



TEST REPORT

Report Number. : 13911916-E8V1

Applicant : APPLE, INC.
1 APPLE PARK WAY
CUPERTINO, CA 95014, U.S.A.

Model : A2595

Brand : APPLE

FCC ID : BCG-E4082A

EUT Description : SMARTPHONE

Test Standard(s) : FCC CFR47 PART 2, 22H, 24E, 27, 90S, 90R, AND 96.

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Revision History

Rev.	Issue Date	Revisions	Revised By
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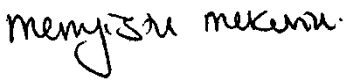
1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	APPLE, INC. 1 APPLE PARK WAY CUPERTINO, CA 95014, U.S.A.
Model	A2595
Brand	APPLE
FCC ID	BCG-E4082A
EUT Description	SMARTPHONE
Serial Number	FG114670W860J57NA (Conducted) AND G2HG2D1Q9D (Radiated)
Sample Receipt Date	SEPTEMBER 08, 2021
Date Tested	SEPTEMBER 08, 2021 to JANUARY 21, 2022
Applicable Standards	FCC CFR47 2, 22H, 24E, 27, 90S, 90R, AND 96
Test Results	COMPLIES

UL Verification Services Inc. 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 Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of the U.S. government.

Approved & Released By: 	Reviewed By: 	Prepared By: 
Mengistu Mekuria Staff Engineer UL Verification Services Inc.	John Thompson Test Engineer UL Verification Services Inc.	Tewodros Woldemichael Senior Laboratory Technician UL Verification Services Inc.

2. SUMMARY OF TEST RESULTS

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for the validity of results after the integration of the data provided by the customer.

Requirement Description	Band	Requirement Clause Number (FCC)	Result	Remarks
RF Conducted Output Power	26 (90S)	2.1046 , 90.635 (b)	Complies	
Effective Radiated Power	5, 26	22.913 (a)(5)	Complies	
	12	27.50 (c) (10)	Complies	
	13	27.50 (b) (10)	Complies	
	14	90.541 (d)	Complies	
	17	27.50 (c) (10)	Complies	
Equivalent Isotropic Radiated	2, 25	24.232 (c)	Complies	
	4, 66	27.50 (d) (4)	Complies	
	30	27.50 (a) (3)	Complies	
	7, 41	27.50 (h) (2)	Complies	
	48	96.41 (b)	Complies	
	71	27.50 (c) (10)	Complies	
	77	96.41 (b), 27.50 (j) (3), (k) (3)	Complies	

Requirement Description	Requirement Clause Number (FCC)	Result	Remarks
Occupied Bandwidth	2.1049	Complies	
Band Edge and Emission Mask	2.1051, 22.917 (a), 24.238 (a), 27.53 (h), 27.53 (m)(4) & (m) (6), 96.41(e) , 27.53 (g), 27.53 (c) (f), 27.53(a), 27.53(l), 90.543 (e)(f), 90.691 (a), 96.41(e)	Complies	
Out of Band Emissions	2.1051, 22.917 (a), 24.238 (a), 27.53 (h), 27.53 (m)(4) & (m) (6), 96.41(e) , 27.53 (g), 27.53 (c) (f), 27.53(a), 27.53(l), 90.543 (e)(f), 90.691 (a), 96.41(e)	Complies	
Frequency Stability	2.1055, 22.355, 24.235, 27.54, 90.539, 90.213	Complies	
Peak-to-Average Ratio	22.913 (d), 24.232 (d), 27.50 (d) (5), 27.50 (j) (4), 96.41 (g)	Complies	
Field Strength of Spurious Radiation	2.1053, 22.917 (a), 24.238 (a), 27.53 (h), 27.53 (m)(4) & (m) (6), 96.41(e) , 27.53 (g), 27.53 (c) (f), 27.53(a), 27.53(l), 90.543 (e)(f), 90.691 (a), 96.41(e)	Complies	

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, Part 90, and Part 96
- [FCC KDB 971168 D01 v03r01](#): Power Meas License Digital Systems
- [FCC KDB 971168 D02 v02r01](#): Misc Rev Approv License Devices
- [FCC KDB 412172 D01 v01r01](#): Determining ERP and EIRP

4. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0, 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
☒	Building 1: 47173 Benicia Street, Fremont, California, USA	US0104	2324A	550739
☒	Building 2: 47266 Benicia Street, Fremont, California, USA	US0104	22541	550739
☐	Building 4: 47658 Kato Rd, Fremont, California, USA	US0104	2324B	550739

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}
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.84 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 dB
Occupied Channel Bandwidth	±1.22 %
Temperature	±2.26%
Supply voltages	±0.57 %
Time	±3.39 %

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 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.
36.5 dBuV + 0 dB + 10.1 dB + 0 dB = 46.6 dBuV

6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The Apple iPhone is a smartphone with multimedia functions (music, application support, and video), cellular GSM, GPRS, EGPRS, UMTS, LTE, 5G FR1, IEEE 802.11a/b/g/n/ac/ax, Bluetooth, GPS and NFC. All models support at least one UICC based SIM. The second SIM is an UICC based e-SIM (electronic SIM) in some models. China model has 1 p-SIM only. The device supports a built-in inductive charging receiver. The rechargeable battery is not user accessible.

Testing was performed on the parent model and is used to support the application for the parent and variants identified in this report based on the test plan submitted and approved via KDB inquiry by the FCC.

6.2. MAXIMUM OUTPUT POWER

EIRP/ERP TEST PROCEDURE

ANSI C63.26:2015
KDB 971168 D01 Section 5.6

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

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

PMeas = 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:

5G NR n5

Part 22H (Ant 1)								
ERP Limit (W)		7.00						
Antenna Gain (dBi)		-1.60						
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	25.64	21.89	0.155	4528	4M53G7W
	QPSK			25.70	21.95	0.157	4482	4M48G7W
	16QAM			24.77	21.02	0.126	4459	4M46D7W
10.0	BPSK	829.0	844.0	25.70	21.95	0.157	8914	8M91G7W
	QPSK			25.63	21.88	0.154	8960	8M96G7W
	16QAM			24.80	21.05	0.127	8975	8M98D7W
15.0	BPSK	831.5	841.5	25.63	21.88	0.154	13403	13M4G7W
	QPSK			25.70	21.95	0.157	13429	13M4G7W
	16QAM			24.78	21.03	0.127	13391	13M4D7W
20.0	BPSK	834.0	839.0	25.65	21.90	0.155	17854	17M9G7W
	QPSK			25.70	21.95	0.157	17891	17M9G7W
	16QAM			24.85	21.10	0.129	17815	17M8D7W

LTE BAND 7

Part 27 (Ant 2)								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		2.80						
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	2502.5	2567.5	22.40	25.20	0.331	4520	4M52G7W
	16QAM			21.39	24.19	0.262	4501	4M50D7W
10.0	QPSK	2505.0	2565.0	22.40	25.20	0.331	8999	9M00G7W
	16QAM			20.99	23.79	0.239	8963	8M96D7W
15.0	QPSK	2507.5	2562.5	22.40	25.20	0.331	13435	13M4G7W
	16QAM			21.36	24.16	0.261	13443	13M4D7W
20.0	QPSK	2510.0	2560.0	22.40	25.20	0.331	17909	17M9G7W
	16QAM			21.18	23.98	0.250	17892	17M9D7W

5G NR n7

Part 27 (Ant 2)								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		2.80						
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	BPSK	2502.5	2567.5	22.20	25.00	0.316	4514	4M51G7W
	QPSK			22.40	25.20	0.331	4486	4M49G7W
	16QAM			21.72	24.52	0.283	4491	4M49D7W
10.0	BPSK	2505.0	2565.0	22.36	25.16	0.328	8950	8M95G7W
	QPSK			22.40	25.20	0.331	8957	8M96G7W
	16QAM			21.67	24.47	0.280	8985	8M99D7W
15.0	BPSK	2507.5	2562.5	22.29	25.09	0.323	13395	13M4G7W
	QPSK			22.40	25.20	0.331	13398	13M4G7W
	16QAM			21.76	24.56	0.286	13398	13M4D7W
20.0	BPSK	2510.0	2560.0	22.40	25.20	0.331	17874	17M9G7W
	QPSK			22.40	25.20	0.331	17930	17M9G7W
	16QAM			21.63	24.43	0.277	17903	17M9D7W
25.0	BPSK	2512.5	2557.5	21.40	24.20	0.263	22893	22M9G7W
	QPSK			21.38	24.18	0.262	22867	22M9G7W
	16QAM			20.62	23.42	0.220	22943	22M9D7W
30.0	BPSK	2515.0	2555.0	21.40	24.20	0.263	28639	28M6G7W
	QPSK			21.37	24.17	0.261	28615	28M6G7W
	16QAM			20.59	23.39	0.218	28590	28M6D7W
40.0	BPSK	2520.0	2550.0	21.38	24.18	0.262	38617	38M6G7W
	QPSK			21.40	24.20	0.263	38603	38M6G7W
	16QAM			20.47	23.27	0.212	38590	38M6D7W

LTE BAND 12

Part 27 (Ant 1)								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-3.90						
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	699.7	715.3	25.70	19.65	0.092	1082	1M08G7W
	16QAM			25.32	19.27	0.085	1084	1M08D7W
3.0	QPSK	700.5	714.5	25.70	19.65	0.092	2697	2M70G7W
	16QAM			25.25	19.20	0.083	2697	2M70D7W
5.0	QPSK	701.5	713.5	25.70	19.65	0.092	4495	4M50G7W
	16QAM			25.30	19.25	0.084	4491	4M49D7W
10.0	QPSK	704.0	711.0	25.70	19.65	0.092	8979	8M98G7W
	16QAM			25.45	19.40	0.087	8945	8M95D7W

5G NR n12

Part 27 (Ant 1)								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-3.90						
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	701.5	713.5	25.70	19.65	0.092	4470	4M47G7W
	QPSK			25.70	19.65	0.092	4468	4M47G7W
	16QAM			25.27	19.22	0.084	4468	4M47D7W
10.0	BPSK	704.0	711.0	25.69	19.64	0.092	8940	8M94G7W
	QPSK			25.70	19.65	0.092	8941	8M94G7W
	16QAM			25.16	19.11	0.081	8918	8M92D7W
15.0	BPSK	706.5	708.5	25.65	19.60	0.091	13405	13M4G7W
	QPSK			25.70	19.65	0.092	13410	13M4G7W
	16QAM			25.13	19.08	0.081	13368	13M4D7W

LTE BAND 13

Part 27 (Ant 1)								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-3.30						
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	QPSK	779.5	784.5	25.70	20.25	0.106	4482	4M48G7W
	16QAM			25.28	19.83	0.096	4465	4M47D7W
10.0	QPSK	782.0	782.0	25.70	20.25	0.106	8920	8M92G7W
	16QAM			25.27	19.82	0.096	8939	8M94D7W

LTE BAND 14

Part 90R (Ant 1)								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-3.30						
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	QPSK	790.5	795.5	25.70	20.25	0.106	4480	4M48G7W
	16QAM			25.42	19.97	0.099	4469	4M47D7W
10.0	QPSK	793.0	793.0	25.70	20.25	0.106	8943	8M94G7W
	16QAM			25.40	19.95	0.099	8948	8M95D7W

LTE BAND 17

Part 27 (Ant 1)								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-3.90						
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	QPSK	706.5	713.5	25.70	19.65	0.092	4470	4M47G7W
	16QAM			25.30	19.25	0.084	4461	4M46D7W
10.0	QPSK	709.0	711.0	25.70	19.65	0.092	8949	8M95G7W
	16QAM			25.32	19.27	0.085	8951	8M95D7W

LTE BAND 25

Part 24 (Ant 1)								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		1.90						
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	1914.3	25.70	27.60	0.575	1089	1M09G7W
	16QAM			25.23	27.13	0.517	1093	1M09D7W
3.0	QPSK	1851.5	1913.5	25.70	27.60	0.575	2696	2M70G7W
	16QAM			25.28	27.18	0.522	2693	2M69D7W
5.0	QPSK	1852.5	1912.5	25.70	27.60	0.575	4494	4M49G7W
	16QAM			25.32	27.22	0.528	4493	4M49D7W
10.0	QPSK	1855.0	1910.0	25.70	27.60	0.575	8998	9M00G7W
	16QAM			25.33	27.23	0.529	8976	8M98D7W
15.0	QPSK	1857.5	1907.5	25.70	27.60	0.575	13444	13M4G7W
	16QAM			25.05	26.95	0.495	13455	13M5D7W
20.0	QPSK	1860.0	1905.0	25.70	27.60	0.575	17952	18M0G7W
	16QAM			25.50	27.40	0.549	17921	17M9D7W

5G NR n25

Part 24 (Ant 1)								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		1.90						
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	BPSK	1852.5	1912.5	25.57	27.47	0.558	4468	4M47G7W
	QPSK			25.70	27.60	0.575	4477	4M48G7W
	16QAM			25.12	27.02	0.504	4486	4M49D7W
10.0	BPSK	1855.0	1910.0	25.70	27.60	0.575	8928	8M93G7W
	QPSK			25.68	27.58	0.573	8927	8M93G7W
	16QAM			25.19	27.09	0.512	8923	8M92D7W
15.0	BPSK	1857.5	1907.5	25.69	27.59	0.574	13384	13M4G7W
	QPSK			25.70	27.60	0.575	13371	13M4G7W
	16QAM			25.12	27.02	0.504	13439	13M4D7W
20.0	BPSK	1860.0	1905.0	25.70	27.60	0.575	17862	17M9G7W
	QPSK			25.69	27.59	0.574	17864	17M9G7W
	16QAM			25.19	27.09	0.512	17879	17M9D7W
25.0	BPSK	1862.5	1902.5	24.70	26.60	0.457	22838	22M8G7W
	QPSK			24.69	26.59	0.456	22837	22M8G7W
	16QAM			24.20	26.10	0.407	22823	22M8D7W
30.0	BPSK	1865.0	1900.0	24.70	26.60	0.457	28514	28M5G7W
	QPSK			24.67	26.57	0.454	28515	28M5G7W
	16QAM			24.14	26.04	0.402	28533	28M5D7W
40.0	BPSK	1870.0	1895.0	24.68	26.58	0.455	38632	38M6G7W
	QPSK			24.70	26.60	0.457	38968	39M0G7W
	16QAM			24.10	26.00	0.398	38909	38M9D7W

LTE BAND 26 (Part 90S)

Part 90S (Ant 1)							
Conducted Limit (W)		100.00					
Antenna Gain (dBi)		-1.60					
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	814.7	823.3	25.70	0.372	1085	1M09G7W
	16QAM			25.32	0.340	1083	1M08D7W
3.0	QPSK	815.5	822.5	25.70	0.372	2689	2M69G7W
	16QAM			25.38	0.345	2685	2M69D7W
5.0	QPSK	816.5	821.5	25.70	0.372	4486	4M49G7W
	16QAM			25.41	0.348	4477	4M48D7W
10.0	QPSK	819.0	819.0	25.70	0.372	8947	8M95G7W
	16QAM			25.45	0.351	8930	8M93D7W

LTE BAND 26 (Part 22)

Part 22 (Ant 1)								
ERP Limit (W)		7.00						
Antenna Gain (dBi)		-1.60						
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	25.70	21.95	0.157	1078	1M08G7W
	16QAM			25.36	21.61	0.145	1081	1M08D7W
3.0	QPSK	825.5	847.5	25.70	21.95	0.157	2678	2M68G7W
	16QAM			25.28	21.53	0.142	2683	2M68D7W
5.0	QPSK	826.5	846.5	25.70	21.95	0.157	4484	4M48G7W
	16QAM			25.29	21.54	0.143	4476	4M48D7W
10.0	QPSK	829.0	844.0	25.70	21.95	0.157	8939	8M94G7W
	16QAM			25.11	21.36	0.137	8933	8M93D7W

LTE BAND 30

Part 27 (Ant 1)								
EIRP Limit (W)		0.25						
Antenna Gain (dBi)		-0.50						
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	24.00	23.50	0.224	4487	4M49G7W
	16QAM			23.99	23.49	0.223	4475	4M48D7W
10.0	QPSK	2310.0	2310.0	24.00	23.50	0.224	8961	8M96G7W
	16QAM			23.96	23.46	0.222	8949	8M95D7W

5G NR n30

Part 27 (Ant 1)								
EIRP Limit (W)		0.25						
Antenna Gain (dBi)		-0.50						
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	BPSK	2307.5	2312.5	24.00	23.50	0.224	4487	4M49G7W
	QPSK			23.98	23.48	0.223	4488	4M49G7W
	16QAM			23.98	23.48	0.223	4472	4M47D7W
10.0	BPSK	2310.0	2310.0	24.00	23.50	0.224	8950	8M95G7W
	QPSK			23.97	23.35	0.216	8962	8M96G7W
	16QAM			23.99	23.49	0.224	8898	8M90D7W

LTE BAND 41

Part 27 (Ant 2)								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		2.80						
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	24.20	27.00	0.501	4470	4M47G7W
	16QAM			23.53	26.33	0.430	4452	4M45D7W
10.0	QPSK	2501.0	2685.0	24.20	27.00	0.501	8928	8M93G7W
	16QAM			23.72	26.52	0.449	8945	8M95D7W
15.0	QPSK	2503.5	2682.5	24.20	27.00	0.501	13481	13M5G7W
	16QAM			23.57	26.37	0.434	13404	13M4D7W
20.0	QPSK	2506.0	2680.0	24.20	27.00	0.501	17877	17M9G7W
	16QAM			23.54	26.34	0.431	17870	17M9D7W

5G NR n41

Part 27 (Ant 2)								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		2.80						
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	BPSK	2506.0	2680.0	27.70	30.50	1.122	17867	17M9G7W
	QPSK			27.26	30.06	1.014	17820	17M8G7W
	16QAM			27.01	29.81	0.957	17905	17M9D7W
30.0	BPSK	2511.0	2675.0	27.70	30.50	1.122	26811	26M8G7W
	QPSK			26.84	29.64	0.920	26826	26M8G7W
	16QAM			26.44	29.24	0.839	26777	26M8D7W
40.0	BPSK	2516.0	2670.0	27.70	30.50	1.122	35798	35M8G7W
	QPSK			27.42	30.22	1.052	35701	35M7G7W
	16QAM			27.32	30.12	1.028	35741	35M7D7W
50.0	BPSK	2521.0	2665.0	27.70	30.50	1.122	45670	45M7G7W
	QPSK			27.32	30.12	1.028	45789	45M8G7W
	16QAM			27.08	29.88	0.973	45694	45M7D7W
60.0	BPSK	2526.0	2660.0	27.70	30.50	1.122	57823	57M8G7W
	QPSK			27.39	30.19	1.045	57683	57M7G7W
	16QAM			26.96	29.76	0.946	57878	57M9D7W
80.0	BPSK	2536.0	2650.0	27.70	30.50	1.122	77133	77M1G7W
	QPSK			27.39	30.19	1.045	77106	77M1G7W
	16QAM			26.82	29.62	0.916	77041	77M0D7W
90.0	BPSK	2541.0	2645.0	27.70	30.50	1.122	86566	86M6G7W
	QPSK			27.45	30.25	1.059	86873	86M9G7W
	16QAM			27.01	29.81	0.957	86661	86M7D7W
100.0	BPSK	2546.0	2640.0	27.70	30.50	1.122	96250	96M3G7W
	QPSK			27.65	30.45	1.109	96169	96M2G7W
	16QAM			26.79	29.59	0.910	96402	96M4D7W

LTE BAND 48

Part 96 (Ant 1)								
EIRP Limit (W)/ 10MHz		0.20						
Antenna Gain (dBi)		-0.20						
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	22.70	22.50	0.178	4474	4M47G7W
	16QAM			22.69	22.49	0.178	4443	4M44D7W
10.0	QPSK	3555.0	3695.0	22.70	22.50	0.178	8938	8M94G7W
	16QAM			22.70	22.50	0.178	8897	8M90D7W
15.0	QPSK	3557.5	3692.5	22.70	22.50	0.178	13364	13M4G7W
	16QAM			22.68	22.48	0.177	13383	13M4D7W
20.0	QPSK	3560.0	3690.0	22.70	22.50	0.178	17875	17M9G7W
	16QAM			22.66	22.46	0.176	17777	17M8D7W

LTE BAND 66

Part 27 (Ant 1)								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		0.80						
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	25.70	26.50	0.447	1079	1M08G7W
	16QAM			25.20	26.00	0.398	1079	1M08D7W
3.0	QPSK	1711.5	1778.5	25.70	26.50	0.447	2687	2M69G7W
	16QAM			25.37	26.17	0.414	2678	2M68D7W
5.0	QPSK	1712.5	1777.5	25.70	26.50	0.447	4517	4M52G7W
	16QAM			25.09	25.89	0.388	4499	4M50D7W
10.0	QPSK	1715.0	1775.0	25.70	26.50	0.447	8987	8M99G7W
	16QAM			25.02	25.82	0.382	8974	8M97D7W
15.0	QPSK	1717.5	1772.5	25.70	26.50	0.447	13419	13M4G7W
	16QAM			25.43	26.23	0.420	13423	13M4D7W
20.0	QPSK	1720.0	1770.0	25.70	26.50	0.447	17889	17M9G7W
	16QAM			25.42	26.22	0.419	17894	17M9D7W

5G NR n66

Part 27 (Ant 1)								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		0.80						
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	BPSK	1712.5	1777.5	25.60	26.40	0.437	4483	4M48G7W
	QPSK			25.70	26.50	0.447	4482	4M48G7W
	16QAM			24.63	25.43	0.349	4494	4M49D7W
10.0	BPSK	1715.0	1775.0	25.70	26.50	0.447	8966	8M97G7W
	QPSK			25.66	26.46	0.443	8966	8M97G7W
	16QAM			24.62	25.42	0.348	8935	8M94D7W
15.0	BPSK	1717.5	1772.5	25.70	26.50	0.447	13389	13M4G7W
	QPSK			25.60	26.40	0.437	13453	13M5G7W
	16QAM			24.40	25.20	0.331	13416	13M4D7W
20.0	BPSK	1720.0	1770.0	25.70	26.50	0.447	17912	17M9G7W
	QPSK			25.70	26.50	0.447	17862	17M9G7W
	16QAM			24.35	25.15	0.327	17858	17M9D7W
30.0	BPSK	1725.0	1765.0	24.40	25.20	0.331	28602	28M6G7W
	QPSK			24.39	25.19	0.330	28600	28M6G7W
	16QAM			23.30	24.10	0.257	28504	28M5D7W
40.0	BPSK	1730.0	1760.0	24.40	25.20	0.331	38483	38M5G7W
	QPSK			24.34	25.14	0.327	38586	38M6G7W
	16QAM			23.29	24.09	0.256	38549	38M5D7W

LTE BAND 71

Part 27 (Ant 1)								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-3.80						
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	QPSK	665.5	695.5	25.70	19.75	0.094	4492	4M49G7W
	16QAM			25.45	19.50	0.089	4481	4M48D7W
10.0	QPSK	668.0	693.0	25.70	19.75	0.094	8983	8M98G7W
	16QAM			25.19	19.24	0.084	8968	8M97D7W
15.0	QPSK	670.5	690.5	25.70	19.75	0.094	13437	13M4G7W
	16QAM			25.53	19.58	0.091	13408	13M4D7W
20.0	QPSK	673.0	688.0	25.70	19.75	0.094	17783	17M8G7W
	16QAM			25.26	19.31	0.085	17886	17M9D7W

5G NR n71

Part 27 (Ant 1)								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-3.80						
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	665.5	695.5	25.67	19.72	0.094	4463	4M46G7W
	QPSK			25.70	19.75	0.094	4468	4M47G7W
	16QAM			25.00	19.05	0.080	4458	4M46D7W
10.0	BPSK	668.0	693.0	25.70	19.75	0.094	8945	8M95G7W
	QPSK			25.65	19.70	0.093	8911	8M91G7W
	16QAM			24.87	18.92	0.078	8935	8M94D7W
15.0	BPSK	670.5	690.5	25.70	19.75	0.094	13389	13M4G7W
	QPSK			25.54	19.59	0.091	13400	13M4G7W
	16QAM			24.88	18.93	0.078	13378	13M4D7W
20.0	BPSK	673.0	688.0	25.70	19.75	0.094	17844	17M8G7W
	QPSK			25.62	19.67	0.093	17810	17M8G7W
	16QAM			24.83	18.88	0.077	17831	17M8D7W

5G NR n77 (3450-3550MHz)

Part 27 (Ant 1)								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		-1.50						
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	BPSK	3460.0	3540.0	27.70	26.20	0.417	17879	17M9G7W
	QPSK			27.44	25.94	0.393	17908	17M9G7W
	16QAM			26.55	25.05	0.320	17916	17M9D7W
30.0	BPSK	3465.0	3535.0	27.70	26.20	0.417	26835	26M8G7W
	QPSK			26.25	24.75	0.299	26797	26M8G7W
	16QAM			25.77	24.27	0.267	26901	26M9D7W
40.0	BPSK	3470.0	3530.0	27.70	26.20	0.417	35785	35M8G7W
	QPSK			26.35	24.85	0.305	35833	35M8G7W
	16QAM			25.78	24.28	0.268	35794	35M8D7W
50.0	BPSK	3475.0	3525.0	27.70	26.20	0.417	45912	45M9G7W
	QPSK			27.52	26.02	0.400	45852	45M9G7W
	16QAM			26.89	25.39	0.346	45970	46M0D7W
60.0	BPSK	3480.0	3520.0	27.70	26.20	0.417	58255	58M3G7W
	QPSK			27.21	25.71	0.372	58115	58M1G7W
	16QAM			26.53	25.03	0.318	58337	58M3D7W
70.0	BPSK	3485.0	3515.0	27.62	26.12	0.409	64861	64M9G7W
	QPSK			27.70	26.20	0.417	64782	64M8G7W
	16QAM			26.49	24.99	0.316	64932	64M9D7W
80.0	BPSK	3490.0	3510.0	27.70	26.20	0.417	77774	77M8G7W
	QPSK			27.69	26.19	0.416	77834	77M8G7W
	16QAM			26.69	25.19	0.330	77844	77M8D7W
90.0	BPSK	3495.0	3505.0	27.67	26.17	0.414	87584	87M6G7W
	QPSK			27.70	26.20	0.417	87484	87M5G7W
	16QAM			26.64	25.14	0.327	87423	87M4D7W
100.0	BPSK	3500.0	3500.0	27.70	26.20	0.417	97149	97M1G7W
	QPSK			27.02	25.52	0.356	97239	97M2G7W
	16QAM			26.50	25.00	0.316	96912	96M9D7W

5G NR n77 (3700-3980MHz)

Part 27 (Ant 1)								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		-1.50						
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	BPSK	3710.0	3970.0	27.70	26.20	0.417	17940	17M9G7W
	QPSK			27.60	26.10	0.407	17913	17M9G7W
	16QAM			26.55	25.05	0.320	17866	17M9D7W
30.0	BPSK	3715.0	3965.0	27.70	26.20	0.417	26899	26M9G7W
	QPSK			27.68	26.18	0.415	26864	26M9G7W
	16QAM			26.66	25.16	0.328	26891	26M9D7W
40.0	BPSK	3720.0	3960.0	27.70	26.20	0.417	35658	35M7G7W
	QPSK			27.68	26.18	0.415	35679	35M7G7W
	16QAM			26.64	25.14	0.327	35810	35M8D7W
50.0	BPSK	3725.0	3955.0	27.70	26.20	0.417	45731	45M7G7W
	QPSK			27.64	26.14	0.411	45752	45M8G7W
	16QAM			26.67	25.17	0.329	45768	45M8D7W
60.0	BPSK	3730.0	3950.0	27.70	26.20	0.417	57797	57M8G7W
	QPSK			27.05	25.55	0.359	57646	57M6G7W
	16QAM			26.22	24.72	0.296	57796	57M8D7W
70.0	BPSK	3735.0	3945.0	27.55	26.05	0.403	64445	64M4G7W
	QPSK			27.32	25.82	0.382	64504	64M5G7W
	16QAM			26.34	24.84	0.305	64546	64M5D7W
80.0	BPSK	3740.0	3940.0	27.47	25.97	0.395	77285	77M3G7W
	QPSK			27.28	25.78	0.378	76932	76M9G7W
	16QAM			26.38	24.88	0.308	77159	77M2D7W
90.0	BPSK	3745.0	3935.0	27.70	26.20	0.417	87063	87M1G7W
	QPSK			27.52	26.02	0.400	86790	86M8G7W
	16QAM			26.55	25.05	0.320	87213	87M2D7W
100.0	BPSK	3750.0	3930.0	27.68	26.18	0.415	96494	96M5G7W
	QPSK			27.66	26.16	0.413	96332	96M3G7W
	16QAM			26.75	25.25	0.335	96405	96M4D7W

6.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version: 0.13.02.

6.4. MAXIMUM ANTENNA GAIN

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

LTE Bands	ANT 1 Antenna Gain (dBi)	ANT 2 Antenna Gain (dBi)	ANT 4 Antenna Gain (dBi)
5G NR n5, 824 – 849 MHz	-1.6	-4.0	
LTE Band 7, n7, 2500 – 2570 MHz	-2.3	2.8	
LTE Band 12, 5G NR n12, 699 – 716 MHz	-3.9	-4.2	
LTE Band 13, 777 – 787 MHz	-3.3	-3.5	
LTE Band 14, 788 – 798 MHz	-3.3	-3.5	
LTE Band 17, 704 – 716 MHz	-3.9	-4.2	
LTE Band 25, 5G NR n25, 1850 – 1915 MHz	1.9	2.0	
LTE Band 26, 814 – 849 MHz	-1.6	-4.0	
LTE Band 30, 5G NR n30, 2305 – 2315 MHz	-0.5	2.9	
LTE Band 41, 5G NR n41, 2496 – 2690 MHz	-2.3	2.8	
LTE Band 48, 3550 – 3700 MHz	-0.2		-2.1
LTE Band 66, 5G NR n66, 1710 – 1780 MHz	0.8	-0.1	
LTE Band 71, 5G NR n71 663 – 698 MHz	-3.8	-5.5	
5G NR n77 3450 – 3550 MHz	-1.5		-0.6
5G NR n77 3700 – 3980 MHz	-1.5		-0.6

6.5. WORST-CASE CONFIGURATION AND MODE

The EUT supports the following LTE and 5G NR Bands:

Band 2, Band 4, Band 5, Band 7, Band 12, Band 13, Band 14, Band 17, Band 25, Band 26, Band 30, Band 41, Band 48, Band 66, Band 71, 5G NR n2, 5G NR n5, 5G NR n7, 5G NR n12, 5G NR n25, 5G NR n30, 5G NR n41, 5G NR n66, 5G NR n71, and 5G NR n77.

LTE Band 2 and 5G NR n2 (1850-1910MHz) are covered by LTE Band 25 and 5G NR n25 respectively. Because they are the subset of LTE band 25 and 5G NR n25 with the same output power and supported bandwidths.

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

FCC rule Part 22.905 of LTE Band 5 (824-849MHz) is covered by LTE Band 26 of same rule since they have the same output power and supported bandwidths.

BPSK modulation applied only for 5G NR frequencies and has the same tune up power as QPSK modulations.

The DFT-s-OFDM and CP-OFDM waveforms were investigated, and DFT-s-OFDM was found to be the worst case.

The worst-case scenario for all measurements is based on an engineering evaluation made on different modulations. Then, QPSK and BPSK were observed as the worst mode to LTE bands and 5G NR bands respectively and set for all conducted and radiated. Output power measurements were measured on BPSK, QPSK, 16QAM, 64QAM, and 256QAM modulations. For testing purposes emissions on sections 8 and 9 were measured while QPSK/BPSK was set at or above target power for all bands. Conducted tests were performed on the worst case antenna because it has the highest conducted power. The worst case antenna is shown in the table below.

LTE and 5G NR Bands	Worst case Antenna
LTE BAND 2, LTE BAND 25, 5G NR n2, and 5G NR n25	Ant 1
LTE BAND 4, LTE BAND 66, and 5G NR n66	
LTE BAND 26 and 5G NR n5	
LTE BAND 12	
LTE BAND 13	
LTE BAND 14	
LTE Band 17	
LTE BAND 30, and 5G NR n30	
LTE BAND 41	
LTE BAND 71, and 5G NR n71	
5G NR n77	
LTE BAND 48	
5G NR n41	Ant 2

The EUT was investigated in three orthogonal orientations X/Y/Z on all ANT 1, ANT2, and ANT4 antennas to determine the worst case orientation. The following table exhibit the worst case orientation for different frequency bands. The full tests of the EUT have made upon the orientations that shown in the table below.

Frequency Bands	ANT1	ANT2	ANT4
663 – 849 MHz	X	X	N/A
1710 – 1915 MHz	X	X	N/A
2300 – 2700 MHz	Y	Y	N/A
3300 – 3980 MHz	Z	N/A	Y

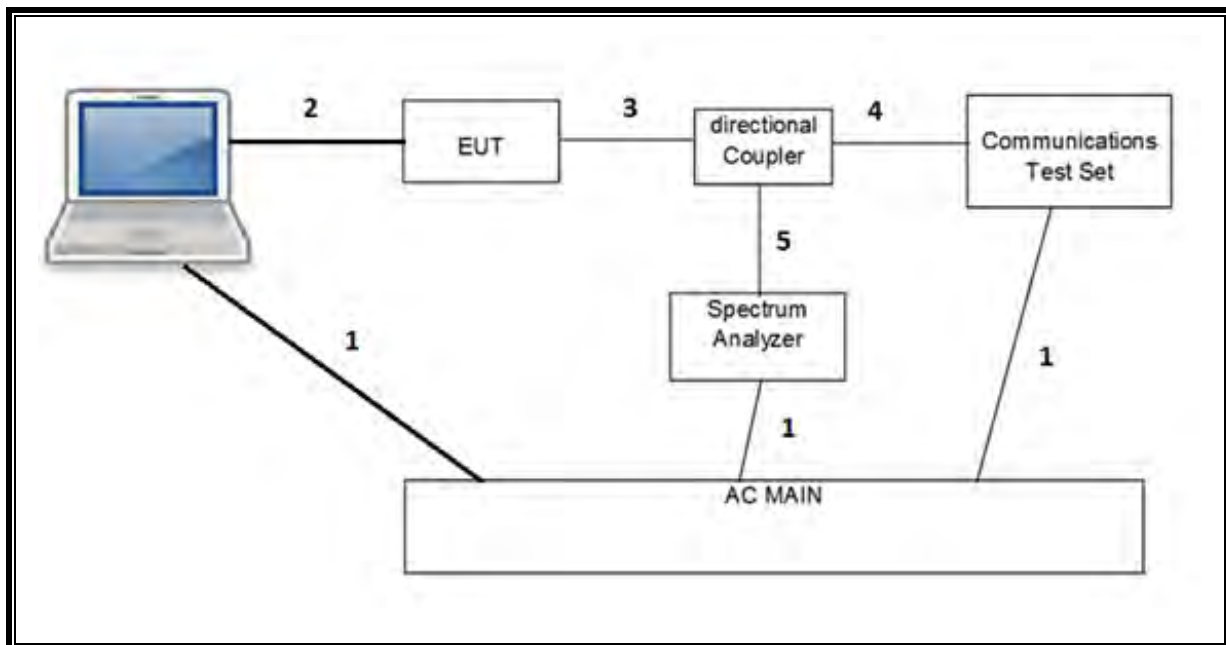
Radiated spurious emissions were investigated from 9kHz to 30MHz, 30MHz-1GHz and above 1GHz. There were no emissions found with less than 20dB of margin from 9kHz to 1GHz.

For simultaneous transmission of multiple channels in the 2.4GHz/5GH WLAN, UWB, and Cellular bands, tests were conducted for various configurations having the highest power, least separation in frequencies and widest operation bandwidths. No noticeable new emission was found.

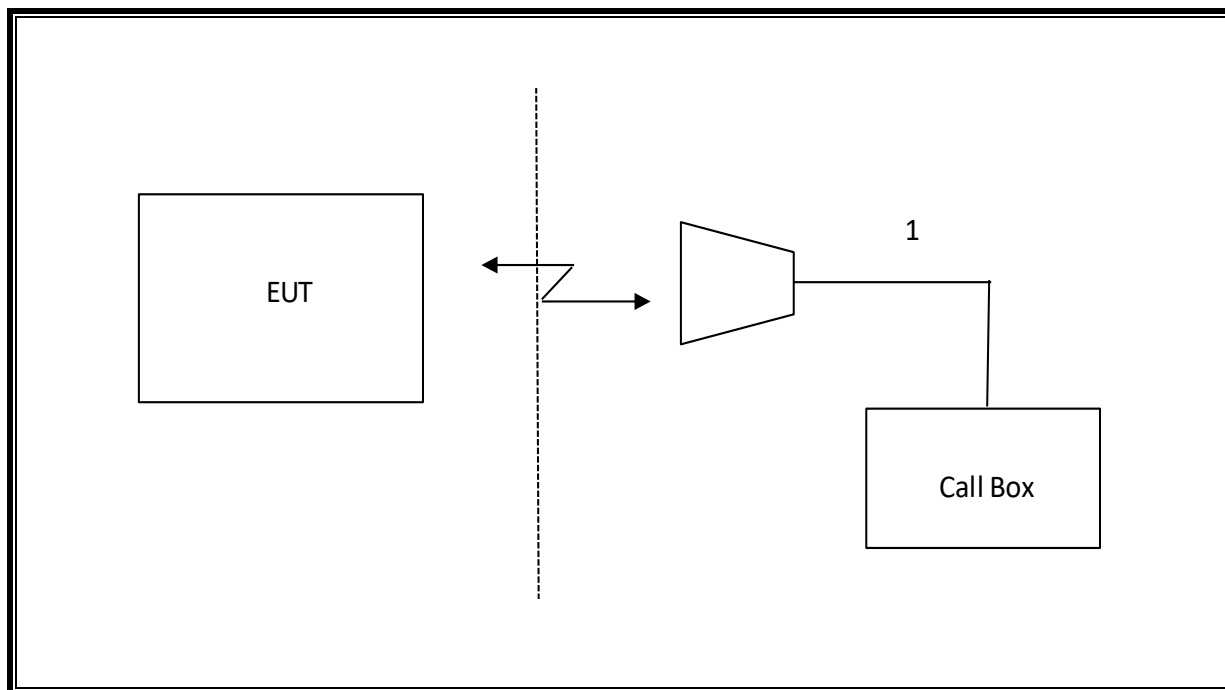
6.6. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT						
Description		Manufacturer	Model	Serial Number		FCC ID/ DoC
Laptop		Apple	MacBook Pro	QDS-BRCM1069		A1398
AC/DC adapter		Apple	B123	N/A		PA-1450-BA1
I/O CABLES (RF CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	3	US 115V	Un-shielded	2.0	N/A
2	USB	1	DC	Un-shielded	1.0	N/A
3	RF In/Out	1	EUT	Un-shielded	0.6	N/A
4	RF In/Out	1	Communication Test Set	Un-shielded	1.2	N/A
5	RF In/Out	1	Barrel	N/A	N/A	N/A
I/O CABLES (RF RADIATED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	RF In/Out	1	Antenna	Un-shielded	5.0	N/A

CONDUCTED SETUP



RADIATED SETUP



7. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Asset	Cal Due
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T345	05/26/2022
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T136	07/07/2022
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	T900	02/24/2022
Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-S-42	T1165	06/12/2022
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T907	07/22/2022
Spectrum Analyzer, PSA, 3Hz to 44GHz	Keysight	N9030A	T123	*01/19/2022
Spectrum Analyzer, PSA, 3Hz to 44GHz	Keysight	N9030A	T908	01/28/2022
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	T200	*01/19/2022
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	T905	01/21/2022
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T340	01/28/2022
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T199	*01/20/2022
Spectrum Analyzer, PXA 3Hz to 50GHz	Keysight	N9030B	207995	05/27/2022
Spectrum Analyzer, PXA, 3Hz to 50GHz w/Ext. Mixer	Keysight	N9030A	T342	01/25/2022
Spectrum Analyzer, PSA 3Hz to 44GHz	Keysight	E4446A	T123	01/22/2022
Directional Coupler	KRYTAR	152610	T1161	09/23/2022
Directional Coupler	KRYTAR	152610	T1536	09/23/2022
Directional Coupler	KRYTAR	152610	T1537	09/23/2022
Power Meter, P-series single channel	Keysight	N1912A	T1245	01/21/2022
Power Meter, P-series single channel	Keysight	N1912A	T1269	01/25/2022
Power Meter, P-series single channel	Keysight	N1912A	T1272	01/21/2022
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight	N1921A	T1224	01/28/2022
Filter, HPF 3.0GHz	Micro-Tronics	HPM17543	T487	04/27/2022
Filter, HPF 1.2GHz	Micro-Tronics	152043	152043	7/29/2022
Filter, BR 1850 – 1910 MHz	Micro-Tronics	BRM50714-02	T1796	06/10/2022
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	T1210	01/22/2022
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T1526	02/26/2022
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T260	02/20/2022
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T958	02/22/2022
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T964	02/17/2022
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T979	02/22/2022
5G NR Communication Test Set, Call Box	Keysight	UXM	207269	04/07/2022
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T754	06/16/2022
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T1154	06/15/2022
Amplifier, 26.5GHz to 40GHz	Miteq	NSP 4000 SP2	T88	04/22/2022
Amplifier, 1 to 26.5GHz, 23.5dB Gain minimum	Keysight	8449B	T404	04/19/2022
Antenna, Horn 18 to 26.5GHz	ARA	MWH-1826/B	T447	04/22/2022
Antenna, Horn 26.5GHz to 40GHz	ARA	MWH-2640	T1864	04/19/2022
Spectrum Analyzer	Keysight	8564E	T106	01/27/2022
Antenna, Active Loop 9KHz to 30MHz	EMCO	PRE0154914	T1683	05/24/2022
UL AUTOMATION SOFTWARE				
CLT Software	UL	UL RF	Ver 3.4, June 08, 2021	
Power Measurement Software	UL	UL RF	Ver 3.1.4, May 20, 2021	
Radiated test software	UL	UL RF	Ver 9.5, July 07, 2020	

NOTES:

1. * Testing is completed before equipment expiration date.

8. RF OUTPUT POWER VERIFICATION

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 TS136.101 specification.

UE Power Class: 3 (23 +/- 2dBm). Band 41 UE Power Class: 2 (26 +/-2 dBm).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 TS136.101.

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 TS138.521-1 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	≤ 1.2 ¹	≤ 0.2 ¹
		≤ 0.5 ²		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		
CP-OFDM	256 QAM	≤ 4.5		
	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
		≤ 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 6.2.2.3-2: 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		

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS136.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".

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

Network Signalling value	Requirements (subclause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	N/A
NS_03	6.6.2.2.1	2, 4, 10, 23, 25, 35, 36, 66, 70	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2, 6.6.3.3.19	41	5, 10, 15, 20	Table 6.2.4-4, Table 6.2.4-4a	

The allowed A-MPR values specified below in Table 6.2.3.3.1-1 of 3GPP TS 38.521-1 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".

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

Network signalling label	Requirements (subclause)	NR Band	Channel bandwidth (MHz)	Resources blocks (N_{RB})	A-MPR (dB)
NS_01		Table 5.2-1	5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100	Table 5.3.2-1	N/A
NS_03	6.5.2.3.3.3	n2, n25, n66, n70, n86			Clause 6.2.3.3.7
NS_03U	6.5.2.3.3.3, 6.5.2.4.2.3	n2, n25, n66, n86			Clause 6.2.3.3.7
NS_04	6.5.2.3.3.2, 6.5.3.3.3.1	n41	10, 15, 20, 40, 50, 60, 80, 90, 100		Clause 6.2.3.3.2

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. 5G NR n5

Test Engineer ID:	19467	Test Date:	9/14/2021
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OUTPUT POWER FOR 5G NR n5 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				165300	167300	169300	165300	167300	169300
5.0	BPSK	1	0	25.39	25.24	25.10	24.01	23.89	23.79
			1	25.64	25.55	25.29	24.20	24.04	24.00
		1	23	25.53	25.40	25.16	24.07	24.01	23.87
			24	25.30	25.16	24.95	23.91	23.84	23.66
		12	6	25.54	25.39	25.16	24.16	24.10	23.93
			0	25.28	25.09	24.93	23.93	23.82	23.64
	QPSK	1	0	24.97	24.78	24.60	23.54	23.34	23.24
			1	25.70	25.53	25.38	24.18	24.06	23.98
		1	23	25.54	25.33	25.14	24.01	23.98	23.81
			24	24.79	24.67	24.42	23.38	23.35	23.00
		12	6	25.58	25.38	25.14	24.10	24.07	23.85
			0	24.86	24.66	24.48	23.48	23.40	23.12
	16QAM	1	0	23.78	23.55	23.33	22.58	22.43	22.32
			1	24.77	24.59	24.38	23.51	23.43	23.32
		1	23	24.62	24.44	24.21	23.44	23.37	23.10
			24	23.62	23.42	23.18	22.41	22.42	22.10
		12	6	24.76	24.61	24.36	23.45	23.39	22.86
			0	23.78	23.66	23.44	22.46	22.40	22.00
	64QAM	1	0	23.25	22.94	22.84	21.94	21.90	21.77
			1	23.16	22.97	22.78	21.89	21.83	21.82
		1	23	23.04	22.86	22.65	21.78	21.80	21.59
			24	23.07	22.83	22.59	21.84	21.83	21.51
		12	6	23.22	23.05	22.87	21.99	21.88	21.26
			0	23.26	23.09	22.88	22.00	21.92	21.49
	256QAM	1	0	21.44	21.21	21.04	20.68	20.50	20.49
			1	21.43	21.17	20.96	20.71	20.46	20.43
		1	23	21.21	21.07	20.88	20.50	20.46	20.26
			24	21.30	21.06	20.83	20.55	20.46	20.34
		12	6	21.28	20.99	20.87	19.97	19.89	19.81
			0	21.29	21.10	20.93	19.87	19.80	19.63

OUTPUT POWER FOR 5G NR n5 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				165800	167300	168800	165800	167300	168800
10.0	BPSK	1	0	25.43	25.30	25.16	23.98	23.87	23.85
			1	25.70	25.55	25.44	24.20	24.03	24.05
		1	50	25.45	25.32	25.21	23.99	23.97	23.83
			51	25.25	25.19	24.98	23.82	23.77	23.72
		25	12	25.55	25.42	25.31	24.08	24.06	23.90
			0	25.32	25.19	25.09	23.87	23.89	23.72
	QPSK	1	0	24.96	24.86	24.69	23.45	23.33	23.30
			1	25.63	25.52	25.38	24.11	24.00	23.98
		1	50	25.50	25.37	25.25	24.01	23.91	23.84
			51	24.71	24.59	24.46	23.22	23.22	22.84
		25	12	25.55	25.42	25.33	24.09	24.06	23.95
			0	24.83	24.68	24.63	23.44	23.33	23.22
	16QAM	1	0	23.68	23.65	23.42	22.51	22.48	22.44
			1	24.73	24.61	24.49	23.51	23.46	23.39
		1	50	24.55	24.45	24.25	23.35	23.35	23.03
			51	23.48	23.39	23.28	22.38	22.36	22.08
		25	12	24.80	24.70	24.56	23.37	23.40	23.21
			0	23.83	23.73	23.57	22.32	22.36	22.18
	64QAM	1	0	23.15	23.03	22.81	21.94	21.69	21.85
			1	23.10	23.06	22.92	21.90	21.77	21.69
		1	50	22.94	22.94	22.70	21.73	21.76	21.42
			51	23.00	22.84	22.72	21.58	21.76	21.49
		25	12	23.24	23.21	23.06	21.94	21.91	21.75
			0	23.31	23.18	23.10	21.87	21.85	21.68
	256QAM	1	0	21.32	21.24	21.06	20.48	20.41	20.44
			1	21.32	21.23	21.07	20.51	20.43	20.32
		1	50	21.19	21.05	20.95	20.46	20.40	20.27
			51	21.19	21.08	21.03	20.53	20.48	20.29
		25	12	21.30	21.16	21.07	19.86	19.81	19.63
			0	21.29	21.17	21.00	19.81	19.85	19.67

OUTPUT POWER FOR 5G NR n5 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				166300	167300	168300	166300	167300	168300
				831.5 MHz	836.5 MHz	841.5 MHz	831.5 MHz	836.5 MHz	841.5 MHz
15.0	BPSK	1	0	25.43	25.33	25.23	24.02	23.92	23.88
		1	1	25.63	25.58	25.45	24.19	24.13	24.05
		1	77	25.37	25.36	25.24	24.04	23.94	23.81
		1	78	25.22	25.14	25.02	23.83	23.65	23.68
		36	18	25.47	25.32	25.34	24.00	23.92	23.84
		75	0	25.26	25.14	25.10	23.88	23.74	23.70
	QPSK	1	0	24.92	24.80	24.80	23.48	23.36	23.35
		1	1	25.70	25.56	25.49	24.20	24.05	24.02
		1	77	25.45	25.39	25.27	24.01	23.84	23.77
		1	78	24.68	24.60	24.54	23.35	23.17	22.92
		36	18	25.49	25.44	25.37	24.11	23.99	23.89
		75	0	24.82	24.72	24.63	23.40	23.28	23.20
	16QAM	1	0	23.72	23.60	23.56	22.60	22.41	22.42
		1	1	24.78	24.68	24.60	23.54	23.38	23.38
		1	77	24.51	24.39	24.34	23.41	23.20	23.02
		1	78	23.49	23.32	23.26	22.36	22.14	22.04
		36	18	24.77	24.66	24.63	23.44	23.28	23.19
		75	0	23.77	23.66	23.64	22.42	22.30	22.23
	64QAM	1	0	23.09	23.16	23.03	22.01	21.81	21.72
		1	1	23.12	23.15	22.97	21.95	21.76	21.73
		1	77	22.86	22.83	22.75	21.90	21.71	21.50
		1	78	22.92	22.99	22.76	21.80	21.57	21.53
		36	18	23.27	23.22	23.11	21.85	21.78	21.66
		75	0	23.31	23.24	23.12	21.92	21.83	21.72
	256QAM	1	0	21.31	21.31	21.20	20.55	20.45	20.40
		1	1	21.36	21.29	21.25	20.48	20.43	20.42
		1	77	21.23	21.10	21.00	20.37	20.42	20.28
		1	78	21.24	21.06	21.02	20.38	20.32	20.14
		36	18	21.21	21.17	21.03	19.92	19.81	19.71
		75	0	21.21	21.18	21.06	19.89	19.81	19.67

OUTPUT POWER FOR 5G NR n5 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				166800	167300	167800	166800	167300	167800
				834.0 MHz	836.5 MHz	839.0 MHz	834.0 MHz	836.5 MHz	839.0 MHz
20.0	BPSK	1	0	25.45	25.36	25.42	24.07	23.98	23.96
		1	1	25.64	25.65	25.59	24.18	24.15	24.12
		1	104	25.32	25.34	25.30	23.95	23.89	23.83
		1	105	25.21	25.09	25.03	23.69	23.68	23.70
		50	25	25.49	25.50	25.50	24.01	24.03	23.97
		100	0	25.29	25.27	25.22	23.84	23.83	23.73
	QPSK	1	0	24.93	24.96	24.97	23.45	23.45	23.37
		1	1	25.66	25.70	25.61	24.20	24.15	24.09
		1	104	25.46	25.32	25.36	23.86	23.86	23.75
		1	105	24.61	24.59	24.58	23.13	23.10	22.95
		50	25	25.52	25.52	25.46	24.06	24.01	23.91
		100	0	24.81	24.75	24.73	23.33	23.33	23.27
	16QAM	1	0	23.86	23.63	23.65	22.44	22.49	22.52
		1	1	24.85	24.70	24.76	23.53	23.44	23.43
		1	104	24.39	24.50	24.44	23.25	23.07	23.03
		1	105	23.45	23.41	23.30	22.32	22.27	22.17
		50	25	24.81	24.77	24.71	23.32	23.30	23.24
		100	0	23.72	23.78	23.73	22.34	22.34	22.27
	64QAM	1	0	23.11	23.17	23.20	21.98	21.83	21.77
		1	1	23.19	23.11	23.08	21.73	21.77	21.72
		1	104	22.86	22.90	22.86	21.69	21.50	21.57
		1	105	22.96	22.92	22.79	21.57	21.61	21.43
		50	25	23.22	23.23	23.20	21.79	21.77	21.68
		100	0	23.25	23.25	23.27	21.79	21.77	21.73
	256QAM	1	0	21.29	21.29	21.22	20.53	20.50	20.42
		1	1	21.33	21.33	21.39	20.51	20.45	20.45
		1	104	21.20	21.11	21.11	20.33	20.26	20.22
		1	105	21.21	21.18	21.11	20.34	20.31	20.26
		50	25	21.21	21.22	21.19	19.80	19.75	19.74
		100	0	21.26	21.26	21.21	19.83	19.80	19.80

8.2. LTE BAND 7 AND 5G NR n7

LTE BAND 7

Test Engineer ID:	44353	Test Date:	11/12/2021
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OUTPUT POWER FOR LTE BAND 7 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				20775	21100	21425	20775	21100	21425
5.0	QPSK	1	0	25.55	25.64	25.56	22.22	22.32	22.17
		1	12	25.56	25.61	25.59	22.23	22.26	22.21
		1	24	25.61	25.66	25.70	22.40	22.31	22.11
		12	0	24.93	25.16	24.90	21.43	21.38	21.14
		12	6	24.93	24.93	25.13	21.49	21.38	21.16
		12	11	25.02	25.03	25.15	21.52	21.37	21.15
		25	0	25.03	25.02	25.06	21.52	21.35	21.17
		1	0	25.16	25.43	25.20	21.19	20.75	20.59
	16QAM	1	12	25.35	24.99	25.28	21.30	20.71	20.58
		1	24	25.29	25.24	25.25	21.39	20.73	20.52
		12	0	23.83	24.12	24.11	19.96	19.74	19.54
		12	6	24.01	24.30	24.14	20.00	19.74	19.57
		12	11	24.00	24.02	24.18	20.01	19.75	19.56
		25	0	23.96	24.03	24.14	19.91	19.65	19.52
		1	0	24.19	24.38	24.28	18.57	19.20	19.20
		1	12	24.47	24.46	24.50	18.78	19.17	19.17
	64QAM	1	24	24.48	24.33	24.36	19.04	19.18	19.16
		12	0	23.11	23.02	22.92	18.26	19.16	19.15
		12	6	23.03	23.09	23.13	18.34	19.17	19.15
		12	11	23.06	23.24	23.05	18.38	19.16	19.15
		25	0	23.01	23.13	23.10	18.29	19.15	19.16
		1	0	21.11	20.99	21.37	16.20	15.93	16.20
		1	12	21.26	21.05	21.31	16.25	15.97	16.19
		1	24	21.10	20.99	21.20	16.45	15.90	16.13
	256QAM	12	0	21.05	21.05	21.14	16.24	16.21	16.09
		12	6	21.05	21.12	21.11	16.34	16.25	16.12
		12	11	21.03	21.19	21.08	16.37	16.24	16.12
		25	0	21.02	21.11	21.04	16.33	16.27	16.11

OUTPUT POWER FOR LTE BAND 7 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				20800	21100	21400	20800	21100	21400
10.0	QPSK	1	0	25.62	25.70	25.54	21.70	22.32	22.18
		1	24	25.50	25.57	25.60	22.04	22.25	22.12
		1	49	25.45	25.65	25.61	22.40	22.28	22.13
		25	0	24.93	25.12	25.06	21.66	21.42	21.29
		25	12	24.90	25.09	25.10	21.68	21.46	21.32
		25	24	24.93	25.01	25.01	21.66	21.35	21.19
		50	0	24.91	25.12	25.11	21.63	21.43	21.28
		1	0	25.09	25.38	25.33	20.78	20.66	20.97
	16QAM	1	24	25.18	25.25	25.13	20.99	20.52	20.88
		1	49	25.15	25.19	25.24	20.98	20.60	20.83
		25	0	23.99	24.24	24.11	20.03	19.77	19.65
		25	12	23.99	24.19	24.17	20.03	19.77	19.65
		25	24	24.01	24.08	24.10	20.04	19.69	19.52
		50	0	23.96	24.10	24.11	19.93	19.70	19.62
		1	0	24.17	24.21	24.03	17.93	19.16	19.04
		1	24	24.28	24.38	24.40	18.38	19.15	19.02
	64QAM	1	49	23.97	24.14	24.41	18.86	19.14	19.00
		25	0	23.07	23.17	23.09	18.37	19.15	18.99
		25	12	23.04	23.10	23.12	18.41	19.15	19.01
		25	24	22.98	23.02	23.16	18.43	19.14	19.03
		50	0	22.92	23.07	23.07	18.32	19.16	19.02
		1	0	21.11	21.26	21.07	16.17	16.80	15.89
		1	24	21.05	21.30	21.36	16.36	16.62	15.80
		1	49	21.04	21.21	21.16	16.36	16.70	15.74
	256QAM	25	0	20.99	21.08	21.07	16.39	16.32	16.21
		25	12	20.90	21.14	21.09	16.41	16.33	16.22
		25	24	20.95	21.04	20.99	16.41	16.26	16.13
		50	0	20.90	21.07	21.10	16.34	16.30	16.14

OUTPUT POWER FOR LTE BAND 7 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				20825	21100	21375	20825	21100	21375
15.0	QPSK	1	0	25.46	25.51	25.57	21.61	22.40	22.34
		1	37	25.45	25.70	25.34	22.08	22.29	22.20
		1	74	25.46	25.65	25.51	22.03	22.34	22.19
		36	0	24.74	24.97	24.93	21.74	21.45	21.39
		36	16	24.81	24.92	24.93	21.79	21.46	21.37
		36	35	24.86	24.87	24.91	21.71	21.38	21.27
		75	0	24.80	24.89	24.97	21.65	21.43	21.32
		1	0	25.19	25.19	25.43	21.22	20.69	21.06
	16QAM	1	37	25.27	25.02	25.03	21.36	20.58	20.96
		1	74	25.28	25.11	25.19	21.34	20.58	20.87
		36	0	23.80	24.05	23.99	19.98	19.76	19.76
		36	16	23.86	23.98	23.98	20.03	19.75	19.75
		36	35	23.82	23.97	23.92	19.94	19.67	19.64
		75	0	23.85	23.97	24.01	19.93	19.73	19.69
		1	0	24.44	24.32	24.27	18.75	19.17	19.61
		1	37	24.21	24.40	23.68	19.23	19.15	19.58
	64QAM	1	74	24.01	24.31	24.29	19.25	19.14	19.59
		36	0	22.95	23.06	23.07	18.39	19.16	19.57
		36	16	22.85	23.03	23.01	18.47	19.15	19.58
		36	35	22.91	23.03	22.84	18.41	19.13	19.56
		75	0	22.89	23.06	22.94	18.32	19.14	19.59
		1	0	21.10	20.96	21.32	16.57	16.07	16.32
		1	37	21.00	21.15	21.13	16.79	16.07	16.39
		1	74	21.07	21.38	20.99	16.79	16.04	16.29
	256QAM	36	0	20.86	20.98	20.98	16.39	16.26	16.16
		36	16	20.83	21.11	20.93	16.51	16.27	16.21
		36	35	20.84	20.91	20.87	16.43	16.19	16.10
		75	0	20.87	20.93	20.91	16.38	16.26	16.18

OUTPUT POWER FOR LTE BAND 7 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				20850	21100	21350	20850	21100	21350
20.0	QPSK	1	0	25.52	25.33	25.50	22.29	22.33	22.15
		1	49	25.32	25.41	25.56	22.40	22.23	22.09
		1	99	25.70	25.51	25.66	22.37	22.26	22.07
		50	0	24.76	24.87	24.90	21.51	21.44	21.28
		50	24	24.79	24.88	24.91	21.49	21.37	21.25
		50	49	24.77	24.73	24.73	21.44	21.28	21.13
		100	0	24.76	24.86	24.87	21.45	21.36	21.24
		1	0	25.29	24.72	24.79	21.14	21.07	21.04
	16QAM	1	49	24.92	24.73	24.91	21.18	20.94	21.01
		1	99	25.40	24.99	24.83	21.14	20.95	20.93
		50	0	23.75	23.92	23.84	19.83	19.67	19.62
		50	24	23.80	23.92	23.94	19.82	19.62	19.62
		50	49	23.78	23.77	23.74	19.75	19.56	19.48
		100	0	23.66	23.89	23.88	19.76	19.64	19.60
		1	0	24.17	24.28	24.01	18.64	19.35	19.02
		1	49	23.80	23.81	24.20	19.29	19.34	19.00
	64QAM	1	99	24.07	23.85	24.05	18.99	19.34	19.00
		50	0	22.66	22.84	22.91	18.26	19.35	19.00
		50	24	22.79	22.96	22.88	18.25	19.33	19.00
		50	49	22.79	22.77	22.80	18.20	19.32	19.00
		100	0	22.80	22.93	22.85	18.18	19.33	18.99
		1	0	21.05	20.88	20.47	16.13	16.23	15.86
		1	49	21.07	20.85	21.43	16.39	16.21	15.94
		1	99	20.71	20.95	20.94	16.30	16.21	15.83
	256QAM	50	0	20.77	20.83	20.82	16.22	16.18	16.07
		50	24	20.82	20.93	20.87	16.21	16.17	16.11
		50	49	20.76	20.75	20.84	16.18	16.09	16.00
		100	0	20.70	20.87	20.82	16.16	16.13	16.08

5G NR n7

Test Engineer ID:	19146	Test Date:	9/10/2021
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OUTPUT POWER FOR 5G NR n7 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				500500	507000	513500	500500	507000	513500
5.0	BPSK	1	0	25.55	25.34	25.40	21.45	21.90	21.72
		1	1	25.70	25.51	25.59	21.78	22.15	21.97
		1	23	25.59	25.56	25.70	21.94	22.15	21.97
		1	24	25.33	25.34	25.43	21.76	21.90	21.71
		12	6	25.44	25.49	25.59	21.94	22.20	21.98
		25	0	25.22	25.29	25.38	21.80	21.99	21.51
	QPSK	1	0	24.78	24.78	24.83	20.39	21.45	21.15
		1	1	25.51	25.55	25.62	21.31	22.32	21.85
		1	23	25.48	25.56	25.66	21.77	22.40	21.15
		1	24	24.69	24.79	24.91	20.88	21.48	20.43
		12	6	25.45	25.55	25.57	21.72	22.32	21.97
		25	0	24.76	24.80	24.90	20.39	21.51	20.89
	16QAM	1	0	24.12	24.04	24.16	19.57	20.58	20.38
		1	1	25.15	25.13	25.18	20.63	21.56	21.28
		1	23	25.05	25.18	25.21	21.08	21.72	20.72
		1	24	24.08	24.13	24.19	19.95	20.58	19.80
		12	6	24.68	24.70	24.84	20.66	21.39	21.08
		25	0	23.75	23.80	23.80	19.75	20.47	20.24
	64QAM	1	0	23.21	23.27	23.25	18.81	20.04	19.78
		1	1	23.24	23.25	23.22	18.87	20.00	19.80
		1	23	23.22	23.16	23.34	19.37	20.02	19.28
		1	24	23.09	23.21	23.30	19.34	19.96	19.30
		12	6	23.09	23.18	23.20	19.52	19.88	19.64
		25	0	23.26	23.28	23.33	19.18	19.89	19.60
	256QAM	1	0	21.27	21.35	21.27	17.18	17.61	17.42
		1	1	21.28	21.35	21.30	17.20	17.64	17.43
		1	23	21.26	21.35	21.33	17.57	17.68	17.41
		1	24	21.20	21.37	21.45	17.66	17.55	17.42
		12	6	21.13	21.22	21.21	17.71	17.82	17.64
		25	0	21.11	21.22	21.24	17.66	17.79	17.61

OUTPUT POWER FOR 5G NR n7 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				501000	507000	513000	501000	507000	513000
10.0	BPSK	1	0	25.28	25.33	25.34	21.85	22.06	21.79
		1	1	25.54	25.54	25.58	22.09	22.32	22.06
		1	50	25.47	25.49	25.70	22.36	22.25	22.11
		1	51	25.30	25.30	25.46	22.20	22.03	21.73
		25	12	25.45	25.55	25.57	22.35	22.30	22.10
		50	0	25.29	25.37	25.40	22.10	22.14	21.74
	QPSK	1	0	24.78	24.79	24.80	20.42	21.31	21.14
		1	1	25.46	25.53	25.51	21.39	22.29	22.17
		1	50	25.49	25.44	25.67	22.02	22.40	21.36
		1	51	24.68	24.71	24.88	21.11	21.58	20.55
		25	12	25.47	25.57	25.65	21.79	22.35	22.19
		50	0	24.72	24.82	24.87	20.86	21.62	21.42
	16QAM	1	0	24.13	24.15	24.17	19.64	20.54	20.44
		1	1	25.17	25.17	25.23	20.65	21.53	21.40
		1	50	25.01	25.00	25.15	21.33	21.67	20.75
		1	51	24.00	24.01	24.15	20.54	20.68	19.90
		25	12	24.72	24.81	24.84	21.11	21.58	21.41
		50	0	23.72	23.77	23.85	19.98	20.58	20.37
	64QAM	1	0	23.30	23.24	23.23	19.00	19.85	19.77
		1	1	23.17	23.29	23.28	18.92	20.00	19.89
		1	50	23.17	23.14	23.33	19.90	20.13	19.46
		1	51	23.09	23.09	23.33	20.05	20.10	19.39
		25	12	23.23	23.29	23.33	19.73	20.04	19.85
		50	0	23.23	23.26	23.30	19.55	20.01	19.82
	256QAM	1	0	21.30	21.30	21.33	17.29	17.80	17.56
		1	1	21.27	21.28	21.29	17.32	17.78	17.60
		1	50	21.24	21.29	21.38	17.77	17.76	17.57
		1	51	21.29	21.18	21.29	17.84	17.70	17.49
		25	12	21.10	21.19	21.27	17.84	17.92	17.71
		50	0	21.22	21.23	21.30	17.87	17.99	17.76

OUTPUT POWER FOR 5G NR n7 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				501500	507000	512500	501500	507000	512500
15.0	BPSK	1	0	25.27	25.33	25.49	21.65	21.97	21.56
		1	1	25.50	25.53	25.65	21.88	22.22	21.72
		1	77	25.52	25.61	25.63	22.19	22.29	21.68
		1	78	25.33	25.44	25.51	21.99	22.04	21.47
		36	18	25.30	25.44	25.43	22.12	22.14	21.60
		75	0	25.17	25.27	25.29	21.94	21.94	21.37
	QPSK	1	0	24.74	24.76	24.94	20.41	20.94	21.11
		1	1	25.51	25.52	25.64	21.37	22.01	21.83
		1	77	25.52	25.61	25.70	22.05	22.40	21.71
		1	78	24.74	24.93	24.94	21.20	21.63	21.03
		36	18	25.41	25.53	25.55	21.79	22.24	21.71
		75	0	24.67	24.78	24.77	20.90	21.44	20.99
	16QAM	1	0	24.06	24.02	24.18	19.65	20.25	19.82
		1	1	25.06	25.14	25.13	20.69	21.24	20.78
		1	77	25.01	25.11	25.23	21.42	21.76	20.77
		1	78	24.02	24.17	24.21	20.39	20.73	19.71
		36	18	24.62	24.74	24.80	21.14	21.47	20.87
		75	0	23.54	23.73	23.71	19.93	20.49	19.92
	64QAM	1	0	23.11	23.31	23.12	18.98	19.64	19.44
		1	1	23.09	23.21	23.11	19.05	19.64	19.42
		1	77	23.12	23.28	23.21	19.75	20.20	19.50
		1	78	22.96	23.15	23.18	19.82	20.12	19.51
		36	18	23.01	23.25	23.24	19.73	19.85	19.44
		75	0	23.00	23.27	23.20	19.56	19.84	19.40
	256QAM	1	0	21.04	21.21	21.33	17.19	17.65	17.20
		1	1	21.03	21.20	21.31	17.17	17.65	17.34
		1	77	21.17	21.37	21.38	17.69	17.75	17.34
		1	78	21.22	21.37	21.45	17.77	17.74	17.34
		36	18	20.94	21.18	21.17	17.84	17.83	17.44
		75	0	20.96	21.19	21.12	17.82	17.79	17.41

OUTPUT POWER FOR 5G NR n7 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				502000	507000	512000	502000	507000	512000
20.0	BPSK	1	0	25.10	25.35	25.60	25.10	25.35	25.60
		1	1	25.41	25.53	25.67	22.08	22.40	22.25
		1	104	25.53	25.66	25.61	22.32	22.35	22.17
		1	105	25.36	25.47	25.40	22.10	22.14	22.03
		50	25	25.39	25.51	25.64	22.35	22.31	22.16
		100	0	25.17	25.31	25.48	22.02	22.10	21.93
	QPSK	1	0	24.71	24.84	24.95	21.19	21.66	21.49
		1	1	25.38	25.57	25.65	22.04	22.40	22.25
		1	104	25.51	25.70	25.60	22.33	22.30	22.18
		1	105	24.80	24.93	24.91	21.68	21.57	21.46
		50	25	25.39	25.46	25.64	22.40	22.29	22.16
		100	0	24.60	24.81	24.90	21.52	21.54	21.46
	16QAM	1	0	23.99	24.20	24.27	19.88	20.47	20.17
		1	1	24.99	25.06	25.20	20.91	21.39	21.30
		1	104	25.12	25.19	25.24	21.40	21.44	21.22
		1	105	24.07	24.24	24.19	20.47	20.34	20.28
		50	25	24.57	24.74	24.87	21.63	21.52	21.49
		100	0	23.62	23.79	23.92	20.51	20.50	20.50
	64QAM	1	0	23.06	23.10	23.39	19.35	20.15	19.99
		1	1	23.09	23.26	23.32	19.68	19.94	20.13
		1	104	23.04	23.15	23.20	20.29	20.10	20.05
		1	105	23.08	23.25	23.35	20.13	19.98	20.07
		50	25	23.05	23.28	23.34	20.14	20.02	20.02
		100	0	23.06	23.28	23.37	20.06	20.00	20.01
	256QAM	1	0	21.08	21.03	21.19	17.61	17.83	17.72
		1	1	21.03	21.16	21.33	17.54	17.92	17.78
		1	104	21.16	21.42	21.44	18.03	17.85	17.88
		1	105	21.20	21.29	21.33	18.04	17.85	17.86
		50	25	21.07	21.20	21.28	18.17	18.01	18.00
		100	0	21.05	21.17	21.27	18.00	18.01	17.97

OUTPUT POWER FOR 5G NR n7 (25.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				502500	507000	511500	502500	507000	511500
25.0	BPSK	1	0	23.91	23.99	24.03	20.45	20.87	20.72
		1	1	24.34	24.48	24.54	21.01	21.40	21.27
		1	131	24.48	24.59	24.48	21.34	21.32	21.17
		1	132	24.00	24.03	24.11	20.85	20.81	20.65
		64	32	24.40	24.41	24.50	21.31	21.32	21.22
		128	0	23.85	23.88	23.99	20.79	20.81	20.71
	QPSK	1	0	23.34	23.50	23.53	20.16	20.39	20.24
		1	1	24.40	24.52	24.54	21.15	21.38	21.29
		1	131	24.70	24.62	24.50	21.36	21.35	21.12
		1	132	23.52	23.44	23.50	20.33	20.27	20.21
		64	32	24.36	24.42	24.54	21.33	21.32	21.19
		128	0	23.33	23.37	23.52	20.30	20.29	20.18
	16QAM	1	0	22.62	22.86	22.86	19.25	19.65	19.43
		1	1	23.71	23.76	23.94	20.32	20.49	20.23
		1	131	23.79	23.88	23.70	20.62	20.36	20.16
		1	132	22.77	22.80	22.74	19.62	19.43	19.10
		64	32	23.34	23.34	23.53	20.28	20.26	20.06
		128	0	22.31	22.37	22.48	19.26	19.23	19.00
	64QAM	1	0	21.72	21.97	21.91	18.53	18.76	18.53
		1	1	21.61	21.85	21.83	18.56	18.78	18.43
		1	131	21.77	21.97	21.77	18.73	18.62	18.47
		1	132	21.87	21.88	21.87	18.67	18.57	18.39
		64	32	21.81	21.80	21.88	18.84	18.69	18.53
		128	0	21.77	21.83	21.87	18.74	18.63	18.47
	256QAM	1	0	19.82	19.88	20.02	16.33	16.45	16.32
		1	1	19.74	19.96	20.06	16.46	16.49	16.45
		1	131	20.03	20.13	19.96	16.78	16.61	16.57
		1	132	20.10	20.04	20.01	16.81	16.60	16.51
		64	32	19.75	19.77	19.87	16.73	16.56	16.40
		128	0	19.74	19.86	19.88	16.61	16.54	16.40

OUTPUT POWER FOR 5G NR n7 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				503000	507000	511000	503000	507000	511000
30.0	BPSK	1	0	23.97	24.05	24.06	20.49	20.75	20.78
		1	1	24.52	24.61	24.58	21.10	21.31	21.26
		1	158	24.61	24.68	24.57	21.40	21.31	21.15
		1	159	24.16	24.21	24.06	20.84	20.77	20.67
		80	40	24.50	24.52	24.63	21.36	21.28	21.19
		160	0	24.00	24.02	24.14	20.74	20.79	20.71
	QPSK	1	0	23.53	23.59	23.60	20.08	20.25	20.29
		1	1	24.57	24.69	24.60	21.14	21.31	21.35
		1	158	24.63	24.70	24.62	21.37	21.37	21.25
		1	159	23.71	23.69	23.61	20.42	20.40	20.22
		80	40	24.55	24.54	24.65	21.32	21.35	21.28
		160	0	23.52	23.53	23.58	20.25	20.38	20.23
	16QAM	1	0	22.77	22.81	22.84	19.12	19.53	19.47
		1	1	23.87	23.85	23.82	20.30	20.47	20.42
		1	158	23.90	23.94	23.91	20.59	20.45	20.32
		1	159	22.97	22.95	22.94	19.48	19.42	19.42
		80	40	23.47	23.49	23.61	20.35	20.31	20.23
		160	0	22.43	22.48	22.58	19.28	19.32	19.20
	64QAM	1	0	21.79	22.01	21.84	18.61	18.55	18.72
		1	1	21.84	21.98	22.02	18.47	18.63	18.57
		1	158	21.90	21.91	21.83	18.80	18.74	18.75
		1	159	21.94	22.00	21.80	18.65	18.76	18.63
		80	40	21.90	21.92	22.03	18.84	18.79	18.64
		160	0	21.98	22.02	22.10	18.76	18.84	18.66
	256QAM	1	0	19.95	20.07	19.99	16.41	16.68	16.69
		1	1	19.88	20.04	20.08	16.35	16.57	16.64
		1	158	20.32	20.49	20.21	17.01	16.74	16.72
		1	159	20.36	20.34	20.20	17.02	16.82	16.67
		80	40	19.90	19.90	20.05	16.70	16.71	16.57
		160	0	19.90	19.92	20.03	16.67	16.72	16.52

OUTPUT POWER FOR 5G NR n7 (40.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				504000	507000	510000	504000	507000	510000
40.0	BPSK	1	0	23.98	24.00	24.12	20.55	20.80	20.76
		1	1	24.41	24.52	24.67	21.09	21.35	21.21
		1	214	24.61	24.70	24.56	21.25	21.19	21.11
		1	215	24.14	24.16	24.17	20.76	20.73	20.61
		108	54	24.54	24.51	24.51	21.38	21.30	21.11
		216	0	24.05	24.07	23.99	20.80	20.82	20.69
	QPSK	1	0	23.54	23.60	23.57	20.17	20.30	20.31
		1	1	24.51	24.53	24.58	21.20	21.27	21.11
		1	214	24.65	24.48	24.65	21.35	21.29	20.95
		1	215	23.55	23.66	23.61	20.41	20.19	20.19
		108	54	24.54	24.57	24.63	21.40	21.32	21.18
		216	0	23.56	23.59	23.56	20.31	20.32	20.24
	16QAM	1	0	22.72	22.68	22.95	19.27	19.48	19.43
		1	1	23.85	23.76	24.06	20.18	20.32	20.47
		1	214	23.96	23.88	23.99	20.39	20.31	20.35
		1	215	22.76	22.77	22.85	19.43	19.32	19.25
		108	54	23.47	23.50	23.55	20.42	20.31	20.11
		216	0	22.54	22.50	22.54	19.28	19.30	19.23
	64QAM	1	0	21.75	21.75	21.89	18.37	18.71	18.71
		1	1	22.02	21.87	21.91	18.47	18.70	18.54
		1	214	21.81	21.94	21.80	18.66	18.65	18.48
		1	215	21.98	21.79	21.86	18.73	18.69	18.50
		108	54	21.96	21.90	21.93	18.85	18.79	18.48
		216	0	22.01	22.02	22.01	18.78	18.80	18.64
	256QAM	1	0	19.94	20.00	20.02	16.46	16.50	16.50
		1	1	20.02	20.08	20.22	16.49	16.66	16.71
		1	214	20.21	20.34	20.27	16.45	16.73	16.73
		1	215	20.12	20.28	20.00	16.56	16.56	16.65
		108	54	19.87	19.92	19.88	16.45	16.66	16.50
		216	0	19.98	19.96	19.91	16.54	16.66	16.50

8.3. LTE BAND 12 AND 5G NR n12

LTE BAND 12

Test Engineer ID:	52275	Test Date:	11/11/2021
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OUTPUT POWER FOR LTE BAND 12 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23017	23095	23173	23017	23095	23173
				699.7 MHz	707.5 MHz	715.3 MHz	699.7 MHz	707.5 MHz	715.3 MHz
1.4	QPSK	1	0	25.52	25.53	25.59	24.06	24.14	24.15
		1	2	25.54	25.57	25.67	24.04	24.19	24.14
		1	5	25.59	25.53	25.50	24.03	24.09	24.13
		3	0	25.60	25.54	25.50	24.06	24.05	24.15
		3	1	25.70	25.62	25.68	24.07	24.13	24.16
		3	2	25.70	25.55	25.65	24.07	24.09	24.20
	16QAM	6	0	24.94	24.93	24.87	23.14	23.11	23.13
		1	0	25.06	25.07	25.19	23.15	23.28	23.70
		1	2	25.31	25.15	25.32	23.28	23.37	23.73
		1	5	25.24	25.11	25.07	23.20	23.27	23.61
		3	0	25.12	25.07	25.00	23.35	23.22	23.39
		3	1	25.11	25.02	24.96	23.41	23.23	23.45
	64QAM	3	2	25.16	25.00	25.06	23.41	23.26	23.48
		6	0	23.99	23.97	23.90	22.35	22.31	22.05
		1	0	24.25	24.07	24.19	22.73	22.10	22.53
		1	2	24.35	24.17	24.37	22.92	22.08	22.53
		1	5	24.16	24.02	24.20	22.75	22.05	22.54
		3	0	24.20	23.99	24.04	22.81	22.07	22.55
	256QAM	3	1	24.10	24.09	24.05	22.74	22.07	22.54
		3	2	24.18	24.15	24.14	22.69	22.07	22.55
		6	0	23.03	23.02	22.91	21.32	22.08	22.55
		1	0	20.97	20.97	20.98	19.40	18.83	19.28
		1	2	21.01	21.05	21.18	19.55	19.17	19.37
		1	5	21.05	21.01	21.03	19.46	19.13	19.27
	256QAM	3	0	21.08	20.98	20.93	19.34	19.14	19.34
		3	1	21.14	21.07	21.10	19.38	19.24	19.25
		3	2	21.12	20.96	21.14	19.32	19.23	19.26
		6	0	20.92	20.98	20.83	19.31	19.36	19.25

OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23025	23095	23165	23025	23095	23165
				700.5 MHz	707.5 MHz	714.5 MHz	700.5 MHz	707.5 MHz	714.5 MHz
3.0	QPSK	1	0	25.70	25.53	25.59	24.04	24.06	24.20
		1	7	25.58	25.62	25.67	24.06	24.08	24.08
		1	14	25.58	25.52	25.64	23.97	24.02	24.10
		8	0	25.03	24.86	24.95	23.08	23.03	23.06
		8	4	24.95	24.96	24.95	23.11	23.11	23.08
		8	7	24.97	24.98	25.01	23.10	23.10	23.17
	16QAM	15	0	24.96	24.89	25.04	23.11	23.12	23.07
		1	0	25.21	25.14	25.25	23.12	23.14	23.54
		1	7	25.20	25.10	25.21	23.17	22.98	23.44
		1	14	25.04	25.07	25.06	23.04	22.99	23.42
		8	0	24.14	23.95	24.01	22.17	22.16	22.14
		8	4	24.02	24.04	23.97	22.14	22.23	22.18
	64QAM	8	7	23.97	23.95	23.99	22.14	22.24	22.22
		15	0	24.03	23.96	23.91	22.06	22.16	22.13
		1	0	24.18	24.31	24.14	22.29	22.63	22.20
		1	7	24.19	24.27	24.22	22.28	22.63	22.21
		1	14	24.12	24.08	24.21	22.29	22.61	22.20
		8	0	23.05	22.98	23.06	21.31	22.61	22.21
	256QAM	8	4	23.02	23.09	23.08	21.27	22.63	22.20
		8	7	23.00	23.06	23.02	21.26	22.62	22.23
		15	0	22.95	22.97	22.88	21.26	22.61	22.20
		1	0	21.04	21.04	21.10	19.04	19.14	19.47
		1	7	21.01	21.14	21.18	19.00	19.22	19.48
		1	14	21.09	21.14	21.03	18.98	19.12	19.43
	256QAM	8	0	21.01	20.88	20.94	19.19	19.21	19.16
		8	4	21.09	21.04	20.96	19.23	19.33	19.21
		8	7	20.93	20.99	20.97	19.22	19.32	19.20
		15	0	20.99	20.96	20.93	19.32	19.24	19.15

OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23035	23095	23155	23035	23095	23155
5.0	QPSK			701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz
		1	0	25.53	25.56	25.63	24.12	24.20	24.03
		1	12	25.60	25.47	25.70	24.07	24.03	24.10
		1	24	25.66	25.60	25.67	24.04	24.06	24.00
		12	0	25.06	24.88	24.91	23.10	23.04	23.06
		12	6	25.15	25.01	24.91	23.14	23.11	23.07
		12	11	24.94	24.89	25.05	23.10	23.05	23.10
		25	0	25.01	25.04	24.90	23.08	23.09	23.10
	16QAM	1	0	25.30	25.26	25.07	23.32	23.31	23.61
		1	12	24.98	25.19	25.28	23.15	23.18	23.62
		1	24	25.17	25.08	25.22	23.27	23.22	23.59
		12	0	23.89	24.00	24.05	22.13	22.10	22.25
		12	6	24.00	24.00	24.02	22.19	22.17	22.23
		12	11	24.00	23.87	24.05	22.14	22.11	22.25
	64QAM	25	0	23.95	24.08	24.04	22.07	22.11	22.14
		1	0	24.27	24.25	24.16	22.68	22.52	22.08
		1	12	24.31	24.37	24.22	22.66	22.51	22.08
		1	24	24.32	24.05	24.00	22.67	22.52	22.08
		12	0	23.13	23.00	23.01	21.12	22.51	22.08
		12	6	23.11	22.98	23.02	21.21	22.51	22.09
5.0	256QAM	12	11	22.91	22.71	23.17	21.15	22.51	22.08
		25	0	23.09	23.00	22.94	21.18	22.50	22.09
		1	0	21.15	20.99	21.09	19.34	19.18	18.85
		1	12	21.24	21.01	21.40	19.33	19.21	18.86
		1	24	21.05	20.98	21.20	19.31	19.16	18.78
		12	0	20.93	20.93	21.13	19.23	19.16	19.10
	256QAM	12	6	21.14	20.82	20.88	19.29	19.19	19.15
		12	11	20.99	20.73	21.02	19.23	19.15	19.09
		25	0	20.94	21.07	20.95	19.26	19.17	19.17

OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23060	23095	23130	23060	23095	23130
10.0	QPSK			704.0 MHz	707.5 MHz	711.0 MHz	704.0 MHz	707.5 MHz	711.0 MHz
		1	0	25.67	25.70	25.70	24.12	24.12	24.20
		1	24	25.47	25.56	25.68	24.07	24.07	24.17
		1	49	25.63	25.46	25.47	24.10	24.07	24.20
		25	0	24.92	24.95	24.88	23.19	23.18	23.21
		25	12	25.12	25.01	25.05	23.22	23.22	23.27
		25	24	24.92	24.93	24.97	23.20	23.18	23.25
		50	0	24.99	24.99	25.00	23.23	23.21	23.28
	16QAM	1	0	25.45	25.03	25.37	23.20	23.17	23.66
		1	24	25.13	24.87	25.00	23.13	23.10	23.61
		1	49	25.11	24.90	25.29	23.13	23.14	23.69
		25	0	24.01	23.97	24.00	22.28	22.21	22.25
		25	12	24.11	24.03	24.06	22.34	22.29	22.32
		25	24	23.94	24.00	24.00	22.29	22.23	22.31
		50	0	23.99	23.93	24.03	22.30	22.21	22.29
	64QAM	1	0	23.98	24.02	23.92	22.36	22.42	22.15
		1	24	24.32	24.26	24.47	22.28	22.48	22.12
		1	49	24.21	23.79	24.36	22.28	22.46	22.14
		25	0	22.93	22.97	22.91	21.37	22.43	22.14
		25	12	23.05	22.99	23.06	21.40	22.48	22.15
		25	24	22.92	22.95	22.94	21.33	22.42	22.13
		50	0	23.02	22.91	22.99	21.37	22.48	22.12
	256QAM	1	0	21.17	20.76	20.64	18.99	19.24	19.69
		1	24	21.18	20.90	21.10	19.01	19.22	19.65
		1	49	21.01	21.09	21.06	19.01	19.24	19.72
		25	0	20.90	20.84	20.98	19.31	19.33	19.31
		25	12	21.06	20.95	20.97	19.39	19.38	19.34
		25	24	21.03	20.92	20.95	19.29	19.32	19.27
		50	0	20.92	20.98	21.04	19.32	19.32	19.30

5G NR n12

Test Engineer ID:	44353	Test Date:	11/12/2021
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OUTPUT POWER FOR 5G NR n12 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				140300	141500	142700	140300	141500	142700
				701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz
5.0	BPSK	1	0	25.50	25.42	25.32	23.64	23.61	24.05
		1	1	25.70	25.69	25.56	23.94	23.86	24.20
		1	23	25.56	25.50	25.42	23.83	23.75	24.18
		1	24	25.31	25.29	25.19	23.56	23.47	23.96
		12	6	25.50	25.58	25.47	23.81	23.75	24.10
		25	0	25.70	25.32	25.18	23.52	23.30	23.96
	QPSK	1	0	25.56	25.00	24.92	23.10	23.05	23.49
		1	1	25.31	25.70	25.59	23.80	23.67	24.17
		1	23	25.60	25.50	25.44	23.63	23.54	24.14
		1	24	24.81	24.79	24.72	22.96	22.90	23.37
		12	6	25.62	25.63	25.38	23.60	23.67	24.20
		25	0	24.90	24.85	24.73	22.50	22.60	23.45
	16QAM	1	0	24.17	24.29	23.98	21.98	21.86	22.39
		1	1	25.22	25.27	24.98	22.95	22.87	23.41
		1	23	25.04	24.99	24.91	22.84	22.91	23.26
		1	24	23.99	23.99	23.85	21.81	21.82	22.25
		12	6	24.85	24.89	24.80	22.34	22.99	23.32
		25	0	23.85	23.82	23.74	21.40	21.81	22.35
	64QAM	1	0	23.02	23.23	23.17	21.90	21.88	22.36
		1	1	23.11	23.32	23.17	21.79	21.77	22.17
		1	23	23.10	23.13	22.90	21.72	21.65	22.33
		1	24	22.91	23.11	22.96	21.65	22.15	22.27
		12	6	23.44	23.43	23.29	20.47	21.76	21.67
		25	0	23.33	23.35	23.21	20.52	21.68	21.70
	256QAM	1	0	21.18	21.27	21.16	19.39	19.82	19.74
		1	1	21.18	21.23	21.17	19.38	19.75	19.91
		1	23	21.09	21.08	20.96	19.38	19.82	19.81
		1	24	21.00	21.16	21.01	19.35	19.73	19.72
		12	6	21.36	21.40	21.21	19.30	19.99	19.92
		25	0	21.38	21.31	21.21	19.23	19.94	19.93

OUTPUT POWER FOR 5G NR n12 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				140800	141500	142200	140800	141500	142200
				704.0 MHz	707.5 MHz	711.0 MHz	704.0 MHz	707.5 MHz	711.0 MHz
10.0	BPSK	1	0	25.42	25.41	25.43	23.91	23.88	23.97
		1	1	25.69	25.59	25.65	24.06	24.06	24.20
		1	50	25.59	25.48	25.43	24.04	24.01	23.92
		1	51	25.36	25.30	25.22	23.82	23.78	23.68
		25	12	25.66	25.54	25.51	23.96	24.08	23.96
		50	0	25.50	25.38	25.34	23.82	23.84	23.81
	QPSK	1	0	24.98	24.93	24.97	23.35	23.31	23.45
		1	1	25.68	25.57	25.67	24.03	24.04	24.13
		1	50	25.61	25.50	25.49	24.00	23.90	23.92
		1	51	24.91	24.78	24.79	23.23	23.21	23.10
		25	12	25.70	25.63	25.56	24.06	24.07	24.04
		50	0	25.03	24.93	24.86	23.31	23.39	23.34
	16QAM	1	0	24.06	23.95	24.06	22.25	22.20	22.18
		1	1	25.16	25.06	25.09	23.27	23.25	23.36
		1	50	25.01	25.00	24.93	23.12	23.02	22.74
		1	51	24.00	23.91	23.81	22.11	21.97	21.75
		25	12	24.96	24.91	24.80	23.18	23.15	23.29
		50	0	24.06	24.00	23.88	22.21	22.34	22.38
	64QAM	1	0	23.25	23.19	23.23	22.22	22.14	22.09
		1	1	23.28	23.26	23.24	22.03	22.17	21.92
		1	50	23.18	23.15	23.06	22.19	21.85	21.64
		1	51	23.23	23.13	22.94	22.13	21.88	21.73
		25	12	23.45	23.41	23.28	21.53	21.66	21.89
		50	0	23.55	23.49	23.36	21.56	21.84	21.81
	256QAM	1	0	21.21	21.22	21.19	19.60	19.64	19.89
		1	1	21.23	21.21	21.30	19.77	19.63	19.83
		1	50	21.36	21.17	21.01	19.67	19.59	19.64
		1	51	21.21	21.15	21.07	19.58	19.61	19.59
		25	12	21.46	21.41	21.29	19.78	19.84	19.75
		50	0	21.50	21.39	21.34	19.79	19.86	19.81

OUTPUT POWER FOR 5G NR n12 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				141300	141500	141700	141300	141500	141700
15.0	BPSK	1	0	706.5 MHz	707.5 MHz	708.5 MHz	706.5 MHz	707.5 MHz	708.5 MHz
			1	25.46	25.38	25.40	23.97	23.97	23.91
			77	25.65	25.65	25.56	24.20	24.20	24.12
			78	25.38	25.38	25.33	23.92	23.92	23.96
			18	25.16	25.20	25.14	23.68	23.68	23.72
	QPSK	1	0	25.38	25.39	25.39	23.96	23.96	23.97
			77	25.23	25.17	25.22	23.81	23.81	23.78
			78	25.01	24.92	24.97	23.45	23.45	23.50
			18	25.70	25.62	25.69	24.13	24.13	24.14
			75	25.39	25.40	25.36	23.92	23.92	23.89
	16QAM	1	0	24.70	24.65	24.72	23.10	23.10	23.21
			77	24.70	24.67	24.56	23.29	23.29	23.23
			78	25.48	25.44	25.43	24.04	24.04	23.99
			18	24.79	24.78	24.79	23.34	23.34	23.25
			75	24.07	23.97	24.06	22.18	22.18	22.08
	64QAM	1	0	25.13	25.11	25.11	23.36	23.36	23.30
			77	24.84	24.82	24.77	22.74	22.74	22.99
			78	23.78	23.80	23.77	21.75	21.75	21.84
			18	23.31	23.30	23.22	21.89	21.89	21.71
			75	24.70	24.67	24.56	23.29	23.29	23.23
	256QAM	1	0	23.74	23.76	23.74	22.38	22.38	22.28
			77	23.18	23.31	23.16	22.09	22.09	21.97
			78	23.34	23.17	23.16	21.92	21.92	21.93
			18	23.00	22.88	22.96	21.64	21.64	21.70
			75	22.79	22.90	22.90	21.73	21.73	21.68
		1	0	23.30	23.30	23.22	21.89	21.89	21.71
			77	23.28	23.28	23.23	21.81	21.81	21.78
			78	21.19	21.34	21.32	19.89	19.89	19.73
			18	21.28	21.21	21.19	19.83	19.83	19.66
			75	21.13	21.00	20.86	19.64	19.64	19.60
		1	0	21.03	21.05	20.89	19.59	19.59	19.56
			77	21.23	21.23	21.19	19.75	19.75	19.72
			78	21.24	21.22	21.19	19.81	19.81	19.78
			18						
			75						

8.4. LTE BAND 13

Test Engineer ID:	10646	Test Date:	9/10/2021
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OUTPUT POWER FOR LTE BAND 13 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23205	23230	23255	23205	23230	23255
5.0	QPSK	1	0	25.62	25.55	25.50	23.09	23.72	23.79
			12	25.70	25.52	25.48	23.83	24.18	24.05
		1	24	25.63	25.43	25.36	23.97	23.99	24.20
			0	24.94	24.91	24.96	22.88	23.09	23.09
		12	6	25.07	24.98	25.05	23.02	23.23	23.09
			11	24.94	24.91	24.90	23.13	23.13	23.26
		25	0	25.04	24.98	24.97	23.09	23.21	23.21
	16QAM	1	0	25.19	25.19	25.23	22.54	23.09	23.25
			12	25.21	25.03	25.19	23.03	23.34	23.34
		1	24	25.18	25.20	25.28	23.24	23.31	23.39
			0	24.03	23.97	24.00	21.91	22.18	22.12
		12	6	24.03	24.04	24.09	22.28	22.27	22.12
			11	24.00	24.04	24.01	22.19	22.24	22.20
		25	0	24.00	24.01	24.02	22.18	22.17	22.26
	64QAM	1	0	23.35	24.22	24.26	20.84	21.37	21.83
			12	24.24	24.16	24.36	21.36	21.84	22.35
		1	24	24.46	24.22	24.24	21.79	22.09	22.42
			0	22.69	22.97	22.98	20.26	20.63	20.78
		12	6	23.05	23.03	23.09	20.49	20.71	21.02
			11	23.07	23.01	23.04	20.51	20.70	21.21
		25	0	22.94	23.03	23.06	20.46	20.73	20.98
	256QAM	1	0	21.08	21.06	21.18	19.19	19.23	19.50
			12	21.13	21.20	21.03	19.38	19.19	19.48
		1	24	21.16	21.04	20.93	19.43	19.29	19.46
			0	21.03	20.87	21.00	19.11	19.19	19.12
		12	6	21.07	21.01	21.06	19.26	19.25	19.17
			11	21.02	21.08	21.04	19.17	19.30	19.31
		25	0	21.12	21.03	21.03	19.20	19.29	19.25

OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				N/A	23230	N/A	N/A	23230	N/A
10.0	QPSK	1	0		25.61			23.58	
			24		25.50			24.20	
		1	49		25.70			24.06	
			0		24.94			23.16	
		25	12		24.96			23.28	
			24		24.98			23.22	
		50	0		25.03			23.22	
	16QAM	1	0		25.27			23.04	
			24		25.07			23.32	
		1	49		25.23			23.35	
			0		23.99			22.15	
		25	12		24.06			22.33	
			24		24.06			22.25	
		50	0		23.97			22.25	
	64QAM	1	0		23.52			20.94	
			24		24.24			21.83	
		1	49		24.04			22.67	
			0		23.03			20.49	
		25	12		23.03			20.72	
			24		22.96			20.85	
		50	0		23.07			20.70	
	256QAM	1	0		21.02			19.37	
			24		21.07			19.34	
		1	49		21.23			19.31	
			0		20.94			19.16	
		25	12		21.02			19.26	
			24		20.97			19.17	
		50	0		21.00			19.30	

8.5. LTE BAND 14

Test Engineer ID:	10646	Test Date:	9/10/2021
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OUTPUT POWER FOR LTE BAND 14 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23305 790.5 MHz	23330 793.0 MHz	23355 795.5 MHz	23305 790.5 MHz	23330 793.0 MHz	23355 795.5 MHz
5.0	QPSK	1	0	25.70	25.44	25.69	24.07	23.94	23.99
		1	12	25.61	25.55	25.54	24.20	23.89	24.16
		1	24	25.50	25.60	25.59	24.16	23.97	24.07
		12	0	24.80	24.93	24.86	23.14	23.15	22.98
		12	6	24.91	24.99	24.83	23.18	23.16	23.12
		12	11	24.80	24.84	24.90	23.05	23.04	23.12
	16QAM	25	0	24.91	24.90	24.90	23.16	23.05	23.12
		1	0	25.23	25.16	25.42	23.40	23.57	23.42
		1	12	25.20	25.23	25.32	23.37	23.41	23.47
		1	24	25.19	25.21	25.13	23.37	23.48	23.39
		12	0	23.91	23.89	23.92	22.20	22.25	22.11
		12	6	23.96	23.89	23.87	22.23	22.20	22.08
	64QAM	12	11	23.89	23.96	23.93	22.18	22.10	22.17
		25	0	23.93	23.89	23.92	22.09	22.12	22.15
		1	0	23.75	24.27	24.17	22.43	22.28	22.47
		1	12	24.25	24.33	24.32	22.47	22.42	22.42
		1	24	24.20	24.34	24.24	22.33	22.39	22.08
		12	0	22.45	22.87	22.88	21.20	21.13	21.05
	256QAM	12	6	22.50	23.01	22.87	21.20	21.18	21.18
		12	11	22.94	22.89	22.92	21.21	21.20	21.17
		25	0	22.69	22.97	22.87	21.13	21.14	21.16
		1	0	21.09	21.01	21.09	19.23	19.28	19.40
		1	12	21.00	21.37	21.23	19.34	19.38	19.35
		1	24	20.76	21.07	21.03	19.34	19.29	19.18
		12	0	20.87	20.91	20.80	19.19	19.17	19.17
		12	6	20.97	20.90	20.84	19.22	19.20	19.18
		12	11	20.93	20.94	20.88	19.16	19.13	19.17
		25	0	20.96	20.95	20.91	19.15	19.14	19.14

OUTPUT POWER FOR LTE BAND 14 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				N/A	23330 793.0 MHz	N/A	N/A	23330 793.0 MHz	N/A
10.0	QPSK	1	0		25.59			24.20	
		1	24		25.70			24.15	
		1	49		25.68			24.08	
		25	0		25.01			23.12	
		25	12		25.09			23.14	
		25	24		25.08			23.11	
	16QAM	50	0		25.09			23.09	
		1	0		25.40			23.30	
		1	24		25.39			23.16	
		1	49		25.22			23.29	
		25	0		24.05			22.16	
		25	12		24.16			22.13	
	64QAM	25	24		24.14			22.11	
		50	0		24.06			22.14	
		1	0		24.30			22.08	
		1	24		24.41			22.14	
		1	49		24.18			22.21	
		25	0		23.05			21.18	
	256QAM	25	12		23.12			21.11	
		25	24		23.09			21.08	
		50	0		23.17			21.10	
		1	0		21.30			19.07	
		1	24		21.07			19.32	
		1	49		21.29			19.16	
		25	0		21.02			19.16	
		25	12		21.10			19.11	
		25	24		21.14			19.09	
		50	0		21.10			19.11	

8.6. LTE BAND 17

Test Engineer ID:	10646	Test Date:	9/10/2021
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OUTPUT POWER FOR LTE BAND 17 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23755	23790	23825	23755	23790	23825
				706.5 MHz	710.0 MHz	713.5 MHz	706.5 MHz	710.0 MHz	713.5 MHz
5.0	QPSK	1	0	25.66	25.67	25.52	24.02	23.97	23.93
		1	12	25.70	25.51	25.47	24.08	24.11	24.19
		1	24	25.64	25.51	25.56	23.96	24.20	24.02
		12	0	24.87	24.91	24.96	23.05	23.08	23.05
		12	6	25.06	25.03	24.99	23.25	23.09	23.03
		12	11	24.94	24.93	25.01	23.18	23.10	23.15
		25	0	25.01	24.93	24.95	23.14	23.16	23.07
	16QAM	1	0	25.20	25.25	25.19	23.42	23.35	23.48
		1	12	25.30	25.23	25.13	23.20	23.25	23.50
		1	24	25.27	24.99	25.23	23.46	23.32	23.36
		12	0	23.90	23.91	23.90	22.18	22.19	22.12
		12	6	24.01	24.00	24.06	22.28	22.25	22.19
		12	11	24.03	23.99	24.07	22.26	22.18	22.21
		25	0	24.02	23.93	23.91	22.20	22.09	22.15
	64QAM	1	0	24.30	24.19	24.14	22.41	22.36	22.55
		1	12	24.48	24.35	24.18	22.47	22.42	22.20
		1	24	24.45	24.35	24.34	22.46	22.38	22.13
		12	0	23.09	22.94	23.01	21.20	21.09	21.12
		12	6	23.07	23.02	23.04	21.28	21.24	21.23
		12	11	23.01	22.97	22.96	21.16	21.12	21.25
		25	0	22.99	23.08	22.94	21.29	21.22	21.15
	256QAM	1	0	21.03	21.11	21.01	19.27	19.13	19.40
		1	12	21.29	21.29	21.03	19.35	19.29	19.78
		1	24	21.21	20.94	21.12	19.43	19.42	19.32
		12	0	21.03	21.06	20.96	19.19	19.08	19.17
		12	6	21.03	21.14	21.10	19.35	19.21	19.22
		12	11	21.07	21.04	21.07	19.23	19.27	19.26
		25	0	21.07	21.01	20.94	19.18	19.24	19.17

OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23780	23790	23800	23780	23790	23800
10.0	QPSK	1	0	25.41	25.53	25.64	24.04	24.20	24.19
			24	25.49	25.44	25.48	24.13	24.05	24.02
		1	49	25.46	25.70	25.55	23.98	23.85	24.08
			0	24.71	24.72	24.76	23.01	23.02	23.04
		25	12	24.88	24.86	24.81	23.18	23.19	23.17
			24	24.86	24.85	24.86	23.11	23.12	23.13
		50	0	24.88	24.87	24.81	23.15	23.14	23.13
			0	25.03	25.08	25.32	23.45	23.35	23.24
	16QAM	1	24	25.03	25.12	24.94	23.27	23.36	23.44
			49	24.81	25.04	25.12	23.26	23.46	23.19
		25	0	23.81	23.87	23.75	22.08	22.10	22.12
			12	23.92	23.94	23.87	22.22	22.22	22.18
		25	24	23.89	23.93	23.91	22.17	22.23	22.20
			0	23.88	23.89	23.78	22.15	22.15	22.15
		50	0	23.93	24.14	24.28	22.21	22.33	22.37
			0	23.73	23.96	24.06	22.25	22.51	22.57
	64QAM	1	49	23.92	23.94	24.12	21.92	22.04	22.24
			0	22.84	22.85	22.89	21.15	21.11	21.09
		25	12	22.96	22.92	22.85	21.26	21.19	21.21
			24	22.94	22.88	22.93	21.28	21.17	21.17
		50	0	22.91	22.91	22.83	21.19	21.16	21.22
			0	20.81	20.59	20.98	19.08	19.15	19.34
		1	24	21.10	20.82	20.85	19.37	19.43	19.37
			49	21.09	21.03	21.27	19.45	19.33	19.35
	256QAM	25	0	20.81	20.78	20.78	19.03	19.10	19.04
			12	20.93	20.93	20.87	19.23	19.18	19.19
		25	24	20.88	20.91	20.85	19.19	19.23	19.18
			0	20.89	20.89	20.79	19.19	19.14	19.19

8.7. LTE BAND 25 AND 5G NR n25

LTE BAND 25

Test Engineer ID:	44353	Test Date:	11/12/2021
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OUTPUT POWER FOR LTE BAND 25 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26047	26365	26683	26047	26365	26683
1.4	QPSK	1	0	25.31	25.13	25.42	22.11	22.05	21.74
		1	2	25.51	25.22	25.50	22.32	22.08	21.64
		1	5	25.49	25.21	25.52	22.40	22.12	21.75
		3	0	25.46	25.15	25.56	22.30	21.97	21.68
		3	1	25.46	25.28	25.62	22.34	22.06	21.75
		3	2	25.58	25.29	25.70	22.35	22.09	21.78
	16QAM	6	0	24.87	24.57	24.97	21.44	21.07	20.73
		1	0	24.91	24.66	25.08	21.41	21.15	21.23
		1	2	25.05	24.76	25.13	21.51	21.23	21.30
		1	5	24.97	24.71	25.23	21.55	21.25	21.26
		3	0	24.83	24.63	25.03	21.63	21.15	20.95
		3	1	24.96	24.65	25.14	21.72	21.18	21.00
	64QAM	3	2	24.94	24.69	25.16	21.73	21.24	20.98
		6	0	23.89	23.67	23.96	20.66	20.31	19.68
		1	0	23.86	23.97	24.17	20.99	20.92	20.35
		1	2	23.99	23.96	24.29	21.09	20.90	20.37
		1	5	24.08	23.90	24.21	21.08	20.95	20.34
		3	0	23.87	23.77	24.06	20.77	20.93	20.32
	256QAM	3	1	23.91	23.67	24.06	20.83	20.92	20.31
		3	2	23.85	23.80	24.11	20.85	20.91	20.30
		6	0	22.76	22.54	23.01	19.84	20.92	20.32
		1	0	20.99	20.69	20.92	17.81	17.56	17.16
		1	2	21.01	20.85	21.07	17.94	17.70	17.42
		1	5	21.02	20.75	20.96	17.87	17.66	17.40
	256QAM	3	0	20.82	20.63	21.05	17.85	17.45	17.42
		3	1	20.86	20.77	21.06	17.81	17.53	17.43
		3	2	20.83	20.80	21.08	17.85	17.51	17.46
		6	0	20.97	20.60	20.84	17.84	17.45	17.68

OUTPUT POWER FOR LTE BAND 25 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26055	26365	26675	26055	26365	26675
3.0	QPSK	1	0	25.48	25.27	25.50	22.29	21.91	21.73
		1	7	25.46	25.33	25.64	22.40	22.08	21.75
		1	14	25.52	25.25	25.70	22.38	22.08	21.74
		8	0	24.88	24.55	24.94	21.32	20.96	20.67
		8	4	24.95	24.67	25.00	21.39	21.05	20.72
		8	7	24.97	24.68	24.99	21.46	21.08	20.75
	16QAM	15	0	24.94	24.65	24.93	21.40	21.07	20.72
		1	0	25.08	24.74	25.14	21.31	20.97	21.08
		1	7	25.13	24.76	25.28	21.48	20.93	21.03
		1	14	25.19	24.95	25.21	21.41	21.08	21.16
		8	0	23.78	23.56	23.95	20.38	20.11	19.69
		8	4	23.94	23.79	24.07	20.51	20.20	19.84
	64QAM	8	7	23.99	23.73	24.07	20.56	20.23	19.92
		15	0	23.91	23.58	23.94	20.42	20.12	19.81
		1	0	24.08	23.77	24.18	21.05	20.19	20.68
		1	7	24.25	23.90	24.22	20.94	20.15	20.66
		1	14	24.38	23.87	24.18	20.83	20.15	20.65
		8	0	22.85	22.71	23.04	19.74	20.14	20.64
	256QAM	8	4	22.89	22.73	22.95	19.84	20.15	20.66
		8	7	22.88	22.72	23.07	19.87	20.15	20.66
		15	0	22.91	22.67	22.92	19.75	20.17	20.65
		1	0	21.20	20.63	21.00	18.13	17.18	17.45
		1	7	21.14	20.78	21.15	18.24	17.23	17.51
		1	14	21.02	20.92	21.28	18.24	17.39	17.58
	256QAM	8	0	20.89	20.77	20.98	17.80	17.31	17.50
		8	4	20.96	20.79	21.12	17.84	17.48	17.61
		8	7	21.02	20.79	21.03	17.91	17.55	17.65
		15	0	20.94	20.87	21.00	17.79	17.55	17.56

OUTPUT POWER FOR LTE BAND 25 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26065	26365	26665	26065	26365	26665
5.0	QPSK	1	0	1852.5	1882.5	1912.5	1852.5	1882.5	1912.5
		1	12	25.34	25.28	25.39	22.13	21.86	21.53
		1	24	25.69	25.42	25.70	22.14	21.94	21.41
		1	24	25.45	25.32	25.59	22.19	21.89	21.40
		12	0	24.72	24.40	24.87	21.15	20.78	20.50
		12	6	24.99	24.56	24.98	21.24	20.83	20.56
		12	11	24.89	24.66	24.99	21.24	20.87	20.54
		25	0	24.78	24.62	24.92	21.18	20.84	20.54
	16QAM	1	0	24.88	24.91	25.20	21.24	20.99	21.09
		1	12	25.19	25.07	25.27	21.28	21.02	21.01
		1	24	25.24	24.90	25.32	21.33	21.05	21.04
		12	0	23.77	23.68	23.77	20.24	19.85	19.66
		12	6	23.85	23.72	23.88	20.26	19.96	19.73
		12	11	23.93	23.86	23.90	20.34	19.97	19.73
		25	0	23.82	23.72	24.08	20.19	19.87	19.62
		25	0	22.77	22.72	22.98	19.48	19.48	20.29
	64QAM	1	0	24.11	23.97	24.34	22.40	22.40	20.32
		1	12	24.14	24.12	24.31	20.44	20.44	20.32
		1	24	24.01	23.92	24.36	20.43	20.43	20.30
		12	0	22.77	22.60	22.94	19.50	19.50	20.29
		12	6	22.79	22.93	23.00	19.57	19.57	20.30
		12	11	22.94	22.78	23.05	19.55	19.55	20.29
		25	0	22.77	22.72	22.98	19.48	19.48	20.29
		25	0	20.95	20.60	20.81	17.50	17.50	17.35
	256QAM	1	0	21.10	20.97	20.97	17.56	17.56	17.41
		1	12	20.82	20.86	21.15	17.56	17.56	17.40
		12	0	20.85	20.78	20.91	17.51	17.51	17.25
		12	6	20.77	20.87	21.02	17.57	17.57	17.31
		12	11	20.86	20.74	21.04	17.55	17.55	17.33
		25	0	20.90	20.71	20.99	17.52	17.52	17.26

OUTPUT POWER FOR LTE BAND 25 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26090	26365	26640	26090	26365	26640
10.0	QPSK	1	0	1855.0	1882.5	1910.0	1855.0	1882.5	1910.0
		1	24	25.58	25.38	25.70	22.39	22.12	22.04
		1	49	25.62	25.16	25.44	22.37	22.09	21.89
		1	49	25.40	25.28	25.68	22.40	22.18	21.83
		25	0	25.00	24.74	24.88	21.50	21.21	21.00
		25	12	24.96	24.73	25.05	21.52	21.24	20.94
		25	24	24.95	24.74	25.08	21.51	21.26	20.92
		50	0	25.02	24.80	24.96	21.53	21.24	20.97
	16QAM	1	0	25.15	24.72	24.93	21.44	21.07	21.50
		1	24	25.13	24.74	25.20	21.42	21.07	21.31
		1	49	25.33	25.11	25.30	21.43	21.10	21.25
		25	0	23.94	23.75	23.88	20.61	20.23	20.03
		25	12	24.02	23.81	24.05	20.65	20.28	20.03
		25	24	23.98	23.79	24.12	20.64	20.26	20.00
		50	0	24.02	23.77	23.90	20.57	20.22	20.00
		50	0	24.25	23.78	24.07	20.87	20.44	20.48
	64QAM	1	0	24.34	23.94	23.70	20.32	20.46	20.48
		1	24	24.31	23.46	24.32	20.79	20.46	20.47
		1	49	24.31	23.46	24.32	20.79	20.46	20.47
		25	0	22.96	22.71	22.89	19.82	20.46	20.48
		25	12	23.03	22.84	23.05	19.72	20.43	20.46
		25	24	22.97	22.87	23.11	19.78	20.45	20.49
		50	0	23.05	22.76	22.99	19.70	20.46	20.47
		50	0	21.15	20.91	20.98	17.80	18.06	17.36
	256QAM	1	0	20.97	20.99	20.89	17.77	18.00	17.30
		1	24	20.97	20.99	20.89	17.77	18.00	17.30
		1	49	21.21	20.86	21.08	17.72	18.05	17.33
		25	0	20.95	20.81	20.98	17.90	17.61	17.63
		25	12	21.09	20.80	21.19	17.84	17.65	17.68
		25	24	20.97	20.83	21.06	17.88	17.66	17.67
		50	0	21.06	20.79	21.02	17.78	17.61	17.61

OUTPUT POWER FOR LTE BAND 25 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26115	26365	26615	26115	26365	26615
15.0	QPSK	1	0	1857.5	1882.5	1907.5	1857.5	1882.5	1907.5
		1	37	25.10	25.25	25.40	22.40	22.16	22.13
		1	74	25.01	25.06	24.97	22.32	22.10	21.91
		36	0	25.51	25.37	25.70	22.24	22.09	21.69
		36	16	24.75	24.57	24.66	21.44	21.21	21.14
		36	35	24.67	24.52	24.68	21.47	21.24	21.08
		75	0	24.64	24.45	24.64	21.42	21.19	20.96
	16QAM	1	0	24.70	24.49	24.66	21.43	21.22	21.05
		1	37	24.74	24.74	25.04	21.82	21.67	21.13
		1	74	25.05	24.78	24.99	21.91	21.59	20.95
		36	0	24.92	24.65	24.90	21.74	21.47	20.76
		36	16	23.81	23.64	23.65	20.50	20.20	20.17
		36	35	23.65	23.45	23.73	20.57	20.19	20.11
		75	0	23.77	23.42	23.80	20.51	20.17	20.00
	64QAM	1	0	23.62	23.52	23.68	20.52	20.19	20.13
		1	37	23.81	23.66	24.04	21.29	20.46	20.46
		1	74	23.91	23.56	23.70	20.87	20.45	20.46
		36	0	24.04	24.02	24.42	21.30	20.46	20.45
		36	16	22.84	22.58	22.70	19.78	20.45	20.45
		36	35	22.66	22.68	22.76	19.81	20.43	20.45
		75	0	22.76	22.57	22.81	19.73	20.45	20.43
	256QAM	1	0	22.74	22.55	22.71	19.80	20.45	20.43
		1	37	21.15	20.54	20.93	18.00	17.92	17.34
		1	74	20.88	20.83	20.75	18.01	17.95	17.35
		36	0	20.78	20.80	20.97	18.00	17.99	17.32
		36	16	20.77	20.48	20.77	17.83	17.66	17.63
		36	35	20.73	20.56	20.71	17.86	17.68	17.62
		75	0	20.80	20.51	20.77	17.80	17.63	17.57
		75	0	20.70	20.48	20.75	17.81	17.63	17.61

OUTPUT POWER FOR LTE BAND 25 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26140	26365	26590	26140	26365	26590
20.0	QPSK	1	0	1860.0	1882.5	1905.0	1860.0	1882.5	1905.0
		1	49	25.70	25.24	25.57	22.40	22.07	22.14
		1	99	25.51	25.36	25.41	22.28	22.07	21.94
		50	0	25.70	25.33	25.62	22.13	21.97	21.70
		50	24	25.00	24.70	24.97	21.45	21.15	21.11
		50	49	24.71	24.73	24.89	21.43	21.17	21.05
		100	0	24.91	24.72	24.93	21.34	21.13	20.90
	16QAM	1	0	25.00	24.74	24.96	21.40	21.13	20.56
		1	49	25.15	24.97	25.20	21.79	21.62	21.56
		1	99	25.16	24.81	25.50	21.72	21.60	21.35
		50	0	25.29	24.97	25.37	21.59	21.58	21.12
		50	24	23.90	23.73	23.93	20.46	20.18	20.16
		50	49	24.21	23.72	23.91	20.43	20.20	20.10
		100	0	23.96	23.72	23.90	20.34	20.16	19.97
	64QAM	1	0	23.95	23.69	23.93	20.42	20.18	20.07
		1	49	24.03	24.25	23.91	20.78	20.53	20.66
		1	99	24.34	23.69	24.07	20.72	20.51	20.66
		50	0	24.22	23.75	24.28	20.86	20.51	20.64
		50	24	22.96	22.82	22.95	19.70	20.52	20.65
		50	49	23.09	22.78	22.97	19.71	20.52	20.65
		100	0	23.02	22.73	22.95	19.60	20.51	20.65
	256QAM	1	0	23.01	22.74	22.93	19.71	20.57	20.67
		1	49	20.96	21.14	21.63	17.66	17.61	17.65
		1	99	21.12	20.83	20.78	17.65	17.64	17.62
		50	0	21.62	20.92	20.98	17.51	17.57	17.57
		50	24	21.00	20.77	20.89	17.79	17.52	17.56
		50	49	21.01	20.71	20.94	17.80	17.55	17.56
		100	0	20.93	20.71	21.00	17.67	17.50	17.52
		100	0	21.06	20.75	20.94	17.78	17.48	17.53

5G NR n25

Test Engineer ID:	44353	Test Date:	11/12/2021
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OUTPUT POWER FOR 5G NR n25 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				370500	376500	382500	370500	376500	382500
5.0	BPSK	1	0	24.68	24.77	24.97	21.58	21.82	21.64
		1	1	25.14	25.29	25.43	22.04	22.28	22.14
		1	23	25.19	25.32	25.53	22.07	22.40	22.17
		1	24	24.66	24.78	25.11	21.63	21.83	21.71
		12	6	25.19	25.31	25.57	22.06	22.36	22.17
		25	0	24.62	24.77	25.01	21.47	21.77	21.61
	QPSK	1	0	24.07	24.64	24.41	20.98	21.24	21.10
		1	1	25.12	25.62	25.48	21.95	22.23	22.09
		1	23	25.21	25.66	25.57	21.67	22.34	22.09
		1	24	24.12	24.57	24.58	20.79	21.35	21.13
		12	6	24.79	25.70	25.61	21.25	22.37	21.77
		25	0	23.77	24.69	24.55	20.28	21.32	21.03
	16QAM	1	0	23.60	24.10	23.91	20.13	20.37	20.25
		1	1	24.57	25.09	24.97	21.10	21.40	21.22
		1	23	24.67	25.12	25.02	20.98	21.51	21.30
		1	24	23.58	24.07	24.00	20.09	20.45	20.25
		12	6	23.93	24.56	24.43	20.31	21.21	20.95
		25	0	22.94	23.59	23.48	19.37	20.21	20.02
	64QAM	1	0	22.24	22.72	22.65	18.93	19.29	19.02
		1	1	22.24	22.78	22.66	18.87	19.28	19.02
		1	23	22.27	21.60	22.71	19.00	19.33	19.07
		1	24	22.21	22.71	22.76	18.93	19.26	19.15
		12	6	22.51	23.10	23.07	19.06	19.85	19.64
		25	0	22.54	23.16	23.02	19.25	19.81	19.56
	256QAM	1	0	20.59	21.14	20.92	17.62	17.55	17.29
		1	1	20.57	21.07	20.93	17.57	17.49	17.31
		1	23	20.66	21.15	21.01	17.68	17.62	17.37
		1	24	20.62	21.10	20.96	17.65	17.59	17.39
		12	6	20.55	21.07	20.90	17.81	17.81	17.56
		25	0	20.61	21.11	21.01	17.82	17.74	17.54

OUTPUT POWER FOR 5G NR n25 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				371000	376500	382000	371000	376500	382000
10.0	BPSK	1	0	24.87	25.16	25.00	21.81	21.80	21.62
		1	1	25.37	25.63	25.49	22.37	22.31	22.09
		1	50	25.68	25.66	25.62	22.40	22.30	22.16
		1	51	25.13	25.12	25.08	21.87	21.77	21.65
		25	12	25.44	25.70	25.57	22.34	22.30	22.07
		50	0	24.96	25.15	25.03	21.80	21.78	21.60
	QPSK	1	0	24.40	24.53	24.50	21.36	21.21	21.11
		1	1	25.36	25.68	25.51	22.31	22.22	22.06
		1	50	25.51	25.65	25.62	22.07	22.29	22.08
		1	51	24.52	24.65	24.56	21.16	21.29	21.09
		25	12	25.10	25.68	25.58	21.45	22.31	22.09
		50	0	24.16	24.67	24.49	20.45	21.28	21.12
	16QAM	1	0	23.87	24.09	23.93	20.48	20.38	20.26
		1	1	24.90	25.18	25.00	21.43	21.36	21.26
		1	50	24.95	25.19	25.11	21.33	21.45	21.25
		1	51	24.09	24.09	24.05	20.36	20.46	20.20
		25	12	24.24	24.60	24.46	20.50	21.24	20.97
		50	0	23.37	23.72	23.57	19.67	20.29	20.11
	64QAM	1	0	22.53	22.84	22.65	19.20	19.25	19.12
		1	1	22.53	22.80	22.67	19.23	19.14	19.12
		1	50	22.78	22.88	22.79	19.23	19.20	19.08
		1	51	22.44	22.83	22.74	19.20	19.21	19.10
		25	12	22.89	23.15	22.98	19.25	19.76	19.61
		50	0	22.90	23.15	23.00	19.18	19.74	19.54
	256QAM	1	0	20.89	21.13	20.97	17.58	17.50	17.33
		1	1	20.94	21.06	21.03	17.57	17.49	17.33
		1	50	21.12	21.19	20.90	17.50	17.59	17.36
		1	51	21.08	21.19	21.06	17.51	17.50	17.35
		25	12	20.89	21.17	21.04	17.82	17.70	17.52
		50	0	20.94	21.20	20.99	17.84	17.77	17.61

OUTPUT POWER FOR 5G NR n25 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				371500	376500	381500	371500	376500	381500
15.0	BPSK	1	0	1857.5	1882.5	1907.5	1857.5	1882.5	1907.5
		1	1	24.96	25.08	25.15	21.85	21.75	21.74
		1	1	25.43	25.64	25.64	22.35	22.23	22.25
		1	77	25.65	25.69	25.69	22.40	22.32	22.20
		1	78	25.19	25.13	25.19	21.84	21.80	21.76
		36	18	25.41	25.54	25.53	22.28	22.20	22.19
	QPSK	75	0	24.83	25.06	25.04	21.81	21.73	21.72
		1	0	24.42	24.58	24.61	21.37	21.26	21.19
		1	1	25.36	25.55	25.62	22.38	22.25	22.20
		1	77	25.66	25.70	25.61	22.32	22.28	22.19
		1	78	24.62	24.67	24.61	21.26	21.28	21.18
		36	18	25.22	25.64	25.64	21.40	22.27	22.18
	16QAM	75	0	24.48	24.63	24.60	20.64	21.32	21.22
		1	0	23.87	24.06	24.05	20.48	20.45	20.35
		1	1	24.86	25.08	25.06	21.49	21.41	21.41
		1	77	25.10	25.07	25.12	21.49	21.39	21.35
		1	78	24.09	23.99	24.05	20.44	20.41	20.34
		36	18	24.38	24.56	24.56	20.66	21.23	21.23
	64QAM	75	0	23.44	23.60	23.59	19.80	20.24	20.18
		1	0	22.60	22.80	22.89	19.22	19.21	19.28
		1	1	22.54	22.75	22.82	19.33	19.26	19.21
		1	77	22.78	22.73	22.72	19.25	19.18	19.10
		1	78	22.78	22.87	22.73	19.19	19.24	19.20
		36	18	23.01	23.16	23.13	19.28	19.84	19.72
	256QAM	75	0	23.00	23.12	23.11	19.32	19.75	19.74
		1	0	20.94	21.09	21.11	17.57	17.47	17.38
		1	1	20.91	21.13	21.03	17.56	17.50	17.51
		1	77	21.11	21.12	21.02	17.54	17.51	17.46
		1	78	21.16	21.15	21.11	17.59	17.47	17.38
		36	18	20.94	21.10	21.05	17.79	17.70	17.63
		75	0	20.91	21.09	21.09	17.79	17.75	17.67

OUTPUT POWER FOR 5G NR n25 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				372000	376500	381000	372000	376500	381000
20.0	BPSK	1	0	1860.0	1882.5	1905.0	1860.0	1882.5	1905.0
		1	1	24.95	25.14	25.13	21.95	21.79	21.79
		1	1	25.55	25.68	25.67	22.40	22.28	22.32
		1	104	25.70	25.62	25.63	22.33	22.23	22.29
		1	105	25.19	25.09	25.12	21.85	21.78	21.73
		50	25	25.52	25.61	25.61	22.36	22.28	22.24
	QPSK	100	0	24.96	25.11	25.07	21.50	21.77	21.77
		1	0	24.40	24.66	24.56	21.33	21.22	21.29
		1	1	25.52	25.66	25.64	22.32	22.22	22.24
		1	104	25.69	25.63	25.64	22.30	22.20	22.17
		1	105	24.69	24.59	24.56	21.22	21.20	21.21
		50	25	25.52	25.58	25.61	21.63	22.31	22.27
	16QAM	100	0	24.51	24.65	24.61	20.95	21.29	21.22
		1	0	23.99	24.07	24.06	20.48	20.35	20.43
		1	1	24.88	25.19	25.13	21.53	21.51	21.38
		1	104	25.13	25.05	25.09	21.47	21.41	21.30
		1	105	24.10	24.05	24.03	20.37	20.32	20.34
		50	25	24.51	24.61	24.67	20.76	21.29	21.26
	64QAM	100	0	23.54	23.59	23.63	20.05	20.25	20.23
		1	0	22.64	22.89	22.81	19.23	19.27	19.18
		1	1	22.60	22.91	22.91	19.35	19.24	19.18
		1	104	22.81	22.77	22.77	19.26	19.27	19.12
		1	105	22.90	22.85	22.67	19.19	19.29	19.29
		50	25	23.06	23.10	23.09	19.32	19.74	19.68
	256QAM	100	0	22.99	23.09	23.07	19.53	19.73	19.61
		1	0	20.95	21.09	21.03	17.59	17.53	17.47
		1	1	20.92	20.96	21.06	17.60	17.53	17.49
		1	104	21.18	21.06	21.00	17.52	17.51	17.37
		1	105	21.07	21.07	20.95	17.48	17.53	17.42
		50	25	20.99	21.11	21.05	17.78	17.72	17.67
		100	0	21.04	21.11	21.01	17.80	17.75	17.69

OUTPUT POWER FOR 5G NR n25 (25.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				372500	376500	380500	372500	376500	380500
25.0	BPSK	1	0	23.93	24.10	24.05	20.98	20.85	20.72
		1	1	24.36	24.70	24.50	21.40	21.24	21.20
		1	132	24.60	24.55	24.55	21.35	21.15	21.15
		1	131	24.07	24.05	24.02	20.83	20.70	20.63
		64	32	24.53	24.53	24.51	21.32	21.22	21.17
		128	0	24.13	24.14	24.03	20.85	20.67	20.70
	QPSK	1	0	23.42	23.66	23.49	20.31	20.25	20.17
		1	1	24.38	24.69	24.50	21.40	21.26	21.18
		1	132	24.50	24.38	24.54	21.22	21.11	21.13
		1	131	23.57	23.52	23.51	20.23	20.07	20.11
		64	32	24.53	24.56	24.52	21.36	21.18	21.17
		128	0	23.61	23.58	23.51	20.32	20.17	20.19
	16QAM	1	0	22.80	22.97	22.93	19.57	19.41	19.28
		1	1	23.94	24.04	23.88	20.44	20.39	20.36
		1	132	24.20	23.95	23.94	20.37	20.28	20.29
		1	131	23.00	23.04	22.87	19.36	19.28	19.23
		64	32	23.52	23.58	23.58	20.31	20.20	20.12
		128	0	22.66	22.60	22.49	19.31	19.13	19.12
	64QAM	1	0	21.65	21.81	21.79	18.45	18.37	18.17
		1	1	21.65	21.81	21.69	18.36	18.35	18.18
		1	132	21.74	21.81	21.72	18.30	18.13	18.15
		1	131	21.75	21.80	21.61	18.31	18.19	18.25
		64	32	21.93	21.98	21.99	18.71	18.63	18.60
		128	0	22.01	22.03	21.97	18.75	18.66	18.67
	256QAM	1	0	20.15	20.14	20.14	16.69	16.80	16.63
		1	1	20.07	20.15	20.11	16.69	16.59	16.48
		1	132	20.19	20.17	20.09	16.69	16.61	16.62
		1	131	20.24	20.19	20.02	16.62	16.55	16.41
		64	32	19.95	20.02	19.97	16.77	16.60	16.51
		128	0	20.04	20.02	19.97	16.76	16.65	16.55

OUTPUT POWER FOR 5G NR n25 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				373000	376500	380000	373000	376500	380000
30.0	BPSK	1	0	23.95	24.17	24.09	20.81	20.68	20.71
		1	1	24.47	24.69	24.54	21.40	21.27	21.15
		1	158	24.53	24.69	24.56	21.17	21.13	20.98
		1	159	24.10	24.14	24.15	20.67	20.55	20.60
		80	40	24.70	24.61	24.65	21.25	21.09	21.13
		160	0	24.24	24.21	24.16	20.82	20.66	20.66
	QPSK	1	0	23.49	23.55	23.52	20.25	20.15	20.07
		1	1	24.50	24.60	24.59	21.30	21.11	21.11
		1	158	24.60	24.66	24.55	21.14	21.01	21.08
		1	159	23.55	23.65	23.57	20.11	19.98	19.96
		80	40	24.67	24.65	24.60	21.30	21.12	21.12
		160	0	23.69	23.71	23.67	20.31	20.14	20.14
	16QAM	1	0	22.90	23.14	23.14	19.43	19.28	19.35
		1	1	23.91	24.00	24.05	20.46	20.34	20.25
		1	158	24.08	24.14	24.08	20.22	20.11	20.15
		1	159	23.07	23.02	23.00	19.26	19.25	19.20
		80	40	23.64	23.63	23.61	20.26	20.12	20.11
		160	0	22.68	22.66	22.61	19.29	19.16	19.15
	64QAM	1	0	21.55	21.86	21.93	18.29	18.15	18.09
		1	1	21.63	21.93	21.79	18.48	18.22	18.14
		1	158	21.88	21.94	21.77	18.19	18.05	17.98
		1	159	21.80	21.84	21.92	18.09	18.00	17.93
		80	40	22.08	22.12	22.09	18.72	18.61	18.55
		160	0	22.18	22.18	22.17	18.75	18.65	18.56
	256QAM	1	0	20.04	20.29	20.17	16.63	16.54	16.48
		1	1	20.03	20.28	20.11	16.59	16.56	16.47
		1	158	20.23	20.19	20.17	16.52	16.47	16.46
		1	159	20.34	20.27	20.18	16.57	16.56	16.37
		80	40	20.19	20.06	20.16	16.74	16.61	16.51
		160	0	20.16	20.16	20.15	16.72	16.62	16.56

OUTPUT POWER FOR 5G NR n25 (40.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				374000	376500	379000	374000	376500	379000
40.0	BPSK	1	0	1870.0	1882.5	1895.0	1870.0	1882.5	1895.0
		1	1	24.12	24.09	24.25	20.86	20.79	20.79
		1	1	24.53	24.68	24.68	21.40	21.38	21.36
		1	214	24.64	24.54	24.59	21.22	21.17	21.11
		1	215	24.13	24.17	24.13	20.66	20.72	20.60
		108	54	24.65	24.63	24.63	21.31	21.20	21.25
	QPSK	216	0	24.19	24.22	24.17	20.88	20.78	20.80
		1	0	23.50	23.60	23.63	20.32	20.24	20.25
		1	1	24.27	24.56	24.68	21.38	21.33	21.35
		1	214	24.64	24.58	24.64	21.27	21.14	21.20
		1	215	23.54	23.57	23.58	20.17	20.10	20.07
		108	54	24.70	24.66	24.70	21.39	21.22	21.31
	16QAM	216	0	23.68	23.77	23.73	20.41	20.28	20.33
		1	0	22.93	23.13	23.16	19.51	19.43	19.45
		1	1	24.02	24.05	24.06	20.49	20.44	20.42
		1	214	23.93	24.10	23.93	20.32	20.26	20.13
		1	215	23.09	22.99	23.01	19.29	19.30	19.25
		108	54	23.73	23.69	23.71	20.35	20.20	20.29
	64QAM	216	0	22.74	22.69	22.72	19.36	19.25	19.29
		1	0	21.68	21.86	21.85	18.51	18.31	18.37
		1	1	21.67	21.95	21.90	18.43	18.19	18.31
		1	214	21.83	22.03	21.99	18.15	18.06	18.09
		1	215	21.73	21.77	21.74	18.28	18.20	18.09
		108	54	22.16	22.10	22.09	18.81	18.69	18.65
	256QAM	216	0	22.19	22.18	22.22	18.85	18.68	18.72
		1	0	20.19	20.18	20.20	16.70	16.63	16.47
		1	1	20.03	20.14	20.18	16.77	16.62	16.69
		1	214	20.32	20.25	20.24	16.68	16.76	16.61
		1	215	20.32	20.26	20.25	16.57	16.57	16.62
		108	54	20.14	20.12	20.07	16.85	16.69	16.70
		216	0	20.19	20.18	20.16	16.88	16.72	16.73

8.8. LTE BAND 26 (Part 90S)

Test Engineer ID:	10646	Test Date:	9/10/2021
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OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26697	26740	26783	26697	26740	26783
				814.7 MHz	819.0 MHz	823.3 MHz	814.7 MHz	819.0 MHz	823.3 MHz
1.4	QPSK	1	0	25.60	25.67	25.70	24.03	24.15	24.01
		1	2	25.70	25.61	25.61	24.13	24.08	24.09
		1	5	25.60	25.55	25.57	24.05	24.05	23.99
		3	0	25.54	25.67	25.64	24.17	24.20	24.13
		3	1	25.63	25.66	25.65	24.13	24.12	24.16
		3	2	25.58	25.69	25.70	24.16	24.18	24.07
	16QAM	6	0	24.95	24.94	25.03	23.18	23.18	23.18
		1	0	25.07	25.28	25.16	23.19	23.40	23.39
		1	2	25.28	25.22	25.32	23.36	23.66	23.42
		1	5	25.10	25.12	25.18	23.34	23.47	23.24
		3	0	25.03	25.22	25.05	23.18	23.40	23.22
		3	1	25.04	25.25	25.15	23.19	23.39	23.35
	64QAM	3	2	25.07	25.23	25.12	23.29	23.42	23.28
		6	0	23.97	24.04	24.04	22.29	22.22	22.26
		1	0	23.84	23.96	24.19	21.48	22.12	22.23
		1	2	23.89	24.05	24.31	21.51	22.23	22.37
		1	5	23.79	24.16	24.27	21.72	22.30	22.24
		3	0	23.70	23.82	24.20	21.33	22.32	22.30
	256QAM	3	1	23.89	24.00	24.15	21.47	22.38	22.40
		3	2	23.91	23.98	24.13	21.61	22.41	22.36
		6	0	22.75	22.99	23.09	20.45	21.29	21.36
		1	0	21.06	21.16	21.28	19.24	19.34	19.33
		1	2	21.21	21.19	21.18	19.43	19.45	19.44
		1	5	21.09	21.08	21.17	19.24	19.32	19.35
	256QAM	3	0	21.10	21.17	20.96	19.26	19.37	19.26
		3	1	21.07	21.13	21.07	19.25	19.48	19.30
		3	2	21.03	21.19	21.04	19.31	19.43	19.34
		6	0	20.99	21.03	21.08	19.17	19.25	19.29

OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26705	26740	26775	26705	26740	26775
				815.5 MHz	819.0 MHz	822.5 MHz	815.5 MHz	819.0 MHz	822.5 MHz
3.0	QPSK	1	0	25.48	25.45	25.67	24.05	24.12	24.20
		1	7	25.56	25.53	25.53	24.03	24.16	24.13
		1	14	25.65	25.70	25.67	23.98	24.01	24.09
		8	0	24.88	24.87	24.85	23.11	23.19	23.14
		8	4	24.95	24.95	24.96	23.13	23.23	23.15
		8	7	24.87	24.91	24.91	23.15	23.12	23.11
	16QAM	15	0	24.91	24.90	24.92	23.14	23.19	23.20
		1	0	25.17	25.13	25.38	23.24	23.30	23.54
		1	7	25.13	25.06	25.20	23.27	23.35	23.31
		1	14	24.98	25.10	25.08	23.34	23.32	23.44
		8	0	23.92	23.95	23.92	22.06	22.23	22.16
		8	4	24.03	24.03	24.09	22.25	22.25	22.28
	64QAM	8	7	23.92	23.91	23.91	22.16	22.13	22.20
		15	0	23.87	23.96	23.92	22.16	22.16	22.13
		1	0	23.80	23.67	24.10	21.55	21.85	22.32
		1	7	23.77	23.77	24.26	21.69	21.88	22.17
		1	14	23.77	24.02	24.28	22.08	22.05	22.30
		8	0	22.60	22.78	22.94	20.48	21.24	21.19
	256QAM	8	4	22.69	22.87	23.02	20.78	21.21	21.28
		8	7	22.65	22.91	22.97	20.94	21.17	21.22
		15	0	22.56	22.73	22.93	20.78	21.17	21.18
		1	0	21.05	20.97	21.25	19.23	19.29	19.28
		1	7	20.97	21.09	21.13	19.39	19.39	19.40
		1	14	21.02	21.05	21.11	19.21	19.20	19.26
	256QAM	8	0	20.97	20.92	20.80	19.18	19.23	19.14
		8	4	21.01	20.98	20.99	19.23	19.23	19.21
		8	7	20.92	20.92	20.93	19.13	19.12	19.25
		15	0	20.97	20.92	20.91	19.17	19.13	19.15

OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26715	26740	26765	26715	26740	26765
				816.5 MHz	819.0 MHz	821.5 MHz	816.5 MHz	819.0 MHz	821.5 MHz
5.0	QPSK	1	0	25.58	25.61	25.57	24.20	24.08	24.09
		1	12	25.46	25.54	25.52	24.05	24.07	23.97
		1	24	25.47	25.59	25.70	23.80	24.00	24.11
		12	0	24.97	24.98	24.93	23.04	23.16	23.14
		12	6	25.10	25.01	25.01	23.22	23.18	23.18
		12	11	24.94	25.03	25.05	23.15	23.17	23.11
		25	0	24.94	25.02	25.00	23.16	23.13	23.10
	16QAM	1	0	25.37	25.13	25.41	23.22	23.54	23.44
		1	12	25.32	25.15	25.14	23.44	23.58	23.24
		1	24	25.21	25.28	25.18	23.47	23.48	23.29
		12	0	23.94	23.99	24.01	22.14	22.21	22.07
		12	6	24.01	24.09	24.09	22.22	22.20	22.24
		12	11	24.06	24.06	24.09	22.14	22.13	22.17
		25	0	24.04	24.03	24.05	22.15	22.15	22.17
	64QAM	1	0	23.67	23.89	24.10	21.56	21.93	22.20
		1	12	23.70	24.01	24.10	21.99	22.03	22.32
		1	24	23.85	24.62	24.27	22.09	22.11	22.44
		12	0	22.67	22.73	23.04	20.73	21.24	21.14
		12	6	22.72	22.85	23.04	20.99	21.27	21.23
		12	11	22.70	23.08	22.98	21.20	21.13	21.18
		25	0	22.57	22.81	23.06	20.99	21.12	21.17
	256QAM	1	0	21.23	21.12	21.11	19.44	19.43	19.11
		1	12	20.96	21.17	21.06	19.27	19.47	19.33
		1	24	21.37	21.06	21.03	19.51	19.31	19.43
		12	0	21.02	20.93	21.01	19.25	19.21	19.13
		12	6	21.06	21.06	21.11	19.25	19.32	19.26
		12	11	21.05	21.06	21.10	19.31	19.09	19.20
		25	0	21.00	21.02	21.04	19.15	19.21	19.18

OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				N/A	26740	N/A	N/A	26740	N/A
				N/A	819.0 MHz	N/A	N/A	819.0 MHz	N/A
10.0	QPSK	1	0		25.70			24.20	
		1	24		25.52			24.00	
		1	49		25.47			24.03	
		25	0		24.99			23.07	
		25	12		25.01			23.21	
		25	24		24.99			23.14	
		50	0		24.97			23.10	
	16QAM	1	0		25.45			23.39	
		1	24		25.20			23.23	
		1	49		25.23			23.32	
		25	0		23.93			22.14	
		25	12		24.01			22.24	
		25	24		24.00			22.15	
		50	0		23.99			22.15	
	64QAM	1	0		23.93			21.81	
		1	24		24.06			22.43	
		1	49		24.31			22.49	
		25	0		22.68			21.07	
		25	12		22.89			21.20	
		25	24		22.96			21.14	
		50	0		22.96			21.19	
	256QAM	1	0		20.97			19.14	
		1	24		21.02			19.29	
		1	49		21.11			19.35	
		25	0		20.91			19.06	
		25	12		21.03			19.16	
		25	24		20.94			19.13	
		50	0		20.98			19.15	

8.9. LTE BAND 26 (Part 22)

Test Engineer ID:	44353	Test Date:	11/12/2021
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OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26797	26915	27033	26797	26915	27033
				824.7 MHz	836.5 MHz	848.3 MHz	824.7 MHz	836.5 MHz	848.3 MHz
1.4	QPSK	1	0	25.60	25.54	25.54	24.18	24.15	23.53
		1	2	25.63	25.61	25.53	24.18	24.08	23.50
		1	5	25.55	25.55	25.43	24.11	24.11	23.41
		3	0	25.68	25.59	25.52	24.07	24.14	23.41
		3	1	25.70	25.61	25.58	24.16	24.17	23.44
		3	2	25.70	25.56	25.57	24.12	24.20	23.43
	16QAM	6	0	25.03	24.90	24.88	23.14	23.11	22.57
		1	0	25.30	25.15	24.96	22.81	23.17	22.13
		1	2	25.24	25.34	25.20	22.89	23.26	22.11
		1	5	25.36	25.07	25.01	22.77	23.18	22.04
		3	0	25.20	25.02	24.82	22.74	22.90	22.24
		3	1	25.22	25.07	24.93	22.75	22.95	22.26
	64QAM	3	2	25.22	25.11	24.97	22.80	22.92	22.33
		6	0	24.07	23.97	23.89	21.85	21.56	21.32
		1	0	24.24	23.82	23.59	22.64	21.86	21.20
		1	2	24.35	24.04	23.62	22.73	21.85	21.17
		1	5	24.25	24.00	23.19	22.59	21.86	21.16
		3	0	24.24	23.96	23.61	22.34	21.87	21.14
	256QAM	3	1	24.18	24.13	23.52	22.36	21.88	21.13
		3	2	24.24	24.03	23.47	22.34	21.86	21.12
		6	0	23.10	22.97	22.41	21.01	21.87	21.11
		1	0	20.99	21.07	21.04	19.60	19.02	19.44
		1	2	21.12	21.19	21.21	19.74	19.37	19.54
		1	5	21.00	21.08	20.99	19.61	19.34	19.43
	256QAM	3	0	21.16	20.91	21.02	19.51	19.39	19.46
		3	1	21.24	20.98	21.04	19.56	19.39	19.44
		3	2	21.23	21.04	21.00	19.47	19.38	19.39
		6	0	20.99	20.91	20.78	19.49	19.57	19.46

OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26805	26915	27025	26805	26915	27025
				825.5 MHz	836.5 MHz	847.5 MHz	825.5 MHz	836.5 MHz	847.5 MHz
3.0	QPSK	1	0	25.61	25.60	25.57	24.18	24.20	23.94
		1	7	25.70	25.50	25.48	24.10	24.20	23.47
		1	14	25.69	25.62	25.44	24.15	24.12	23.35
		8	0	24.91	24.97	24.81	23.10	23.16	22.80
		8	4	25.04	24.99	24.84	23.18	23.15	22.65
		8	7	25.06	25.00	24.82	23.19	23.24	22.61
	16QAM	15	0	24.99	24.88	24.85	23.14	23.12	22.82
		1	0	25.12	25.11	25.14	23.03	22.74	22.51
		1	7	25.28	25.18	25.03	22.98	22.78	22.06
		1	14	25.20	25.20	24.94	22.98	22.66	21.91
		8	0	24.03	24.04	23.82	21.64	21.70	21.47
		8	4	24.08	23.95	23.91	21.76	21.77	21.37
	64QAM	8	7	24.03	23.99	23.79	21.77	21.82	21.32
		15	0	24.07	23.91	23.87	21.72	21.64	21.32
		1	0	24.25	24.36	24.04	22.07	22.32	21.15
		1	7	24.53	24.06	24.20	22.09	22.34	21.13
		1	14	24.37	24.06	23.50	22.14	22.34	21.13
		8	0	23.14	22.93	22.95	21.04	22.35	21.12
	256QAM	8	4	23.03	23.04	22.89	21.12	22.33	21.12
		8	7	22.92	22.98	22.53	21.08	22.34	21.12
		15	0	23.12	22.91	22.89	21.11	22.33	21.11
		1	0	21.21	21.24	21.03	19.33	19.46	19.76
		1	7	21.17	21.16	20.99	19.33	19.57	19.75
		1	14	21.07	21.17	20.88	19.34	19.44	19.72
	256QAM	8	0	21.11	20.94	21.03	19.39	19.54	19.48
		8	4	21.08	21.04	20.92	19.60	19.54	19.49
		8	7	21.00	20.93	20.79	19.53	19.66	19.49
		15	0	21.00	20.87	20.90	19.64	19.50	19.46

OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26815 826.5 MHz	26915 836.5 MHz	27015 846.5 MHz	26815 826.5 MHz	26915 836.5 MHz	27015 846.5 MHz
5.0	QPSK	1	0	25.70	25.65	25.56	24.02	24.15	24.20
		1	12	25.64	25.54	25.54	23.98	24.10	23.93
		1	24	25.59	25.66	25.56	24.00	24.12	23.52
		12	0	24.94	24.86	24.87	23.02	23.08	23.06
		12	6	25.00	24.81	24.93	23.13	23.09	22.84
		12	11	25.02	24.81	24.82	23.07	23.12	22.50
		25	0	24.99	24.93	24.77	23.10	23.03	23.00
	16QAM	1	0	25.29	25.13	25.05	23.11	22.72	22.74
		1	12	25.11	25.23	25.11	23.09	22.71	22.56
		1	24	25.25	25.13	25.14	23.09	22.75	22.16
		12	0	24.23	24.02	23.94	21.71	21.64	21.64
		12	6	24.12	23.90	23.99	21.75	21.66	21.55
		12	11	24.00	23.83	23.83	21.71	21.65	21.22
		25	0	23.98	23.91	23.85	21.66	21.54	21.59
	64QAM	1	0	24.27	24.24	24.26	22.33	22.23	21.58
		1	12	24.34	24.16	24.18	22.39	22.23	21.56
		1	24	24.05	24.12	23.74	22.32	22.23	21.54
		12	0	23.00	22.97	22.98	20.92	22.23	21.53
		12	6	23.07	23.00	22.91	21.00	22.22	21.52
		12	11	22.95	22.93	22.71	20.89	22.22	21.52
		25	0	23.07	22.90	22.83	20.94	22.24	21.51
	256QAM	1	0	21.19	20.93	21.13	19.57	19.45	19.04
		1	12	21.01	20.93	21.11	19.56	19.53	19.13
		1	24	21.03	21.10	20.87	19.56	19.40	18.99
		12	0	20.98	20.99	20.89	19.45	19.41	19.29
		12	6	21.03	21.01	21.00	19.54	19.39	19.39
		12	11	21.04	20.95	20.82	19.47	19.39	19.26
		25	0	20.97	20.89	20.88	19.48	19.36	19.29

OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26840 829.0 MHz	26915 836.5 MHz	26990 844.0 MHz	26840 829.0 MHz	26915 836.5 MHz	26990 844.0 MHz
10.0	QPSK	1	0	25.65	25.70	25.43	24.20	24.19	24.15
		1	24	25.36	25.55	25.43	24.14	24.15	24.14
		1	49	25.54	25.24	25.30	24.14	24.06	23.99
		25	0	24.80	24.72	24.67	23.19	23.23	23.18
		25	12	24.85	24.68	24.79	23.23	23.18	23.18
		25	24	24.83	24.67	24.72	23.20	23.21	23.25
		50	0	24.84	24.75	24.71	23.25	23.16	23.21
	16QAM	1	0	25.09	24.97	24.96	23.02	23.06	22.60
		1	24	25.11	24.85	24.93	23.00	23.12	22.64
		1	49	24.86	24.99	25.06	22.98	23.01	22.51
		25	0	23.92	23.78	23.85	21.74	21.69	21.71
		25	12	23.90	23.75	23.73	21.81	21.66	21.68
		25	24	23.85	23.77	23.81	21.79	21.72	21.76
		50	0	23.81	23.73	23.72	21.77	21.72	21.73
	64QAM	1	0	23.84	24.12	24.00	22.11	22.40	21.93
		1	24	23.92	24.06	24.32	22.12	22.38	21.92
		1	49	24.04	24.02	23.61	22.08	22.37	21.91
		25	0	22.84	22.81	22.71	21.11	22.37	21.91
		25	12	22.91	22.77	22.76	21.16	22.38	21.91
		25	24	22.81	22.84	22.70	21.10	22.37	21.92
		50	0	22.87	22.80	22.71	21.10	22.35	21.92
	256QAM	1	0	20.63	20.70	20.72	19.27	19.69	19.89
		1	24	20.98	20.88	21.17	19.28	19.66	19.78
		1	49	21.14	20.82	20.93	19.30	19.69	19.80
		25	0	20.77	20.82	20.71	19.55	19.49	19.50
		25	12	20.96	20.79	20.72	19.59	19.46	19.46
		25	24	20.75	20.73	20.70	19.55	19.47	19.48
		50	0	20.86	20.67	20.66	19.57	19.42	19.46

8.10. LTE BAND 30 AND 5G NR n30

LTE BAND 30

Test Engineer ID:	44353	Test Date:	11/30/2021
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OUTPUT POWER FOR LTE BAND 30 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				27685	27710	27735	27685	27710	27735
				2307.5	2310.0	2312.5	2307.5	2310.0	2312.5
5.0	QPSK	1	0	24.00	23.82	23.82	20.42	20.50	20.40
		1	12	23.98	23.95	23.91	20.45	20.36	20.41
		1	24	23.85	23.92	23.93	20.32	20.37	20.34
		12	0	23.83	23.92	23.83	20.38	20.33	20.36
		12	6	23.99	23.92	23.89	20.43	20.41	20.32
		12	11	23.81	23.81	23.85	20.32	20.43	20.38
		25	0	23.81	23.88	23.85	20.33	20.40	20.37
		1	0	23.81	23.92	23.98	20.34	20.48	20.37
	16QAM	1	12	23.85	23.99	23.92	20.38	20.46	20.49
		1	24	23.92	23.84	23.97	20.31	20.40	20.31
		12	0	23.90	23.98	23.93	20.39	20.49	20.35
		12	6	23.86	23.86	23.90	20.07	19.82	19.84
		12	11	23.84	23.83	23.96	20.00	19.77	19.91
		25	0	23.89	23.92	23.99	19.91	19.70	19.98
		1	0	23.95	23.88	23.92	20.05	19.68	19.82
		1	12	23.64	23.08	22.91	19.53	19.22	18.95
	64QAM	1	24	23.22	22.97	23.71	19.28	18.91	19.01
		12	0	23.03	23.49	23.79	19.18	19.14	19.24
		12	6	22.25	21.84	22.07	18.30	17.98	17.86
		12	11	22.08	21.80	22.36	18.30	17.83	17.86
		25	0	22.01	21.92	22.50	18.00	17.80	17.88
		1	0	22.08	21.93	22.23	18.18	17.88	17.89
		1	12	20.76	20.96	20.94	17.70	18.02	17.90
		1	24	21.09	21.10	21.18	18.04	17.88	17.98
	256QAM	12	0	21.23	21.09	21.12	17.91	17.91	17.69
		12	6	20.87	20.91	20.84	17.70	17.70	17.68
		12	11	21.02	21.05	21.02	17.79	17.87	17.84
		25	0	20.98	20.95	20.92	17.81	17.75	17.86

OUTPUT POWER FOR LTE BAND 30 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				N/A	27710	N/A	N/A	27710	N/A
				N/A	2310.0	N/A	N/A	2310.0	N/A
10.0	QPSK	1	0		23.81			20.30	
		1	24		23.95			20.45	
		1	49		23.90			20.48	
		25	0		24.00			20.34	
		25	12		23.89			20.35	
		25	24		23.97			20.50	
		50	0		23.99			20.44	
		1	0		23.90			20.41	
	16QAM	1	24		23.96			20.36	
		1	49		23.84			20.44	
		25	0		23.93			20.20	
		25	12		23.96			20.06	
		25	24		23.88			20.15	
		50	0		23.87			20.20	
		1	0		23.92			19.79	
		1	24		23.31			19.56	
		1	49		23.83			19.52	
	64QAM	25	0		22.09			18.39	
		25	12		22.07			18.16	
		25	24		22.33			18.14	
		50	0		22.26			18.31	
		1	0		20.93			17.91	
		1	24		21.05			18.00	
		1	49		21.18			18.19	
		25	0		20.95			17.90	
	256QAM	25	12		21.06			18.02	
		25	24		21.08			18.09	
		50	0		21.04			18.00	

5G NR n30

Test Engineer ID:	44353	Test Date:	12/1/2021
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OUTPUT POWER FOR 5G NR n30 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				501200	518600	536000	501200	518600	536000
5.0	BPSK	1	0	20.65	20.70	20.69	17.28	17.29	17.21
		1	1	23.81	23.98	24.00	20.34	20.48	20.50
		1	23	23.83	23.83	23.89	20.32	20.30	20.44
		1	24	20.54	20.51	20.61	17.33	17.25	17.27
		12	6	23.91	23.83	23.92	20.37	20.39	20.46
		25	0	22.10	22.20	22.02	18.90	18.80	18.83
	QPSK	1	0	20.64	20.61	20.60	17.28	17.32	17.29
		1	1	23.85	23.82	23.98	20.48	20.34	20.49
		1	23	23.88	23.96	23.91	20.39	20.44	20.38
		1	24	20.67	20.53	20.69	17.39	17.26	17.30
		12	6	23.88	23.93	23.96	20.32	20.45	20.48
		25	0	22.15	22.11	22.15	18.82	18.87	18.87
	16QAM	1	0	20.51	20.65	20.57	17.34	17.37	17.21
		1	1	23.86	23.93	23.83	20.37	20.45	20.44
		1	23	23.94	23.85	23.98	20.44	20.48	20.41
		1	24	20.66	20.57	20.70	17.26	17.21	17.38
		12	6	23.88	23.70	23.85	20.41	20.11	20.04
		25	0	22.08	22.09	22.00	18.81	18.75	18.71
	64QAM	1	0	20.58	20.54	20.56	17.24	17.32	17.39
		1	1	23.14	22.93	22.75	19.63	19.36	19.21
		1	23	22.68	22.83	23.35	19.16	19.00	19.02
		1	24	20.63	20.61	20.58	17.24	17.39	17.32
		12	6	22.46	22.12	22.35	19.05	18.61	18.48
		25	0	22.11	22.20	22.18	18.84	18.61	18.47
	256QAM	1	0	20.67	20.59	20.64	17.38	17.29	17.26
		1	1	21.11	21.10	21.20	17.85	17.59	17.67
		1	23	21.25	21.31	21.31	17.62	17.35	17.53
		1	24	20.58	20.57	20.56	17.37	17.33	17.30
		12	6	21.16	20.82	21.04	17.85	17.33	17.19
		25	0	21.04	20.72	21.00	17.50	17.19	17.01

OUTPUT POWER FOR 5G NR n30 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				N/A	518600	N/A	N/A	518600	N/A
10.0	BPSK	1	0		20.65			17.40	
		1	1		23.82			20.43	
		1	50		23.83			20.47	
		1	51		20.70			17.29	
		25	12		24.00			20.50	
		50	0		22.20			18.90	
	QPSK	1	0		20.53			17.35	
		1	1		23.96			20.46	
		1	50		23.97			20.38	
		1	51		20.62			17.24	
		25	12		23.95			20.42	
		50	0		22.15			18.75	
	16QAM	1	0		20.62			17.39	
		1	1		23.93			20.39	
		1	50		23.99			20.38	
		1	51		20.64			17.33	
		25	12		23.83			20.29	
		50	0		22.12			18.71	
	64QAM	1	0		20.64			17.32	
		1	1		23.15			19.45	
		1	50		23.18			18.84	
		1	51		20.57			17.28	
		25	12		22.23			18.89	
		50	0		22.07			18.73	
	256QAM	1	0		20.67			17.26	
		1	1		21.15			17.97	
		1	50		21.39			17.59	
		1	51		20.54			17.33	
		25	12		20.85			17.36	
		50	0		21.09			17.24	

8.11. LTE BAND 41 AND 5G NR n41

LTE BAND 41

Test Engineer ID:	25780	Test Date:	9/14/2021
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OUTPUT POWER FOR LTE BAND 41 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				39675	40620	41565	39675	40620	41565
5.0	QPSK	1	0	24.73	27.68	27.65	20.10	24.18	24.10
		1	12	27.70	27.65	27.57	22.30	24.11	24.18
		1	24	27.61	27.62	27.64	22.95	24.10	24.20
		12	0	23.82	26.68	26.70	19.42	23.17	23.19
		12	6	23.84	26.72	26.74	19.48	23.28	23.26
		12	11	26.69	26.69	26.72	21.59	23.21	23.21
		25	0	23.76	26.71	26.74	19.46	23.18	23.16
		1	0	24.17	27.06	26.89	19.68	23.53	23.33
	16QAM	1	12	27.03	27.06	26.84	21.84	23.48	23.40
		1	24	27.10	27.05	26.82	22.28	23.50	23.41
		12	0	22.80	25.83	25.79	18.37	22.35	22.31
		12	6	22.84	25.95	25.84	18.47	22.45	22.28
		12	11	25.65	25.89	25.90	20.67	22.31	22.29
		25	0	22.75	25.75	25.73	18.44	22.27	22.18
		1	0	23.41	26.08	25.76	18.87	22.56	22.19
		1	12	25.31	25.94	25.70	19.80	22.42	22.34
	64QAM	1	24	25.81	26.00	25.63	20.64	22.50	22.20
		12	0	21.93	24.73	24.76	17.53	21.26	21.20
		12	6	21.93	24.70	24.81	17.59	21.27	21.34
		12	11	23.94	24.73	24.76	18.71	21.25	21.23
		25	0	21.65	24.57	24.71	17.37	21.16	21.21
	256QAM	1	0	20.08	23.14	23.09	15.70	19.71	19.69
		1	12	23.19	23.09	23.16	18.75	19.67	19.73
		1	24	23.15	23.00	22.94	19.01	19.63	19.76
		12	0	19.79	22.74	22.70	15.36	19.27	19.25
		12	6	19.79	22.80	22.73	15.43	19.30	19.29
		12	11	22.71	22.74	22.73	18.49	19.22	19.23
		25	0	19.73	22.76	22.76	15.41	19.21	19.22

OUTPUT POWER FOR LTE BAND 41 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				39700	40620	41540	39700	40620	41540
10.0	QPSK	1	0	22.56	27.70	27.48	18.34	24.19	24.20
		1	24	27.50	27.66	27.51	23.07	24.13	24.13
		1	49	27.47	27.55	27.43	23.70	24.09	24.09
		25	0	23.66	26.60	26.63	19.52	23.23	23.21
		25	12	26.69	26.64	26.59	21.95	23.24	23.27
		25	24	25.58	26.51	26.52	21.65	23.21	23.27
		50	0	23.65	26.60	26.59	19.58	23.20	23.18
		1	0	22.01	27.17	26.97	17.65	23.49	23.72
	16QAM	1	24	26.93	27.12	26.79	22.43	23.39	23.48
		1	49	26.92	27.02	26.66	23.13	23.46	23.52
		25	0	22.69	25.65	25.59	18.55	22.24	22.24
		25	12	25.69	25.71	25.59	20.98	22.22	22.32
		25	24	24.52	25.63	25.56	20.70	22.20	22.27
		50	0	22.65	25.72	25.61	18.61	22.24	22.25
		1	0	21.10	25.98	25.43	16.49	22.11	22.57
		1	24	25.68	25.92	25.57	20.20	22.09	22.64
	64QAM	1	49	25.97	26.01	25.43	21.02	22.13	22.69
		25	0	21.63	24.55	24.65	17.50	21.28	21.20
		25	12	23.98	24.60	24.69	18.85	21.33	21.28
		25	24	23.53	24.52	24.59	19.33	21.28	21.26
		50	0	21.63	24.64	24.62	17.54	21.19	21.20
	256QAM	1	0	17.22	22.89	22.82	13.63	19.37	19.12
		1	24	22.38	22.87	22.77	18.98	19.30	19.21
		1	49	22.35	22.87	22.61	19.05	19.29	19.12
		25	0	19.66	22.63	22.66	15.52	19.30	19.31
		25	12	22.77	22.73	22.65	18.66	19.27	19.41
		25	24	21.58	22.62	22.57	17.69	19.24	19.36
		50	0	19.62	22.68	22.66	15.52	19.26	19.17

OUTPUT POWER FOR LTE BAND 41 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				39725	40620	41515	39725	40620	41515
15.0	QPSK	1	0	22.64	27.57	27.64	18.17	24.20	24.08
		1	37	27.56	27.62	27.61	23.45	24.07	24.05
		1	74	27.54	27.66	27.70	23.61	24.12	24.14
		36	0	22.74	26.79	26.78	18.52	23.25	23.18
		36	16	26.73	26.81	26.73	22.51	23.21	23.22
		36	35	23.66	26.73	26.69	19.73	23.17	23.20
		75	0	22.75	26.78	26.74	18.55	23.20	23.15
	16QAM	1	0	22.00	27.03	26.95	17.38	23.57	23.41
		1	37	27.06	26.97	27.01	22.84	23.39	23.37
		1	74	27.03	27.00	26.98	22.90	23.41	23.57
		36	0	21.77	25.80	25.76	17.53	22.25	22.19
		36	16	25.73	25.84	25.75	21.48	22.20	22.19
		36	35	22.65	25.75	25.65	18.70	22.17	22.19
		75	0	21.80	25.79	25.76	17.61	22.20	22.27
	64QAM	1	0	21.14	25.95	25.57	16.42	22.03	22.60
		1	37	26.11	25.84	25.55	20.54	21.84	22.63
		1	74	26.13	25.93	25.59	21.50	22.06	22.71
		36	0	20.88	24.76	24.81	16.56	21.27	21.25
		36	16	24.64	24.75	24.82	19.47	21.27	21.33
		36	35	21.76	24.71	24.75	17.71	21.24	21.31
		75	0	20.80	24.82	24.76	16.58	21.19	21.29
	256QAM	1	0	17.43	23.12	22.85	13.63	19.37	18.86
		1	37	22.46	23.06	22.79	19.01	19.23	18.96
		1	74	22.48	23.14	22.86	19.24	19.31	19.05
		36	0	18.87	22.73	22.78	14.56	19.29	19.22
		36	16	22.77	22.78	22.81	18.77	19.27	19.27
		36	35	19.73	22.74	22.75	15.72	19.22	19.31
		75	0	18.75	22.79	22.76	14.63	19.24	19.26

OUTPUT POWER FOR LTE BAND 41 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				39750	40620	41490	39750	40620	41490
20.0	QPSK	1	0	22.67	27.70	27.62	18.05	24.20	23.99
		1	49	27.59	27.59	27.53	23.50	23.93	24.08
		1	99	27.64	27.66	27.59	23.57	24.04	24.09
		50	0	22.75	26.76	26.74	18.48	23.13	23.05
		50	24	26.72	26.75	26.74	22.65	23.12	23.07
		50	49	23.65	26.74	26.66	19.70	23.04	23.11
		100	0	22.75	26.79	26.73	18.65	23.09	23.07
	16QAM	1	0	21.78	27.16	27.03	17.43	23.29	23.54
		1	49	26.73	27.03	26.94	22.78	23.13	23.40
		1	99	26.90	27.10	27.04	22.88	23.24	23.50
		50	0	21.79	25.81	25.75	17.52	22.15	22.11
		50	24	25.74	25.82	25.77	21.66	22.09	22.10
		50	49	22.68	25.76	25.65	18.68	22.04	22.19
		100	0	21.74	25.81	25.72	17.64	22.08	22.06
	64QAM	1	0	20.84	26.06	26.31	16.72	22.57	21.98
		1	49	25.63	25.98	26.19	21.12	22.29	22.33
		1	99	25.85	26.07	26.26	21.61	22.27	22.56
		50	0	20.78	24.77	24.79	16.56	21.19	21.11
		50	24	24.78	24.85	24.81	19.83	21.17	21.14
		50	49	21.73	24.74	24.73	17.73	21.14	21.16
		100	0	20.75	24.82	24.75	16.65	21.13	21.12
	256QAM	1	0	17.83	23.13	23.14	13.66	19.56	19.51
		1	49	22.84	23.04	23.10	18.96	19.32	19.55
		1	99	22.94	23.11	23.10	19.16	19.28	19.51
		50	0	18.83	22.75	22.74	14.52	19.20	19.12
		50	24	22.83	22.86	22.76	18.75	19.21	19.11
		50	49	19.73	22.75	22.68	15.72	19.15	19.18
		100	0	18.83	22.80	22.78	14.66	19.17	19.12

5G NR n41

Test Engineer ID:	19467	Test Date:	10/21/2021
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OUTPUT POWER FOR 5G NR n41 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 2			ANT 1		
				501200	518600	536000	501200	518600	536000
20.0	BPSK	1	0	2506.0	2593.0	2680.0	2506.0	2593.0	2680.0
		1	0	21.44	24.88	24.91	17.84	20.00	20.23
		1	1	21.64	26.70	25.11	17.97	23.59	23.85
		1	49	27.70	25.88	18.78	23.57	23.74	24.03
		1	50	24.50	24.94	22.32	19.85	20.29	20.61
		25	12	24.24	26.20	20.49	19.96	23.74	23.90
	QPSK	50	0	24.21	25.10	20.98	19.93	23.14	23.41
		1	0	21.33	24.92	24.81	17.46	20.07	20.40
		1	1	21.26	25.95	25.18	17.47	23.66	23.93
		1	49	27.26	25.84	22.84	23.64	23.91	24.20
		1	50	24.49	24.96	24.77	19.96	20.29	20.58
		25	12	23.15	26.44	24.02	18.96	23.67	23.83
	16QAM	50	0	23.17	25.78	24.20	18.91	22.68	22.83
		1	0	21.12	24.94	24.69	17.18	19.90	20.25
		1	1	21.04	26.09	25.75	17.31	22.52	22.69
		1	49	26.90	26.31	24.37	22.50	22.60	23.08
		1	50	24.27	24.80	24.81	19.80	20.22	20.30
		25	12	22.58	27.01	25.06	18.35	22.62	22.80
	64QAM	50	0	22.61	26.36	24.98	18.52	21.67	21.91
		1	0	20.67	24.86	24.72	16.85	19.78	20.23
		1	1	20.64	25.80	25.59	16.78	20.99	20.94
		1	49	25.22	25.85	25.50	20.71	21.36	21.52
		1	50	24.30	24.89	24.67	19.74	20.16	20.48
		25	12	22.65	25.99	25.91	18.46	21.01	21.23
	256QAM	50	0	22.59	25.88	25.81	18.49	21.12	21.33
		1	0	19.37	24.25	24.20	15.32	19.00	19.14
		1	1	19.34	24.26	24.18	15.67	19.13	19.10
		1	49	23.40	24.16	24.23	18.91	19.37	19.60
		1	50	23.45	24.19	24.22	18.83	19.19	19.42
		25	12	21.08	24.03	23.86	16.86	19.07	19.19
		50	0	20.94	23.95	23.81	16.92	19.13	19.32

OUTPUT POWER FOR 5G NR n41 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 2			ANT 1		
				502200	518600	525000	502200	518600	525000
30.0	BPSK	1	0	2511	2593	2675	2511	2593	2675
		1	0	21.49	24.08	24.20	17.83	19.95	20.05
		1	1	21.61	26.70	27.20	17.94	23.50	23.54
		1	76	27.70	26.56	25.21	23.53	23.70	24.08
		1	77	24.40	24.31	24.41	19.91	20.13	20.44
		36	18	24.16	26.45	26.21	19.81	23.57	23.72
	QPSK	75	0	24.06	26.12	25.80	19.88	23.02	23.25
		1	0	21.30	24.19	24.31	17.39	20.13	20.06
		1	1	21.30	26.20	26.77	17.41	23.72	23.68
		1	76	26.84	26.08	25.16	23.61	23.82	24.20
		1	77	24.29	24.16	24.41	20.03	20.22	20.63
		36	18	23.09	25.99	25.81	18.82	23.59	23.70
	16QAM	75	0	23.10	25.44	25.36	18.86	22.53	22.81
		1	0	21.07	23.82	24.15	17.31	19.90	20.11
		1	1	20.99	25.85	26.44	17.23	22.50	22.48
		1	76	26.44	25.72	24.85	22.43	22.52	23.07
		1	77	23.97	23.92	24.20	19.81	20.22	20.36
		36	18	22.61	25.65	25.61	18.32	22.51	22.64
	64QAM	75	0	22.56	25.40	24.96	18.34	21.50	21.74
		1	0	21.04	24.22	24.41	17.04	20.16	19.80
		1	1	20.84	25.18	25.45	16.95	21.05	20.90
		1	76	25.44	25.25	24.03	20.74	20.88	21.51
		1	77	24.31	24.50	24.18	19.89	20.03	20.26
		36	18	22.62	24.91	24.89	18.33	21.11	21.19
	256QAM	75	0	22.63	25.01	24.79	18.29	21.05	21.21
		1	0	19.02	22.98	23.20	15.37	18.88	18.81
		1	1	19.00	22.97	23.16	15.25	19.06	18.95
		1	76	23.11	22.97	23.24	18.92	19.21	19.41
		1	77	23.12	23.08	22.95	18.74	19.16	19.38
		36	18	21.03	23.03	23.20	16.77	19.05	19.11
		75	0	21.00	22.98	23.16	16.81	19.02	19.15

OUTPUT POWER FOR 5G NR n41 (40.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 2			ANT 1		
				503200	518600	534000	503200	518600	534000
40.0	BPSK	1	0	21.98	24.74	24.44	17.97	19.96	20.18
		1	1	22.15	26.96	27.70	17.81	23.49	23.59
		1	104	26.76	26.64	23.16	23.62	23.79	24.03
		1	105	25.21	24.83	24.64	20.05	20.34	20.57
		50	25	25.02	27.64	26.00	19.90	23.62	23.67
		100	0	25.03	27.04	25.34	19.94	23.14	23.21
	QPSK	1	0	21.75	24.71	24.53	17.48	20.06	20.09
		1	1	21.73	26.81	27.18	17.45	23.72	23.66
		1	104	26.85	27.35	24.82	23.70	24.00	24.20
		1	105	25.19	24.75	24.56	20.13	20.37	20.60
		50	25	24.00	27.42	26.34	18.88	23.66	23.65
		100	0	23.98	26.97	25.99	18.97	22.57	22.64
	16QAM	1	0	21.82	24.91	24.74	17.04	19.79	20.06
		1	1	21.88	26.81	27.12	17.36	22.04	22.29
		1	104	26.74	27.32	25.42	22.58	22.64	22.79
		1	105	25.27	24.86	24.72	19.90	20.16	20.37
		50	25	23.44	27.02	26.86	18.45	22.70	22.61
		100	0	23.48	26.19	25.96	18.46	21.58	21.67
	64QAM	1	0	21.60	25.06	24.93	16.84	19.89	20.09
		1	1	21.57	26.07	25.78	16.76	20.91	21.14
		1	104	26.30	25.97	25.79	21.06	21.10	21.59
		1	105	25.31	24.94	24.90	19.97	20.28	20.06
		50	25	23.38	25.58	25.35	18.36	21.14	21.18
		100	0	23.43	25.66	25.45	18.40	21.10	21.10
	256QAM	1	0	20.18	24.30	23.88	15.26	18.90	18.88
		1	1	19.98	24.20	23.91	15.24	18.92	18.99
		1	104	24.46	24.20	23.95	19.06	19.23	19.35
		1	105	24.59	24.26	23.95	18.87	19.37	19.35
		50	25	21.91	23.57	23.40	16.92	19.10	19.12
		100	0	21.89	23.56	23.41	16.96	19.06	19.18

OUTPUT POWER FOR 5G NR n41 (50.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 2			ANT 1		
				504200	518600	533000	504200	518600	533000
50.0	BPSK	1	0	22.07	24.42	24.27	17.71	19.95	20.18
		1	1	22.04	26.98	27.70	17.70	23.40	23.70
		1	131	27.09	26.92	23.28	23.72	24.02	24.13
		1	132	24.86	24.53	24.33	20.13	20.33	20.58
		64	32	24.78	27.26	26.25	19.85	23.61	23.61
		128	0	24.61	26.80	25.49	19.89	23.17	23.17
	QPSK	1	0	21.54	24.51	24.37	17.33	19.99	20.14
		1	1	21.42	26.43	27.32	17.37	23.60	23.67
		1	131	26.69	27.02	24.63	23.76	24.05	24.20
		1	132	24.89	24.65	24.23	20.14	20.44	20.58
		64	32	23.78	27.09	26.06	18.81	23.66	23.63
		128	0	23.58	26.69	25.94	18.83	22.65	22.66
	16QAM	1	0	21.59	24.61	24.47	17.49	19.64	19.89
		1	1	21.58	26.42	26.91	17.00	22.47	22.37
		1	131	26.67	27.08	25.36	22.61	22.88	23.03
		1	132	24.99	24.62	24.47	19.98	20.01	20.40
		64	32	23.18	26.83	26.58	18.36	22.61	22.64
		128	0	22.99	25.80	25.67	18.45	21.67	21.67
	64QAM	1	0	21.37	24.92	24.53	16.43	19.87	19.82
		1	1	21.13	25.67	25.65	16.97	20.61	20.82
		1	131	26.16	25.62	25.46	21.04	21.40	21.47
		1	132	25.09	24.95	24.50	19.98	19.98	20.19
		64	32	23.21	25.33	25.27	18.24	21.09	21.11
		128	0	22.97	25.35	25.22	18.34	21.15	21.19
	256QAM	1	0	19.74	24.02	23.76	15.37	18.93	19.05
		1	1	19.79	23.84	23.70	15.37	18.94	19.07
		1	131	24.22	23.84	23.56	18.92	19.31	19.29
		1	132	24.22	23.94	23.53	19.02	19.13	19.27
		64	32	21.63	23.29	23.13	16.68	19.01	18.99
		128	0	21.42	23.25	23.16	16.81	19.08	19.09

OUTPUT POWER FOR 5G NR n41 (60.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 2			ANT 1		
				505200	518600	532000	505200	518600	532000
60.0	BPSK	1	0	21.84	24.46	24.09	17.90	19.76	20.09
		1	1	21.70	26.83	27.57	17.79	23.38	23.73
		1	160	27.70	26.82	22.74	23.76	24.12	24.12
		1	161	25.04	24.47	24.18	20.35	20.48	20.74
		81	40	24.72	27.27	26.27	20.00	23.78	23.72
		162	0	24.65	26.67	25.60	19.94	23.34	23.31
	QPSK	1	0	21.32	24.37	24.15	17.40	20.06	20.27
		1	1	21.22	26.26	27.39	17.46	23.47	23.78
		1	160	26.64	26.78	24.68	23.86	24.10	24.20
		1	161	24.78	24.36	24.33	20.44	20.64	20.86
		81	40	23.64	27.19	26.28	19.07	23.81	23.82
		162	0	23.56	26.70	26.16	18.97	22.90	22.82
	16QAM	1	0	21.42	24.52	24.37	16.93	20.01	20.03
		1	1	21.36	26.42	26.81	17.43	22.40	22.53
		1	160	26.56	26.96	25.29	22.94	22.91	23.22
		1	161	24.88	24.44	24.40	20.39	20.49	20.81
		81	40	23.13	26.76	26.70	18.53	22.78	22.67
		162	0	23.04	25.79	25.66	18.46	21.88	21.85
	64QAM	1	0	21.06	24.84	24.41	17.06	19.99	20.32
		1	1	21.19	25.58	25.58	17.02	21.10	21.35
		1	160	25.87	25.52	25.27	21.34	21.77	21.63
		1	161	24.99	24.94	24.44	20.21	20.63	20.49
		81	40	23.12	25.25	25.15	18.56	21.36	21.20
		162	0	23.08	25.26	25.17	18.43	21.32	21.30
	256QAM	1	0	19.64	23.92	23.52	15.34	19.17	19.05
		1	1	19.60	23.90	23.54	15.63	18.84	18.97
		1	160	24.11	23.77	23.71	19.41	19.38	19.90
		1	161	24.37	23.85	23.74	19.07	19.83	19.35
		81	40	21.52	23.20	23.13	16.96	19.25	19.19
		162	0	21.45	23.17	23.11	16.96	19.18	19.28

OUTPUT POWER FOR 5G NR n41 (80.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				507200	518600	530000	507200	518600	530000
80.0	BPSK	1	0	21.71	22.44	23.81	17.83	17.92	19.93
		1	1	21.85	22.41	27.48	17.86	17.98	23.57
		1	215	27.22	27.70	20.42	23.79	23.82	24.12
		1	216	24.40	24.18	23.97	20.19	20.28	20.44
		108	54	24.54	26.74	25.51	20.08	23.71	23.67
		216	0	24.47	25.55	24.82	20.05	23.26	23.27
	QPSK	1	0	21.34	22.09	23.88	17.45	17.61	20.08
		1	1	21.23	21.90	27.05	17.24	17.59	23.61
		1	215	27.07	27.39	23.38	23.73	23.87	24.20
		1	216	24.47	24.15	24.07	20.19	20.41	20.71
		108	54	23.57	26.57	25.61	19.02	23.64	23.64
		216	0	23.45	25.82	24.92	19.02	22.75	22.76
	16QAM	1	0	21.45	22.12	24.20	17.35	17.54	20.02
		1	1	21.17	22.22	26.43	17.02	17.16	22.47
		1	215	26.82	26.76	24.41	22.84	22.99	22.90
		1	216	24.66	24.29	24.16	20.08	20.40	20.68
		108	54	23.04	26.69	26.20	18.53	22.69	22.58
		216	0	22.89	25.67	25.58	18.50	21.77	21.73
	64QAM	1	0	21.23	21.74	24.28	16.96	17.37	20.00
		1	1	20.98	21.67	25.24	16.77	17.00	21.09
		1	215	25.76	25.32	25.20	21.43	21.31	21.31
		1	216	24.61	24.66	24.46	20.21	20.33	20.66
		108	54	22.98	25.25	25.19	18.47	21.19	21.16
		216	0	22.91	25.22	25.09	18.45	21.23	21.22
	256QAM	1	0	19.59	20.24	23.35	15.13	15.45	18.99
		1	1	19.68	20.19	23.29	15.59	15.50	19.10
		1	215	23.89	23.48	23.48	19.20	19.11	19.83
		1	216	23.87	23.43	23.42	19.49	19.30	19.71
		108	54	21.52	23.16	23.20	16.93	19.14	19.12
		216	0	21.34	23.14	23.05	16.99	19.13	19.24

OUTPUT POWER FOR 5G NR n41 (90.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 2			ANT 1		
				508200	518600	529000	508200	518600	529000
90.0	BPSK	1	0	21.41	22.31	24.06	17.96	18.18	20.29
		1	1	21.64	22.32	27.40	17.62	18.15	23.68
		1	243	27.31	27.70	20.40	23.97	24.18	24.20
		1	244	24.38	24.34	24.14	20.03	20.73	20.76
		120	60	24.60	26.70	25.62	20.16	23.81	23.86
		243	0	24.54	25.58	24.84	20.13	23.41	23.37
	QPSK	1	0	21.42	21.97	23.93	17.38	17.60	20.31
		1	1	21.31	21.99	26.78	17.40	17.63	23.59
		1	243	27.00	27.45	23.34	23.86	24.14	24.20
		1	244	24.51	24.28	24.06	20.48	20.75	20.81
		120	60	23.60	26.73	25.92	19.10	23.86	23.86
		243	0	23.51	25.98	25.55	19.06	22.87	22.84
	16QAM	1	0	21.44	22.08	24.12	17.37	17.67	19.69
		1	1	21.21	22.19	26.52	17.07	17.75	22.94
		1	243	27.01	26.89	24.52	23.04	22.96	23.30
		1	244	24.43	24.15	24.21	20.29	20.60	20.91
		120	60	23.06	26.76	26.56	18.51	22.86	22.89
		243	0	22.92	25.78	25.56	18.61	21.88	21.86
	64QAM	1	0	21.10	21.42	24.32	16.98	17.23	20.18
		1	1	20.80	21.32	25.01	16.74	17.37	21.05
		1	243	25.26	25.15	24.93	21.68	21.71	22.14
		1	244	24.45	24.18	23.86	20.22	20.15	20.74
		120	60	23.07	25.28	25.10	18.62	21.33	21.36
		243	0	22.95	25.37	25.08	18.61	21.42	21.35
	256QAM	1	0	19.63	20.41	23.50	15.53	15.63	19.31
		1	1	19.85	20.01	23.14	15.35	15.68	18.98
		1	243	23.86	23.60	23.48	19.90	20.01	19.77
		1	244	23.88	23.88	23.46	19.31	19.48	19.52
		120	60	21.47	23.22	23.03	17.06	19.25	19.31
		243	0	21.34	23.27	23.04	17.16	19.32	19.29

OUTPUT POWER FOR 5G NR n41 (100.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 2			ANT 1		
				509200	528600	528000	509200	528600	528000
100.0	BPSK	1	0	21.41	21.87	21.67	17.73	17.92	17.80
		1	1	21.33	21.95	21.49	17.57	17.91	17.82
		1	271	27.70	27.68	26.81	23.85	24.07	24.09
		1	272	24.04	24.12	23.99	20.43	20.55	20.70
		135	67	24.25	27.44	27.36	20.16	23.70	23.84
		270	0	24.10	27.13	26.88	20.08	23.32	23.19
	QPSK	1	0	21.10	21.60	21.17	17.30	17.54	17.46
		1	1	20.94	21.49	20.97	17.30	17.45	17.62
		1	271	27.52	27.65	26.87	23.81	23.91	24.20
		1	272	24.11	24.22	23.96	20.56	20.64	20.78
		135	67	23.18	27.48	27.31	19.01	23.67	23.81
		270	0	23.02	26.60	26.33	19.07	22.78	22.69
	16QAM	1	0	21.11	21.66	21.22	17.23	17.45	17.00
		1	1	20.90	21.77	21.54	17.27	17.51	17.20
		1	271	26.64	26.79	26.42	22.86	22.64	22.91
		1	272	24.02	24.22	24.06	20.36	20.31	20.47
		135	67	22.60	26.47	26.36	18.59	22.71	22.78
		270	0	22.51	25.57	25.31	18.60	21.83	21.68
	64QAM	1	0	20.31	21.16	20.52	16.66	17.12	16.64
		1	1	20.20	20.89	20.91	16.94	17.14	17.07
		1	271	25.02	25.06	24.88	21.27	21.31	21.48
		1	272	24.14	24.06	24.06	20.50	20.37	20.65
		135	67	22.62	24.95	24.84	18.56	21.27	21.30
		270	0	22.43	25.03	24.79	18.56	21.37	21.19
	256QAM	1	0	18.85	19.27	19.15	15.34	15.37	15.90
		1	1	18.91	19.34	19.30	15.25	15.65	15.85
		1	271	22.87	22.98	22.72	19.74	19.75	19.77
		1	272	22.96	22.88	22.73	20.13	19.34	18.92
		135	67	21.10	22.87	22.83	17.03	19.18	19.28
		270	0	20.99	23.03	22.73	17.05	19.26	19.15

8.12. LTE BAND 48

LTE BAND 48

Test Engineer ID:	44353	Test Date:	11/29/2021
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OUTPUT POWER FOR LTE BAND 48 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				55265	55990	56715	55260	55990	56715
5.0	QPSK			3552.5	3625.0	3697.5	3552.5	3625.0	3697.5
		1	0	22.57	22.52	22.56	22.17	22.33	22.28
		1	12	22.56	22.56	22.70	22.17	22.33	22.18
		1	24	22.67	22.64	22.54	22.18	22.50	22.32
		12	0	22.62	22.64	22.53	21.34	21.46	21.33
		12	6	22.61	22.53	22.68	21.31	21.48	21.32
		12	11	22.69	22.63	22.60	21.31	21.46	21.35
		25	0	22.65	22.59	22.59	21.31	21.47	21.32
	16QAM	1	0	22.66	22.67	22.51	21.59	21.74	21.47
		1	12	22.55	22.68	22.68	21.49	21.72	21.38
		1	24	22.58	22.56	22.62	21.68	21.77	21.49
		12	0	22.52	22.50	22.69	20.27	20.65	20.37
		12	6	22.69	22.54	22.69	20.31	20.55	20.42
		12	11	22.56	22.51	22.50	20.26	20.59	20.38
		25	0	22.53	22.65	22.52	20.32	20.44	20.31
		1	0	22.62	22.66	22.69	20.88	20.74	20.34
	64QAM	1	12	22.66	22.55	22.62	20.93	20.65	20.22
		1	24	22.63	22.58	22.56	20.92	20.83	20.38
		12	0	22.57	22.57	22.62	19.41	19.46	19.39
		12	6	22.69	22.67	22.51	19.48	19.50	19.37
		12	11	22.56	22.60	22.61	19.47	19.51	19.32
		25	0	22.51	22.69	22.65	19.31	19.36	19.33
	256QAM	1	0	21.56	21.85	21.49	17.74	17.86	17.75
		1	12	21.56	21.78	21.32	17.79	17.90	17.73
		1	24	21.61	21.91	21.50	17.83	17.97	17.77
		12	0	21.30	21.53	21.19	17.22	17.51	17.34
		12	6	21.25	21.52	21.18	17.34	17.48	17.31
		12	11	21.31	21.51	21.26	17.35	17.50	17.32
		25	0	21.27	21.48	21.21	17.29	17.48	17.33

OUTPUT POWER FOR LTE BAND 48 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				55290	55990	56690	55290	55990	56690
10.0	QPSK			3555.0	3625.0	3695.0	3555.0	3625.0	3695.0
		1	0	22.67	22.62	22.64	22.15	22.42	22.24
		1	24	22.63	22.51	22.55	22.22	22.45	22.19
		1	49	22.70	22.53	22.52	22.36	22.50	22.32
		25	0	22.70	22.65	22.58	21.36	21.48	21.34
		25	12	22.60	22.53	22.54	21.45	21.56	21.38
		25	24	22.64	22.59	22.56	21.46	21.50	21.42
		50	0	22.70	22.64	22.50	21.39	21.55	21.39
	16QAM	1	0	22.69	22.55	22.56	21.72	21.81	21.71
		1	24	22.66	22.56	22.68	21.66	21.85	21.59
		1	49	22.53	22.70	22.55	21.68	21.87	21.76
		25	0	22.51	22.61	22.66	20.39	20.51	20.40
		25	12	22.60	22.64	22.65	20.47	20.65	20.44
		25	24	22.51	22.63	22.56	20.45	20.63	20.36
		50	0	22.69	22.70	22.59	20.45	20.61	20.38
		1	0	22.51	22.54	22.67	20.72	20.98	20.29
	64QAM	1	24	22.60	22.66	22.55	20.80	21.08	20.31
		1	49	22.57	22.64	22.54	20.89	21.14	20.36
		25	0	22.65	22.67	22.63	19.34	19.47	19.48
		25	12	22.67	22.52	22.64	19.44	19.61	19.53
		25	24	22.53	22.60	22.62	19.45	19.58	19.46
		50	0	22.58	22.68	22.69	19.44	19.62	19.45
	256QAM	1	0	21.35	21.62	21.07	17.07	17.84	17.43
		1	24	21.37	21.65	21.07	17.13	17.84	17.51
		1	49	21.41	21.73	21.22	17.26	17.93	17.56
		25	0	21.35	21.53	21.32	17.48	17.49	17.48
		25	12	21.35	21.54	21.41	17.54	17.66	17.51
		25	24	21.34	21.50	21.36	17.55	17.65	17.41
		50	0	21.33	21.55	21.21	17.38	17.63	17.43

OUTPUT POWER FOR LTE BAND 48 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				55315	55990	56665	55315	55990	56665
15.0	QPSK	1	0	22.57	22.70	22.63	22.16	22.27	22.15
		1	37	22.52	22.57	22.52	22.18	22.46	22.18
		1	74	22.58	22.60	22.55	22.24	22.50	22.26
		36	0	22.65	22.70	22.67	21.34	21.46	21.37
		36	16	22.65	22.55	22.67	21.42	21.52	21.37
		36	35	22.67	22.53	22.58	21.45	21.53	21.39
		75	0	22.54	22.69	22.53	21.43	21.54	21.36
	16QAM	1	0	22.53	22.52	22.67	21.54	21.64	21.50
		1	37	22.55	22.64	22.66	21.67	21.66	21.54
		1	74	22.50	22.61	22.63	21.63	21.75	21.60
		36	0	22.51	22.57	22.68	20.35	20.47	20.37
		36	16	22.68	22.67	22.52	20.42	20.57	20.37
		36	35	22.58	22.54	22.55	20.42	20.58	20.37
		75	0	22.64	22.54	22.51	20.43	20.52	20.36
	64QAM	1	0	22.60	22.62	22.67	20.75	20.59	20.23
		1	37	22.51	22.54	22.55	20.83	20.63	20.22
		1	74	22.62	22.57	22.62	20.88	20.74	20.33
		36	0	22.62	22.68	22.62	19.44	19.45	19.46
		36	16	22.62	22.67	22.55	19.55	19.57	19.46
		36	35	22.66	22.53	22.60	19.55	19.54	19.46
		75	0	22.53	22.56	22.70	19.52	19.58	19.42
	256QAM	1	0	21.28	21.49	21.05	17.01	17.78	17.46
		1	37	21.37	21.51	21.00	17.07	17.82	17.40
		1	74	21.42	21.65	21.18	17.27	18.08	17.61
		36	0	21.16	21.43	21.25	17.38	17.50	17.48
		36	16	21.22	21.48	21.24	17.43	17.62	17.51
		36	35	21.15	21.47	21.30	17.50	17.65	17.50
		75	0	21.20	21.49	21.20	17.44	17.61	17.45

OUTPUT POWER FOR LTE BAND 48 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				55340	55990	56640	55340	55990	56640
20.0	QPSK	1	0	22.62	22.55	22.66	22.48	22.40	22.40
		1	49	22.68	22.68	22.55	22.50	22.42	22.34
		1	99	22.65	22.64	22.55	22.46	22.50	22.41
		50	0	22.63	22.70	22.59	21.48	21.55	21.47
		50	24	22.69	22.55	22.69	21.60	21.67	21.49
		50	49	22.52	22.55	22.52	21.61	21.70	21.52
		100	0	22.56	22.56	22.59	21.62	21.60	21.52
	16QAM	1	0	22.61	22.50	22.59	21.83	21.84	21.50
		1	49	22.64	22.64	22.60	21.86	21.97	21.62
		1	99	22.58	22.66	22.60	21.90	22.06	21.55
		50	0	22.57	22.59	22.63	20.55	20.63	20.52
		50	24	22.57	22.51	22.54	20.66	20.71	20.53
		50	49	22.63	22.55	22.64	20.65	20.72	20.53
		100	0	22.60	22.51	22.54	20.63	20.57	20.51
	64QAM	1	0	22.68	22.54	22.51	20.76	21.03	20.67
		1	49	22.66	22.55	22.69	20.80	21.16	20.64
		1	99	22.68	22.57	22.62	20.85	21.22	20.74
		50	0	22.64	22.51	22.59	19.52	19.64	19.55
		50	24	22.60	22.52	22.69	19.67	19.77	19.58
		50	49	22.53	22.52	22.60	19.66	19.79	19.59
		100	0	22.54	22.52	22.66	19.65	19.64	19.55
	256QAM	1	0	21.50	21.56	21.46	17.79	17.99	17.70
		1	49	21.48	21.54	21.32	17.87	18.03	17.57
		1	99	21.59	21.67	21.44	17.95	18.16	17.74
		50	0	21.07	21.33	21.29	17.52	17.61	17.54
		50	24	21.13	21.44	21.31	17.58	17.71	17.59
		50	49	21.14	21.41	21.29	17.64	17.73	17.60
		100	0	21.12	21.43	21.32	17.67	17.68	17.61

8.13. LTE BAND 66 AND 5G NR n66

LTE BAND 66

Test Engineer ID:	44353	Test Date:	11/12/2021
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OUTPUT POWER FOR LTE BAND 66 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				131979	132322	132665	131979	132322	132665
1.4	QPSK	1	0	1710.7	1745.0	1779.3	1710.7	1745.0	1779.3
		1	2	25.68	25.40	25.53	22.25	22.28	22.36
		1	2	25.70	25.43	25.50	22.30	22.29	22.32
		1	5	25.65	25.37	25.50	22.21	22.26	22.33
		3	0	25.59	25.41	25.45	22.24	22.20	22.33
		3	1	25.65	25.44	25.55	22.31	22.26	22.38
		3	2	25.64	25.42	25.46	22.28	22.24	22.40
		6	0	24.95	24.75	24.94	21.37	21.27	21.42
	16QAM	1	0	25.12	25.12	24.86	21.39	21.38	21.92
		1	2	25.20	25.12	24.99	21.48	21.43	21.96
		1	5	25.13	25.11	24.88	21.41	21.41	21.90
		3	0	25.05	24.95	25.05	21.58	21.32	21.57
		3	1	25.08	25.00	25.10	21.61	21.34	21.59
		3	2	25.12	25.00	25.13	21.60	21.42	21.62
		6	0	24.17	23.66	24.04	20.58	20.44	20.30
	64QAM	1	0	24.62	23.92	24.20	21.93	22.02	21.55
		1	2	24.71	23.96	24.27	22.05	22.00	21.50
		1	5	24.62	23.87	24.20	22.01	22.01	21.50
		3	0	24.37	23.96	23.95	21.69	22.01	21.48
		3	1	24.33	23.92	23.98	21.72	22.00	21.50
		3	2	24.34	23.98	24.04	21.74	22.00	21.50
		6	0	23.06	23.11	23.01	20.77	22.00	21.51
	256QAM	1	0	18.66	18.99	18.62	18.73	18.65	18.41
		1	2	18.73	18.38	18.67	18.78	18.81	19.06
		1	5	18.64	18.32	18.57	18.68	18.67	18.96
		3	0	18.44	18.35	18.66	18.83	18.52	18.71
		3	1	18.51	18.33	18.67	18.84	18.55	18.79
		3	2	18.47	18.42	18.61	18.74	18.51	18.76
		6	0	18.39	18.53	18.60	18.76	18.50	18.70

OUTPUT POWER FOR LTE BAND 66 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				131987	132322	132657	131987	132322	132657
3.0	QPSK	1	0	1711.5	1745.0	1778.5	1711.5	1745.0	1778.5
		1	7	25.70	25.45	25.65	22.28	22.22	22.40
		1	7	25.69	25.62	25.64	22.19	22.32	22.40
		1	14	25.65	25.46	25.54	22.23	22.22	22.35
		8	0	25.04	24.79	24.93	21.37	21.26	21.41
		8	4	25.08	24.83	24.93	21.41	21.27	21.44
		8	7	25.07	24.83	24.94	21.31	21.32	21.44
		15	0	25.04	24.80	24.92	21.26	21.30	21.42
	16QAM	1	0	25.05	24.82	25.37	21.46	21.29	21.83
		1	7	25.08	24.71	25.31	21.41	21.20	21.79
		1	14	25.07	24.75	25.32	21.39	21.28	21.81
		8	0	24.04	23.94	23.96	20.43	20.41	20.43
		8	4	24.13	23.90	24.02	20.42	20.46	20.55
		8	7	24.12	23.97	24.06	20.38	20.46	20.52
		15	0	24.04	23.84	24.01	20.26	20.33	20.49
	64QAM	1	0	24.10	24.24	24.39	21.72	21.38	22.04
		1	7	24.11	24.23	24.51	21.77	21.38	22.04
		1	14	24.10	24.16	24.34	21.76	21.38	22.01
		8	0	23.08	22.75	23.05	20.71	21.38	22.01
		8	4	23.09	22.80	23.08	20.72	21.38	22.02
		8	7	23.14	22.80	23.08	20.72	21.37	22.02
		15	0	23.08	22.88	22.98	20.72	21.39	22.01
	256QAM	1	0	19.38	19.54	18.59	19.05	18.37	18.77
		1	7	19.40	19.54	18.50	19.11	18.32	18.76
		1	14	19.39	19.54	18.54	19.13	18.39	18.77
		8	0	19.49	19.22	18.67	18.83	18.50	18.82
		8	4	19.54	19.26	18.72	18.85	18.67	18.88
		8	7	19.55	19.26	18.71	18.88	18.68	18.89
		15	0	19.45	19.23	18.82	18.80	18.64	18.81

OUTPUT POWER FOR LTE BAND 66 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				131997	132322	132647	131997	132322	132647
5.0	QPSK	1	0	25.64	25.51	25.70	22.30	22.21	22.40
		1	12	25.62	25.49	25.69	22.30	22.36	22.33
		1	24	25.62	25.49	25.65	22.20	22.27	22.35
		12	0	24.98	24.81	25.01	21.28	21.29	21.40
		12	6	24.98	24.83	25.02	21.29	21.41	21.46
		12	11	24.98	24.82	25.01	21.27	21.32	21.42
	16QAM	25	0	24.95	24.80	24.98	21.30	21.34	21.36
		1	0	25.08	24.94	25.07	21.41	21.80	21.48
		1	12	25.01	24.88	25.05	21.43	21.86	21.44
		1	24	25.09	24.94	25.04	21.34	21.85	21.46
		12	0	24.01	23.86	24.03	20.35	20.50	20.44
		12	6	24.04	23.86	24.06	20.42	20.53	20.48
	64QAM	12	11	24.01	23.84	24.03	20.36	20.51	20.47
		25	0	23.91	23.76	23.96	20.33	20.43	20.37
		1	0	24.18	24.02	23.97	21.12	20.90	20.71
		1	12	24.31	24.18	24.03	21.14	20.91	20.72
		1	24	24.22	24.08	23.90	21.16	20.90	20.73
		12	0	23.07	22.92	23.07	19.62	20.89	20.73
	256QAM	12	6	23.10	23.00	23.04	19.69	20.87	20.70
		12	11	23.04	22.93	23.02	19.65	20.89	20.70
		25	0	22.98	22.88	22.99	19.64	20.89	20.69
		1	0	19.71	19.26	18.84	17.78	17.53	17.42
		1	12	19.79	19.44	18.85	17.79	17.54	17.49
		1	24	19.77	19.30	18.77	17.82	17.54	17.41
		12	0	19.72	19.31	19.10	17.68	17.58	17.70
		12	6	19.72	19.32	19.15	17.75	17.63	17.73
		12	11	19.72	19.26	19.09	17.70	17.56	17.68
		25	0	19.69	19.31	19.15	17.68	17.60	17.77

OUTPUT POWER FOR LTE BAND 66 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				132022	132322	132622	132022	132322	132622
10.0	QPSK	1	0	25.56	25.53	25.70	22.35	22.29	22.40
		1	24	25.57	25.45	25.62	22.25	22.29	22.35
		1	49	25.52	25.44	25.60	22.20	22.40	22.32
		25	0	24.97	24.86	24.95	21.38	21.37	21.38
		25	12	24.99	24.86	25.03	21.38	21.42	21.39
		25	24	24.96	24.82	24.99	21.29	21.46	21.44
	16QAM	50	0	24.99	24.86	24.94	21.34	21.41	21.37
		1	0	25.02	24.89	25.02	21.73	21.33	21.44
		1	24	25.01	24.86	24.96	21.69	21.32	21.38
		1	49	24.94	24.77	24.91	21.70	21.39	21.38
		25	0	24.08	23.96	24.06	20.44	20.49	20.40
		25	12	24.07	23.96	24.13	20.44	20.53	20.44
	64QAM	25	24	24.05	23.93	24.09	20.38	20.55	20.46
		50	0	24.02	23.89	24.00	20.36	20.44	20.38
		1	0	24.18	24.27	24.19	20.80	20.78	20.63
		1	24	24.23	24.29	24.18	20.78	20.76	20.60
		1	49	24.19	24.19	24.13	20.80	20.77	20.60
		25	0	23.12	22.98	23.10	19.82	20.76	20.62
	256QAM	25	12	23.11	22.98	23.19	19.84	20.77	20.58
		25	24	23.07	22.91	23.14	19.84	20.77	20.60
		50	0	23.03	22.92	23.00	19.82	20.75	20.61
		1	0	19.51	19.24	19.66	17.50	17.58	18.22
		1	24	19.52	19.32	19.64	17.48	17.59	18.34
		1	49	19.51	19.20	19.57	17.50	17.60	18.30
		25	0	19.86	19.40	19.25	17.77	17.69	17.76
		25	12	19.89	19.41	19.22	17.85	17.70	17.81
		25	24	19.82	19.35	19.20	17.84	17.66	17.84
		50	0	19.82	19.36	19.21	17.78	17.66	17.75

OUTPUT POWER FOR LTE BAND 66 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				132047	132322	132597	132047	132322	132597
15.0	QPSK	1	0	25.61	25.50	25.70	22.23	22.11	22.40
		1	37	25.61	25.43	25.70	22.14	22.23	22.30
		1	74	25.57	25.41	25.58	22.09	22.29	22.19
		36	0	24.88	24.84	24.90	21.23	21.24	21.29
		36	16	25.01	24.84	24.96	21.25	21.33	21.29
		36	35	24.96	24.81	25.00	21.19	21.34	21.34
		75	0	24.94	24.81	24.91	21.19	21.28	21.27
	16QAM	1	0	25.32	25.17	25.43	21.62	21.55	21.34
		1	37	25.36	25.17	25.43	21.53	21.67	21.26
		1	74	25.29	25.09	25.34	21.47	21.67	21.20
		36	0	23.90	23.81	23.89	20.33	20.25	20.29
		36	16	23.99	23.81	23.92	20.31	20.30	20.31
		36	35	23.96	23.77	23.98	20.27	20.35	20.35
		75	0	23.96	23.83	23.92	20.25	20.32	20.27
	64QAM	1	0	24.46	24.33	24.24	20.65	20.79	20.57
		1	37	24.55	24.39	24.27	20.81	20.81	20.54
		1	74	24.50	24.34	24.17	20.78	20.79	20.53
		36	0	22.94	22.85	22.98	19.72	20.80	20.53
		36	16	23.04	22.87	23.01	19.77	20.77	20.53
		36	35	22.99	22.82	23.05	19.76	20.78	20.54
		75	0	23.05	22.89	22.95	19.68	20.78	20.53
	256QAM	1	0	18.80	19.21	19.81	17.32	17.58	17.96
		1	37	18.85	19.26	19.92	17.47	17.71	18.07
		1	74	18.82	19.23	19.86	17.46	17.78	18.09
		36	0	19.01	19.07	19.44	17.65	17.47	17.60
		36	16	19.10	19.11	19.50	17.70	17.52	17.73
		36	35	19.07	19.03	19.55	17.70	17.50	17.69
		75	0	19.06	19.06	19.44	17.67	17.48	17.68

OUTPUT POWER FOR LTE BAND 66 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				132072	132322	132572	132072	132322	132572
20.0	QPSK	1	0	25.70	25.64	25.67	22.22	22.11	22.40
		1	49	25.66	25.54	25.67	22.06	22.23	22.26
		1	99	25.64	25.51	25.58	22.11	22.33	22.19
		50	0	25.02	24.90	24.95	21.24	21.24	21.31
		50	24	25.06	24.97	25.06	21.21	21.36	21.38
		50	49	25.04	24.90	25.03	21.15	21.37	21.30
		100	0	25.05	24.93	25.05	21.19	21.33	21.26
	16QAM	1	0	25.42	25.30	25.35	21.70	21.53	21.93
		1	49	25.38	25.26	25.38	21.52	21.68	21.83
		1	99	25.35	25.23	25.29	21.55	21.77	21.77
		50	0	23.97	23.86	23.94	20.27	20.26	20.35
		50	24	24.05	23.93	24.06	20.25	20.34	20.42
		50	49	23.99	23.87	24.02	20.19	20.36	20.37
		100	0	24.05	23.95	24.07	20.23	20.38	20.33
	64QAM	1	0	24.38	24.31	24.61	21.18	20.44	20.68
		1	49	24.37	24.26	24.66	21.23	20.44	20.65
		1	99	24.34	24.29	24.59	21.24	20.44	20.66
		50	0	23.09	23.00	23.04	19.67	20.43	20.66
		50	24	23.18	23.04	23.14	19.70	20.43	20.68
		50	49	23.12	23.00	23.08	19.68	20.42	20.67
		100	0	23.12	23.01	23.05	19.63	20.42	20.68
	256QAM	1	0	19.64	19.39	19.13	17.73	17.37	17.74
		1	49	19.69	19.38	19.09	17.80	17.38	17.74
		1	99	19.71	19.30	19.13	17.84	17.51	17.85
		50	0	19.58	19.48	18.95	17.69	17.55	17.57
		50	24	19.58	19.55	18.98	17.69	17.57	17.60
		50	49	19.58	19.46	18.94	17.70	17.59	17.65
		100	0	19.55	19.51	18.93	17.66	17.57	17.53

5G NR n66

Test Engineer ID:	44353	Test Date:	11/12/2021
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OUTPUT POWER FOR 5G NR n66 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				342500	349000	355500	342500	349000	355500
5.0	BPSK	1	0	24.94	24.74	25.02	21.33	21.65	21.82
		1	1	25.47	25.29	25.53	22.03	22.15	22.34
		1	23	25.50	25.29	25.57	22.22	22.20	22.36
		1	24	24.94	24.74	25.04	21.87	21.74	21.87
		12	6	25.20	25.28	25.60	22.03	22.18	22.33
		25	0	24.78	24.76	25.06	21.57	21.64	21.79
		1	0	23.74	24.33	24.59	20.54	21.17	21.17
		1	1	24.66	25.51	25.65	21.47	22.28	22.13
		1	23	24.75	25.53	25.45	21.65	22.27	21.93
		1	24	23.87	24.31	24.55	20.75	21.21	21.00
		12	6	24.38	25.37	25.70	21.34	22.21	22.40
		25	0	23.32	24.34	24.61	20.15	21.24	21.40
	QPSK	1	0	22.62	23.12	23.40	19.67	20.28	20.15
		1	1	23.50	24.04	24.43	20.58	21.36	21.18
		1	23	23.58	24.05	24.36	20.77	21.40	21.05
		1	24	22.63	23.05	23.33	19.82	20.30	20.12
		12	6	23.60	24.28	24.63	20.51	21.20	21.31
		25	0	22.56	23.31	23.56	19.34	20.22	20.31
		1	0	22.42	22.98	23.26	19.07	19.66	19.61
		1	1	22.51	22.88	23.22	19.04	19.77	19.70
		1	23	22.51	22.88	23.16	19.02	19.76	19.59
		1	24	22.51	22.81	23.12	19.00	19.73	19.57
		12	6	22.22	22.74	23.03	18.91	19.72	19.81
		25	0	22.12	22.74	23.02	18.81	19.79	19.83
	16QAM	1	0	20.63	20.58	20.82	17.62	17.72	17.74
		1	1	20.64	20.61	20.85	17.54	17.68	17.74
		1	23	20.65	21.00	20.79	17.67	17.72	17.74
		1	24	20.63	20.91	20.81	17.65	17.76	17.72
		12	6	20.75	21.17	21.08	17.65	17.87	17.90
		25	0	20.61	21.10	21.01	17.47	17.79	17.80
	64QAM	1	0	20.63	20.58	20.82	17.62	17.72	17.74
		1	1	20.64	20.61	20.85	17.54	17.68	17.74
		1	23	20.65	21.00	20.79	17.67	17.72	17.74
		1	24	20.63	20.91	20.81	17.65	17.76	17.72
		12	6	20.75	21.17	21.08	17.65	17.87	17.90
		25	0	20.61	21.10	21.01	17.47	17.79	17.80
	256QAM	1	0	20.63	20.58	20.82	17.62	17.72	17.74
		1	1	20.64	20.61	20.85	17.54	17.68	17.74
		1	23	20.65	21.00	20.79	17.67	17.72	17.74
		1	24	20.63	20.91	20.81	17.65	17.76	17.72
		12	6	20.75	21.17	21.08	17.65	17.87	17.90
		25	0	20.61	21.10	21.01	17.47	17.79	17.80

OUTPUT POWER FOR 5G NR n66 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				343000	349000	355000	343000	349000	355000
10.0	BPSK	1	0	24.90	25.10	25.04	21.73	21.75	21.76
		1	1	25.50	25.70	25.65	22.28	22.26	22.30
		1	50	25.58	25.67	25.61	22.38	22.27	22.36
		1	51	25.03	25.13	25.04	21.83	21.76	21.86
		25	12	25.53	25.61	25.60	22.23	22.24	22.31
		50	0	25.04	25.14	25.08	21.47	21.76	21.83
		1	0	24.17	24.63	24.61	20.46	21.23	21.34
		1	1	25.12	25.63	25.59	21.43	22.31	22.40
		1	50	25.49	25.66	25.50	21.93	22.35	22.03
		1	51	24.55	24.64	24.53	20.98	21.26	21.05
		25	12	24.77	25.66	25.63	21.06	22.28	22.36
		50	0	23.62	24.63	24.57	20.07	21.27	21.31
	QPSK	1	0	22.83	23.32	23.19	19.45	20.22	20.29
		1	1	23.74	24.35	24.23	20.47	21.41	21.41
		1	50	24.11	24.29	24.30	20.96	21.34	21.10
		1	51	23.18	23.24	23.22	20.03	20.31	20.27
		25	12	24.04	24.62	24.50	20.42	21.24	21.27
		50	0	22.84	23.56	23.50	19.40	20.21	20.23
	16QAM	1	0	22.65	23.10	23.07	19.02	19.70	19.66
		1	1	22.68	23.04	22.99	19.01	19.73	19.64
		1	50	23.03	23.10	23.04	19.39	19.71	19.74
		1	51	23.09	23.09	23.00	19.44	19.69	19.76
		25	12	22.65	23.14	23.07	19.12	19.77	19.73
		50	0	22.48	23.03	23.01	19.02	19.71	19.70
	64QAM	1	0	21.20	21.20	21.20	17.73	17.70	17.71
		1	1	21.24	21.12	21.14	17.74	17.70	17.73
		1	50	21.23	21.20	21.21	17.71	17.67	17.69
		1	51	21.24	21.28	21.17	17.75	17.75	17.60
		25	12	21.05	21.07	21.02	17.71	17.76	17.68
		50	0	21.06	21.08	20.99	17.58	17.75	17.75

OUTPUT POWER FOR 5G NR n66 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				343500	349000	354500	343500	349000	354500
15.0	BPSK	1	0	1717.5	1745.0	1772.5	1717.5	1745.0	1772.5
		1	1	25.04	24.96	24.82	21.76	21.69	21.65
		1	1	25.63	25.49	25.42	22.26	22.19	22.12
		1	77	25.70	25.52	25.49	22.37	22.21	22.20
		1	78	25.11	25.00	24.92	21.83	21.78	21.73
		36	18	25.53	25.39	25.35	22.25	22.12	22.08
	QPSK	75	0	25.06	24.94	24.89	21.75	21.68	21.61
		1	0	24.11	24.47	24.43	20.77	21.24	21.17
		1	1	25.01	25.49	25.44	21.69	22.29	22.19
		1	77	25.60	25.52	25.35	22.40	22.37	22.28
		1	78	24.64	24.50	24.41	21.39	21.27	21.27
		36	18	24.68	25.43	25.44	21.75	22.17	22.13
	16QAM	75	0	23.95	24.47	24.45	20.69	21.21	21.16
		1	0	22.81	23.16	23.11	19.87	20.24	20.19
		1	1	23.74	24.03	24.07	20.71	21.27	21.38
		1	77	24.28	24.15	24.09	21.41	21.45	21.39
		1	78	23.29	23.10	23.19	20.39	20.25	20.31
		36	18	24.06	24.40	24.37	20.74	21.17	21.14
	64QAM	75	0	23.20	23.41	23.35	19.91	20.18	20.13
		1	0	22.49	22.83	22.89	19.16	19.76	19.58
		1	1	22.63	22.94	22.84	19.24	19.63	19.61
		1	77	23.03	22.95	22.88	19.74	19.70	19.72
		1	78	23.12	22.85	22.82	19.68	19.71	19.60
		36	18	22.70	22.91	22.87	19.38	19.63	19.60
	256QAM	75	0	22.71	22.89	22.87	19.45	19.61	19.56
		1	0	21.25	21.07	20.95	17.64	17.66	17.58
		1	1	21.10	21.11	21.03	17.73	17.74	17.57
		1	77	21.30	21.08	21.01	17.84	17.72	17.67
		1	78	21.25	21.03	21.06	17.72	17.66	17.64
		36	18	20.99	20.86	20.80	17.69	17.63	17.58
		75	0	21.00	20.85	20.82	17.66	17.57	17.54

OUTPUT POWER FOR 5G NR n66 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				344000	349000	354000	344000	349000	354000
20.0	BPSK	1	0	1720.0	1745.0	1770.0	1720.0	1745.0	1770.0
		1	1	25.13	24.90	24.81	21.74	21.69	21.66
		1	1	25.70	25.46	25.37	22.25	22.17	22.09
		1	104	25.70	25.45	25.42	22.34	22.25	22.15
		1	105	25.13	24.93	24.84	21.88	21.77	21.73
		50	25	25.65	25.41	25.37	22.29	22.16	22.13
	QPSK	100	0	22.01	24.93	24.85	18.35	21.72	21.68
		1	0	24.08	24.47	24.36	20.73	21.24	21.21
		1	1	25.01	25.45	25.38	21.69	22.32	22.23
		1	104	25.70	25.42	25.41	22.40	22.31	22.22
		1	105	24.67	24.43	24.38	21.36	21.24	21.25
		50	25	25.11	25.47	25.37	21.87	22.22	22.14
	16QAM	100	0	24.15	24.41	24.32	20.86	21.20	21.17
		1	0	22.74	23.08	22.99	19.67	20.28	20.24
		1	1	23.69	24.01	23.98	20.75	21.36	21.16
		1	104	24.35	24.00	23.96	21.56	21.48	21.26
		1	105	23.43	23.03	23.00	20.32	20.25	20.23
		50	25	24.31	24.32	24.24	21.04	21.16	21.08
	64QAM	100	0	23.31	23.39	23.34	20.02	20.20	20.10
		1	0	22.63	22.88	22.73	19.30	19.71	19.48
		1	1	22.67	22.91	22.86	19.31	19.58	19.58
		1	104	23.17	22.84	22.80	19.81	19.59	19.62
		1	105	23.13	22.78	22.91	19.70	19.56	19.77
		50	25	22.91	22.83	22.79	19.72	19.63	19.59
	256QAM	100	0	22.82	22.85	22.83	19.60	19.68	19.63
		1	0	21.28	20.95	20.96	17.62	17.58	17.53
		1	1	21.24	21.10	20.92	17.57	17.68	17.54
		1	104	21.29	21.09	21.04	17.69	17.64	17.71
		1	105	21.13	20.91	20.99	17.71	17.75	17.58
		50	25	21.05	20.86	20.77	17.74	17.64	17.63
		100	0	20.90	20.82	20.72	17.70	17.62	17.57

OUTPUT POWER FOR 5G NR n66 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				345000	349000	353000	345000	349000	353000
30.0	BPSK	1	0	23.86	23.80	23.85	20.76	20.80	20.69
		1	1	24.40	24.33	24.35	21.26	21.29	21.25
		1	158	24.33	24.32	24.27	21.29	21.24	21.21
		1	159	23.81	23.85	23.85	20.81	20.70	20.71
		80	40	24.31	24.25	24.32	21.29	21.14	21.19
		160	0	23.86	23.76	23.85	20.78	20.71	20.70
	QPSK	1	0	23.40	23.35	23.34	20.36	20.34	20.28
		1	1	24.39	24.31	24.29	21.40	21.39	21.30
		1	158	24.27	24.31	24.27	21.32	21.33	21.29
		1	159	23.28	23.32	23.32	20.22	20.23	20.21
		80	40	24.39	24.28	24.35	21.34	21.17	21.21
		160	0	23.37	23.32	23.35	20.30	20.24	20.23
	16QAM	1	0	22.01	21.93	21.98	19.53	19.31	19.35
		1	1	22.98	23.00	22.93	20.41	20.38	20.25
		1	158	22.92	22.95	22.93	20.35	20.41	20.08
		1	159	21.96	21.85	21.99	19.22	19.14	19.29
		80	40	23.27	23.25	23.30	20.27	20.13	20.19
		160	0	22.37	22.28	22.36	19.30	19.25	19.19
	64QAM	1	0	21.69	21.85	21.82	18.71	18.59	18.58
		1	1	21.87	21.78	21.67	18.63	18.61	18.50
		1	158	21.76	21.82	21.75	18.60	18.60	18.73
		1	159	21.75	21.86	21.65	18.81	18.64	18.39
		80	40	21.78	21.71	21.79	18.72	18.57	18.58
		160	0	21.82	21.78	21.87	18.79	18.75	18.65
	256QAM	1	0	20.12	19.90	19.97	16.81	16.57	16.63
		1	1	20.13	20.04	19.95	16.92	16.86	16.66
		1	158	20.05	20.17	20.04	16.91	16.65	16.66
		1	159	20.15	20.15	20.21	16.94	16.86	16.85
		80	40	19.81	19.73	19.73	16.74	16.58	16.63
		160	0	19.82	19.72	19.78	16.74	16.70	16.62

OUTPUT POWER FOR 5G NR n66 (40.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				346000	349000	352000	346000	349000	352000
40.0	BPSK	1	0	23.83	23.75	23.67	20.75	20.72	20.69
		1	1	24.38	24.34	24.17	21.25	21.25	21.23
		1	214	24.40	24.24	24.24	21.14	21.17	21.07
		1	215	23.86	23.77	23.78	20.68	20.62	20.66
		108	54	24.25	24.18	24.25	21.20	21.18	21.14
		216	0	23.80	23.71	23.78	20.74	20.66	20.66
	QPSK	1	0	23.31	23.35	23.24	20.29	20.22	20.20
		1	1	24.31	24.28	24.18	21.40	21.32	21.26
		1	214	24.33	24.24	24.31	21.24	21.27	21.19
		1	215	23.40	23.25	23.21	20.13	20.20	20.16
		108	54	24.34	24.24	24.23	21.25	21.21	21.21
		216	0	23.30	23.24	23.29	20.25	20.23	20.20
	16QAM	1	0	22.01	21.89	21.87	19.35	19.39	19.35
		1	1	23.14	22.83	22.80	20.41	20.45	20.20
		1	214	22.92	22.90	22.86	20.26	20.26	20.11
		1	215	21.94	21.91	22.01	19.09	19.24	19.28
		108	54	23.29	23.20	23.23	20.19	20.15	20.14
		216	0	22.33	22.21	22.25	19.31	19.22	19.21
	64QAM	1	0	21.76	21.62	21.65	18.64	18.75	18.67
		1	1	21.79	21.60	21.67	18.63	18.62	18.61
		1	214	21.87	21.65	21.65	18.56	18.56	18.60
		1	215	21.73	21.76	21.68	18.47	18.52	18.67
		108	54	21.74	21.68	21.68	18.68	18.63	18.63
		216	0	21.78	21.69	21.74	18.73	18.67	18.65
	256QAM	1	0	20.04	20.01	19.88	16.62	16.77	16.73
		1	1	19.93	19.85	19.66	16.75	16.67	16.73
		1	214	20.17	20.11	19.75	16.79	16.87	16.76
		1	215	20.01	19.99	19.91	16.70	16.48	16.65
		108	54	19.69	19.67	19.68	16.69	16.62	16.59
		216	0	19.75	19.72	19.74	16.72	16.63	16.59

8.14. LTE BAND 71 AND 5G NR n71

LTE BAND 71

Test Engineer ID:	10646	Test Date:	9/10/2021
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OUTPUT POWER FOR LTE BAND 71 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				133147	133297	133447	133147	133297	133447
				665.5 MHz	680.5 MHz	695.5 MHz	665.5 MHz	680.5 MHz	695.5 MHz
5.0	QPSK	1	0	25.60	25.70	25.63	24.20	23.97	24.04
		1	12	25.67	25.52	25.65	24.10	24.08	24.10
		1	24	25.61	25.63	25.63	24.02	23.97	23.71
		12	0	24.87	24.98	25.04	23.00	22.92	23.15
		12	6	25.05	25.00	24.96	23.08	23.07	23.01
		12	11	24.96	24.94	24.93	23.16	22.95	22.94
		25	0	25.03	25.00	24.93	23.09	22.98	22.95
	16QAM	1	0	25.30	25.32	25.45	23.44	23.35	23.64
		1	12	25.15	25.36	25.13	23.33	23.22	23.20
		1	24	25.10	25.29	24.99	23.26	23.21	23.15
		12	0	23.96	24.05	24.05	22.04	22.08	22.12
		12	6	24.05	24.08	24.04	22.24	22.10	22.01
		12	11	23.99	24.03	24.05	22.19	22.00	21.97
		25	0	23.98	24.03	23.94	22.08	22.03	22.04
	64QAM	1	0	24.12	24.41	24.48	22.39	22.25	22.48
		1	12	24.35	24.37	24.34	22.38	22.20	22.31
		1	24	24.23	24.25	24.20	22.26	22.22	22.26
		12	0	22.91	23.05	23.07	21.14	21.13	21.14
		12	6	22.99	23.04	23.08	21.26	21.13	21.08
		12	11	23.06	23.01	22.95	21.17	21.07	21.00
		25	0	23.06	23.03	22.99	21.17	21.13	21.04
	256QAM	1	0	20.96	21.15	21.18	19.33	19.14	19.38
		1	12	21.03	21.12	21.23	19.20	19.00	19.32
		1	24	20.92	20.99	21.02	19.21	19.21	19.35
		12	0	20.95	20.99	21.06	19.17	19.14	19.09
		12	6	21.12	21.09	21.04	19.20	19.22	19.16
		12	11	20.99	21.02	21.00	19.15	19.05	19.08
		25	0	21.02	21.07	21.04	19.09	19.12	19.08

OUTPUT POWER FOR LTE BAND 71 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				133172	133322	133422	133172	133322	133422
				668.0 MHz	683.0 MHz	693.0 MHz	668.0 MHz	683.0 MHz	693.0 MHz
10.0	QPSK	1	0	25.53	25.48	25.70	23.95	24.20	23.93
		1	24	25.54	25.63	25.53	24.08	24.02	23.91
		1	49	25.41	25.45	25.70	24.18	23.83	23.92
		25	0	24.90	24.96	24.88	23.06	23.07	23.03
		25	12	24.91	24.92	24.89	23.17	23.01	23.05
		25	24	24.90	24.94	24.85	23.12	23.03	23.10
		50	0	24.98	24.91	24.88	23.14	23.04	23.03
	16QAM	1	0	25.00	25.17	25.07	23.19	23.21	23.20
		1	24	24.91	25.19	24.90	23.22	23.06	23.41
		1	49	25.01	25.03	24.94	23.49	23.04	23.39
		25	0	23.86	23.93	23.95	22.11	22.13	22.03
		25	12	23.95	23.95	23.90	22.17	22.07	22.11
		25	24	23.92	23.95	23.96	22.24	22.12	22.12
		50	0	23.94	23.89	23.90	22.20	22.06	22.04
	64QAM	1	0	23.97	23.92	24.01	22.46	22.23	22.30
		1	24	24.02	24.28	24.45	22.36	22.17	22.42
		1	49	24.00	24.25	24.34	22.42	22.15	22.16
		25	0	22.91	22.89	22.92	21.09	21.08	21.03
		25	12	23.00	22.94	22.95	21.19	21.08	21.01
		25	24	22.98	22.92	22.94	21.15	21.12	21.04
		50	0	22.96	22.91	22.89	21.15	20.99	21.04
	256QAM	1	0	20.98	21.27	21.18	19.16	19.09	19.15
		1	24	21.07	20.76	21.10	19.25	19.33	19.25
		1	49	21.15	21.03	20.80	19.22	19.32	19.23
		25	0	20.91	20.94	20.94	19.17	19.09	19.06
		25	12	21.00	20.85	20.91	19.27	19.03	19.14
		25	24	20.88	21.00	20.89	19.19	19.06	19.19
		50	0	20.95	20.89	20.92	19.20	19.07	19.03

OUTPUT POWER FOR LTE BAND 71 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				133197	133297	133397	133197	133297	133397
				670.5 MHz	680.5 MHz	690.5 MHz	670.5 MHz	680.5 MHz	690.5 MHz
15.0	QPSK	1	0	25.62	25.59	25.57	24.10	24.13	24.16
		1	37	25.65	25.67	25.70	24.13	24.20	24.14
		1	74	25.60	25.65	25.50	24.15	24.02	23.98
		36	0	24.97	25.05	25.01	23.22	23.16	23.05
		36	16	24.97	24.97	24.96	23.21	23.07	23.12
		36	35	25.05	25.00	25.05	23.21	23.12	23.17
		75	0	25.05	25.04	24.95	23.22	23.19	23.13
	16QAM	1	0	25.17	25.53	25.24	23.33	23.53	23.35
		1	37	25.20	25.10	25.09	23.46	23.09	23.37
		1	74	25.13	25.39	25.13	23.28	23.26	23.31
		36	0	24.01	24.04	24.00	22.25	22.24	22.08
		36	16	24.01	24.04	23.93	22.22	22.15	22.10
		36	35	24.04	23.98	24.07	22.23	22.16	22.18
		75	0	24.08	24.04	24.00	22.25	22.19	22.12
	64QAM	1	0	24.29	24.31	24.34	22.53	22.52	22.27
		1	37	24.36	23.92	24.23	22.43	22.52	22.48
		1	74	24.16	24.11	24.24	22.42	22.47	22.23
		36	0	23.04	23.05	23.02	21.21	21.16	21.16
		36	16	23.03	23.02	23.06	21.20	21.14	21.17
		36	35	23.07	23.09	23.09	21.23	21.21	21.18
		75	0	23.06	23.09	23.00	21.26	21.18	21.10
	256QAM	1	0	21.19	21.10	21.11	19.11	19.39	19.32
		1	37	21.22	21.36	21.12	19.28	19.32	19.40
		1	74	21.24	20.92	21.12	19.45	19.33	19.40
		36	0	21.05	21.06	21.04	19.22	19.21	19.14
		36	16	20.99	20.98	21.01	19.24	19.15	19.16
		36	35	21.03	21.07	21.04	19.20	19.13	19.19
		75	0	21.11	21.10	20.99	19.25	19.22	19.15

OUTPUT POWER FOR LTE BAND 71 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				133222	133322	133372	133222	133322	133372
				673.0 MHz	683.0 MHz	688.0 MHz	673.0 MHz	683.0 MHz	688.0 MHz
20.0	QPSK	1	0	25.57	25.60	25.61	24.15	24.20	24.11
		1	49	25.64	25.64	25.70	24.11	24.04	23.93
		1	99	25.50	25.48	25.34	23.91	24.05	23.98
		50	0	24.92	24.92	24.90	23.21	23.15	23.10
		50	24	25.00	24.92	24.86	23.21	23.12	23.09
		50	49	24.95	24.88	24.92	23.14	23.10	23.12
		100	0	24.98	24.91	24.86	23.22	23.09	23.10
	16QAM	1	0	25.04	25.18	25.15	23.47	23.34	23.36
		1	49	25.13	25.12	25.05	23.39	23.29	23.40
		1	99	25.26	25.07	25.03	23.17	23.33	23.15
		50	0	23.93	23.99	23.93	22.19	22.13	22.11
		50	24	23.96	23.96	23.90	22.21	22.11	22.09
		50	49	23.95	23.95	23.89	22.13	22.09	22.15
		100	0	24.03	23.88	23.89	22.22	22.12	22.11
	64QAM	1	0	24.08	24.27	24.01	22.45	22.75	22.34
		1	49	24.18	24.11	24.13	22.30	22.11	22.43
		1	99	24.06	24.15	24.10	22.28	22.34	22.26
		50	0	22.94	22.96	22.96	21.19	21.15	21.15
		50	24	22.98	22.95	22.93	21.24	21.16	21.12
		50	49	22.97	22.92	22.96	21.15	21.09	21.15
		100	0	23.00	22.92	22.94	21.20	21.13	21.07
	256QAM	1	0	20.94	21.17	20.99	19.32	19.40	19.20
		1	49	21.09	20.94	21.22	19.37	19.20	19.42
		1	99	21.01	21.33	21.09	19.40	19.39	19.44
		50	0	20.95	20.98	20.98	19.17	19.17	19.16
		50	24	21.01	20.97	20.89	19.25	19.06	19.09
		50	49	20.94	20.90	20.96	19.13	19.10	19.08
		100	0	21.03	20.93	20.86	19.20	19.11	19.11

5G NR n71

Test Engineer ID:	19146	Test Date:	9/10/2021
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OUTPUT POWER FOR 5G NR n71 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				133100	136100	139100	133100	136100	139100
5.0	BPSK	1	0	25.45	25.40	25.34	23.65	23.48	23.37
			1	25.65	25.57	25.49	24.12	23.96	23.89
			23	25.53	25.48	25.28	24.07	23.91	23.75
			24	25.41	25.35	25.10	23.52	23.43	23.22
			12	25.67	25.63	25.43	24.09	24.01	23.82
	QPSK	25	0	25.36	25.36	25.15	23.52	23.46	23.22
			1	25.00	24.92	24.80	23.19	23.06	23.03
			1	25.70	25.57	25.53	24.20	24.06	24.03
			23	25.57	25.52	25.29	24.14	24.03	23.87
			24	24.93	24.81	24.62	23.08	22.96	22.85
	16QAM	12	6	25.69	25.67	25.44	24.08	24.00	23.83
			0	24.08	24.88	24.72	23.09	23.03	22.85
		25	0	23.84	23.80	23.66	22.19	22.08	21.96
			1	24.87	24.75	24.63	23.19	23.06	23.03
			23	24.77	24.62	24.46	23.13	22.96	22.84
	64QAM	1	24	23.73	23.68	23.44	22.04	21.98	21.82
			12	25.00	24.89	24.72	23.17	23.07	22.91
			25	23.87	23.82	23.57	22.18	22.04	21.94
		1	0	23.35	23.17	23.07	21.77	21.63	21.56
			1	23.27	23.20	23.17	21.73	21.60	21.60
	256QAM	1	23	23.28	23.12	22.91	21.66	21.53	21.32
			24	23.27	23.09	22.92	21.63	21.52	21.38
			12	23.43	23.32	23.16	21.61	21.49	21.36
		25	0	23.26	23.36	23.18	21.45	21.43	21.28
			1	21.34	21.24	21.08	19.47	19.37	19.29
			1	21.41	21.21	21.13	19.42	19.26	19.29
		1	23	21.27	21.17	20.93	19.33	19.20	19.05
			24	21.31	21.17	20.99	19.32	19.21	19.06
			12	21.39	21.42	21.19	19.50	19.47	19.30
			25	21.38	21.31	21.19	19.50	19.41	19.23

OUTPUT POWER FOR 5G NR n71 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				133600	136600	138600	133600	136600	138600
				668.0 MHz	683.0 MHz	693.0 MHz	668.0 MHz	683.0 MHz	693.0 MHz
10.0	BPSK	1	0	25.46	25.37	25.32	23.62	23.51	23.41
		1	1	25.70	25.60	25.54	24.16	23.98	23.97
		1	50	25.49	25.46	25.30	23.96	23.88	23.74
		1	51	25.30	25.27	25.13	23.46	23.39	23.27
		25	12	25.59	25.59	25.42	24.06	23.98	23.80
	QPSK	50	0	25.43	25.35	25.28	23.55	23.55	23.35
		1	0	25.00	24.85	24.81	23.16	23.07	23.05
		1	1	25.65	25.53	25.48	24.20	24.07	23.99
		1	50	25.52	25.39	25.31	24.04	23.97	23.83
		1	51	24.85	24.73	24.64	22.99	22.96	22.83
	16QAM	25	12	25.59	25.55	25.47	24.02	24.03	23.85
		50	0	24.96	24.89	24.76	23.05	23.04	22.84
		1	0	23.88	23.74	23.68	22.21	22.03	22.06
		1	1	24.87	24.66	24.63	23.23	23.05	22.98
		1	50	24.67	24.57	24.43	23.02	22.93	22.74
	64QAM	1	51	23.70	23.59	23.46	22.07	21.91	21.80
		25	12	24.84	24.80	24.70	23.10	23.10	22.94
		50	0	23.88	23.82	23.70	22.02	22.02	21.84
		1	0	23.28	23.16	23.15	21.67	21.62	21.55
		1	1	23.33	23.20	23.05	21.70	21.58	21.47
	256QAM	1	50	23.18	23.18	22.96	21.59	21.51	21.38
		1	51	23.03	22.99	22.94	21.54	21.45	21.41
		25	12	23.38	23.35	23.20	21.44	21.40	21.31
		50	0	23.39	23.37	23.21	21.54	21.48	21.37
		1	0	21.20	21.12	21.15	19.43	19.31	19.25
	256QAM	1	1	21.35	21.15	21.12	19.44	19.29	19.25
		1	50	21.20	21.14	21.02	19.34	19.25	19.03
		1	51	21.22	21.17	21.01	19.31	19.09	19.09
		25	12	21.37	21.30	21.22	19.42	19.43	19.30
		50	0	21.40	21.38	21.29	19.54	19.33	19.35

OUTPUT POWER FOR 5G NR n71 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				134100	136100	138100	134100	136100	138100
				670.5 MHz	680.5 MHz	690.5 MHz	670.5 MHz	680.5 MHz	690.5 MHz
15.0	BPSK	1	0	25.52	25.34	25.24	23.68	23.46	23.35
		1	1	25.70	25.55	25.42	24.08	23.95	23.89
		1	77	25.51	25.45	25.19	23.93	23.91	23.67
		1	78	25.29	25.23	25.03	23.51	23.39	23.18
		36	18	25.44	25.37	25.28	23.95	23.91	23.72
		75	0	25.28	25.22	25.15	23.44	23.42	23.14
	QPSK	1	0	24.93	24.79	24.72	23.26	23.02	22.87
		1	1	25.54	25.51	25.41	24.20	24.07	23.94
		1	77	25.46	25.42	25.25	24.07	23.95	23.75
		1	78	24.79	24.67	24.49	23.04	22.94	22.73
		36	18	25.51	25.49	25.40	24.00	23.93	23.79
		75	0	24.81	24.78	24.69	23.03	22.94	22.72
	16QAM	1	0	23.93	23.81	23.67	22.23	22.01	21.97
		1	1	24.88	24.73	24.62	23.27	23.15	22.94
		1	77	24.66	24.63	24.40	23.11	23.00	22.75
		1	78	23.80	23.63	23.44	22.00	22.01	21.70
		36	18	24.82	24.75	24.66	23.03	22.81	22.84
		75	0	23.82	23.77	23.74	21.98	21.88	21.67
	64QAM	1	0	23.27	23.12	23.06	21.81	21.56	21.53
		1	1	23.28	23.13	22.94	21.80	21.61	21.42
		1	77	23.07	23.03	22.80	21.57	21.48	21.33
		1	78	23.11	22.95	22.93	21.64	21.47	21.28
		36	18	23.34	23.24	23.12	21.48	21.41	21.32
		75	0	23.39	23.31	23.17	21.45	21.36	21.23
	256QAM	1	0	21.30	21.09	20.99	19.55	19.29	19.33
		1	1	21.27	21.16	21.02	19.42	19.30	19.18
		1	77	21.31	21.13	20.85	19.36	19.33	19.11
		1	78	21.26	21.15	20.89	19.49	19.15	19.05
		36	18	21.35	21.27	21.17	19.39	19.30	19.26
		75	0	21.29	21.23	21.11	19.45	19.38	19.25

OUTPUT POWER FOR 5G NR n71 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				134600	136600	137600	134600	136600	137600
				673.0 MHz	683.0 MHz	688.0 MHz	673.0 MHz	683.0 MHz	688.0 MHz
20.0	BPSK	1	0	25.42	25.30	25.30	23.65	23.46	23.42
		1	1	25.70	25.54	25.48	24.14	23.94	23.94
		1	104	25.41	25.33	25.20	23.86	23.79	23.61
		1	105	25.15	25.16	25.05	23.34	23.23	23.12
		50	25	25.49	25.39	25.40	23.90	23.89	23.75
		100	0	25.36	25.27	25.13	23.45	23.35	23.21
	QPSK	1	0	24.89	24.80	24.76	23.17	23.06	22.98
		1	1	25.62	25.49	25.43	24.20	24.03	23.98
		1	104	25.34	25.26	25.18	23.91	23.81	23.66
		1	105	24.64	24.64	24.41	22.86	22.80	22.69
		50	25	25.49	25.48	25.44	23.93	23.92	23.77
		100	0	24.86	24.75	24.62	22.94	22.90	22.79
	16QAM	1	0	23.89	23.81	23.76	22.25	22.10	22.06
		1	1	24.83	24.74	24.64	23.14	23.11	23.09
		1	104	24.62	24.51	24.39	22.88	22.92	22.74
		1	105	23.60	23.45	23.42	21.92	21.74	21.67
		50	25	24.76	24.69	24.63	22.94	22.89	22.75
		100	0	23.97	23.73	23.68	21.90	21.88	21.74
	64QAM	1	0	23.26	23.11	23.22	21.74	21.62	21.74
		1	1	23.28	23.12	23.00	21.61	21.61	21.64
		1	104	22.93	22.99	22.62	21.33	21.52	21.25
		1	105	23.05	23.00	22.73	21.46	21.40	21.29
		50	25	23.28	23.20	23.16	21.37	21.34	21.22
		100	0	23.40	23.24	23.13	21.36	21.34	21.21
	256QAM	1	0	21.23	21.00	21.07	19.46	19.29	19.15
		1	1	21.20	21.10	21.08	19.33	19.22	19.32
		1	104	21.06	21.06	20.99	19.40	19.29	19.03
		1	105	21.24	21.06	21.01	19.38	19.13	19.09
		50	25	21.27	21.21	21.22	19.37	19.36	19.23
		100	0	21.35	21.25	21.12	19.38	19.34	19.19

8.15. 5G NR n77 (3450-3550MHz)

Test Engineer ID:	44353	Test Date:	11/12/2021
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OUTPUT POWER FOR 5G NR n77 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				630666	633332	635998	630666	633332	635998
20.0	BPSK	1	0	24.09	23.83	24.24	20.96	20.86	20.74
		1	1	27.70	27.39	27.29	24.08	23.95	23.82
		1	49	19.56	22.33	27.28	24.07	23.97	23.78
		1	50	22.94	23.34	23.81	20.96	20.85	20.71
		25	12	26.99	27.10	27.17	24.12	23.99	23.88
		50	0	26.84	26.73	26.73	23.91	23.85	23.80
	QPSK	1	0	23.91	23.71	23.68	21.05	21.00	20.87
		1	1	27.44	18.50	27.21	24.30	24.17	23.97
		1	49	18.16	25.90	27.26	24.29	24.21	24.02
		1	50	22.61	23.43	23.74	21.06	21.04	20.87
		25	12	27.00	27.13	27.18	24.06	23.90	23.80
		50	0	26.27	26.21	26.15	23.50	23.41	23.20
	16QAM	1	0	23.93	23.78	23.95	21.44	21.17	20.90
		1	1	26.53	21.85	26.55	23.73	23.70	23.60
		1	49	22.13	25.65	26.53	23.84	23.61	23.48
		1	50	22.97	23.60	23.93	21.29	21.06	21.00
		25	12	26.17	26.17	26.23	23.60	23.36	23.21
		50	0	25.38	25.17	25.22	22.53	22.37	22.23
	64QAM	1	0	23.74	12.65	23.62	21.17	20.94	20.96
		1	1	23.40	23.39	24.75	22.16	21.96	21.84
		1	49	24.48	24.24	24.64	22.08	21.84	21.77
		1	50	23.68	23.56	23.70	21.05	20.92	20.84
		25	12	24.86	24.75	24.68	21.96	21.78	21.68
		50	0	24.90	24.85	24.75	21.99	21.82	21.71
	256QAM	1	0	23.00	22.75	23.02	19.09	19.34	19.28
		1	1	22.87	22.80	22.91	19.28	19.54	19.42
		1	49	23.01	22.91	23.04	19.49	19.61	19.33
		1	50	23.06	22.68	22.98	19.50	19.38	19.39
		25	12	23.03	22.74	22.55	19.82	19.74	13.96
		50	0	22.98	22.65	22.62	19.87	19.74	17.68

OUTPUT POWER FOR 5G NR n77 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				631000	633332	635666	631000	633332	635666
30.0	BPSK	1	0	24.24	24.16	24.14	20.75	20.57	20.56
		1	1	27.70	26.81	27.27	23.84	23.74	23.75
		1	76	27.29	27.62	27.24	24.01	23.90	23.76
		1	77	24.23	24.03	23.92	20.89	20.84	20.67
		36	18	27.01	26.92	27.00	24.30	24.19	24.15
		75	0	26.50	26.61	26.54	24.16	24.01	23.91
	QPSK	1	0	24.19	24.13	24.09	20.89	20.71	20.68
		1	1	26.11	26.06	26.11	24.00	23.97	23.88
		1	76	26.01	26.25	26.15	24.14	24.07	24.02
		1	77	24.15	24.03	23.99	21.02	21.01	20.91
		36	18	25.96	26.16	26.07	24.29	24.22	24.09
		75	0	25.43	25.42	25.51	23.64	23.54	23.47
	16QAM	1	0	24.33	23.92	24.04	20.92	20.90	20.93
		1	1	25.75	25.23	25.16	23.55	23.51	23.39
		1	76	25.77	25.41	25.52	23.81	23.69	23.66
		1	77	24.39	23.83	23.89	21.27	21.17	20.94
		36	18	25.38	25.37	25.42	23.71	23.67	23.54
		75	0	24.72	24.70	24.67	22.63	22.54	22.42
	64QAM	1	0	24.15	23.92	23.92	20.82	20.77	20.67
		1	1	24.40	24.40	24.15	21.99	21.69	21.74
		1	76	24.30	24.49	24.42	22.02	21.93	21.80
		1	77	24.11	23.84	23.79	21.02	20.87	20.70
		36	18	24.32	24.40	24.24	22.18	22.16	22.07
		75	0	24.33	24.33	24.31	22.03	21.97	21.93
	256QAM	1	0	23.21	22.91	22.97	19.40	19.40	19.09
		1	1	23.42	22.89	23.05	19.35	19.40	7.24
		1	76	23.18	22.78	23.20	19.72	19.48	16.50
		1	77	23.12	22.87	22.93	19.59	10.14	18.30
		36	18	23.25	23.02	22.88	13.49	16.71	19.45
		75	0	23.20	23.01	22.95	18.73	18.80	19.65

OUTPUT POWER FOR 5G NR n77 (40.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				631332	633332	635332	631332	633332	635332
40.0	BPSK	1	0	24.54	24.33	24.31	20.54	20.42	20.28
		1	1	27.50	27.32	26.83	23.57	23.42	23.38
		1	104	27.21	27.12	26.99	23.75	23.62	23.48
		1	105	24.30	24.27	24.21	20.59	20.40	20.38
		50	25	27.70	26.40	26.90	24.30	24.12	24.06
		100	0	26.95	26.31	26.67	24.04	23.87	23.79
	QPSK	1	0	24.54	24.43	24.30	20.69	20.56	20.42
		1	1	26.18	25.96	26.06	23.72	23.61	23.57
		1	104	26.27	26.09	26.35	23.84	23.69	23.60
		1	105	24.28	24.34	24.29	20.64	20.50	20.54
		50	25	26.31	26.15	26.27	24.28	24.14	24.05
		100	0	25.64	25.50	25.71	23.55	23.39	23.35
	16QAM	1	0	24.17	24.54	24.48	20.79	20.61	20.68
		1	1	25.24	25.31	25.55	23.14	23.02	23.21
		1	104	25.20	25.63	25.78	23.27	23.36	23.23
		1	105	24.23	24.47	24.39	20.73	20.59	20.61
		50	25	25.67	25.57	25.60	23.72	23.60	23.48
		100	0	24.81	24.87	24.69	22.52	22.42	22.31
	64QAM	1	0	24.14	24.17	23.91	20.52	20.47	20.53
		1	1	24.12	24.12	24.10	21.68	21.47	21.48
		1	104	24.42	24.22	24.47	21.61	21.57	21.52
		1	105	24.04	23.97	24.11	20.64	20.42	20.47
		50	25	24.53	24.55	24.63	22.19	22.10	21.99
		100	0	24.48	24.44	24.54	22.00	21.85	21.81
	256QAM	1	0	23.44	23.01	22.92	14.98	18.93	18.91
		1	1	23.29	22.97	23.21	18.29	19.06	18.96
		1	104	23.39	23.18	23.24	18.98	19.34	19.07
		1	105	23.34	22.99	23.01	19.24	19.17	18.49
		50	25	23.41	23.16	23.18	19.96	11.08	17.26
		100	0	23.31	23.19	23.17	19.89	17.18	18.58

OUTPUT POWER FOR 5G NR n77 (50.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				631666	633332	634998	631666	633332	634998
50.0	BPSK	1	0	24.01	23.75	23.92	20.93	20.73	20.65
		1	1	27.56	27.37	27.57	24.01	23.84	23.72
		1	131	27.70	27.47	27.58	24.09	23.95	23.79
		1	132	24.23	23.99	24.02	20.86	20.84	20.70
		64	32	27.58	21.39	27.49	23.96	23.93	23.83
		128	0	25.71	25.92	27.00	23.89	23.83	23.74
	QPSK	1	0	23.70	23.65	23.83	21.14	20.84	20.77
		1	1	27.29	27.33	27.38	24.27	24.03	23.98
		1	131	27.52	27.39	27.50	24.30	24.22	24.00
		1	132	23.96	24.05	23.91	21.07	20.99	20.90
		64	32	26.17	23.58	27.47	24.05	23.94	23.84
		128	0	26.20	25.68	26.47	23.46	23.34	23.26
	16QAM	1	0	23.80	23.62	24.26	21.06	20.84	20.93
		1	1	26.33	26.32	26.87	23.89	23.49	23.48
		1	131	26.38	26.45	26.89	23.73	23.79	23.49
		1	132	22.27	21.46	24.24	21.21	20.92	20.83
		64	32	25.73	25.90	26.52	23.43	23.36	23.27
		128	0	25.31	25.14	25.43	22.43	22.31	22.25
	64QAM	1	0	23.73	23.52	23.79	21.00	20.66	20.69
		1	1	24.64	24.49	25.09	22.02	21.83	21.84
		1	131	14.14	22.10	25.15	21.87	21.92	22.01
		1	132	22.86	23.23	24.04	21.00	20.99	20.88
		64	32	24.92	24.83	24.95	21.98	21.83	21.77
		128	0	24.98	24.84	24.95	21.93	21.87	21.82
	256QAM	1	0	22.64	22.90	23.33	19.57	19.12	19.28
		1	1	22.43	22.51	23.26	19.59	19.34	19.32
		1	131	21.27	21.51	23.16	19.63	19.18	19.54
		1	132	19.48	20.02	22.96	19.58	19.63	19.26
		64	32	23.16	10.23	22.89	19.72	19.65	19.57
		128	0	23.06	22.92	22.90	19.86	19.71	19.61

OUTPUT POWER FOR 5G NR n77 (60.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				632000	633332	634666	632000	633332	634666
60.0	BPSK	1	0	24.96	24.61	24.40	21.44	21.21	21.14
		1	1	27.70	27.66	27.69	24.15	24.07	24.02
		1	160	25.57	25.64	25.38	21.73	21.73	21.62
		1	161	22.02	21.93	21.79	18.43	18.42	18.45
		81	40	26.64	26.44	26.42	22.82	22.70	22.68
		162	0	26.16	25.95	25.87	22.71	22.61	22.59
	QPSK	1	0	24.94	24.55	24.51	21.47	21.27	21.20
		1	1	27.17	27.21	27.08	24.30	24.14	24.11
		1	160	25.77	25.55	25.58	21.91	21.92	21.80
		1	161	21.99	22.02	21.70	18.66	18.62	18.44
		81	40	26.66	26.42	26.46	22.83	22.73	22.67
		162	0	25.61	25.47	25.42	22.19	22.12	22.07
	16QAM	1	0	24.84	24.32	24.50	21.67	21.66	21.36
		1	1	26.53	26.42	26.27	23.58	23.66	23.58
		1	160	24.68	24.47	24.47	21.52	21.42	21.38
		1	161	21.83	21.62	21.60	18.53	18.74	18.68
		81	40	25.55	25.40	25.38	22.32	22.13	22.07
		162	0	24.60	24.39	24.41	21.26	21.15	21.07
	64QAM	1	0	24.72	24.51	24.55	21.37	21.13	21.00
		1	1	25.23	24.88	24.98	22.30	22.06	21.83
		1	160	23.04	22.92	22.72	19.97	19.55	19.41
		1	161	21.73	21.44	21.47	18.74	18.58	18.47
		81	40	24.04	23.91	23.90	20.77	20.65	20.62
		162	0	24.00	23.87	23.86	20.72	20.67	20.53
	256QAM	1	0	23.63	23.32	23.36	19.87	19.34	19.84
		1	1	23.32	23.12	23.11	19.60	19.59	19.39
		1	160	20.71	20.80	20.84	16.97	17.17	16.88
		1	161	20.61	20.60	20.59	17.05	16.86	16.93
		81	40	22.08	21.92	21.85	18.48	18.46	10.95
		162	0	22.01	21.88	21.83	18.47	18.41	17.26

OUTPUT POWER FOR 5G NR n77 (70.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				632333	633333	634333	632333	633333	634333
70.0	BPSK	1	0	23.82	23.84	23.79	19.38	20.49	19.60
		1	1	27.41	27.28	27.30	23.60	23.96	23.59
		1	187	27.62	27.23	27.37	23.85	24.06	23.81
		1	188	24.04	23.75	23.88	20.34	20.66	20.48
		90	45	27.54	27.29	27.42	24.08	24.08	23.97
		180	0	27.01	26.80	26.89	23.59	23.57	23.54
	QPSK	1	0	24.15	23.81	23.86	20.71	20.75	20.48
		1	1	27.70	27.54	27.42	24.24	24.22	24.22
		1	187	27.54	27.42	27.46	24.20	24.29	24.30
		1	188	23.94	23.90	23.97	20.69	20.71	20.63
		90	45	27.46	27.33	27.40	24.12	16.96	24.14
		180	0	26.48	26.31	26.38	23.13	20.70	23.08
	16QAM	1	0	23.84	23.65	23.69	20.84	19.96	20.69
		1	1	26.41	26.20	26.12	10.48	22.94	16.63
		1	187	26.49	26.49	26.40	20.65	23.21	21.88
		1	188	23.76	23.89	23.76	19.56	20.68	20.15
		90	45	26.49	26.41	26.39	22.55	23.04	22.89
		180	0	25.41	25.49	25.38	21.72	22.11	21.96
	64QAM	1	0	23.56	24.08	23.70	20.59	20.46	20.55
		1	1	24.67	24.65	24.64	21.70	21.72	21.49
		1	187	24.86	24.94	24.76	21.71	21.66	21.48
		1	188	23.81	23.74	23.90	20.63	20.49	20.68
		90	45	24.92	24.94	24.91	21.61	21.56	21.56
		180	0	24.93	24.95	24.89	21.67	12.94	21.56
	256QAM	1	0	22.82	22.82	22.71	19.09	17.62	6.85
		1	1	22.60	22.65	22.63	19.18	18.27	16.43
		1	187	22.94	22.62	22.83	19.13	18.65	18.73
		1	188	22.76	22.68	22.74	19.17	18.66	18.81
		90	45	23.01	22.91	22.80	19.66	19.42	19.45
		180	0	22.91	22.87	22.83	19.64	19.45	19.46

OUTPUT POWER FOR 5G NR n77 (80.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				632666	633332	633998	632666	633332	633998
80.0	BPSK	1	0	24.13	24.13	23.88	19.51	20.51	15.67
		1	1	27.64	27.60	27.54	23.51	24.06	22.72
		1	215	27.70	27.66	27.50	23.84	24.15	23.48
		1	216	24.02	24.12	23.95	20.30	20.58	20.24
		108	54	27.58	27.51	27.50	24.01	24.05	23.87
		216	0	27.08	27.04	26.97	23.50	23.55	23.43
	QPSK	1	0	24.18	24.00	23.86	20.68	20.62	20.55
		1	1	27.64	27.61	27.54	24.21	24.23	24.13
		1	215	27.69	27.64	27.56	24.30	24.25	24.07
		1	216	24.04	24.02	24.02	20.63	20.62	20.61
		108	54	27.57	27.52	27.54	24.13	18.75	16.68
		216	0	26.60	26.56	26.47	23.06	21.43	20.86
	16QAM	1	0	24.19	24.11	23.97	21.15	19.65	20.41
		1	1	26.55	26.44	26.41	23.52	22.90	22.80
		1	215	26.69	26.59	26.57	23.48	23.22	23.07
		1	216	23.95	23.93	23.86	20.67	20.77	20.96
		108	54	26.53	26.49	26.45	19.14	23.04	22.96
		216	0	25.54	25.49	25.48	20.69	22.01	22.04
	64QAM	1	0	24.11	23.97	23.63	19.90	20.61	20.65
		1	1	25.22	24.96	24.68	21.35	7.06	21.74
		1	215	24.84	24.78	24.74	21.36	19.23	21.67
		1	216	23.96	24.07	23.65	20.68	19.66	20.36
		108	54	25.07	25.00	24.94	21.50	21.24	21.48
		216	0	25.02	24.99	24.97	21.50	21.42	15.07
	256QAM	1	0	23.06	22.87	22.67	19.33	19.26	18.18
		1	1	23.09	22.88	22.84	19.13	19.15	19.06
		1	215	23.14	22.99	23.06	19.62	19.21	18.98
		1	216	23.01	23.06	22.72	19.08	14.64	19.21
		108	54	22.97	22.98	22.94	19.56	17.94	19.42
		216	0	23.01	22.99	22.97	19.51	19.08	19.44

OUTPUT POWER FOR 5G NR n77 (90.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				633000	633332	633666	633000	633332	633666
90.0	BPSK	1	0	23.99	23.94	24.07	20.49	20.65	20.28
		1	1	27.56	27.59	27.58	24.20	24.08	24.01
		1	243	27.67	27.50	27.57	24.27	24.11	23.95
		1	244	24.08	24.09	24.03	20.75	20.69	20.58
		120	60	27.47	27.43	27.45	24.22	24.30	24.19
		243	0	27.00	26.95	27.02	18.37	23.75	23.72
	QPSK	1	0	24.13	24.08	24.06	19.05	16.64	17.81
		1	1	27.70	27.60	27.65	23.90	23.23	23.55
		1	243	27.58	27.60	27.58	24.10	23.90	24.06
		1	244	24.05	23.99	24.11	20.71	20.72	20.59
		120	60	27.48	27.44	27.53	24.21	24.16	24.18
		243	0	26.46	26.46	26.45	23.22	23.22	23.15
	16QAM	1	0	23.91	23.95	23.92	21.14	20.94	20.97
		1	1	26.44	26.61	26.64	23.64	23.65	23.45
		1	243	26.63	26.33	26.62	23.47	23.41	17.63
		1	244	23.86	24.00	24.03	21.19	15.75	18.98
		120	60	26.43	26.42	26.40	18.22	22.13	22.62
		243	0	25.41	25.47	25.49	20.94	21.90	21.97
	64QAM	1	0	23.74	23.60	24.03	20.41	20.63	20.83
		1	1	24.87	24.83	24.85	21.76	21.82	21.81
		1	243	24.86	25.02	24.78	21.86	21.81	21.77
		1	244	23.91	24.15	23.98	20.81	20.75	20.83
		120	60	24.89	24.94	24.92	21.73	21.75	21.74
		243	0	24.94	24.99	24.96	17.35	21.74	13.11
	256QAM	1	0	22.77	22.89	23.00	17.80	19.72	17.75
		1	1	22.92	22.90	22.82	19.04	19.67	18.97
		1	243	23.07	22.80	22.99	19.23	14.52	19.48
		1	244	22.90	22.96	22.66	19.20	18.85	19.01
		120	60	22.98	22.95	22.95	19.72	19.48	19.66
		243	0	22.99	22.97	22.97	19.65	19.65	19.69

OUTPUT POWER FOR 5G NR n77 (100.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				N/A	633332	N/A	N/A	633332	N/A
				N/A	3500.0	N/A	N/A	3500.0	N/A
100.0	BPSK	1	0		24.74			20.42	
		1	1		27.17			24.01	
		1	271		27.55			23.97	
		1	272		24.52			20.27	
		135	67		27.70			23.73	
		270	0		27.27			23.23	
	QPSK	1	0		24.87			20.30	
		1	1		26.49			23.80	
		1	271		26.91			23.78	
		1	272		24.45			20.21	
		135	67		27.02			23.72	
		270	0		26.14			22.77	
	16QAM	1	0		25.10			20.11	
		1	1		25.80			22.72	
		1	271		26.50			22.58	
		1	272		24.55			20.26	
		135	67		26.16			22.77	
		270	0		25.38			21.78	
	64QAM	1	0		24.43			20.30	
		1	1		24.20			21.55	
		1	271		25.12			21.56	
		1	272		24.60			20.28	
		135	67		25.28			21.20	
		270	0		25.11			21.23	
	256QAM	1	0		23.28			19.17	
		1	1		23.56			19.09	
		1	271		23.41			20.91	
		1	272		23.26			19.08	
		135	67		23.56			19.21	
		270	0		23.55			20.30	

8.16. 5G NR n77 (3700-3980MHz)

Test Engineer ID:	44353	Test Date:	11/12/2021
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OUTPUT POWER FOR 5G NR n77 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				647333	656000	664666	647333	656000	664666
20.0	BPSK	1	0	23.84	23.78	23.45	20.35	20.23	20.70
		1	1	27.47	27.47	27.07	23.94	23.75	24.26
		1	49	27.70	27.61	27.13	23.86	23.87	24.30
		1	50	24.05	23.97	23.46	20.25	20.35	20.72
		25	12	27.39	27.38	26.98	23.66	23.69	24.14
		50	0	26.89	26.90	26.47	23.26	23.21	23.63
	QPSK	1	0	23.83	23.91	23.51	20.33	20.27	20.69
		1	1	27.42	27.40	27.08	23.86	23.67	24.22
		1	49	27.60	27.50	26.66	23.77	23.52	24.12
		1	50	24.01	23.95	23.52	20.24	20.41	20.78
		25	12	27.34	27.40	26.94	23.69	23.55	24.12
		50	0	26.32	26.37	25.96	22.72	22.73	23.12
	16QAM	1	0	23.81	23.92	23.49	20.52	20.23	20.87
		1	1	26.27	26.36	26.12	22.92	22.86	23.28
		1	49	26.54	26.55	26.08	23.01	22.96	23.40
		1	50	23.98	24.05	23.49	20.34	20.45	20.94
		25	12	26.33	26.41	26.00	22.66	22.76	23.31
		50	0	25.28	25.36	25.05	21.69	21.68	22.14
	64QAM	1	0	23.92	24.08	23.72	20.03	19.93	20.51
		1	1	24.88	25.09	24.73	21.12	20.96	21.42
		1	49	25.30	25.16	24.77	21.10	21.05	21.47
		1	50	24.16	24.17	23.77	20.01	19.99	20.53
		25	12	24.71	24.80	24.43	21.23	21.28	21.72
		50	0	24.70	24.80	24.51	21.22	21.20	21.68
	256QAM	1	0	22.50	22.57	22.19	19.47	19.40	19.97
		1	1	22.46	22.49	22.41	19.57	19.38	19.91
		1	49	22.64	22.72	22.31	19.42	19.43	19.95
		1	50	22.77	22.55	22.33	19.37	19.43	19.90
		25	12	22.64	22.69	22.42	19.10	19.17	19.64
		50	0	22.79	22.85	22.53	19.15	19.17	19.57

OUTPUT POWER FOR 5G NR n77 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				647666	656000	664333	647666	656000	664333
30.0	BPSK	1	0	23.54	23.58	23.11	20.10	20.02	20.38
		1	1	27.21	27.31	26.75	23.62	23.55	23.96
		1	76	27.63	27.60	26.81	23.84	23.84	24.16
		1	77	24.00	23.97	23.22	20.31	20.21	17.95
		36	18	27.59	27.70	26.97	24.01	23.96	24.30
		75	0	27.08	27.10	26.44	23.41	23.37	23.71
	QPSK	1	0	23.55	23.65	23.12	20.03	20.06	16.05
		1	1	27.11	27.12	26.70	23.44	23.46	23.91
		1	76	27.61	27.49	26.67	23.80	23.47	24.08
		1	77	24.02	23.93	23.23	20.26	20.21	20.56
		36	18	27.66	27.68	26.90	23.97	23.74	24.30
		75	0	26.57	26.60	25.93	22.91	22.85	23.23
	16QAM	1	0	23.61	23.56	23.10	20.18	19.91	20.46
		1	1	26.20	26.19	25.66	22.67	22.68	23.12
		1	76	26.66	26.49	25.75	22.90	22.95	23.23
		1	77	24.06	23.89	23.22	20.38	20.43	20.68
		36	18	26.60	26.59	25.94	22.85	22.83	23.17
		75	0	25.49	25.50	24.86	21.95	19.94	22.19
	64QAM	1	0	23.81	23.83	23.25	19.83	19.76	20.07
		1	1	24.72	24.89	24.33	20.99	20.88	21.22
		1	76	25.32	25.15	24.38	21.18	21.07	21.36
		1	77	24.16	24.18	23.34	20.08	19.92	19.85
		36	18	25.09	25.11	24.42	21.48	21.43	21.79
		75	0	25.00	25.00	24.36	21.48	21.45	21.74
	256QAM	1	0	22.32	22.40	21.84	19.26	19.13	19.43
		1	1	22.48	22.28	21.88	19.15	19.07	19.50
		1	76	22.73	22.72	22.02	19.56	19.41	19.73
		1	77	22.66	22.67	21.75	19.58	19.35	19.65
		36	18	22.99	23.05	22.37	19.46	19.37	19.77
		75	0	22.97	23.03	22.34	19.34	19.35	19.66

OUTPUT POWER FOR 5G NR n77 (40.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				648000	656000	664000	648000	656000	664000
40.0	BPSK	1	0	23.12	23.18	22.70	19.60	19.70	20.07
		1	1	26.77	26.84	26.28	23.35	23.24	23.51
		1	104	27.25	27.24	26.39	23.63	23.35	23.83
		1	105	23.54	23.57	22.79	20.08	19.79	20.26
		50	25	27.70	27.61	26.93	23.94	23.94	24.23
		100	0	26.96	26.90	26.29	23.27	23.20	23.62
		1	0	23.14	23.21	22.72	19.81	19.84	20.04
		1	1	26.65	26.77	26.22	23.18	23.29	23.51
	QPSK	1	104	27.10	27.13	26.31	23.53	23.32	23.72
		1	105	23.49	23.59	22.78	19.89	19.86	20.29
		50	25	27.68	27.52	26.95	23.94	23.71	24.30
		100	0	26.44	26.30	25.76	22.77	22.72	23.04
		1	0	23.21	23.17	22.72	19.86	19.97	20.15
		1	1	25.70	25.67	25.35	22.43	22.39	22.70
		1	104	25.99	26.07	25.42	22.71	22.48	22.92
		1	105	23.55	23.51	22.82	20.19	19.98	20.52
	16QAM	50	25	26.64	26.46	25.96	22.91	22.84	23.26
		100	0	25.44	25.30	24.79	21.83	21.73	22.07
		1	0	23.22	23.13	22.83	19.71	19.47	19.72
		1	1	24.25	24.41	24.04	20.45	20.47	20.76
		1	104	24.77	24.70	24.04	20.83	20.61	21.03
		1	105	23.48	23.64	23.08	19.61	19.75	19.89
		50	25	25.05	24.92	24.40	21.48	21.32	21.74
		100	0	24.86	24.74	24.24	21.32	21.18	21.51
	64QAM	1	0	21.77	21.84	21.52	18.85	18.77	19.12
		1	1	21.83	21.82	21.45	18.80	18.92	19.19
		1	104	22.26	22.32	21.57	19.09	19.11	19.38
		1	105	22.21	22.35	21.56	19.18	19.01	19.35
		50	25	23.06	22.97	22.43	19.38	19.31	19.72
		100	0	22.88	22.79	22.25	19.20	19.10	19.54
	256QAM	1	0	22.88	22.79	22.25	19.20	19.10	19.54
		1	1	22.88	22.79	22.25	19.20	19.10	19.54
		1	104	22.88	22.79	22.25	19.20	19.10	19.54
		1	105	22.88	22.79	22.25	19.20	19.10	19.54
		50	25	22.88	22.79	22.25	19.20	19.10	19.54
		100	0	22.88	22.79	22.25	19.20	19.10	19.54
		1	0	22.88	22.79	22.25	19.20	19.10	19.54
		1	1	22.88	22.79	22.25	19.20	19.10	19.54

OUTPUT POWER FOR 5G NR n77 (50.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				648333	656000	663666	648333	656000	663666
50.0	BPSK	1	0	23.51	23.37	23.28	20.14	20.05	20.62
		1	1	27.16	26.98	26.88	23.64	23.56	24.20
		1	131	27.43	27.70	27.09	23.97	23.96	24.30
		1	132	23.75	24.08	23.48	20.39	20.50	20.77
		64	32	27.28	27.45	26.89	23.88	23.78	24.24
		128	0	26.72	26.92	26.39	23.36	23.24	23.74
		1	0	23.50	23.41	23.24	20.27	20.09	20.81
		1	1	27.02	26.90	26.78	23.58	23.50	24.04
	QPSK	1	131	27.27	27.64	26.58	23.92	23.96	24.30
		1	132	23.72	24.16	23.53	20.59	20.61	20.67
		64	32	27.31	27.50	26.87	23.93	23.73	24.26
		128	0	26.18	26.39	25.85	22.86	22.73	23.20
		1	0	23.50	23.46	23.30	20.29	20.19	20.68
		1	1	25.95	25.97	25.93	22.91	22.60	23.28
		1	131	26.41	26.67	26.06	23.02	23.04	23.57
		1	132	23.76	24.06	23.63	20.78	20.62	21.02
	16QAM	64	32	26.32	26.49	25.90	22.92	22.77	23.26
		128	0	25.20	25.41	24.87	21.79	21.71	22.21
		1	0	23.41	23.58	23.48	19.65	19.92	20.47
		1	1	24.72	24.62	24.53	20.85	20.88	21.42
		1	131	24.84	25.19	24.53	21.22	21.15	21.65
		1	132	24.15	24.33	23.62	20.36	20.28	20.48
		64	32	24.76	24.99	24.33	21.38	21.25	21.71
		128	0	24.73	24.91	24.35	21.33	21.25	21.76
	256QAM	1	0	22.27	22.22	22.04	19.28	19.20	19.70
		1	1	22.30	22.20	22.00	19.25	18.97	19.69
		1	131	22.31	22.72	22.21	19.52	19.44	19.93
		1	132	22.44	22.73	22.16	19.57	19.65	19.97
		64	32	22.61	22.84	22.24	19.34	19.17	19.69
		128	0	22.64	22.87	22.26	19.26	19.18	19.65
		1	0	22.64	22.87	22.26	19.26	19.18	19.65
		1	1	22.64	22.87	22.26	19.26	19.18	19.65

OUTPUT POWER FOR 5G NR n77 (60.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				648666	656000	663333	648666	656000	663333
60.0	BPSK	1	0	24.13	26.33	26.25	20.94	23.48	23.88
		1	1	27.57	27.70	26.66	24.22	24.30	24.23
		1	160	25.64	24.21	23.73	22.49	21.36	21.66
		1	161	21.83	20.17	19.85	18.87	17.35	17.82
		81	40	26.38	26.51	26.06	23.23	23.34	23.86
		162	0	25.89	25.94	25.52	22.67	22.85	23.34
		1	0	24.17	26.19	25.23	20.98	22.80	22.73
		1	1	26.94	27.05	25.93	23.84	23.52	23.53
		1	160	25.63	24.11	23.79	22.42	21.16	21.58
		1	161	21.85	20.29	19.84	18.83	17.48	17.77
		81	40	26.41	26.56	25.82	23.20	23.34	23.80
		162	0	25.39	25.44	24.96	22.15	22.35	22.78
	QPSK	1	0	24.23	25.71	24.64	21.00	22.22	22.30
		1	1	26.22	26.17	25.38	23.02	23.04	22.86
		1	160	24.60	23.22	22.78	21.55	20.46	20.71
		1	161	22.04	20.27	19.64	18.91	17.40	17.83
		81	40	25.48	25.47	24.71	22.24	22.39	22.90
		162	0	24.32	24.39	23.70	21.16	21.32	21.81
		1	0	24.30	25.52	24.13	20.72	21.54	21.43
		1	1	25.18	25.30	24.03	21.40	21.53	21.48
		1	160	23.23	21.73	21.02	19.77	18.44	18.90
		1	161	22.27	20.39	19.74	18.68	17.18	17.41
		81	40	23.95	24.01	23.21	20.71	20.90	21.37
		162	0	23.85	23.89	23.15	20.65	20.82	21.28
	16QAM	1	0	22.78	23.90	22.58	20.01	21.01	20.57
		1	1	22.84	23.98	22.54	19.79	20.99	20.73
		1	160	20.74	19.51	18.76	18.01	16.85	17.20
		1	161	20.60	19.08	18.26	17.95	16.51	16.93
		81	40	21.86	22.00	21.18	18.64	18.82	19.35
		162	0	21.78	21.89	21.12	18.60	18.79	19.26
	64QAM	1	0	22.78	23.90	22.58	20.01	21.01	20.57
		1	1	22.84	23.98	22.54	19.79	20.99	20.73
		1	160	20.74	19.51	18.76	18.01	16.85	17.20
		1	161	20.60	19.08	18.26	17.95	16.51	16.93
		81	40	21.86	22.00	21.18	18.64	18.82	19.35
		162	0	21.78	21.89	21.12	18.60	18.79	19.26
	256QAM	1	0	22.78	23.90	22.58	20.01	21.01	20.57
		1	1	22.84	23.98	22.54	19.79	20.99	20.73
		1	160	20.74	19.51	18.76	18.01	16.85	17.20
		1	161	20.60	19.08	18.26	17.95	16.51	16.93
		81	40	21.86	22.00	21.18	18.64	18.82	19.35
		162	0	21.78	21.89	21.12	18.60	18.79	19.26

OUTPUT POWER FOR 5G NR n77 (70.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				649000	656000	663000	649000	656000	663000
70.0	BPSK	1	0	23.51	23.28	23.58	19.59	19.55	20.27
		1	1	26.94	26.78	27.22	23.02	23.24	23.71
		1	187	27.19	27.37	27.55	23.43	23.74	24.30
		1	188	23.40	23.67	23.91	19.82	20.21	20.72
		90	45	27.08	27.14	27.28	23.41	23.47	24.05
		180	0	26.51	26.70	26.74	22.89	22.92	23.55
	QPSK	1	0	23.56	23.29	23.67	19.50	19.74	20.20
		1	1	26.96	26.85	27.04	22.82	23.05	23.78
		1	187	26.97	27.30	27.32	23.25	23.78	23.93
		1	188	23.49	23.76	23.76	19.83	20.20	20.71
		90	45	27.09	27.16	27.28	23.46	23.43	23.91
		180	0	26.02	26.25	26.27	22.36	22.45	23.09
	16QAM	1	0	23.17	23.04	23.32	19.91	19.92	20.21
		1	1	25.91	25.58	25.76	22.20	22.47	22.87
		1	187	25.69	26.34	26.17	22.33	22.95	23.50
		1	188	23.42	23.61	23.45	20.11	20.44	20.65
		90	45	26.10	26.12	26.25	22.43	22.40	23.00
		180	0	25.02	25.10	25.28	21.33	21.40	22.06
	64QAM	1	0	23.40	23.05	23.42	19.37	19.44	20.06
		1	1	24.46	24.21	24.85	20.33	20.35	20.94
		1	187	24.50	24.82	24.88	20.52	20.89	21.58
		1	188	23.53	23.89	23.77	19.70	19.84	20.39
		90	45	24.54	24.70	24.80	20.93	20.88	21.53
		180	0	24.50	24.64	24.73	20.84	20.91	21.55
	256QAM	1	0	22.58	22.34	23.04	18.55	18.66	19.49
		1	1	22.45	22.46	22.72	18.74	18.78	19.27
		1	187	22.53	23.02	22.80	19.14	19.31	20.00
		1	188	22.50	23.05	23.16	18.80	19.51	19.84
		90	45	22.54	22.67	22.68	18.86	18.85	19.53
		180	0	22.49	22.68	22.66	18.82	18.89	19.51

OUTPUT POWER FOR 5G NR n77 (80.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				649333	656000	662666	649333	656000	662666
				3740.0	3840.0	3940.0	3740.0	3840.0	3940.0
80.0	BPSK	1	0	23.53	23.20	23.71	19.64	19.81	20.31
		1	1	27.10	26.80	27.09	23.22	23.24	23.91
		1	215	27.03	27.38	27.47	23.47	23.86	24.30
		1	216	23.52	23.83	23.81	19.87	20.42	20.77
		108	54	27.06	27.18	27.25	23.55	23.52	24.09
		216	0	26.47	26.65	26.80	22.90	22.98	23.57
	QPSK	1	0	23.58	23.05	23.59	19.49	19.81	20.28
		1	1	26.95	26.81	27.09	23.02	23.16	23.68
		1	215	26.89	27.20	27.26	23.39	23.98	23.82
		1	216	23.44	23.70	23.89	20.08	20.33	20.63
		108	54	27.02	27.19	27.28	23.47	23.48	23.91
		216	0	25.96	26.13	26.24	22.41	22.46	23.06
	16QAM	1	0	23.52	22.81	23.48	19.97	20.04	20.46
		1	1	25.74	25.52	25.84	22.22	22.32	23.08
		1	215	25.53	26.38	26.17	22.82	23.15	23.30
		1	216	23.23	23.66	23.52	20.18	20.61	20.81
		108	54	26.05	26.18	26.25	22.46	22.50	23.10
		216	0	24.97	25.14	25.21	21.37	21.55	22.08
	64QAM	1	0	23.58	23.29	23.66	19.37	19.64	19.98
		1	1	24.57	24.23	24.79	20.43	20.57	20.96
		1	215	24.27	24.81	24.82	20.97	21.21	21.36
		1	216	23.64	23.80	23.82	19.92	20.05	20.49
		108	54	24.54	24.67	24.74	20.94	20.95	21.56
		216	0	24.47	24.71	24.77	20.90	20.96	21.52
	256QAM	1	0	22.42	22.46	22.88	18.52	19.04	19.43
		1	1	22.68	22.47	22.78	18.87	18.79	19.23
		1	215	22.71	22.92	22.84	19.20	19.52	19.72
		1	216	22.44	22.87	23.00	19.31	19.75	19.98
		108	54	22.47	22.65	22.76	18.88	18.94	19.50
		216	0	22.42	22.62	22.67	18.87	18.92	19.53

OUTPUT POWER FOR 5G NR n77 (90.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				649666	656000	662333	649666	656000	662333
				3745.0	3840.0	3935.0	3745.0	3840.0	3935.0
90.0	BPSK	1	0	23.32	23.02	23.45	19.67	19.63	20.06
		1	1	26.86	26.61	27.14	23.25	23.36	23.63
		1	243	27.13	27.31	27.70	23.62	24.02	24.30
		1	244	23.64	23.92	24.12	20.22	20.35	20.80
		120	60	26.91	27.21	27.34	23.42	23.46	24.06
		243	0	26.36	26.71	26.83	22.95	22.98	23.60
	QPSK	1	0	23.30	23.24	23.59	19.61	19.83	20.16
		1	1	26.77	26.84	27.01	23.17	23.24	23.65
		1	243	27.10	27.52	27.22	23.67	23.93	23.96
		1	244	23.66	23.86	23.96	20.17	20.64	20.84
		120	60	26.89	27.26	27.35	23.43	23.48	23.91
		243	0	25.81	26.20	26.29	22.43	22.46	23.06
	16QAM	1	0	23.03	22.91	23.48	19.84	20.11	20.34
		1	1	25.62	25.66	25.94	22.01	22.35	22.82
		1	243	25.75	26.01	26.55	22.83	23.35	23.28
		1	244	23.20	23.59	23.85	20.33	20.52	20.91
		120	60	25.89	26.28	26.34	22.42	22.46	23.08
		243	0	24.82	25.17	25.26	21.44	21.50	22.03
	64QAM	1	0	23.33	23.54	23.82	19.61	19.58	19.88
		1	1	24.50	24.15	24.59	20.55	20.55	20.89
		1	243	24.56	25.00	25.28	20.91	21.46	21.42
		1	244	23.87	23.94	24.21	19.88	20.22	20.68
		120	60	24.37	24.72	24.78	20.92	21.04	21.53
		243	0	24.33	24.75	24.79	20.93	20.94	21.55
	256QAM	1	0	22.55	22.42	22.81	18.72	18.77	19.17
		1	1	22.40	22.37	22.81	18.82	18.82	19.41
		1	243	22.76	23.07	22.93	19.50	19.54	20.16
		1	244	22.53	23.19	23.13	19.38	19.77	19.85
		120	60	22.33	22.64	22.76	18.88	18.91	19.50
		243	0	22.35	22.65	22.70	18.83	18.91	19.52

OUTPUT POWER FOR 5G NR n77 (100.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 4		
				650000	656000	662000	650000	656000	662000
				3750.0	3840.0	3930.0	3750.0	3840.0	3930.0
100.0	BPSK	1	0	23.65	23.28	23.76	19.51	19.66	19.99
		1	1	27.30	27.01	27.21	23.18	23.20	23.42
		1	271	27.45	27.68	27.15	23.68	24.06	24.30
		1	272	24.13	24.03	24.09	20.06	20.48	20.73
		135	67	27.31	27.58	27.54	23.35	23.41	23.88
		270	0	27.15	26.99	27.02	22.84	22.95	23.43
	QPSK	1	0	23.91	23.19	23.68	19.43	19.57	19.83
		1	1	27.18	26.89	27.28	22.97	22.95	23.18
		1	271	27.40	27.66	26.24	23.56	23.49	23.60
		1	272	24.06	24.22	23.99	20.09	20.51	20.46
		135	67	27.38	27.55	27.44	23.35	23.35	23.58
		270	0	26.66	26.47	26.50	22.36	22.42	22.87
	16QAM	1	0	23.65	23.20	23.42	19.33	19.48	19.83
		1	1	26.55	25.72	25.91	21.92	22.12	22.08
		1	271	26.70	26.75	26.06	22.62	22.72	22.74
		1	272	23.99	24.05	24.12	20.26	20.39	20.61
		135	67	26.68	26.66	26.55	22.36	22.42	22.98
		270	0	26.74	25.45	25.49	21.41	21.45	21.90
	64QAM	1	0	23.94	23.27	23.65	19.58	19.69	20.66
		1	1	24.95	24.48	24.45	20.58	20.73	20.72
		1	271	25.22	25.35	25.20	21.27	21.57	21.91
		1	272	24.30	24.44	24.31	20.45	20.80	20.70
		135	67	25.11	25.05	24.58	20.89	20.99	21.46
		270	0	25.71	25.01	24.98	20.91	20.95	21.39
	256QAM	1	0	22.35	22.19	22.28	18.53	18.81	18.96
		1	1	22.65	24.50	22.54	18.60	18.69	19.10
		1	271	22.65	22.81	22.86	19.43	19.42	19.90
		1	272	23.08	22.88	22.93	19.42	19.60	19.99
		135	67	23.05	23.04	22.98	18.73	18.91	19.42
		270	0	22.95	22.94	22.72	18.80	18.85	19.37

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.

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	4.528	4.93
	5MHz, QPSK			4.482	4.85
	5MHz, 16QAM			4.459	4.80
	10MHz, BPSK	50/0		8.914	9.35
	10MHz, QPSK			8.960	9.38
	10MHz, 16QAM			8.975	9.44
	15MHz, BPSK	75/0		13.403	14.15
	15MHz, QPSK			13.429	14.22
	15MHz, 16QAM			13.391	14.20
	20MHz, BPSK	100/0		17.854	18.80
	20MHz, QPSK			17.891	18.86
	20MHz, 16QAM			17.815	18.61
	20MHz, BPSK	1/0		0.298	0.475

LTE BAND 7

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 7	5MHz, QPSK	25/0	2535.0	4.520	4.95
	5MHz, 16QAM			4.501	4.97
	10MHz, QPSK	50/0		8.999	9.77
	10MHz, 16QAM			8.963	9.76
	15MHz, QPSK	75/0		13.435	14.58
	15MHz, 16QAM			13.443	14.57
	20MHz, QPSK	100/0		17.909	19.37
	20MHz, 16QAM			17.892	19.36
	20MHz, QPSK	1/0		0.277	0.433

5G NR n7

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n7	5MHz, BPSK	25/0	2535.0	4.514	5.00
	5MHz, QPSK			4.486	4.94
	5MHz, 16QAM			4.491	4.87
	10MHz, BPSK	50/0		8.950	9.56
	10MHz, QPSK			8.957	9.55
	10MHz, 16QAM			8.985	9.57
	15MHz, BPSK	75/0		13.395	14.15
	15MHz, QPSK			13.398	14.06
	15MHz, 16QAM			13.398	14.10
	20MHz, BPSK	100/0		17.874	18.91
	20MHz, QPSK			17.930	18.77
	20MHz, 16QAM			17.903	18.77
	25MHz, BPSK	128/0		22.893	23.97
	25MHz, QPSK			22.867	23.95
	25MHz, 16QAM			22.943	23.96
	30MHz, BPSK	160/0		28.639	29.80
	30MHz, QPSK			28.615	29.93
	30MHz, 16QAM			28.590	29.85
	40MHz, BPSK	216/0		38.617	40.33
	40MHz, QPSK			38.603	40.37
	40MHz, 16QAM			38.590	40.34
	40MHz, BPSK	1/0		0.397	0.604

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	1.082	1.23
	1.4MHz, 16QAM			1.084	1.23
	3MHz, QPSK	15/0		2.697	2.99
	3MHz, 16QAM			2.697	2.98
	5MHz, QPSK	25/0		4.495	4.93
	5MHz, 16QAM			4.491	4.93
	10MHz, QPSK	50/0		8.979	9.79
	10MHz, 16QAM			8.945	9.73
	10MHz, QPSK	1/0		0.234	0.405

5G NR n12

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n12	5MHz, BPSK	25/0	707.5	4.470	4.90
	5MHz, QPSK			4.468	4.89
	5MHz, 16QAM			4.468	4.90
	10MHz, BPSK	50/0		8.940	9.59
	10MHz, QPSK			8.941	9.59
	10MHz, 16QAM			8.918	9.56
	15MHz, BPSK	75/0		13.405	14.23
	15MHz, QPSK			13.410	14.21
	15MHz, 16QAM			13.368	14.18
	15MHz, BPSK	1/0		0.285	0.472

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	4.482	4.82
	5MHz, 16QAM			4.465	4.84
	10MHz, QPSK	50/0		8.920	9.51
	10MHz, 16QAM			8.939	9.59
	10MHz, QPSK	1/0		0.238	0.388

LTE BAND 14

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 14	5MHz, QPSK	25/0	793.0	4.480	4.88
	5MHz, 16QAM			4.469	4.83
	10MHz, QPSK	50/0		8.943	9.51
	10MHz, 16QAM			8.948	9.59
	10MHz, QPSK	1/0		0.233	0.408

LTE BAND 17

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 17	5MHz, QPSK	25/0	710.0	4.470	4.85
	5MHz, 16QAM			4.461	4.84
	10MHz, QPSK	50/0		8.949	9.57
	10MHz, 16QAM			8.951	9.56
	10MHz, QPSK	1/0		0.244	0.395

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	1.089	1.23
	1.4MHz, 16QAM			1.093	1.24
	3MHz, QPSK	15/0		2.696	3.00
	3MHz, 16QAM			2.693	2.98
	5MHz, QPSK	25/0		4.494	4.95
	5MHz, 16QAM			4.493	4.93
	10MHz, QPSK	50/0		8.998	9.83
	10MHz, 16QAM			8.976	9.79
	15MHz, QPSK	75/0		13.444	14.54
	15MHz, 16QAM			13.455	14.57
	20MHz, QPSK	100/0		17.952	19.35
	20MHz, 16QAM			17.921	19.35
	20MHz, QPSK	1/0		0.274	0.470

5G NR n25

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n25	5MHz, BPSK	25/0	1882.5	4.468	4.92
	5MHz, QPSK			4.477	4.87
	5MHz, 16QAM			4.486	4.93
	10MHz, BPSK	50/0		8.928	9.59
	10MHz, QPSK			8.927	9.59
	10MHz, 16QAM			8.923	9.59
	15MHz, BPSK	75/0		13.384	14.20
	15MHz, QPSK			13.371	14.19
	15MHz, 16QAM			13.439	14.26
	20MHz, BPSK	100/0		17.862	18.80
	20MHz, QPSK			17.864	18.80
	20MHz, 16QAM			17.879	18.83
	25MHz, BPSK	128/0		22.838	23.85
	25MHz, QPSK			22.837	23.86
	25MHz, 16QAM			22.823	23.82
	30MHz, BPSK	160/0		28.514	29.55
	30MHz, QPSK			28.515	29.55
	30MHz, 16QAM			28.533	29.66
	40MHz, BPSK	216/0		38.632	40.37
	40MHz, QPSK			38.968	41.15
	40MHz, 16QAM			38.909	41.12
		40MHz, BPSK		1/0	

LTE BAND 26 (PART 90S)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 26	1.4MHz, QPSK	6/0	819.0	1.085	1.22
	1.4MHz,16QAM			1.083	1.22
	3MHz, QPSK	15/0		2.689	2.96
	3MHz, 16QAM			2.685	2.92
	5MHz, QPSK	25/0		4.486	4.88
	5MHz, 16QAM			4.477	4.88
	10MHz, QPSK	50/0		8.947	9.63
	10MHz, 16QAM			8.930	9.54
	10MHz. OPSK	1/0		0.243	0.390

LTE BAND 26 (PART 22)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 26	1.4MHz, QPSK	6/0	836.5	1.078	1.21
	1.4MHz, 16QAM			1.081	1.22
	3MHz, QPSK	15/0		2.678	2.92
	3MHz, 16QAM			2.683	2.96
	5MHz, QPSK	25/0		4.484	4.86
	5MHz, 16QAM			4.476	4.89
	10MHz, QPSK	50/0		8.939	9.71
	10MHz, 16QAM			8.933	9.64
	15MHz, QPSK	75/0		13.438	14.54
	15MHz, 16QAM			13.431	14.51
	15MHz, QPSK	1/0		0.257	0.431

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	4.487	4.89
	5MHz, 16QAM			4.475	4.86
	10MHz, QPSK	50/0		8.961	9.56
	10MHz, 16QAM			8.949	9.63
	10MHz, QPSK	1/0		0.235	0.373

5G NR n30

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n30	5MHz, BPSK	25/0	2310.0	4.487	4.94
	5MHz, QPSK			4.488	4.93
	5MHz, 16QAM			4.472	4.82
	10MHz, BPSK	50/0		8.950	9.39
	10MHz, QPSK			8.962	9.53
	10MHz, 16QAM			8.898	9.39
	10MHz, BPSK	1/0		0.226	0.379

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	4.470	5.12
	5MHz, 16QAM			4.452	4.77
	10MHz, QPSK	50/0		8.928	9.39
	10MHz, 16QAM			8.945	9.65
	15MHz, QPSK	75/0		13.481	14.15
	15MHz, 16QAM			13.404	14.19
	20MHz, QPSK	100/0		17.877	18.93
	20MHz, 16QAM			17.870	19.54
	20MHz, QPSK	1/0		0.246	0.394

5G NR n41

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n41 (FCC)	20MHz, BPSK	50/0	2593.0	17.867	18.98
	20MHz, QPSK			17.820	18.98
	20MHz, 16QAM			17.905	20.11
	30MHz, BPSK	75/0		26.811	28.13
	30MHz, QPSK			26.826	28.19
	30MHz, 16QAM			26.777	28.27
	40MHz, BPSK	100/0		35.798	37.41
	40MHz, QPSK			35.701	37.31
	40MHz, 16QAM			35.741	37.32
	50MHz, BPSK	128/0		45.670	47.33
	50MHz, QPSK			45.789	47.54
	50MHz, 16QAM			45.694	47.33
	60MHz, BPSK	162/0		57.823	59.64
	60MHz, QPSK			57.683	59.87
	60MHz, 16QAM			57.878	59.73
	80MHz, BPSK	216/0		77.133	79.50
	80MHz, QPSK			77.106	79.63
	80MHz, 16QAM			77.041	79.63
	90MHz, BPSK	243/0		86.566	89.82
	90MHz, QPSK			86.873	89.73
	90MHz, 16QAM			86.661	90.91
	100MHz, BPSK	270/0		96.250	101.4
	100MHz, QPSK			96.169	99.41
	100MHz, 16QAM			96.402	99.50
		100MHz, OPSK		1/0	

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	4.474	4.93
	5MHz, 16QAM			4.443	4.84
	10MHz, QPSK	50/0		8.938	9.61
	10MHz, 16QAM			8.897	9.48
	15MHz, QPSK	75/0		13.364	14.07
	15MHz, 16QAM			13.383	14.23
	20MHz, QPSK	100/0		17.875	18.52
	20MHz, 16QAM			17.777	19.38
	20MHz, QPSK	1/0		0.270	0.399

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	1.079	1.20
	1.4MHz,16QAM			1.079	1.19
	3MHz, QPSK	15/0		2.687	2.94
	3MHz, 16QAM			2.678	2.89
	5MHz, QPSK	25/0		4.517	4.93
	5MHz, 16QAM			4.499	4.97
	10MHz, QPSK	50/0		8.987	9.77
	10MHz, 16QAM			8.974	9.78
	15MHz, QPSK	75/0		13.419	14.56
	15MHz, 16QAM			13.423	14.55
	20MHz, QPSK	100/0		17.889	19.35
	20MHz, 16QAM			17.894	19.36
	20MHz, QPSK	1/0		0.249	0.450

5G NR n66

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n66	5MHz, BPSK	25/0	1745.0	4.483	4.96
	5MHz, QPSK			4.482	4.96
	5MHz, 16QAM			4.494	4.95
	10MHz, BPSK	50/0		8.966	9.56
	10MHz, QPSK			8.966	9.56
	10MHz, 16QAM			8.935	9.62
	15MHz, BPSK	75/0		13.389	14.22
	15MHz, QPSK			13.453	14.26
	15MHz, 16QAM			13.416	14.28
	20MHz, BPSK	100/0		17.912	18.80
	20MHz, QPSK			17.862	18.92
	20MHz, 16QAM			17.858	18.89
	30MHz, BPSK	160/0		28.602	29.69
	30MHz, QPSK			28.600	29.69
	30MHz, 16QAM			28.504	29.69
	40MHz, BPSK	216/0		38.483	40.06
	40MHz, QPSK			38.586	40.16
	40MHz, 16QAM			38.549	40.13
	40MHz, QPSK	1/0		0.366	0.585

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	4.492	4.92
	5MHz, 16QAM			4.481	4.88
	10MHz, QPSK	50/0	683	8.983	9.81
	10MHz, 16QAM			8.968	9.71
	15MHz, QPSK	75/0	680.5	13.437	14.56
	15MHz, 16QAM			13.408	14.58
	20MHz, QPSK	100/0	683	17.783	18.60
	20MHz, 16QAM			17.886	19.22
	20MHz, QPSK	1/0	680.5	0.255	0.407

5G NR n71

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n71	5MHz, BPSK	25/0	680.5	4.463	4.74
	5MHz, QPSK			4.468	4.76
	5MHz, 16QAM			4.458	4.69
	10MHz, BPSK	50/0	683	8.945	9.45
	10MHz, QPSK			8.911	9.57
	10MHz, 16QAM			8.935	9.36
	15MHz, BPSK	75/0	680.5	13.389	14.01
	15MHz, QPSK			13.400	14.21
	15MHz, 16QAM			13.378	13.98
	20MHz, BPSK	100/0	683	17.844	18.75
	20MHz, QPSK			17.810	18.67
	20MHz, 16QAM			17.831	18.76
	20MHz, QPSK	1/0	680.5	0.262	0.420

5G NR n77 (3450-3550MHz)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n77 (FCC Part 27 3450-3550MHz)	20MHz, BPSK	50/0	3500.0	17.879	19.43
	20MHz, QPSK			17.908	19.05
	20MHz, 16QAM			17.916	19.03
	30MHz, BPSK	75/0		26.835	28.25
	30MHz, QPSK			26.797	28.33
	30MHz, 16QAM			26.901	28.34
	40MHz, BPSK	100/0		35.785	37.50
	40MHz, QPSK			35.833	37.51
	40MHz, 16QAM			35.794	37.66
	50MHz, BPSK	128/0		45.912	48.17
	50MHz, QPSK			45.852	48.20
	50MHz, 16QAM			45.970	48.13
	60MHz, BPSK	162/0		58.255	61.52
	60MHz, QPSK			58.115	61.43
	60MHz, 16QAM			58.337	61.56
	70MHz, BPSK	180/0		64.861	68.34
	70MHz, QPSK			64.782	68.33
	70MHz, 16QAM			64.932	68.38
	80MHz, BPSK	216/0		77.774	82.19
	80MHz, QPSK			77.834	82.07
	80MHz, 16QAM			77.844	82.32
	90MHz, BPSK	243/0		87.584	91.84
	90MHz, QPSK			87.484	91.89
	90MHz, 16QAM			87.423	91.93
	100MHz, BPSK	270/0		97.149	101.7
	100MHz, QPSK			97.239	101.7
	100MHz, 16QAM			96.912	101.8
	100MHz, QPSK	1/0		0.593	0.994

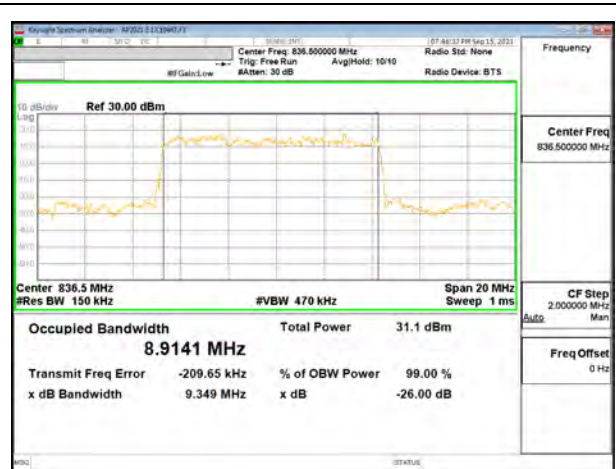
5G NR n77 (3700-3980MHz)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n77 (FCC Part 27 3700- 3980MHz)	20MHz, BPSK	50/0	3840.0	17.940	19.13
	20MHz, QPSK			17.913	19.31
	20MHz, 16QAM			17.866	19.22
	30MHz, BPSK	75/0		26.899	28.36
	30MHz, QPSK			26.864	28.44
	30MHz, 16QAM			26.891	28.50
	40MHz, BPSK	100/0		35.658	37.69
	40MHz, QPSK			35.679	37.62
	40MHz, 16QAM			35.810	37.61
	50MHz, BPSK	128/0		45.731	48.15
	50MHz, QPSK			45.752	48.17
	50MHz, 16QAM			45.768	48.16
	60MHz, BPSK	162/0		57.797	60.30
	60MHz, QPSK			57.646	60.27
	60MHz, 16QAM			57.796	60.48
	70MHz, BPSK	180/0		64.445	67.99
	70MHz, QPSK			64.504	67.99
	70MHz, 16QAM			64.546	68.02
	80MHz, BPSK	216/0		77.285	81.09
	80MHz, QPSK			76.932	81.11
	80MHz, 16QAM			77.159	81.19
	90MHz, BPSK	243/0		87.063	91.65
	90MHz, QPSK			86.790	91.84
	90MHz, 16QAM			87.213	91.76
	100MHz, BPSK	270/0		96.494	101.3
	100MHz, QPSK			96.332	101.4
	100MHz, 16QAM			96.405	101.7
	100MHz, QPSK	1/0		0.594	0.858

9.1.1. 5G NR n5



5G NR n5 5MHz BPSK Middle Channel RB25-0



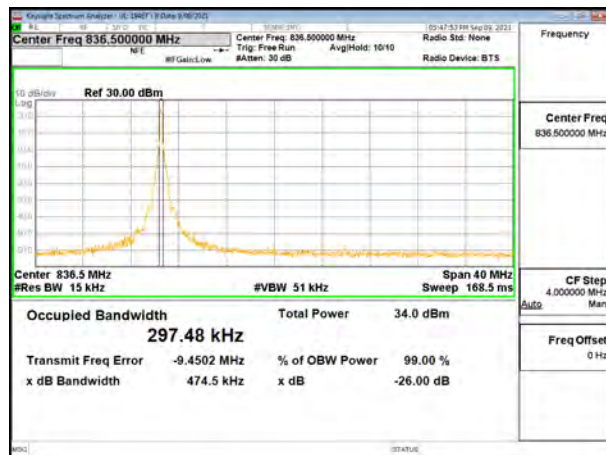
5G NR n5 10MHz BPSK Middle Channel RB50-0



5G NR n5 15MHz BPSK Middle Channel RB75-0



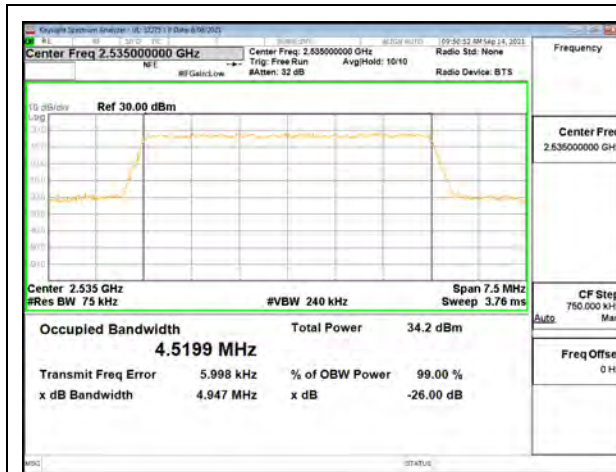
5G NR n5 20MHz BPSK Middle Channel RB100-0



5G NR n5 20MHz BPSK Middle Channel RB1-0

9.1.2. LTE BAND 7 AND 5G NR n7

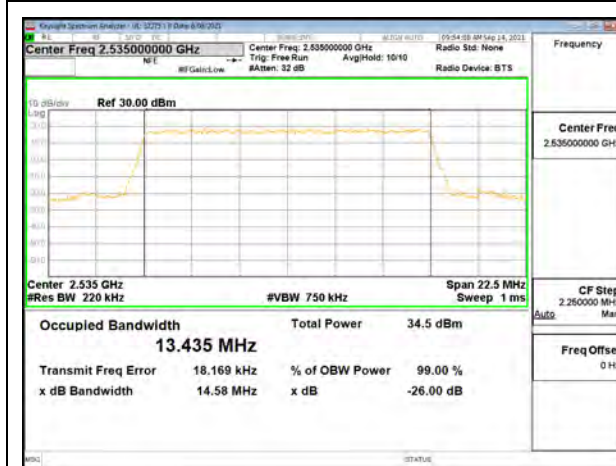
LTE BAND 7



LTE B7 5MHz QPSK Middle Channel RB25-0



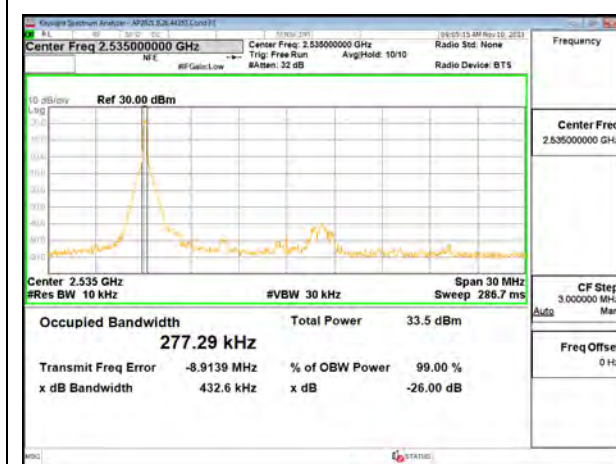
LTE B7 10MHz QPSK Middle Channel RB50-0



LTE B7 15MHz QPSK Middle Channel RB75-0



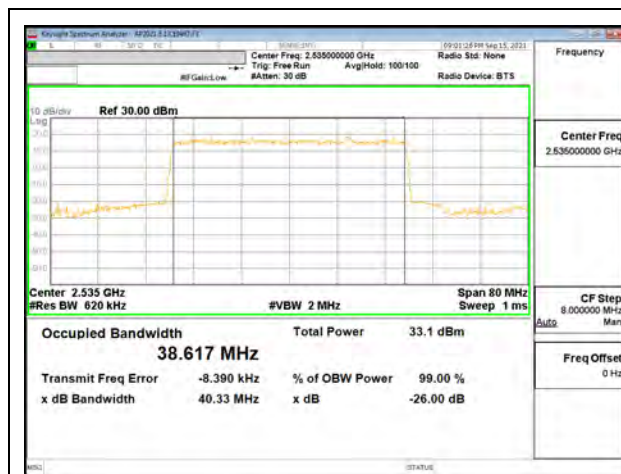
LTE B7 20MHz QPSK Middle Channel RB100-0



LTE B7 20MHz QPSK Middle Channel RB1-0

5G NR n7





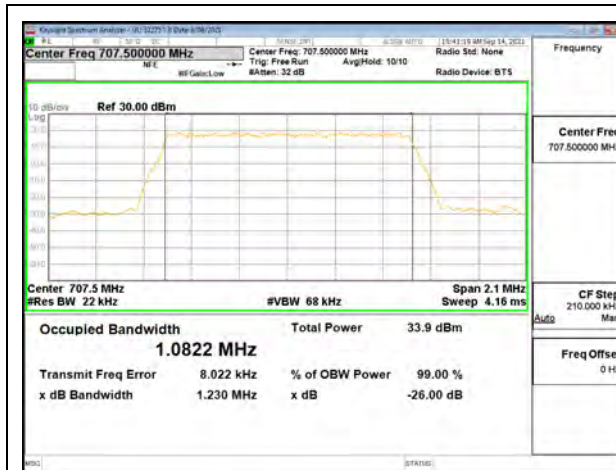
5G NR n7 40MHz BPSK Middle Channel RB216-0



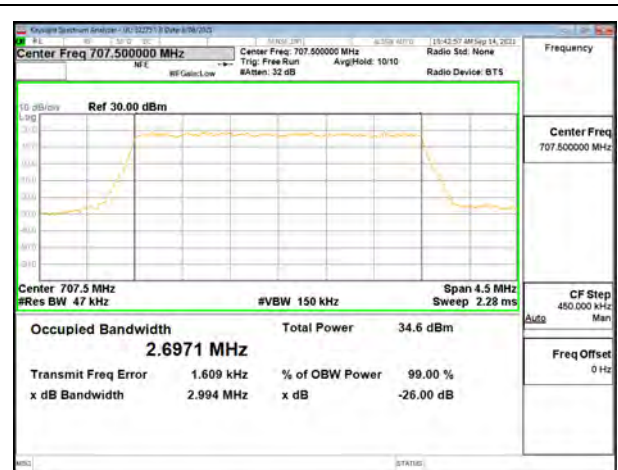
5G NR n7 40MHz BPSK Middle Channel RB1-0

9.1.3. LTE BAND 12 AND 5G NR n12

LTE BAND 12



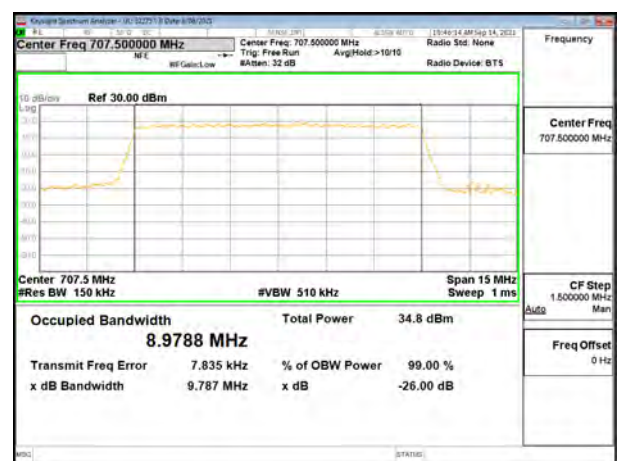
LTE B12 1.4MHz QPSK Middle Channel RB6-0



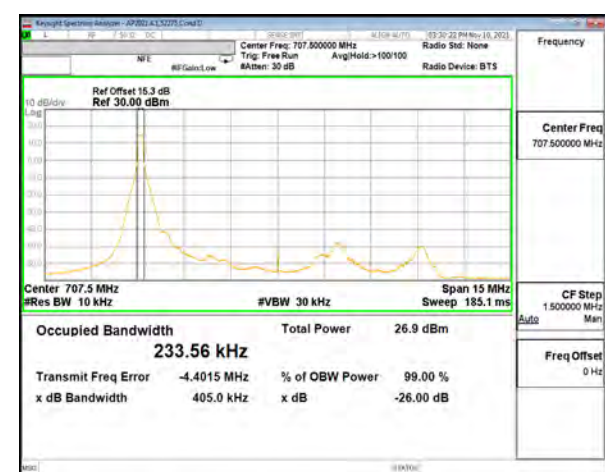
LTE B12 3MHz QPSK Middle Channel RB15-0



LTE B12 5MHz QPSK Middle Channel RB25-0



LTE B12 10MHz QPSK Middle Channel RB50-0



LTE B12 10MHz QPSK Middle Channel RB1-0

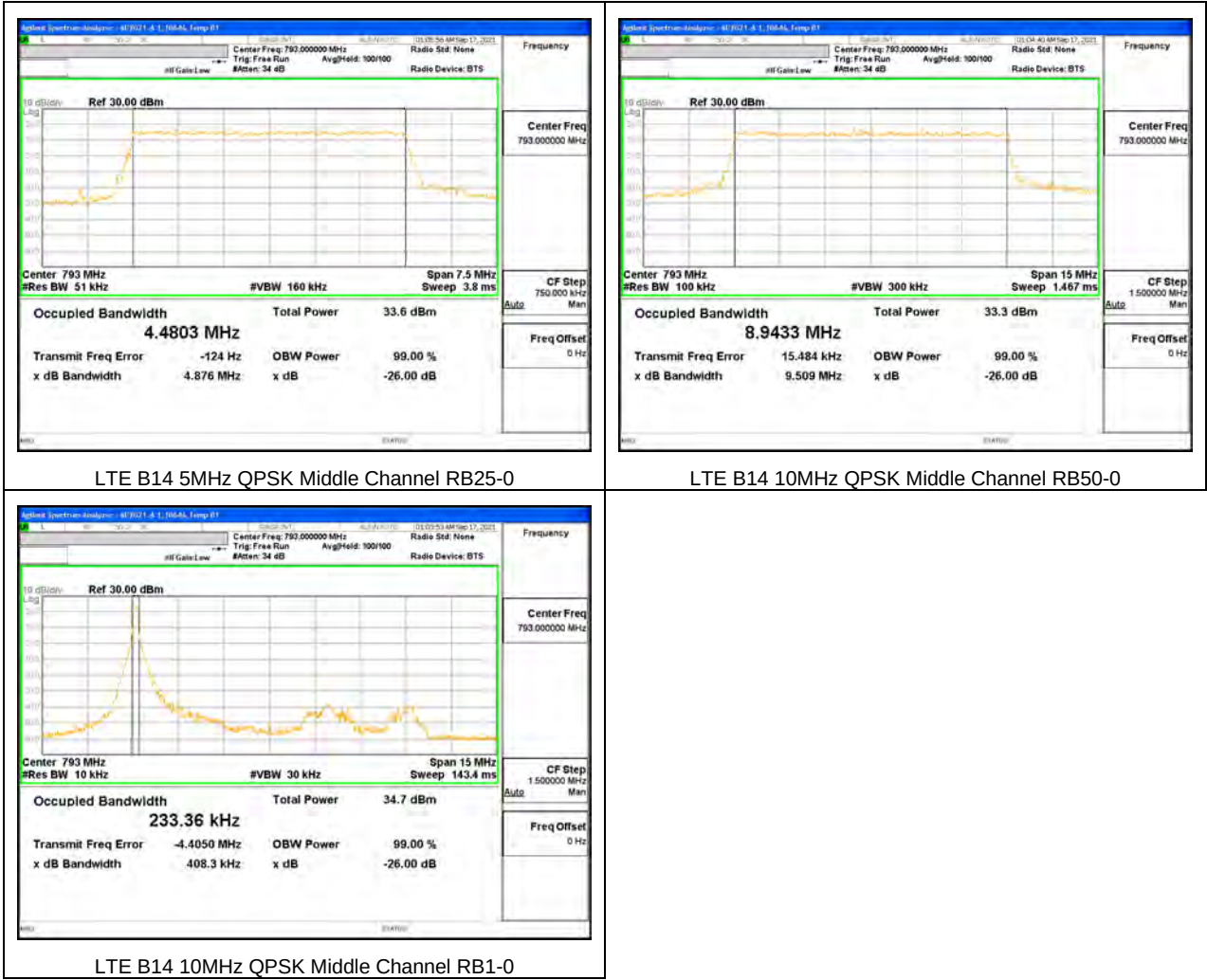
5G NR n12



9.1.4. LTE BAND 13



9.1.5. LTE BAND 14

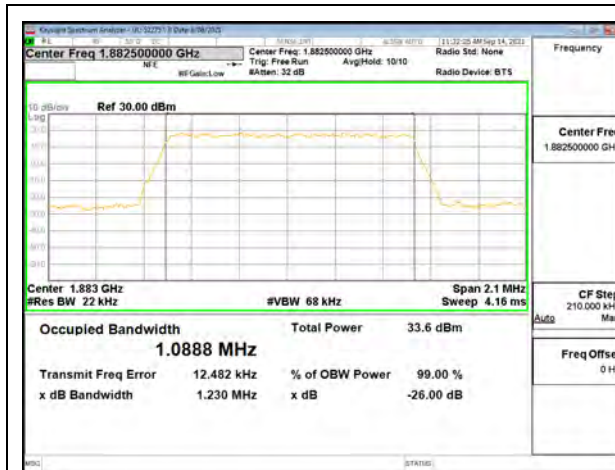


9.1.6. LTE BAND 17

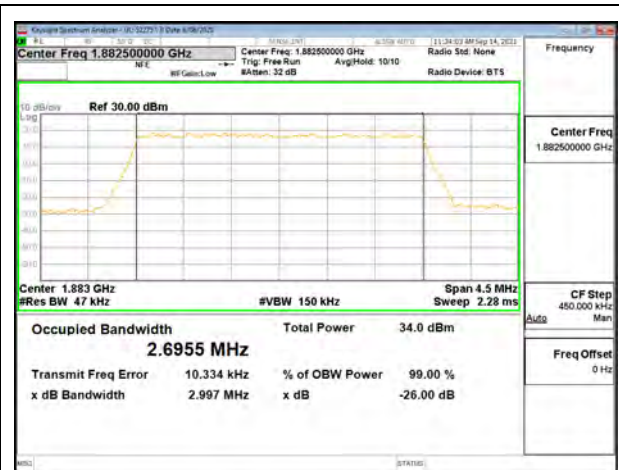


9.1.7. LTE BAND 25 AND 5G NR n25

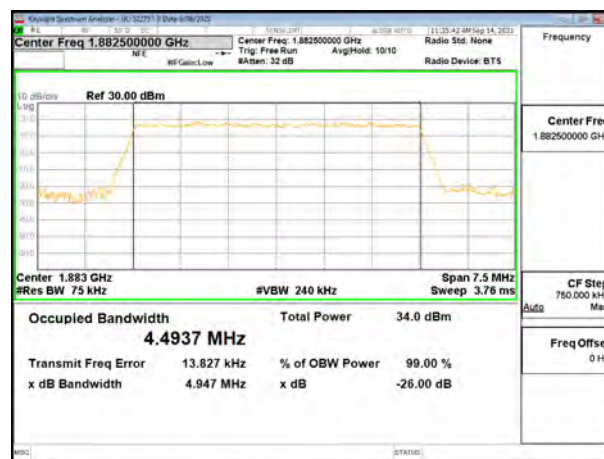
LTE BAND 25



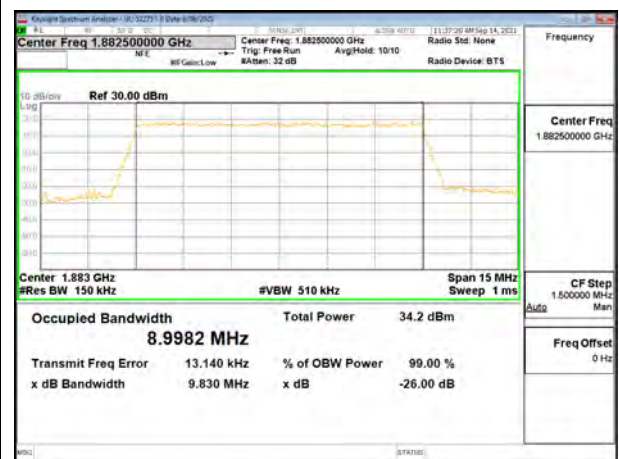
LTE B25 1.4MHz QPSK Middle Channel RB6-0



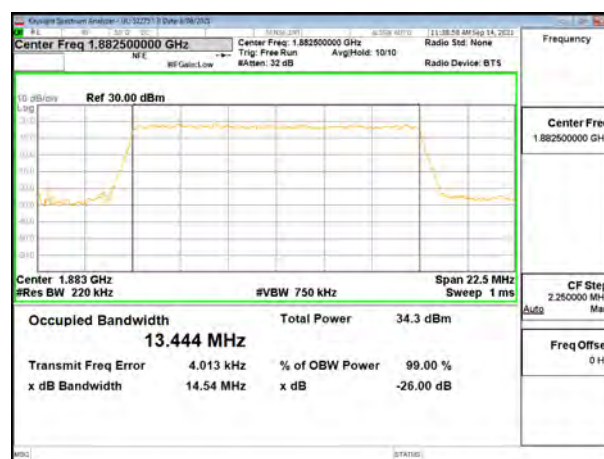
LTE B25 3MHz QPSK Middle Channel RB15-0



LTE B25 5MHz QPSK Middle Channel RB25-0



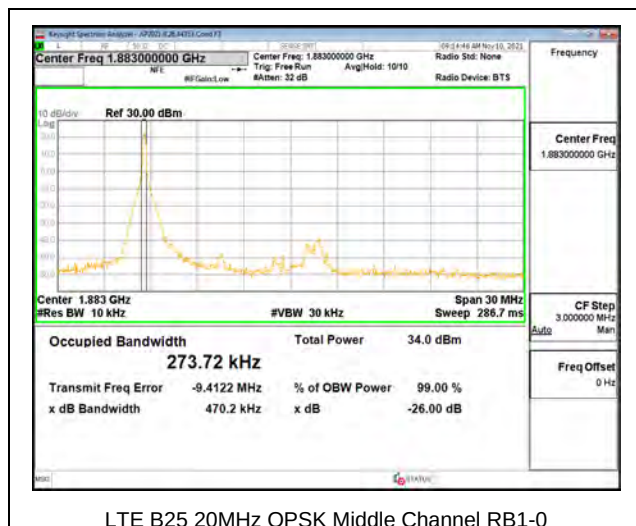
LTE B25 10MHz QPSK Middle Channel RB50-0



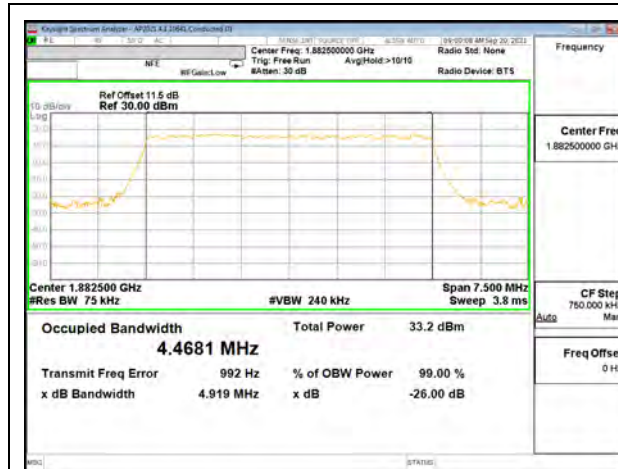
LTE B25 15MHz QPSK Middle Channel RB75-0



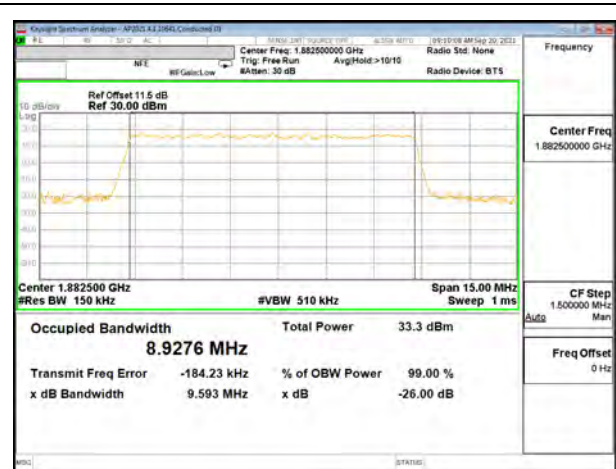
LTE B25 20MHz QPSK Middle Channel RB100-0



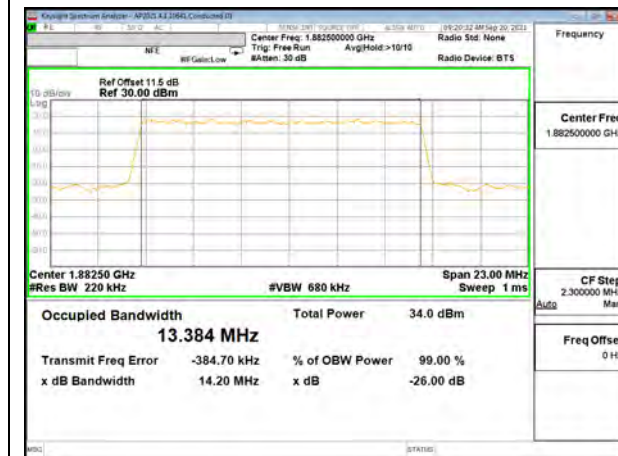
5G NR n25



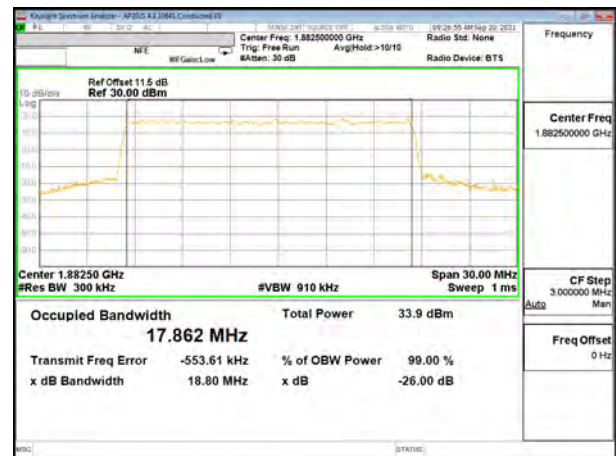
5G NR n25 5MHz BPSK Middle Channel RB25-0



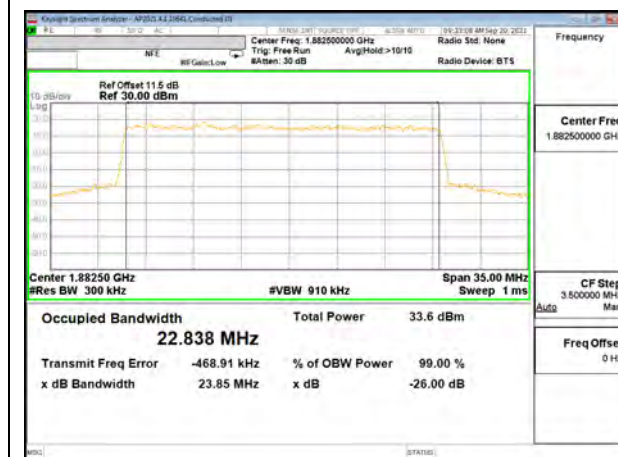
5G NR n25 10MHz BPSK Middle Channel RB50-0



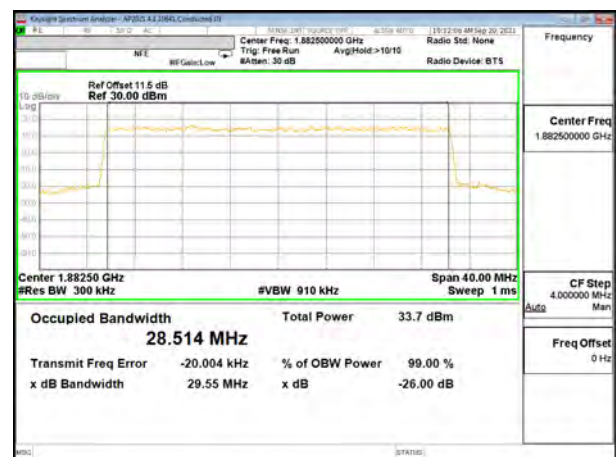
5G NR n25 15MHz BPSK Middle Channel RB75-0



5G NR n25 20MHz BPSK Middle Channel RB100-0



5G NR n25 25MHz BPSK Middle Channel RB128-0



5G NR n25 30MHz BPSK Middle Channel RB160-0



9.1.8. LTE BAND 26 (PART 90S)



LTE B26 1.4MHz QPSK Middle Channel RB6-0



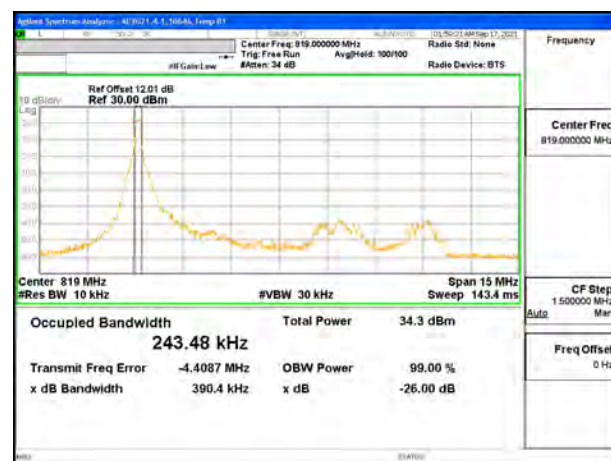
LTE B26 3MHz QPSK Middle Channel RB15-0



LTE B26 5MHz QPSK Middle Channel RB25-0



LTE B26 10MHz QPSK Middle Channel RB50-0



LTE B26 10MHz QPSK Middle Channel RB1-0

9.1.9. LTE BAND 26 (PART 22)



9.1.10. LTE BAND 30 AND 5G NR n30

LTE BAND 30



LTE B30 5MHz QPSK Middle Channel RB25-0



LTE B30 10MHz QPSK Middle Channel RB50-0



LTE B30 10MHz QPSK Middle Channel RB1-0

5G NR n30



9.1.11. LTE BAND 41 AND 5G NR n41

LTE BAND 41



LTE B41 5MHz QPSK Middle Channel RB25-0



LTE B41 10MHz QPSK Middle Channel RB50-0



LTE B41 15MHz QPSK Middle Channel RB75-0



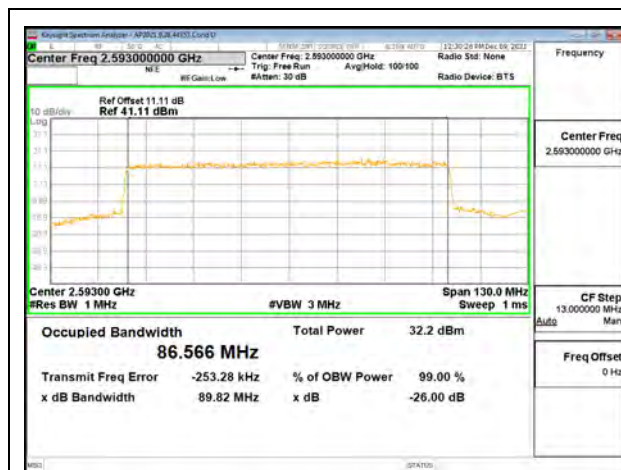
LTE B41 20MHz QPSK Middle Channel RB100-0



LTE B41 20MHz QPSK Middle Channel RB1-0

5G NR n41

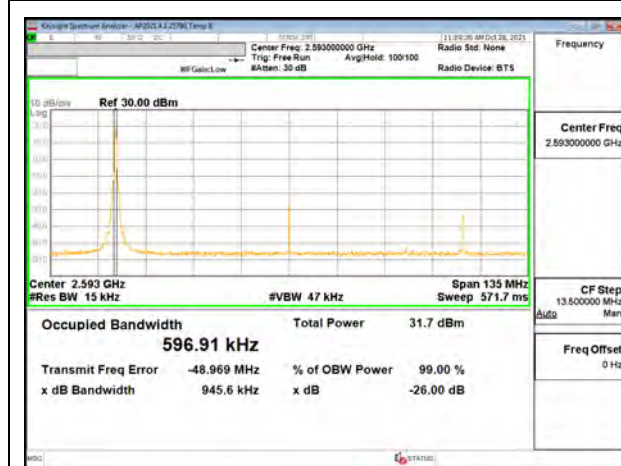




5G NR n41 90MHz BPSK Middle Channel RB243-0



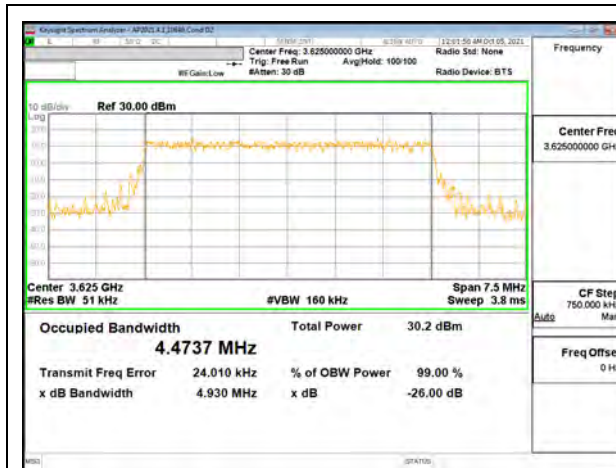
5G NR n41 100MHz BPSK Middle Channel RB270-0



5G NR n41 100MHz BPSK Middle Channel RB1-0

9.1.12. LTE BAND 48

LTE BAND 48



LTE B48 5MHz QPSK Middle Channel RB25-0



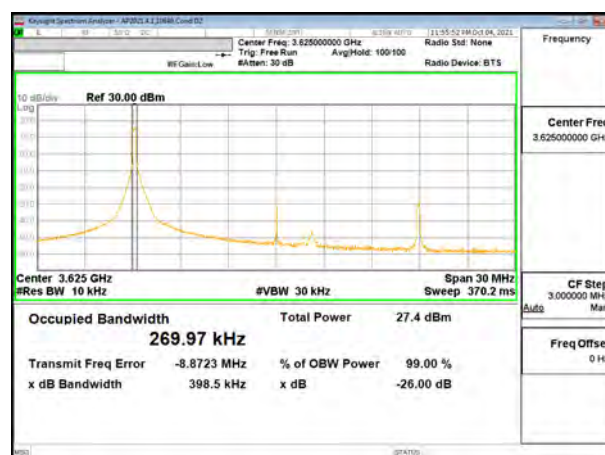
LTE B48 10MHz QPSK Middle Channel RB50-0



LTE B48 15MHz QPSK Middle Channel RB75-0



LTE B48 20MHz QPSK Middle Channel RB100-0

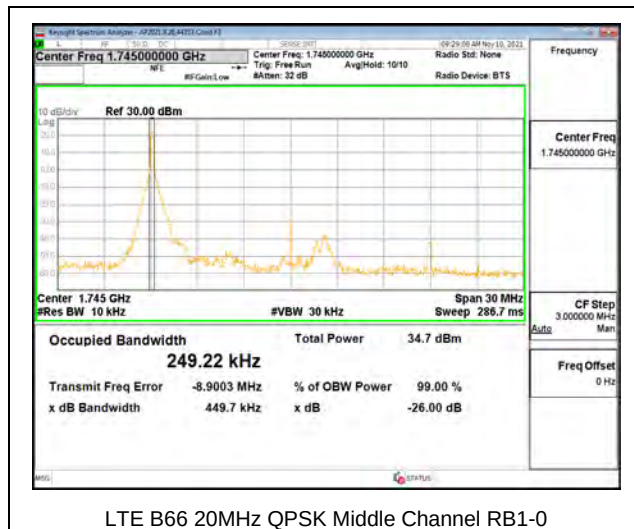


LTE B48 20MHz QPSK Middle Channel RB1-0

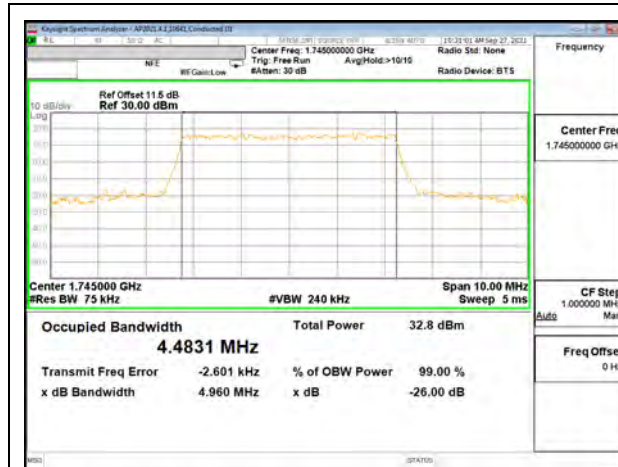
9.1.13. LTE BAND 66 AND 5G NR n66

LTE BAND 66

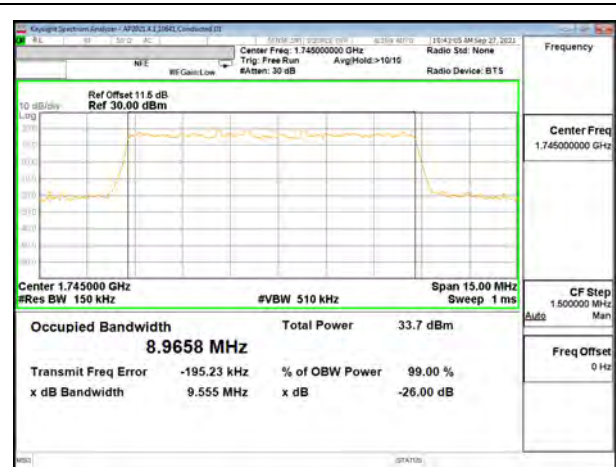




5G NR n66



5G NR n66 5MHz BPSK Middle Channel RB25-0



5G NR n66 10MHz BPSK Middle Channel RB50-0



5G NR n66 15MHz BPSK Middle Channel RB75-0



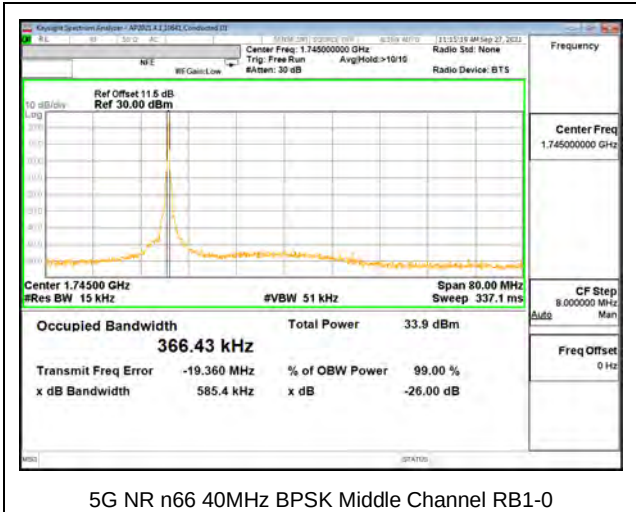
5G NR n66 20MHz BPSK Middle Channel RB100-0



5G NR n66 30MHz BPSK Middle Channel RB160-0



5G NR n66 40MHz BPSK Middle Channel RB216-0



9.1.14. LTE BAND 71 AND 5G NR n71

LTE BAND 71



LTE B71 5MHz QPSK Middle Channel RB25-0



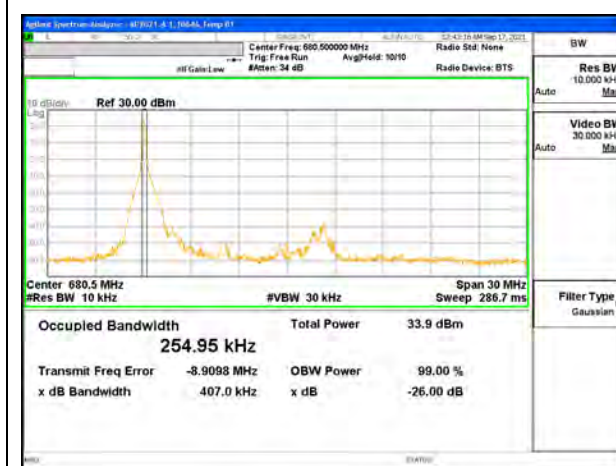
LTE B71 10MHz QPSK Middle Channel RB50-0



LTE B71 15MHz QPSK Middle Channel RB75-0



LTE B71 20MHz QPSK Middle Channel RB100-0

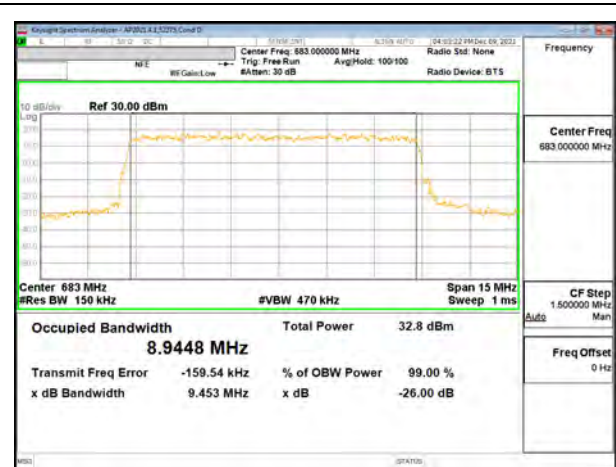


LTE B71 20MHz QPSK Middle Channel RB1-0

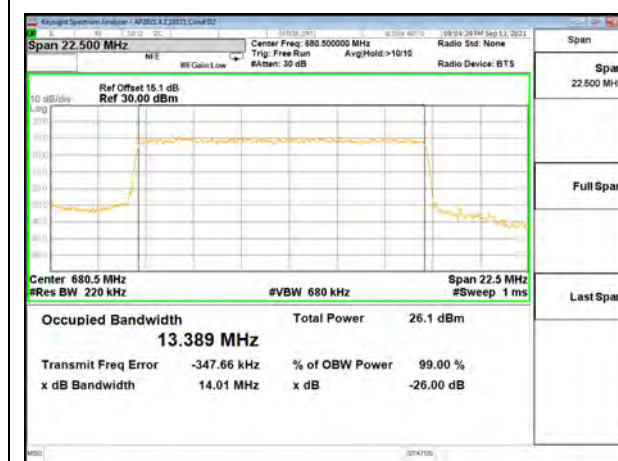
5G NR n71



5G NR n71 5MHz BPSK Middle Channel RB25-0



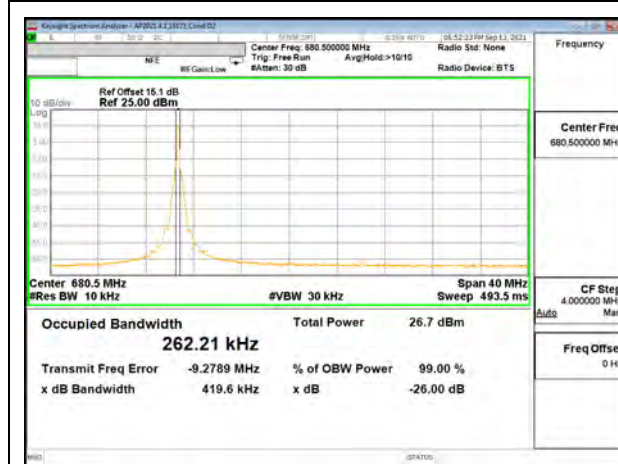
5G NR n71 10MHz BPSK Middle Channel RB50-0



5G NR n71 15MHz BPSK Middle Channel RB75-0



5G NR n71 20MHz BPSK Middle Channel RB100-0



5G NR n71 20MHz BPSK Middle Channel RB1-0

9.1.15. 5G NR n77 (Part 27 3450-3550MHz)





9.1.16. 5G NR n77 (Part 27 3700-3980MHz)





9.2. EMISSION MASK AND ADJACENT CHANNEL POWER

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 CMW500 Test 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 Emission Mask measurement:

1. Set the spectrum analyzer span to include the block edge frequency.
2. Set the Spectrum Emission Mask to cover all frequencies at their respective limits
3. Set the Spectrum Emission Mask to use the required Measurement Bandwidth
4. Set resolution bandwidth to at least 1% of emission bandwidth.

TEST PROCEDURE (LTE BAND 14)

(b) ACP measurement procedure. The following are the procedures for making the transmitter ACP measurements. For all measurements modulate the transmitter as it would be modulated in normal operating conditions. For time division multiple access (TDMA) systems, the measurements are to be made under TDMA operation only during time slots when the transmitter is active. All measurements are made at the transmitter's output port. If a transmitter has an integral antenna, a suitable power coupling device shall be used to couple the RF signal to the measurement instrument. The coupling device shall substantially maintain the proper transmitter load impedance. The ACP measurements may be made with a spectrum analyzer capable of making direct ACP measurements. "Measurement bandwidth", as used for non-swept measurements, implies an instrument that measures the power in many narrow bandwidths equal to the nominal resolution bandwidth and integrates these powers to determine the total power in the specified measurement bandwidth.

(1) Setting reference level. Set transmitter to maximum output power. Using a spectrum analyzer capable of ACP measurements, set the measurement bandwidth to the channel size. For example, for a 6.25 kHz transmitter set the measurement bandwidth to 6.25 kHz. Set the frequency offset of the measurement bandwidth to zero and adjust the center frequency of the instrument to the assigned center frequency to measure the average power level of the transmitter. Record this power level in dBm as the "reference power level."

(2) Non-swept power measurement. Using a spectrum analyzer capable of ACP measurements, set the measurement bandwidth and frequency offset from the assigned center frequency as shown in the tables in §90.543 (a) above. Any value of resolution bandwidth may be used as long as it does not exceed 2 percent of the specified measurement bandwidth. Measure the power level in dBm. These measurements should be made at maximum power. Calculate ACP by subtracting the reference power level measured in (b)(1) from the measurements made in this step. The absolute value of the calculated ACP must be greater than or equal to the absolute value of the ACP given in the table for each condition above.

(3) Swept power measurement. Set a spectrum analyzer to 30 kHz resolution bandwidth, 1 MHz video bandwidth and average, sample, or RMS detection. Set the reference level of the spectrum analyzer to the RMS value of the transmitter power. Sweep above and below the carrier frequency to the limits defined in the tables. Calculate ACP by subtracting the reference power level measured in (b)(1) from the measurements made in this step. The absolute value of the calculated ACP must be greater than or equal to the absolute value of the ACP given in the table for each condition above.

TEST PROCEDURE (LTE BAND 7, 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 (LTE BAND 30)

(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 (LTE BAND 48)

(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. 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.

5G NR n5 EMISSION MASK

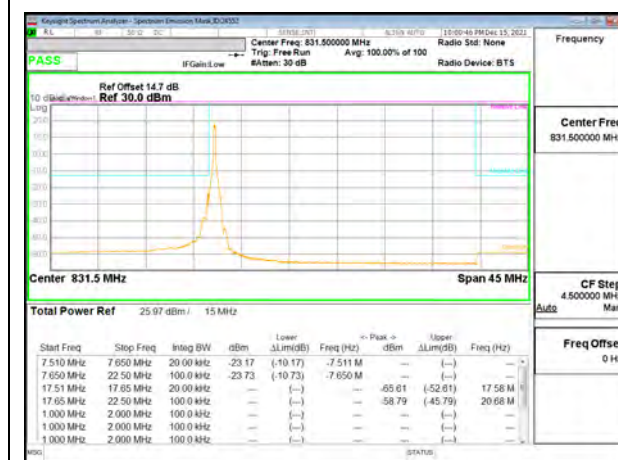




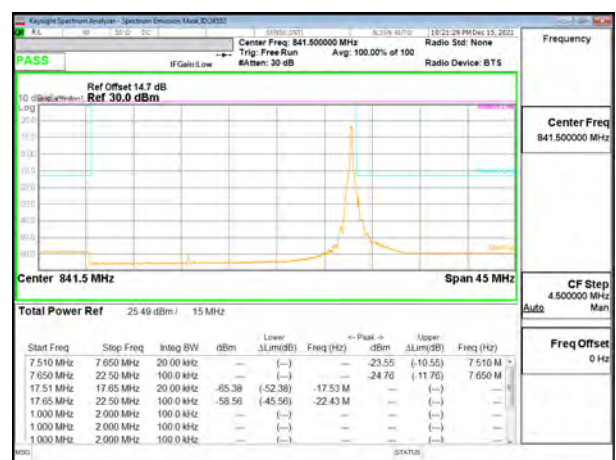
5G NR n5 10MHz BPSK Low Channel RB50-0



5G NR n5 10MHz BPSK High Channel RB50-0



5G NR n5 15MHz BPSK Low Channel RB1-0



5G NR n5 15MHz BPSK High Channel RB1-78



5G NR n5 15MHz BPSK Low Channel RB75-0



5G NR n5 15MHz BPSK High Channel RB75-0



9.2.2. LTE BAND 7 AND 5G NR n7 EMISSION MASK

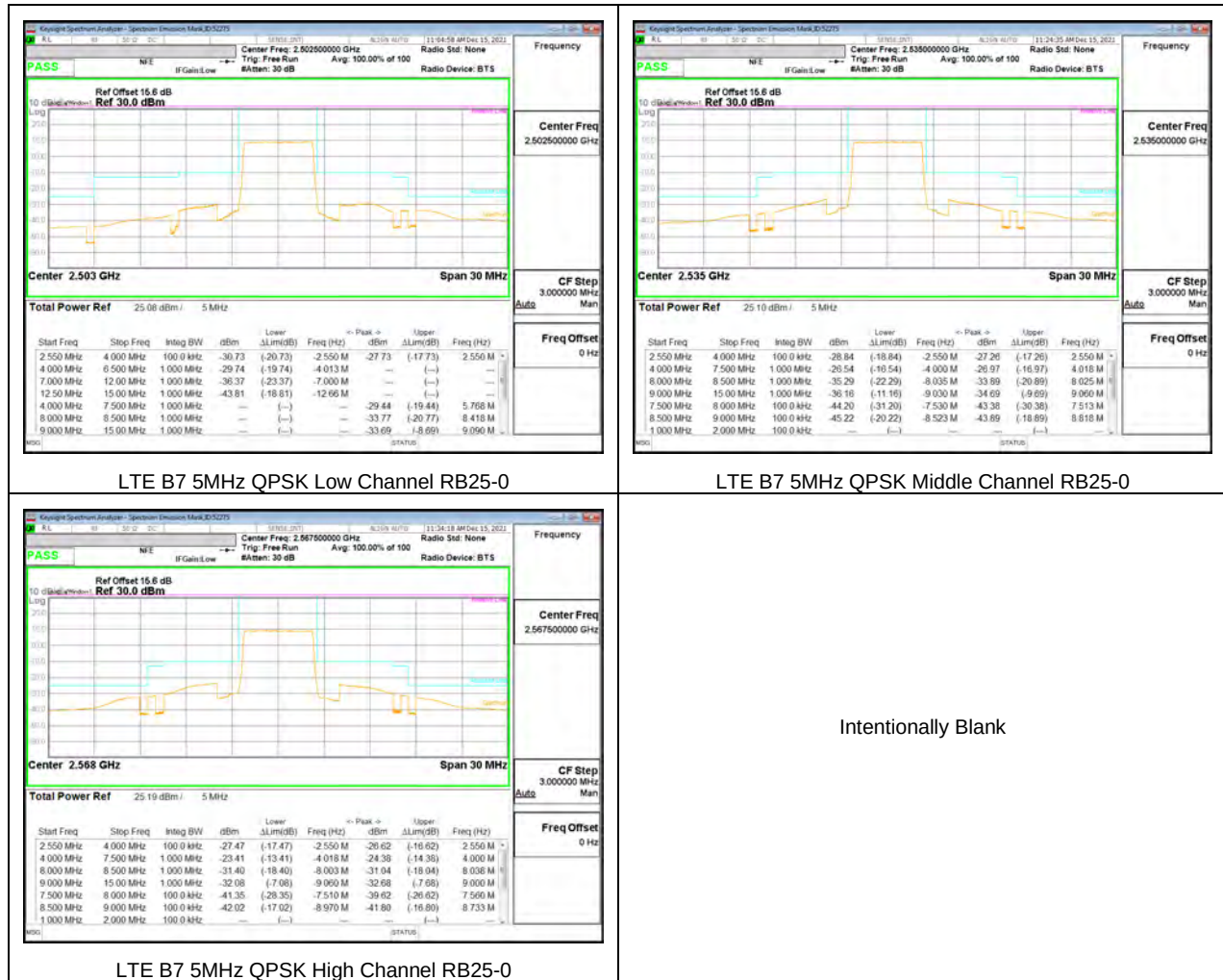
LIMITS

FCC: §27.53

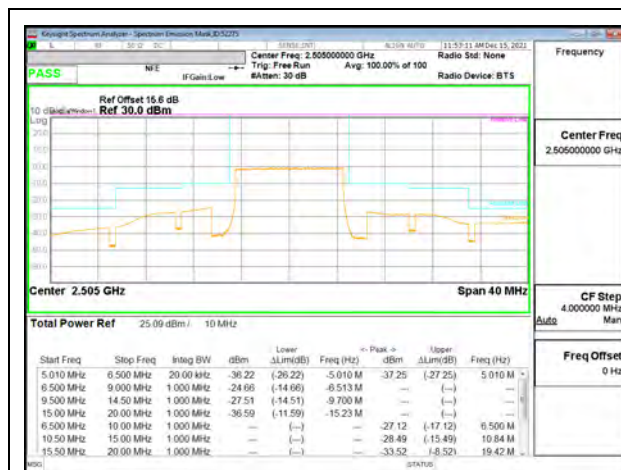
(m)(4) For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

LTE BAND 7 EMISSION MASK





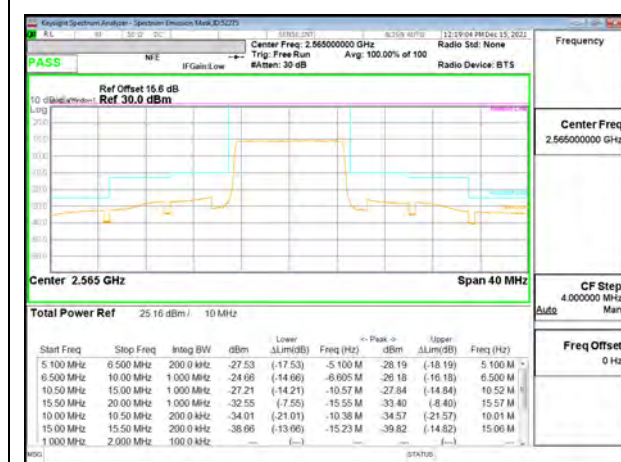




LTE B7 10MHz QPSK Low Channel RB50-0

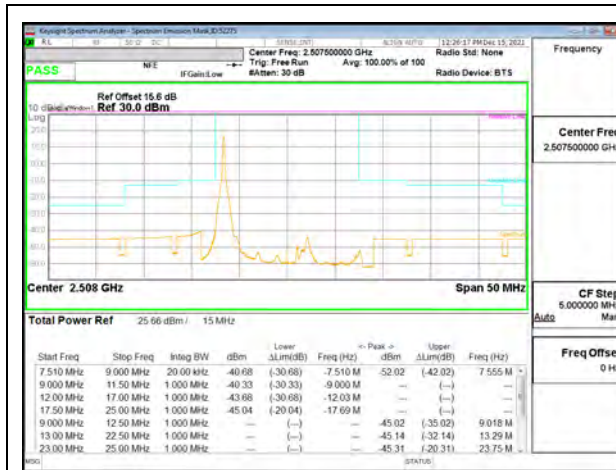


LTE B7 10MHz QPSK Middle Channel RB50-0

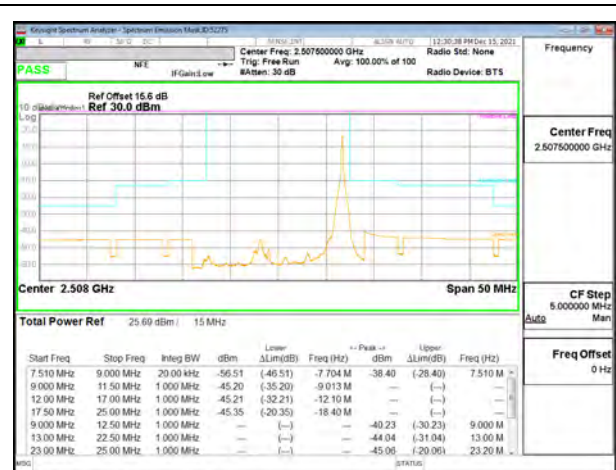


LTE B7 10MHz QPSK High Channel RB50-0

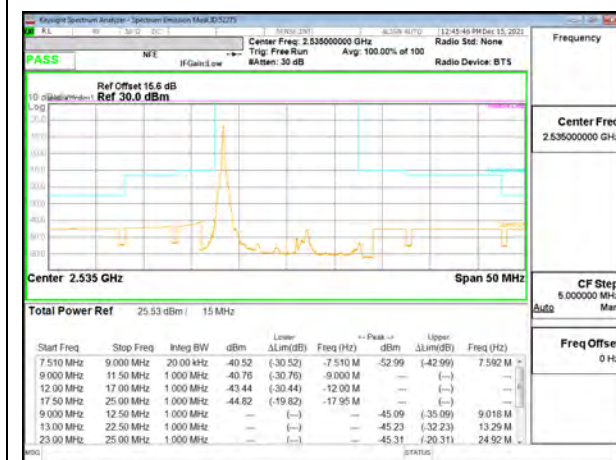
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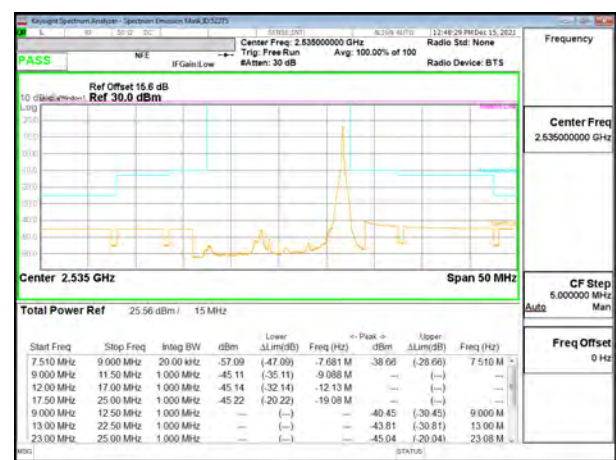
LTE B7 15MHz QPSK Low Channel RB1-0



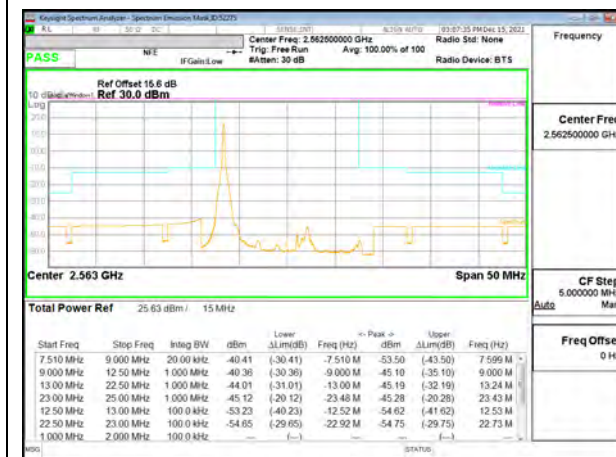
LTE B7 15MHz QPSK Low Channel RB1-74



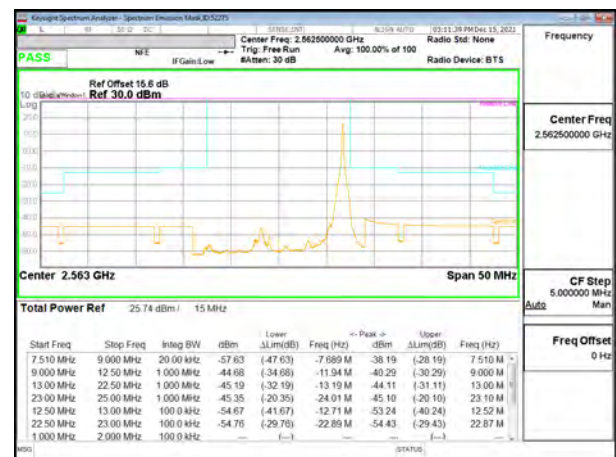
LTE B7 15MHz QPSK Middle Channel RB1-0



LTE B7 15MHz QPSK Middle Channel RB1-74



LTE B7 15MHz QPSK High Channel RB1-0



LTE B7 15MHz QPSK High Channel RB1-74







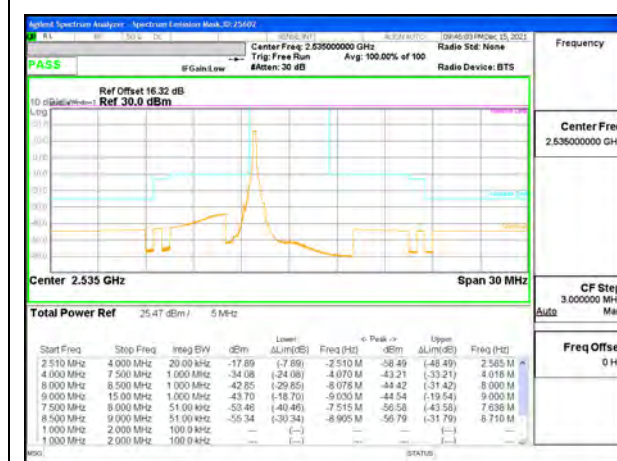
5G NR n7 EMISSION MASK



5G NR n7 5MHz BPSK Low Channel RB1-0



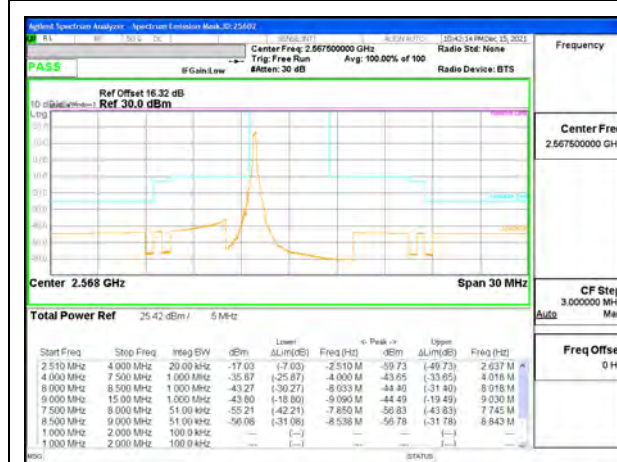
5G NR n7 5MHz BPSK Low Channel RB1-24



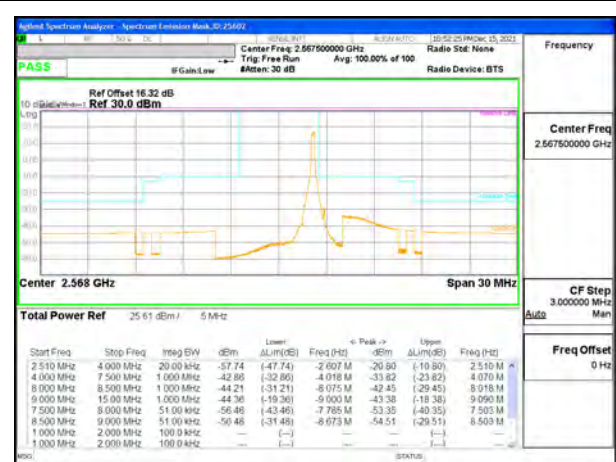
5G NR n7 5MHz BPSK Middle Channel RB1-0



5G NR n7 5MHz BPSK Middle Channel RB1-24



5G NR n7 5MHz BPSK High Channel RB1-0



5G NR n7 5MHz BPSK High Channel RB1-24



5G NR n7 5MHz BPSK Low Channel RB25-0



5G NR n7 5MHz BPSK Middle Channel RB25-0

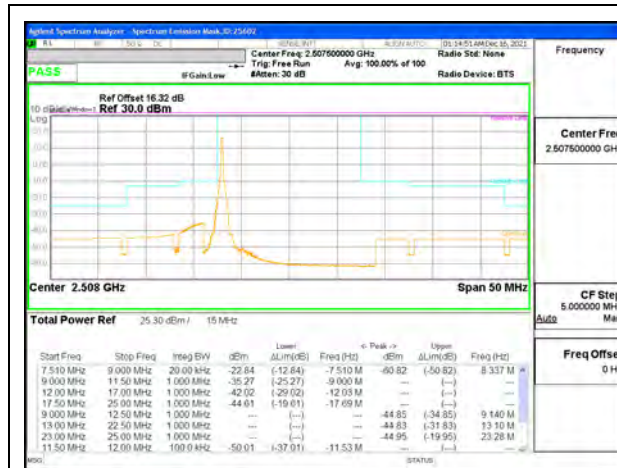


5G NR n7 5MHz BPSK High Channel RB25-0

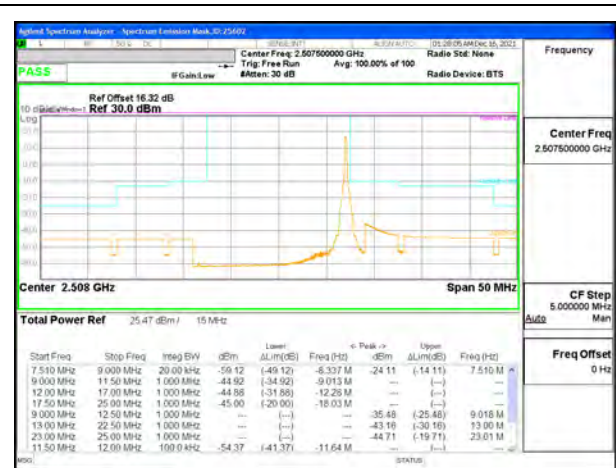
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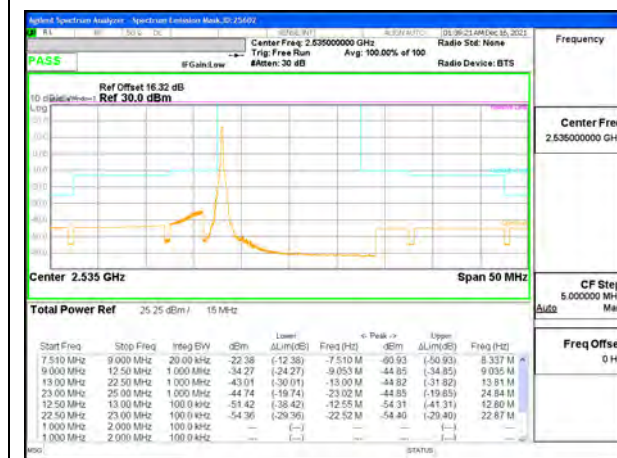




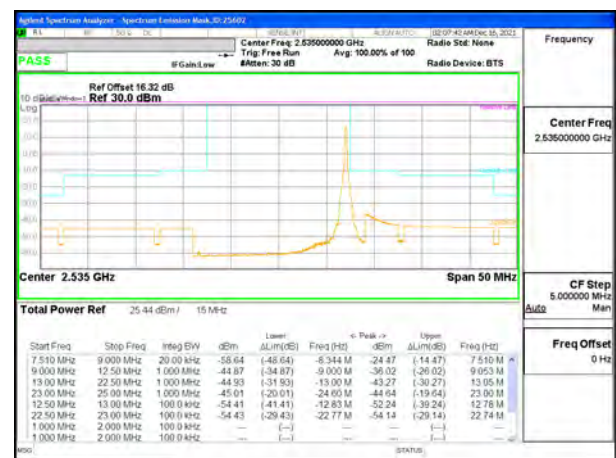
5G NR n7 15MHz BPSK Low Channel RB1-0



5G NR n7 15MHz BPSK Low Channel RB1-78



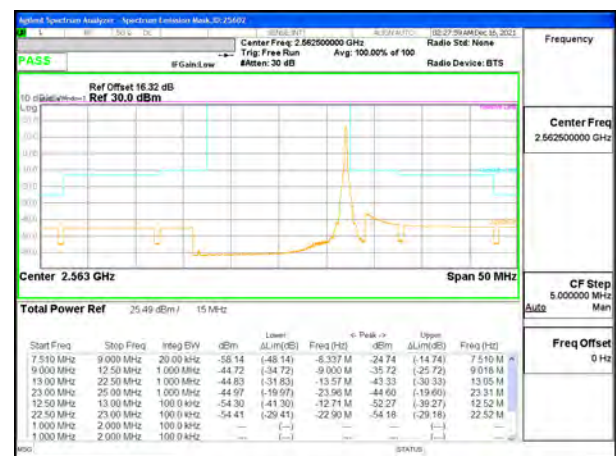
5G NR n7 15MHz BPSK Middle Channel RB1-0



5G NR n7 15MHz BPSK Middle Channel RB1-78

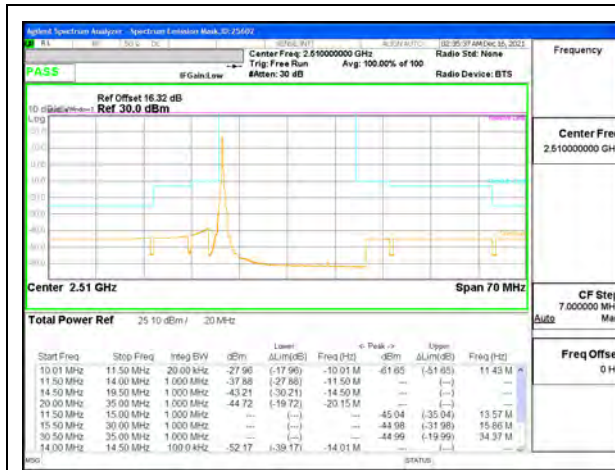


5G NR n7 15MHz BPSK High Channel RB1-0



5G NR n7 15MHz BPSK High Channel RB1-78





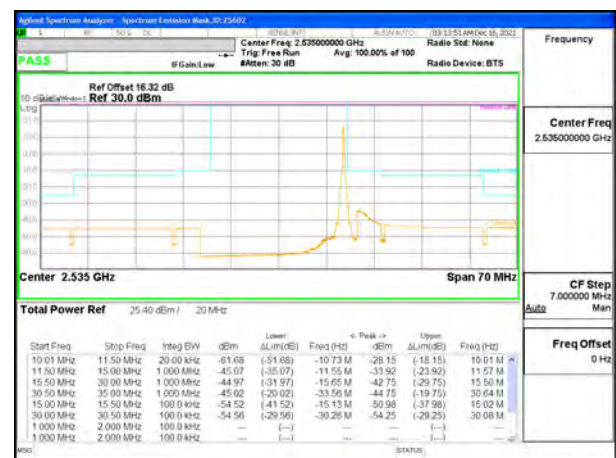
5G NR n7 20MHz BPSK Low Channel RB1-0



5G NR n7 20MHz BPSK Low Channel RB1-105



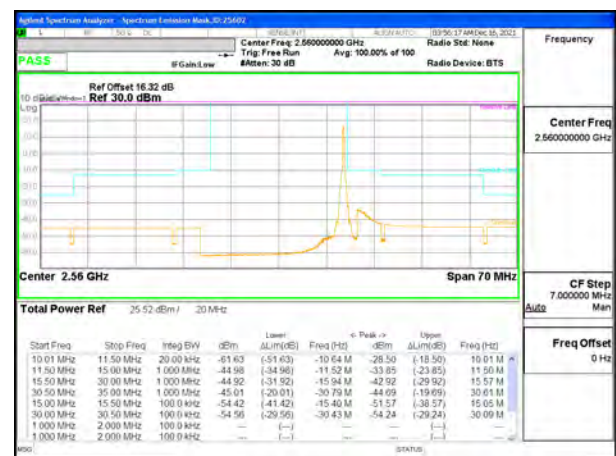
5G NR n7 20MHz BPSK Middle Channel RB1-0



5G NR n7 20MHz BPSK Middle Channel RB1-105



5G NR n7 20MHz BPSK High Channel RB1-0



5G NR n7 20MHz BPSK High Channel RB1-105







5G NR n7 25MHz BPSK Low Channel RB128-0



5G NR n7 25MHz BPSK Middle Channel RB128-0



5G NR n7 25MHz BPSK High Channel RB128-0

Intentionally Blank



