



TEST REPORT

Report Number. : R15103618-E10

Applicant : Sony Corporation
1-7-1 Konan Minato-ku
Tokyo, 108-0075, Japan

FCC ID : PY7-46195Y

EUT Description : LTE/5G Portable Data Transmitter with BT, DTS/UNII a/b/g/n/ac/ax and GPS

Test Standard(s) : FCC CFR 47 Part 2, Part 22H, Part 24E, Part 27 and 96

Date Of Issue:
2024-03-29

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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2024-03-25	Initial Review	Noah Bennett
V2	2024-03-26	-Removed n30 5Mhz Test Data. -Updated Section 6.1 -General Formatting revisions.	Noah Bennett
		TCB Feedback:	
V3	2024-03-27	-Corrected various typos in section 6.2 -Corrected swapped plot locations in section 9.3.9	Noah Bennett
		-Clarified section 6.5 worst-case emissions.	
V4	2024-03-29	-Added All Worst-Case emission plots to section 10.2	Noah Bennett

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Sony Corporation
1-7-1 Konan Minato-ku
Tokyo, 108-0075, Japan

EUT DESCRIPTION: LTE/5G Portable Data Transmitter with BT, DTS/UNII a/b/g/n/ac/ax and GPS

SERIAL NUMBER: QV77008VJP, QV7700DNJP, QV77005HJP, QV7700QGLA, QV77008ELY,
QV77006PLY, QV7700HBHQ

FCC ID: PY7-46195Y

SAMPLE RECEIPT DATE: 2023-12-14; 2023-12-12, 2023-12-18

DATE TESTED: 2023-12-26 to 2024-03-25

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 2	Complies
CFR 47 Part 22	Complies
CFR 47 Part 24	Complies
CFR 47 Part 27	Complies
CFR 47 Part 96	Complies

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document.

Approved & Released For
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2. SUMMARY OF TEST RESULTS

This report contains data provided by the applicant which can impact the validity of results. UL LLC is only responsible for the validity of results after the integration of the data provided by the customer. Below is a list of the data provided by the customer:

- 1) Antenna gain and type (see section 6.4)
- 2) Cable loss (see section 6.2, 8, and 9)
- 3) Supported bands, bandwidths, modulations, power settings, and MPR configurations. (see section 6.5)

Requirement Description	Band	Requirement Clause Number (FCC)	Result	Remarks
Effective Radiated Power	5	22.913 (a)(5)	Complies	N/A
	12	27.50 (c) (10)	Complies	N/A
	13	27.50 (b) (10)	Complies	N/A
	17	27.50 (c) (10)	Complies	N/A
Equivalent Isotropic Radiated Power	2, 25	24.232 (c)	Complies	N/A
	4, 66	27.50 (d) (4)	Complies	N/A
	30	27.50 (a) (3)	Complies	N/A
	41	27.50 (h) (2)	Complies	N/A
	48	96.41 (b)	Complies	N/A
	71	27.50 (c) (10)	Complies	N/A
	77	96.41 (b), 27.50 (j) (3), (k) (3)	Complies	N/A

Requirement Description	Requirement Clause Number (FCC)	Result	Remarks
Occupied Bandwidth	2.1049	Complies	N/A
Band Edge and Emission Mask	2.1051, 22.917 (a), 24.238 (a), 27.53 (h), 27.53 (m)(4) & (m)(6), 27.53 (g), 27.53 (c) (f), 27.53(a)(4), 27.53(n)(2), 27.53(l)(2), 96.41(e)	Complies	N/A
Out of Band Emissions		Complies	N/A
Frequency Stability	2.1055, 22.355, 24.235, 27.54, 96.41	Complies	N/A
Peak-to-Average Ratio	22.913 (d), 27.50(d)(5), 27.50(j)(4), 96.41 (g)	Complies	N/A
Field Strength of Spurious Radiation	2.1051, 22.917 (a), 24.238 (a), 27.53 (h), 27.53 (m)(4) & (m)(6), 27.53 (g), 27.53 (c) (f), 27.53(a)(4), 27.53(n)(2), 27.53(l)(2), 96.41(e)	Complies	N/A

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with the following:

- ANSI C63.26:2015
- FCC CFR 47 Part 2, Part 22, Part 24, Part 27 and Part 96.
- [FCC KDB 971168 D01 v03r01](#): Power Meas License Digital Systems
- [FCC KDB 971168 D02 v02r02](#): Misc Rev Approv License Devices
- [FCC KDB 412172 D01 v01r01](#). Determining ERP and EIRP

4. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification # 0751.06, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
<input checked="" type="checkbox"/>	Building: 2800 Perimeter Park Dr. Suite B Morrisville, NC 27560, U.S.A	US0067	27265	825374

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U_{Lab}
Radio Frequency (Spectrum Analyzer)	141.2 Hz
Occupied Channel Bandwidth	1.22%
RF output power, conducted	1.3 dB (PK) 0.45 dB (AV)
Unwanted Emissions, conducted	1.94 dB
All emissions, radiated	6.01 dB
Temperature	0.57°C
Humidity	3.39%
DC Supply voltages	1.70%
Power Spectral Density	2.46 dB

Uncertainty figures are valid to a confidence level of 95%.

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
 $36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$

6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The EUT is a LTE/5G Portable Data Transmitter with BT, DTS/UNII a/b/g/n/ac/ax and GPS. This test report covers the WWAN radio portion of the EUT.

The EUT supports the following LTE and 5G FR1 Bands and their antenna configurations:

LTE and 5G NR Bands	Main 1 Antenna	Main 2 Antenna	Sub Antenna	Sub-UHB Antenna	Cell 3rd Antenna	Cell 4 th Antenna
LTE Band 2, 5G FR1 n2	-	Y	Y (LTE Band 2 Only) (EN-DC) ¹	-	-	-
LTE Band 4	-	Y	Y (EN-DC) ¹	-	-	-
LTE Band 5, 5G FR1 n5	Y	-	Y	-	-	-
LTE Band 12	Y	-	Y	-	-	-
LTE Band 13	Y	-	Y	-	-	-
LTE Band 17	Y	-	Y	-	-	-
LTE Band 25, 5G FR1 n25	-	Y	-	-	-	-
LTE Band 30, 5G FR1 n30	-	Y	Y (EN-DC) ¹	-	-	-
LTE Band 41, 5G FR1 n41	-	Y	Y (n41 Only)	-	Y (n41 Only)	Y (n41 Only)
LTE Band 48, 5G FR1 n48	Y	-	-	Y	Y (n48 Only)	Y (n48 Only)
LTE Band 66, 5G FR1 n66	-	Y	Y (EN-DC)	-	-	-
LTE Band 71, 5G FR1 n71	Y	-	-	-	-	-
5G FR1 n77	Y	-	-	Y	Y	Y

Notes:

1. LTE2, LTE30, and LTE66 can transmit on Sub antenna an EN-DC configuration only.
2. The EUT Supports UL-MIMO on bands n41, n48 and n77.

For 5G NR, the EUT Supports the following Bandwidth Configurations per band:

Band	SCS [kHz]	Supported BWs [MHz]
5G NR n5	15	5, 10, 15, 20
5G NR n25	15	5, 10, 15, 20
5G NR n30	15	10
5G NR n41	30	20, 30, 40, 50, 60, 80, 90, 100
5G NR n48	30	20, 40
5G NR n66	15	5, 10, 15, 20
5G NR n71	15	5, 10, 15, 20
5G NR n77	30	20, 30, 40, 60, 80, 100

6.2. MAXIMUM OUTPUT POWER

EIRP/ERP TEST PROCEDURE

ANSI C63.26:2015

KDB 971168 D01 Section 5.6

$$\text{ERP/EIRP} = \text{PMes} + \text{GT} - \text{LC}$$

where: ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMes, typically dBW or dBm);

PMes = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

EUT includes different power levels for head use configuration and body use configuration and the below tables contain the highest of all configurations average conducted and ERP/EIRP output powers as follows:

LTE BAND 2

Part 24 / RSS 133								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		-0.93						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1850.7	1909.3	23.93	23.00	0.200	1088.3	1M09G7W
	16QAM			22.97	22.04	0.160	1087.7	1M09D7W
3.0	QPSK	1851.5	1908.5	23.45	22.52	0.179	2690	2M69G7W
	16QAM			22.63	21.70	0.148	2691.1	2M69D7W
5.0	QPSK	1852.5	1907.5	23.55	22.62	0.183	4487.2	4M49G7W
	16QAM			23.00	22.07	0.161	4482.9	4M48D7W
10.0	QPSK	1855.0	1905.0	23.58	22.65	0.184	8973.6	8M97G7W
	16QAM			22.93	22.00	0.158	8926.7	8M93D7W
15.0	QPSK	1857.5	1902.5	23.70	22.77	0.189	13437	13M4G7W
	16QAM			22.85	21.92	0.156	13444	13M4D7W
20.0	QPSK	1860.0	1900.0	23.60	22.67	0.185	17892	17M9G7W
	16QAM			23.00	22.07	0.161	17930	17M9D7W

LTE BAND 5 – Sub

Part 22H		ERP Limit (W)	7.00	Antenna Gain (dBi)	-0.65	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator													
1.4	QPSK	824.7	848.3			24.36	21.56	0.143	1091.3	1M09G7W																	
	16QAM					23.81	21.01	0.126	1093	1M09D7W																	
3.0	QPSK	825.5	847.5			24.44	21.64	0.146	2701.2	2M70G7W																	
	16QAM					23.75	20.95	0.124	2699.1	2M70D7W																	
5.0	QPSK	826.5	846.5			24.45	21.65	0.146	4510.1	4M51G7W																	
	16QAM					23.79	20.99	0.126	4498.5	4M50D7W																	
10.0	QPSK	829.0	844.0			24.41	21.61	0.145	8970.8	8M97G7W																	
	16QAM					23.75	20.95	0.124	8995.6	9M00D7W																	

5G NR n5 - Main 1

Part 22H		ERP Limit (W)	7.00	Antenna Gain (dBi)	-0.97	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator													
5.0	BPSK	826.5	846.5			24.49	21.37	0.137	4472	4M47G7W																	
	16QAM					23.56	20.44	0.111	4486.5	4M49D7W																	
10.0	BPSK	829.0	844.0			24.40	21.28	0.134	8984.7	8M98G7W																	
	16QAM					23.69	20.57	0.114	8937.1	8M94D7W																	
15.0	BPSK	831.5	841.5			24.54	21.42	0.139	13514	13M5G7W																	
	16QAM					23.71	20.59	0.115	13406	13M4D7W																	
20.0	BPSK	834.0	839.0			24.90	21.78	0.151	17867	17M9G7W																	
	16QAM					23.86	20.74	0.119	17866	17M9D7W																	

5G NR n5 – Sub

Part 22H		ERP Limit (W)	7.00	Antenna Gain (dBi)	-0.65	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator													
5.0	BPSK	826.5	846.5			24.27	21.47	0.140	4472	4M47G7W																	
	16QAM					23.01	20.21	0.105	4486.5	4M49D7W																	
10.0	BPSK	829.0	844.0			24.28	21.48	0.141	8984.7	8M98G7W																	
	16QAM					23.50	20.70	0.117	8937.1	8M94D7W																	
15.0	BPSK	831.5	841.5			24.36	21.56	0.143	13514	13M5G7W																	
	16QAM					23.35	20.55	0.114	13406	13M4D7W																	
20.0	BPSK	834.0	839.0			24.45	21.65	0.146	17867	17M9G7W																	
	16QAM					23.50	20.70	0.117	17866	17M9D7W																	

LTE BAND 12 – Main 1

Part 27 / RSS 130		Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
ERP Limit (W)	3.00							
Antenna Gain (dBi)	-0.92							
1.4	QPSK	699.7	715.3	23.56	20.49	0.112	1091.5	1M09G7W
	16QAM			22.92	19.85	0.097	1095.8	1M10D7W
3.0	QPSK	700.5	714.5	23.69	20.62	0.115	2705.6	2M71G7W
	16QAM			23.06	19.99	0.100	2706.6	2M71D7W
5.0	QPSK	701.5	713.5	23.76	20.69	0.117	4506.3	4M51G7W
	16QAM			23.13	20.06	0.101	4497	4M50D7W
10.0	QPSK	704.0	711.0	23.50	20.43	0.110	8945.4	8M95G7W
	16QAM			23.04	19.97	0.099	8958.8	8M96D7W

LTE BAND 12 – Sub

Part 27 / RSS 130		Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
ERP Limit (W)	3.00							
Antenna Gain (dBi)	-3.07							
1.4	QPSK	699.7	715.3	24.36	19.14	0.082	1091.5	1M09G7W
	16QAM			23.81	18.59	0.072	1095.8	1M10D7W
3.0	QPSK	700.5	714.5	24.44	19.22	0.084	2705.6	2M71G7W
	16QAM			23.75	18.53	0.071	2706.6	2M71D7W
5.0	QPSK	701.5	713.5	24.45	19.23	0.084	4506.3	4M51G7W
	16QAM			23.79	18.57	0.072	4497	4M50D7W
10.0	QPSK	704.0	711.0	24.41	19.19	0.083	8945.4	8M95G7W
	16QAM			23.75	18.53	0.071	8958.8	8M96D7W

LTE BAND 13 – Main 1

Part 27 / RSS 130		Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
ERP Limit (W)	3.00							
Antenna Gain (dBi)	-0.98							
5.0	QPSK	779.5	784.5	23.94	20.81	0.121	4487.5	4M49G7W
	16QAM			23.40	20.27	0.106	4495.2	4M50D7W
10.0	QPSK	782.0	782.0	23.89	20.76	0.119	8967.4	8M97G7W
	16QAM			23.27	20.14	0.103	8967.1	8M97D7W

LTE BAND 13 – Sub

Part 27 / RSS 130		Antenna Gain (dBi)	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
ERP Limit (W)	3.00										
Antenna Gain (dBi)	-2.69										
5.0	QPSK	779.5	784.5		24.36	19.52	0.090	4487.5	4M49G7W		
	16QAM				23.70	18.86	0.077	4495.2	4M50D7W		
10.0	QPSK	782.0	782.0		24.26	19.42	0.087	8967.4	8M97G7W		
	16QAM				23.62	18.78	0.076	8967.1	8M97D7W		

LTE BAND 25 – Main 2

Part 24 / RSS 133		Antenna Gain (dBi)	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
EIRP Limit (W)	2.00										
Antenna Gain (dBi)	1.35										
1.4	QPSK	1850.7	1914.3		24.87	26.22	0.419	1093.5	1M09G7W		
	16QAM				23.56	24.91	0.310	1096.6	1M10D7W		
3.0	QPSK	1851.5	1913.5		24.81	26.16	0.413	2703.3	2M70G7W		
	16QAM				23.41	24.76	0.299	2704.1	2M70D7W		
5.0	QPSK	1852.5	1912.5		24.82	26.17	0.414	4499	4M50G7W		
	16QAM				23.57	24.92	0.310	4510.8	4M51D7W		
10.0	QPSK	1855.0	1910.0		24.81	26.16	0.413	8978.6	8M98G7W		
	16QAM				23.49	24.84	0.305	9000.2	9M00D7W		
15.0	QPSK	1857.5	1907.5		24.67	26.02	0.400	13465	13M5G7W		
	16QAM				23.29	24.64	0.291	13438	13M4D7W		
20.0	QPSK	1860.0	1905.0		24.69	26.04	0.402	17914	17M9G7W		
	16QAM				23.31	24.66	0.292	17913	17M9D7W		

5G NR n25 – Main 2

Part 24/ RSS 133		Antenna Gain (dBi)	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
EIRP Limit (W)	2.00										
Antenna Gain (dBi)	1.35										
5.0	QPSK	1852.5	1912.5		23.87	25.22	0.333	4498	4M50G7W		
	16QAM				23.13	24.48	0.281	4479.1	4M48D7W		
10.0	QPSK	1855.0	1910.0		23.86	25.21	0.332	8953.5	8M95G7W		
	16QAM				22.88	24.23	0.265	8953.5	8M95D7W		
15.0	QPSK	1857.5	1907.5		24.05	25.40	0.347	13428	13M4G7W		
	16QAM				23.07	24.42	0.277	13446	13M4D7W		
20.0	QPSK	1860.0	1905.0		24.18	25.53	0.357	17889	17M9G7W		
	16QAM				23.28	24.63	0.290	17896	17M9D7W		

LTE BAND 30 – Main 2

Part 27 / RSS 195								
EIRP Limit (W)		0.25						
Antenna Gain (dBi)		1.57						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2307.5	2312.5	21.76	23.33	0.215	4484	4M48G7W
	16QAM			22.25	23.82	0.241	4490.6	4M49D7W
10.0	QPSK	2310.0	2310.0	21.63	23.20	0.209	8983.9	8M98G7W
	16QAM			21.71	23.28	0.213	8963	8M96D7W

LTE BAND 30 - Sub

Part 27 / RSS 195								
EIRP Limit (W)		0.25						
Antenna Gain (dBi)		0.39						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2307.5	2312.5	22.93	23.32	0.215	4484	4M48G7W
	16QAM			22.84	23.23	0.210	4490.6	4M49D7W
10.0	QPSK	2310.0	2310.0	22.64	23.03	0.201	8983.9	8M98G7W
	16QAM			22.37	22.76	0.189	8963	8M96D7W

5G NR n30 – Main 2

Part 27 / RSS 195								
EIRP Limit (W)		0.25						
Antenna Gain (dBi)		1.57						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
10.0	QPSK	2310.0	2310.0	21.78	23.35	0.216	8958.6	8M96G7W
	16QAM			21.26	22.83	0.192	8918.9	8M92D7W

LTE BAND 41

Part 27								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		1.35						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2498.5	2687.5	24.24	25.59	0.362	4510.4	4M51G7W
	16QAM			23.27	24.62	0.290	4504.7	4M50D7W
10.0	QPSK	2501.0	2685.0	24.19	25.54	0.358	8992.5	8M99G7W
	16QAM			23.29	24.64	0.291	8991.5	8M99D7W
15.0	QPSK	2503.5	2682.5	24.07	25.42	0.348	13455	13M5G7W
	16QAM			23.05	24.40	0.275	13474	13M5D7W
20.0	QPSK	2506.0	2680.0	24.05	25.40	0.347	17950	18M0G7W
	16QAM			23.29	24.64	0.291	17947	17M9D7W

5G NR n41 - Main 2

Part 27		Antenna Gain (dBi)	EIRP Limit (W)	Low Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator								
Bandwidth (MHz)	Modulation																
20.0	BPSK	2506.5	2680.0	21.28	22.63	0.183	17911	17M9G7W									
	16QAM			20.92	22.27	0.169	17935	17M9D7W									
30.0	BPSK	2511.0	2675.0	21.25	22.60	0.182	26841	26M8G7W									
	16QAM			20.82	22.17	0.165	26932	26M9D7W									
40.0	BPSK	2516.0	2670.0	21.28	22.63	0.183	35785	35M8G7W									
	16QAM			20.86	22.21	0.166	35722	35M7D7W									
50.0	BPSK	2521.0	2665.0	21.12	22.47	0.177	45826	45M8G7W									
	16QAM			20.57	21.92	0.156	45647	45M6D7W									
60.0	BPSK	2526.0	2660.0	21.27	22.62	0.183	57951	58M0G7W									
	QPSK			20.94	22.29	0.169	57935	57M9G7W									
80.0	BPSK	2536.0	2650.0	21.04	22.39	0.173	77373	77M4G7W									
	16QAM			20.85	22.20	0.166	77284	77M3D7W									
90.0	BPSK	2541.0	2645.0	21.01	22.36	0.172	86939	86M9G7W									
	16QAM			20.83	22.18	0.165	87022	87M0D7W									
100.0	BPSK	2546.0	2640.0	21.25	22.60	0.182	96563	96M6G7W									
	16QAM			20.99	22.34	0.171	96448	96M4D7W									

5G NR n41 – Sub

Part 27		Antenna Gain (dBi)	EIRP Limit (W)	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator									
Bandwidth (MHz)	Modulation																		
20.0	BPSK	2506.5	2680.0	19.72	20.50	0.112	17911	17M9G7W											
	16QAM			18.94	19.72	0.094	17935	17M9D7W											
30.0	BPSK	2511.0	2675.0	19.84	20.62	0.115	26841	26M8G7W											
	16QAM			19.10	19.88	0.097	26932	26M9D7W											
40.0	BPSK	2516.0	2670.0	19.82	20.60	0.115	35785	35M8G7W											
	16QAM			19.39	20.17	0.104	35722	35M7D7W											
50.0	BPSK	2521.0	2665.0	19.69	20.47	0.111	45826	45M8G7W											
	16QAM			19.11	19.89	0.097	45647	45M6D7W											
60.0	BPSK	2526.0	2660.0	19.65	20.43	0.110	57951	58M0G7W											
	QPSK			19.09	19.87	0.097	57935	57M9G7W											
80.0	BPSK	2536.0	2650.0	19.54	20.32	0.108	77373	77M4G7W											
	16QAM			19.09	19.87	0.097	77284	77M3D7W											
90.0	BPSK	2541.0	2645.0	19.49	20.27	0.106	86939	86M9G7W											
	16QAM			19.21	19.99	0.100	87022	87M0D7W											
100.0	BPSK	2546.0	2640.0	19.56	20.34	0.108	96563	96M6G7W											
	16QAM			18.90	19.68	0.093	96448	96M4D7W											

5G NR n41 – Cell 3rd

Part 27		EIRP Limit (W)	Antenna Gain (dBi)	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator											
EIRP Limit (W)	Antenna Gain (dBi)																						
20.0	BPSK	2506.5	2680.0	20.49	21.15	0.130	17911	17M9G7W															
	16QAM			19.97	20.63	0.116	17935	17M9D7W															
30.0	BPSK	2511.0	2675.0	20.45	21.11	0.129	26841	26M8G7W															
	16QAM			20.07	20.73	0.118	26932	26M9D7W															
40.0	BPSK	2516.0	2670.0	20.47	21.13	0.130	35785	35M8G7W															
	16QAM			20.06	20.72	0.118	35722	35M7D7W															
50.0	BPSK	2521.0	2665.0	20.36	21.02	0.126	45826	45M8G7W															
	16QAM			19.85	20.51	0.112	45647	45M6D7W															
60.0	BPSK	2526.0	2660.0	20.27	20.93	0.124	57951	58M0G7W															
	QPSK			19.81	20.47	0.111	57935	57M9G7W															
80.0	BPSK	2536.0	2650.0	20.09	20.75	0.119	77373	77M4G7W															
	16QAM			19.57	20.23	0.105	77284	77M3D7W															
90.0	BPSK	2541.0	2645.0	20.16	20.82	0.121	86939	86M9G7W															
	16QAM			19.83	20.49	0.112	87022	87M0D7W															
100.0	BPSK	2546.0	2640.0	20.18	20.84	0.121	96563	96M6G7W															
	16QAM			19.61	20.27	0.106	96448	96M4D7W															

5G NR n41 – Cell 4th

Part 27		EIRP Limit (W)	Antenna Gain (dBi)	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator											
EIRP Limit (W)	Antenna Gain (dBi)																						
20.0	BPSK	2506.5	2680.0	20.58	21.79	0.151	17911	17M9G7W															
	16QAM			19.82	21.03	0.127	17935	17M9D7W															
30.0	BPSK	2511.0	2675.0	20.51	21.72	0.149	26841	26M8G7W															
	16QAM			20.24	21.45	0.140	26932	26M9D7W															
40.0	BPSK	2516.0	2670.0	20.56	21.77	0.150	35785	35M8G7W															
	16QAM			20.18	21.39	0.138	35722	35M7D7W															
50.0	BPSK	2521.0	2665.0	20.46	21.67	0.147	45826	45M8G7W															
	16QAM			20.03	21.24	0.133	45647	45M6D7W															
60.0	BPSK	2526.0	2660.0	20.45	21.66	0.147	57951	58M0G7W															
	QPSK			19.87	21.08	0.128	57935	57M9G7W															
80.0	BPSK	2536.0	2650.0	20.25	21.46	0.140	77373	77M4G7W															
	16QAM			19.90	21.11	0.129	77284	77M3D7W															
90.0	BPSK	2541.0	2645.0	20.19	21.40	0.138	86939	86M9G7W															
	16QAM			19.87	21.08	0.128	87022	87M0D7W															
100.0	BPSK	2546.0	2640.0	20.20	21.41	0.138	96563	96M6G7W															
	16QAM			19.78	20.99	0.126	96448	96M4D7W															

LTE BAND 48 – Main 1

Part 96		EIRP Limit (W)/ 10MHz	0.20	Antenna Gain (dBi)		0.93			
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator	
5.0	QPSK	3552.5	3697.5	21.48	22.41	0.174	4477.7	4M48G7W	
	16QAM			21.48	22.41	0.174	4455.1	4M46D7W	
10.0	QPSK	3555.0	3695.0	21.50	22.43	0.175	8931.3	8M93G7W	
	16QAM			21.46	22.39	0.173	8926.5	8M93D7W	
15.0	QPSK	3557.5	3692.5	21.30	22.23	0.167	13365	13M4G7W	
	16QAM			21.28	22.21	0.166	13397	13M4D7W	
20.0	QPSK	3560.0	3690.0	21.35	22.28	0.169	17838	17M8G7W	
	16QAM			21.45	22.38	0.173	17805	17M8D7W	

LTE BAND 48 – Sub-UHB

Part 96		EIRP Limit (W)/ 10MHz	0.20	Antenna Gain (dBi)		-0.94			
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator	
5.0	QPSK	3552.5	3697.5	20.58	19.64	0.092	4477.7	4M48G7W	
	64QAM			20.77	19.83	0.096	4455.1	4M46D7W	
10.0	QPSK	3555.0	3695.0	20.71	19.77	0.095	8931.3	8M93G7W	
	16QAM			20.71	19.77	0.095	8926.5	8M93D7W	
15.0	QPSK	3557.5	3692.5	20.58	19.64	0.092	13365	13M4G7W	
	16QAM			20.96	20.02	0.100	13397	13M4D7W	
20.0	QPSK	3560.0	3690.0	20.58	19.64	0.092	17838	17M8G7W	
	16QAM			20.87	19.93	0.098	17805	17M8D7W	

5G NR n48 – Main 1

Part 96		EIRP Limit (W)	0.20	Antenna Gain (dBi)		0.93			
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator	
20.0	QPSK	3560.0	3690.0	21.11	22.04	0.160	17904	17M9G7W	
	16QAM			21.22	22.15	0.164	17889	17M9D7W	
40.0	QPSK	3570.0	3680.0	21.24	22.17	0.165	35838	35M8G7W	
	16QAM			21.32	22.25	0.168	35813	35M8D7W	

LTE BAND 66 – Main 2

Part 27 / RSS 139		EIRP Limit (W)	1.00	Antenna Gain (dBi)		1.45			
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator	
1.4	QPSK	1710.7	1779.3	23.80	25.25	0.335	1089.4	1M09G7W	
	16QAM			23.16	24.61	0.289	1089.3	1M09D7W	
3.0	QPSK	1711.5	1778.5	23.85	25.30	0.339	2684.4	2M68G7W	
	16QAM			23.19	24.64	0.291	2685.4	2M69D7W	
5.0	QPSK	1712.5	1777.5	23.95	25.40	0.347	4546.8	4M55G7W	
	16QAM			23.32	24.77	0.300	4528.5	4M53D7W	
10.0	QPSK	1715.0	1775.0	23.84	25.29	0.338	8949	8M95G7W	
	16QAM			23.17	24.62	0.290	8948.7	8M95D7W	
15.0	QPSK	1717.5	1772.5	23.68	25.13	0.326	13384	13M4G7W	
	16QAM			22.98	24.43	0.277	13447	13M4D7W	
20.0	QPSK	1720.0	1770.0	23.65	25.10	0.324	17905	17M9G7W	
	16QAM			23.06	24.51	0.282	17913	17M9D7W	

LTE BAND 66 – Sub

Part 27 / RSS 139		EIRP Limit (W)	1.00	Antenna Gain (dBi)		-0.42			
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator	
1.4	QPSK	1710.7	1779.3	23.99	23.57	0.228	1089.4	1M09G7W	
	16QAM			22.99	22.57	0.181	1089.3	1M09D7W	
3.0	QPSK	1711.5	1778.5	23.85	23.43	0.220	2684.4	2M68G7W	
	16QAM			22.93	22.51	0.178	2685.4	2M69D7W	
5.0	QPSK	1712.5	1777.5	23.83	23.41	0.219	4546.8	4M55G7W	
	16QAM			22.99	22.57	0.181	4528.5	4M53D7W	
10.0	QPSK	1715.0	1775.0	24.00	23.58	0.228	8949	8M95G7W	
	16QAM			22.99	22.57	0.181	8948.7	8M95D7W	
15.0	QPSK	1717.5	1772.5	23.97	23.55	0.226	13384	13M4G7W	
	16QAM			23.00	22.58	0.181	13447	13M4D7W	
20.0	QPSK	1720.0	1770.0	23.78	23.36	0.217	17905	17M9G7W	
	16QAM			23.00	22.58	0.181	17913	17M9D7W	

5G NR n66 – Main 2

Part 27/ RSS 139		EIRP Limit (W)	1.00	Antenna Gain (dBi)		1.45			
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator	
5.0	QPSK	1712.5	1777.5	24.14	25.59	0.362	4516.3	4M52G7W	
	16QAM			23.23	24.68	0.294	4478	4M48D7W	
10.0	QPSK	1715.0	1775.0	24.11	25.56	0.360	9008.7	9M01G7W	
	16QAM			23.20	24.65	0.292	8953.1	8M95D7W	
15.0	QPSK	1717.5	1772.5	24.27	25.72	0.373	13414	13M4G7W	
	16QAM			23.37	24.82	0.303	13429	13M4D7W	
20.0	QPSK	1720.0	1770.0	24.24	25.69	0.371	17909	17M9G7W	
	16QAM			23.37	24.82	0.303	17863	17M9D7W	

LTE BAND 71 – Main 1

Part 27 / RSS 130		Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
ERP Limit (W)	3.00									
Antenna Gain (dBi)	-1.01									
5.0	QPSK	665.5	695.5	23.98	20.82	0.121	4505	4M51G7W		
	16QAM			23.34	20.18	0.104	4493.1	4M49D7W		
10.0	QPSK	668.0	693.0	23.52	20.36	0.109	8982.3	8M98G7W		
	16QAM			22.95	19.79	0.095	8975.2	8M98D7W		
15.0	QPSK	670.5	690.5	23.39	20.23	0.105	13455	13M5G7W		
	16QAM			22.62	19.46	0.088	13445	13M4D7W		
20.0	QPSK	673.0	688.0	23.37	20.21	0.105	17921	17M9G7W		
	16QAM			22.82	19.66	0.092	17925	17M9D7W		

5G NR n71 – Main 1

Part 27 / RSS 130		Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
ERP Limit (W)	3.00									
Antenna Gain (dBi)	-1.01									
5.0	QPSK	665.5	695.5	24.31	21.15	0.130	4492.9	4M49G7W		
	16QAM			23.42	20.26	0.106	4466.8	4M47D7W		
10.0	QPSK	668.0	693.0	24.26	21.10	0.129	8928.1	8M93G7W		
	16QAM			23.29	20.13	0.103	8941.3	8M94D7W		
15.0	QPSK	670.5	690.5	24.29	21.13	0.130	13397	13M4G7W		
	16QAM			23.33	20.17	0.104	13434	13M4D7W		
20.0	QPSK	673.0	688.0	24.31	21.15	0.130	17889	17M9G7W		
	16QAM			23.49	20.33	0.108	17880	17M9D7W		

5G NR n77 – Main 1 (FCC Part 27 3450-3550MHz)

Part 27		Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
EIRP Limit (W)	1.00									
Antenna Gain (dBi)	1.46									
20.0	QPSK	3460.0	3540.0	26.36	27.82	0.605	17967	18M0G7W		
	16QAM			25.82	27.28	0.535	17889	17M9D7W		
30.0	QPSK	3465.0	3535.0	26.91	28.37	0.687	26827	26M8G7W		
	16QAM			25.93	27.39	0.548	26847	26M8D7W		
40.0	QPSK	3470.0	3530.0	26.75	28.21	0.662	35583	35M6G7W		
	16QAM			25.99	27.45	0.556	35729	35M7D7W		
60.0	QPSK	3480.0	3520.0	26.62	28.08	0.643	57850	57M9G7W		
	16QAM			25.78	27.24	0.530	57946	57M9D7W		
80.0	QPSK	3490.0	3510.0	26.33	27.79	0.601	77361	77M4G7W		
	16QAM			25.60	27.06	0.508	77277	77M3D7W		
100.0	QPSK	3500.0	3500.0	26.12	27.58	0.573	96518	96M5G7W		
	16QAM			24.98	26.44	0.441	96262	96M3D7W		

5G NR n77 – Main 1 (FCC Part 27 3700-3980MHz)

Part 27								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		1.46						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
20.0	QPSK	3710.0	3970.0	27.17	28.63	0.729	17894	17M9G7W
	16QAM			26.46	27.92	0.619	17872	17M9D7W
30.0	QPSK	3715.0	3965.0	27.22	28.68	0.738	26772	26M8G7W
	16QAM			26.17	27.63	0.579	26854	26M9D7W
40.0	QPSK	3720.0	3960.0	27.09	28.55	0.716	35869	35M9G7W
	16QAM			26.03	27.49	0.561	35771	35M8D7W
60.0	QPSK	3730.0	3950.0	26.06	27.52	0.565	57860	57M9G7W
	16QAM			25.18	26.64	0.461	57854	57M9D7W
80.0	QPSK	3740.0	3940.0	26.04	27.50	0.562	77051	77M1G7W
	16QAM			25.18	26.64	0.461	77272	77M3D7W
100.0	QPSK	3750.0	3930.0	26.44	27.90	0.617	96106	96M1G7W
	16QAM			25.24	26.70	0.468	96377	96M4D7W

6.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version 0.143 for Conducted and 0.183 radiated samples.

6.4. MAXIMUM ANTENNA GAIN

The antenna(s) gain as provided by the manufacturer' are as follows:

LTE and 5G NR Bands	Frequency Range (MHz)	Main 1 Antenna Gain (dBi)	Main 2 Antenna Gain (dBi)	Sub Antenna Gain (dBi)	Sub-UHB Antenna Gain (dBi)	Cell 3rd Antenna Gain (dBi)	Cell 4 th Antenna Gain (dBi)
LTE BAND 2	1850 – 1910	-	1.35	-0.93	-	-	-
LTE BAND 4	1710 – 1755	-	1.45	-	-	-	-
LTE BAND 5, 5G NR n5	824 – 849	-0.97	-	-0.65	-	-	-
LTE BAND 12, 5G NR n12	699 – 716	-0.92	-	-3.07	-	-	-
LTE BAND 13	777 – 787	-0.98	-	-2.69	-	-	-
LTE BAND 17	704 – 716	-	-0.92	-3.07	-	-	-
LTE BAND 25, 5G NR n25	1850 – 1915	-	1.35	-	-	-	-
LTE BAND 30, 5G NR n30	2305 – 2315	-	1.57	0.39	-	-	-
LTE BAND 41, 5G NR n41	2496 – 2690	-	1.35	0.78	-	0.66	1.21
LTE BAND 48, 5G NR n48	3550 – 3700	0.93	-	-	-0.94	2.61	-1.31
LTE BAND 66, 5G NR n66	1710 – 1780		1.45	-0.42	-	-	-
LTE BAND 71, 5G NR n71	663 – 698	-1.01	-	-	-	-	-
5G NR n77	3450 – 3550 & 3700 – 3980 (FCC Part 27)	1.46	-	-	1.03	2.61	1.52

6.5. WORST-CASE CONFIGURATION AND MODE

LTE Band 2 on the “Main 2” Antenna (1850-1910MHz) are covered by LTE Band 25 on the “Main 2” Antenna because it is a subset of the LTE Band 25, and they have the same output power.

LTE Band 4 (1710-1755MHz, 1.4/3/5/10/15/20MHz bandwidth) is covered by LTE Band 66 because it is a subset of LTE band 66 and they have the same output power.

LTE Band 17 (704-716MHz, 1.4/3/5/10MHz bandwidth) is covered by LTE Band 12 because it is a subset of LTE band 12 and they have the same output power.

For LTE Band 66, LTE Band 2, and LTE Band 30 on the “Sub” antenna, the EUT only supports full power while connected to 5G FR1 NSA Mode DC_66A_n30A, 2A_n66A, and 30A_n66A. Therefore, testing on the Sub antenna may have an n30/n66 fundamental visible, which should be ignored against any regulatory limits.

The worst-case scenario for all measurements is based on an engineering evaluation made on conducted average power on different modulations found during pretesting. Output power measurements were measured on QPSK, 16QAM, and 64QAM modulations for LTE, and BPSK, QPSK, 16QAM, 64QAM, and 256QAM for 5G FR1. The modulations with the highest output power were selected as worst-case.

For 5G NR Bands, conducted output power was taken on all modulations at Full Bandwidth configurations on Low, Mid, and High channel, to determine worst case modulation between BPSK and QPSK. 16QAM was chosen as worst-case over 64QAM and 256QAM because they have lower output power. Remaining output power was taken on the modulation type with the highest measured output power.

Conducted tests were performed on the worst-case antenna port per band, with spot check tests performed on all other antennas with lower output power. Only the worst-case conducted antenna port band data is reported. Full Radiated Emissions Testing on each antenna was performed and reported. For testing purposes, test data in section 9 and 10 was set at or above target power for all bands.

The following is the worst-case antenna port, for Conducted Output Power:

LTE and 5G NR Bands	Worst-case Antenna port for Conducted output power	Worst-case Modulation for Conducted Output Power as tested
LTE BAND 2	Sub Antenna	QPSK
LTE BAND 5 5G NR n5	Sub Antenna (LTE5) Main 1 (5G NR n5)	QPSK (LTE5) BPSK (5G NR n5)
LTE BAND 12	Sub Antenna	QPSK
LTE BAND 13	Sub Antenna	QPSK
LTE BAND 25, 5G NR n25	Main 2	QPSK
LTE BAND 30, 5G NR n30	Sub Antenna Main 2	QPSK
LTE BAND 41 5G NR n41	Main 2	QPSK (LTE41) BPSK (5G NR n41)
LTE BAND 48 5G NR n48	Main 1	QPSK
LTE BAND 66 5G NR n66	Sub Antenna (LTE66) Main 2 (5G NR n66)	QPSK
LTE BAND 71, 5G NR n71	Main 1	QPSK
5G NR n77 DoD & C-Block	Main 1	QPSK

For 5G FR1, the manufacturer has declared that DFTs-OFDM was worst-case for all 5G FR1 bands. Therefore, all testing was performed in DFTs-OFDM Waveform mode.

The EUT was investigated in three orthogonal orientations X/Y/Z on both Low Band (Fundamental Below 1GHz) Mid Band (Fundamental between 1-3GHz) and High Band (Fundamental above 3GHz) over all antennas to find the worst-case orientation. For Simultaneous Tx scans in which there are two or more F_c ranges with different worst-case orientations, scans were performed in the orientation with the highest output power, and sufficient margin was added to cover other orientations. The following is the worst-case orientations:

LTE and 5G NR Bands	Main 1 Antenna	Main 2 Antenna	Sub Antenna	Sub-UHB Antenna	Cell 3rd Antenna	Cell 4 th Antenna
Low Band ($F_c < 1\text{GHz}$)	X	-	X	-	-	-
Mid Band ($1\text{GHz} < F_c < 3\text{GHz}$)	-	X	X	-	Z	Z
High Band ($F_c > 3\text{GHz}$)	Y	-	-	X	X	X

The EUT was tested while connected to AC Lines via charging cable and brick to represent worst case emissions.

Worst Case emissions from 9kHz-30Mhz, 30-1000MHz, 18-26.5GHz, and 26.5GHz-40GHz were done on the modes with the highest conducted average power. This test data is reported in section 10.2, which shows worst case emissions per antenna.

Simultaneous transmission was also investigated for various configurations that yielded the highest power, and least separation in frequencies as a worst-case scenario.

The following scans were investigated for simultaneous transmission:

Scan #	Mode	Mode	Mode
1	LTE B66 QPSK, 20M, RB1-49, 1745MHz (Main2)	BT GFSK C0 2441MHz	WLAN UNII-1 11ax HE20 26T RU4 MCS0 5240MHz (CH 48) MIMO
2	LTE B66 QPSK, 20M, RB1-49, 1745MHz [(Main2)]	BT GFSK C1 2441MHz	WLAN UNII-1 11ax HE20 26T RU4 MCS0 5240MHz (CH 48) MIMO
3	LTE B66 QPSK, 20M, RB1-49, 1745MHz (Main2)	2442MHz 11g 6Mbps MIMO	-
4	FR1 n41 PC2, BPSK, 100M, RB1-135, 2549.995MHz, UL-MIMO (2T4R) (Main2 + Cell Sub)	WLAN UNII-5 11ax HE40 484T RU65 MCS0 6365MHz (CH 83) MIMO	-
5	FR1 n41 PC2, BPSK, 100M, RB1-135, 2549.995MHz, (2T4R) (Cell 3rd + Cell 4th)	WLAN UNII-5 11ax HE40 484T RU65 MCS0 6365MHz (CH 83) MIMO	-
6	LTE B12 QPSK, 10M, RB1-24, 704MHz (Main1)	2462MHz 11g 6Mbps MIMO	-
7	FR2 n261 QPSK, 50M, RB1-15, 27.525GHz, SISO 2Tx (ANT0)	BT GFSK C0 2441MHz	WLAN UNII-8 11ax HE160 2*996T RU68 MCS0 6985MHz (Ch 207) MIMO
8	FR2 n261 QPSK, 50M, RB1-15, 27.525GHz, SISO 2Tx (ANT1)	BT GFSK C1 2441MHz	WLAN UNII-8 11ax HE160 2*996T RU68 MCS0 6985MHz (Ch 207) MIMO

6.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Support Laptop	Lenovo	T14 Gen3	PF4FKVWW	N/A
Support Laptop	Lenovo	T14 Gen3	PF4FKVZE	N/A
Support Laptop	Lenovo	Yoga 7	PF49WDF9	PD9AX211NG
AC Adapter	Sony	XQZ-UC1-010-236-21	3223W09206247	N/A
AC Adapter	Sony	XQZ-UC1-010-236-21	1821W34209802	N/A
AC Adapter	Sony	XQZ-UC1-010-236-21	1821W34209866	N/A

I/O CABLES

I/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB-C	2	USB	Shielded	<1m	Used to Connect EUT to AC Mains.
2	RJ-45	1	RJ-45	Shielded	<3m	Connected from EUT to support laptop
3	HDMI	1	HDMI	Shielded	<3m	Connected from EUT to support laptop
4	USB-C	1	USB-C	Shielded	<3m	Connected from EUT to support laptop

Test Setup

The EUT was connected to a base station simulator and set to transmit at max power for GSM/WCDMA/LTE testing. For 5G FR1 testing, Factory Test Mode software was used.

Setup Diagram

Please see R15103618-EP10 for Setup Diagrams and Setup Photos.

7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment Used - Wireless Conducted Attenuators, Cables, and Couplers

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
Common Equipment					
Attenuators					
ATTEN 'A"	Attenuator – 3dB	CentricRF	C18S2-3	2023-06-23	2024-06-23
ATTEN 'G"	SMA Coaxial 10dB Attenuator 25MHz-18GHz	CentricRF	C18S2-10	2023-02-16 2024-03-01	2024-02-29 2025-03-01
226552	SMA Coaxial 10dB Attenuator 25MHz-18GHz	CentricRF	C18S2-10	2023-02-16 2024-03-01	2024-02-29 2025-03-01
226562	SMA Coaxial 20dB Attenuator 25MHz-18GHz	CentricRF	C18S2-20	2023-02-16 2024-03-01	2024-02-29 2025-03-01
226559	SMA Coaxial 10dB Attenuator 25MHz-18GHz	CentricRF	C18S2-10	2024-03-01	2025-03-01
Cables					
CBL032 899307	SMA Male to SMA Male Cable Using PE-P141 Coax - 36"	Pasternack	PE300-36	2023-06-27	2024-06-27
CBL033 89306	SMA Male to SMA Male Cable Using PE-P141 Coax - 12"	Pasternack	PE300-12	2023-06-27	2024-06-27
CBL031 89299	SMA Male to SMA Male Cable Using PE-P141 Coax - 12"	Pasternack	PE300-12	2023-06-27	2024-06-27
CBL036 89213	N-Male to SMA-Male, 6Ft, LMR-240	Times Microwave	LMR-240	2023-02-17 2024-03-01	2024-02-29 2025-03-01
CBL037 89214	N-Male to SMA-Male, 6Ft, LMR-240	Times Microwave	LMR-240	2023-02-17 2024-03-01	2024-02-29 2025-03-01
CBL105	SMA Male to SMA Male Cable – 27'	Micro-Coax	UFB293C Armored.	2023-02-17 2024-03-01	2024-02-29 2025-03-01
CBL010 245309	SMA Male to SMA Male Cable - 36"	Huber+Suhner	Sucoflex 104PEA	2023-02-17 2024-03-01	2024-02-29 2025-03-01
CBL246259	SMA Male to SMA Male Cable – 24"	Pasternack	PE336-24	2024-03-19	2025-03-19
Couplers/Splitters					
238020 [CPL001]	Ultra-Wideband Directional Coupler 0.5-18GHz	Mini-Circuits	ZUDC20-183+	2023-02-17	2024-02-29
238019 [CPL002]	Ultra-Wideband Directional Coupler 0.5-18GHz	Mini-Circuits	ZUDC10-183+	2023-02-17	2024-02-29
SPL53257	2 Way Power Splitter/Combiner	Mini-Circuits	ZRFSC-123-S+	2023-02-17	2024-02-29

NOTES:

1. * Testing is completed before equipment expiration date.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	Common Equipment				
	Conducted Room 1				
90416	Spectrum Analyzer	Keysight Technologies	N9030A	2023-06-09	2024-06-30
207726	Temp/Humid Chamber	Thermotron	SM-32-8200	2023-01-20	2024-01-20
179892	Environmental Meter	Fisher Scientific	15-077-963	2023-07-26	2024-06-31
SOFTEMI	Antenna Port Software	UL	Version 2022.8.16	NA	NA
SOFTEMI	CLT Software	UL	V4.0 b-ph	NA	NA
Power Software	Boonton Power Analyzer	Boonton	Version 3.0.13.0	NA	NA
	Conducted Room 2				
90410	Spectrum Analyzer	Keysight Technologies	N9030A	2023-06-14	2024-06-14
76023	Temp/Humid Chamber	Cincinnati Sub-Zero	ZPH-8-3.5-SCT/AC	2023-01-20	2024-01-20
238710	Environmental Meter	Fisher Scientific	15-077-963	2023-06-27	2024-06-27
SOFTEMI	Power Verification Software	UL	Version 4.0.4	NA	NA
	Additional Equipment used				
208721	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500 (SN 170194)	2023-06-06	2024-06-06
213025	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500 (SN 170732)	2023-12-18	2024-12-18
212167	Wideband Radio Communications Tester	Anritsu	MT8821C	2023-06-05	2024-06-05
207618	Radio Communication Test Set	Anritsu	MT8000A	2022-06-06	2023-06-06

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 1)

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
0.009-30MHz					
135144	Active Loop Antenna	ETS-Lindgren	6502	2024-01-24	2025-01-24
30-1000 MHz					
90629	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2024-01-30	2026-01-30
1-18 GHz					
206211	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2023-04-06	2024-04-06
Gain-Loss Chains					
91974	Gain-loss string: 0.009-30MHz	Various	Various	2023-05-16	2024-05-16
91976	Gain-loss string: 25-1000MHz	Various	Various	2023-05-16	2024-05-16
91979	Gain-loss string: 1-18GHz	Various	Various	2023-05-16	2024-05-16
Receiver & Software					
206496	Spectrum Analyzer	Rohde & Schwarz	ESW44	2023-03-24	2024-03-24
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
Additional Equipment used					
241205	Environmental Meter	Fisher Scientific	15-077-963	2023-09-05	2025-09-05
212167	Wideband Radio Communications Tester	Anritsu	MT8821C	2023-06-05	2024-06-05
213025	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500	2023-12-18	2024-12-18
198917	1GHz high-pass filter, 2W, Fhigh =18GHz	Micro-Tronics	HPM18129-02	2023-07-20	2024-07-20
77414 (BRF003)	2.4GHz notch filter, 2W, Fhigh =18GHz	Micro-Tronics	BRM50702	2023-02-15	2024-02-29
169108 (BRF010)	1.85-1.97GHz notch filter, 2W, Fhigh = 9GHz	Micro-Tronics	BRM50714-01	2023-02-15	2024-02-29
231408 (BRF011)	2.495-2.690GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50709-01	2023-02-15	2024-02-29
169109 (BRF012)	3.4-3.8GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50711-01	2023-02-15	2024-02-29
150716 (LPF008)	DC-1000MHz low-pass filter	Pasternack	PE8720	2024-03-04	2025-03-04
77412 (BRF001)	900MHz notch filter, 2W, Fhigh =6GHz	Micro-Tronics	BRM50706	2024-03-04	2025-03-04

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 4)

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	1-18 GHz				
89509	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2023-05-23	2025-05-23
	18-40 GHz				
204704	Horn Antenna, 18-26.5GHz	Com-Power	AH-826	2023-07-20	2025-07-20
204705	Horn Antenna, 26-40GHz	Com-Power	AH-640	2023-07-20	2025-07-20
	Gain-Loss Chains				
207640	Gain-loss string: 1-18GHz	Various	Various	2023-05-17	2024-05-17
225795	Gain-loss string: 18-40GHz	Various	Various	2023-05-17	2024-05-17
	Receiver & Software				
197955	Spectrum Analyzer	Rohde & Schwarz	ESW44	2023-04-10	2024-04-10
81018	Spectrum Analyzer	Agilent	E4446A	2023-08-01	2024-08-01
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
241204	Environmental Meter	Fisher Scientific	15-077-963	2023-09-05	2025-09-05
212167	Wideband Radio Communications Tester	Anritsu	MT8821C	2023-06-05	2024-06-05
PS216	AC Power Source	Elgar	CW2501M	NA	NA
82635 (HPF009)	1GHz high-pass filter, 2W, Fhigh =10GHz	Micro-Tronics	HPM17672	2023-02-15	2024-02-29
169106 (BRF008)	1710-1785MHz notch filter, 2W, Fhigh = 9GHz	Micro-Tronics	BRM50713-01	2023-02-15	2024-02-29
169109 (BRF012)	3.4-3.8GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50711-01	2023-02-15	2024-02-29
77414 (BRF003)	2.4GHz notch filter, 2W, Fhigh =18GHz	Micro-Tronics	BRM50702	2023-02-15	2024-02-29
169108 (BRF010)	1.85-1.97GHz notch filter, 2W, Fhigh = 9GHz	Micro-Tronics	BRM50714-01	2023-02-15	2024-02-29
241199 (BRF018)	3.3-4.2GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50732	2024-03-01	2025-03-01

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 2)

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	1-18 GHz				
86408	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2023-06-19	2025-06-19
	Gain-Loss Chains				
91977	Gain-loss string: 1-18GHz	Various	Various	2023-06-06	2024-06-06
	Receiver & Software				
197954	Spectrum Analyzer	Rohde & Schwarz	ESW44	2023-02-02	2024-02-02
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
200540	Environmental Meter	Fisher Scientific	15-077-963	2023-07-19	2025-07-19
82635 (HPF009)	1GHz high-pass filter, 2W, Fhigh =10GHz	Micro-Tronics	HPM17672	2023-02-15	2024-02-29
169109 (BRF012)	3.4-3.8GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50711-01	2023-02-15	2024-02-29
231408 (BRF011)	2.495-2.690GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50709-01	2023-02-15	2024-02-29
169108 (BRF010)	1.85-1.97GHz notch filter, 2W, Fhigh = 9GHz	Micro-Tronics	BRM50714-01	2023-02-15	2024-02-29

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber A)

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
65682	Active Loop Antenna	EMCO	6502	2023-10-03	2024-10-03
	Gain-Loss Chains				
SAC_E_LR	Gain-Loss string for loop/rod antenna	Various	Various	2024-03-05	2025-03-05
200697	Cable	UL		2024-03-05	2025-04-05
	Receiver & Software				
77035	Spectrum Analyzer	Agilent	PXA N9030A	2023-08-03	2024-08-03
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
	Additional Equipment used				
207229	Temp/Humid/Pressure Meter	Extech	SD700	2023-05-09	2024-05-09
212967	Wideband Radio Communications Tester	Rohde and Schwarz	CMW500	2024-01-03	2025-01-03

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville – Chamber 4)

Equip. ID	Description	Manufacturer/Brand	Model Number	Last Cal.	Next Cal.
	1-18 GHz				
89509	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2023-05-23	2025-05-23
	Gain-Loss Chains				
207640	Gain-loss string: 1-18GHz	Various	Various	2023-05-17	2024-05-17
	Receiver & Software				
197955	Spectrum Analyzer	Rohde & Schwarz	ESW44	2023-04-10	2024-04-10
SOFTEMI	EMI Software	UL	Version 9.5 (18 Oct 2021)		
	Additional Equipment used				
241204	Environmental Meter	Fisher Scientific	15-077-963	2023-09-05	2025-09-05
207620	Wideband Radio Communications Tester	Anritsu	MT8821C	2022-07-03	2023-07-03
212167	Wideband Radio Communications Tester	Anritsu	MT8821C	2023-06-05	2024-06-05
PS214	AC Power Source	Elgar	CW2501M	NA	NA
198917	1GHz high-pass filter, 2W, Fhigh =18GHz	Micro-Tronics	HPM18129-02	2023-07-20	2024-07-20
169106 (BRF008)	1710-1785MHz notch filter, 2W, Fhigh = 9GHz	Micro-Tronics	BRM50713-01	2023-02-15	2024-02-29
231408 (BRF011)	2.495-2.690GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50709-01	2023-02-15	2024-02-29
216159 (HPF019)	7GHz high-pass filter, 2W, Fhigh =18GHz	Micro-Tronics	HPM50107	2023-02-15	2024-02-29
241199 (BRF018)	3.3-4.2GHz notch filter, 2W, Fhigh = 18GHz	Micro-Tronics	BRM50732	2023-10-31	2024-10-31
77414 (BRF003)	2.4GHz notch filter, 2W, Fhigh =18GHz	Micro-Tronics	BRM50702	2023-02-15	2024-02-29

NOTES:

1. * Testing is completed before equipment expiration date.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

8. RF OUTPUT POWER VERIFICATION

8.1. LTE & 5G NR

CONDUCTED OUTPUT POWER MEASUREMENT PROCEDURE

All LTE bands conducted average power is obtained from the CMW500 telecommunication test set.

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS 36.101 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 TS 36.101.

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 following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS 38.521-1 specification.

The allowed MPR for SRS, PUCCH formats 0, 1, 3 and 4, and PRACH shall be as specified for QPSK modulated DFTs-OFDM of equivalent RB allocation. The allowed MPR for PUCCH format 2 shall be as specified for QPSK modulated CP-OFDM of equivalent RB allocation.

Table 6.2.2.3-1: Maximum power reduction (MPR) for power class 3

Modulation	MPR (dB)		
	Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5 ¹ ≤ 0.5 ²	≤ 1.2 ¹ 0 ²
	Pi/2 BPSK w Pi/2 BPSK DMRS	≤ 0.5 ²	0 ²
	QPSK	≤ 1	0
	16 QAM	≤ 2	≤ 1
	64 QAM	≤ 2.5	
	256 QAM	≤ 4.5	
CP-OFDM	QPSK	≤ 3	≤ 1.5
	16 QAM	≤ 3	≤ 2
	64 QAM	≤ 3.5	
	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 with Pi/2 BPSK modulation 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.

Table 6.2.2-2 Maximum power reduction (MPR) for power class 2

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	Pi/2 BPSK	≤ 3.5	≤ 0.5	0
	QPSK	≤ 3.5	≤ 1	0
	16 QAM	≤ 3.5	≤ 2	≤ 1
	64 QAM	≤ 3.5	≤ 2.5	
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3.5	≤ 3	≤ 1.5
	16 QAM	≤ 3.5	≤ 3	≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

A-MPR

To meet additional spectrum requirements, additional maximum power reduction (A-MPR) is allowed for the maximum output power as specified in Table 6.2.1-1. UE Power Class. Unless stated otherwise, the total reduction to UE maximum output power is max (MPR, A-MPR) where MPR is defined in clause 6.2.2. Outer and inner allocation notation used in clause 6.2.3 is defined in clause 6.2.2. Unless stated otherwise, Edge RB allocations get the same AMPR as Outer RB allocations. In absence of modulation and waveform types the A-MPR applies to all modulation and waveform types.

In this report, 5G NR n41 was measured with A-MPR applied, and are as follows:

Note: LTE Band 48 and 5G NR n48 support A-MPR, but was tested without as worst-case.

5G NR n41 NS 04 Supported and implemented A-MPR: NS 04 [PC2 A4]**Table 6.2.3.2-2: A-MPR' values Access**

Modulation/Waveform		A-MPR' (dB)					
		PC3_A1	PC3_A2	PC2_A3	PC2_A4	PC1.5_A5 ¹	PC1.5_A6 ¹
DFT-s-OFDM	Pi/2-BPSK	≤ 3.5	≤ 3.5	≤ 3.5	≤ 5.5	≤ 5	≤ 7
	QPSK	≤ 4	≤ 4	≤ 4.5	≤ 6	≤ 6	≤ 7.5
	16 QAM	≤ 4	≤ 4	≤ 5	≤ 6	≤ 6.5	≤ 7.5
	64 QAM	≤ 4	≤ 4.5	≤ 5	≤ 6.5	≤ 6.5	≤ 8
	256 QAM	≤ 4.5	≤ 6	≤ 6.5	≤ 8	≤ 8	≤ 9.5
CP-OFDM	QPSK	≤ 5.5	≤ 5.5	≤ 6.5	≤ 7.5	≤ 8	≤ 9
	16 QAM	≤ 5.5	≤ 5.5	≤ 6.5	≤ 7.5	≤ 8	≤ 9
	64 QAM	≤ 5.5	≤ 5.5	≤ 6.5	≤ 7.5	≤ 8	≤ 9
	256 QAM	≤ 6.5	≤ 8	≤ 7.5	≤ 10	≤ 9	≤ 11.5

NOTE 1: PC1.5 assumes dual Tx.

5G NR n48 A-MPR NS_27 [A7]**Table 6.2.3.16-2: A-MPR for modulation and waveform type**

Modulation/Wave form		A1	A2	A3	A4	A5	A6	A7	A8
		Outer	Outer	Outer/Inner	Outer/Inner	Outer/Inner	Outer/Inner	Outer/Inner	Outer/Inner
DFT-s-OFDM	PI/2 BPSK	4.5	6	4	4	4	4	10.5	4
	QPSK	4.5	6	4	4	4	4	10.5	4
	16 QAM	4.5	6	5	4	5	4	11	4
	64 QAM	4.5	6	5	4	5	4	11	4
	256 QAM		6					11	
CP-OFDM	QPSK	5.5	7	6	4	6	4	11.5	4
	16 QAM	5.5	7	6	4	6	4	11.5	4
	64 QAM	5.5	7	6	4	6	4	11.5	4
	256 QAM		7					11.5	
NOTE 1: The backoff applied is max (MPR, A-MPR) where MPR is defined in Table 6.2.2-1									
NOTE 2: Outer and inner allocations are defined in clause 6.2.2									

AVERAGE OUTPUT POWER TEST PROCEDURE

The transmitter output is connected to a power meter.

The power output was measured on the EUT antenna port using SMA cable with directional coupler connected to a power meter via wideband average power sensor. Gated average output power was read directly from power meter.

PEAK OUTPUT POWER TEST PROCEDURE

The transmitter output is connected to a power meter.

The power output was measured on the EUT antenna port using SMA cable with directional coupler connected to a power meter via wideband peak power sensor. Peak output power was read directly from power meter.

RESULTS

EUT includes different power levels for head use configuration and body use configuration and the below tables contain the highest of all configurations average conducted output powers as follows:

8.1.1. LTE BAND 2

Test Engineer ID:	22797/44389	Test Date:	2024-01-29	EUT Serial Number:	QV7700DNJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Sub Antenna		
				Conducted Average (dBm)		
				18700	18900	19100
20.0	QPSK	1	0	23.07	22.87	23.20
		1	49	23.60	22.90	22.94
		1	99	23.23	23.17	23.20
		50	0	22.48	21.73	22.22
		50	24	22.59	21.91	22.18
		50	50	22.51	22.16	22.29
		100	0	22.48	21.89	22.21
	16QAM	1	0	22.26	23.00	22.47
		1	49	22.62	22.41	22.05
		1	99	22.33	22.72	22.09
		50	0	21.44	20.89	21.26
		50	24	21.56	21.06	21.22
		50	50	21.55	21.29	21.23
		100	0	21.39	21.17	21.13
	64QAM	1	0	21.14	21.30	21.39
		1	49	21.62	21.59	20.56
		1	99	21.32	21.86	21.03
		50	0	20.44	19.85	20.23
		50	24	20.67	20.08	20.16
		50	50	20.73	20.29	20.34
		100	0	20.46	20.04	20.20

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Sub Antenna		
				Conducted Average (dBm)		
				18675	18900	19125
15.0	QPSK	1	0	22.79	23.01	23.12
		1	37	23.26	22.86	22.93
		1	74	23.51	23.70	23.14
		36	0	22.34	21.83	22.01
		36	20	22.41	21.98	21.97
		36	39	22.56	22.07	22.29
		75	0	22.44	21.89	22.11
	16QAM	1	0	22.36	22.29	21.80
		1	37	22.69	22.54	22.16
		1	74	22.85	22.55	22.06
		36	0	21.31	20.91	20.96
		36	20	21.49	21.08	21.11
		36	39	21.55	21.22	21.37
		75	0	21.59	21.07	21.15
	64QAM	1	0	21.09	21.26	20.97
		1	37	21.39	21.17	21.17
		1	74	21.48	21.78	21.11
		36	0	20.49	19.97	20.05
		36	20	20.27	20.09	20.24
		36	39	20.84	20.26	20.47
		75	0	20.46	20.29	20.20

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Sub Antenna		
				Conducted Average (dBm)		
				18650	18900	19150
10.0	QPSK	1	0	23.11	22.44	23.06
		1	25	23.58	23.05	23.45
		1	49	23.36	22.87	23.20
		25	0	22.44	21.87	22.07
		25	12	22.59	22.17	22.35
		25	25	22.64	22.11	22.37
		50	0	22.50	21.92	22.08
	16QAM	1	0	22.66	21.99	22.65
		1	25	22.56	22.66	22.43
		1	49	22.93	22.75	22.91
		25	0	21.43	20.92	21.15
		25	12	21.47	21.22	21.14
		25	25	21.57	21.19	21.36
		50	0	21.49	21.05	21.30
	64QAM	1	0	21.37	21.11	21.12
		1	25	21.55	21.85	21.11
		1	49	21.37	21.57	21.75
		25	0	20.37	19.90	20.18
		25	12	20.54	20.35	20.14
		25	25	20.49	20.14	20.76
		50	0	20.37	20.04	20.25

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Sub Antenna		
				Conducted Average (dBm)		
				18625	18900	19175
5.0	QPSK	1	0	1852.5 MHz	1880 MHz	1907.5 MHz
		1	0	23.21	22.93	23.14
		1	12	23.29	23.35	23.55
		1	24	23.38	23.15	23.31
		12	0	22.33	21.92	22.48
		12	7	22.40	22.02	22.56
		12	13	22.47	22.08	22.51
	16QAM	25	0	22.31	21.97	22.53
		1	0	22.26	22.50	22.59
		1	12	22.55	22.49	23.00
		1	24	22.58	22.87	22.77
		12	0	21.41	21.15	21.48
		12	7	21.43	21.15	21.64
		12	13	21.32	21.21	21.39
	64QAM	25	0	21.29	21.13	21.44
		1	0	21.17	21.47	21.19
		1	12	21.54	21.77	21.56
		1	24	21.49	21.56	21.44
		12	0	20.41	20.19	20.51
		12	7	20.53	20.15	20.77
		12	13	20.38	20.20	20.64
		25	0	19.86	20.15	20.41

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Sub Antenna		
				Conducted Average (dBm)		
				18615	18900	19185
				1851.5 MHz	1880 MHz	1908.5 MHz
3.0	QPSK	1	0	23.34	22.77	23.14
		1	8	23.22	22.99	23.45
		1	14	23.17	22.89	23.32
		8	0	22.29	21.94	22.44
		8	4	22.32	22.01	22.46
		8	7	22.35	21.92	22.49
		15	0	22.24	22.01	22.32
	16QAM	1	0	22.16	22.38	22.35
		1	8	21.99	22.63	22.56
		1	14	22.00	22.43	22.63
		8	0	21.33	21.14	21.48
		8	4	21.38	21.16	21.48
		8	7	21.37	21.18	21.93
		15	0	21.38	21.10	21.48
	64QAM	1	0	21.37	21.24	21.23
		1	8	21.45	21.63	21.71
		1	14	21.30	21.57	21.55
		8	0	20.86	20.08	20.49
		8	4	20.51	20.52	20.45
		8	7	20.47	20.26	20.50
		15	0	20.36	20.10	20.45

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Sub Antenna		
				Conducted Average (dBm)		
				18607	18900	19193
				1850.7 MHz	1880 MHz	1909.3 MHz
1.4	QPSK	1	0	23.28	23.17	23.82
		1	3	23.17	23.41	23.93
		1	5	23.20	23.19	23.75
		3	0	23.22	23.19	23.72
		3	1	23.16	23.31	23.79
		3	3	23.22	23.24	23.89
		6	0	22.18	22.17	22.70
	16QAM	1	0	22.94	22.89	22.97
		1	3	22.84	22.94	22.62
		1	5	22.73	22.83	22.57
		3	0	22.72	22.62	22.77
		3	1	22.61	22.52	22.74
		3	3	22.67	22.61	22.89
		6	0	21.43	21.41	21.92
	64QAM	1	0	21.62	21.82	21.72
		1	3	21.69	21.95	21.85
		1	5	21.81	21.70	21.50
		3	0	21.44	21.42	21.76
		3	1	21.64	21.45	21.48
		3	3	21.72	21.64	21.92
		6	0	20.34	20.37	20.84

8.1.2. LTE BAND 5

Test Engineer ID:	22797/44389	Test Date:	2024-01-04 2024-01-10 2024-01-12	EUT Serial Number:	QV77008VJP QV7700DNJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20450	20525	20600	20450	20525	20600
10.0	QPSK	1	0	24.12	24.05	24.12	24.36	24.18	24.26
		1	25	24.16	24.11	24.09	24.35	24.26	24.25
		1	49	24.11	24.05	24.06	24.41	24.17	23.90
		25	0	23.00	22.98	23.01	23.35	23.23	23.28
		25	12	23.11	23.03	23.01	23.43	23.24	23.27
		25	25	23.05	23.02	23.11	23.40	23.29	23.31
		50	0	23.04	23.01	22.95	23.41	23.25	23.28
	16QAM	1	0	23.46	23.51	23.40	23.75	23.53	23.69
		1	25	23.35	23.44	23.45	23.61	23.52	23.55
		1	49	23.41	23.55	23.37	23.73	23.60	23.27
		25	0	22.07	22.05	22.10	22.33	22.29	22.30
		25	12	22.11	22.13	22.16	22.43	22.27	22.30
		25	25	22.16	22.11	22.19	22.40	22.30	22.33
		50	0	22.18	22.10	22.08	22.43	22.26	22.27
	64QAM	1	0	22.62	22.64	22.66	22.37	22.46	22.60
		1	25	22.64	22.72	22.66	22.37	22.50	22.50
		1	49	22.65	22.70	22.67	22.48	22.45	22.31
		25	0	21.34	21.44	21.47	21.18	21.28	21.29
		25	12	21.45	21.45	21.48	21.28	21.30	21.32
		25	25	21.42	21.50	21.49	21.26	21.33	21.35
		50	0	21.43	21.43	21.43	21.26	21.29	21.27

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20425	20525	20625	20425	20525	20625
5.0	QPSK	1	0	24.05	24.11	24.10	24.32	24.30	24.31
		1	12	24.16	24.18	24.10	24.43	24.45	24.41
		1	24	23.98	24.00	23.94	24.30	24.29	23.78
		12	0	22.95	22.90	23.02	23.36	23.32	23.32
		12	7	23.04	23.05	23.02	23.38	23.36	23.35
		12	13	23.03	23.12	23.06	23.34	23.40	23.22
		25	0	23.01	23.05	23.06	23.35	23.30	23.29
	16QAM	1	0	23.32	23.38	23.44	23.66	23.67	23.59
		1	12	23.33	23.49	23.62	23.74	23.78	23.79
		1	24	23.14	23.34	23.46	23.65	23.65	23.21
		12	0	21.91	22.08	22.10	22.42	22.38	22.31
		12	7	21.99	22.06	22.05	22.44	22.43	22.36
		12	13	21.98	22.18	22.20	22.41	22.47	22.32
		25	0	21.99	22.04	22.09	22.40	22.33	22.34
	64QAM	1	0	22.52	22.57	22.83	22.53	22.57	22.56
		1	12	22.62	22.67	22.88	22.58	22.69	22.65
		1	24	22.46	22.59	22.86	22.53	22.65	22.14
		12	0	21.36	21.37	21.36	21.34	21.32	21.32
		12	7	21.40	21.41	21.41	21.35	21.33	21.36
		12	13	21.39	21.46	21.44	21.33	21.41	21.34
		25	0	21.29	21.38	21.40	21.37	21.34	21.30

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20415	20525	20635	20415	20525	20635
3.0	QPSK	1	0	24.03	23.97	23.95	24.38	24.25	24.29
		1	8	24.12	24.11	24.04	24.44	24.43	24.13
		1	14	24.01	23.92	23.84	24.38	24.28	23.78
		8	0	23.01	22.93	22.98	23.48	23.31	23.34
		8	4	23.12	22.96	22.97	23.53	23.35	23.26
		8	7	23.06	23.07	23.01	23.50	23.41	23.15
		15	0	23.00	22.97	22.95	23.30	23.30	23.28
	16QAM	1	0	23.28	23.37	23.24	23.57	23.64	23.58
		1	8	23.26	23.42	23.36	23.63	23.75	23.44
		1	14	23.15	23.35	23.21	23.47	23.64	23.10
		8	0	22.00	21.98	21.98	22.38	22.40	22.40
		8	4	22.03	22.06	22.16	22.38	22.41	22.29
		8	7	22.11	22.22	22.13	22.42	22.49	22.18
		15	0	22.10	21.97	22.09	22.36	22.40	22.26
	64QAM	1	0	22.48	22.55	22.53	22.59	22.58	22.58
		1	8	22.50	22.61	22.63	22.61	22.67	22.52
		1	14	22.40	22.59	22.56	22.58	22.64	22.13
		8	0	21.29	21.39	21.42	21.34	21.47	21.48
		8	4	21.31	21.45	21.46	21.38	21.49	21.42
		8	7	21.30	21.54	21.44	21.39	21.58	21.27
		15	0	21.24	21.33	21.44	21.39	21.38	21.31

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20407	20525	20643	20407	20525	20643
1.4	QPSK	1	0	23.87	24.12	24.07	24.32	24.29	23.97
		1	2	23.93	24.16	24.09	24.32	24.33	23.89
		1	5	23.91	24.09	24.06	24.33	24.30	23.78
		3	0	23.94	24.13	24.00	24.28	24.28	23.85
		3	1	23.98	24.08	24.05	24.28	24.30	23.82
		3	2	24.00	24.12	23.94	24.29	24.36	23.85
		6	0	22.97	23.00	22.94	23.38	23.31	22.93
	16QAM	1	0	23.17	23.46	23.29	23.62	23.71	23.18
		1	2	23.14	23.46	23.30	23.80	23.78	23.08
		1	5	23.16	23.47	23.34	23.81	23.78	23.01
		3	0	23.19	23.27	23.16	23.67	23.54	23.07
		3	1	23.15	23.29	23.06	23.67	23.54	23.01
		3	2	23.13	23.30	23.11	23.68	23.57	22.99
		6	0	22.08	22.07	22.09	22.53	22.43	21.98
	64QAM	1	0	22.93	22.62	22.51	22.78	22.64	22.34
		1	2	22.50	22.56	22.50	22.78	22.70	22.26
		1	5	22.53	22.61	22.48	22.73	22.66	22.13
		3	0	22.33	22.41	22.43	22.51	22.50	22.04
		3	1	22.38	22.44	22.47	22.56	22.50	21.99
		3	2	22.34	22.45	22.44	22.57	22.49	22.03
		6	0	21.24	21.36	21.41	21.42	21.36	21.09

8.1.3. 5G NR n5

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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1		Sub Antenna		
				Conducted Average (dBm)		Conducted Average (dBm)		
				166800	167300	167800	166800	167300
20.0	BPSK	1	0	24.32	24.27	24.40	23.86	23.82
		1	52	24.82	24.90	24.84	24.33	24.26
		1	104	24.71	24.68	24.65	24.24	24.19
		50	0	24.28	24.34	24.30	23.77	23.87
		50	25	24.82	24.87	24.84	24.33	24.30
		50	50	24.36	24.31	24.27	23.83	23.85
		100	0	24.33	24.28	24.30	23.82	23.90
	QPSK	1	0	23.65	23.75	23.79	23.33	23.41
		1	52	24.89	24.83	24.89	24.43	24.44
		1	104	24.62	24.25	23.75	24.29	23.63
		50	0	23.80	23.82	23.80	23.26	23.39
		50	25	24.84	24.86	24.82	24.36	24.35
		50	50	23.84	23.71	23.41	23.38	23.32
		100	0	23.79	23.77	23.72	23.33	23.30
	16QAM	1	0	22.55	22.68	22.95	22.41	22.19
		1	52	23.73	23.18	23.83	23.48	23.25
		1	104	23.47	23.22	23.02	23.34	22.58
		50	0	22.74	22.79	22.81	22.29	22.36
		50	25	23.81	23.83	23.86	23.37	23.30
		50	50	22.80	22.78	22.50	22.38	22.35
		100	0	22.73	22.78	22.86	22.30	22.28
	64QAM	1	0	22.30	22.12	22.49	21.94	21.85
		1	52	22.45	22.20	22.21	21.94	21.88
		1	104	22.29	21.78	21.57	21.83	21.30
		50	0	22.29	22.34	22.30	21.78	21.90
		50	25	22.30	22.40	22.36	21.87	21.83
		50	50	22.36	22.31	22.00	21.86	21.84
		100	0	22.31	22.25	22.33	21.78	21.81
	256QAM	1	0	20.08	20.28	20.48	19.91	19.95
		1	52	20.21	20.29	20.40	19.93	19.94
		1	104	20.09	19.99	19.65	19.93	19.54
		50	0	20.26	20.29	20.34	19.85	19.92
		50	25	20.25	20.32	20.33	19.80	19.82
		50	50	20.24	20.21	20.23	19.76	19.77
		100	0	20.27	20.28	20.35	19.81	19.79

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				166300	167300	168300	166300	167300	168300
15.0	BPSK	1	0	24.04	24.15	24.02	23.59	23.64	23.83
		1	39	24.54	24.54	24.42	24.18	24.29	24.36
		1	77	24.45	24.40	24.27	24.30	24.25	24.36
		36	0	23.95	23.96	23.97	23.55	23.62	23.77
		36	18	24.46	24.44	24.37	24.09	24.17	24.23
		36	36	24.03	23.93	23.83	23.71	23.77	23.75
		75	0	24.04	24.03	23.90	23.62	23.79	23.75
	16QAM	1	0	22.52	22.72	22.68	21.88	21.90	22.35
		1	39	23.50	23.71	23.61	23.00	23.05	23.35
		1	77	23.43	23.50	22.64	23.13	23.01	22.49
		36	0	22.48	22.63	22.55	22.03	22.21	22.29
		36	18	23.51	23.55	23.45	23.15	23.29	23.31
		36	36	22.54	22.54	22.17	22.22	22.29	21.76
		75	0	22.53	22.55	22.36	22.20	22.30	22.29
Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				165800	167300	168800	165800	167300	168800
10.0	BPSK	1	0	23.89	23.90	23.82	23.37	23.35	23.61
		1	26	24.40	24.28	24.25	24.01	24.05	24.15
		1	50	24.39	24.33	24.23	24.02	24.16	24.28
		25	0	23.94	23.90	23.80	23.38	23.55	23.64
		25	12	24.38	24.35	24.24	23.85	24.03	24.15
		25	25	23.86	23.90	23.72	23.45	23.57	23.70
		50	0	23.89	23.85	23.85	23.45	23.58	23.69
	16QAM	1	0	22.51	22.67	22.41	21.64	22.23	22.13
		1	26	23.53	23.69	23.11	22.73	23.38	23.07
		1	50	23.54	23.61	22.27	22.77	23.50	22.42
		25	0	22.41	22.43	22.32	21.86	22.03	22.20
		25	12	23.39	23.38	22.94	22.93	23.06	22.80
		25	25	22.29	22.41	22.00	21.98	22.10	21.43
		50	0	22.41	22.35	21.88	21.95	22.09	21.88
Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				165300	167300	169300	165300	167300	169300
5.0	BPSK	1	0	23.86	23.99	23.85	23.28	23.55	23.64
		1	12	24.46	24.37	24.32	23.84	23.49	24.19
		1	23	24.48	24.44	24.31	23.91	24.19	24.27
		12	0	24.06	23.88	23.69	23.29	23.55	23.69
		12	6	24.49	24.39	23.97	23.81	23.99	24.17
		12	12	24.03	23.89	23.43	23.32	23.58	23.63
		25	0	24.00	23.79	23.77	22.65	23.50	23.74
	16QAM	1	0	22.36	22.62	22.24	21.59	22.08	22.09
		1	12	23.36	22.37	22.50	22.60	22.01	22.71
		1	23	23.36	23.56	22.38	22.68	23.00	22.52
		12	0	22.49	22.44	21.99	21.78	22.00	21.47
		12	6	23.54	23.41	22.11	22.84	23.01	22.37
		12	12	22.54	22.49	22.78	21.86	22.05	22.25
		25	0	22.56	22.39	22.37	22.16	22.02	21.31

8.1.4. LTE BAND 12

Test Engineer ID:	22797/44389	Test Date:	2024-01-10	EUT Serial Number:	QV77008VJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23060	23095	23130	20450	20525	20600
10.0	QPSK	1	0	23.49	23.49	23.50	24.36	24.18	24.26
		1	25	23.43	23.48	23.42	24.35	24.26	24.25
		1	49	23.45	23.39	23.30	24.41	24.17	23.90
		25	0	22.50	22.49	22.41	23.35	23.23	23.28
		25	12	22.55	22.47	22.40	23.43	23.24	23.27
		25	25	22.49	22.46	22.41	23.40	23.29	23.31
		50	0	22.54	22.44	22.37	23.41	23.25	23.28
	16QAM	1	0	23.04	22.87	22.89	23.75	23.53	23.69
		1	25	22.86	22.83	22.69	23.61	23.52	23.55
		1	49	22.92	22.75	22.70	23.73	23.60	23.27
		25	0	21.53	21.51	21.46	22.33	22.29	22.30
		25	12	21.56	21.47	21.42	22.43	22.27	22.30
		25	25	21.52	21.48	21.45	22.40	22.30	22.33
		50	0	21.55	21.43	21.38	22.43	22.26	22.27
	64QAM	1	0	22.45	22.35	22.47	22.37	22.46	22.60
		1	25	22.46	22.39	22.45	22.37	22.50	22.50
		1	49	22.43	22.39	22.42	22.48	22.45	22.31
		25	0	21.18	21.18	21.17	21.18	21.28	21.29
		25	12	21.25	21.19	21.27	21.28	21.30	21.32
		25	25	21.23	21.22	21.21	21.26	21.33	21.35
		50	0	21.24	21.15	21.22	21.26	21.29	21.27

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23035	23095	23155	20425	20525	20625
5.0	QPSK	1	0	23.59	23.63	23.62	24.32	24.30	24.31
		1	12	23.75	23.76	23.70	24.43	24.45	24.41
		1	24	23.58	23.61	23.58	24.30	24.29	23.78
		12	0	22.71	22.63	22.59	23.36	23.32	23.32
		12	7	22.67	22.66	22.60	23.38	23.36	23.35
		12	13	22.59	22.65	22.63	23.34	23.40	23.22
		25	0	22.66	22.59	22.56	23.35	23.30	23.29
	16QAM	1	0	23.00	22.94	23.03	23.66	23.67	23.59
		1	12	23.09	23.12	23.13	23.74	23.78	23.79
		1	24	22.98	22.93	23.05	23.65	23.65	23.21
		12	0	21.72	21.69	21.76	22.42	22.38	22.31
		12	7	21.74	21.71	21.77	22.44	22.43	22.36
		12	13	21.68	21.74	21.82	22.41	22.47	22.32
		25	0	21.70	21.62	21.57	22.40	22.33	22.34
	64QAM	1	0	22.46	22.37	22.45	22.53	22.57	22.56
		1	12	22.55	22.48	22.53	22.58	22.69	22.65
		1	24	22.51	22.38	22.45	22.53	22.65	22.14
		12	0	21.32	21.20	21.17	21.34	21.32	21.32
		12	7	21.37	21.22	21.27	21.35	21.33	21.36
		12	13	21.32	21.26	21.24	21.33	21.41	21.34
		25	0	21.21	21.14	21.06	21.37	21.34	21.30

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20415	20525	20635	20415	20525	20635
3.0	QPSK	1	0	23.63	23.58	23.54	24.38	24.25	24.29
			8	23.69	23.65	23.63	24.44	24.43	24.13
			14	23.57	23.54	23.51	24.38	24.28	23.78
		8	0	22.70	22.59	22.57	23.48	23.31	23.34
		8	4	22.69	22.61	22.66	23.53	23.35	23.26
		8	7	22.69	22.67	22.64	23.50	23.41	23.15
		15	0	22.67	22.56	22.54	23.30	23.30	23.28
	16QAM	1	0	22.97	22.91	22.90	23.57	23.64	23.58
		1	8	23.00	23.02	23.06	23.63	23.75	23.44
		1	14	22.90	22.88	22.89	23.47	23.64	23.10
		8	0	21.78	21.63	21.64	22.38	22.40	22.40
		8	4	21.79	21.67	21.74	22.38	22.41	22.29
		8	7	21.77	21.73	21.71	22.42	22.49	22.18
		15	0	21.71	21.61	21.55	22.36	22.40	22.26
	64QAM	1	0	22.51	22.36	22.21	22.59	22.58	22.58
		1	8	22.57	22.50	22.36	22.61	22.67	22.52
		1	14	22.49	22.39	22.25	22.58	22.64	22.13
		8	0	21.26	21.21	21.06	21.34	21.47	21.48
		8	4	21.32	21.23	21.16	21.38	21.49	21.42
		8	7	21.30	21.28	21.17	21.39	21.58	21.27
		15	0	21.23	21.15	21.06	21.39	21.38	21.31

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20407	20525	20643	20407	20525	20643
1.4	QPSK	1	0	23.49	23.44	23.46	24.32	24.29	23.97
			3	23.56	23.50	23.48	24.32	24.33	23.89
			5	23.49	23.46	23.49	24.33	24.30	23.78
		3	0	23.50	23.46	23.44	24.28	24.28	23.85
		3	1	23.48	23.47	23.43	24.28	24.30	23.82
		3	3	23.49	23.48	23.46	24.29	24.36	23.85
		6	0	22.52	22.42	22.44	23.38	23.31	22.93
	16QAM	1	0	22.84	22.66	22.80	23.62	23.71	23.18
		1	3	22.92	22.72	22.80	23.80	23.78	23.08
		1	5	22.86	22.65	22.79	23.81	23.78	23.01
		3	0	22.69	22.60	22.63	23.67	23.54	23.07
		3	1	22.71	22.61	22.62	23.67	23.54	23.01
		3	3	22.71	22.61	22.65	23.68	23.57	22.99
		6	0	21.64	21.45	21.49	22.53	22.43	21.98
	64QAM	1	0	22.44	22.28	22.43	22.78	22.64	22.34
		1	3	22.46	22.36	22.37	22.78	22.70	22.26
		1	5	22.45	22.29	22.40	22.73	22.66	22.13
		3	0	22.30	22.26	22.26	22.51	22.50	22.04
		3	1	22.31	22.27	22.23	22.56	22.50	21.99
		3	3	22.30	22.30	22.23	22.57	22.49	22.03
		6	0	21.29	21.00	21.11	21.42	21.36	21.09

8.1.5. LTE BAND 13

Test Engineer ID:	22797/44389	Test Date:	2024-01-10 2024-01-12	EUT Serial Number:	QV7700QGLA QV7700DNJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				-	23230	-	-	23230	-
10.0	QPSK	1	0	-	23.88	-	-	24.18	-
		1	25	-	23.89	-	-	24.26	-
		1	49	-	23.81	-	-	24.21	-
		25	0	-	22.85	-	-	23.23	-
		25	12	-	22.87	-	-	23.23	-
		25	25	-	22.87	-	-	23.27	-
		50	0	-	22.84	-	-	23.24	-
	16QAM	1	0	-	23.27	-	-	23.62	-
		1	25	-	23.19	-	-	23.54	-
		1	49	-	23.18	-	-	23.60	-
		25	0	-	21.91	-	-	22.28	-
		25	12	-	21.92	-	-	22.29	-
		25	25	-	21.94	-	-	22.35	-
		50	0	-	21.85	-	-	22.23	-
	64QAM	1	0	-	22.19	-	-	22.48	-
		1	25	-	22.20	-	-	22.52	-
		1	49	-	22.11	-	-	22.50	-
		25	0	-	20.85	-	-	21.21	-
		25	12	-	20.88	-	-	21.23	-
		25	25	-	20.91	-	-	21.29	-
		50	0	-	20.87	-	-	21.22	-

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23205	23230	23255	23205	23230	23255
5.0	QPSK	1	0	23.90	23.84	23.86	23.21	24.11	24.10
		1	12	23.93	23.94	23.93	24.36	24.24	24.21
		1	24	23.81	23.84	23.84	24.26	24.11	24.09
		12	0	22.81	22.81	22.82	23.24	23.11	23.08
		12	7	22.87	22.84	22.92	23.26	23.15	23.10
		12	13	22.91	22.88	22.89	23.32	23.23	23.16
		25	0	22.81	22.82	22.90	23.23	23.15	23.15
	16QAM	1	0	23.20	23.19	23.31	23.70	23.50	23.50
		1	12	23.40	23.29	23.30	23.69	23.70	23.51
		1	24	23.16	23.19	23.19	23.64	23.55	23.48
		12	0	21.92	21.85	21.84	22.13	22.06	22.17
		12	7	21.95	21.87	21.94	22.19	22.11	22.19
		12	13	21.99	21.89	21.90	22.26	22.15	22.22
		25	0	21.83	21.81	21.95	22.22	22.06	22.19
	64QAM	1	0	22.17	22.15	22.17	22.52	22.35	22.42
		1	12	22.23	22.24	22.18	22.55	22.43	22.53
		1	24	22.17	22.12	22.13	22.48	22.39	22.41
		12	0	20.88	20.85	20.82	21.27	21.09	21.18
		12	7	20.95	20.87	20.93	21.32	21.12	21.20
		12	13	20.98	20.93	20.89	21.38	21.18	21.24
		25	0	20.82	20.79	20.92	21.24	21.09	21.13

8.1.6. LTE BAND 25

Test Engineer ID:		22797/46722	Test Date:	2024-01-08	EUT Serial Number:	QV77008VJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				26140	26365	26590
20.0	QPSK	1	0	24.59	24.59	24.62
		1	49	24.62	24.63	24.69
		1	99	24.61	24.62	24.61
		50	0	23.69	23.61	23.64
		50	24	23.71	23.70	23.74
		50	50	23.69	23.70	23.72
		100	0	23.70	23.69	23.67
	16QAM	1	0	23.16	23.14	23.10
		1	49	23.31	23.28	23.28
		1	99	23.22	23.10	23.13
		50	0	21.94	21.93	21.91
		50	24	22.05	22.02	22.00
		50	50	22.04	22.01	22.00
		100	0	22.03	22.00	21.94
	64QAM	1	0	22.06	22.16	22.05
		1	49	22.27	22.34	22.26
		1	99	22.15	22.12	22.08
		50	0	20.90	20.93	20.89
		50	24	21.00	21.02	21.00
		50	50	20.99	21.01	20.97
		100	0	21.01	21.01	20.92

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				26115	26365	26615
15.0	QPSK	1	0	23.64	24.55	24.56
		1	37	24.59	24.59	24.63
		1	74	24.67	24.63	24.62
		36	0	23.68	23.60	23.60
		36	20	23.67	23.67	23.61
		36	39	23.67	23.67	23.69
		75	0	23.67	23.65	23.60
	16QAM	1	0	23.22	23.11	23.10
		1	37	23.23	23.18	23.22
		1	74	23.29	23.08	23.05
		36	0	21.99	21.93	21.88
		36	20	22.01	22.00	21.90
		36	39	22.03	22.01	21.96
		75	0	21.99	21.99	21.89
	64QAM	1	0	22.23	22.15	22.15
		1	37	22.27	22.18	22.26
		1	74	22.37	22.10	22.17
		36	0	20.99	20.94	20.89
		36	20	20.99	21.04	20.88
		36	39	20.99	21.02	20.95
		75	0	20.98	21.03	20.90

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
10.0	QPSK	1	0	24.77	24.68	24.75
		1	25	24.81	24.73	24.73
		1	49	24.78	24.71	24.74
		25	0	23.79	23.64	23.67
		25	12	23.83	23.76	23.75
		25	25	23.80	23.75	23.78
		50	0	23.81	23.77	23.70
	16QAM	1	0	23.42	23.39	23.34
		1	25	23.41	23.42	23.35
		1	49	23.49	23.40	23.40
		25	0	22.17	22.06	22.04
		25	12	22.23	22.14	22.06
		25	25	22.20	22.14	22.11
		50	0	22.16	22.12	22.00
	64QAM	1	0	22.30	22.23	22.20
		1	25	22.38	22.29	22.23
		1	49	22.42	22.29	22.25
		25	0	21.17	21.09	21.05
		25	12	21.19	21.18	21.09
		25	25	21.19	21.17	21.12
		50	0	21.16	21.14	21.06

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				26065	26365	26665
5.0	QPSK	1	0	24.65	24.62	24.64
		1	12	24.82	24.75	24.71
		1	24	24.63	24.62	24.61
		12	0	23.72	23.59	23.61
		12	7	23.76	23.70	23.68
		12	13	23.76	23.65	23.65
		25	0	23.72	23.67	23.67
	16QAM	1	0	23.44	23.35	23.36
		1	12	23.56	23.41	23.57
		1	24	23.36	23.30	23.34
		12	0	22.18	21.93	21.98
		12	7	22.21	22.05	22.01
		12	13	22.17	22.01	22.00
		25	0	22.10	22.04	22.07
	64QAM	1	0	22.25	22.28	22.23
		1	12	22.37	22.41	22.33
		1	24	22.29	22.34	22.26
		12	0	21.04	21.10	21.10
		12	7	21.10	21.21	21.13
		12	13	21.06	21.19	21.10
		25	0	21.05	21.11	21.07

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				26055	26365	26675
		1851.5 MHz		1882.5 MHz	1913.5 MHz	
3.0	QPSK	1	0	24.78	24.63	24.56
		1	8	24.81	24.69	24.62
		1	14	24.73	24.63	24.50
		8	0	23.78	23.64	23.60
		8	4	23.81	23.73	23.63
		8	7	23.83	23.72	23.63
		15	0	23.79	23.64	23.57
	16QAM	1	0	23.32	23.31	23.21
		1	8	23.41	23.35	23.37
		1	14	23.32	23.32	23.20
		8	0	22.19	22.07	22.03
		8	4	22.21	22.17	22.09
		8	7	22.23	22.17	22.07
		15	0	22.13	22.13	22.04
	64QAM	1	0	22.27	22.24	22.12
		1	8	22.36	22.30	22.22
		1	14	22.41	22.31	22.10
		8	0	21.22	21.10	21.01
		8	4	21.26	21.21	21.06
		8	7	21.25	21.22	21.05
		15	0	21.18	21.14	21.06

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				26047	26365	26683
		1850.7 MHz		1882.5 MHz	1914.3 MHz	
1.4	QPSK	1	0	24.75	24.80	24.70
		1	3	24.81	24.87	24.69
		1	5	24.84	24.78	24.67
		3	0	24.82	24.77	24.63
		3	1	24.83	24.77	24.66
		3	3	24.86	24.77	24.62
		6	0	23.83	23.75	23.67
	16QAM	1	0	23.52	23.37	23.27
		1	3	23.56	23.47	23.31
		1	5	23.47	23.46	23.30
		3	0	23.33	23.26	23.19
		3	1	23.28	23.27	23.16
		3	3	23.32	23.23	23.11
		6	0	22.16	22.16	21.99
	64QAM	1	0	22.39	22.34	22.31
		1	3	22.43	22.39	22.33
		1	5	22.41	22.37	22.31
		3	0	22.23	22.21	22.12
		3	1	22.26	22.20	22.12
		3	3	22.24	22.17	22.09
		6	0	21.23	20.89	21.22

8.1.7. 5G NR n25

Test Engineer ID:	22797/85502	Test Date:	2024-02-23	EUT Serial Number:	QV77005HJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				372000	376500	381000
20.0	BPSK	1	0	23.52	23.55	23.61
		1	52	24.02	24.06	24.06
		1	104	24.04	24.11	24.06
		50	0	23.50	23.52	23.57
		50	25	24.00	24.06	24.07
		50	50	23.51	23.52	23.52
		100	0	23.43	23.61	23.60
	QPSK	1	0	23.03	23.14	23.11
		1	52	24.07	24.18	24.16
		1	104	24.06	24.18	24.14
		50	0	23.10	23.11	23.08
		50	25	24.05	24.10	24.10
		50	50	23.04	23.07	23.06
		100	0	23.01	23.14	23.09
	16QAM	1	0	22.18	22.08	22.19
		1	52	23.16	23.01	22.95
		1	104	23.13	23.02	22.93
		50	0	22.03	22.05	22.01
		50	25	23.28	23.08	22.99
		50	50	22.18	22.03	22.05
		100	0	22.18	22.03	22.07
	64QAM	1	0	21.47	21.61	21.62
		1	52	21.48	21.61	21.62
		1	104	21.47	21.66	21.69
		50	0	21.54	21.59	21.55
		50	25	21.51	21.54	21.58
		50	50	21.46	21.50	21.54
		100	0	21.57	21.61	21.58
	256QAM	1	0	19.49	19.55	19.44
		1	52	19.49	19.56	19.37
		1	104	19.46	19.48	19.39
		50	0	19.49	19.53	19.54
		50	25	19.50	19.51	19.52
		50	50	19.51	19.48	19.49
		100	0	19.47	19.52	19.57

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2				
				Conducted Average (dBm)				
				371500	376500	381500		
15.0	QPSK	1	0	23.10	23.12	22.87		
		1	39	23.99	24.05	23.83		
		1	77	23.93	23.95	23.87		
		36	0	22.89	23.04	22.86		
		36	18	23.93	23.93	23.83		
		36	36	22.92	22.93	22.81		
		75	0	22.92	22.98	22.88		
	16QAM	1	0	21.93	22.16	21.97		
		1	39	22.95	23.06	22.97		
		1	77	22.94	22.99	22.97		
		36	0	21.97	22.06	21.87		
		36	18	23.07	23.03	22.85		
		36	36	22.01	21.99	21.83		
		75	0	21.98	21.98	21.88		
		Bandwidth (MHz)	Modulation	Main 2				
				Conducted Average (dBm)				
				371000	376500	382000		
10.0	QPSK	Bandwidth (MHz)	Modulation	371500	376500	382000		
				1855.0	1882.5	1910.0		
				1	22.71	22.66		
				1	23.78	23.68		
				1	23.86	23.64		
				25	22.82	22.76		
				25	23.81	23.75		
	16QAM			25	22.81	22.75		
				50	22.84	22.81		
				1	21.86	22.29		
				1	22.85	22.29		
				1	22.88	22.21		
				25	21.86	21.81		
				25	22.86	22.78		
				25	21.84	21.77		
5.0	QPSK	Bandwidth (MHz)	Modulation	25	21.84	21.78		
				Main 2				
				Conducted Average (dBm)				
				370500	376500	382500		
				1852.5	1882.5	1912.5		
				1	22.90	22.82		
				1	23.76	22.87		
	16QAM			1	23.79	23.71		
				12	22.89	22.78		
				12	23.87	23.78		
				12	22.85	22.74		
				25	22.87	22.75		
				1	21.82	21.98		
				1	22.68	21.93		
				1	22.76	22.87		

8.1.8. LTE BAND 30

Test Engineer ID:	33499/84740	Test Date:	2024-03-19	EUT Serial Number:	QV7700DNJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				-	27710	-	-	27710	-
10.0	QPSK	1	0	-	21.59	-	-	22.64	-
		1	25	-	21.63	-	-	22.13	-
		1	49	-	21.49	-	-	22.13	-
		25	0	-	21.53	-	-	22.23	-
		25	12	-	21.55	-	-	22.07	-
		25	25	-	21.53	-	-	22.01	-
		50	0	-	21.52	-	-	21.95	-
	16QAM	1	0	-	21.71	-	-	22.24	-
		1	25	-	21.70	-	-	22.37	-
		1	49	-	21.62	-	-	22.27	-
		25	0	-	21.58	-	-	21.85	-
		25	12	-	21.57	-	-	22.18	-
		25	25	-	21.55	-	-	22.17	-
		50	0	-	21.55	-	-	21.79	-
	64QAM	1	0	-	21.98	-	-	21.69	-
		1	25	-	21.93	-	-	22.32	-
		1	49	-	21.91	-	-	22.00	-
		25	0	-	21.60	-	-	21.22	-
		25	12	-	21.62	-	-	21.66	-
		25	25	-	21.59	-	-	21.18	-
		50	0	-	21.62	-	-	21.57	-

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				27685	27710	27735	27685	27710	27735
5.0	QPSK	1	0	21.67	21.54	21.57	21.90	22.77	21.80
		1	12	21.76	21.67	21.66	22.37	22.93	21.90
		1	24	21.73	21.53	21.52	21.79	22.40	21.57
		12	0	21.69	21.52	21.58	21.91	22.43	21.82
		12	7	21.72	21.55	21.59	22.08	22.52	21.78
		12	13	21.74	21.62	21.58	22.01	22.46	21.79
		25	0	21.67	21.52	21.57	22.27	22.32	22.06
	16QAM	1	0	22.16	21.74	21.69	22.25	22.84	22.02
		1	12	22.25	21.92	21.81	22.16	22.00	21.78
		1	24	22.12	21.83	21.67	22.12	22.67	22.15
		12	0	21.74	21.51	21.58	22.09	22.54	21.76
		12	7	21.74	21.54	21.63	22.19	22.69	21.71
		12	13	21.79	21.57	21.58	22.05	22.60	21.68
		25	0	21.70	21.57	21.59	21.96	22.60	21.83
	64QAM	1	0	21.61	21.96	21.21	21.62	22.50	21.93
		1	12	22.00	22.04	21.59	22.08	22.64	21.86
		1	24	21.96	21.94	21.52	22.11	22.70	21.97
		12	0	21.77	21.79	21.41	21.04	21.75	21.64
		12	7	21.79	21.81	21.42	21.02	22.15	22.09
		12	13	21.81	21.82	21.44	21.31	22.28	21.72
		25	0	21.61	21.62	21.25	21.28	21.98	21.83

8.1.9. 5G NR n30

Test Engineer ID:	33489	Test Date:	03-19-2024	EUT Serial Number:	QV7700DNJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2	
				Conducted Average (dBm)	
				462000	2310.0
10.0	BPSK	1	0	-	21.59
		1	26	-	21.61
		1	50	-	21.74
		25	0	-	21.57
		25	12	-	21.56
		25	25	-	21.68
		50	0	-	21.59
	QPSK	1	0	-	21.68
		1	26	-	21.69
		1	50	-	21.78
		25	0	-	21.61
		25	12	-	21.63
		25	25	-	21.65
		50	0	-	21.63
	16QAM	1	0	-	21.10
		1	26	-	21.24
		1	50	-	21.17
		25	0	-	21.18
		25	12	-	21.15
		25	25	-	21.15
		50	0	-	21.26
	64QAM	1	0	-	20.55
		1	26	-	20.68
		1	50	-	20.66
		25	0	-	20.71
		25	12	-	20.74
		25	25	-	20.71
		50	0	-	20.69
	256QAM	1	0	-	18.76
		1	26	-	18.89
		1	50	-	18.74
		25	0	-	18.64
		25	12	-	18.60
		25	25	-	18.59
		50	0	-	18.60

8.1.10. LTE BAND 41

Test Engineer ID:	22797/4389	Test Date:	2024-01-11	EUT Serial Number:	QV7700QGLA
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				39750	40620	41490
20.0	QPSK	1	0	23.90	23.82	24.03
		1	49	23.94	23.83	23.99
		1	99	23.87	23.94	24.05
		50	0	22.94	22.83	23.02
		50	24	23.03	22.94	23.02
		50	50	23.01	22.94	23.06
		100	0	23.00	22.91	23.01
	16QAM	1	0	22.98	22.88	23.12
		1	49	23.13	23.05	23.29
		1	99	22.95	23.02	23.12
		50	0	21.96	21.82	22.01
		50	24	22.05	21.95	22.02
		50	50	22.01	21.94	22.09
		100	0	22.01	21.91	21.99
	64QAM	1	0	21.92	21.81	22.06
		1	49	21.94	21.97	22.07
		1	99	21.87	21.90	22.04
		50	0	20.95	20.82	21.01
		50	24	21.03	20.94	21.03
		50	50	21.01	20.94	21.07
		100	0	21.01	20.94	21.01

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				39725	40620	41515
15.0	QPSK	1	0	23.96	23.84	24.05
		1	37	23.96	23.86	24.05
		1	74	23.92	23.94	24.07
		36	0	23.02	22.82	23.00
		36	20	23.02	22.90	23.00
		36	39	23.01	22.93	23.06
		75	0	23.00	22.90	22.97
	16QAM	1	0	22.96	22.83	23.05
		1	37	22.96	22.89	23.03
		1	74	22.90	22.90	23.04
		36	0	22.01	21.84	22.02
		36	20	22.02	21.93	22.00
		36	39	22.00	21.95	22.08
		75	0	22.01	21.93	22.01
	64QAM	1	0	21.95	21.88	22.04
		1	37	22.04	21.88	22.06
		1	74	22.05	21.98	22.13
		36	0	21.02	20.84	21.02
		36	20	21.03	20.92	21.01
		36	39	21.01	20.92	21.07
		75	0	21.00	20.92	21.00

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				39700	40620	41540
		2501 MHz		2593 MHz	2685 MHz	
10.0	QPSK	1	0	24.12	23.99	24.13
		1	25	24.15	24.05	24.19
		1	49	24.09	24.03	24.10
		25	0	23.20	23.00	23.13
		25	12	23.20	23.14	23.16
		25	25	23.17	23.09	23.22
		50	0	23.18	23.08	23.14
	16QAM	1	0	23.22	23.02	23.24
		1	25	23.25	23.16	23.29
		1	49	23.20	23.14	23.24
		25	0	22.19	22.02	22.16
		25	12	22.19	22.11	22.17
		25	25	22.19	22.11	22.25
		50	0	22.17	22.15	22.16
	64QAM	1	0	22.19	21.95	22.17
		1	25	22.16	22.14	22.18
		1	49	22.19	22.07	22.17
		25	0	21.21	21.00	21.16
		25	12	21.23	21.09	21.18
		25	25	21.20	21.10	21.22
		50	0	21.18	21.12	21.15

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				39675	40620	41565
		2498.5 MHz		2593 MHz	2687.5 MHz	
5.0	QPSK	1	0	24.16	23.97	24.10
		1	12	24.24	24.10	24.24
		1	24	24.18	24.06	24.09
		12	0	23.19	23.07	23.16
		12	7	23.23	23.11	23.17
		12	13	23.19	23.09	23.18
		25	0	23.17	23.06	23.16
	16QAM	1	0	23.23	23.04	23.17
		1	12	23.27	23.17	23.25
		1	24	23.21	23.13	23.16
		12	0	22.17	22.10	22.12
		12	7	22.21	22.13	22.16
		12	13	22.18	22.12	22.12
		25	0	22.13	22.07	22.14
	64QAM	1	0	22.12	22.07	22.17
		1	12	22.21	22.10	22.22
		1	24	22.16	22.10	22.13
		12	0	21.13	21.06	21.11
		12	7	21.16	21.13	21.14
		12	13	21.11	21.08	21.12
		25	0	21.17	21.08	21.13

8.1.11. 5G NR n41

Test Engineer ID:	33499/84740	Test Date:	2024-03-06	EUT Serial Number:	QV77005HJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				509199	518598	527997	509199	518598	527997	509199	518598	527997	509199	518598	527997
100.0	BPSK	1	1	21.25	20.68	20.75	19.20	19.06	19.05	20.18	20.01	19.97	20.20	19.99	19.94
		1	135	21.06	20.73	20.86	19.07	19.16	19.31	20.09	19.98	20.05	20.13	20.06	20.11
		1	271	21.02	20.72	20.87	19.11	19.40	19.56	20.00	20.10	20.04	20.13	20.17	20.13
		135	0	20.90	20.62	20.60	19.13	18.98	19.12	20.11	19.95	19.91	20.17	20.03	20.01
		135	67	20.76	20.71	20.68	19.10	19.12	19.26	20.06	19.93	19.98	20.10	20.03	20.07
		135	135	20.72	20.71	20.76	19.02	19.13	19.44	19.97	19.94	19.98	20.04	20.00	20.13
		270	0	20.76	20.56	20.60	19.00	18.95	19.22	19.93	19.76	19.93	20.04	19.91	20.01
	QPSK	1	1	20.56	20.30	20.18	18.64	18.42	18.48	19.68	19.33	19.53	19.94	19.51	19.49
		1	135	20.42	20.26	20.23	18.60	18.57	18.72	19.52	19.33	19.63	19.84	19.51	19.59
		1	271	20.35	20.41	20.37	18.65	18.78	19.00	19.44	19.51	19.60	19.77	19.61	19.63
		135	0	20.43	20.10	20.04	18.54	18.42	18.55	19.60	19.38	19.36	19.78	19.37	19.41
		135	67	20.27	20.11	20.14	18.50	18.54	18.73	19.52	19.37	19.45	19.76	19.47	19.53
		135	135	20.18	20.06	20.24	18.50	18.59	18.87	19.47	19.37	19.50	19.69	19.47	19.56
		270	0	20.22	19.96	20.07	18.37	18.33	18.48	19.38	19.17	19.34	19.60	19.23	19.43
	16QAM	1	1	20.55	20.94	20.76	18.64	18.60	18.40	19.47	19.40	19.26	19.78	19.31	19.29
		1	135	20.37	20.86	20.86	18.55	18.67	18.65	19.33	19.41	19.40	19.69	19.38	19.43
		1	271	20.32	20.97	20.99	18.63	18.89	18.89	19.28	19.53	19.40	19.71	19.53	19.49
		135	0	20.99	20.55	20.59	18.58	18.58	18.58	19.61	19.44	19.44	19.64	19.46	19.47
		135	67	20.83	20.60	20.66	18.55	18.57	18.75	19.54	19.44	19.48	19.63	19.44	19.52
		135	135	20.72	20.61	20.74	18.53	18.61	18.90	19.48	19.43	19.52	19.50	19.45	19.57
		270	0	20.64	20.36	20.48	18.36	18.38	18.61	19.35	19.16	19.35	19.36	19.28	19.45
	64QAM	1	1	20.28	19.84	20.18	18.32	17.76	17.97	19.29	19.07	18.99	19.18	19.12	18.89
		1	135	20.13	19.78	20.32	18.22	17.89	18.22	19.14	19.10	19.06	19.11	19.16	19.04
		1	271	20.05	19.91	20.37	18.29	18.08	18.48	19.10	19.21	19.06	19.07	19.26	19.09
		135	0	19.94	19.66	19.59	18.12	18.01	18.06	19.08	18.93	18.88	19.15	19.01	18.99
		135	67	19.81	19.64	19.72	18.07	18.04	18.20	18.99	18.87	18.90	19.12	18.99	19.07
		135	135	19.70	19.65	19.79	17.99	18.13	18.40	18.90	18.88	18.98	19.05	18.99	19.10
		270	0	19.68	19.36	19.54	17.85	17.83	18.01	18.81	18.69	18.80	18.93	18.78	18.91
	256QAM	1	1	18.93	18.67	18.34	16.85	16.65	16.41	17.99	17.97	17.97	17.57	17.20	17.44
		1	135	18.84	18.72	18.41	16.79	16.74	16.65	17.88	17.99	17.97	17.51	17.26	17.56
		1	271	18.74	18.74	18.46	16.82	16.98	16.95	17.77	18.11	17.96	17.49	17.34	17.60
		135	0	18.93	18.57	18.53	16.58	16.42	16.59	18.04	17.82	17.87	17.62	17.45	17.50
		135	67	18.81	18.57	18.59	16.52	16.53	16.73	17.99	17.85	17.94	17.58	17.46	17.56
		135	135	18.70	18.59	18.70	16.48	16.61	16.86	17.92	17.85	17.94	17.45	17.46	17.64
		270	0	18.68	18.43	18.51	16.30	16.33	16.45	17.82	17.62	17.77	17.37	17.22	17.46

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				508200	518598	528996	508200	518598	528996	508200	518598	528996	508200	518598	528996
90.0	BPSK	1	1	21.01	20.79	20.69	19.23	18.92	19.09	20.16	19.85	19.88	20.10	19.99	19.91
		1	120	20.86	20.78	20.86	19.04	19.05	19.36	20.00	19.93	20.10	20.11	20.05	20.13
		1	243	20.88	20.92	20.81	19.08	19.28	19.49	19.94	20.00	19.99	20.10	20.14	20.10
		120	0	20.93	20.61	20.66	19.10	18.96	19.10	20.09	19.98	19.85	20.19	20.02	19.96
		120	60	20.78	20.61	20.70	19.10	19.09	19.29	20.04	19.98	20.03	20.12	20.03	20.16
		120	120	20.71	20.59	20.18	19.05	19.10	19.37	19.94	19.96	19.98	20.05	20.05	20.12
		243	0	20.76	20.57	20.59	18.99	18.93	19.17	19.96	19.79	19.92	20.05	19.88	20.03
	16QAM	1	1	20.58	20.47	20.71	18.83	18.74	18.68	19.83	19.39	19.33	19.77	19.38	19.68
		1	120	20.42	20.47	20.78	18.73	18.91	18.96	19.78	19.47	19.54	19.73	19.48	19.87
		1	243	20.39	20.61	20.83	18.79	19.06	19.21	19.67	19.48	19.45	19.72	19.54	19.86
		120	0	20.40	20.13	20.15	18.59	18.47	18.60	19.61	19.48	19.36	19.69	19.51	19.51
		120	60	20.25	20.12	20.16	18.54	18.53	18.79	19.55	19.46	19.50	19.62	19.48	19.64
		120	120	20.22	20.08	20.22	18.52	18.65	18.88	19.47	19.47	19.45	19.56	19.52	19.60
		243	0	20.17	19.89	20.01	18.34	18.38	18.60	19.37	19.25	19.33	19.48	19.29	19.40

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2				Sub Antenna				Cell 3rd				Cell 4th MBHB			
				Conducted Average (dBm)				Conducted Average (dBm)				Conducted Average (dBm)				Conducted Average (dBm)			
				507198	518598	529998	507198	518598	529998	507198	518598	529998	507198	518598	529998	507198	518598	529998	507198
80.0	BPSK	1	1	21.04	20.67	20.66	19.17	18.92	19.11	20.09	19.77	19.75	20.17	19.94	20.08				
		1	108	20.87	20.72	20.85	19.19	19.10	19.34	20.03	19.88	19.86	20.18	20.05	20.16				
		1	215	20.75	20.77	20.81	19.10	19.27	19.54	19.90	19.92	19.83	20.06	20.10	20.14				
		108	0	20.97	20.64	20.63	19.17	19.22	19.23	20.06	19.89	19.85	20.23	20.06	20.07				
		108	54	20.81	20.65	20.67	19.09	19.12	19.33	19.99	19.84	19.93	20.17	20.01	20.12				
		108	108	20.73	20.63	20.68	19.06	19.18	19.50	19.91	19.89	19.97	20.08	20.03	20.25				
	16QAM	216	0	20.85	20.52	20.58	19.05	19.02	19.23	19.94	19.78	19.81	20.13	19.95	20.07				
		1	1	20.85	20.00	19.94	18.89	18.44	18.63	19.53	19.29	19.16	19.58	19.38	19.75				
		1	108	20.82	20.00	20.11	18.85	18.56	18.92	19.43	19.29	19.20	19.60	19.47	19.90				
		1	215	20.69	20.02	20.12	18.83	18.71	19.09	19.38	19.38	19.15	19.48	19.55	19.85				
		108	0	20.35	20.07	20.10	18.67	18.48	18.67	19.57	19.39	19.34	19.66	19.54	19.58				
		108	54	20.30	20.08	20.16	18.60	18.60	18.78	19.51	19.34	19.35	19.61	19.52	19.58				
		108	108	20.22	20.01	20.16	18.53	18.67	18.92	19.41	19.35	19.42	19.56	19.53	19.71				
		216	0	20.16	19.95	19.95	18.47	18.43	18.67	19.43	19.17	19.23	19.53	19.40	19.51				
60.0	BPSK	1	1	21.23	20.89	21.13	19.29	19.14	19.35	20.25	19.92	20.10	20.45	20.17	20.16				
		1	81	21.24	20.99	21.25	19.31	19.23	19.49	20.27	20.07	20.13	20.42	20.26	20.21				
		1	160	21.17	20.94	21.27	19.25	19.30	19.61	20.12	20.06	20.13	20.33	20.27	20.23				
		81	0	21.14	20.70	20.82	19.28	19.22	19.35	20.23	20.07	20.01	20.38	20.18	20.17				
		81	40	21.04	20.70	20.80	19.29	19.23	19.46	20.21	20.05	20.10	20.37	20.18	20.27				
		81	81	21.01	20.80	20.84	19.27	19.26	19.65	20.20	20.01	20.12	20.31	20.21	20.33				
	16QAM	162	0	21.03	20.67	20.75	19.24	19.23	19.46	20.22	20.01	20.04	20.33	20.16	20.21				
		1	1	20.36	19.91	20.48	18.96	18.83	18.81	19.60	19.55	19.71	19.81	19.66	19.59				
		1	81	20.22	20.02	20.63	18.90	18.95	18.97	19.57	19.65	19.81	19.79	19.82	19.66				
		1	160	20.23	20.01	20.60	18.82	19.06	19.09	19.43	19.61	19.75	19.67	19.76	19.65				
		81	0	20.61	20.14	20.29	18.80	18.71	18.83	19.72	19.50	19.52	19.87	19.66	19.68				
		81	40	20.57	20.13	20.24	18.75	18.71	18.93	19.70	19.51	19.59	19.83	19.64	19.72				
		81	81	20.51	20.22	20.32	18.75	18.78	19.02	19.69	19.63	19.60	19.80	19.61	19.75				
		128	0	20.94	20.81	20.20	18.70	18.63	18.79	19.65	19.45	19.47	19.74	19.64	19.68				
50.0	BPSK	1	1	21.12	20.89	20.87	19.40	19.20	19.38	20.33	20.07	20.10	20.46	20.16	20.20				
		1	64	21.10	20.89	20.93	19.41	19.24	19.49	20.36	20.12	20.10	20.45	20.23	20.21				
		1	131	21.08	20.86	21.04	19.39	19.42	19.69	20.28	20.22	20.15	20.44	20.35	20.26				
		64	0	21.08	20.75	20.75	19.28	19.21	19.40	20.28	20.13	20.08	20.38	20.19	20.22				
		64	32	21.07	20.75	20.74	19.26	19.25	19.51	20.27	20.09	20.06	20.41	20.20	20.20				
		64	64	21.06	20.78	20.77	19.24	19.28	19.63	20.24	20.08	20.12	20.33	20.21	20.29				
	16QAM	128	0	21.06	20.70	20.75	19.22	19.22	19.49	20.23	20.07	20.03	20.32	20.20	20.20				
		1	1	20.28	20.18	20.24	18.99	18.71	18.79	19.85	19.34	19.53	19.86	19.78	19.68				
		1	64	20.25	20.19	20.18	18.92	18.87	18.86	19.79	19.44	19.48	19.78	19.91	19.60				
		1	131	20.27	20.32	20.25	18.99	18.99	19.11	19.80	19.53	19.55	19.78	20.03	19.79				
		64	0	20.57	20.20	20.19	18.72	18.71	18.92	19.80	19.62	19.53	19.89	19.67	19.72				
		64	32	20.53	20.18	20.21	18.71	18.75	18.97	19.80	19.58	19.53	19.85	19.68	19.71				
		64	64	20.53	20.25	20.35	18.69	18.79	19.09	19.74	19.57	19.53	19.85	19.67	19.80				
		128	0	20.52	20.14	20.14	18.69	18.71	18.89	19.73	19.52	19.51	19.84	19.60	19.64				
40.0	BPSK	1	1	21.27	20.92	21.06	19.45	19.31	19.64	20.47	20.14	20.19	20.56	20.33	20.37				
		1	50	21.15	20.87	21.02	19.29	19.26	19.63	20.32	20.11	20.26	20.44	20.32	20.43				
		1	104	21.28	20.94	21.11	19.39	19.44	19.82	20.44	20.21	20.30	20.50	20.41	20.40				
		50	0	21.21	20.77	20.94	19.39	19.16	19.56	20.39	20.02	20.12	20.45	20.12	20.25				
		50	25	21.20	20.86	20.95	19.35	19.30	19.67	20.35	20.13	20.24	20.43	20.27	20.42				
		50	50	21.16	20.92	20.99	19.41	19.37	19.80	20.39	20.15	20.27	20.42	20.29	20.43				
	16QAM	100	0	21.16	20.89	20.98	19.40	19.30	19.58	20.36	20.15	20.25	20.42	20.25	20.43				
		1	1	20.62	20.44	20.17	19.02	18.62	19.16	20.06	19.46	19.45	20.18	19.67	19.76				
		1	50	20.48	20.32	20.21	18.92	18.69	19.31	19.90	19.46	19.46	20.07	19.60	19.78				
		1	104	20.58	20.46	20.26	18.99	18.89	19.39	19.97	19.61	19.47	20.13	19.78	19.79				
		50	0	20.69	20.27	20.39	18.86	18.73	19.06	19.88	19.63	19.68	20.00	19.67	19.83				
		50	25	20.66	20.35	20.40	18.87	18.74	19.21	19.89	19.66	19.70	19.96	19.73	19.92				
		50	50	20.64	20.34	20.46	18.87	18.80	19.25	19.86	19.67	19.72	19.97	19.79	19.98				
		100	0	20.86	20.38	20.43	18.85	18.73	19.13	19.88	19.61	19.71	19.88	19.73	19.84				

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				502200	518598	534996	502200	518598	534996	502200	518598	534996	502200	518598	534996
30.0	BPSK	1	1	21.09	20.80	20.98	19.43	19.23	19.66	20.43	20.21	20.21	20.44	20.19	20.39
		1	36	21.08	20.84	20.93	19.40	19.20	19.71	20.37	20.12	20.26	20.44	20.25	20.35
		1	76	21.25	20.93	21.03	19.52	19.49	19.84	20.45	20.20	20.21	20.51	20.33	20.40
		36	0	21.09	20.79	20.96	19.43	19.23	19.62	20.40	20.16	20.25	20.44	20.28	20.35
		36	18	21.03	20.77	21.00	19.43	19.30	19.71	20.39	20.15	20.29	20.49	20.26	20.35
		36	36	21.14	20.89	20.95	19.46	19.35	19.83	20.41	20.19	20.27	20.50	20.30	20.45
		75	0	21.20	20.79	20.97	19.44	19.33	19.69	20.39	20.14	20.23	20.45	20.30	20.37
	16QAM	1	1	20.82	20.38	20.41	18.29	18.32	18.95	20.04	19.40	19.76	20.22	20.07	19.85
		1	36	20.72	20.23	20.45	18.23	18.32	18.92	20.00	19.41	19.78	20.15	20.09	19.79
		1	76	20.82	20.44	20.54	18.31	18.42	19.10	20.07	19.51	19.70	20.23	20.24	19.84
		36	0	20.69	20.31	20.43	18.37	18.32	18.57	19.90	19.64	19.79	19.97	19.82	19.88
		36	18	20.72	20.26	20.52	18.39	18.35	18.65	19.91	19.63	19.80	20.01	19.83	19.89
		36	36	20.69	20.36	20.49	18.42	18.42	18.79	19.94	19.70	19.78	20.02	19.85	19.99
		75	0	20.65	20.29	20.38	18.30	18.36	18.69	19.84	19.64	19.64	19.96	19.79	19.83
Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				501198	518598	535998	501198	518598	535998	501198	518598	535998	501198	518598	535998
20.0	BPSK	1	1	21.24	20.88	21.07	19.54	19.28	19.64	20.49	20.19	20.08	20.56	20.19	20.29
		1	25	21.24	20.87	21.00	19.51	19.30	19.72	20.47	20.18	20.09	20.58	20.33	20.30
		1	49	21.28	20.89	20.91	19.54	19.31	19.71	20.49	20.18	19.99	20.53	20.30	20.19
		25	0	21.21	20.86	20.99	19.48	19.35	19.68	20.40	20.12	20.17	20.49	20.25	20.31
		25	12	21.17	20.88	20.97	19.48	19.32	19.70	20.41	20.14	20.12	20.53	20.26	20.33
		25	25	21.17	20.85	20.89	19.48	19.38	19.68	20.40	20.15	20.05	20.49	20.26	20.22
		50	0	21.17	20.90	20.93	19.47	19.34	19.65	20.39	20.12	20.13	20.50	20.25	20.32
	16QAM	1	1	20.92	20.22	20.52	18.09	18.52	18.87	19.89	19.14	19.89	19.82	19.13	19.25
		1	25	20.86	20.27	20.52	18.05	18.54	18.94	19.97	19.22	19.87	19.75	19.23	19.25
		1	49	20.88	20.29	20.48	18.04	18.57	18.93	19.85	19.22	19.87	19.76	19.26	19.13
		25	0	20.68	20.38	20.37	18.46	18.32	18.69	19.93	19.65	19.65	19.58	19.37	19.34
		25	12	20.64	20.37	20.40	18.46	18.37	18.64	19.97	19.64	19.59	19.58	19.35	19.26
		25	25	20.75	20.36	20.38	18.44	18.36	18.67	19.96	19.63	19.60	19.57	19.36	19.26
		50	0	20.56	20.31	20.43	18.41	18.26	18.66	19.87	19.66	19.58	19.45	19.32	19.23

8.1.12. LTE BAND 48

Test Engineer ID:		28076/44389	Test Date:	2024-03-14	EUT Serial Number:	QV7700QGLA
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB		
				Conducted Average (dBm)			Conducted Average (dBm)		
				55340 3560 MHz	55990 3625MHz	56640 3690 MHz	55340 3560 MHz	55990 3625MHz	56640 3690 MHz
20.0	QPSK	1	0	21.32	21.27	21.07	20.43	20.46	20.52
		1	49	21.30	21.20	21.09	20.45	20.51	20.46
		1	99	21.29	21.19	21.02	20.47	20.44	20.39
		50	0	21.35	21.34	21.15	20.51	20.54	20.54
		50	24	21.29	21.27	21.16	20.57	20.57	20.54
		50	50	21.29	21.28	21.15	20.46	20.58	20.53
		100	0	21.28	21.26	21.14	20.45	20.48	20.53
	16QAM	1	0	21.27	21.27	21.27	20.46	20.64	20.52
		1	49	21.45	21.36	21.20	20.58	20.87	20.66
		1	99	21.33	21.22	21.21	20.47	20.66	20.41
		50	0	21.32	21.30	21.18	20.52	20.56	20.53
		50	24	21.26	21.25	21.16	20.55	20.56	20.55
		50	50	21.26	21.24	21.16	20.47	20.59	20.51
		100	0	21.24	21.23	21.16	20.45	20.48	20.54
	64QAM	1	0	21.20	21.28	21.01	20.39	20.36	20.37
		1	49	21.32	21.31	20.95	20.55	20.44	20.39
		1	99	21.20	21.22	21.00	20.45	20.33	20.27
		50	0	21.31	21.27	21.16	20.48	20.48	20.47
		50	24	21.25	21.23	21.17	20.51	20.52	20.48
		50	50	21.23	21.22	21.13	20.43	20.54	20.44
		100	0	21.23	21.21	21.14	20.40	20.41	20.46

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB		
				Conducted Average (dBm)			Conducted Average (dBm)		
				55315 3557.5 MHz	55990 3625MHz	56665 3692.5 MHz	55315 3557.5 MHz	55990 3625MHz	56665 3692.5 MHz
15.0	QPSK	1	0	21.17	21.20	21.11	20.52	20.46	20.51
		1	37	21.27	21.24	21.08	20.56	20.50	20.57
		1	74	21.26	21.20	21.08	20.56	20.55	20.57
		36	0	21.29	21.28	21.18	20.56	20.54	20.57
		36	20	21.29	21.30	21.16	20.58	20.56	20.57
		36	39	21.24	21.22	21.16	20.55	20.55	20.58
		75	0	21.21	21.21	21.14	20.53	20.53	20.53
	16QAM	1	0	21.19	21.17	21.07	20.70	20.59	20.61
		1	37	21.27	21.25	21.11	20.91	20.96	20.77
		1	74	21.14	21.19	21.03	20.71	20.80	20.76
		36	0	21.26	21.28	21.19	20.54	20.53	20.54
		36	20	21.27	21.28	21.19	20.57	20.57	20.57
		36	39	21.18	21.21	21.19	20.56	20.55	20.57
		75	0	21.17	21.19	21.20	20.55	20.53	20.55
	64QAM	1	0	21.20	21.16	21.10	20.45	20.44	20.49
		1	37	21.26	21.26	21.11	20.44	20.46	20.49
		1	74	21.21	21.20	21.00	20.38	20.40	20.39
		36	0	21.27	21.26	21.19	20.47	20.51	20.50
		36	20	21.27	21.27	21.18	20.48	20.50	20.49
		36	39	21.21	21.20	21.16	20.48	20.50	20.51
		75	0	21.20	21.18	21.18	20.49	20.50	20.48

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB		
				Conducted Average (dBm)			Conducted Average (dBm)		
				55290	55990	56690	55290	55990	56690
10.0	QPSK	1	0	21.36	21.33	21.29	20.57	20.60	20.66
		1	25	21.39	21.36	21.31	20.59	20.65	20.65
		1	49	21.43	21.32	21.25	20.58	20.63	20.62
		25	0	21.40	21.42	21.33	20.63	20.66	20.67
		25	12	21.44	21.50	21.37	20.66	20.71	20.71
		25	25	21.44	21.35	21.32	20.68	20.68	20.68
		50	0	21.44	21.35	21.33	20.64	20.70	20.66
	16QAM	1	0	21.44	21.44	21.28	20.69	20.52	20.67
		1	25	21.43	21.46	21.26	20.65	20.56	20.66
		1	49	21.44	21.42	21.15	20.69	20.53	20.67
		25	0	21.37	21.40	21.34	20.63	20.68	20.69
		25	12	21.42	21.42	21.37	20.66	20.71	20.68
		25	25	21.42	21.36	21.34	20.66	20.71	20.64
		50	0	21.42	21.32	21.32	20.64	20.69	20.67
	64QAM	1	0	21.37	21.39	21.38	20.66	20.72	20.64
		1	25	21.44	21.47	21.38	20.69	20.73	20.63
		1	49	21.43	21.42	21.33	20.63	20.74	20.64
		25	0	21.42	21.42	21.35	20.68	20.69	20.67
		25	12	21.46	21.47	21.39	20.72	20.74	20.70
		25	25	21.45	21.37	21.34	20.69	20.72	20.69
		50	0	21.43	21.36	21.33	20.69	20.70	20.67

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB		
				Conducted Average (dBm)			Conducted Average (dBm)		
				55265	55990	56715	55265	55990	56715
5.0	QPSK	1	0	21.36	21.31	21.18	20.47	20.52	20.49
		1	12	21.41	21.46	21.28	20.47	20.48	20.51
		1	24	21.40	21.38	21.21	20.54	20.58	20.56
		12	0	21.43	21.39	21.26	20.44	20.46	20.54
		12	7	21.48	21.43	21.30	20.47	20.44	20.52
		12	13	21.45	21.40	21.27	20.46	20.43	20.51
		25	0	21.42	21.41	21.27	20.53	20.52	20.53
	16QAM	1	0	21.39	21.41	21.18	20.57	20.64	20.63
		1	12	21.47	21.48	21.30	20.60	20.64	20.67
		1	24	21.43	21.43	21.20	20.77	20.73	20.73
		12	0	21.44	21.45	21.29	20.50	20.45	20.47
		12	7	21.47	21.48	21.33	20.47	20.43	20.47
		12	13	21.44	21.44	21.32	20.47	20.45	20.47
		25	0	21.44	21.30	21.28	20.49	20.49	20.52
	64QAM	1	0	21.39	21.33	21.26	20.57	20.61	20.62
		1	12	21.48	21.50	21.37	20.72	20.66	20.72
		1	24	21.41	21.35	21.20	20.63	20.66	20.64
		12	0	21.50	21.32	21.25	20.62	20.65	20.67
		12	7	21.49	21.33	21.28	20.68	20.68	20.72
		12	13	21.47	21.38	21.41	20.65	20.66	20.71
		25	0	21.42	21.42	21.33	20.66	20.69	20.65

8.1.13. 5G NR n48

Test Engineer ID:	33499/84740	Test Date:	2024-03-12	EUT Serial Number:	QV77005HJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				638000 3570.0	641333 3620.0	645332 3680.0									
40.0	BPSK	1	0	20.90	21.05	21.12	18.81	18.79	18.80	16.95	16.90	17.00	16.01	15.94	15.94
		1	50	20.93	21.02	21.06	18.84	18.83	18.73	16.87	16.83	17.06	15.90	15.85	15.90
		1	104	21.03	21.16	21.11	18.92	18.75	18.75	16.99	16.93	17.09	16.00	15.95	15.97
		50	0	20.90	21.10	21.04	18.66	18.70	18.76	16.87	16.82	17.02	15.92	15.80	15.92
		50	25	20.92	20.97	21.04	18.70	18.69	18.62	16.86	16.82	16.97	15.89	15.77	15.87
		50	50	20.93	20.97	21.03	18.68	18.66	18.60	16.90	16.84	16.99	15.88	15.77	15.85
		100	0	20.96	20.95	21.05	18.63	18.68	18.66	16.86	16.81	16.99	15.91	15.79	15.89
	QPSK	1	0	20.97	20.90	21.15	18.73	18.67	18.67	16.87	16.87	16.93	15.84	15.98	15.86
		1	50	21.02	21.08	21.20	18.83	18.67	18.65	16.86	16.84	17.05	15.79	15.93	15.97
		1	104	21.14	21.11	21.24	18.85	18.71	18.70	16.96	16.92	17.07	15.88	15.97	15.91
		50	0	20.84	20.98	21.06	18.68	18.69	18.70	16.84	16.84	17.03	15.87	15.78	15.85
		50	25	20.89	20.99	21.06	18.68	18.65	18.61	16.83	16.81	16.93	15.88	15.76	15.75
		50	50	20.95	20.99	21.01	18.66	18.66	18.62	16.84	16.82	17.00	15.88	15.78	15.81
		100	0	20.89	20.97	21.02	18.66	18.68	18.62	16.83	16.80	16.86	15.85	15.78	15.79
	16QAM	1	0	21.19	21.08	20.98	18.64	18.82	18.92	17.03	16.58	17.06	16.08	15.73	15.69
		1	50	21.10	21.14	20.98	18.69	18.79	18.83	17.13	16.61	17.23	16.13	15.62	15.71
		1	104	21.21	21.32	21.03	18.74	18.83	18.95	17.22	16.71	17.27	16.19	15.75	15.70
		50	0	20.95	20.98	21.07	18.67	18.72	18.70	16.80	16.82	16.93	15.92	15.81	15.78
		50	25	20.92	20.98	21.04	18.62	18.68	18.68	16.80	16.83	16.90	15.89	15.77	15.73
		50	50	20.90	20.98	21.02	18.63	18.68	18.62	16.82	16.82	16.85	15.86	15.78	15.79
		100	0	20.89	20.96	20.99	18.66	18.65	18.64	16.83	16.84	16.93	15.89	15.75	15.83
	64QAM	1	0	21.13	20.87	21.20	18.73	18.90	18.86	16.71	16.69	16.71	15.79	15.94	15.46
		1	50	21.18	20.83	21.18	18.72	18.88	18.88	16.70	16.75	16.71	15.81	15.81	15.52
		1	104	21.23	20.99	21.28	18.81	18.98	18.85	16.87	16.83	16.87	15.80	15.87	15.57
		50	0	20.93	21.03	21.07	18.72	18.71	18.70	16.87	16.88	16.98	15.91	15.87	15.86
		50	25	20.94	20.98	21.04	18.67	18.62	18.65	16.85	16.87	16.94	15.91	15.85	15.83
		50	50	20.93	21.01	21.03	18.65	18.62	18.63	16.88	16.87	16.90	15.88	15.83	15.89
		100	0	20.93	20.99	21.02	18.67	18.65	18.63	16.82	16.82	16.90	15.90	15.78	15.78
	256QAM	1	0	19.70	19.93	20.05	18.00	17.93	18.08	15.68	15.74	15.79	15.05	14.64	14.77
		1	50	19.78	20.00	20.06	18.02	17.96	18.09	15.71	15.79	15.86	15.07	14.58	14.82
		1	104	19.88	20.07	20.11	18.05	17.97	18.12	15.86	15.90	15.95	15.15	14.66	14.83
		50	0	19.74	19.80	19.90	17.99	17.75	18.01	15.82	15.80	15.89	14.86	14.78	14.88
		50	25	19.74	19.81	19.85	18.00	17.70	17.98	15.81	15.80	15.87	14.83	14.77	14.80
		50	50	19.73	19.80	19.81	18.00	17.70	17.92	15.84	15.80	15.84	14.82	14.73	14.77
		100	0	19.66	19.80	19.82	17.97	17.69	17.95	15.81	15.85	15.86	14.89	14.78	14.87

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				637333 3560.0	641333 3620.0	645999 3690.0	637333	641333	645999	637333	641333	645999	637333	641333	645999
20.0	QPSK	1	0	20.89	20.99	21.06	18.84	18.66	18.76	16.85	16.81	17.07	15.83	15.93	15.92
		1	25	20.89	21.03	21.07	18.84	18.64	18.73	16.89	16.84	17.09	15.85	15.89	15.91
		1	49	20.92	21.02	21.05	18.84	18.68	18.72	16.90	16.88	17.06	15.88	15.81	15.93
		25	0	20.91	21.03	21.09	18.75	18.67	18.67	16.82	16.85	17.05	15.85	15.88	15.86
		25	12	20.89	21.05	21.11	18.76	18.66	18.66	16.84	16.82	17.04	15.89	15.79	15.88
		25	25	20.93	21.03	21.03	18.75	18.66	18.67	16.82	16.84	17.05	15.87	15.82	15.84
		50	0	20.88	21.01	21.05	18.76	18.68	18.64	16.80	16.83	17.00	15.89	15.77	15.87
	16QAM	1	0	21.17	21.03	20.74	18.80	18.71	18.69	16.90	16.79	17.27	16.16	15.74	16.24
		1	25	21.16	21.04	20.75	18.81	18.74	18.63	16.94	16.83	17.23	16.14	15.75	16.18
		1	49	21.22	21.03	20.75	18.86	18.78	18.66	16.98	16.86	17.24	16.16	15.65	16.23
		25	0	20.94	20.99	21.08	18.74	18.66	18.63	16.86	16.82	17.04	15.85	15.91	15.89
		25	12	20.96	21.01	21.04	18.67	18.65	18.67	16.87	16.85	17.05	15.85	15.83	15.86
		25	25	20.98	21.03	21.06	18.67	18.67	18.47	16.90	16.87	17.04	15.87	15.81	15.85
		50	0	20.89	21.00	21.03	18.69	18.70	18.67	16.82	16.84	17.04	15.83	15.80	15.83

8.1.14. LTE BAND 66

Test Engineer ID:	22797/44389	Test Date:	2024-01-11 2024-02-09	EUT Serial Number:	QV7700QGLA QV7700DNJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				132072 1720 MHz	132322 1745 MHz	132572 1770 MHz	132072 1720 MHz	132322 1745 MHz	132572 1770 MHz
20.0	QPSK	1	0	23.61	23.56	23.52	23.26	23.25	23.78
		1	49	23.59	23.55	23.52	23.06	23.21	23.52
		1	99	23.65	23.62	23.51	23.40	23.26	23.60
		50	0	22.56	22.57	22.55	22.00	22.37	22.63
		50	24	22.66	22.57	22.56	22.09	22.28	22.45
		50	50	22.66	22.66	22.63	22.18	22.30	22.59
		100	0	22.66	22.56	22.53	22.17	22.27	22.55
	16QAM	1	0	22.90	22.82	22.80	22.49	22.70	22.94
		1	49	23.06	22.93	22.93	22.57	22.84	23.00
		1	99	22.96	22.92	22.75	22.85	22.70	22.95
		50	0	21.57	21.56	21.57	21.05	21.38	21.66
		50	24	21.65	21.59	21.57	21.05	21.27	21.58
		50	50	21.65	21.66	21.63	21.21	21.33	21.61
		100	0	21.65	21.55	21.56	21.17	21.34	21.62
	64QAM	1	0	21.92	21.87	21.87	21.44	21.54	21.84
		1	49	22.02	21.99	21.99	21.08	21.40	21.77
		1	99	21.95	21.95	21.89	21.62	21.57	21.84
		50	0	20.55	20.57	20.56	20.03	20.51	20.73
		50	24	20.63	20.60	20.58	20.05	20.37	20.62
		50	50	20.64	20.66	20.63	20.13	20.37	20.66
		100	0	20.65	20.57	20.58	20.06	20.33	20.56

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				132047 1717.5 MHz	132322 1745 MHz	132597 1772.5 MHz	132047 1717.5 MHz	132322 1745 MHz	132597 1772.5 MHz
15.0	QPSK	1	0	23.24	23.57	23.58	23.17	23.73	23.56
		1	37	23.63	23.63	23.58	23.01	23.27	23.37
		1	74	23.67	23.68	23.56	23.14	23.31	23.97
		36	0	22.61	22.58	22.57	22.17	22.46	22.63
		36	20	22.61	22.59	22.56	22.12	22.18	22.57
		36	39	22.69	22.67	22.63	22.12	22.20	22.71
		75	0	22.59	22.58	22.54	22.21	22.18	22.67
	16QAM	1	0	22.97	22.80	22.78	22.56	22.85	22.96
		1	37	22.93	22.92	22.84	22.34	22.57	22.68
		1	74	22.98	22.92	22.76	22.45	22.67	23.00
		36	0	21.65	21.60	21.59	21.19	21.46	21.66
		36	20	21.62	21.59	21.58	21.21	21.36	21.57
		36	39	21.71	21.70	21.65	21.17	21.41	21.77
		75	0	21.63	21.60	21.57	21.20	21.39	21.66
	64QAM	1	0	21.94	21.90	21.92	21.56	21.75	21.89
		1	37	21.95	21.89	21.93	21.22	21.54	21.79
		1	74	21.98	21.98	21.89	21.41	21.76	21.93
		36	0	20.59	20.56	20.65	20.24	20.62	20.66
		36	20	20.60	20.56	20.64	20.23	20.45	20.67
		36	39	20.69	20.65	20.69	20.27	20.44	20.79
		75	0	20.61	20.57	20.60	20.33	20.52	20.67

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				132022 1715 MHz	132322 1745 MHz	132622 1775 MHz	132022 1715 MHz	132322 1745 MHz	132622 1775 MHz
10.0	QPSK	1	0	23.80	23.75	23.80	23.16	23.08	23.70
		1	25	23.83	23.84	23.84	23.52	23.56	23.84
		1	49	23.78	23.78	23.77	22.86	22.98	24.00
		25	0	22.80	22.74	22.75	22.43	22.40	22.65
		25	12	22.83	22.79	22.80	22.51	22.55	22.71
		25	25	22.80	22.83	22.86	22.26	22.41	22.89
		50	0	22.80	22.73	22.76	22.29	22.29	22.66
	16QAM	1	0	23.08	23.17	23.13	22.63	22.52	22.99
		1	25	23.07	23.09	23.10	22.85	22.88	22.97
		1	49	23.13	23.16	23.15	22.19	22.42	22.88
		25	0	21.82	21.78	21.79	21.45	21.48	21.67
		25	12	21.86	21.80	21.80	21.58	21.57	21.69
		25	25	21.84	21.88	21.87	21.36	21.50	21.95
		50	0	21.80	21.77	21.79	21.38	21.46	21.77
	64QAM	1	0	22.02	22.07	22.05	21.35	21.41	21.91
		1	25	22.02	22.10	22.14	21.66	21.84	21.61
		1	49	22.05	22.11	22.10	21.09	21.25	21.58
		25	0	20.82	20.79	20.79	20.51	20.37	20.61
		25	12	20.85	20.82	20.83	20.29	20.73	20.80
		25	25	20.82	20.87	20.89	20.36	20.53	20.94
		50	0	20.80	20.79	20.80	20.38	20.44	20.74

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				131997 1712.5 MHz	132322 1745 MHz	132647 1777.5 MHz	131997 1712.5 MHz	132322 1745 MHz	132647 1777.5 MHz
5.0	QPSK	1	0	23.70	23.72	23.86	23.59	23.39	23.74
		1	12	23.86	23.90	23.95	23.47	23.45	23.83
		1	24	23.73	23.75	23.85	23.26	23.35	23.77
		12	0	22.77	22.72	22.88	22.61	22.40	22.71
		12	7	22.80	22.78	22.96	22.51	22.55	22.85
		12	13	22.79	22.82	22.91	22.47	22.42	22.85
		25	0	22.77	22.72	22.88	22.53	22.33	22.79
	16QAM	1	0	23.07	23.12	23.21	22.92	22.95	22.92
		1	12	23.28	23.23	23.32	22.99	22.99	22.44
		1	24	23.01	23.08	23.25	22.73	22.81	22.65
		12	0	21.79	21.72	22.00	21.58	21.55	21.84
		12	7	21.80	21.78	22.02	21.64	21.58	21.93
		12	13	21.78	21.84	21.98	21.54	21.51	21.92
		25	0	21.83	21.70	21.90	21.55	21.45	21.87
	64QAM	1	0	22.08	21.93	22.10	21.91	21.78	21.94
		1	12	22.02	22.11	22.15	21.80	21.74	21.80
		1	24	21.96	22.02	22.07	21.48	21.64	21.70
		12	0	20.85	20.93	20.93	20.65	20.54	20.92
		12	7	20.89	20.97	20.96	20.58	20.58	20.93
		12	13	20.86	21.02	20.93	20.58	20.63	21.00
		25	0	20.80	20.75	20.90	20.61	20.70	20.86

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				131987 1711.5 MHz	132322 1745 MHz	132657 1778.5 MHz	131987 1711.5 MHz	132322 1745 MHz	132657 1778.5 MHz
3.0	QPSK	1	0	23.71	23.69	23.71	23.46	23.40	23.64
		1	8	23.79	23.85	23.83	23.46	23.49	23.85
		1	14	23.69	23.76	23.71	23.34	23.39	23.82
		8	0	22.78	22.71	22.79	22.59	22.45	22.82
		8	4	22.83	22.83	22.84	22.57	22.57	22.83
		8	7	22.81	22.84	22.82	22.53	22.50	22.82
		15	0	22.76	22.72	22.79	22.50	22.41	22.74
	16QAM	1	0	23.06	23.02	23.02	22.84	22.74	22.22
		1	8	23.13	23.12	23.19	22.89	22.93	22.81
		1	14	23.10	23.09	23.09	22.90	22.72	22.62
		8	0	21.86	21.79	21.82	21.64	21.61	21.93
		8	4	21.89	21.89	21.86	21.64	21.65	21.96
		8	7	21.88	21.87	21.84	21.61	21.62	21.99
		15	0	21.82	21.73	21.83	21.55	21.50	21.91
	64QAM	1	0	22.11	22.04	22.08	21.69	21.73	21.89
		1	8	22.16	22.21	22.15	21.73	21.75	21.69
		1	14	22.07	22.12	22.13	21.55	21.66	21.56
		8	0	20.83	20.83	20.86	20.62	20.60	20.92
		8	4	20.88	20.94	20.91	20.64	20.71	21.00
		8	7	20.89	20.94	20.89	20.54	20.62	20.97
		15	0	20.81	20.73	20.86	20.41	20.47	20.89

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2			Sub Antenna		
				Conducted Average (dBm)			Conducted Average (dBm)		
				131979 1710.7 MHz	132322 1745 MHz	132665 1779.3 MHz	131979 1710.7 MHz	132322 1745 MHz	132665 1779.3 MHz
1.4	QPSK	1	0	23.77	23.79	23.74	23.62	23.37	23.72
		1	3	23.78	23.80	23.76	23.55	23.46	23.71
		1	5	23.73	23.76	23.74	23.97	23.42	23.99
		3	0	23.73	23.76	23.80	23.63	23.43	23.55
		3	1	23.76	23.76	23.77	23.80	23.46	23.61
		3	3	23.77	23.77	23.78	23.41	23.43	23.45
		6	0	22.74	22.77	22.75	22.45	22.37	22.62
	16QAM	1	0	23.13	23.11	22.95	22.99	22.98	22.89
		1	3	23.16	23.14	22.99	22.98	22.85	22.87
		1	5	23.08	23.14	22.96	22.68	22.73	22.91
		3	0	22.92	23.03	22.91	22.48	22.62	22.74
		3	1	22.91	22.96	22.93	22.84	22.63	22.80
		3	3	22.92	22.94	22.99	21.58	22.66	22.79
		6	0	21.78	21.86	21.84	21.56	21.58	21.44
	64QAM	1	0	22.01	22.16	22.15	21.90	21.67	21.85
		1	3	22.00	22.18	22.07	21.82	21.65	21.97
		1	5	22.11	22.11	22.09	21.75	21.64	21.77
		3	0	21.87	21.96	21.91	21.74	21.61	21.84
		3	1	21.86	21.93	21.93	21.71	21.63	22.00
		3	3	21.94	21.93	21.92	21.66	21.63	21.69
		6	0	20.81	20.93	20.82	20.57	20.54	20.60

8.1.15. 5G NR n66

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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				344000	349000	354000
20.0	BPSK	1	0	23.62	23.58	23.50
		1	52	23.78	24.21	23.87
		1	104	24.21	24.04	23.81
		50	0	23.54	23.78	23.44
		50	25	23.90	24.17	23.88
		50	50	23.52	23.70	23.36
		100	0	23.57	23.76	23.39
	QPSK	1	0	23.09	23.01	23.01
		1	52	23.85	24.22	23.82
		1	104	24.01	24.06	23.74
		50	0	23.09	23.20	23.01
		50	25	24.00	24.24	23.91
		50	50	23.07	23.20	22.86
		100	0	23.14	23.03	22.92
	16QAM	1	0	22.04	22.26	22.00
		1	52	22.99	23.37	22.80
		1	104	23.12	23.29	22.76
		50	0	22.13	22.16	21.89
		50	25	23.02	23.18	22.88
		50	50	22.05	22.16	21.79
		100	0	22.09	22.24	21.92
	64QAM	1	0	21.65	21.59	21.56
		1	52	21.57	21.51	21.43
		1	104	21.69	21.55	21.39
		50	0	21.56	21.71	21.45
		50	25	21.48	21.67	21.36
		50	50	21.64	21.65	21.35
		100	0	21.57	21.76	21.40
	256QAM	1	0	19.75	19.53	19.20
		1	52	19.70	19.52	19.09
		1	104	19.80	19.52	19.00
		50	0	19.61	19.74	19.42
		50	25	19.56	19.68	19.36
		50	50	19.62	19.68	19.35
		100	0	19.57	19.70	19.36

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				343500	349000	354500
15.0	QPSK	1	0	23.18	23.32	22.92
		1	39	24.16	24.27	23.86
		1	77	24.17	24.25	23.88
		36	0	23.24	23.12	22.77
		36	18	24.16	24.10	23.78
		36	36	23.16	23.11	22.73
		75	0	23.23	23.11	22.80
	16QAM	1	0	22.24	22.21	21.96
		1	39	23.27	23.15	22.83
		1	77	23.37	23.10	22.62
		36	0	22.24	22.15	21.85
		36	18	23.23	23.21	22.79
		36	36	22.22	22.13	21.75
		75	0	22.26	22.15	21.79

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				343000	349000	355000
				1715.0	1745.0	1775.0
10.0	QPSK	1	0	23.12	23.07	22.87
		1	26	24.11	24.03	23.81
		1	50	24.06	23.95	23.72
		25	0	23.08	23.02	22.63
		25	12	24.09	23.97	23.58
		25	25	23.06	22.95	22.57
		50	0	23.07	22.97	22.62
	16QAM	1	0	21.91	22.23	21.86
		1	26	22.94	23.20	22.78
		1	50	22.87	23.10	22.76
		25	0	22.11	21.99	21.66
		25	12	23.10	22.94	22.62
		25	25	22.10	21.94	21.61
		50	0	22.09	22.01	21.64
Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 2		
				Conducted Average (dBm)		
				342500	349000	355500
				1712.5	1745.0	1777.5
5.0	QPSK	1	0	23.07	23.00	22.69
		1	12	24.13	22.96	23.62
		1	23	24.12	23.89	23.66
		12	0	23.10	23.05	22.63
		12	6	24.14	23.99	23.70
		12	12	23.07	23.03	22.61
		25	0	23.09	22.95	22.62
	16QAM	1	0	22.20	21.81	21.70
		1	12	23.21	21.91	22.64
		1	23	23.23	22.87	22.71
		12	0	22.02	22.02	21.55
		12	6	22.99	23.05	22.60
		12	12	21.95	21.98	21.56
		25	0	22.11	21.97	21.63

8.1.16. LTE BAND 71

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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1		
				Conducted Average (dBm)		
				133222	133297	133372
20.0	QPSK	1	0	23.35	23.22	23.20
		1	49	23.37	23.26	23.32
		1	99	23.29	23.35	23.32
		50	0	22.30	22.28	22.23
		50	24	22.36	22.37	22.95
		50	50	22.33	22.34	22.13
		100	0	22.36	22.38	22.14
		1	0	22.56	22.52	22.43
	16QAM	1	49	22.79	22.82	22.74
		1	99	22.63	22.64	22.64
		50	0	21.29	21.29	21.35
		50	24	21.36	21.39	21.33
		50	50	21.34	21.37	21.44
		100	0	21.37	21.37	21.33
		1	0	21.56	21.48	21.06
		1	49	21.85	21.74	21.22
	64QAM	1	99	21.61	21.67	21.51
		50	0	20.30	20.11	20.28
		50	24	20.38	20.20	20.32
		50	50	20.37	20.16	20.42
		100	0	20.39	20.11	20.32

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1		
				Conducted Average (dBm)		
				133197	133297	133397
15.0	QPSK	1	0	23.39	23.14	23.18
		1	37	23.17	23.19	23.28
		1	74	23.14	23.14	23.23
		36	0	22.27	22.16	22.21
		36	20	22.19	22.19	22.25
		36	39	22.24	22.24	22.30
		75	0	22.27	22.22	22.26
		1	0	22.62	22.42	22.40
	16QAM	1	37	22.44	22.41	22.49
		1	74	22.39	22.41	22.45
		36	0	21.28	21.18	21.23
		36	20	21.23	21.18	21.27
		36	39	21.28	21.25	21.33
		75	0	21.32	21.25	21.29
		1	0	21.59	21.34	21.50
		1	37	21.41	21.41	21.63
	64QAM	1	74	21.37	21.36	21.55
		36	0	20.31	20.21	20.30
		36	20	20.26	20.22	20.32
		36	39	20.28	20.29	20.36
		75	0	20.34	20.29	20.33

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1		
				Conducted Average (dBm)		
				133172	133297	133422
10.0	QPSK	1	0	23.58	23.40	23.40
		1	25	23.42	23.39	23.48
		1	49	23.38	23.38	23.50
		25	0	22.54	22.36	22.46
		25	12	22.50	22.37	22.45
		25	25	22.41	22.38	22.50
		50	0	22.47	22.42	22.43
	16QAM	1	0	22.95	22.80	22.75
		1	25	22.73	22.76	22.77
		1	49	22.71	22.81	22.86
		25	0	21.55	21.44	21.44
		25	12	21.50	21.45	21.48
		25	25	21.40	21.47	21.51
		50	0	21.48	21.42	21.46
	64QAM	1	0	21.73	21.70	21.77
		1	25	21.58	21.73	21.81
		1	49	21.55	21.71	21.82
		25	0	20.56	20.41	20.47
		25	12	20.52	20.41	20.50
		25	25	20.45	20.44	20.54
		50	0	20.51	20.47	20.46

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1		
				Conducted Average (dBm)		
				133147	133297	133447
5.0	QPSK	1	0	23.77	23.55	23.80
		1	12	23.90	23.70	23.98
		1	24	23.75	23.59	23.80
		12	0	22.77	22.55	22.82
		12	7	22.80	22.60	22.87
		12	13	22.85	22.63	22.90
		25	0	22.78	22.65	22.83
	16QAM	1	0	23.15	22.95	23.14
		1	12	23.31	23.11	23.34
		1	24	23.18	22.94	23.17
		12	0	21.91	21.71	21.85
		12	7	21.92	21.73	21.89
		12	13	21.96	21.80	21.91
		25	0	21.83	21.73	21.84
	64QAM	1	0	21.99	21.89	22.10
		1	12	22.00	21.98	22.21
		1	24	21.89	21.91	22.15
		12	0	20.73	20.71	20.99
		12	7	20.73	20.75	21.04
		12	13	20.67	20.81	21.09
		25	0	20.59	20.71	20.92

8.1.17. 5G NR n71

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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1		
				Conducted Average (dBm)		
				134600	136100	137600
20.0	BPSK	1	0	23.64	23.78	23.80
		1	52	24.23	24.28	24.02
		1	104	24.20	24.29	24.00
		50	0	23.67	23.73	23.32
		50	25	24.23	24.23	23.98
		50	50	23.72	23.68	23.38
		100	0	23.73	23.71	23.44
	QPSK	1	0	23.12	23.22	23.17
		1	52	23.53	24.24	23.91
		1	104	24.21	24.17	23.88
		50	0	23.19	23.19	23.26
		50	25	24.31	24.27	24.02
		50	50	23.23	23.18	23.32
		100	0	23.24	23.19	23.31
	16QAM	1	0	22.49	22.18	22.13
		1	52	23.48	23.12	22.86
		1	104	23.49	23.16	22.87
		50	0	22.15	22.23	22.21
		50	25	23.23	23.24	22.90
		50	50	22.21	22.17	22.26
		100	0	22.20	22.19	22.29
	64QAM	1	0	21.87	21.84	21.97
		1	52	21.93	21.87	21.94
		1	104	21.89	21.83	21.69
		50	0	21.70	21.72	21.37
		50	25	21.75	21.68	21.44
		50	50	21.76	21.63	21.38
		100	0	21.71	21.65	21.40
	256QAM	1	0	19.68	19.69	19.63
		1	52	19.63	19.62	19.56
		1	104	19.83	19.72	19.40
		50	0	19.64	19.74	19.44
		50	25	19.70	19.68	19.48
		50	50	19.69	19.61	19.40
		100	0	19.72	19.68	19.37

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1				
				Conducted Average (dBm)				
				Main 2	136100	138100		
15.0	QPSK	1	0	23.24	23.23	23.23		
		1	39	24.21	24.29	24.20		
		1	77	24.26	24.29	24.18		
		36	0	23.29	23.26	23.16		
		36	18	24.20	24.28	24.16		
		36	36	23.23	23.18	23.20		
		75	0	23.32	23.23	23.26		
	16QAM	1	0	22.32	22.17	22.12		
		1	39	23.28	23.18	23.29		
		1	77	23.26	23.17	23.19		
		36	0	22.28	22.26	22.18		
		36	18	23.28	23.33	23.17		
		36	36	22.31	22.20	22.19		
		75	0	22.33	22.22	22.16		
		Bandwidth (MHz)	Modulation	Main 1				
				Conducted Average (dBm)				
				133600	136100	138600		
10.0	QPSK	668.0	680.5	693.0				
		1	0	23.21	23.20	23.18		
		1	26	24.21	24.23	24.20		
		1	50	24.14	24.20	24.21		
		25	0	23.16	23.18	23.16		
		25	12	24.21	24.26	24.22		
		25	25	23.15	23.15	23.11		
	16QAM	50	0	23.17	23.18	23.19		
		1	0	23.13	22.13	22.02		
		1	26	23.22	22.89	23.14		
		1	50	23.11	22.88	23.06		
		25	0	22.12	22.10	22.19		
		25	12	23.22	23.21	23.29		
		25	25	22.15	22.12	22.18		
		50	0	22.15	22.17	22.19		
5.0	QPSK	Bandwidth (MHz)	Modulation	Main 1				
				Conducted Average (dBm)				
				133100	136100	139100		
		5.0	Modulation	665.5	680.5	695.5		
				1	23.22	23.15		
				1	12	24.31		
				1	23	24.29		
	16QAM			12	0	23.15		
				12	6	24.20		
				12	12	23.25		
				25	0	23.21		
				1	0	22.22		
				1	12	23.19		
				1	23	23.26		
				12	0	22.23		

8.1.18. 5G NR n77 (Part 27 3450-3550MHz)

Test Engineer ID:		33499/84740	Test Date:		2024-03-01	EUT Serial Number:		QV77005HJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1		Sub-UHB		Cell 3rd		Cell 4th MBHB	
				Conducted Average (dBm)		Conducted Average (dBm)		Conducted Average (dBm)		Conducted Average (dBm)	
100.0	BPSK	1	1	-	26.11	-	24.09	-	23.34	-	25.02
		1	135	-	26.10	-	24.39	-	23.11	-	23.60
		1	271	-	25.63	-	24.44	-	23.04	-	23.76
		135	0	-	25.21	-	24.10	-	23.24	-	23.56
		135	67	-	25.55	-	24.51	-	23.72	-	24.71
		135	135	-	25.14	-	23.88	-	23.45	-	24.45
		270	0	-	25.55	-	23.87	-	23.94	-	24.05
	QPSK	1	1	-	26.12	-	23.85	-	23.19	-	24.78
		1	135	-	25.68	-	24.40	-	23.06	-	23.60
		1	271	-	25.69	-	24.41	-	23.01	-	23.77
		135	0	-	25.28	-	23.63	-	23.38	-	23.52
		135	67	-	25.51	-	24.54	-	23.89	-	24.48
		135	135	-	25.09	-	23.74	-	23.27	-	23.91
	16QAM	270	0	-	25.00	-	23.50	-	23.33	-	23.01
		1	1	-	24.98	-	23.90	-	22.47	-	23.79
		1	135	-	24.74	-	23.42	-	22.50	-	23.53
		1	271	-	24.69	-	23.42	-	22.38	-	23.72
		135	0	-	24.24	-	22.55	-	22.14	-	23.06
		135	67	-	24.72	-	23.49	-	22.57	-	23.70
		135	135	-	24.21	-	22.75	-	22.35	-	23.05
	64QAM	270	0	-	24.00	-	22.54	-	22.24	-	22.72
		1	1	-	23.69	-	21.92	-	21.24	-	22.79
		1	135	-	23.66	-	22.14	-	21.15	-	22.68
		1	271	-	23.58	-	22.19	-	20.90	-	22.57
		135	0	-	23.71	-	21.96	-	21.36	-	22.63
		135	67	-	23.37	-	21.98	-	21.51	-	22.52
		135	135	-	23.71	-	21.83	-	21.52	-	22.62
	256QAM	270	0	-	23.07	-	21.69	-	21.77	-	22.25
		1	1	-	21.55	-	19.83	-	20.15	-	20.47
		1	135	-	21.71	-	19.79	-	19.68	-	20.84
		1	271	-	21.69	-	19.88	-	19.92	-	20.50
		135	0	-	21.92	-	19.92	-	19.82	-	20.39
		135	67	-	21.71	-	19.98	-	19.87	-	20.82
		135	135	-	21.86	-	19.74	-	19.93	-	20.14
	256QAM	270	0	-	21.58	-	19.68	-	19.55	-	20.71

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB			Cell 3rd			Cell 4th MBHB			
				Conducted Average (dBm)	632666	633333	634000	Conducted Average (dBm)	632666	633333	634000	Conducted Average (dBm)	632666	633333	634000	
80.0	BPSK	1	1	-	-	-	-	-	23.09	23.16	23.26	24.04	24.61	24.79	-	
		1	108	-	-	-	-	-	23.26	23.10	22.78	24.47	24.36	24.39	-	
		1	215	-	-	-	-	-	23.18	23.02	22.87	24.53	24.44	24.47	-	
		108	0	-	-	-	-	-	24.09	24.11	24.02	25.08	25.06	25.05	-	
		108	54	-	-	-	-	-	24.04	23.88	23.88	25.33	25.35	25.35	-	
		108	108	-	-	-	-	-	24.10	24.03	23.93	25.05	25.04	25.02	-	
		216	0	-	-	-	-	-	24.40	24.43	24.34	25.04	25.07	24.96	-	
	QPSK	1	1	26.33	26.15	26.17	24.68	24.23	24.36	-	-	-	-	-	-	-
		1	108	26.26	25.97	25.95	24.40	24.19	24.14	-	-	-	-	-	-	-
		1	215	26.14	26.04	26.04	24.61	24.40	24.34	-	-	-	-	-	-	-
		108	0	25.24	25.21	25.17	23.66	23.67	23.74	-	-	-	-	-	-	-
		108	54	25.17	25.22	26.11	24.71	24.68	24.75	-	-	-	-	-	-	-
		108	108	25.20	26.17	25.13	23.74	23.71	23.77	-	-	-	-	-	-	-
	16QAM	216	0	25.08	25.01	25.08	23.57	23.57	23.63	-	-	-	-	-	-	-
		1	1	25.52	25.19	25.53	23.85	23.45	23.38	22.33	22.11	22.31	23.87	23.81	23.87	-
		1	108	25.41	25.18	25.45	23.92	23.59	23.40	22.87	22.04	22.01	23.60	23.70	23.67	-
		1	215	25.34	24.98	25.30	24.00	23.66	23.54	22.37	22.05	22.08	23.62	23.79	23.71	-
		108	0	24.21	24.20	24.09	22.61	22.66	22.69	22.73	22.90	22.70	23.54	23.47	23.49	-
		108	54	25.22	25.60	25.10	23.62	23.65	23.66	23.41	23.53	23.36	23.78	23.83	23.81	-
		108	108	24.16	24.63	24.04	22.69	22.68	22.73	22.68	22.75	22.60	23.55	23.46	23.50	-
		216	0	24.10	24.27	24.03	22.56	22.55	22.62	22.79	22.73	22.75	23.44	23.40	23.34	-

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB			Cell 3rd			Cell 4th MBHB			
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			
				632000	633333	634666	632000	633333	634666	632000	633333	634666	632000	633333	634666	
60.0	BPSK	1	1	-	-	-	-	-	-	23.27	22.97	22.74	24.13	24.11	24.11	
		1	81	-	-	-	-	-	-	22.89	22.72	23.13	24.31	24.22	24.17	
		1	160	-	-	-	-	-	-	23.20	23.24	23.20	24.16	24.10	24.07	
		81	0	-	-	-	-	-	-	23.87	23.92	23.81	24.19	24.17	24.11	
		81	40	-	-	-	-	-	-	23.88	23.72	23.82	24.11	24.11	24.12	
		81	81	-	-	-	-	-	-	23.77	23.86	23.65	24.13	24.11	24.03	
	QPSK	162	0	-	-	-	-	-	-	24.44	24.32	24.39	24.09	24.04	24.15	
		1	1	26.18	25.99	25.80	24.26	24.07	24.08	-	-	-	-	-	-	
		1	81	26.18	26.05	25.96	23.90	23.96	23.89	-	-	-	-	-	-	
		1	160	25.98	25.93	25.79	23.89	23.85	23.86	-	-	-	-	-	-	
		81	0	25.92	25.92	25.68	23.90	23.93	23.88	-	-	-	-	-	-	
		81	40	26.54	26.62	26.36	24.95	24.57	24.69	-	-	-	-	-	-	
	16QAM	81	81	25.93	25.86	25.52	23.99	23.92	23.85	-	-	-	-	-	-	
		162	0	25.84	25.80	25.22	23.91	23.86	23.88	-	-	-	-	-	-	
		1	1	25.38	25.13	24.90	23.27	23.09	23.40	22.14	21.71	22.23	24.30	23.81	23.55	
		1	81	25.43	25.25	25.05	22.81	22.92	22.83	22.08	21.71	22.73	24.37	23.76	23.63	
		1	160	25.22	25.09	24.96	22.80	22.83	22.84	21.82	22.18	22.33	24.31	23.68	23.52	
		81	0	24.88	24.89	25.21	22.82	22.92	22.86	22.81	22.96	22.73	23.65	23.62	23.62	
	16QAM	81	40	25.78	25.70	25.77	23.92	23.91	23.83	23.40	23.55	23.39	24.09	24.06	24.13	
		81	81	24.89	24.85	24.91	22.83	22.92	22.85	22.71	22.86	22.64	23.60	23.55	23.54	
		162	0	24.83	24.83	24.36	22.86	22.79	22.86	22.69	22.66	22.61	23.52	23.49	23.51	
Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB			Cell 3rd			Cell 4th MBHB			
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			
				631333	633333	635333	631333	633333	635333	631333	633333	635333	631333	633333	635333	
40.0	BPSK	3469.995	3500.0	3529.995	3469.995	3500.0	3529.995	3469.995	3500.0	3529.995	3469.995	3500.0	3529.995	3469.995	3500.0	3529.995
		1	1	-	-	-	-	-	-	23.29	23.16	22.70	24.29	24.34	24.33	
		1	50	-	-	-	-	-	-	22.89	22.81	23.71	24.28	24.21	24.21	
		1	104	-	-	-	-	-	-	22.72	22.76	23.41	24.40	24.35	24.39	
		50	0	-	-	-	-	-	-	23.64	23.66	23.54	24.34	24.24	24.20	
		50	25	-	-	-	-	-	-	23.98	23.92	23.82	24.28	24.24	24.19	
	QPSK	50	50	-	-	-	-	-	-	23.58	23.49	23.44	24.34	24.29	24.25	
		100	0	-	-	-	-	-	-	23.92	23.74	23.82	24.32	24.30	24.23	
		1	1	26.19	25.96	25.43	24.24	24.13	24.30	-	-	-	-	-	-	
		1	50	26.24	26.04	25.59	23.96	23.90	24.11	-	-	-	-	-	-	
		1	104	26.10	25.97	25.49	23.95	24.02	24.12	-	-	-	-	-	-	
		50	0	26.09	26.08	25.63	23.96	23.53	24.06	-	-	-	-	-	-	
	16QAM	50	25	26.75	26.67	25.94	25.05	23.55	24.70	-	-	-	-	-	-	
		50	50	26.14	26.11	25.57	24.09	23.60	24.12	-	-	-	-	-	-	
		100	0	26.04	26.04	25.48	24.07	23.58	24.11	-	-	-	-	-	-	
		1	1	25.58	24.92	24.54	23.16	23.11	23.30	22.28	22.10	21.99	24.23	24.09	23.46	
		1	50	25.61	25.05	24.64	23.24	23.18	23.40	22.20	22.01	22.05	24.10	24.01	23.45	
		1	104	25.44	24.83	24.50	23.20	23.23	23.35	22.00	21.88	21.98	23.94	23.99	23.37	
30.0	BPSK	50	0	25.08	25.05	24.61	23.06	23.34	23.04	22.80	22.78	22.69	23.83	23.70	23.62	
		50	25	25.99	25.83	25.19	24.08	23.51	23.95	23.18	23.11	23.12	24.29	24.21	24.13	
		50	50	25.06	25.08	24.60	23.13	23.05	23.05	22.78	22.75	22.54	23.85	23.76	23.71	
		75	0	25.04	25.07	24.59	23.02	23.05	23.09	22.77	22.50	22.68	23.83	23.73	23.78	
	QPSK	75	0	-	-	-	-	-	-	23.89	23.77	23.66	24.38	24.32	24.25	
		1	1	26.73	26.91	26.19	24.33	24.53	24.15	-	-	-	-	-	-	
		1	36	26.44	26.90	26.18	25.63	24.19	23.87	-	-	-	-	-	-	
		1	76	26.35	26.89	26.03	25.57	24.29	23.92	-	-	-	-	-	-	
		36	0	25.86	26.12	26.02	25.37	24.19	24.16	-	-	-	-	-	-	
		36	18	-	-	-	-	-	-	23.99	24.01	23.91	24.35	24.25	24.22	
	16QAM	36	36	-	-	-	-	-	-	23.67	23.50	23.42	24.37	24.31	24.25	
		75	0	25.95	25.93	26.12	25.27	24.01	23.99	-	-	-	-	-	-	
		1	1	25.79	25.80	25.34	23.32	23.52	23.44	22.49	21.91	21.83	24.03	23.96	23.66	
		1	36	25.54	25.81	25.28	24.92	23.47	23.43	22.30	21.85	22.04	23.86	23.84	23.62	
		1	76	25.54	25.81	25.34	24.77	23.23	23.45	22.26	21.86	21.84	23.84	23.90	24.35	
		36	0	24.99	25.05	25.05	24.21	23.14	23.15	22.78	22.73	22.67	23.84	23.75	23.75	
		36	18	25.76	25.93	25.62	24.67	24.04	23.85	23.15	23.11	22.98	24.33	24.21	24.22	
		36	36	25.08	25.06	25.32	24.25	23.11	23.07	22.75	22.75	22.56	23.85	23.80	23.78	
		75	0	25.15	25.07	25.40	24.26	23.07	23.09	22.71	22.66	22.48	23.80	23.75	23.70	

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				630666	633333	636000	630666	633333	636000	630666	633333	636000	630666	633333	636000
20.0	BPSK	1	1	-	-	-	-	-	-	23.10	22.94	22.85	24.38	24.26	24.25
		1	25	-	-	-	-	-	-	23.00	22.79	23.88	24.37	24.23	24.19
		1	49	-	-	-	-	-	-	22.88	22.76	23.48	24.38	24.32	24.30
		25	0	-	-	-	-	-	-	23.85	23.77	23.56	24.39	24.29	24.23
		25	12	-	-	-	-	-	-	24.02	23.66	23.51	24.30	24.30	24.24
		25	25	-	-	-	-	-	-	24.01	23.87	23.75	24.34	24.33	24.27
		50	0	-	-	-	-	-	-	23.88	23.79	23.70	24.34	24.30	24.24
	QPSK	1	1	26.11	25.91	25.81	24.20	24.17	24.21	-	-	-	-	-	-
		1	25	26.13	25.96	26.01	23.81	23.90	24.03	-	-	-	-	-	-
		1	49	25.95	25.87	25.84	23.78	23.93	24.00	-	-	-	-	-	-
		25	0	25.83	25.73	25.73	24.16	24.17	24.17	-	-	-	-	-	-
		25	12	26.36	26.29	26.02	24.85	24.68	24.55	-	-	-	-	-	-
	16QAM	25	25	25.82	25.17	25.77	24.22	24.12	24.10	-	-	-	-	-	-
		50	0	25.83	25.01	25.44	24.23	24.06	23.90	-	-	-	-	-	-
		1	1	25.17	25.27	24.90	23.16	23.26	23.38	22.10	21.84	22.11	24.21	24.06	23.81
		1	25	25.23	25.36	25.07	23.17	23.31	23.41	22.06	21.86	22.20	24.37	24.06	23.84
		1	49	25.04	25.21	24.94	23.12	23.32	23.33	21.95	21.82	22.16	24.18	24.00	23.74
	64QAM	25	0	24.88	24.82	24.63	23.15	23.19	23.14	22.99	22.99	22.88	23.85	23.76	23.75
		25	12	25.82	25.67	25.64	24.09	24.07	23.92	23.64	23.60	23.45	24.25	24.27	24.25
		25	25	24.80	24.79	24.68	23.11	23.12	23.09	23.04	22.93	22.84	23.78	23.78	23.76
		50	0	24.77	24.14	24.65	23.22	23.07	23.05	22.74	22.69	22.64	23.83	23.75	23.73

8.1.19. 5G NR n77 (Part 27 3700-3980MHz)

Test Engineer ID:		33499/84740	Test Date:		2024-03-01	EUT Serial Number:				QV77005HJP
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Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				650000	656000	662000	650000	656000	662000	650000	656000	662000	650000	656000	662000
100.0	BPSK	1	1	26.06	25.76	25.89	24.66	24.71	24.24	23.22	24.46	23.39	25.10	25.18	24.65
		1	135	26.00	26.18	25.95	24.57	24.76	23.64	23.32	24.02	22.74	25.12	24.95	23.78
		1	271	26.21	25.88	25.37	24.93	24.10	24.15	25.06	23.16	23.37	25.37	24.21	23.42
		135	0	25.57	25.46	25.44	24.13	24.21	24.29	24.09	24.04	23.69	24.61	24.66	24.80
		135	67	25.96	26.07	26.04	24.48	24.69	24.26	24.18	24.42	23.69	24.97	25.21	25.00
		135	135	25.51	25.50	25.44	24.02	24.22	23.64	24.23	24.14	23.41	24.60	24.67	24.25
		270	0	25.45	25.35	25.57	24.00	24.07	24.19	24.10	24.23	23.78	24.48	24.55	24.77
	QPSK	1	1	26.09	25.73	25.84	24.61	24.72	24.86	24.88	24.77	24.58	25.09	25.11	24.27
		1	135	25.94	26.09	26.44	24.54	24.75	24.57	24.75	24.90	23.95	24.99	24.95	23.75
		1	271	26.16	25.83	26.01	24.88	24.75	24.11	23.59	24.58	23.29	25.24	23.37	23.32
		135	0	25.10	25.22	25.12	23.52	23.69	23.74	23.74	23.80	23.68	24.05	24.11	24.19
		135	67	25.90	26.07	25.85	24.44	24.71	23.89	24.06	24.21	23.60	24.94	25.18	24.98
		135	135	25.01	25.67	25.29	24.26	23.73	24.13	23.64	23.79	23.54	24.06	24.08	24.22
		270	0	25.99	25.41	25.11	24.12	23.52	23.65	23.54	23.62	23.35	23.89	23.99	24.20
	16QAM	1	1	25.18	24.41	24.65	23.45	23.72	23.78	24.02	24.08	23.89	23.96	24.02	23.41
		1	135	25.03	24.85	25.12	23.33	23.78	23.18	23.98	24.17	23.30	23.92	24.13	23.02
		1	271	25.24	24.46	24.97	23.73	23.79	22.91	23.89	23.96	22.63	24.20	23.41	22.48
		135	0	24.10	24.01	24.16	23.36	22.65	22.75	22.65	22.81	22.65	22.98	23.06	23.12
		135	67	24.97	25.04	25.08	23.40	23.60	23.40	23.29	23.46	22.74	23.87	24.16	23.98
		135	135	24.04	25.00	24.26	23.31	22.67	22.61	22.66	22.76	21.96	22.98	23.15	23.24
		270	0	24.28	24.15	24.05	23.16	22.50	22.60	22.53	22.56	22.54	22.84	22.94	23.16
	64QAM	1	1	23.61	23.28	23.49	22.06	21.88	22.12	21.92	21.97	22.16	22.44	22.76	22.25
		1	135	23.41	23.71	23.77	21.91	21.94	22.16	21.86	22.09	21.73	22.32	22.84	21.88
		1	271	23.72	23.51	23.80	22.30	22.06	21.89	22.26	22.10	21.05	22.83	22.42	21.28
		135	0	23.60	23.38	23.44	22.07	22.16	22.22	22.08	22.10	21.81	22.51	22.60	22.74
		135	67	23.45	23.50	23.71	21.93	22.14	22.07	22.05	22.17	21.54	22.38	22.65	22.81
		135	135	23.47	23.39	23.59	22.03	22.19	21.78	22.16	22.11	21.20	22.49	22.65	22.40
		270	0	23.34	23.21	23.40	21.85	21.90	22.04	22.05	22.04	22.00	22.29	22.45	22.58
	256QAM	1	1	21.43	21.41	21.28	19.94	19.87	20.44	20.03	20.12	20.43	20.49	20.52	20.45
		1	135	21.27	21.85	21.73	19.78	19.99	20.47	19.92	20.22	20.48	20.36	20.61	20.41
		1	271	21.52	21.60	21.58	20.13	20.07	20.52	20.33	20.31	20.41	20.82	20.68	20.25
		135	0	21.56	21.36	21.41	20.04	20.06	20.21	20.20	20.17	20.32	20.46	20.56	20.67
		135	67	21.43	21.45	21.63	19.82	20.05	20.21	20.04	20.16	20.04	20.32	20.59	20.75
		135	135	21.39	21.42	21.78	19.89	20.08	20.26	20.10	20.23	19.71	20.45	20.61	20.72
		270	0	21.30	21.19	21.44	19.81	19.96	20.02	19.93	19.95	20.12	20.28	20.37	20.53

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				649333	656000	662666	649333	656000	662666	649333	656000	662666	649333	656000	662666
80.0	BPSK	1	1	-	-	-	-	-	-	23.62	24.12	22.95	25.13	25.17	24.23
		1	108	-	-	-	-	-	-	23.73	23.56	23.51	25.21	25.10	23.60
		1	215	-	-	-	-	-	-	23.74	23.16	23.23	25.24	24.63	23.43
		108	0	-	-	-	-	-	-	24.20	24.21	23.86	24.67	24.76	24.89
		108	54	-	-	-	-	-	-	23.81	23.75	23.18	25.06	25.28	24.36
		108	108	-	-	-	-	-	-	24.07	24.15	23.25	24.41	24.71	24.48
		216	0	-	-	-	-	-	-	24.25	24.36	23.61	24.52	24.68	24.71
	QPSK	1	1	25.70	25.99	25.10	24.41	24.89	24.93	-	-	-	-	-	-
		1	108	25.70	25.93	25.64	24.46	24.85	24.40	-	-	-	-	-	-
		1	215	26.04	25.68	25.23	24.40	24.82	24.08	-	-	-	-	-	-
		108	0	25.14	25.04	25.32	23.77	23.86	23.95	-	-	-	-	-	-
		108	54	25.62	26.02	25.25	24.69	24.83	24.06	-	-	-	-	-	-
		108	108	25.13	25.58	25.32	24.22	23.77	23.72	-	-	-	-	-	-
		216	0	25.72	25.38	25.18	23.55	23.69	23.68	-	-	-	-	-	-
	16QAM	1	1	24.26	25.08	24.43	23.64	23.79	24.03	24.01	23.95	23.41	24.26	24.06	23.36
		1	108	24.20	25.18	24.18	23.68	23.73	23.67	24.03	23.96	22.88	24.21	24.06	22.89
		1	215	24.49	24.95	24.73	23.72	23.72	23.34	24.00	23.80	22.39	24.29	23.51	22.64
		108	0	24.12	24.00	24.20	22.74	22.74	22.88	22.83	22.85	22.69	23.10	23.20	23.24
		108	54	24.80	24.99	24.24	23.59	22.67	23.64	23.42	23.62	23.17	24.01	24.21	24.14
		108	108	24.37	24.01	24.32	23.22	22.66	22.85	22.59	22.81	22.34	22.86	23.14	23.24
		216	0	24.87	24.60	24.18	22.53	22.64	22.72	22.56	22.73	22.45	22.91	23.09	23.19

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)											
				648666 3730	656000 3840.0	663333 3950	648666 3730	656000 3840.0	663333 3950	648666 3730	656000 3840.0	663333 3950	648666 3730	656000 3840.0	663333 3950
60.0	BPSK	1	1	-	-	-	-	-	-	23.63	23.75	23.51	23.99	23.79	23.91
		1	81	-	-	-	-	-	-	23.81	23.27	23.22	23.80	23.89	23.47
		1	160	-	-	-	-	-	-	23.37	22.99	23.24	23.54	23.99	23.25
		81	0	-	-	-	-	-	-	24.27	24.32	23.61	23.94	23.85	23.94
		81	40	-	-	-	-	-	-	24.47	24.45	23.31	23.83	23.87	24.02
		81	81	-	-	-	-	-	-	24.25	24.32	23.18	23.69	23.86	24.00
	QPSK	162	0	-	-	-	-	-	-	24.37	24.43	23.44	23.80	23.84	23.91
		1	1	25.30	26.06	25.24	25.04	24.94	24.77	-	-	-	-	-	-
		1	81	25.39	25.84	25.14	24.94	24.90	24.37	-	-	-	-	-	-
		1	160	25.29	25.50	25.21	24.66	25.00	24.17	-	-	-	-	-	-
		81	0	25.30	25.02	25.13	23.89	23.95	23.99	-	-	-	-	-	-
		81	40	25.65	25.13	25.67	24.88	24.91	24.01	-	-	-	-	-	-
	16QAM	81	81	25.17	25.00	25.09	23.76	23.97	23.76	-	-	-	-	-	-
		162	0	25.26	25.22	25.08	23.84	23.90	23.77	-	-	-	-	-	-
		1	1	24.56	25.18	24.28	23.63	24.01	23.88	23.95	23.93	23.19	24.15	23.71	22.99
		1	81	24.69	25.04	24.23	23.47	23.96	23.48	23.85	23.93	22.78	24.00	23.68	22.71
		1	160	24.89	24.60	24.18	23.27	24.01	23.25	23.62	23.77	22.43	23.71	23.49	22.38
		81	0	24.33	24.12	24.10	22.86	22.89	22.87	22.98	22.94	22.73	23.38	23.35	23.92
		81	40	25.07	25.06	25.07	23.77	23.85	23.51	23.91	23.76	23.25	23.77	23.80	23.93
		81	81	24.21	24.02	24.06	22.62	22.84	22.74	23.86	22.98	22.48	23.15	23.33	23.29
		162	0	24.25	24.01	24.07	22.69	22.76	22.88	22.78	22.93	22.46	23.22	23.29	23.31
40.0	BPSK	Main 1				Sub-UHB			Cell 3rd			Cell 4th MBHB			
		Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)	
		648000 3720	656000 3840.0	664000 3960	648000 3720										
		1	1	-	-	-	-	-	-	23.75	23.52	23.43	24.23	24.04	24.03
		1	50	-	-	-	-	-	-	23.92	23.27	23.46	24.14	23.91	23.69
		1	104	-	-	-	-	-	-	23.77	23.20	23.22	24.08	24.01	23.72
	QPSK	50	0	-	-	-	-	-	-	24.37	24.04	23.40	23.99	24.03	24.34
		50	25	-	-	-	-	-	-	24.81	24.44	23.63	24.06	23.99	24.27
		50	50	-	-	-	-	-	-	24.41	23.98	23.27	24.03	23.97	24.27
		100	0	-	-	-	-	-	-	24.58	24.29	23.46	24.06	24.01	24.30
		1	1	26.56	26.50	26.47	25.33	25.37	24.86	-	-	-	-	-	-
		1	50	26.75	26.27	26.33	25.07	25.08	24.88	-	-	-	-	-	-
	16QAM	1	104	26.59	26.04	26.26	25.14	25.14	24.96	-	-	-	-	-	-
		50	0	25.80	25.81	26.17	24.13	24.11	24.41	-	-	-	-	-	-
		50	25	26.85	26.74	27.09	25.09	25.02	24.86	-	-	-	-	-	-
		50	50	25.77	25.71	26.14	24.03	24.01	24.34	-	-	-	-	-	-
		100	0	25.82	25.75	26.06	24.05	24.01	24.34	-	-	-	-	-	-
		1	1	25.82	25.52	25.89	24.43	24.34	24.26	23.74	23.67	22.67	24.34	23.98	23.14
	30.0	1	50	25.79	25.34	25.84	24.20	24.14	24.32	23.85	23.58	22.65	24.20	23.85	23.14
		1	104	25.81	25.07	25.71	24.26	24.13	24.38	23.83	23.48	22.67	24.24	23.64	23.11
		50	0	24.72	24.80	25.17	23.07	23.02	23.44	23.09	22.97	22.47	23.49	23.46	23.74
		50	25	25.85	25.74	26.03	24.00	24.05	24.19	23.67	23.36	22.78	24.01	23.95	24.23
		50	50	24.76	24.74	25.13	23.08	23.01	23.39	23.05	22.96	22.43	23.50	23.42	23.75
		100	0	24.83	24.75	25.05	23.12	23.08	23.40	23.07	22.74	22.60	23.52	23.46	23.72

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Main 1			Sub-UHB			Cell 3rd			Cell 4th MBHB		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				647333	656000	664666	647333	656000	664666	647333	656000	664666	647333	656000	664666
20.0	BPSK	1	1	-	-	-	-	-	-	23.92	23.73	23.22	24.08	23.99	24.03
		1	25	-	-	-	-	-	-	23.84	23.39	23.23	24.12	24.11	23.89
		1	49	-	-	-	-	-	-	23.97	23.21	23.22	24.13	24.10	23.84
		25	0	-	-	-	-	-	-	23.64	24.29	23.59	24.06	24.04	24.23
		25	12	-	-	-	-	-	-	23.62	24.50	23.52	24.04	24.03	24.22
		25	25	-	-	-	-	-	-	23.65	24.30	23.53	24.15	24.04	24.20
		50	0	-	-	-	-	-	-	23.65	24.38	23.55	24.03	24.02	24.24
	QPSK	1	1	26.88	26.95	27.17	25.30	25.23	25.04	-	-	-	-	-	-
		1	25	26.83	26.96	27.12	25.26	25.11	25.03	-	-	-	-	-	-
		1	49	26.90	26.93	27.13	25.27	25.12	25.05	-	-	-	-	-	-
		25	0	25.88	25.86	26.08	24.22	24.06	24.35	-	-	-	-	-	-
		25	12	26.86	26.85	27.13	25.19	25.04	24.95	-	-	-	-	-	-
		25	25	25.87	25.84	26.08	24.20	24.08	24.32	-	-	-	-	-	-
		50	0	25.87	25.84	26.07	24.20	24.08	24.33	-	-	-	-	-	-
	16QAM	1	1	25.77	25.31	26.29	24.52	24.09	24.16	22.87	22.58	21.91	24.28	24.25	22.95
		1	25	25.72	25.29	26.40	24.40	23.95	24.19	23.00	22.48	21.91	24.29	24.10	23.06
		1	49	25.86	25.32	26.46	24.48	23.95	24.21	23.31	22.27	22.21	24.39	23.90	22.91
		25	0	24.89	24.78	25.06	23.19	23.12	23.43	23.11	23.12	22.99	23.46	23.52	23.67
		25	12	25.85	25.76	26.03	24.15	24.02	24.41	23.63	23.83	23.44	23.96	24.04	24.21
		25	25	24.86	24.76	24.99	23.17	23.03	23.41	23.14	23.08	22.88	23.55	23.53	23.71
		50	0	24.79	24.77	25.12	23.17	23.06	23.37	23.12	22.95	22.68	23.54	23.49	23.69

9. CONDUCTED TEST RESULTS

9.1. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only.

TEST PROCEDURE

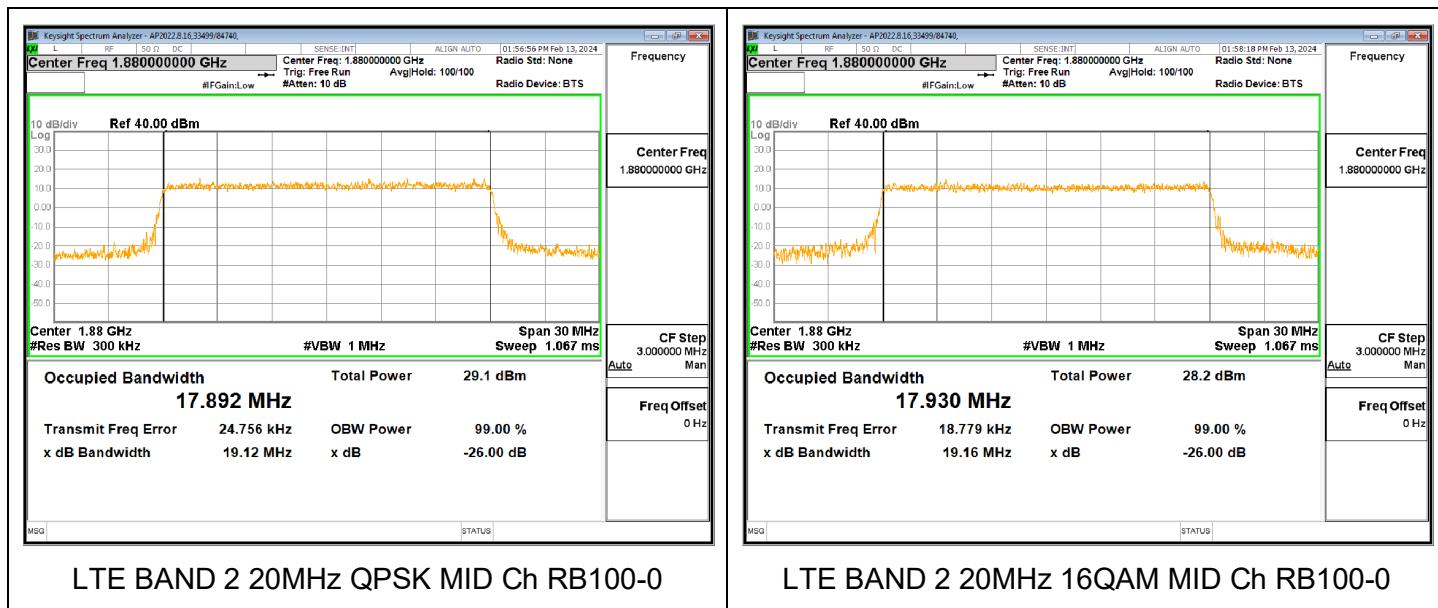
The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the middle channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

RESULTS

There is no limit required and power is the same for low, middle and high channel; therefore, only middle channel was tested. Worst-case plots (highest bandwidth) are reported only.

9.1.1. LTE BAND 2

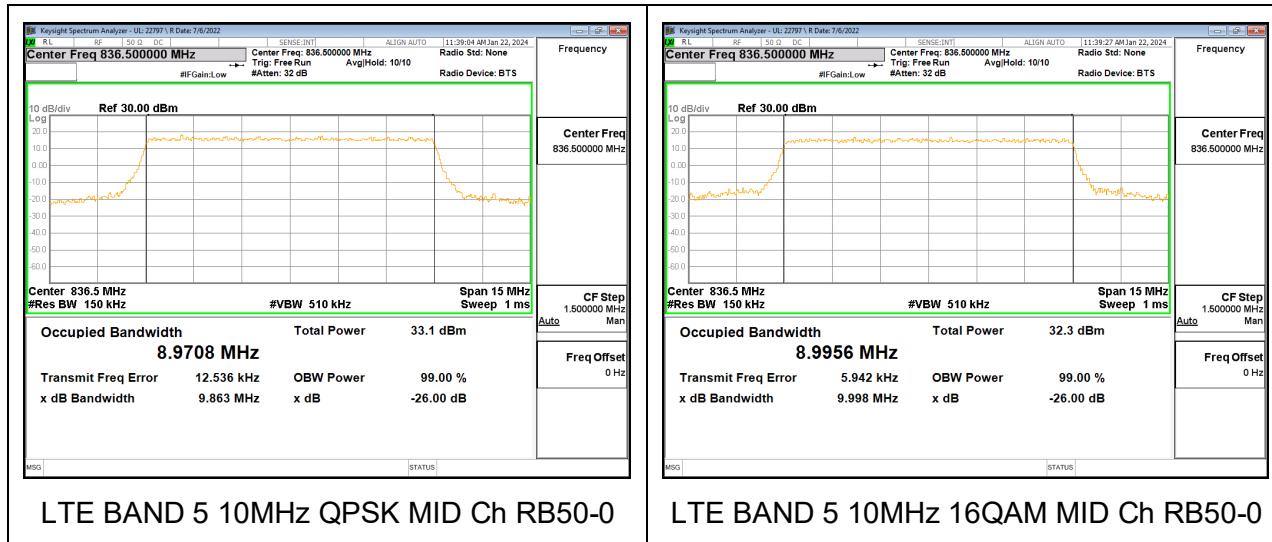
Band	Mode	RB Allocation-RB Offset	F _c (MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 2	1.4MHz, QPSK	RB6-0	1880	1.0883	1.299	
	1.4MHz, 16QAM			1.0877	1.341	
	3MHz, QPSK	RB15-0		2.6900	3.017	
	3MHz, 16QAM			2.6911	2.997	
	5MHz, QPSK	RB25-0		4.4872	4.987	
	5MHz, 16QAM			4.4829	5.028	
	10MHz, QPSK	RB50-0		8.9736	9.887	
	10MHz, 16QAM			8.9267	9.766	
	15MHz, QPSK	RB75-0		13.437	14.40	
	15MHz, 16QAM			13.444	14.49	
	20MHz, QPSK	RB100-0		17.892	19.12	
	20MHz, 16QAM			17.930	19.16	



Test Engineer ID:	33499/84740	Test Date:	2024-02-13	EUT Serial Number:	QV7700DNJP
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9.1.2. LTE BAND 5

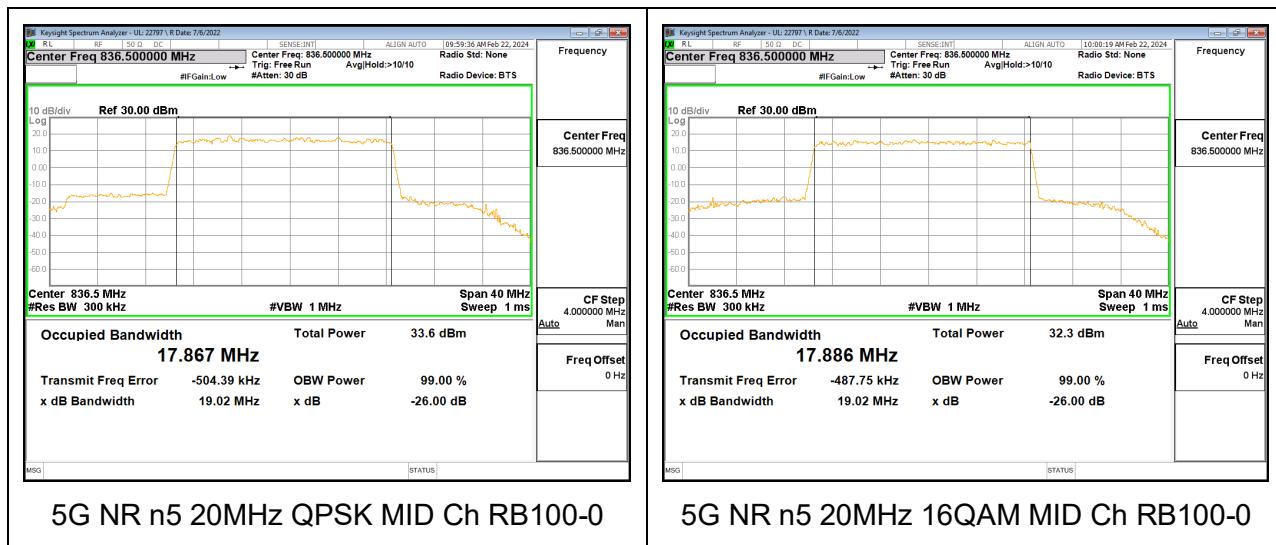
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 5	1.4MHz, QPSK	6/0	836.5	1.0913	1.340	
	1.4MHz, 16QAM			1.0930	1.365	
	3MHz, QPSK	15/0		2.7012	3.037	
	3MHz, 16QAM			2.6991	3.050	
	5MHz, QPSK	25/0		4.5101	5.114	
	5MHz, 16QAM			4.4985	5.112	
	10MHz, QPSK	50/0		8.9708	9.863	
	10MHz, 16QAM			8.9956	9.998	



Test Engineer ID:	22797/85502	Test Date:	2024-01-22	EUT Serial Number:	QV7700DNJP
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9.1.3. 5G NR n5

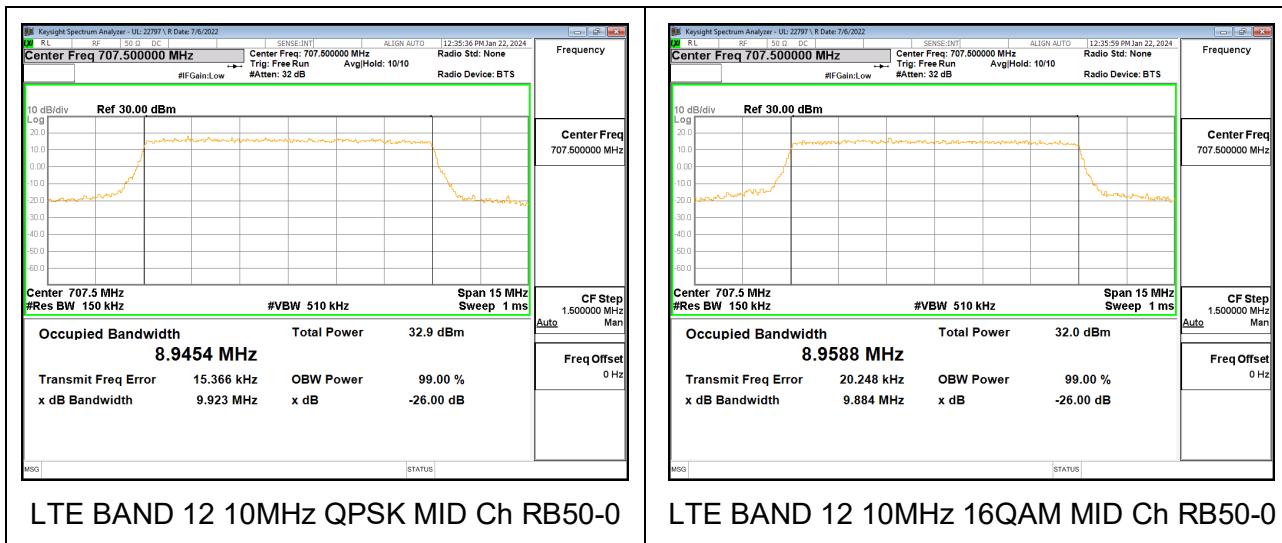
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR n5	5MHz, BPSK	25/0	836.5	4.4720	4.853	
	5MHz, 16QAM			4.4865	5.087	
	10MHz, BPSK	50/0		8.9847	9.808	
	10MHz, 16QAM			8.9371	9.858	
	15MHz, QPSK	75/0		13.514	14.46	
	15MHz, 16QAM			13.406	14.48	
	20MHz, BPSK	100/0		17.867	19.02	
	20MHz, 16QAM			17.886	19.02	



Test Engineer ID:	22797/85502	Test Date:	2024-02-22	EUT Serial Number:	QV7700DNJP
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9.1.4. LTE BAND 12

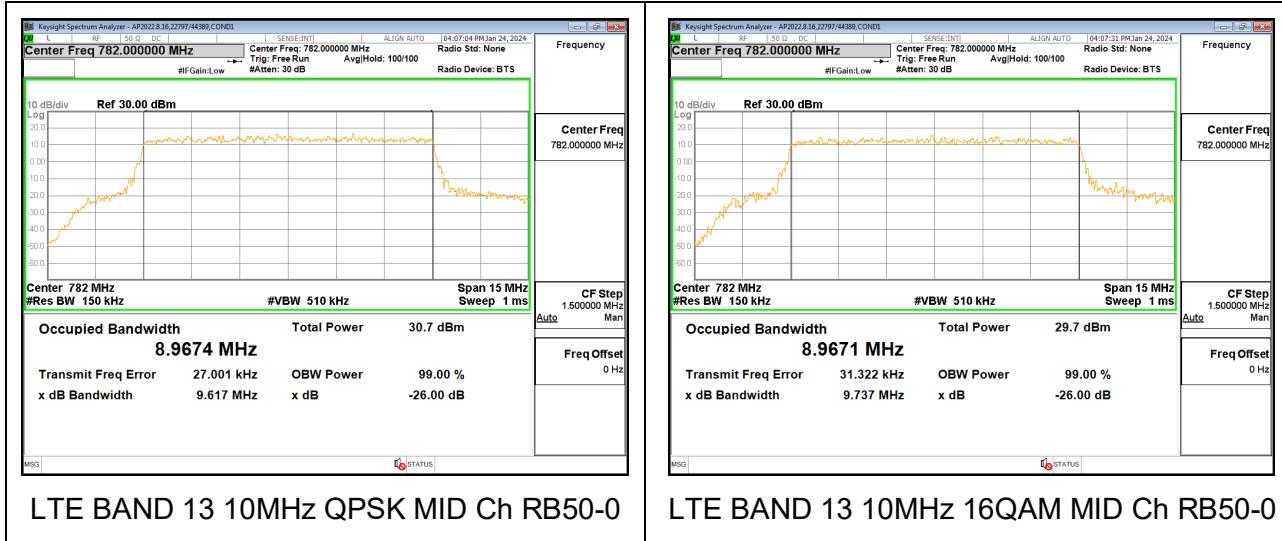
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 12	1.4MHz, QPSK	6/0	707.5	1.0915	1.342	
	1.4MHz, 16QAM			1.0958	1.362	
	3MHz, QPSK	15/0		2.7056	3.049	
	3MHz, 16QAM			2.7066	3.041	
	5MHz, QPSK	25/0		4.5063	5.083	
	5MHz, 16QAM			4.4970	5.078	
	10MHz, QPSK	50/0		8.9454	9.923	
	10MHz, 16QAM			8.9588	9.884	



Test Engineer ID:	22797/85502	Test Date:	2024-01-22	EUT Serial Number:	QV7700DNJP
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9.1.5. LTE BAND 13

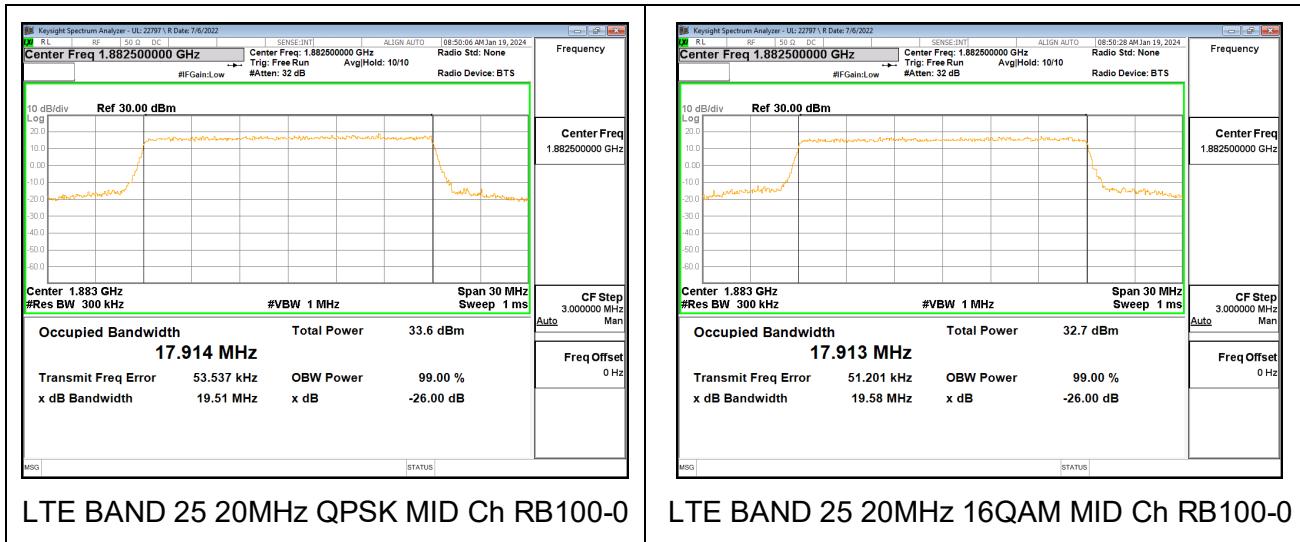
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 13	5MHz, QPSK	25/0	782.0	4.4875	5.019	
	5MHz, 16QAM			4.4952	5.115	
	10MHz, QPSK	50/0		8.9674	9.617	
	10MHz, 16QAM			8.9671	9.737	



Test Engineer ID:	22797/44389	Test Date:	2024-01-24	EUT Serial Number:	QV7700DNJP
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9.1.6. LTE BAND 25

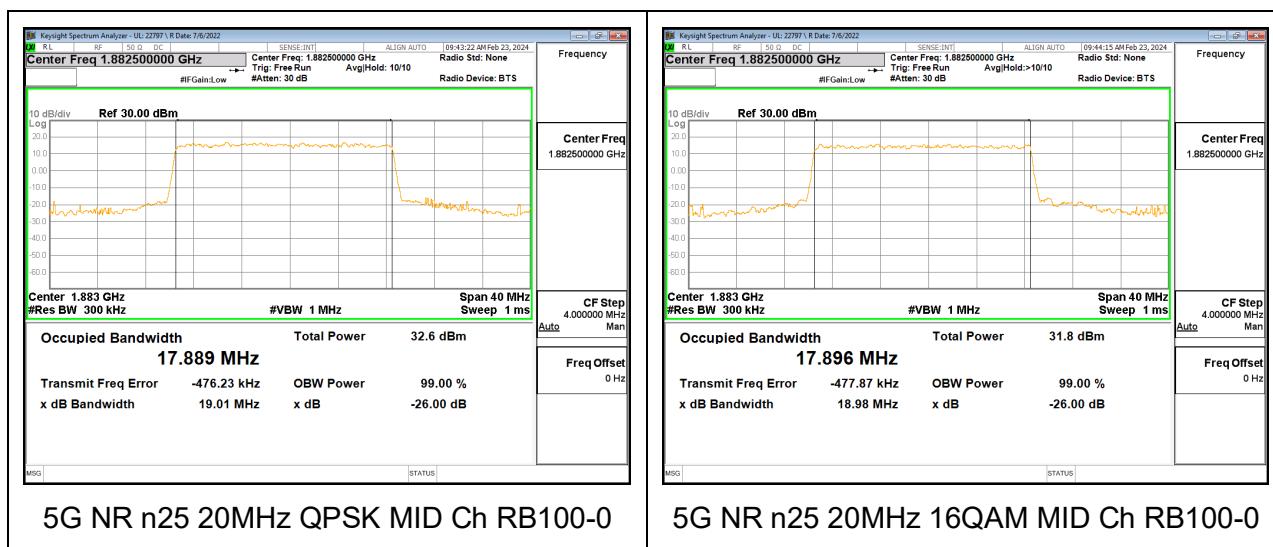
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 25	1.4MHz, QPSK	6/0	1882.5	1.0935	1.348	
	1.4MHz, 16QAM			1.0966	1.385	
	3MHz, QPSK	15/0		2.7033	3.072	
	3MHz, 16QAM			2.7041	3.026	
	5MHz, QPSK	25/0		4.4990	5.142	
	5MHz, 16QAM			4.5108	5.163	
	10MHz, QPSK	50/0		8.9786	9.842	
	10MHz, 16QAM			9.0002	10.01	
	15MHz, QPSK	75/0		13.465	14.90	
	15MHz, 16QAM			13.438	14.91	
	20MHz, QPSK	100/0		17.914	19.51	
	20MHz, 16QAM			17.913	19.58	



Test Engineer ID:	22797/85502	Test Date:	2024-01-19	EUT Serial Number:	QV7700QGLA
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9.1.7. 5G NR n25

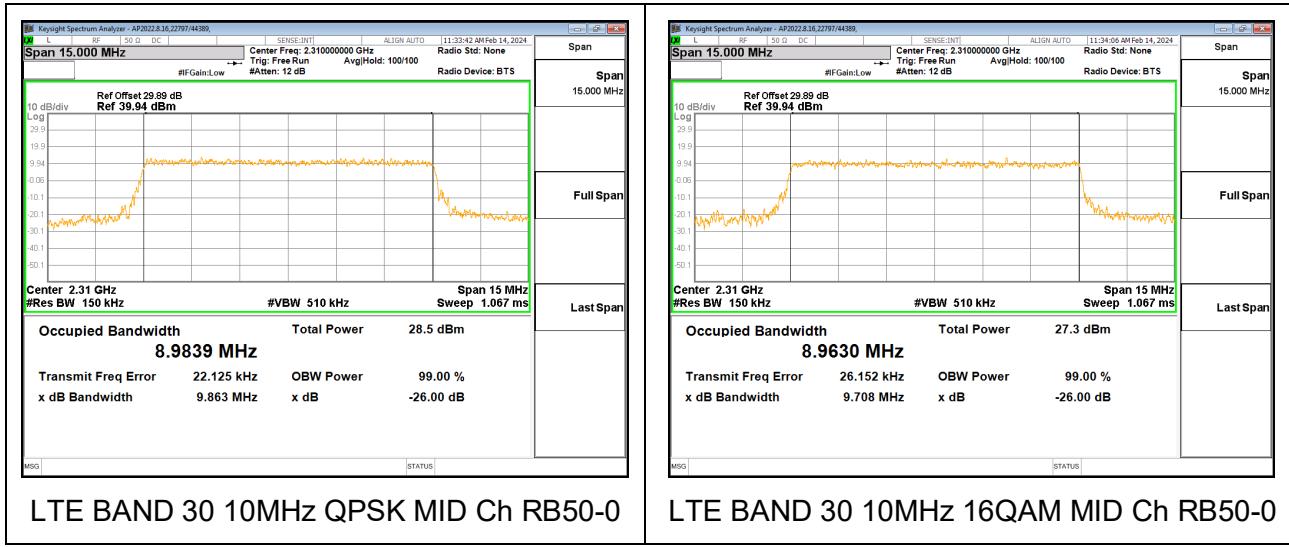
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR n25	5MHz, QPSK	25/0	1882.5	4.4980	5.058	
	5MHz, 16QAM			4.4791	4.994	
	10MHz, QPSK	50/0		8.9535	9.830	
	10MHz, 16QAM			8.9535	9.844	
	15MHz, QPSK	75/0		13.428	14.42	
	15MHz, 16QAM			13.446	14.29	
	20MHz, QPSK	100/0		17.889	19.01	
	20MHz, 16QAM			17.896	18.98	



Test Engineer ID: 22797/85502 Test Date: 2024-02-23 EUT Serial Number: QV77005HJP

9.1.8. LTE BAND 30

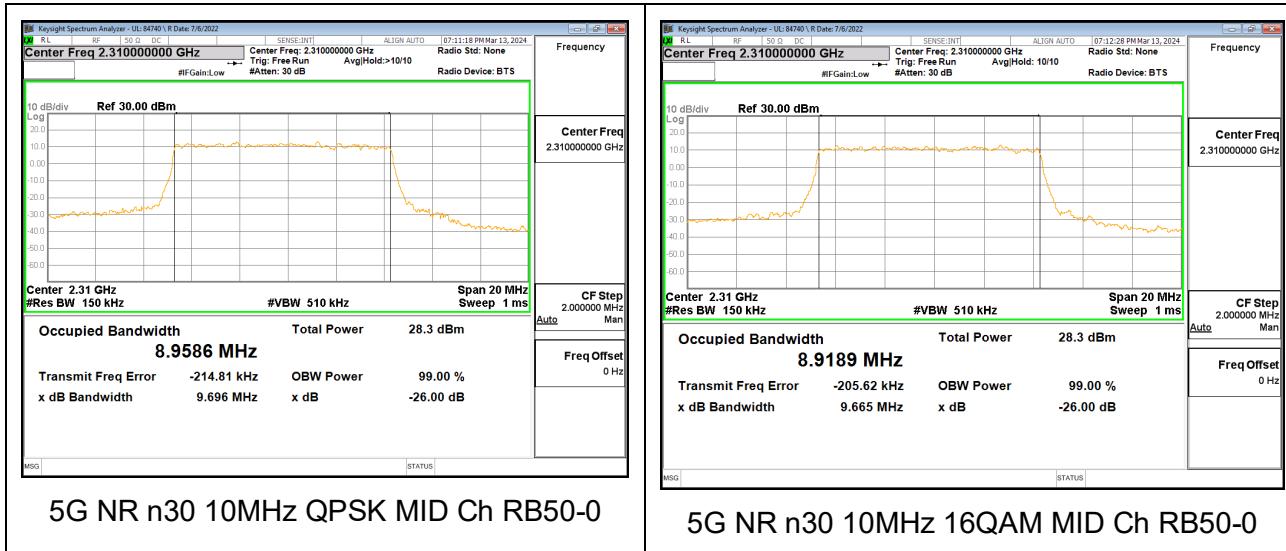
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 30	5MHz, QPSK	25/0	2310.0	4.4840	5.05	
	5MHz, 16QAM			4.4906	5.032	
	10MHz, QPSK	50/0		8.9839	9.863	
	10MHz, 16QAM			8.9630	9.708	



Test Engineer ID:	22797/44389	Test Date:	2024-02-14	EUT Serial Number:	QV7700DNJP
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9.1.9. 5G NR n30

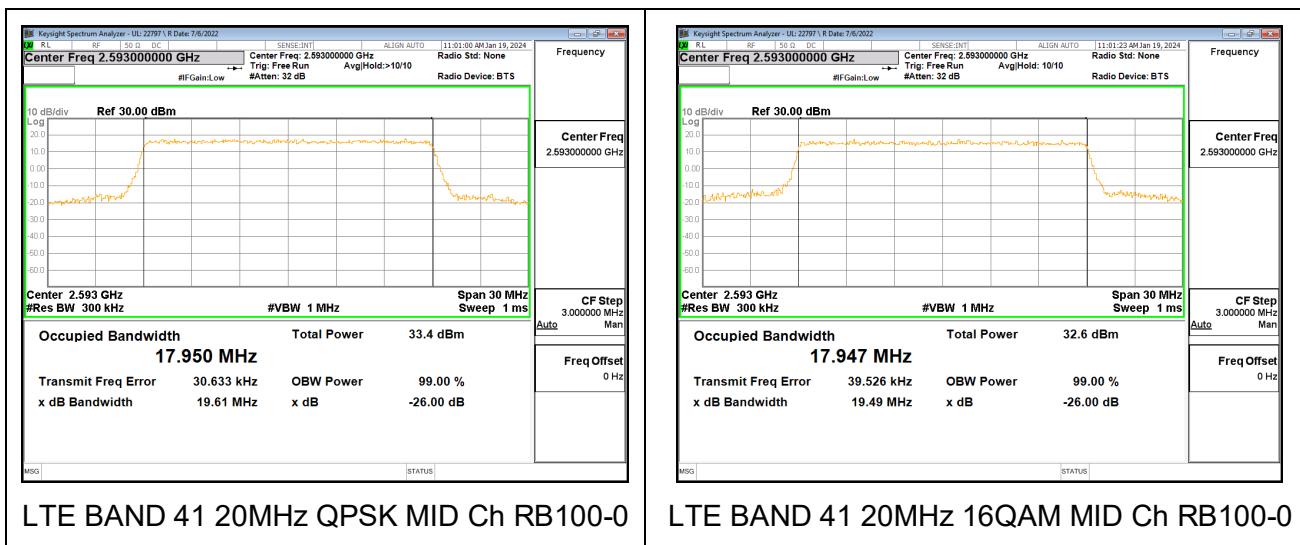
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n30	10MHz, QPSK	50/0	2310.0	8.9586	9.696
	10MHz, 16QAM			8.9189	9.665



Test Engineer ID:	84740	Test Date:	2024-03-13	EUT Serial Number:	QV7700DNJP
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9.1.10. LTE BAND 41

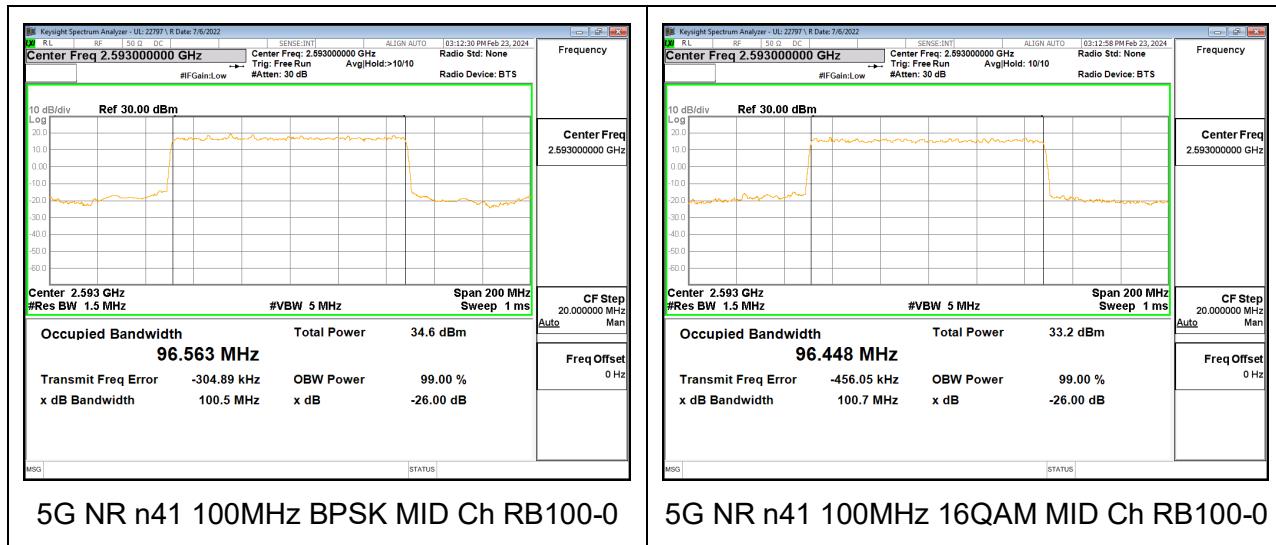
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 41	5MHz, QPSK	25/0	2593.0	4.5104	5.110	
	5MHz, 16QAM			4.5047	5.111	
	10MHz, QPSK	50/0		8.9925	10.04	
	10MHz, 16QAM			8.9915	9.899	
	15MHz, QPSK	75/0		13.455	14.76	
	15MHz, 16QAM			13.474	14.66	
	20MHz, QPSK	100/0		17.950	19.61	
	20MHz, 16QAM			17.947	19.49	



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9.1.11. 5G NR n41

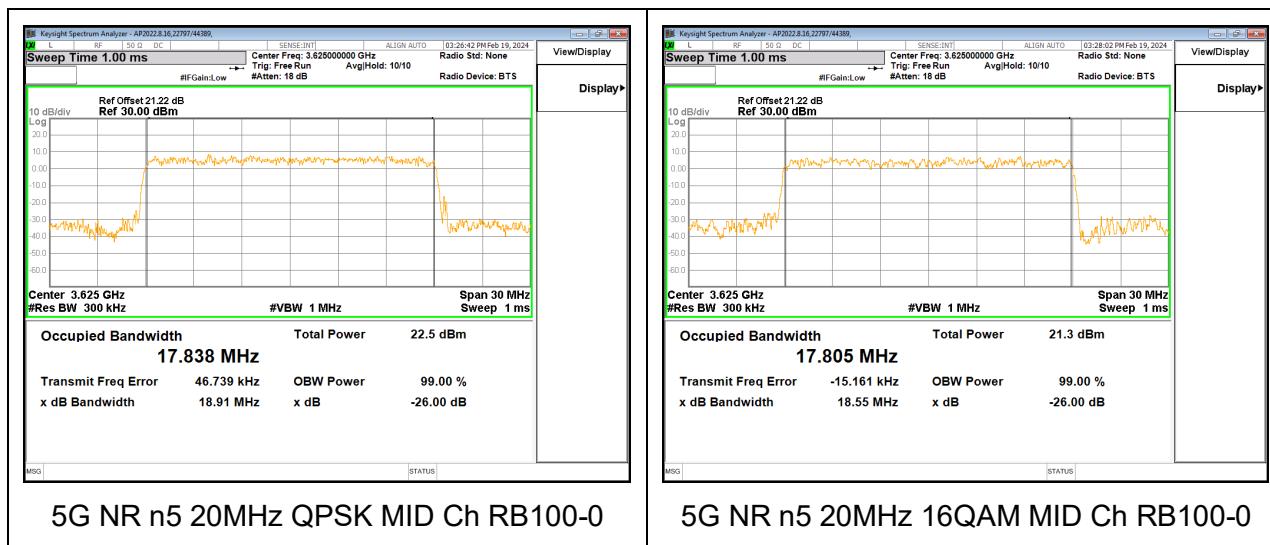
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR n41	20MHz, BPSK	50/0	2593.0	17.911	19.35	
	20MHz, 16QAM			17.935	19.79	
	30MHz, BPSK	75/0		26.841	29.02	
	30MHz, 16QAM			26.932	28.68	
	40MHz, BPSK	100/0		35.785	38.05	
	40MHz, 16QAM			35.722	37.93	
	50MHz, BPSK	128/0		45.826	48.15	
	50MHz, 16QAM			45.647	48.33	
	60MHz, BPSK	162/0		57.951	60.85	
	60MHz, 16QAM			57.935	60.97	
	80MHz, BPSK	216/0		77.373	80.84	
	80MHz, 16QAM			77.284	80.59	
	90MHz, BPSK	243/0		86.939	90.29	
	90MHz, 16QAM			87.022	90.75	
	100MHz, BPSK	270/0		96.563	100.5	
	100MHz, 16QAM			96.448	100.7	



Test Engineer ID:	22797/85502	Test Date:	2024-02-23	EUT Serial Number:	QV77005HJP
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9.1.12. LTE BAND 48

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 48	5MHz, QPSK	25/0	3625.0	4.4777	4.664	
	5MHz, 16QAM			4.4551	4.663	
	10MHz, QPSK	50/0		8.9313	9.388	
	10MHz, 16QAM			8.9265	9.335	
	15MHz, QPSK	75/0		13.365	13.98	
	15MHz, 16QAM			13.397	14.05	
	20MHz, QPSK	100/0		17.838	18.91	
	20MHz, 16QAM			17.805	18.55	



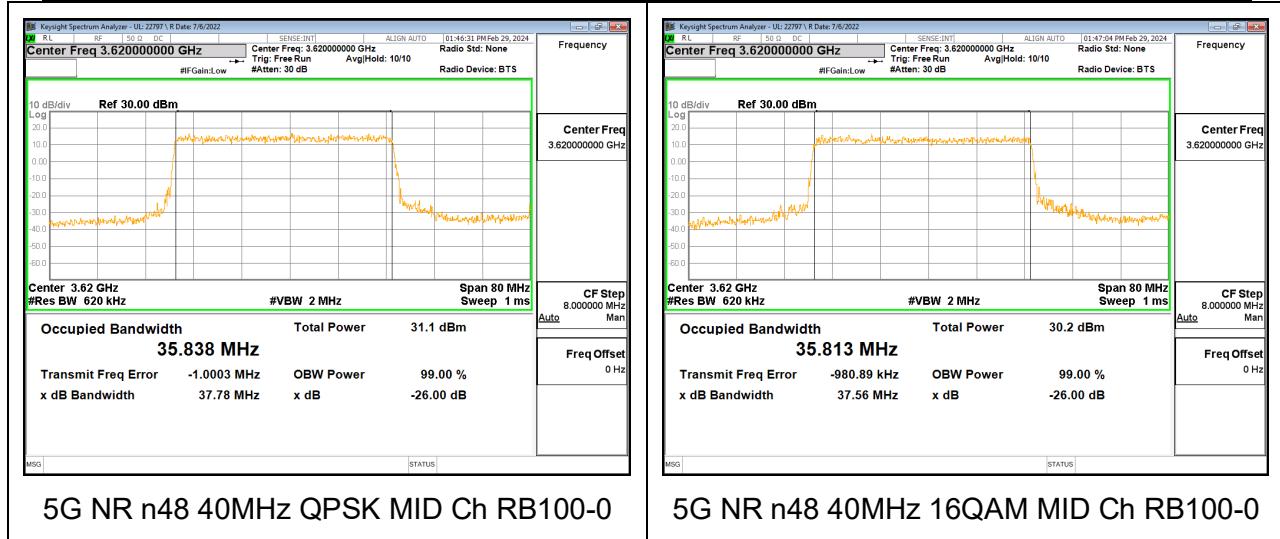
5G NR n5 20MHz QPSK MID Ch RB100-0

5G NR n5 20MHz 16QAM MID Ch RB100-0

Test Engineer ID:	22797/44389	Test Date:	2024-02-19	EUT Serial Number:	QV7700DNJP
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9.1.13. 5G NR n48

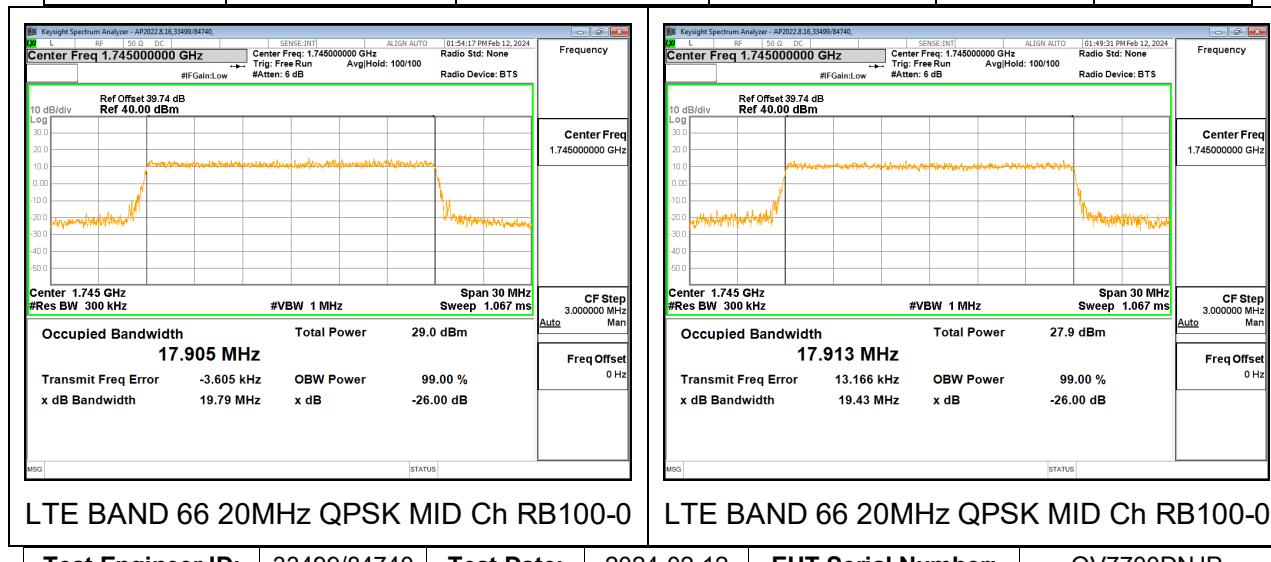
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR n48	20MHz, QPSK	50/0	3625.0	17.904	18.66	
	20MHz, 16QAM			17.889	19.22	
	40MHz, QPSK	100/0		35.838	37.78	
	40MHz, 16QAM			35.813	37.56	



Test Engineer ID:	22797/85502	Test Date:	2024-02-29	EUT Serial Number:	QV77005HJP
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9.1.14. LTE BAND 66

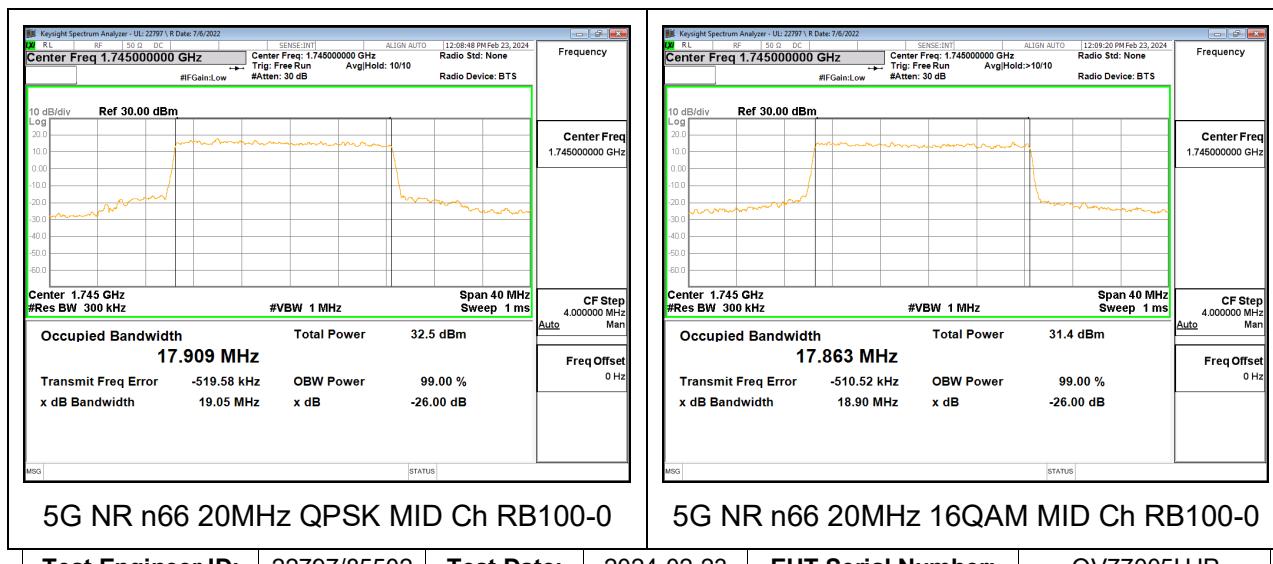
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 66	1.4MHz, QPSK	6/0	1745.0	1.0894	1.303	
	1.4MHz,16QAM			1.0893	1.337	
	3MHz, QPSK	15/0		2.6844	3.039	
	3MHz, 16QAM			2.6854	2.991	
	5MHz, QPSK	25/0		4.5468	5.227	
	5MHz, 16QAM			4.5285	5.170	
	10MHz, QPSK	50/0		8.9490	9.896	
	10MHz, 16QAM			8.9487	9.671	
	15MHz, QPSK	75/0		13.384	14.55	
	15MHz, 16QAM			13.447	14.51	
	20MHz, QPSK	100/0		17.905	19.79	
	20MHz, 16QAM			17.913	19.43	



Test Engineer ID:	33499/84740	Test Date:	2024-02-12	EUT Serial Number:	QV7700DNJP
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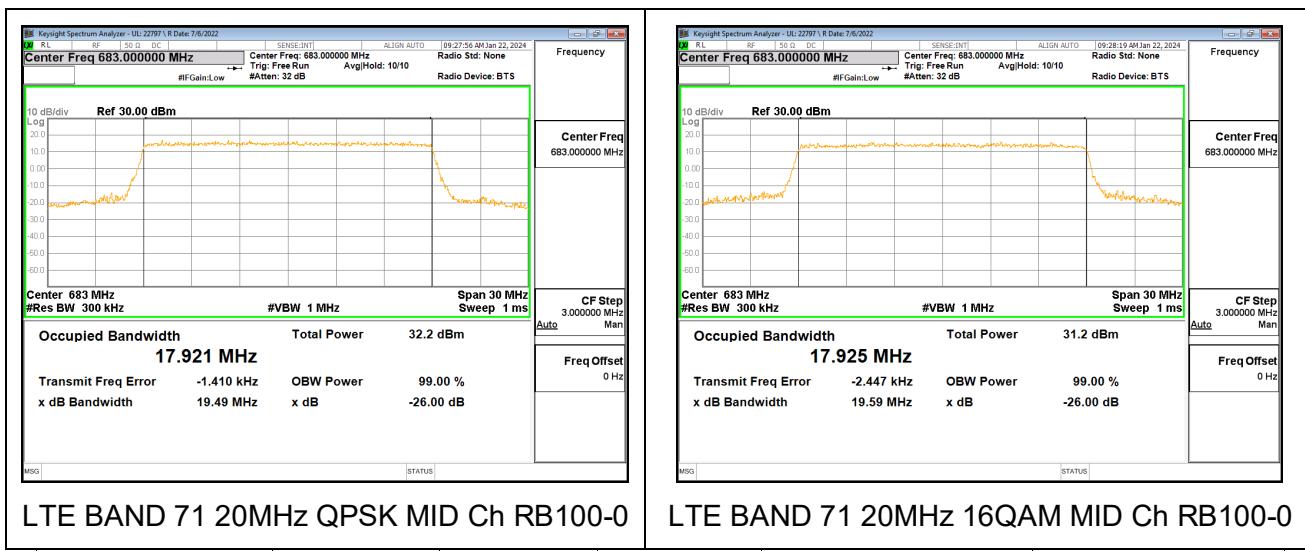
9.1.15. 5G NR n66

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR n66	5MHz, QPSK	25/0	1745	4.5163	4.199	
	5MHz, 16QAM			4.4780	4.996	
	10MHz, QPSK	50/0		9.0087	9.902	
	10MHz, 16QAM			8.9531	9.809	
	15MHz, QPSK	75/0		13.414	14.43	
	15MHz, 16QAM			13.429	14.37	
	20MHz, QPSK	100/0		17.909	19.05	
	20MHz, 16QAM			17.863	18.90	



9.1.16. LTE BAND 71

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 71	5MHz, QPSK	25/0	680.5	4.5050	4.085	
	5MHz, 16QAM			4.4931	5.073	
	10MHz, QPSK	50/0		8.9823	9.897	
	10MHz, 16QAM			8.9752	9.956	
	15MHz, QPSK	75/0		13.455	14.67	
	15MHz, 16QAM			13.445	14.87	
	20MHz, QPSK	100/0		17.921	19.49	
	20MHz, 16QAM			17.925	19.59	



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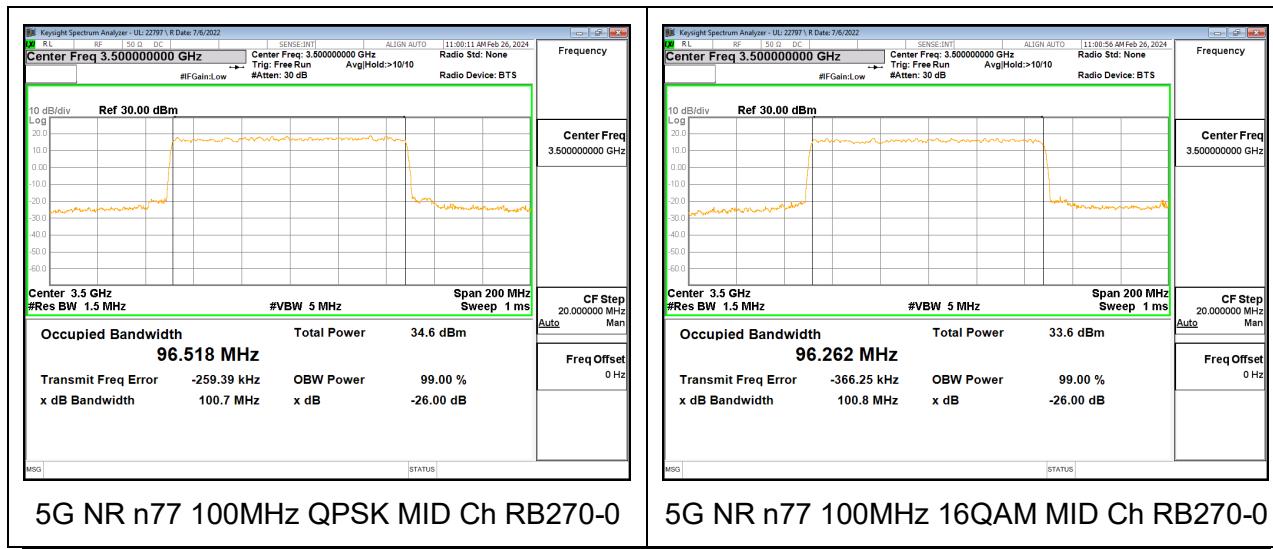
9.1.17. 5G NR n71

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR n71	5MHz, QPSK	25/0	680.5	4.4929	5.093	
	5MHz, 16QAM			4.4668	4.931	
	10MHz, QPSK	50/0		8.9281	9.687	
	10MHz, 16QAM			8.9413	9.840	
	15MHz, QPSK	75/0		13.397	14.42	
	15MHz, 16QAM			13.434	14.38	
	20MHz, QPSK	100/0		17.889	18.95	
	20MHz, 16QAM			17.880	18.95	



9.1.18. 5G NR n77(FCC Part 27 3450-3550MHz)

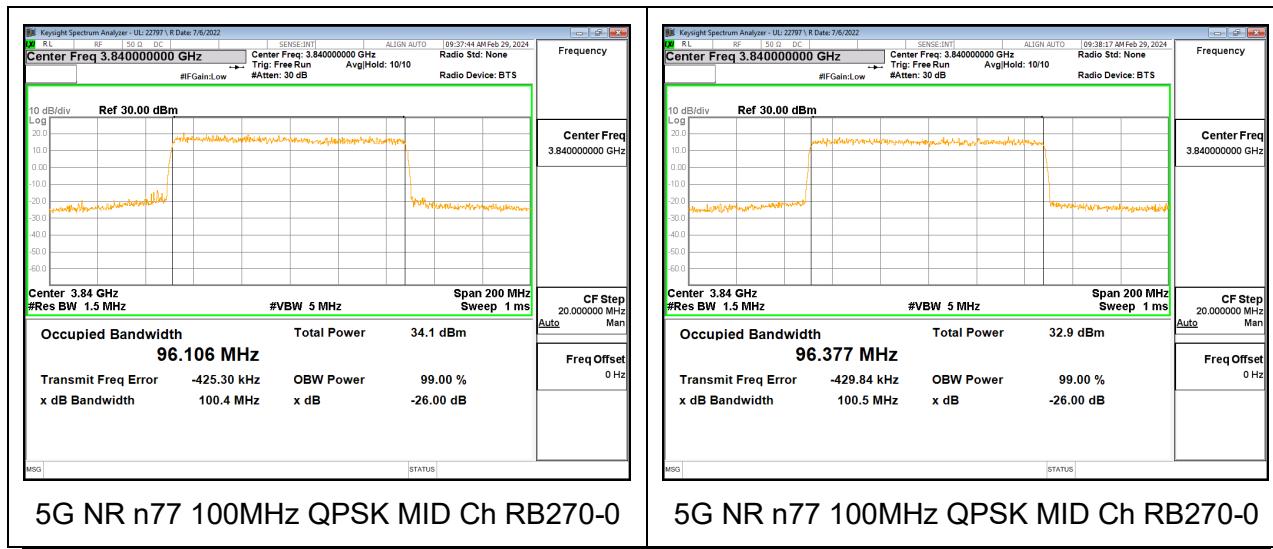
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR n77	20MHz, QPSK	50/0	3500	17.967	19.34	
	20MHz, 16QAM			17.889	19.24	
	30MHz, QPSK	75/0		26.827	28.89	
	30MHz, 16QAM			26.847	28.77	
	40MHz, QPSK	100/0		35.583	37.80	
	40MHz, 16QAM			35.729	38.01	
	60MHz, QPSK	162/0		57.850	60.86	
	60MHz, 16QAM			57.946	60.95	
	80MHz, QPSK	216/0		77.361	80.62	
	80MHz, 16QAM			77.277	80.90	
	100MHz, QPSK	270/0		96.518	100.7	
	100MHz, 16QAM			96.262	100.8	



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9.1.19. 5G NR n77(FCC Part 27 3700-3980MHz)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR n77	20MHz, QPSK	50/0	3840	17.894	18.85	
	20MHz, 16QAM			17.872	18.95	
	30MHz, QPSK	75/0		26.772	28.35	
	30MHz, 16QAM			26.854	28.54	
	40MHz, QPSK	100/0		35.869	37.83	
	40MHz, 16QAM			35.771	37.44	
	60MHz, QPSK	162/0		57.860	60.45	
	60MHz, 16QAM			57.854	60.37	
	80MHz, QPSK	216/0		77.051	80.47	
	80MHz, 16QAM			77.272	80.46	
	100MHz, QPSK	270/0		96.106	100.4	
	100MHz, 16QAM			96.377	100.5	



Test Engineer ID:	22797/85502	Test Date:	2024-02-29	EUT Serial Number:	QV77005HJP
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9.2. EMISSION MASK AND BAND EDGE

For Spectrum Emission Mask plots, the Keysight PXA N9030A is configured to sweep with a moving integration window, the width of which can be adjusted to different sizes across the sweep. The window width is configured to be greater than or equal to the required reference bandwidth. The center frequencies of the integration window for the different integration windows was set such that the upper and lower edges of the windows are aligned with the transition points in the reference bandwidths. This is achieved by setting the start / stop frequencies of the window with an offset equal to the reference bandwidth / 2 from the transition point.

TEST PROCEDURE

The transmitter output was connected to a CMW500Test Set and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.

For each band edge measurement:

1. Set the spectrum analyzer span to include the block edge frequency.
2. Set a marker to point the corresponding band edge frequency in each test case.
3. Set display line at -13/-25/-40 dBm
4. Set resolution bandwidth to at least 1% of emission bandwidth.

TEST PROCEDURE (FCC LTE BAND 41)

(m)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed; for mobile digital stations, in the 1 megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.* 1 megahertz or 1 percent of emission bandwidth, as specified; or 1 megahertz or 2 percent for mobile digital stations, except in the band 2495-2496 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

TEST PROCEDURE (FCC LTE BAND 30, 5G NR n30)

(5) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the channel blocks at 2305, 2310, 2315, 2320, 2345, 2350, 2355, and 2360 MHz, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.*, 1 MHz). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

TEST PROCEDURE (FCC LTE BAND 48, 5G NR n48 FCC Part 96)

(i) Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, a resolution bandwidth of no less than one percent of the fundamental emission bandwidth may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full reference bandwidth (i.e., 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(ii) When measuring unwanted emissions to demonstrate compliance with the limits, the CBSD and End User Device nominal carrier frequency/channel shall be adjusted as close to the licensee's authorized frequency block edges, both upper and lower, as the design permits.

(iii) Compliance with emission limits shall be demonstrated using either average (RMS)-detected or peak-detected power measurement techniques.

RESULTS

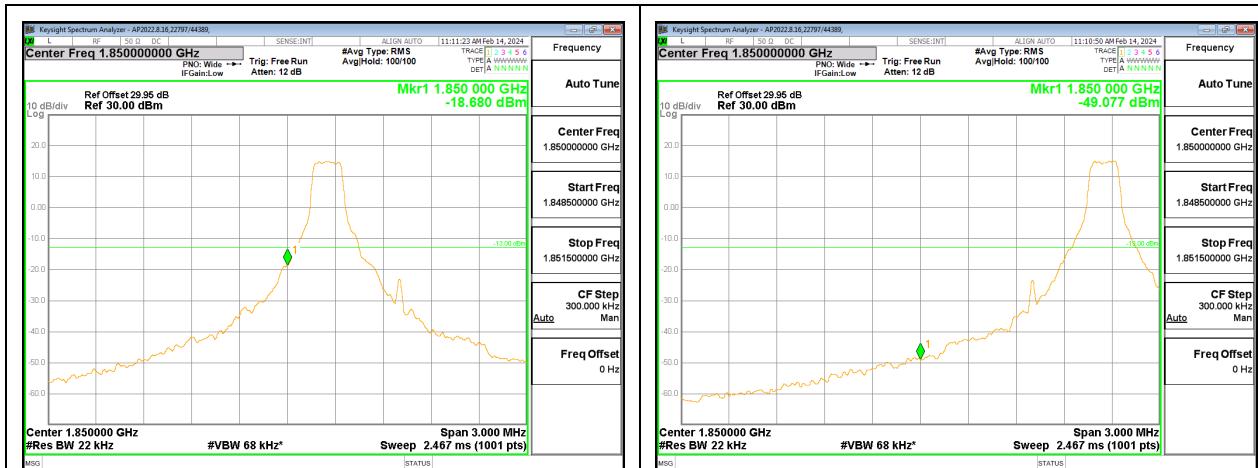
9.2.1. LTE BAND 2

LIMITS

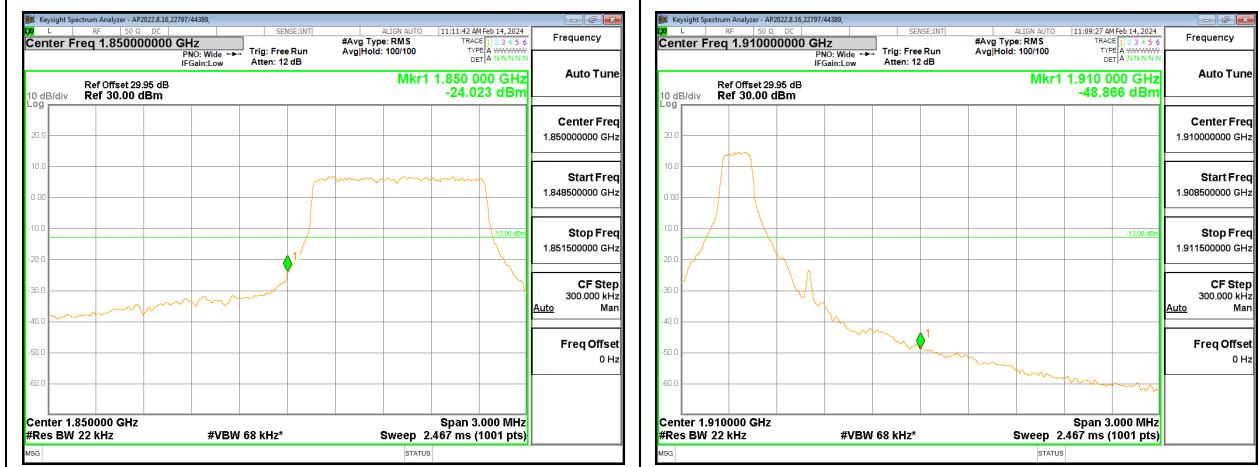
FCC: §24.238 (a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

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LTE BAND 2

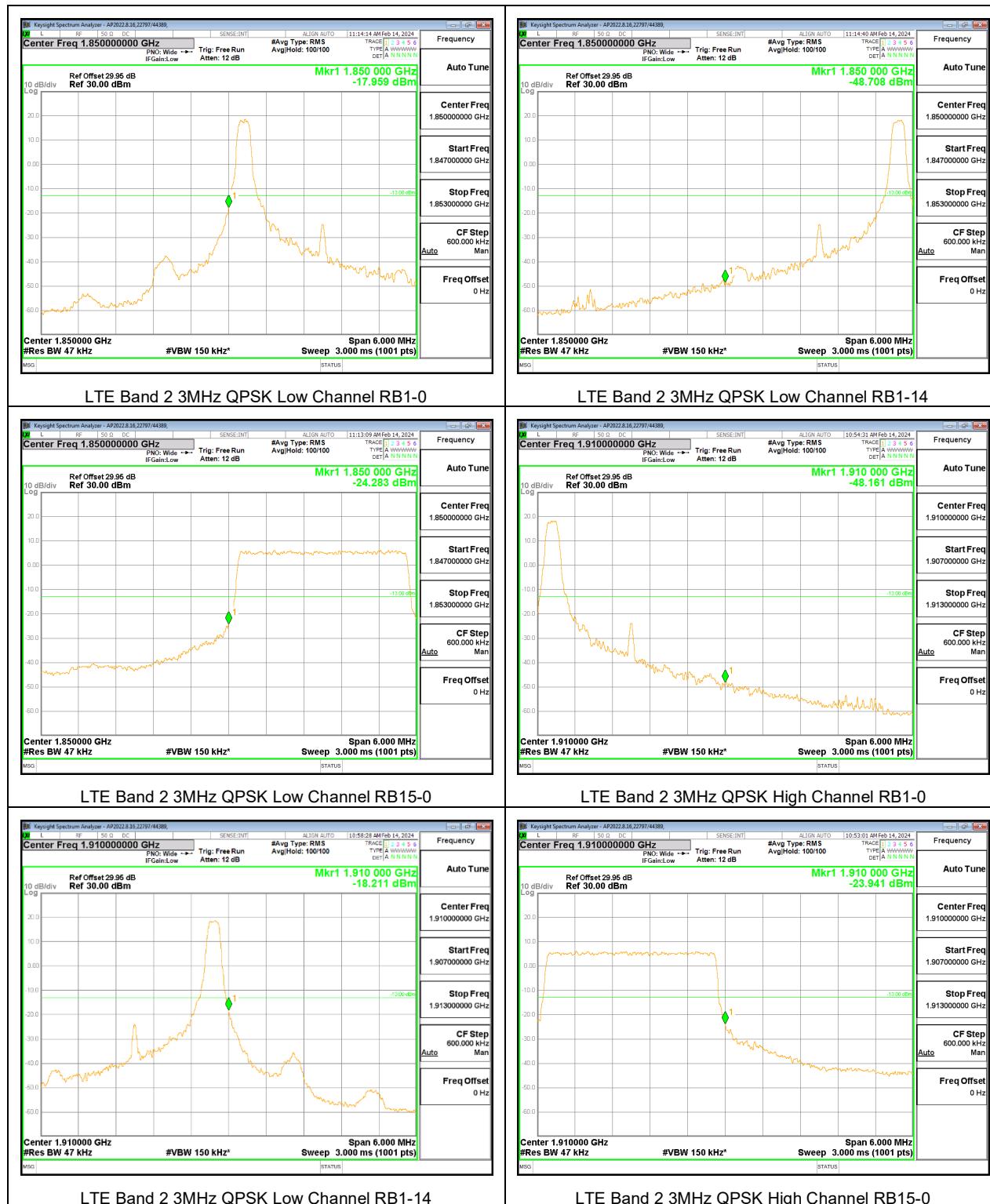
LTE Band 2 1.4MHz QPSK Low Channel RB1-0

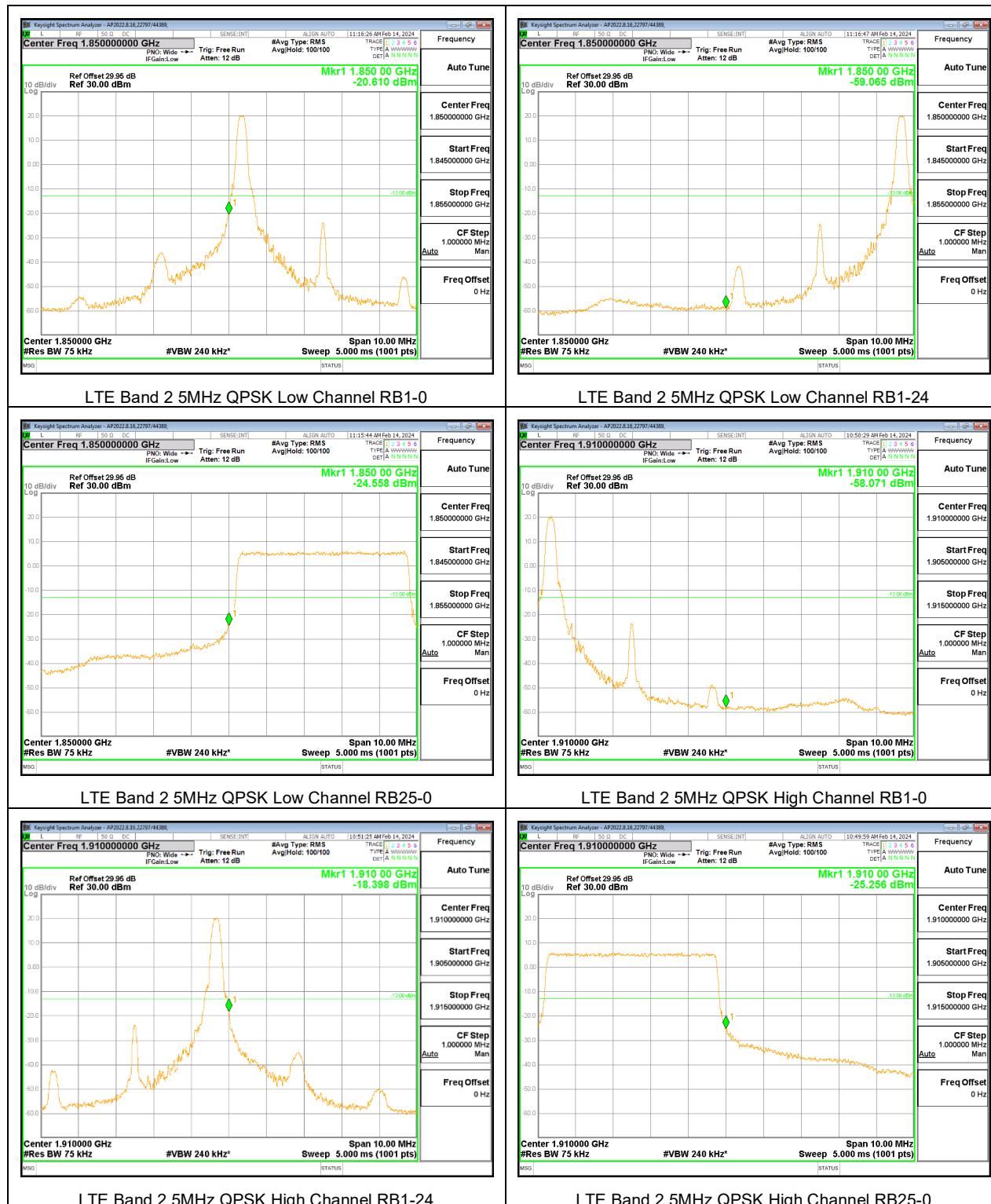


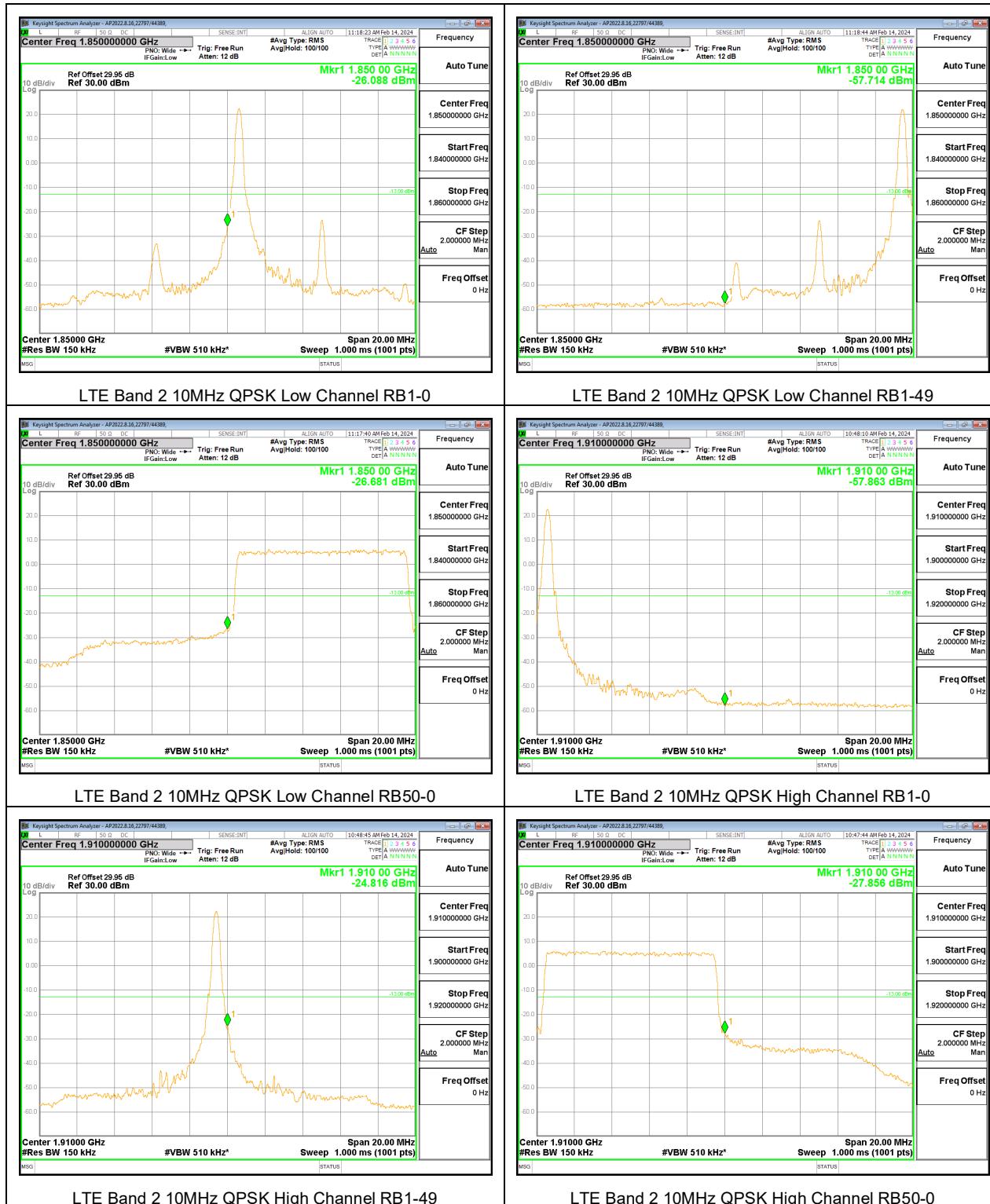
LTE Band 2 1.4MHz QPSK Low Channel RB1-5

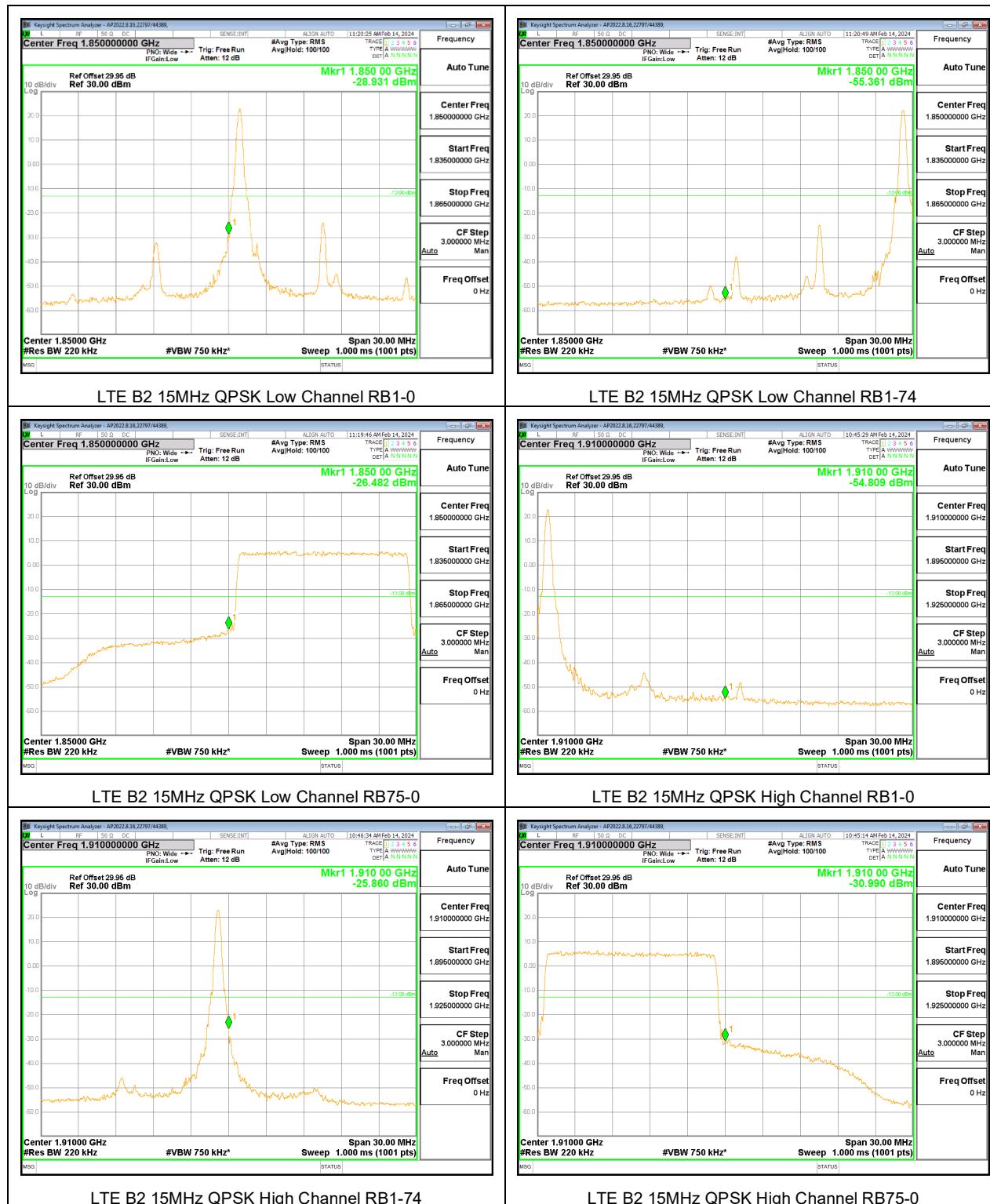


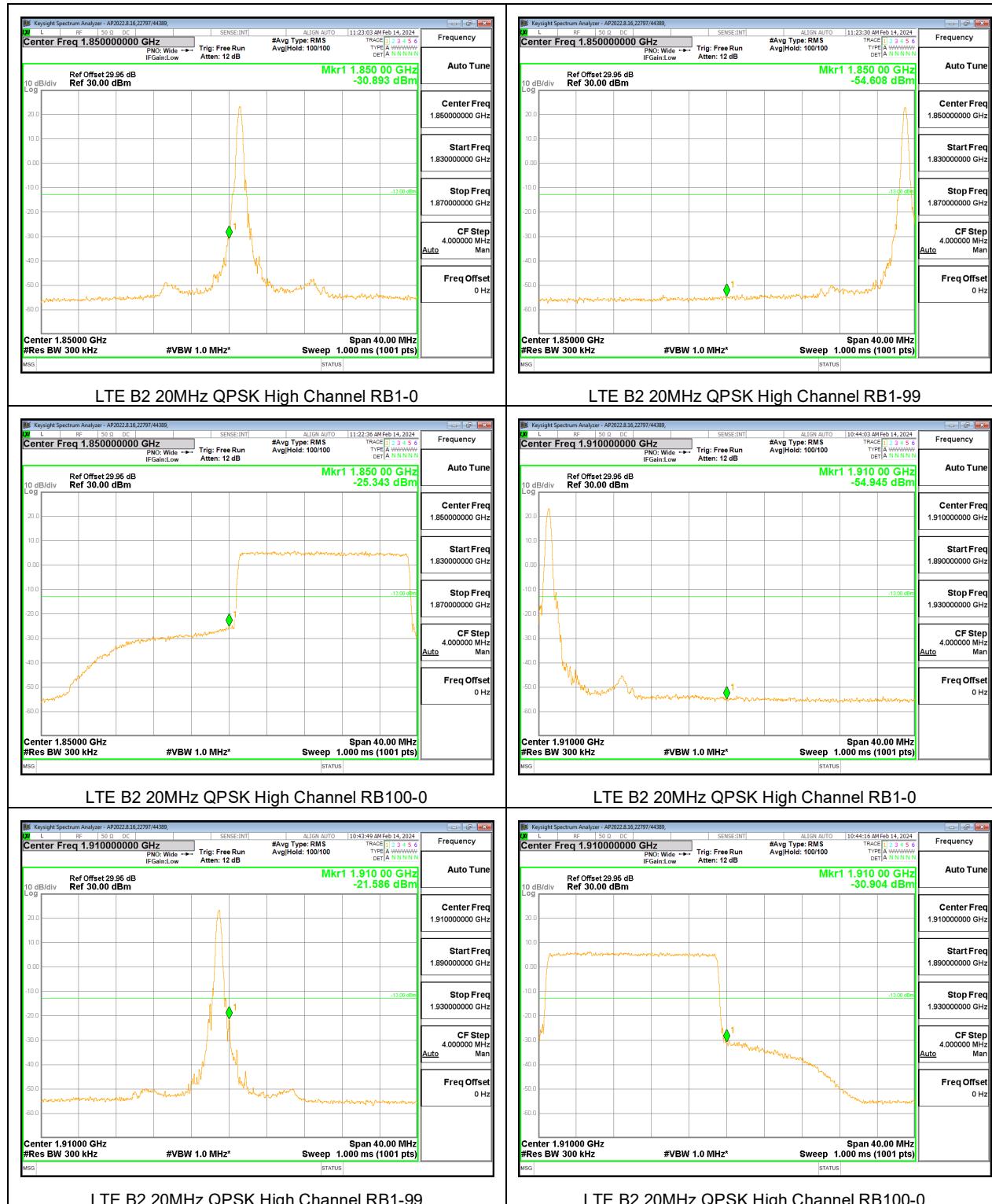
LTE Band 2 1.4MHz QPSK Low Channel RB6-0











9.2.2. LTE BAND 5 AND 5G NR n5 EMISSION MASK

LIMITS

FCC: §22.917 (a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

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LTE BAND 5