-3-2022	D5GHzV2 (5250)	1209	Head	1g	7.98	79.8	78.00	2.31	
				10g	2.28	22.8	22.40	1.79	
10-3-2022	D5GHzV2 (5600)	1209	Head	1g	8.65	86.5	80.90	6.92	
				10g	2.45	24.5	23.10	6.06	
10-3-2022	D5GHzV2 (5800)	1209	Head	1g	8.54	85.4	79.00	8.10	6
				10g	2.42	24.2	22.40	8.04	
10-4-2022	D1750V2	1125	Head	1g	3.38	33.8	36.80	-8.15	7
				10g	1.78	17.8	19.40	-8.25	

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			
8-31-2022	D835V2	4d194	Head	1g	0.98	9.8	9.77	0.20	
				10g	0.66	6.6	6.39	3.13	
9-5-2022	D750V3	1205	Head	1g	0.86	8.6	8.66	-1.04	
				10g	0.56	5.6	5.65	-0.18	
9-5-2022	D835V2	4d194	Head	1g	0.98	9.8	9.77	-0.10	
				10g	0.65	6.5	6.39	1.41	
9-13-2022	D750V3	1205	Head	1g	0.91	9.1	8.66	4.85	
				10g	0.61	6.1	5.65	8.50	
9-13-2022	D835V2	4d194	Head	1g	1.02	10.2	9.77	4.40	8
				10g	0.68	6.8	6.39	7.04	
9-20-2022	D3500V2	1121	Head	1g	6.41	64.1	66.30	-3.32	
				10g	2.65	26.5	25.00	6.00	
9-20-2022	D3700V2	1036	Head	1g	6.39	63.9	67.90	-5.89	9
				10g	2.52	25.2	24.30	3.70	
9-20-2022	D3900V2	1069	Head	1g	6.72	67.2	70.10	-4.14	
				10g	2.56	25.6	24.30	5.35	
9-26-2022	D3500V2	1121	Head	1g	6.57	65.7	66.30	-0.90	
				10g	2.55	25.5	25.00	2.00	
9-26-2022	D3700V2	1036	Head	1g	6.97	69.7	67.90	2.65	
				10g	2.61	26.1	24.30	7.41	
9-26-2022	D3900V2	1069	Head	1g	6.68	66.8	70.10	-4.71	10
				10g	2.41	24.1	24.30	-0.82	
9-27-2022	D2450V2	960	Head	1g	5.34	53.4	51.90	2.89	
				10g	2.54	25.4	24.00	5.83	
9-30-2022	D3500V2	1121	Head	1g	6.55	65.5	66.30	-1.21	
				10g	2.53	25.3	25.00	1.20	
9-30-2022	D3700V2	1036	Head	1g	6.65	66.5	67.90	-2.06	
				10g	2.47	24.7	24.30	1.65	
9-30-2022	D3900V2	1069	Head	1g	7.14	71.4	70.10	1.85	
				10g	2.56	25.6	24.30	5.35	
10-3-2022	D2600V2	1097	Head	1g	5.77	57.7	57.10	1.05	
				10g	2.59	25.9	25.50	1.57	
10-12-2022	D2450V2	960	Head	1g	4.76	47.6	51.90	-8.29	11
				10g	2.40	24.0	24.00	0.00	

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SAR 6 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			
10-20-2022	D1900V2	5d199	Head	1g	3.98	39.8	39.40	1.02	12
				10g	2.04	20.4	20.50	-0.49	

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			
9-13-2022	CLA-13	1015	Head	1g	0.05	0.5	0.55	-3.28	13
				10g	0.03	0.3	0.34	-2.94	
9-14-2022	D750V3	1122	Head	1g	0.81	8.1	8.58	-5.24	14
				10g	0.53	5.3	5.65	-6.73	
9-21-2022	D2600V2	1097	Head	1g	5.61	56.1	57.10	-1.75	
				10g	2.49	24.9	25.50	-2.35	
9-26-2022	D2600V2	1097	Head	1g	6.06	60.6	57.10	6.13	15
				10g	2.73	27.3	25.50	7.06	

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9. Conducted Output Power Measurements

9.1. GSM

Per KDB 941225 D01 3G SAR Procedures:

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

GSM850 Measured Results

Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Allowed Average Power (dBm)			
					DSI = 0, 1, 2, 3, 4			
					Measured		Tune-up Limit	
					Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM (Voice)	CS1	1	128	824.2	31.77	22.74	33.7	24.7
			190	836.6	32.29	23.26		
			251	848.8	33.10	24.07		
GPRS (GMSK)	CS1	1	128	824.2	32.37	23.34	33.7	24.7
			190	836.6	32.28	23.25		
			251	848.8	33.08	24.05		
		2	128	824.2	30.71	24.69	32.0	**26.0**
			190	836.6	30.64	24.62		
			251	848.8	31.22	25.20		
		3	128	824.2	28.91	24.65	30.0	25.7
			190	836.6	28.84	24.58		
			251	848.8	29.17	24.91		
		4	128	824.2	27.12	24.11	27.5	24.5
			190	836.6	27.06	24.05		
			251	848.8	27.50	24.49		
EGPRS (8PSK)	MCS5	1	128	824.2	25.95	16.92	27.5	18.5
			190	836.6	26.79	17.76		
			251	848.8	27.17	18.14		
		2	128	824.2	24.44	18.42	25.7	19.7
			190	836.6	24.89	18.87		
			251	848.8	25.21	19.19		
		3	128	824.2	22.41	18.15	23.7	19.4
			190	836.6	22.89	18.63		
			251	848.8	23.20	18.94		
		4	128	824.2	21.25	18.24	22.5	19.5
			190	836.6	21.90	18.89		
			251	848.8	22.31	19.30		

Notes:

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

- GMSK (GPRS) mode with 2 time slots for Max power, based on the Tune-up Procedure. Refer to §6.3.
- 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.

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GSM1900 Measured Results

Mode	Coding Scheme	Time Slots	Ch No.	Freq. (MHz)	Maximum Allowed Average Power (dBm)											
					DSI = 0, 2				DSI = 3				DSI = 1, 4			
					Measured		Tune-up Limit		Measured		Tune-up Limit		Measured		Tune-up Limit	
					Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr	Burst Pwr	Frame Pwr
GSM (Voice)	CS1	1	512	1850.2	30.11	21.08	31.0	22.0	28.24	19.21	29.0	20.0	27.81	18.78	29.0	20.0
			661	1880.0	30.08	21.05			28.24	19.21			28.25	19.22		
			810	1909.8	30.46	21.43			28.76	19.73			28.78	19.75		
GPRS (GMSK)	CS1	1	512	1850.2	30.08	21.05	31.0	22.0	27.90	18.87	29.0	20.0	27.95	18.92	29.0	20.0
			661	1880.0	30.01	20.98			28.19	19.16			28.25	19.22		
			810	1909.8	30.40	21.37			28.67	19.64			28.73	19.70		
		2	512	1850.2	27.85	21.83	29.0	**23.0**	24.74	18.72	26.0	20.0	24.79	18.77	26.0	20.0
			661	1880.0	27.52	21.50			24.50	18.48			24.57	18.55		
			810	1909.8	27.95	21.93			24.89	18.87			24.98	18.96		
		3	512	1850.2	26.17	21.91	27.0	22.7	22.92	18.66	24.2	19.9	22.98	18.72	24.2	19.9
			661	1880.0	26.01	21.75			23.29	19.03			23.37	19.11		
			810	1909.8	26.30	22.04			23.84	19.58			23.93	19.67		
		4	512	1850.2	24.17	21.16	25.5	22.5	21.37	18.36	23.0	**20.0**	21.34	18.33	23.0	**20.0**
			661	1880.0	24.14	21.13			21.62	18.61			21.69	18.68		
			810	1909.8	24.61	21.60			21.80	18.79			22.18	19.17		
EGPRS (8PSK)	MCS5	1	512	1850.2	25.73	16.70	26.5	17.5	25.70	16.67	26.5	17.5	25.77	16.74	26.5	17.5
			661	1880.0	25.88	16.85			26.05	17.02			26.12	17.09		
			810	1909.8	26.20	17.17			26.47	17.44			26.44	17.41		
		2	512	1850.2	23.94	17.92	24.7	18.7	24.04	18.02	24.7	18.7	24.11	18.09	24.7	18.7
			661	1880.0	23.70	17.68			23.77	17.75			23.85	17.83		
			810	1909.8	23.94	17.92			24.12	18.10			24.20	18.18		
		3	512	1850.2	21.99	17.73	22.7	18.4	21.99	17.73	22.7	18.4	22.07	17.81	22.7	18.4
			661	1880.0	21.63	17.37			21.70	17.44			21.78	17.52		
			810	1909.8	21.87	17.61			22.07	17.81			21.97	17.71		
		4	512	1850.2	20.80	17.79	21.7	18.7	20.96	17.95	21.7	18.7	21.04	18.03	21.7	18.7
			661	1880.0	20.86	17.85			20.95	17.94			21.02	18.01		
			810	1909.8	21.16	18.15			21.28	18.27			21.28	18.27		

Notes:

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

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

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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			

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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

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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.		

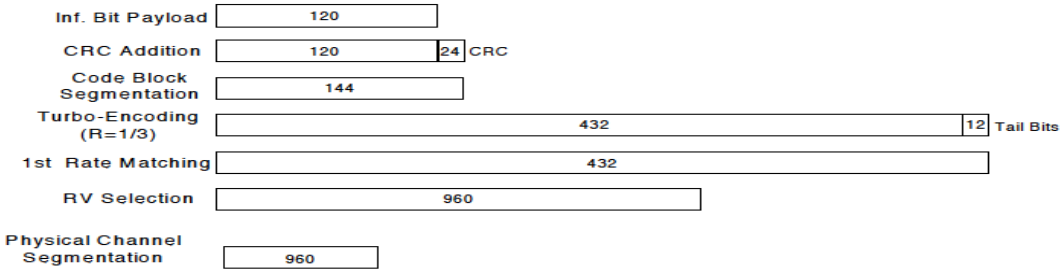

Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

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.

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W-CDMA Band II Measured Results

Mode		UL Ch No.	Freq. (MHz)	Maximum Allowed Average Power (dBm)								
				DSI = 0, 2			DSI = 3			DSI = 1, 4		
				Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	9262	1852.4	23.39	N/A	24.0	18.21	N/A	19.0	21.39	N/A	22.0
		9400	1880.0	23.11			18.21			21.38		
		9538	1907.6	23.58			18.48			21.33		
HSDPA	Subtest 1	9262	1852.4	22.43	0	24.0	17.50	0	19.0	20.42	0	22.0
		9400	1880.0	22.07			17.22			20.14		
		9538	1907.6	22.54			17.45			20.32		
	Subtest 2	9262	1852.4	22.37	0	24.0	17.47	0	19.0	20.40	0	22.0
		9400	1880.0	22.09			17.19			20.10		
		9538	1907.6	22.54			17.43			20.32		
	Subtest 3	9262	1852.4	21.92	0.5	23.5	17.01	0.5	18.5	19.90	0.5	21.5
		9400	1880.0	21.61			16.71			19.63		
		9538	1907.6	22.07			16.94			19.81		
	Subtest 4	9262	1852.4	21.93	0.5	23.5	17.00	0.5	18.5	19.92	0.5	21.5
		9400	1880.0	21.61			16.72			19.62		
		9538	1907.6	22.05			16.94			19.81		
HSUPA	Subtest 1	9262	1852.4	22.38	0	24.0	17.46	0	19.0	20.37	0	22.0
		9400	1880.0	22.11			17.18			20.10		
		9538	1907.6	22.59			17.44			20.34		
	Subtest 2	9262	1852.4	20.38	2	22.0	15.47	2	17.0	18.39	2	20.0
		9400	1880.0	20.23			15.22			18.13		
		9538	1907.6	20.43			15.46			18.36		
	Subtest 3	9262	1852.4	21.48	1	23.0	16.48	1	18.0	19.41	1	21.0
		9400	1880.0	21.20			16.24			19.15		
		9538	1907.6	21.41			16.46			19.31		
	Subtest 4	9262	1852.4	20.48	2	22.0	15.48	2	17.0	18.39	2	20.0
		9400	1880.0	20.23			15.21			18.12		
		9538	1907.6	20.39			15.47			18.35		
	Subtest 5	9262	1852.4	22.48	0	24.0	17.03	0	19.0	19.97	0	22.0
		9400	1880.0	22.23			16.78			19.71		
		9538	1907.6	22.42			17.03			19.89		
DC-HSDPA	Subtest 1	9262	1852.4	22.37	0	24.0	17.48	0	19.0	20.40	0	22.0
		9400	1880.0	22.12			17.23			20.13		
		9538	1907.6	22.60			17.49			20.35		
	Subtest 2	9262	1852.4	22.40	0	24.0	17.49	0	19.0	20.41	0	22.0
		9400	1880.0	22.11			17.20			20.10		
		9538	1907.6	22.58			17.43			20.34		
	Subtest 3	9262	1852.4	21.92	0.5	23.5	17.01	0.5	18.5	19.92	0.5	21.5
		9400	1880.0	21.58			16.72			19.63		
		9538	1907.6	22.10			16.96			19.85		
	Subtest 4	9262	1852.4	21.93	0.5	23.5	17.02	0.5	18.5	19.91	0.5	21.5
		9400	1880.0	21.63			16.74			19.63		
		9538	1907.6	22.10			16.99			19.85		

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W-CDMA Band IV Measured Results

Mode		UL Ch No.	Freq. (MHz)	Maximum Allowed Average Power (dBm)								
				DSI = 0, 2			DSI = 3			DSI = 1, 4		
				Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit	Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	1312	1712.4	23.06	N/A	24.0	18.44	N/A	19.0	20.98	N/A	22.0
		1413	1732.6	23.39			18.43			21.32		
		1513	1752.6	23.46			18.55			21.39		
HSDPA	Subtest 1	1312	1712.4	22.05	0	24.0	17.12	0	19.0	20.00	0	22.0
		1413	1732.6	22.36			17.45			20.31		
		1513	1752.6	22.44			17.56			20.40		
	Subtest 2	1312	1712.4	22.07	0	24.0	17.11	0	19.0	19.98	0	22.0
		1413	1732.6	22.37			17.42			20.30		
		1513	1752.6	22.46			17.57			20.37		
	Subtest 3	1312	1712.4	21.55	0.5	23.5	16.59	0.5	18.5	19.47	0.5	21.5
		1413	1732.6	21.87			16.82			19.82		
		1513	1752.6	21.96			17.04			19.91		
	Subtest 4	1312	1712.4	21.58	0.5	23.5	16.59	0.5	18.5	19.48	0.5	21.5
		1413	1732.6	21.87			16.93			19.79		
		1513	1752.6	21.94			17.05			19.90		
HSUPA	Subtest 1	1312	1712.4	22.03	0	24.0	17.10	0	19.0	19.97	0	22.0
		1413	1732.6	22.37			17.45			20.28		
		1513	1752.6	22.46			17.53			20.40		
	Subtest 2	1312	1712.4	20.06	2	22.0	15.11	2	17.0	17.97	2	20.0
		1413	1732.6	20.37			15.43			18.33		
		1513	1752.6	20.47			15.58			18.41		
	Subtest 3	1312	1712.4	21.07	1	23.0	16.09	1	18.0	19.00	1	21.0
		1413	1732.6	21.39			16.42			19.32		
		1513	1752.6	21.48			16.58			19.42		
	Subtest 4	1312	1712.4	20.06	2	22.0	15.11	2	17.0	17.98	2	20.0
		1413	1732.6	20.40			15.43			18.33		
		1513	1752.6	20.47			15.59			18.41		
	Subtest 5	1312	1712.4	21.61	0	24.0	16.63	0	19.0	19.56	0	22.0
		1413	1732.6	21.96			16.98			19.89		
		1513	1752.6	22.47			17.14			20.48		
DC-HSDPA	Subtest 1	1312	1712.4	22.10	0	24.0	17.14	0	19.0	20.01	0	22.0
		1413	1732.6	22.42			17.49			20.35		
		1513	1752.6	22.48			17.60			20.45		
	Subtest 2	1312	1712.4	22.10	0	24.0	17.16	0	19.0	19.96	0	22.0
		1413	1732.6	22.38			17.47			20.31		
		1513	1752.6	22.49			17.59			20.41		
	Subtest 3	1312	1712.4	21.58	0.5	23.5	16.62	0.5	18.5	19.49	0.5	21.5
		1413	1732.6	21.91			16.97			19.83		
		1513	1752.6	21.98			17.05			19.95		
	Subtest 4	1312	1712.4	21.59	0.5	23.5	16.65	0.5	18.5	19.48	0.5	21.5
		1413	1732.6	21.89			16.95			19.83		
		1513	1752.6	21.97			17.08			19.95		

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W-CDMA Band V Measured Results

Mode		UL Ch No.	Freq. (MHz)	Maximum Allowed Average Power (dBm)		
				DSI = 0, 1, 2, 3, 4		
				Measured Pwr	MPR	Tune-up Limit
Release 99	Rel 99 (RMC, 12.2 kbps)	4132	826.4	24.83	N/A	25.5
		4183	836.6	24.98		
		4233	846.6	24.59		
HSDPA	Subtest 1	4132	826.4	23.54	0	24.5
		4183	836.6	23.42		
		4233	846.6	23.26		
	Subtest 2	4132	826.4	23.53	0	24.5
		4183	836.6	23.40		
		4233	846.6	23.24		
	Subtest 3	4132	826.4	23.02	0.5	24.0
		4183	836.6	22.91		
		4233	846.6	22.75		
	Subtest 4	4132	826.4	23.03	0.5	24.0
		4183	836.6	22.91		
		4233	846.6	22.76		
HSUPA	Subtest 1	4132	826.4	23.53	0	24.5
		4183	836.6	23.39		
		4233	846.6	23.21		
	Subtest 2	4132	826.4	21.48	2	22.5
		4183	836.6	21.43		
		4233	846.6	21.22		
	Subtest 3	4132	826.4	22.51	1	23.5
		4183	836.6	22.39		
		4233	846.6	22.25		
	Subtest 4	4132	826.4	21.54	2	22.5
		4183	836.6	21.40		
		4233	846.6	21.24		
	Subtest 5	4132	826.4	23.54	0	24.5
		4183	836.6	23.43		
		4233	846.6	23.24		
DC-HSDPA	Subtest 1	4132	826.4	23.22	0	24.5
		4183	836.6	23.09		
		4233	846.6	22.95		
	Subtest 2	4132	826.4	23.18	0	24.5
		4183	836.6	23.07		
		4233	846.6	22.92		
	Subtest 3	4132	826.4	22.68	0.5	24.0
		4183	836.6	22.55		
		4233	846.6	22.42		
	Subtest 4	4132	826.4	21.53	0.5	24.0
		4183	836.6	21.88		
		4233	846.6	21.98		

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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

<u>Maximum Output Power (Tune-up Limit) for LTE</u>

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)
- 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.

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LTE Band 4 (Sub1 Ant.) Measured Results

BW(MHz)	Mode	RB Allocation	RB offset	Maximum Average Power (dBm)					Reduced Average Power (dBm) Hotspot back-off					Reduced Average Power (dBm) RCV back-off				
				DSI = 0, 1, 4					DSI = 3					DSI = 2				
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				20050	20175	20300			20050	20175	20300			20050	20175	20300		
				1720 MHz	1732.5 MHz	1745 MHz			1720 MHz	1732.5 MHz	1745 MHz			1720 MHz	1732.5 MHz	1745 MHz		
20 MHz	QPSK	1	0	19.4	19.6	19.8	0.0	21.0	18.4	18.6	18.6	0.0	20.0	16.6	16.9	16.9	0.0	17.5
		1	49	19.5	19.7	19.8	0.0	21.0	18.5	18.7	18.6	0.0	20.0	16.7	17.0	17.0	0.0	17.5
		1	99	19.6	19.7	19.8	0.0	21.0	18.6	18.6	18.7	0.0	20.0	16.8	17.0	17.0	0.0	17.5
		50	0	19.4	19.7	19.8	0.0	21.0	18.4	18.7	18.6	0.0	20.0	16.7	16.9	17.0	0.0	17.5
		50	24	19.6	19.7	19.9	0.0	21.0	18.6	18.8	18.7	0.0	20.0	16.8	17.0	17.1	0.0	17.5
		50	50	19.6	19.8	19.8	0.0	21.0	18.5	18.8	18.6	0.0	20.0	16.8	17.0	17.0	0.0	17.5
		100	0	19.6	19.7	19.8	0.0	21.0	18.5	18.7	18.6	0.0	20.0	16.8	17.0	17.1	0.0	17.5
	16QAM	1	0	19.2	19.6	19.7	0.0	21.0	18.3	18.7	18.5	0.0	20.0	16.7	16.9	17.1	0.0	17.5
		1	49	19.4	19.8	19.7	0.0	21.0	18.4	18.9	18.6	0.0	20.0	16.9	17.1	17.1	0.0	17.5
		1	99	19.5	19.7	19.8	0.0	21.0	18.5	18.8	18.6	0.0	20.0	17.0	17.0	17.1	0.0	17.5
		50	0	19.4	19.7	19.8	0.0	21.0	18.4	18.7	18.5	0.0	20.0	16.8	16.9	17.1	0.0	17.5
		50	24	19.6	19.8	19.9	0.0	21.0	18.6	18.7	18.7	0.0	20.0	16.9	17.0	17.1	0.0	17.5
		50	50	19.6	19.8	19.9	0.0	21.0	18.6	18.8	18.6	0.0	20.0	16.9	17.1	17.1	0.0	17.5
		100	0	19.5	19.7	19.9	0.0	21.0	18.6	18.8	18.6	0.0	20.0	16.9	17.0	17.1	0.0	17.5
	64QAM	1	0	19.4	19.5	19.8	0.0	21.0	18.4	18.5	18.7	0.0	20.0	16.6	16.8	17.1	0.0	17.5
		1	49	19.5	19.5	19.9	0.0	21.0	18.6	18.6	18.6	0.0	20.0	16.8	17.2	17.0	0.0	17.5
		1	99	19.6	19.7	19.8	0.0	21.0	18.6	18.6	18.6	0.0	20.0	16.9	17.0	17.1	0.0	17.5
		50	0	19.5	19.7	19.8	0.0	21.0	18.5	18.7	18.7	0.0	20.0	16.7	16.9	17.0	0.0	17.5
		50	24	19.6	19.7	19.9	0.0	21.0	18.6	18.8	18.6	0.0	20.0	16.8	17.0	17.1	0.0	17.5
		50	50	19.6	19.8	19.9	0.0	21.0	18.6	18.8	18.7	0.0	20.0	16.9	17.1	17.1	0.0	17.5
		100	0	19.6	19.7	19.9	0.0	21.0	18.6	18.8	18.7	0.0	20.0	16.8	17.0	17.0	0.0	17.5
	256QAM	1	0	17.9	18.0	18.1	2.0	19.0	17.6	17.8	18.1	1.0	19.0	16.6	16.9	16.9	0.0	17.5
		1	49	17.9	18.0	18.2	2.0	19.0	17.8	18.0	18.0	1.0	19.0	16.9	17.2	17.1	0.0	17.5
		1	99	17.9	18.0	18.2	2.0	19.0	17.8	18.0	18.1	1.0	19.0	16.9	17.1	17.1	0.0	17.5
		50	0	17.9	18.0	18.1	2.0	19.0	17.8	18.0	18.1	1.0	19.0	16.7	17.0	17.0	0.0	17.5
		50	24	17.9	18.1	18.2	2.0	19.0	17.9	18.1	18.2	1.0	19.0	16.9	17.0	17.1	0.0	17.5
		50	50	17.9	18.1	18.2	2.0	19.0	17.9	18.1	18.2	1.0	19.0	16.9	17.1	17.1	0.0	17.5
		100	0	17.9	18.0	18.2	2.0	19.0	17.9	18.0	18.1	1.0	19.0	16.9	17.0	17.1	0.0	17.5
BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				20025	20175	20325			20025	20175	20325			20025	20175	20325		
				1717.5 MHz	1732.5 MHz	1747.5 MHz			1717.5 MHz	1732.5 MHz	1747.5 MHz			1717.5 MHz	1732.5 MHz	1747.5 MHz		
15 MHz	QPSK	1	0	19.3	19.6	19.7	0.0	21.0	18.3	18.6	18.7	0.0	20.0	16.6	16.9	17.0	0.0	17.5
		1	37	19.5	19.7	19.8	0.0	21.0	18.5	18.7	18.7	0.0	20.0	16.7	17.0	17.0	0.0	17.5
		1	74	19.5	19.7	19.8	0.0	21.0	18.6	18.7	18.8	0.0	20.0	16.8	17.0	17.0	0.0	17.5
		36	0	19.5	19.7	19.7	0.0	21.0	18.4	18.7	18.7	0.0	20.0	16.7	16.9	17.0	0.0	17.5
		36	20	19.6	19.7	19.8	0.0	21.0	18.6	18.7	18.8	0.0	20.0	16.8	17.0	17.0	0.0	17.5
		36	39	19.6	19.8	19.8	0.0	21.0	18.5	18.8	18.8	0.0	20.0	16.8	17.0	17.1	0.0	17.5
		75	0	19.6	19.7	19.8	0.0	21.0	18.6	18.7	18.7	0.0	20.0	16.7	16.9	16.9	0.0	17.5
	16QAM	1	0	19.3	19.6	19.8	0.0	21.0	18.3	18.5	18.8	0.0	20.0	16.6	16.9	17.0	0.0	17.5
		1	37	19.6	19.7	19.9	0.0	21.0	18.5	18.7	18.8	0.0	20.0	16.8	17.0	17.0	0.0	17.5
		1	74	19.6	19.7	19.9	0.0	21.0	18.5	18.7	18.8	0.0	20.0	16.9	17.0	17.1	0.0	17.5
		36	0	19.5	19.7	19.8	0.0	21.0	18.5	18.7	18.8	0.0	20.0	16.7	16.9	17.0	0.0	17.5
		36	20	19.6	19.7	19.9	0.0	21.0	18.6	18.8	18.8	0.0	20.0	16.8	17.0	17.0	0.0	17.5
		36	39	19.6	19.8	19.9	0.0	21.0	18.6	18.8	18.8	0.0	20.0	16.8	17.1	17.1	0.0	17.5
		75	0	19.6	19.7	19.9	0.0	21.0	18.6	18.7	18.8	0.0	20.0	16.7	17.0	17.0	0.0	17.5
	64QAM	1	0	19.3	19.7	19.8	0.0	21.0	18.4	18.7	18.8	0.0	20.0	16.4	16.6	16.8	0.0	17.5
		1	37	19.4	19.7	19.9	0.0	21.0	18.4	18.7	18.8	0.0	20.0	16.6	16.9	17.0	0.0	17.5
		1	74	19.6	19.7	19.8	0.0	21.0	18.5	18.7	18.8	0.0	20.0	16.7	16.9	16.9	0.0	17.5
		36	0	19.5	19.7	19.8	0.0	21.0	18.5	18.7	18.8	0.0	20.0	16.7	16.9	16.9	0.0	17.5
		36	20	19.6	19.7	19.8	0.0	21.0	18.6	18.7	18.8	0.0	20.0	16.8	17.0	16.9	0.0	17.5
		36	39	19.6	19.7	19.8	0.0	21.0	18.6	18.7	18.7	0.0	20.0	16.8	17.0	17.0	0.0	17.5
		75	0	19.6	19.7	19.8	0.0	21.0	18.6	18.8	18.7	0.0	20.0	16.8	16.9	17.0	0.0	17.5
	256QAM	1	0	17.6	17.8	18.0	2.0	19.0	17.6	17.7	18.0	1.0	19.0	16.4	16.7	16.8	0.0	17.5
		1	37	17.8	18.0	18.1	2.0	19.0	17.8	17.9	18.2	1.0	19.0	16.7	17.0	17.0	0.0	17.5
		1	74	17.9	18.0	18.2	2.0	19.0	17.9	17.9	18.1	1.0	19.0	16.8	17.0	17.0	0.0	17.5
		36	0	17.8	18.0	18.1	2.0	19.0	17.8	18.0	18.1	1.0	19.0	16.6	17.0	17.0	0.0	17.5
		36	20	17.9	18.0	18.2	2.0	19.0	17.9	18.0	18.2	1.0	19.0	16.8	17.0	17.1	0.0	17.5
		36	39	17.9	18.1	18.2	2.0	19.0	17.9	18.1	18.2	1.0	19.0	16.8	17.1	17.1	0.0	17.5
		75	0	17.9	18.0	18.2	2.0	19.0	17.9	18.1	18.2	1.0	19.0	16.7	17.0	17.1	0.0	17.5

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LTE Band 4 (Sub1 Ant.) Measured Results (Continued)

BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				20000	20175	20350			20000	20175	20350			20000	20175	20350		
				1715 MHz	1732.5 MHz	1750 MHz			1715 MHz	1732.5 MHz	1750 MHz			1715 MHz	1732.5 MHz	1750 MHz		
10 MHz	QPSK	1	0	19.1	19.4	19.9	0.0	21.0	18.1	18.4	18.9	0.0	20.0	16.3	16.6	17.1	0.0	17.5
		1	25	19.9	20.1	20.0	0.0	21.0	18.8	19.1	19.0	0.0	20.0	17.0	17.3	17.2	0.0	17.5
		1	49	19.2	19.5	20.0	0.0	21.0	18.2	18.5	18.9	0.0	20.0	16.4	16.6	17.1	0.0	17.5
		25	0	19.5	19.8	19.9	0.0	21.0	18.5	18.8	18.9	0.0	20.0	16.7	17.0	17.1	0.0	17.5
		25	12	19.8	20.0	19.9	0.0	21.0	18.8	19.1	18.9	0.0	20.0	17.0	17.2	17.1	0.0	17.5
		25	25	19.7	19.9	20.0	0.0	21.0	18.6	18.9	19.0	0.0	20.0	16.9	17.1	17.2	0.0	17.5
		50	0	19.7	19.8	19.9	0.0	21.0	18.6	18.9	18.9	0.0	20.0	16.8	17.0	17.1	0.0	17.5
	16QAM	1	0	19.2	19.6	20.0	0.0	21.0	18.3	18.6	19.0	0.0	20.0	16.3	16.7	17.1	0.0	17.5
		1	25	19.9	20.2	20.1	0.0	21.0	18.9	19.2	19.1	0.0	20.0	17.1	17.4	17.2	0.0	17.5
		1	49	19.3	19.5	20.1	0.0	21.0	18.3	18.6	19.0	0.0	20.0	16.5	16.7	17.2	0.0	17.5
		25	0	19.6	19.8	19.9	0.0	21.0	18.5	18.9	18.9	0.0	20.0	16.7	17.0	17.1	0.0	17.5
		25	12	19.8	20.0	20.1	0.0	21.0	18.8	19.0	18.9	0.0	20.0	17.0	17.2	17.1	0.0	17.5
		25	25	19.7	19.9	20.0	0.0	21.0	18.7	18.9	19.0	0.0	20.0	16.8	17.1	17.2	0.0	17.5
		50	0	19.6	19.9	20.0	0.0	21.0	18.6	18.8	18.9	0.0	20.0	16.8	17.0	17.1	0.0	17.5
	64QAM	1	0	19.1	19.4	20.0	0.0	21.0	18.2	18.4	18.9	0.0	20.0	16.3	16.6	17.0	0.0	17.5
		1	25	19.2	20.0	20.0	0.0	21.0	18.2	19.1	19.0	0.0	20.0	16.8	17.2	17.1	0.0	17.5
		1	49	19.2	19.4	20.0	0.0	21.0	18.2	18.4	19.0	0.0	20.0	16.3	16.6	17.0	0.0	17.5
		25	0	19.2	19.8	20.0	0.0	21.0	18.2	18.8	18.9	0.0	20.0	16.7	17.0	17.1	0.0	17.5
		25	12	19.2	20.0	20.1	0.0	21.0	18.2	19.0	19.0	0.0	20.0	17.0	17.2	17.1	0.0	17.5
		25	25	19.2	19.9	20.0	0.0	21.0	18.2	18.9	19.0	0.0	20.0	16.8	17.1	17.2	0.0	17.5
		50	0	19.2	19.9	20.0	0.0	21.0	18.2	18.9	19.0	0.0	20.0	16.8	17.0	17.1	0.0	17.5
	256QAM	1	0	17.4	17.7	18.2	2.0	19.0	17.4	17.7	18.1	1.0	19.0	16.2	16.6	17.0	0.0	17.5
		1	25	18.1	18.4	18.3	2.0	19.0	18.1	18.4	18.3	1.0	19.0	17.0	17.3	17.2	0.0	17.5
		1	49	17.5	17.8	18.3	2.0	19.0	17.5	17.8	18.2	1.0	19.0	16.4	16.6	17.1	0.0	17.5
		25	0	17.8	18.2	18.2	2.0	19.0	17.8	18.2	18.2	1.0	19.0	16.7	17.0	17.1	0.0	17.5
		25	12	18.1	18.3	18.4	2.0	19.0	18.1	18.4	18.3	1.0	19.0	17.0	17.2	17.3	0.0	17.5
		25	25	17.9	18.2	18.3	2.0	19.0	18.0	18.2	18.3	1.0	19.0	16.8	17.1	17.2	0.0	17.5
		50	0	17.9	18.1	18.3	2.0	19.0	17.9	18.2	18.3	1.0	19.0	16.8	17.0	17.2	0.0	17.5

BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				19975	20175	20375			19975	20175	20375			19975	20175	20375		
				1712.5 MHz	1732.5 MHz	1752.5 MHz			1712.5 MHz	1732.5 MHz	1752.5 MHz			1712.5 MHz	1732.5 MHz	1752.5 MHz		
5 MHz	QPSK	1	0	19.5	19.9	19.9	0.0	21.0	18.5	18.9	18.8	0.0	20.0	16.7	17.1	17.0	0.0	17.5
		1	12	19.6	20.1	20.0	0.0	21.0	18.6	19.1	18.9	0.0	20.0	16.8	17.4	17.2	0.0	17.5
		1	24	19.6	19.9	19.9	0.0	21.0	18.6	18.9	18.9	0.0	20.0	16.7	17.1	17.1	0.0	17.5
		12	0	19.6	20.0	19.9	0.0	21.0	18.5	19.0	18.9	0.0	20.0	16.7	17.2	17.1	0.0	17.5
		12	7	19.7	20.1	20.0	0.0	21.0	18.7	19.1	18.9	0.0	20.0	16.8	17.3	17.1	0.0	17.5
		12	13	19.7	20.1	20.0	0.0	21.0	18.7	19.1	19.0	0.0	20.0	16.8	17.2	17.2	0.0	17.5
		25	0	19.7	20.0	19.9	0.0	21.0	18.6	19.0	18.9	0.0	20.0	16.8	17.2	17.1	0.0	17.5
	16QAM	1	0	19.7	20.1	20.1	0.0	21.0	18.7	19.1	19.1	0.0	20.0	16.9	17.2	17.2	0.0	17.5
		1	12	19.9	20.2	20.2	0.0	21.0	18.9	19.2	19.2	0.0	20.0	16.9	17.4	17.3	0.0	17.5
		1	24	19.7	20.1	20.1	0.0	21.0	18.8	19.0	19.1	0.0	20.0	16.9	17.3	17.3	0.0	17.5
		12	0	19.5	20.0	19.9	0.0	21.0	18.6	19.0	18.9	0.0	20.0	16.7	17.2	17.2	0.0	17.5
		12	7	19.7	20.1	20.1	0.0	21.0	18.7	19.0	19.0	0.0	20.0	16.8	17.2	17.1	0.0	17.5
		12	13	19.7	20.1	20.1	0.0	21.0	18.7	19.1	19.0	0.0	20.0	16.8	17.2	17.2	0.0	17.5
		25	0	19.7	20.0	20.0	0.0	21.0	18.7	19.0	18.9	0.0	20.0	16.8	17.2	17.1	0.0	17.5
	64QAM	1	0	19.5	19.9	19.9	0.0	21.0	18.5	18.9	18.9	0.0	20.0	16.8	17.0	17.1	0.0	17.5
		1	12	19.7	20.1	20.1	0.0	21.0	18.7	19.1	19.0	0.0	20.0	16.9	17.3	17.2	0.0	17.5
		1	24	19.6	19.9	20.0	0.0	21.0	18.6	18.8	19.0	0.0	20.0	16.8	17.1	17.1	0.0	17.5
		12	0	19.6	20.0	20.0	0.0	21.0	18.6	19.0	19.0	0.0	20.0	16.7	17.2	17.1	0.0	17.5
		12	7	19.7	20.1	20.1	0.0	21.0	18.7	19.1	19.1	0.0	20.0	16.8	17.3	17.2	0.0	17.5
		12	13	19.7	20.1	20.1	0.0	21.0	18.7	19.1	19.0	0.0	20.0	16.8	17.3	17.2	0.0	17.5
		25	0	19.7	20.0	20.1	0.0	21.0	18.6	19.0	19.0	0.0	20.0	16.8	17.2	17.1	0.0	17.5
	256QAM	1	0	17.8	18.2	18.1	2.0	19.0	17.8	18.2	18.2	1.0	19.0	16.6	17.1	17.2	0.0	17.5
		1	12	18.0	18.5	18.4	2.0	19.0	18.0	18.5	18.4	1.0	19.0	16.9	17.4	17.3	0.0	17.5
		1	24	17.9	18.3	18.3	2.0	19.0	17.9	18.3	18.3	1.0	19.0	16.8	17.1	17.2	0.0	17.5
		12	0	17.9	18.3	18.3	2.0	19.0	17.9	18.3	18.3	1.0	19.0	16.7	17.2	17.2	0.0	17.5
		12	7	18.0	18.4	18.4	2.0	19.0	18.0	18.4	18.4	1.0	19.0	16.9	17.3	17.3	0.0	17.5
		12	13	17.9	18.4	18.4	2.0	19.0	17.9	18.4	18.3	1.0	19.0	16.8	17.3	17.2	0.0	17.5
		25	0	17.9	18.4	18.4	2.0	19.0	17.9	18.4	18.4	1.0	19.0	16.8	17.2	17.2	0.0	17.5

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LTE Band 5 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)				
				DSI = 0, 1, 2, 3, 4				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				20450	20525	20600		
				829 MHz	836.5 MHz	844 MHz		
10 MHz	QPSK	1	0		24.7		0.0	25.5
		1	25		24.7		0.0	25.5
		1	49		24.6		0.0	25.5
		25	0		23.7		1.0	24.5
		25	12		23.7		1.0	24.5
		25	25		23.6		1.0	24.5
		50	0		23.7		1.0	24.5
	16QAM	1	0		24.0		1.0	24.5
		1	25		24.0		1.0	24.5
		1	49		23.9		1.0	24.5
		25	0		22.7		2.0	23.5
		25	12		22.7		2.0	23.5
		25	25		22.7		2.0	23.5
		50	0		22.6		2.0	23.5
	64QAM	1	0		21.4		2.0	23.5
		1	25		21.5		2.0	23.5
		1	49		21.6		2.0	23.5
		25	0		20.5		3.0	22.5
		25	12		20.5		3.0	22.5
		25	25		20.4		3.0	22.5
		50	0		20.4		3.0	22.5
	256QAM	1	0		18.4		5.0	20.5
		1	25		18.6		5.0	20.5
		1	49		18.7		5.0	20.5
		25	0		18.5		5.0	20.5
		25	12		18.3		5.0	20.5
		25	25		18.4		5.0	20.5
		50	0		18.4		5.0	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	24.8	24.8	24.7	0.0	25.5
		1	12	24.9	24.8	24.8	0.0	25.5
		1	24	24.8	24.7	24.7	0.0	25.5
		12	0	23.8	23.7	23.6	1.0	24.5
		12	7	23.8	23.8	23.6	1.0	24.5
		12	13	23.8	23.7	23.5	1.0	24.5
		25	0	23.8	23.7	23.7	1.0	24.5
	16QAM	1	0	23.9	24.1	24.1	1.0	24.5
		1	12	24.0	24.2	24.2	1.0	24.5
		1	24	23.8	24.1	24.0	1.0	24.5
		12	0	22.7	22.8	22.6	2.0	23.5
		12	7	22.7	22.8	22.6	2.0	23.5
		12	13	22.7	22.7	22.6	2.0	23.5
		25	0	22.8	22.7	22.8	2.0	23.5
	64QAM	1	0	22.9	22.9	23.0	2.0	23.5
		1	12	22.9	23.0	23.1	2.0	23.5
		1	24	22.8	22.9	23.0	2.0	23.5
		12	0	21.9	21.8	21.6	3.0	22.5
		12	7	21.9	21.8	21.6	3.0	22.5
		12	13	21.9	21.8	21.6	3.0	22.5
		25	0	21.8	21.8	21.7	3.0	22.5
	256QAM	1	0	20.0	19.9	19.9	5.0	20.5
		1	12	20.0	20.0	19.9	5.0	20.5
		1	24	19.9	19.9	19.9	5.0	20.5
		12	0	19.9	19.8	19.8	5.0	20.5
		12	7	19.9	19.8	19.8	5.0	20.5
		12	13	19.9	19.8	19.8	5.0	20.5
		25	0	19.9	19.8	19.8	5.0	20.5

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LTE Band 5 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	24.8	24.7	24.4	0.0	25.5
		1	8	24.9	24.7	24.6	0.0	25.5
		1	14	24.8	24.6	24.4	0.0	25.5
		8	0	23.9	23.7	23.5	1.0	24.5
		8	4	23.9	23.7	23.5	1.0	24.5
		8	7	23.9	23.7	23.5	1.0	24.5
		15	0	23.9	23.7	23.5	1.0	24.5
	16QAM	1	0	23.9	23.8	23.6	1.0	24.5
		1	8	24.1	23.8	23.8	1.0	24.5
		1	14	23.9	23.8	23.6	1.0	24.5
		8	0	22.9	22.7	22.5	2.0	23.5
		8	4	22.9	22.7	22.6	2.0	23.5
		8	7	22.9	22.7	22.5	2.0	23.5
		15	0	22.8	22.6	22.5	2.0	23.5
	64QAM	1	0	22.9	22.9	22.7	2.0	23.5
		1	8	23.1	22.9	22.8	2.0	23.5
		1	14	22.9	22.9	22.7	2.0	23.5
		8	0	21.9	21.7	21.5	3.0	22.5
		8	4	21.9	21.8	21.5	3.0	22.5
		8	7	21.9	21.8	21.5	3.0	22.5
		15	0	21.9	21.7	21.5	3.0	22.5
	256QAM	1	0	20.0	19.8	19.6	5.0	20.5
		1	8	20.1	19.8	19.7	5.0	20.5
		1	14	19.9	19.7	19.6	5.0	20.5
		8	0	19.9	19.7	19.5	5.0	20.5
		8	4	19.9	19.7	19.6	5.0	20.5
		8	7	19.9	19.8	19.5	5.0	20.5
		15	0	19.8	19.7	19.5	5.0	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	24.8	24.7	24.5	0.0	25.5
		1	3	24.9	24.7	24.5	0.0	25.5
		1	5	24.8	24.7	24.5	0.0	25.5
		3	0	24.8	24.7	24.5	0.0	25.5
		3	1	24.9	24.7	24.5	0.0	25.5
		3	3	24.9	24.7	24.5	0.0	25.5
		6	0	23.8	23.7	23.5	1.0	24.5
	16QAM	1	0	24.0	23.8	23.6	1.0	24.5
		1	3	24.0	24.0	23.7	1.0	24.5
		1	5	24.0	23.8	23.7	1.0	24.5
		3	0	23.9	23.8	23.6	1.0	24.5
		3	1	23.9	23.9	23.6	1.0	24.5
		3	3	23.9	23.8	23.6	1.0	24.5
		6	0	22.9	22.6	22.5	2.0	23.5
	64QAM	1	0	23.0	22.8	22.7	2.0	23.5
		1	3	23.1	22.9	22.6	2.0	23.5
		1	5	23.1	22.8	22.6	2.0	23.5
		3	0	22.9	22.8	22.6	2.0	23.5
		3	1	22.9	22.8	22.6	2.0	23.5
		3	3	22.9	22.8	22.5	2.0	23.5
		6	0	21.9	21.7	21.5	3.0	22.5
	256QAM	1	0	20.1	19.8	19.6	5.0	20.5
		1	3	20.1	19.8	19.6	5.0	20.5
		1	5	20.0	19.7	19.6	5.0	20.5
		3	0	19.9	19.7	19.6	5.0	20.5
		3	1	19.9	19.8	19.5	5.0	20.5
		3	3	19.9	19.8	19.6	5.0	20.5
		6	0	19.9	20.0	19.5	5.0	20.5

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LTE Band 12 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)				
				DSI = 0, 1, 2, 3, 4				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				23060	23095	23130		
				704 MHz	707.5 MHz	711 MHz		
10 MHz	QPSK	1	0		23.8		0.0	25.0
		1	25		23.8		0.0	25.0
		1	49		23.8		0.0	25.0
		25	0		22.7		1.0	24.0
		25	12		22.8		1.0	24.0
		25	25		22.8		1.0	24.0
		50	0		22.7		1.0	24.0
	16QAM	1	0		23.1		1.0	24.0
		1	25		23.1		1.0	24.0
		1	49		23.1		1.0	24.0
		25	0		21.7		2.0	23.0
		25	12		21.7		2.0	23.0
		25	25		21.8		2.0	23.0
		50	0		21.7		2.0	23.0
	64QAM	1	0		21.9		2.0	23.0
		1	25		22.0		2.0	23.0
		1	49		22.0		2.0	23.0
		25	0		20.8		3.0	22.0
		25	12		20.8		3.0	22.0
		25	25		20.8		3.0	22.0
		50	0		20.7		3.0	22.0
	256QAM	1	0		18.9		5.0	20.0
		1	25		19.0		5.0	20.0
		1	49		19.0		5.0	20.0
		25	0		18.8		5.0	20.0
		25	12		18.8		5.0	20.0
		25	25		18.9		5.0	20.0
		50	0		18.8		5.0	20.0

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	23.8	23.9	24.0	0.0	25.0
		1	12	23.9	23.9	24.1	0.0	25.0
		1	24	23.8	23.9	24.0	0.0	25.0
		12	0	22.8	22.9	23.0	1.0	24.0
		12	7	22.9	22.9	23.0	1.0	24.0
		12	13	22.9	23.0	23.0	1.0	24.0
		25	0	22.9	22.9	23.0	1.0	24.0
	16QAM	1	0	23.2	23.2	23.4	1.0	24.0
		1	12	23.3	23.3	23.5	1.0	24.0
		1	24	23.2	23.3	23.4	1.0	24.0
		12	0	21.9	21.9	22.1	2.0	23.0
		12	7	22.0	21.9	22.1	2.0	23.0
		12	13	22.0	21.9	22.1	2.0	23.0
		25	0	21.9	22.0	22.0	2.0	23.0
	64QAM	1	0	22.0	22.1	22.2	2.0	23.0
		1	12	22.1	22.2	22.2	2.0	23.0
		1	24	21.9	22.1	22.2	2.0	23.0
		12	0	20.8	20.9	21.0	3.0	22.0
		12	7	20.9	20.9	21.0	3.0	22.0
		12	13	20.9	21.0	21.1	3.0	22.0
		25	0	20.9	20.9	21.0	3.0	22.0
	256QAM	1	0	18.9	18.9	19.1	5.0	20.0
		1	12	19.0	19.1	19.3	5.0	20.0
		1	24	18.9	19.0	19.1	5.0	20.0
		12	0	18.8	18.9	19.0	5.0	20.0
		12	7	18.9	18.9	19.0	5.0	20.0
		12	13	18.9	18.9	19.1	5.0	20.0
		25	0	18.9	18.9	19.0	5.0	20.0

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LTE Band 12 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				23025	23095	23165		
				700.5 MHz	707.5 MHz	714.5 MHz		
3 MHz	QPSK	1	0	23.8	23.9	24.0	0.0	25.0
		1	8	23.9	24.0	24.1	0.0	25.0
		1	14	23.8	23.9	24.0	0.0	25.0
		8	0	22.8	22.9	23.0	1.0	24.0
		8	4	22.9	22.9	23.0	1.0	24.0
		8	7	22.9	23.0	23.1	1.0	24.0
		15	0	22.9	23.0	23.0	1.0	24.0
	16QAM	1	0	23.2	23.1	23.3	1.0	24.0
		1	8	23.3	23.2	23.4	1.0	24.0
		1	14	23.2	23.2	23.3	1.0	24.0
		8	0	21.9	21.9	22.0	2.0	23.0
		8	4	22.0	22.0	22.0	2.0	23.0
		8	7	22.0	22.0	22.1	2.0	23.0
		15	0	21.9	22.0	22.0	2.0	23.0
	64QAM	1	0	22.0	22.0	22.3	2.0	23.0
		1	8	22.1	22.1	22.4	2.0	23.0
		1	14	22.0	22.0	22.3	2.0	23.0
		8	0	20.9	20.9	21.0	3.0	22.0
		8	4	21.0	20.9	21.0	3.0	22.0
		8	7	21.0	21.0	21.1	3.0	22.0
		15	0	20.9	21.0	21.0	3.0	22.0
	256QAM	1	0	18.9	18.9	19.0	5.0	20.0
		1	8	19.1	19.1	19.2	5.0	20.0
		1	14	18.9	19.0	19.1	5.0	20.0
		8	0	18.8	18.9	19.0	5.0	20.0
		8	4	19.0	18.9	19.0	5.0	20.0
		8	7	18.9	19.0	19.1	5.0	20.0
		15	0	18.9	18.9	19.0	5.0	20.0

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	23.8	23.9	24.0	0.0	25.0
		1	3	23.8	24.0	24.1	0.0	25.0
		1	5	23.8	23.9	24.0	0.0	25.0
		3	0	23.9	23.9	24.0	0.0	25.0
		3	1	23.9	23.9	24.0	0.0	25.0
		3	3	23.8	23.9	24.0	0.0	25.0
		6	0	22.9	22.9	23.0	1.0	24.0
	16QAM	1	0	23.0	23.2	23.4	1.0	24.0
		1	3	23.0	23.3	23.4	1.0	24.0
		1	5	23.0	23.2	23.4	1.0	24.0
		3	0	23.0	23.0	23.2	1.0	24.0
		3	1	23.0	23.0	23.3	1.0	24.0
		3	3	23.0	23.1	23.2	1.0	24.0
		6	0	21.9	22.0	22.1	2.0	23.0
	64QAM	1	0	22.0	22.1	22.2	2.0	23.0
		1	3	22.0	22.1	22.3	2.0	23.0
		1	5	22.0	22.1	22.3	2.0	23.0
		3	0	21.9	21.9	22.1	2.0	23.0
		3	1	21.9	21.9	22.1	2.0	23.0
		3	3	21.9	21.9	22.1	2.0	23.0
		6	0	20.9	20.9	21.1	3.0	22.0
	256QAM	1	0	19.0	18.9	19.1	5.0	20.0
		1	3	19.0	19.0	19.2	5.0	20.0
		1	5	19.0	19.0	19.1	5.0	20.0
		3	0	19.0	18.9	19.0	5.0	20.0
		3	1	18.9	18.9	19.0	5.0	20.0
		3	3	19.0	18.9	19.0	5.0	20.0
		6	0	18.9	18.9	18.9	5.0	20.0

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LTE Band 13 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)				
				DSI = 0, 1, 2, 3, 4				
				Measured Pwr (dBm)			MPR	Tune-up Limit
					23230			
					782 MHz			
10 MHz	QPSK	1	0		23.4		0.0	25.0
		1	25		23.5		0.0	25.0
		1	49		23.6		0.0	25.0
		25	0		22.5		1.0	24.0
		25	12		22.4		1.0	24.0
		25	25		22.5		1.0	24.0
		50	0		22.5		1.0	24.0
	16QAM	1	0		22.8		1.0	24.0
		1	25		22.8		1.0	24.0
		1	49		22.9		1.0	24.0
		25	0		21.5		2.0	23.0
		25	12		21.5		2.0	23.0
		25	25		21.6		2.0	23.0
		50	0		21.4		2.0	23.0
	64QAM	1	0		21.7		2.0	23.0
		1	25		21.8		2.0	23.0
		1	49		21.8		2.0	23.0
		25	0		20.6		3.0	22.0
		25	12		20.6		3.0	22.0
		25	25		20.6		3.0	22.0
		50	0		20.6		3.0	22.0
	256QAM	1	0		18.6		5.0	20.0
		1	25		18.8		5.0	20.0
		1	49		18.8		5.0	20.0
		25	0		18.6		5.0	20.0
		25	12		18.6		5.0	20.0
		25	25		18.7		5.0	20.0
		50	0		18.6		5.0	20.0

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	23.7	23.4	23.8	0.0	25.0
		1	12	23.8	23.5	23.8	0.0	25.0
		1	24	23.8	23.4	23.8	0.0	25.0
		12	0	23.8	22.4	23.8	1.0	24.0
		12	7	23.8	22.5	23.8	1.0	24.0
		12	13	23.8	22.4	23.8	1.0	24.0
		25	0	22.7	22.4	22.7	1.0	24.0
	16QAM	1	0	23.2	22.8	23.2	1.0	24.0
		1	12	23.3	22.8	23.3	1.0	24.0
		1	24	23.2	22.8	23.2	1.0	24.0
		12	0	22.9	21.3	22.8	2.0	23.0
		12	7	23.0	21.4	22.9	2.0	23.0
		12	13	23.0	21.4	22.9	2.0	23.0
		25	0	21.8	21.5	21.7	2.0	23.0
	64QAM	1	0	22.0	21.6	21.9	2.0	23.0
		1	12	22.0	21.6	22.0	2.0	23.0
		1	24	22.0	21.6	22.0	2.0	23.0
		12	0	21.8	20.4	21.8	3.0	22.0
		12	7	21.8	20.5	21.8	3.0	22.0
		12	13	21.8	20.5	21.8	3.0	22.0
		25	0	20.7	20.4	20.7	3.0	22.0
	256QAM	1	0	18.9	18.6	18.8	5.0	20.0
		1	12	18.9	18.8	18.9	5.0	20.0
		1	24	19.0	18.7	18.9	5.0	20.0
		12	0	18.7	18.4	18.7	5.0	20.0
		12	7	18.7	18.5	18.7	5.0	20.0
		12	13	18.8	18.5	18.8	5.0	20.0
		25	0	18.7	18.5	18.7	5.0	20.0

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LTE Band 25 Measured Results

BW(MHz)	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)														
				DSI = 0, 2					DSI = 3					DSI = 1, 4				
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26140	26365	26590			26140	26365	26590			26140	26365	26590		
				1860 MHz	1882.5 MHz	1905 MHz			1860 MHz	1882.5 MHz	1905 MHz			1860 MHz	1882.5 MHz	1905 MHz		
20 MHz	QPSK	1	0	22.8	22.6	22.6	0.0	24.0	18.2	17.8	18.0	0.0	19.0	20.0	19.8	19.9	0.0	21.0
		1	49	22.7	22.5	22.7	0.0	24.0	18.0	17.8	18.1	0.0	19.0	19.9	19.7	20.0	0.0	21.0
		1	99	22.6	22.6	22.7	0.0	24.0	17.9	17.9	18.2	0.0	19.0	19.8	19.8	20.0	0.0	21.0
		50	0	21.8	21.6	21.7	1.0	23.0	18.3	17.9	18.1	0.0	19.0	20.1	19.8	20.0	0.0	21.0
		50	24	21.8	21.7	21.7	1.0	23.0	18.1	17.9	18.2	0.0	19.0	20.0	19.8	20.1	0.0	21.0
		50	50	21.7	21.6	21.7	1.0	23.0	18.0	17.9	18.3	0.0	19.0	19.9	19.8	20.0	0.0	21.0
		100	0	21.7	21.7	21.7	1.0	23.0	18.2	17.9	18.2	0.0	19.0	20.0	19.8	20.1	0.0	21.0
	16QAM	1	0	22.1	22.1	21.9	1.0	23.0	18.2	18.1	18.2	0.0	19.0	20.3	20.2	20.3	0.0	21.0
		1	49	22.0	22.1	22.0	1.0	23.0	18.3	18.1	18.4	0.0	19.0	20.2	20.1	20.6	0.0	21.0
		1	99	22.0	22.0	22.0	1.0	23.0	18.1	18.2	18.4	0.0	19.0	20.1	20.2	20.6	0.0	21.0
		50	0	20.9	20.7	20.6	2.0	22.0	18.1	17.9	18.1	0.0	19.0	20.0	19.8	20.0	0.0	21.0
		50	24	20.8	20.7	20.8	2.0	22.0	18.1	17.9	18.2	0.0	19.0	20.0	19.9	20.1	0.0	21.0
		50	50	20.7	20.7	20.7	2.0	22.0	18.0	17.9	18.3	0.0	19.0	19.9	19.8	20.1	0.0	21.0
		100	0	20.7	20.7	20.7	2.0	22.0	18.0	17.9	18.2	0.0	19.0	20.0	19.9	20.1	0.0	21.0
	64QAM	1	0	21.5	21.3	21.4	2.0	22.0	18.3	17.9	18.1	0.0	19.0	20.2	19.9	20.0	0.0	21.0
		1	49	21.5	21.2	21.5	2.0	22.0	18.2	18.0	18.3	0.0	19.0	20.1	19.9	20.2	0.0	21.0
		1	99	21.3	21.4	21.6	2.0	22.0	18.0	18.0	18.3	0.0	19.0	19.9	20.0	20.2	0.0	21.0
		50	0	20.4	20.2	20.3	3.0	21.0	18.1	17.9	18.1	0.0	19.0	20.0	19.8	20.0	0.0	21.0
		50	24	20.4	20.2	20.4	3.0	21.0	18.0	17.9	18.2	0.0	19.0	20.0	19.8	20.1	0.0	21.0
		50	50	20.2	20.2	20.4	3.0	21.0	18.0	17.9	18.3	0.0	19.0	19.9	19.8	20.2	0.0	21.0
		100	0	20.4	20.2	20.5	3.0	21.0	18.0	17.9	18.2	0.0	19.0	20.0	19.9	20.1	0.0	21.0
	256QAM	1	0	18.5	18.2	18.4	5.0	19.0	18.2	18.1	18.2	1.0	18.0	18.2	18.0	18.1	2.0	19.0
		1	49	18.5	18.2	18.6	5.0	19.0	18.2	18.0	18.3	1.0	18.0	18.1	18.0	18.2	2.0	19.0
		1	99	18.5	18.4	18.7	5.0	19.0	18.1	18.2	18.4	1.0	18.0	18.1	18.2	18.4	2.0	19.0
		50	0	18.4	18.2	18.3	5.0	19.0	18.1	17.9	18.1	1.0	18.0	18.0	17.8	18.0	2.0	19.0
		50	24	18.4	18.2	18.4	5.0	19.0	18.0	17.9	18.2	1.0	18.0	18.0	17.8	18.1	2.0	19.0
		50	50	18.3	18.2	18.5	5.0	19.0	17.9	17.9	18.2	1.0	18.0	17.9	17.8	18.1	2.0	19.0
		100	0	18.4	18.2	18.5	5.0	19.0	18.0	17.9	18.2	1.0	18.0	18.0	17.8	18.1	2.0	19.0
BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26115	26365	26615			26115	26365	26615			26115	26365	26615		
				1857.5 MHz	1882.5 MHz	1907.5 MHz			1857.5 MHz	1882.5 MHz	1907.5 MHz			1857.5 MHz	1882.5 MHz	1907.5 MHz		
15 MHz	QPSK	1	0	22.9	22.7	22.7	0.0	24.0	18.0	17.8	18.0	0.0	19.0	19.6	19.6	19.9	0.0	21.0
		1	37	22.8	22.6	22.7	0.0	24.0	18.0	17.8	18.1	0.0	19.0	19.7	19.6	19.8	0.0	21.0
		1	74	22.8	22.6	22.7	0.0	24.0	17.9	17.8	18.2	0.0	19.0	19.7	19.5	19.8	0.0	21.0
		36	0	21.9	21.7	21.7	1.0	23.0	18.1	17.9	18.1	0.0	19.0	19.7	19.7	19.9	0.0	21.0
		36	20	21.9	21.7	21.7	1.0	23.0	18.0	17.9	18.1	0.0	19.0	19.7	19.7	19.9	0.0	21.0
		36	39	21.8	21.7	21.8	1.0	23.0	17.9	17.9	18.2	0.0	19.0	19.7	19.6	19.8	0.0	21.0
		75	0	21.9	21.6	21.7	1.0	23.0	18.0	17.9	18.2	0.0	19.0	19.7	19.6	19.9	0.0	21.0
	16QAM	1	0	22.1	21.8	21.8	1.0	23.0	18.3	18.1	18.4	0.0	19.0	20.0	19.9	20.2	0.0	21.0
		1	37	22.0	21.7	21.8	1.0	23.0	18.2	18.2	18.5	0.0	19.0	20.0	19.8	20.2	0.0	21.0
		1	74	22.0	21.7	21.8	1.0	23.0	18.3	18.2	18.5	0.0	19.0	20.0	19.8	20.1	0.0	21.0
		36	0	20.9	20.7	20.7	2.0	22.0	18.1	17.9	18.2	0.0	19.0	19.7	19.7	19.9	0.0	21.0
		36	20	20.9	20.7	20.7	2.0	22.0	18.0	17.9	18.2	0.0	19.0	19.7	19.7	19.9	0.0	21.0
		36	39	20.8	20.6	20.8	2.0	22.0	18.0	17.9	18.3	0.0	19.0	19.8	19.7	19.8	0.0	21.0
		75	0	20.9	20.7	20.7	2.0	22.0	18.0	17.9	18.1	0.0	19.0	19.7	19.6	19.9	0.0	21.0
	64QAM	1	0	21.1	20.8	20.8	2.0	22.0	18.2	17.9	18.2	0.0	19.0	20.0	19.8	19.8	0.0	21.0
		1	37	21.1	20.8	20.9	2.0	22.0	18.2	17.9	18.3	0.0	19.0	20.0	19.8	19.9	0.0	21.0
		1	74	21.1	20.7	20.9	2.0	22.0	18.2	18.0	18.4	0.0	19.0	19.9	19.8	19.9	0.0	21.0
		36	0	20.0	19.7	19.7	3.0	21.0	18.1	17.9	18.1	0.0	19.0	19.9	19.7	19.7	0.0	21.0
		36	20	20.0	19.7	19.7	3.0	21.0	18.0	17.9	18.2	0.0	19.0	19.9	19.7	19.7	0.0	21.0
		36	39	19.8	19.7	19.8	3.0	21.0	18.0	17.9	18.3	0.0	19.0	19.8	19.7	19.8	0.0	21.0
		75	0	20.0	19.7	19.8	3.0	21.0	18.0	17.9	18.2	0.0	19.0	19.9	19.7	19.7	0.0	21.0
	256QAM	1	0	18.1	17.9	17.7	5.0	19.0	18.1	18.0	18.2	1.0	18.0	18.0	17.7	17.8	2.0	19.0
		1	37	18.0	17.8	17.8	5.0	19.0	18.1	18.0	18.4	1.0	18.0	18.0	17.7	17.9	2.0	19.0
		1	74	17.9	17.9	17.8	5.0	19.0	18.0	18.1	18.5	1.0	18.0	17.9	17.7	17.9	2.0	19.0
		36	0	17.9	17.7	17.7	5.0	19.0	18.1	17.9	18.2	1.0	18.0	17.9	17.7	17.7	2.0	19.0
		36	20	17.9	17.7	17.7	5.0	19.0	18.0	17.9	18.2	1.0	18.0	17.9	17.6	17.7	2.0	19.0
		36	39	17.8	17.7	17.8	5.0	19.0	18.0	17.9	18.3	1.0	18.0	17.8	17.7	17.7	2.0	19.0
		75	0	17.9	17.7	17.7	5.0	19.0	18.0	17.9	18.2	1.0	18.0	17.9	17.7	17.7	2.0	19.0

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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	Measured Pwr (dBm)			MPR	Tune-up Limit
				26090	26365	26640			26090	26365	26640			26090	26365	26640		
				1855 MHz	1882.5 MHz	1910 MHz			1855 MHz	1882.5 MHz	1910 MHz			1855 MHz	1882.5 MHz	1910 MHz		
10 MHz	QPSK	1	0	23.0	22.8	22.9	0.0	24.0	18.2	17.9	18.3	0.0	19.0	19.9	19.7	19.8	0.0	21.0
		1	25	23.1	22.8	22.9	0.0	24.0	18.2	18.0	18.4	0.0	19.0	20.0	19.8	19.9	0.0	21.0
		1	49	23.0	22.8	22.9	0.0	24.0	18.1	18.0	18.3	0.0	19.0	19.9	19.7	19.8	0.0	21.0
		25	0	22.1	21.8	21.9	1.0	23.0	18.2	18.0	18.3	0.0	19.0	20.0	19.7	19.8	0.0	21.0
		25	12	22.1	21.8	21.9	1.0	23.0	18.2	18.0	18.4	0.0	19.0	20.0	19.8	19.9	0.0	21.0
		25	25	22.0	21.8	21.9	1.0	23.0	18.1	18.0	18.4	0.0	19.0	20.0	19.7	19.9	0.0	21.0
		50	0	22.1	21.8	21.9	1.0	23.0	18.2	17.9	18.4	0.0	19.0	20.0	19.7	19.9	0.0	21.0
	16QAM	1	0	22.2	21.9	22.0	1.0	23.0	18.4	18.3	18.6	0.0	19.0	20.2	20.1	20.2	0.0	21.0
		1	25	22.2	22.0	22.1	1.0	23.0	18.4	18.3	18.6	0.0	19.0	20.3	20.0	20.2	0.0	21.0
		1	49	22.1	22.0	22.0	1.0	23.0	18.4	18.4	18.6	0.0	19.0	20.3	20.0	20.1	0.0	21.0
		25	0	21.1	20.9	20.9	2.0	22.0	18.2	17.9	18.3	0.0	19.0	20.0	19.8	19.8	0.0	21.0
		25	12	21.1	20.9	20.9	2.0	22.0	18.3	18.0	18.4	0.0	19.0	20.0	19.8	19.9	0.0	21.0
		25	25	21.1	20.8	20.9	2.0	22.0	18.1	18.0	18.3	0.0	19.0	20.0	19.8	19.9	0.0	21.0
		50	0	21.1	20.9	21.0	2.0	22.0	18.2	18.0	18.4	0.0	19.0	20.0	19.8	19.9	0.0	21.0
	64QAM	1	0	21.3	21.0	21.1	2.0	22.0	18.5	18.1	18.5	0.0	19.0	20.2	20.1	20.0	0.0	21.0
		1	25	21.3	21.0	21.1	2.0	22.0	18.5	18.1	18.6	0.0	19.0	20.2	20.1	20.1	0.0	21.0
		1	49	21.2	21.0	21.1	2.0	22.0	18.4	18.1	18.5	0.0	19.0	20.2	20.0	20.1	0.0	21.0
		25	0	20.1	19.8	19.9	3.0	21.0	18.3	18.0	18.3	0.0	19.0	20.1	19.8	19.8	0.0	21.0
		25	12	20.1	19.9	20.0	3.0	21.0	18.3	18.1	18.4	0.0	19.0	20.1	19.8	19.9	0.0	21.0
		25	25	20.1	19.8	20.0	3.0	21.0	18.1	18.0	18.4	0.0	19.0	20.1	19.8	19.9	0.0	21.0
		50	0	20.1	19.8	19.9	3.0	21.0	18.2	18.0	18.4	0.0	19.0	20.1	19.8	19.9	0.0	21.0
	256QAM	1	0	18.1	17.9	18.0	5.0	19.0	18.3	18.1	18.4	1.0	18.0	18.2	17.9	17.9	2.0	19.0
		1	25	18.2	18.0	18.0	5.0	19.0	18.4	18.2	18.5	1.0	18.0	18.2	18.0	18.0	2.0	19.0
		1	49	18.1	17.9	18.0	5.0	19.0	18.2	18.2	18.5	1.0	18.0	18.1	17.9	17.9	2.0	19.0
		25	0	18.1	17.9	17.9	5.0	19.0	18.3	18.0	18.3	1.0	18.0	18.1	17.8	17.8	2.0	19.0
		25	12	18.1	17.9	18.0	5.0	19.0	18.3	18.1	18.4	1.0	18.0	18.1	17.8	17.9	2.0	19.0
		25	25	18.1	17.8	17.9	5.0	19.0	18.2	18.1	18.4	1.0	18.0	18.1	17.8	17.9	2.0	19.0
		50	0	18.1	17.8	17.9	5.0	19.0	18.3	18.0	18.4	1.0	18.0	18.1	17.8	17.9	2.0	19.0

BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26065	26365	26665			26065	26365	26665			26065	26365	26665		
				1852.5 MHz	1882.5 MHz	1912.5 MHz			1852.5 MHz	1882.5 MHz	1912.5 MHz			1852.5 MHz	1882.5 MHz	1912.5 MHz		
5 MHz	QPSK	1	0	23.0	22.8	22.9	0.0	24.0	18.2	17.9	18.3	0.0	19.0	20.0	19.6	19.8	0.0	21.0
		1	12	23.1	22.8	23.0	0.0	24.0	18.2	18.0	18.4	0.0	19.0	20.0	19.8	19.9	0.0	21.0
		1	24	23.0	22.8	22.9	0.0	24.0	18.1	17.9	18.3	0.0	19.0	19.9	19.7	19.8	0.0	21.0
		12	0	22.1	21.8	21.8	1.0	23.0	18.2	17.9	18.3	0.0	19.0	20.0	19.7	19.8	0.0	21.0
		12	7	22.1	21.8	21.8	1.0	23.0	18.2	17.9	18.3	0.0	19.0	20.1	19.7	19.8	0.0	21.0
		12	13	22.1	21.8	21.9	1.0	23.0	18.1	18.0	18.4	0.0	19.0	20.0	19.7	19.9	0.0	21.0
		25	0	22.1	21.8	21.8	1.0	23.0	18.1	18.0	18.3	0.0	19.0	20.0	19.7	19.8	0.0	21.0
	16QAM	1	0	22.2	21.9	22.0	1.0	23.0	18.6	18.3	18.7	0.0	19.0	20.3	20.0	20.1	0.0	21.0
		1	12	22.3	21.9	22.1	1.0	23.0	18.6	18.4	18.8	0.0	19.0	20.4	20.1	20.2	0.0	21.0
		1	24	22.2	21.9	22.0	1.0	23.0	18.6	18.3	18.7	0.0	19.0	20.4	20.0	20.1	0.0	21.0
		12	0	21.1	20.8	20.9	2.0	22.0	18.2	18.0	18.4	0.0	19.0	20.0	19.7	19.9	0.0	21.0
		12	7	21.1	20.8	20.9	2.0	22.0	18.1	18.0	18.4	0.0	19.0	20.1	19.7	20.0	0.0	21.0
		12	13	21.1	20.8	21.0	2.0	22.0	18.1	18.0	18.4	0.0	19.0	20.1	19.7	20.0	0.0	21.0
		25	0	21.1	20.8	20.8	2.0	22.0	18.1	18.0	18.3	0.0	19.0	20.0	19.8	19.8	0.0	21.0
	64QAM	1	0	21.3	21.0	21.0	2.0	22.0	18.4	18.1	18.6	0.0	19.0	20.2	19.8	19.9	0.0	21.0
		1	12	21.3	21.0	21.1	2.0	22.0	18.4	18.2	18.6	0.0	19.0	20.3	19.9	20.0	0.0	21.0
		1	24	21.3	20.9	21.0	2.0	22.0	18.3	18.1	18.6	0.0	19.0	20.3	19.8	19.9	0.0	21.0
		12	0	20.1	19.8	19.9	3.0	21.0	18.3	18.0	18.3	0.0	19.0	20.1	19.8	19.8	0.0	21.0
		12	7	20.2	19.9	19.9	3.0	21.0	18.2	18.0	18.4	0.0	19.0	20.2	19.9	19.9	0.0	21.0
		12	13	20.1	19.8	20.0	3.0	21.0	18.2	18.0	18.4	0.0	19.0	20.1	19.8	19.9	0.0	21.0
		25	0	20.1	19.8	19.9	3.0	21.0	18.2	18.0	18.3	0.0	19.0	20.1	19.8	19.9	0.0	21.0
	256QAM	1	0	18.3	17.9	17.9	5.0	19.0	18.4	18.2	18.4	1.0	18.0	18.2	17.8	18.0	2.0	19.0
		1	12	18.4	18.0	18.1	5.0	19.0	18.5	18.2	18.6	1.0	18.0	18.3	17.9	18.1	2.0	19.0
		1	24	18.3	17.9	18.0	5.0	19.0	18.3	18.2	18.5	1.0	18.0	18.2	17.8	18.0	2.0	19.0
		12	0	18.1	17.8	17.9	5.0	19.0	18.3	18.0	18.3	1.0	18.0	18.1	17.8	17.8	2.0	19.0
		12	7	18.2	17.9	17.9	5.0	19.0	18.2	18.0	18.4	1.0	18.0	18.1	17.8	17.9	2.0	19.0
		12	13	18.2	17.8	17.9	5.0	19.0	18.2	18.0	18.4	1.0	18.0	18.1	17.8	17.9	2.0	19.0
		25	0	18.1	17.8	17.9	5.0	19.0	18.2	18.0	18.4	1.0	18.0	18.1	17.8	17.8	2.0	19.0

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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	Measured Pwr (dBm)			MPR	Tune-up Limit
				26055	26365	26675			26055	26365	26675			26055	26365	26675		
				1851.5 MHz	1882.5 MHz	1913.5 MHz			1851.5 MHz	1882.5 MHz	1913.5 MHz			1851.5 MHz	1882.5 MHz	1913.5 MHz		
3 MHz	QPSK	1	0	23.0	22.7	22.9	0.0	24.0	18.2	17.9	18.3	0.0	19.0	20.0	19.7	19.7	0.0	21.0
		1	8	23.1	22.8	22.9	0.0	24.0	18.2	17.9	18.4	0.0	19.0	20.1	19.8	19.9	0.0	21.0
		1	14	23.0	22.7	22.8	0.0	24.0	18.1	17.9	18.3	0.0	19.0	20.0	19.7	19.8	0.0	21.0
		8	0	22.1	21.7	21.8	1.0	23.0	18.2	17.9	18.3	0.0	19.0	20.0	19.7	19.8	0.0	21.0
		8	4	22.1	21.8	21.9	1.0	23.0	18.2	18.0	18.4	0.0	19.0	20.1	19.7	19.9	0.0	21.0
		8	7	22.1	21.8	21.9	1.0	23.0	18.2	17.9	18.4	0.0	19.0	20.0	19.7	19.9	0.0	21.0
		15	0	22.1	21.7	21.9	1.0	23.0	18.2	17.9	18.4	0.0	19.0	20.0	19.7	19.8	0.0	21.0
	16QAM	1	0	22.2	21.8	22.0	1.0	23.0	18.4	18.3	18.7	0.0	19.0	20.3	20.0	20.1	0.0	21.0
		1	8	22.2	21.9	22.2	1.0	23.0	18.5	18.3	18.8	0.0	19.0	20.4	20.1	20.2	0.0	21.0
		1	14	22.1	21.8	22.0	1.0	23.0	18.4	18.3	18.7	0.0	19.0	20.3	20.0	20.1	0.0	21.0
		8	0	21.1	20.9	20.8	2.0	22.0	18.2	18.0	18.3	0.0	19.0	20.1	19.8	19.8	0.0	21.0
		8	4	21.1	20.9	20.9	2.0	22.0	18.3	18.0	18.4	0.0	19.0	20.1	19.8	20.0	0.0	21.0
		8	7	21.1	20.9	20.9	2.0	22.0	18.3	18.1	18.5	0.0	19.0	20.1	19.8	20.0	0.0	21.0
		15	0	21.1	20.8	20.9	2.0	22.0	18.2	18.0	18.4	0.0	19.0	20.1	19.7	19.9	0.0	21.0
	64QAM	1	0	21.2	20.8	21.1	2.0	22.0	18.4	18.0	18.5	0.0	19.0	20.2	20.0	20.0	0.0	21.0
		1	8	21.3	20.9	21.2	2.0	22.0	18.4	18.2	18.7	0.0	19.0	20.3	20.1	20.1	0.0	21.0
		1	14	21.2	20.8	21.1	2.0	22.0	18.4	18.1	18.5	0.0	19.0	20.2	19.9	20.0	0.0	21.0
		8	0	20.1	19.8	19.9	3.0	21.0	18.3	18.0	18.3	0.0	19.0	20.1	19.8	19.8	0.0	21.0
		8	4	20.2	19.9	20.0	3.0	21.0	18.3	18.0	18.4	0.0	19.0	20.1	19.9	19.9	0.0	21.0
		8	7	20.1	19.8	20.0	3.0	21.0	18.3	18.0	18.4	0.0	19.0	20.1	19.9	20.0	0.0	21.0
		15	0	20.1	19.8	19.9	3.0	21.0	18.3	18.0	18.3	0.0	19.0	20.1	19.8	19.9	0.0	21.0
	256QAM	1	0	18.2	17.9	17.9	5.0	19.0	18.3	18.1	18.4	1.0	18.0	18.2	17.8	17.8	2.0	19.0
		1	8	18.2	18.0	18.1	5.0	19.0	18.5	18.2	18.5	1.0	18.0	18.2	18.0	17.9	2.0	19.0
		1	14	18.2	17.9	18.0	5.0	19.0	18.4	18.1	18.2	1.0	18.0	18.2	17.9	17.9	2.0	19.0
		8	0	18.1	17.8	17.9	5.0	19.0	18.3	18.0	18.4	1.0	18.0	18.1	17.8	17.8	2.0	19.0
		8	4	18.1	17.9	17.9	5.0	19.0	18.3	18.1	18.4	1.0	18.0	18.2	17.8	17.9	2.0	19.0
		8	7	18.2	17.8	17.9	5.0	19.0	18.3	18.0	18.4	1.0	18.0	18.1	17.9	18.0	2.0	19.0
		15	0	18.1	17.8	17.9	5.0	19.0	18.3	18.0	18.3	1.0	18.0	18.1	17.8	17.9	2.0	19.0

BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				26047	26365	26683			26047	26365	26683			26047	26365	26683		
				1850.7 MHz	1882.5 MHz	1914.3 MHz			1850.7 MHz	1882.5 MHz	1914.3 MHz			1850.7 MHz	1882.5 MHz	1914.3 MHz		
1.4 MHz	QPSK	1	0	23.1	22.8	22.9	0.0	24.0	18.2	17.9	18.4	0.0	19.0	20.0	19.7	19.8	0.0	21.0
		1	3	23.1	22.8	22.9	0.0	24.0	18.2	17.9	18.4	0.0	19.0	20.1	19.7	19.8	0.0	21.0
		1	5	23.1	22.8	22.9	0.0	24.0	18.2	17.9	18.4	0.0	19.0	20.1	19.7	19.8	0.0	21.0
		3	0	23.1	22.8	22.8	0.0	24.0	18.2	17.9	18.4	0.0	19.0	20.0	19.7	19.8	0.0	21.0
		3	1	23.1	22.7	22.8	0.0	24.0	18.2	17.9	18.4	0.0	19.0	20.0	19.7	19.8	0.0	21.0
		3	3	23.1	22.8	22.9	0.0	24.0	18.2	17.9	18.4	0.0	19.0	20.0	19.7	19.8	0.0	21.0
		6	0	22.0	21.7	21.9	1.0	23.0	18.2	17.9	18.4	0.0	19.0	20.0	19.7	19.8	0.0	21.0
	16QAM	1	0	22.1	21.9	22.0	1.0	23.0	18.5	18.1	18.7	0.0	19.0	20.3	19.8	20.1	0.0	21.0
		1	3	22.2	21.9	22.0	1.0	23.0	18.6	18.1	18.7	0.0	19.0	20.3	19.9	20.1	0.0	21.0
		1	5	22.2	21.9	22.0	1.0	23.0	18.5	18.1	18.6	0.0	19.0	20.3	19.9	20.2	0.0	21.0
		3	0	22.1	21.8	21.9	1.0	23.0	18.4	18.0	18.5	0.0	19.0	20.2	19.9	19.9	0.0	21.0
		3	1	22.2	21.8	22.0	1.0	23.0	18.3	18.0	18.5	0.0	19.0	20.2	19.9	20.0	0.0	21.0
		3	3	22.1	21.8	22.0	1.0	23.0	18.4	18.0	18.5	0.0	19.0	20.2	19.9	20.0	0.0	21.0
		6	0	21.0	20.7	20.9	2.0	22.0	18.3	18.0	18.4	0.0	19.0	20.1	19.7	19.9	0.0	21.0
	64QAM	1	0	21.2	20.9	20.9	2.0	22.0	18.5	18.1	18.6	0.0	19.0	20.4	19.9	20.0	0.0	21.0
		1	3	21.2	21.0	21.0	2.0	22.0	18.5	18.1	18.6	0.0	19.0	20.4	20.0	20.0	0.0	21.0
		1	5	21.2	20.9	20.9	2.0	22.0	18.5	18.1	18.5	0.0	19.0	20.4	19.9	19.9	0.0	21.0
		3	0	21.1	20.8	21.0	2.0	22.0	18.3	18.0	18.5	0.0	19.0	20.2	19.8	20.0	0.0	21.0
		3	1	21.1	20.8	21.0	2.0	22.0	18.3	18.0	18.5	0.0	19.0	20.2	19.9	20.0	0.0	21.0
		3	3	21.1	20.8	21.0	2.0	22.0	18.3	18.0	18.5	0.0	19.0	20.2	19.8	20.0	0.0	21.0
		6	0	20.1	19.8	19.9	3.0	21.0	18.3	18.0	18.3	0.0	19.0	20.0	19.8	19.8	0.0	21.0
	256QAM	1	0	18.2	17.9	18.0	5.0	19.0	18.3	18.0	18.4	1.0	18.0	18.1	17.9	17.9	2.0	19.0
		1	3	18.2	18.0	18.0	5.0	19.0	18.3	18.0	18.4	1.0	18.0	18.2	17.9	18.0	2.0	19.0
		1	5	18.2	17.9	17.9	5.0	19.0	18.3	18.0	18.2	1.0	18.0	18.1	17.9	18.0	2.0	19.0
		3	0	18.1	17.8	18.0	5.0	19.0	18.3	18.0	18.4	1.0	18.0	18.2	17.9	17.9	2.0	19.0
		3	1	18.1	17.8	18.0	5.0	19.0	18.3	18.0	18.3	1.0	18.0	18.2	17.8	17.9	2.0	19.0
		3	3	18.1	17.8	18.0	5.0	19.0	18.3	18.0	18.3	1.0	18.0	18.2	17.8	17.8	2.0	19.0
		6	0	18.1	17.7	17.9	5.0	19.0	18.2	17.9	18.2	1.0	18.0	18.2	17.7	17.9	2.0	19.0

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LTE Band 26 Measured Results

BW (MHz)	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)				
				DSI = 0, 1, 2, 3, 4				
				Measured Pwr (dBm)			MPR	Tune-up Limit
				26765	26865	26965		
				821.5 MHz	831.5 MHz	841.5 MHz		
15 MHz	QPSK	1	0		24.1		0.0	25.0
		1	37		24.1		0.0	25.0
		1	74		23.9		0.0	25.0
		36	0		23.1		1.0	24.0
		36	20		23.0		1.0	24.0
		36	39		23.1		1.0	24.0
		75	0		23.1		1.0	24.0
	16QAM	1	0		23.4		1.0	24.0
		1	37		23.3		1.0	24.0
		1	74		23.2		1.0	24.0
		36	0		22.1		2.0	23.0
		36	20		22.0		2.0	23.0
		36	39		22.1		2.0	23.0
		75	0		22.1		2.0	23.0
	64QAM	1	0		22.2		2.0	23.0
		1	37		22.1		2.0	23.0
		1	74		22.0		2.0	23.0
		36	0		21.1		3.0	22.0
		36	20		21.0		3.0	22.0
		36	39		21.1		3.0	22.0
		75	0		21.1		3.0	22.0
	256QAM	1	0		19.1		5.0	20.0
		1	37		19.1		5.0	20.0
		1	74		19.1		5.0	20.0
		36	0		19.1		5.0	20.0
		36	20		19.0		5.0	20.0
		36	39		19.1		5.0	20.0
		75	0		19.1		5.0	20.0
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	24.3	24.1	24.0	0.0	25.0
		1	25	24.3	24.1	24.0	0.0	25.0
		1	49	24.2	24.1	23.9	0.0	25.0
		25	0	23.2	23.1	23.0	1.0	24.0
		25	12	23.3	23.1	22.9	1.0	24.0
		25	25	23.2	23.1	22.9	1.0	24.0
		50	0	23.3	23.1	23.0	1.0	24.0
	16QAM	1	0	23.6	23.6	23.4	1.0	24.0
		1	25	23.5	23.5	23.2	1.0	24.0
		1	49	23.5	23.5	23.2	1.0	24.0
		25	0	22.2	22.1	22.0	2.0	23.0
		25	12	22.3	22.1	22.0	2.0	23.0
		25	25	22.3	22.2	22.0	2.0	23.0
		50	0	22.3	22.1	22.0	2.0	23.0
	64QAM	1	0	22.4	22.3	22.1	2.0	23.0
		1	25	22.4	22.3	22.1	2.0	23.0
		1	49	22.3	22.3	22.0	2.0	23.0
		25	0	21.2	21.1	21.0	3.0	22.0
		25	12	21.3	21.1	21.0	3.0	22.0
		25	25	21.2	21.1	21.0	3.0	22.0
		50	0	21.2	21.1	21.0	3.0	22.0
	256QAM	1	0	19.3	19.2	19.1	5.0	20.0
		1	25	19.4	19.3	19.1	5.0	20.0
		1	49	19.3	19.1	19.0	5.0	20.0
		25	0	19.2	19.1	19.0	5.0	20.0
		25	12	19.3	19.1	19.0	5.0	20.0
		25	25	19.2	19.1	19.0	5.0	20.0
		50	0	19.2	19.1	19.0	5.0	20.0

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LTE Band 26 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26715	26865	27015		
				816.5 MHz	831.5 MHz	846.5 MHz		
5 MHz	QPSK	1	0	24.2	24.1	23.9	0.0	25.0
		1	12	24.3	24.2	23.9	0.0	25.0
		1	24	24.2	24.1	23.8	0.0	25.0
		12	0	23.2	23.1	22.9	1.0	24.0
		12	7	23.3	23.1	23.0	1.0	24.0
		12	13	23.3	23.1	22.9	1.0	24.0
		25	0	23.3	23.0	22.9	1.0	24.0
	16QAM	1	0	23.6	23.5	23.4	1.0	24.0
		1	12	23.7	23.6	23.4	1.0	24.0
		1	24	23.5	23.5	23.4	1.0	24.0
		12	0	22.1	22.2	22.0	2.0	23.0
		12	7	22.2	22.3	22.0	2.0	23.0
		12	13	22.2	22.3	22.0	2.0	23.0
		25	0	22.3	22.1	21.9	2.0	23.0
	64QAM	1	0	22.4	22.3	22.1	2.0	23.0
		1	12	22.5	22.3	22.1	2.0	23.0
		1	24	22.4	22.2	22.0	2.0	23.0
		12	0	21.2	21.1	21.0	3.0	22.0
		12	7	21.3	21.1	20.9	3.0	22.0
		12	13	21.2	21.1	21.0	3.0	22.0
		25	0	21.3	21.1	20.9	3.0	22.0
	256QAM	1	0	19.3	19.1	19.0	5.0	20.0
		1	12	19.4	19.2	19.0	5.0	20.0
		1	24	19.4	19.1	19.0	5.0	20.0
		12	0	19.2	19.1	18.9	5.0	20.0
		12	7	19.3	19.1	19.0	5.0	20.0
		12	13	19.2	19.1	18.9	5.0	20.0
		25	0	19.2	19.1	18.9	5.0	20.0

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	24.2	24.1	23.9	0.0	25.0
		1	8	24.3	24.2	23.9	0.0	25.0
		1	14	24.2	24.0	23.8	0.0	25.0
		8	0	23.2	23.1	22.9	1.0	24.0
		8	4	23.3	23.1	22.9	1.0	24.0
		8	7	23.3	23.2	22.9	1.0	24.0
		15	0	23.3	23.1	22.9	1.0	24.0
	16QAM	1	0	23.5	23.5	23.2	1.0	24.0
		1	8	23.6	23.6	23.3	1.0	24.0
		1	14	23.5	23.5	23.2	1.0	24.0
		8	0	22.3	22.1	21.9	2.0	23.0
		8	4	22.4	22.2	22.0	2.0	23.0
		8	7	22.3	22.2	22.0	2.0	23.0
		15	0	22.2	22.1	21.9	2.0	23.0
	64QAM	1	0	22.3	22.3	22.1	2.0	23.0
		1	8	22.4	22.4	22.1	2.0	23.0
		1	14	22.2	22.3	22.0	2.0	23.0
		8	0	21.2	21.1	21.0	3.0	22.0
		8	4	21.3	21.1	21.0	3.0	22.0
		8	7	21.3	21.2	21.0	3.0	22.0
		15	0	21.3	21.1	20.9	3.0	22.0
	256QAM	1	0	19.2	19.1	18.9	5.0	20.0
		1	8	19.4	19.3	19.0	5.0	20.0
		1	14	19.3	19.1	19.0	5.0	20.0
		8	0	19.2	19.1	18.9	5.0	20.0
		8	4	19.3	19.1	18.9	5.0	20.0
		8	7	19.2	19.2	19.0	5.0	20.0
		15	0	19.2	19.1	18.9	5.0	20.0

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LTE Band 26 Measured Results (Continued)

BW (MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
				26697	26865	27033		
				814.7 MHz	831.5 MHz	848.3 MHz		
1.4 MHz	QPSK	1	0	23.0	23.9	24.0	0.0	25.0
		1	3	24.0	24.0	24.0	0.0	25.0
		1	5	24.0	24.0	24.0	0.0	25.0
		3	0	24.0	24.0	24.0	0.0	25.0
		3	1	24.0	24.0	24.0	0.0	25.0
		3	3	24.0	24.0	24.0	0.0	25.0
		6	0	22.8	22.7	22.5	1.0	24.0
	16QAM	1	0	23.4	23.2	23.3	1.0	24.0
		1	3	23.4	23.4	23.4	1.0	24.0
		1	5	23.4	23.3	23.4	1.0	24.0
		3	0	23.1	23.1	23.1	1.0	24.0
		3	1	23.2	23.2	23.2	1.0	24.0
		3	3	23.1	23.1	23.2	1.0	24.0
		6	0	22.4	22.3	22.0	2.0	23.0
	64QAM	1	0	22.4	22.2	22.1	2.0	23.0
		1	3	22.4	22.2	22.3	2.0	23.0
		1	5	22.3	22.3	22.2	2.0	23.0
		3	0	22.2	22.1	22.1	2.0	23.0
		3	1	22.2	22.2	22.2	2.0	23.0
		3	3	22.2	22.2	22.2	2.0	23.0
		6	0	21.3	21.1	21.0	3.0	22.0
	256QAM	1	0	19.3	19.1	19.1	5.0	20.0
		1	3	19.3	19.2	19.2	5.0	20.0
		1	5	19.3	19.1	19.2	5.0	20.0
		3	0	19.2	19.1	19.1	5.0	20.0
		3	1	19.3	19.1	19.2	5.0	20.0
		3	3	19.3	19.1	19.1	5.0	20.0
		6	0	19.1	19.1	18.9	5.0	20.0

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LTE Band 41 (Power Class 3) Measured Results

BW(MHz)	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)																									
				DSI = 0, 2							DSI = 3							DSI = 1, 4						
				Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490			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			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
20 MHz	QPSK	1	0	24.2	24.2	24.4	24.7	24.6	0.0	25.0	22.0	22.4	22.5	22.7	22.6	0.0	23.0	22.0	22.3	22.5	22.7	22.5	0.0	23.0
		1	49	24.2	24.2	24.5	24.7	24.5	0.0	25.0	22.0	22.4	22.5	22.6	22.5	0.0	23.0	22.1	22.4	22.5	22.6	22.5	0.0	23.0
		1	99	24.3	24.1	24.6	24.7	24.5	0.0	25.0	22.1	22.4	22.6	22.6	22.6	0.0	23.0	22.1	22.4	22.6	22.7	22.5	0.0	23.0
		50	0	23.2	23.3	23.5	23.8	23.5	1.0	24.0	22.0	22.4	22.5	22.7	22.6	0.0	23.0	22.0	22.4	22.5	22.7	22.6	0.0	23.0
		50	24	23.3	23.3	23.6	23.8	23.5	1.0	24.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
		50	50	23.3	23.2	23.6	23.7	23.5	1.0	24.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
		100	0	23.3	23.3	23.5	23.7	23.5	1.0	24.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
	16QAM	1	0	23.3	23.3	23.4	23.8	23.7	1.0	24.0	22.2	22.4	22.6	22.8	22.6	0.0	23.0	22.0	22.2	22.6	22.6	22.4	0.0	23.0
		1	49	23.4	23.5	23.5	23.8	23.5	1.0	24.0	22.3	22.5	22.6	22.8	22.5	0.0	23.0	22.1	22.3	22.6	22.6	22.4	0.0	23.0
		1	99	23.3	23.3	23.8	23.8	23.6	1.0	24.0	22.2	22.5	22.7	22.8	22.6	0.0	23.0	22.1	22.1	22.7	22.6	22.4	0.0	23.0
		50	0	22.2	22.3	22.4	22.7	22.5	2.0	23.0	22.0	22.4	22.5	22.7	22.6	0.0	23.0	22.0	22.4	22.5	22.7	22.6	0.0	23.0
		50	24	22.3	22.3	22.5	22.7	22.5	2.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0	22.1	22.5	22.6	22.6	22.6	0.0	23.0
		50	50	22.3	22.2	22.5	22.7	22.4	2.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0	22.1	22.4	22.6	22.7	22.6	0.0	23.0
		100	0	22.3	22.3	22.5	22.7	22.5	2.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
	64QAM	1	0	22.3	22.6	22.5	22.7	22.5	2.0	23.0	22.0	22.4	22.6	22.7	22.6	0.0	23.0	22.0	22.3	22.6	22.8	22.6	0.0	23.0
		1	49	22.3	22.8	22.5	22.7	22.6	2.0	23.0	22.2	22.4	22.6	22.7	22.6	0.0	23.0	22.1	22.3	22.6	22.8	22.6	0.0	23.0
		1	99	22.4	22.6	22.6	22.7	22.8	2.0	23.0	22.2	22.4	22.7	22.7	22.6	0.0	23.0	22.2	22.3	22.6	22.8	22.6	0.0	23.0
		50	0	21.2	21.6	21.6	21.7	21.6	3.0	22.0	20.9	21.4	21.5	21.7	21.6	0.0	23.0	21.0	21.4	21.5	21.7	21.5	0.0	23.0
		50	24	21.3	21.7	21.7	21.8	21.6	3.0	22.0	21.1	21.5	21.6	21.7	21.6	0.0	23.0	21.1	21.4	21.6	21.7	21.6	0.0	23.0
		50	50	21.3	21.7	21.8	21.7	21.7	3.0	22.0	21.1	21.4	21.6	21.7	21.6	0.0	23.0	21.1	21.4	21.6	21.7	21.6	0.0	23.0
		100	0	21.3	21.7	21.7	21.8	21.7	3.0	22.0	21.1	21.4	21.6	21.7	21.6	0.0	23.0	21.1	21.4	21.6	21.7	21.6	0.0	23.0
	256QAM	1	0	18.9	19.3	19.3	19.8	19.4	5.0	20.0	18.9	19.3	19.5	19.6	19.5	3.0	20.0	18.9	19.3	19.6	19.6	19.5	3.0	20.0
		1	49	19.0	19.0	19.5	19.7	19.3	5.0	20.0	18.9	19.3	19.5	19.5	19.4	3.0	20.0	19.0	19.3	19.6	19.6	19.5	3.0	20.0
		1	99	19.3	19.3	19.6	19.8	19.4	5.0	20.0	19.1	19.4	19.6	19.6	19.5	3.0	20.0	19.1	19.5	19.7	19.6	19.4	3.0	20.0
		50	0	19.1	19.3	19.4	19.7	19.5	5.0	20.0	19.0	19.3	19.5	19.7	19.5	3.0	20.0	18.9	19.3	19.5	19.6	19.5	3.0	20.0
		50	24	19.3	19.2	19.5	19.8	19.5	5.0	20.0	19.1	19.4	19.6	19.7	19.6	3.0	20.0	19.1	19.4	19.6	19.6	19.5	3.0	20.0
		50	50	19.2	19.2	19.5	19.6	19.4	5.0	20.0	19.1	19.4	19.6	19.7	19.6	3.0	20.0	19.1	19.4	19.6	19.7	19.5	3.0	20.0
		100	0	19.2	19.2	19.5	19.7	19.5	5.0	20.0	19.1	19.4	19.6	19.7	19.6	3.0	20.0	19.0	19.4	19.6	19.6	19.5	3.0	20.0
BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490			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			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
15 MHz	QPSK	1	0	24.1	24.2	24.5	24.7	24.4	0.0	25.0	21.8	22.2	22.4	22.5	22.3	0.0	23.0	21.9	22.3	22.5	22.6	22.4	0.0	23.0
		1	37	24.2	24.2	24.5	24.8	24.5	0.0	25.0	21.9	22.3	22.4	22.5	22.3	0.0	23.0	21.9	22.4	22.5	22.5	22.5	0.0	23.0
		1	74	24.3	24.3	24.7	24.7	24.5	0.0	25.0	22.0	22.3	22.5	22.6	22.4	0.0	23.0	22.0	22.4	22.6	22.6	22.5	0.0	23.0
		36	0	23.2	23.3	23.5	23.8	23.5	1.0	24.0	21.8	22.3	22.4	22.5	22.4	0.0	23.0	21.9	22.3	22.5	22.6	22.5	0.0	23.0
		36	20	23.3	23.3	23.5	23.8	23.5	1.0	24.0	21.9	22.3	22.5	22.5	22.4	0.0	23.0	22.0	22.4	22.6	22.7	22.5	0.0	23.0
		36	39	23.3	23.2	23.6	23.7	23.5	1.0	24.0	21.9	22.3	22.5	22.5	22.4	0.0	23.0	22.0	22.4	22.6	22.6	22.5	0.0	23.0
		75	0	23.3	23.3	23.5	23.7	23.5	1.0	24.0	21.9	22.3	22.5	22.5	22.4	0.0	23.0	22.0	22.4	22.6	22.6	22.5	0.0	23.0
	16QAM	1	0	23.2	23.2	23.5	23.8	23.4	1.0	24.0	21.9	22.1	22.4	22.5	22.3	0.0	23.0	21.8	22.3	22.4	22.5	22.5	0.0	23.0
		1	37	23.3	23.1	23.4	23.7	23.4	1.0	24.0	22.0	22.2	22.4	22.6	22.3	0.0	23.0	21.9	22.4	22.4	22.5	22.5	0.0	23.0
		1	74	23.2	23.2	23.5	23.8	23.6	1.0	24.0	22.0	22.3	22.5	22.6	22.3	0.0	23.0	22.0	22.4	22.5	22.6	22.5	0.0	23.0
		36	0	22.2	22.3	22.4	22.7	22.5	2.0	23.0	21.8	22.3	22.4	22.5	22.4	0.0	23.0	21.9	22.3	22.5	22.6	22.5	0.0	23.0
		36	20	22.3	22.2	22.5	22.7	22.5	2.0	23.0	22.0	22.3	22.5	22.5	22.4	0.0	23.0	22.0	22.4	22.5	22.6	22.5	0.0	23.0
		36	39	22.3	22.1	22.5	22.7	22.5	2.0	23.0	22.0	22.3	22.5	22.6	22.4	0.0	23.0	22.0	22.4	22.6	22.6	22.5	0.0	23.0
		75	0	22.3	22.3	22.5	22.8	22.5	2.0	23.0	22.0	22.3	22.5	22.6	22.4	0.0	23.0	22.0	22.4	22.5	22.6	22.5	0.0	23.0
	64QAM	1	0	22.1	22.7	22.8	22.8	22.7	2.0	23.0	22.1	21.7	21.7	22.0	21.9	0.0	23.0	21.9	22.3	22.5	22.5	22.4	0.0	23.0
		1	37	22.2	22.6	22.6	22.9	22.6	2.0	23.0	22.0	21.7	21.8	21.9	21.9	0.0	23.0	21.8	22.3	22.6	22.6	22.4	0.0	23.0
		1	74	22.3	22.6	22.9	22.8	22.6	2.0	23.0	21.9	21.7	21.9	22.1	22.0	0.0	23.0	22.0	22.4	22.6	22.6	22.5	0.0	23.0
		36	0	21.2	21.6	21.7	21.8	21.7	3.0	22.0	21.1	20.7	20.7	21.0	20.9	0.0	23.0	20.9	21.3	21.5	21.6	21.5	0.0	23.0
		36	20	21.3	21.6	21.8	21.9	21.7	3.0	22.0	21.0	20.7	20.8	21.1	21.0	0.0	23.0	21.0	21.4	21.6	21.6	21.5	0.0	23.0
		36	39	21.3	21.7	21.8	21.9	21.7	3.0	22.0	20.9	20.7	20.8	21.1	20.9	0.0	23.0	21.0	21.4	21.6	21.6	21.5	0.0	23.0
		75	0	21.3	21.7	21.7	21.8	21.7	3.0	22.0	21.0	20.7	20.8	21.0	20.9	0.0	23.0	21.0	21.4	21.6	21.6	21.5	0.0	23.0
	256QAM	1	0	19.0	19.2	19.1	19.8	19.3	5.0	20.0	19.0	18.6	18.5	18.9	18.8	3.0	20.0	18.8	19.2	19.3	19.5	19.4	3.0	20.0
		1	37	19.1	19.1	19.2	19.6	19.3	5.0	20.0	19.0	18.6	18.6	18.9	18.8	3.0	20.0	18.9	19.4	19.4	19.5	19.3	3.0	20.0
		1	74	19.2	19.1	19.4	19.6	19.4	5.0	20.0	18.9	18.6	18.7	18.9	18.9	3.0	20.0	19.0	19.5	19.5	19.6	19.4	3.0	20.0
		36	0	19.1	19.2	19.4	19.7	19.4	5.0	20.0	19.1	18.7	18.7	19.0	18.9	3.0	20.0	18.9	19.3	19.5	19.6	19.4	3.0	20.0
		36	20	19.2	19.3	19.5	19.7	19.4	5.0	20.0	19.1	18.7	18.8	19.0	18.9	3.0	20.0	19.0	19.4	19.5	19.6	19.4	3.0	20.0
		36	39	19.2	19.2	19.5	19.8	19.4	5.0	20.0	18.9	18.7	18.8	19.0	18.9	3.0	20.0	19.0	19.4	19.6	19.6	19.4	3.0	20.0
		75	0	19.3	19.3	19.5	19.8	19.4	5.0	20.0	19.0	18.7	18.8	19.0	18.9	3.0	20.0	19.0	19.4	19.6	19.6	19.5	3.0	20.0
BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490			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			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
10 MHz	QPSK	1	0	24.6	24.4	24.6	24.9	24.6	0.0	25.0	22.0	22.4	22.5	22.6	22.5	0.0	23.0	22.0	22.4	22.5	22.7	22.6	0.0	23.0
		1	25	24.6	24.4	24.7	24.9	24.7	0.0	25.0	22.1	22.4	22.6	22.7	22.5	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
		1	49	24.5	24.3	24.6	24.8	24.6	0.0	25.0	22.1	22.4	22.5	22.6	22.4	0.0	23.0	22.1	22.5	22.6	22.6	22.5	0.0	23.0
		25	0	23.6	23.4	23.6	23.9	23.6	1.0	24.0	22.0	22.3	22.5	22.7	22.5	0.0	23.0	22.1	22.4	22.6	22.7	22.6	0.0	23.0
		25	12	23.6	23.4	23.7	24.0	23.7	1.0	24.0	22.1	22.4	22.6	22.7	22.6	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
		25	25	23.6	23.3	23.7	23.9	23.6	1.0	24.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0	22.1	22.5	22.7	22.7	22.6	0.0	23.0
		50	0	23.6	23.4	23.6	23.9	23.6	1.0	24.0	22.1	22.4	22.6	22.7	22.5	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
	16QAM	1	0	23.7	23.4	23.6	23.8	23.6	1.0	24.0	21.8	22.4	22.5	22.5	22.5	0.0	23.0	22.0	22.5	22.5	22.6	22.6	0.0	23.0
		1	25	23.8	23.4	23.8	23.8	23.5	1.0	24.0	21.9	22.4	22.6	22.5	22.5	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
		1	49	23.6	23.4	23.8	23.7	23.5	1.0	24.0	22.0	22.5	22.6	22.5	22.5	0.0	23.0	22.1	22.5	22.5	22.6	22.5	0.0	23.0
		25	0	22.6	22.4	22.6	22.9	22.6	2.0	23.0	22.0	22.3	22.6	22.6	22.5	0.0	23.0	22.0	22.4	22.6	22.7	22.6	0.0	23.0
		25	12	22.6	22.4	22.7	22.9	22.6	2.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0	22.1	22.5	22.7	22.7	22.6	0.0	23.0
		25	25	22.6	22.3	22.7	22.9	22.6	2.0	23.0	22.1	22.5	22.7	22.6	22.5	0.0	23.0	22.1	22.5	22.7	22.7	22.6	0.0	23.0
		50	0	22.6	22.4	22.6	22.9	22.6	2.0	23.0	22.0	22.4	22.6	22.7	22.5	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
	64QAM	1	0	22.2	22.6	22.9	22.9	22.7	2.0	23.0	22.1	21.7	21.9	22.2	22.1	0.0	23.0	22.1	22.4	22.6	22.8	22.4	0.0	23.0
		1	25	22.2	22.7	22.9	23.0	22.8	2.0	23.0	22.2	21.8	22.0	22.3	22.1	0.0	23.0	22.1	22.5	22.7	22.8	22.5	0.0	23.0
		1	49	22.4	22.7	22.9	22.9	22.7	2.0	23.0	22.1	21.8	21.9	22.2	22.1	0.0	23.0	22.1	22.5	22.6	22.7	22.4	0.0	23.0
		25	0	21.3	21.7	21.9	21.9	21.8	3.0	22.0	21.2	20.9	20.8	21.1	21.1	0.0	23.0	21.0	21.4	21.6	21.7	21.6	0.0	23.0
		25	12	21.5	21.8	22.0	22.0	21.9	3.0	22.0	21.2	20.9	21.0	21.2	21.1	0.0	23.0	21.1	21.5	21.7	21.8	21.6	0.0	23.0
		25	25	21.4	21.8	21.9	21.9	21.8	3.0	22.0	21.1	20.8	20.9	21.2	21.1	0.0	23.0	21.1	21.5	21.7	21.7	21.6	0.0	23.0
		50	0	21.4	21.8	21.9	21.9	21.8	3.0	22.0	21.2	20.9	20.9	21.1	21.0	0.0	23.0	21.0	21.5	21.6	21.7	21.6	0.0	23.0
	256QAM	1	0	19.1	19.3	19.3	19.8	19.4	5.0	20.0	19.1	18.7	18.7	18.9	19.0	3.0	20.0	19.0	19.3	19.4	19.7	19.5	3.0	20.0
		1	25	19.3	19.4	19.4	19.7	19.5	5.0	20.0	19.1	18.8	18.9	19.0	19.0	3.0	20.0	19.1	19.4	19.6	19.7	19.6	3.0	20.0
		1	49	19.2	19.2	19.5	19.6	19.4	5.0	20.0	19.0	18.8	18.8	18.9	18.9	3.0	20.0	19.0	19.4	19.5	19.7	19.4	3.0	20.0
		25	0	19.2	19.4	19.6	19.9	19.5	5.0	20.0	19.1	18.8	18.8	19.2	19.1	3.0	20.0	19.0	19.4	19.5	19.7	19.6	3.0	20.0
		25	12	19.4	19.4	19.7	19.9	19.6	5.0	20.0	19.2	18.8	19.0	19.2	19.1	3.0	20.0	19.1	19.5	19.6	19.7	19.6	3.0	20.0
		25	25	19.4	19.3	19.6	19.9	19.6	5.0	20.0	19.1	18.8	18.9	19.2	19.0	3.0	20.0	19.1	19.5	19.6	19.7	19.6	3.0	20.0
		50	0	19.3	19.4	19.6	19.8	19.6	5.0	20.0	19.1	18.8	18.9	19.2	19.1	3.0	20.0	19.1	19.4	19.6	19.7	19.6	3.0	20.0

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

BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
				39750	40185	40620	41055	41490			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			2506 MHz	2549.5 MHz	2593 MHz	2636.5 MHz	2680 MHz		
5 MHz	QPSK	1	0	23.3	24.4	24.6	24.8	24.6	0.0	25.0	22.0	22.4	22.5	22.6	22.5	0.0	23.0	22.0	22.4	22.5	22.6	22.5	0.0	23.0
		1	12	24.4	24.5	24.7	24.9	24.6	0.0	25.0	22.1	22.5	22.6	22.6	22.6	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
		1	24	24.3	24.3	24.7	24.8	24.5	0.0	25.0	22.0	22.4	22.5	22.5	22.4	0.0	23.0	22.1	22.5	22.6	22.6	22.5	0.0	23.0
		12	0	23.4	23.4	23.6	23.9	23.6	1.0	24.0	22.0	22.4	22.6	22.6	22.5	0.0	23.0	22.0	22.5	22.7	22.7	22.6	0.0	23.0
		12	7	23.4	23.5	23.7	23.9	23.6	1.0	24.0	22.1	22.4	22.6	22.6	22.6	0.0	23.0	22.1	22.5	22.7	22.7	22.6	0.0	23.0
		12	13	23.4	23.4	23.7	23.9	23.6	1.0	24.0	22.1	22.4	22.6	22.6	22.5	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
		25	0	23.4	23.4	23.6	23.9	23.6	1.0	24.0	22.0	22.4	22.5	22.6	22.5	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
	16QAM	1	0	23.3	23.6	23.6	23.7	23.7	1.0	24.0	22.0	22.5	22.5	22.6	22.6	0.0	23.0	22.0	22.4	22.6	22.6	22.5	0.0	23.0
		1	12	23.5	23.5	23.6	23.9	23.8	1.0	24.0	22.1	22.6	22.6	22.6	22.7	0.0	23.0	22.1	22.4	22.7	22.7	22.6	0.0	23.0
		1	24	23.5	23.4	23.7	23.8	23.6	1.0	24.0	22.0	22.5	22.6	22.6	22.6	0.0	23.0	22.0	22.4	22.6	22.6	22.5	0.0	23.0
		12	0	22.4	22.4	22.5	22.9	22.6	2.0	23.0	22.0	22.4	22.5	22.6	22.5	0.0	23.0	22.0	22.4	22.7	22.8	22.4	0.0	23.0
		12	7	22.5	22.5	22.6	22.9	22.6	2.0	23.0	22.1	22.5	22.5	22.6	22.5	0.0	23.0	22.1	22.5	22.7	22.8	22.5	0.0	23.0
		12	13	22.4	22.5	22.6	22.9	22.6	2.0	23.0	22.1	22.4	22.6	22.6	22.5	0.0	23.0	22.1	22.4	22.7	22.8	22.4	0.0	23.0
		25	0	22.4	22.3	22.6	22.9	22.6	2.0	23.0	22.1	22.4	22.6	22.6	22.5	0.0	23.0	22.1	22.5	22.6	22.7	22.6	0.0	23.0
	64QAM	1	0	22.4	22.6	22.7	23.0	22.7	2.0	23.0	22.2	21.7	22.0	22.2	22.1	0.0	23.0	22.0	22.5	22.5	22.7	22.5	0.0	23.0
		1	12	22.3	22.7	22.9	23.0	22.7	2.0	23.0	22.2	21.9	22.1	22.2	22.0	0.0	23.0	22.0	22.6	22.6	22.8	22.6	0.0	23.0
		1	24	22.3	22.8	22.9	23.0	22.7	2.0	23.0	22.2	21.8	22.0	22.1	21.9	0.0	23.0	22.1	22.5	22.6	22.8	22.5	0.0	23.0
		12	0	21.3	21.7	21.9	22.0	21.8	3.0	22.0	21.2	20.8	20.9	21.1	21.0	0.0	23.0	21.0	21.5	21.6	21.7	21.5	0.0	23.0
		12	7	21.4	21.8	21.9	22.0	21.9	3.0	22.0	21.2	20.8	21.0	21.2	21.1	0.0	23.0	21.1	21.5	21.6	21.7	21.6	0.0	23.0
		12	13	21.3	21.8	21.9	21.9	21.8	3.0	22.0	21.1	20.8	20.9	21.1	21.0	0.0	23.0	21.1	21.5	21.7	21.7	21.6	0.0	23.0
		25	0	21.4	21.8	22.0	21.9	21.8	3.0	22.0	21.2	20.8	20.9	21.1	21.0	0.0	23.0	21.1	21.5	21.6	21.7	21.5	0.0	23.0
	256QAM	1	0	19.3	19.2	19.4	19.8	19.5	5.0	20.0	19.2	18.7	18.6	19.2	18.9	3.0	20.0	18.9	19.4	19.5	19.6	19.5	3.0	20.0
		1	12	19.3	19.4	19.7	20.0	19.7	5.0	20.0	19.2	18.8	18.8	19.3	19.1	3.0	20.0	19.1	19.5	19.6	19.6	19.6	3.0	20.0
		1	24	19.2	19.3	19.6	19.8	19.4	5.0	20.0	19.0	18.8	18.8	19.2	19.0	3.0	20.0	19.1	19.5	19.6	19.6	19.4	3.0	20.0
		12	0	19.2	19.4	19.5	19.8	19.6	5.0	20.0	19.1	18.8	18.9	19.1	19.0	3.0	20.0	19.0	19.5	19.6	19.7	19.6	3.0	20.0
		12	7	19.3	19.4	19.7	19.8	19.6	5.0	20.0	19.2	18.8	18.9	19.2	19.1	3.0	20.0	19.1	19.5	19.7	19.8	19.6	3.0	20.0
		12	13	19.2	19.4	19.6	19.8	19.5	5.0	20.0	19.0	18.8	18.9	19.2	19.0	3.0	20.0	19.1	19.5	19.6	19.7	19.6	3.0	20.0
		25	0	19.3	19.3	19.6	19.8	19.5	5.0	20.0	19.1	18.8	18.9	19.2	19.0	3.0	20.0	19.1	19.5	19.6	19.7	19.5	3.0	20.0

LTE Band 41 (Power Class 2) Measured Results

DSI	Modulation	BW (MHz)	Channel	Freq. (MHz)	RB/Offset	Power (dBm)	
						Tune-up Limit	Meas.
DSI = 0,2	QPSK	20	41055	2636.5	1/0	26.50	26.24
DSI = 1	QPSK	20	41055	2636.5	50/24	25.00	24.92
DSI = 3	QPSK	20	41055	2636.5	50/24	25.00	24.91

Notes:

Conducted Power measurement for LTE Band 41 Power Class 2 were performed with the highest SAR test configuration in Power Class 3 for each RF Exposure condition.

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LTE Band 66 Measured Results

BW(MHz)	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)														
				DSI = 0, 2					DSI = 3					DSI = 1, 4				
				Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				132072	132322	132572			132072	132322	132572			132072	132322	132572		
				1720 MHz	1745 MHz	1770 MHz			1720 MHz	1745 MHz	1770 MHz			1720 MHz	1745 MHz	1770 MHz		
20 MHz	QPSK	1	0	22.5	22.9	22.8	0.0	24.0	18.5	19.2	19.1	0.0	20.0	19.5	20.1	20.1	0.0	21.0
		1	49	22.7	23.1	22.8	0.0	24.0	18.7	19.3	19.0	0.0	20.0	19.6	20.2	20.0	0.0	21.0
		1	99	22.9	23.1	22.7	0.0	24.0	18.9	19.3	18.9	0.0	20.0	19.9	20.2	19.9	0.0	21.0
		50	0	21.6	22.0	21.8	1.0	23.0	18.6	19.2	19.1	0.0	20.0	19.6	20.2	20.1	0.0	21.0
		50	24	21.8	22.1	21.8	1.0	23.0	18.8	19.2	19.0	0.0	20.0	19.8	20.2	20.1	0.0	21.0
		50	50	21.9	22.2	21.9	1.0	23.0	18.9	19.3	19.0	0.0	20.0	19.9	20.3	20.0	0.0	21.0
		100	0	21.8	22.1	21.8	1.0	23.0	18.8	19.2	19.0	0.0	20.0	19.8	20.2	20.1	0.0	21.0
	16QAM	1	0	21.8	22.4	22.2	1.0	23.0	18.9	19.4	19.4	0.0	20.0	19.9	20.4	20.4	0.0	21.0
		1	49	22.0	22.5	22.3	1.0	23.0	19.0	19.6	19.4	0.0	20.0	20.1	20.6	20.4	0.0	21.0
		1	99	22.2	22.5	22.1	1.0	23.0	19.3	19.5	19.1	0.0	20.0	20.3	20.5	20.1	0.0	21.0
		50	0	20.6	21.0	20.8	2.0	22.0	18.6	19.2	19.1	0.0	20.0	19.6	20.2	20.1	0.0	21.0
		50	24	20.8	21.1	20.9	2.0	22.0	18.8	19.3	19.1	0.0	20.0	19.7	20.3	20.1	0.0	21.0
		50	50	20.9	21.1	20.9	2.0	22.0	18.9	19.2	19.0	0.0	20.0	19.8	20.2	20.1	0.0	21.0
		100	0	20.8	21.1	20.8	2.0	22.0	18.8	19.2	19.0	0.0	20.0	19.7	20.2	20.1	0.0	21.0
	64QAM	1	0	21.1	21.7	21.5	2.0	22.0	18.7	19.4	19.3	0.0	20.0	19.7	20.3	20.3	0.0	21.0
		1	49	21.2	21.8	21.4	2.0	22.0	18.9	19.4	19.2	0.0	20.0	19.9	20.5	20.2	0.0	21.0
		1	99	21.4	21.7	21.3	2.0	22.0	19.1	19.4	19.0	0.0	20.0	20.1	20.4	19.9	0.0	21.0
		50	0	19.9	20.5	20.4	3.0	21.0	18.6	19.2	19.1	0.0	20.0	19.6	20.2	20.1	0.0	21.0
		50	24	20.1	20.5	20.3	3.0	21.0	18.8	19.3	19.1	0.0	20.0	19.8	20.2	20.1	0.0	21.0
		50	50	20.2	20.5	20.3	3.0	21.0	18.9	19.2	19.0	0.0	20.0	19.8	20.2	20.0	0.0	21.0
		100	0	20.1	20.5	20.3	3.0	21.0	18.8	19.2	19.1	0.0	20.0	19.8	20.2	20.0	0.0	21.0
	256QAM	1	0	17.9	18.5	18.5	5.0	19.0	17.6	18.3	18.3	1.0	19.0	17.6	18.3	18.3	2.0	19.0
		1	49	18.1	18.7	18.3	5.0	19.0	17.8	18.6	18.2	1.0	19.0	17.7	18.5	18.2	2.0	19.0
		1	99	18.4	18.6	18.2	5.0	19.0	18.1	18.4	18.1	1.0	19.0	18.1	18.4	18.1	2.0	19.0
		50	0	17.9	18.5	18.4	5.0	19.0	17.6	18.2	18.1	1.0	19.0	17.6	18.2	18.1	2.0	19.0
		50	24	18.1	18.6	18.4	5.0	19.0	17.8	18.3	18.1	1.0	19.0	17.8	18.3	18.1	2.0	19.0
		50	50	18.2	18.5	18.3	5.0	19.0	17.9	18.2	18.0	1.0	19.0	17.8	18.2	18.0	2.0	19.0
		100	0	18.1	18.5	18.4	5.0	19.0	17.8	18.2	18.1	1.0	19.0	17.8	18.2	18.1	2.0	19.0
BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				132047	132322	132597			132047	132322	132597			132047	132322	132597		
				1717.5 MHz	1745 MHz	1772.5 MHz			1717.5 MHz	1745 MHz	1772.5 MHz			1717.5 MHz	1745 MHz	1772.5 MHz		
15 MHz	QPSK	1	0	22.5	22.8	23.0	0.0	24.0	18.5	19.1	19.1	0.0	20.0	19.5	20.0	19.9	0.0	21.0
		1	37	22.6	23.2	23.2	0.0	24.0	18.6	19.2	19.3	0.0	20.0	19.6	20.1	19.9	0.0	21.0
		1	74	22.8	23.2	23.2	0.0	24.0	18.8	19.1	19.2	0.0	20.0	19.7	20.1	19.8	0.0	21.0
		36	0	21.6	22.1	22.0	1.0	23.0	18.6	19.2	19.1	0.0	20.0	19.6	20.1	20.0	0.0	21.0
		36	20	21.7	22.1	22.1	1.0	23.0	18.7	19.1	19.2	0.0	20.0	19.7	20.1	19.9	0.0	21.0
		36	39	21.7	22.1	22.1	1.0	23.0	18.7	19.1	19.1	0.0	20.0	19.7	20.1	19.9	0.0	21.0
		75	0	21.7	22.1	22.1	1.0	23.0	18.7	19.1	19.2	0.0	20.0	19.7	20.1	19.9	0.0	21.0
	16QAM	1	0	21.7	22.4	22.4	1.0	23.0	18.8	19.4	19.4	0.0	20.0	19.7	20.2	20.1	0.0	21.0
		1	37	21.8	22.6	22.7	1.0	23.0	18.9	19.5	19.7	0.0	20.0	19.9	20.3	20.1	0.0	21.0
		1	74	22.0	22.6	22.6	1.0	23.0	19.0	19.4	19.6	0.0	20.0	20.0	20.3	20.0	0.0	21.0
		36	0	20.6	21.0	21.0	2.0	22.0	18.7	19.2	19.1	0.0	20.0	19.6	20.1	19.9	0.0	21.0
		36	20	20.7	21.1	21.1	2.0	22.0	18.7	19.1	19.2	0.0	20.0	19.7	20.1	19.9	0.0	21.0
		36	39	20.7	21.1	21.1	2.0	22.0	18.8	19.1	19.2	0.0	20.0	19.7	20.0	19.9	0.0	21.0
		75	0	20.7	21.1	21.1	2.0	22.0	18.7	19.1	19.2	0.0	20.0	19.7	20.0	19.9	0.0	21.0
	64QAM	1	0	20.7	21.2	21.1	2.0	22.0	18.8	19.2	19.2	0.0	20.0	19.7	20.2	20.1	0.0	21.0
		1	37	20.7	21.4	21.3	2.0	22.0	18.9	19.3	19.4	0.0	20.0	19.8	20.3	20.0	0.0	21.0
		1	74	20.9	21.4	21.3	2.0	22.0	18.9	19.3	19.4	0.0	20.0	19.9	20.3	19.9	0.0	21.0
		36	0	19.6	20.0	20.0	3.0	21.0	18.7	19.1	19.1	0.0	20.0	19.6	20.1	20.0	0.0	21.0
		36	20	19.7	20.1	20.1	3.0	21.0	18.7	19.1	19.1	0.0	20.0	19.7	20.1	19.9	0.0	21.0
		36	39	19.7	20.1	20.1	3.0	21.0	18.8	19.0	19.1	0.0	20.0	19.7	20.1	19.9	0.0	21.0
		75	0	19.7	20.1	20.1	3.0	21.0	18.8	19.1	19.1	0.0	20.0	19.7	20.1	19.9	0.0	21.0
	256QAM	1	0	17.5	18.1	18.2	5.0	19.0	17.7	18.0	18.2	1.0	19.0	17.6	18.1	18.1	2.0	19.0
		1	37	17.7	18.3	18.3	5.0	19.0	17.9	18.1	18.4	1.0	19.0	17.7	18.2	18.1	2.0	19.0
		1	74	17.8	18.4	18.4	5.0	19.0	17.9	18.2	18.4	1.0	19.0	17.9	18.2	18.0	2.0	19.0
		36	0	17.6	18.0	18.0	5.0	19.0	17.7	18.1	18.1	1.0	19.0	17.6	18.1	17.9	2.0	19.0
		36	20	17.7	18.1	18.1	5.0	19.0	17.7	18.1	18.1	1.0	19.0	17.7	18.1	17.9	2.0	19.0
		36	39	17.7	18.1	18.1	5.0	19.0	17.7	18.0	18.1	1.0	19.0	17.7	18.0	17.9	2.0	19.0
		75	0	17.7	18.1	18.1	5.0	19.0	17.7	18.1	18.1	1.0	19.0	17.7	18.1	17.9	2.0	19.0

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LTE Band 66 Measured Results (Continued)

BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				132022	132322	132622			132022	132322	132622			132022	132322	132622		
				1715 MHz	1745 MHz	1775 MHz			1715 MHz	1745 MHz	1775 MHz			1715 MHz	1745 MHz	1775 MHz		
10 MHz	QPSK	1	0	22.6	23.3	22.1	0.0	24.0	18.8	19.3	19.1	0.0	20.0	19.6	20.2	20.0	0.0	21.0
		1	25	22.8	23.4	23.2	0.0	24.0	18.9	19.4	19.1	0.0	20.0	19.8	20.3	20.0	0.0	21.0
		1	49	22.8	23.3	23.1	0.0	24.0	18.9	19.3	19.0	0.0	20.0	19.8	20.2	19.9	0.0	21.0
		25	0	21.7	22.3	22.0	1.0	23.0	18.8	19.3	19.1	0.0	20.0	19.7	20.2	20.0	0.0	21.0
		25	12	21.8	22.3	22.1	1.0	23.0	18.9	19.3	19.1	0.0	20.0	19.8	20.2	20.0	0.0	21.0
		25	25	21.8	22.3	22.1	1.0	23.0	18.9	19.4	19.0	0.0	20.0	19.8	20.3	20.0	0.0	21.0
		50	0	21.8	22.2	22.1	1.0	23.0	18.9	19.3	19.1	0.0	20.0	19.8	20.2	20.0	0.0	21.0
	16QAM	1	0	22.0	22.5	22.3	1.0	23.0	19.0	19.6	19.3	0.0	20.0	19.9	20.5	20.4	0.0	21.0
		1	25	22.2	22.7	22.4	1.0	23.0	19.1	19.7	19.3	0.0	20.0	20.0	20.5	20.4	0.0	21.0
		1	49	22.2	22.6	22.5	1.0	23.0	19.1	19.6	19.3	0.0	20.0	20.0	20.5	20.3	0.0	21.0
		25	0	20.8	21.3	21.0	2.0	22.0	18.8	19.3	19.1	0.0	20.0	19.7	20.3	20.0	0.0	21.0
		25	12	20.9	21.3	21.1	2.0	22.0	18.9	19.3	19.1	0.0	20.0	19.8	20.3	20.0	0.0	21.0
		25	25	20.9	21.3	21.2	2.0	22.0	18.8	19.3	19.1	0.0	20.0	19.8	20.3	20.0	0.0	21.0
		50	0	20.8	21.2	21.0	2.0	22.0	18.8	19.3	19.1	0.0	20.0	19.8	20.2	20.0	0.0	21.0
	64QAM	1	0	20.8	21.3	21.1	2.0	22.0	18.9	19.4	19.3	0.0	20.0	19.8	20.3	20.1	0.0	21.0
		1	25	20.9	21.5	21.2	2.0	22.0	19.0	19.6	19.3	0.0	20.0	19.9	20.5	20.1	0.0	21.0
		1	49	21.0	21.4	21.2	2.0	22.0	19.1	19.4	19.2	0.0	20.0	19.9	20.4	20.0	0.0	21.0
		25	0	19.7	20.2	20.0	3.0	21.0	18.7	19.3	19.1	0.0	20.0	19.7	20.2	20.0	0.0	21.0
		25	12	19.8	20.3	20.1	3.0	21.0	18.8	19.3	19.1	0.0	20.0	19.8	20.2	20.0	0.0	21.0
		25	25	19.8	20.3	20.1	3.0	21.0	18.8	19.4	19.0	0.0	20.0	19.8	20.2	20.0	0.0	21.0
		50	0	19.8	20.2	20.0	3.0	21.0	18.8	19.3	19.1	0.0	20.0	19.7	20.2	20.0	0.0	21.0
	256QAM	1	0	17.7	18.3	18.1	5.0	19.0	17.8	18.3	18.2	1.0	19.0	17.7	18.2	18.1	2.0	19.0
		1	25	17.8	18.5	18.3	5.0	19.0	17.9	18.5	18.2	1.0	19.0	17.8	18.4	18.1	2.0	19.0
		1	49	17.9	18.4	18.3	5.0	19.0	18.0	18.4	18.1	1.0	19.0	17.9	18.3	18.0	2.0	19.0
		25	0	17.7	18.3	18.0	5.0	19.0	17.7	18.3	18.1	1.0	19.0	17.6	18.2	18.0	2.0	19.0
		25	12	17.8	18.3	18.1	5.0	19.0	17.9	18.3	18.1	1.0	19.0	17.7	18.2	18.0	2.0	19.0
		25	25	17.8	18.3	18.1	5.0	19.0	17.8	18.3	18.0	1.0	19.0	17.8	18.3	18.0	2.0	19.0
		50	0	17.8	18.2	18.0	5.0	19.0	17.8	18.3	18.0	1.0	19.0	17.7	18.2	18.0	2.0	19.0

BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				131997	132322	132647			131997	132322	132647			131997	132322	132647		
				1712.5 MHz	1745 MHz	1777.5 MHz			1712.5 MHz	1745 MHz	1777.5 MHz			1712.5 MHz	1745 MHz	1777.5 MHz		
5 MHz	QPSK	1	0	22.6	23.2	23.1	0.0	24.0	18.7	19.1	19.1	0.0	20.0	19.6	20.2	20.0	0.0	21.0
		1	12	22.7	23.4	23.1	0.0	24.0	18.7	19.1	19.1	0.0	20.0	19.7	20.3	20.0	0.0	21.0
		1	24	22.7	23.3	23.0	0.0	24.0	18.7	19.2	19.2	0.0	20.0	19.6	20.2	19.9	0.0	21.0
		12	0	21.6	22.2	22.1	1.0	23.0	18.7	19.1	19.1	0.0	20.0	19.6	20.2	20.0	0.0	21.0
		12	7	21.8	22.3	22.1	1.0	23.0	18.8	19.1	19.1	0.0	20.0	19.7	20.2	20.0	0.0	21.0
		12	13	21.7	22.3	22.0	1.0	23.0	18.7	19.1	19.1	0.0	20.0	19.7	20.3	20.0	0.0	21.0
		25	0	21.8	22.2	22.0	1.0	23.0	18.7	19.1	19.1	0.0	20.0	19.7	20.2	20.0	0.0	21.0
	16QAM	1	0	22.0	22.5	22.4	1.0	23.0	19.0	19.4	19.5	0.0	20.0	19.9	20.6	20.3	0.0	21.0
		1	12	22.1	22.6	22.4	1.0	23.0	19.1	19.4	19.5	0.0	20.0	20.1	20.7	20.4	0.0	21.0
		1	24	22.1	22.5	22.3	1.0	23.0	19.0	19.5	19.6	0.0	20.0	20.0	20.6	20.3	0.0	21.0
		12	0	20.7	21.2	21.0	2.0	22.0	18.7	19.0	19.1	0.0	20.0	19.5	20.2	20.1	0.0	21.0
		12	7	20.8	21.3	21.0	2.0	22.0	18.8	19.0	19.1	0.0	20.0	19.7	20.3	20.1	0.0	21.0
		12	13	20.8	21.3	21.0	2.0	22.0	18.8	19.0	19.1	0.0	20.0	19.6	20.3	20.1	0.0	21.0
		25	0	20.7	21.2	21.1	2.0	22.0	18.8	19.0	19.1	0.0	20.0	19.7	20.2	20.0	0.0	21.0
	64QAM	1	0	20.7	21.5	21.1	2.0	22.0	18.8	19.2	19.2	0.0	20.0	19.8	20.4	20.1	0.0	21.0
		1	12	20.9	21.6	21.2	2.0	22.0	18.9	19.2	19.2	0.0	20.0	19.9	20.5	20.2	0.0	21.0
		1	24	20.8	21.5	21.1	2.0	22.0	18.8	19.3	19.3	0.0	20.0	19.8	20.4	20.1	0.0	21.0
		12	0	19.6	20.3	20.1	3.0	21.0	18.7	19.0	19.1	0.0	20.0	19.6	20.2	20.0	0.0	21.0
		12	7	19.8	20.3	20.1	3.0	21.0	18.8	19.1	19.1	0.0	20.0	19.7	20.3	20.0	0.0	21.0
		12	13	19.8	20.4	20.0	3.0	21.0	18.8	19.1	19.1	0.0	20.0	19.7	20.3	20.0	0.0	21.0
		25	0	19.7	20.3	20.0	3.0	21.0	18.7	19.1	19.1	0.0	20.0	19.7	20.2	20.0	0.0	21.0
	256QAM	1	0	17.7	18.3	18.1	5.0	19.0	17.7	18.2	18.2	1.0	19.0	17.6	18.3	18.1	2.0	19.0
		1	12	17.9	18.5	18.2	5.0	19.0	17.8	18.2	18.2	1.0	19.0	17.8	18.4	18.1	2.0	19.0
		1	24	17.8	18.4	18.1	5.0	19.0	17.8	18.4	18.3	1.0	19.0	17.7	18.3	18.0	2.0	19.0
		12	0	17.6	18.3	18.0	5.0	19.0	17.6	18.0	18.0	1.0	19.0	17.6	18.2	18.0	2.0	19.0
		12	7	17.8	18.3	18.1	5.0	19.0	17.7	18.1	18.1	1.0	19.0	17.8	18.3	18.0	2.0	19.0
		12	13	17.8	18.4	18.0	5.0	19.0	17.7	18.1	18.0	1.0	19.0	17.7	18.3	18.0	2.0	19.0
		25	0	17.8	18.3	18.0	5.0	19.0	17.7	18.0	18.1	1.0	19.0	17.7	18.2	18.0	2.0	19.0

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LTE Band 66 Measured Results (Continued)

BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				131987	132322	132657			131987	132322	132657			131987	132322	132657		
				1711.5 MHz	1745 MHz	1778.5 MHz			1711.5 MHz	1745 MHz	1778.5 MHz			1711.5 MHz	1745 MHz	1778.5 MHz		
3 MHz	QPSK	1	0	22.6	23.2	22.9	0.0	24.0	19.0	19.0	19.0	0.0	20.0	19.5	20.1	19.9	0.0	21.0
		1	8	22.7	23.3	23.1	0.0	24.0	19.0	19.0	19.1	0.0	20.0	19.6	20.2	20.0	0.0	21.0
		1	14	22.6	23.2	22.9	0.0	24.0	19.0	19.1	18.9	0.0	20.0	19.6	20.1	19.9	0.0	21.0
		8	0	21.7	22.2	22.0	1.0	23.0	19.1	19.0	19.0	0.0	20.0	19.6	20.1	20.0	0.0	21.0
		8	4	21.7	22.2	22.0	1.0	23.0	19.0	19.0	19.0	0.0	20.0	19.6	20.2	20.0	0.0	21.0
		8	7	21.7	22.2	22.0	1.0	23.0	19.1	19.1	19.0	0.0	20.0	19.6	20.1	20.0	0.0	21.0
		15	0	21.7	22.2	22.0	1.0	23.0	19.0	19.0	19.0	0.0	20.0	19.6	20.1	20.0	0.0	21.0
	16QAM	1	0	22.0	22.5	22.3	1.0	23.0	19.4	19.3	19.2	0.0	20.0	19.8	20.5	20.2	0.0	21.0
		1	8	22.1	22.7	22.5	1.0	23.0	19.4	19.3	19.3	0.0	20.0	19.9	20.6	20.3	0.0	21.0
		1	14	22.0	22.6	22.3	1.0	23.0	19.4	19.3	19.3	0.0	20.0	19.8	20.5	20.2	0.0	21.0
		8	0	20.7	21.3	21.0	2.0	22.0	19.0	19.1	19.0	0.0	20.0	19.6	20.2	20.0	0.0	21.0
		8	4	20.8	21.3	21.1	2.0	22.0	19.1	19.1	19.1	0.0	20.0	19.6	20.2	20.0	0.0	21.0
		8	7	20.8	21.3	21.1	2.0	22.0	19.1	19.1	19.1	0.0	20.0	19.6	20.2	20.0	0.0	21.0
		15	0	20.7	21.2	21.0	2.0	22.0	19.0	19.0	19.0	0.0	20.0	19.6	20.1	20.0	0.0	21.0
	64QAM	1	0	20.7	21.4	21.1	2.0	22.0	19.2	19.2	19.2	0.0	20.0	19.7	20.3	20.1	0.0	21.0
		1	8	20.9	21.5	21.2	2.0	22.0	19.2	19.2	19.3	0.0	20.0	19.8	20.4	20.1	0.0	21.0
		1	14	20.8	21.4	21.1	2.0	22.0	19.2	19.2	19.2	0.0	20.0	19.7	20.3	20.1	0.0	21.0
		8	0	19.7	20.2	20.0	3.0	21.0	19.0	19.0	19.0	0.0	20.0	19.6	20.1	20.0	0.0	21.0
		8	4	19.8	20.3	20.0	3.0	21.0	19.0	19.0	19.0	0.0	20.0	19.7	20.2	20.0	0.0	21.0
		8	7	19.8	20.3	20.0	3.0	21.0	19.0	19.1	19.0	0.0	20.0	19.7	20.2	20.0	0.0	21.0
		15	0	19.7	20.2	20.0	3.0	21.0	19.0	19.0	19.0	0.0	20.0	19.6	20.1	20.0	0.0	21.0
	256QAM	1	0	17.6	18.3	18.1	5.0	19.0	18.1	18.1	18.0	1.0	19.0	17.6	18.3	18.1	2.0	19.0
		1	8	17.8	18.4	18.3	5.0	19.0	18.2	18.2	18.2	1.0	19.0	17.8	18.4	18.2	2.0	19.0
		1	14	17.7	18.3	18.1	5.0	19.0	18.2	18.2	18.0	1.0	19.0	17.7	18.3	18.1	2.0	19.0
		8	0	17.7	18.2	18.0	5.0	19.0	18.0	17.9	18.0	1.0	19.0	17.6	18.1	18.0	2.0	19.0
		8	4	17.7	18.3	18.1	5.0	19.0	18.0	18.0	18.0	1.0	19.0	17.7	18.2	18.0	2.0	19.0
		8	7	17.7	18.3	18.0	5.0	19.0	18.0	18.0	18.1	1.0	19.0	17.7	18.2	18.0	2.0	19.0
		15	0	17.7	18.2	18.0	5.0	19.0	18.0	18.0	18.0	1.0	19.0	17.6	18.1	17.9	2.0	19.0

BW(MHz)	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
				131979	132322	132665			131979	132322	132665			131979	132322	132665		
				1710.7 MHz	1745 MHz	1779.3 MHz			1710.7 MHz	1745 MHz	1779.3 MHz			1710.7 MHz	1745 MHz	1779.3 MHz		
1.4 MHz	QPSK	1	0	22.7	22.1	23.0	0.0	24.0	19.2	19.3	19.0	0.0	20.0	20.1	20.2	19.9	0.0	21.0
		1	3	22.7	23.0	23.0	0.0	24.0	19.3	19.3	19.0	0.0	20.0	20.1	20.2	19.9	0.0	21.0
		1	5	22.7	23.0	23.0	0.0	24.0	19.3	19.3	19.0	0.0	20.0	20.1	20.2	19.9	0.0	21.0
		3	0	22.7	23.0	23.0	0.0	24.0	19.3	19.2	19.0	0.0	20.0	20.1	20.2	19.9	0.0	21.0
		3	1	22.7	23.0	23.0	0.0	24.0	19.3	19.2	19.0	0.0	20.0	20.1	20.2	19.9	0.0	21.0
		3	3	22.7	23.0	23.0	0.0	24.0	19.3	19.3	19.0	0.0	20.0	20.2	20.2	19.9	0.0	21.0
		6	0	21.7	22.8	23.0	1.0	23.0	19.2	19.2	19.0	0.0	20.0	20.0	20.1	19.9	0.0	21.0
	16QAM	1	0	21.8	22.4	22.3	1.0	23.0	19.5	19.5	19.3	0.0	20.0	20.4	20.4	20.2	0.0	21.0
		1	3	21.8	22.4	22.4	1.0	23.0	19.6	19.6	19.3	0.0	20.0	20.4	20.5	20.3	0.0	21.0
		1	5	21.8	22.5	22.4	1.0	23.0	19.6	19.6	19.2	0.0	20.0	20.5	20.5	20.2	0.0	21.0
		3	0	21.8	22.1	22.1	1.0	23.0	19.4	19.4	19.1	0.0	20.0	20.3	20.3	20.0	0.0	21.0
		3	1	21.8	22.1	22.1	1.0	23.0	19.4	19.4	19.1	0.0	20.0	20.3	20.3	20.1	0.0	21.0
		3	3	21.8	22.1	22.1	1.0	23.0	19.4	19.4	19.1	0.0	20.0	20.3	20.3	20.1	0.0	21.0
		6	0	20.7	22.0	21.9	2.0	22.0	19.2	19.2	19.0	0.0	20.0	20.2	20.1	19.9	0.0	21.0
	64QAM	1	0	20.8	21.2	21.2	2.0	22.0	19.4	19.4	19.0	0.0	20.0	20.4	20.4	20.0	0.0	21.0
		1	3	20.9	21.2	21.2	2.0	22.0	19.5	19.5	19.1	0.0	20.0	20.4	20.4	20.0	0.0	21.0
		1	5	20.8	21.2	21.2	2.0	22.0	19.4	19.5	19.0	0.0	20.0	20.4	20.4	20.0	0.0	21.0
		3	0	20.8	21.1	21.1	2.0	22.0	19.3	19.3	19.1	0.0	20.0	20.2	20.2	20.0	0.0	21.0
		3	1	20.8	21.1	21.1	2.0	22.0	19.4	19.3	19.1	0.0	20.0	20.2	20.2	20.0	0.0	21.0
		3	3	20.8	21.1	21.1	2.0	22.0	19.4	19.3	19.0	0.0	20.0	20.3	20.2	19.9	0.0	21.0
		6	0	19.8	21.0	20.9	3.0	21.0	19.2	19.2	19.0	0.0	20.0	20.1	20.1	19.9	0.0	21.0
	256QAM	1	0	17.9	18.1	18.1	5.0	19.0	18.3	18.3	18.1	1.0	19.0	18.2	18.2	17.9	2.0	19.0
		1	3	17.9	18.2	18.2	5.0	19.0	18.4	18.4	18.1	1.0	19.0	18.4	18.3	18.0	2.0	19.0
		1	5	17.9	18.2	18.2	5.0	19.0	18.3	18.3	18.1	1.0	19.0	18.3	18.2	17.9	2.0	19.0
		3	0	17.8	18.0	18.0	5.0	19.0	18.3	18.2	17.9	1.0	19.0	18.1	18.2	17.9	2.0	19.0
		3	1	17.8	18.0	18.0	5.0	19.0	18.2	18.2	18.0	1.0	19.0	18.1	18.2	17.9	2.0	19.0
		3	3	17.8	18.0	18.0	5.0	19.0	18.3	18.3	18.0	1.0	19.0	18.3	18.3	17.9	2.0	19.0
		6	0	17.7	17.9	18.0	5.0	19.0	18.2	18.3	18.1	1.0	19.0	18.1	18.1	17.9	2.0	19.0

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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

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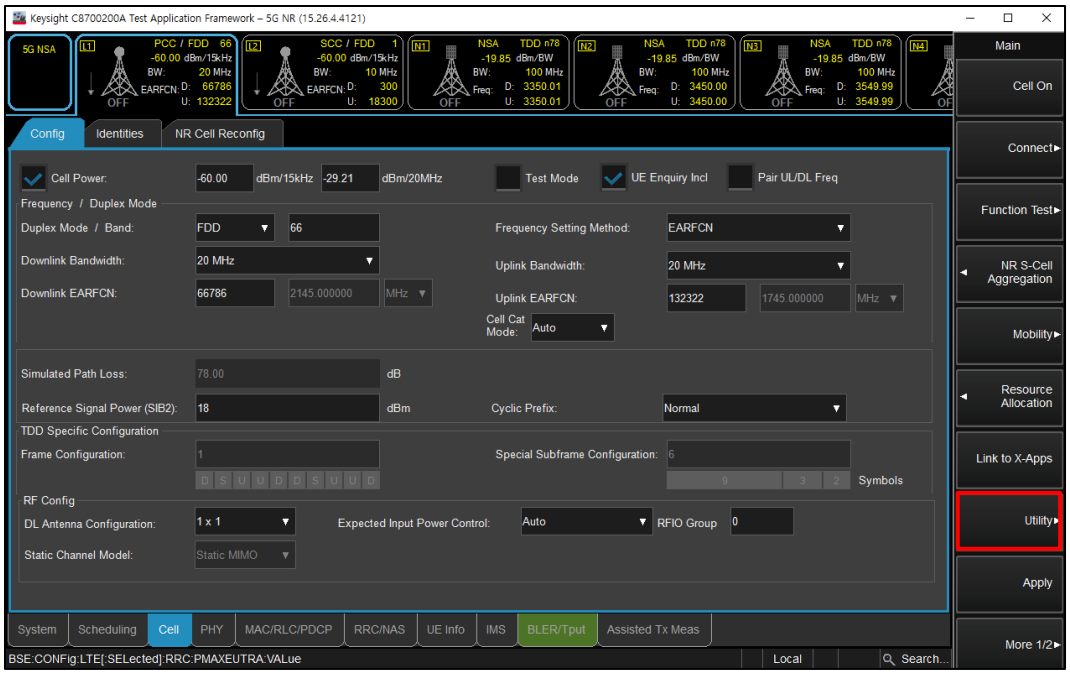
Procedures used to establish power measurement for NR Bands

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)

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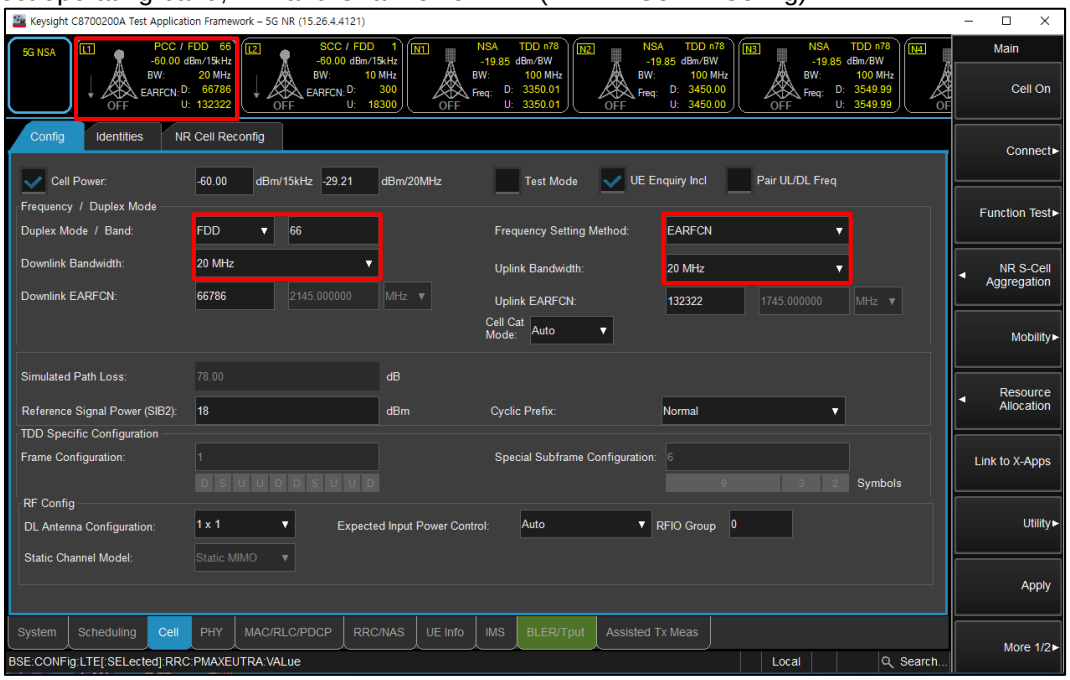
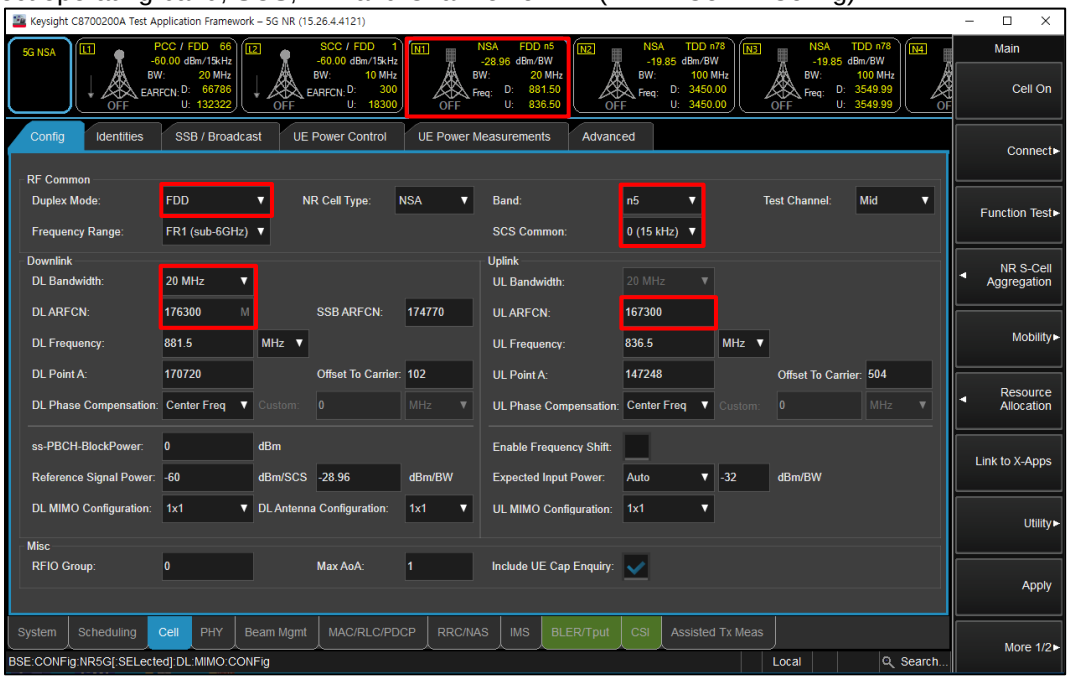
NSA Mode

- 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)

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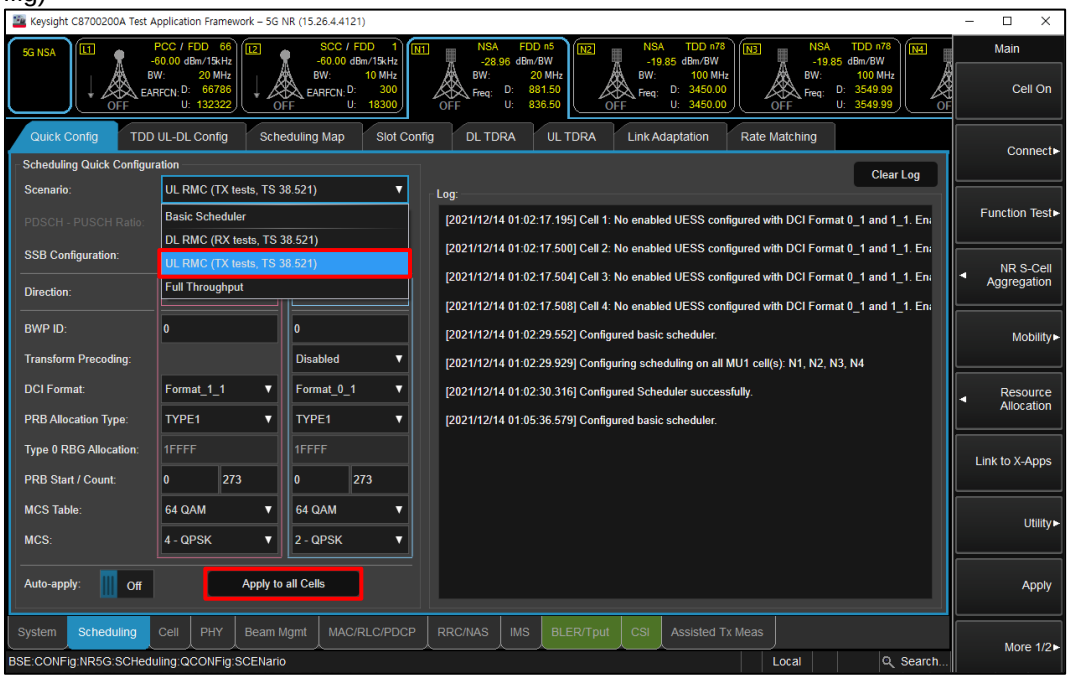
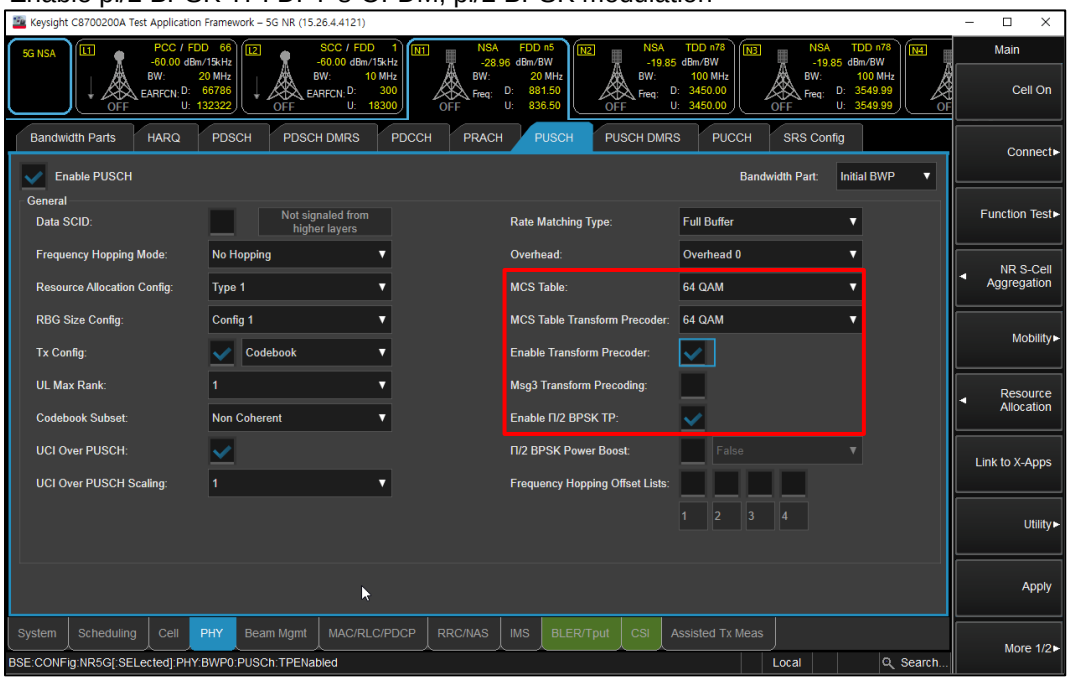
- Select “UL RMC (TX tests, TS 38.521)” for maximum power RB scheduling (NR -> Scheduling -> Quick Config)



(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)

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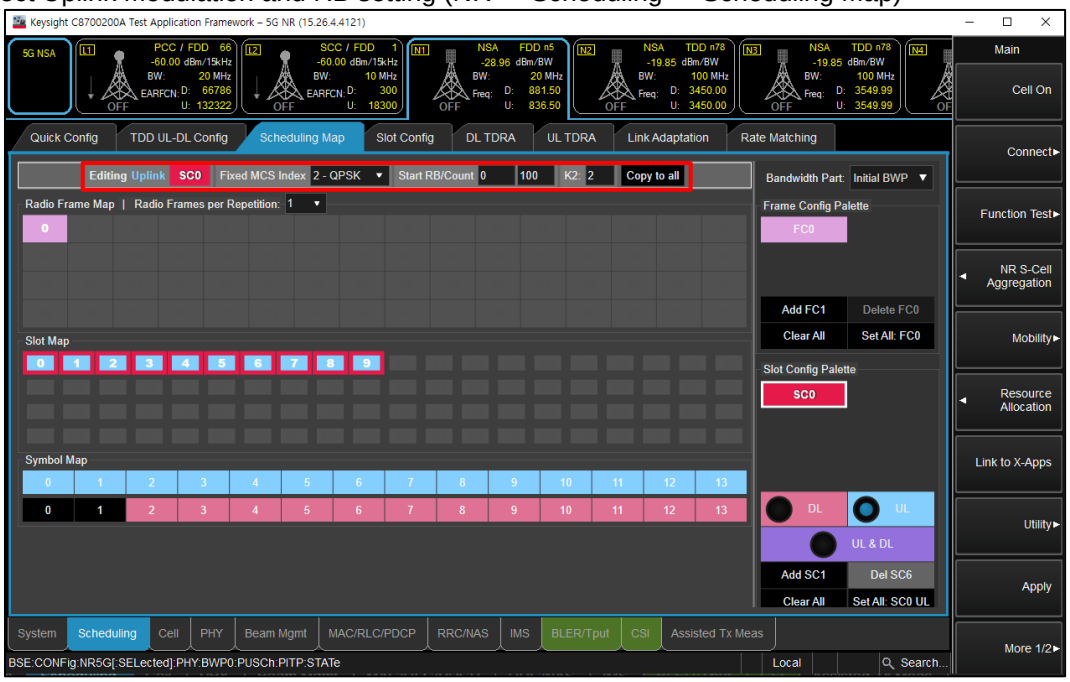
- Select Uplink Modulation and RB setting (NR -> Scheduling -> Scheduling Map)



(Figure 2-5)

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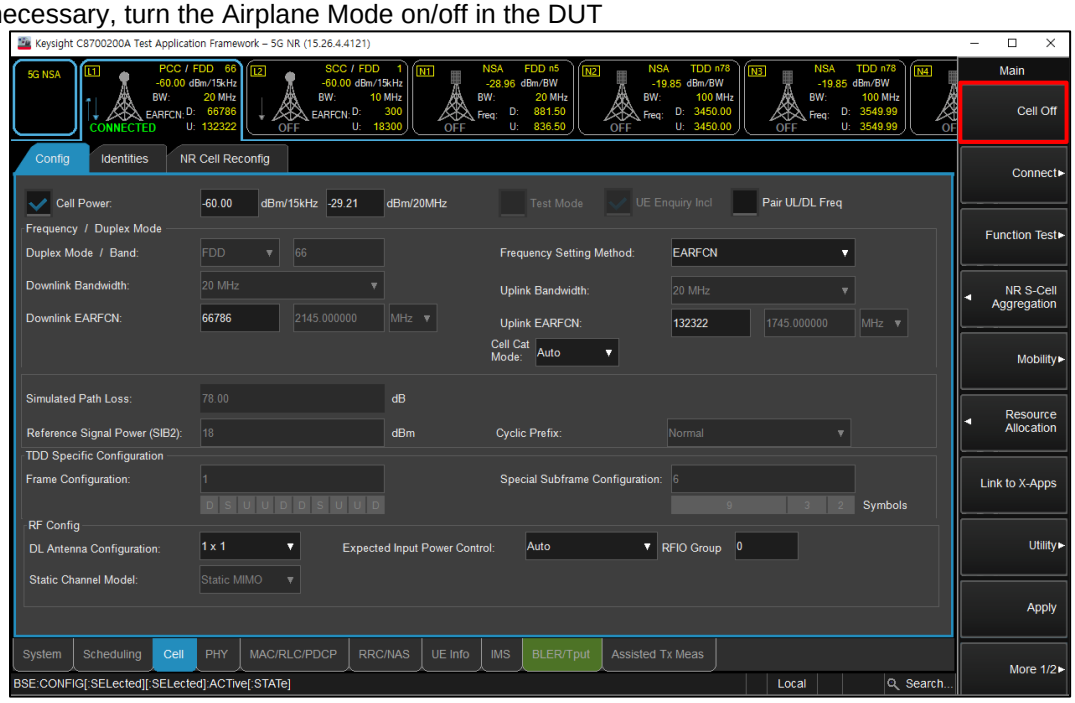
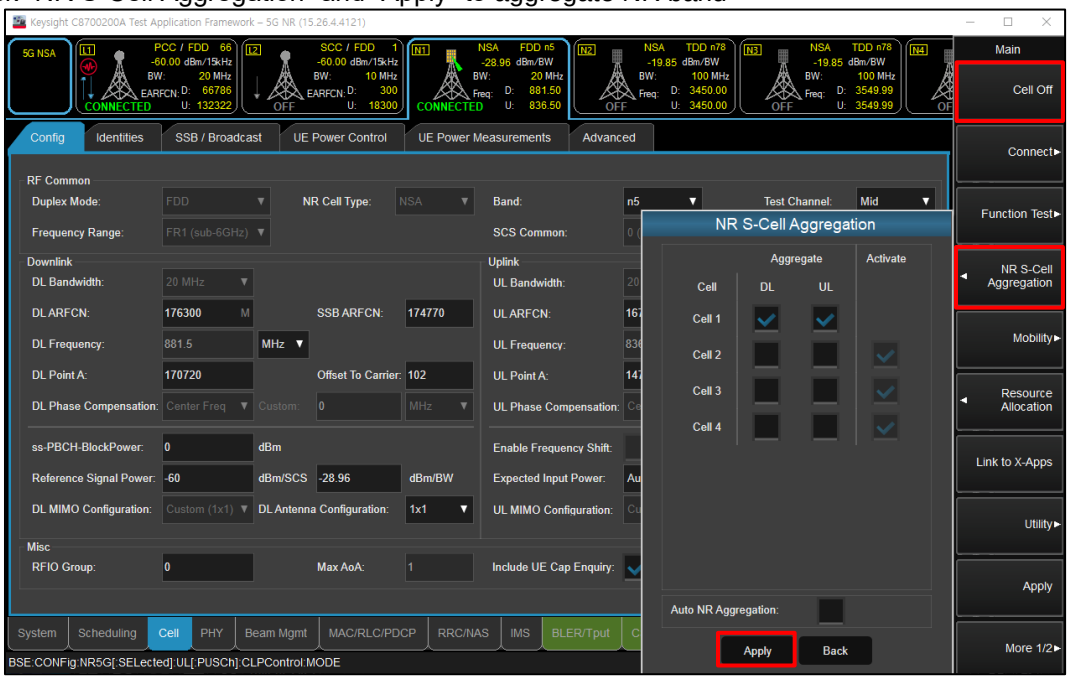
- Click “Cell On” button in the right of Test application screen in the LTE tab
- If necessary, turn the Airplane Mode on/off in the DUT



(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)

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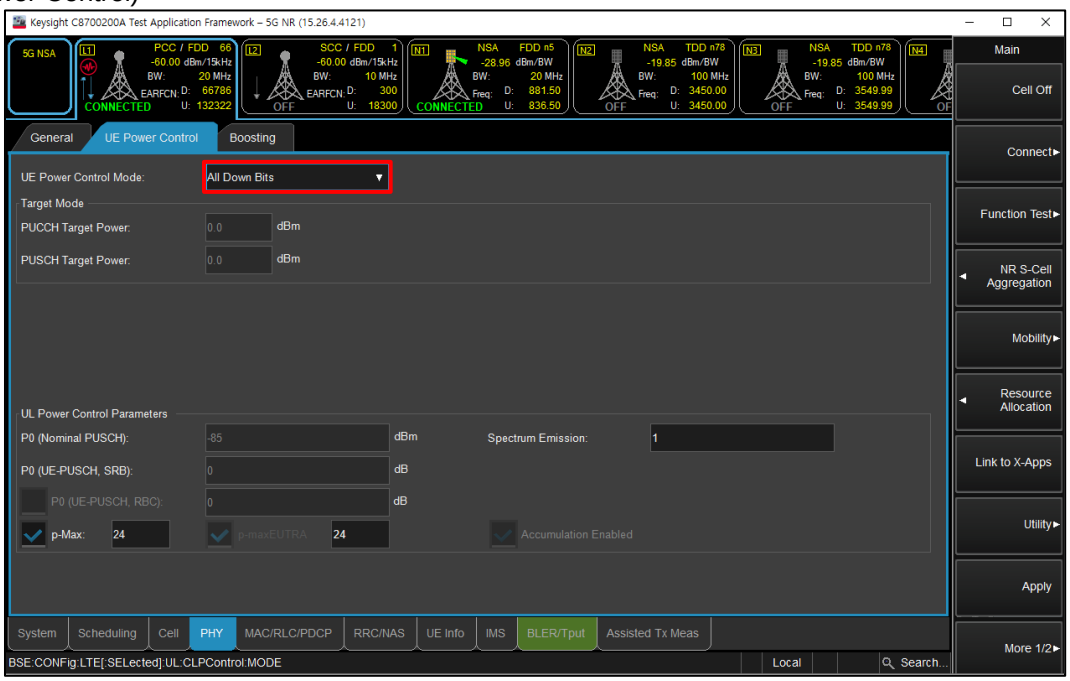
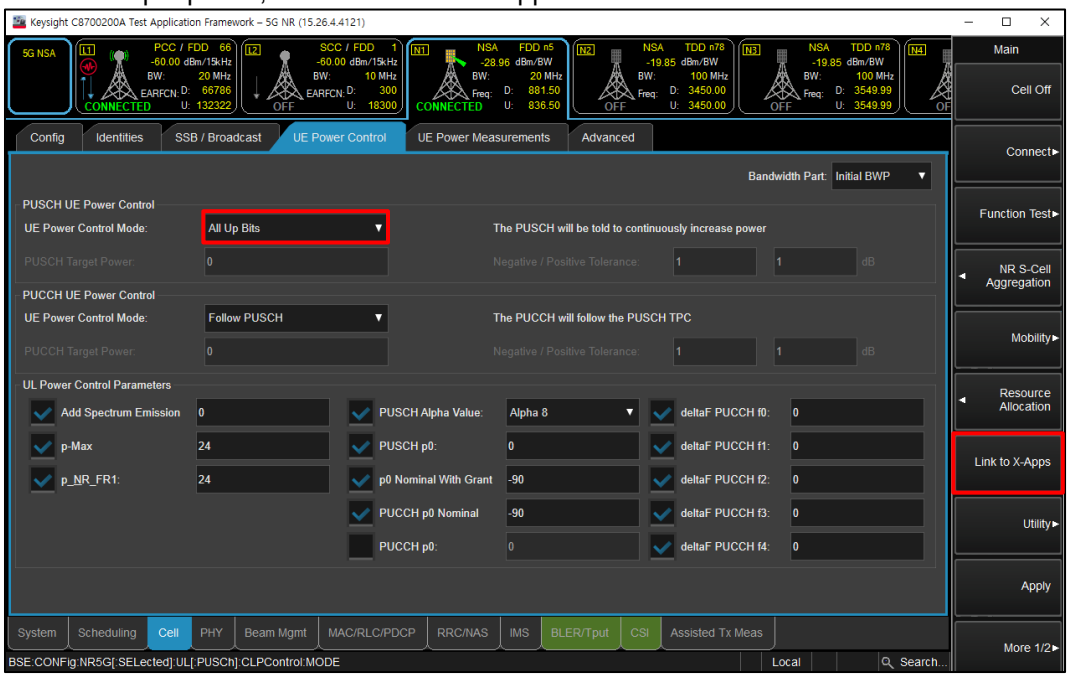
- Select “All Down Bits” of UL Power control Mode in LTE tab for NR maximum power (LTE -> PHY -> UE Power Control)



(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)

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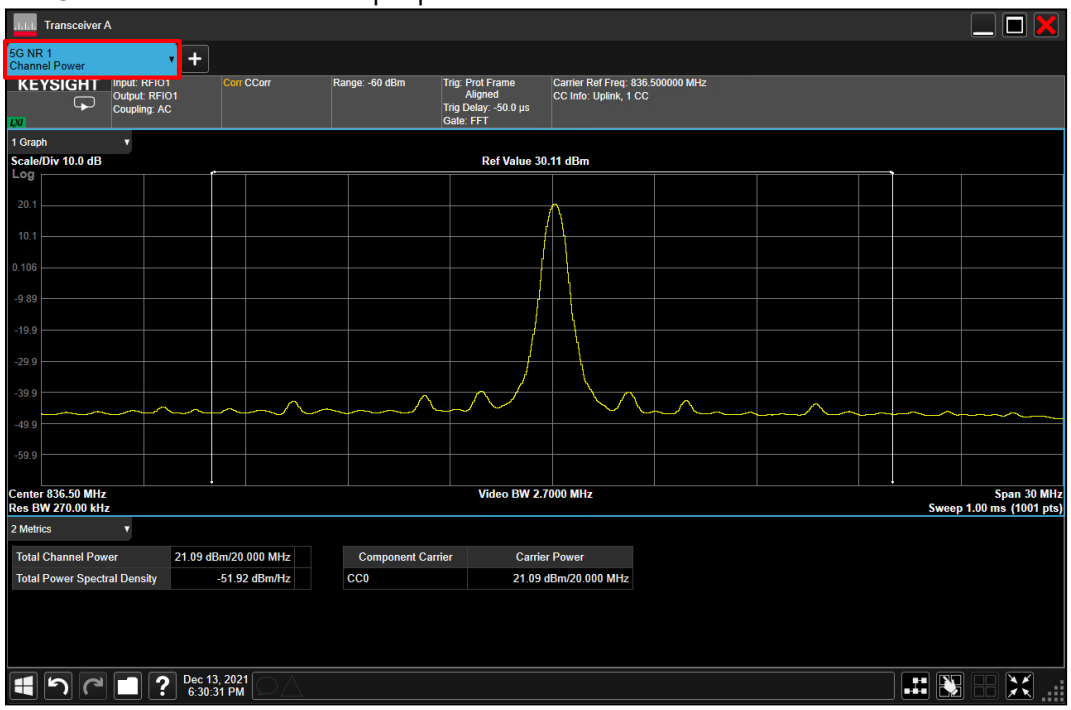
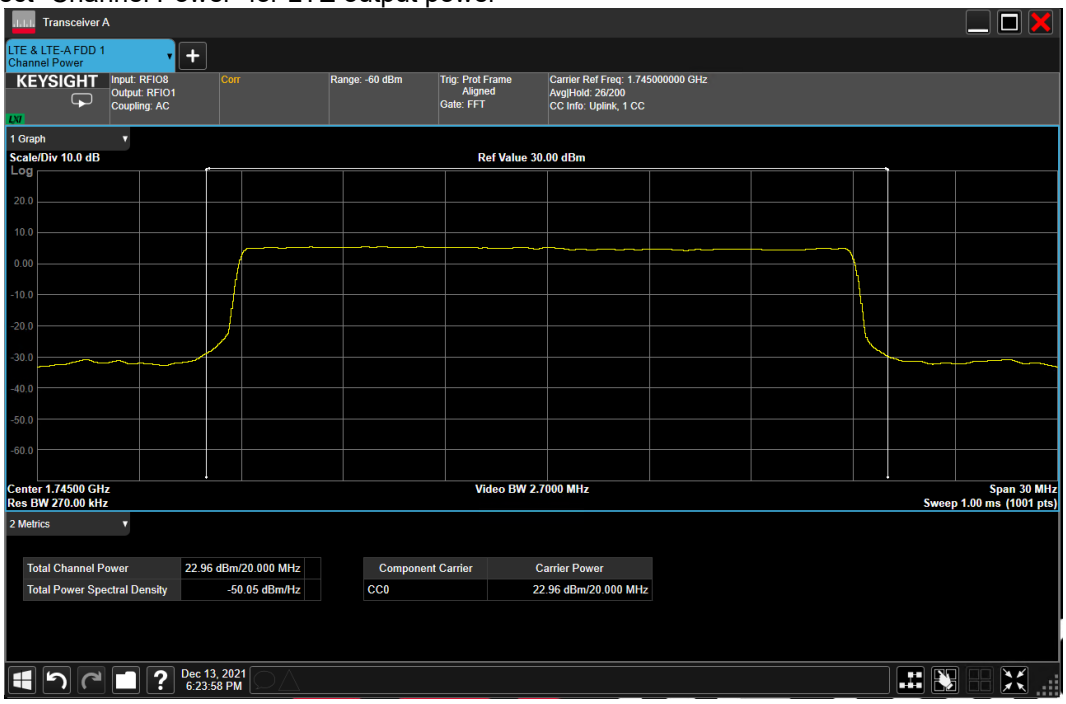
- Select “Channel Power” for NR output power



(Figure 2-10)

- Select “Channel Power” for LTE output power



(Figure 2-11)

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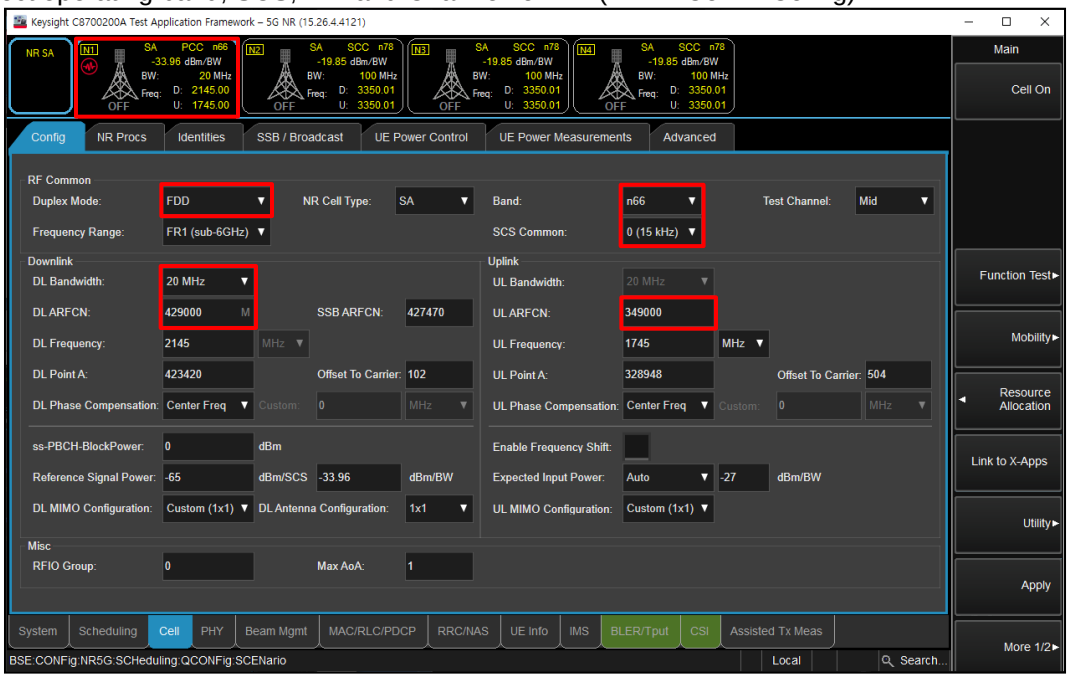
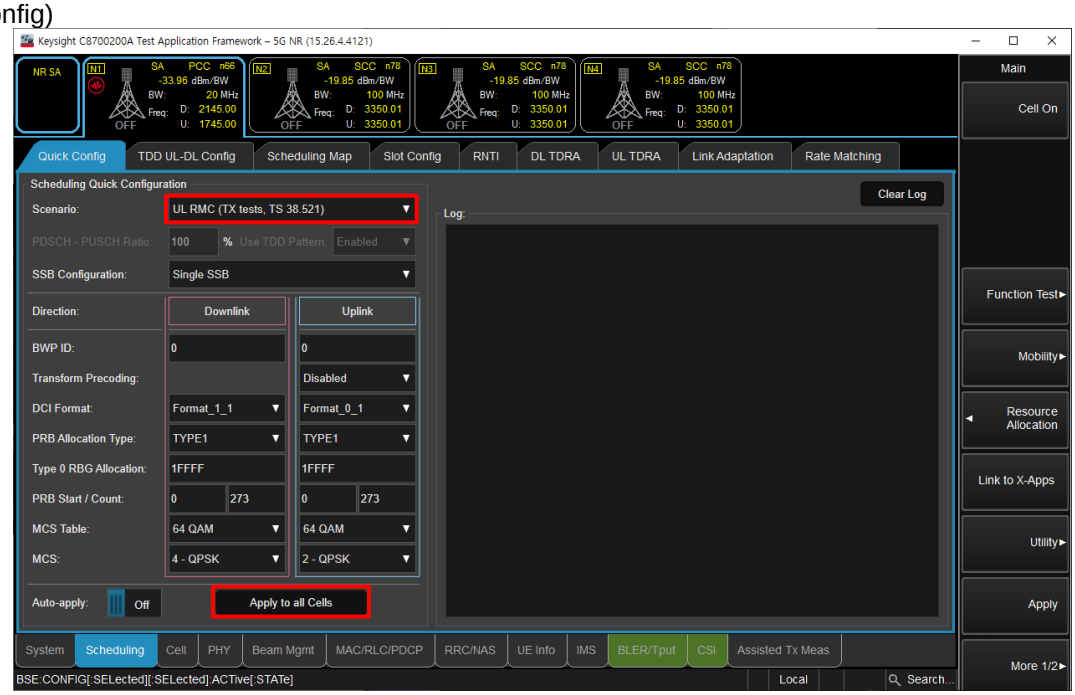
SA Mode

- 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)

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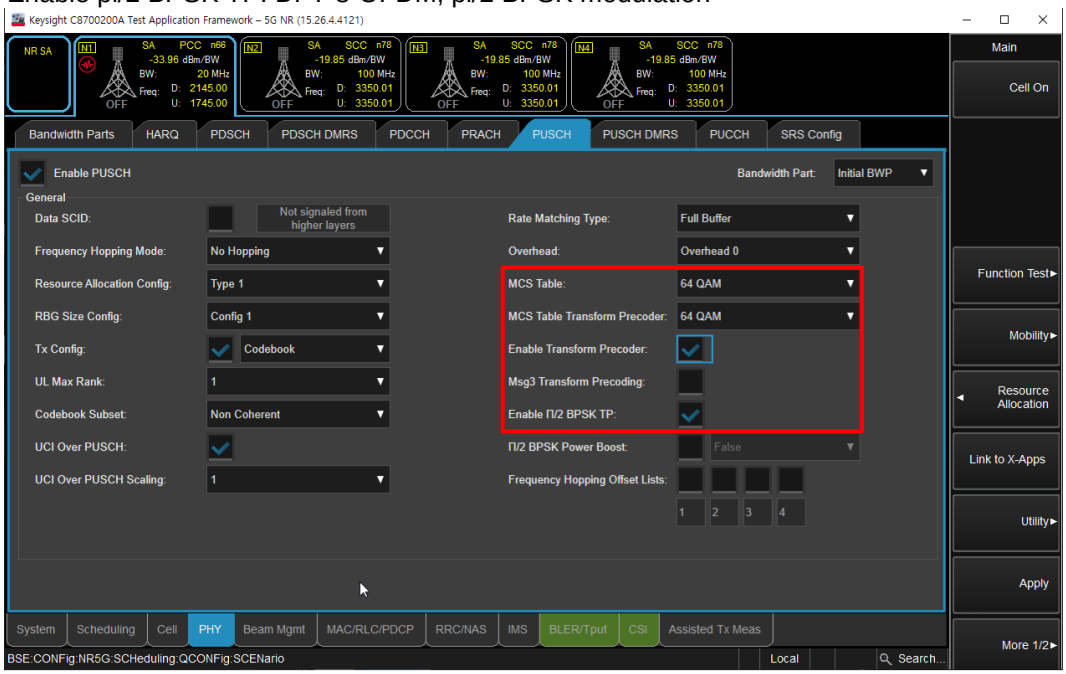
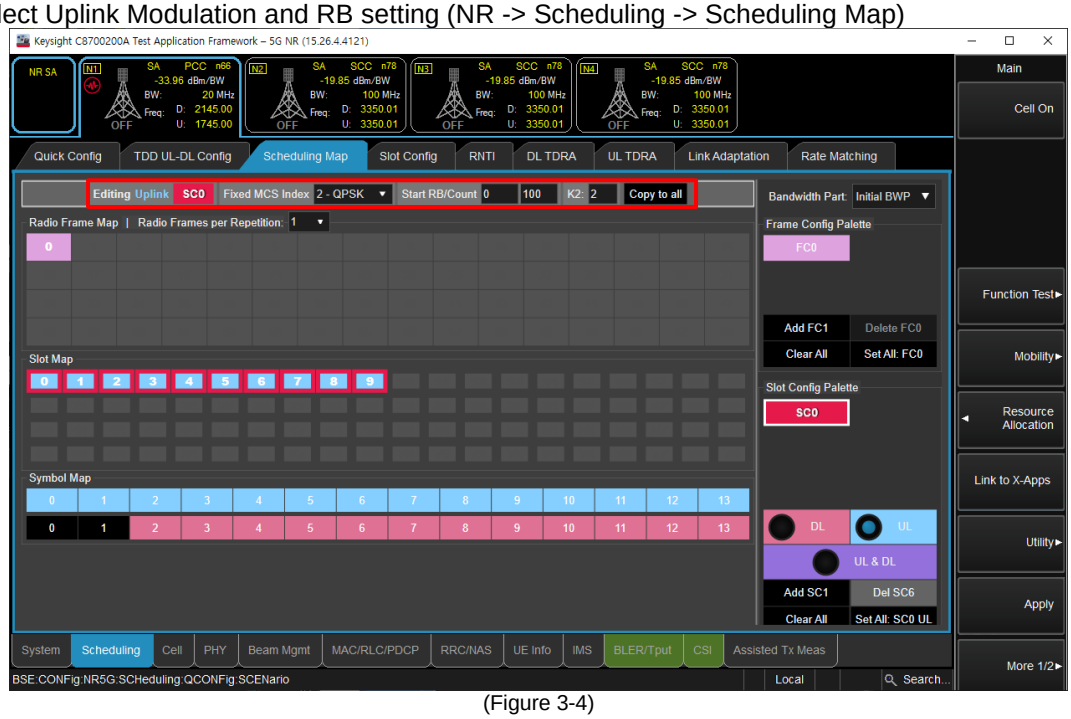
- To set waveform for NR Band (NR -> PHY -> PUSCH)
  - Select highest modulation in the MCS Table and MCS Table Transform Precoder
  - Enable Transform Precoder: DFT-s-OFDM / disable for CP-OFDM
  - Enable pi/2 BPSK TP: DFT-s-OFDM, pi/2 BPSK modulation



(Figure 3-3)

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



(Figure 3-4)

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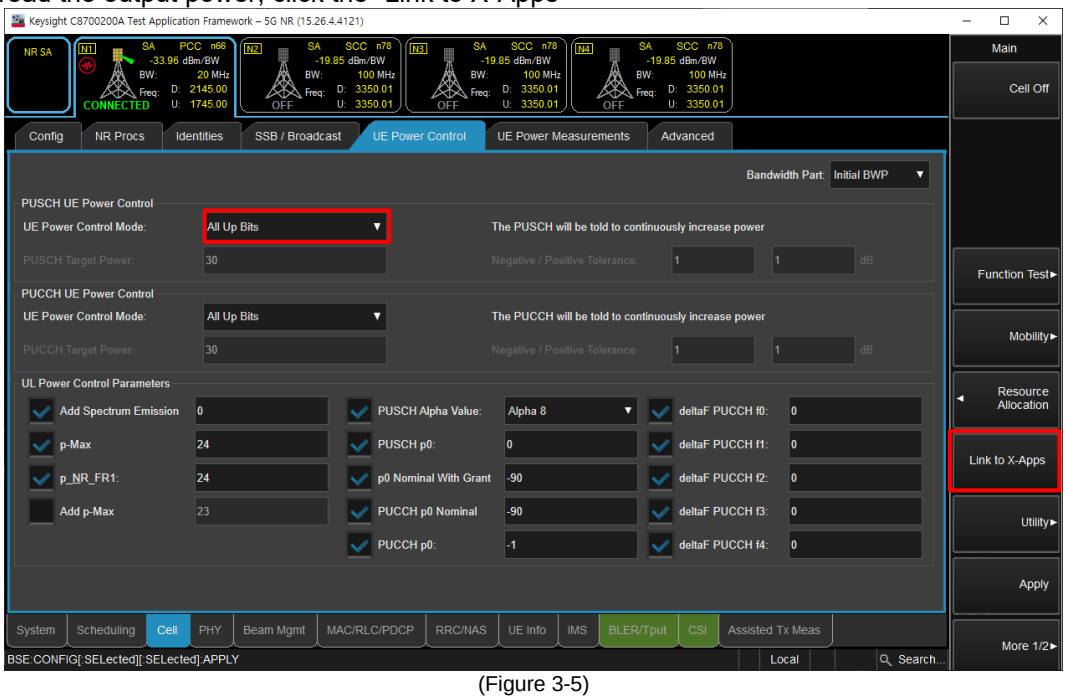
- Click “Cell On” button in the right of Test application screen
- If necessary, turn the Airplane Mode on/off in the DUT
- Select “All Up Bits” of UL Power control Mode (Cell -> UE Power Control)
- To read the output power, click the “Link to X-Apps”



(Figure 3-5)

- Select “Channel Power”

(Figure 3-6)

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NR Band n5 Measured Results

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)				
					DSI = 0, 1, 2, 3, 4				
					Measured Pwr (dBm)			MPR	Tune-up Limit
					166800	167300	167800		
					834 MHz	836.5 MHz	839 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1		24.7		0.0	25.0
			1	53		24.5		0.0	25.0
			1	104		24.4		0.0	25.0
			50	0		23.8		0.5	24.5
			50	28		24.7		0.0	25.0
			50	56		23.6		0.5	24.5
			100	0		23.7		0.5	24.5
		QPSK	1	1		24.8		0.0	25.0
			1	53		24.7		0.0	25.0
			1	104		24.6		0.0	25.0
			50	0		23.8		1.0	24.0
			50	28		24.7		0.0	25.0
			50	56		23.6		1.0	24.0
			100	0		23.7		1.0	24.0
		16QAM	1	1		23.8		1.0	24.0
			1	53		23.6		1.0	24.0
			1	104		23.5		1.0	24.0
		64QAM	1	1		22.5		2.5	22.5
		256QAM	1	1		19.8		4.5	20.5
	CP-OFDM	QPSK	1	1		23.3		1.5	23.5
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					166300	167300	168300		
					831.5 MHz	836.5 MHz	841.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1		24.6		0.0	25.0
			1	40		24.5		0.0	25.0
			1	77		24.4		0.0	25.0
			36	0		23.6		0.5	24.5
			36	22		24.6		0.0	25.0
			36	43		23.5		0.5	24.5
			75	0		23.6		0.5	24.5
		QPSK	1	1		24.8		0.0	25.0
			1	40		24.6		0.0	25.0
			1	77		24.6		0.0	25.0
			36	0		23.7		1.0	24.0
			36	22		24.6		0.0	25.0
			36	43		23.5		1.0	24.0
			75	0		23.6		1.0	24.0
		16QAM	1	1		23.6		1.0	24.0
		64QAM	1	1		22.4		2.5	22.5
		256QAM	1	1		19.7		4.5	20.5
	CP-OFDM	QPSK	1	1		23.1		1.5	23.5

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NR Band n5 Measured Results (Continued)

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					165800	167300	168800		
					829 MHz	836.5 MHz	844 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1		24.4		0.0	25.0
			1	26		24.4		0.0	25.0
			1	50		24.3		0.0	25.0
			25	0		23.5		0.5	24.5
			25	14		24.5		0.0	25.0
			25	27		23.4		0.5	24.5
			50	0		23.5		0.5	24.5
		QPSK	1	1		24.5		0.0	25.0
			1	26		24.4		0.0	25.0
			1	50		24.4		0.0	25.0
			25	0		23.5		1.0	24.0
			25	14		24.4		0.0	25.0
			25	27		23.5		1.0	24.0
			50	0		23.5		1.0	24.0
		16QAM	1	1		23.4		1.0	24.0
		64QAM	1	1		22.2		2.5	22.5
		256QAM	1	1		19.5		4.5	20.5
	CP-OFDM	QPSK	1	1		22.9		1.5	23.5

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit
					165300	167300	169300		
					826.5 MHz	836.5 MHz	846.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	24.6	24.4	24.3	0.0	25.0
			1	13	24.6	24.3	24.2	0.0	25.0
			1	23	24.5	24.4	24.2	0.0	25.0
			12	0	23.6	23.5	23.3	0.5	24.5
			12	7	24.6	24.4	24.3	0.0	25.0
			12	13	23.6	23.4	23.3	0.5	24.5
			25	0	23.7	23.5	23.3	0.5	24.5
		QPSK	1	1	24.8	24.6	24.4	0.0	25.0
			1	13	24.6	24.5	24.3	0.0	25.0
			1	23	24.7	24.5	24.3	0.0	25.0
			12	0	23.6	23.4	23.3	1.0	24.0
			12	7	24.6	24.4	24.2	0.0	25.0
			12	13	23.6	23.4	23.3	1.0	24.0
			25	0	23.6	23.5	23.3	1.0	24.0
		16QAM	1	1	23.6	23.4	23.3	1.0	24.0
		64QAM	1	1	22.3	22.2	22.1	2.5	22.5
		256QAM	1	1	19.6	19.5	19.4	4.5	20.5
	CP-OFDM	QPSK	1	1	23.1	22.9	22.8	1.5	23.5

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NR Band n25 Measured Results

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)														
					DSI = 0, 2					DSI = 3					DSI = 1, 4				
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					372000	376500	381000			372000	376500	381000			372000	376500	381000		
					1860 MHz	1882.5 MHz	1905 MHz			1860 MHz	1882.5 MHz	1905 MHz			1860 MHz	1882.5 MHz	1905 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.6	22.6	22.4	0.0	24.0	17.6	17.7	17.5	0.0	19.0	19.4	19.3	19.3	0.0	21.0
			1	53	22.6	22.6	22.3	0.0	24.0	17.6	17.6	17.6	0.0	19.0	19.4	19.3	19.3	0.0	21.0
			1	104	22.6	22.6	22.2	0.0	24.0	17.7	17.5	17.5	0.0	19.0	19.4	19.3	19.3	0.0	21.0
			50	0	21.7	21.6	21.4	0.5	23.5	17.7	17.7	17.7	0.0	19.0	19.4	19.4	19.3	0.0	21.0
			50	28	22.8	22.7	22.4	0.0	24.0	17.8	17.7	17.6	0.0	19.0	19.5	19.4	19.3	0.0	21.0
			50	56	21.7	21.7	21.5	0.5	23.5	17.8	17.7	17.7	0.0	19.0	19.5	19.4	19.4	0.0	21.0
			100	0	21.7	21.8	21.4	0.5	23.5	17.8	17.8	17.7	0.0	19.0	19.5	19.4	19.3	0.0	21.0
		QPSK	1	1	22.7	22.7	22.4	0.0	24.0	17.7	17.7	17.7	0.0	19.0	19.4	19.4	19.4	0.0	21.0
			1	53	22.7	22.7	22.4	0.0	24.0	17.7	17.7	17.7	0.0	19.0	19.4	19.4	19.3	0.0	21.0
			1	104	22.7	22.7	22.3	0.0	24.0	17.7	17.8	17.6	0.0	19.0	19.5	19.5	19.3	0.0	21.0
			50	0	21.7	21.7	21.4	1.0	23.0	17.7	17.8	17.7	0.0	19.0	19.4	19.4	19.3	0.0	21.0
			50	28	22.8	22.8	22.4	0.0	24.0	17.8	17.8	17.6	0.0	19.0	19.5	19.6	19.3	0.0	21.0
			50	56	21.7	21.7	21.4	1.0	23.0	17.7	17.7	17.7	0.0	19.0	19.5	19.4	19.4	0.0	21.0
			100	0	21.7	21.8	21.4	1.0	23.0	17.7	17.8	17.7	0.0	19.0	19.5	19.6	19.4	0.0	21.0
		16QAM	1	1	21.7	21.7	21.5	1.0	23.0	17.7	17.7	17.6	0.0	19.0	19.4	19.4	19.3	0.0	21.0
			1	53	21.6	21.5	21.4	1.0	23.0	17.7	17.6	17.6	0.0	19.0	19.4	19.4	19.3	0.0	21.0
			1	104	21.4	21.4	21.3	1.0	23.0	17.7	17.5	17.5	0.0	19.0	19.4	19.5	19.3	0.0	21.0
		64QAM	1	1	20.4	20.4	20.1	2.5	21.5	17.9	17.8	17.7	0.0	19.0	19.6	19.5	19.3	0.0	21.0
		256QAM	1	1	17.6	17.7	17.4	4.5	19.5	17.3	17.3	17.2	0.5	18.5	17.5	17.5	17.5	1.5	19.5
	CP-OFDM	QPSK	1	1	21.1	21.2	20.9	1.5	22.5	17.8	17.8	17.7	0.0	19.0	19.4	19.5	19.5	0.0	21.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					371500	376500	381500			371500	376500	381500			371500	376500	381500		
					1857.5 MHz	1882.5 MHz	1907.5 MHz			1857.5 MHz	1882.5 MHz	1907.5 MHz			1857.5 MHz	1882.5 MHz	1907.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.6	22.6	22.3	0.0	24.0	17.8	17.8	17.5	0.0	19.0	19.4	19.4	19.3	0.0	21.0
			1	40	22.6	22.4	22.3	0.0	24.0	17.7	17.7	17.6	0.0	19.0	19.4	19.4	19.3	0.0	21.0
			1	77	22.6	22.4	22.3	0.0	24.0	17.7	17.6	17.5	0.0	19.0	19.4	19.3	19.2	0.0	21.0
			36	0	21.6	21.6	21.4	0.5	23.5	17.8	17.7	17.6	0.0	19.0	19.5	19.5	19.3	0.0	21.0
			36	22	22.7	22.6	22.5	0.0	24.0	17.9	17.7	17.7	0.0	19.0	19.5	19.4	19.4	0.0	21.0
			36	43	21.7	21.6	21.4	0.5	23.5	17.9	17.7	17.7	0.0	19.0	19.5	19.5	19.4	0.0	21.0
			75	0	21.8	21.6	21.5	0.5	23.5	17.9	17.7	17.7	0.0	19.0	19.6	19.5	19.4	0.0	21.0
		QPSK	1	1	22.7	22.7	21.6	0.0	24.0	17.8	17.8	17.6	0.0	19.0	19.5	19.5	19.3	0.0	21.0
			1	40	22.7	22.5	22.4	0.0	24.0	17.9	17.6	17.7	0.0	19.0	19.5	19.4	19.4	0.0	21.0
			1	77	22.7	22.5	22.4	0.0	24.0	17.8	17.6	17.6	0.0	19.0	19.5	19.4	19.3	0.0	21.0
			36	0	21.7	21.6	21.4	1.0	23.0	17.8	17.8	17.6	0.0	19.0	19.4	19.5	19.3	0.0	21.0
			36	22	22.7	22.6	22.4	0.0	24.0	17.9	17.7	17.7	0.0	19.0	19.5	19.5	19.4	0.0	21.0
			36	43	21.7	21.6	21.4	1.0	23.0	17.8	17.7	17.7	0.0	19.0	19.5	19.5	19.4	0.0	21.0
			75	0	21.7	21.6	21.4	1.0	23.0	17.9	17.7	17.7	0.0	19.0	19.6	19.5	19.4	0.0	21.0
		16QAM	1	1	21.7	21.7	21.4	1.0	23.0	17.8	17.7	17.6	0.0	19.0	19.5	19.5	19.4	0.0	21.0
		64QAM	1	1	20.4	20.4	20.1	2.5	21.5	18.0	17.9	17.7	0.0	19.0	19.7	19.7	19.5	0.0	21.0
		256QAM	1	1	17.6	17.6	17.3	4.5	19.5	17.3	17.3	17.2	0.5	18.5	17.6	17.6	17.4	1.5	19.5
	CP-OFDM	QPSK	1	1	21.1	21.1	20.8	1.5	22.5	17.9	17.8	17.7	0.0	19.0	19.6	19.6	19.4	0.0	21.0

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NR Band n25 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	Measured Pwr (dBm)			MPR	Tune-up Limit
					371000	376500	382000			371000	376500	382000			371000	376500	382000		
					1855 MHz	1882.5 MHz	1910 MHz			1855 MHz	1882.5 MHz	1910 MHz			1855 MHz	1882.5 MHz	1910 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.4	22.3	22.3	0.0	24.0	17.6	17.5	17.5	0.0	19.0	19.2	19.2	19.2	0.0	21.0
			1	26	22.4	22.4	22.2	0.0	24.0	17.6	17.6	17.4	0.0	19.0	19.3	19.3	19.2	0.0	21.0
			1	50	22.4	22.3	22.1	0.0	24.0	17.6	17.5	17.4	0.0	19.0	19.2	19.2	19.1	0.0	21.0
			25	0	21.6	21.5	21.3	0.5	23.5	17.8	17.7	17.6	0.0	19.0	19.4	19.4	19.3	0.0	21.0
			25	14	22.5	22.4	22.3	0.0	24.0	17.8	17.6	17.5	0.0	19.0	19.4	19.4	19.3	0.0	21.0
			25	27	21.6	21.5	21.3	0.5	23.5	17.7	17.7	17.5	0.0	19.0	19.3	19.3	19.2	0.0	21.0
			50	0	21.5	21.4	21.3	0.5	23.5	17.7	17.6	17.6	0.0	19.0	19.3	19.4	19.3	0.0	21.0
		QPSK	1	1	22.5	22.4	22.3	0.0	24.0	17.7	17.5	17.6	0.0	19.0	19.2	19.3	19.3	0.0	21.0
			1	26	22.5	22.4	22.3	0.0	24.0	17.7	17.6	17.5	0.0	19.0	19.3	19.4	19.2	0.0	21.0
			1	50	22.5	22.4	22.2	0.0	24.0	17.7	17.5	17.5	0.0	19.0	19.3	19.3	19.2	0.0	21.0
			25	0	21.5	21.5	21.3	1.0	23.0	17.8	17.7	17.6	0.0	19.0	19.4	19.3	19.3	0.0	21.0
			25	14	22.5	22.4	22.3	0.0	24.0	17.7	17.6	17.5	0.0	19.0	19.4	19.4	19.2	0.0	21.0
			25	27	21.5	21.5	21.3	1.0	23.0	17.7	17.6	17.5	0.0	19.0	19.3	19.3	19.3	0.0	21.0
			50	0	21.6	21.5	21.2	1.0	23.0	17.7	17.7	17.5	0.0	19.0	19.4	19.4	19.2	0.0	21.0
		16QAM	1	1	21.5	21.4	21.3	1.0	23.0	17.5	17.4	17.5	0.0	19.0	19.3	19.2	19.2	0.0	21.0
		64QAM	1	1	20.1	20.0	19.9	2.5	21.5	17.7	17.6	17.7	0.0	19.0	19.4	19.4	19.4	0.0	21.0
		256QAM	1	1	17.3	17.3	17.2	4.5	19.5	17.1	17.0	17.0	0.5	18.5	17.3	17.3	17.3	1.5	19.5
	CP-OFDM	QPSK	1	1	20.8	20.8	20.7	1.5	22.5	17.6	17.5	17.5	0.0	19.0	19.3	19.3	19.3	0.0	21.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					370500	376500	382500			370500	376500	382500			370500	376500	382500		
					1852.5 MHz	1882.5 MHz	1912.5 MHz			1852.5 MHz	1882.5 MHz	1912.5 MHz			1852.5 MHz	1882.5 MHz	1912.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.5	22.4	22.2	0.0	24.0	17.6	17.6	17.4	0.0	19.0	19.2	19.4	19.2	0.0	21.0
			1	13	22.3	22.4	22.2	0.0	24.0	17.5	17.6	17.4	0.0	19.0	19.1	19.3	19.2	0.0	21.0
			1	23	22.5	22.5	22.1	0.0	24.0	17.7	17.6	17.4	0.0	19.0	19.3	19.3	19.1	0.0	21.0
			12	0	21.5	21.5	21.3	0.5	23.5	17.6	17.6	17.5	0.0	19.0	19.2	19.3	19.2	0.0	21.0
			12	7	22.4	22.5	22.3	0.0	24.0	17.6	17.6	17.5	0.0	19.0	19.3	19.4	19.2	0.0	21.0
			12	13	21.5	21.4	21.3	0.5	23.5	17.6	17.6	17.5	0.0	19.0	19.3	19.3	19.2	0.0	21.0
			25	0	21.5	21.5	21.3	0.5	23.5	17.7	17.7	17.5	0.0	19.0	19.3	19.4	19.2	0.0	21.0
		QPSK	1	1	22.5	22.5	22.3	0.0	24.0	17.6	17.7	17.5	0.0	19.0	19.3	19.4	19.2	0.0	21.0
			1	13	22.4	22.5	22.2	0.0	24.0	17.5	17.6	17.5	0.0	19.0	19.2	19.3	19.2	0.0	21.0
			1	23	22.5	22.5	22.2	0.0	24.0	17.7	17.6	17.4	0.0	19.0	19.3	19.4	19.2	0.0	21.0
			12	0	21.5	21.5	21.3	1.0	23.0	17.6	17.6	17.5	0.0	19.0	19.3	19.3	19.2	0.0	21.0
			12	7	22.5	22.5	22.2	0.0	24.0	17.6	17.6	17.4	0.0	19.0	19.2	19.4	19.2	0.0	21.0
			12	13	21.6	21.5	21.3	1.0	23.0	17.7	17.6	17.5	0.0	19.0	19.3	19.3	19.3	0.0	21.0
			25	0	21.5	21.5	21.2	1.0	23.0	17.7	17.7	17.5	0.0	19.0	19.3	19.4	19.2	0.0	21.0
		16QAM	1	1	21.5	21.5	21.3	1.0	23.0	17.5	17.6	17.4	0.0	19.0	19.3	19.4	19.2	0.0	21.0
		64QAM	1	1	20.2	20.2	19.9	2.5	21.5	17.8	17.8	17.6	0.0	19.0	19.4	19.5	19.3	0.0	21.0
		256QAM	1	1	17.4	17.4	17.2	4.5	19.5	17.1	17.1	17.0	0.5	18.5	17.3	17.4	17.3	1.5	19.5
	CP-OFDM	QPSK	1	1	20.9	20.9	20.6	1.5	22.5	17.7	17.6	17.5	0.0	19.0	19.3	19.4	19.3	0.0	21.0

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NR Band n41 (Voice/data/SRS0) Measured Results

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)																			
					DSI = 0, 1, 4							DSI = 3							DSI = 2					
					Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
					509202 2506.01 MHz		518598 2592.99 MHz		528000 2640 MHz			509202 2506.01 MHz		518598 2592.99 MHz		528000 2640 MHz			509202 2506.01 MHz		518598 2592.99 MHz		528000 2640 MHz		
100 MHz	DFT-s-OFDM	π/2 BPSK	1	1			18.1			0.0	19.0			15.1			0.0	16.0			14.3			0.0	15.0
			1	137			18.0			0.0	19.0			14.9			0.0	16.0			14.2			0.0	15.0
			1	271			18.1			0.0	19.0			15.1			0.0	16.0			14.3			0.0	15.0
			135	0			18.0			0.0	19.0			15.0			0.0	16.0			14.2			0.0	15.0
			135	69			18.0			0.0	19.0			15.0			0.0	16.0			14.2			0.0	15.0
			135	138			18.0			0.0	19.0			15.1			0.0	16.0			14.3			0.0	15.0
			270	0			17.9			0.0	19.0			15.0			0.0	16.0			14.2			0.0	15.0
		QPSK	1	1			18.1			0.0	19.0			15.1			0.0	16.0			14.2			0.0	15.0
			1	137			18.1			0.0	19.0			15.0			0.0	16.0			14.2			0.0	15.0
			1	271			18.3			0.0	19.0			15.2			0.0	16.0			14.7			0.0	15.0
			135	0			18.0			0.0	19.0			15.1			0.0	16.0			14.2			0.0	15.0
			135	69			18.0			0.0	19.0			15.0			0.0	16.0			14.3			0.0	15.0
			135	138			18.2			0.0	19.0			15.2			0.0	16.0			14.6			0.0	15.0
		16QAM	1	0			18.0			0.0	19.0			15.1			0.0	16.0			14.2			0.0	15.0
			1	1			18.0			0.0	19.0			14.7			0.0	16.0			14.2			0.0	15.0
			1	137			18.0			0.0	19.0			14.6			0.0	16.0			14.3			0.0	15.0
			1	271			18.1			0.0	19.0			14.8			0.0	16.0			14.3			0.0	15.0
		64QAM	1	1			18.2			0.0	19.0			15.1			0.0	16.0			14.1			0.0	15.0
		256QAM	1	1			17.7			0.0	19.0			15.0			0.0	16.0			14.5			0.0	15.0
	CP-OFDM	QPSK	1	1			18.2			0.0	19.0			15.2			0.0	16.0			14.3			0.0	15.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
					508200 2541 MHz				528996 2644.98 MHz			508200 2541 MHz				528996 2644.98 MHz			508200 2541 MHz				528996 2644.98 MHz		
90 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.2				18.1	0.0	19.0	15.1				15.0	0.0	16.0	14.1				14.0	0.0	15.0
			1	123	18.2				18.2	0.0	19.0	15.1				15.1	0.0	16.0	14.0				14.0	0.0	15.0
			1	243	18.2				18.2	0.0	19.0	15.1				15.3	0.0	16.0	14.0				14.2	0.0	15.0
			120	0	18.2				18.1	0.0	19.0	15.1				15.1	0.0	16.0	14.2				14.1	0.0	15.0
			120	63	18.2				18.2	0.0	19.0	15.1				15.2	0.0	16.0	14.1				14.1	0.0	15.0
			120	125	18.1				18.2	0.0	19.0	15.0				15.2	0.0	16.0	14.1				14.1	0.0	15.0
			243	0	18.2				18.2	0.0	19.0	15.1				15.2	0.0	16.0	14.1				14.1	0.0	15.0
		QPSK	1	1	18.2				18.1	0.0	19.0	15.1				15.1	0.0	16.0	14.1				14.0	0.0	15.0
			1	123	18.2				18.1	0.0	19.0	15.1				15.2	0.0	16.0	14.1				14.0	0.0	15.0
			1	243	18.2				18.2	0.0	19.0	15.1				15.3	0.0	16.0	14.0				14.1	0.0	15.0
			120	0	18.2				18.1	0.0	19.0	15.1				15.1	0.0	16.0	14.2				14.1	0.0	15.0
			120	63	18.2				18.2	0.0	19.0	15.2				15.2	0.0	16.0	14.1				14.0	0.0	15.0
			120	125	18.1				18.2	0.0	19.0	15.0				15.2	0.0	16.0	14.1				14.1	0.0	15.0
			243	0	18.2				18.2	0.0	19.0	15.2				15.3	0.0	16.0	14.1				14.1	0.0	15.0
		16QAM	1	1	18.4				17.9	0.0	19.0	15.0				15.1	0.0	16.0	14.4				14.1	0.0	15.0
		64QAM	1	1	18.4				18.1	0.0	19.0	15.1				14.9	0.0	16.0	13.9				14.0	0.0	15.0
		256QAM	1	1	18.0				17.9	0.0	19.0	15.2				14.8	0.0	16.0	14.3				14.1	0.0	15.0
	CP-OFDM	QPSK	1	1	18.2				18.0	0.0	19.0	15.2				15.0	0.0	16.0	14.2				14.0	0.0	15.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
					507204 2536.02 MHz				529998 2649.99 MHz			507204 2536.02 MHz				529998 2649.99 MHz			507204 2536.02 MHz				529998 2649.99 MHz		
80 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.2				18.1	0.0	19.0	15.3				15.0	0.0	16.0	14.1				14.0	0.0	15.0
			1	109	18.2				18.2	0.0	19.0	15.1				15.2	0.0	16.0	14.2				14.1	0.0	15.0
			1	215	18.1				18.3	0.0	19.0	15.1				15.2	0.0	16.0	14.1				14.2	0.0	15.0
			108	0	18.2				18.2	0.0	19.0	15.2				15.2	0.0	16.0	14.1				14.1	0.0	15.0
			108	55	18.1				18.1	0.0	19.0	15.1				15.2	0.0	16.0	14.2				14.0	0.0	15.0
			108	109	18.1				18.2	0.0	19.0	15.1				15.2	0.0	16.0	14.0				14.1	0.0	15.0
			216	0	18.1				18.2	0.0	19.0	15.1				15.2	0.0	16.0	14.1				14.0	0.0	15.0
		QPSK	1	1	18.1				18.1	0.0	19.0	15.2				15.0	0.0	16.0	14.1				14.0	0.0	15.0
			1	109	18.2				18.2	0.0	19.0	15.2				15.2	0.0	16.0	14.2				14.1	0.0	15.0
			1	215	18.0				18.2	0.0	19.0	15.1				15.3	0.0	16.0	14.1				14.1	0.0	15.0
			108	0	18.1				18.4	0.0	19.0	15.2				15.2	0.0	16.0	14.2				14.2	0.0	15.0
			108	55	18.0				18.4	0.0	19.0	15.1				15.2	0.0	16.0	14.2				14.1	0.0	15.0
			108	109	18.0				18.3	0.0	19.0	15.1				15.2	0.0	16.0	14.1				14.1	0.0	15.0
			216	0	18.2				18.3	0.0	19.0	15.2				15.2	0.0	16.0	14.2				14.0	0.0	15.0
		16QAM	1	1	18.3				18.0	0.0	19.0	15.4				15.0	0.0	16.0	13.6				14.3	0.0	15.0
		64QAM	1	1	18.3				18.2	0.0	19.0	15.4				15.0	0.0	16.0	14.4				14.1	0.0	15.0
		256QAM	1	1	17.8				18.1	0.0	19.0	15.0				14.7	0.0	16.0	14.6				14.3	0.0	15.0
	CP-OFDM	QPSK	1	1	18.2				18.1	0.0	19.0	15.1				15.1	0.0	16.0	14.2				14.0	0.0	15.0
BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
					526202 2631.01 MHz				531000 2655 MHz			526202 2631.01 MHz				531000 2655 MHz			526202 2631.01 MHz				531000 2655 MHz		
70 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.0				18.3	0.0	19.0	15.1				15.3	0.0	16.0	14.0				14.2	0.0	15.0
			1	95	18.3				18.3	0.0	19.0	15.3				15.3	0.0	16.0	14.3				14.3	0.0	15.0
			1	187	17.5				17.3	0.0	19.0	14.5				14.3	0.0	16.0	13.4				13.2	0.0	15.0
			90	0	18.3				18.3	0.0	19.0	15.3				15.3	0.0	16.0	14.2				14.3	0.0	15.0
			90	50	18.3				18.3	0.0	19.0	15.3				15.3	0.0	16.0	14.2				14.3	0.0	15.0
			90	99	17.3				16.9	0.0	19.0	14.3				13.9	0.0	16.0	13.2				12.9	0.0	15.0
			180	0	17.8				17.7	0.0	19.0	14.8				14.6	0.0	16.0	13.7				13.6	0.0	15.0
		QPSK	1	1	18.1				18.2	0.0	19.0	15.2				15.2	0.0	16.0	14.1				14.2	0.0	15.0
			1	95	18.3				18.3	0.0	19.0	15.3				15.3	0.0	16.0	14.3				14.3	0.0	15.0
			1	187	17.5				17.3	0.0	19.0	14.5				14.2	0.0	16.0	13.4				13.2	0.0	15.0
			90	0	18.3				18.4	0.0	19.0	15.3				15.4	0.0	16.0	14.3				14.3	0.0	15.0
			90	50	18.4				18.3	0.0	19.0	15.3				15.4	0.0	16.0	14.3				14.3	0.0	15.0
			90	99	17.3				17.0	0.0	19.0	14.4				14.0	0.0	16.0	13.3				12.9	0.0	15.0
			180	0	17.6				17.6	0.0	19.0	14.8				14.6	0.0	16.0	13.8				13.6	0.0	15.0
		16QAM	1	1	17.9				18.4	0.0	19.0	15.0				15.4	0.0	16.0	13.9				14.3	0.0	15.0
		64QAM	1	1	18.0				18.1	0.0	19.0	15.0				15.2	0.0	16.0	13.9				14.1	0.0	15.0
		256QAM	1	1	18.3				18.4	0.0	19.0	15.3				15.4	0.0	16.0	14.2				14.4	0.0	15.0
	CP-OFDM	QPSK	1	1	18.2				18.1	0.0	19.0	15.2				15.1	0.0	16.0	14.2				14.1	0.0	15.0

Notes:

Voice/data/SRS0 were measured output power through FTM mode provided by manufacturer.

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NR Band n41 (Voice/data/SRS0) - 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	Measured Pwr (dBm)					MPR	Tune-up Limit
					505200		518598		531996			505200		518598		531996			505200		518598		531996		
					2526 MHz		2592.99 MHz		2659.98 MHz			2526 MHz		2592.99 MHz		2659.98 MHz			2526 MHz		2592.99 MHz		2659.98 MHz		
60 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.4		18.3		18.3	0.0	19.0	15.4		15.2		15.1	0.0	16.0	14.4		14.2		14.1	0.0	15.0
			1	81	18.4		18.3		18.4	0.0	19.0	15.4		15.2		15.2	0.0	16.0	14.4		14.2		14.3	0.0	15.0
			1	160	18.3		18.3		18.5	0.0	19.0	15.3		15.1		15.3	0.0	16.0	14.4		14.1		14.3	0.0	15.0
			81	0	18.4		18.3		18.4	0.0	19.0	15.3		15.1		15.2	0.0	16.0	14.4		14.2		14.2	0.0	15.0
			81	41	18.4		18.3		18.5	0.0	19.0	15.3		15.2		15.3	0.0	16.0	14.4		14.2		14.2	0.0	15.0
			81	81	18.4		18.2		18.5	0.0	19.0	15.3		15.1		15.4	0.0	16.0	14.4		14.2		14.3	0.0	15.0
			162	0	18.5		18.3		18.5	0.0	19.0	15.3		15.1		15.3	0.0	16.0	14.4		14.2		14.3	0.0	15.0
		QPSK	1	1	18.5		18.4		18.4	0.0	19.0	15.4		15.2		15.2	0.0	16.0	14.4		14.2		14.1	0.0	15.0
			1	81	18.5		18.4		18.5	0.0	19.0	15.3		15.2		15.3	0.0	16.0	14.4		14.3		14.3	0.0	15.0
			1	160	18.4		18.3		18.6	0.0	19.0	15.2		15.1		15.4	0.0	16.0	14.3		14.1		14.4	0.0	15.0
			81	0	18.4		18.3		18.5	0.0	19.0	15.3		15.1		15.3	0.0	16.0	14.4		14.2		14.2	0.0	15.0
			81	41	18.4		18.3		18.5	0.0	19.0	15.3		15.2		15.3	0.0	16.0	14.4		14.2		14.3	0.0	15.0
			81	81	18.5		18.3		18.6	0.0	19.0	15.4		15.1		15.4	0.0	16.0	14.4		14.2		14.3	0.0	15.0
			162	0	18.4		18.3		18.6	0.0	19.0	15.3		15.2		15.3	0.0	16.0	14.4		14.2		14.3	0.0	15.0
		16QAM	1	1	18.4		18.4		18.5	0.0	19.0	15.6		15.3		15.3	0.0	16.0	14.4		14.5		14.2	0.0	15.0
		64QAM	1	1	18.4		18.5		18.6	0.0	19.0	15.6		15.1		15.2	0.0	16.0	14.3		14.1		14.1	0.0	15.0
		256QAM	1	1	18.1		18.1		18.1	0.0	19.0	15.3		15.2		15.0	0.0	16.0	14.8		14.6		14.4	0.0	15.0
	CP-OFDM	QPSK	1	1	18.4		18.3		18.5	0.0	19.0	15.4		15.3		15.2	0.0	16.0	14.5		14.3		14.1	0.0	15.0

BW (MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
					504204		518598		532998			504204		518598		532998			504204		518598		532998		
					2512.02MHz		2592.99MHz		2664.99MHz			2512.02MHz		2592.99MHz		2664.99MHz			2512.02MHz		2592.99MHz		2664.99MHz		
50 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.2		18.1		18.1	0.0	19.0	15.3		15.1		15.1	0.0	16.0	14.3		14.1		14.1	0.0	15.0
			1	67	18.2		18.2		18.1	0.0	19.0	15.3		15.1		15.1	0.0	16.0	14.3		14.1		14.1	0.0	15.0
			1	131	18.2		18.2		18.3	0.0	19.0	15.3		15.2		15.2	0.0	16.0	14.3		14.1		14.3	0.0	15.0
			64	0	18.2		18.1		18.2	0.0	19.0	15.2		15.1		15.1	0.0	16.0	14.2		14.0		14.1	0.0	15.0
			64	35	18.2		18.2		18.1	0.0	19.0	15.2		15.1		15.1	0.0	16.0	14.2		14.1		14.1	0.0	15.0
			64	69	18.2		18.0		18.3	0.0	19.0	15.3		14.9		15.2	0.0	16.0	14.3		14.0		14.2	0.0	15.0
			128	0	18.2		18.1		18.2	0.0	19.0	15.3		15.1		15.2	0.0	16.0	14.2		14.1		14.1	0.0	15.0
		QPSK	1	1	18.1		18.1		18.3	0.0	19.0	15.2		15.1		15.2	0.0	16.0	14.2		14.1		14.2	0.0	15.0
			1	67	18.2		18.1		18.3	0.0	19.0	15.2		15.1		15.2	0.0	16.0	14.2		14.1		14.2	0.0	15.0
			1	131	18.2		18.2		18.5	0.0	19.0	15.2		15.2		15.3	0.0	16.0	14.2		14.1		14.3	0.0	15.0
			64	0	18.2		18.1		18.2	0.0	19.0	15.2		15.1		15.1	0.0	16.0	14.2		14.0		14.1	0.0	15.0
			64	35	18.2		18.1		18.2	0.0	19.0	15.3		15.1		15.1	0.0	16.0	14.2		14.1		14.1	0.0	15.0
			64	69	18.2		18.0		18.3	0.0	19.0	15.3		15.0		15.3	0.0	16.0	14.2		14.0		14.3	0.0	15.0
			128	0	18.2		18.1		18.2	0.0	19.0	15.3		15.1		15.2	0.0	16.0	14.2		14.1		14.1	0.0	15.0
		16QAM	1	1	18.1		18.4		18.1	0.0	19.0	15.1		14.9		15.1	0.0	16.0	14.1		13.9		14.0	0.0	15.0
		64QAM	1	1	18.3		18.3		18.4	0.0	19.0	15.1		15.1		15.4	0.0	16.0	14.0		14.1		14.3	0.0	15.0
		256QAM	1	1	18.5		18.3		18.6	0.0	19.0	15.6		15.4		15.5	0.0	16.0	14.5		14.4		14.5	0.0	15.0
	CP-OFDM	QPSK	1	1	18.2		17.9		18.2	0.0	19.0	15.1		14.9		15.2	0.0	16.0	14.1		13.9		14.2	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
					503202	513468		523734	534000			503202	513468		523734	534000			503202	513468		523734	534000		
					2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz			2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz			2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.5	18.4		18.3	18.4	0.0	19.0	15.6	15.4		15.2	15.3	0.0	16.0	14.3	14.2		14.2	14.2	0.0	15.0
			1	53	18.4	18.4		18.3	18.5	0.0	19.0	15.4	15.4		15.2	15.3	0.0	16.0	14.3	14.2		14.2	14.3	0.0	15.0
			1	104	18.4	18.4		18.4	18.0	0.0	19.0	15.4	15.4		15.3	14.8	0.0	16.0	14.3	14.2		14.2	13.5	0.0	15.0
			50	0	18.5	18.4		18.3	18.4	0.0	19.0	15.4	15.3		15.1	15.1	0.0	16.0	14.3	14.3		14.1	14.2	0.0	15.0
			50	28	18.4	18.4		18.3	18.5	0.0	19.0	15.3	15.2		15.2	15.2	0.0	16.0	14.3	14.3		14.1	14.2	0.0	15.0
			50	56	18.5	18.4		18.4	18.5	0.0	19.0	15.3	15.2		15.3	15.2	0.0	16.0	14.4	14.3		14.2	14.1	0.0	15.0
			100	0	18.4	18.5		18.4	18.5	0.0	19.0	15.3	15.2		15.2	15.2	0.0	16.0	14.3	14.3		14.2	14.2	0.0	15.0
		QPSK	1	1	18.6	18.4		18.4	18.5	0.0	19.0	15.4	15.3		15.2	15.3	0.0	16.0	14.4	14.3		14.2	14.3	0.0	15.0
			1	53	18.5	18.5		18.4	18.5	0.0	19.0	15.3	15.3		15.3	15.3	0.0	16.0	14.3	14.3		14.2	14.3	0.0	15.0
			1	104	18.5	18.4		18.5	18.1	0.0	19.0	15.3	15.3		15.3	14.8	0.0	16.0	14.4	14.4		14.2	13.6	0.0	15.0
			50	0	18.5	18.4		18.3	18.4	0.0	19.0	15.3	15.2		15.1	14.9	0.0	16.0	14.4	14.3		14.1	14.2	0.0	15.0
			50	28	18.5	18.4		18.3	18.5	0.0	19.0	15.3	15.2		15.2	15.3	0.0	16.0	14.3	14.3		14.2	14.3	0.0	15.0
			50	56	18.5	18.4		18.4	18.5	0.0	19.0	15.4	15.2		15.2	15.2	0.0	16.0	14.4	14.3		14.2	14.1	0.0	15.0
			100	0	18.4	18.5		18.4	18.5	0.0	19.0	15.3	15.2		15.3	15.3	0.0	16.0	14.4	14.2		14.2	14.2	0.0	15.0
		16QAM	1	1	18.7	18.7		18.5	18.6	0.0	19.0	15.7	15.4		15.2	15.2	0.0	16.0	14.4	14.3		14.5	14.2	0.0	15.0
		64QAM	1	1	18.8	18.6		18.4	18.5	0.0	19.0	15.4	15.5		15.3	15.5	0.0	16.0	14.5	14.2		14.1	14.2	0.0	15.0
		256QAM	1	1	18.6	18.6		18.0	18.1	0.0	19.0	15.4	14.9		15.3	15.2	0.0	16.0	14.7	14.7		14.4	14.5	0.0	15.0
	CP-OFDM	QPSK	1	1	18.7	18.3		18.3	18.3	0.0	19.0	15.5	15.3		15.2	15.1	0.0	16.0	14.4	14.3		14.3	14.2	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
					502200	510402	518598	526800	534996			502200	510402	518598	526800	534996			502200	510402	518598	526800	534996		
					2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz			2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz			2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.5	18.6	18.5	18.5	18.5	0.0	19.0	15.4	15.4	15.5	15.3	15.4	0.0	16.0	14.5	14.4	14.3	14.4	14.5	0.0	15.0
			1	39	18.4	18.4	18.4	18.4	18.5	0.0	19.0	15.3	15.3	15.3	15.2	15.3	0.0	16.0	14.4	14.4	14.3	14.3	14.5	0.0	15.0
			1	76	18.6	18.6	18.5	18.7	18.0	0.0	19.0	15.4	15.4	15.5	15.5	14.9	0.0	16.0	14.5	14.4	14.4	14.4	13.5	0.0	15.0
			36	0	18.6	18.5	18.4	18.5	18.6	0.0	19.0	15.4	15.3	15.2	15.3	15.4	0.0	16.0	14.4	14.3	14.3	14.3	14.4	0.0	15.0
			36	21	18.5	18.5	18.5	18.5	18.5	0.0	19.0	15.3	15.3	15.3	15.3	15.3	0.0	16.0	14.4	14.4	14.3	14.3	14.5	0.0	15.0
			36	42	18.5	18.6	18.5	18.6	18.5	0.0	19.0	15.2	15.3	15.3	15.4	15.2	0.0	16.0	14.4	14.4	14.4	14.4	14.2	0.0	15.0
			75	0	18.6	18.6	18.5	18.6	18.6	0.0	19.0	15.3	15.4	15.3	15.3	15.4	0.0	16.0	14.5	14.3	14.3	14.4	14.4	0.0	15.0
		QPSK	1	1	18.6	18.6	18.6	18.5	18.7	0.0	19.0	15.5	15.5	15.5	15.4	15.4	0.0	16.0	14.5	14.4	14.3	14.3	14.5	0.0	15.0
			1	39	18.5	18.5	18.5	18.5	18.6	0.0	19.0	15.4	15.4	15.3	15.3	15.3	0.0	16.0	14.4	14.4	14.2	14.3	14.4	0.0	15.0
			1	76	18.7	18.7	18.6	18.7	18.1	0.0	19.0	15.4	15.5	15.4	15.5	14.8	0.0	16.0	14.4	14.4	14.4	14.5	13.5	0.0	15.0
			36	0	18.6	18.5	18.4	18.5	18.6	0.0	19.0	15.3	15.3	15.2	15.3	15.4	0.0	16.0	14.4	14.4	14.3	14.4	14.4	0.0	15.0
			36	21	18.6	18.6	18.5	18.5	18.6	0.0	19.0	15.3	15.4	15.2	15.3	15.4	0.0	16.0	14.4	14.4	14.3	14.3	14.5	0.0	15.0
			36	42	18.6	18.6	18.5	18.6	18.5	0.0	19.0	15.2	15.3	15.2	15.3	15.3	0.0	16.0	14.4	14.4	14.4	14.4	14.2	0.0	15.0
			75	0	18.6	18.5	18.5	18.5	18.6	0.0	19.0	15.3	15.3	15.3	15.3	15.4	0.0	16.0	14.4	14.3	14.3	14.4	14.4	0.0	15.0
		16QAM	1	1	18.7	18.4	18.3	18.6	18.6	0.0	19.0	15.2	15.3	15.3	15.3	15.3	0.0	16.0	14.7	14.6	14.2	14.3	14.4	0.0	15.0
		64QAM	1	1	18.8	18.7	18.7	18.5	18.8	0.0	19.0	15.6	15.5	15.5	15.4	15.5	0.0	16.0	14.5	14.3	14.3	14.0	14.4	0.0	15.0
		256QAM	1	1	18.3	18.1	18.4	18.5	18.5	0.0	19.0	15.5	15.1	15.3	15.2	15.4	0.0	16.0	14.9	14.9	14.7	14.8	14.8	0.0	15.0
	CP-OFDM	QPSK	1	1	18.7	18.6	18.5	18.5	18.7	0.0	19.0	15.6	15.4	15.4	15.3	15.4	0.0	16.0	14.6	14.4	14.4	14.4	14.5	0.0	15.0

Notes:

Voice/data/SRS0 were measured output power through FTM mode provided by manufacturer.

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NR Band n41 (Voice/data/SRS0) - 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	Measured Pwr (dBm)					MPR	Tune-up Limit
					501204	509898	518598	527298	535998			501204	509898	518598	527298	535998			501204	509898	518598	527298	535998		
					2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz			2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz			2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.4	18.4	18.3	18.2	18.3	0.0	19.0	15.3	15.3	15.3	15.2	15.4	0.0	16.0	14.3	14.2	14.1	14.1	14.2	0.0	15.0
			1	26	18.4	18.4	18.1	18.2	18.3	0.0	19.0	15.3	15.3	15.1	15.2	15.3	0.0	16.0	14.3	14.0	13.9	14.1	14.2	0.0	15.0
			1	49	18.4	18.3	18.2	18.2	18.3	0.0	19.0	15.3	15.3	15.2	15.2	15.3	0.0	16.0	14.3	14.1	14.0	14.1	14.1	0.0	15.0
			25	0	18.5	18.3	18.2	18.2	18.4	0.0	19.0	15.3	15.2	15.2	15.2	15.4	0.0	16.0	14.2	14.1	14.0	14.1	14.1	0.0	15.0
			25	13	18.5	18.3	18.1	18.3	18.3	0.0	19.0	15.3	15.3	15.1	15.3	15.4	0.0	16.0	14.2	14.1	14.0	14.1	14.2	0.0	15.0
			25	26	18.4	18.3	18.1	18.2	18.3	0.0	19.0	15.3	15.3	15.1	15.3	15.3	0.0	16.0	14.2	14.1	13.9	14.1	14.1	0.0	15.0
			50	0	18.5	18.4	18.1	18.3	18.3	0.0	19.0	15.3	15.3	15.1	15.3	15.3	0.0	16.0	14.2	14.1	13.9	14.1	14.2	0.0	15.0
		QPSK	1	1	18.4	18.5	18.3	18.3	18.4	0.0	19.0	15.4	15.5	15.2	15.3	15.4	0.0	16.0	14.3	14.3	14.1	14.1	14.2	0.0	15.0
			1	26	18.4	18.4	18.2	18.4	18.4	0.0	19.0	15.3	15.5	15.1	15.4	15.3	0.0	16.0	14.2	14.1	13.9	14.1	14.2	0.0	15.0
			1	49	18.4	18.4	18.2	18.3	18.3	0.0	19.0	15.4	15.4	15.2	15.3	15.4	0.0	16.0	14.2	14.2	14.0	14.1	14.1	0.0	15.0
			25	0	18.5	18.3	18.2	18.2	18.3	0.0	19.0	15.4	15.3	15.2	15.2	15.3	0.0	16.0	14.2	14.2	14.0	14.1	14.2	0.0	15.0
			25	13	18.5	18.4	18.1	18.2	18.3	0.0	19.0	15.3	15.3	15.1	15.2	15.3	0.0	16.0	14.2	14.1	14.0	14.0	14.2	0.0	15.0
			25	26	18.4	18.3	18.1	18.3	18.3	0.0	19.0	15.3	15.3	15.1	15.3	15.3	0.0	16.0	14.2	14.1	13.9	14.0	14.2	0.0	15.0
			50	0	18.5	18.4	18.1	18.3	18.3	0.0	19.0	15.4	15.3	15.1	15.2	15.4	0.0	16.0	14.2	14.1	14.0	14.1	14.2	0.0	15.0
		16QAM	1	1	18.5	18.4	18.3	17.9	18.3	0.0	19.0	15.3	15.3	15.3	14.9	15.3	0.0	16.0	14.1	14.3	14.1	14.3	14.2	0.0	15.0
		64QAM	1	1	18.5	18.5	18.2	18.3	18.4	0.0	19.0	15.5	15.5	15.2	15.3	15.4	0.0	16.0	14.3	14.3	14.2	14.1	14.3	0.0	15.0
		256QAM	1	1	18.4	18.2	18.1	17.9	18.3	0.0	19.0	15.6	15.2	15.1	15.0	15.3	0.0	16.0	14.6	14.3	14.5	14.4	14.6	0.0	15.0
	CP-OFDM	QPSK	1	1	18.5	18.3	18.2	18.2	18.4	0.0	19.0	15.4	15.4	15.3	15.3	15.4	0.0	16.0	14.4	14.3	14.1	14.2	14.3	0.0	15.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
					500700	509652	518598	527550	536496			500700	509652	518598	527550	536496			500700	509652	518598	527550	536496		
					2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz			2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz			2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.5	18.4	18.2	18.3	18.3	0.0	19.0	15.4	15.3	15.2	15.1	15.3	0.0	16.0	14.4	14.3	14.2	14.1	14.2	0.0	15.0
			1	19	18.3	18.2	18.1	18.2	18.2	0.0	19.0	15.3	15.2	15.0	15.1	15.3	0.0	16.0	14.3	14.2	14.1	14.1	14.2	0.0	15.0
			1	36	18.3	18.4	18.1	18.3	18.3	0.0	19.0	15.4	15.3	15.1	15.2	15.2	0.0	16.0	14.3	14.3	14.1	14.1	14.2	0.0	15.0
			18	0	18.4	18.4	18.1	18.2	18.3	0.0	19.0	15.4	15.2	15.1	15.1	15.2	0.0	16.0	14.4	14.3	14.1	14.2	14.2	0.0	15.0
			18	10	18.4	18.3	18.1	18.3	18.3	0.0	19.0	15.3	15.2	15.1	15.1	15.3	0.0	16.0	14.3	14.2	14.2	14.2	14.1	0.0	15.0
			18	20	18.4	18.4	18.1	18.2	18.3	0.0	19.0	15.3	15.3	15.1	15.2	15.3	0.0	16.0	14.3	14.3	14.1	14.2	14.2	0.0	15.0
			36	0	18.4	18.3	18.1	18.3	18.4	0.0	19.0	15.4	15.3	15.1	15.2	15.3	0.0	16.0	14.3	14.3	14.1	14.2	14.2	0.0	15.0
		QPSK	1	1	18.5	18.4	18.2	18.2	18.3	0.0	19.0	15.5	15.3	15.1	15.2	15.3	0.0	16.0	14.5	14.4	14.1	14.2	14.2	0.0	15.0
			1	19	18.3	18.2	18.1	18.2	18.3	0.0	19.0	15.4	15.2	15.0	15.2	15.2	0.0	16.0	14.3	14.3	14.2	14.2	14.2	0.0	15.0
			1	36	18.3	18.4	18.1	18.3	18.2	0.0	19.0	15.4	15.3	15.0	15.2	15.2	0.0	16.0	14.3	14.3	14.1	14.2	14.2	0.0	15.0
			18	0	18.4	18.3	18.2	18.2	18.3	0.0	19.0	15.4	15.3	15.1	15.1	15.3	0.0	16.0	14.4	14.3	14.1	14.2	14.2	0.0	15.0
			18	10	18.4	18.3	18.1	18.3	18.3	0.0	19.0	15.3	15.2	15.1	15.2	15.3	0.0	16.0	14.3	14.2	14.1	14.2	14.2	0.0	15.0
			18	20	18.4	18.3	18.1	18.2	18.3	0.0	19.0	15.3	15.3	15.0	15.2	15.2	0.0	16.0	14.3	14.3	14.1	14.2	14.2	0.0	15.0
			36	0	18.4	18.3	18.1	18.2	18.4	0.0	19.0	15.4	15.3	15.1	15.2	15.3	0.0	16.0	14.4	14.3	14.1	14.2	14.2	0.0	15.0
		16QAM	1	1	18.0	18.5	18.5	18.3	18.5	0.0	19.0	15.7	15.3	15.5	15.0	15.6	0.0	16.0	14.6	14.7	14.1	14.2	14.4	0.0	15.0
		64QAM	1	1	18.5	18.4	18.4	18.2	18.4	0.0	19.0	15.4	15.4	15.2	15.0	15.3	0.0	16.0	14.3	14.4	14.1	14.2	14.3	0.0	15.0
		256QAM	1	1	18.6	18.8	18.6	18.4	18.7	0.0	19.0	15.7	15.7	15.4	15.5	15.7	0.0	16.0	14.6	14.5	14.5	14.5	14.4	0.0	15.0
	CP-OFDM	QPSK	1	1	18.6	18.3	18.1	18.2	18.4	0.0	19.0	15.4	15.3	15.1	15.1	15.3	0.0	16.0	14.4	14.4	14.2	14.2	14.3	0.0	15.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit	Measured Pwr (dBm)					MPR	Tune-up Limit
					500202	509400	518598	527802	537000			500202	509400	518598	527802	537000			500202	509400	518598	527802	537000		
					2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz			2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz			2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.3	18.4	18.1	18.2	18.1	0.0	19.0	15.3	15.3	15.1	15.2	15.1	0.0	16.0	14.2	14.2	14.1	14.1	14.1	0.0	15.0
			1	12	18.3	18.3	18.0	18.2	18.1	0.0	19.0	15.3	15.3	15.0	15.2	15.1	0.0	16.0	14.2	14.2	14.1	14.1	14.1	0.0	15.0
			1	22	18.3	18.3	18.0	18.3	18.1	0.0	19.0	15.3	15.3	15.0	15.3	15.1	0.0	16.0	14.2	14.2	14.1	14.1	14.1	0.0	15.0
			12	0	18.3	18.3	18.0	18.2	18.2	0.0	19.0	15.3	15.3	15.1	15.2	15.2	0.0	16.0	14.2	14.2	14.1	14.1	14.1	0.0	15.0
			12	6	18.3	18.3	18.1	18.2	18.2	0.0	19.0	15.3	15.2	15.0	15.2	15.1	0.0	16.0	14.2	14.2	14.1	14.0	14.1	0.0	15.0
			12	12	18.3	18.3	18.0	18.2	18.2	0.0	19.0	15.3	15.3	15.0	15.2	15.2	0.0	16.0	14.2	14.2	14.0	14.0	14.1	0.0	15.0
			24	0	18.3	18.3	18.0	18.2	18.2	0.0	19.0	15.3	15.3	15.1	15.2	15.2	0.0	16.0	14.2	14.2	14.0	14.0	14.1	0.0	15.0
		QPSK	1	1	18.4	18.3	18.0	18.2	18.3	0.0	19.0	15.4	15.3	15.1	15.2	15.3	0.0	16.0	14.3	14.2	14.0	14.0	14.1	0.0	15.0
			1	12	18.3	18.3	18.0	18.2	18.2	0.0	19.0	15.3	15.3	15.0	15.2	15.2	0.0	16.0	14.3	14.2	14.0	14.0	14.1	0.0	15.0
			1	22	18.3	18.3	18.0	18.2	18.2	0.0	19.0	15.3	15.3	15.0	15.2	15.2	0.0	16.0	14.3	14.2	14.0	14.2	14.1	0.0	15.0
			12	0	18.3	18.3	18.0	18.2	18.2	0.0	19.0	15.3	15.2	15.0	15.2	15.2	0.0	16.0	14.3	14.2	14.0	14.1	14.1	0.0	15.0
			12	6	18.3	18.3	18.0	18.2	18.2	0.0	19.0	15.3	15.3	15.0	15.2	15.2	0.0	16.0	14.2	14.2	14.0	14.1	14.1	0.0	15.0
			12	12	18.3	18.2	18.0	18.2	18.2	0.0	19.0	15.3	15.3	15.0	15.2	15.2	0.0	16.0	14.2	14.2	14.0	14.1	14.1	0.0	15.0
			24	0	18.3	18.2	18.0	18.2	18.2	0.0	19.0	15.3	15.2	15.0	15.2	15.2	0.0	16.0	14.2	14.2	14.0	14.1	14.1	0.0	15.0
		16QAM	1	1	18.4	18.1	18.1	18.0	18.2	0.0	19.0	15.4	15.0	15.1	15.1	15.2	0.0	16.0	14.2	14.2	14.2	14.2	14.2	0.0	15.0
		64QAM	1	1	18.4	18.2	18.0	18.3	18.2	0.0	19.0	15.4	15.3	15.0	15.3	15.2	0.0	16.0	14.2	14.1	14.2	14.1	14.2	0.0	15.0
		256QAM	1	1	18.7	18.6	18.2	18.4	18.5	0.0	19.0	15.6	15.6	15.2	15.4	15.5	0.0	16.0	14.6	14.5	14.4	14.5	14.2	0.0	15.0
	CP-OFDM	QPSK	1	1	18.3	18.3	18.1	18.1	18.3	0.0	19.0	15.3	15.3	15.1	15.1	15.3	0.0	16.0	14.3	14.2	14.0	14.1	14.2	0.0	15.0

Notes:

Voice/data/SRS0 were measured output power through FTM mode provided by manufacturer.

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NR Band n41(SRS1) Measured Results

BW(MHz)	Mode	Maximum Allowed Average Power (dBm)											
		DSI = 0, 1, 4						DSI = 2, 3					
		Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		509202		518598		528000		509202		518598		528000	
		2546.01 MHz		2592.99 MHz		2640 MHz		2546.01 MHz		2592.99 MHz		2640 MHz	
100 MHz	SRS CW			14.2			16.0			11.3			13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		508200				528996		508200				528996	
		2541 MHz				2644.98 MHz		2541 MHz				2644.98 MHz	
90 MHz	SRS CW	14.4				14.4	16.0	11.4				11.5	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		507204				529998		507204				529998	
		2536.02 MHz				2649.99 MHz		2536.02 MHz				2649.99 MHz	
80 MHz	SRS CW	14.3				14.4	16.0	11.4				11.5	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		526202				531000		526202				531000	
		2631.01 MHz				2655 MHz		2631.01 MHz				2655 MHz	
70 MHz	SRS CW	14.3				14.3	16.0	11.3				11.3	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		505200		518598		531996		505200		518598		531996	
		2526 MHz		2592.99 MHz		2659.98 MHz		2526 MHz		2592.99 MHz		2659.98 MHz	
60 MHz	SRS CW	14.5		14.3		14.5	16.0	11.6		11.4		11.6	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		504204		518598		532998		504204		518598		532998	
		2512.02 MHz		2592.99 MHz		2664.99 MHz		2512.02 MHz		2592.99 MHz		2664.99 MHz	
50 MHz	SRS CW	14.6		14.4		14.5	16.0	11.7		11.4		11.5	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		503202	513468		523734	534000		503202	513468		523734	534000	
		2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz		2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz	
40 MHz	SRS CW	14.5	14.5		14.4	14.6	16.0	11.6	11.5		11.4	11.6	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		502200	510402	518598	526800	534996		502200	510402	518598	526800	534996	
		2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz		2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz	
30 MHz	SRS CW	14.7	14.6	14.5	14.5	14.7	16.0	11.8	11.6	11.5	11.6	11.8	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		501204	509898	518598	527298	535998		501204	509898	518598	527298	535998	
		2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz		2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz	
20 MHz	SRS CW	14.7	14.6	14.4	14.4	14.7	16.0	11.7	11.6	11.4	11.5	11.7	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		500700	509652	518598	527550	536496		500700	509652	518598	527550	536496	
		2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz		2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz	
15 MHz	SRS CW	14.7	14.5	14.4	14.4	14.5	16.0	11.7	11.5	11.3	11.3	11.4	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		500202	509400	518598	527802	537000		500202	509400	518598	527802	537000	
		2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz		2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz	
10 MHz	SRS CW	14.7	14.5	14.3	14.3	14.5	16.0	11.7	11.4	11.2	11.2	11.4	13.0

Notes:

SRS1/SRS2/SRS3 were measured output power through FTM mode provided by manufacturer.

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NR Band n41(SRS2) Measured Results

BW(MHz)	Mode	Maximum Allowed Average Power (dBm)											
		DSI = 0, 1, 4						DSI = 2, 3					
		Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		509202		518598		528000		509202		518598		528000	
		2546.01 MHz		2592.99 MHz		2640 MHz		2546.01 MHz		2592.99 MHz		2640 MHz	
100 MHz	SRS CW			14.1			16.0			11.2			13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		508200				528996		508200				528996	
		2541 MHz				2644.98 MHz		2541 MHz				2644.98 MHz	
90 MHz	SRS CW	13.9				14.0	16.0	10.9				11.2	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		507204				529998		507204				529998	
		2536.02 MHz				2649.99 MHz		2536.02 MHz				2649.99 MHz	
80 MHz	SRS CW	13.9				14.0	16.0	10.8				11.1	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		526202				531000		526202				531000	
		2631.01 MHz				2655 MHz		2631.01 MHz				2655 MHz	
70 MHz	SRS CW	14.2				14.2	16.0	11.2				11.2	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		505200		518598		531996		505200		518598		531996	
		2526 MHz		2592.99 MHz		2659.98 MHz		2526 MHz		2592.99 MHz		2659.98 MHz	
60 MHz	SRS CW	14.0		14.0		14.1	16.0	11.0		11.0		11.2	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		504204		518598		532998		504204		518598		532998	
		2512.02 MHz		2592.99 MHz		2664.99 MHz		2512.02 MHz		2592.99 MHz		2664.99 MHz	
50 MHz	SRS CW	14.2		14.3		14.3	16.0	11.2		11.2		11.4	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		503202	513468		523734	534000		503202	513468		523734	534000	
		2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz		2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz	
40 MHz	SRS CW	13.9	14.0		14.0	14.1	16.0	11.0	11.1		11.1	11.3	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		502200	510402	518598	526800	534996		502200	510402	518598	526800	534996	
		2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz		2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz	
30 MHz	SRS CW	14.0	14.0	14.1	14.1	14.3	16.0	11.1	11.1	11.2	11.2	11.4	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		501204	509898	518598	527298	535998		501204	509898	518598	527298	535998	
		2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz		2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz	
20 MHz	SRS CW	14.0	14.0	13.9	14.0	14.2	16.0	11.1	11.1	11.0	11.2	11.4	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		500700	509652	518598	527550	536496		500700	509652	518598	527550	536496	
		2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz		2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz	
15 MHz	SRS CW	14.5	14.5	14.3	14.4	14.5	16.0	11.4	11.4	11.3	11.3	11.4	13.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		500202	509400	518598	527802	537000		500202	509400	518598	527802	537000	
		2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz		2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz	
10 MHz	SRS CW	14.5	14.4	14.3	14.3	14.4	16.0	11.4	11.3	11.1	11.2	11.3	13.0

Notes:

SRS1/SRS2/SRS3 were measured output power through FTM mode provided by manufacturer.

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NR Band n41(SRS3) Measured Results

BW(MHz)	Mode	Maximum Allowed Average Power (dBm)											
		DSI = 0, 1, 4						DSI = 2, 3					
		Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		509202		518598		528000		509202		518598		528000	
		2546.01 MHz		2592.99 MHz		2640 MHz		2546.01 MHz		2592.99 MHz		2640 MHz	
100 MHz	SRS CW			11.9			13.0			8.9			10.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		508200				528996		508200				528996	
		2541 MHz				2644.98 MHz		2541 MHz				2644.98 MHz	
90 MHz	SRS CW	12.2				11.6	13.0	9.3				9.0	10.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		507204				529998		507204				529998	
		2536.02 MHz				2649.99 MHz		2536.02 MHz				2649.99 MHz	
80 MHz	SRS CW	12.5				12.3	13.0	9.3				9.0	10.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		526202				531000		526202				531000	
		2631.01 MHz				2655 MHz		2631.01 MHz				2655 MHz	
70 MHz	SRS CW	11.8				11.7	13.0	8.8				8.7	10.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		505200		518598		531996		505200		518598		531996	
		2526 MHz		2592.99 MHz		2659.98 MHz		2526 MHz		2592.99 MHz		2659.98 MHz	
60 MHz	SRS CW	12.8		12.3		12.3	13.0	9.5		9.0		9.1	10.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		504204		518598		532998		504204		518598		532998	
		2512.02 MHz		2592.99 MHz		2664.99 MHz		2512.02 MHz		2592.99 MHz		2664.99 MHz	
50 MHz	SRS CW	12.8		12.2		12.0	13.0	9.9		9.1		9.0	10.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		503202	513468		523734	534000		503202	513468		523734	534000	
		2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz		2516.01 MHz	2567.34 MHz		2618.67 MHz	2670 MHz	
40 MHz	SRS CW	12.9	12.6		12.3	12.4	13.0	9.8	9.3		9.0	9.2	10.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		502200	510402	518598	526800	534996		502200	510402	518598	526800	534996	
		2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz		2511 MHz	2552.01 MHz	2592.99 MHz	2634 MHz	2674.98 MHz	
30 MHz	SRS CW	12.9	12.7	12.4	12.3	12.5	13.0	9.9	9.5	9.3	9.2	9.4	10.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		501204	509898	518598	527298	535998		501204	509898	518598	527298	535998	
		2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz		2506.02 MHz	2549.49 MHz	2592.99 MHz	2636.49 MHz	2679.99 MHz	
20 MHz	SRS CW	12.8	12.8	12.2	12.2	12.5	13.0	9.9	9.5	9.1	9.1	9.4	10.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		500700	509652	518598	527550	536496		500700	509652	518598	527550	536496	
		2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz		2503.5 MHz	2548.26 MHz	2592.99 MHz	2637.75 MHz	2682.48 MHz	
15 MHz	SRS CW	12.9	12.5	12.0	12.0	12.1	13.0	9.9	9.5	9.0	9.0	9.1	10.0
BW(MHz)	Mode	Measured Pwr (dBm)					Tune-up Limit	Measured Pwr (dBm)					Tune-up Limit
		500202	509400	518598	527802	537000		500202	509400	518598	527802	537000	
		2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz		2501.01 MHz	2547 MHz	2592.99 MHz	2639.01 MHz	2685 MHz	
10 MHz	SRS CW	12.9	12.5	12.0	11.8	12.0	13.0	9.9	9.5	8.9	8.8	9.0	10.0

Notes:

SRS1/SRS2/SRS3 were measured output power through FTM mode provided by manufacturer.

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NR Band n66 (Main 1 Ant) Measured Results

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)														
					DSI = 0, 2					DSI = 3					DSI = 1, 4				
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					344000	349000	354000			344000	349000	354000			344000	349000	354000		
					1720 MHz	1745 MHz	1770 MHz			1720 MHz	1745 MHz	1770 MHz			1720 MHz	1745 MHz	1770 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.7	22.7	22.5	0.0	24.0	18.7	18.6	18.5	0.0	20.0	19.7	19.7	19.5	0.0	21.0
			1	53	22.5	22.5	22.5	0.0	24.0	18.5	18.5	18.5	0.0	20.0	19.5	19.5	19.5	0.0	21.0
			1	104	22.6	22.6	22.7	0.0	24.0	18.6	18.5	18.7	0.0	20.0	19.5	19.6	19.5	0.0	21.0
			50	0	21.8	21.8	21.7	0.5	23.5	18.7	18.7	18.7	0.0	20.0	19.7	19.7	19.5	0.0	21.0
			50	28	22.7	22.7	22.7	0.0	24.0	18.7	18.6	18.7	0.0	20.0	19.7	19.6	19.5	0.0	21.0
			50	56	21.8	21.7	21.8	0.5	23.5	18.7	18.6	18.7	0.0	20.0	19.7	19.6	19.6	0.0	21.0
			100	0	21.7	21.7	21.7	0.5	23.5	18.7	18.6	18.7	0.0	20.0	19.6	19.6	19.7	0.0	21.0
		QPSK	1	1	22.8	22.8	22.7	0.0	24.0	18.8	18.7	18.5	0.0	20.0	19.8	19.7	19.7	0.0	21.0
			1	53	22.6	22.6	22.7	0.0	24.0	18.7	18.6	18.6	0.0	20.0	19.8	19.6	19.7	0.0	21.0
			1	104	22.7	22.9	22.8	0.0	24.0	18.7	18.8	18.8	0.0	20.0	19.7	19.8	19.7	0.0	21.0
			50	0	21.7	21.7	21.7	1.0	23.0	18.7	18.7	18.6	0.0	20.0	19.7	19.6	19.7	0.0	21.0
			50	28	22.7	22.8	22.7	0.0	24.0	18.8	18.8	18.8	0.0	20.0	19.7	19.7	19.7	0.0	21.0
			50	56	21.7	21.7	21.8	1.0	23.0	18.7	18.7	18.7	0.0	20.0	19.7	19.7	19.7	0.0	21.0
			100	0	21.7	21.8	21.8	1.0	23.0	18.7	18.8	18.6	0.0	20.0	19.7	19.7	19.7	0.0	21.0
		16QAM	1	1	21.7	21.8	21.6	1.0	23.0	18.7	18.7	18.6	0.0	20.0	19.8	19.7	19.7	0.0	21.0
			1	53	21.6	21.6	21.7	1.0	23.0	18.6	18.5	18.6	0.0	20.0	19.6	19.7	19.6	0.0	21.0
			1	104	21.7	21.8	21.7	1.0	23.0	18.6	18.7	18.8	0.0	20.0	19.7	19.7	19.6	0.0	21.0
		64QAM	1	1	20.5	20.5	20.3	2.5	21.5	18.8	19.0	18.9	0.0	20.0	19.9	19.9	19.5	0.0	21.0
		256QAM	1	1	17.8	17.7	17.6	4.5	19.5	17.7	17.7	17.6	0.5	19.5	17.7	17.6	17.5	1.5	19.5
	CP-OFDM	QPSK	1	1	21.4	21.3	21.2	1.5	22.5	18.8	18.8	18.8	0.0	20.0	19.8	19.8	19.6	0.0	21.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					343500	349000	354500			343500	349000	354500			343500	349000	354500		
					1717.5 MHz	1745 MHz	1772.5 MHz			1717.5 MHz	1745 MHz	1772.5 MHz			1717.5 MHz	1745 MHz	1772.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.5	22.5	22.5	0.0	24.0	18.5	18.5	18.6	0.0	20.0	19.5	19.5	19.6	0.0	21.0
			1	40	22.5	22.5	22.5	0.0	24.0	18.5	18.5	18.6	0.0	20.0	19.5	19.5	19.7	0.0	21.0
			1	77	22.4	22.5	22.5	0.0	24.0	18.5	18.5	18.6	0.0	20.0	19.5	19.5	19.6	0.0	21.0
			36	0	21.6	21.6	21.6	0.5	23.5	18.5	18.5	18.6	0.0	20.0	19.6	19.5	19.7	0.0	21.0
			36	22	22.6	22.5	22.6	0.0	24.0	18.6	18.5	18.7	0.0	20.0	19.6	19.6	19.7	0.0	21.0
			36	43	21.5	21.5	21.6	0.5	23.5	18.5	18.5	18.7	0.0	20.0	19.5	19.5	19.7	0.0	21.0
			75	0	21.5	21.5	21.6	0.5	23.5	18.5	18.5	18.6	0.0	20.0	19.5	19.6	19.6	0.0	21.0
		QPSK	1	1	22.5	22.5	22.6	0.0	24.0	18.6	18.5	18.6	0.0	20.0	19.6	19.6	19.7	0.0	21.0
			1	40	22.5	22.5	22.6	0.0	24.0	18.6	18.5	18.7	0.0	20.0	19.6	19.6	19.7	0.0	21.0
			1	77	22.5	22.5	22.6	0.0	24.0	18.5	18.5	18.7	0.0	20.0	19.5	19.6	19.6	0.0	21.0
			36	0	21.6	21.5	21.6	1.0	23.0	18.5	18.5	18.6	0.0	20.0	19.6	19.6	19.7	0.0	21.0
			36	22	22.5	22.6	22.6	0.0	24.0	18.6	18.5	18.7	0.0	20.0	19.6	19.6	19.7	0.0	21.0
			36	43	21.6	21.6	21.7	1.0	23.0	18.6	18.5	18.6	0.0	20.0	19.5	19.6	19.7	0.0	21.0
			75	0	21.6	21.6	21.7	1.0	23.0	18.5	18.5	18.7	0.0	20.0	19.6	19.6	19.7	0.0	21.0
		16QAM	1	1	21.5	21.6	21.6	1.0	23.0	18.5	18.6	18.7	0.0	20.0	19.6	19.5	19.6	0.0	21.0
		64QAM	1	1	20.2	20.2	20.3	2.5	21.5	18.7	18.7	18.8	0.0	20.0	19.7	19.7	19.9	0.0	21.0
		256QAM	1	1	17.5	17.5	17.6	4.5	19.5	17.5	17.5	17.6	0.5	19.5	17.5	17.6	17.7	1.5	19.5
	CP-OFDM	QPSK	1	1	21.1	21.1	21.1	1.5	22.5	18.6	18.5	18.6	0.0	20.0	19.6	19.6	19.7	0.0	21.0

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NR Band n66 (Main 1 Ant) 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	Measured Pwr (dBm)			MPR	Tune-up Limit
					343000	349000	355000			343000	349000	355000			343000	349000	355000		
					1715 MHz	1745 MHz	1775 MHz			1715 MHz	1745 MHz	1775 MHz			1715 MHz	1745 MHz	1775 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.5	22.4	22.6	0.0	24.0	18.5	18.4	18.7	0.0	20.0	19.6	19.5	19.6	0.0	21.0
			1	26	22.5	22.5	22.6	0.0	24.0	18.5	18.5	18.6	0.0	20.0	19.6	19.5	19.7	0.0	21.0
			1	50	22.5	22.5	22.6	0.0	24.0	18.6	18.4	18.6	0.0	20.0	19.6	19.5	19.7	0.0	21.0
			25	0	21.5	21.6	21.7	0.5	23.5	18.6	18.5	18.7	0.0	20.0	19.6	19.6	19.7	0.0	21.0
			25	14	22.6	22.6	22.7	0.0	24.0	18.6	18.6	18.7	0.0	20.0	19.6	19.6	19.8	0.0	21.0
			25	27	21.5	21.5	21.7	0.5	23.5	18.6	18.5	18.7	0.0	20.0	19.6	19.5	19.7	0.0	21.0
			50	0	21.6	21.5	21.6	0.5	23.5	18.6	18.5	18.7	0.0	20.0	19.6	19.5	19.7	0.0	21.0
		QPSK	1	1	22.6	22.4	22.7	0.0	24.0	18.6	18.5	18.7	0.0	20.0	19.6	19.5	19.7	0.0	21.0
			1	26	22.6	22.6	22.7	0.0	24.0	18.6	18.5	18.7	0.0	20.0	19.6	19.6	19.7	0.0	21.0
			1	50	22.6	22.5	22.7	0.0	24.0	18.6	18.5	18.7	0.0	20.0	19.7	19.5	19.7	0.0	21.0
			25	0	21.6	21.5	21.7	1.0	23.0	18.6	18.5	18.7	0.0	20.0	19.6	19.6	19.7	0.0	21.0
			25	14	22.6	22.5	22.7	0.0	24.0	18.6	18.6	18.7	0.0	20.0	19.6	19.6	19.7	0.0	21.0
			25	27	21.6	21.5	21.7	1.0	23.0	18.6	18.5	18.7	0.0	20.0	19.5	19.6	19.7	0.0	21.0
			50	0	21.6	21.5	21.7	1.0	23.0	18.6	18.6	18.7	0.0	20.0	19.6	19.5	19.7	0.0	21.0
		16QAM	1	1	21.6	21.5	21.7	1.0	23.0	18.6	18.5	18.7	0.0	20.0	19.6	19.5	19.7	0.0	21.0
		64QAM	1	1	20.2	20.1	20.4	2.5	21.5	18.7	18.6	18.8	0.0	20.0	19.7	19.7	19.9	0.0	21.0
		256QAM	1	1	17.6	17.4	17.6	4.5	19.5	17.6	17.5	17.7	0.5	19.5	17.6	17.5	17.7	1.5	19.5
	CP-OFDM	QPSK	1	1	21.1	21.0	21.1	1.5	22.5	18.6	18.5	18.7	0.0	20.0	19.6	19.5	19.7	0.0	21.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					342500	349000	355500			342500	349000	355500			342500	349000	355500		
					1712.5 MHz	1745 MHz	1777.5 MHz			1712.5 MHz	1745 MHz	1777.5 MHz			1712.5 MHz	1745 MHz	1777.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	22.6	22.6	22.5	0.0	24.0	18.7	18.6	18.6	0.0	20.0	19.7	19.6	19.6	0.0	21.0
			1	13	22.4	22.5	22.5	0.0	24.0	18.6	18.5	18.6	0.0	20.0	19.6	19.5	19.6	0.0	21.0
			1	23	22.6	22.5	22.6	0.0	24.0	18.7	18.6	18.7	0.0	20.0	19.7	19.6	19.7	0.0	21.0
			12	0	21.7	21.6	21.6	0.5	23.5	18.8	18.6	18.6	0.0	20.0	19.8	19.6	19.7	0.0	21.0
			12	7	22.7	22.6	22.6	0.0	24.0	18.7	18.6	18.6	0.0	20.0	19.7	19.6	19.6	0.0	21.0
			12	13	21.7	21.6	21.7	0.5	23.5	18.8	18.6	18.7	0.0	20.0	19.8	19.6	19.8	0.0	21.0
			25	0	21.7	21.6	21.6	0.5	23.5	18.7	18.6	18.6	0.0	20.0	19.7	19.6	19.7	0.0	21.0
		QPSK	1	1	22.7	22.6	22.6	0.0	24.0	18.7	18.7	18.6	0.0	20.0	19.8	19.7	19.7	0.0	21.0
			1	13	22.6	22.6	22.6	0.0	24.0	18.7	18.6	18.7	0.0	20.0	19.7	19.6	19.7	0.0	21.0
			1	23	22.7	22.6	22.7	0.0	24.0	18.8	18.6	18.7	0.0	20.0	19.8	19.6	19.8	0.0	21.0
			12	0	21.7	21.6	21.7	1.0	23.0	18.7	18.6	18.7	0.0	20.0	19.8	19.7	19.7	0.0	21.0
			12	7	22.6	22.6	22.6	0.0	24.0	18.7	18.6	18.6	0.0	20.0	19.7	19.7	19.7	0.0	21.0
			12	13	21.7	21.6	21.7	1.0	23.0	18.8	18.6	18.7	0.0	20.0	19.8	19.6	19.7	0.0	21.0
			25	0	21.7	21.6	21.6	1.0	23.0	18.7	18.6	18.6	0.0	20.0	19.7	19.7	19.7	0.0	21.0
		16QAM	1	1	21.7	21.6	21.6	1.0	23.0	18.7	18.7	18.6	0.0	20.0	19.7	19.7	19.7	0.0	21.0
		64QAM	1	1	20.3	20.3	20.3	2.5	21.5	18.9	18.8	18.8	0.0	20.0	19.9	19.8	19.8	0.0	21.0
		256QAM	1	1	17.7	17.6	17.5	4.5	19.5	17.7	17.6	17.5	0.5	19.5	17.7	17.6	17.6	1.5	19.5
	CP-OFDM	QPSK	1	1	21.2	21.2	21.1	1.5	22.5	18.8	18.7	18.7	0.0	20.0	19.8	19.7	19.7	0.0	21.0

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NR Band n66 (Sub 2 Ant) Measured Results

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)									
					DSI = 0, 1, 3, 4					DSI = 2				
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					344000	349000	354000			344000	349000	354000		
					1720 MHz	1745 MHz	1770 MHz			1720 MHz	1745 MHz	1770 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.6	18.9	19.0	0.0	20.0	16.3	16.8	16.7	0.0	18.0
			1	53	18.8	19.0	18.9	0.0	20.0	16.5	16.9	16.7	0.0	18.0
			1	104	18.9	19.1	18.8	0.0	20.0	16.8	16.9	16.7	0.0	18.0
			50	0	18.8	19.1	18.9	0.0	20.0	16.4	17.0	16.8	0.0	18.0
			50	28	18.9	19.1	19.0	0.0	20.0	16.6	16.9	16.7	0.0	18.0
			50	56	18.9	19.1	18.8	0.0	20.0	16.7	17.0	16.8	0.0	18.0
			100	0	18.9	19.2	18.9	0.0	20.0	16.5	16.9	16.7	0.0	18.0
		QPSK	1	1	18.6	18.9	19.0	0.0	20.0	16.2	16.7	16.7	0.0	18.0
			1	53	18.7	19.0	18.8	0.0	20.0	16.4	16.9	16.6	0.0	18.0
			1	104	18.9	19.1	18.8	0.0	20.0	16.7	17.0	16.7	0.0	18.0
			50	0	18.8	19.2	19.0	0.0	20.0	16.4	17.0	16.8	0.0	18.0
			50	28	18.9	19.2	19.0	0.0	20.0	16.6	17.0	16.8	0.0	18.0
			50	56	19.0	19.2	18.9	0.0	20.0	16.7	17.0	16.7	0.0	18.0
			100	0	18.8	19.1	19.0	0.0	20.0	16.6	17.0	16.8	0.0	18.0
		16QAM	1	1	18.7	19.1	19.1	0.0	20.0	16.4	16.9	16.9	0.0	18.0
			1	53	18.9	19.2	19.0	0.0	20.0	16.6	17.0	16.7	0.0	18.0
			1	104	19.0	19.1	19.0	0.0	20.0	16.8	17.0	16.8	0.0	18.0
		64QAM	1	1	18.7	19.0	18.8	0.0	20.0	16.1	16.7	16.6	0.0	18.0
		256QAM	1	1	17.8	18.2	18.2	0.5	19.5	16.2	16.5	16.3	0.0	18.0
	CP-OFDM	QPSK	1	1	18.7	19.1	19.1	0.0	20.0	16.4	16.8	16.8	0.0	18.0
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		
					1717.5 MHz	1745 MHz	1772.5 MHz			1717.5 MHz	1745 MHz	1772.5 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.4	18.9	18.7	0.0	20.0	16.3	16.8	16.7	0.0	18.0
			1	40	18.5	19.0	18.6	0.0	20.0	16.3	16.9	16.7	0.0	18.0
			1	77	18.7	19.0	18.7	0.0	20.0	16.7	17.0	16.7	0.0	18.0
			36	0	18.6	19.0	18.8	0.0	20.0	16.4	16.9	16.8	0.0	18.0
			36	22	18.6	19.0	18.7	0.0	20.0	16.5	17.0	16.7	0.0	18.0
			36	43	18.7	19.1	18.7	0.0	20.0	16.6	17.0	16.8	0.0	18.0
			75	0	18.6	19.0	18.8	0.0	20.0	16.5	17.0	16.7	0.0	18.0
		QPSK	1	1	18.5	18.8	18.7	0.0	20.0	16.3	16.8	16.7	0.0	18.0
			1	40	18.6	18.9	18.6	0.0	20.0	16.3	16.8	16.6	0.0	18.0
			1	77	18.8	19.0	18.7	0.0	20.0	16.6	16.9	16.7	0.0	18.0
			36	0	18.7	19.0	18.8	0.0	20.0	16.5	17.0	16.8	0.0	18.0
			36	22	18.6	19.0	18.7	0.0	20.0	16.5	16.9	16.7	0.0	18.0
			36	43	18.8	19.1	18.7	0.0	20.0	16.6	17.0	16.8	0.0	18.0
			75	0	18.6	19.1	18.8	0.0	20.0	16.5	16.9	16.8	0.0	18.0
		16QAM	1	1	18.5	18.9	18.8	0.0	20.0	16.3	16.9	16.9	0.0	18.0
		64QAM	1	1	18.6	18.8	18.8	0.0	20.0	16.2	16.7	16.5	0.0	18.0
		256QAM	1	1	17.7	18.0	17.9	0.5	19.5	16.0	16.5	16.2	0.0	18.0
	CP-OFDM	QPSK	1	1	18.5	18.9	18.8	0.0	20.0	16.3	16.8	16.8	0.0	18.0

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NR Band n66 (Sub 2 Ant) 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 MHz	1745 MHz	1775 MHz			1715 MHz	1745 MHz	1775 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.5	18.9	18.6	0.0	20.0	16.2	17.4	16.6	0.0	18.0
			1	26	19.3	19.6	18.7	0.0	20.0	16.9	16.8	16.6	0.0	18.0
			1	50	18.7	18.9	18.6	0.0	20.0	16.5	17.2	16.5	0.0	18.0
			25	0	18.9	19.3	18.7	0.0	20.0	16.6	17.4	16.6	0.0	18.0
			25	14	19.2	19.5	18.7	0.0	20.0	16.9	17.2	16.6	0.0	18.0
			25	27	18.9	19.3	18.7	0.0	20.0	16.7	17.2	16.6	0.0	18.0
			50	0	18.9	19.4	18.6	0.0	20.0	16.7	16.8	16.5	0.0	18.0
		QPSK	1	1	18.4	18.8	18.6	0.0	20.0	16.2	17.3	16.6	0.0	18.0
			1	26	19.2	19.6	18.6	0.0	20.0	16.9	16.8	16.5	0.0	18.0
			1	50	18.6	18.9	18.6	0.0	20.0	16.4	17.1	16.5	0.0	18.0
			25	0	19.0	19.3	18.7	0.0	20.0	16.6	17.4	16.6	0.0	18.0
			25	14	19.1	19.5	18.7	0.0	20.0	16.9	17.2	16.6	0.0	18.0
			25	27	19.0	19.3	18.7	0.0	20.0	16.8	17.2	16.6	0.0	18.0
			50	0	19.0	19.3	18.7	0.0	20.0	16.7	16.8	16.6	0.0	18.0
		16QAM	1	1	18.5	18.9	18.7	0.0	20.0	16.3	16.8	16.7	0.0	18.0
		64QAM	1	1	18.4	18.9	18.6	0.0	20.0	15.9	16.7	16.5	0.0	18.0
		256QAM	1	1	17.6	18.0	17.8	0.5	19.5	16.3	16.5	16.2	0.0	18.0
	CP-OFDM	QPSK	1	1	18.5	18.9	18.6	0.0	20.0	16.8	16.8	16.7	0.0	18.0

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		
					1712.5 MHz	1745 MHz	1777.5 MHz			1712.5 MHz	1745 MHz	1777.5 MHz		
5 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.8	18.9	18.6	0.0	20.0	16.6	16.7	16.5	0.0	18.0
			1	13	19.1	18.9	18.6	0.0	20.0	16.8	16.8	16.5	0.0	18.0
			1	23	18.9	18.9	18.6	0.0	20.0	16.7	16.8	16.5	0.0	18.0
			12	0	19.1	19.0	18.6	0.0	20.0	16.7	16.8	16.5	0.0	18.0
			12	7	19.1	19.0	18.6	0.0	20.0	16.7	16.8	16.5	0.0	18.0
			12	13	19.1	18.9	18.6	0.0	20.0	16.9	16.8	16.5	0.0	18.0
			25	0	19.1	19.0	18.7	0.0	20.0	16.7	16.8	16.6	0.0	18.0
		QPSK	1	1	18.8	18.9	18.6	0.0	20.0	16.7	16.7	16.5	0.0	18.0
			1	13	19.1	18.9	18.6	0.0	20.0	16.9	16.8	16.5	0.0	18.0
			1	23	18.9	18.9	18.6	0.0	20.0	16.8	16.7	16.5	0.0	18.0
			12	0	19.1	19.0	18.7	0.0	20.0	16.7	16.9	16.5	0.0	18.0
			12	7	19.2	19.0	18.7	0.0	20.0	16.8	16.9	16.6	0.0	18.0
			12	13	19.1	18.9	18.6	0.0	20.0	16.8	16.9	16.6	0.0	18.0
			25	0	19.1	19.0	18.6	0.0	20.0	16.7	16.8	16.5	0.0	18.0
		16QAM	1	1	19.0	19.0	18.6	0.0	20.0	16.7	16.7	16.5	0.0	18.0
		64QAM	1	1	18.8	18.8	18.5	0.0	20.0	16.8	16.5	16.4	0.0	18.0
		256QAM	1	1	18.0	18.1	17.8	0.5	19.5	16.2	16.4	16.1	0.0	18.0
	CP-OFDM	QPSK	1	1	18.9	18.9	18.6	0.0	20.0	16.7	16.7	16.5	0.0	18.0

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NR Band n77 (Voice/data/SRS0) – Lower Band – Measured Results

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)													
					DSI = 0, 1, 4					DSI = 3					DSI = 2			
					Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
						633334					633334					633334			
						3500.01 MHz					3500.01 MHz					3500.01 MHz			
100 MHz	DFT-s-OFDM	π/2 BPSK	1	1		18.5		0.0	19.0		17.5		0.0	18.0		14.5		0.0	15.0
			1	137		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			1	271		18.8		0.0	19.0		17.8		0.0	18.0		14.7		0.0	15.0
			135	0		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			135	69		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			135	138		18.6		0.0	19.0		17.6		0.0	18.0		14.7		0.0	15.0
			270	0		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
		QPSK	1	1		18.5		0.0	19.0		17.6		0.0	18.0		14.4		0.0	15.0
			1	137		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			1	271		18.8		0.0	19.0		17.8		0.0	18.0		14.8		0.0	15.0
			135	0		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			135	69		18.7		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			135	138		18.7		0.0	19.0		17.7		0.0	18.0		14.7		0.0	15.0
			270	0		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
		16QAM	1	1		18.7		0.0	19.0		17.7		0.0	18.0		14.5		0.0	15.0
			1	137		18.7		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			1	271		18.9		0.0	19.0		17.9		0.0	18.0		14.8		0.0	15.0
		64QAM	1	1		18.6		0.0	19.0		17.6		0.0	18.0		14.4		0.0	15.0
		256QAM	1	1		18.5		0.0	19.0		17.5		0.0	18.0		14.7		0.0	15.0
	CP-OFDM	QPSK	1	1		18.4		0.0	19.0		17.4		0.0	18.0		14.4		0.0	15.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					633000	633334	633666			633000	633334	633666			633000	633334	633666		
					3495 MHz	3500.01 MHz	3504.99 MHz			3495 MHz	3500.01 MHz	3504.99 MHz			3495 MHz	3500.01 MHz	3504.99 MHz		
90 MHz	DFT-s-OFDM	π/2 BPSK	1	1		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			1	123		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			1	243		18.8		0.0	19.0		17.9		0.0	18.0		14.7		0.0	15.0
			120	0		18.5		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			120	63		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			120	125		18.6		0.0	19.0		17.6		0.0	18.0		14.7		0.0	15.0
			243	0		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
		QPSK	1	1		18.5		0.0	19.0		17.6		0.0	18.0		14.5		0.0	15.0
			1	123		18.6		0.0	19.0		17.6		0.0	18.0		14.5		0.0	15.0
			1	243		18.6		0.0	19.0		17.9		0.0	18.0		14.7		0.0	15.0
			120	0		18.5		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			120	63		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			120	125		18.6		0.0	19.0		17.7		0.0	18.0		14.7		0.0	15.0
			243	0		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
		16QAM	1	1		18.6		0.0	19.0		17.7		0.0	18.0		14.7		0.0	15.0
		64QAM	1	1		18.4		0.0	19.0		17.4		0.0	18.0		14.7		0.0	15.0
		256QAM	1	1		18.4		0.0	19.0		17.4		0.0	18.0		14.8		0.0	15.0
	CP-OFDM	QPSK	1	1		18.6		0.0	19.0		17.8		0.0	18.0		14.5		0.0	15.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					632668	633334	634000			632668	633334	634000			632668	633334	634000		
					3490.02 MHz	3500.01 MHz	3510 MHz			3490.02 MHz	3500.01 MHz	3510 MHz			3490.02 MHz	3500.01 MHz	3510 MHz		
80 MHz	DFT-s-OFDM	π/2 BPSK	1	1		18.5		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			1	109		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			1	215		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			108	0		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			108	55		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			108	109		18.6		0.0	19.0		17.7		0.0	18.0		14.7		0.0	15.0
			216	0		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
		QPSK	1	1		18.5		0.0	19.0		17.5		0.0	18.0		14.6		0.0	15.0
			1	109		18.5		0.0	19.0		17.5		0.0	18.0		14.6		0.0	15.0
			1	215		18.7		0.0	19.0		17.7		0.0	18.0		14.7		0.0	15.0
			108	0		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			108	55		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			108	109		18.6		0.0	19.0		17.7		0.0	18.0		14.7		0.0	15.0
			216	0		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
		16QAM	1	1		18.8		0.0	19.0		17.9		0.0	18.0		14.5		0.0	15.0
		64QAM	1	1		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
		256QAM	1	1		18.2		0.0	19.0		17.4		0.0	18.0		14.9		0.0	15.0
	CP-OFDM	QPSK	1	1		18.7		0.0	19.0		17.8		0.0	18.0		14.6		0.0	15.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					632334	633334	634332			632334	633334	634332			632334	633334	634332		
					3485.01 MHz	3500.01 MHz	3514.99 MHz			3485.01 MHz	3500.01 MHz	3514.99 MHz			3485.01 MHz	3500.01 MHz	3514.99 MHz		
70 MHz	DFT-s-OFDM	π/2 BPSK	1	1		18.7		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			1	95		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			1	188		17.7		0.0	19.0		17.8		0.0	18.0		14.6		0.0	15.0
			90	0		17.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			90	50		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			90	99		18.7		0.0	19.0		17.7		0.0	18.0		14.7		0.0	15.0
			180	0		18.7		0.0	19.0		17.7		0.0	18.0		14.7		0.0	15.0
		QPSK	1	1		18.6		0.0	19.0		17.6		0.0	18.0		14.6		0.0	15.0
			1	95		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			1	188		18.7		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			90	0		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			90	50		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
			90	99		18.7		0.0	19.0		17.7		0.0	18.0		14.7		0.0	15.0
			180	0		18.6		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0
		16QAM	1	1		18.6		0.0	19.0		17.6		0.0	18.0		14.4		0.0	15.0
		64QAM	1	1		18.9		0.0	19.0		17.9		0.0	18.0		14.6		0.0	15.0
		256QAM	1	1		18.6		0.0	19.0		17.6		0.0	18.0		14.7		0.0	15.0
	CP-OFDM	QPSK	1	1		18.8		0.0	19.0		17.7		0.0	18.0		14.6		0.0	15.0

Notes:

Voice/data/SRS0 were measured output power through FTM mode provided by manufacturer.

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NR Band n77 (Voice/data/SRS0) – Lower Band – 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	Measured Pwr (dBm)			MPR	Tune-up Limit
					632000	633334	634666			632000	633334	634666			632000	633334	634666		
					3480 MHz	3500.01 MHz	3519.99 MHz			3480 MHz	3500.01 MHz	3519.99 MHz			3480 MHz	3500.01 MHz	3519.99 MHz		
60 MHz	DFT-s-OFDM	π/2 BPSK	1	1		18.9		0.0	19.0		17.9		0.0	18.0		14.6		0.0	15.0
			1	81		18.9		0.0	19.0		18.0		0.0	18.0		14.7		0.0	15.0
			1	160		18.9		0.0	19.0		17.9		0.0	18.0		14.7		0.0	15.0
			81	0		18.8		0.0	19.0		17.9		0.0	18.0		14.7		0.0	15.0
			81	41		18.9		0.0	19.0		17.9		0.0	18.0		14.7		0.0	15.0
			81	81		18.8		0.0	19.0		17.8		0.0	18.0		14.7		0.0	15.0
			162	0		18.9		0.0	19.0		17.9		0.0	18.0		14.8		0.0	15.0
		QPSK	1	1		18.8		0.0	19.0		17.8		0.0	18.0		14.7		0.0	15.0
			1	81		18.9		0.0	19.0		17.9		0.0	18.0		14.7		0.0	15.0
			1	160		18.8		0.0	19.0		17.8		0.0	18.0		14.8		0.0	15.0
			81	0		18.9		0.0	19.0		17.9		0.0	18.0		14.8		0.0	15.0
			81	41		18.9		0.0	19.0		17.9		0.0	18.0		14.7		0.0	15.0
			81	81		18.9		0.0	19.0		17.8		0.0	18.0		14.6		0.0	15.0
			162	0		18.9		0.0	19.0		17.8		0.0	18.0		14.7		0.0	15.0
		16QAM	1	1		18.9		0.0	19.0		17.9		0.0	18.0		14.7		0.0	15.0
		64QAM	1	1		18.8		0.0	19.0		17.7		0.0	18.0		14.5		0.0	15.0
		256QAM	1	1		18.6		0.0	19.0		17.6		0.0	18.0		14.8		0.0	15.0
	CP-OFDM	QPSK	1	1		18.9		0.0	19.0		17.9		0.0	18.0		14.7		0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					631668	633334	635000			631668	633334	635000			631668	633334	635000		
					3475.02 MHz	3500.01 MHz	3525 MHz			3475.02 MHz	3500.01 MHz	3525 MHz			3475.02 MHz	3500.01 MHz	3525 MHz		
50 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.9		18.9	0.0	19.0	17.9		17.9	0.0	18.0	14.8		14.7	0.0	15.0
			1	67	18.7		18.8	0.0	19.0	17.8		17.8	0.0	18.0	14.6		14.7	0.0	15.0
			1	131	18.8		18.8	0.0	19.0	17.8		17.8	0.0	18.0	14.6		14.8	0.0	15.0
			64	0	18.8		18.8	0.0	19.0	17.8		17.8	0.0	18.0	14.6		14.8	0.0	15.0
			64	35	18.8		18.9	0.0	19.0	17.8		17.8	0.0	18.0	14.6		14.7	0.0	15.0
			64	69	18.7		18.9	0.0	19.0	17.8		17.8	0.0	18.0	14.6		14.7	0.0	15.0
			128	0	18.8		18.9	0.0	19.0	17.8		17.8	0.0	18.0	14.6		14.7	0.0	15.0
		QPSK	1	1	18.9		18.9	0.0	19.0	17.9		17.8	0.0	18.0	14.7		14.7	0.0	15.0
			1	67	18.8		18.8	0.0	19.0	17.8		17.7	0.0	18.0	14.7		14.7	0.0	15.0
			1	131	18.8		18.8	0.0	19.0	17.8		17.8	0.0	18.0	14.6		14.7	0.0	15.0
			64	0	18.8		18.9	0.0	19.0	17.8		17.8	0.0	18.0	14.7		14.8	0.0	15.0
			64	35	18.8		18.9	0.0	19.0	17.8		17.8	0.0	18.0	14.6		14.8	0.0	15.0
			64	69	18.8		18.8	0.0	19.0	17.7		17.8	0.0	18.0	14.6		14.7	0.0	15.0
			128	0	18.8		18.9	0.0	19.0	17.8		17.8	0.0	18.0	14.6		14.7	0.0	15.0
		16QAM	1	1	18.7		18.6	0.0	19.0	17.8		17.7	0.0	18.0	14.6		14.8	0.0	15.0
		64QAM	1	1	18.9		19.0	0.0	19.0	17.7		17.8	0.0	18.0	14.3		14.9	0.0	15.0
		256QAM	1	1	18.6		18.7	0.0	19.0	17.4		17.7	0.0	18.0	14.9		14.9	0.0	15.0
	CP-OFDM	QPSK	1	1	18.9		18.8	0.0	19.0	17.9		18.0	0.0	18.0	14.6		14.6	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					631334	633334	635332			631334	633334	635332			631334	633334	635332		
					3470.01 MHz	3500.01 MHz	3529.98 MHz			3470.01 MHz	3500.01 MHz	3529.98 MHz			3470.01 MHz	3500.01 MHz	3529.98 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.9		18.9	0.0	19.0	18.0		18.0	0.0	18.0	14.9		14.9	0.0	15.0
			1	53	18.9		18.9	0.0	19.0	17.9		17.9	0.0	18.0	14.8		14.9	0.0	15.0
			1	104	18.8		19.0	0.0	19.0	17.9		18.0	0.0	18.0	14.9		14.9	0.0	15.0
			50	0	18.8		18.9	0.0	19.0	17.9		18.0	0.0	18.0	14.9		14.9	0.0	15.0
			50	28	18.8		18.9	0.0	19.0	17.9		18.0	0.0	18.0	14.8		14.9	0.0	15.0
			50	56	18.8		19.0	0.0	19.0	17.9		18.0	0.0	18.0	15.0		15.0	0.0	15.0
			100	0	18.8		18.9	0.0	19.0	17.9		17.9	0.0	18.0	14.8		14.9	0.0	15.0
		QPSK	1	1	18.9		19.0	0.0	19.0	17.9		18.0	0.0	18.0	14.9		15.0	0.0	15.0
			1	53	18.8		18.9	0.0	19.0	17.8		17.9	0.0	18.0	14.8		15.0	0.0	15.0
			1	104	18.8		19.0	0.0	19.0	17.9		17.8	0.0	18.0	15.0		15.0	0.0	15.0
			50	0	18.9		18.9	0.0	19.0	18.0		17.9	0.0	18.0	14.9		14.9	0.0	15.0
			50	28	18.8		18.9	0.0	19.0	17.9		17.9	0.0	18.0	14.8		14.9	0.0	15.0
			50	56	18.8		18.9	0.0	19.0	17.9		17.9	0.0	18.0	14.9		14.9	0.0	15.0
			100	0	18.8		19.0	0.0	19.0	17.9		17.9	0.0	18.0	14.8		15.0	0.0	15.0
		16QAM	1	1	18.7		18.7	0.0	19.0	17.9		18.0	0.0	18.0	14.7		14.9	0.0	15.0
		64QAM	1	1	18.9		18.8	0.0	19.0	18.0		18.0	0.0	18.0	14.8		14.9	0.0	15.0
		256QAM	1	1	18.5		18.9	0.0	19.0	18.0		17.9	0.0	18.0	14.9		14.9	0.0	15.0
	CP-OFDM	QPSK	1	1	18.8		19.0	0.0	19.0	17.9		18.0	0.0	18.0	14.9		14.9	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					631000	633334	635666			631000	633334	635666			631000	633334	635666		
					3465 MHz	3500.01 MHz	3534.99 MHz			3465 MHz	3500.01 MHz	3534.99 MHz			3465 MHz	3500.01 MHz	3534.99 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.9	19.0	19.0	0.0	19.0	18.0	17.8	17.9	0.0	18.0	15.0	15.0	15.0	0.0	15.0
			1	39	18.8	18.8	18.9	0.0	19.0	17.9	17.8	17.8	0.0	18.0	14.8	15.0	14.7	0.0	15.0
			1	76	18.9	19.0	19.0	0.0	19.0	18.0	17.9	17.9	0.0	18.0	14.9	14.8	14.9	0.0	15.0
			36	0	18.8	18.9	18.9	0.0	19.0	17.9	17.8	17.8	0.0	18.0	14.8	15.0	15.0	0.0	15.0
			36	21	18.8	18.9	18.8	0.0	19.0	17.9	17.8	17.9	0.0	18.0	14.8	14.9	14.9	0.0	15.0
			36	42	18.9	18.9	18.9	0.0	19.0	17.9	17.8	17.8	0.0	18.0	14.9	15.0	14.8	0.0	15.0
			75	0	18.9	18.9	18.9	0.0	19.0	17.9	17.8	17.9	0.0	18.0	14.8	14.9	14.9	0.0	15.0
		QPSK	1	1	18.9	18.9	18.9	0.0	19.0	18.0	17.9	17.9	0.0	18.0	14.9	15.0	14.9	0.0	15.0
			1	39	18.8	18.9	18.8	0.0	19.0	17.8	17.8	17.7	0.0	18.0	14.8	15.0	15.0	0.0	15.0
			1	76	18.9	18.9	18.9	0.0	19.0	18.0	17.9	17.9	0.0	18.0	14.9	15.0	15.0	0.0	15.0
			36	0	18.9	18.9	18.9	0.0	19.0	17.9	17.8	17.8	0.0	18.0	14.9	14.9	15.0	0.0	15.0
			36	21	18.8	18.8	18.9	0.0	19.0	17.8	17.8	17.8	0.0	18.0	14.8	14.9	15.0	0.0	15.0
			36	42	18.9	18.9	18.9	0.0	19.0	18.0	17.8	17.8	0.0	18.0	14.9	14.9	15.0	0.0	15.0
			75	0	18.8	18.9	18.9	0.0	19.0	17.9	17.8	17.9	0.0	18.0	14.9	14.9	15.0	0.0	15.0
		16QAM	1	1	18.7	18.9	18.9	0.0	19.0	17.9	17.7	17.7	0.0	18.0	14.8	14.9	14.8	0.0	15.0
		64QAM	1	1	18.9	19.0	18.9	0.0	19.0	18.0	17.9	17.9	0.0	18.0	14.8	14.7	14.7	0.0	15.0
		256QAM	1	1	18.6	18.6	18.8	0.0	19.0	17.6	17.9	17.8	0.0	18.0	15.0	15.0	15.0	0.0	15.0
	CP-OFDM	QPSK	1	1	18.9	18.9	18.9	0.0	19.0	18.0	17.8	18.0	0.0	18.0	14.9	15.0	15.0	0.0	15.0

Notes:

Voice/data/SRS0 were measured output power through FTM mode provided by manufacturer.

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NR Band n77 (Voice/data/SRS0) – Lower Band – 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	Measured Pwr (dBm)			MPR	Tune-up Limit
					630668	633334	636000			630668	633334	636000			630668	633334	636000		
					3460.02 MHz	3500.01 MHz	3540 MHz			3460.02 MHz	3500.01 MHz	3540 MHz			3460.02 MHz	3500.01 MHz	3540 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.8	18.9	18.8	0.0	19.0	17.8	17.8	17.8	0.0	18.0	14.9	15.0	14.9	0.0	15.0
			1	26	18.8	18.8	18.8	0.0	19.0	17.7	17.7	17.8	0.0	18.0	14.7	14.9	15.0	0.0	15.0
			1	49	18.8	18.8	18.7	0.0	19.0	17.7	17.8	17.7	0.0	18.0	14.9	14.9	15.0	0.0	15.0
			25	0	18.7	18.7	18.7	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	14.9	0.0	15.0
			25	13	18.7	18.7	18.7	0.0	19.0	17.7	17.6	17.7	0.0	18.0	14.7	14.8	14.9	0.0	15.0
			25	26	18.7	18.8	18.7	0.0	19.0	17.7	17.7	17.6	0.0	18.0	14.7	14.8	15.0	0.0	15.0
			50	0	18.8	18.8	18.7	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.9	14.9	0.0	15.0
		QPSK	1	1	18.7	18.9	18.7	0.0	19.0	17.8	17.8	17.7	0.0	18.0	14.8	14.9	14.9	0.0	15.0
			1	26	18.7	18.8	18.7	0.0	19.0	17.8	17.7	17.7	0.0	18.0	14.7	14.8	15.0	0.0	15.0
			1	49	18.7	18.9	18.7	0.0	19.0	17.7	17.6	17.7	0.0	18.0	14.8	14.9	14.9	0.0	15.0
			25	0	18.7	18.8	18.8	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	14.9	0.0	15.0
			25	13	18.8	18.7	18.7	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	14.9	0.0	15.0
			25	26	18.7	18.8	18.8	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	15.0	0.0	15.0
			50	0	18.7	18.7	18.8	0.0	19.0	17.6	17.7	17.7	0.0	18.0	14.7	14.8	15.0	0.0	15.0
		16QAM	1	1	18.8	18.7	19.0	0.0	19.0	17.7	17.7	17.6	0.0	18.0	14.8	14.9	15.0	0.0	15.0
		64QAM	1	1	19.0	18.8	18.9	0.0	19.0	17.9	17.8	18.0	0.0	18.0	14.6	14.8	14.9	0.0	15.0
		256QAM	1	1	18.4	18.6	18.8	0.0	19.0	17.7	17.3	17.8	0.0	18.0	14.9	15.0	14.9	0.0	15.0
	CP-OFDM	QPSK	1	1	18.9	18.8	18.9	0.0	19.0	17.7	17.8	18.0	0.0	18.0	14.8	14.9	14.9	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					630500	633334	636166			630500	633334	636166			630500	633334	636166		
					3457.5 MHz	3500.01 MHz	3542.49 MHz			3457.5 MHz	3500.01 MHz	3542.49 MHz			3457.5 MHz	3500.01 MHz	3542.49 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.8	18.8	18.6	0.0	19.0	17.8	17.7	17.7	0.0	18.0	14.8	14.9	15.0	0.0	15.0
			1	19	18.8	18.8	18.9	0.0	19.0	17.8	17.7	17.7	0.0	18.0	14.8	14.9	15.0	0.0	15.0
			1	36	18.9	18.9	18.9	0.0	19.0	17.8	17.8	17.8	0.0	18.0	14.8	15.0	15.0	0.0	15.0
			18	0	18.7	18.7	18.7	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	14.9	0.0	15.0
			18	10	18.7	18.7	18.7	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	14.9	0.0	15.0
			18	20	18.8	18.8	18.9	0.0	19.0	17.8	17.7	17.7	0.0	18.0	14.7	14.8	15.0	0.0	15.0
			36	0	18.8	18.8	18.8	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	14.9	0.0	15.0
		QPSK	1	1	18.8	18.8	18.9	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.8	14.9	14.9	0.0	15.0
			1	19	18.8	18.7	18.8	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.8	14.9	15.0	0.0	15.0
			1	36	19.0	18.9	18.9	0.0	19.0	17.9	17.8	17.8	0.0	18.0	14.9	15.0	15.0	0.0	15.0
			18	0	18.7	18.8	18.8	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	14.9	0.0	15.0
			18	10	18.7	18.8	18.8	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	14.9	0.0	15.0
			18	20	18.8	18.8	18.8	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	15.0	0.0	15.0
			36	0	18.8	18.8	18.8	0.0	19.0	17.7	17.7	17.7	0.0	18.0	14.7	14.8	14.9	0.0	15.0
		16QAM	1	1	18.7	18.8	18.5	0.0	19.0	17.7	17.5	17.7	0.0	18.0	14.5	14.9	14.9	0.0	15.0
		64QAM	1	1	18.8	18.9	18.8	0.0	19.0	17.7	18.0	17.6	0.0	18.0	14.7	14.7	14.9	0.0	15.0
		256QAM	1	1	18.6	18.7	18.7	0.0	19.0	17.4	17.5	17.5	0.0	18.0	14.9	15.0	15.0	0.0	15.0
	CP-OFDM	QPSK	1	1	18.8	18.8	18.9	0.0	19.0	17.6	17.7	17.7	0.0	18.0	14.8	14.8	14.9	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit	Measured Pwr (dBm)			MPR	Tune-up Limit
					630334	633334	636332			630334	633334	636332			630334	633334	636332		
					3455.01 MHz	3500.01 MHz	3544.98 MHz			3455.01 MHz	3500.01 MHz	3544.98 MHz			3455.01 MHz	3500.01 MHz	3544.98 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.6	18.7	18.7	0.0	19.0	17.6	17.5	17.6	0.0	18.0	14.7	14.7	14.8	0.0	15.0
			1	12	18.6	18.7	18.8	0.0	19.0	17.5	17.5	17.7	0.0	18.0	14.7	14.7	14.8	0.0	15.0
			1	22	18.6	18.7	18.9	0.0	19.0	17.5	17.5	17.7	0.0	18.0	14.7	14.7	14.8	0.0	15.0
			12	0	18.5	18.6	18.7	0.0	19.0	17.5	17.5	17.6	0.0	18.0	14.6	14.7	14.9	0.0	15.0
			12	6	18.5	18.6	18.8	0.0	19.0	17.6	17.5	17.6	0.0	18.0	14.6	14.7	14.8	0.0	15.0
			12	12	18.6	18.6	18.8	0.0	19.0	17.5	17.5	17.7	0.0	18.0	14.6	14.7	14.8	0.0	15.0
			24	0	18.6	18.6	18.7	0.0	19.0	17.5	17.5	17.6	0.0	18.0	14.6	14.7	14.9	0.0	15.0
		QPSK	1	1	18.5	18.7	18.6	0.0	19.0	17.6	17.5	17.5	0.0	18.0	14.6	14.7	14.8	0.0	15.0
			1	12	18.5	18.7	18.7	0.0	19.0	17.5	17.5	17.5	0.0	18.0	14.6	14.7	14.8	0.0	15.0
			1	22	18.6	18.7	18.8	0.0	19.0	17.6	17.5	17.7	0.0	18.0	14.6	14.7	14.8	0.0	15.0
			12	0	18.5	18.6	18.7	0.0	19.0	17.5	17.5	17.6	0.0	18.0	14.7	14.7	14.8	0.0	15.0
			12	6	18.6	18.6	18.8	0.0	19.0	17.5	17.6	17.7	0.0	18.0	14.6	14.7	14.8	0.0	15.0
			12	12	18.6	18.6	18.7	0.0	19.0	17.5	17.6	17.7	0.0	18.0	14.6	14.7	14.8	0.0	15.0
			24	0	18.6	18.7	18.7	0.0	19.0	17.5	17.5	17.6	0.0	18.0	14.6	14.7	14.8	0.0	15.0
		16QAM	1	1	18.5	18.4	18.7	0.0	19.0	17.4	17.5	17.6	0.0	18.0	14.6	14.6	15.0	0.0	15.0
		64QAM	1	1	18.6	18.6	18.6	0.0	19.0	17.7	17.6	17.5	0.0	18.0	14.4	14.7	14.7	0.0	15.0
		256QAM	1	1	18.4	18.5	18.4	0.0	19.0	17.1	17.5	17.5	0.0	18.0	15.0	14.9	14.9	0.0	15.0
	CP-OFDM	QPSK	1	1	18.6	18.7	18.6	0.0	19.0	17.5	17.5	17.6	0.0	18.0	14.5	14.6	14.9	0.0	15.0

Notes:

Voice/data/SRS0 were measured output power through FTM mode provided by manufacturer.

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NR Band n77(SRS1) – Lower Band – Measured Results

BW (MHz)	Mode	Maximum Allowed Average Power (dBm)											
		DSI = 0, 1, 4				DSI = 3				DSI = 2			
		Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
			633334				633334				633334		
			3500.01 MHz				3500.01 MHz				3500.01 MHz		
100 MHz	SRS CW		15.1		16.0		14.1		15.0		10.2		11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		633000	633334	633666		633000	633334	633666		633000	633334	633666	
		3495 MHz	3500.01 MHz	3504.99 MHz		3495 MHz	3500.01 MHz	3504.99 MHz		3495 MHz	3500.01 MHz	3504.99 MHz	
90 MHz	SRS CW		15.1		16.0		14.1		15.0		10.2		11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		632668	633334	634000		632668	633334	634000		632668	633334	634000	
		3490.02 MHz	3500.01 MHz	3510 MHz		3490.02 MHz	3500.01 MHz	3510 MHz		3490.02 MHz	3500.01 MHz	3510 MHz	
80 MHz	SRS CW		15.1		16.0		14.1		15.0		10.2		11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		632334	633334	634332		632334	633334	634332		632334	633334	634332	
		3485.01 MHz	3500.01 MHz	3514.98 MHz		3485.01 MHz	3500.01 MHz	3514.98 MHz		3485.01 MHz	3500.01 MHz	3514.98 MHz	
70 MHz	SRS CW		15.1		16.0		14.1		15.0		10.2		11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		632000	633334	634666		632000	633334	634666		632000	633334	634666	
		3480 MHz	3500.01 MHz	3519.99 MHz		3480 MHz	3500.01 MHz	3519.99 MHz		3480 MHz	3500.01 MHz	3519.99 MHz	
60 MHz	SRS CW		15.2		16.0		14.3		15.0		10.2		11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		631668	633334	635000		631668	633334	635000		631668	633334	635000	
		3475.02 MHz	3500.01 MHz	3525 MHz		3475.02 MHz	3500.01 MHz	3525 MHz		3475.02 MHz	3500.01 MHz	3525 MHz	
50 MHz	SRS CW	15.3		15.1	16.0	14.3		14.2	15.0	10.2		10.3	11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		631334	633334	635332		631334	633334	635332		631334	633334	635332	
		3470.01 MHz	3500.01 MHz	3529.98 MHz		3470.01 MHz	3500.01 MHz	3529.98 MHz		3470.01 MHz	3500.01 MHz	3529.98 MHz	
40 MHz	SRS CW	15.5		15.4	16.0	14.6		14.4	15.0	10.5		10.6	11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		631000	633334	635666		631000	633334	635666		631000	633334	635666	
		3465 MHz	3500.01 MHz	3534.99 MHz		3465 MHz	3500.01 MHz	3534.99 MHz		3465 MHz	3500.01 MHz	3534.99 MHz	
30 MHz	SRS CW	15.5	15.5	15.4	16.0	14.5	14.5	14.4	15.0	10.5	10.5	10.5	11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		630668	633334	636000		630668	633334	636000		630668	633334	636000	
		3460.02 MHz	3500.01 MHz	3540 MHz		3460.02 MHz	3500.01 MHz	3540 MHz		3460.02 MHz	3500.01 MHz	3540 MHz	
20 MHz	SRS CW	15.4	15.3	15.3	16.0	14.4	14.4	14.3	15.0	10.4	10.4	10.4	11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		630500	633334	636166		630500	633334	636166		630500	633334	636166	
		3457.5 MHz	3500.01 MHz	3542.49 MHz		3457.5 MHz	3500.01 MHz	3542.49 MHz		3457.5 MHz	3500.01 MHz	3542.49 MHz	
15 MHz	SRS CW	15.4	15.3	15.2	16.0	14.4	14.3	14.3	15.0	10.4	10.4	10.4	11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		630334	633334	636332		630334	633334	636332		630334	633334	636332	
		3455.01 MHz	3500.01 MHz	3544.98 MHz		3455.01 MHz	3500.01 MHz	3544.98 MHz		3455.01 MHz	3500.01 MHz	3544.98 MHz	
10 MHz	SRS CW	15.2	15.2	15.2	16.0	14.3	14.2	14.2	15.0	10.4	10.3	10.3	11.0

Notes:

SRS1/SRS2/SRS3 were measured output power through FTM mode provided by manufacturer.

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NR Band n77(SRS2) – Lower Band – Measured Results

BW (MHz)	Mode	Maximum Allowed Average Power (dBm)											
		DSI = 0, 1, 4				DSI = 3				DSI = 2			
		Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
			633334				633334				633334		
			3500.01 MHz				3500.01 MHz				3500.01 MHz		
100 MHz	SRS CW		13.1		15.0		12.1		14.0		9.0		11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		633000	633334	633666		633000	633334	633666		633000	633334	633666	
		3495 MHz	3500.01 MHz	3504.99 MHz		3495 MHz	3500.01 MHz	3504.99 MHz		3495 MHz	3500.01 MHz	3504.99 MHz	
90 MHz	SRS CW		13.1		15.0		12.1		14.0		8.9		11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		632668	633334	634000		632668	633334	634000		632668	633334	634000	
		3490.02 MHz	3500.01 MHz	3510 MHz		3490.02 MHz	3500.01 MHz	3510 MHz		3490.02 MHz	3500.01 MHz	3510 MHz	
80 MHz	SRS CW		13.2		15.0		12.1		14.0		8.9		11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		632334	633334	634332		632334	633334	634332		632334	633334	634332	
		3485.01 MHz	3500.01 MHz	3514.98 MHz		3485.01 MHz	3500.01 MHz	3514.98 MHz		3485.01 MHz	3500.01 MHz	3514.98 MHz	
70 MHz	SRS CW		13.1		15.0		12.2		14.0		8.9		11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		632000	633334	634666		632000	633334	634666		632000	633334	634666	
		3480 MHz	3500.01 MHz	3519.99 MHz		3480 MHz	3500.01 MHz	3519.99 MHz		3480 MHz	3500.01 MHz	3519.99 MHz	
60 MHz	SRS CW		13.1		15.0		12.1		14.0		8.9		11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		631668	633334	635000		631668	633334	635000		631668	633334	635000	
		3475.02 MHz	3500.01 MHz	3525 MHz		3475.02 MHz	3500.01 MHz	3525 MHz		3475.02 MHz	3500.01 MHz	3525 MHz	
50 MHz	SRS CW	13.3		13.0	15.0	12.3		12.0	14.0	9.0		8.9	11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		631334	633334	635332		631334	633334	635332		631334	633334	635332	
		3470.01 MHz	3500.01 MHz	3529.98 MHz		3470.01 MHz	3500.01 MHz	3529.98 MHz		3470.01 MHz	3500.01 MHz	3529.98 MHz	
40 MHz	SRS CW	13.6		13.4	15.0	12.7		12.4	14.0	9.4		9.2	11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		631000	633334	635666		631000	633334	635666		631000	633334	635666	
		3465 MHz	3500.01 MHz	3534.99 MHz		3465 MHz	3500.01 MHz	3534.99 MHz		3465 MHz	3500.01 MHz	3534.99 MHz	
30 MHz	SRS CW	13.7	13.5	13.4	15.0	12.6	12.4	12.3	14.0	9.4	9.3	9.2	11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		630668	633334	636000		630668	633334	636000		630668	633334	636000	
		3460.02 MHz	3500.01 MHz	3540 MHz		3460.02 MHz	3500.01 MHz	3540 MHz		3460.02 MHz	3500.01 MHz	3540 MHz	
20 MHz	SRS CW	13.5	13.3	13.2	15.0	12.4	12.3	12.1	14.0	9.3	9.1	9.0	11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		630500	633334	636166		630500	633334	636166		630500	633334	636166	
		3457.5 MHz	3500.01 MHz	3542.49 MHz		3457.5 MHz	3500.01 MHz	3542.49 MHz		3457.5 MHz	3500.01 MHz	3542.49 MHz	
15 MHz	SRS CW	13.5	13.4	13.4	15.0	12.5	12.3	12.3	14.0	9.3	9.1	9.0	11.0
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		630334	633334	636332		630334	633334	636332		630334	633334	636332	
		3455.01 MHz	3500.01 MHz	3544.98 MHz		3455.01 MHz	3500.01 MHz	3544.98 MHz		3455.01 MHz	3500.01 MHz	3544.98 MHz	
10 MHz	SRS CW	13.4	13.2	13.0	15.0	12.3	12.1	11.9	14.0	9.2	8.9	8.9	11.0

Notes:

SRS1/SRS2/SRS3 were measured output power through FTM mode provided by manufacturer.

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NR Band n77(SRS3) – Lower Band – Measured Results

BW (MHz)	Mode	Maximum Allowed Average Power (dBm)											
		DSI = 0, 1, 4				DSI = 3				DSI = 2			
		Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
			633334				633334				633334		
			3500.01 MHz				3500.01 MHz				3500.01 MHz		
100 MHz	SRS CW		14.5		15.0		13.5		14.0		10.9		11.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		633000	633334	633666		633000	633334	633666		633000	633334	633666	
		3495 MHz	3500.01 MHz	3504.99 MHz		3495 MHz	3500.01 MHz	3504.99 MHz		3495 MHz	3500.01 MHz	3504.99 MHz	
90 MHz	SRS CW		14.5		15.0		13.8		14.0		10.9		11.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		632668	633334	634000		632668	633334	634000		632668	633334	634000	
		3490.02 MHz	3500.01 MHz	3510 MHz		3490.02 MHz	3500.01 MHz	3510 MHz		3490.02 MHz	3500.01 MHz	3510 MHz	
80 MHz	SRS CW		14.6		15.0		13.8		14.0		10.9		11.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		632334	633334	634332		632334	633334	634332		632334	633334	634332	
		3485.01 MHz	3500.01 MHz	3514.98 MHz		3485.01 MHz	3500.01 MHz	3514.98 MHz		3485.01 MHz	3500.01 MHz	3514.98 MHz	
70 MHz	SRS CW		14.6		15.0		13.7		14.0		10.9		11.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		632000	633334	634666		632000	633334	634666		632000	633334	634666	
		3480 MHz	3500.01 MHz	3519.99 MHz		3480 MHz	3500.01 MHz	3519.99 MHz		3480 MHz	3500.01 MHz	3519.99 MHz	
60 MHz	SRS CW		14.7		15.0		13.7		14.0		11.0		11.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		631668	633334	635000		631668	633334	635000		631668	633334	635000	
		3475.02 MHz	3500.01 MHz	3525 MHz		3475.02 MHz	3500.01 MHz	3525 MHz		3475.02 MHz	3500.01 MHz	3525 MHz	
50 MHz	SRS CW	14.9		14.5	15.0	13.9		13.6	14.0	11.0		10.9	11.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		631334	633334	635332		631334	633334	635332		631334	633334	635332	
		3470.01 MHz	3500.01 MHz	3529.98 MHz		3470.01 MHz	3500.01 MHz	3529.98 MHz		3470.01 MHz	3500.01 MHz	3529.98 MHz	
40 MHz	SRS CW	14.8		14.6	15.0	13.8		13.8	14.0	11.3		11.3	11.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		631000	633334	635666		631000	633334	635666		631000	633334	635666	
		3465 MHz	3500.01 MHz	3534.99 MHz		3465 MHz	3500.01 MHz	3534.99 MHz		3465 MHz	3500.01 MHz	3534.99 MHz	
30 MHz	SRS CW	14.9	14.9	14.6	15.0	13.8	14.0	13.7	14.0	11.3	11.3	11.2	11.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		630668	633334	636000		630668	633334	636000		630668	633334	636000	
		3460.02 MHz	3500.01 MHz	3540 MHz		3460.02 MHz	3500.01 MHz	3540 MHz		3460.02 MHz	3500.01 MHz	3540 MHz	
20 MHz	SRS CW	14.8	14.8	14.4	15.0	13.7	13.9	13.5	14.0	11.2	11.2	11.1	11.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		630500	633334	636166		630500	633334	636166		630500	633334	636166	
		3457.5 MHz	3500.01 MHz	3542.49 MHz		3457.5 MHz	3500.01 MHz	3542.49 MHz		3457.5 MHz	3500.01 MHz	3542.49 MHz	
15 MHz	SRS CW	14.7	14.8	14.4	15.0	13.7	13.9	13.5	14.0	11.2	11.2	11.1	11.5
BW (MHz)	Mode	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit	Measured Pwr (dBm)			Tune-up Limit
		630334	633334	636332		630334	633334	636332		630334	633334	636332	
		3455.01 MHz	3500.01 MHz	3544.98 MHz		3455.01 MHz	3500.01 MHz	3544.98 MHz		3455.01 MHz	3500.01 MHz	3544.98 MHz	
10 MHz	SRS CW	14.7	14.7	14.4	15.0	13.6	13.8	13.5	14.0	11.1	11.1	10.9	11.5

Notes:

SRS1/SRS2/SRS3 were measured output power through FTM mode provided by manufacturer.

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NR Band n77 (Voice/data/SRS0) – Upper Band – Measured Results

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Maximum Allowed Average Power (dBm)																															
					DSI = 0, 1, 4										DSI = 3										DSI = 2									
					Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit
					650000		656000		662000				650000		656000		662000				650000		656000		662000			
					3750 MHz		3840 MHz		3930 MHz				3750 MHz		3840 MHz		3930 MHz				3750 MHz		3840 MHz		3930 MHz			
100 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.2				18.5		0.0	19.0	17.0				17.4		0.0	18.0	14.2				14.7		0.0	15.0
			1	137	18.6				18.4		0.0	19.0	17.4				17.3		0.0	18.0	14.2				14.7		0.0	15.0
			1	271	18.8				18.3		0.0	19.0	17.5				17.4		0.0	18.0	14.7				14.7		0.0	15.0
			135	0	18.4				18.5		0.0	19.0	17.2				17.4		0.0	18.0	14.4				14.7		0.0	15.0
			135	69	18.5				18.4		0.0	19.0	17.3				17.3		0.0	18.0	14.4				14.7		0.0	15.0
			135	138	18.6				18.4		0.0	19.0	17.4				17.4		0.0	18.0	14.5				14.7		0.0	15.0
			270	0	18.5				18.4		0.0	19.0	17.3				17.3		0.0	18.0	14.5				14.7		0.0	15.0
		QPSK	1	1	18.1				18.5		0.0	19.0	17.2				17.4		0.0	18.0	14.4				14.8		0.0	15.0
			1	137	18.6				18.0		0.0	19.0	17.5				17.4		0.0	18.0	14.7				14.8		0.0	15.0
			1	271	18.8				18.7		0.0	19.0	17.7				17.5		0.0	18.0	14.8				14.8		0.0	15.0
			135	0	18.4				18.3		0.0	19.0	17.4				17.3		0.0	18.0	14.4				14.7		0.0	15.0
			135	69	18.4				18.3		0.0	19.0	17.4				17.4		0.0	18.0	14.6				14.7		0.0	15.0
			135	138	18.7				18.3		0.0	19.0	17.5				17.4		0.0	18.0	14.6				14.7		0.0	15.0
			270	0	18.4				18.3		0.0	19.0	17.4				17.3		0.0	18.0	14.5				14.8		0.0	15.0
		16QAM	1	1	18.2				18.5		0.0	19.0	16.7				17.5		0.0	18.0	14.4				14.7		0.0	15.0
			1	137	18.6				18.6		0.0	19.0	17.1				17.5		0.0	18.0	14.7				14.6		0.0	15.0
			1	271	18.7				18.7		0.0	19.0	17.2				17.5		0.0	18.0	14.9				14.6		0.0	15.0
		64QAM	1	1	18.0				18.5		0.0	19.0	17.2				17.4		0.0	18.0	14.3				14.7		0.0	15.0
		256QAM	1	1	17.8				18.5		0.0	19.0	16.7				17.2		0.0	18.0	14.3				15.0		0.0	15.0
	CP-OFDM	QPSK	1	1	18.1				18.6		0.0	19.0	17.2				17.3		0.0	18.0	14.4				14.9		0.0	15.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit
					649668		656000		662332				649668		656000		662332				649668		656000		662332			
					3745.02 MHz		3840 MHz		3934.98 MHz				3745.02 MHz		3840 MHz		3934.98 MHz				3745.02 MHz		3840 MHz		3934.98 MHz			
90 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.1		18.4		18.6		0.0	19.0	17.4		17.5		17.6		0.0	18.0	14.2		14.7		14.8		0.0	15.0
			1	123	18.4		18.4		18.7		0.0	19.0	17.7		17.6		17.9		0.0	18.0	14.6		14.8		14.7		0.0	15.0
			1	243	18.4		18.5		18.8		0.0	19.0	17.7		17.6		17.9		0.0	18.0	14.7		14.8		14.6		0.0	15.0
			120	0	18.2		18.4		18.7		0.0	19.0	17.5		17.5		17.7		0.0	18.0	14.4		14.7		14.7		0.0	15.0
			120	63	18.2		18.4		18.7		0.0	19.0	17.7		17.6		17.8		0.0	18.0	14.4		14.7		14.7		0.0	15.0
			120	125	18.2		18.4		18.7		0.0	19.0	17.6		17.6		17.8		0.0	18.0	14.6		14.8		14.6		0.0	15.0
			243	0	18.2		18.3		18.6		0.0	19.0	17.5		17.6		17.8		0.0	18.0	14.5		14.7		14.7		0.0	15.0
		QPSK	1	1	18.2		18.2		18.5		0.0	19.0	17.3		17.6		17.7		0.0	18.0	14.4		14.7		14.8		0.0	15.0
			1	123	18.3		18.3		18.6		0.0	19.0	17.6		17.7		17.9		0.0	18.0	14.4		14.8		14.7		0.0	15.0
			1	243	18.4		18.4		18.7		0.0	19.0	17.6		17.7		17.9		0.0	18.0	14.6		14.9		14.7		0.0	15.0
			120	0	18.2		18.4		18.6		0.0	19.0	17.6		17.6		17.7		0.0	18.0	14.5		14.7		14.7		0.0	15.0
			120	63	18.2		18.4		18.7		0.0	19.0	17.6		17.7		17.8		0.0	18.0	14.4		14.8		14.6		0.0	15.0
			120	125	18.2		18.4		18.7		0.0	19.0	17.6		17.7		17.9		0.0	18.0	14.6		14.7		14.6		0.0	15.0
			243	0	18.2		18.3		18.4		0.0	19.0	17.5		17.7		17.8		0.0	18.0	14.5		14.8		14.7		0.0	15.0
		16QAM	1	1	18.2		18.5		18.5		0.0	19.0	17.2		17.6		17.5		0.0	18.0	14.5		14.7		14.6		0.0	15.0
		64QAM	1	1	18.4		18.6		18.8		0.0	19.0	17.2		17.5		17.7		0.0	18.0	14.4		14.5		14.8		0.0	15.0
		256QAM	1	1	17.9		18.7		18.7		0.0	19.0	17.6		17.6		17.8		0.0	18.0	14.4		14.9		14.8		0.0	15.0
	CP-OFDM	QPSK	1	1	18.1		18.4		18.8		0.0	19.0	17.3		17.5		17.5		0.0	18.0	14.4		14.7		14.8		0.0	15.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit
					649334		656000		662666				649334		656000		662666				649334		656000		662666			
					3740.01 MHz		3840 MHz		3939.99 MHz				3740.01 MHz		3840 MHz		3939.99 MHz				3740.01 MHz		3840 MHz		3939.99 MHz			
80 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.2		18.4		18.5		0.0	19.0	17.4		17.5		17.6		0.0	18.0	14.2		14.7		14.6		0.0	15.0
			1	109	18.4		18.6		18.7		0.0	19.0	17.7		17.6		17.8		0.0	18.0	14.3		14.8		14.6		0.0	15.0
			1	215	18.4		18.6		18.8		0.0	19.0	17.6		17.6		17.9		0.0	18.0	14.6		14.7		14.5		0.0	15.0
			108	0	18.2		18.4		18.8		0.0	19.0	17.5		17.6		17.7		0.0	18.0	14.5		14.7		14.6		0.0	15.0
			108	55	18.3		18.4		18.8		0.0	19.0	17.5		17.6		17.8		0.0	18.0	14.4		14.7		14.6		0.0	15.0
			108	109	18.2		18.4		18.9		0.0	19.0	17.6		17.6		17.9		0.0	18.0	14.4		14.8		14.6		0.0	15.0
			216	0	18.3		18.4		18.8		0.0	19.0	17.5		17.7		17.8		0.0	18.0	14.4		14.8		14.6		0.0	15.0
		QPSK	1	1	18.2		18.4		18.5		0.0	19.0	17.4		17.7		17.7		0.0	18.0	14.4		14.7		14.7		0.0	15.0
			1	109	18.4		18.5		18.7		0.0	19.0	17.7		17.8		17.9		0.0	18.0	14.4		14.7		14.7		0.0	15.0
			1	215	18.4		18.5		18.8		0.0	19.0	17.6		17.7		17.9		0.0	18.0	14.6		14.7		14.5		0.0	15.0
			108	0	18.2		18.3		18.7		0.0	19.0	17.5		17.5		17.7		0.0	18.0	14.4		14.6		14.6		0.0	15.0
			108	55	18.3		18.4		18.7		0.0	19.0	17.6		17.6		17.9		0.0	18.0	14.4		14.7		14.7		0.0	15.0
			108	109	18.3		18.6		18.8		0.0	19.0	17.6		17.6		17.9		0.0	18.0	14.4		14.7		14.6		0.0	15.0
			216	0	18.3		18.5		18.7		0.0	19.0	17.5		17.6		17.9		0.0	18.0	14.4		14.7		14.7		0.0	15.0
		16QAM	1	1	18.0		18.7		18.4		0.0	19.0	17.5		17.6		17.5		0.0	18.0	14.4		15.0		15.0		0.0	15.0
		64QAM	1	1	18.4		18.4		18.4		0.0	19.0	17.2		17.8		17.5		0.0	18.0	14.3		14.7		14.7		0.0	15.0
		256QAM	1	1	18.0		18.1		18.2		0.0	19.0	17.4		17.9		17.9		0.0	18.0	14.3		14.7		15.0		0.0	15.0
	CP-OFDM	QPSK	1	1	18.2		18.4		18.4		0.0	19.0	17.5		17.5		17.7		0.0	18.0	14.3		14.6		14.7		0.0	15.0
BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit
					649000	653666			658334	663000			649000	653666			658334	663000			649000	653666			658334	663000		
					3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz			3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz			3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz		
70 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.3	18.3			18.4	18.5	0.0	19.0	17.4	17.6			17.7	17.6	0.0	18.0	14.1	14.6			14.7	14.7	0.0	15.0
			1	95	18.4	18.4			18.5	18.7	0.0	19.0	17.5	17.6			17.8	17.8	0.0	18.0	14.3	14.7			14.7	14.7	0.0	15.0
			1	188	18.3	18.3			18.4	18.7	0.0	19.0	17.5	17.5			17.7	17.9	0.0	18.0	14.4	14.6			14.5	14.5	0.0	15.0
			90	0	18.2	18.3			18.4	18.5	0.0	19.0	17.5	17.6			17.7	17.7	0.0	18.0	14.2	14.6			14.8	14.6	0.0	15.0
			90	50	18.3	18.4			18.4	18.6	0.0	19.0	17.5	17.6			17.7	17.8	0.0	18.0	14.3	14.6			14.7	14.6	0.0	15.0
			90	99	18.2	18.3			18.5	18.7	0.0	19.0	17.6	17.6			17.7	17.9	0.0	18.0	14.4	14.6			14.7	14.6	0.0	15.0
			180	0	18.2	18.3			18.4	18.7	0.0	19.0	17.5	17.6			17.7	17.8	0.0	18.0	14.3	14.7			14.8	14.6	0.0	15.0
		QPSK	1	1	18.2	18.3			18.3	18.6	0.0	19.0	17.3	17.6			17.7	17.7	0.0	18.0	14.1	14.7			14.7	14.7	0.0	15.0
			1	95	18.3	18.3			18.4	18.7	0.0	19.0	17.5	17.6			17.7	17.9	0.0	18.0	14.3	14.7			14.8	14.7	0.0	15.0
			1	188	18.3	18.3			18.4	18.7	0.0	19.0	17.5	17.6			17.6	18.0	0.0	18.0	14.4	14.7			14.6	14.5	0.0	15.0
			90	0	18.2	18.5			18.4	18.5	0.0	19.0	17.5	17.6			17.7	17.8	0.0	18.0	14.3	14.6			14.7	14.7	0.0	15.0
			90	50	18.3	18.4			18.4	18.7	0.0	19.0	17.5	17.6			17.7	17.9	0.0	18.0	14.3	14.7			14.8	14.6	0.0	15.0
			90	99	18.2	18.3			18.5	18.8	0.0	19.0	17.6	17.6			17.7	17.9	0.0	18.0	14.5	14.7			14.7	14.6	0.0	15.0
			180	0	18.2	18.4			18.4	18.6	0.0	19.0	17.5	17.6			17.7	17.9	0.0	18.0	14.3	14.7			14.8	14.6	0.0	15.0
		16QAM	1	1	18.2	18.5			18.0	18.6	0.0	19.0	17.5	17.5			17.6	17.8	0.0	18.0	14.1	14.5			14.9	14.6	0.0	15.0
		64QAM	1	1	18.1	18.5			18.3	18.5	0.0	19.0	17.4	17.6			17.6	17.8	0.0	18.0	14.1	14.7			14.6	14.6	0.0	15.0
		256QAM	1	1	17.9	18.2			18.1	18.8	0.0	19.0	17.7	17.8			17.8	17.9	0.0	18.0	14.6	14.8			14.6	15.0	0.0	15.0
	CP-OFDM	QPSK	1	1	18.1	18.3			18.2	18.6	0.0	19.0	17.5	17.6			17.6	17.6	0.0	18.0	14.1	14.5			14.7	14.7	0.0	15.0

Notes:

Voice/data/SRS0 were measured output power through FTM mode provided by manufacturer.

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NR Band n77 (Voice/data/SRS0) – Upper Band – 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	Measured Pwr (dBm)						MPR	Tune-up Limit
					648668	653556			658444	663332			648668	653556			658444	663332			648668	653556			658444	663332		
					3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz			3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz			3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz		
60 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.2	18.3			18.5	18.6	0.0	19.0	17.4	17.6			17.8	17.8	0.0	18.0	14.3	14.6			14.8	14.8	0.0	15.0
			1	81	18.2	18.3			18.5	18.8	0.0	19.0	17.6	17.7			17.9	17.9	0.0	18.0	14.3	14.7			14.8	14.7	0.0	15.0
			1	160	18.3	18.3			18.6	19.0	0.0	19.0	17.6	17.7			17.8	17.8	0.0	18.0	14.6	14.8			14.7	14.7	0.0	15.0
			81	0	18.1	18.3			18.5	18.8	0.0	19.0	17.6	17.7			17.8	17.8	0.0	18.0	14.3	14.7			14.8	14.7	0.0	15.0
			81	41	18.2	18.3			18.5	18.9	0.0	19.0	17.5	17.7			17.8	18.0	0.0	18.0	14.3	14.8			14.8	14.7	0.0	15.0
			81	81	18.2	18.4			18.7	19.0	0.0	19.0	17.7	17.7			17.7	17.7	0.0	18.0	14.4	14.8			14.7	14.7	0.0	15.0
			162	0	18.1	18.3			18.5	19.0	0.0	19.0	17.6	17.7			17.8	17.8	0.0	18.0	14.3	14.8			14.9	14.7	0.0	15.0
		QPSK	1	1	18.1	18.3			18.6	18.7	0.0	19.0	17.5	17.5			17.9	17.8	0.0	18.0	14.2	14.7			14.9	14.7	0.0	15.0
			1	81	18.1	18.3			18.6	18.7	0.0	19.0	17.5	17.7			17.9	17.9	0.0	18.0	14.3	14.8			14.9	14.8	0.0	15.0
			1	160	18.2	18.3			18.7	18.9	0.0	19.0	17.7	17.9			17.9	17.8	0.0	18.0	14.5	14.9			14.7	14.7	0.0	15.0
			81	0	18.2	18.3			18.5	18.8	0.0	19.0	17.5	17.7			17.8	17.9	0.0	18.0	14.3	14.8			14.9	14.7	0.0	15.0
			81	41	18.2	18.3			18.5	18.9	0.0	19.0	17.5	17.7			17.8	18.0	0.0	18.0	14.3	14.8			14.9	14.7	0.0	15.0
			81	81	18.1	18.4			18.7	18.9	0.0	19.0	17.6	17.7			17.8	17.8	0.0	18.0	14.4	14.8			14.8	14.7	0.0	15.0
			162	0	18.2	18.4			18.5	18.9	0.0	19.0	17.6	17.7			17.8	17.8	0.0	18.0	14.4	14.8			14.9	14.7	0.0	15.0
		16QAM	1	1	18.3	18.2			18.6	18.8	0.0	19.0	17.4	17.3			17.6	17.8	0.0	18.0	14.2	14.5			14.7	14.5	0.0	15.0
		64QAM	1	1	18.2	18.4			18.3	18.9	0.0	19.0	17.4	17.6			17.8	17.9	0.0	18.0	14.0	14.6			14.8	14.8	0.0	15.0
		256QAM	1	1	18.1	18.2			18.3	18.3	0.0	19.0	17.5	17.9			17.8	17.8	0.0	18.0	14.6	14.9			14.7	14.7	0.0	15.0
	CP-OFDM	QPSK	1	1	18.1	18.1			18.5	18.6	0.0	19.0	17.4	17.6			17.8	17.8	0.0	18.0	14.2	14.7			14.8	14.6	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit
					648334	652166	656000		659834	663666			648334	652166	656000		659834	663666			648334	652166	656000		659834	663666		
					3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz			3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz			3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz		
50 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.1	18.4	18.6		18.6	18.8	0.0	19.0	17.6	17.6	17.8		17.8	17.9	0.0	18.0	14.4	14.7	14.9		14.7	14.7	0.0	15.0
			1	67	18.3	18.5	18.7		18.6	18.7	0.0	19.0	17.8	17.8	17.9		17.8	18.0	0.0	18.0	14.4	14.8	14.9		14.6	14.7	0.0	15.0
			1	131	18.2	18.6	18.7		18.6	18.7	0.0	19.0	17.7	17.8	17.9		17.9	17.8	0.0	18.0	14.5	14.9	14.9		14.6	14.7	0.0	15.0
			64	0	18.1	18.4	18.6		18.6	18.7	0.0	19.0	17.6	17.6	17.7		17.7	17.9	0.0	18.0	14.5	14.7	14.8		14.6	14.7	0.0	15.0
			64	35	18.2	18.5	18.7		18.6	18.7	0.0	19.0	17.6	17.7	17.8		17.8	18.0	0.0	18.0	14.5	14.8	14.9		14.6	14.7	0.0	15.0
			64	69	18.2	18.4	18.7		18.6	18.7	0.0	19.0	17.6	17.7	17.8		17.8	17.9	0.0	18.0	14.4	14.7	14.9		14.5	14.7	0.0	15.0
			128	0	18.2	18.4	18.7		18.6	18.6	0.0	19.0	17.6	17.7	17.8		17.8	18.0	0.0	18.0	14.5	14.8	14.9		14.5	14.7	0.0	15.0
		QPSK	1	1	18.2	18.5	18.6		18.6	18.7	0.0	19.0	17.6	17.7	17.8		17.8	17.9	0.0	18.0	14.5	14.6	14.9		14.6	14.7	0.0	15.0
			1	67	18.3	18.4	18.7		18.6	18.8	0.0	19.0	17.7	17.8	17.9		17.8	17.8	0.0	18.0	14.4	14.8	14.9		14.5	14.7	0.0	15.0
			1	131	18.3	18.6	18.7		18.6	18.7	0.0	19.0	17.7	17.8	18.0		17.8	17.8	0.0	18.0	14.4	14.8	14.9		14.6	14.6	0.0	15.0
			64	0	18.2	18.5	18.6		18.7	18.7	0.0	19.0	17.6	17.6	17.7		17.8	17.9	0.0	18.0	14.5	14.7	14.8		14.7	14.7	0.0	15.0
			64	35	18.2	18.5	18.7		18.7	18.8	0.0	19.0	17.6	17.8	17.9		17.8	18.0	0.0	18.0	14.5	14.8	14.8		14.6	14.8	0.0	15.0
			64	69	18.2	18.5	18.7		18.7	18.7	0.0	19.0	17.6	17.7	17.8		17.8	18.0	0.0	18.0	14.5	14.8	14.9		14.5	14.7	0.0	15.0
			128	0	18.2	18.5	18.7		18.7	18.6	0.0	19.0	17.6	17.7	17.8		17.7	18.0	0.0	18.0	14.5	14.8	14.9		14.5	14.7	0.0	15.0
		16QAM	1	1	18.3	18.5	18.6		19.0	18.8	0.0	19.0	17.4	17.6	17.9		17.7	17.8	0.0	18.0	14.6	14.8	14.7		14.6	14.6	0.0	15.0
		64QAM	1	1	18.2	18.5	18.5		18.8	19.0	0.0	19.0	17.4	17.6	17.8		17.6	17.7	0.0	18.0	14.3	14.4	14.9		14.8	14.5	0.0	15.0
		256QAM	1	1	17.8	18.5	18.4		18.8	18.5	0.0	19.0	17.8	17.8	17.8		18.0	17.7	0.0	18.0	14.7	14.9	15.0		14.8	15.0	0.0	15.0
	CP-OFDM	QPSK	1	1	18.3	18.7	18.6		18.7	18.8	0.0	19.0	17.5	17.6	17.7		17.8	18.0	0.0	18.0	14.5	14.8	14.9		14.7	14.8	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit
					648000	651200	654400	657600	660800	664000			648000	651200	654400	657600	660800	664000			648000	651200	654400	657600	660800	664000		
					3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz			3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz			3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz		
40 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.6	18.9	18.9	19.0	18.8	18.9	0.0	19.0	18.0	18.0	18.0	17.8	18.0	17.8	0.0	18.0	14.7	14.5	14.7	14.9	14.9	15.0	0.0	15.0
			1	53	18.5	18.8	18.6	18.8	18.7	19.0	0.0	19.0	17.9	17.9	17.9	17.7	17.9	17.7	0.0	18.0	14.5	14.5	14.6	14.7	14.8	14.8	0.0	15.0
			1	104	18.7	18.9	18.7	18.9	18.9	18.9	0.0	19.0	18.0	17.9	17.8	17.8	18.0	17.7	0.0	18.0	14.7	14.5	14.6	14.7	13.9	14.8	0.0	15.0
			50	0	18.4	18.7	18.7	18.8	18.8	18.8	0.0	19.0	17.8	17.8	17.9	17.7	17.9	17.8	0.0	18.0	14.5	14.5	14.6	14.7	14.8	14.9	0.0	15.0
			50	28	18.4	18.7	18.7	18.9	18.8	18.9	0.0	19.0	17.9	17.8	17.9	17.7	17.9	18.0	0.0	18.0	14.5	14.4	14.5	14.6	14.8	14.8	0.0	15.0
			50	56	18.5	18.9	18.7	18.9	18.7	18.9	0.0	19.0	17.9	17.8	17.9	17.8	18.0	17.7	0.0	18.0	14.6	14.5	14.6	14.7	14.8	14.7	0.0	15.0
			100	0	18.5	18.8	18.7	18.8	18.9	18.8	0.0	19.0	17.7	17.8	17.9	17.8	18.0	17.9	0.0	18.0	14.5	14.5	14.6	14.7	14.8	14.8	0.0	15.0
		QPSK	1	1	18.4	18.9	18.9	19.0	18.9	18.7	0.0	19.0	17.9	18.0	17.7	18.0	17.8	17.7	0.0	18.0	14.7	14.6	14.6	14.9	14.9	14.9	0.0	15.0
			1	53	18.4	18.8	18.7	18.9	18.8	18.8	0.0	19.0	17.8	17.9	17.9	17.8	17.7	17.8	0.0	18.0	14.5	14.4	14.5	14.6	14.8	14.8	0.0	15.0
			1	104	18.6	18.9	18.8	18.9	18.8	18.9	0.0	19.0	17.9	17.9	17.9	17.9	17.9	17.8	0.0	18.0	14.7	14.5	14.6	14.7	14.9	14.8	0.0	15.0
			50	0	18.5	18.8	18.8	18.9	18.8	18.8	0.0	19.0	17.8	17.9	17.9	17.8	17.8	17.8	0.0	18.0	14.4	14.5	14.6	14.6	14.8	14.9	0.0	15.0
			50	28	18.4	18.8	18.7	18.9	18.9	18.8	0.0	19.0	17.8	17.8	17.8	17.8	17.8	17.9	0.0	18.0	14.5	14.5	14.6	14.7	14.8	14.8	0.0	15.0
			50	56	18.5	18.8	18.8	18.8	18.9	18.7	0.0	19.0	17.8	17.8	17.9	17.9	17.9	17.8	0.0	18.0	14.6	14.5	14.6	14.7	14.8	14.7	0.0	15.0
			100	0	18.5	18.8	18.7	18.9	18.9	18.8	0.0	19.0	17.8	17.8	17.9	17.8	17.9	17.8	0.0	18.0	14.5	14.5	14.6	14.7	14.8	14.8	0.0	15.0
		16QAM	1	1	18.5	18.9	18.9	18.9	18.7	18.7	0.0	19.0	17.8	17.7	17.8	18.0	17.7	18.0	0.0	18.0	14.6	14.4	14.9	15.0	14.8	14.8	0.0	15.0
		64QAM	1	1	18.6	18.8	19.0	18.9	18.8	18.9	0.0	19.0	17.7	17.7	17.7	17.8	18.0	17.8	0.0	18.0	14.6	14.6	14.5	14.8	14.8	14.8	0.0	15.0
		256QAM	1	1	18.5	18.5	18.5	18.6	18.9	18.9	0.0	19.0	17.8	17.8	17.9	17.8	18.0	17.7	0.0	18.0	14.8	15.0	14.9	14.9	15.0	15.0	0.0	15.0
	CP-OFDM	QPSK	1	1	18.7	18.9	18.9	18.8	18.9	18.9	0.0	19.0	17.9	17.9	17.9	17.9	17.9	17.7	0.0	18.0	14.5	14.6	14.7	14.8	14.8	14.9	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit
					647668	651000	654334	657666	661000	664332			647668	651000	654334	657666	661000	664332			647668	651000	654334	657666	661000	664332		
					3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz			3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz			3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz		
30 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.7	18.7	18.8	18.8	18.7	18.9	0.0	19.0	17.7	17.7	17.9	18.0	17.6	17.8	0.0	18.0	14.6	14.8	14.7	14.8	14.9	14.8	0.0	15.0
			1	39	18.6	18.7	18.9	18.9	18.6	18.7	0.0	19.0	17.7	17.7	17.8	17.8	17.6	17.8	0.0	18.0	14.5	14.8	14.7	14.9	14.9	14.6	0.0	15.0
			1	76	18.8	18.8	18.8	18.8	18.7	18.7	0.0	19.0	17.9	17.8	17.9	17.9	17.7	17.8	0.0	18.0	14.6	14.8	14.8	14.9	15.0	14.6	0.0	15.0
			36	0	18.6	18.7	18.8	18.7	18.8	18.8	0.0	19.0	17.7	17.7	17.8	17.8	17.6	17.6	0.0	18.0	14.5	14.7	14.7	14.9	14.9	14.5	0.0	15.0
			36	21	18.6	18.7	18.9	18.6	19.0	18.8	0.0	19.0	17.7	17.7	17.8	17.9	17.6	17.7	0.0	18.0	14.4	14.7	14.7	14.9	14.9	14.6	0.0	15.0
			36	42	18.7	18.8	19.0	18.7	18.8	18.5	0.0	19.0	17.8	17.8	17.8	17.9	17.6	17.8	0.0	18.0	14.5	14.7	14.7	14.9	14.8	14.5	0.0	15.0
			75	0	18.7	18.7	19.0	18.9	18.8	18.7	0.0	19.0	17.7	17.8	17.9	17.9	17.6	17.7	0.0	18.0	14.5	14.7	14.7	14.9	14.9	14.6	0.0	15.0
		QPSK	1	1	18.5	18.8	18.7	18.9	18.5	18.8	0.0	19.0	17.7	17.8	17.9	18.0	17.6	17.8	0.0	18.0	14.6	14.7	14.7	15.0	14.9	14.8	0.0	15.0
			1	39	18.6	18.7	18.8	18.8	18.8	18.9	0.0	19.0	17.7	17.8	17.9	17.9	17.6	17.7	0.0	18.0	14.5	14.7	14.7	14.8	14.8	14.7	0.0	15.0
			1	76	18.7	18.8	18.8	18.8	18.7	18.7	0.0	19.0	17.8	17.8	17.9	17.9	17.7	17.6	0.0	18.0	14.7	14.7	14.7	14.9	14.9	14.6	0.0	15.0
			36	0	18.5	18.7	18.7	18.8	18.7	18.7	0.0	19.0	17.7	17.8	17.8	17.9	17.6	17.6	0.0	18.0	14.5	14.7	14.7	14.8	15.0	14.6	0.0	15.0
			36	21	18.6	18.7	18.8	18.7	18.7	18.7	0.0	19.0	17.7	17.7	17.8	17.8	17.5	17.7	0.0	18.0	14.4	14.7	14.7	14.7	15.0	14.6	0.0	15.0
			36	42	18.7	18.7	18.9	18.7	18.8	18.9	0.0	19.0	17.8	17.8	17.8	17.9	17.6	17.8	0.0	18.0	14.5	14.7	14.7	14.8	14.9	14.5	0.0	15.0
			75	0	18.5	18.7	19.0	18.8	18.8	18.8	0.0	19.0	17.7	17.8	17.8	17.9	17.6	17.7	0.0	18.0	14.5	14.7	14.7	14.8	15.0	14.6	0.0	15.0
		16QAM	1	1	18.7	18.7	18.8	18.8	18.8	18.7	0.0	19.0	17.7	17.6	18.0	18.0	17.9	17.8	0.0	18.0	14.5	14.9	14.9	14.9	14.9	14.7	0.0	15.0
		64QAM	1	1	18.4	18.6	18.7	18.8	18.9	18.8	0.0	19.0	17.6	17.7	17.7	17.9	17.4	17.5	0.0	18.0	14.6	14.6	14.6	15.0	14.7	14.4	0.0	15.0
		256QAM	1	1	18.8	19.0	18.8	18.9	18.9	18.8	0.0	19.0	18.0	17.9	17.9	17.8	17.7	17.6	0.0	18.0	15.0	15.0	15.0	14.7	14.9	14.9	0.0	15.0
	CP-OFDM	QPSK	1	1	18.6	18.7	18.8	18.7	18.9	18.9	0.0	19.0	17.6	17.8	17.9	17.9	17.5	17.7	0.0	18.0	14.6	14.6	14.6	14.9	15.0	14.8	0.0	15.0

Notes:

Voice/data/SRS0 were measured output power through FTM mode provided by manufacturer.

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NR Band n77 (Voice/data/SRS0) – Upper Band – 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	Measured Pwr (dBm)						MPR	Tune-up Limit
					647334	650800	654266	657734	661200	664666			647334	650800	654266	657734	661200	664666			647334	650800	654266	657734	661200	664666		
					3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz			3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz			3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz		
20 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.6	18.6	18.9	18.7	18.9	18.9	0.0	19.0	17.7	17.8	17.9	17.8	17.7	17.7	0.0	18.0	14.3	14.5	14.6	14.8	14.9	14.9	0.0	15.0
			1	26	18.6	18.6	18.9	18.6	18.9	18.8	0.0	19.0	17.6	17.8	17.8	17.8	17.7	17.6	0.0	18.0	14.3	14.5	14.5	14.7	14.9	14.9	0.0	15.0
			1	49	18.7	18.7	19.0	18.7	19.0	18.8	0.0	19.0	17.8	17.8	17.9	17.9	17.7	17.6	0.0	18.0	14.3	14.5	14.5	14.8	15.0	14.8	0.0	15.0
			25	0	18.5	18.6	18.9	18.7	18.9	18.8	0.0	19.0	17.6	17.8	17.8	17.9	17.7	17.5	0.0	18.0	14.3	14.5	14.6	14.7	14.9	14.9	0.0	15.0
			25	13	18.5	18.6	18.9	18.7	19.0	18.8	0.0	19.0	17.6	17.8	17.8	17.8	17.7	17.6	0.0	18.0	14.2	14.5	14.5	14.7	14.9	14.9	0.0	15.0
			25	26	18.5	18.7	18.9	18.7	19.0	18.8	0.0	19.0	17.6	17.8	17.8	17.9	17.7	17.5	0.0	18.0	14.2	14.4	14.6	14.7	14.9	14.8	0.0	15.0
			50	0	18.5	18.7	18.9	18.7	18.9	18.9	0.0	19.0	17.6	17.7	17.8	17.8	17.7	17.6	0.0	18.0	14.3	14.5	14.6	14.7	14.9	14.9	0.0	15.0
		QPSK	1	1	18.5	18.7	18.9	18.8	18.8	18.9	0.0	19.0	17.7	17.8	17.8	17.9	17.7	17.6	0.0	18.0	14.2	14.5	14.6	14.8	14.8	14.9	0.0	15.0
			1	26	18.5	18.7	18.9	18.8	18.9	18.8	0.0	19.0	17.6	17.8	17.8	17.9	17.7	17.6	0.0	18.0	14.2	14.5	14.6	14.8	14.9	14.8	0.0	15.0
			1	49	18.6	18.7	18.9	18.8	18.9	18.8	0.0	19.0	17.7	17.9	17.8	17.9	17.7	17.6	0.0	18.0	14.4	14.5	14.7	14.8	15.0	14.8	0.0	15.0
			25	0	18.5	18.7	18.9	18.7	19.0	18.9	0.0	19.0	17.5	17.8	17.9	17.9	17.7	17.6	0.0	18.0	14.4	14.5	14.6	14.7	14.9	14.9	0.0	15.0
			25	13	18.5	18.7	18.9	18.7	18.9	18.8	0.0	19.0	17.6	17.8	17.8	17.9	17.7	17.6	0.0	18.0	14.1	14.4	14.6	14.7	14.9	14.8	0.0	15.0
			25	26	18.6	18.8	18.9	18.8	18.9	18.8	0.0	19.0	17.6	17.8	17.8	17.9	17.8	17.5	0.0	18.0	14.2	14.5	14.6	14.8	14.9	14.8	0.0	15.0
			50	0	18.5	18.7	18.9	18.8	19.0	18.8	0.0	19.0	17.6	17.7	17.9	17.9	17.7	17.6	0.0	18.0	14.1	14.5	14.6	14.7	15.0	14.9	0.0	15.0
		16QAM	1	1	18.9	18.8	18.7	18.6	18.8	18.8	0.0	19.0	17.3	17.6	17.8	18.0	17.6	17.5	0.0	18.0	14.1	14.6	14.3	14.8	14.9	14.7	0.0	15.0
		64QAM	1	1	18.5	18.8	19.0	18.7	18.7	18.9	0.0	19.0	17.6	17.8	17.8	18.0	17.8	17.4	0.0	18.0	14.1	14.3	14.4	14.5	14.7	14.9	0.0	15.0
		256QAM	1	1	18.8	18.7	18.9	18.8	18.8	19.0	0.0	19.0	18.0	17.8	17.8	17.7	18.0	17.8	0.0	18.0	14.5	14.6	14.9	14.9	14.6	14.9	0.0	15.0
	CP-OFDM	QPSK	1	1	18.5	18.7	18.9	18.7	18.9	18.9	0.0	19.0	17.7	17.8	17.9	17.8	17.8	17.5	0.0	18.0	14.2	14.5	14.7	14.7	14.9	14.9	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit
					647168	650700	654234	657766	661300	664832			647168	650700	654234	657766	661300	664832			647168	650700	654234	657766	661300	664832		
					3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz			3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz			3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz		
15 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.5	18.8	18.8	18.8	19.0	18.9	0.0	19.0	17.7	17.7	17.9	17.9	17.9	17.9	0.0	18.0	14.2	14.5	14.6	14.8	14.9	14.9	0.0	15.0
			1	19	18.5	18.6	18.8	18.7	18.8	18.9	0.0	19.0	17.6	17.7	17.8	17.8	17.8	17.9	0.0	18.0	14.2	14.5	14.5	14.7	14.9	14.8	0.0	15.0
			1	36	18.5	18.7	18.9	18.8	19.0	18.9	0.0	19.0	17.6	17.8	17.9	17.9	18.0	17.9	0.0	18.0	14.1	14.4	14.7	14.9	14.9	14.9	0.0	15.0
			18	0	18.4	18.7	18.9	18.7	18.9	18.8	0.0	19.0	17.6	17.7	17.8	17.9	17.9	17.9	0.0	18.0	14.2	14.5	14.6	14.8	15.0	14.9	0.0	15.0
			18	10	18.4	18.6	18.9	18.8	18.9	18.8	0.0	19.0	17.6	17.8	17.8	17.8	17.9	17.9	0.0	18.0	14.1	14.4	14.6	14.7	14.9	14.8	0.0	15.0
			18	20	18.5	18.7	18.9	18.8	19.0	18.8	0.0	19.0	17.6	17.8	17.9	17.9	18.0	17.8	0.0	18.0	14.1	14.4	14.6	14.8	14.9	14.9	0.0	15.0
			36	0	18.5	18.6	18.8	18.8	19.0	18.9	0.0	19.0	17.6	17.8	17.9	17.9	17.9	17.9	0.0	18.0	14.1	14.5	14.6	14.7	14.9	14.9	0.0	15.0
		QPSK	1	1	18.5	18.8	19.0	18.8	18.9	18.9	0.0	19.0	17.6	17.8	17.9	17.9	18.0	17.9	0.0	18.0	14.2	14.5	14.6	14.8	14.9	14.8	0.0	15.0
			1	19	18.4	18.6	18.8	18.7	18.9	18.9	0.0	19.0	17.6	17.7	17.9	17.8	17.9	17.9	0.0	18.0	14.2	14.5	14.5	14.8	14.9	15.0	0.0	15.0
			1	36	18.4	18.7	18.9	18.9	18.9	18.8	0.0	19.0	17.6	17.9	18.0	17.9	17.7	17.9	0.0	18.0	14.1	14.5	14.7	14.9	14.9	14.8	0.0	15.0
			18	0	18.4	18.7	18.9	18.7	18.9	18.8	0.0	19.0	17.6	17.8	17.9	17.8	18.0	17.9	0.0	18.0	14.2	14.4	14.6	14.8	14.8	14.9	0.0	15.0
			18	10	18.4	18.7	18.9	18.8	18.9	18.8	0.0	19.0	17.6	17.8	17.8	17.9	17.9	17.9	0.0	18.0	14.1	14.5	14.6	14.8	14.9	14.9	0.0	15.0
			18	20	18.5	18.7	18.9	18.9	19.0	18.8	0.0	19.0	17.6	17.8	17.9	17.9	18.0	17.9	0.0	18.0	14.1	14.4	14.6	14.8	14.9	14.9	0.0	15.0
			36	0	18.5	18.7	18.9	18.8	18.9	18.8	0.0	19.0	17.6	17.8	17.9	17.9	17.9	17.9	0.0	18.0	14.1	14.5	14.6	14.8	15.0	14.8	0.0	15.0
		16QAM	1	1	18.6	18.6	18.6	18.8	18.9	18.8	0.0	19.0	17.9	17.8	17.8	17.7	17.8	18.0	0.0	18.0	14.1	14.7	14.6	15.0	14.8	14.8	0.0	15.0
		64QAM	1	1	18.4	18.8	18.9	18.9	18.8	18.6	0.0	19.0	17.4	17.8	17.8	17.9	17.8	18.0	0.0	18.0	14.1	14.5	14.4	14.9	14.7	14.8	0.0	15.0
		256QAM	1	1	18.7	18.7	18.7	18.8	18.8	18.8	0.0	19.0	17.8	17.8	17.7	17.7	17.9	17.8	0.0	18.0	14.7	14.5	15.0	14.7	14.8	14.7	0.0	15.0
	CP-OFDM	QPSK	1	1	18.5	18.7	18.8	18.8	18.9	18.9	0.0	19.0	17.6	17.8	18.0	17.9	18.0	17.9	0.0	18.0	14.2	14.6	14.7	14.9	14.8	14.9	0.0	15.0

BW(MHz)	Modulation	Mode	RB Allocation	RB offset	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit	Measured Pwr (dBm)						MPR	Tune-up Limit
					647000	650600	654200	657800	661400	665000			647000	650600	654200	657800	661400	665000			647000	650600	654200	657800	661400	665000		
					3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz			3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz			3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz		
10 MHz	DFT-s-OFDM	π/2 BPSK	1	1	18.5	18.5	18.8	18.9	18.9	18.9	0.0	19.0	17.5	17.6	17.6	17.7	17.8	17.4	0.0	18.0	14.2	14.4	14.5	14.7	14.9	14.9	0.0	15.0
			1	12	18.5	18.6	18.8	18.9	19.0	18.8	0.0	19.0	17.5	17.7	17.7	17.8	17.8	17.4	0.0	18.0	14.1	14.4	14.6	14.8	14.9	14.8	0.0	15.0
			1	22	18.5	18.5	18.8	18.8	18.9	18.9	0.0	19.0	17.6	17.6	17.6	17.7	17.8	17.3	0.0	18.0	14.2	14.4	14.6	14.7	14.9	14.8	0.0	15.0
			12	0	18.4	18.5	18.7	18.9	18.9	18.9	0.0	19.0	17.5	17.6	17.7	17.8	17.7	17.4	0.0	18.0	14.1	14.3	14.6	14.7	14.9	14.8	0.0	15.0
			12	6	18.4	18.5	18.7	18.9	18.9	19.0	0.0	19.0	17.5	17.6	17.6	17.8	17.8	17.4	0.0	18.0	14.1	14.3	14.5	14.7	14.9	14.7	0.0	15.0
			12	12	18.4	18.5	18.7	18.8	19.0	19.0	0.0	19.0	17.5	17.6	17.6	17.7	17.7	17.4	0.0	18.0	14.1	14.3	14.5	14.7	14.9	14.8	0.0	15.0
			24	0	18.5	18.5	18.7	18.9	19.0	18.6	0.0	19.0	17.5	17.6	17.7	17.8	17.8	17.4	0.0	18.0	14.1	14.3	14.6	14.7	14.9	14.8	0.0	15.0
		QPSK	1	1	18.4	18.6	18.8	19.0	19.0	18.9	0.0	19.0	17.4	17.6	17.6	17.8	17.8	17.3	0.0	18.0	14.1	14.3	14.5	14.8	14.8	14.9	0.0	15.0
			1	12	18.4	18.6	18.7	18.9	19.0	19.0	0.0	19.0	17.5	17.7	17.7	17.9	17.8	17.4	0.0	18.0	14.2	13.3	14.5	14.8	14.9	14.8	0.0	15.0
			1	22	18.5	18.5	18.8	18.9	18.9	19.0	0.0	19.0	17.6	17.6	17.6	17.8	17.8	17.3	0.0	18.0	14.2	14.3	14.6	14.8	14.8	14.8	0.0	15.0
			12	0	18.4	18.5	18.6	18.9	18.9	19.0	0.0	19.0	17.5	17.6	17.7	17.8	17.1	17.4	0.0	18.0	14.1	14.3	14.5	14.7	14.8	14.9	0.0	15.0
			12	6	18.4	18.5	18.7	18.9	18.9	18.8	0.0	19.0	17.6	17.6	17.7	17.8	17.1	17.4	0.0	18.0	14.1	14.3	14.5	14.7	14.9	14.8	0.0	15.0
			12	12	18.4	18.5	18.7	18.9	18.9	18.9	0.0	19.0	17.5	17.6	17.7	17.8	17.1	17.4	0.0	18.0	14.1	14.3	14.6	14.7	12.9	14.8	0.0	15.0
			24	0	18.4	18.5	18.7	18.9	18.9	19.0	0.0	19.0	17.5	17.6	17.7	17.8	17.1	17.4	0.0	18.0	14.1	14.4	14.6	14.7	14.9	14.8	0.0	15.0
		16QAM	1	1	18.3	18.9	18.6	18.6	18.7	18.8	0.0	19.0	17.5	17.7	17.8	17.9	16.9	17.2	0.0	18.0	14.1	14.1	14.6	14.8	14.9	14.9	0.0	15.0
		64QAM	1	1	18.4	18.4	18.7	18.9	18.8	18.9	0.0	19.0	17.4	17.6	17.4	17.6	17.1	17.3	0.0	18.0	14.0	14.5	14.4	14.8	14.8	14.6	0.0	15.0
		256QAM	1	1	18.8	18.9	18.8	18.8	18.8	18.8	0.0	19.0	17.6	17.9	17.7	17.7	17.5	17.6	0.0	18.0	14.4	14.5	14.7	15.0	14.7	14.8	0.0	15.0
	CP-OFDM	QPSK	1	1	18.4	18.5	18.8	18.9	18.9	18.8	0.0	19.0	17.4	17.6	17.7	17.8	17.1	17.3	0.0	18.0	14.1	14.3	14.6	14.8	14.9	14.9	0.0	15.0

Notes:

Voice/data/SRS0 were measured output power through FTM mode provided by manufacturer.

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NR Band n77(SRS1) – Upper Band – Measured Results

BW (MHz)	Mode	Maximum Allowed Average Power (dBm)																							
		DSI = 0, 1, 4							DSI = 3							DSI = 2									
		Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		650000		656000		662000			650000		656000		662000			650000		656000		662000		
		3750 MHz		3840 MHz		3930 MHz			3750 MHz		3840 MHz		3930 MHz			3750 MHz		3840 MHz		3930 MHz		
100 MHz	SRS CW	14.4				14.8		16.0	13.5				13.8		15.0	9.8				10.3		11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		649668		656000		662332			649668		656000		662332			649668		656000		662332		
		3745.02 MHz		3840 MHz		3934.98 MHz			3745.02 MHz		3840 MHz		3934.98 MHz			3745.02 MHz		3840 MHz		3934.98 MHz		
90 MHz	SRS CW	14.3		14.5		14.7		16.0	13.3		13.5		13.8		15.0	9.7		9.8		10.3		11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		649334		656000		662666			649334		656000		662666			649334		656000		662666		
		3740.01 MHz		3840 MHz		3939.99 MHz			3740.01 MHz		3840 MHz		3939.99 MHz			3740.01 MHz		3840 MHz		3939.99 MHz		
80 MHz	SRS CW	14.3		14.5		14.8		16.0	13.4		13.5		13.8		15.0	9.7		9.8		10.3		11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		649000	653666			658334	663000		649000	653666			658334	663000		649000	653666			658334	663000	
		3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz		3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz		3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz	
70 MHz	SRS CW	14.3	14.5			14.6	14.9	16.0	13.3	13.5			13.6	13.9	15.0	9.7	9.7			10.0	10.4	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		648668	653556			658444	663332		648668	653556			658444	663332		648668	653556			658444	663332	
		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz	
60 MHz	SRS CW	14.3	14.5			14.7	15.0	16.0	13.3	13.6			13.8	13.9	15.0	9.6	9.8			10.1	10.6	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		648334	652166	656000		659834	663666		648334	652166	656000		659834	663666		648334	652166	656000		659834	663666	
		3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz		3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz		3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz	
50 MHz	SRS CW	14.4	14.4	14.1		14.7	15.0	16.0	13.4	13.5	13.6		13.7	14.0	15.0	9.7	9.8	9.8		10.0	10.6	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		648000	651200	654400	657600	660800	664000		648000	651200	654400	657600	660800	664000		648000	651200	654400	657600	660800	664000	
		3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz		3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz		3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz	
40 MHz	SRS CW	14.6	14.7	14.8	14.9	14.9	15.2	16.0	13.6	13.7	13.8	13.9	13.9	14.2	15.0	10.0	9.9	9.9	10.1	10.4	10.6	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647668	651000	654334	657666	661000	664332		647668	651000	654334	657666	661000	664332		647668	651000	654334	657666	661000	664332	
		3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz		3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz		3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz	
30 MHz	SRS CW	14.6	14.7	14.8	14.9	14.9	15.2	16.0	13.6	13.8	13.8	13.9	14.0	14.3	15.0	9.9	10.0	10.0	10.1	10.4	10.5	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647334	650800	654266	657734	661200	664666		647334	650800	654266	657734	661200	664666		647334	650800	654266	657734	661200	664666	
		3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz		3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz		3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz	
20 MHz	SRS CW	14.5	14.6	14.6	14.8	14.9	15.2	16.0	13.5	13.6	13.7	13.9	14.0	14.2	15.0	9.8	9.9	9.9	10.1	10.4	10.6	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647168	650700	654234	657766	661300	664832		647168	650700	654234	657766	661300	664832		647168	650700	654234	657766	661300	664832	
		3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz		3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz		3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz	
15 MHz	SRS CW	14.5	14.6	14.6	14.9	14.9	15.2	16.0	13.5	13.6	13.7	13.9	14.0	14.2	15.0	9.9	10.0	9.9	10.1	10.4	10.7	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647000	650600	654200	657800	661400	665000		647000	650600	654200	657800	661400	665000		647000	650600	654200	657800	661400	665000	
		3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz		3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz		3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz	
10 MHz	SRS CW	14.4	14.5	14.6	14.6	14.7	15.1	16.0	13.4	13.5	13.7	13.6	13.8	14.1	15.0	9.8	9.8	9.8	10.0	10.2	10.6	11.0

Notes:

SRS1/SRS2/SRS3 were measured output power through FTM mode provided by manufacturer.

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NR Band n77(SRS2) – Upper Band – Measured Results

BW (MHz)	Mode	Maximum Allowed Average Power (dBm)																						
		DSI = 0, 1, 4							DSI = 3							DSI = 2								
		Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		650000		656000		662000			650000		656000		662000			650000		656000		662000		
		3750 MHz		3840 MHz		3930 MHz			3750 MHz		3840 MHz		3930 MHz			3750 MHz		3840 MHz		3930 MHz		
100 MHz	SRS CW	13.8				13.2		15.0	12.8				12.1		14.0	9.8				9.0		11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		649668		656000		662332			649668		656000		662332			649668		656000		662332		
		3745.02 MHz		3840 MHz		3934.98 MHz			3745.02 MHz		3840 MHz		3934.98 MHz			3745.02 MHz		3840 MHz		3934.98 MHz		
90 MHz	SRS CW	13.8		13.2		13.1		15.0	12.8		12.2		12.1		14.0	9.7		9.0		8.8		11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		649334		656000		662666			649334		656000		662666			649334		656000		662666		
		3740.01 MHz		3840 MHz		3939.99 MHz			3740.01 MHz		3840 MHz		3939.99 MHz			3740.01 MHz		3840 MHz		3939.99 MHz		
80 MHz	SRS CW	13.8		13.2		13.1		15.0	12.8		12.2		12.0		14.0	9.7		9.0		8.9		11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		649000	653666			658334	663000		649000	653666			658334	663000		649000	653666			658334	663000	
		3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz		3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz		3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz	
70 MHz	SRS CW	13.8	13.2			13.0	13.1	15.0	12.7	12.3			12.1	12.1	14.0	9.7	9.2			8.9	8.8	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		648668	653556			658444	663332		648668	653556			658444	663332		648668	653556			658444	663332	
		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz	
60 MHz	SRS CW	13.8	13.3			13.1	13.2	15.0	12.8	12.3			12.2	12.2	14.0	9.7	9.2			9.0	8.9	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		648334	652166	656000		659834	663666		648334	652166	656000		659834	663666		648334	652166	656000		659834	663666	
		3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz		3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz		3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz	
50 MHz	SRS CW	13.8	13.5	13.1		13.0	13.0	15.0	12.8	12.5	12.0		12.0	11.9	14.0	9.8	9.3	9.0		8.9	8.8	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		648000	651200	654400	657600	660800	664000		648000	651200	654400	657600	660800	664000		648000	651200	654400	657600	660800	664000	
		3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz		3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz		3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz	
40 MHz	SRS CW	14.1	13.9	13.6	13.3	13.3	13.3	15.0	13.0	12.9	12.5	12.4	12.3	12.3	14.0	10.0	9.7	9.5	9.1	9.2	9.2	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647668	651000	654334	657666	661000	664332		647668	651000	654334	657666	661000	664332		647668	651000	654334	657666	661000	664332	
		3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz		3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz		3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz	
30 MHz	SRS CW	14.1	13.9	13.5	13.4	13.4	13.2	15.0	13.0	12.9	12.5	12.4	12.3	12.3	14.0	10.0	9.8	9.5	9.2	9.2	9.2	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647334	650800	654266	657734	661200	664666		647334	650800	654266	657734	661200	664666		647334	650800	654266	657734	661200	664666	
		3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz		3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz		3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz	
20 MHz	SRS CW	13.8	13.9	13.5	13.3	13.3	13.1	15.0	12.8	12.9	12.4	12.3	12.3	12.1	14.0	9.8	9.7	9.2	9.1	9.0	9.1	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647168	650700	654234	657766	661300	664832		647168	650700	654234	657766	661300	664832		647168	650700	654234	657766	661300	664832	
		3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz		3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz		3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz	
15 MHz	SRS CW	13.9	13.9	13.5	13.2	13.3	13.1	15.0	12.8	12.9	12.4	12.1	12.3	12.1	14.0	9.8	9.7	9.3	9.1	9.1	9.1	11.0
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647000	650600	654200	657800	661400	665000		647000	650600	654200	657800	661400	665000		647000	650600	654200	657800	661400	665000	
		3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz		3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz		3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz	
10 MHz	SRS CW	13.7	13.8	13.3	13.0	13.2	13.0	15.0	12.7	12.7	12.2	12.0	12.1	11.9	14.0	9.6	9.6	9.2	8.8	8.9	8.9	11.0

Notes:

SRS1/SRS2/SRS3 were measured output power through FTM mode provided by manufacturer.

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NR Band n77(SRS3) – Upper Band – Measured Results

BW (MHz)	Mode	Maximum Allowed Average Power (dBm)																							
		DSI = 0, 1, 4							DSI = 3							DSI = 2									
		Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		650000		656000		662000			650000		656000		662000			650000		656000		662000		
		3750 MHz		3840 MHz		3930 MHz			3750 MHz		3840 MHz		3930 MHz			3750 MHz		3840 MHz		3930 MHz		
100 MHz	SRS CW	14.0				14.7		15.0	13.1				13.7		14.0	9.6				10.7		11.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		649668		656000		662332			649668		656000		662332			649668		656000		662332		
		3745.02 MHz		3840 MHz		3934.98 MHz			3745.02 MHz		3840 MHz		3934.98 MHz			3745.02 MHz		3840 MHz		3934.98 MHz		
90 MHz	SRS CW	13.9		14.7		14.7		15.0	12.9		13.7		13.8		14.0	9.5		10.6		10.7		11.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		649334		656000		662666			649334		656000		662666			649334		656000		662666		
		3740.01 MHz		3840 MHz		3939.99 MHz			3740.01 MHz		3840 MHz		3939.99 MHz			3740.01 MHz		3840 MHz		3939.99 MHz		
80 MHz	SRS CW	13.8		14.7		14.8		15.0	12.8		13.8		13.8		14.0	9.4		10.6		10.7		11.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		649000	653666			658334	663000		649000	653666			658334	663000		649000	653666			658334	663000	
		3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz		3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz		3735 MHz	3804.99 MHz			3875.01 MHz	3945 MHz	
70 MHz	SRS CW	13.8	14.5			14.8	14.8	15.0	12.8	13.5			13.9	13.8	14.0	9.3	10.3			10.8	10.7	11.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		648668	653556			658444	663332		648668	653556			658444	663332		648668	653556			658444	663332	
		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz		3730.02 MHz	3803.34 MHz			3876.66 MHz	3949.98 MHz	
60 MHz	SRS CW	13.7	14.6			14.9	14.8	15.0	12.7	13.6			13.9	13.9	14.0	9.3	10.4			10.9	10.8	11.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		648334	652166	656000		659834	663666		648334	652166	656000		659834	663666		648334	652166	656000		659834	663666	
		3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz		3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz		3725.01 MHz	3782.49 MHz	3840 MHz		3897.51 MHz	3954.99 MHz	
50 MHz	SRS CW	13.6	14.2	14.7		14.8	14.8	15.0	12.6	13.1	13.7		13.8	13.8	14.0	9.3	10.0	10.6		10.8	10.9	11.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		648000	651200	654400	657600	660800	664000		648000	651200	654400	657600	660800	664000		648000	651200	654400	657600	660800	664000	
		3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz		3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz		3720 MHz	3768 MHz	3816 MHz	3864 MHz	3912 MHz	3960 MHz	
40 MHz	SRS CW	13.7	14.4	14.8	14.9	15.0	15.0	15.0	12.7	13.3	13.7	13.9	13.9	13.9	14.0	9.6	10.0	10.6	11.0	11.0	11.1	11.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647668	651000	654334	657666	661000	664332		647668	651000	654334	657666	661000	664332		647668	651000	654334	657666	661000	664332	
		3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz		3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz		3715.02 MHz	3765 MHz	3815.01 MHz	3864.99 MHz	3915 MHz	3964.98 MHz	
30 MHz	SRS CW	13.6	14.2	14.6	14.9	14.9	14.9	15.0	12.6	13.2	13.7	13.9	13.9	13.9	14.0	9.5	10.0	10.5	11.0	11.1	11.1	11.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647334	650800	654266	657734	661200	664666		647334	650800	654266	657734	661200	664666		647334	650800	654266	657734	661200	664666	
		3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz		3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz		3710.01 MHz	3762 MHz	3813.99 MHz	3866.01 MHz	3918 MHz	3969.99 MHz	
20 MHz	SRS CW	13.5	14.1	14.5	14.8	15.0	14.8	15.0	12.5	13.1	13.6	13.9	13.9	13.8	14.0	9.3	9.9	10.5	11.0	11.1	11.0	11.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647168	650700	654234	657766	661300	664832		647168	650700	654234	657766	661300	664832		647168	650700	654234	657766	661300	664832	
		3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz		3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz		3707.52 MHz	3760.5 MHz	3813.51 MHz	3866.49 MHz	3919.5 MHz	3972.48 MHz	
15 MHz	SRS CW	13.5	14.0	14.5	14.9	14.9	14.8	15.0	12.5	13.1	13.5	13.9	13.9	13.8	14.0	9.3	9.9	10.5	10.9	11.1	10.9	11.5
BW (MHz)	Mode	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit	Measured Pwr (dBm)						Tune-up Limit
		647000	650600	654200	657800	661400	665000		647000	650600	654200	657800	661400	665000		647000	650600	654200	657800	661400	665000	
		3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz		3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz		3705 MHz	3759 MHz	3813 MHz	3867 MHz	3921 MHz	3975 MHz	
10 MHz	SRS CW	13.5	14.0	14.6	14.7	14.8	14.8	15.0	12.5	13.0	13.6	13.8	13.8	13.8	14.0	9.2	9.6	10.4	10.8	10.9	10.8	11.5

Notes:

SRS1/SRS2/SRS3 were measured output power through FTM mode provided by manufacturer.

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9.5. Wi-Fi 2.4 GHz (DTS Band)

WLAN output power results – Normal mode

Antenna	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
					Max. Average Power			Reduced Average Power		
					Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
WiFi 2.4G SISO Ant.2	802.11b	1 Mbps	1	2412.0	17.37	18.0	Yes	13.74	14.0	Yes
			6	2437.0	17.19			13.84		
			11	2462.0	17.23			13.70		
			12	2467.0	Not Required	9.0	No	Not Required	10.0	No
			13	2472.0		3.0			3.0	
	802.11g	6 Mbps	1	2412.0	Not Required	17.0	No	Not Required	14.0	No
			6	2437.0						
			11	2462.0						
			12	2467.0		6.0			6.0	
			13	2472.0		0.0			0.0	
	802.11n	6.5 Mbps	1	2412.0	Not Required	17.0	No	Not Required	14.0	No
			6	2437.0						
			11	2462.0						
			12	2467.0		6.0			6.0	
			13	2472.0		0.0			0.0	
	802.11ax	7.3 Mbps	1	2412.0	Not Required	17.0	No	Not Required	14.0	No
			6	2437.0						
			11	2462.0						
			12	2467.0		6.0			6.0	
			13	2472.0		0.0			0.0	
WiFi 2.4G MIMO Ant.1	802.11b	1 Mbps	1	2412.0	16.95	18.0	Yes	13.86	14.0	Yes
			6	2437.0	16.48			13.62		
			11	2462.0	17.13			13.61		
			12	2467.0	Not Required	6.0	No	Not Required	6.0	No
			13	2472.0		0.0			0.0	
	802.11g	6 Mbps	1	2412.0	Not Required	17.0	No	Not Required	14.0	No
			6	2437.0						
			11	2462.0						
			12	2467.0		6.0			6.0	
			13	2472.0		0.0			0.0	
	802.11n	6.5 Mbps	1	2412.0	Not Required	17.0	No	Not Required	14.0	No
			6	2437.0						
			11	2462.0						
			12	2467.0		6.0			6.0	
			13	2472.0		0.0			0.0	
	802.11ax	7.3 Mbps	1	2412.0	Not Required	17.0	No	Not Required	14.0	No
			6	2437.0						
			11	2462.0						
			12	2467.0		6.0			6.0	
			13	2472.0		0.0			0.0	
WiFi 2.4G MIMO Ant.2	802.11b	1 Mbps	1	2412.0	17.62	18.0	Yes	13.25	14.0	Yes
			6	2437.0	17.76			13.45		
			11	2462.0	17.46			12.78		
			12	2467.0	Not Required	6.0	No	Not Required	6.0	No
			13	2472.0		0.0			0.0	
	802.11g	6 Mbps	1	2412.0	Not Required	17.0	No	Not Required	14.0	No
			6	2437.0						
			11	2462.0						
			12	2467.0		6.0			6.0	
			13	2472.0		0.0			0.0	
	802.11n	6.5 Mbps	1	2412.0	Not Required	17.0	No	Not Required	14.0	No
			6	2437.0						
			11	2462.0						
			12	2467.0		6.0			6.0	
			13	2472.0		0.0			0.0	
	802.11ax	7.3 Mbps	1	2412.0	Not Required	17.0	No	Not Required	14.0	No
			6	2437.0						
			11	2462.0						
			12	2467.0		6.0			6.0	
			13	2472.0		0.0			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.

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WLAN output power results – RSDB mode

Antenna	Mode	Data Rate	Ch #	Freq. (MHz)	RSDB WLAN mode power		
					Max. Average Power		
					Meas. Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
WiFi 2.4G SISO Ant.2	802.11b	1 Mbps	1	2412.0	3.64	5.0	Yes
			6	2437.0	3.61		
			11	2462.0	3.15		
			12	2467.0	3.05		No
			13	2472.0	3.01		
	802.11g	6 Mbps	1	2412.0	Not Required	5.0	No
			6	2437.0			
			11	2462.0			
			12	2467.0			
			13	2472.0			
	802.11n	6.5 Mbps	1	2412.0	Not Required	5.0	No
			6	2437.0			
			11	2462.0			
			12	2467.0			
			13	2472.0			
	802.11ax	7.3 Mbps	1	2412.0	Not Required	5.0	No
			6	2437.0			
			11	2462.0			
			12	2467.0			
			13	2472.0			
WiFi 2.4G MIMO Ant.1	802.11b	1 Mbps	1	2412.0	3.61	5.0	Yes
			6	2437.0	3.22		
			11	2462.0	3.31		
			12	2467.0	3.05		No
			13	2472.0	3.01		
	802.11g	6 Mbps	1	2412.0	Not Required	5.0	No
			6	2437.0			
			11	2462.0			
			12	2467.0			
			13	2472.0			
	802.11n	6.5 Mbps	1	2412.0	Not Required	5.0	No
			6	2437.0			
			11	2462.0			
			12	2467.0			
			13	2472.0			
	802.11ax	7.3 Mbps	1	2412.0	Not Required	5.0	No
			6	2437.0			
			11	2462.0			
			12	2467.0			
			13	2472.0			
WiFi 2.4G MIMO Ant.2	802.11b	1 Mbps	1	2412.0	3.75	5.0	Yes
			6	2437.0	3.65		
			11	2462.0	3.30		
			12	2467.0	3.02		No
			13	2472.0	2.98		
	802.11g	6 Mbps	1	2412.0	Not Required	5.0	No
			6	2437.0			
			11	2462.0			
			12	2467.0			
			13	2472.0			
	802.11n	6.5 Mbps	1	2412.0	Not Required	5.0	No
			6	2437.0			
			11	2462.0			
			12	2467.0			
			13	2472.0			
	802.11ax	7.3 Mbps	1	2412.0	Not Required	5.0	No
			6	2437.0			
			11	2462.0			
			12	2467.0			
			13	2472.0			

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.

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

WLAN output power Results – Normal mode SISO (Ant.1 only)

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
						Max. Average Power			Reduced Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz SISO Ant.1	5.3 (UNII 2A)	802.11a	6 Mbps	52	5260	15.36	16.0	Yes	11.42	12.0	Yes
				56	5280	15.21			11.82		
				60	5300	15.44			11.42		
				64	5320	15.31			11.71		
	5.5 (U-NII 2C)	802.11a	6 Mbps	100	5500	15.40	16.0	Yes	11.54	12.0	Yes
				120	5600	15.67			11.64		
				124	5620	15.52			11.51		
				144	5720	15.62			11.57		
	5.8 (U-NII 3)	802.11a	6 Mbps	149	5745	15.44	16.0	Yes	11.40	12.0	Yes
				157	5785	15.17			11.32		
				165	5825	15.43			11.85		
	5.9 (U-NII 4)	802.11a	6 Mbps	169	5845	15.38	16.0	Yes	11.79	12.0	Yes
				173	5865	15.54			11.56		
				177	5885	15.59			11.53		

WLAN output power Results – Normal mode MIMO (Ant.1)

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
						Max. Average Power			Reduced Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.1	5.3 (UNII 2A)	802.11a	6 Mbps	52	5260	Not Required	16.0	No	Not Required	12.0	No
				56	5280						
				60	5300						
				64	5320						
		802.11n (HT20)	6.5 Mbps	52	5260	Not Required	16.0	No	Not Required	12.0	No
				56	5280						
				60	5300						
				64	5320						
		802.11n (HT40)	13.5 Mbps	54	5270	15.08	16.0	Yes	Not Required	12.0	No
				62	5310	14.64					
		802.11ac (VHT20)	6.5 Mbps	52	5260	Not Required	16.0	No	Not Required	12.0	No
				56	5280						
				60	5300						
				64	5320						
		802.11ac (VHT40)	13.5 Mbps	54	5270	Not Required	16.0	No	Not Required	12.0	No
				62	5310						
		802.11ac (VHT80)	29.3 Mbps	58	5290	Not Required	15.0	No	11.60	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	52	5260	Not Required	16.0	No	Not Required	12.0	No
				56	5280						
				60	5300						
				64	5320						
		802.11ax (HE40)	14.6 Mbps	54	5270	Not Required	16.0	No	Not Required	12.0	No
				62	5310						
		802.11ax (HE80)	36.0 Mbps	58	5290	Not Required	15.0	No	Not Required	12.0	No
	U-NII 1 & U-NII 2A	802.11ac (VHT160)	58.5 Mbps	50	5250	Not Required	14.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	50	5250	Not Required	14.0	No	Not Required	12.0	No
	5.5 (U-NII 2C)	802.11a	6 Mbps	100	5500	Not Required	16.0	No	Not Required	12.0	No
				120	5600						
				124	5620						
				144	5720						
		802.11n (HT20)	6.5 Mbps	100	5500	Not Required	15.0	No	Not Required	12.0	No
				120	5600						
				124	5620						
				144	5720						
		802.11n (HT40)	13.5 Mbps	102	5510	14.50	16.0	Yes	Not Required	12.0	No
				118	5590	14.82					
				126	5630	14.62					
				142	5710	15.52					
		802.11ac (VHT20)	6.5 Mbps	100	5500	Not Required	15.0	No	Not Required	12.0	No
				120	5600						
				124	5620						
				144	5720						
		802.11ac (VHT40)	13.5 Mbps	102	5510	Not Required	16.0	No	Not Required	12.0	No
				118	5590						
				126	5630						
				142	5710						
		802.11ac (VHT80)	29.3 Mbps	106	5530	Not Required	15.0	No	10.55	12.0	Yes
				122	5610				10.91		
				138	5690				11.13		
		802.11ac (VHT160)	58.5 Mbps	114	5570	Not Required	14.0	No	Not Required	12.0	No
		802.11ax (HE20)	7.3 Mbps	100	5500	Not Required	15.0	No	Not Required	12.0	No
				120	5600						
				124	5620						
				144	5720						
		802.11ax (HE40)	14.6 Mbps	102	5510	Not Required	16.0	No	Not Required	12.0	No
				118	5590						
				126	5630						
				142	5710						
		802.11ax (HE80)	36.0 Mbps	106	5530	Not Required	15.0	No	Not Required	12.0	No
				122	5610						
				138	5690						
		802.11ax (HE160)	72.0 Mbps	114	5570	Not Required	14.0	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 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.

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

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
						Max. Average Power			Reduced Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.1	5.8 (U-NII 3)	802.11a	6 Mbps	149	5745	Not Required	16.0	No	Not Required	12.0	No
				157	5785						
				165	5825						
		802.11n (HT20)	6.5 Mbps	149	5745	Not Required	16.0	No	Not Required	12.0	No
				157	5785						
				165	5825						
		802.11n (HT40)	13.5 Mbps	151	5755	15.40	16.0	Yes	Not Required	12.0	No
				159	5795	15.25					
		802.11ac (VHT20)	6.5 Mbps	149	5745	Not Required	16.0	No	Not Required	12.0	No
				157	5785						
				165	5825						
		802.11ac (VHT40)	13.5 Mbps	151	5755	Not Required	16.0	No	Not Required	12.0	No
				159	5795						
		802.11ac (VHT80)	29.3 Mbps	155	5775	Not Required	15.0	No	10.69	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	149	5745	Not Required	16.0	No	Not Required	12.0	No
				157	5785						
				165	5825						
		802.11ax (HE40)	14.6 Mbps	151	5755	Not Required	16.0	No	Not Required	12.0	No
				159	5795						
		802.11ax (HE80)	36.0 Mbps	155	5775	Not Required	15.0	No	Not Required	12.0	No
	5.9 (U-NII 4)	802.11a	6 Mbps	169	5845	Not Required	16.0	No	Not Required	12.0	No
				173	5865						
				177	5885						
		802.11n (HT20)	6.5 Mbps	169	5845	Not Required	16.0	No	Not Required	12.0	No
				173	5865						
				177	5885						
		802.11n (HT40)	13.5 Mbps	167	5835	15.21	16.0	Yes	Not Required	12.0	No
				175	5875	15.87					
		802.11ac (VHT20)	6.5 Mbps	169	5845	Not Required	16.0	No	Not Required	12.0	No
				173	5865						
				177	5885						
		802.11ac (VHT40)	13.5 Mbps	167	5835	Not Required	16.0	No	Not Required	12.0	No
				175	5875						
		802.11ac (VHT80)	29.3 Mbps	171	5855	Not Required	15.0	No	11.64	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	169	5845	Not Required	16.0	No	Not Required	12.0	No
				173	5865						
				177	5885						
		802.11ax (HE40)	14.6 Mbps	167	5835	Not Required	16.0	No	Not Required	12.0	No
				175	5875						
		802.11ax (HE80)	36.0 Mbps	171	5855	Not Required	15.0	No	Not Required	12.0	No
	U-NII 3 & U-NII 4	802.11ac (VHT160)	58.5 Mbps	163	5815	Not Required	14.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	163	5815	Not Required	14.0	No	Not Required	12.0	No

WLAN output power Results – Normal mode MIMO (Ant.2)

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
						Max. Average Power			Reduced Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.2	5.3 (UNII 2A)	802.11a	6 Mbps	52	5260	Not Required	16.0	No	Not Required	12.0	No
				56	5280						
				60	5300						
				64	5320						
		802.11n (HT20)	6.5 Mbps	52	5260	Not Required	16.0	No	Not Required	12.0	No
				56	5280						
				60	5300						
				64	5320						
		802.11n (HT40)	13.5 Mbps	54	5270	15.40	16.0	Yes	Not Required	12.0	No
				62	5310	15.52					
		802.11ac (VHT20)	6.5 Mbps	52	5260	Not Required	16.0	No	Not Required	12.0	No
				56	5280						
				60	5300						
				64	5320						
		802.11ac (VHT40)	13.5 Mbps	54	5270	Not Required	16.0	No	Not Required	12.0	No
				62	5310						
		802.11ac (VHT80)	29.3 Mbps	58	5290	Not Required	15.0	No	11.50	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	52	5260	Not Required	16.0	No	Not Required	12.0	No
				56	5280						
				60	5300						
				64	5320						
		802.11ax (HE40)	14.6 Mbps	54	5270	Not Required	16.0	No	Not Required	12.0	No
				62	5310						
		802.11ax (HE80)	36.0 Mbps	58	5290	Not Required	15.0	No	Not Required	12.0	No
	U-NII 1 & U-NII 2A	802.11ac (VHT160)	58.5 Mbps	50	5250	Not Required	14.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	50	5250	Not Required	14.0	No	Not Required	12.0	No

Note(s):

4. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
5. 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.
6. 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.

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

Antenna	Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	Normal WLAN mode power					
						Max. Average Power			Reduced Average Power		
						Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5GHz MIMO Ant.2	5.5 (U-NII 2C)	802.11a	6 Mbps	100	5500	Not Required	16.0	No	Not Required	12.0	No
				120	5600						
				124	5620						
				144	5720						
		802.11n (HT20)	6.5 Mbps	100	5500	Not Required	15.0	No	Not Required	12.0	No
				120	5600						
				124	5620						
				144	5720						
		802.11n (HT40)	13.5 Mbps	102	5510	15.89	16.0	Yes	Not Required	12.0	No
				118	5590	15.65					
				126	5630	15.62					
				142	5710	15.63					
		802.11ac (VHT20)	6.5 Mbps	100	5500	Not Required	15.0	No	Not Required	12.0	No
				120	5600						
				124	5620						
				144	5720						
		802.11ac (VHT40)	13.5 Mbps	102	5510	Not Required	16.0	No	Not Required	12.0	No
				118	5590						
				126	5630						
				142	5710						
		802.11ac (VHT80)	29.3 Mbps	106	5530	Not Required	15.0	No	11.64	12.0	Yes
				122	5610				11.71		
				138	5690				11.01		
		802.11ac (VHT160)	58.5 Mbps	114	5570	Not Required	14.0	No	Not Required	12.0	No
		802.11ax (HE20)	7.3 Mbps	100	5500	Not Required	15.0	No	Not Required	12.0	No
				120	5600						
				124	5620						
				144	5720						
		802.11ax (HE40)	14.6 Mbps	102	5510	Not Required	16.0	No	Not Required	12.0	No
				118	5590						
				126	5630						
				142	5710						
		802.11ax (HE80)	36.0 Mbps	106	5530	Not Required	15.0	No	Not Required	12.0	No
				122	5610						
				138	5690						
		802.11ax (HE160)	72.0 Mbps	114	5570	Not Required	14.0	No	Not Required	12.0	No
	5.8 (U-NII 3)	802.11a	6 Mbps	149	5745	Not Required	16.0	No	Not Required	12.0	No
				157	5785						
				165	5825						
		802.11n (HT20)	6.5 Mbps	149	5745	Not Required	16.0	No	Not Required	12.0	No
				157	5785						
				165	5825						
		802.11n (HT40)	13.5 Mbps	151	5755	15.76	16.0	Yes	Not Required	12.0	No
				159	5795	15.69					
		802.11ac (VHT20)	6.5 Mbps	149	5745	Not Required	16.0	No	Not Required	12.0	No
				157	5785						
				165	5825						
		802.11ac (VHT40)	13.5 Mbps	151	5755	Not Required	16.0	No	Not Required	12.0	No
				159	5795						
		802.11ac (VHT80)	29.3 Mbps	155	5775	Not Required	15.0	No	11.53	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	149	5745	Not Required	16.0	No	Not Required	12.0	No
				157	5785						
				165	5825						
		802.11ax (HE40)	14.6 Mbps	151	5755	Not Required	16.0	No	Not Required	12.0	No
				159	5795						
		802.11ax (HE80)	36.0 Mbps	155	5775	Not Required	15.0	No	Not Required	12.0	No
	5.9 (U-NII 4)	802.11a	6 Mbps	169	5845	Not Required	16.0	No	Not Required	12.0	No
				173	5865						
				177	5885						
		802.11n (HT20)	6.5 Mbps	169	5845	Not Required	16.0	No	Not Required	12.0	No
				173	5865						
				177	5885						
		802.11n (HT40)	13.5 Mbps	167	5835	15.26	16.0	Yes	Not Required	12.0	No
				175	5875	14.71					
		802.11ac (VHT20)	6.5 Mbps	169	5845	Not Required	16.0	No	Not Required	12.0	No
				173	5865						
				177	5885						
		802.11ac (VHT40)	13.5 Mbps	167	5835	Not Required	16.0	No	Not Required	12.0	No
				175	5875						
		802.11ac (VHT80)	29.3 Mbps	171	5855	Not Required	15.0	No	11.86	12.0	Yes
		802.11ax (HE20)	7.3 Mbps	169	5845	Not Required	16.0	No	Not Required	12.0	No
				173	5865						
				177	5885						
		802.11ax (HE40)	14.6 Mbps	167	5835	Not Required	16.0	No	Not Required	12.0	No
				175	5875						
		802.11ax (HE80)	36.0 Mbps	171	5855	Not Required	15.0	No	Not Required	12.0	No
	U-NII 3 & U-NII 4	802.11ac (VHT160)	58.5 Mbps	163	5815	Not Required	14.0	No	Not Required	12.0	No
		802.11ax (HE160)	72.0 Mbps	163	5815	Not Required	14.0	No	Not Required	12.0	No

Note(s):

7. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1, b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.
8. 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.
9. 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.

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WLAN output power Results – RSDB mode MIMO

Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	RSDB MIMO WLAN mode power			RSDB MIMO WLAN mode power		
					Max. Average Power - Ant.1			Max. Average Power - Ant.2		
					Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5.3 (UNII 2A)	802.11a	6 Mbps	52	5260	Not Required	9.0	No	Not Required	9.0	No
			56	5280						
			60	5300						
			64	5320						
	802.11n (HT20)	6.5 Mbps	52	5260	Not Required	9.0	No	Not Required	9.0	No
			56	5280						
			60	5300						
			64	5320						
	802.11n (HT40)	13.5 Mbps	54	5270	Not Required	9.0	No	Not Required	9.0	No
			62	5310						
	802.11ac (VHT20)	6.5 Mbps	52	5260	Not Required	9.0	No	Not Required	9.0	No
			56	5280						
			60	5300						
			64	5320						
	802.11ac (VHT40)	13.5 Mbps	54	5270	Not Required	9.0	No	Not Required	9.0	No
			62	5310						
	802.11ac (VHT80)	29.3 Mbps	58	5290	8.11	9.0	Yes	8.40	9.0	Yes
	802.11ax (HE20)	7.3 Mbps	52	5260	Not Required	9.0	No	Not Required	9.0	No
			56	5280						
			60	5300						
			64	5320						
	802.11ax (HE40)	14.6 Mbps	54	5270	Not Required	9.0	No	Not Required	9.0	No
			62	5310						
	802.11ax (HE80)	36.0 Mbps	58	5290	Not Required	9.0	No	Not Required	9.0	No
U-NII 1 & U-NII 2A	802.11ac (VHT160)	58.5 Mbps	50	5250	Not Required	9.0	No	Not Required	9.0	No
	802.11ax (HE160)	72.0 Mbps	50	5250	Not Required	9.0	No	Not Required	9.0	No
5.5 (U-NII 2C)	802.11a	6 Mbps	100	5500	Not Required	9.0	No	Not Required	9.0	No
			120	5600						
			124	5620						
			144	5720						
	802.11n (HT20)	6.5 Mbps	100	5500	Not Required	9.0	No	Not Required	9.0	No
			120	5600						
			124	5620						
			144	5720						
	802.11n (HT40)	13.5 Mbps	102	5510	Not Required	9.0	No	Not Required	9.0	No
			118	5590						
			126	5630						
			142	5710						
	802.11ac (VHT20)	6.5 Mbps	100	5500	Not Required	9.0	No	Not Required	9.0	No
			120	5600						
			124	5620						
			144	5720						
	802.11ac (VHT40)	13.5 Mbps	102	5510	Not Required	9.0	No	Not Required	9.0	No
			118	5590						
			126	5630						
			142	5710						
	802.11ac (VHT80)	29.3 Mbps	106	5530	7.92	9.0	Yes	8.80	9.0	Yes
			122	5610	7.71			8.68		
			138	5690	8.68			8.69		
	802.11ac (VHT160)	58.5 Mbps	114	5570	Not Required	9.0	No	Not Required	9.0	No
	802.11ax (HE20)	7.3 Mbps	100	5500	Not Required	9.0	No	Not Required	9.0	No
			120	5600						
			124	5620						
			144	5720						
	802.11ax (HE40)	14.6 Mbps	102	5510	Not Required	9.0	No	Not Required	9.0	No
			118	5590						
			126	5630						
			142	5710						
	802.11ax (HE80)	36.0 Mbps	106	5530	Not Required	9.0	No	Not Required	9.0	No
			122	5610						
			138	5690						
	802.11ax (HE160)	72.0 Mbps	114	5570	Not Required	9.0	No	Not Required	9.0	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 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.

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WLAN output power Results – RSDB mode MIMO (Continued)

Band (GHz)	Mode	Data Rate	Ch #	Freq. (MHz)	RSDB MIMO WLAN mode power			RSDB MIMO WLAN mode power		
					Max. Average Power - Ant.1			Max. Average Power - Ant.2		
					Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)	Avg Pwr (dBm)	Max. Tune-up Limit (dBm)	SAR Test (Yes/No)
5.8 (U-NII 3)	802.11a	6 Mbps	149	5745	Not Required	9.0	No	Not Required	9.0	No
			157	5785						
			165	5825						
	802.11n (HT20)	6.5 Mbps	149	5745	Not Required	9.0	No	Not Required	9.0	No
			157	5785						
			165	5825						
	802.11n (HT40)	13.5 Mbps	151	5755	Not Required	9.0	No	Not Required	9.0	No
			159	5795						
	802.11ac (VHT20)	6.5 Mbps	149	5745	Not Required	9.0	No	Not Required	9.0	No
			157	5785						
			165	5825						
	802.11ac (VHT40)	13.5 Mbps	151	5755	Not Required	9.0	No	Not Required	9.0	No
			159	5795						
	802.11ac (VHT80)	29.3 Mbps	155	5775	7.19	9.0	Yes	8.52	9.0	Yes
	802.11ax (HE20)	7.3 Mbps	149	5745	Not Required	9.0	No	Not Required	9.0	No
			157	5785						
			165	5825						
	802.11ax (HE40)	14.6 Mbps	151	5755	Not Required	9.0	No	Not Required	9.0	No
			159	5795						
	802.11ax (HE80)	36.0 Mbps	155	5775	Not Required	9.0	No	Not Required	9.0	No
5.9 (U-NII 4)	802.11a	6 Mbps	169	5845	Not Required	9.0	No	Not Required	9.0	No
			173	5865						
			177	5885						
	802.11n (HT20)	6.5 Mbps	169	5845	Not Required	9.0	No	Not Required	9.0	No
			173	5865						
			177	5885						
	802.11n (HT40)	13.5 Mbps	167	5835	Not Required	9.0	No	Not Required	9.0	No
			175	5875						
	802.11ac (VHT20)	6.5 Mbps	169	5845	Not Required	9.0	No	Not Required	9.0	No
			173	5865						
			177	5885						
	802.11ac (VHT40)	13.5 Mbps	167	5835	Not Required	9.0	No	Not Required	9.0	No
			175	5875						
	802.11ac (VHT80)	29.3 Mbps	171	5855	8.34	9.0	Yes	8.84	9.0	Yes
	802.11ax (HE20)	7.3 Mbps	169	5845	Not Required	9.0	No	Not Required	9.0	No
			173	5865						
			177	5885						
	802.11ax (HE40)	14.6 Mbps	167	5835	Not Required	9.0	No	Not Required	9.0	No
			175	5875						
	802.11ax (HE80)	36.0 Mbps	171	5855	Not Required	9.0	No	Not Required	9.0	No
U-NII 3 & U-NII 4	802.11ac (VHT160)	58.5 Mbps	163	5815	Not Required	9.0	No	Not Required	9.0	No
	802.11ax (HE160)	72.0 Mbps	163	5815	Not Required	9.0	No	Not Required	9.0	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 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.

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9.7. Bluetooth

Bluetooth output power Results

Antenna	Mode	Ch #	Freq. (MHz)	Maximum Average Pow er (dBm)		Reduced Average Pow er (dBm) RCV Back-off	
				Meas Pw r	Tune-up Limit	Meas Pw r	Tune-up Limit
Ant.1	GFSK BDR	0	2402	13.2	14.0	10.2	12.0
		39	2441	13.7		11.4	
		78	2480	13.0		10.7	
	EDR	0	2402	9.6	11.0		
		39	2441	10.1			
		78	2480	10.2			
	LE - 1 Mbps	0	2402	12.7	14.5		
		19	2440	13.6			
		39	2480	12.3			
Ant.2	GFSK BDR	0	2402	13.9	14.0	12.3	12.5
		39	2441	12.5		11.8	
		78	2480	11.1		10.1	
	EDR	0	2402	11.0	11.0		
		39	2441	9.6			
		78	2480	7.8			
	LE - 1 Mbps	0	2402	13.9	14.5		
		19	2440	13.4			
		39	2480	11.8			

Note(s):
BLE doesn't support RCV audio mode.

Duty Factor Measured Results

Mode	Type	T on (ms)	Period (ms)	Maximum Duty Cyle	Measured Duty Cycle	Crest Factor (maximum duty/ measured duty cycle)
GFSK	DH5	2.877	3.751	78.13%	76.70%	1.02
LE	1 Mbps 255 pkt	2.129	2.499	84.80%	85.19%	1.00

Note(s):
1. Maximum Duty Cycle is mentioned in Operational description. Detail of BT Duty Cycle refer to Operational description.
2. Duty cycle 76.70% was used for SAR test in Head exposure condition, and then scale up to max. duty cycle 78.13%.
3. Duty cycle 85.19% was used for SAR test in Body-worn & Hotspot exposure conditions, and it is higher than max. duty cycle.

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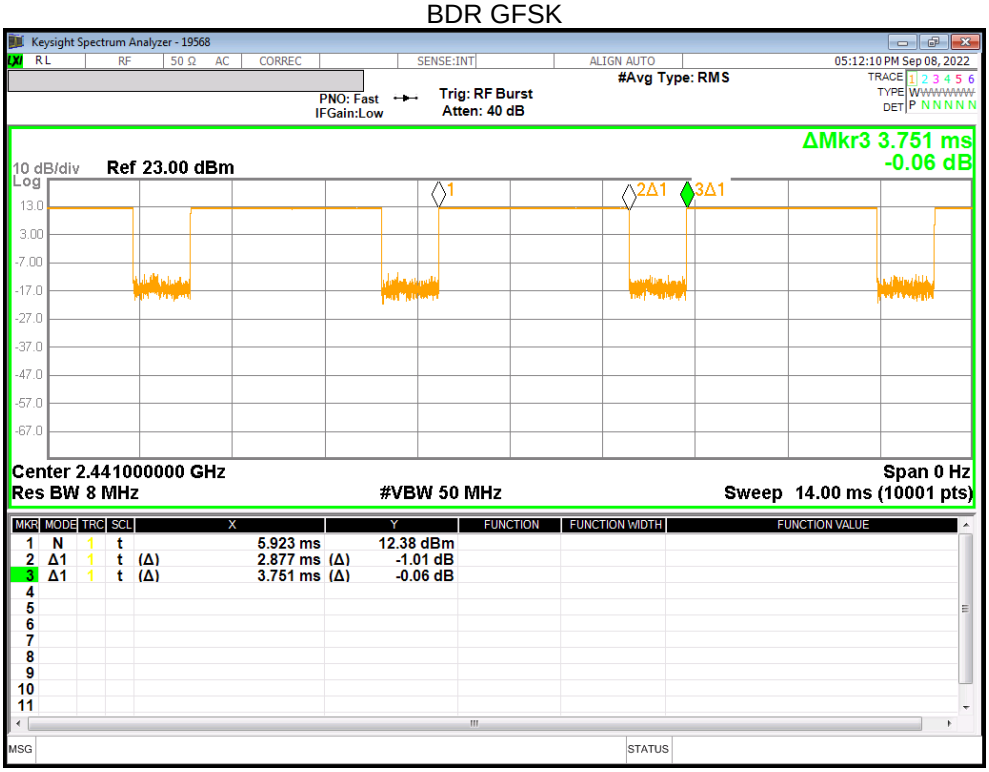
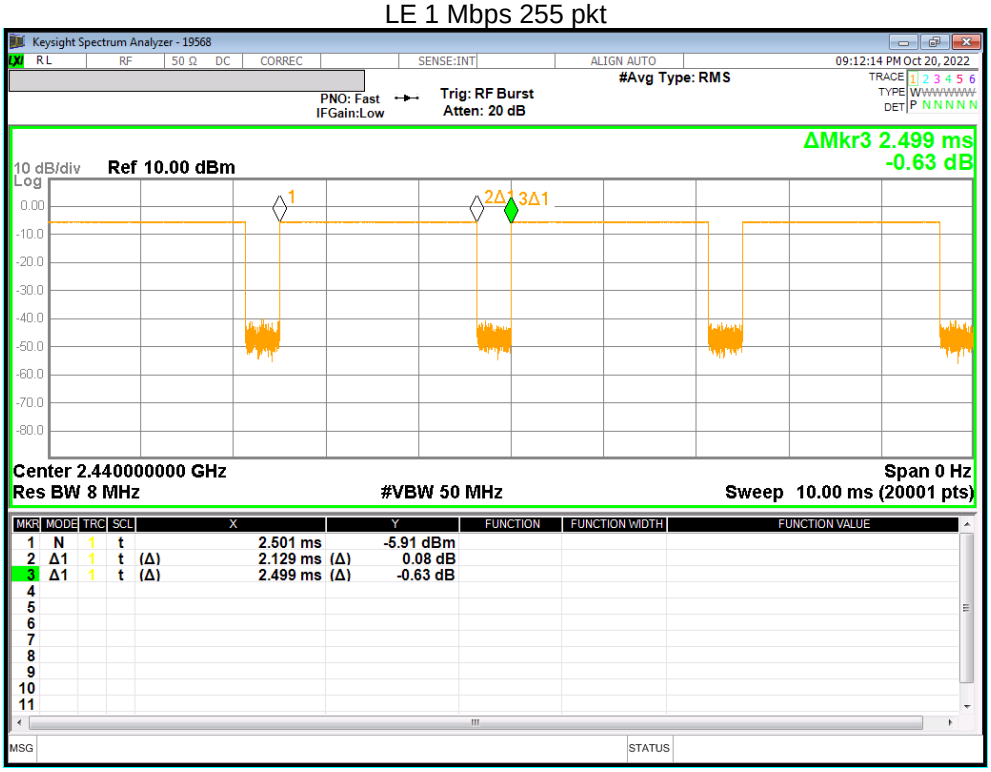
Duty Cycle plots

BDR GFSK



LE 1 Mbps 255 pkt



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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.

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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*.

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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	
Main1 Ant.	Head	GPRS 2 Slots	0	Left Touch	251	848.8	32.00	31.22	0.173	0.207	1
				Left Tilt	251	848.8	32.00	31.22	0.104	0.124	
				Right Touch	251	848.8	32.00	31.22	0.260	0.311	
				Right Tilt	251	848.8	32.00	31.22	0.130	0.156	
	Body-worn	GPRS 2 Slots	15	Rear	251	848.8	32.00	31.22	0.244	0.292	2
				Front	251	848.8	32.00	31.22	0.198	0.237	
	Hotspot	GPRS 2 Slots	10	Rear	251	848.8	32.00	31.22	0.460	0.551	3
				Front	251	848.8	32.00	31.22	0.280	0.335	
				Edge 2	251	848.8	32.00	31.22	0.351	0.420	
				Edge 3	251	848.8	32.00	31.22	0.217	0.260	
				Edge 4	251	848.8	32.00	31.22	0.167	0.200	

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	
Main1 Ant.	Head	GPRS 2 Slots	0	Left Touch	661	1880.0	29.00	27.52	0.084	0.118	4
				Left Tilt	661	1880.0	29.00	27.52	0.036	0.051	
				Right Touch	661	1880.0	29.00	27.52	0.046	0.064	
				Right Tilt	661	1880.0	29.00	27.52	0.032	0.045	
	Body-worn	GPRS 2 Slots	15	Rear	661	1880.0	29.00	27.52	0.338	0.475	5
				Front	661	1880.0	29.00	27.52	0.265	0.373	
	Hotspot	GPRS 4 Slots	10	Rear	661	1880.0	23.00	21.62	0.295	0.405	
				Front	661	1880.0	23.00	21.62	0.127	0.175	
				Edge 2	661	1880.0	23.00	21.62	0.038	0.052	
				Edge 3	512	1850.2	23.00	21.37	0.597	0.869	6
					661	1880.0	23.00	21.62	0.596	0.819	
					810	1909.8	23.00	21.80	0.594	0.783	
				Edge 4	661	1880.0	23.00	21.62	0.051	0.070	
Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		10-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main1 Ant.	Product Specific 10-g	GPRS 2 Slots	12	Edge 3	661	1880.0	29.00	27.52	0.508	0.714	
		GPRS 4 Slots	0	Edge 3	810	1909.8	23.00	22.18	1.070	1.292	7

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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	
Main1 Ant.	Head	Rel 99 RMC	0	Left Touch	9400	1880.0	24.00	23.11	0.147	0.180	8
				Left Tilt	9400	1880.0	24.00	23.11	0.085	0.104	
				Right Touch	9400	1880.0	24.00	23.11	0.076	0.093	
				Right Tilt	9400	1880.0	24.00	23.11	0.063	0.077	
	Body-worn	Rel 99 RMC	15	Rear	9262	1852.4	24.00	23.39	0.700	0.806	
					9400	1880.0	24.00	23.11	0.667	0.819	9
					9538	1907.6	24.00	23.58	0.544	0.599	
				Front	9400	1880.0	24.00	23.11	0.463	0.568	
	Hotspot	Rel 99 RMC	10	Rear	9400	1880.0	19.00	18.21	0.586	0.703	
				Front	9400	1880.0	19.00	18.21	0.477	0.572	
				Edge 2	9400	1880.0	19.00	18.21	0.065	0.078	
				Edge 3	9262	1852.4	19.00	18.21	0.880	1.056	10
					9400	1880.0	19.00	18.21	0.834	1.000	
					9538	1907.6	19.00	18.48	0.856	0.965	
				Edge 4	9400	1880.0	19.00	18.21	0.081	0.097	

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		10-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main1 Ant.	Product Specific 10-g	Rel 99 RMC	8	Rear	9400	1880.0	24.00	23.11	0.871	1.069	
			7	Front	9400	1880.0	24.00	23.11	0.782	0.960	
			12	Edge 3	9400	1880.0	24.00	23.11	1.090	1.338	
			0	Rear	9400	1880.0	22.00	21.38	1.730	1.995	
				Front	9400	1880.0	22.00	21.38	1.640	1.892	
				Edge 3	9262	1852.4	22.00	21.39	2.190	2.520	
					9400	1880.0	22.00	21.38	2.380	2.745	11
					9538	1907.6	22.00	21.33	2.250	2.625	

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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	
Main1 Ant.	Head	Rel 99 RMC	0	Left Touch	1413	1732.6	24.00	23.39	0.203	0.234	12
				Left Tilt	1413	1732.6	24.00	23.39	0.057	0.066	
				Right Touch	1413	1732.6	24.00	23.39	0.097	0.112	
				Right Tilt	1413	1732.6	24.00	23.39	0.084	0.096	
	Body-worn	Rel 99 RMC	15	Rear	1413	1732.6	24.00	23.39	0.660	0.760	13
				Front	1413	1732.6	24.00	23.39	0.549	0.632	
	Hotspot	Rel 99 RMC	10	Rear	1413	1732.6	19.00	18.43	0.600	0.684	
				Front	1413	1732.6	19.00	18.43	0.488	0.556	
				Edge 2	1413	1732.6	19.00	18.43	0.052	0.060	
				Edge 3	1312	1712.4	19.00	18.44	0.821	0.934	
					1413	1732.6	19.00	18.43	0.894	1.019	14
					1513	1752.6	19.00	18.55	0.870	0.965	
				Edge 4	1413	1732.6	19.00	18.43	0.304	0.347	
Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		10-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main1 Ant.	Product Specific 10-g	Rel 99 RMC	8	Rear	1413	1732.6	24.00	23.39	0.921	1.060	
			7	Front	1413	1732.6	24.00	23.39	0.832	0.957	
			12	Edge 3	1413	1732.6	24.00	23.39	0.915	1.053	
			0	Rear	1312	1712.4	22.00	20.98	1.620	2.049	
					1413	1732.6	22.00	21.32	1.820	2.128	
					1513	1752.6	22.00	21.39	1.840	2.117	
				Front	1413	1732.6	22.00	21.32	1.680	1.965	
				Edge 3	1312	1712.4	22.00	20.98	2.170	2.744	
					1413	1732.6	22.00	21.32	2.400	2.807	15
					1513	1752.6	22.00	21.39	2.180	2.509	

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	
Main1 Ant.	Head	Rel 99 RMC	0	Left Touch	4183	836.6	25.50	24.98	0.186	0.210	
				Left Tilt	4183	836.6	25.50	24.98	0.104	0.117	
				Right Touch	4183	836.6	25.50	24.98	0.302	0.340	16
				Right Tilt	4183	836.6	25.50	24.98	0.142	0.160	
	Body-worn	Rel 99 RMC	15	Rear	4183	836.6	25.50	24.98	0.293	0.330	17
				Front	4183	836.6	25.50	24.98	0.239	0.269	
	Hotspot	Rel 99 RMC	10	Rear	4183	836.6	25.50	24.98	0.539	0.608	18
				Front	4183	836.6	25.50	24.98	0.339	0.382	
				Edge 2	4183	836.6	25.50	24.98	0.297	0.335	
				Edge 3	4183	836.6	25.50	24.98	0.232	0.262	
				Edge 4	4183	836.6	25.50	24.98	0.242	0.273	

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10.6. LTE Band 4 (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	
Sub2 Ant.	Head	QPSK	0	Left Touch	20175	1732.5	1	49	17.50	17.02	0.246	0.275	
							50	50	17.50	17.01	0.242	0.271	
				Left Tilt	20175	1732.5	1	49	17.50	17.02	0.427	0.477	
							50	50	17.50	17.01	0.416	0.466	
				Right Touch	20175	1732.5	1	49	17.50	17.02	0.530	0.592	
							50	50	17.50	17.01	0.510	0.571	
				Right Tilt	20175	1732.5	1	49	17.50	17.02	0.572	0.639	19
							50	50	17.50	17.01	0.562	0.629	
	Body-worn	QPSK	15	Rear	20175	1732.5	1	49	21.00	19.72	0.137	0.184	20
							50	50	21.00	19.77	0.133	0.177	
				Front	20175	1732.5	1	49	21.00	19.72	0.105	0.141	
							50	50	21.00	19.77	0.102	0.135	
	Hotspot	QPSK	10	Rear	20175	1732.5	1	49	20.00	18.67	0.224	0.304	
							50	50	20.00	18.79	0.225	0.297	
				Front	20175	1732.5	1	49	20.00	18.67	0.162	0.220	
							50	50	20.00	18.79	0.159	0.210	
				Edge 1	20175	1732.5	1	49	20.00	18.67	0.384	0.522	21
							50	50	20.00	18.79	0.381	0.503	
				Edge 4	20175	1732.5	1	49	20.00	18.67	0.092	0.124	
							50	50	20.00	18.79	0.090	0.119	

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	
Main1 Ant.	Head	QPSK	0	Left Touch	20525	836.5	1	0	25.50	24.69	0.170	0.205	
							25	0	24.50	23.70	0.127	0.153	
				Left Tilt	20525	836.5	1	0	25.50	24.69	0.153	0.184	
							25	0	24.50	23.70	0.123	0.148	
				Right Touch	20525	836.5	1	0	25.50	24.69	0.252	0.304	22
							25	0	24.50	23.70	0.212	0.255	
				Right Tilt	20525	836.5	1	0	25.50	24.69	0.136	0.164	
							25	0	24.50	23.70	0.116	0.140	
	Body-worn	QPSK	15	Rear	20525	836.5	1	0	25.50	24.69	0.325	0.392	23
							25	0	24.50	23.70	0.271	0.326	
				Front	20525	836.5	1	0	25.50	24.69	0.233	0.281	
							25	0	24.50	23.70	0.186	0.224	
	Hotspot	QPSK	10	Rear	20525	836.5	1	0	25.50	24.69	0.569	0.685	24
							25	0	24.50	23.70	0.456	0.548	
				Front	20525	836.5	1	0	25.50	24.69	0.337	0.406	
							25	0	24.50	23.70	0.268	0.322	
				Edge 2	20525	836.5	1	0	25.50	24.69	0.260	0.313	
							25	0	24.50	23.70	0.204	0.245	
				Edge 3	20525	836.5	1	0	25.50	24.69	0.371	0.447	
							25	0	24.50	23.70	0.314	0.378	
				Edge 4	20525	836.5	1	0	25.50	24.69	0.180	0.217	
							25	0	24.50	23.70	0.129	0.155	

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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	
Main1 Ant.	Head	QPSK	0	Left Touch	23095	707.5	1	49	25.00	23.81	0.171	0.225	25
							25	25	24.00	22.80	0.119	0.157	
				Left Tilt	23095	707.5	1	49	25.00	23.81	0.088	0.116	
							25	25	24.00	22.80	0.072	0.095	
				Right Touch	23095	707.5	1	49	25.00	23.81	0.165	0.217	
							25	25	24.00	22.80	0.132	0.174	
				Right Tilt	23095	707.5	1	49	25.00	23.81	0.076	0.100	
							25	25	24.00	22.80	0.063	0.083	
	Body-worn	QPSK	15	Rear	23095	707.5	1	49	25.00	23.81	0.199	0.262	
							25	25	24.00	22.80	0.167	0.220	
				Front	23095	707.5	1	49	25.00	23.81	0.216	0.284	26
							25	25	24.00	22.80	0.179	0.236	
	Hotspot	QPSK	10	Rear	23095	707.5	1	49	25.00	23.81	0.283	0.372	27
							25	25	24.00	22.80	0.230	0.303	
				Front	23095	707.5	1	49	25.00	23.81	0.200	0.263	
							25	25	24.00	22.80	0.163	0.215	
				Edge 2	23095	707.5	1	49	25.00	23.81	0.122	0.160	
							25	25	24.00	22.80	0.100	0.132	
				Edge 3	23095	707.5	1	49	25.00	23.81	0.099	0.130	
							25	25	24.00	22.80	0.081	0.107	
				Edge 4	23095	707.5	1	49	25.00	23.81	0.249	0.327	
							25	25	24.00	22.80	0.198	0.261	

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	
Main1 Ant.	Head	QPSK	0	Left Touch	23230	782.0	1	49	25.00	23.57	0.121	0.168	
							25	25	24.00	22.54	0.098	0.137	
				Left Tilt	23230	782.0	1	49	25.00	23.57	0.075	0.104	
							25	25	24.00	22.54	0.064	0.090	
				Right Touch	23230	782.0	1	49	25.00	23.57	0.170	0.237	28
							25	25	24.00	22.54	0.134	0.188	
				Right Tilt	23230	782.0	1	49	25.00	23.57	0.086	0.120	
							25	25	24.00	22.54	0.070	0.098	
	Body-worn	QPSK	15	Rear	23230	782.0	1	49	25.00	23.57	0.268	0.373	29
							25	25	24.00	22.54	0.210	0.294	
				Front	23230	782.0	1	49	25.00	23.57	0.197	0.274	
							25	25	24.00	22.54	0.159	0.223	
	Hotspot	QPSK	10	Rear	23230	782.0	1	49	25.00	23.57	0.450	0.626	30
							25	25	24.00	22.54	0.361	0.506	
				Front	23230	782.0	1	49	25.00	23.57	0.257	0.358	
							25	25	24.00	22.54	0.205	0.287	
				Edge 2	23230	782.0	1	49	25.00	23.57	0.175	0.243	
							25	25	24.00	22.54	0.135	0.189	
				Edge 3	23230	782.0	1	49	25.00	23.57	0.159	0.221	
							25	25	24.00	22.54	0.131	0.183	
				Edge 4	23230	782.0	1	49	25.00	23.57	0.142	0.198	
							25	25	24.00	22.54	0.116	0.162	

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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	
Main1 Ant.	Head	QPSK	0	Left Touch	26140	1860.0	1	0	24.00	22.80	0.129	0.170	31
							50	0	23.00	21.85	0.107	0.139	
				Left Tilt	26140	1860.0	1	0	24.00	22.80	0.062	0.082	
							50	0	23.00	21.85	0.049	0.064	
				Right Touch	26140	1860.0	1	0	24.00	22.80	0.060	0.080	
							50	0	23.00	21.85	0.051	0.067	
				Right Tilt	26140	1860.0	1	0	24.00	22.80	0.067	0.088	
							50	0	23.00	21.85	0.048	0.063	
	Body-worn	QPSK	15	Rear	26140	1860.0	1	0	24.00	22.80	0.497	0.656	32
							50	0	23.00	21.85	0.400	0.521	
				Front	26140	1860.0	1	0	24.00	22.80	0.483	0.637	
							50	0	23.00	21.85	0.389	0.507	
	Hotspot	QPSK	10	Rear	26140	1860.0	1	0	19.00	18.18	0.447	0.540	
							50	0	19.00	18.28	0.448	0.529	
				Front	26140	1860.0	1	0	19.00	18.18	0.358	0.432	
							50	0	19.00	18.28	0.363	0.428	
				Edge 2	26140	1860.0	1	0	19.00	18.18	0.051	0.062	
							50	0	19.00	18.28	0.049	0.058	
				Edge 3	26140	1860.0	1	0	19.00	18.18	0.825	0.996	
							50	0	19.00	18.28	0.843	0.995	
							100	0	19.00	18.23	0.864	1.032	
					26365	1882.5	1	0	19.00	17.82	0.854	1.121	
							50	0	19.00	17.91	0.876	1.126	33
					26590	1905.0	1	0	19.00	17.98	0.812	1.027	
							50	0	19.00	18.07	0.809	1.002	
				Edge 4	26140	1860.0	1	0	19.00	18.18	0.074	0.089	
							50	0	19.00	18.28	0.075	0.088	

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		10-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Main1 Ant.	Product Specific 10-g	QPSK	8	Rear	26140	1860.0	1	0	24.00	22.80	0.746	0.984	
							50	0	23.00	21.85	0.672	0.876	
			7	Front	26140	1860.0	1	0	24.00	22.80	0.731	0.965	
			12	Edge 3	26140	1860.0	1	0	24.00	22.80	0.938	1.238	
							50	0	23.00	21.85	0.741	0.966	
			0	Rear	26140	1860.0	1	0	21.00	20.04	1.360	1.696	
							50	0	21.00	20.11	1.490	1.829	
				Front	26140	1860.0	1	0	21.00	20.04	1.190	1.484	
				Edge 3	26140	1860.0	1	0	21.00	20.04	1.470	1.834	
							50	0	21.00	20.11	1.500	1.841	34

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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	
Main1 Ant.	Head	QPSK	0	Left Touch	26865	831.5	1	0	25.00	24.13	0.143	0.175	
							36	0	24.00	23.21	0.104	0.125	
				Left Tilt	26865	831.5	1	0	25.00	24.13	0.100	0.122	
							36	0	24.00	23.21	0.078	0.094	
				Right Touch	26865	831.5	1	0	25.00	24.13	0.212	0.259	35
							36	0	24.00	23.21	0.165	0.198	
				Right Tilt	26865	831.5	1	0	25.00	24.13	0.100	0.122	
							36	0	24.00	23.21	0.077	0.092	
	Body-worn	QPSK	15	Rear	26865	831.5	1	0	25.00	24.13	0.262	0.320	36
							36	0	24.00	23.21	0.241	0.289	
				Front	26865	831.5	1	0	25.00	24.13	0.202	0.247	
							36	0	24.00	23.21	0.160	0.192	
	Hotspot	QPSK	10	Rear	26865	831.5	1	0	25.00	24.13	0.481	0.588	37
							36	0	24.00	23.21	0.441	0.529	
				Front	26865	831.5	1	0	25.00	24.13	0.252	0.308	
							36	0	24.00	23.21	0.214	0.257	
				Edge 2	26865	831.5	1	0	25.00	24.13	0.233	0.285	
							36	0	24.00	23.21	0.163	0.196	
				Edge 3	26865	831.5	1	0	25.00	24.13	0.295	0.360	
							36	0	24.00	23.21	0.265	0.318	
				Edge 4	26865	831.5	1	0	25.00	24.13	0.175	0.214	
							36	0	24.00	23.21	0.137	0.164	

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10.12. 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	
Main1 Ant.	Head	QPSK	0	Left Touch	132322	1745.0	1	49	24.00	23.08	0.155	0.192	38
							50	50	23.00	22.15	0.126	0.153	
				Left Tilt	132322	1745.0	1	49	24.00	23.08	0.059	0.072	
							50	50	23.00	22.15	0.038	0.046	
				Right Touch	132322	1745.0	1	49	24.00	23.08	0.130	0.161	
							50	50	23.00	22.15	0.095	0.115	
				Right Tilt	132322	1745.0	1	49	24.00	23.08	0.080	0.099	
							50	50	23.00	22.15	0.055	0.067	
	Body-worn	QPSK	15	Rear	132322	1745.0	1	49	24.00	23.08	0.645	0.797	39
							50	50	23.00	22.15	0.514	0.625	
				Front	132322	1745.0	1	49	24.00	23.08	0.600	0.742	
							50	50	23.00	22.15	0.481	0.585	
	Hotspot	QPSK	10	Rear	132322	1745.0	1	49	20.00	19.26	0.541	0.642	
							50	50	20.00	19.28	0.533	0.629	
				Front	132322	1745.0	1	49	20.00	19.26	0.434	0.515	
							50	50	20.00	19.28	0.438	0.517	
				Edge 2	132322	1745.0	1	49	20.00	19.26	0.055	0.065	
							50	50	20.00	19.28	0.055	0.065	
				Edge 3	132072	1720.0	1	49	20.00	18.69	0.758	1.025	
							50	50	20.00	18.87	0.786	1.020	
					132322	1745.0	1	49	20.00	19.26	0.855	1.014	
							50	50	20.00	19.28	0.873	1.030	
							100	0	20.00	19.24	0.879	1.047	
					132572	1770.0	1	49	20.00	18.96	0.864	1.098	40
							50	50	20.00	18.99	0.869	1.097	
				Edge 4	132322	1745.0	1	49	20.00	19.26	0.109	0.129	
							50	50	20.00	19.28	0.108	0.127	

Antenna	RF Exposure Conditions	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		10-g SAR (W/kg)		Plot No.
									Tune-up limit	Meas.	Meas.	Scaled	
Main1 Ant.	Product Specific 10-g	QPSK	8	Rear	132322	1745.0	1	49	24.00	23.08	1.110	1.372	
							50	50	23.00	22.15	0.798	0.970	
			7	Front	132322	1745.0	1	49	24.00	23.08	0.839	1.037	
			12	Edge 3	132322	1745.0	1	49	24.00	23.08	0.781	0.965	
							50	50	23.00	22.15	0.636	0.773	
			0	Rear	132322	1745.0	1	49	21.00	20.24	1.320	1.572	
							50	50	21.00	20.25	1.340	1.593	
				Front	132322	1745.0	1	49	21.00	20.24	1.330	1.584	
				Edge 3	132322	1745.0	1	49	21.00	20.24	1.430	1.703	
							50	50	21.00	20.25	1.460	1.735	41

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10.13. 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	
Main2 Ant.	Head	QPSK	0	Left Touch	41055	2636.5	1	0	25.00	24.70	0.147	0.158	42
							50	24	24.00	23.77	0.121	0.128	
				Left Tilt	41055	2636.5	1	0	25.00	24.70	0.071	0.076	
							50	24	24.00	23.77	0.056	0.059	
				Right Touch	41055	2636.5	1	0	25.00	24.70	0.066	0.070	
							50	24	24.00	23.77	0.048	0.051	
				Right Tilt	41055	2636.5	1	0	25.00	24.70	0.041	0.044	
							50	24	24.00	23.77	0.031	0.032	
	Body-worn	QPSK	15	Rear	41055	2636.5	1	0	25.00	24.70	0.372	0.399	43
							50	24	24.00	23.77	0.305	0.322	
				Front	41055	2636.5	1	0	25.00	24.70	0.264	0.283	
							50	24	24.00	23.77	0.212	0.224	
	Hotspot	QPSK	10	Rear	41055	2636.5	1	0	23.00	22.65	0.467	0.506	
							50	24	23.00	22.70	0.473	0.507	44
				Front	41055	2636.5	1	0	23.00	22.65	0.282	0.306	
							50	24	23.00	22.70	0.291	0.312	
				Edge 3	41055	2636.5	1	0	23.00	22.65	0.429	0.465	
							50	24	23.00	22.70	0.431	0.462	
				Edge 4	41055	2636.5	1	0	23.00	22.65	0.407	0.441	
							50	24	23.00	22.70	0.411	0.440	

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	
Main2 Ant.	Head	QPSK	0	Left Touch	41055	2636.5	1	0	26.50	26.24	0.157	0.167	
	Body-worn	QPSK	15	Rear	41055	2636.5	1	0	26.50	26.24	0.265	0.281	
	Hotspot	QPSK	10	Rear	41055	2636.5	50	24	25.00	24.91	0.500	0.510	45

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.

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

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

Reported SAR vs. Output power linearly scaled

Antenna	RF Exposure Conditions	Power Class 2				Power Class 3				PC2 linearly scaled Reported SAR (W/kg)	Linearly scaled (<10%)
		Duty Cycle (%)	Tune-up Power (dBm)	Fram Avg. Power (dBm)	Reported SAR (W/kg)	Duty Cycle	Tune-up Power (dBm)	Fram Avg. Power (dBm)	Reported SAR (W/kg)		
Main 2 Ant.	Head	43.3	26.5	193.4	0.167	63.3	25.0	200.2	0.158	0.153	9.4
	Body-worn	43.3	26.5	193.4	0.281	63.3	25.0	200.2	0.399	0.386	-27.1
	Hotspot	43.3	25.0	136.9	0.510	63.3	23.0	126.3	0.507	0.550	-7.2

Note(s):

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

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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	
Main1 Ant.	Head	DFT-s-OFDM	QPSK	0	Left Touch	167300	836.5	1	1	25.00	24.84	0.159	0.165	
								50	28	25.00	24.69	0.160	0.172	
					Left Tilt	167300	836.5	1	1	25.00	24.84	0.136	0.141	
								50	28	25.00	24.69	0.126	0.135	
					Right Touch	167300	836.5	1	1	25.00	24.84	0.212	0.220	
								50	28	25.00	24.69	0.228	0.245	46
					Right Tilt	167300	836.5	1	1	25.00	24.84	0.124	0.129	
								50	28	25.00	24.69	0.132	0.142	
		CP-OFDM	QPSK	0	Right Touch	167300	836.5	1	1	23.50	23.31	0.230	0.240	
	Body-worn	DFT-s-OFDM	QPSK	15	Rear	167300	836.5	1	1	25.00	24.84	0.201	0.209	
								50	28	25.00	24.69	0.355	0.381	47
					Front	167300	836.5	1	1	25.00	24.84	0.221	0.229	
								50	28	25.00	24.69	0.250	0.268	
		CP-OFDM	QPSK	15	Rear	167300	836.5	1	1	23.50	23.31	0.280	0.293	
	Hotspot	DFT-s-OFDM	QPSK	10	Rear	167300	836.5	1	1	25.00	24.84	0.610	0.633	
								50	28	25.00	24.69	0.721	0.774	48
					Front	167300	836.5	1	1	25.00	24.84	0.321	0.333	
								50	28	25.00	24.69	0.367	0.394	
					Edge 2	167300	836.5	1	1	25.00	24.84	0.223	0.231	
								50	28	25.00	24.69	0.216	0.232	
					Edge 3	167300	836.5	1	1	25.00	24.84	0.246	0.255	
								50	28	25.00	24.69	0.308	0.331	
					Edge 4	167300	836.5	1	1	25.00	24.84	0.169	0.175	
								50	28	25.00	24.69	0.164	0.176	
		CP-OFDM	QPSK	10	Rear	167300	836.5	1	1	23.50	23.31	0.587	0.613	

Note(s):

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

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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	
Main1 Ant.	Head	DFT-s-OFDM	QPSK	0	Left Touch	376500	1882.5	1	104	24.00	22.73	0.103	0.138	
								50	28	24.00	22.76	0.118	0.157	49
					Left Tilt	376500	1882.5	1	104	24.00	22.73	0.056	0.075	
								50	28	24.00	22.76	0.057	0.076	
					Right Touch	376500	1882.5	1	104	24.00	22.73	0.077	0.103	
								50	28	24.00	22.76	0.074	0.098	
					Right Tilt	376500	1882.5	1	104	24.00	22.73	0.060	0.081	
								50	28	24.00	22.76	0.056	0.074	
		CP-OFDM	QPSK	0	Left Touch	376500	1882.5	1	1	22.50	21.15	0.081	0.111	
	Body-worn	DFT-s-OFDM	QPSK	15	Rear	376500	1882.5	1	104	24.00	22.73	0.511	0.685	
								50	28	24.00	22.76	0.549	0.730	50
					Front	376500	1882.5	1	104	24.00	22.73	0.448	0.600	
								50	28	24.00	22.76	0.482	0.641	
		CP-OFDM	QPSK	15	Rear	376500	1882.5	1	1	22.50	21.15	0.390	0.532	
	Hotspot	DFT-s-OFDM	QPSK	10	Rear	376500	1882.5	1	104	19.00	17.76	0.478	0.636	
								50	28	19.00	17.84	0.513	0.670	
					Front	376500	1882.5	1	104	19.00	17.76	0.388	0.516	
								50	28	19.00	17.84	0.419	0.547	
					Edge 2	376500	1882.5	1	104	19.00	17.76	0.044	0.058	
								50	28	19.00	17.84	0.048	0.063	
					Edge 3	372000	1860.0	1	104	19.00	17.73	0.727	0.974	
								50	28	19.00	17.79	0.733	0.969	
						376500	1882.5	1	104	19.00	17.76	0.720	0.958	
								50	28	19.00	17.84	0.757	0.989	
								100	0	19.00	17.75	0.758	1.011	51
						381000	1905.0	1	104	19.00	17.61	0.654	0.901	
								50	28	19.00	17.61	0.673	0.927	
					Edge 4	376500	1882.5	1	104	19.00	17.76	0.072	0.096	
								50	28	19.00	17.84	0.060	0.079	
		CP-OFDM	QPSK	10	Edge 3	376500	1882.5	1	1	20.00	18.59	0.710	0.982	

Antenna	RF Exposure Conditions	Modulation	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		10-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main1 Ant.	Product Specific 10-g	DFT-s-OFDM	QPSK	8	Rear	376500	1882.5	1	104	24.00	22.73	0.799	1.070	
								50	28	24.00	22.76	0.847	1.127	
				7	Front	376500	1882.5	1	104	24.00	22.73	0.652	0.873	
								50	28	24.00	22.76	0.695	0.925	
				12	Edge 3	376500	1882.5	1	104	24.00	22.73	0.697	0.934	
								50	28	24.00	22.76	0.811	1.079	
				0	Rear	376500	1882.5	1	104	21.00	19.51	1.200	1.691	
								50	28	21.00	19.55	1.260	1.759	
					Front	376500	1882.5	1	104	21.00	19.51	1.070	1.508	
								50	28	21.00	19.55	1.130	1.578	
					Edge 3	372000	1860.0	1	104	21.00	19.50	1.410	1.992	
								50	28	21.00	19.51	1.420	2.001	
						376500	1882.5	1	104	21.00	19.51	1.510	2.128	
								50	28	21.00	19.55	1.620	2.262	52
								100	0	21.00	19.55	1.490	2.081	
						381000	1905.0	1	104	21.00	19.28	1.350	2.006	
								50	28	21.00	19.31	1.410	2.081	
		CP-OFDM	QPSK	0	Edge 3	376500	1882.5	1	1	21.00	19.52	1.410	1.983	

Note(s):

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

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10.16. 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	
Main1 Ant.	Head	DFT-s-OFDM	QPSK	0	Left Touch	349000	1745.0	1	104	24.00	22.85	0.185	0.241	53
								50	28	24.00	22.75	0.134	0.179	
					Left Tilt	349000	1745.0	1	104	24.00	22.85	0.076	0.099	
								50	28	24.00	22.75	0.083	0.111	
					Right Touch	349000	1745.0	1	104	24.00	22.85	0.092	0.120	
								50	28	24.00	22.75	0.088	0.117	
					Right Tilt	349000	1745.0	1	104	24.00	22.85	0.086	0.112	
								50	28	24.00	22.75	0.079	0.106	
		CP-OFDM	QPSK	0	LeftTouch	349000	1745.0	1	1	22.50	21.33	0.126	0.165	
	Body-worn	DFT-s-OFDM	QPSK	15	Rear	344000	1720.0	1	104	24.00	22.71	0.549	0.739	
								50	28	24.00	22.69	0.745	1.007	54
						349000	1745.0	1	104	24.00	22.85	0.745	0.971	
								50	28	24.00	22.75	0.744	0.992	
								100	0	23.00	21.77	0.524	0.696	
						354000	1770.0	1	104	24.00	22.84	0.546	0.713	
								50	28	24.00	22.72	0.676	0.908	
					Front	349000	1745.0	1	104	24.00	22.85	0.472	0.615	
								50	28	24.00	22.75	0.491	0.655	
		CP-OFDM	QPSK	15	Rear	344000	1720.0	1	1	22.50	21.33	0.507	0.664	
	Hotspot	DFT-s-OFDM	QPSK	10	Rear	349000	1745.0	1	104	20.00	18.78	0.532	0.705	
								50	28	20.00	18.81	0.555	0.730	
					Front	349000	1745.0	1	104	20.00	18.78	0.422	0.559	
								50	28	20.00	18.81	0.428	0.563	
					Edge 2	349000	1745.0	1	104	20.00	18.78	0.043	0.057	
								50	28	20.00	18.81	0.044	0.058	
					Edge 3	344000	1720.0	1	104	20.00	18.73	0.742	0.994	
								50	28	20.00	18.75	0.762	1.016	
						349000	1745.0	1	104	20.00	18.78	0.746	0.988	
								50	28	20.00	18.81	0.749	0.985	
								100	0	20.00	18.81	0.756	0.994	
						354000	1770.0	1	104	20.00	18.77	0.763	1.013	
								50	28	20.00	18.75	0.776	1.035	55
					Edge 4	349000	1745.0	1	104	20.00	18.78	0.079	0.104	
								50	28	20.00	18.81	0.081	0.107	
		CP-OFDM	QPSK	10	Edge 3	354000	1770.0	1	1	20.00	18.83	0.640	0.838	

Antenna	RF Exposure Conditions	Modulation	Mode	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	RB Allocation	RB offest	Power (dBm)		10-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Main1 Ant.	Product Specific 10-g	DFT-s-OFDM	QPSK	8	Rear	349000	1745.0	1	104	24.00	22.85	0.963	1.255	
								50	28	24.00	22.75	0.988	1.318	
				7	Front	349000	1745.0	1	104	24.00	22.85	0.653	0.851	
								50	28	24.00	22.75	0.679	0.905	
				12	Edge 3	349000	1745.0	1	104	24.00	22.85	0.902	1.175	
								50	28	24.00	22.75	0.897	1.196	
				0	Rear	349000	1745.0	1	104	21.00	19.83	1.250	1.636	
								50	28	21.00	19.73	1.310	1.755	
					Front	349000	1745.0	1	104	21.00	19.83	1.060	1.388	
								50	28	21.00	19.73	1.110	1.487	
					Edge 3	349000	1745.0	1	104	21.00	19.83	1.350	1.767	
								50	28	21.00	19.73	1.410	1.889	56
		CP-OFDM	QPSK	0	Edge 3	349000	1745.0	1	1	21.00	19.75	1.320	1.760	

Note(s):

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

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NR Band n66 (20MHz Bandwidth) (Continued)

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	
Sub2 Ant.	Head	DFT-s-OFDM	QPSK	0	Left Touch	349000	1745.0	1	104	18.00	16.96	0.258	0.328	
								50	0	18.00	17.04	0.253	0.316	
					Left Tilt	349000	1745.0	1	104	18.00	16.96	0.332	0.422	
								50	0	18.00	17.04	0.331	0.413	
					Right Touch	349000	1745.0	1	104	18.00	16.96	0.388	0.493	
								50	0	18.00	17.04	0.445	0.555	
					Right Tilt	349000	1745.0	1	104	18.00	16.96	0.500	0.635	
								50	0	18.00	17.04	0.557	0.695	57
		CP-OFDM	QPSK	0	Right Tilt	349000	1745.0	1	1	18.50	17.63	0.554	0.677	
	Body-worn	DFT-s-OFDM	QPSK	15	Rear	349000	1745.0	1	104	20.00	19.05	0.121	0.151	58
								50	0	20.00	19.23	0.121	0.144	
					Front	349000	1745.0	1	104	20.00	19.05	0.083	0.103	
								50	0	20.00	19.23	0.083	0.099	
		CP-OFDM	QPSK	15	Rear	349000	1745.0	1	1	20.00	19.09	0.112	0.138	
	Hotspot	DFT-s-OFDM	QPSK	10	Rear	349000	1745.0	1	104	20.00	19.05	0.208	0.259	
								50	0	20.00	19.23	0.219	0.261	
					Front	349000	1745.0	1	104	20.00	19.05	0.144	0.179	
								50	0	20.00	19.23	0.152	0.181	
					Edge 1	349000	1745.0	1	104	20.00	19.05	0.378	0.470	59
								50	0	20.00	19.23	0.390	0.466	
					Edge 4	349000	1745.0	1	104	20.00	19.05	0.074	0.092	
								50	0	20.00	19.23	0.078	0.093	
		CP-OFDM	QPSK	10	Edge 1	349000	1745.0	1	1	20.00	19.09	0.353	0.435	

Note(s):

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

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10.17. 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	
Sub2 Ant.	Head	DFT-s-OFDM	QPSK	0	Left Touch	518598	2593.0	1	271	15.00	14.71	0.333	0.356	
								135	138	15.00	14.62	0.317	0.346	
					Left Tilt	518598	2593.0	1	271	15.00	14.71	0.304	0.325	
								135	138	15.00	14.62	0.369	0.403	
					Right Touch	518598	2593.0	1	271	15.00	14.71	0.581	0.621	
								135	138	15.00	14.62	0.591	0.645	
					Right Tilt	518598	2593.0	1	271	15.00	14.71	0.633	0.677	
								135	138	15.00	14.62	0.659	0.719	60
		CP-OFDM	QPSK	0	Right Tilt	518598	2593.0	1	1	16.00	15.21	0.588	0.705	
	Body-worn	DFT-s-OFDM	QPSK	15	Rear	518598	2593.0	1	271	19.00	18.33	0.147	0.172	
								135	138	19.00	18.15	0.153	0.186	61
					Front	518598	2593.0	1	271	19.00	18.33	0.083	0.097	
								135	138	19.00	18.15	0.088	0.107	
		CP-OFDM	QPSK	15	Rear	518598	2593.0	1	1	19.00	18.21	0.107	0.128	
	Hotspot	DFT-s-OFDM	QPSK	10	Rear	518598	2593.0	1	271	16.00	15.22	0.134	0.160	
								135	138	16.00	15.17	0.104	0.126	
					Front	518598	2593.0	1	271	16.00	15.22	0.079	0.095	
								135	138	16.00	15.17	0.064	0.077	
					Edge 1	518598	2593.0	1	271	16.00	15.22	0.181	0.217	
								135	138	16.00	15.17	0.182	0.220	62
					Edge 4	518598	2593.0	1	271	16.00	15.22	0.016	0.019	
								135	138	16.00	15.17	0.018	0.022	
		CP-OFDM	QPSK	10	Edge 1	518598	2593.0	1	1	16.00	15.21	0.144	0.173	

Note(s):

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

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

Antenna	RF Exposure Conditions	Modulation	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main2 Ant. (SRS 1)	Head	SRS CW	0	Left Touch	518598	2593.0	13.00	11.30	0.007	0.010	
				Left Tilt	518598	2593.0	13.00	11.30	0.001	0.001	
				Right Touch	518598	2593.0	13.00	11.30	<0.001	<0.001	
				Right Tilt	518598	2593.0	13.00	11.30	<0.001	<0.001	
	Body-worn	SRS CW	15	Rear	518598	2593.0	16.00	14.24	0.054	0.081	63
				Front	518598	2593.0	16.00	14.24	0.032	0.048	
	Hotspot	SRS CW	10	Rear	518598	2593.0	13.00	11.30	0.048	0.071	
				Front	518598	2593.0	13.00	11.30	0.028	0.041	
				Edge 3	518598	2593.0	13.00	11.30	0.060	0.089	64
				Edge 4	518598	2593.0	13.00	11.30	0.054	0.080	
Sub1 Ant. (SRS 2)	Head	SRS CW	0	Left Touch	518598	2593.0	13.00	11.23	0.218	0.328	65
				Left Tilt	518598	2593.0	13.00	11.23	0.179	0.269	
				Right Touch	518598	2593.0	13.00	11.23	0.062	0.093	
				Right Tilt	518598	2593.0	13.00	11.23	0.070	0.105	
	Body-worn	SRS CW	15	Rear	518598	2593.0	16.00	14.12	0.039	0.060	
				Front	518598	2593.0	16.00	14.12	0.041	0.063	
	Hotspot	SRS CW	10	Rear	518598	2593.0	13.00	11.23	0.025	0.038	
				Front	518598	2593.0	13.00	11.23	0.026	0.039	
				Edge 1	518598	2593.0	13.00	11.23	0.033	0.050	
				Edge 2	518598	2593.0	13.00	11.23	0.018	0.027	
Main4 Ant. (SRS 3)	Head	SRS CW	0	Left Touch	518598	2593.0	10.00	8.86	<0.001	<0.001	
				Left Tilt	518598	2593.0	10.00	8.86	0.001	0.001	
				Right Touch	518598	2593.0	10.00	8.86	<0.001	<0.001	
				Right Tilt	518598	2593.0	10.00	8.86	<0.001	<0.001	
	Body-worn	SRS CW	15	Rear	518598	2593.0	13.00	11.92	0.007	0.009	
				Front	518598	2593.0	13.00	11.92	<0.001	<0.001	
	Hotspot	SRS CW	10	Rear	518598	2593.0	10.00	8.86	0.010	0.013	
				Front	518598	2593.0	10.00	8.86	<0.001	<0.001	
				Edge 2	518598	2593.0	10.00	8.86	<0.001	<0.001	
				Edge 3	518598	2593.0	10.00	8.86	<0.001	<0.001	

Note(s):

SRS1/SRS2/SRS3 tested using FTM mode.

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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	Pow er (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
Sub2 Ant.	Head	DFT-s-OFDM	QPSK	0	Left Touch	633334	3500.0	1	271	15.00	14.82	0.221	0.230	
								135	138	15.00	14.73	0.186	0.198	
					Left Tilt	633334	3500.0	1	271	15.00	14.82	0.242	0.252	
								135	138	15.00	14.73	0.240	0.255	
					Right Touch	633334	3500.0	1	271	15.00	14.82	0.390	0.407	
								135	138	15.00	14.73	0.374	0.398	
					Right Tilt	633334	3500.0	1	271	15.00	14.82	0.513	0.535	66
								135	138	15.00	14.73	0.453	0.482	
						650000	3750.0	1	271	15.00	14.82	0.274	0.286	
						662000	3930.0	1	271	15.00	14.83	0.463	0.481	
		CP-OFDM	QPSK	0	Right Tilt	633334	3500.0	1	1	15.00	14.41	0.382	0.438	
	Body-w orn	DFT-s-OFDM	QPSK	15	Rear	633334	3500.0	1	271	19.00	18.81	0.254	0.265	
						650000	3750.0	1	271	19.00	18.76	0.335	0.354	67
								135	138	19.00	18.65	0.305	0.331	
						662000	3930.0	1	271	19.00	18.71	0.309	0.330	
					Front	650000	3750.0	1	271	19.00	18.76	0.036	0.038	
								135	138	19.00	18.65	0.033	0.035	
		CP-OFDM	QPSK	15	Rear	650000	3750.0	1	1	19.00	18.12	0.278	0.340	
	Hotspot	DFT-s-OFDM	QPSK	10	Rear	633334	3500.0	1	271	18.00	17.81	0.256	0.267	
								135	138	18.00	17.67	0.362	0.391	
						650000	3750.0	1	271	18.00	17.67	0.495	0.534	
								135	138	18.00	17.53	0.387	0.431	
						662000	3930.0	1	271	18.00	17.48	0.544	0.613	68
								135	138	18.00	17.42	0.395	0.451	
					Front	662000	3930.0	1	271	18.00	17.48	0.067	0.075	
								135	138	18.00	17.42	0.132	0.151	
					Edge 1	662000	3930.0	1	271	18.00	17.48	0.072	0.081	
								135	138	18.00	17.42	0.115	0.131	
					Edge 4	662000	3930.0	1	271	18.00	17.48	0.055	0.062	
								135	138	18.00	17.42	0.032	0.037	
		CP-OFDM	QPSK	10	Rear	662000	3930	1	1	18.00	17.32	0.476	0.557	

Note(s):

1. CP-OFDM mode were evaluated at worst configuration of DFT-s-OFDM in standalone exposure conditions.
2. Both Lower band and Upper band in NR Band n77 are tested at worst configuration in each of RF exposure conditions.

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

Antenna	RF Exposure Conditions	Modulation	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Power (dBm)		1-g SAR (W/kg)		Plot No.
							Tune-up limit	Meas.	Meas.	Scaled	
Main3 Ant. (SRS 1)	Head	SRS CW	0	Left Touch	633334	3500.0	11.00	10.23	0.009	0.011	
					650000	3750.0	11.00	9.77	<0.001	<0.001	
					662000	3930.0	11.00	10.26	<0.001	<0.001	
				Left Tilt	633334	3500.0	11.00	10.23	<0.001	<0.001	
				Right Touch	633334	3500.0	11.00	10.23	0.003	0.004	
				Right Tilt	633334	3500.0	11.00	10.23	0.003	0.004	
	Body-worn	SRS CW	15	Rear	633334	3500.0	16.00	15.08	0.032	0.040	
					650000	3750.0	16.00	14.40	0.034	0.048	
					662000	3930.0	16.00	14.75	0.007	0.009	
				Front	650000	3750.0	16.00	14.40	0.007	0.009	
	Hotspot	SRS CW	10	Rear	633334	3500.0	15.00	14.12	0.056	0.068	
				Front	633334	3500.0	15.00	14.12	0.032	0.039	
				Edge 3	633334	3500.0	15.00	14.12	0.016	0.019	
				Edge 4	633334	3500.0	15.00	14.12	0.079	0.097	
					650000	3750.0	15.00	13.49	0.060	0.085	
					662000	3930.0	15.00	13.78	0.033	0.044	
Sub5 Ant. (SRS 2)	Head	SRS CW	0	Left Touch	650000	3750.0	11.00	9.80	0.035	0.046	
				Left Tilt	650000	3750.0	11.00	9.80	0.003	0.003	
				Right Touch	633334	3500.0	11.00	9.00	0.018	0.028	
					650000	3750.0	11.00	9.80	0.057	0.075	69
					662000	3930.0	11.00	9.00	0.039	0.062	
				Right Tilt	650000	3750.0	11.00	9.80	<0.001	<0.001	
	Body-worn	SRS CW	15	Rear	633334	3500.0	15.00	13.10	0.002	0.003	
					650000	3750.0	15.00	13.80	<0.001	<0.001	
					662000	3930.0	15.00	13.20	0.004	0.006	
				Front	662000	3930.0	15.00	13.20	0.002	0.003	
	Hotspot	SRS CW	10	Rear	633334	3500.0	14.00	12.10	0.006	0.009	
					650000	3750.0	14.00	12.80	0.016	0.021	
					662000	3930.0	14.00	12.10	0.015	0.023	
				Front	662000	3930.0	14.00	12.10	0.007	0.011	
				Edge 4	662000	3930.0	14.00	12.10	0.003	0.005	
Main4 Ant. (SRS 3)	Head	SRS CW	0	Left Touch	650000	3750.0	11.50	9.57	<0.001	<0.001	
				Left Tilt	633334	3500.0	11.50	10.92	<0.001	<0.001	
					650000	3750.0	11.50	9.57	<0.001	<0.001	
					662000	3930.0	11.50	10.72	<0.001	<0.001	
				Right Touch	650000	3750.0	11.50	9.57	<0.001	<0.001	
				Right Tilt	650000	3750.0	11.50	9.57	<0.001	<0.001	
	Body-worn	SRS CW	15	Rear	633334	3500.0	15.00	14.49	0.124	0.139	
					650000	3750.0	15.00	14.04	0.145	0.181	70
					662000	3930.0	15.00	14.71	0.082	0.087	
				Front	650000	3750.0	15.00	14.04	0.005	0.006	
	Hotspot	SRS CW	10	Rear	633334	3500.0	14.00	13.53	0.222	0.247	
					650000	3750.0	14.00	13.05	0.246	0.306	71
					662000	3930.0	14.00	13.69	0.215	0.231	
				Front	650000	3750.0	14.00	13.05	0.012	0.015	
				Edge 2	650000	3750.0	14.00	13.05	0.012	0.015	
				Edge 3	650000	3750.0	14.00	13.05	0.050	0.062	

Note(s):

1. SRS1/SRS2/SRS3 tested using FTM mode.
2. Both Lower band and Upper band in NR Band n77 are tested at worst configuration in each of RF exposure conditions.

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10.21. Wi-Fi (DTS Band)

Normal WLAN SISO(Ant.2 only) SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
2.4GHz SISO Ant.2	2.4GHz	802.11b 1 Mbps	Head	On	0	Left Touch	1	2412.0	0.643	98.9%	14.00	13.86	0.494	0.516		72
						Left Tilt	1	2412.0	0.112	98.9%	14.00	13.86	0.086	0.090	4	
						Right Touch	1	2412.0	0.343	98.9%	14.00	13.86	0.253	0.264	2	
						Right Tilt	1	2412.0	0.077	98.9%	14.00	13.86	0.054	0.056	4	
			Body-worn	Off	15	Rear	1	2412.0	0.085	98.9%	18.00	17.37	0.052	0.060	4	
						Front	1	2412.0	0.128	98.9%	18.00	17.37	0.089	0.104	1	73
			Hotspot	Off	10	Rear	1	2412.0	0.205	98.9%	18.00	17.37	0.127	0.149	4	
						Front	1	2412.0	0.252	98.9%	18.00	17.37	0.188	0.220	1	74
						Edge 1	1	2412.0	0.016	98.9%	18.00	17.37				
						Edge 2	1	2412.0	0.115	98.9%	18.00	17.37				

Normal WLAN MIMO SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
2.4GHz MIMO Ant.1	2.4GHz	802.11b 1 Mbps	Head	On	0	Left Touch	6	2437.0	0.632	98.9%	14.00	13.84				
						Left Tilt	6	2437.0	0.124	98.9%	14.00	13.84				
						Right Touch	6	2437.0	0.576	98.9%	14.00	13.84	0.408	0.428	2	
						Right Tilt	6	2437.0	0.284	98.9%	14.00	13.84	0.225	0.236	4	
			Body-worn	Off	15	Rear	6	2437.0	0.262	98.9%	18.00	16.48	0.188	0.270	1	75
						Front	6	2437.0	0.233	98.9%	18.00	16.48				
			Hotspot	Off	10	Rear	6	2437.0	0.443	98.9%	18.00	16.48	0.317	0.455	2	
						Front	6	2437.0	0.498	98.9%	18.00	16.48	0.352	0.505		76
						Edge 1	6	2437.0	0.140	98.9%	18.00	16.48				
						Edge 2	6	2437.0	0.064	98.9%	18.00	16.48				
						Edge 4	6	2437.0	0.408	98.9%	18.00	16.48				
2.4GHz MIMO Ant.2	2.4GHz	802.11b 1 Mbps	Head	On	0	Left Touch	6	2437.0	0.632	98.9%	14.00	13.45	0.461	0.529		77
						Left Tilt	6	2437.0	0.124	98.9%	14.00	13.45	0.098	0.112	4	
						Right Touch	6	2437.0	0.576	98.9%	14.00	13.45	0.422	0.485	2	
						Right Tilt	6	2437.0	0.284	98.9%	14.00	13.45				
			Body-worn	Off	15	Rear	6	2437.0	0.262	98.9%	18.00	17.76				
						Front	6	2437.0	0.233	98.9%	18.00	17.76				
			Hotspot	Off	10	Rear	6	2437.0	0.443	98.9%	18.00	17.76				
						Front	6	2437.0	0.498	98.9%	18.00	17.76	0.224	0.239		
						Edge 1	6	2437.0	0.140	98.9%	18.00	17.76				
						Edge 2	6	2437.0	0.064	98.9%	18.00	17.76				
						Edge 4	6	2437.0	0.408	98.9%	18.00	17.76				

Note(s):

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

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RSDB WLAN SISO(Ant.2 only) SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
2.4GHz RSDB SISO Ant.2	2.4GHz	802.11b 1 Mbps	Head	N/A	0	Left Touch	1	2412.0	0.065	98.9%	5.00	3.64	0.040	0.055	1	
						Left Tilt	1	2412.0	0.007	98.9%	5.00	3.64				
						Right Touch	1	2412.0	0.019	98.9%	5.00	3.64				
						Right Tilt	1	2412.0	0.008	98.9%	5.00	3.64				

RSDB WLAN MIMO SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
2.4GHz RSDB MIMO Ant.1	2.4GHz	802.11b 1 Mbps	Head	N/A	0	Left Touch	1	2412.0	0.043	98.9%	5.00	3.61				
						Left Tilt	1	2412.0	0.010	98.9%	5.00	3.61				
						Right Touch	1	2412.0	0.065	98.9%	5.00	3.61	0.028	0.039	1	
						Right Tilt	1	2412.0	0.018	98.9%	5.00	3.61				
			Body-worn	N/A	15	Rear	1	2412.0	0.006	98.9%	5.00	3.61	0.002	0.003	1	
						Front	1	2412.0	0.004	98.9%	5.00	3.61				
			Hotspot	N/A	10	Rear	1	2412.0	0.011	98.9%	5.00	3.61	0.003	0.004	1	
						Front	1	2412.0	0.009	98.9%	5.00	3.61				
						Edge 1	1	2412.0	0.001	98.9%	5.00	3.61				
						Edge 2	1	2412.0	0.001	98.9%	5.00	3.61				
						Edge 4	1	2412.0	0.014	98.9%	5.00	3.61				
2.4GHz RSDB MIMO Ant.2	2.4GHz	802.11b 1 Mbps	Head	N/A	0	Left Touch	1	2412.0	0.043	98.9%	5.00	3.75				
						Left Tilt	1	2412.0	0.010	98.9%	5.00	3.75				
						Right Touch	1	2412.0	0.065	98.9%	5.00	3.75				
						Right Tilt	1	2412.0	0.018	98.9%	5.00	3.75				
			Body-worn	N/A	15	Rear	1	2412.0	0.006	98.9%	5.00	3.61				
						Front	1	2412.0	0.004	98.9%	5.00	3.61				
			Hotspot	N/A	10	Rear	1	2412.0	0.011	98.9%	5.00	3.61				
						Front	1	2412.0	0.009	98.9%	5.00	3.61				
						Edge 1	1	2412.0	0.001	98.9%	5.00	3.61				
						Edge 2	1	2412.0	0.001	98.9%	5.00	3.61				
						Edge 4	1	2412.0	0.014	98.9%	5.00	3.61				

Note(s):

1. When the Highest reported SAR is ≤ 0.4 or 1.0 W/kg (1-g or 10-g respectively). Therefore, further SAR measurements within this exposure condition are not required.
2. Highest reported SAR is > 0.4 or 1.0 W/kg (1-g or 10-g respectively). Due to the highest reported SAR for this test position, other test positions in this exposure condition were evaluated until a SAR ≤ 0.8 or 2.0 W/kg (1-g or 10-g respectively) was reported.
3. Testing for a second channel was required because the reported SAR for this test position was > 0.8 or 2.0 W/kg (1-g or 10-g respectively).
4. Additional testing required in order satisfying FCC simultaneous transmission limit criteria.
5. RSDB WLAN SAR additionally evaluated due to satisfy simultaneous transmission criteria of RSDB configurations.
6. 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.

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10.22. Wi-Fi (U-NII Bands)

U-NII 2A – Normal SISO(Ant.1 only) SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled		
5GHz SISO Ant.1	5.3 GHz U-NII 2A	802.11a 6 Mbps	Head	On	0	Left Touch	56	5280.0	0.102	96.2%	12.00	11.82						
						Left Tilt	56	5280.0	0.128	96.2%	12.00	11.82						
						Right Touch	56	5280.0	0.931	96.2%	12.00	11.82	0.381	0.413				78
						Right Tilt	56	5280.0	0.324	96.2%	12.00	11.82	0.134	0.145			2	
			Body-worn	Off	15	Rear	60	5300.0	0.284	96.2%	16.00	15.44	0.132	0.156			1	79
						Front	60	5300.0	0.172	96.2%	16.00	15.44						
			Product Specific 10-g	Off	0	Rear	60	5300.0	5.505	96.2%	16.00	15.44			0.917	1.085	4	
						Front	60	5300.0	8.288	96.2%	16.00	15.44			0.913	1.080	2	
						Edge 1	60	5300.0	1.300	96.2%	16.00	15.44						
						Edge 4	60	5300.0	11.689	96.2%	16.00	15.44			1.010	1.195		80

U-NII 2A – Normal MIMO SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled		
5GHz MIMO Ant.1	5.3 GHz U-NII 2A	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	58	5290.0	0.108	94.5%	12.00	11.60						
						Left Tilt	58	5290.0	0.132	94.5%	12.00	11.60						
						Right Touch	58	5290.0	0.742	94.5%	12.00	11.60	0.287	0.333			1	81
						Right Tilt	58	5290.0	0.298	94.5%	12.00	11.60	0.145	0.168			4	
		802.11n HT40 13.5 Mbps	Body-worn	Off	15	Rear	62	5310.0	0.242	94.6%	16.00	14.64	0.112	0.162			1	82
						Front	62	5310.0	0.140	94.6%	16.00	14.64						
			Product Specific 10-g	Off	0	Rear	62	5310.0	4.344	94.6%	16.00	14.64			0.612	0.885	2	
						Front	62	5310.0	3.523	94.6%	16.00	14.64			0.644	0.931	4	
						Edge 1	62	5310.0	2.227	94.6%	16.00	14.64						
						Edge 2	62	5310.0	1.293	94.6%	16.00	14.64						
						Edge 4	62	5310.0	4.325	94.6%	16.00	14.64			0.892	1.290		83
5GHz MIMO Ant.2	5.3 GHz U-NII 2A	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	58	5290.0	0.108	94.5%	12.00	11.50	0.047	0.055			4	
						Left Tilt	58	5290.0	0.132	94.5%	12.00	11.50	0.066	0.078			4	
						Right Touch	58	5290.0	0.742	94.5%	12.00	11.50						
						Right Tilt	58	5290.0	0.298	94.5%	12.00	11.50						
		802.11n HT40 13.5 Mbps	Body-worn	Off	15	Rear	62	5310.0	0.242	94.6%	16.00	15.52						
						Front	62	5310.0	0.140	94.6%	16.00	15.52						
			Product Specific 10-g	Off	0	Rear	62	5310.0	4.344	94.6%	16.00	15.52						
						Front	62	5310.0	3.523	94.6%	16.00	15.52						
						Edge 1	62	5310.0	2.227	94.6%	16.00	15.52						
						Edge 2	62	5310.0	1.293	94.6%	16.00	15.52						
						Edge 4	62	5310.0	4.325	94.6%	16.00	15.52						

U-NII 2A – RSDB MIMO SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
5GHz RSDB MIMO Ant.1	5.3 GHz U-NII 2A	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	58	5290.0	0.080	94.5%	9.00	8.11				
						Left Tilt	58	5290.0	0.097	94.5%	9.00	8.11				
						Right Touch	58	5290.0	0.225	94.5%	9.00	8.11	0.120	0.156	1	
						Right Tilt	58	5290.0	0.103	94.5%	9.00	8.11	0.043	0.056	4	
5GHz RSDB MIMO Ant.2	5.3 GHz U-NII 2A	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	58	5290.0	0.080	94.5%	9.00	8.40	0.033	0.039	4	
						Left Tilt	58	5290.0	0.097	94.5%	9.00	8.40	0.035	0.043	4	
						Right Touch	58	5290.0	0.225	94.5%	9.00	8.40				
						Right Tilt	58	5290.0	0.103	94.5%	9.00	8.40				

Note(s):

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

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U-NII 2C – Normal SISO(Ant.1 only) SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled		
5GHz SISO Ant.1	5.5 GHz U-NII 2C	802.11a 6 Mbps	Head	On	0	Left Touch	120	5600.0	0.180	96.2%	12.00	11.64						
						Left Tilt	120	5600.0	0.201	96.2%	12.00	11.64						
						Right Touch	120	5600.0	0.959	96.2%	12.00	11.64	0.444	0.502				84
						Right Tilt	120	5600.0	0.620	96.2%	12.00	11.64	0.238	0.269			2	
			Body-worn	Off	15	Rear	120	5600.0	0.510	96.2%	16.00	15.67	0.263	0.295			1	85
						Front	120	5600.0	0.195	96.2%	16.00	15.67						
			Product Specific 10-g	Off	0	Rear	120	5600.0	14.013	96.2%	16.00	15.67			1.400	1.571		86
						Front	120	5600.0	11.402	96.2%	16.00	15.67			0.975	1.094	4	
						Edge 1	120	5600.0	1.273	96.2%	16.00	15.67						
						Edge 4	120	5600.0	12.473	96.2%	16.00	15.67			1.020	1.144	2	

U-NII 2C – Normal MIMO SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled		
5GHz MIMO Ant.1	5.5 GHz U-NII 2C	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	122	5610.0	0.139	94.5%	12.00	10.91						
						Left Tilt	122	5610.0	0.196	94.5%	12.00	10.91						
						Right Touch	122	5610.0	0.753	94.5%	12.00	10.91	0.298	0.405				87
						Right Tilt	122	5610.0	0.425	94.5%	12.00	10.91	0.186	0.253			2	
		802.11n HT40 13.5 Mbps	Body-worn	Off	15	Rear	102	5510.0	0.412	94.6%	16.00	14.50	0.195	0.291			1	88
						Front	102	5510.0	0.187	94.6%	16.00	14.50						
			Product Specific 10-g	Off	0	Rear	102	5510.0	11.144	94.6%	16.00	14.50			1.120	1.673	2	
						Front	102	5510.0	7.258	94.6%	16.00	14.50			0.710	1.061	4	
						Edge 1	102	5510.0	2.637	94.6%	16.00	14.50						
						Edge 2	102	5510.0	0.503	94.6%	16.00	14.50						
						Edge 4	102	5510.0	14.827	94.6%	16.00	14.50			1.440	2.151		
							118	5590.0	21.726	94.6%	16.00	14.82			2.040	2.831	3	89
5GHz MIMO Ant.2	5.5 GHz U-NII 2C	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	122	5610.0	0.139	94.5%	12.00	11.71						
						Left Tilt	122	5610.0	0.196	94.5%	12.00	11.71						
						Right Touch	122	5610.0	0.753	94.5%	12.00	11.71						
						Right Tilt	122	5610.0	0.425	94.5%	12.00	11.71						
		802.11n HT40 13.5 Mbps	Body-worn	Off	15	Rear	102	5510.0	0.412	94.6%	16.00	15.89						
						Front	102	5510.0	0.187	94.6%	16.00	15.89						
			Product Specific 10-g	Off	0	Rear	102	5510.0	11.144	94.6%	16.00	15.89						
						Front	102	5510.0	7.258	94.6%	16.00	15.89						
						Edge 1	102	5510.0	2.637	94.6%	16.00	15.89						
						Edge 2	102	5510.0	0.503	94.6%	16.00	15.89						
						Edge 4	102	5510.0	14.827	94.6%	16.00	14.50						
							118	5590.0	21.726	94.6%	16.00	14.82						

U-NII 2C – RSDB MIMO SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
5GHz RSDB MIMO Ant.1	5.5 GHz U-NII 2C	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	106	5530.0	0.082	94.5%	9.00	7.92				
						Left Tilt	106	5530.0	0.095	94.5%	9.00	7.92	0.035	0.047	4	
						Right Touch	106	5530.0	0.352	94.5%	9.00	7.92	0.170	0.231	1	
						Right Tilt	106	5530.0	0.271	94.5%	9.00	7.92	0.091	0.123	4	
5GHz RSDB MIMO Ant.2	5.5 GHz U-NII 2C	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	106	5530.0	0.082	94.5%	9.00	8.80	0.031	0.035	4	
						Left Tilt	106	5530.0	0.095	94.5%	9.00	8.80				
						Right Touch	106	5530.0	0.352	94.5%	9.00	8.80				
						Right Tilt	106	5530.0	0.271	94.5%	9.00	8.80				

Note(s):

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

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U-NII 3 – Normal SISO(Ant.1 only) SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Pow er (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
5GHz SISO Ant.1	5.8 GHz U-NII 3	802.11a 6 Mbps	Head	On	0	Left Touch	165	5825.0	0.114	96.2%	12.00	11.85				
						Left Tilt	165	5825.0	0.119	96.2%	12.00	11.85				
						Right Touch	165	5825.0	0.872	96.2%	12.00	11.85	0.328	0.353	1	90
						Right Tilt	165	5825.0	0.389	96.2%	12.00	11.85	0.155	0.167	4	
			Body-w orn	Off	15	Rear	149	5745.0	0.482	96.2%	16.00	15.44	0.237	0.280	1	91
						Front	149	5745.0	0.200	96.2%	16.00	15.44				
			Hotspot	Off	10	Rear	149	5745.0	0.754	96.2%	16.00	15.44	0.391	0.463	2	
						Front	149	5745.0	0.347	96.2%	16.00	15.44				
						Edge 1	149	5745.0	0.231	96.2%	16.00	15.44				
						Edge 4	149	5745.0	0.875	96.2%	16.00	15.44	0.427	0.505		92

U-NII 3 – Normal MIMO SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Pow er (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
5GHz MIMO Ant.1	5.8 GHz U-NII 3	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	155	5775.0	0.109	94.5%	12.00	10.69				
						Left Tilt	155	5775.0	0.075	94.5%	12.00	10.69				
						Right Touch	155	5775.0	0.518	94.5%	12.00	10.69	0.256	0.366	1	93
						Right Tilt	155	5775.0	0.400	94.5%	12.00	10.69				
		802.11n HT40 13.5 Mbps	Body-w orn	Off	15	Rear	151	5755.0	0.410	94.6%	16.00	15.40	0.193	0.234	1	94
						Front	151	5755.0	0.137	94.6%	16.00	15.40				
			Hotspot	Off	10	Rear	151	5755.0	0.668	94.6%	16.00	15.40	0.280	0.340	2	
						Front	151	5755.0	0.203	94.6%	16.00	15.40				
						Edge 1	151	5755.0	0.242	94.6%	16.00	15.40				
						Edge 2	151	5755.0	0.072	94.6%	16.00	15.40				
						Edge 4	151	5755.0	0.807	94.6%	16.00	15.40	0.360	0.437		95
5GHz MIMO Ant.2	5.8 GHz U-NII 3	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	155	5775.0	0.109	94.5%	12.00	11.53				
						Left Tilt	155	5775.0	0.075	94.5%	12.00	11.53				
						Right Touch	155	5775.0	0.518	94.5%	12.00	11.53				
						Right Tilt	155	5775.0	0.400	94.5%	12.00	11.53				
		802.11n HT40 13.5 Mbps	Body-w orn	Off	15	Rear	151	5755.0	0.410	94.6%	16.00	15.76				
						Front	151	5755.0	0.137	94.6%	16.00	15.76				
			Hotspot	Off	10	Rear	151	5755.0	0.668	94.6%	16.00	15.76				
						Front	151	5755.0	0.203	94.6%	16.00	15.76				
						Edge 1	151	5755.0	0.242	94.6%	16.00	15.76				
						Edge 2	151	5755.0	0.072	94.6%	16.00	15.76				
						Edge 4	151	5755.0	0.807	94.6%	16.00	15.76				

U-NII 3 – RSDB MIMO SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Pow er (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
5GHz RSDB MIMO Ant.1	5.8 GHz U-NII 3	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	155	5775.0	0.058	94.5%	9.00	7.19				
						Left Tilt	155	5775.0	0.055	94.5%	9.00	7.19	0.020	0.032	4	
						Right Touch	155	5775.0	0.256	94.5%	9.00	7.19	0.116	0.186	1	
						Right Tilt	155	5775.0	0.162	94.5%	9.00	7.19	0.050	0.080	4	
5GHz RSDB MIMO Ant.2	5.8 GHz U-NII 3	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	155	5775.0	0.058	94.5%	9.00	8.52	0.019	0.023	4	
						Left Tilt	155	5775.0	0.055	94.5%	9.00	8.52				
						Right Touch	155	5775.0	0.256	94.5%	9.00	8.52				
						Right Tilt	155	5775.0	0.162	94.5%	9.00	8.52				

Note(s):

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

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U-NII 4 – Normal SISO(Ant.1 only) SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled		
5GHz SISO Ant.1	5.9 GHz U-NII 4	802.11a 6 Mbps	Head	On	0	Left Touch	169	5845.0	0.117	96.2%	12.00	11.79	0.061	0.066			4	
						Left Tilt	169	5845.0	0.161	96.2%	12.00	11.79	0.075	0.082			4	
						Right Touch	169	5845.0	0.812	96.2%	12.00	11.79	0.305	0.333			1	96
						Right Tilt	169	5845.0	0.354	96.2%	12.00	11.79	0.147	0.160			4	
			Body-worn	Off	15	Rear	177	5885.0	0.338	96.2%	16.00	15.59	0.141	0.161			1	97
						Front	177	5885.0	0.122	96.2%	16.00	15.59						
			Product Specific 10-g	Off	0	Rear	177	5885.0	5.594	96.2%	16.00	15.59			0.678	0.775	2	
						Front	177	5885.0	5.132	96.2%	16.00	15.59						
						Edge 1	177	5885.0	2.571	96.2%	16.00	15.59						
						Edge 4	177	5885.0	23.148	96.2%	16.00	15.59			1.510	1.726		98

U-NII 4 – Normal MIMO SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		10-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled	Meas.	Scaled		
5GHz MIMO Ant.1	5.9 GHz U-NII 4	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	171	5855.0	0.104	94.5%	12.00	11.64						
						Left Tilt	171	5855.0	0.102	94.5%	12.00	11.64						
						Right Touch	171	5855.0	0.659	94.5%	12.00	11.64	0.260	0.299			1	99
						Right Tilt	171	5855.0	0.447	94.5%	12.00	11.64						
		802.11n HT40 13.5 Mbps	Body-worn	Off	15	Rear	175	5875.0	0.351	94.6%	16.00	15.87	0.159	0.173			1	100
						Front	175	5875.0	0.131	94.6%	16.00	15.87						
			Product Specific 10-g	Off	0	Rear	175	5875.0	7.624	94.6%	16.00	15.87			0.691	0.753	2	
						Front	175	5875.0	4.067	94.6%	16.00	15.87						
						Edge 1	175	5875.0	1.536	94.6%	16.00	15.87						
						Edge 2	175	5875.0	0.482	94.6%	16.00	15.87						
						Edge 4	175	5875.0	16.227	94.6%	16.00	15.87			1.520	1.656		101
5GHz MIMO Ant.2	5.9 GHz U-NII 4	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	171	5855.0	0.104	94.5%	12.00	11.86						
						Left Tilt	171	5855.0	0.102	94.5%	12.00	11.86						
						Right Touch	171	5855.0	0.659	94.5%	12.00	11.86						
						Right Tilt	171	5855.0	0.447	94.5%	12.00	11.86						
		802.11n HT40 13.5 Mbps	Body-worn	Off	15	Rear	175	5875.0	0.351	94.6%	16.00	14.71						
						Front	175	5875.0	0.131	94.6%	16.00	14.71						
			Product Specific 10-g	Off	0	Rear	175	5875.0	7.624	94.6%	16.00	14.71						
						Front	175	5875.0	4.067	94.6%	16.00	14.71						
						Edge 1	175	5875.0	1.536	94.6%	16.00	14.71						
						Edge 2	175	5875.0	0.482	94.6%	16.00	14.71						
						Edge 4	175	5875.0	16.227	94.6%	16.00	14.71						

U-NII 4 – RSDB MIMO SAR result

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Area Scan Max. SAR (W/kg)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Note	Plot No.
											Tune-up limit	Meas.	Meas.	Scaled		
5GHz RSDB MIMO Ant.1	5.9 GHz U-NII 4	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	171	5855.0	0.060	94.5%	9.00	8.34				
						Left Tilt	171	5855.0	0.042	94.5%	9.00	8.34	0.016	0.020	4	
						Right Touch	171	5855.0	0.277	94.5%	9.00	8.34	0.130	0.160	1	
						Right Tilt	171	5855.0	0.179	94.5%	9.00	8.34	0.057	0.070	4	
5GHz RSDB MIMO Ant.2	5.9 GHz U-NII 4	802.11ac VHT80 29.3 Mbps	Head	On	0	Left Touch	171	5855.0	0.060	94.5%	9.00	8.84	0.017	0.018	4	
						Left Tilt	171	5855.0	0.042	94.5%	9.00	8.84	0.016	0.018	4	
						Right Touch	171	5855.0	0.277	94.5%	9.00	8.84				
						Right Tilt	171	5855.0	0.179	94.5%	9.00	8.84				

Note(s):

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

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10.23. Bluetooth

Antenna	Frequency Band	Mode	RF Exposure Conditions	PWR Back-off	Dist. (mm)	Test Position	Ch #.	Freq. (MHz)	Duty Cycle	Power (dBm)		1-g SAR (W/kg)		Plot No.
										Tune-up limit	Meas.	Meas.	Scaled	
2.4GHz Ant.1	2.4GHz Bluetooth	BDR GFSK	Head	On	0	Left Touch	39	2441.0	76.7%	12.00	11.35	0.041	0.049	
						Left Tilt	39	2441.0	76.7%	12.00	11.35	0.037	0.043	
						Right Touch	39	2441.0	76.7%	12.00	11.35	0.170	0.201	102
						Right Tilt	39	2441.0	76.7%	12.00	11.35	0.102	0.121	
		BLE 1Mbps (255 pkt)	Body-worn	Off	15	Rear	19	2440.0	85.2%	14.50	13.82	0.006	0.007	103
						Front	19	2440.0	85.2%	14.50	13.82	0.003	0.004	
			Hotspot	Off	10	Rear	19	2440.0	85.2%	14.50	13.82	0.012	0.014	
						Front	19	2440.0	85.2%	14.50	13.82	0.012	0.013	
						Edge 1	19	2440.0	85.2%	14.50	13.82	0.002	0.003	
						Edge 4	19	2440.0	85.2%	14.50	13.82	0.019	0.022	104
2.4GHz Ant.2	2.4GHz	BDR GFSK	Head	On	0	Left Touch	0	2402.0	76.7%	12.50	12.25	0.255	0.275	105
						Left Tilt	0	2402.0	76.7%	12.50	12.25	0.040	0.043	
						Right Touch	0	2402.0	76.7%	12.50	12.25	0.188	0.203	
						Right Tilt	0	2402.0	76.7%	12.50	12.25	0.037	0.040	
		BLE 1Mbps (255 pkt)	Body-worn	Off	15	Rear	0	2402.0	85.2%	14.50	13.88	0.004	0.005	106
						Front	0	2402.0	85.2%	14.50	13.88	0.003	0.003	
			Hotspot	Off	10	Rear	0	2402.0	85.2%	14.50	13.88	0.014	0.016	
						Front	0	2402.0	85.2%	14.50	13.88	0.012	0.014	
						Edge 1	0	2402.0	85.2%	14.50	13.88	0.008	0.009	
						Edge 2	0	2402.0	85.2%	14.50	13.88	0.024	0.027	107

10.24. NFC

Antenna	Mode	RF Exposure Conditions	Dist. (mm)	Test Position	Test Setup		Freq. (MHz)	10-g SAR (W/kg)	Plot No.
					Type	Bitrate		Meas.	
NFC	PBRS	Product specific 10-g SAR	0	Rear	A	106	13.56	0.016	
					A	212	13.56	0.021	
					A	424	13.56	0.020	
					B	212	13.56	0.024	108
					F	212	13.56	0.024	
				Front	B	212	13.56	<0.001	
				Edge 2	B	212	13.56	<0.001	
				Edge 4	B	212	13.56	<0.001	

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11. SAR Measurement Variability

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

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

Peak spatial-average (1g of tissue)

Frequency Band (MHz)	Air Interface	RF Exposure Conditions	Test Position	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Repeated Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1750	WCDMA Band IV	Hotspot	Edge 3	Yes	0.894	0.863	1.04
	LTE Band 66	Hotspot	Edge 3	No	0.879	N/A	N/A
1900	WCDMA Band II	Hotspot	Edge 3	Yes	0.880	0.880	1.00
	LTE Band 25	Hotspot	Edge 3	No	0.876	N/A	N/A

Peak spatial-average (10g of tissue)

Frequency Band (MHz)	Air Interface	RF Exposure Conditions	Test Position	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Repeated Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1750	WCDMA Band IV	Product Specific 10g	Edge 3	No	2.400	2.400	1.00
1900	WCDMA Band II	Product Specific 10g	Edge 3	No	2.380	2.380	1.00
5500	Wi-Fi 802.11a/n	Product Specific 10g	Edge 4	No	2.040	2.020	1.01

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.

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12. Simultaneous Transmission SAR Analysis

Simultaneous Transmission Condition

RF Exposure Condition	Item	Capable Transmit Configurations						
Head & Body-worn & Hotspot & Product Specific 10-g	1	WWAN (2G/3G/LTE/NR)	+	BT Ant.1				
	2	WWAN (2G/3G/LTE/NR)	+	BT Ant.2				
	3	WWAN (2G/3G/LTE/NR)	+	UNII Ant.1				
	4	WWAN (2G/3G/LTE/NR)	+	BT Ant.1	+	DTS Ant.2		
	5	WWAN (2G/3G/LTE/NR)	+	DTS MIMO				
	6	WWAN (2G/3G/LTE/NR)	+	UNII MIMO				
	7	WWAN (2G/3G/LTE/NR)	+	BT Ant.1	+	UNII MIMO		
	8	WWAN (2G/3G/LTE/NR)	+	BT Ant.2	+	UNII MIMO		
	9	WWAN (2G/3G/LTE/NR)	+	BT Ant.1	+	DTS Ant.2	+	UNII MIMO
	10	WWAN (2G/3G/LTE/NR)	+	DTS MIMO	+	UNII MIMO		
	11	ENDC or ULCA	+	BT Ant.1				
	12	ENDC or ULCA	+	BT Ant.2				
	13	ENDC or ULCA	+	UNII Ant.1				
	14	ENDC or ULCA	+	BT Ant.1	+	DTS Ant.2		
	15	ENDC or ULCA	+	DTS MIMO				
	16	ENDC or ULCA	+	UNII MIMO				
	17	ENDC or ULCA	+	BT Ant.1	+	UNII MIMO		
	18	ENDC or ULCA	+	BT Ant.2	+	UNII MIMO		
	19	ENDC or ULCA	+	BT Ant.1	+	DTS Ant.2	+	UNII MIMO
	20	ENDC or ULCA	+	DTS MIMO	+	UNII MIMO		
Product Specific 10-g	21	All scenarios (1-20) + NFC + UWB						

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. DTS Radio can transmit simultaneously with Bluetooth Radio.
6. RSDB support to both DTS & UNII bands.
7. NR Radio support to both SA and NSA(ENDC) Radio.
8. BT tethering is considered about each RF exposure conditions.
9. LTE support UL CA inter Band configuration.
10. UWB Ant.1 and Ant.2 can not transmit simultaneously.

Note(s):

For EN-DC mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from 4G(LTE) and time-averaged RF exposure from 5G NR. Smart Transmit algorithm controls the total RF exposure from both 4G and 5G NR to not exceed FCC limit. Therefore, simultaneous transmission compliance between 4G+5G NR operation is demonstrated in the Part 2 Report during algorithm validation. In Part 1 Report, simultaneous transmission compliance was evaluated individually with other Radios (WLAN or BT) using one of 4G or 5G NR.

For UL-CA (Inter band) mode, Qualcomm Smart Transmit algorithm in WWAN adds directly the time-averaged RF exposure from LTE-PCC and time-averaged RF exposure from LTE-SCC. Smart Transmit algorithm controls the total RF exposure from both LTE-PCC and LTE-SCC to not exceed FCC limit. Therefore, simultaneous transmission compliance between LTE-PCC + LTE-SCC operation is demonstrated in the Part 2 Report during algorithm validation. In Part 1 Report, simultaneous transmission compliance was evaluated individually with other Radios (WLAN or BT) using one of LTE-PCC or LTE-SCC.

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12.1. Sub6 Antenna Groups

The 2nd generation of Smart Transmit (GEN2) operates based on pre-defined sub6 antenna groups(AG) and mmW module groups (MG). Sub6 Tx antennas in UE are grouped based on spatial variation of RF exposure distributions, where the RF exposure of one AG is mutually exclusive from the other AG. This is accomplished by demonstrating below conditions for all RF exposure scenarios (This procedures are follow according to Qualcomm's document (80-W2112-4));

1. (Condition#1 Sum of SAR) : Demonstrate that the sum of maximum *reported* SAR from each of the sub6 AGs and the *reported* SAR values from radios outside Smart Transmit(WLAN/BT) should be less than the regulatory limit for each supported DSI.

2. If the condition#1 is not met, then for a given antenna grouping scheme plus external radios/antennas (ERs), demonstrate all AG pairs, all ER pairs and all (AG, ER) pairs in the configuration meet SPLSR (SAR to Peak Location Ratio) criteria for each supported DSI (each RF exposure scenarios).
   For a conservative assessment of SPLSR, the separation distance between each AGs were determined using only the y-axis coordinates of the peak locations.

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

This device supports antenna groups like below table.

Antenna Groups	Grouped antenna list			
AG0	Main 1	Main 2	Main 3	Main 4
AG1	Sub 1	Sub 2	Sub 5	
ER(s)	WLAN/BT Ant.	NFC	UWB	
ER = Exteral radios/antennas suppored ourtside of Smart Transmit (ex; WLAN/BT…)				

This section is a step in evaluating whether each AGs are mutually exclusive using Condition#1 and Condition#2 guide. And If it is evaluated that each AGs are mutually exclusive for all DSIs (each RF exposure scenarios),

Additional analysis for Simultaneous transmission SAR test exclusion for Both AGs and ER(s) compliance demonstration evaluate at Section.12.2.

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12.1.1 Head exposure (DSI = 2) Antenna group analysis

Condition#1

Antenna group : AG0

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)				
			Antenna Group : AG0				Highest SAR level
			Main.1	Main.2	Main.3	Main.4	
Head (1-g SAR)	2	Left Touch	0.241	0.158	0.011	0.000	0.241
		Left Tilt	0.184	0.076	0.000	0.001	0.184
		Right Touch	0.340	0.070	0.004	0.000	0.340
		Right Tilt	0.164	0.044	0.004	0.000	0.164

Antenna group : AG1

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)				
			Antenna Group : AG1				Highest SAR level
			Sub.1	Sub.2	Sub.5		
Head (1-g SAR)	2	Left Touch	0.328	0.356	0.046		0.356
		Left Tilt	0.269	0.477	0.003		0.477
		Right Touch	0.093	0.645	0.075		0.645
		Right Tilt	0.105	0.719	0.000		0.719

SUM for Antenna groups

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)			
			Antenna Groups			SUM SAR
			AG0 Highest SAR	AG1 Highest SAR	ER Highest SAR	
Head (1-g SAR)	2	Left Touch	0.241	0.356	0.680	1.277
		Left Tilt	0.184	0.477	0.502	1.163
		Right Touch	0.340	0.645	0.608	1.593
		Right Tilt	0.164	0.719	0.526	1.409
ER = Exteral radios/antennas suppored ourtside of Smart Transmit (ex; WLAN/BT…)						

Note(s):

1. For ER' Highest SAR, please refer to section.12.2.
2. SUM SAR results are below 1.6 or 4.0 W/kg (1-g or 10-g respectively), So Condition#2 is not required.

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12.1.2 Body-worn exposure (DSI = 0) Antenna group analysis

Condition#1

Antenna group : AG0

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)				
			Antenna Group : AG0				Highest SAR level
			Main.1	Main.2	Main.3	Main.4	
Body-worn (1-g SAR)	0	Rear	1.007	0.399	0.048	0.181	1.007
		Front	0.742	0.283	0.009	0.006	0.742

Antenna group : AG1

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)				
			Antenna Group : AG1				Highest SAR level
			Sub.1	Sub.2	Sub.5		
Body-worn (1-g SAR)	0	Rear	0.060	0.354	0.006		0.354
		Front	0.063	0.141	0.003		0.141

SUM for Antenna groups

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)				
			Antenna Groups			SUM SAR	
			AG0 Highest SAR	AG1 Highest SAR	ER Highest SAR		
Body-worn (1-g SAR)	0	Rear	1.007	0.354	0.359	1.720	***Note.2***
		Front	0.742	0.141	0.399	1.282	
ER = Exteral radios/antennas suppored ourtside of Smart Transmit (ex; WLAN/BT…)							

Note(s):

1. For ER' Highest SAR, please refer to section.12.2.
2. Additional evaluation is required due to over FCC limit. So please refer to Condition#2.

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Condition#2

Test position	No.	Antenna pairs		AG0		AG1		ER SAR (W/kg)	AG0+AG1+ER SUM SAR (W/kg)	SPLSR of AG0 & AG1
		AG0	AG1	SAR (W/kg)	Y-axis location (mm)	SAR (W/kg)	Y-axis location (mm)			
Rear	1	Main.1	Sub.1	1.007	-2.0	0.060	80.5	0.359	1.426	N/A
	2	Main.1	Sub.2	1.007	-2.0	0.354	67.4	0.359	1.720	0.03
	3	Main.1	Sub.5	1.007	-2.0	0.006	28.6	0.359	1.372	N/A
	4	Main.2	Sub.1	0.399	-56.2	0.060	80.5	0.359	0.818	N/A
	5	Main.2	Sub.2	0.399	-56.2	0.354	67.4	0.359	1.111	N/A
	6	Main.2	Sub.5	0.399	-56.2	0.006	28.6	0.359	0.763	N/A
	7	Main.3	Sub.1	0.048	-52.8	0.060	80.5	0.359	0.467	N/A
	8	Main.3	Sub.2	0.048	-52.8	0.354	67.4	0.359	0.761	N/A
	9	Main.3	Sub.5	0.048	-52.8	0.006	28.6	0.359	0.413	N/A
	10	Main.4	Sub.1	0.181	-57.6	0.060	80.5	0.359	0.600	N/A
	11	Main.4	Sub.2	0.181	-57.6	0.354	67.4	0.359	0.894	N/A
	12	Main.4	Sub.5	0.181	-57.6	0.006	28.6	0.359	0.546	N/A

Highest Reported SAR and Peak SAR location (only Y-axis location) in each WWAN Bands in each Antennas

Antenna Group	Antenna	Bands	SAR (W/kg)	Y-axis(mm)
AG0	Main 1	GSM 850	0.292	-42.0
		GSM 1900	0.475	-78.0
		WCDMA 2	0.819	-83.0
		WCDMA 4	0.760	-86.0
		WCDMA 5	0.330	-2.0
		LTE Band 5	0.392	-67.5
		LTE Band 12	0.262	-69.0
		LTE Band 13	0.373	-65.0
		LTE Band 25	0.656	-83.0
		LTE Band 26	0.320	-67.5
		LTE Band 66	0.797	-81.0
		NR Band n5	0.381	-60.5
		NR Band n25	0.730	-77.0
		NR Band n66	1.007	-87.0
		Worst configuration	**1.007**	**-2.0**

Antenna Group	Antenna	Bands	SAR (W/kg)	Y-axis(mm)
AG1	Sub.2	n41 SRS0	0.186	77.5
		n77 SRS0	0.354	67.4
		LTE 4	0.184	80.5
		N66	0.151	80.0
		Worst configuration	**0.354**	**67.4**

Note(s):

1. If Antenna pair's SUM SAR results are below 1.6 or 4.0 W/kg (1-g or 10-g respectively), then Condition#2 is not required.
2. If SPLSR criteria is below 0.04 or 1.0 (1-g or 10-g respectively) in all antenna pair (AG0 & AG1), additional evaluation is not required.

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12.1.3 Hotspot exposure (DSI = 3) Antenna group analysis

Condition#1

Antenna group : AG0

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)				
			Antenna Group : AG0				Highest SAR level
			Main.1	Main.2	Main.3	Main.4	
Hotspot (1-g SAR)	3	Rear	0.774	0.510	0.068	0.306	0.774
		Front	0.572	0.312	0.039	0.015	0.572
		Edge 1					0.000
		Edge 2	0.420			0.015	0.420
		Edge 3	1.126	0.465	0.019	0.062	1.126
		Edge 4	0.347	0.441	0.097		0.441

Antenna group : AG1

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)				
			Antenna Group : AG1				Highest SAR level
			Sub.1	Sub.2	Sub.5		
Hotspot (1-g SAR)	3	Rear	0.038	0.613	0.023		0.613
		Front	0.039	0.220	0.011		0.220
		Edge 1	0.050	0.522			0.522
		Edge 2	0.027				0.027
		Edge 3					0.000
		Edge 4		0.124	0.005		0.124

SUM for Antenna groups

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)				
			Antenna Groups			SUM SAR	
			AG0 Highest SAR	AG1 Highest SAR	ER Highest SAR		
Hotspot (1-g SAR)	3	Rear	0.774	0.613	0.503	1.890	***Note.2***
		Front	0.572	0.220	0.670	1.463	
		Edge 1		0.522	0.660	1.181	
		Edge 2	0.420	0.027	0.657	1.104	
		Edge 3	1.126			1.126	
		Edge 4	0.441	0.124	0.459	1.024	
ER = Exteral radios/antennas suppored ourtside of Smart Transmit (ex; WLAN/BT…)							

Note(s):

1. For ER' Highest SAR, please refer to section.12.2.
2. Additional evaluation is required due to over FCC limit. So please refer to Condition#2.

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Condition#2

Test position	No.	Antenna pairs		AG0		AG1		ER SAR (W/kg)	AG0+AG1+ER SUM SAR (W/kg)	SPLSR of AG0 & AG1
		AG0	AG1	SAR (W/kg)	Y-axis location (mm)	SAR (W/kg)	Y-axis location (mm)			
Rear	1	Main.1	Sub.1	0.774	-59.5	0.038	79.0	0.503	1.315	N/A
	2	Main.1	Sub.2	0.774	-59.5	0.613	67.4	0.503	1.890	0.02
	3	Main.1	Sub.5	0.774	-59.5	0.023	27.6	0.503	1.300	N/A
	4	Main.2	Sub.1	0.510	-76.6	0.038	79.0	0.503	1.051	N/A
	5	Main.2	Sub.2	0.510	-76.6	0.613	67.4	0.503	1.626	0.01
	6	Main.2	Sub.5	0.510	-76.6	0.023	27.6	0.503	1.036	N/A
	7	Main.3	Sub.1	0.068	-57.8	0.038	79.0	0.503	0.609	N/A
	8	Main.3	Sub.2	0.068	-57.8	0.613	67.4	0.503	1.184	N/A
	9	Main.3	Sub.5	0.068	-57.8	0.023	27.6	0.503	0.594	N/A
	10	Main.4	Sub.1	0.306	-63.6	0.038	79.0	0.503	0.847	N/A
	11	Main.4	Sub.2	0.306	-63.6	0.613	67.4	0.503	1.422	N/A
	12	Main.4	Sub.5	0.306	-63.6	0.023	27.6	0.503	0.832	N/A

Highest Reported SAR and Peak SAR location (only Y-axis location) in each WWAN Bands in each Antennas

Antenna Group	Antenna	Bands	SAR (W/kg)	Y-axis(mm)
AG0	Main 1	GSM 850	0.551	-70.5
		GSM 1900	0.405	-78.0
		WCDMA 2	0.703	-78.5
		WCDMA 4	0.684	-89.0
		WCDMA 5	0.608	-67.5
		LTE Band 5	0.685	-59.5
		LTE Band 12	0.372	-67.5
		LTE Band 13	0.626	-71.1
		LTE Band 25	0.540	-75.0
		LTE Band 26	0.588	-69.0
		LTE Band 66	0.642	-82.5
		NR Band n5	0.774	-60.0
		NR Band n25	0.670	-85.5
		NR Band n66	0.730	-87.0
		Worst configuration	**0.774**	**-59.5**
	Main 2	LTE Band 41	0.510	-76.6
		NR Band n41-SRS1	0.071	-78.5
		Worst configuration	**0.510**	**-76.6**

Antenna Group	Antenna	Bands	SAR (W/kg)	Y-axis(mm)
AG1	Sub.2	n41 SRS0	0.160	77.0
		n77 SRS0	0.613	67.4
		LTE 4	0.304	77.5
		N66	0.261	82.0
		Worst configuration	**0.613**	**67.4**

Note(s):

1. If Antenna pair's SUM SAR results are below 1.6 or 4.0 W/kg (1-g or 10-g respectively), then Condition#2 is not required.
2. If SPLSR criteria is below 0.04 or 1.0 (1-g or 10-g respectively) in all antenna pair (AG0 & AG1), additional evaluation is not required.

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12.1.4 Product Specific 10-g exposure (DSI = 0, 1, 4) Antenna group analysis

Condition#1

Antenna group : AG0

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)				
			Antenna Group : AG0				Highest SAR level
			Main.1	Main.2	Main.3	Main.4	
Product Specific 10-g (10-g SAR)	0,1,4	Rear	2.128	N/A	N/A	N/A	2.128
		Front	1.965	N/A	N/A	N/A	1.965
		Edge 1		N/A	N/A	N/A	0.000
		Edge 2		N/A	N/A	N/A	0.000
		Edge 3	2.807	N/A	N/A	N/A	2.807
		Edge 4		N/A	N/A	N/A	0.000

Antenna group : AG1

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)				
			Antenna Group : AG1				Highest SAR level
			Sub.1	Sub.2	Sub.5		
Product Specific 10-g (10-g SAR)	0,1,4	Rear	N/A	N/A	N/A		0.000
		Front	N/A	N/A	N/A		0.000
		Edge 1	N/A	N/A	N/A		0.000
		Edge 2	N/A	N/A	N/A		0.000
		Edge 3	N/A	N/A	N/A		0.000
		Edge 4	N/A	N/A	N/A		0.000

SUM for Antenna groups

RF Exposure	DSI state	Test Position	Standalone SAR (W/kg)			
			Antenna Groups			SUM SAR
			AG0 Highest SAR	AG1 Highest SAR	ER Highest SAR	
Product Specific 10-g (10-g SAR)	0,1,4	Rear	2.128	N/A	1.698	3.826
		Front	1.965	N/A	1.094	3.059
		Edge 1		N/A	2.831	2.831
		Edge 2		N/A	2.831	2.831
		Edge 3	2.807	N/A		2.807
		Edge 4		N/A	2.831	2.831
ER = Exteral radios/antennas suppored ourtside of Smart Transmit (ex; WLAN/BT…)						

Note(s):

1. For ER' Highest SAR, please refer to section.12.2.
2. AG0+ER simultaneous transmission scenario consider at Section.12.2.

Conclusion:

1. Head & Product Specific 10-g exposure condition (DSI = 0, 1, 4) : AG0+AG1+ER's sum is below FCC limit. So additional analysis is not required for AG0 and AG1.
2. Body-worn and Hotspot exposure condition (DSI = 0, 3) : Sub6 antenna group is demonstrated to show that AG0 is mutually exclusive from AG1 in Body-worn and Hotspot exposure condition (DSI = 0, 3) according to SPLSR criteria.

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Simultaneous transmission SAR test exclusion considerations

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

Sum of SAR

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

SAR to Peak Location Separation 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.

Sum to Peak Location Separation Ratio

Instead of doing a small volume scan over a co-located antenna pair (Hybrid SPLSR guide), Simultaneous transmission SAR test exclusion may algebraically sum the SAR values of the co-located pair and use that value in SPLSR calculation;

-In the calculation Separation distance must use the minimum distance between the spatially separated antenna and the closest antenna of the co-located antenna pair to be conservative.

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12.2. Simultaneous transmission analysis

12.2.1. Head exposure condition

Normal mode

ER's SAR (DTS & BT & UNII)

RF Exposure	Test Position	ER's standalone SAR (W/kg)							ER's normal mode simultaneous SAR (W/kg)					Worst case Combination
		BT Ant.1	BT Ant.2	2.4GHz Ant.2	2.4GHz MIMO	5GHz Ant.1	5GHz MIMO	6GHz MIMO	BT Ant.1 + 2.4GHz Ant.2	BT Ant.1 + 5GHz MIMO	BT Ant.1 + 6GHz MIMO	BT Ant.2 + 5GHz MIMO	BT Ant.2 + 6GHz MIMO	
		1	2	3	4	5	6	7	1 + 3	1 + 6	1 + 7	2 + 6	2 + 7	
Head (1-g SAR)	Left Touch	0.049	0.275	0.516	0.529	0.502	0.405	0.037	0.565	0.454	0.086	0.680	0.312	0.680
	Left Tilt	0.043	0.043	0.090	0.112	0.502	0.405	0.037	0.133	0.448	0.080	0.448	0.080	0.502
	Right Touch	0.201	0.203	0.264	0.485	0.502	0.405	0.194	0.465	0.606	0.395	0.608	0.397	0.608
	Right Tilt	0.121	0.040	0.056	0.236	0.269	0.405	0.111	0.177	0.526	0.232	0.445	0.151	0.526

Simultaneous Transmission Analysis

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)
		AG0	AG1	ER	AG0 + AG1 + ER
Head (1-g SAR)	Left Touch	0.241	0.356	0.680	1.277
	Left Tilt	0.184	0.477	0.502	1.163
	Right Touch	0.340	0.645	0.608	1.593
	Right Tilt	0.164	0.719	0.526	1.409

RSDB mode

ER's SAR (DTS & BT & UNII)

RF Exposure	Test Position	ER's standalone SAR (W/kg)					ER's RSDB mode simultaneous SAR (W/kg)				Worst case Combination
		BT Ant.1	2.4GHz Ant.2	2.4GHz MIMO	5GHz MIMO	6GHz MIMO	2.4GHz MIMO + 5GHz MIMO	2.4GHz MIMO + 6GHz MIMO	BT Ant.1 + 2.4GHz Ant.2 + 5GHz MIMO	BT Ant.1 + 2.4GHz Ant.2 + 6GHz MIMO	
		1	2	3	4	5	3 + 4	3 + 5	1 + 2 + 4	1 + 2 + 5	
Head (1-g SAR)	Left Touch	0.049	0.055	0.039	0.039	0.037	0.078	0.076	0.143	0.141	0.143
	Left Tilt	0.043	0.055	0.039	0.047	0.037	0.086	0.076	0.145	0.135	0.145
	Right Touch	0.201	0.055	0.039	0.231	0.194	0.270	0.233	0.487	0.450	0.487
	Right Tilt	0.121	0.055	0.039	0.123	0.111	0.162	0.150	0.298	0.286	0.298

Simultaneous Transmission Analysis

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)
		AG0	AG1	ER	AG0 + AG1 + ER
Head (1-g SAR)	Left Touch	0.241	0.356	0.143	0.740
	Left Tilt	0.184	0.477	0.145	0.806
	Right Touch	0.340	0.645	0.487	1.472
	Right Tilt	0.164	0.719	0.298	1.181

Note(s):

1. Green value is estimated SAR value.

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12.2.2. Body-worn exposure condition

Normal mode

ER's SAR (DTS & BT & UNII)

RF Exposure	Test Position	ER's standalone SAR (W/kg)							ER's normal mode simultaneous SAR (W/kg)					Worst case Combination
		BT Ant.1	BT Ant.2	2.4GHz Ant.2	2.4GHz MIMO	5GHz Ant.1	5GHz MIMO	6GHz MIMO	BT Ant.1 + 2.4GHz Ant.2	BT Ant.1 + 5GHz MIMO	BT Ant.1 + 6GHz MIMO	BT Ant.2 + 5GHz MIMO	BT Ant.2 + 6GHz MIMO	
		1	2	3	4	5	6	7	1 + 3	1 + 6	1 + 7	2 + 6	2 + 7	
Body-worn (1-g SAR)	Rear	0.007	0.005	0.060	0.270	0.295	0.291	0.127	0.067	0.298	0.134	0.296	0.132	0.298
	Front	0.004	0.003	0.104	0.270	0.295	0.291	0.021	0.108	0.295	0.025	0.294	0.024	0.295

Simultaneous Transmission Analysis

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)	
		AG0	AG1	ER	AG0 + ER	AG1 + ER
Body-worn (1-g SAR)	Rear	1.007	0.354	0.298	1.305	0.652
	Front	0.742	0.141	0.295	1.037	0.436

RSDB mode

ER's SAR (DTS & BT & UNII)

RF Exposure	Test Position	ER's standalone SAR (W/kg)					ER's RSDB mode simultaneous SAR (W/kg)				Worst case Combination
		BT Ant.1	2.4GHz Ant.2	2.4GHz MIMO	5GHz MIMO	6GHz MIMO	2.4GHz MIMO + 5GHz MIMO	2.4GHz MIMO + 6GHz MIMO	BT Ant.1 + 2.4GHz Ant.2 + 5GHz MIMO	BT Ant.1 + 2.4GHz Ant.2 + 6GHz MIMO	
		1	2	3	4	5	3 + 4	3 + 5	1 + 2 + 4	1 + 2 + 5	
Body-worn (1-g SAR)	Rear	0.007	0.060	0.003	0.291	0.127	0.294	0.130	0.359	0.195	0.359
	Front	0.004	0.104	0.003	0.291	0.021	0.294	0.024	0.399	0.129	0.399

Simultaneous Transmission Analysis

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)	
		AG0	AG1	ER	AG0 + ER	AG1 + ER
Body-worn (1-g SAR)	Rear	1.007	0.354	0.359	1.366	0.713
	Front	0.742	0.141	0.399	1.141	0.540

Note(s):

1. For Hotspot exposure condition, AG0 and AG1 are mutually exclusive according to Hotspot exposure antenna group analysis in Section.12.1.3. So Simultaneous transmission for AG0 + AG1 + ER were considered each AG0 + ER and AG1 + ER.
2. Green value is estimated SAR value.

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12.2.3. Hotspot exposure condition

Normal mode

ER's SAR (DTS & BT & UNII)

RF Exposure	Test Position	ER's standalone SAR (W/kg)							ER's normal mode simultaneous SAR (W/kg)					Worst case Combination
		BT Ant.1	BT Ant.2	2.4GHz Ant.2	2.4GHz MIMO	5GHz Ant.1	5GHz MIMO	6GHz MIMO	BT Ant.1 + 2.4GHz Ant.2	BT Ant.1 + 5GHz MIMO	BT Ant.1 + 6GHz MIMO	BT Ant.2 + 5GHz MIMO	BT Ant.2 + 6GHz MIMO	
		1	2	3	4	5	6	7	1 + 3	1 + 6	1 + 7	2 + 6	2 + 7	
Hotspot (1-g SAR)	Rear	0.014	0.016	0.149	0.455	0.463	0.340	N/A	0.163	0.354	0.014	0.356	0.016	0.463
	Front	0.013	0.014	0.220	0.505	0.505	0.437	N/A	0.233	0.450	0.013	0.451	0.014	0.505
	Edge 1	0.003	0.009	0.220	0.505	0.505	0.437	N/A	0.223	0.440	0.003	0.446	0.009	0.505
	Edge 2		0.027	0.220	0.505		0.437	N/A	0.220	0.437		0.464	0.027	0.505
	Edge 3							N/A						
	Edge 4	0.022			0.505	0.505	0.437	N/A	0.022	0.459	0.022	0.437		0.505

Simultaneous Transmission Analysis

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)	
		AG0	AG1	ER	AG0 + ER	AG1 + ER
Hotspot (1-g SAR)	Rear	0.774	0.613	0.463	1.237	1.076
	Front	0.572	0.220	0.505	1.077	0.725
	Edge 1		0.522	0.505	0.505	1.027
	Edge 2	0.420	0.027	0.505	0.925	0.532
	Edge 3	1.126			1.126	
	Edge 4	0.441	0.124	0.505	0.946	0.629

RSDB mode

ER's SAR (DTS & BT & UNII)

RF Exposure	Test Position	ER's standalone SAR (W/kg)					ER's RSDB mode simultaneous SAR (W/kg)				Worst case Combination
		BT Ant.1	2.4GHz Ant.2	2.4GHz MIMO	5GHz MIMO	6GHz MIMO	2.4GHz MIMO + 5GHz MIMO	2.4GHz MIMO + 6GHz MIMO	BT Ant.1 + 2.4GHz Ant.2 + 5GHz MIMO	BT Ant.1 + 2.4GHz Ant.2 + 6GHz MIMO	
		1	2	3	4	5	3 + 4	3 + 5	1 + 2 + 4	1 + 2 + 5	
Hotspot (1-g SAR)	Rear	0.014	0.149	0.004	0.340	N/A	0.344	0.004	0.503	0.163	0.503
	Front	0.013	0.220	0.004	0.437	N/A	0.441	0.004	0.670	0.233	0.670
	Edge 1	0.003	0.220	0.004	0.437	N/A	0.441	0.004	0.660	0.222	0.660
	Edge 2		0.220	0.004	0.437	N/A	0.441	0.004	0.657	0.220	0.657
	Edge 3					N/A					
	Edge 4	0.022		0.004	0.437	N/A	0.441	0.004	0.459	0.022	0.459

Simultaneous Transmission Analysis

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)	
		AG0	AG1	ER	AG0 + ER	AG1 + ER
Hotspot (1-g SAR)	Rear	0.774	0.613	0.503	1.277	1.116
	Front	0.572	0.220	0.670	1.243	0.891
	Edge 1		0.522	0.660	0.660	1.181
	Edge 2	0.420	0.027	0.657	1.077	0.684
	Edge 3	1.126			1.126	
	Edge 4	0.441	0.124	0.459	0.900	0.583

Note(s):

1. For Hotspot exposure condition, AG0 and AG1 are mutually exclusive according to Hotspot exposure antenna group analysis in Section.12.1.3. So Simultaneous transmission for AG0 + AG1 + ER were considered each AG0 + ER and AG1 + ER.
2. Green value is estimated SAR value.

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12.2.4. Product Specific 10-g exposure condition

Normal mode

ER's SAR (DTS & BT & UNII & NFC & UWB)

RF Exposure	Test Position	ER's standalone SAR (W/kg)						ER's normal mode simultaneous SAR (W/kg)					Worst case Combination
		5GHz Ant.1	5GHz MIMO	6GHz MIMO	NFC	UWB Ant.1	UWB Ant.2	BT Ant.1 + 2.4GHz Ant.2 + NFC + UWB	BT Ant.1 + 5GHz MIMO + NFC + UWB	BT Ant.1 + 6GHz MIMO + NFC + UWB	BT Ant.2 + 5GHz MIMO + NFC + UWB	BT Ant.2 + 6GHz MIMO + NFC + UWB	
		1	2	3	4	5	6	4 + 5 + 6	2 + 4 + 5 + 6	3 + 4 + 5 + 6	2 + 4 + 5 + 6	3 + 4 + 5 + 6	
Product Specific 10-g (10-g SAR)	Rear	1.571	1.673	0.287	0.024	0.000	0.001	0.025	1.698	0.312	1.698	0.312	1.698
	Front	1.094	1.061	0.253	0.000	0.000	0.000	0.000	1.061	0.253	1.061	0.253	1.094
	Edge 1	1.726	2.831	0.076			0.000	0.000	2.831	0.076	2.831	0.076	2.831
	Edge 2		2.831	0.018	0.000			0.000	2.831	0.018	2.831	0.018	2.831
	Edge 3												
	Edge 4	1.726	2.831	0.594	0.000	0.000	0.000	0.000	2.831	0.594	2.831	0.594	2.831

Simultaneous Transmission Analysis

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)
		AG0	AG1	ER	AG0 + ER
Product Specific 10-g (10-g SAR)	Rear	2.128	N/A	1.698	3.826
	Front	2.119	N/A	1.094	3.212
	Edge 1		N/A	2.831	2.831
	Edge 2		N/A	2.831	2.831
	Edge 3	2.807	N/A		2.807
	Edge 4		N/A	2.831	2.831

RSDB mode

ER's SAR (DTS & BT & UNII)

RF Exposure	Test Position	ER's standalone SAR (W/kg)					ER's RSDB mode simultaneous SAR (W/kg)				Worst case Combination
		5GHz MIMO	6GHz MIMO	NFC	UWB Ant.1	UWB Ant.2	2.4GHz MIMO + 5GHz MIMO + NFC + UWB	2.4GHz MIMO + 6GHz MIMO + NFC + UWB	BT Ant.1 + 2.4GHz Ant.2 + 5GHz MIMO + NFC + UWB	BT Ant.1 + 2.4GHz Ant.2 + 6GHz MIMO + NFC + UWB	
		1	2	3	4	5	1 + 3 + 4 +5	2 + 3 + 4 + 5	1 + 3 + 4 + 5	2 + 3 + 4 + 5	
Product Specific 10-g (10-g SAR)	Rear	1.673	0.286	0.024	0.000	0.001	1.698	0.311	1.698	0.311	1.698
	Front	1.061	0.252	0.000	0.000	0.000	1.061	0.252	1.061	0.252	1.061
	Edge 1	2.831	0.075			0.000	2.831	0.075	2.831	0.075	2.831
	Edge 2	2.831	0.017	0.000			2.831	0.017	2.831	0.017	2.831
	Edge 3										
	Edge 4	2.831	0.591	0.000	0.000	0.000	2.831	0.591	2.831	0.591	2.831

Simultaneous Transmission Analysis

RF Exposure	Test Position	Highest SAR (W/kg)			Sum SAR (W/kg)
		AG0	AG1	ER	AG0 + AG1 + ER
Product Specific 10-g (10-g SAR)	Rear	2.128	N/A	1.698	3.826
	Front	2.119	N/A	1.061	3.180
	Edge 1		N/A	2.831	2.831
	Edge 2		N/A	2.831	2.831
	Edge 3	2.807	N/A		2.807
	Edge 4		N/A	2.831	2.831

Note(s):

1. Green value is estimated SAR value.

Conclusion:

Simultaneous Transmission SAR analysis results is satisfied the FCC Limit requirement according to follow procedures with "Sum of SAR" or "Sum-Peak Location Separation Ratio".

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Appendixes

Refer to separated files for the following appendixes.

4790541040-S1 FCC Report SAR_App A_Photos & Ant. Locations

4790541040-S1 FCC Report SAR_App B_Highest SAR Test Plots

4790541040-S1 FCC Report SAR_App C_System Check Plots

4790541040-S1 FCC Report SAR_App D_SAR Tissue Ingredients

4790541040-S1 FCC Report SAR_App E_Probe Cal. Certificates

4790541040-S1 FCC Report SAR_App F_Dipole Cal. Certificates

4790541040-S1 FCC Report SAR_App G_Proximity Sensor feature

4790541040-S1 FCC Report SAR_App H_LTE Carrier Aggregation

4790541040-S1 FCC Report SAR_App I_Dynamic Antenna Tuner testing

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