



# TEST REPORT

**Report Number :** 13571601-E8V3

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

**Model :** A2483

**Brand :** APPLE

**FCC ID :** BCG-E4000A

**EUT Description :** SMARTPHONE

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

**Date Of Issue:**  
AUGUST 04, 2021

**Prepared by:**

UL Verification Services Inc.  
47173 Benicia Street  
Fremont, CA 94538, U.S.A.  
TEL: (510) 319-4000  
FAX: (510) 661-0888



Revision History

Rev.	Issue Date	Revisions	Revised By
V1	7/16/2021	Initial Review	Dan Corona
V2	7/21/2021	Addressed TCB Questions	Mengistu Mekuria
V3	8/04/2021	Updated 6.5 to clarify that conducted tests were selected based on worst case conducted power.	John Thompson

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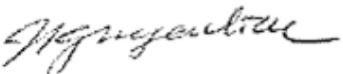
## 1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	APPLE, INC 1 APPLE PARK WAY CUPERTINO, CA 95014, U.S.A.
Model	A2483
Brand	APPLE
FCC ID	BCG-E4000A
EUT Description	SMARTPHONE
Serial Number	C07049600270G472 (Conducted), HXKPFXHJK2 (Radiated)
Sample Receipt Date	FEBRUARY 22, 2021
Date Tested	FEBRUARY 23, 2021 TO JUNE 28, 2021
Applicable Standards	FCC CFR47 PART 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.

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Approved & Released By:	Reviewed By:	Prepared By:
		
Dan Corona Operations Leader UL Verification Services Inc.	Lieu Nguyen Project Engineer UL Verification Services Inc.	Tony Li Test Engineer 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 A2LA, certification #0751.05, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
<input checked="" type="checkbox"/>	Building 1: 47173 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	208313
<input checked="" type="checkbox"/>	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA	US0104	22541	208313
<input checked="" type="checkbox"/>	Building 4: 47658 Kato Rd, Fremont, CA 94538, USA	US0104	2324B	208313

## 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 <sub>Lab</sub>
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.87 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 (dB<sub>uV/m</sub>) = Measured Voltage (dB<sub>uV</sub>) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)  
36.5 dB<sub>uV</sub> + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dB<sub>uV/m</sub>

#### MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dB<sub>uV</sub>) = Measured Voltage (dB<sub>uV</sub>) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.  
36.5 dB<sub>uV</sub> + 0 dB + 10.1 dB + 0 dB = 46.6 dB<sub>uV</sub>

## 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, CDMA, IEEE 802.11a/b/g/n/ac/ax, Bluetooth, Ultra-Wideband, GPS and NFC. All models support at least one UICC based SIM. The second SIM is either an UICC based p-SIM (physical SIM) or e-SIM (electronic SIM). The device supports a built-in inductive charging transmitter and receiver. The rechargeable battery is not user accessible.

Test was performed on the parent model and is used to support the application for the parent and variant 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

ERP/EIRP = PMeas + GT – 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(Ant 1)**

Part 22H		ERP Limit (W)	7.00	Antenna Gain (dBi)	-4.80	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
Bandwidth (MHz)	Modulation									
5.0	BPSK	826.5	846.5	25.70	18.75	0.075	4551	4M55G7W		
	QPSK			25.39	18.44	0.070	4571	4M57G7W		
	16QAM			24.71	17.76	0.060	4583	4M58D7W		
10.0	BPSK	829.0	844.0	25.70	18.75	0.075	9004	9M00G7W		
	QPSK			25.68	18.73	0.075	8947	8M95G7W		
	16QAM			24.91	17.96	0.063	8937	8M94D7W		
15.0	BPSK	831.5	841.5	25.70	18.75	0.075	13455	13M5G7W		
	QPSK			25.31	18.36	0.069	13448	13M4G7W		
	16QAM			24.04	17.09	0.051	13380	13M4D7W		
20.0	BPSK	834.0	839.0	25.70	18.75	0.075	17800	17M8G7W		
	QPSK			25.38	18.43	0.070	17855	17M9G7W		
	16QAM			24.66	17.71	0.059	17794	17M8D7W		

### **LTE BAND 7(Ant 3)**

Part 22H		ERP Limit (W)	2.00	Antenna Gain (dBi)	0.20	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
Bandwidth (MHz)	Modulation									
5.0	QPSK	2502.5	2567.5	25.20	25.40	0.347	4498	4M50G7W		
	16QAM			24.35	24.55	0.285	4489	4M49D7W		
	QPSK			25.20	25.40	0.347	8961	8M96G7W		
10.0	16QAM	2505.0	2565.0	24.32	24.52	0.283	8919	8M92D7W		
	QPSK			25.20	25.40	0.347	13399	13M4G7W		
	16QAM			24.71	24.91	0.310	13411	13M4D7W		
20.0	QPSK	2510.0	2560.0	25.20	25.40	0.347	17793	17M8G7W		
	16QAM			24.41	24.61	0.289	17879	17M9D7W		

### **5G NR n7 (Ant 3)**

Part 27		EIRP Limit (W)	2.00	Antenna Gain (dBi)	0.20	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
Bandwidth (MHz)	Modulation									
5.0	BPSK	2502.5	2567.5	25.20	25.40	0.347	4595	4M59G7W		
	QPSK			25.18	25.38	0.345	4604	4M60G7W		
	16QAM			24.34	24.54	0.284	4573	4M57D7W		
10.0	BPSK	2505.0	2565.0	25.20	25.40	0.347	8994	8M99G7W		
	QPSK			25.13	25.33	0.341	9003	9M00G7W		
	16QAM			24.02	24.22	0.264	8978	8M98D7W		
15.0	BPSK	2507.5	2562.5	25.20	25.40	0.347	13403	13M4G7W		
	QPSK			25.19	25.39	0.346	13385	13M4G7W		
	16QAM			24.67	24.87	0.307	13413	13M4D7W		
20.0	BPSK	2510.0	2560.0	25.20	25.40	0.347	17859	17M9G7W		
	QPSK			25.17	25.37	0.344	17813	17M8G7W		
	16QAM			24.23	24.43	0.277	17832	17M8D7W		
25.0	BPSK	2512.5	2557.5	22.95	23.15	0.207	22824	22M8G7W		
	QPSK			22.87	23.07	0.203	22753	22M8G7W		
	16QAM			23.20	23.40	0.219	22813	22M8D7W		
30.0	BPSK	2515.0	2555.0	22.99	23.19	0.208	28383	28M4G7W		
	QPSK			22.85	23.05	0.202	28560	28M6G7W		
	16QAM			23.20	23.40	0.219	28436	28M4D7W		
40.0	BPSK	2520.0	2550.0	23.12	23.32	0.215	38393	38M4G7W		
	QPSK			23.07	23.27	0.212	38388	38M4G7W		
	16QAM			23.20	23.40	0.219	38434	38M4D7W		

### LTE BAND 12(Ant 1)

Part 27		Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator							
ERP Limit (W)															
Antenna Gain (dBi)															
Bandwidth (MHz)	Modulation														
1.4	QPSK	699.7	715.3	25.70	18.45	0.070	1093	1M09G7W							
	16QAM			25.07	17.82	0.061	1083	1M08D7W							
3.0	QPSK	700.5	714.5	25.70	18.45	0.070	2693	2M69G7W							
	16QAM			25.06	17.81	0.060	2681	2M68D7W							
5.0	QPSK	701.5	713.5	25.70	18.45	0.070	4487	4M49G7W							
	16QAM			24.83	17.58	0.057	4486	4M49D7W							
10.0	QPSK	704.0	711.0	25.70	18.45	0.070	8938	8M94G7W							
	16QAM			24.75	17.50	0.056	8925	8M92D7W							

### 5G NR n12 (Ant 1)

Part 27		Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator							
ERP Limit (W)															
Antenna Gain (dBi)															
Bandwidth (MHz)	Modulation														
5.0	BPSK	701.5	713.5	25.68	18.43	0.070	4549	4M55G7W							
	QPSK			25.70	18.45	0.070	4563	4M56G7W							
	16QAM			24.74	17.49	0.056	4580	4M58D7W							
10.0	BPSK	704.0	711.0	25.70	18.45	0.070	8998	9M00G7W							
	QPSK			25.70	18.45	0.070	9016	9M02G7W							
	16QAM			24.83	17.58	0.057	8944	8M94D7W							
15.0	BPSK	706.5	708.5	25.70	18.45	0.070	13457	13M5G7W							
	QPSK			25.70	18.45	0.070	13447	13M4G7W							
	16QAM			24.67	17.42	0.055	13383	13M4D7W							

### LTE BAND 13(Ant 1)

Part 27		Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator							
ERP Limit (W)															
Antenna Gain (dBi)															
Bandwidth (MHz)	Modulation														
5.0	QPSK	779.5	784.5	25.70	18.75	0.075	4496	4M50G7W							
	16QAM			25.07	18.12	0.065	4563	4M56D7W							
10.0	QPSK	782.0	782.0	25.70	18.75	0.075	8950	8M95G7W							
	16QAM			24.84	17.89	0.062	8998	9M00D7W							

### LTE BAND 14 (Ant 1)

Part 90R		Antenna Gain (dBi)	-4.80	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator											
ERP Limit (W)																							
Antenna Gain (dBi)																							
5.0	QPSK	790.5	795.5	5.0	QPSK	25.70	18.75	0.075	4513	4M51G7W													
	16QAM					25.19	18.24	0.067	4514	4M51D7W													
10.0	QPSK	793.0	793.0	10.0	QPSK	25.70	18.75	0.075	8987	8M99G7W													
	16QAM					24.71	17.76	0.060	8948	8M95D7W													

### LTE BAND 17 (Ant 1)

Part 27		Antenna Gain (dBi)	-5.10	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator											
ERP Limit (W)																							
Antenna Gain (dBi)																							
5.0	QPSK	706.5	713.5	5.0	QPSK	25.70	18.45	0.070	4489	4M49G7W													
	16QAM					25.16	17.91	0.062	4503	4M50D7W													
10.0	QPSK	709.0	711.0	10.0	QPSK	25.70	18.45	0.070	8947	8M95G7W													
	16QAM					24.73	17.48	0.056	8923	8M92D7W													

### LTE BAND 25 (Ant 3)

Part 24		Antenna Gain (dBi)	0.00	Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator											
EIRP Limit (W)																							
Antenna Gain (dBi)																							
1.4	QPSK	1850.7	1914.3	1.4	QPSK	25.20	25.20	0.331	1087	1M09G7W													
	16QAM					24.60	24.60	0.288	1079	1M08D7W													
3.0	QPSK	1851.5	1913.5	3.0	QPSK	25.20	25.20	0.331	2693	2M69G7W													
	16QAM					24.31	24.31	0.270	2690	2M69D7W													
5.0	QPSK	1852.5	1912.5	5.0	QPSK	25.20	25.20	0.331	4489	4M49G7W													
	16QAM					24.36	24.36	0.273	4491	4M49D7W													
10.0	QPSK	1855.0	1910.0	10.0	QPSK	25.20	25.20	0.331	8952	8M95G7W													
	16QAM					24.33	24.33	0.271	8934	8M93D7W													
15.0	QPSK	1857.5	1907.5	15.0	QPSK	25.20	25.20	0.331	13406	13M4G7W													
	16QAM					24.62	24.62	0.290	13402	13M4D7W													
20.0	QPSK	1860.0	1905.0	20.0	QPSK	25.20	25.20	0.331	17873	17M9G7W													
	16QAM					24.76	24.76	0.299	17846	17M8D7W													

**5G NR n25 (Ant 3)**

Part 24		Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator									
EIRP Limit (W)																			
Antenna Gain (dBi)																			
5.0	BPSK QPSK 16QAM	1852.5	1912.5	25.20	25.20	0.331	4476	4M48G7W											
10.0	BPSK QPSK 16QAM	1855.0	1910.0	25.13	25.13	0.326	4494	4M49G7W											
15.0	BPSK QPSK 16QAM	1857.5	1907.5	24.44	24.44	0.278	4462	4M46D7W											
20.0	BPSK QPSK 16QAM	1860.0	1905.0	25.20	25.20	0.331	8896	8M90G7W											
25.0	BPSK QPSK 16QAM	1862.5	1902.5	25.19	25.19	0.330	8918	8M92G7W											
30.0	BPSK QPSK 16QAM	1865.0	1900.0	24.40	24.40	0.275	8877	8M88D7W											
40.0	BPSK QPSK 16QAM	1870.0	1895.0	25.12	25.12	0.325	13397	13M4G7W											
				25.20	25.20	0.331	13420	13M4G7W											
				24.50	24.50	0.282	13418	13M4D7W											
				25.13	25.13	0.326	17826	17M8G7W											
				25.20	25.20	0.331	17864	17M9G7W											
				24.30	24.30	0.269	17868	17M9D7W											
				23.17	23.17	0.207	22835	22M8G7W											
				23.14	23.14	0.206	22858	22M9G7W											
				22.95	22.95	0.197	22818	22M8D7W											
				23.02	23.02	0.200	28512	28M5G7W											
				22.94	22.94	0.197	28549	28M5G7W											
				22.86	22.86	0.193	28469	28M5D7W											
				23.01	23.01	0.200	38467	38M5G7W											
				22.95	22.95	0.197	38402	38M4G7W											
				22.88	22.88	0.194	38468	38M5D7W											

**LTE BAND 26 (FCC Part 90S) (Ant 1)**

Part 90S		Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	Average (W)	99% BW (kHz)	Emission Designator								
Conducted Limit (W)																	
Antenna Gain (dBi)																	
1.4	QPSK 16QAM	814.7	823.3	25.70	0.372	1086	1M09G7W										
3.0	QPSK 16QAM			25.02	0.318	1091	1M09D7W										
5.0	QPSK 16QAM	815.5	822.5	25.70	0.372	2692	2M69G7W										
10.0	QPSK 16QAM			25.16	0.328	2697	2M70D7W										
1.4	QPSK 16QAM	816.5	821.5	25.70	0.372	4518	4M52G7W										
3.0	QPSK 16QAM			25.19	0.330	4496	4M50D7W										
5.0	QPSK 16QAM	819.0	819.0	25.70	0.372	8966	8M97G7W										
10.0	QPSK 16QAM			24.90	0.309	8938	8M94D7W										

**LTE BAND 26 (FCC Part 22)(Ant 1)**

Part 22		Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator									
ERP Limit (W)																			
Antenna Gain (dBi)																			
1.4	QPSK 16QAM	824.7	848.3	25.70	18.75	0.075	1088	1M09G7W											
3.0	QPSK 16QAM			24.92	17.97	0.063	1081	1M08D7W											
5.0	QPSK 16QAM	825.5	847.5	25.70	18.75	0.075	2695	2M69G7W											
10.0	QPSK 16QAM			25.11	18.16	0.065	2690	2M69D7W											
1.4	QPSK 16QAM	826.5	846.5	25.70	18.75	0.075	4519	4M52G7W											
3.0	QPSK 16QAM			25.12	18.17	0.066	4499	4M50D7W											
5.0	QPSK 16QAM	829.0	844.0	25.70	18.75	0.075	8954	8M95G7W											
10.0	QPSK 16QAM			25.01	18.06	0.064	8962	8M96D7W											

### LTE BAND 30 (Ant 3)

Part 27								
EIRP Limit (W)		0.25						
Antenna Gain (dBi)		1.20						
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	2307.5	2312.5	22.30	23.50	0.224	4502	4M50G7W
	16QAM			21.17	22.37	0.173	4496	4M50D7W
10.0	QPSK	2310.0	2310.0	22.30	23.50	0.224	8973	8M97G7W
	16QAM			21.44	22.64	0.184	8981	8M98D7W

### 5G NR n30 (Ant 3)

Part 27								
EIRP Limit (W)		0.25						
Antenna Gain (dBi)		1.20						
Bandwidth (MHz)	Modulation	Low Frequency	Upper Frequency	Conducted Average	EIRP Average	EIRP Average	99% BW (kHz)	Emission Designator
5.0	BPSK	2307.5	2312.5	22.30	23.50	0.224	4466	4M47G7W
	QPSK			22.15	23.35	0.216	4462	4M46G7W
	16QAM			21.71	22.91	0.195	4461	4M46D7W
10.0	BPSK	2310.0	2310.0	22.30	23.50	0.224	8958	8M96G7W
	QPSK			22.19	23.39	0.218	8948	8M95G7W
	16QAM			21.33	22.53	0.179	8922	8M92D7W

### LTE BAND 41(Ant 3)

Part 27								
EIRP Limit (W)		2.00						
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	2498.5	2687.5	26.50	26.70	0.468	4489	4M49G7W
	16QAM			25.91	26.11	0.408	4506	4M51D7W
10.0	QPSK	2501.0	2685.0	26.50	26.70	0.468	8982	8M98G7W
	16QAM			25.65	25.85	0.385	8937	8M94D7W
15.0	QPSK	2503.5	2682.5	26.50	26.70	0.468	13426	13M4G7W
	16QAM			25.83	26.03	0.401	13371	13M4D7W
20.0	QPSK	2506.0	2680.0	26.50	26.70	0.468	17777	17M8G7W
	16QAM			25.94	26.14	0.411	17776	17M8D7W

**5G NR n41(Ant 4)**

Part 27								
EIRP Limit (W)		2.00						
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
20.0	BPSK	2506.5	2680.0	27.20	27.40	0.550	17902	17M9G7W
	QPSK			26.88	27.08	0.511	17889	17M9G7W
	16QAM			25.96	26.16	0.413	17801	17M8D7W
30.0	BPSK	2511.0	2675.0	27.10	27.30	0.537	26862	26M9G7W
	QPSK			27.20	27.40	0.550	26794	26M8G7W
	16QAM			25.83	26.03	0.401	26689	26M7D7W
40.0	BPSK	2516.0	2670.0	27.20	27.40	0.550	35533	35M5G7W
	QPSK			27.13	27.33	0.541	35762	35M8G7W
	16QAM			26.15	26.35	0.432	35633	35M6D7W
50.0	BPSK	2521.0	2665.0	27.20	27.40	0.550	45875	45M9G7W
	QPSK			27.08	27.28	0.535	45725	45M7G7W
	16QAM			26.16	26.36	0.433	45698	45M7D7W
60.0	BPSK	2526.0	2660.0	27.05	27.25	0.531	57702	57M7G7W
	QPSK			27.20	27.40	0.550	57945	57M9G7W
	16QAM			26.36	26.56	0.453	58004	58M0D7W
80.0	BPSK	2536.0	2650.0	27.20	27.40	0.550	77027	77M0G7W
	QPSK			27.18	27.38	0.547	76987	77M0G7W
	16QAM			26.48	26.68	0.466	77106	77M1D7W
90.0	BPSK	2541.0	2645.0	27.14	27.34	0.542	86790	86M8G7W
	QPSK			27.20	27.40	0.550	86713	86M7G7W
	16QAM			26.28	26.48	0.445	86808	86M8D7W
100.0	BPSK	2546.0	2640.0	27.17	27.37	0.546	96536	96M5G7W
	QPSK			27.20	27.40	0.550	96401	96M4G7W
	16QAM			26.22	26.42	0.439	96506	96M5D7W

**LTE BAND 48 (Ant 7)**

Part 96								
EIRP Limit (W)/ 10MHz		0.20						
Antenna Gain (dBi)		-3.10						
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	25.60	22.50	0.178	4472	4M47G7W
	16QAM			25.20	22.10	0.162	4473	4M47D7W
10.0	QPSK	3555.0	3695.0	25.60	22.50	0.178	8949	8M95G7W
	16QAM			25.07	21.97	0.157	8975	8M97D7W
15.0	QPSK	3557.5	3692.5	25.60	22.50	0.178	13421	13M4G7W
	16QAM			25.12	22.02	0.159	13470	13M5D7W
20.0	QPSK	3560.0	3690.0	25.60	22.50	0.178	17880	17M9G7W
	16QAM			24.85	21.75	0.150	17928	17M9D7W

### LTE BAND 66 (Ant 3)

Part 27								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		-1.70						
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	25.20	23.50	0.224	1087	1M09G7W
	16QAM			24.45	22.75	0.188	1077	1M08D7W
3.0	QPSK	1711.5	1778.5	25.20	23.50	0.224	2686	2M69G7W
	16QAM			24.28	22.58	0.181	2686	2M69D7W
5.0	QPSK	1712.5	1777.5	25.20	23.50	0.224	4492	4M49G7W
	16QAM			24.40	22.70	0.186	4487	4M49D7W
10.0	QPSK	1715.0	1775.0	25.20	23.50	0.224	8945	8M94G7W
	16QAM			24.22	22.52	0.179	8945	8M95D7W
15.0	QPSK	1717.5	1772.5	25.20	23.50	0.224	13434	13M4G7W
	16QAM			24.68	22.98	0.199	13403	13M4D7W
20.0	QPSK	1720.0	1770.0	25.20	23.50	0.224	17833	17M8G7W
	16QAM			24.66	22.96	0.198	17884	17M9D7W

### 5G NR n66 (Ant 3)

Part 27								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		-1.70						
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	25.20	23.50	0.224	4464	4M46G7W
	QPSK			25.16	23.46	0.222	4472	4M47G7W
	16QAM			24.19	22.49	0.177	4454	4M45D7W
10.0	BPSK	1715.0	1775.0	25.17	23.47	0.222	8870	8M87G7W
	QPSK			25.20	23.50	0.224	8926	8M93G7W
	16QAM			24.22	22.52	0.179	8890	8M89D7W
15.0	BPSK	1717.5	1772.5	25.20	23.50	0.224	13378	13M4G7W
	QPSK			25.13	23.43	0.220	13373	13M4G7W
	16QAM			24.17	22.47	0.177	13291	13M3D7W
20.0	BPSK	1720.0	1770.0	25.19	23.49	0.223	17887	17M9G7W
	QPSK			25.20	23.50	0.224	17859	17M9G7W
	16QAM			24.69	22.99	0.199	17826	17M8D7W
30.0	BPSK	1725.0	1765.0	23.07	21.37	0.137	28538	28M5G7W
	QPSK			23.20	21.50	0.141	28537	28M5G7W
	16QAM			23.10	21.40	0.138	28498	28M5D7W
40.0	BPSK	1730.0	1760.0	23.20	21.50	0.141	38400	38M4G7W
	QPSK			23.18	21.48	0.141	38496	38M5G7W
	16QAM			23.07	21.37	0.137	38459	38M5D7W

**LTE BAND 71 (Ant 1)**

Part 27		ERP Limit (W) 3.00	Antenna Gain (dBi) -5.10								
Bandwidth (MHz)	Modulation			Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)		
5.0	QPSK			665.5	695.5	25.70	18.45	0.070	4489 4M49G7W		
	16QAM					25.24	17.99	0.063	4482 4M48D7W		
10.0	QPSK	668.0	693.0			25.70	18.45	0.070	8951 8M95G7W		
	16QAM					25.14	17.89	0.062	8942 8M94D7W		
15.0	QPSK	670.5	690.5			25.70	18.45	0.070	13391 13M4G7W		
	16QAM					25.18	17.93	0.062	13384 13M4D7W		
20.0	QPSK	673.0	688.0			25.70	18.45	0.070	17831 17M8G7W		
	16QAM					25.27	18.02	0.063	17873 17M9D7W		

**5G NR n71(Ant 1)**

Part 27		EIRP Limit (W) 3.00	Antenna Gain (dBi) -5.10								
Bandwidth (MHz)	Modulation			Low Frequency	Upper Frequency	Conducted Average	EIRP Average	EIRP Average	99% BW (kHz)		
5.0	BPSK			665.5	695.5	25.63	18.38	0.069	4463 4M46G7W		
	QPSK					25.70	18.45	0.070	4465 4M47G7W		
	16QAM					24.84	17.59	0.057	4468 4M47G7W		
10.0	BPSK	668.0	693.0			25.70	18.45	0.070	8928 8M93G7W		
	QPSK					25.54	18.29	0.067	8940 8M94G7W		
	16QAM					24.77	17.52	0.056	8929 8M93G7W		
15.0	BPSK	670.5	690.5			25.52	18.27	0.067	13354 13M4G7W		
	QPSK					25.70	18.45	0.070	13362 13M4G7W		
	16QAM					24.94	17.69	0.059	13349 13M3G7W		
20.0	BPSK	673.0	688.0			25.60	18.35	0.068	17831 17M8G7W		
	QPSK					25.70	18.45	0.070	17846 17M8G7W		
	16QAM					24.71	17.46	0.056	17798 17M8G7W		

**5G NR n77 (FCC Part 27 3450-3550MHz) (Ant 7)**

Part 27								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		-4.60						
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	354.0	27.70	23.10	0.204	17945	17M9G7W
	QPSK			27.56	22.96	0.198	17901	17M9G7W
	16QAM			26.86	22.26	0.168	17951	18M0D7W
30.0	BPSK	3465.0	3535.0	27.70	23.10	0.204	26806	26M8G7W
	QPSK			27.62	23.02	0.200	26862	26M9G7W
	16QAM			27.00	22.40	0.174	26810	26M8D7W
40.0	BPSK	3470.0	3530.0	27.64	23.04	0.201	35793	35M8G7W
	QPSK			27.70	23.10	0.204	35744	35M7G7W
	16QAM			26.72	22.12	0.163	35676	35M7D7W
50.0	BPSK	3475.0	3525.0	27.68	23.08	0.203	45704	45M7G7W
	QPSK			27.70	23.10	0.204	45743	45M7G7W
	16QAM			26.67	22.07	0.161	45669	45M7D7W
60.0	BPSK	3480.0	3520.0	27.70	23.10	0.204	57951	58M0G7W
	QPSK			27.56	22.96	0.198	58148	58M1G7W
	16QAM			27.05	22.45	0.176	58181	58M2D7W
70.0	BPSK	3485.0	3515.0	27.70	23.10	0.204	64375	64M4G7W
	QPSK			27.62	23.02	0.200	64514	64M5G7W
	16QAM			27.14	22.54	0.179	64659	64M7D7W
80.0	BPSK	3490.0	3510.0	27.70	23.10	0.204	77270	77M3G7W
	QPSK			27.62	23.02	0.200	77330	77M3G7W
	16QAM			26.68	22.08	0.161	77262	77M3D7W
90.0	BPSK	3495.0	3505.0	27.70	23.10	0.204	86840	86M8G7W
	QPSK			27.70	23.10	0.204	86840	86M8G7W
	16QAM			26.71	22.11	0.163	86766	86M8D7W
100.0	BPSK	3500.0	3500.0	27.70	23.10	0.204	96713	96M7G7W
	QPSK			27.56	22.96	0.198	96658	96M7G7W
	16QAM			26.54	21.94	0.156	95576	95M6D7W

**5G NR n77 (FCC Part 27 3700-3980MHz) (Ant 7)**

Part 27								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		-4.60						
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	23.10	0.204	17888	17M9G7W
	QPSK			27.11	22.51	0.178	17947	17M9G7W
	16QAM			26.65	22.05	0.160	17908	17M9D7W
30.0	BPSK	3715.0	3965.0	27.70	23.10	0.204	26783	26M8G7W
	QPSK			27.30	22.70	0.186	26832	26M8G7W
	16QAM			26.23	21.63	0.146	26865	26M9D7W
40.0	BPSK	3720.0	3960.0	27.70	23.10	0.204	35642	35M6G7W
	QPSK			27.50	22.90	0.195	35675	35M7G7W
	16QAM			26.46	21.86	0.153	35573	35M6D7W
50.0	BPSK	3725.0	3955.0	27.70	23.10	0.204	45596	45M6G7W
	QPSK			27.56	22.96	0.198	45675	45M7G7W
	16QAM			26.77	22.17	0.165	45606	45M6D7W
60.0	BPSK	3730.0	3950.0	27.70	23.10	0.204	57745	57M7G7W
	QPSK			27.69	23.09	0.204	57981	58M0G7W
	16QAM			27.00	22.40	0.174	57802	57M8D7W
70.0	BPSK	3735.0	3945.0	27.70	23.10	0.204	64182	64M2G7W
	QPSK			27.50	22.90	0.195	64160	64M2G7W
	16QAM			26.62	22.02	0.159	67270	67M3D7W
80.0	BPSK	3740.0	3940.0	27.70	23.10	0.204	77050	77M1G7W
	QPSK			27.11	22.51	0.178	77012	77M0G7W
	16QAM			26.03	21.43	0.139	77187	77M2D7W
90.0	BPSK	3745.0	3935.0	27.70	23.10	0.204	86712	86M7G7W
	QPSK			27.39	22.79	0.190	86650	86M7G7W
	16QAM			27.11	22.51	0.178	86713	86M7D7W
100.0	BPSK	3750.0	3930.0	27.70	23.10	0.204	95983	96M0G7W
	QPSK			27.60	23.00	0.200	96310	96M3G7W
	16QAM			26.60	22.00	0.158	96314	96M3D7W

## 6.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version 0.21.02-1.

## 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 3 Antenna Gain (dBi)	ANT 4 Antenna Gain (dBi)	ANT 7 Antenna Gain (dBi)	ANT 8 Antenna Gain (dBi)	ANT 9 Antenn a Gain (dBi)
5G NR n5, 824 – 849 MHz	-4.8	-6.2					
LTE Band 7, n7, 2500 – 2570 MHz	-3.7	-1.6	0.2	0.2			
LTE Band 12, 5G NR n12, 699 – 716 MHz	-5.1	-7.2					
LTE Band 13, 777 – 787 MHz	-4.8	-5.8					
LTE Band 14, 788 – 798 MHz	-4.8	-5.8					
LTE Band 17, 704 – 716 MHz	-5.1	-7.2					
LTE Band 25, 5G NR n25, 1850 – 1915 MHz	-4.1	-2.6	0.0	-0.4			
LTE Band 26, 814 – 849 MHz	-4.8	-6.2					
LTE Band 30, 5G NR n30, 2305 – 2315 MHz	-2.6	-1.7	1.2	-2.0			
LTE Band 41, 5G NR n41, 2496 – 2690 MHz	-3.7	-1.6	0.2	0.2			
LTE Band 48, n48, 3550 – 3700 MHz				-1.4	-3.1	-3.1	-3.8
LTE Band 66, 5G NR n66, 1710 – 1780 MHz	-2.4	-5.1	-1.7	-3.2			
LTE Band 71, 5G NR n71 663 – 698 MHz	-5.1	-8.2					
5G NR n77 3450 – 3550MHz (FCC Part 27)				-2.6	-4.6	-3.8	-4.9
5G NR n77 3700 – 3980 MHz (FCC Part 27)				-3.2	-4.6	-3.8	-4.9

## 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 n48, 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) is covered by LTE Band 66 of same rule. Because it is a subset of LTE band 66 with the same output power and supported bandwidths.

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.

For 5G NRs, conducted spurious emission tests were conducted on wider bandwidth with inner 1RB since this is the worst bandwidth and the highest output power.

The worst-case scenario for all measurements is based on an engineering evaluation and QPSK was observed as the worst one and set for all conducted and radiated. Output power measurements were measured on QPSK, 16QAM, 64QAM, 256QAM, and BPSK, modulations. For testing purposes emissions on sections 8 and 9 were measured while QPSK was set at or above target power for all bands. Conducted tests were performed on the worst case antenna port because it has the highest conducted power. ANT1 is the worst case antenna port for all bands except Band 48, 5G NR n41, and 5G NR n77. For 5G NR n41 ANT2 is the worst case antenna port. For bands 48 ANT7 is the worst case antenna port and 5G NR n77 ANT7 is the worst case antenna port.

For 5G NR n41 20MHz BW, antenna 2 and antenna 4 powers are higher than LTE band 41. Therefore, additional power measurements and occupied bandwidth tests were performed on antenna 2 and antenna 4 for 20MHz BW. Since LTE antenna 1 the highest output power of all (LTE band 41 and 5G NR n41) antennas, all other conducted tests for 20MHz BW were performed only on LTE antenna 1.

The EUT was investigated in three orthogonal orientations X/Y/Z on all ANT 1, ANT2, ANT3, ANT4, ANT7, ANT8 and ANT 9 antennas to determine the worst case orientation. The following table exabit 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	ANT3	ANT4	ANT7	ANT8	ANT9
663 – 849 MHz	X	X	N/A	N/A	N/A	N/A	N/A
1710 – 1915 MHz	X	X	Y	X	N/A	N/A	N/A
2300 – 2700 MHz	X	Z	Y	X	N/A	N/A	N/A
3300 – 3980 MHz	N/A	N/A	N/A	X	X	Z	X

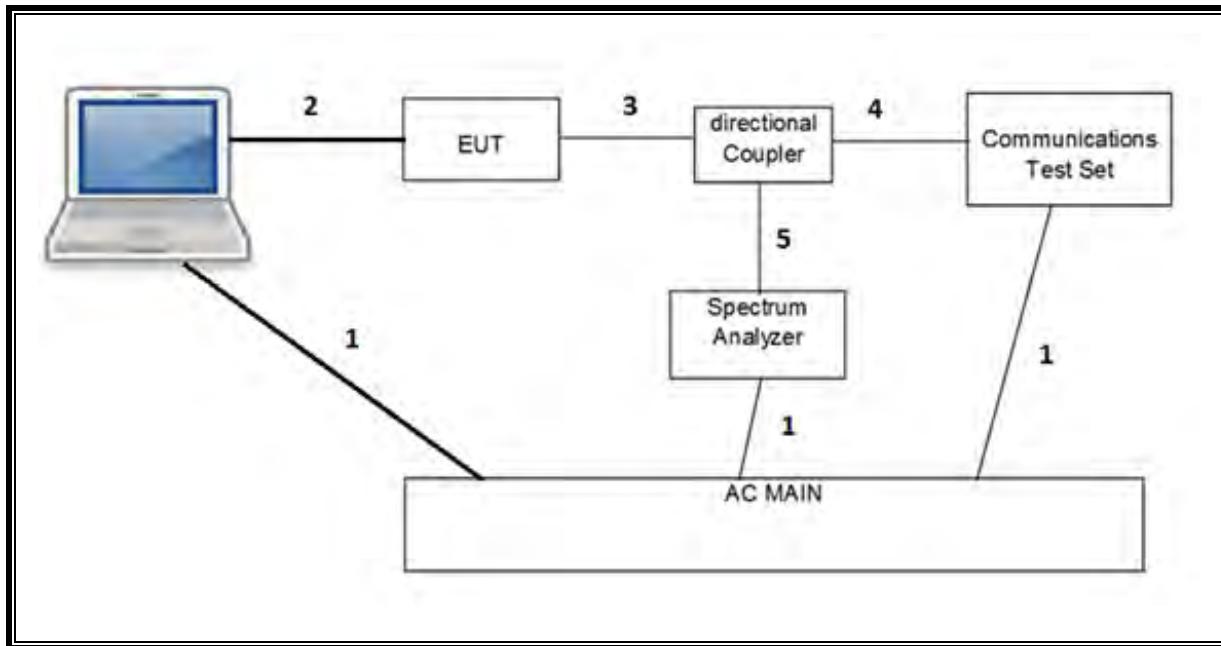
Radiated spurious emissions were investigated from 9kHz to 30MHz, 30MHz-1GHz and above 1GHz. There were no emissions found with less than 20dB of margin from 9kHz to 1GHz.

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.

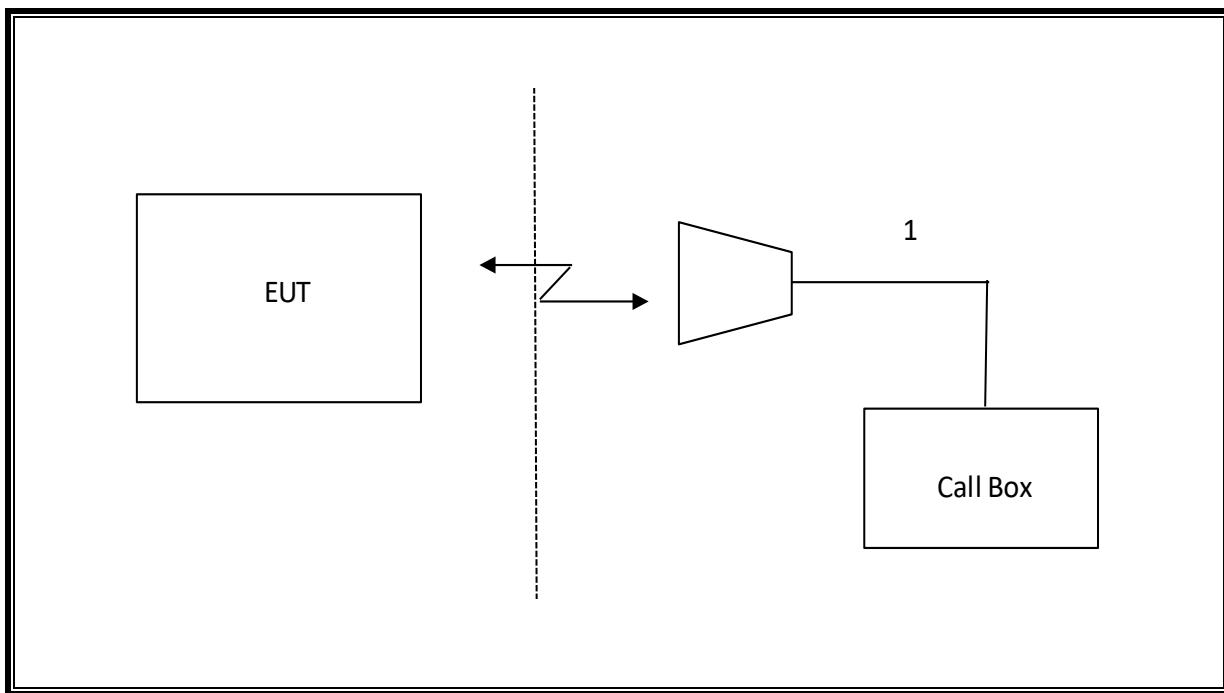
## 6.6. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT						
Description	Manufacturer	Model	Serial Number	FCC ID/ DoC		
Laptop	A1398	C02PM012G3QD	QDS-BRCM1069	A1398		
AC/DC adapter	PA-1450-BA1	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	T136	7/7/2021
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences Corp.	JB3	T899	9/14/2021
RF Amplifier, 1-18GHz	MITEQ	AFS42-00101800-25-S-42	T1165	8/10/2021
Amplifier, 100KHz to 1GHz, 32dB	Keysight Technologies Inc	8447D	T15	01/14/2022
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	T1450	1/21/2022
Wideband Communication Test Set, Call Box	Rohde & Schwarz (Koeln) GmbH & Co. KG	CMW500	T260	Connection Purposes Only
Antenna, Horn 1-18GHz	ETS-Lindgren (Cedar Park, Texas)	3117	PRE0213971	9/25/2021
Amplifier, 100MHz-18GHz	AMPLICAL	AMP0.1G18-47-20	190323	12/03/2021
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	201502	2/24/2022
Antenna, Horn 1-18GHz	ETS-Lindgren (Cedar Park, Texas)	3117	200785	9/25/2021
RF Amplifier 1-18GHz, 45dB Min	AMPLICAL	AMP0.1G18-47-20	172124	12/09/2021
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	201501	2/23/2022
Antenna, Horn 1-18GHz	ETS-Lindgren (Cedar Park, Texas)	3117	PRE0213972	8/20/2021
Amplifier 1-18GHz, 45dB Min	AMPLICAL	AMP0.1G18-47-20	172123	1/23/2022
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	201497	2/25/2022
Wideband Communication Test Set, Call Box	Rohde & Schwarz (Koeln) GmbH & Co. KG	CMW500	T703	Connection Purposes Only
Antenna, Horn 1-18GHz	ETS-Lindgren (Cedar Park, Texas)	3117	PRE0213831	12/3/2021
RF Amplifier 1-18GHz, 45dB Min	AMPLICAL	AMP0.1G18-47-20	172122	12/31/2021
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	201498	2/25/2022
Antenna, Horn 1-18GHz	ETS-Lindgren (Cedar Park, Texas)	3117	PRE0213833	2/16/2022
RF Device, Active, Amplifier	AMPLICAL	AMP0.1G18-47-20	206055	5/13/2022
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	201500	2/26/2022
Wideband Radio Communications Tester	Rohde & Schwarz (Koeln) GmbH & Co. KG	CMW500	T964	2/17/2022
Wideband Communication Test Set, Call Box	Rohde & Schwarz (Koeln) GmbH & Co. KG	CMW500	T972	2/20/2022
Directional Coupler	KRYTAR	152610	T1161	9/16/2021
Directional Coupler	KRYTAR	152610	T1536	9/16/2021
Directional Coupler	KRYTAR	152610	T1537	9/16/2021
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T754	6/21/2021
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T1154	6/21/2021
Filter, 2.7 to 18GHz High Pass	MICROWAVE CIRCUITS	H2G518G6	T772	1/22/2022
Filter, HPF 1.2GHz 18GHz Max	MICRO-TRONICS	HPM50108	PRE0182423	4/22/2022
Filter, High Pass 1.2GHz	MICRO-TRONICS	HPM50108	T1737	6/23/2021
Filter, BRF 2495 to 2690MHz	MICRO-TRONICS	BRM50709-02	T790	6/23/2021
Filter, BRF 3400 to 3800MHz	MICRO-TRONICS	BRM50711-02	T1792	6/23/2021

Antenna, Horn 18 to 26.5GHz	ARA	MWH-1826/B	T449	4/22/2022
Amplifier, 1 to 26.5GHz, 23.5dB Gain minimum	Keysight Technologies Inc	8449B	T404	4/19/2022
Antenna, Horn 26.5 to 40GHz	A.R.A.	MWH-2640/B	PRE0182201	4/22/2022
Amplifier, 26 - 40GHz	MITEQ	TTA2640-35-HG	T1864	4/19/2022
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	T1454	1/27/2022
Spectrum Analyzer, PSA, 3Hz to 26.5GHz	Keysight Technologies Inc	E4440A	T200	2/19/2022
Spectrum Analyzer, PSA, 3Hz to 44GHz	Keysight Technologies Inc	E4446A	T146	2/16/2022
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	T908	1/28/2022
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	T341	1/28/2022
Power Meter, P-series single channel	Keysight Technologies Inc	N1911A	T1271	1/20/2022
*Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1921A	T1228	4/13/2021
Power Meter, P-series single channel	Keysight Technologies Inc	N1912A	T1245	1/21/2022
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1921A	T1226	2/19/2022
Antenna, Active Loop 9KHz to 30MHz	EMCO	6502	T35	11/23/2021
<b>UL AUTOMATION SOFTWARE</b>				
CLT Software	UL	UL RF	Ver 3.2.5, 4/13/2021	
Power Measurement Software	UL	UL RF	Ver 3.1.2 5/17/2021	
Radiated test software	UL	UL RF	Ver 9.5, 4/14/2021	

**NOTES:**

\* 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 <sub>RB</sub> )						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 <sup>1</sup>	≤ 1.2 <sup>1</sup>
		≤ 0.5 <sup>2</sup>	0 <sup>2</sup>
	Pi/2 BPSK w Pi/2 BPSK DMRS	≤ 0.5 <sup>2</sup>	0 <sup>2</sup>
	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	
	256 QAM	≤ 6.5	

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0dB MPR is 26dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 with Pi/2 BPSK modulation and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40% of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

**Table 6.2.2.3-2: 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:	10641	Test Date:	4/12/2021
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### OUTPUT POWER FOR 5G NR n5 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				165300	167300	169300	165300	167300	169300
5.0	BPSK	1	0	25.16	25.15	24.81	24.04	23.93	23.77
		1	1	24.73	24.33	24.55	24.05	23.97	24.16
		1	23	25.70	25.35	24.95	24.60	24.39	24.43
		1	24	25.16	25.10	24.58	24.70	24.67	24.67
		12	6	25.35	25.24	24.79	24.63	24.43	24.37
		25	0	25.03	24.47	24.28	23.87	23.74	23.70
	QPSK	1	0	24.56	24.27	23.93	23.56	23.47	23.27
		1	1	24.21	23.68	23.52	23.78	23.63	23.70
		1	23	25.39	24.99	24.98	24.69	24.36	24.34
		1	24	24.92	24.79	24.53	24.66	24.38	24.30
		12	6	25.38	24.72	24.59	24.50	24.35	24.26
		25	0	24.53	24.13	23.74	23.52	23.26	23.26
	16QAM	1	0	23.65	23.68	23.19	22.69	22.36	22.33
		1	1	23.19	22.98	23.20	23.19	23.14	22.95
		1	23	24.71	23.76	24.17	23.49	23.24	23.14
		1	24	24.24	24.03	24.03	23.21	23.58	23.44
		12	6	24.37	23.77	23.81	23.56	23.30	23.25
		25	0	23.28	23.16	22.77	22.43	22.13	22.19
	64QAM	1	0	23.09	22.93	22.55	22.18	21.87	22.15
		1	1	21.42	22.53	22.89	22.46	22.82	22.26
		1	23	23.03	23.14	22.57	22.17	21.84	21.58
		1	24	21.64	23.84	22.93	22.49	22.42	22.10
		12	6	23.05	22.68	22.38	22.07	21.87	21.80
		25	0	22.93	22.56	22.39	21.95	21.80	21.78
	256QAM	1	0	20.85	20.87	20.64	20.26	19.86	20.10
		1	1	20.35	20.77	20.37	20.12	20.37	19.81
		1	23	21.48	20.97	20.69	20.15	20.05	19.85
		1	24	20.30	20.60	20.35	20.25	19.89	20.07
		12	6	20.94	20.51	20.35	20.03	19.80	19.72
		25	0	21.04	20.87	20.42	20.09	20.00	19.79

### OUTPUT POWER FOR 5G NR n5 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				165800	167300	168800	165800	167300	168800
10.0	BPSK	1	0	25.24	24.79	24.72	23.20	23.12	23.11
		1	1	25.19	25.22	24.79	23.68	23.21	23.23
		1	50	25.70	25.18	25.23	23.74	23.69	23.65
		1	51	25.25	24.89	24.75	23.84	23.74	24.20
		25	12	25.58	25.26	25.23	23.99	24.70	23.57
		50	0	24.85	24.74	24.70	23.26	23.09	23.06
	QPSK	1	0	24.73	24.40	24.19	22.77	22.66	22.62
		1	1	24.35	24.43	24.37	23.05	22.39	22.46
		1	50	25.62	25.25	25.31	23.72	23.52	23.69
		1	51	24.93	25.01	24.96	23.78	23.02	23.46
		25	12	25.68	25.33	25.25	23.80	23.55	23.62
		50	0	24.36	24.23	24.21	22.73	22.52	22.59
	16QAM	1	0	23.74	23.41	23.38	21.68	21.55	21.46
		1	1	23.39	23.42	24.06	22.51	21.72	21.46
		1	50	24.91	24.40	24.40	22.62	22.49	22.52
		1	51	24.09	23.51	24.15	22.88	22.60	22.65
		25	12	24.67	24.24	24.18	22.85	22.62	22.52
		50	0	23.37	23.23	23.16	21.75	21.59	21.54
	64QAM	1	0	23.49	22.83	22.85	21.24	21.06	21.16
		1	1	22.92	22.61	22.43	21.73	20.65	20.69
		1	50	23.40	22.96	22.89	21.32	21.10	21.35
		1	51	23.23	22.71	23.18	21.13	20.99	20.45
		25	12	23.13	22.71	22.65	21.49	21.05	21.05
		50	0	22.82	22.75	22.70	21.35	21.17	21.16
	256QAM	1	0	21.14	20.77	20.70	19.43	19.25	18.99
		1	1	20.47	20.70	20.86	19.49	19.48	19.28
		1	50	21.27	20.81	20.66	19.64	19.20	19.25
		1	51	20.54	20.74	21.10	19.54	19.07	19.12
		25	12	20.93	20.77	20.74	19.38	19.09	19.11
		50	0	20.87	20.74	20.68	19.19	19.03	18.99

### OUTPUT POWER FOR 5G NR n5 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				166300	167300	168300	166300	167300	168300
15.0	BPSK	1	0	24.36	24.36	24.33	24.19	24.09	24.01
		1	1	24.27	24.14	24.69	24.01	23.90	24.30
		1	77	25.53	25.70	24.92	24.64	24.63	24.62
		1	78	24.49	24.37	24.58	24.56	24.41	24.31
		36	18	24.84	24.57	24.57	24.56	24.46	24.42
		75	0	24.43	24.14	23.97	24.08	23.95	23.97
		1	0	24.46	23.75	23.85	23.66	23.59	23.56
	QPSK	1	1	23.89	23.63	23.89	23.60	23.59	23.48
		1	77	25.31	24.88	24.55	24.49	24.70	24.36
		1	78	24.15	24.13	24.53	24.40	24.10	23.37
		36	18	24.69	24.63	24.50	24.59	24.55	24.46
		75	0	23.92	23.70	23.63	23.64	23.52	23.49
		1	0	23.09	22.74	22.75	22.77	22.56	22.39
		1	1	22.34	22.05	22.31	23.33	22.91	22.62
	16QAM	1	77	22.52	24.04	23.62	23.53	23.69	23.75
		1	78	21.97	22.47	22.79	23.38	23.90	23.24
		36	18	23.64	23.61	23.59	23.53	23.52	23.52
		75	0	22.52	22.53	22.50	22.63	22.45	22.51
		1	0	21.88	21.57	22.14	22.22	22.02	22.01
		1	1	22.03	21.89	21.82	22.21	22.69	21.15
		1	77	21.84	23.25	22.44	22.19	22.00	22.11
	64QAM	1	78	22.27	21.94	22.58	22.30	22.38	22.15
		36	18	22.03	22.29	22.10	22.10	22.03	22.04
		75	0	21.86	22.14	21.99	22.01	21.95	21.98
		1	0	20.48	20.73	20.61	20.09	20.05	20.04
		1	1	20.09	20.00	20.31	20.26	20.14	20.00
		1	77	21.26	20.71	20.54	20.13	20.30	20.42
		1	78	19.45	19.51	20.25	20.84	19.76	20.27
	256QAM	36	18	20.33	20.18	20.08	20.04	19.89	20.01
		75	0	20.28	20.30	20.07	20.13	19.96	19.92

### OUTPUT POWER FOR 5G NR n5 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				166800	167300	167800	166800	167300	167800
20.0	BPSK	1	0	25.70	25.06	24.87	24.08	23.79	24.17
		1	1	24.87	24.83	24.65	23.99	24.34	24.18
		1	104	25.46	25.46	25.41	24.45	24.32	24.58
		1	105	24.81	24.78	24.80	24.70	24.32	24.41
		50	25	25.16	25.11	25.09	24.39	24.32	24.51
		100	0	24.51	24.69	24.62	23.83	23.83	23.98
		1	0	24.88	24.37	24.32	23.55	23.36	23.38
	QPSK	1	1	23.44	23.93	23.95	23.70	23.78	23.16
		1	104	25.38	25.27	24.99	24.40	24.35	24.33
		1	105	24.60	24.27	24.73	23.76	23.99	23.86
		50	25	24.80	25.09	24.97	24.41	24.30	24.43
		100	0	24.05	24.18	24.04	23.49	23.60	23.49
		1	0	23.23	23.57	23.60	22.15	22.63	22.40
		1	1	22.74	23.24	22.84	23.05	22.97	21.96
	16QAM	1	104	24.66	24.55	23.89	23.05	23.14	23.74
		1	105	23.89	23.82	23.81	23.40	23.03	23.17
		50	25	24.16	23.98	23.98	23.39	23.46	23.38
		100	0	23.28	23.32	23.12	22.61	22.33	22.49
		1	0	22.47	23.06	22.88	21.96	22.11	21.89
		1	1	21.91	22.21	22.36	22.66	22.28	21.71
		1	104	22.41	23.37	22.92	22.29	21.75	21.96
	64QAM	1	105	22.40	22.44	23.16	22.57	22.64	20.86
		50	25	22.28	22.72	22.60	21.94	22.07	21.93
		100	0	22.59	22.76	22.59	22.02	21.87	21.78
		1	0	20.45	20.85	20.85	20.21	19.86	19.89
		1	1	20.74	21.47	20.30	20.57	20.45	20.16
		1	104	20.41	20.87	20.88	20.05	20.09	20.06
		1	105	20.84	20.86	20.20	20.51	20.24	20.51
	256QAM	50	25	20.24	20.70	20.54	19.83	19.81	19.81
		100	0	20.64	20.62	20.63	19.99	19.92	19.80

## 8.2. LTE BAND 7 AND 5G NR n7

### LTE BAND 7

Test Engineer ID:	39004	Test Date:	4/12/2021
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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			ANT 3			ANT 4		
				20775	21100	21425	20775	21100	21425	20775	21100	21425	20775	21100	21425
5.0	QPSK	1	0	25.67	25.67	25.32	23.18	23.09	23.11	25.08	25.18	25.11	22.54	23.14	23.20
		1	12	25.65	25.54	25.30	23.17	23.02	23.09	25.12	25.12	25.09	22.55	23.05	23.16
		1	24	25.70	25.59	25.26	23.20	23.03	23.15	25.20	25.18	25.15	23.10	23.07	23.20
		12	0	24.73	24.61	24.36	22.14	22.13	22.17	24.03	24.19	24.16	22.14	22.12	22.07
		12	6	24.74	24.57	24.37	22.17	22.12	22.14	24.07	24.18	24.15	22.15	22.08	22.10
		12	11	24.70	24.58	24.36	22.15	22.06	22.11	24.11	24.15	24.13	22.18	22.10	22.14
		25	0	24.72	24.57	24.37	22.19	22.10	22.17	23.95	24.16	24.15	22.20	22.10	22.16
	16QAM	1	0	24.88	24.82	24.94	22.30	22.23	22.32	23.90	24.34	24.27	22.30	22.27	22.39
		1	12	24.83	24.72	24.89	22.30	22.22	22.35	23.91	24.29	24.30	22.33	22.26	22.37
		1	24	24.90	24.74	24.87	22.34	22.26	22.33	23.95	24.32	24.35	22.37	22.29	22.45
		12	0	23.77	23.69	23.55	21.26	21.19	21.21	23.11	23.25	23.21	21.29	21.24	21.35
		12	6	23.81	23.69	23.59	21.24	21.17	21.18	23.13	23.22	23.19	21.29	21.23	21.38
		12	11	23.77	23.66	23.54	21.27	21.16	21.18	23.16	23.23	23.21	21.32	21.21	21.40
		25	0	23.65	23.63	23.44	21.21	21.09	21.12	23.09	23.14	23.10	21.23	21.15	21.35
64QAM	64QAM	1	0	23.73	23.67	23.78	21.26	21.22	21.30	23.10	23.26	23.21	21.41	21.21	21.24
		1	12	23.76	23.73	23.64	21.26	21.17	21.26	23.16	23.23	23.19	21.37	21.17	21.33
		1	24	23.72	23.71	23.67	21.27	21.19	21.32	23.23	23.24	23.25	21.42	21.18	21.41
		12	0	22.92	22.71	22.67	20.16	20.11	20.17	22.03	22.20	22.13	20.29	20.10	20.27
		12	6	22.88	22.73	22.69	20.21	20.11	20.16	22.07	22.17	22.14	20.29	20.10	20.26
		12	11	22.90	22.72	22.68	20.18	20.10	20.15	22.10	22.16	22.15	20.33	20.11	20.33
		25	0	22.86	22.71	22.61	20.24	20.19	20.26	22.12	22.24	22.21	20.41	20.21	20.37
	256QAM	1	0	20.59	20.89	20.63	17.99	18.33	18.25	20.03	20.24	20.16	18.43	18.22	18.36
		1	12	20.54	20.82	20.56	17.96	18.23	18.14	20.10	20.14	20.11	18.36	18.07	18.29
		1	24	20.65	20.89	20.65	18.02	18.35	18.26	20.22	20.25	20.24	18.45	18.15	18.40
		12	0	20.85	20.78	20.62	18.23	18.25	18.19	20.06	20.22	20.18	18.38	18.13	18.30
		12	6	20.86	20.80	20.69	18.26	18.21	18.19	20.14	20.21	20.16	18.36	18.13	18.30
		12	11	20.85	20.81	20.65	18.24	18.24	18.19	20.12	20.22	20.17	18.34	18.12	18.33
		25	0	21.02	20.76	20.62	18.32	18.19	18.24	20.10	20.25	20.19	18.37	18.17	18.34

### OUTPUT POWER FOR LTE BAND 7 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				20800	21100	21400	20800	21100	21400	20800	21100	21400	20800	21100	21400
10.0	QPSK	1	0	25.70	25.49	25.51	23.14	23.04	22.99	25.03	25.17	25.18	23.10	23.04	22.94
		1	24	25.65	25.47	25.39	23.10	22.96	22.94	25.20	25.10	25.13	23.09	22.93	22.93
		1	49	25.62	25.36	25.35	23.20	22.92	22.89	25.20	25.13	25.16	23.20	22.86	22.93
		25	0	24.75	24.66	24.59	22.26	22.17	22.15	24.30	24.28	24.32	22.23	22.16	22.08
		25	12	24.69	24.66	24.57	22.19	22.18	22.15	24.29	24.32	24.35	22.18	22.11	22.10
		25	24	24.65	24.62	24.49	22.14	22.16	22.13	24.31	24.32	24.37	22.17	22.17	22.05
		50	0	24.68	24.64	24.54	22.15	22.14	22.12	24.27	24.31	24.32	22.14	22.09	22.09
	16QAM	1	0	25.09	24.63	24.60	22.10	22.19	22.14	24.17	24.29	24.27	22.08	22.12	22.10
		1	24	25.05	24.56	24.34	22.04	22.07	22.01	24.24	24.18	24.21	22.02	21.97	22.07
		1	49	25.13	24.54	24.33	22.10	22.08	22.04	24.32	24.29	24.31	22.09	21.98	22.24
		25	0	23.82	23.76	23.64	21.26	21.27	21.25	23.39	23.42	23.39	21.25	21.21	21.30
		25	12	23.74	23.79	23.58	21.21	21.30	21.27	23.39	23.44	23.44	21.16	21.22	21.38
		25	24	23.71	23.72	23.51	21.20	21.29	21.25	23.41	23.39	23.45	21.18	21.18	21.38
		50	0	23.71	23.70	23.52	21.15	21.21	21.17	23.31	23.36	23.35	21.11	21.11	21.33
64QAM	64QAM	1	0	23.67	23.50	23.71	21.32	21.27	21.26	23.26	23.36	23.31	20.77	20.72	20.68
		1	24	23.79	23.43	23.65	21.21	21.13	21.11	23.31	23.22	23.24	20.79	20.54	20.63
		1	49	23.76	23.44	23.62	21.25	21.16	21.10	23.42	23.33	23.37	20.92	20.54	20.79
		25	0	22.92	22.29	22.79	20.38	20.35	20.30	22.39	22.43	22.41	19.65	19.75	19.87
		25	12	22.86	22.29	22.78	20.32	20.36	20.33	22.41	22.40	22.47	19.63	19.76	19.93
		25	24	22.85	22.25	22.74	20.35	20.27	20.29	22.44	22.41	22.45	19.61	19.66	19.94
		50	0	22.77	22.20	22.70	20.28	20.27	20.27	22.36	22.40	22.41	19.57	19.67	19.92
256QAM	256QAM	1	0	20.86	20.57	20.49	18.38	18.64	18.08	20.32	20.46	20.36	18.15	18.23	18.37
		1	24	20.78	20.53	20.39	18.30	18.56	17.94	20.39	20.28	20.31	18.05	18.07	18.28
		1	49	20.80	20.69	20.39	18.33	18.58	17.88	20.46	20.45	20.48	18.09	18.03	18.40
		25	0	20.90	20.26	20.73	18.40	18.29	18.30	20.45	20.45	20.44	18.21	18.24	18.39
		25	12	20.86	20.26	20.73	18.33	18.29	18.31	20.44	20.45	20.50	18.14	18.24	18.42
		25	24	20.84	20.29	20.68	18.34	18.29	18.26	20.44	20.44	20.48	18.15	18.20	18.40
		50	0	20.79	20.26	20.65	18.29	18.29	18.21	20.37	20.41	20.43	18.11	18.19	18.37

**OUTPUT POWER FOR LTE BAND 7 (15.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	ANT 1			ANT 2			ANT 3			ANT 4		
				20825	21100	21375	20825	21100	21375	20825	21100	21375	20825	21100	21375
15.0	QPSK	1	0	25.70	25.64	25.44	23.17	23.20	23.19	24.26	25.17	25.11	23.14	23.12	23.09
		1	37	25.62	25.58	25.47	23.13	23.11	23.07	24.23	24.99	25.00	23.13	23.07	23.08
		1	74	25.52	25.47	25.29	23.14	23.08	23.04	25.20	25.07	25.09	23.20	22.97	23.20
		36	0	24.75	24.65	24.46	22.23	22.18	22.16	24.20	24.07	24.06	22.30	22.12	22.10
		36	16	24.75	24.67	24.50	22.17	22.18	22.14	24.27	24.06	24.09	22.29	22.12	22.13
		36	35	24.58	24.60	24.51	22.12	22.14	22.11	24.25	24.05	24.09	22.35	22.12	22.12
		75	0	24.69	24.62	24.42	22.13	22.12	22.11	23.71	24.06	24.06	22.11	22.20	22.16
	16QAM	1	0	24.76	24.97	24.52	21.58	22.55	22.50	23.53	24.62	24.54	22.16	22.24	22.13
		1	37	24.67	24.76	24.49	21.28	22.59	22.67	23.69	24.46	24.48	21.67	22.23	22.28
		1	74	24.99	24.97	24.37	21.84	22.62	22.64	24.71	24.48	24.61	22.17	22.27	22.47
		36	0	23.78	23.64	23.46	21.21	21.15	21.14	23.18	23.05	23.05	21.76	21.40	21.40
		36	16	23.82	23.67	23.50	21.16	21.19	21.15	23.28	23.07	23.05	21.81	21.45	21.49
	64QAM	36	35	23.63	23.62	23.52	21.13	21.16	21.11	23.19	23.05	23.09	20.98	21.42	21.53
		75	0	23.73	23.64	23.49	21.14	21.16	21.14	23.19	23.08	23.07	20.98	21.45	21.56
		1	0	23.76	23.79	23.48	21.75	21.71	21.72	23.51	23.55	23.49	21.23	21.54	21.64
		1	37	23.79	23.73	23.51	21.69	21.64	21.63	23.64	23.41	23.42	21.18	21.43	21.64
		1	74	23.69	23.72	23.48	21.66	21.58	21.57	23.66	23.48	23.52	21.23	21.35	21.27
	256QAM	36	0	22.66	22.55	22.47	20.33	20.27	20.27	22.19	22.06	22.08	19.82	19.95	20.40
		36	16	22.71	22.59	22.49	20.29	20.30	20.29	22.28	22.07	22.07	19.75	19.92	20.47
		36	35	22.57	22.54	22.54	20.25	20.24	20.22	22.21	22.06	22.06	19.73	19.86	20.55
		75	0	22.65	22.52	22.41	20.24	20.27	20.23	22.14	22.05	22.08	19.77	19.86	18.57
		1	0	20.79	20.74	20.13	18.45	18.51	17.91	20.27	20.39	20.33	18.32	18.65	18.68
	256QAM	1	37	20.83	20.82	20.28	18.48	18.51	17.98	20.49	20.27	20.31	18.28	18.49	18.52
		1	74	20.74	20.80	20.20	18.37	18.46	17.86	20.47	20.41	20.43	18.27	18.45	18.02
		36	0	20.63	20.53	20.37	18.30	18.22	18.21	20.23	20.11	20.14	18.16	18.26	18.26
		36	16	20.64	20.54	20.43	18.19	18.24	18.21	20.31	20.12	20.14	18.09	18.25	18.29
		36	35	20.53	20.52	20.47	18.17	18.22	18.16	20.27	20.11	20.15	18.06	18.19	18.26
		75	0	20.58	20.51	20.37	18.17	18.21	18.14	20.19	20.12	20.12	18.02	18.17	18.22

**OUTPUT POWER FOR LTE BAND 7 (20.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				20850	21100	21350	20850	21100	21350	20850	21100	21350	20850	21100	21350
20.0	QPSK	1	0	25.70	25.59	25.42	23.10	23.18	23.15	23.60	25.15	25.15	23.20	23.20	23.19
		1	49	25.67	25.53	25.48	23.12	23.11	23.11	23.86	24.96	25.06	22.68	23.01	23.11
		1	99	25.43	25.42	25.37	23.20	23.10	23.09	25.20	25.07	25.16	23.19	22.95	23.16
		50	0	24.73	24.65	24.48	22.24	22.24	22.19	24.13	24.08	24.18	22.33	22.17	22.19
		50	24	24.65	24.68	24.49	22.16	22.26	22.23	24.34	24.09	24.18	22.34	22.15	22.23
	16QAM	50	49	24.56	24.59	24.54	22.18	22.24	22.19	24.27	24.09	24.17	22.36	22.11	22.24
		100	0	24.62	24.63	24.44	22.17	22.20	22.19	23.67	24.08	24.17	22.41	22.13	22.31
		1	0	25.12	24.99	24.99	21.99	22.32	22.21	23.12	24.24	24.23	21.94	21.60	21.79
		1	49	25.27	25.02	25.04	21.16	22.26	22.28	23.45	24.39	24.30	21.96	21.42	21.77
		1	99	24.90	24.87	24.97	22.22	22.21	22.26	24.41	24.22	24.39	22.09	21.36	21.90
	64QAM	50	0	23.77	23.65	23.51	21.27	21.25	21.22	23.20	23.10	23.16	20.68	20.14	20.54
		50	24	23.69	23.67	23.54	21.24	21.25	21.25	23.31	23.07	23.17	20.67	20.11	20.58
		50	49	23.59	23.61	23.60	21.21	21.21	21.18	23.27	23.10	23.18	20.71	20.12	20.62
		100	0	23.65	23.64	23.50	21.24	21.26	21.20	23.20	23.09	23.18	20.79	20.22	20.69
		1	0	23.72	23.74	23.71	21.65	21.55	21.59	23.08	23.11	22.94	21.45	20.86	21.33
	256QAM	1	49	23.77	23.78	23.76	21.72	21.67	21.51	23.18	22.94	22.96	21.14	20.88	21.29
		1	99	23.60	23.73	23.74	21.73	21.63	21.58	23.21	23.05	23.13	21.68	20.81	20.78
		50	0	22.65	22.58	22.39	20.09	20.07	20.04	21.55	21.44	21.50	20.10	19.31	19.93
		50	24	22.56	22.61	22.43	20.03	20.09	20.08	21.64	21.43	21.53	20.18	19.28	20.02
		50	49	22.52	22.57	22.50	20.03	20.06	20.04	21.60	21.43	21.54	18.49	19.26	11.88
	256QAM	100	0	22.54	22.53	22.37	20.06	20.08	20.06	21.54	21.43	21.54	18.41	19.36	9.02
		1	0	20.38	20.46	20.37	18.08	18.36	18.27	19.96	20.05	20.02	18.41	18.16	18.74
		1	49	20.44	20.60	20.58	18.23	18.37	18.36	20.15	20.00	20.03	18.46	18.06	18.31
		1	99	20.33	20.61	20.58	18.08	18.30	18.28	20.15	20.09	20.16	18.46	17.98	18.31
		50	0	20.65	20.50	20.36	18.33	18.26	18.26	20.29	20.18	20.27	18.33	18.30	18.23
		50	24	20.56	20.54	20.41	18.23	18.29	18.28	20.38	20.19	20.27	18.29	18.25	18.29
		50	49	20.50	20.51	20.47	18.21	18.27	18.25	20.34	20.17	20.26	18.25	18.19	18.24
		100	0	20.53	20.45	20.36	18.23	18.21	18.22	20.28	20.18	20.26	18.20	18.22	18.22

**5G NR n7**

Test Engineer ID:	10641	Test Date:	4/5/2021
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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			ANT 3			ANT 4		
				500500 2502.5	507000 2535.0	513500 2567.5	500500 2502.5	507000 2535.0	513500 2567.5	500500 2502.5	507000 2535.0	513500 2567.5	500500 2502.5	507000 2535.0	513500 2567.5
5.0	BPSK	1	0	25.50	25.70	24.54	22.97	23.18	23.08	22.81	22.80	24.59	22.19	22.69	22.58
		1	1	25.57	25.51	25.25	22.98	23.12	23.04	22.69	22.69	25.07	22.71	23.09	23.10
		1	23	25.66	25.58	24.38	22.95	23.08	22.99	22.50	22.76	25.13	22.87	23.08	23.20
		1	24	25.43	25.44	25.34	22.98	23.20	23.08	22.70	22.72	24.58	22.38	22.64	22.59
		12	6	25.52	25.54	24.42	22.91	23.14	22.93	22.40	22.48	25.20	22.71	23.06	23.10
	QPSK	25	0	25.08	25.45	24.32	22.83	23.08	22.94	22.26	22.54	24.65	22.21	22.51	22.64
		1	0	25.31	25.08	23.99	22.51	22.65	22.47	22.64	22.72	24.14	21.64	21.95	22.08
		1	1	25.38	25.36	24.99	22.97	23.10	22.97	22.53	22.45	25.06	22.58	22.98	23.11
		1	23	25.37	25.03	23.85	22.44	22.60	22.50	22.50	24.41	25.17	22.80	23.00	23.15
		1	24	25.40	25.32	25.13	23.01	23.19	23.02	22.60	22.60	25.18	21.80	21.94	22.09
	16QAM	12	6	25.58	25.55	24.35	22.93	23.05	22.95	22.44	22.43	25.18	22.75	23.14	23.05
		25	0	25.26	25.03	23.45	22.41	22.55	22.45	22.07	22.47	24.22	21.84	22.09	22.14
		1	0	24.27	24.13	23.00	21.38	21.61	21.57	21.70	21.86	23.01	20.91	21.18	21.29
		1	1	24.49	24.45	23.95	22.38	22.51	22.46	21.60	21.10	24.10	22.02	22.09	22.25
		1	23	24.27	24.06	22.85	21.44	21.50	21.48	21.53	21.31	24.11	22.07	22.17	22.16
	64QAM	1	24	24.52	24.41	24.38	22.46	22.51	22.42	21.65	21.20	23.07	21.00	21.11	21.25
		12	6	25.18	25.08	23.87	22.45	22.68	22.56	21.49	20.98	24.34	21.95	22.04	22.17
		25	0	24.16	24.01	22.90	21.33	21.56	21.45	21.38	21.06	23.16	20.89	21.08	21.05
		1	0	23.82	23.57	22.27	20.88	21.29	20.99	20.87	21.01	22.54	20.18	20.28	20.50
		1	1	22.96	22.99	22.51	21.08	21.13	20.99	20.79	20.70	22.65	20.10	20.24	20.56
	256QAM	1	23	23.99	23.96	22.97	20.98	21.09	21.02	20.76	20.33	22.64	20.26	20.47	20.38
		1	24	23.02	22.99	22.67	21.03	21.23	21.10	20.85	20.90	22.79	20.17	20.32	20.34
		12	6	23.74	23.74	22.74	21.01	21.18	21.05	20.64	20.42	22.67	20.38	20.47	20.66
		25	0	23.82	23.64	22.65	20.89	21.08	21.02	20.60	20.40	22.64	20.40	20.56	20.67
		1	0	21.91	21.96	20.65	19.07	19.29	19.09	17.77	17.26	20.89	18.78	18.68	18.76
	256QAM	1	1	20.85	20.65	21.03	18.98	19.15	19.14	17.49	17.56	20.87	18.99	18.89	18.85
		1	23	21.99	21.66	20.97	19.06	19.16	19.03	17.53	17.72	20.89	18.84	19.00	18.87
		1	24	20.95	21.03	20.92	19.06	19.22	19.12	17.69	17.69	21.02	19.02	18.74	18.90
		12	6	21.86	21.55	20.56	18.76	19.07	18.94	17.39	17.66	20.75	18.41	18.64	18.72
		25	0	21.89	22.08	20.98	18.96	19.17	19.05	17.32	18.57	20.71	18.39	18.57	18.74

**OUTPUT POWER FOR 5G NR n7 (10.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				501000 2505.0	507000 2535.0	513000 2565.0	501000 2505.0	507000 2535.0	513000 2565.0	501000 2505.0	507000 2535.0	513000 2565.0	501000 2505.0	507000 2535.0	513000 2565.0
10.0	BPSK	1	0	25.70	25.51	25.23	22.77	22.83	23.20	24.49	24.54	24.12	22.15	22.55	22.62
		1	1	25.55	25.57	25.31	22.72	22.68	22.64	24.93	24.96	24.71	22.62	23.11	23.08
		1	50	25.60	25.47	25.21	22.65	22.76	22.80	25.20	24.90	24.62	22.94	23.07	23.18
		1	51	25.63	25.60	25.45	22.75	22.80	23.14	24.70	24.28	24.22	22.49	22.53	22.69
		25	12	25.55	25.47	25.12	22.70	22.75	22.59	25.09	24.94	24.68	22.91	23.02	23.20
	QPSK	50	0	24.79	25.49	25.19	22.60	22.69	22.50	24.01	24.33	24.14	22.86	22.57	22.58
		1	0	25.09	25.04	24.76	22.24	22.34	23.10	23.89	24.02	23.71	21.64	22.01	21.99
		1	1	25.48	25.52	25.30	22.63	22.71	22.93	24.92	25.00	24.76	22.65	23.02	23.00
		1	50	25.06	24.95	24.63	22.13	22.27	22.64	25.13	24.88	24.72	22.99	23.03	23.11
		1	51	25.64	25.48	25.26	22.71	22.78	23.09	24.19	23.98	23.81	22.03	22.04	21.98
	16QAM	25	12	25.63	25.52	25.22	22.65	22.76	22.70	24.64	24.90	24.77	22.90	23.08	23.10
		50	0	25.11	25.02	24.75	22.15	22.24	22.39	23.29	23.87	23.70	21.95	22.08	22.13
		1	0	23.94	23.86	23.64	21.09	21.34	22.03	22.80	22.96	23.00	20.90	21.27	21.23
		1	1	24.60	24.65	24.30	21.19	22.22	21.73	23.89	23.87	23.81	22.04	22.27	22.18
		1	50	24.01	23.82	23.63	21.26	21.21	21.55	24.00	23.76	24.00	22.27	22.38	22.40
	64QAM	1	51	24.39	24.51	24.33	22.11	22.31	21.80	22.94	22.89	22.82	21.30	21.44	21.19
		25	12	25.17	25.02	24.75	22.17	22.74	21.51	24.01	24.02	23.79	21.88	22.17	22.02
		50	0	24.08	23.92	23.73	21.25	21.31	21.38	22.98	23.00	22.79	20.89	21.09	21.13
		1	0	23.62	23.50	23.16	20.74	20.86	21.21	22.58	22.19	22.11	20.15	20.32	20.31
		1	1	22.98	22.81	22.85	20.73	20.53	20.76	22.37	22.46	22.12	20.07	20.53	20.33
	256QAM	1	50	23.52	23.36	23.08	20.73	20.76	20.73	22.57	22.39	22.03	20.47	20.55	20.47
		1	51	22.97	22.86	22.81	20.91	20.98	20.84	22.62	22.33	22.11	20.32	20.57	20.38
		25	12	23.69	23.55	23.20	20.67	20.57	20.66	22.47	22.53	22.26	20.47	20.66	20.64
		50	0	23.68	23.43	23.17	20.76	20.75	20.62	22.52	22.36	22.26	20.37	20.59	20.55
		1	0	21.80	21.77	21.36	18.72	19.07	19.61	20.56	20.67	20.21	18.60	18.84	18.70

**OUTPUT POWER FOR 5G NR n7 (15.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				501500	507000	512500	501500	507000	512500	501500	507000	512500	501500	507000	512500
15.0	BPSK	1	0	25.49	25.30	25.18	23.05	23.20	22.91	24.45	24.64	24.51	22.19	22.70	22.62
		1	1	25.27	25.70	25.13	22.85	22.98	22.75	25.00	25.16	25.02	22.74	23.15	23.15
		1	77	25.26	25.10	25.14	22.82	22.76	22.68	25.20	25.17	24.92	23.18	23.20	23.18
		1	78	25.53	25.29	25.24	22.98	23.18	22.84	24.71	24.53	24.46	22.68	22.71	22.71
		36	18	25.31	25.03	25.14	22.54	22.59	22.45	25.00	25.13	24.88	22.95	23.01	22.98
		75	0	24.49	25.13	25.13	22.37	22.54	22.38	24.13	24.51	24.37	22.42	22.62	22.58
		1	0	24.86	24.92	24.81	22.82	23.09	22.81	24.11	24.19	23.96	21.65	22.19	22.08
	QPSK	1	1	25.13	25.24	25.25	22.57	22.88	22.72	25.10	25.19	25.06	22.63	23.04	23.04
		1	77	24.79	24.64	24.80	22.52	22.84	22.61	25.15	25.16	25.08	23.11	23.18	23.08
		1	78	25.32	25.37	25.30	22.68	22.95	22.74	24.29	24.13	23.96	22.10	22.06	22.10
		36	18	25.09	25.19	25.16	22.43	22.77	22.57	24.16	25.03	24.87	22.99	23.13	23.12
		75	0	24.89	24.68	24.69	22.31	22.65	22.30	23.13	24.00	23.88	21.95	22.16	22.14
	16QAM	1	0	23.89	23.67	23.56	22.33	22.26	21.60	23.21	23.17	22.71	20.92	21.49	21.49
		1	1	24.34	24.43	24.52	22.06	22.03	21.49	24.21	24.27	23.70	22.06	22.55	22.53
		1	77	23.81	23.57	23.43	21.98	21.90	21.40	24.67	24.32	23.72	22.62	22.52	22.60
		1	78	24.49	24.59	24.40	22.17	22.12	21.57	23.54	23.31	22.76	21.51	21.58	21.51
		36	18	24.92	24.70	24.77	21.87	21.88	21.34	24.23	23.98	23.80	21.96	22.13	22.13
		75	0	23.86	23.67	23.67	21.61	21.81	20.27	23.18	22.93	22.82	20.96	21.19	21.22
		1	0	23.38	23.36	23.26	21.18	21.22	20.86	22.44	22.47	22.51	20.00	20.25	20.28
	64QAM	1	1	22.61	23.25	23.14	21.10	21.07	20.66	22.32	22.48	22.42	19.84	20.44	20.32
		1	77	23.44	23.15	23.19	20.92	20.90	20.60	22.58	22.46	22.36	20.50	20.48	20.51
		1	78	22.90	23.53	23.28	21.14	21.19	20.78	22.50	22.48	22.47	20.24	20.40	20.39
		36	18	23.41	23.30	23.35	20.89	20.87	20.54	22.74	22.49	22.40	20.49	20.72	20.73
		75	0	23.32	23.10	23.17	20.76	20.73	20.41	22.69	22.54	22.32	20.48	20.70	20.64
	256QAM	1	0	21.57	21.41	21.36	19.31	19.43	19.07	20.46	20.48	20.48	18.44	18.84	18.99
		1	1	20.62	21.41	21.47	19.21	19.10	18.90	20.43	20.57	20.48	18.53	18.94	18.93
		1	77	21.67	21.43	21.30	19.13	19.03	18.85	20.72	20.46	20.47	18.92	19.06	18.89
		1	78	20.69	21.53	21.35	19.24	19.22	19.01	20.67	20.40	20.41	18.82	19.01	18.86
		36	18	21.45	21.24	21.22	18.98	18.90	18.83	20.70	20.50	20.32	18.49	18.70	18.62
		75	0	21.41	21.23	21.15	18.91	18.81	18.78	20.66	20.61	20.37	18.50	18.71	18.62

**OUTPUT POWER FOR 5G NR n7 (20.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				502000	507000	512000	502000	507000	512000	502000	507000	512000	502000	507000	512000
20.0	BPSK	1	0	25.55	24.93	25.10	23.20	22.05	22.06	24.51	24.63	24.39	22.15	22.63	22.65
		1	1	25.47	24.68	25.05	22.88	21.93	21.91	24.92	25.07	24.94	22.62	23.20	23.17
		1	104	25.44	24.68	25.08	22.83	21.88	21.87	25.20	24.98	24.81	23.14	23.16	23.13
		1	105	25.54	24.85	25.07	23.11	22.00	21.98	24.61	24.36	24.30	22.65	22.70	22.72
		50	25	25.49	24.75	25.11	22.70	21.77	21.79	25.14	24.86	23.90	23.01	23.15	23.00
		100	0	24.65	24.24	24.26	22.58	21.72	21.72	23.14	23.24	23.16	22.42	22.52	22.47
		1	0	25.22	24.47	24.60	22.94	21.98	21.46	23.98	24.23	24.02	21.58	22.00	22.06
	QPSK	1	1	25.57	24.78	25.15	22.84	21.82	21.38	25.11	25.17	24.96	22.54	23.03	23.01
		1	104	25.09	24.29	24.66	22.81	21.77	21.33	25.17	25.13	24.94	23.08	23.00	22.97
		1	105	25.70	25.01	25.20	22.87	21.88	21.41	24.14	24.12	23.92	22.10	22.08	22.07
		50	25	25.51	24.84	25.16	22.57	21.62	21.29	25.16	24.94	24.76	22.97	23.11	22.95
		100	0	25.00	24.30	24.59	22.41	21.43	21.25	23.49	23.92	23.76	21.92	22.12	22.03
	16QAM	1	0	23.88	23.10	23.42	22.21	20.88	21.13	22.79	22.97	22.69	20.86	21.40	21.37
		1	1	24.77	22.87	24.50	22.05	20.78	21.02	23.72	24.00	23.73	22.02	22.45	22.62
		1	104	23.79	23.01	23.47	21.94	20.74	20.96	24.06	23.82	23.57	22.51	22.58	22.57
		1	105	25.03	24.17	24.29	22.13	20.83	21.07	23.14	22.82	22.61	21.58	21.55	21.46
		50	25	24.95	24.23	24.66	21.90	20.55	20.87	24.23	23.90	23.81	22.06	22.13	22.04
	64QAM	100	0	24.01	23.27	23.58	21.79	20.47	20.78	23.10	22.93	22.83	21.06	21.16	21.02
		1	0	23.58	22.89	22.94	21.10	20.29	20.12	22.48	22.46	22.38	19.84	20.36	20.26
		1	1	23.56	22.75	23.32	20.90	20.12	20.00	22.37	22.52	22.38	19.72	20.31	20.32
		104	23.64	22.66	23.11	20.79	20.07	19.99	22.51	22.33	22.41	20.25	20.32	20.25	
		105	23.49	22.91	23.05	20.97	20.24	20.04	22.82	22.41	22.30	20.40	20.40	20.24	
	256QAM	50	25	23.49	22.92	23.17	20.67	19.92	19.71	22.62	22.47	22.32	20.54	20.62	20.62
		100	0	23.51	22.77	23.14	20.54	19.83	19.66	22.60	22.50	22.33	20.52	20.60	20.53
		1	0	21.63	21.01	21.19	19.07	18.16	17.94	20.40	20.47	20.36	18.35	18.85	18.61
		1	1	21.60	20.98	21.47	18.88	18.02	17.81	20.37	20.43	20.26	18.37	18.88	18.73
		104	21.53	20.91	21.28	18.83	17.95	17.73	20.70	20.39	20.26	19.01	18.84	18.76	
		105	21.68	20.89	21.18	19.05	18.10	17.87	20.42	20.40	20.31	18.97	18.83	18.87	
		50	25	21.54	20.82	21.12	18.64	17.58	17.61	20.67	20.42	20.32	18.57		

**OUTPUT POWER FOR 5G NR n7 (25.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				502500	507000	511500	502500	507000	511500	502500	507000	511500	502500	507000	511500
25.0	BPSK	1	0	23.67	23.41	23.26	21.48	21.32	21.63	22.53	22.94	22.74	20.88	21.70	21.34
		1	1	23.54	23.33	23.27	21.35	21.31	21.47	22.61	22.95	22.63	20.84	21.54	21.24
		1	131	23.50	23.44	23.26	21.49	21.18	21.44	22.81	22.84	22.64	21.44	21.40	21.53
		1	132	23.42	23.48	23.30	21.44	21.26	21.62	22.88	22.88	22.53	21.35	21.51	21.44
		64	32	23.50	23.52	23.34	21.33	21.31	21.47	22.70	22.74	22.53	21.24	21.51	21.23
		128	0	23.50	23.48	23.28	21.29	21.15	21.54	22.73	22.69	22.46	21.18	21.50	21.23
		1	0	23.70	23.52	23.24	21.44	21.25	21.50	22.46	22.87	22.63	20.84	21.51	21.23
	QPSK	1	1	23.42	23.37	23.13	21.48	21.30	21.60	22.50	22.80	22.56	21.00	21.51	21.34
		1	131	23.49	23.40	23.23	21.38	21.20	21.53	22.71	22.73	22.60	21.36	21.51	21.23
		1	132	23.41	23.44	23.26	21.31	21.36	21.70	22.84	22.59	22.48	21.33	21.61	21.23
		64	32	23.44	23.59	23.29	21.27	21.26	21.48	22.69	22.74	22.48	21.28	21.51	21.33
		128	0	23.53	23.52	23.32	21.27	21.13	21.53	22.67	22.64	22.39	21.09	21.51	21.21
	16QAM	1	0	22.51	22.20	22.12	20.33	20.32	20.60	21.90	22.07	21.96	19.74	20.40	20.13
		1	1	22.27	22.49	22.19	21.39	21.11	21.41	22.90	23.11	22.88	20.91	20.40	21.14
		1	131	22.30	22.00	22.17	21.13	20.27	20.72	23.20	22.96	22.85	21.39	20.40	20.23
		1	132	22.44	22.31	22.35	21.06	21.18	21.70	21.99	21.83	21.84	20.40	20.30	20.16
		64	32	23.43	23.45	23.27	21.23	21.21	21.67	22.75	22.69	22.46	21.19	20.51	21.43
	64QAM	128	0	22.47	22.50	22.28	20.31	20.15	20.59	21.69	21.63	21.39	20.18	20.51	20.33
		1	0	22.32	22.03	21.86	19.90	19.80	20.17	21.06	21.36	21.14	19.66	20.10	19.93
		1	1	21.28	21.18	20.87	19.84	19.84	20.23	21.27	21.19	21.18	19.72	20.00	19.84
		1	131	22.07	21.88	21.84	19.79	19.73	20.19	21.75	20.96	21.16	19.96	19.70	19.93
		1	132	21.46	20.98	21.03	19.83	19.90	20.27	21.23	21.19	21.07	19.95	20.21	19.83
	256QAM	64	32	22.04	22.05	21.73	19.83	19.70	20.17	21.14	21.16	20.99	19.68	20.00	19.84
		128	0	22.03	21.97	21.84	19.87	19.72	20.05	21.07	21.18	20.98	19.68	20.00	19.83
		1	0	20.43	20.21	19.98	17.89	17.96	18.22	19.08	19.21	19.34	17.68	18.00	17.83
		1	1	18.98	19.12	18.61	17.88	17.80	18.17	19.11	19.23	19.27	17.61	18.00	17.84
		1	131	20.11	20.17	19.86	17.87	17.83	18.18	19.26	19.10	19.25	17.96	17.36	17.83
		1	132	18.83	19.01	18.52	17.85	17.82	18.26	19.13	18.98	19.18	17.88	17.80	17.63
		64	32	20.02	19.98	19.82	17.89	17.81	18.08	19.19	19.19	18.93	17.68	18.00	17.93
		128	0	19.04	19.95	19.78	17.85	17.72	18.08	19.09	19.13	18.98	17.69	18.00	17.84

**OUTPUT POWER FOR 5G NR n7 (30.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				503000	507000	511000	503000	507000	511000	503000	507000	511000	503000	507000	511000
30.0	BPSK	1	0	23.58	23.32	23.61	21.55	21.20	21.44	22.64	22.96	22.74	20.69	21.62	21.58
		1	1	23.57	23.30	23.41	21.50	21.24	21.24	22.69	22.99	22.65	20.59	21.38	21.44
		1	158	23.50	23.23	23.40	21.48	21.32	21.27	22.77	22.79	22.65	21.32	21.40	21.39
		1	159	23.60	23.40	23.61	21.60	21.24	21.36	22.87	22.89	22.49	21.08	21.59	21.33
		80	40	23.46	23.31	23.44	21.51	21.34	21.30	22.65	22.64	22.65	21.29	21.38	21.49
		160	0	23.44	23.33	23.50	21.55	21.35	21.29	22.59	22.66	22.54	21.25	21.41	21.33
		1	0	23.70	23.49	23.56	21.62	21.39	21.42	22.51	22.77	22.62	20.74	21.70	21.47
	QPSK	1	1	23.53	23.29	23.26	21.47	21.32	21.30	22.52	22.69	22.45	21.05	21.36	21.59
		1	158	23.48	23.19	23.43	21.47	21.46	21.26	22.65	22.62	22.59	21.22	21.61	21.47
		1	159	23.50	23.49	23.54	21.65	21.20	21.50	22.85	22.75	22.33	21.39	20.42	21.27
		80	40	23.44	23.26	23.45	21.56	21.36	21.32	22.69	22.62	22.71	21.25	21.34	21.33
		160	0	23.43	23.27	23.48	21.50	21.30	21.34	22.66	22.65	22.54	21.16	21.54	21.54
	16QAM	1	0	22.39	22.20	22.59	20.55	20.35	20.64	21.86	22.23	21.91	19.98	21.15	20.44
		1	1	22.54	22.44	22.34	21.56	21.36	21.34	22.93	23.10	23.05	21.29	21.67	21.39
		1	158	23.32	22.26	22.48	20.66	20.93	20.52	23.20	23.03	22.96	21.41	21.65	21.60
		1	159	22.51	22.51	22.42	21.70	21.42	21.67	21.89	21.84	21.73	20.39	20.45	20.34
		80	40	23.49	23.24	23.46	21.47	21.34	21.29	22.61	22.60	22.59	21.36	21.41	21.34
	64QAM	160	0	22.43	22.34	22.46	20.60	20.36	20.28	21.62	21.59	21.56	20.16	20.60	21.58
		1	0	22.20	21.88	22.14	19.96	19.96	19.93	21.14	21.19	21.24	19.69	20.01	19.87
		1	1	21.55	21.41	20.76	20.06	19.75	19.92	21.11	21.22	21.20	19.07	19.97	19.83
		1	158	21.95	21.72	21.67	20.18	20.00	20.03	21.12	21.22	21.25	19.77	19.90	19.91
		1	159	20.95	21.69	21.37	20.11	19.89	19.74	21.37	21.25	21.04	19.79	20.02	19.79
	256QAM	80	40	21.92	21.81	21.93	19.95	19.89	19.85	21.16	21.22	21.19	19.84	19.91	19.84
		160	0	21.92	21.74	21.99	20.05	19.80	19.83	21.05	21.14	21.17	19.69	20.04	19.83
		1	0	20.08	19.68	20.01	18.08	17.90	17.99	19.20	19.11	19.15	17.68	18.32	18.18
		1	1	19.01	18.85	19.11	18.08	17.99	17.94	19.21	19.24	19.33	17.60	18.66	17.59
		1	158	20.06	19.93	19.93	18.10	18.03	17.97	19.34	19.33	19.16	17.79	17.86	17.85
		1	159	19.55	19.02	18.57	18.05	17.97	18.02	19.31	19.31	19.14	17.70	18.40	17.29
		80	40	19.96	19.78	19.93	18.02	17.82	17.78	19.12	19				

**OUTPUT POWER FOR 5G NR n7 (40.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				504000 2520.0	507000 2535.0	510000 2550.0	504000 2520.0	507000 2535.0	510000 2550.0	504000 2520.0	507000 2535.0	510000 2550.0	504000 2520.0	507000 2535.0	510000 2550.0
40.0	BPSK	1	0	<b>23.70</b>	23.12	23.36	21.46	21.39	<b>21.66</b>	22.95	23.00	22.99	20.81	21.47	<b>21.70</b>
		1	1	23.53	23.17	23.02	21.49	21.48	21.55	22.73	<b>23.12</b>	23.03	20.81	21.46	21.55
		1	214	23.40	23.02	23.15	21.59	21.51	21.51	22.98	22.99	22.88	21.50	21.45	21.53
		1	215	23.28	23.26	23.08	21.52	21.50	21.59	22.76	22.88	22.79	21.14	21.36	21.69
		108	54	23.50	23.04	23.22	21.43	21.46	21.46	22.93	22.84	22.88	21.16	21.37	21.50
		216	0	23.53	23.10	23.26	21.54	21.51	21.55	22.90	22.88	22.79	21.19	21.31	21.51
	QPSK	1	0	<b>23.64</b>	23.30	23.25	21.54	21.34	21.63	22.73	22.98	22.95	20.66	21.36	21.43
		1	1	23.42	23.05	23.12	21.48	21.46	21.45	22.70	<b>23.07</b>	22.97	20.70	21.40	21.54
		1	214	23.49	23.21	23.17	21.63	21.46	21.46	22.96	22.80	22.85	21.35	21.32	21.59
		1	215	23.02	23.21	23.10	21.55	21.45	<b>21.70</b>	22.87	22.78	22.86	20.04	21.40	<b>21.61</b>
		108	54	23.55	23.09	23.25	21.50	21.51	21.45	22.83	22.82	22.83	21.30	21.29	21.58
		216	0	23.60	23.02	23.25	21.52	21.56	21.62	22.93	22.97	22.80	21.18	21.28	21.52
	16QAM	1	0	22.60	21.98	22.35	20.41	20.26	20.68	21.68	22.06	22.06	20.10	20.28	20.38
		1	1	22.70	22.18	21.86	21.31	21.43	21.39	<b>22.46</b>	<b>23.20</b>	22.77	21.16	21.52	<b>21.63</b>
		1	214	22.53	21.96	22.09	20.39	20.43	20.05	23.02	22.65	22.83	21.27	21.30	21.08
		1	215	22.01	22.58	22.19	21.39	21.31	21.37	22.13	21.83	21.94	21.10	20.11	20.63
		108	54	<b>23.56</b>	23.08	23.20	21.54	21.50	<b>21.57</b>	22.96	22.90	22.95	21.21	21.21	21.61
		216	0	22.53	22.09	22.20	20.61	20.49	20.48	21.93	21.95	21.76	20.28	20.37	21.51
	64QAM	1	0	<b>22.08</b>	21.73	21.87	20.11	20.07	20.07	21.24	<b>21.53</b>	21.19	19.44	20.08	20.21
		1	1	20.58	20.78	20.59	20.13	20.06	20.13	21.26	21.35	21.45	19.07	19.93	20.19
		1	214	21.73	21.90	21.87	<b>20.23</b>	20.19	19.90	<b>21.53</b>	<b>21.53</b>	<b>21.53</b>	19.68	19.97	20.15
		1	215	20.96	20.58	20.45	20.19	20.01	20.05	21.35	<b>21.53</b>	21.34	19.19	19.85	<b>20.35</b>
		108	54	22.04	21.57	21.72	19.94	20.05	19.91	21.44	21.32	21.24	19.72	19.83	20.00
		216	0	22.07	21.61	21.85	20.02	20.05	19.98	21.42	21.48	21.36	19.79	19.90	20.10
	256QAM	1	0	19.94	19.97	19.85	18.53	18.43	18.35	19.45	19.64	19.58	17.35	17.98	18.15
		1	1	18.70	18.82	18.36	18.48	18.33	18.38	19.62	<b>19.65</b>	19.48	17.42	18.00	18.13
		1	214	19.87	19.66	19.65	18.40	18.15	18.26	19.57	19.59	19.46	17.41	18.07	<b>18.22</b>
		1	215	19.00	18.92	18.71	<b>18.59</b>	18.39	18.42	19.39	19.62	19.49	17.16	17.66	18.18
		108	54	20.00	19.62	19.69	17.93	17.96	17.91	19.35	19.43	19.30	17.75	17.82	<b>18.22</b>
		216	0	<b>20.05</b>	19.58	19.61	17.98	18.09	18.05	19.37	19.45	19.32	17.79	17.87	18.04

### 8.3. LTE BAND 12 AND 5G NR n12

#### LTE BAND 12

Test Engineer ID:	39004	Test Date:	3/26/2021
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#### OUTPUT POWER FOR LTE BAND 12 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				23017	23095	23173	23017	23095	23173
1.4	QPSK	1	0	25.53	25.62	25.55	24.60	24.49	24.49
		1	2	25.58	<b>25.70</b>	25.59	<b>24.70</b>	24.58	24.57
		1	5	25.52	25.66	25.54	24.63	24.48	24.51
		3	0	25.54	25.60	25.54	24.60	24.51	24.46
		3	1	25.56	25.63	25.54	24.63	24.55	24.57
		3	2	25.58	25.62	25.59	24.63	24.54	24.58
		6	0	24.62	24.66	24.54	23.68	23.60	23.64
	16QAM	1	0	24.57	24.70	24.97	23.77	23.57	23.57
		1	2	24.71	24.83	<b>25.07</b>	23.85	23.71	23.75
		1	5	24.63	24.78	24.97	23.79	23.64	23.68
		3	0	24.77	24.71	24.75	23.73	23.76	23.76
		3	1	24.86	24.77	24.82	23.78	23.84	<b>23.87</b>
		3	2	24.85	24.75	24.83	23.77	23.81	23.87
		6	0	23.79	23.81	23.48	22.84	22.79	22.81
	64QAM	1	0	23.75	23.82	23.02	22.41	22.44	22.50
		1	2	23.86	23.94	23.14	22.52	22.50	<b>22.66</b>
		1	5	23.77	23.90	23.01	22.42	22.43	22.54
		3	0	23.66	23.66	23.93	22.53	22.53	22.33
		3	1	23.78	23.68	<b>23.96</b>	22.56	22.56	22.45
		3	2	23.73	23.68	23.01	22.55	22.56	22.49
		6	0	23.72	22.73	22.60	21.35	21.36	21.44
	256QAM	1	0	20.45	20.64	20.63	19.75	19.43	19.43
		1	2	20.54	20.77	<b>20.80</b>	19.89	<b>19.89</b>	19.54
		1	5	20.53	20.65	20.67	19.75	19.76	19.53
		3	0	20.61	20.76	20.71	19.69	19.68	19.50
		3	1	20.62	20.79	20.75	19.74	19.73	19.61
		3	2	20.63	20.74	20.77	19.70	19.71	19.58
		6	0	20.79	20.74	20.71	19.60	19.62	19.75

#### OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				23025	23095	23165	23025	23095	23165
3.0	QPSK	1	0	25.66	25.68	25.69	24.69	24.65	24.66
		1	7	25.55	25.62	25.65	24.67	24.59	24.59
		1	14	<b>25.58</b>	<b>25.70</b>	25.63	<b>24.70</b>	24.62	24.63
		8	0	24.76	24.72	24.68	23.82	23.76	23.70
		8	4	24.74	24.80	24.72	23.81	23.76	23.73
		8	7	24.74	24.80	24.71	23.82	23.73	23.76
		15	0	24.71	24.77	24.70	23.81	23.74	23.70
	16QAM	1	0	24.75	24.72	25.02	23.75	23.77	<b>23.79</b>
		1	7	24.64	24.63	25.05	23.70	23.69	23.70
		1	14	24.66	24.66	<b>25.06</b>	23.70	23.70	23.77
		8	0	23.79	23.85	23.75	22.93	22.82	22.74
		8	4	23.80	23.86	23.80	22.93	22.79	22.75
		8	7	23.79	23.87	23.77	22.91	22.80	22.82
		15	0	23.70	23.79	23.76	22.83	22.72	22.66
	64QAM	1	0	<b>23.71</b>	23.67	23.45	<b>22.42</b>	22.41	22.39
		1	7	23.41	23.63	23.42	22.29	22.27	22.32
		1	14	23.52	23.66	23.43	22.36	22.33	22.35
		8	0	22.39	22.41	22.35	21.45	21.43	21.35
		8	4	22.36	22.43	22.42	21.44	21.42	21.34
		8	7	22.39	22.46	22.40	21.43	21.42	21.43
		15	0	22.46	22.35	22.41	21.36	21.35	21.33
	256QAM	1	0	20.78	<b>21.22</b>	20.59	19.77	<b>20.29</b>	19.58
		1	7	20.72	21.14	20.49	19.73	20.11	19.53
		1	14	20.75	21.19	20.51	19.75	20.13	19.60
		8	0	20.94	20.80	20.64	19.93	19.89	19.68
		8	4	20.92	20.88	20.70	19.95	19.88	19.70
		8	7	20.94	20.87	20.68	19.94	19.86	19.76
		15	0	20.84	20.82	20.82	19.88	19.79	19.82

**OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				23035	23095	23155	23035	23095	23155
5.0	QPSK	1	0	25.60	25.70	25.49	24.70	24.67	24.54
		1	12	25.51	25.61	25.52	24.56	24.57	24.58
		1	24	25.52	25.65	25.51	24.55	24.61	24.65
		12	0	24.58	24.63	24.60	23.62	23.62	23.63
		12	6	24.64	24.62	24.60	23.65	23.67	23.61
		12	11	24.58	24.59	24.56	23.59	23.60	23.61
		25	0	24.59	24.64	24.63	23.66	23.62	23.64
		1	0	24.78	24.83	24.06	24.14	23.87	23.73
	16QAM	1	12	24.62	24.77	24.10	24.08	23.71	23.84
		1	24	24.72	24.79	24.12	24.16	23.71	23.81
		12	0	23.65	23.70	23.70	22.76	22.70	22.66
		12	6	23.66	23.73	23.74	22.80	22.71	22.64
		12	11	23.62	23.66	23.71	22.78	22.66	22.69
		25	0	23.54	23.66	23.69	22.73	22.58	22.59
	64QAM	1	0	23.95	23.57	23.89	22.75	22.78	22.66
		1	12	23.89	23.52	23.89	22.64	22.64	22.68
		1	24	23.87	23.54	23.88	22.72	22.69	22.72
		12	0	22.68	22.67	22.57	21.61	21.59	21.55
		12	6	22.70	22.68	22.56	21.63	21.63	21.56
		12	11	22.67	22.62	22.54	21.60	21.54	21.60
		25	0	22.65	22.61	22.58	21.70	21.66	21.67
	256QAM	1	0	20.72	20.40	20.76	19.74	19.41	19.77
		1	12	20.61	20.34	20.72	19.67	19.38	19.73
		1	24	20.63	20.35	20.72	19.70	19.37	19.77
		12	0	20.63	20.63	20.63	19.67	19.66	19.68
		12	6	20.66	20.66	20.68	19.71	19.67	19.67
		12	11	20.62	20.60	20.62	19.66	19.63	19.68
		25	0	20.67	20.69	20.64	19.70	19.72	19.66

**OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				23060	23095	23130	23060	23095	23130
10.0	QPSK	1	0	25.64	25.70	25.69	24.70	24.67	24.65
		1	24	25.57	25.64	25.63	24.69	24.60	24.60
		1	49	25.60	25.64	25.63	24.66	24.56	24.60
		25	0	24.74	24.80	24.79	23.78	23.73	23.73
		25	12	24.77	24.83	24.82	23.83	23.80	23.75
		25	24	24.73	24.78	24.77	23.79	23.76	23.76
		50	0	24.78	24.83	24.82	23.84	23.81	23.72
		1	0	24.75	24.73	24.72	23.76	23.80	23.80
	16QAM	1	24	24.64	24.66	24.65	23.74	23.72	23.70
		1	49	24.68	24.67	24.66	23.66	23.71	23.73
		25	0	23.83	23.82	23.81	22.82	22.87	22.86
		25	12	23.90	23.85	23.84	22.87	22.91	22.83
		25	24	23.83	23.83	23.82	22.83	22.87	22.87
		50	0	23.83	23.81	23.80	22.83	22.85	22.77
	64QAM	1	0	23.97	23.98	23.81	22.69	22.65	22.66
		1	24	23.91	23.76	23.74	22.58	22.57	22.57
		1	49	23.87	23.67	23.80	22.62	22.58	22.63
		25	0	22.85	22.81	22.87	21.73	21.73	21.68
		25	12	22.89	22.86	22.83	21.77	21.74	21.67
		25	24	22.84	22.86	22.87	21.70	21.66	21.67
	256QAM	50	0	22.82	22.82	22.76	21.73	21.71	21.64
		1	0	20.76	21.18	20.50	19.82	20.36	19.66
		1	24	20.75	21.17	20.49	19.85	20.24	19.55
		1	49	20.83	21.31	20.54	19.88	20.25	19.64
		25	0	20.87	20.79	20.84	19.93	19.84	19.84
		25	12	20.92	20.87	20.80	19.97	19.90	19.82
		25	24	20.86	20.85	20.81	19.93	19.83	19.87
		50	0	20.88	20.89	20.73	19.91	19.89	19.77

## 5G NR n12

Test Engineer ID:	10641	Test Date:	5/4/2021
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### OUTPUT POWER FOR 5G NR n12 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				140300	141500	142700	140300	141500	142700
5.0	BPSK	1	0	25.02	25.10	24.83	23.99	24.03	23.68
		1	1	25.59	25.68	25.36	24.49	24.55	24.32
		1	23	25.67	25.67	25.46	24.44	24.35	24.45
		1	24	25.14	23.16	24.92	23.94	23.87	23.84
		12	6	25.51	25.49	25.23	24.33	24.43	24.15
	QPSK	25	0	24.92	24.94	24.77	23.79	23.94	23.63
		1	0	24.51	24.66	24.35	23.63	23.70	23.28
		1	1	25.47	25.56	25.25	24.55	24.70	24.28
		1	23	25.70	25.69	25.43	24.51	24.48	24.15
		1	24	24.71	24.71	24.48	23.50	23.47	23.05
	16QAM	12	6	25.39	25.58	25.19	24.37	24.45	24.18
		25	0	24.46	24.47	24.23	23.21	23.49	23.08
		1	0	23.47	23.65	23.39	22.59	22.77	22.30
		1	1	24.59	24.59	24.35	23.46	23.85	23.38
		1	23	23.09	24.74	23.43	23.51	23.62	23.05
	64QAM	1	24	23.66	23.72	22.92	22.44	23.12	22.05
		12	6	24.40	24.46	24.14	23.24	23.36	23.07
		25	0	23.41	23.46	23.02	22.29	22.38	22.12
		1	0	23.08	23.19	22.81	21.81	21.93	21.45
		1	1	23.00	23.17	22.81	21.67	22.14	21.68
	256QAM	1	23	23.12	23.19	22.92	21.86	22.04	22.05
		1	24	23.11	23.17	22.87	21.94	21.72	21.57
		12	6	22.89	23.09	22.80	22.08	21.96	21.75
		25	0	22.93	23.02	22.77	21.88	21.94	21.68
		1	0	20.92	21.02	20.77	19.89	19.92	19.61
	256QAM	1	1	20.91	21.18	20.77	19.76	19.85	19.63
		1	23	21.19	21.12	20.92	19.90	20.08	19.82
		1	24	21.12	21.11	20.87	19.94	19.84	19.72
		12	6	20.84	20.95	20.77	19.87	19.91	19.48
		25	0	21.00	21.05	20.73	19.91	19.94	19.78

### OUTPUT POWER FOR 5G NR n12 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				140800	141500	142200	140800	141500	142200
10.0	BPSK	1	0	25.12	25.06	24.99	24.06	24.07	24.04
		1	1	25.68	25.57	25.67	24.54	24.42	24.43
		1	50	25.70	25.62	25.42	24.47	24.42	24.35
		1	51	25.21	25.12	24.94	23.88	23.95	23.80
		25	12	25.59	25.59	25.49	24.47	24.44	24.39
	QPSK	50	0	25.01	24.99	24.79	23.97	23.82	23.79
		1	0	24.59	24.60	24.56	23.68	23.71	23.57
		1	1	25.51	25.63	25.35	24.64	24.55	24.70
		1	50	24.78	25.70	25.49	24.51	24.45	24.27
		1	51	24.78	24.69	24.56	23.49	23.41	23.27
	16QAM	25	12	25.51	25.62	25.38	24.49	24.64	24.36
		50	0	24.49	24.51	24.39	23.53	23.49	23.45
		1	0	23.48	23.70	23.67	22.75	22.41	22.79
		1	1	24.70	24.67	24.56	23.73	23.81	23.78
		1	50	24.83	24.52	24.47	23.28	23.32	23.03
	64QAM	1	51	23.81	23.73	23.53	22.26	22.18	22.09
		25	12	24.48	24.54	24.33	23.45	23.55	23.15
		50	0	23.45	23.46	23.27	22.47	22.46	22.22
		1	0	23.21	23.21	23.45	21.93	22.05	21.99
		1	1	23.02	23.32	23.38	21.92	22.08	21.53
	256QAM	1	50	23.16	23.12	22.95	22.10	22.26	21.90
		1	51	23.11	23.11	23.08	22.22	22.16	21.96
		25	12	23.05	23.09	22.89	22.10	21.99	21.71
		50	0	23.06	22.89	22.85	22.04	21.96	21.80
		1	0	20.83	21.04	20.89	19.79	19.85	19.99
	256QAM	1	1	21.06	21.25	20.90	20.07	20.09	19.86
		1	50	21.25	21.24	20.98	20.27	20.01	19.94
		1	51	21.13	21.13	21.02	20.10	20.08	19.88
		25	12	21.04	21.16	20.70	20.00	19.94	19.76
		50	0	21.13	20.93	20.78	19.92	19.93	19.89

**OUTPUT POWER FOR 5G NR n12 (15.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				141300	141500	141700	141300	141500	141700
15.0	BPSK	1	0	25.15	25.07	25.10	24.04	24.16	24.13
		1	1	25.50	25.50	<b>25.70</b>	24.45	<b>24.70</b>	23.99
		1	77	25.52	25.55	25.44	23.91	24.02	24.03
		1	78	24.98	25.01	23.03	23.46	23.53	23.47
		36	18	25.69	25.39	25.46	24.29	23.86	23.86
		75	0	24.90	24.87	24.87	23.40	23.73	23.70
		1	0	24.69	24.70	24.69	23.39	23.24	23.65
	QPSK	1	1	25.57	<b>25.70</b>	25.41	24.08	<b>24.50</b>	24.29
		1	77	25.57	25.56	25.48	23.96	23.99	23.96
		1	78	24.61	24.57	24.55	23.05	22.98	22.94
		36	18	25.50	25.47	25.44	24.18	24.12	23.74
		75	0	24.50	24.59	24.47	22.91	22.90	23.01
	16QAM	1	0	23.61	23.50	23.57	22.36	22.65	22.27
		1	1	24.61	24.51	24.52	23.39	23.45	<b>24.07</b>
		1	77	<b>24.67</b>	24.52	24.36	22.90	22.84	22.69
		1	78	23.66	23.72	23.00	21.74	21.66	21.67
		36	18	24.59	24.48	24.43	23.10	23.14	22.87
	64QAM	75	0	23.42	23.49	23.40	21.85	21.54	21.80
		1	0	23.24	23.13	22.95	21.48	21.52	<b>22.16</b>
		1	1	<b>23.39</b>	23.18	23.12	21.27	21.69	22.13
		1	77	23.14	22.83	23.00	21.69	21.84	21.63
		1	78	22.92	23.00	22.94	20.72	21.71	21.60
	256QAM	36	18	22.95	22.96	22.97	<b>21.76</b>	21.84	21.37
		75	0	22.91	22.87	22.93	21.29	21.52	21.28
		1	0	20.95	20.99	21.07	19.87	19.98	<b>20.54</b>
		1	1	<b>21.22</b>	21.10	21.10	19.89	19.75	20.00
		1	77	20.90	21.00	21.03	19.51	19.72	19.68
		1	78	21.04	21.03	20.86	19.54	19.58	19.48
		36	18	21.09	20.95	20.97	19.38	19.85	19.74
		75	0	20.95	20.83	20.86	19.49	19.71	19.48

## 8.4. LTE BAND 13

Test Engineer ID:	39004	Test Date:	3/5/2021
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### OUTPUT POWER FOR LTE BAND 13 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				23205	23230	23255	23205	23230	23255
5.0	QPSK	1	0	25.70	25.49	25.53	24.63	24.65	24.60
		1	12	25.64	25.47	25.49	24.61	24.66	24.61
		1	24	25.62	25.53	25.55	24.65	24.70	24.64
		12	0	24.73	24.72	24.60	23.74	23.74	23.73
		12	6	24.65	24.65	24.58	23.75	23.80	23.69
		12	11	24.64	24.62	24.62	23.73	23.78	23.74
		25	0	24.74	24.67	24.57	23.78	23.80	23.80
	16QAM	1	0	24.77	25.07	24.60	23.77	23.72	23.64
		1	12	24.77	24.94	24.42	23.50	23.53	23.54
		1	24	24.76	25.01	24.54	23.69	23.77	23.68
		12	0	23.81	23.79	23.66	22.79	22.83	22.80
		12	6	23.76	23.78	23.63	22.79	22.87	22.78
		12	11	23.75	23.75	23.68	22.82	22.84	22.82
		25	0	23.76	23.73	23.54	22.75	22.78	22.76
	64QAM	1	0	23.34	23.09	23.39	22.70	22.70	22.68
		1	12	23.43	23.12	23.50	22.63	22.60	22.57
		1	24	23.41	23.12	23.41	22.70	22.76	22.70
		12	0	22.26	22.24	22.13	21.72	21.73	21.67
		12	6	22.28	22.29	22.16	21.73	21.76	21.67
		12	11	22.27	22.27	22.15	21.74	21.73	21.73
		25	0	22.25	22.26	22.19	21.85	21.82	21.82
	256QAM	1	0	19.31	19.19	20.04	19.72	19.75	19.72
		1	12	19.35	19.15	19.98	19.69	19.66	19.58
		1	24	19.36	19.28	20.06	19.73	19.81	19.76
		12	0	19.18	19.21	20.25	19.73	19.73	19.66
		12	6	19.13	19.26	20.22	19.75	19.76	19.66
		12	11	19.14	19.21	20.30	19.72	19.77	19.72
		25	0	19.21	19.23	20.30	19.81	19.83	19.77

### OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				N/A	23230	N/A	N/A	23230	N/A
10.0	QPSK	1	0	25.70			24.70		
		1	24		25.63			24.58	
		1	49		25.57			24.58	
		25	0		24.83			23.84	
		25	12		24.89			23.90	
		25	24		24.81			23.87	
		50	0		24.87			23.92	
	16QAM	1	0	24.84			23.76		
		1	24		24.71			23.65	
		1	49		24.74			23.63	
		25	0		23.95			22.85	
		25	12		23.97			22.92	
		25	24		23.91			22.89	
		50	0		23.93			22.90	
	64QAM	1	0	23.45			22.68		
		1	24		22.24			22.62	
		1	49		22.33			22.75	
		25	0		21.07			21.50	
		25	12		22.40			21.56	
		25	24		22.35			21.53	
		50	0		22.34			21.55	
	256QAM	1	0	20.27			20.19		
		1	24		18.92			20.08	
		1	49		18.84			20.22	
		25	0		18.72			19.87	
		25	12		18.62			19.91	
		25	24		18.72			19.95	
		50	0		18.64			19.95	

## 8.5. LTE BAND 14

Test Engineer ID:	39004	Test Date:	3/5/2021
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### OUTPUT POWER FOR LTE BAND 14 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				23305	23330	23355	23305	23330	23355
5.0	QPSK	1	0	25.61	25.66	25.50	24.64	24.64	24.66
		1	12	25.65	25.64	25.62	24.70	24.68	24.67
		1	24	25.61	25.70	25.60	24.69	24.61	24.65
		12	0	24.63	24.66	24.62	23.62	23.64	23.67
		12	6	24.71	24.66	24.64	23.71	23.76	23.67
		12	11	24.66	24.63	24.65	23.67	23.67	23.70
		25	0	24.64	24.67	24.62	23.70	23.73	23.66
		1	0	24.82	24.72	25.06	23.82	23.82	23.93
	16QAM	1	12	24.81	24.78	25.19	23.85	23.95	23.86
		1	24	24.86	24.84	25.17	23.85	23.81	23.78
		12	0	23.70	23.68	23.75	22.77	22.75	22.75
		12	6	23.74	23.79	23.80	22.82	22.84	22.75
		12	11	23.73	23.73	23.79	22.78	22.78	22.77
		25	0	23.64	23.69	23.70	22.73	22.70	22.63
		1	0	23.87	23.76	23.42	22.72	22.81	22.77
		1	12	23.86	23.84	23.56	22.79	22.89	22.81
5.0	64QAM	1	24	23.87	23.88	23.53	22.73	22.74	22.76
		12	0	22.54	22.58	22.58	21.61	21.68	21.66
		12	6	22.54	22.64	22.58	21.69	21.75	21.67
		12	11	22.56	22.65	22.60	21.69	21.68	21.71
		25	0	22.53	22.60	22.52	21.78	21.78	21.72
		1	0	20.72	20.52	20.28	19.69	19.74	19.83
		1	12	20.82	20.61	20.36	19.75	19.85	19.82
		1	24	20.77	20.65	20.35	19.78	19.78	19.75
	256QAM	12	0	20.62	20.53	20.52	19.66	19.71	19.69
		12	6	20.65	20.61	20.57	19.71	19.77	19.70
		12	11	20.61	20.56	20.56	19.70	19.75	19.72
		25	0	20.58	20.61	20.61	19.74	19.75	19.72

### OUTPUT POWER FOR LTE BAND 14 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				N/A	23330	N/A	N/A	23330	N/A
10.0	QPSK	1	0		25.70			24.67	
		1	24		25.63			24.69	
		1	49		25.65			24.50	
		25	0		24.71			23.68	
		25	12		24.78			23.76	
		25	24		24.77			23.70	
		50	0		24.79			23.74	
		1	0	24.71			23.68		
	16QAM	1	24	24.62		23.71			
		1	49	24.65		23.60			
		25	0	23.75		22.71			
		25	12	23.80		22.76			
		25	24	23.81		22.77			
		50	0	23.76		22.70			
		1	0	23.83		22.67			
		1	24	23.82		22.62			
10.0	64QAM	1	49	23.78		22.63			
		25	0	22.70		21.37			
		25	12	22.75		21.43			
		25	24	22.77		21.45			
		50	0	22.70		21.42			
		1	0	20.68		20.13			
		1	24	20.73		20.26			
		1	49	20.81		20.15			
	256QAM	25	0	20.69		19.77			
		25	12	20.76		19.82			
		25	24	20.73		19.85			
		50	0	20.74		19.84			

## 8.6. LTE BAND 17

Test Engineer ID:	39004	Test Date:	3/5/2021
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### OUTPUT POWER FOR LTE BAND 17 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				23755	23790	23825	23755	23790	23825
5.0	QPSK	1	0	25.56	25.61	25.51	24.64	24.58	24.58
		1	12	25.57	25.61	25.56	24.64	24.59	24.67
		1	24	25.62	25.70	25.54	24.70	24.67	24.54
		12	0	24.59	24.55	24.56	23.65	23.62	23.67
		12	6	24.63	24.63	24.65	23.69	23.69	23.76
		12	11	24.63	24.60	24.61	23.69	23.66	23.72
		25	0	24.60	24.63	24.55	23.67	23.67	23.72
	16QAM	1	0	24.69	24.73	25.15	23.88	23.83	23.28
		1	12	24.72	24.78	25.16	23.92	23.85	23.34
		1	24	24.79	24.82	25.16	23.90	23.96	23.46
		12	0	23.63	23.65	23.72	22.71	22.69	22.92
		12	6	23.69	23.69	23.79	22.76	22.71	22.99
		12	11	23.68	23.69	23.75	22.74	22.74	22.93
		25	0	23.57	23.63	23.61	22.66	22.62	22.84
	64QAM	1	0	23.57	23.44	23.82	22.71	22.63	22.21
		1	12	23.71	23.41	23.84	22.73	22.72	21.91
		1	24	23.73	23.51	23.86	22.75	22.77	21.94
		12	0	22.49	22.52	22.54	21.57	21.56	21.70
		12	6	22.59	22.58	22.63	21.66	21.62	21.77
		12	11	22.57	22.56	22.57	21.62	21.61	21.75
		25	0	22.62	22.58	22.47	21.69	21.65	21.77
	256QAM	1	0	20.57	20.27	20.68	19.74	19.74	19.26
		1	12	20.62	20.31	20.70	19.82	19.77	19.40
		1	24	20.69	20.35	20.71	19.83	19.85	19.01
		12	0	20.52	20.53	20.57	19.74	19.74	19.35
		12	6	20.62	20.61	20.64	19.81	19.82	19.01
		12	11	20.61	20.56	20.61	19.79	19.80	19.09
		25	0	20.63	20.65	20.54	19.82	19.81	19.01

### OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				23780	23790	23800	23780	23790	23800
10.0	QPSK	1	0	25.64	25.62	25.70	24.40	24.65	24.70
		1	24	25.61	25.57	25.65	24.55	24.62	24.68
		1	49	25.57	25.49	25.66	24.52	24.60	24.68
		25	0	24.64	24.65	24.69	23.60	23.68	23.73
		25	12	24.76	24.76	24.70	23.73	23.83	23.81
		25	24	24.76	24.72	24.73	23.76	23.82	23.82
		50	0	24.74	24.73	24.67	23.68	23.79	23.78
	16QAM	1	0	24.73	24.73	24.72	23.59	23.74	23.79
		1	24	24.71	24.69	24.64	23.71	23.77	23.83
		1	49	24.64	24.68	24.60	23.65	23.78	23.78
		25	0	23.76	23.74	23.73	22.68	22.81	22.85
		25	12	23.86	23.87	23.75	22.85	22.94	22.91
		25	24	23.85	23.85	23.78	22.89	22.92	23.00
		50	0	23.80	23.78	23.64	22.78	22.87	22.82
	64QAM	1	0	23.79	23.67	23.76	22.58	22.68	22.72
		1	24	23.78	23.71	23.67	22.60	22.64	22.77
		1	49	23.78	23.68	23.78	22.72	22.69	22.74
		25	0	22.73	22.73	22.71	21.63	21.72	21.75
		25	12	22.87	22.84	22.73	21.78	21.88	21.83
		25	24	22.86	22.81	22.79	21.75	21.80	21.85
		50	0	22.78	22.74	22.67	21.75	21.81	21.77
	256QAM	1	0	20.44	20.64	21.15	19.57	19.72	19.82
		1	24	20.52	20.76	21.17	19.85	19.93	19.95
		1	49	20.56	20.84	21.31	19.93	20.00	20.01
		25	0	20.73	20.75	20.68	19.77	19.88	19.92
		25	12	20.84	20.86	20.79	19.94	20.03	19.98
		25	24	20.83	20.84	20.80	19.90	19.97	20.05
		50	0	20.76	20.77	20.73	19.85	19.92	19.87

## 8.7. LTE BAND 25 AND 5G NR n25

### LTE BAND 25

Test Engineer ID:	39004	Test Date:	4/12/2021
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### OUTPUT POWER FOR LTE BAND 25 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				26047	26365	26683	26047	26365	26683	26047	26365	26683	26047	26365	26683
1.4	QPSK	1	0	25.55	25.50	25.59	23.58	23.65	23.63	25.04	25.15	25.04	23.58	23.58	23.50
		1	2	25.59	25.62	25.70	23.66	23.69	23.66	25.11	25.18	25.08	23.64	23.64	23.60
		1	5	25.63	25.63	25.66	23.64	23.66	23.68	25.10	25.18	25.12	23.63	23.70	23.62
		3	0	25.56	25.52	25.53	23.62	23.61	23.62	25.03	25.10	25.05	23.58	23.52	23.50
		3	1	25.61	25.61	25.65	23.68	23.69	23.67	25.09	25.19	25.11	23.62	23.57	23.56
		3	2	25.62	25.63	25.65	23.70	23.70	23.70	25.11	25.20	25.10	23.64	23.60	23.61
	16QAM	6	0	24.62	24.68	24.64	22.72	22.75	22.69	24.13	24.20	24.13	22.66	22.62	22.66
		1	0	24.92	24.66	24.75	22.74	22.74	22.99	24.14	24.52	24.46	22.68	22.66	22.58
		1	2	24.91	24.78	24.85	22.84	22.84	23.08	24.24	24.60	24.52	22.80	22.77	22.73
		1	5	24.84	24.74	24.86	22.83	22.79	23.09	24.23	24.57	24.49	22.77	22.84	22.74
		3	0	24.82	24.81	24.70	22.87	22.91	22.89	24.28	24.39	24.31	22.83	22.66	22.77
		3	1	24.87	24.88	24.81	22.96	22.97	22.93	24.37	24.43	24.35	22.92	22.73	22.85
	64QAM	3	2	24.88	24.90	24.80	22.98	22.97	22.94	24.36	24.47	24.35	22.92	22.74	22.88
		6	0	23.56	23.84	23.78	21.92	21.88	21.63	23.32	23.13	23.02	21.87	21.78	21.82
		1	0	23.71	23.82	22.86	21.81	21.93	21.84	23.34	23.43	23.34	21.73	21.66	20.85
		1	2	23.78	23.93	22.99	21.90	21.86	21.94	23.41	23.51	23.40	21.84	21.74	21.18
		1	5	23.75	23.90	22.94	21.89	21.97	21.92	23.43	23.45	23.36	21.82	21.81	21.13
		3	0	23.86	23.70	22.89	21.86	21.80	21.73	23.44	23.51	23.39	21.80	21.72	21.01
	256QAM	3	1	23.94	23.75	23.01	21.93	21.85	21.78	23.47	23.54	23.45	21.88	21.80	21.06
		3	2	23.96	23.79	23.04	21.95	21.86	21.82	23.50	23.54	23.45	21.88	21.81	21.09
		6	0	22.74	22.79	22.06	20.79	20.86	20.82	22.30	22.36	22.30	20.65	20.61	19.69
		1	0	20.62	20.34	20.39	18.76	18.81	18.45	20.09	20.19	20.09	18.64	18.58	18.65
		1	2	20.75	20.81	20.56	18.86	18.93	18.57	20.23	20.33	20.22	18.75	18.68	18.82
		1	5	20.68	20.75	20.55	18.81	18.85	18.62	20.21	20.28	20.18	18.72	18.72	18.77

### OUTPUT POWER FOR LTE BAND 25 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				26055	26365	26675	26055	26365	26675	26055	26365	26675	26055	26365	26675
3.0	QPSK	1	0	25.46	25.51	25.52	23.47	23.60	23.50	24.99	25.06	25.04	23.52	23.53	23.48
		1	7	25.59	25.54	25.58	23.57	23.64	23.53	25.07	25.11	25.04	23.56	23.57	23.51
		1	14	25.64	25.65	25.70	23.63	23.70	23.66	25.18	25.20	25.15	23.70	23.65	23.70
		8	0	24.56	24.59	24.64	22.63	22.67	22.56	24.16	24.15	24.16	22.62	22.60	22.50
		8	4	24.66	24.69	24.76	22.69	22.77	22.67	24.17	24.30	24.18	22.71	22.65	22.67
		8	7	24.69	24.74	24.82	22.72	22.79	22.70	24.26	24.33	24.22	22.70	22.71	22.72
	16QAM	15	0	24.65	24.66	24.77	22.69	22.77	22.66	24.19	24.23	24.16	22.68	22.64	22.60
		1	0	24.75	24.68	24.58	22.65	22.67	22.61	24.05	24.18	24.17	22.58	22.65	22.48
		1	7	24.73	24.66	24.64	22.66	22.72	22.60	24.10	24.25	24.15	22.60	22.68	22.52
		1	14	24.73	24.76	24.70	22.73	22.85	22.79	24.17	24.31	24.23	22.67	22.76	22.64
		8	0	23.70	23.72	23.73	21.71	21.72	21.65	23.23	23.21	23.16	21.75	21.63	21.63
		8	4	23.76	23.73	23.87	21.73	21.81	21.73	23.31	23.32	23.23	21.87	21.68	21.72
	64QAM	8	7	23.81	23.75	23.88	21.76	21.88	21.77	23.33	23.33	23.25	21.86	21.71	21.82
		15	0	23.67	23.66	23.78	21.66	21.74	21.63	23.26	23.16	23.14	21.73	21.59	21.67
		1	0	23.70	23.85	23.60	21.58	21.65	21.58	23.52	23.52	23.53	21.67	21.51	21.68
		1	7	23.68	23.87	23.72	21.58	21.69	21.60	23.53	23.56	23.49	21.73	21.79	21.74
		1	14	23.85	23.94	23.80	21.71	21.82	21.72	23.69	23.70	23.57	21.76	21.77	21.73
		8	0	22.50	22.60	22.62	20.67	20.72	20.66	22.63	22.57	22.54	20.45	20.45	21.36
	256QAM	8	4	22.58	22.70	22.73	20.73	20.83	20.72	22.66	22.68	22.63	20.53	20.55	21.44
		8	7	22.65	22.74	22.76	20.78	20.89	20.80	22.73	22.74	22.64	20.58	20.56	21.52
		15	0	22.62	22.60	22.70	20.67	20.77	20.67	22.62	22.59	22.53	20.46	20.43	21.37
		1	0	20.46	20.94	20.36	18.58	18.66	18.55	20.11	20.14	20.15	19.13	19.06	18.51
		1	7	20.52	21.06	20.47	18.66	18.73	18.60	20.24	20.23	20.16	19.21	19.15	18.61
		1	14	20.66	21.19	20.59	18.74	18.81	18.73	20.32	20.35	20.27	19.25	19.34	18.79
		8	0	20.66	20.66	20.48	18.76	18.78	18.72	20.33	20.32	20.29	18.74	18.73	18.65
		8	4	20.69	20.71	20.63	18.83	18.91	18.77	20.41	20.42	20.34	18.82	18.79	18.81
		8	7	20.78	20.75	20.68	18.89	18.96	18.87	20.45	20.45	20.38	18.86	18.85	18.87
		15	0	20.64	20.68	20.76	18.73	18.87	18.73	20.35	20.28	20.26	18.79	18.73	18.68

**OUTPUT POWER FOR LTE BAND 25 (5.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				26065	26365	26665	26065	26365	26665	26065	26365	26665	26065	26365	26665
5.0	QPSK	1	0	25.48	25.58	25.58	23.59	23.68	23.46	25.11	25.06	25.05	23.60	23.63	23.57
		1	12	25.60	25.61	25.61	23.62	23.68	23.52	25.18	25.12	25.09	23.66	23.62	23.60
		1	24	25.56	25.65	25.70	23.66	23.70	23.66	25.20	25.20	25.12	23.70	23.70	23.66
		12	0	24.52	24.58	24.58	22.64	22.67	22.47	24.11	24.05	24.05	22.57	22.58	22.51
		12	6	24.64	24.68	24.68	22.72	22.75	22.60	24.15	24.20	24.13	22.61	22.61	22.58
		12	11	24.69	24.67	24.67	22.69	22.77	22.67	24.22	24.24	24.17	22.65	22.66	22.59
		25	0	24.65	24.66	24.66	22.67	22.72	22.58	24.15	24.09	24.13	22.65	22.58	22.53
	16QAM	1	0	24.86	24.77	24.77	22.82	22.86	22.66	24.29	24.28	24.16	22.74	22.76	22.71
		1	12	24.72	24.78	24.78	22.81	22.91	22.76	24.28	24.29	24.26	22.75	22.82	22.78
		1	24	24.73	24.86	24.81	22.84	22.90	22.88	24.36	24.36	24.34	22.83	22.86	22.83
		12	0	23.66	23.65	23.65	21.70	21.70	21.54	23.16	23.11	23.08	21.66	21.61	21.54
		12	6	23.78	23.71	23.71	21.72	21.82	21.66	23.24	23.22	23.21	21.72	21.63	21.59
		12	11	23.86	23.75	23.75	21.76	21.84	21.73	23.31	23.26	23.22	21.73	21.68	21.64
		25	0	23.71	23.65	23.65	21.64	21.66	21.56	23.19	23.03	23.05	21.73	21.57	21.49
	64QAM	1	0	23.72	23.43	23.81	21.68	21.74	21.60	23.12	23.12	23.08	21.75	20.62	21.83
		1	12	23.81	23.50	23.93	21.69	21.79	21.65	23.18	23.18	23.16	21.66	21.62	21.95
		1	24	23.85	23.55	23.96	21.71	21.82	21.75	23.23	23.22	23.18	21.65	21.63	21.97
		12	0	22.52	22.52	22.49	20.57	20.60	20.44	22.06	21.96	21.93	20.70	20.65	20.50
		12	6	22.61	22.69	22.56	20.64	20.72	20.56	22.07	22.08	22.08	20.76	20.71	20.53
		12	11	22.67	22.70	22.65	20.64	20.69	20.61	22.14	22.15	22.08	20.85	20.73	20.55
		25	0	22.58	22.57	22.57	20.66	20.75	20.63	22.16	22.10	22.10	20.73	20.59	20.55
	256QAM	1	0	20.51	20.27	20.65	18.61	18.72	18.56	20.16	20.15	20.08	18.39	18.36	18.67
		1	12	20.54	20.39	20.73	18.64	18.73	18.59	20.20	20.17	20.16	18.48	18.42	18.72
		1	24	20.62	20.40	20.81	18.66	18.76	18.71	20.27	20.28	20.24	18.48	18.47	18.83
		12	0	20.47	20.48	20.55	18.62	18.68	18.51	20.12	20.11	20.07	18.65	18.58	18.54
		12	6	20.55	20.62	20.63	18.70	18.76	18.66	20.20	20.21	20.20	18.73	18.67	18.62
		12	11	20.61	20.64	20.71	18.71	18.77	18.67	20.22	20.23	20.22	18.77	18.63	18.65
		25	0	20.56	20.63	20.58	18.71	18.79	18.64	20.18	20.14	20.17	18.78	18.68	18.59

**OUTPUT POWER FOR LTE BAND 25 (10.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				26090	26365	26640	26090	26365	26640	26090	26365	26640	26090	26365	26640
10.0	QPSK	1	0	25.56	25.68	25.53	23.48	23.70	23.44	25.19	25.20	25.09	23.63	23.65	23.67
		1	24	25.53	25.61	25.61	23.49	23.60	23.34	25.15	25.17	25.12	23.66	23.66	23.70
		1	49	25.58	25.64	25.70	23.45	23.60	23.48	25.17	25.20	25.16	23.64	23.65	23.69
		25	0	24.62	24.68	24.62	22.67	22.72	22.44	24.22	24.26	24.19	22.73	22.75	22.74
		25	12	24.74	24.77	24.77	22.67	22.71	22.50	24.32	24.27	24.32	22.83	22.79	22.85
		25	24	24.74	24.75	24.79	22.63	22.73	22.53	24.32	24.36	24.33	22.83	22.73	22.84
		50	0	24.73	24.78	24.77	22.63	22.68	22.53	24.35	24.28	24.32	22.81	22.75	22.87
	16QAM	1	0	24.69	24.65	24.79	22.66	22.69	22.89	24.26	24.33	24.24	22.79	22.84	22.86
		1	24	24.66	24.59	24.87	22.57	22.58	22.86	24.25	24.24	24.21	22.75	22.74	22.78
		1	49	24.74	24.67	24.81	22.60	22.62	22.94	24.33	24.33	24.27	22.81	22.80	22.84
		25	0	23.72	23.71	23.62	21.77	21.74	21.49	23.31	23.33	23.29	21.85	21.86	21.86
		25	12	23.85	23.81	23.82	21.75	21.74	21.61	23.43	23.39	23.41	21.93	21.88	21.96
		25	24	23.85	23.81	23.85	21.73	21.77	21.57	23.42	23.45	23.41	21.90	21.85	21.98
		50	0	23.78	23.75	23.80	21.70	21.68	21.62	23.36	23.31	23.36	21.86	21.81	21.91
	64QAM	1	0	23.80	23.74	23.57	21.66	21.76	21.61	23.28	23.35	23.28	21.82	21.83	21.90
		1	24	23.85	23.76	23.67	21.55	21.61	21.50	23.25	23.30	23.24	21.77	21.75	21.83
		1	49	23.87	23.81	23.81	21.61	21.73	21.67	23.36	23.41	23.32	21.85	21.84	21.88
		25	0	22.61	22.62	22.62	20.74	20.80	20.60	22.29	22.34	22.27	20.85	20.87	20.88
		25	12	22.73	22.77	22.76	20.76	20.82	20.68	22.47	22.39	22.38	20.92	20.88	20.98
		25	24	22.76	22.74	22.83	20.73	20.82	20.68	22.45	22.46	22.40	20.89	20.86	20.93
		50	0	22.68	22.72	22.70	20.70	20.76	20.67	22.41	22.36	22.38	20.88	20.83	20.96
	256QAM	1	0	20.63	21.05	20.33	18.64	18.79	18.63	20.32	20.31	20.24	18.83	18.82	18.87
		1	24	20.66	21.06	20.42	18.63	18.79	18.61	20.38	20.36	20.30	18.88	18.79	18.90
		1	49	20.71	21.16	20.51	18.64	18.79	18.66	20.42	20.47	20.39	18.93	18.91	18.93
		25	0	20.59	20.58	20.55	18.73	18.78	18.66	20.31	20.38	20.31	18.83	18.88	18.93
		25	12	20.73	20.73	20.69	18.75	18.81	18.70	20.45	20.42	20.42	18.95	18.93	18.99
		25	24	20.76	20.76	20.74	18.71	18.85	18.70	20.48	20.49	20.40	18.96	18.88	19.00
		50	0	20.70	20.72	20.65	18.70	18.77	18.68	20.39	20.36	20.37	18.90	18.83	18.95

**OUTPUT POWER FOR LTE BAND 25 (15.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				26115 1857.5	26365 1882.5	26615 1907.5	26115 1857.5	26365 1882.5	26615 1907.5	26115 1857.5	26365 1882.5	26615 1907.5	26115 1857.5	26365 1882.5	26615 1907.5
15.0	QPSK	1	0	25.61	25.58	25.63	23.64	23.69	23.70	25.10	25.20	25.15	23.56	23.70	23.63
		1	37	25.58	25.49	25.47	23.53	23.55	23.60	25.10	25.13	25.05	23.52	23.63	23.61
		1	74	25.70	25.54	25.59	23.53	23.49	23.61	25.13	25.19	25.03	23.53	23.62	23.55
		36	0	24.59	24.62	24.55	22.59	22.59	22.65	24.14	24.13	24.10	22.64	22.63	22.58
		36	16	24.69	24.67	24.55	22.65	22.55	22.60	24.23	24.14	24.19	22.64	22.63	22.60
		36	35	24.70	24.64	24.64	22.57	22.53	22.60	24.18	24.19	24.15	22.59	22.65	22.61
		75	0	24.63	24.66	24.58	22.60	22.52	22.65	24.17	24.12	24.14	22.62	22.57	22.55
	16QAM	1	0	25.06	24.57	25.06	22.92	22.94	23.04	24.05	24.62	24.14	22.56	22.96	22.93
		1	37	25.09	24.52	24.95	23.05	23.00	23.16	24.14	24.57	24.05	22.52	23.05	23.07
		1	74	25.09	24.55	25.02	22.91	22.98	23.18	24.12	24.58	24.10	22.54	23.09	23.12
		36	0	23.58	23.63	23.61	21.63	21.58	21.63	23.12	23.14	23.11	21.64	21.63	21.58
		36	16	23.69	23.72	23.59	21.68	21.54	21.60	23.24	23.14	23.19	21.65	21.61	21.58
		36	35	23.66	23.64	23.68	21.60	21.55	21.62	23.23	23.18	23.15	21.61	21.67	21.60
		75	0	23.67	23.68	23.56	21.64	21.53	21.68	23.21	23.13	23.20	21.61	21.59	21.59
	64QAM	1	0	23.98	23.83	23.67	21.61	21.54	21.60	23.44	23.43	23.46	21.90	21.78	21.94
		1	37	23.87	23.80	23.58	21.47	21.39	21.45	23.42	23.40	23.36	21.86	21.92	21.90
		1	74	23.79	23.85	23.69	21.48	21.38	21.50	23.46	23.45	23.39	21.87	21.93	21.88
		36	0	22.52	22.58	22.60	20.19	20.04	20.09	22.00	22.00	21.98	20.55	20.50	20.47
		36	16	22.60	22.64	22.57	20.22	20.00	20.06	22.10	21.97	22.05	20.55	20.50	20.47
		36	35	22.61	22.60	22.64	20.17	20.02	20.06	22.09	22.05	22.02	20.51	20.56	20.54
		75	0	22.63	22.61	22.56	20.22	19.98	20.12	22.08	21.97	22.01	20.53	20.49	20.46
	256QAM	1	0	20.67	20.89	20.34	18.99	18.84	18.95	20.37	20.35	20.40	18.78	18.76	18.82
		1	37	20.77	20.92	20.30	18.99	18.81	18.88	20.39	20.42	20.37	18.85	18.89	18.88
		1	74	20.95	20.97	20.47	19.03	18.82	18.88	20.50	20.49	20.43	18.90	18.92	18.84
		36	0	20.48	20.59	20.50	18.79	18.61	18.67	20.17	20.17	20.13	18.67	18.64	18.60
		36	16	20.58	20.63	20.50	18.83	18.57	18.63	20.24	20.15	20.22	18.65	18.64	18.61
		36	35	20.58	20.60	20.58	18.73	18.57	18.63	20.21	20.20	20.16	18.63	18.68	18.64
		75	0	20.58	20.60	20.51	18.80	18.52	18.70	20.23	20.16	20.23	18.66	18.65	18.59

**OUTPUT POWER FOR LTE BAND 25 (20.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				26140 1860.0	26365 1882.5	26590 1905.0	26140 1860.0	26365 1882.5	26590 1905.0	26140 1860.0	26365 1882.5	26590 1905.0	26140 1860.0	26365 1882.5	26590 1905.0
20.0	QPSK	1	0	25.55	25.68	25.70	23.69	23.69	23.66	25.09	25.16	25.18	23.61	23.70	23.63
		1	49	25.61	25.62	25.50	23.54	23.60	23.70	25.17	25.13	25.06	23.61	23.64	23.66
		1	99	25.67	25.64	25.59	23.60	23.59	23.68	25.18	25.20	25.08	23.61	23.68	23.66
		50	0	24.61	24.66	24.64	22.65	22.69	22.74	24.16	24.16	24.17	22.64	22.71	22.67
		50	24	24.78	24.74	24.64	22.70	22.67	22.82	24.25	24.17	24.20	22.72	22.71	22.75
		50	49	24.79	24.69	24.63	22.66	22.67	22.73	24.22	24.24	24.14	22.70	22.76	22.73
		100	0	24.73	24.72	24.70	22.68	22.65	22.81	24.24	24.15	24.22	22.72	22.70	22.75
	16QAM	1	0	24.68	24.76	24.72	23.10	23.11	23.07	24.66	24.55	24.59	23.20	23.13	23.01
		1	49	24.76	24.67	24.67	22.99	23.07	23.16	24.70	24.58	24.51	23.17	23.11	23.10
		1	99	24.71	24.23	24.68	23.04	23.04	23.13	24.76	24.66	24.55	23.24	23.11	23.07
		50	0	23.60	23.70	23.67	21.63	21.68	21.73	23.19	23.16	23.11	21.70	21.71	21.64
		50	24	23.75	23.77	23.67	21.67	21.63	21.81	23.30	23.18	23.19	21.77	21.72	21.76
		50	49	23.74	23.72	23.67	21.63	21.70	21.73	23.30	23.26	23.15	21.74	21.75	21.73
		100	0	23.75	23.77	23.72	21.72	21.65	21.82	23.28	23.20	23.26	21.79	21.70	21.77
	64QAM	1	0	23.68	23.67	23.81	21.71	21.74	21.74	23.80	23.76	23.77	21.76	21.74	21.62
		1	49	23.80	23.87	23.67	21.60	21.72	21.79	23.82	23.81	23.75	21.73	21.79	21.75
		1	99	23.84	23.78	23.72	21.56	21.69	21.78	23.83	23.88	23.74	21.66	21.78	21.77
		50	0	22.56	22.65	22.62	20.11	20.15	20.16	22.19	22.23	22.21	20.13	20.19	20.15
		50	24	22.73	22.71	22.65	20.13	20.15	20.27	22.28	22.24	22.26	20.19	20.21	20.26
		50	49	22.78	22.72	22.62	20.09	20.14	20.20	22.25	22.31	22.23	20.15	20.24	20.22
		100	0	22.69	22.70	22.65	20.15	20.10	20.29	22.27	22.24	22.32	20.19	20.20	20.26
	256QAM	1	0	20.40	20.78	20.78	18.60	18.64	18.56	20.03	20.10	20.09	18.61	18.63	18.53
		1	49	20.53	20.75	20.68	18.55	18.62	18.67	20.12	20.11	20.11	18.58	18.57	18.64
		1	99	20.62	20.80	20.77	18.60	18.59	18.60	20.12	20.20	20.09	18.63	18.64	18.70
		50	0	20.56	20.63	20.62	18.73	18.76	18.79	20.22	20.24	20.24	18.73	18.77	18.72
		50	24	20.68	20.66	20.62	18.77	18.70	18.87	20.30	20.24	20.27	18.75	18.77	18.82
		50	49	20.71	20.64	20.60	18.69	18.71	18.80	20.26	20.30	20.23	18.71	18.82	18.78
		100	0	20.67	20.63	20.64	18.75	18.67	18.82	20.29	20.25	20.26	18.77	18.74	18.79



**OUTPUT POWER FOR 5G NR n25 (15.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				371500	376500	381500	371500	376500	381500	371500	376500	381500	371500	376500	381500
15.0	BPSK	1	0	25.19	25.17	25.13	22.99	23.01	23.19	24.37	24.41	24.56	22.60	23.04	23.05
		1	1	25.33	25.52	25.62	23.57	23.36	<b>23.70</b>	24.95	25.04	25.06	23.45	23.54	23.54
		1	77	25.27	25.49	25.56	23.58	23.30	<b>23.64</b>	25.09	25.05	<b>25.12</b>	22.90	23.02	23.10
		1	78	25.08	25.11	25.32	23.09	23.30	23.21	24.52	24.47	24.58	23.50	23.36	<b>23.60</b>
		36	18	25.24	25.40	<b>25.64</b>	23.35	23.30	23.62	25.02	24.96	25.04	23.34	23.38	23.44
	QPSK	75	0	24.95	24.90	24.97	22.88	23.10	23.17	24.40	24.45	24.63	22.86	22.92	23.00
		1	0	24.44	24.54	24.75	22.44	22.54	22.67	24.06	24.09	24.13	22.54	22.52	22.62
		1	1	25.55	25.59	<b>25.70</b>	23.49	23.47	<b>23.66</b>	24.98	25.09	<b>25.20</b>	23.55	23.60	23.66
		1	77	25.39	25.54	25.58	23.51	23.30	23.65	25.19	25.06	25.18	22.56	22.53	22.63
		1	78	24.44	24.64	24.70	22.49	22.87	22.58	24.07	24.12	24.14	23.56	23.56	<b>23.70</b>
	16QAM	36	18	25.46	25.49	25.63	23.23	23.34	23.64	24.98	24.97	25.14	22.98	23.44	23.46
		75	0	24.57	24.56	24.59	22.32	22.56	22.61	23.95	24.00	24.12	22.16	22.46	22.50
		1	0	23.89	23.88	23.89	21.67	21.72	21.77	23.11	23.13	23.28	21.56	21.64	21.55
		1	1	24.79	24.88	<b>24.96</b>	22.54	<b>23.21</b>	22.76	24.14	24.06	<b>24.50</b>	22.60	<b>22.72</b>	20.55
		1	77	24.79	24.84	24.94	22.62	23.17	22.73	24.37	24.24	24.42	21.72	21.58	21.62
	64QAM	1	78	23.73	23.92	23.96	21.59	22.17	21.72	23.17	23.37	23.26	22.65	22.57	20.76
		36	18	24.43	24.54	24.58	22.32	22.86	22.65	24.06	23.99	24.07	22.06	22.55	22.57
		75	0	23.32	23.52	23.56	21.45	21.60	21.67	23.02	23.00	23.14	21.30	21.53	21.53
		1	0	22.81	22.83	23.05	21.14	21.33	21.29	22.52	22.64	22.41	21.27	21.28	21.19
		1	1	22.72	22.92	22.94	21.16	<b>21.40</b>	21.21	22.49	22.53	22.61	21.05	21.25	<b>21.32</b>
	256QAM	1	77	22.72	22.85	22.89	21.14	21.29	21.25	22.53	22.40	22.62	21.19	21.28	21.20
		1	78	22.70	22.85	22.85	21.05	21.37	21.38	22.40	22.45	22.62	21.14	21.05	<b>21.32</b>
		36	18	22.86	23.01	<b>23.15</b>	20.89	21.31	21.16	22.54	22.57	<b>22.70</b>	20.71	21.08	21.08
		75	0	23.12	23.13	23.07	20.96	21.08	21.16	22.54	22.45	22.62	20.78	20.95	20.91
		1	0	21.38	21.31	21.45	19.11	19.11	19.32	20.54	20.60	20.60	18.81	18.93	18.95
	256QAM	1	1	21.19	21.35	<b>21.48</b>	19.19	<b>19.51</b>	19.38	20.47	20.75	<b>20.79</b>	18.86	18.90	19.00
		1	77	21.14	21.31	<b>21.48</b>	19.30	19.33	19.33	20.61	20.73	20.76	18.82	18.87	18.92
		1	78	21.35	21.34	21.33	19.09	19.40	19.36	20.69	20.68	20.72	18.77	18.93	19.03
		36	18	20.87	20.99	21.10	19.01	19.36	19.10	20.51	20.50	20.64	18.80	19.00	<b>19.10</b>
		75	0	20.95	21.05	21.11	19.05	19.05	19.10	20.45	20.57	20.62	18.96	19.00	19.04

**OUTPUT POWER FOR 5G NR n25 (20.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				372000	376500	381000	372000	376500	381000	372000	376500	381000	372000	376500	381000
20.0	BPSK	1	0	24.78	24.90	25.02	23.12	23.18	23.05	24.61	24.41	24.59	22.90	23.18	23.16
		1	1	25.28	25.50	25.53	23.64	23.60	23.62	24.97	25.08	<b>25.13</b>	23.37	23.53	23.54
		1	104	25.38	25.47	<b>25.65</b>	23.63	23.49	23.62	24.98	25.10	25.03	22.89	23.12	23.02
		1	105	24.86	24.92	25.16	23.04	22.98	23.08	24.52	24.58	24.51	23.39	23.17	23.67
		50	25	25.23	25.25	25.52	23.49	<b>23.70</b>	25.06	25.02	24.98	23.27	23.68	<b>23.70</b>	
	QPSK	100	0	24.76	24.97	24.94	23.06	23.07	23.13	24.57	24.33	24.67	22.71	22.55	22.13
		1	0	24.23	24.36	24.37	22.64	22.62	22.51	24.10	24.06	24.15	22.29	22.56	22.73
		1	1	25.39	25.44	25.68	<b>23.66</b>	23.63	23.54	25.00	25.13	25.10	23.34	23.52	23.67
		1	104	25.41	25.40	<b>25.70</b>	23.39	23.36	23.56	25.00	<b>25.20</b>	25.04	22.36	22.53	22.60
		1	105	24.58	24.62	24.88	22.42	22.51	22.47	24.05	24.04	24.05	23.34	23.63	23.64
	16QAM	50	25	25.35	25.50	25.39	23.33	23.55	23.65	25.07	25.03	25.00	23.24	23.53	<b>23.69</b>
		100	0	24.35	24.38	24.40	22.52	22.54	22.64	24.07	24.07	24.07	22.27	22.59	22.73
		1	0	23.58	23.73	23.68	21.77	21.67	21.71	23.36	23.37	23.38	21.64	22.58	21.72
		1	1	24.45	24.50	24.56	<b>22.73</b>	22.65	22.66	24.22	24.07	<b>24.30</b>	22.64	22.54	22.57
		1	104	24.45	24.62	<b>24.65</b>	22.60	22.63	22.60	24.19	24.17	24.15	21.64	21.52	21.67
	64QAM	1	105	23.61	23.59	23.90	21.60	21.44	21.62	23.24	23.12	23.17	<b>22.72</b>	22.70	21.67
		50	25	24.33	24.29	24.59	22.39	22.57	22.71	24.04	24.10	24.06	22.19	22.61	22.69
		100	0	23.38	23.46	23.68	21.57	21.58	21.69	23.08	23.09	23.06	21.26	21.65	21.69
		1	0	22.95	23.10	23.01	<b>21.24</b>	<b>21.27</b>	21.11	22.31	22.45	22.46	20.99	21.33	21.19
		1	1	23.05	23.26	23.27	21.13	21.14	21.13	22.44	22.61	<b>22.64</b>	21.12	21.13	21.15
	256QAM	1	104	23.03	22.98	<b>23.35</b>	21.10	21.15	21.19	22.34	22.40	22.33	20.99	21.14	21.31
		1	105	22.93	23.06	23.23	21.04	21.15	20.92	22.28	22.45	22.56	<b>21.06</b>	<b>21.36</b>	21.27
		50	25	22.88	22.86	23.12	20.97	21.08	21.20	22.59	22.53	22.53	20.87	21.15	21.17
		100	0	22.93	22.94	23.20	21.00	21.07	21.13	22.55	22.60	22.59	20.76	21.14	21.12
		1	0	21.01	21.00	21.30	19.30	19.34	19.39	20.71	<b>20.89</b>	20.66	18.81	19.20	19.19
	256QAM	1	1	21.12	21.27	<b>21.39</b>	<b>19.47</b>	19.30	19.15	20.50	20.55	20.61	18.67	19.16	19.10
		1	104	21.09	21.23	21.18	19.01	19.28	19.35	20.65	20.59	20.55	18.70	19.10	19.12
		1	105	21.08	21.19	<b>21.39</b>	19.06</td								

**OUTPUT POWER FOR 5G NR n25 (25.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				372500 1862.5	376500 1882.5	380500 1902.5	372500 1862.5	376500 1882.5	380500 1902.5	372500 1862.5	376500 1882.5	380500 1902.5	372500 1862.5	376500 1882.5	380500 1902.5
25.0	BPSK	1	0	22.80	22.94	22.92	20.89	20.88	20.92	23.01	23.11	<b>23.17</b>	20.19	19.59	19.58
		1	1	23.27	23.48	<b>23.70</b>	21.43	21.34	<b>21.61</b>	23.06	22.97	23.07	<b>21.70</b>	20.14	20.05
		1	131	23.24	23.48	23.56	21.46	21.50	21.18	23.02	23.10	23.00	21.21	19.75	19.58
		1	132	23.12	23.07	23.02	20.94	21.10	21.54	23.12	23.15	23.05	20.75	20.21	20.15
		64	32	23.03	23.24	23.39	21.30	21.40	21.57	22.96	23.00	22.92	20.13	20.06	19.91
		128	0	22.61	22.78	22.89	20.70	20.85	21.08	22.90	22.98	22.95	20.24	18.33	19.47
	QPSK	1	0	22.46	22.50	22.58	20.45	20.41	20.60	23.10	22.98	<b>23.14</b>	19.10	19.08	19.15
		1	1	23.27	23.46	23.44	21.38	21.39	<b>21.70</b>	22.99	22.96	23.02	20.21	19.99	20.16
		1	131	23.32	23.48	<b>23.50</b>	21.44	21.44	20.71	23.07	23.04	23.02	19.81	19.04	19.11
		1	132	22.44	22.51	22.60	20.44	20.50	21.63	23.01	23.06	23.11	19.98	20.05	<b>20.23</b>
		64	32	23.19	23.15	23.37	21.21	21.47	21.65	22.95	22.99	22.88	19.68	19.94	20.09
		128	0	22.28	22.31	22.31	20.33	20.37	20.62	22.88	22.96	23.05	19.78	18.93	19.00
	16QAM	1	0	21.46	21.58	21.69	19.65	19.43	19.47	22.11	21.97	22.11	18.19	18.03	18.17
		1	1	22.35	22.57	<b>22.79</b>	20.41	20.53	<b>20.74</b>	22.05	22.00	22.34	<b>19.30</b>	19.03	19.21
		1	131	22.29	22.50	22.71	20.46	20.60	19.72	22.45	22.87	22.94	18.82	18.20	18.19
		1	132	21.54	21.61	21.82	19.49	19.59	20.38	22.01	22.18	22.15	19.13	19.12	19.27
		64	32	21.44	21.65	21.65	20.17	20.40	20.52	22.88	<b>22.95</b>	22.87	18.57	18.97	19.17
		128	0	21.31	21.44	21.58	19.29	19.34	19.51	21.90	21.65	22.08	18.72	17.90	18.18
	64QAM	1	0	21.07	21.03	21.02	19.23	19.03	19.18	21.42	21.41	21.56	17.60	17.26	17.60
		1	1	21.40	21.35	<b>21.57</b>	18.94	18.94	<b>19.33</b>	21.52	21.65	21.61	<b>18.72</b>	17.29	17.43
		1	131	21.03	21.07	21.20	19.23	19.12	19.23	21.58	21.67	21.49	18.22	17.33	17.30
		1	132	21.35	21.30	21.38	19.13	19.16	19.08	21.49	<b>21.71</b>	21.59	17.60	17.18	17.60
		64	32	20.78	20.75	20.96	18.65	18.84	19.04	21.41	21.44	21.50	18.10	17.63	17.66
		128	0	20.77	20.91	21.11	18.80	18.97	19.07	21.48	21.51	21.52	18.15	17.18	17.55
	256QAM	1	0	18.89	19.09	19.29	17.15	16.96	16.33	19.80	19.44	19.74	16.13	15.84	15.56
		1	1	19.32	19.34	<b>19.51</b>	16.98	16.78	17.14	19.69	19.84	19.64	<b>17.49</b>	15.60	15.53
		1	131	19.29	19.28	19.23	17.20	<b>17.37</b>	17.23	19.57	19.77	19.61	17.01	15.49	15.62
		1	132	19.31	19.29	19.50	17.00	17.02	<b>17.25</b>	<b>19.91</b>	19.69	19.58	16.18	15.51	15.70
		64	32	18.85	18.91	19.02	16.77	16.85	17.02	19.44	19.44	19.47	16.05	15.46	15.51
		128	0	18.77	18.94	18.96	16.82	16.88	16.99	19.41	19.46	19.50	16.09	15.59	15.58

**OUTPUT POWER FOR 5G NR n25 (30.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				373000 1865.0	376500 1882.5	380000 1900.0	373000 1865.0	376500 1882.5	380000 1900.0	373000 1865.0	376500 1882.5	380000 1900.0	373000 1865.0	376500 1882.5	380000 1900.0
30.0	BPSK	1	0	22.97	22.94	23.12	20.81	20.96	21.02	22.77	22.89	22.90	21.11	20.94	21.16
		1	1	23.54	23.49	<b>23.70</b>	<b>21.63</b>	21.57	21.61	22.76	22.89	22.93	<b>21.70</b>	21.43	21.68
		1	158	23.39	23.48	23.52	21.07	21.15	21.12	22.77	22.96	22.90	21.14	20.94	21.13
		1	159	22.77	22.99	23.15	21.58	21.49	21.56	22.80	22.90	<b>23.02</b>	21.63	21.49	21.55
		80	40	22.21	22.22	22.42	21.58	21.39	21.47	22.56	22.76	22.80	20.40	21.28	21.52
		160	0	22.71	22.79	22.89	21.07	20.89	21.01	22.77	22.86	22.86	21.03	20.87	21.06
	QPSK	1	0	22.37	22.37	22.57	20.64	20.40	20.44	22.93	22.87	<b>22.94</b>	20.55	20.52	20.76
		1	1	23.54	23.49	23.59	21.64	21.67	<b>21.70</b>	22.92	22.87	22.90	21.67	21.65	<b>21.70</b>
		1	158	23.45	23.49	<b>23.67</b>	20.72	20.58	20.61	22.90	22.92	22.92	20.64	21.69	20.74
		1	159	22.45	22.45	22.52	21.51	21.42	21.57	22.89	21.92	22.86	21.40	21.62	21.69
		80	40	22.21	22.38	22.47	21.40	21.43	21.56	22.57	22.82	22.90	21.50	21.36	21.65
		160	0	22.26	22.25	22.26	20.43	20.41	20.53	21.77	22.81	22.90	20.54	20.55	20.61
	16QAM	1	0	21.08	21.29	21.41	19.56	19.65	19.65	21.63	21.89	21.93	19.63	19.70	19.74
		1	1	22.27	22.51	<b>22.75</b>	<b>20.91</b>	20.89	20.81	21.87	22.37	22.70	20.75	18.85	20.64
		1	158	22.47	22.44	22.40	19.82	19.55	19.75	22.20	22.26	<b>22.79</b>	19.85	19.79	19.82
		1	159	21.52	21.61	21.75	20.37	20.71	20.57	21.57	21.96	21.92	20.74	20.65	<b>20.85</b>
		80	40	21.01	21.24	21.30	20.47	20.42	20.42	22.62	<b>22.86</b>	22.82	20.65	20.34	20.69
		160	0	21.30	21.31	21.30	19.50	19.45	19.48	21.31	22.79	21.92	19.77	19.73	20.18
	64QAM	1	0	20.82	20.79	21.01	19.03	19.11	19.21	21.01	21.17	<b>21.86</b>	18.94	18.56	18.83
		1	1	21.03	21.00	21.14	19.27	19.13	<b>19.32</b>	20.99	21.48	21.40	18.87	18.99	18.87
		1	158	20.85	20.99	21.11	19.11	19.07	19.24	21.42	21.56	21.36	19.09	18.73	18.82
		1	159	20.77	20.98	<b>21.21</b>	19.08	19.02	19.29	21.07	21.46	21.40	18.81	19.01	18.72
		80	40	19.70	19.78	19.93	18.96	18.89	18.98	21.12	21.19	<b>21.47</b>	<b>19.34</b>	18.91	19.13
		160	0	20.66	20.70	20.92	19.00	18.93	19.07	21.28	21.46	21.42	19.32	19.26	19.26
	256QAM	1	0	18.62	18.84	18.99	17.08	16.99	17.24	18.88	19.19	19.17	<b>17.42</b>	17.19	17.27

**OUTPUT POWER FOR 5G NR n25 (40.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				374000	376500	379000	374000	376500	379000	374000	376500	379000	374000	376500	379000
40.0	BPSK	1	0	23.23	23.20	23.01	20.96	20.78	21.02	22.95	22.94	22.91	20.81	20.88	20.98
		1	1	23.45	23.65	23.08	21.43	21.70	21.68	22.89	22.97	22.96	21.48	21.39	21.42
		1	214	23.50	23.70	23.18	20.86	21.21	21.14	22.93	22.96	23.01	20.98	21.02	21.02
		1	215	22.94	23.16	23.00	21.49	21.22	21.60	22.94	22.94	22.88	21.26	21.33	21.51
		108	54	23.09	23.31	23.26	21.26	21.20	21.40	22.69	22.91	22.81	20.25	19.86	21.03
		216	0	22.74	22.92	23.24	20.87	20.79	20.89	22.61	22.94	22.82	20.63	19.68	20.76
	QPSK	1	0	22.31	22.48	22.36	20.43	20.27	20.49	22.94	22.87	22.84	20.25	20.50	20.52
		1	1	23.54	23.67	22.58	21.52	21.52	21.62	22.89	22.92	22.90	21.47	21.51	21.53
		1	214	23.41	23.62	22.67	21.47	20.47	20.53	22.79	22.95	22.89	20.45	20.65	20.58
		1	215	22.44	22.63	22.36	21.52	21.27	21.50	22.09	22.78	22.65	21.06	21.35	21.70
		108	54	23.24	23.36	22.76	21.33	21.21	21.33	22.69	22.73	22.82	21.06	21.32	21.24
		216	0	22.12	22.28	22.77	20.37	20.25	20.37	22.71	22.90	22.90	20.18	20.43	20.36
	16QAM	1	0	21.41	21.35	21.40	19.57	19.23	19.54	21.92	21.88	22.19	19.26	19.56	19.25
		1	1	22.53	22.71	21.55	20.79	20.76	20.58	22.13	22.88	21.94	20.61	20.86	20.28
		1	214	22.49	22.54	21.69	19.63	19.56	19.54	22.08	22.20	22.75	19.53	19.66	19.28
		1	215	21.56	21.59	21.44	20.30	20.33	20.57	22.02	22.31	22.31	20.21	20.67	20.36
		108	54	22.26	22.36	21.71	20.33	20.40	20.42	22.65	22.29	21.89	19.87	20.04	20.07
		216	0	21.27	21.41	21.79	19.29	19.28	19.45	22.67	22.29	21.91	19.43	19.54	19.02
	64QAM	1	0	21.17	21.32	20.97	18.91	19.04	19.14	21.18	20.94	21.18	18.78	18.58	19.01
		1	1	21.03	21.19	21.27	19.20	19.12	19.52	21.18	21.49	21.19	18.66	18.84	18.99
		1	214	21.19	21.18	21.26	19.06	19.23	19.41	21.09	21.28	20.98	19.04	18.85	18.59
		1	215	21.21	21.18	21.16	19.06	18.99	19.26	21.09	21.54	21.18	18.81	18.71	19.12
		108	54	20.76	20.85	21.42	18.70	18.80	18.88	21.18	21.49	21.23	18.64	18.57	18.82
		216	0	20.74	20.86	21.40	18.80	18.90	18.97	21.28	21.49	21.38	18.96	19.00	18.67
	256QAM	1	0	19.19	19.38	18.95	17.12	17.09	17.16	19.18	18.94	19.41	16.92	16.80	17.14
		1	1	19.57	19.54	19.11	17.19	17.18	17.11	18.98	18.94	19.18	17.02	17.24	16.96
		1	214	18.71	18.91	19.23	17.23	17.00	17.17	19.19	19.58	19.25	17.04	16.93	16.93
		1	215	18.96	19.18	18.98	17.11	17.06	17.08	19.44	19.44	18.94	17.01	17.05	17.04
		108	54	18.61	18.78	19.23	16.72	16.86	16.85	19.13	19.32	19.18	16.72	16.75	16.79
		216	0	18.83	18.83	19.27	16.83	16.86	16.99	19.13	19.28	19.31	16.94	16.98	16.90

## 8.8. LTE BAND 26 (FCC Part 90S)

Test Engineer ID:	39004	Test Date:	4/12/2021
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### OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				26697	26740	26783	26697	26740	26783
1.4	QPSK	1	0	25.62	25.54	25.47	24.42	24.49	24.47
		1	2	25.70	25.57	25.51	24.52	24.59	24.57
		1	5	25.60	25.48	25.42	24.41	24.50	24.52
		3	0	25.58	25.57	25.43	24.40	24.55	24.52
		3	1	25.62	25.59	25.50	24.51	24.60	24.57
		3	2	25.58	25.57	25.49	24.51	24.53	24.54
	16QAM	6	0	24.62	24.58	24.55	23.55	23.60	23.60
		1	0	24.72	24.98	24.56	23.52	23.62	23.60
		1	2	24.78	25.02	24.69	23.67	23.73	23.72
		1	5	24.72	24.93	24.57	23.60	23.62	23.64
		3	0	24.70	24.78	24.71	23.74	23.79	23.81
		3	1	24.77	24.80	24.78	23.80	23.86	23.86
	64QAM	3	2	24.75	24.77	24.81	23.76	23.82	23.86
		6	0	23.77	23.48	23.72	22.76	22.77	22.79
		1	0	23.83	23.92	23.00	23.54	23.60	23.61
		1	2	23.93	23.67	23.05	23.68	23.71	23.73
		1	5	23.88	23.87	23.01	23.60	23.65	23.65
		3	0	23.67	23.76	22.75	23.63	23.70	23.74
	256QAM	3	1	23.82	23.84	22.82	23.70	23.74	23.74
		3	2	23.87	23.82	22.80	23.69	23.73	23.75
		6	0	22.86	22.82	21.86	22.52	22.55	22.59
		1	0	20.58	20.32	20.50	19.53	19.57	19.61
		1	2	20.76	20.33	20.59	19.70	19.73	19.74
		1	5	20.59	20.28	20.43	19.60	19.61	19.63
		3	0	20.52	20.38	20.56	19.70	19.73	19.76
		3	1	20.56	20.43	20.62	19.75	19.78	19.80
		3	2	20.57	20.46	20.62	19.75	19.75	19.80
		6	0	20.48	20.59	20.54	19.69	19.71	19.69

### OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				26705	26740	26775	26705	26740	26775
3.0	QPSK	1	0	25.68	25.66	25.69	24.57	24.62	24.63
		1	7	25.66	25.64	25.69	24.57	24.62	24.60
		1	14	25.60	25.68	25.70	24.54	24.64	24.62
		8	0	24.79	24.80	24.68	23.69	23.67	23.63
		8	4	24.82	24.78	24.76	23.72	23.74	23.75
		8	7	24.76	24.74	24.73	23.72	23.72	23.73
	16QAM	15	0	24.78	24.73	24.73	23.65	23.67	23.70
		1	0	24.85	24.70	25.09	23.71	23.70	23.71
		1	7	24.81	24.72	25.08	23.67	23.71	23.71
		1	14	24.74	24.72	25.16	23.62	23.74	23.72
		8	0	23.82	23.88	23.77	22.70	22.70	22.71
		8	4	23.86	23.87	23.83	22.73	22.78	22.82
	64QAM	8	7	23.81	23.88	23.85	22.72	22.79	22.79
		15	0	23.73	23.79	23.76	22.64	22.69	22.68
		1	0	23.91	23.92	23.72	23.74	23.73	23.78
		1	7	23.84	23.95	23.73	23.67	23.68	23.68
		1	14	23.81	23.95	23.75	23.66	23.75	23.73
		8	0	22.66	22.75	22.69	22.79	22.77	22.75
	256QAM	8	4	22.66	22.77	22.76	22.80	22.81	22.84
		8	7	22.68	22.76	22.71	22.80	22.83	22.84
		15	0	22.69	22.66	22.68	22.73	22.75	22.75
		1	0	20.64	21.12	20.45	19.68	19.68	19.72
		1	7	20.66	21.14	20.40	19.70	19.69	19.73
		1	14	20.63	21.12	20.36	19.66	19.66	19.68
		8	0	20.84	20.76	20.54	19.86	19.82	19.82
		8	4	20.83	20.78	20.65	19.89	19.87	19.93
		8	7	20.82	20.78	20.63	19.85	19.86	19.90
		15	0	20.76	20.71	20.80	19.80	19.80	19.79

**OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				26715	26740	26765	26715	26740	26765
5.0	QPSK	1	0	25.68	25.70	25.54	24.66	24.68	24.70
		1	12	25.64	25.65	25.60	24.69	24.68	24.67
		1	24	25.60	25.68	25.56	24.69	24.70	24.68
		12	0	24.68	24.61	24.56	23.70	23.70	23.68
		12	6	24.66	24.68	24.63	23.75	23.73	23.74
		12	11	24.60	24.58	24.56	23.71	23.66	23.67
		25	0	24.64	24.67	24.62	23.75	23.68	23.68
	16QAM	1	0	24.85	24.83	25.16	23.86	23.79	23.81
		1	12	24.83	24.82	25.17	23.92	23.85	23.91
		1	24	24.80	24.84	25.19	23.92	23.94	23.92
		12	0	23.73	23.68	23.75	22.76	22.74	22.75
		12	6	23.75	23.76	23.81	22.80	22.75	22.77
		12	11	23.68	23.72	23.75	22.76	22.71	22.72
		25	0	23.60	23.67	23.69	22.66	22.64	22.62
	64QAM	1	0	23.93	23.80	23.47	23.85	23.78	23.80
		1	12	23.93	23.83	23.43	23.86	23.81	23.80
		1	24	23.85	23.84	23.47	23.87	23.82	23.85
		12	0	22.51	22.60	22.57	22.69	22.62	22.68
		12	6	22.57	22.63	22.61	22.73	22.68	22.70
		12	11	22.52	22.59	22.53	22.67	22.62	22.62
		25	0	22.57	22.55	22.51	22.78	22.70	22.70
	256QAM	1	0	20.71	20.60	20.30	19.75	19.72	19.75
		1	12	20.71	20.59	20.29	19.79	19.75	19.77
		1	24	20.70	20.55	20.24	19.80	19.74	19.73
		12	0	20.61	20.53	20.53	19.74	19.69	19.68
		12	6	20.66	20.61	20.60	19.81	19.74	19.73
		12	11	20.63	20.57	20.53	19.79	19.68	19.67
		25	0	20.63	20.59	20.61	19.80	19.73	19.75

**OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				N/A	26740	N/A	N/A	26740	N/A
10.0	QPSK	1	0		25.70			24.50	
		1	24		25.65			24.51	
		1	49		25.60			24.47	
		25	0		24.73			23.58	
		25	12		24.80			23.66	
		25	24		24.73			23.58	
		50	0		24.78			23.63	
	16QAM	1	0		24.90			23.68	
		1	24		24.72			23.61	
		1	49		24.69			23.70	
		25	0		23.85			22.67	
		25	12		23.90			22.77	
		25	24		23.78			22.69	
		50	0		23.80			22.66	
	64QAM	1	0		23.88			23.70	
		1	24		23.87			23.60	
		1	49		23.79			23.59	
		25	0		22.74			22.69	
		25	12		22.80			22.77	
		25	24		22.73			22.68	
		50	0		22.70			22.69	
	256QAM	1	0		20.68			19.65	
		1	24		20.73			19.74	
		1	49		20.68			19.74	
		25	0		20.74			19.74	
		25	12		20.83			19.81	
		25	24		20.74			19.77	
		50	0		20.74			19.74	

## 8.9. LTE BAND 26 (FCC Part 22)

Test Engineer ID:	39004	Test Date:	4/12/2021
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### OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				26797	26915	27033	26797	26915	27033
1.4	QPSK	1	0	25.25	25.52	25.70	24.64	24.64	24.65
		1	2	25.33	25.65	25.70	24.70	24.70	24.67
		1	5	25.29	25.57	25.62	24.63	24.63	24.56
		3	0	25.33	25.52	25.60	24.59	24.52	24.53
		3	1	25.36	25.59	25.63	24.65	24.63	24.54
		3	2	25.35	25.62	25.59	24.62	24.61	24.57
		6	0	24.34	24.62	24.68	23.66	23.70	23.62
	16QAM	1	0	24.71	24.66	24.81	23.73	23.72	23.73
		1	2	24.85	24.79	24.85	23.84	23.86	23.79
		1	5	24.72	24.71	24.77	23.75	23.75	23.67
		3	0	24.54	24.80	24.78	23.77	23.69	23.63
		3	1	24.56	24.87	24.80	23.79	23.80	23.71
		3	2	24.59	24.92	24.76	23.74	23.79	23.65
		6	0	23.28	23.78	23.83	22.81	22.82	22.72
	64QAM	1	0	23.96	23.89	23.87	21.92	22.71	21.53
		1	2	23.76	23.81	23.80	22.28	22.81	21.82
		1	5	23.97	23.86	23.96	22.08	22.74	21.69
		3	0	23.61	23.84	23.92	22.10	22.72	21.73
		3	1	23.91	23.67	23.92	22.13	22.80	21.76
		3	2	23.67	23.96	23.95	22.14	22.79	21.80
		6	0	22.90	22.86	22.90	20.74	21.68	20.92
	256QAM	1	0	19.94	19.96	19.70	19.74	19.64	19.37
		1	2	20.06	20.13	20.12	19.90	19.75	19.81
		1	5	19.92	19.97	19.94	19.79	19.67	19.64
		3	0	20.08	19.85	19.84	19.68	19.74	19.54
		3	1	20.11	19.90	19.91	19.74	19.81	19.59
		3	2	20.08	19.97	19.90	19.75	19.80	19.60
		6	0	20.00	19.82	19.78	19.65	19.75	19.45

### OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				26805	26915	27025	26805	26915	27025
3.0	QPSK	1	0	25.63	25.63	25.70	24.62	24.66	24.62
		1	7	25.62	25.61	25.68	24.59	24.70	24.55
		1	14	25.67	25.65	25.66	24.62	24.66	24.58
		8	0	24.68	24.66	24.70	23.71	23.66	23.64
		8	4	24.75	24.69	24.72	23.71	23.70	23.64
		8	7	24.77	24.71	24.71	23.74	23.69	23.63
		15	0	24.75	24.71	24.71	23.72	23.67	23.64
	16QAM	1	0	24.72	24.68	25.11	23.70	24.02	23.62
		1	7	24.73	24.66	25.06	23.72	24.03	23.55
		1	14	24.75	24.65	25.03	23.73	24.07	23.56
		8	0	23.73	23.76	23.81	22.76	22.69	22.74
		8	4	23.79	23.76	23.79	22.78	22.80	22.72
		8	7	23.83	23.82	23.78	22.76	22.76	22.74
		15	0	23.69	23.73	23.76	22.64	22.67	22.68
	64QAM	1	0	23.87	23.96	23.97	22.72	22.75	22.73
		1	7	23.90	23.86	23.84	22.83	22.86	22.86
		1	14	23.95	23.98	23.86	22.93	22.91	22.83
		8	0	22.81	22.73	22.78	21.77	21.76	21.71
		8	4	22.87	22.72	22.85	21.76	21.81	21.73
		8	7	22.88	22.79	22.82	21.76	21.79	21.75
		15	0	22.84	22.81	22.72	21.66	21.69	21.67
	256QAM	1	0	20.55	20.70	21.26	20.13	20.12	20.25
		1	7	20.54	20.71	21.22	20.15	20.22	20.08
		1	14	20.48	20.70	21.14	20.09	20.24	20.05
		8	0	20.72	20.86	20.81	19.82	19.77	19.75
		8	4	20.76	20.82	20.85	19.82	19.85	19.78
		8	7	20.81	20.92	20.82	19.80	19.82	19.75
		15	0	20.89	20.83	20.76	19.74	19.74	19.72

**OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				26815	26915	27015	26815	26915	27015
5.0	QPSK	1	0	24.96	25.67	25.65	24.66	24.64	24.65
		1	12	25.06	25.64	25.65	24.62	24.65	24.58
		1	24	25.01	25.70	25.62	24.63	24.70	24.58
		12	0	23.04	24.69	24.70	23.57	23.53	23.53
		12	6	23.06	24.68	24.76	23.62	23.59	23.57
		12	11	24.73	24.72	24.64	23.53	23.55	23.49
		25	0	24.74	24.67	24.67	23.57	23.61	23.46
	16QAM	1	0	25.02	24.95	24.99	23.73	23.69	23.77
		1	12	25.03	25.03	25.00	23.72	23.78	23.71
		1	24	25.12	24.99	24.97	23.77	23.82	23.69
		12	0	23.75	23.72	23.73	22.60	22.65	22.58
		12	6	23.78	23.73	23.76	22.65	22.72	22.64
		12	11	23.77	23.76	23.71	22.58	22.66	22.57
		25	0	23.78	23.68	23.63	22.61	22.62	22.47
	64QAM	1	0	23.56	23.43	23.07	21.61	22.74	22.65
		1	12	23.63	23.48	23.12	22.69	22.77	22.67
		1	24	23.55	23.48	23.06	21.64	22.78	22.60
		12	0	22.20	22.24	22.18	20.63	21.56	21.54
		12	6	22.21	22.20	22.26	20.69	21.62	21.56
		12	11	22.14	22.19	22.16	20.65	21.54	21.50
		25	0	22.23	22.15	22.09	20.61	21.67	21.53
	256QAM	1	0	20.99	20.84	20.50	19.38	19.63	19.59
		1	12	20.97	20.82	20.52	19.35	19.63	19.58
		1	24	20.96	20.83	20.44	19.32	19.65	19.49
		12	0	20.87	20.79	20.74	19.60	19.58	19.55
		12	6	20.93	20.81	20.83	19.62	19.68	19.59
		12	11	20.85	20.78	20.74	19.58	19.59	19.55
		25	0	20.86	20.75	20.75	19.68	19.63	19.52

**OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				26840	26915	26990	26840	26915	26990
10.0	QPSK	1	0	25.70	25.68	25.63	24.70	24.62	24.30
		1	24	25.62	25.65	25.58	24.62	24.61	24.28
		1	49	25.57	25.61	25.58	24.65	24.57	24.20
		25	0	24.66	24.66	24.61	23.67	23.67	23.38
		25	12	24.74	24.65	24.71	23.74	23.74	23.37
		25	24	24.66	24.62	24.60	23.66	23.65	23.35
		50	0	24.70	24.58	24.61	23.72	23.71	23.37
	16QAM	1	0	24.90	24.99	24.90	23.74	23.74	23.51
		1	24	24.82	25.01	24.86	23.62	23.66	23.36
		1	49	24.85	24.89	24.84	23.66	23.63	23.39
		25	0	23.70	23.68	23.65	22.69	22.75	22.50
		25	12	23.77	23.68	23.73	22.77	22.86	22.49
		25	24	23.69	23.69	23.64	22.71	22.77	22.49
		50	0	23.70	23.59	23.61	22.69	22.72	22.47
	64QAM	1	0	23.98	23.98	23.75	22.69	22.77	22.52
		1	24	23.96	23.94	23.81	22.68	22.65	22.39
		1	49	23.91	23.79	23.77	22.69	22.65	22.43
		25	0	22.81	22.77	22.81	21.71	21.73	21.52
		25	12	22.91	22.73	22.83	21.79	21.81	21.50
		25	24	22.81	22.73	22.81	21.72	21.72	21.48
		50	0	22.80	22.66	22.69	21.75	21.74	21.45
	256QAM	1	0	20.76	21.13	20.43	19.77	19.68	19.49
		1	24	20.83	21.18	20.53	19.81	19.77	19.49
		1	49	20.81	21.19	20.48	19.75	19.90	19.41
		25	0	20.84	20.77	20.74	19.80	19.77	19.54
		25	12	20.88	20.73	20.85	19.87	19.86	19.55
		25	24	20.84	20.77	20.78	19.76	19.78	19.54
		50	0	20.82	20.73	20.65	19.78	19.79	19.47

## 8.10. LTE BAND 30 AND 5G NR n30

### LTE BAND 30

Test Engineer ID:		39004	Test Date:		3/7/2021							
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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			ANT 3			ANT 4		
				27685	27710	27735	27685	27710	27735	27685	27710	27735	27685	27710	27735
5.0	QPSK	1	0	25.52	25.54	25.41	23.01	22.85	22.97	22.27	21.99	21.99	23.02	22.99	22.99
		1	12	25.46	25.51	25.55	23.05	22.91	23.07	22.28	21.99	21.99	23.06	23.07	23.11
		1	24	25.55	25.65	25.70	23.17	23.06	23.20	22.30	22.03	22.07	23.18	23.20	23.20
		12	0	24.55	24.52	24.52	22.07	21.93	21.99	20.97	21.02	21.01	21.97	22.04	22.11
		12	6	24.56	24.57	24.58	22.17	22.02	22.07	21.02	21.07	21.04	22.04	22.14	22.19
		12	11	24.54	24.59	24.69	22.18	22.03	22.11	21.00	21.03	21.09	22.08	22.10	22.27
	16QAM	25	0	24.54	24.57	24.56	22.12	21.98	22.04	21.00	21.00	21.02	22.06	22.08	22.21
		1	0	24.66	24.69	24.96	22.17	22.01	22.12	21.11	21.11	21.09	22.18	22.15	22.28
		1	12	24.51	24.64	25.05	22.12	22.08	22.23	21.00	20.96	21.17	22.26	22.31	22.32
		1	24	24.65	24.79	25.23	22.27	22.25	22.34	21.04	21.10	21.17	22.30	22.36	21.88
		12	0	23.59	23.57	23.64	21.09	21.00	21.04	20.02	20.11	20.03	21.04	21.12	21.16
		12	6	23.63	23.65	23.72	21.20	21.10	21.14	20.08	20.12	20.10	21.16	21.20	21.18
	64QAM	12	11	23.63	23.64	23.79	21.21	21.06	21.19	20.01	20.12	20.16	21.22	21.20	21.04
		25	0	23.53	23.57	23.66	21.08	20.98	20.99	19.97	20.00	19.99	21.10	21.08	20.85
		1	0	23.35	23.71	23.48	21.51	21.27	21.35	20.35	20.35	20.30	21.02	20.90	20.14
		1	12	23.27	23.72	23.54	21.55	21.32	21.45	20.36	20.29	20.27	21.13	21.04	20.25
		1	24	23.40	23.86	23.73	21.65	21.45	21.58	20.36	20.38	20.42	21.18	21.10	19.91
		12	0	22.50	22.47	22.38	20.46	20.21	20.25	19.29	19.31	19.25	20.13	20.07	19.12
	256QAM	12	6	22.50	22.48	22.49	20.52	20.30	20.35	19.34	19.34	19.30	20.25	20.19	19.19
		12	11	22.50	22.49	22.59	20.56	20.29	20.41	19.29	19.33	19.33	20.25	20.21	19.10
		25	0	22.51	22.45	22.54	20.55	20.32	20.42	19.35	19.34	19.33	20.15	20.04	18.94
		1	0	20.23	20.55	20.46	18.21	17.94	18.02	17.10	17.09	17.07	17.84	17.78	18.09
		1	12	20.22	20.54	20.52	18.26	17.99	18.13	17.10	17.12	17.08	17.92	17.94	18.26
		1	24	20.29	20.67	20.69	18.34	18.10	18.24	17.10	17.14	17.16	17.98	17.97	18.27

### OUTPUT POWER FOR LTE BAND 30 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				N/A	27710	N/A	N/A	27710	N/A	N/A	27710	N/A	N/A	27710	N/A
10.0	QPSK	1	0	25.54				23.10			22.29			23.20	
		1	24	25.56				23.03			22.30			23.09	
		1	49	25.70				23.20			22.28			22.35	
		25	0	24.71				22.13			21.45			21.66	
		25	12	24.75				22.24			21.47			21.86	
		25	24	24.81				22.30			21.48			21.63	
	16QAM	50	0	24.78				22.23			21.46			21.42	
		1	0	24.69				22.13			21.44			22.13	
		1	24	24.68				22.08			21.41			22.11	
		1	49	24.87				22.20			21.42			22.05	
		25	0	23.82				21.15			20.52			21.24	
		25	12	23.87				21.28			20.59			21.16	
	64QAM	25	24	23.93				21.34			20.58			21.19	
		50	0	23.83				21.24			20.53			21.08	
		1	0	23.75				21.19			20.55			21.13	
		1	24	23.76				21.14			20.47			21.07	
		1	49	23.84				21.31			20.54			21.23	
		25	0	22.77				21.19			20.58			21.12	
	256QAM	25	12	22.78				21.30			20.60			21.24	
		25	24	22.85				21.37			20.58			21.28	
		50	0	22.72				21.29			20.57			21.21	
		1	0	20.65				18.21			17.56			18.12	
		1	24	20.68				18.25			17.61			18.18	
		1	49	20.85				18.38			17.62			18.33	
		25	0	20.79				18.27			17.64			18.16	
		25	12	20.81				18.38			17.68			18.29	
		25	24	20.89				18.40			17.67			18.34	
		50	0	20.78				18.32			17.64			18.28	

### 5G NR n30

Test Engineer ID:	19431	Test Date:	3/7/2021
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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			ANT 3			ANT 4		
				27685	27710	27735	27685	27710	27735	27685	27710	27735	27685	27710	27735
5.0	BPSK	1	0	20.51	20.77	20.65	18.73	18.81	18.89	17.64	17.12	17.21	18.24	18.54	18.97
		1	1	24.23	24.50	25.50	23.02	23.20	23.05	22.07	22.14	22.13	23.06	23.13	23.11
		1	23	24.22	24.52	25.70	22.98	23.10	23.12	22.25	22.30	22.19	23.15	23.20	23.14
		1	24	19.89	19.73	19.92	17.98	17.77	17.77	16.21	16.97	16.22	19.05	19.08	19.11
		12	6	23.91	24.48	24.56	22.95	23.00	23.08	21.86	22.01	22.01	22.86	23.17	22.86
	QPSK	25	0	24.75	24.73	24.72	22.18	22.23	22.25	21.65	21.36	21.28	22.12	22.27	22.17
		1	0	20.58	20.59	20.68	18.17	18.18	18.62	17.75	17.64	17.71	18.53	18.47	18.43
		1	1	24.35	24.24	24.53	22.78	22.85	22.86	22.00	21.74	22.07	23.01	23.00	23.08
		1	23	24.31	24.44	24.94	22.81	22.85	22.79	22.11	21.71	22.15	23.09	23.09	23.08
		1	24	19.74	19.75	19.88	17.58	17.23	17.57	16.65	16.55	16.66	19.47	19.51	19.75
	16QAM	12	6	23.50	24.33	23.40	22.39	22.70	22.67	21.44	21.71	21.22	22.11	23.00	22.44
		25	0	24.15	24.40	24.23	21.25	21.26	21.20	20.38	20.33	20.21	21.02	21.24	21.21
		1	0	20.46	20.72	20.87	18.51	18.22	17.81	17.40	17.46	17.74	18.42	18.62	18.54
		1	1	23.93	23.93	23.84	22.03	22.13	21.91	21.49	21.32	21.71	22.51	22.65	22.41
		1	23	24.01	23.96	24.23	22.15	21.96	22.07	21.64	21.24	21.67	22.50	22.72	22.63
	64QAM	1	24	19.61	19.49	19.97	17.80	16.89	16.98	16.89	16.16	16.81	19.73	19.72	19.73
		12	6	22.53	23.72	22.14	21.71	22.04	21.82	20.53	21.32	20.33	21.46	22.26	21.55
		25	0	23.50	23.64	23.38	20.17	20.21	20.24	19.24	19.24	19.37	20.08	20.20	20.07
		1	0	20.72	20.36	20.43	18.58	17.15	18.05	17.53	17.12	17.07	18.45	18.62	18.31
		1	1	22.30	22.17	21.64	21.06	20.83	20.96	20.16	20.60	20.32	21.25	21.29	21.20
	256QAM	1	23	22.17	22.22	22.43	21.01	20.91	20.99	20.29	20.53	20.34	21.27	21.23	21.18
		1	24	19.92	19.49	19.91	17.74	17.54	16.98	16.93	16.61	16.41	19.26	19.11	19.15
		12	6	22.10	22.25	21.53	20.99	21.04	21.04	20.07	20.42	20.08	20.96	20.85	20.94
		25	0	22.12	22.40	22.33	20.10	20.15	20.14	19.28	19.18	19.54	20.14	20.17	20.11
		1	0	20.52	20.19	20.63	17.90	17.33	18.46	17.05	17.73	17.07	18.42	18.76	18.47
	256QAM	1	1	19.85	20.35	21.15	19.28	19.81	19.05	18.00	18.71	18.05	18.82	19.09	18.84
		1	23	20.01	19.96	20.39	19.34	19.96	19.13	18.07	18.46	18.09	18.85	19.00	18.94
		1	24	19.74	19.64	19.69	17.20	16.64	17.51	16.14	16.74	16.23	19.21	19.28	19.01
		12	6	20.01	20.04	20.15	19.26	19.00	19.09	17.90	18.68	17.93	18.89	19.19	18.85
		25	0	20.62	20.45	20.60	18.16	19.32	18.20	17.54	17.48	17.92	18.78	18.48	18.28

### OUTPUT POWER FOR 5G NR n30 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				N/A	27710	N/A	N/A	27710	N/A	N/A	27710	N/A	N/A	27710	N/A
10.0	BPSK	1	0	19.86				17.25			16.41			17.29	
		1	1	25.46				22.87			22.12			23.16	
		1	51	19.77				16.51			16.13			17.10	
		1	50	25.59				22.94			22.26			22.99	
		25	12	25.60				23.20			22.30			23.20	
	QPSK	50	0	21.78				19.23			18.35			19.07	
		1	0	19.76				17.28			16.35			17.19	
		1	1	25.30				22.80			22.19			22.87	
		1	51	19.96				16.46			16.20			17.26	
		1	50	25.70				22.88			22.19			23.10	
	16QAM	25	12	25.36				23.19			22.18			22.52	
		50	0	21.55				19.14			18.17			19.01	
		1	0	19.52				17.26			16.37			17.80	
		1	1	24.60				21.82			21.07			22.03	
		1	51	19.58				16.69			16.29			17.74	
	64QAM	1	50	24.59				22.29			21.33			22.51	
		25	12	24.88				22.19			21.07			21.76	
		50	0	21.55				19.14			18.17			19.01	
		1	0	19.95				17.18			16.31			17.29	
		1	1	23.42				20.11			19.50			19.83	
	256QAM	1	51	20.05				16.67			16.35			17.08	
		1	50	23.29				20.54			19.57			20.15	
		25	12	22.98				20.66			19.75			20.22	
		50	0	21.67				19.18			18.28			19.17	
		1	0	19.41				17.24			16.26			17.76	
		1	1	20.91				18.41			17.84			19.13	
		1	51	19.88				16.60			16.08			17.41	
		1	50	22.03				18.21			17.74			18.74	
		25	12	21.05				18.64			17.68			18.81	
		50	0	21.27				18.82			17.83			18.67	

## 8.11. LTE BAND 41 AND 5G NR n41

### LTE BAND 41

Test Engineer ID:	39004	Test Date:	3/9/2021
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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				ANT 3			
				39675	40620	41565	39675	40620	41565	39675	40620	41565	39675	40620	41565
5.0	QPSK	1	0	24.99	27.44	27.08	21.98	24.92	24.73	23.39	26.46	26.35	22.27	24.99	24.92
		1	12	27.45	27.50	27.13	24.92	24.94	24.75	26.23	26.48	26.45	24.96	24.85	24.88
		1	24	27.50	27.49	27.06	25.00	24.96	24.77	26.50	26.49	26.36	25.00	24.89	24.91
		12	0	23.53	26.62	26.15	21.26	24.20	24.01	22.55	25.55	25.36	21.83	23.99	24.00
		12	6	23.52	26.58	26.18	21.27	24.17	23.98	22.64	25.51	25.44	21.87	24.00	23.97
		12	11	26.69	26.62	26.12	24.27	24.15	23.96	25.32	25.52	25.47	23.96	23.90	23.97
	16QAM	25	0	23.58	26.59	26.10	21.20	24.16	23.97	22.56	25.52	25.36	21.85	23.93	23.91
		1	0	23.95	26.61	26.50	21.14	24.30	24.11	22.86	25.85	25.79	21.75	24.25	24.24
		1	12	26.65	26.54	26.45	24.29	24.30	24.11	23.39	25.91	25.88	24.32	24.21	24.26
		1	24	26.43	26.62	26.45	24.44	24.35	24.16	25.70	25.88	25.85	24.42	24.18	24.18
		12	0	22.71	25.54	25.23	20.36	23.30	23.11	21.68	24.65	24.57	20.13	23.04	23.02
		12	6	22.75	25.59	25.25	20.36	23.34	23.15	21.80	24.64	24.58	20.16	23.01	23.04
	64QAM	12	11	25.77	25.49	25.25	23.31	23.28	23.09	24.42	24.59	24.64	23.06	22.97	23.06
		25	0	22.65	25.55	25.15	20.25	23.19	23.00	21.66	24.49	24.46	20.31	23.00	22.98
		1	0	22.30	25.57	25.22	20.09	23.40	23.21	21.92	24.47	24.51	20.81	23.21	23.18
		1	12	25.32	25.53	25.36	23.16	23.43	23.24	23.88	24.59	24.70	23.07	23.19	23.19
		1	24	24.99	25.55	25.18	23.23	23.42	23.23	23.86	24.40	24.56	23.70	23.10	23.12
		12	0	21.58	24.63	24.23	19.28	22.26	22.07	20.59	23.43	23.52	19.89	22.05	22.04
	256QAM	12	6	21.57	24.61	24.20	19.12	22.28	22.09	20.66	23.44	23.52	19.80	22.02	22.06
		12	11	24.25	24.62	24.18	22.32	22.27	22.08	23.33	23.40	23.59	22.46	22.00	22.12
		25	0	21.61	24.58	24.20	19.24	22.21	22.02	20.47	23.41	23.52	19.72	22.02	22.01
		1	0	19.94	22.76	22.53	17.14	20.47	20.28	18.74	21.75	21.87	17.09	20.31	20.26
		1	12	23.04	22.75	22.54	20.56	20.49	20.30	21.95	21.73	21.97	20.36	20.29	20.25
		1	24	23.08	22.71	22.55	20.48	20.42	20.23	21.93	21.75	21.99	20.47	20.18	20.23

### OUTPUT POWER FOR LTE BAND 41 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1				ANT 2				ANT 3			
				39700	40620	41540	39700	40620	41540	39700	40620	41540	39700	40620	41540
10.0	QPSK	1	0	22.59	27.50	27.49	20.05	24.98	24.89	21.39	26.34	26.46	20.53	24.81	24.77
		1	24	27.34	27.43	27.35	25.00	24.95	24.81	26.22	26.50	26.42	24.95	24.78	24.81
		1	49	27.48	27.44	27.48	24.92	24.90	24.77	26.12	26.47	26.13	25.00	24.69	24.77
		25	0	23.38	26.57	26.52	21.13	24.04	23.91	22.16	25.32	25.12	21.86	23.99	23.91
		25	12	26.49	26.57	26.54	24.26	24.03	23.92	25.67	25.33	25.12	24.07	23.95	23.91
		25	24	25.56	26.50	26.56	23.20	24.01	23.89	24.11	25.29	25.17	23.03	23.92	23.89
	16QAM	50	0	23.67	26.52	26.58	21.23	24.02	23.89	22.05	25.89	25.10	21.94	23.95	23.87
		1	0	21.02	26.93	26.40	19.16	24.42	24.26	20.67	25.22	25.59	19.08	24.25	24.23
		1	24	26.01	26.86	26.32	24.60	24.38	24.20	25.15	25.21	25.55	24.34	24.15	24.20
		1	49	26.12	26.84	26.31	24.74	24.46	24.24	25.45	25.21	25.65	24.55	24.10	24.31
		25	0	22.16	25.62	25.40	20.28	23.06	23.01	21.20	24.96	24.20	20.88	22.98	22.92
		25	12	25.59	25.66	25.41	23.27	23.12	23.03	24.71	24.78	24.26	23.03	22.94	22.99
	64QAM	25	24	24.67	25.61	25.41	22.19	23.10	23.02	23.23	24.67	24.29	22.02	22.89	22.94
		50	0	22.31	25.60	25.39	20.30	23.07	23.04	21.20	24.68	24.27	20.86	22.93	22.92
		1	0	20.19	25.14	25.59	18.21	23.00	23.06	19.83	24.93	24.26	18.26	23.02	23.01
		1	24	25.54	25.26	25.55	23.18	22.98	22.99	24.72	24.84	24.24	22.62	23.14	23.27
		1	49	25.51	25.35	25.51	23.27	22.99	23.04	24.14	24.93	24.26	22.98	23.12	23.34
		25	0	21.23	24.59	24.21	19.30	22.08	22.05	20.71	23.69	23.40	19.97	22.02	22.16
	256QAM	25	12	24.17	24.60	24.24	22.35	22.07	22.03	23.38	23.71	23.40	21.95	22.79	22.17
		25	24	23.25	24.56	24.17	21.24	22.06	22.04	22.45	23.67	23.47	21.14	22.72	22.70
		50	0	21.24	24.22	24.11	19.32	22.06	22.00	20.34	23.64	23.38	19.76	22.71	22.71
		1	0	17.40	22.56	22.33	15.40	20.19	20.02	16.49	21.79	21.52	15.82	20.23	20.05
		1	24	22.50	22.33	22.29	20.49	20.25	20.11	21.64	21.81	21.54	20.24	20.18	20.09
		1	49	22.54	22.37	22.25	20.34	20.18	20.02	21.57	21.72	21.54	20.23	20.05	20.00
		25	0	19.31	22.32	22.20	17.27	20.04	19.91	18.42	21.66	21.37	17.87	20.00	19.91
		25	12	22.32	22.40	22.22	20.31	20.08	20.00	21.52	21.70	21.40	19.99	20.00	19.97
		25	24	21.27	22.38	22.17	19.20	20.07	20.08	20.53	21.63	21.46	19.03	19.94	19.92
		50	0	19.44	22.47	22.25	17.32	20.05	19.95	18.67	21.69	21.47	17.14	19.98	19.94

**OUTPUT POWER FOR LTE BAND 41 (15.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				39725	40620	41515	39725	40620	41515	39725	40620	41515	39725	40620	41515
15.0	QPSK	1	0	22.41	27.50	27.37	20.08	24.95	24.88	21.65	26.24	26.50	20.49	24.74	24.82
		1	37	27.41	27.41	27.20	25.00	24.93	24.78	26.38	26.19	26.38	24.89	24.54	24.67
		1	74	27.40	27.47	27.23	24.91	24.97	24.91	26.38	26.34	26.43	25.00	24.56	24.74
		36	0	22.46	26.64	26.45	20.13	24.01	23.90	21.07	25.44	25.49	20.78	23.81	23.85
		36	16	26.59	26.68	26.38	24.23	23.99	23.89	25.17	25.43	25.48	24.14	23.72	23.89
		36	35	23.55	26.63	26.36	21.18	23.99	23.85	22.13	25.41	25.52	21.11	23.66	23.83
		75	0	22.54	26.68	26.38	20.12	24.00	23.83	21.18	25.46	25.48	20.77	23.71	23.82
		1	0	21.76	26.64	26.57	19.35	23.86	23.67	20.26	25.61	25.34	19.16	24.12	24.01
	16QAM	1	37	26.57	26.59	26.67	24.49	23.84	23.70	25.39	25.71	25.78	24.21	23.96	24.11
		1	74	26.58	26.00	26.59	24.46	23.90	23.79	25.67	25.83	25.82	24.27	23.94	24.09
		36	0	21.52	25.65	25.51	19.16	23.07	22.97	20.24	24.54	24.43	19.71	22.88	22.88
		36	16	25.61	25.70	25.47	23.19	23.04	22.91	24.31	24.59	24.40	23.11	22.80	22.90
		36	35	22.58	25.71	25.39	20.19	23.07	22.94	21.25	24.55	24.41	20.06	22.71	22.93
		75	0	21.51	25.62	25.40	19.22	22.93	22.95	20.34	24.57	24.37	19.01	22.75	22.93
		1	0	20.57	25.34	25.49	18.03	23.03	23.01	19.89	24.34	24.27	18.48	23.16	23.21
		1	37	25.68	25.38	25.50	23.04	23.01	22.93	24.67	24.27	24.23	22.82	23.24	23.14
	64QAM	1	74	25.56	25.60	25.49	23.02	23.07	23.03	24.33	24.39	24.34	22.84	23.16	23.17
		36	0	20.49	24.70	24.46	18.26	22.61	22.55	19.21	23.76	23.57	18.01	22.08	22.16
		36	16	24.60	24.79	24.43	22.33	22.60	22.52	23.46	23.71	23.56	22.19	22.16	22.22
		36	35	21.56	24.75	24.39	19.29	22.57	22.49	20.21	23.68	23.60	19.16	22.34	22.14
		75	0	20.57	24.66	24.45	18.26	22.53	22.49	19.20	23.67	23.46	18.01	22.72	22.79
		1	0	17.81	22.81	22.68	15.41	19.83	19.77	16.18	21.86	21.68	14.87	20.17	20.11
		1	37	22.77	22.79	22.58	20.33	19.72	19.57	21.29	21.72	21.62	20.18	19.89	19.95
		1	74	22.87	22.85	22.67	20.46	19.93	19.80	21.43	21.88	21.81	20.36	20.02	20.17
	256QAM	36	0	18.20	22.71	22.45	16.29	19.60	19.55	17.21	21.75	21.64	16.06	19.89	19.94
		36	16	22.40	22.80	22.47	20.31	19.58	19.52	21.29	21.70	21.62	20.16	19.80	19.89
		36	35	19.38	22.71	22.39	17.24	19.56	19.50	18.26	21.66	21.66	17.16	19.71	19.89
		75	0	18.46	22.78	22.40	16.30	19.64	19.56	17.34	21.73	21.62	16.07	19.81	19.94

**OUTPUT POWER FOR LTE BAND 41 (20.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				39750	40620	41490	39750	40620	41490	39750	40620	41490	39750	40620	41490
20.0	QPSK	1	0	22.38	27.50	27.20	20.20	24.98	24.98	21.44	26.50	26.00	20.48	24.83	24.70
		1	49	27.24	27.39	27.04	25.00	24.85	24.85	26.32	26.27	25.84	25.00	24.66	24.59
		1	99	27.14	27.31	26.99	25.00	24.96	25.00	26.41	26.34	25.88	24.97	24.53	24.72
		50	0	22.28	26.50	26.24	20.37	24.02	24.03	21.70	25.84	25.09	20.76	23.80	23.74
		50	24	26.37	26.47	26.24	24.28	24.04	24.04	25.77	25.82	25.12	24.01	23.71	23.76
		50	49	23.30	26.45	26.12	21.26	24.02	23.98	22.77	25.81	25.28	21.11	23.63	23.75
		100	0	22.34	26.50	26.20	20.29	24.05	24.00	21.73	25.83	25.32	20.16	23.71	23.79
		1	0	21.66	26.97	26.56	19.72	24.51	24.45	20.33	25.57	25.08	19.08	24.19	23.92
	16QAM	1	49	26.71	26.78	26.39	24.71	24.34	24.27	25.55	25.42	25.94	24.06	23.86	23.98
		1	99	26.66	26.81	26.35	24.69	24.47	24.38	25.64	25.47	25.10	24.22	23.78	24.02
		50	0	21.38	25.56	25.28	19.46	23.14	23.14	20.82	24.82	24.96	19.01	22.82	22.79
		50	24	25.44	25.59	25.24	23.34	23.14	23.10	24.86	24.87	24.94	23.06	22.70	22.78
		50	49	22.36	25.53	25.18	20.33	23.11	23.04	21.88	24.86	24.01	20.10	22.62	22.78
		100	0	21.33	25.56	25.18	19.31	23.10	22.99	20.77	24.87	24.95	19.12	22.71	22.78
		1	0	20.56	25.81	25.83	18.51	23.15	23.06	19.85	24.70	24.43	18.24	23.07	23.17
		1	49	25.56	25.81	25.65	23.53	22.94	22.97	24.24	24.59	24.29	23.07	23.12	23.13
	64QAM	1	99	25.41	25.79	25.61	23.51	23.03	23.04	24.47	24.64	24.43	23.05	23.09	23.12
		50	0	20.40	24.51	24.32	18.42	22.03	22.04	19.83	23.52	23.20	18.13	22.84	22.73
		50	24	24.41	24.54	24.30	22.36	22.15	22.01	23.31	23.51	23.22	22.14	22.74	22.77
		50	49	21.37	24.49	24.20	19.30	22.15	22.04	20.90	23.53	23.26	19.18	22.67	22.77
		100	0	20.45	24.56	24.26	18.32	22.12	22.00	19.83	23.56	23.24	18.10	22.78	22.69
		1	0	17.68	22.76	22.59	15.82	20.66	20.51	16.69	21.66	21.38	15.07	20.49	20.18
		1	49	22.77	22.66	22.38	20.78	20.52	20.31	21.85	21.51	21.31	20.45	20.15	20.10
		1	99	22.78	22.63	22.38	20.89	20.67	20.49	21.99	21.57	21.35	20.51	20.21	20.28
	256QAM	50	0	18.28	22.50	22.33	16.47	20.22	20.09	17.68	21.41	20.94	16.00	19.89	19.81
		50	24	22.41	22.53	22.29	20.36	20.17	20.09	21.66	21.37	21.10	20.06	19.80	19.81
		50	49	19.43	22.48	22.23	17.34	20.23	20.08	18.72	21.29	21.13	17.19	19.72	19.84
		100	0	18.38	22.51	22.25	16.36	20.18	20.12	17.63	21.35	21.12	16.10	19.81	19.84

## 5G NR n41

Test Engineer ID:		18862	Test Date:		5/29/2021									
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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			ANT 4			ANT 3		
				501200	518600	536000	501200	518600	536000	501200	518600	536000	501200	518600	536000
20.0	BPSK	1	0	21.70	24.08	24.05	20.20	22.02	21.93	20.43	23.01	23.09	19.39	21.85	21.90
		1	1	21.73	27.70	27.40	20.11	25.53	25.43	20.54	26.65	26.89	19.30	24.70	24.53
		1	49	27.18	27.59	27.67	25.70	25.54	25.24	26.66	26.56	27.20	24.45	24.52	24.63
		1	50	23.68	23.94	23.94	22.15	21.96	21.80	23.05	23.07	23.27	21.69	21.80	21.75
		25	12	23.81	27.62	27.39	22.15	25.55	25.33	22.82	26.40	26.76	21.57	24.55	24.47
	QPSK	50	0	23.61	27.13	26.95	22.18	25.07	24.85	22.74	25.89	26.24	21.60	24.51	24.45
		1	0	21.21	24.12	24.08	19.63	21.97	21.87	19.94	23.12	23.04	18.89	21.79	21.90
		1	1	21.25	27.60	27.50	19.57	25.45	25.33	19.90	26.57	26.74	18.89	24.56	24.51
		1	49	27.13	27.67	27.60	25.64	25.50	25.17	26.44	26.47	26.88	24.74	24.41	24.50
		1	50	23.69	24.03	24.00	22.13	21.87	21.74	22.92	22.96	23.32	21.80	21.77	21.79
	16QAM	25	12	22.65	27.66	27.50	21.19	25.58	25.32	21.63	26.37	26.64	20.60	24.54	24.42
		50	0	22.59	26.58	26.40	21.20	24.58	24.32	21.72	25.35	25.79	20.59	24.23	24.25
		1	0	21.51	24.33	24.22	19.62	22.36	22.16	20.26	22.73	22.77	18.45	22.29	22.17
		1	1	21.47	26.86	26.64	19.67	24.82	24.59	20.21	25.37	25.81	19.21	24.34	24.06
		1	49	26.33	26.54	26.70	24.84	24.79	24.39	25.59	25.27	25.96	24.42	24.29	24.10
	64QAM	1	50	23.88	24.18	24.12	22.05	22.23	21.99	23.22	22.73	22.97	21.95	21.94	21.71
		25	12	22.15	26.63	26.44	20.67	24.58	24.37	21.19	25.40	25.89	20.11	24.20	24.14
		50	0	23.81	25.68	25.37	20.73	23.64	23.34	22.82	24.30	24.64	20.27	23.25	23.25
		1	0	20.93	24.26	24.20	18.96	22.07	21.84	19.54	22.76	22.86	18.12	21.63	21.80
		1	1	20.91	25.32	25.27	19.08	22.89	22.73	19.49	23.71	23.92	18.23	22.82	22.39
	256QAM	1	49	24.72	25.28	25.08	23.11	23.07	22.71	23.75	23.64	23.98	22.46	22.70	22.41
		1	50	23.80	24.22	24.08	22.10	21.91	21.68	22.76	22.58	22.82	21.21	21.76	21.39
		25	12	22.16	25.17	24.89	20.72	23.10	22.84	21.24	23.91	24.20	20.13	22.75	22.70
		50	0	22.06	24.98	24.88	20.74	23.10	22.83	21.16	23.83	24.02	20.16	22.70	22.75
		1	0	18.98	23.02	22.64	17.68	21.28	21.16	18.13	22.33	22.26	16.82	21.06	20.81
	256QAM	1	1	19.15	23.00	22.71	17.67	21.22	21.03	18.00	22.30	22.64	16.83	20.71	20.81
		1	49	22.32	22.75	22.70	21.26	21.29	20.90	22.04	22.34	22.79	20.74	20.71	20.75
		1	50	22.30	22.66	22.70	21.35	21.18	20.92	22.24	22.29	22.58	20.74	20.67	20.83
		25	12	20.71	23.22	22.97	19.06	21.03	20.80	19.72	21.94	22.24	18.59	20.69	20.73
		50	0	20.62	23.06	22.87	18.22	21.07	20.81	19.64	21.83	21.92	18.73	20.73	20.76

### OUTPUT POWER FOR 5G NR n41 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 2			ANT 1			ANT 4			ANT 3		
				502200	518600	535000	502200	518600	535000	502200	518600	535000	502200	518600	535000
30.0	BPSK	1	0	21.75	24.07	24.19	20.67	21.74	21.60	20.67	23.22	23.44	19.33	21.66	21.55
		1	1	21.84	27.52	27.54	20.57	25.20	25.13	20.71	26.76	26.87	19.27	24.40	24.41
		1	76	27.36	27.47	27.70	25.70	25.18	24.87	26.75	26.73	27.10	24.70	24.43	24.43
		1	77	23.72	23.85	24.17	20.99	21.72	21.53	23.17	23.25	23.60	22.00	21.60	21.66
		36	18	23.44	27.33	27.45	20.72	25.09	24.72	22.85	26.53	26.87	21.51	24.20	24.20
	QPSK	75	0	23.58	26.94	27.11	20.69	24.62	24.28	22.79	26.05	26.21	21.60	24.33	24.30
		1	0	21.27	23.89	24.04	20.66	21.70	21.62	20.11	23.14	23.43	18.73	21.73	21.54
		1	1	21.25	27.27	27.44	18.33	25.26	25.04	20.21	26.73	26.99	18.88	24.35	24.30
		1	76	27.24	27.28	27.63	25.55	25.23	24.60	26.77	26.60	27.20	24.51	24.47	24.40
		1	77	23.55	23.82	24.09	23.27	21.75	21.55	23.18	23.26	23.53	21.92	21.71	21.55
	16QAM	36	18	22.47	27.34	27.55	19.98	25.12	24.66	21.79	26.49	26.74	20.53	24.24	24.24
		75	0	22.51	26.36	26.57	20.05	24.13	23.75	21.81	25.54	25.83	20.55	23.95	23.95
		1	0	21.55	24.14	24.26	20.22	21.80	22.00	20.06	22.87	23.15	18.68	21.44	21.40
		1	1	21.51	26.46	26.60	20.37	24.66	24.49	20.11	25.59	25.65	18.66	24.03	23.86
		1	76	26.44	26.43	26.61	25.03	24.50	23.82	25.45	25.44	25.83	24.25	24.01	23.94
	64QAM	1	77	23.94	23.91	24.22	20.96	22.12	21.84	22.76	22.86	23.39	21.86	21.45	21.57
		36	18	21.96	26.27	26.51	18.99	24.12	23.78	21.31	25.46	25.69	20.10	23.96	23.97
		75	0	23.44	25.38	25.61	19.10	23.11	22.89	22.85	24.52	24.81	20.07	23.02	23.04
		1	0	20.81	24.12	24.48	17.56	22.09	21.80	20.00	23.55	23.81	17.90	21.31	21.23
		1	1	20.77	25.22	25.27	17.56	22.86	22.91	19.95	24.26	24.52	17.96	22.38	22.33
	256QAM	1	76	24.85	25.16	25.48	23.25	22.95	22.18	24.18	24.47	24.55	22.47	22.11	22.42
		1	77	23.69	24.15	24.40	20.71	21.97	21.72	23.36	23.53	23.79	21.61	21.22	21.23
		36	18	21.92	24.86	25.00	18.95	22.61	22.27	21.27	23.88	24.19	20.02	22.41	22.42
		75	0	22.06	24.82	25.08	19.07	22.63	22.32	21.36	23.97	24.34	20.01	22.55	22.46
		1	0	19.15	23.12	23.45	16.17	20.64	20.63	18.26	22.12	22.56	16.87	20.74	20.70
	256QAM	1	1	19.02	23.17	23.14	16.20	20.55	20.72	18.30	22.27	22.33	16.60	20.76	20.68
		1	76	22.36	23.04	23.23	20.96	20.67	20.81</						







## 8.12. LTE BAND 48

Test Engineer ID:	39004	Test Date:	3/9/2021
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### OUTPUT POWER FOR LTE BAND 48 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 7			ANT 8			ANT 9			ANT 4		
				55265	55990	56715	55260	55990	56715	55265	55990	56715	55260	55990	56715
5.0	QPSK	1	0	25.53	25.60	25.60	22.91	22.88	22.93	25.20	25.10	25.16	22.40	22.36	22.50
		1	12	25.43	25.55	25.40	22.94	22.74	22.90	25.02	25.00	25.03	22.38	22.36	22.40
		1	24	25.59	25.55	25.56	23.00	22.90	22.99	25.16	25.17	25.20	22.49	22.50	22.50
		12	0	24.54	24.69	24.54	22.05	21.94	21.96	24.16	24.13	24.18	21.52	21.50	21.54
		12	6	24.52	24.72	24.56	22.00	21.90	21.95	24.16	24.09	24.11	21.47	21.48	21.52
		12	11	24.52	24.67	24.50	22.02	21.91	21.97	24.17	24.10	24.13	21.47	21.49	21.53
		25	0	24.51	24.69	24.59	22.00	21.90	21.94	24.14	24.13	24.10	21.51	21.45	21.50
	16QAM	1	0	24.92	24.94	24.85	22.37	22.20	22.38	24.75	24.50	24.56	21.83	21.83	21.91
		1	12	24.84	24.89	24.75	22.35	22.17	22.26	24.62	24.40	24.45	21.81	21.81	21.84
		1	24	24.95	24.96	24.85	22.44	22.27	22.36	24.71	24.60	24.59	21.90	21.92	21.96
		12	0	23.64	23.75	23.58	21.15	20.98	21.07	23.46	23.22	23.24	20.62	20.65	20.62
		12	6	23.65	23.70	23.55	21.11	20.98	21.02	23.43	23.22	23.28	20.65	20.58	20.65
		12	11	23.60	23.74	23.53	21.11	20.99	21.04	23.46	23.25	23.27	20.65	20.60	20.65
		25	0	23.52	23.69	25.20	21.03	20.92	20.92	23.38	23.14	23.17	20.52	20.49	20.56
	64QAM	1	0	23.77	23.47	23.46	21.19	21.21	21.23	23.34	22.99	23.02	20.77	20.74	20.84
		1	12	23.57	23.23	23.38	21.16	21.18	21.17	23.19	22.88	22.94	20.70	20.70	20.70
		1	24	23.73	23.00	23.40	21.21	21.28	21.23	23.27	22.98	23.03	20.78	20.80	20.79
		12	0	21.86	22.56	22.46	20.04	19.98	20.03	22.09	21.82	21.89	19.62	19.61	19.61
		12	6	21.82	22.57	22.42	20.05	20.02	20.01	22.12	21.85	21.86	19.60	19.55	19.64
		12	11	22.77	22.58	22.40	20.06	19.96	20.03	22.07	21.81	21.86	19.60	19.57	19.61
		25	0	22.79	22.57	22.41	20.03	19.99	19.99	22.10	21.86	21.86	19.64	19.60	19.61
	256QAM	1	0	22.07	22.06	21.85	18.20	18.17	18.24	20.68	20.37	20.40	17.79	17.72	17.82
		1	12	22.06	22.05	21.81	18.22	18.17	18.17	20.63	20.36	20.38	17.83	17.71	17.79
		1	24	22.08	21.92	21.81	18.25	18.23	18.22	20.62	20.40	20.45	17.81	17.80	17.83
		12	0	21.94	21.69	21.48	18.02	17.98	17.97	20.47	20.16	20.20	17.63	17.55	17.60
		12	6	21.91	21.66	21.50	18.02	17.95	17.99	20.41	20.14	20.17	17.60	17.52	17.58
		12	11	21.94	21.66	21.45	17.98	17.96	17.98	20.43	20.14	20.19	17.61	17.52	17.60
		25	0	21.90	21.69	21.49	17.94	17.93	17.97	20.40	20.13	20.14	17.56	17.48	17.56

### OUTPUT POWER FOR LTE BAND 48 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 7			ANT 8			ANT 9			ANT 4		
				55290	55990	56690	55290	55990	56690	55290	55990	56690	55290	55990	56690
10.0	QPSK	1	0	25.60	25.54	23.00	22.98	22.95	25.17	25.04	25.20	22.50	22.42	22.37	
		1	24	25.56	25.50	25.46	22.97	22.91	22.91	25.12	25.01	25.14	22.41	22.39	22.32
		1	49	25.56	25.50	25.51	22.94	22.96	22.98	25.07	25.13	25.19	22.44	22.39	22.39
		25	0	24.69	24.79	24.53	22.15	22.16	22.03	24.25	24.25	24.37	21.62	21.54	21.46
		25	12	24.69	24.76	24.51	22.10	22.15	22.07	24.26	24.28	24.39	21.62	21.58	21.49
		25	24	24.64	24.74	24.56	22.09	22.14	22.13	24.19	24.28	24.37	21.53	21.50	21.54
		50	0	24.66	24.77	24.48	22.11	22.15	22.09	24.27	24.32	24.40	21.61	21.54	21.50
	16QAM	1	0	25.06	25.07	24.87	22.54	22.41	22.43	24.74	24.51	24.66	22.02	21.89	21.83
		1	24	24.91	24.95	24.71	22.42	22.34	22.38	24.58	24.48	24.55	21.87	21.78	21.76
		1	49	25.00	24.99	24.76	22.49	22.42	22.44	24.65	24.59	24.68	21.98	21.92	21.84
		25	0	23.72	23.81	23.49	21.14	21.17	21.07	23.29	23.31	23.44	20.65	20.60	20.50
		25	12	23.75	23.81	23.50	21.15	21.17	21.10	23.30	23.37	23.41	20.68	20.64	20.51
		25	24	23.68	23.78	23.52	21.15	21.16	21.24	23.34	23.41	23.41	20.63	20.61	20.57
		50	0	23.71	23.76	23.69	21.15	21.10	21.05	23.27	23.30	23.39	20.64	20.58	20.46
	64QAM	1	0	23.88	23.54	23.60	20.67	19.94	19.96	23.51	23.50	23.61	20.63	20.54	20.61
		1	24	23.83	23.46	23.88	20.76	19.91	19.92	23.38	23.42	23.50	20.51	20.48	20.52
		1	49	23.73	23.47	23.95	20.81	19.97	19.98	23.41	23.51	23.58	20.59	20.56	20.61
		25	0	22.87	22.79	22.49	20.11	19.20	19.12	22.53	22.56	22.65	19.68	19.62	19.58
		25	12	22.82	22.79	22.49	20.13	19.23	19.17	22.50	22.56	22.68	19.67	19.61	19.60
		25	24	22.81	22.74	22.53	20.08	19.17	19.22	22.50	22.59	22.69	19.63	19.61	19.66
		50	0	22.85	22.70	22.43	20.08	19.17	19.10	22.49	22.58	22.62	19.65	19.61	19.52
	256QAM	1	0	21.96	21.90	21.33	18.17	18.31	18.33	20.36	20.35	20.52	17.68	17.65	17.69
		1	24	21.98	21.80	21.33	18.23	18.25	18.31	20.39	20.46	20.56	17.70	17.72	17.78
		1	49	21.92	21.87	21.37	18.19	18.40	18.39	20.33	20.43	20.51	17.67	17.74	17.75
		25	0	21.82	21.68	21.52	18.06	18.12	18.07	20.25	20.27	20.39	17.56	17.55	17.53
		25	12	21.85	21.73	21.48	18.13	18.18	18.12	20.30	20.31	20.39	17.61	17.61	17.57
		25	24	21.79	21.63	21.56	18.06	18.14	18.15	20.22	20.30	20.40	17.57	17.58	17.61
		50	0	21.87	21.71	21.40	18.13	18.16	18.12	20.29	20.34	20.44	17.59	17.61	17.52

**OUTPUT POWER FOR LTE BAND 48 (15.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 7			ANT 8			ANT 9			ANT 4		
				55315	55990	56665	55315	55990	56665	55315	55990	56665	55315	55990	56665
15.0	QPSK	1	0	25.57	25.59	25.57	23.00	22.89	22.86	25.14	24.88	22.50	22.36	22.48	
		1	37	25.46	25.58	25.52	22.89	22.82	22.82	25.02	25.13	24.93	22.41	22.33	22.40
		1	74	25.57	25.60	25.53	22.97	22.95	22.95	25.13	25.20	25.15	22.50	22.47	22.48
		36	0	24.69	24.78	24.75	22.05	21.97	22.00	24.28	24.18	24.37	21.59	21.53	21.56
		36	16	24.71	24.76	24.75	22.05	21.97	21.98	24.28	24.16	24.40	21.61	21.57	21.50
		36	35	24.65	24.71	24.73	22.04	21.98	22.02	24.24	24.11	24.42	21.59	21.58	21.59
		75	0	24.66	24.75	24.76	22.06	21.97	21.97	24.29	24.26	24.45	21.59	21.60	21.50
	16QAM	1	0	24.98	25.12	25.05	22.40	22.29	22.27	24.58	24.65	24.77	21.90	21.80	21.86
		1	37	24.95	25.04	24.98	22.32	22.28	22.33	24.57	24.56	24.78	21.84	21.85	21.87
		1	74	25.02	24.99	25.00	22.43	22.36	22.37	24.56	24.59	24.87	21.94	21.87	21.90
		36	0	23.69	23.82	23.72	21.07	20.99	20.93	23.20	23.48	23.47	20.62	20.51	20.54
		36	16	23.69	23.87	23.75	21.12	21.05	20.95	23.24	23.44	23.50	20.68	20.63	20.54
		36	35	23.62	23.78	23.70	21.09	21.02	20.98	23.19	23.38	23.51	20.65	20.56	20.55
		75	0	23.70	23.79	23.76	21.06	21.00	20.98	23.32	23.40	23.57	20.64	20.60	20.55
	64QAM	1	0	23.79	23.75	23.83	21.42	21.35	21.41	23.52	23.63	23.69	20.79	20.72	20.76
		1	37	23.80	23.68	23.80	21.35	21.28	21.33	23.40	23.49	23.65	20.69	20.68	20.71
		1	74	23.56	23.75	23.04	21.45	21.42	21.51	23.45	23.53	23.74	20.81	20.79	20.83
		36	0	22.88	23.04	22.54	20.25	20.20	20.23	22.28	22.59	22.63	19.66	19.60	19.63
		36	16	22.82	23.07	22.59	20.27	20.23	20.17	22.31	22.49	22.62	19.66	19.66	19.58
		36	35	22.86	23.01	22.60	20.27	20.25	20.27	22.29	22.47	22.62	19.68	19.66	19.64
		75	0	22.87	22.95	22.57	20.18	20.14	20.12	22.23	22.41	22.54	19.58	19.57	19.49
	256QAM	1	0	21.10	21.10	20.27	18.26	18.23	18.27	20.54	20.76	20.82	17.82	17.73	17.82
		1	37	21.00	20.95	20.25	18.21	18.16	18.27	20.46	20.64	20.80	17.77	17.73	17.77
		1	74	21.12	21.10	20.35	18.37	18.37	18.44	20.64	20.75	20.94	17.90	17.87	17.88
		36	0	20.87	20.99	20.51	17.95	17.94	18.02	20.27	20.57	20.61	17.56	17.53	17.55
		36	16	20.80	20.98	20.51	17.98	17.97	18.00	20.25	20.53	20.65	17.61	17.57	17.51
		36	35	20.74	20.96	20.50	18.00	17.97	18.06	20.27	20.45	20.62	17.57	17.58	17.58
		75	0	20.82	21.01	20.52	18.03	18.03	18.05	20.31	20.53	20.65	17.63	17.60	17.56

**OUTPUT POWER FOR LTE BAND 48 (20.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 7			ANT 8			ANT 9			ANT 4		
				55340	55990	56640	55340	55990	56640	55340	55990	56640	55340	55990	56640
20.0	QPSK	1	0	25.60	25.56	25.58	23.00	22.92	22.94	25.15	25.07	25.20	22.50	22.48	22.45
		1	49	25.39	25.38	25.34	22.82	22.78	22.81	24.94	24.94	25.08	22.31	22.36	22.32
		1	99	25.37	25.34	25.35	22.89	22.88	22.88	25.09	25.17	25.18	22.41	22.47	22.40
		50	0	24.45	24.51	24.54	21.86	21.90	21.93	24.08	24.06	24.22	21.42	21.48	21.42
		50	24	24.53	24.58	24.55	21.92	21.97	21.99	24.09	24.17	24.28	21.52	21.59	21.51
		50	49	24.44	24.49	24.49	21.89	21.98	21.97	24.09	24.23	24.27	21.47	21.54	21.45
		100	0	24.50	24.57	24.53	21.94	22.00	22.02	24.10	24.17	24.25	21.48	21.56	21.47
	16QAM	1	0	24.75	24.83	24.70	22.43	22.24	22.30	24.61	24.54	24.67	21.97	21.98	21.90
		1	49	24.55	24.85	24.74	22.25	22.12	22.11	24.40	24.44	24.56	21.79	21.84	21.78
		1	99	24.55	24.83	24.74	22.36	22.22	22.19	24.57	24.64	24.68	21.90	21.96	21.85
		50	0	23.51	23.59	23.53	20.96	20.89	20.92	23.20	23.12	23.32	20.50	20.53	20.48
		50	24	23.55	23.61	23.53	21.02	20.99	21.02	23.19	23.22	23.39	20.60	20.59	20.58
		50	49	23.50	23.58	23.51	20.95	20.96	20.98	23.17	23.30	23.33	20.54	20.58	20.51
		100	0	23.55	23.53	23.53	20.94	20.97	20.97	23.09	23.15	23.27	20.48	20.51	20.47
	64QAM	1	0	23.37	23.35	23.56	20.98	20.94	21.02	23.10	23.02	23.15	20.78	20.77	20.82
		1	49	23.25	23.20	23.21	20.74	20.78	20.80	22.88	22.95	23.07	20.56	20.62	20.69
		1	99	23.29	23.21	23.28	20.83	20.92	20.92	23.05	23.11	23.16	20.64	20.75	20.66
		50	0	22.15	22.06	21.85	19.56	19.59	19.62	21.84	21.76	21.99	19.42	19.50	19.43
		50	24	22.22	22.08	21.88	19.62	19.72	19.70	21.84	21.91	22.04	19.53	19.55	19.53
		50	49	22.13	22.02	21.87	19.61	19.69	19.70	21.83	21.92	21.99	19.49	19.55	19.48
		100	0	22.18	22.12	21.87	19.62	19.69	19.70	21.80	21.87	21.98	19.51	19.55	19.48
	256QAM	1	0	21.20	21.23	20.82	18.40	18.44	18.50	20.66	20.54	20.77	17.96	17.96	17.94
		1	49	20.99	21.09	20.66	18.32	18.34	18.41	20.48	20.53	20.70	17.78	17.83	17.83
		1	99	20.99	21.10	20.69	18.43	18.49	18.50	20.65	20.75	20.81	17.90	18.02	17.89
		50	0	20.80	20.69	20.54	17.88	17.93	18.00	20.17	20.13	20.30	17.47	17.47	17.43
		50	24	20.86	20.70	20.57	17.92	17.98	18.06	20.14	20.19	20.30	17.50	17.50	17.46
		50	49	20.81	20.64	20.52	17.94	17.99	18.05	20.19	20.29	20.36	17.51	17.57	17.47
		100	0	20.85	20.72	20.52	17.96	18.00	18.07	20.18	20.26	20.34	17.53	17.52	17.49

## 8.13. LTE BAND 66 AND 5G NR n66

### LTE BAND 66

Test Engineer ID:	39004	Test Date:	3/17/2021
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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			ANT 3			ANT 4		
				131979	132322	132665	131979	132322	132665	131979	132322	132665	131979	132322	132665
1.4	QPSK	1	0	25.60	25.60	25.65	23.38	23.55	23.51	25.13	25.13	25.17	23.65	23.60	23.63
		1	2	25.63	25.69	25.70	23.44	23.70	23.52	25.20	25.19	25.20	23.70	23.67	23.70
		1	5	25.62	25.57	25.63	23.38	23.53	23.48	25.13	25.11	25.11	23.65	23.62	23.64
		3	0	25.52	25.62	25.60	23.36	23.52	23.49	25.06	25.09	25.13	23.60	23.63	23.65
		3	1	25.61	25.66	25.64	23.41	23.54	23.51	25.09	25.17	25.15	23.66	23.64	23.70
		3	2	25.61	25.67	25.66	23.41	23.56	23.51	25.11	25.18	25.18	23.65	23.63	23.68
		6	0	25.15	25.22	25.17	22.43	22.55	22.54	24.14	24.21	24.21	22.68	22.64	22.72
	16QAM	1	0	25.27	25.23	25.21	22.49	22.94	22.59	24.26	24.23	24.24	22.82	22.99	22.77
		1	2	25.33	25.33	25.32	22.58	22.97	22.66	24.31	24.32	24.34	22.87	22.61	22.84
		1	5	25.29	25.24	25.22	22.52	22.93	22.58	24.28	24.24	24.26	22.80	22.99	22.79
		3	0	25.18	25.41	25.36	22.66	22.79	22.72	24.22	24.39	24.40	22.74	22.84	22.96
		3	1	25.29	25.46	25.41	22.71	22.80	22.79	24.26	24.45	24.44	22.82	22.91	22.98
		3	2	25.27	25.44	25.42	22.69	22.81	22.81	24.28	24.45	24.44	22.79	22.89	23.02
		6	0	24.32	24.39	24.34	21.66	21.51	21.72	23.33	23.38	23.41	21.80	21.60	21.93
	64QAM	1	0	23.16	23.78	23.68	21.77	21.81	21.80	23.24	23.32	23.29	21.85	21.79	21.88
		1	2	23.24	23.79	23.75	21.83	21.89	21.86	23.32	23.35	23.32	21.96	21.92	21.89
		1	5	23.27	23.78	23.62	21.77	21.82	21.80	23.25	23.30	23.29	21.85	21.82	21.88
		3	0	23.20	23.52	23.67	21.80	21.86	21.87	23.28	23.36	23.36	21.74	21.72	21.94
		3	1	23.32	23.59	23.74	21.85	21.92	21.89	23.32	23.41	23.41	21.77	21.80	21.99
		3	2	23.28	23.57	23.74	21.85	21.91	21.90	23.34	23.37	23.43	21.78	21.78	21.87
		6	0	22.42	22.62	22.84	20.68	20.72	20.69	22.13	22.16	22.19	20.74	20.70	20.76
	256QAM	1	0	21.36	21.28	20.98	18.51	18.59	18.58	20.16	20.24	20.28	18.54	18.47	18.86
		1	2	21.41	21.37	21.08	18.63	18.71	18.71	20.26	20.34	20.37	18.68	18.26	18.97
		1	5	21.34	21.26	21.05	18.55	18.59	18.57	20.18	20.24	20.27	18.62	18.13	18.89
		3	0	21.45	21.20	21.04	18.61	18.66	18.64	20.25	20.31	20.32	18.64	18.07	18.92
		3	1	21.47	21.23	21.08	18.66	18.73	18.70	20.29	20.35	20.37	18.70	18.10	19.00
		3	2	21.47	21.23	21.08	18.64	18.69	18.71	20.29	20.33	20.37	18.70	18.15	19.01
		6	0	21.41	21.14	21.23	18.63	18.65	18.65	20.27	20.34	20.35	18.82	18.06	18.92

### OUTPUT POWER FOR LTE BAND 66 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				131987	132322	132657	131987	132322	132657	131987	132322	132657	131987	132322	132657
3.0	QPSK	1	0	25.65	25.69	25.70	23.51	23.57	23.58	25.06	25.13	25.20	23.60	23.68	23.70
		1	7	25.68	25.67	25.61	23.50	23.58	23.55	25.10	25.14	25.13	23.58	23.62	23.64
		1	14	25.69	25.66	25.63	23.54	23.70	23.57	25.14	25.14	25.12	23.63	23.65	23.70
		8	0	25.32	25.30	25.23	22.60	22.70	22.65	24.20	24.23	24.19	22.72	22.73	22.74
		8	4	25.31	25.29	25.23	22.61	22.70	22.70	24.21	24.28	24.26	22.74	22.75	22.78
		8	7	25.34	25.32	25.23	22.64	22.71	22.70	24.23	24.24	24.25	22.76	22.76	22.78
		15	0	25.27	25.31	25.24	22.62	22.71	22.66	24.17	24.19	24.24	22.70	22.75	22.75
	16QAM	1	0	24.97	25.00	25.00	22.66	22.66	22.68	24.20	24.25	24.28	22.77	22.74	22.81
		1	7	24.99	24.97	24.92	22.62	22.64	22.63	24.16	24.19	24.19	22.69	22.70	22.72
		1	14	25.00	24.97	24.91	22.66	22.71	22.69	24.22	24.25	24.22	22.78	22.75	22.81
		8	0	24.05	24.03	23.97	21.70	21.72	21.71	23.22	23.27	23.26	21.77	21.80	21.83
		8	4	24.07	24.03	24.01	21.70	21.77	21.75	23.28	23.30	23.30	21.80	21.83	21.87
		8	7	24.09	24.07	23.90	21.71	21.76	21.76	23.30	23.30	23.31	21.82	21.83	21.85
		15	0	23.95	23.98	23.84	21.59	21.66	21.66	23.16	23.23	23.20	21.73	21.73	21.75
	64QAM	1	0	23.16	23.63	23.51	21.62	21.69	21.66	23.18	23.25	23.27	21.81	21.83	21.84
		1	7	23.20	23.49	23.26	21.59	21.65	21.61	23.17	23.19	23.19	21.69	21.74	21.75
		1	14	23.33	23.59	23.48	21.65	21.71	21.68	23.25	23.23	23.21	21.77	21.79	21.82
		8	0	22.22	22.41	22.28	20.71	20.77	20.69	22.25	22.34	22.28	20.79	20.81	20.86
		8	4	22.34	22.43	22.31	20.74	20.76	20.73	22.30	22.32	22.31	20.83	20.83	20.86
		8	7	22.38	22.41	22.32	20.75	20.79	20.75	22.31	22.32	22.32	20.85	20.87	20.87
		15	0	22.39	22.50	22.40	20.66	20.70	20.67	22.20	22.24	22.27	20.76	20.80	20.84
	256QAM	1	0	21.30	21.63	20.98	18.61	18.64	18.65	20.15	20.23	20.25	18.75	18.80	18.80
		1	7	21.31	21.60	21.06	18.59	18.65	18.61	20.19	20.23	20.20	18.67	18.72	18.75
		1	14	21.34	21.76	20.98	18.64	18.67	18.67	20.27	20.23	20.23	18.75	18.81	18.83
		8	0	21.45	21.35	21.07	18.79	18.80	18.78	20.38	20.42	20.39	18.88	18.92	18.90
		8	4	21.55	21.35	21.10	18.80	18.85	18.81	20.41	20.44	20.41	18.91	18.93	18.95
		8	7	21.51	21.36	21.10	18.83	18.88	18.84	20.41	20.45	20.42	18.94	18.96	18.94
		15	0	21.43	21.25	21.22	18.72	18.76	18.74	20.30	20.33	20.31	18.82	18.88	18.90

**OUTPUT POWER FOR LTE BAND 66 (5.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				131997	132322	132647	131997	132322	132647	131997	132322	132647	131997	132322	132647
5.0	QPSK	1	0	25.63	25.69	<b>25.70</b>	23.56	23.64	23.65	<b>25.20</b>	25.14	25.19	23.65	23.64	<b>23.70</b>
		1	12	25.65	25.65	25.63	23.64	23.66	<b>23.68</b>	25.16	25.15	25.15	23.68	23.67	23.67
		1	24	25.69	25.66	25.60	23.65	23.65	23.66	25.18	25.14	25.16	23.69	23.68	23.65
		12	0	25.19	25.24	25.21	22.68	22.68	22.64	24.18	24.20	24.17	22.70	22.71	22.70
		12	6	25.25	25.27	25.23	22.71	<b>22.71</b>	22.70	24.26	24.21	24.19	22.77	22.72	22.71
		12	11	25.19	25.22	25.15	22.66	22.69	22.68	24.22	24.14	24.14	22.73	22.73	22.70
	16QAM	25	0	25.20	25.22	25.15	22.66	22.70	22.67	24.20	24.15	24.14	22.69	22.69	22.68
		1	0	25.30	25.37	25.30	22.74	22.85	22.77	24.24	24.23	24.36	22.81	22.77	22.80
		1	12	<b>25.41</b>	25.37	25.16	22.87	<b>22.90</b>	22.73	24.39	24.34	24.36	22.85	22.69	22.75
		1	24	25.40	25.37	25.22	22.89	22.86	22.82	<b>24.40</b>	24.29	24.31	<b>22.87</b>	22.76	22.75
		12	0	24.19	24.35	24.23	21.70	21.76	21.72	23.24	23.23	23.22	21.81	21.77	21.76
		12	6	24.27	24.32	24.26	21.74	21.77	21.75	23.27	23.23	23.24	21.83	21.81	21.80
	64QAM	12	11	24.29	24.29	24.19	21.75	21.73	21.77	23.27	23.21	23.22	21.81	21.79	21.77
		25	0	24.14	24.18	24.10	21.67	21.65	21.64	23.18	23.13	23.13	21.68	21.64	21.67
		1	0	23.60	<b>23.99</b>	23.99	21.71	21.78	21.71	23.23	23.25	23.33	21.73	21.74	21.76
		1	12	23.81	23.97	23.96	21.87	<b>21.89</b>	21.72	<b>23.38</b>	23.33	23.37	<b>21.80</b>	21.71	21.69
		1	24	23.97	23.97	23.84	21.81	21.81	21.82	23.36	23.25	23.29	21.79	21.76	21.73
		12	0	23.14	23.35	23.29	20.66	20.68	20.67	22.18	22.16	22.20	20.72	20.70	20.70
	256QAM	12	6	23.33	23.37	23.30	20.68	20.70	20.71	22.20	22.15	22.21	20.75	20.74	20.73
		12	11	23.29	23.29	23.24	20.65	20.70	20.69	22.18	22.13	22.17	20.71	20.71	20.71
		25	0	23.23	23.27	23.23	20.75	20.76	20.71	22.26	22.22	22.24	20.77	20.76	20.77
		1	0	21.21	20.86	21.21	18.60	18.68	18.71	20.21	20.16	20.25	18.74	18.68	18.81
		1	12	21.25	20.91	21.14	18.66	18.73	18.70	20.20	20.16	20.23	18.77	18.78	18.79
		1	24	21.27	20.88	21.12	18.71	18.74	18.73	20.27	20.18	20.23	18.80	18.79	<b>18.81</b>

**OUTPUT POWER FOR LTE BAND 66 (10.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				132022	132322	132622	132022	132322	132622	132022	132322	132622	132022	132322	132622
10.0	QPSK	1	0	25.69	<b>25.70</b>	25.65	23.50	<b>23.70</b>	23.60	25.01	25.12	25.12	23.66	<b>23.70</b>	23.70
		1	24	25.69	25.63	25.70	23.55	23.60	23.54	25.07	25.12	25.07	23.66	23.62	23.67
		1	49	25.65	25.49	25.57	23.59	23.57	23.55	25.10	<b>25.20</b>	25.00	23.64	23.63	23.65
		25	0	25.27	25.23	25.24	22.69	22.66	22.58	24.13	24.20	24.11	22.80	22.79	22.73
		25	12	25.36	25.29	25.27	22.73	<b>22.75</b>	22.62	24.23	24.22	24.18	22.81	22.80	22.82
		25	24	25.33	25.19	25.28	22.69	22.73	22.67	24.22	24.16	24.15	22.78	22.79	22.81
	16QAM	50	0	25.33	25.27	25.21	22.71	22.73	22.59	24.20	24.19	24.10	22.78	22.79	<b>22.72</b>
		1	0	25.22	<b>25.23</b>	25.16	22.68	<b>22.74</b>	22.64	24.14	24.15	24.17	22.77	22.79	22.80
		1	24	25.19	25.11	25.15	22.66	22.70	22.64	24.16	24.04	24.14	22.76	22.77	22.77
		1	49	25.19	25.02	25.14	22.71	22.74	22.70	<b>24.22</b>	24.05	24.10	22.75	<b>22.85</b>	22.80
		25	0	24.24	24.22	24.21	21.79	21.77	21.68	23.20	23.16	23.20	21.88	21.91	21.79
		25	12	24.34	24.24	24.26	21.83	21.84	21.74	23.32	23.23	23.29	21.90	21.90	21.93
	64QAM	25	24	24.30	24.19	24.27	21.80	21.85	21.79	23.31	23.19	23.22	21.90	21.90	21.93
		50	0	24.26	24.18	24.15	21.75	21.78	21.65	23.22	23.16	23.13	21.83	21.87	21.78
		1	0	23.10	23.54	23.47	21.69	21.71	21.61	23.18	23.22	23.17	21.81	21.77	21.79
		1	24	23.58	23.50	<b>23.63</b>	21.65	21.68	21.58	23.16	23.11	23.11	21.76	21.74	21.74
		1	49	23.49	23.17	<b>23.51</b>	<b>21.72</b>	21.70	21.72	<b>23.24</b>	23.12	23.12	21.80	<b>21.84</b>	21.83
		25	0	22.38	22.27	22.34	20.80	20.72	20.66	22.22	22.24	22.17	20.85	20.86	20.78
	256QAM	25	12	22.46	22.33	22.33	20.80	20.86	20.73	22.31	22.29	22.31	20.89	20.92	20.90
		25	24	22.45	22.24	22.42	20.80	20.78	20.74	22.29	22.22	22.26	20.85	20.88	20.85
		50	0	22.37	22.24	22.26	20.75	20.77	20.65	22.27	22.25	22.14	20.84	20.87	20.79
		1	0	21.36	21.54	20.97	18.69	18.76	18.68	20.21	20.25	20.18	18.82	18.80	18.85
		1	24	21.37	21.59	21.07	18.77	18.79	18.76	20.26	20.24	20.24	18.85	18.93	18.93
		1	49	21.40	<b>21.68</b>	21.02	18.82	18.81	18.77	20.35	20.24	20.22	18.88	18.91	18.93
		25	0	21.33	21.18	21.25	18.82	18.81	18.70	20.26	20.26	20.23	18.93	18.95	18.89
		25	12	21.44	21.25	21.29	<b>18.86</b>	<b>18.88</b>	18.75	<b>20.36</b>	20.34	20.34	18.96	18.96	<b>18.98</b>
		25	24	21.44	21.23	21.31	18.84	18.82	18.80	20.35	20.29	20.30	18.91	18.96	18.94
		50	0	21.37	21.22	21.21	18.79	18.79	18.68	20.30	20.29	20.19	18.90	18.89	18.84



**5G NR n66**

Test Engineer ID:	52275	Test Date:	5/26/2021
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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			ANT 3			ANT 4		
				342500 1712.5	349000 1745.0	355500 1777.5	342500 1712.5	349000 1745.0	355500 1777.5	342500 1712.5	349000 1745.0	355500 1777.5	342500 1712.5	349000 1745.0	355500 1777.5
5.0	BPSK	1	0	25.49	25.52	<b>25.70</b>	23.11	23.01	23.04	24.60	24.55	24.62	23.25	23.23	23.13
		1	1	25.22	25.47	25.50	23.63	23.55	23.60	25.11	25.05	25.19	23.18	23.29	23.24
		1	23	25.40	25.29	25.38	<b>23.70</b>	23.61	23.59	25.14	25.09	<b>25.20</b>	23.22	23.35	23.30
		1	24	25.55	25.38	25.44	23.13	23.12	23.01	24.64	24.50	24.69	23.09	23.29	23.21
		12	6	25.11	25.15	25.37	23.67	23.56	23.63	25.07	25.00	25.19	23.22	23.36	23.25
	QPSK	25	0	25.29	25.43	25.24	23.11	23.01	23.01	24.46	24.42	24.63	<b>23.70</b>	23.20	23.14
		1	0	24.99	25.08	25.39	22.19	22.43	22.41	24.00	23.94	24.00	22.76	22.84	22.74
		1	1	25.17	25.35	25.32	23.08	23.49	23.51	24.76	24.90	25.07	23.28	23.36	23.34
		1	23	25.36	25.22	<b>25.46</b>	23.50	23.46	23.49	24.94	24.86	25.06	23.33	<b>23.39</b>	23.33
		1	24	25.33	24.97	25.41	22.54	22.46	22.47	24.06	24.00	24.06	22.72	22.83	22.79
	16QAM	12	6	25.08	25.17	25.26	23.58	<b>23.62</b>	23.62	25.01	25.01	<b>25.16</b>	23.18	23.33	23.19
		25	0	24.74	24.91	24.60	22.59	22.56	22.58	24.11	24.05	24.13	22.69	22.80	22.74
		1	0	23.72	23.86	24.64	21.42	21.85	21.77	22.98	23.06	23.25	21.68	21.76	21.77
		1	1	23.51	23.32	24.77	22.45	22.89	22.83	23.87	24.04	24.16	22.73	<b>22.83</b>	22.77
		1	23	24.10	23.86	24.61	22.81	<b>22.98</b>	22.93	24.18	24.08	24.12	22.77	<b>22.83</b>	22.71
	64QAM	1	24	23.37	23.06	24.31	21.83	21.88	21.81	23.09	23.09	23.20	21.75	21.87	21.85
		12	6	24.37	23.85	<b>24.81</b>	22.60	22.60	22.58	24.08	24.01	<b>24.19</b>	22.63	22.79	22.59
		25	0	24.10	23.67	24.41	21.60	21.57	21.58	23.08	23.05	23.14	21.67	21.77	21.65
		1	0	23.78	23.73	23.92	20.47	20.58	20.69	22.00	22.17	22.25	21.34	21.49	21.43
		1	1	23.07	23.23	23.79	20.48	20.59	20.78	22.05	22.09	22.22	21.42	21.39	21.39
	256QAM	1	23	23.42	23.00	23.66	20.71	20.67	20.64	22.24	22.17	22.27	21.43	21.51	21.40
		1	24	23.11	23.22	23.72	20.72	20.70	20.78	22.18	22.40	22.23	21.32	<b>21.56</b>	21.47
		12	6	23.06	23.03	<b>23.97</b>	21.12	21.09	21.08	22.67	22.60	<b>22.75</b>	21.20	21.29	21.18
		25	0	23.37	23.28	23.50	<b>21.22</b>	21.08	21.10	22.61	22.56	22.62	21.23	21.29	21.20
		1	0	21.73	<b>21.83</b>	<b>21.83</b>	19.12	<b>19.35</b>	19.28	<b>20.97</b>	20.72	20.84	19.05	19.13	19.06
		1	1	21.27	21.56	21.69	19.17	19.31	19.25	20.75	20.66	20.74	19.12	19.08	19.16
		1	23	21.14	21.61	21.52	19.19	19.29	19.28	20.77	20.67	20.80	19.08	<b>19.31</b>	19.10
		1	24	21.34	21.50	21.73	19.10	19.21	19.31	20.96	20.66	20.82	19.07	19.29	19.07
		12	6	21.04	21.44	21.59	19.22	19.32	19.23	20.64	20.52	20.71	19.13	19.24	19.16
		25	0	21.30	21.78	21.61	19.17	19.09	19.14	20.50	20.48	20.52	19.07	19.29	19.15

**OUTPUT POWER FOR 5G NR n66 (10.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)												
				ANT 1			ANT 2			ANT 3			ANT 4			
				343000 1715.0	349000 1745.0	355000 1775.0	343000 1715.0	349000 1745.0	355000 1775.0	343000 1715.0	349000 1745.0	355000 1775.0	343000 1715.0	349000 1745.0	355000 1775.0	
10.0	BPSK	1	0	25.60	25.64	<b>25.70</b>	23.13	23.14	23.18	24.59	24.48	24.67	22.95	23.05	22.99	
		1	1	25.36	25.23	<b>25.70</b>	23.62	23.67	25.10	<b>25.17</b>	23.57	23.62	23.53			
		1	50	25.50	25.43	25.45	23.69	23.69	23.64	25.08	25.06	25.16	23.53	<b>23.63</b>	23.49	
		1	51	25.43	25.39	25.51	23.22	23.22	23.12	23.08	24.49	24.60	24.68	23.05	23.06	22.98
		25	12	25.12	25.13	25.39	23.53	23.58	23.61	24.98	25.05	25.16	23.52	23.60	23.38	
	QPSK	50	0	25.31	25.19	25.12	20.29	22.73	21.33	22.43	22.55	22.62	21.96	20.24	19.91	
		1	0	24.96	25.22	25.21	21.80	22.53	22.51	23.20	23.96	24.07	21.62	<b>22.53</b>	22.48	
		1	1	25.05	25.25	25.30	22.80	<b>23.63</b>	24.28	24.99	25.11	22.75	23.60	23.44		
		1	50	24.70	25.18	<b>25.32</b>	23.52	23.58	23.55	24.92	24.98	25.06	23.48	23.65	23.48	
		1	51	24.94	25.05	25.15	22.55	22.62	22.52	24.01	23.98	24.06	22.42	22.59	22.41	
	16QAM	25	12	24.57	25.09	25.11	23.60	23.59	23.62	25.08	24.98	<b>25.20</b>	23.50	<b>23.70</b>	23.33	
		50	0	24.71	25.05	24.88	22.63	22.61	22.65	23.98	23.99	24.19	22.53	22.55	22.38	
		1	0	24.74	24.71	24.78	21.00	21.92	21.78	22.43	23.07	23.16	21.17	21.57	21.53	
		1	1	24.46	24.58	<b>24.84</b>	22.14	23.01	22.94	23.33	24.06	24.13	21.96	22.64	22.60	
		1	50	24.28	24.46	24.52	22.80	<b>23.03</b>	22.92	24.04	24.10	24.19	<b>22.66</b>	<b>22.71</b>	22.63	
	64QAM	1	51	24.14	24.33	24.39	21.84	21.92	21.73	23.13	23.05	23.20	21.58	21.73	21.63	
		25	12	24.36	24.54	24.58	22.76	22.76	22.67	22.57	24.03	24.08	<b>24.22</b>	22.52	22.67	22.48
		50	0	24.12	24.10	24.12	21.71	21.65	21.55	22.98	22.96	23.19	21.58	21.65	21.42	
		1	0	23.76	23.84	23.52	20.15	20.67	20.73	21.48	22.19	22.33	20.17	21.00	20.98	
		1	1	23.51	23.69	23.30	20.21	20.77	20.71	21.54	22.13	22.23	20.21	20.85	20.78	
	256QAM	1	50	23.58	23.53	23.58	20.85	21.02	20.64	22.08	22.04	22.29	20.91	20.93	20.52	
		1	51	<b>23.85</b>	23.55	23.51	20.80	20.78	20.76	22.28	22.20	22.17	20.78	20.80	20.74	
		25	12	23.20	23.21	23.25	21.20	21.17	21.04	22.59	22.52	22.65	21.05	<b>21.05</b>	20.92	
		50	0	23.19	23.48	23.42	21.07	<b>21.21</b>	21.11	22.50	22.50	<b>22.68</b>	21.05			

**OUTPUT POWER FOR 5G NR n66 (15.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				343500	349000	354500	343500	349000	354500	343500	349000	354500	343500	349000	354500
15.0	BPSK	1	0	25.67	25.62	25.61	23.05	23.07	23.08	24.55	24.53	24.67	23.13	22.85	22.99
		1	1	25.62	25.63	25.66	23.70	23.59	23.65	25.03	25.08	23.70	23.40	23.47	
		1	77	25.64	25.56	25.61	23.66	23.63	23.67	25.00	25.04	25.20	23.66	23.41	23.58
		1	78	25.70	25.58	25.63	23.06	23.05	23.14	24.43	24.53	24.74	23.66	23.44	23.03
		36	18	25.49	25.44	25.63	23.46	23.39	23.42	24.89	24.88	25.06	23.56	23.36	23.44
	QPSK	75	0	25.60	25.48	25.55	20.18	22.93	23.02	23.41	24.43	24.58	23.21	22.80	23.01
		1	0	25.10	25.08	25.07	21.76	22.39	22.52	23.53	24.01	24.13	22.26	22.40	22.48
		1	1	25.61	25.59	25.65	22.64	23.29	23.58	24.53	24.90	25.12	23.35	23.30	23.51
		1	77	25.65	25.48	25.58	23.60	23.49	23.52	24.96	24.97	25.11	23.55	23.44	23.57
		1	78	25.10	25.05	25.12	22.55	22.54	22.52	23.88	24.01	24.13	23.65	23.42	22.57
	16QAM	36	18	25.56	25.54	25.66	23.57	23.36	23.44	24.96	24.82	25.13	23.64	23.30	23.49
		75	0	25.13	25.08	25.18	22.45	22.39	22.53	23.89	23.91	24.13	22.66	22.35	22.52
		1	0	23.96	23.90	24.11	20.80	21.59	21.62	22.76	23.14	23.13	21.54	21.44	21.58
		1	1	25.09	25.02	25.02	21.96	22.33	22.63	23.54	23.98	24.08	22.48	22.64	22.62
		1	77	25.07	24.90	24.98	22.67	22.67	22.63	24.06	24.17	24.17	22.79	22.51	22.69
	64QAM	1	78	24.08	23.79	23.93	21.65	21.77	21.78	22.94	23.00	23.16	22.54	22.66	21.74
		36	18	25.08	25.09	25.16	22.57	22.26	22.38	23.99	23.96	24.06	22.65	22.43	22.48
		75	0	24.07	24.07	24.22	21.46	21.43	21.53	22.84	23.02	23.12	21.66	21.35	21.55
		1	0	23.45	23.46	23.45	20.05	20.55	20.69	21.94	22.24	21.90	20.55	20.50	20.92
		1	1	23.46	23.54	23.58	20.11	20.80	20.90	21.86	22.15	22.37	20.98	20.66	20.68
	256QAM	1	77	23.61	23.51	23.44	20.72	20.83	20.76	22.08	22.21	21.89	20.86	20.70	20.78
		1	78	23.46	23.37	23.41	20.74	20.65	20.89	22.13	22.10	22.36	20.91	20.94	20.73
		36	18	23.65	23.60	23.65	21.04	20.86	21.03	22.48	22.48	22.67	21.05	20.81	21.03
		75	0	23.54	23.61	23.60	20.90	20.91	20.95	22.41	22.45	22.54	21.20	20.80	20.98
		1	0	21.38	21.39	21.45	19.01	19.18	19.23	20.68	20.71	20.86	19.42	19.01	19.17
		1	1	21.31	21.39	21.42	19.05	19.29	19.32	20.63	20.76	20.65	19.33	19.05	19.11
		1	77	21.32	21.36	21.31	19.20	19.31	19.26	20.56	20.58	20.77	19.34	19.07	19.14
		1	78	21.41	21.35	21.36	19.26	19.45	19.45	20.64	20.71	20.87	19.29	19.05	19.13
		36	18	21.54	21.62	21.57	19.04	18.96	19.06	20.33	20.48	20.64	19.21	18.96	18.98
		75	0	21.60	21.61	21.53	19.01	18.94	18.98	20.31	2.48	20.63	19.20	18.93	19.00

**OUTPUT POWER FOR 5G NR n66 (20.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				344000	349000	354000	344000	349000	354000	344000	349000	354000	344000	349000	354000
20.0	BPSK	1	0	25.53	25.48	25.53	22.80	22.73	22.86	25.12	24.98	24.94	22.77	22.88	23.11
		1	1	25.57	25.56	25.53	23.39	23.03	23.25	25.01	25.08	24.86	23.25	23.35	23.48
		1	104	25.57	25.39	25.46	23.70	23.22	23.24	25.03	25.19	24.91	23.21	23.34	23.70
		1	105	25.70	25.45	25.50	23.13	22.62	22.76	25.05	25.10	24.82	22.75	22.84	23.15
		50	25	25.50	25.43	25.56	23.58	22.95	23.19	24.88	25.02	24.85	23.05	23.21	23.57
	QPSK	100	0	25.46	25.35	25.43	18.96	19.92	20.24	24.90	25.05	24.83	18.33	21.11	19.27
		1	0	25.01	25.06	24.97	21.31	22.05	22.26	24.55	24.63	24.50	21.44	22.24	22.33
		1	1	25.44	25.45	25.42	22.43	22.96	23.20	25.04	25.20	24.88	22.69	23.34	23.11
		1	104	25.55	25.40	25.52	23.59	23.08	23.01	25.08	25.13	24.83	23.11	23.25	23.67
		1	105	25.11	24.92	25.05	22.60	22.00	22.16	24.59	24.65	24.43	22.27	22.38	22.62
	16QAM	50	25	25.50	25.47	25.51	23.60	22.94	23.16	24.90	24.99	24.86	23.01	23.13	23.60
		100	0	24.97	24.96	24.95	22.62	21.95	22.24	24.52	24.59	24.34	22.15	22.19	22.59
		1	0	24.06	23.96	23.89	20.64	21.16	21.27	23.61	23.55	23.46	20.71	21.84	21.45
		1	1	25.02	24.84	24.92	21.48	22.16	22.38	24.50	24.60	24.32	22.17	22.63	22.24
		1	104	24.98	24.75	24.85	22.70	22.22	22.29	24.52	24.69	24.32	22.70	22.93	22.99
	64QAM	1	105	24.09	23.80	23.86	21.72	21.22	21.34	23.72	23.69	23.23	21.59	21.94	21.69
		50	25	24.96	24.95	25.02	22.63	21.92	22.18	24.42	24.55	24.33	22.07	22.24	22.63
		100	0	24.02	23.95	24.07	21.53	20.97	21.23	23.53	23.62	23.32	21.17	21.21	21.50
		1	0	23.42	23.27	23.39	19.78	20.24	20.48	23.29	23.28	23.14	19.97	20.50	20.64
		1	1	23.26	23.46	23.35	19.69	20.23	20.45	23.26	23.33	23.18	19.82	20.51	20.67
	256QAM	1	104	23.39	23.30	23.26	20.93	20.27	20.24	23.32	23.44	22.90	20.49	20.58	20.93
		1	105	23.40	23.34	23.31	20.76	20.25	20.39	23.28	23.36	23.04	20.40	20.48	20.78
		50	25	23.60	23.47	23.51	21.10	20.52	20.68	22.88	23.04	22.86	20.53	20.68	21.00
		100	0	23.53	23.46	23.50	21.09	20.43	20.67	22.90	23.10	22.86	20.57	20.64	21.07
		1	0	21.41	21.35	21.22	18.75	18.86	18.96	21.00	21.11	20.77	18.83	18.90	19.19
		1	1	21.45	21.25	21.28	18.80	18.81	19.07	21.04	21.01	20.80	18.90	19.01	19.08
		1	104	21.29	21.27	21.20	19.23	18.95	19.00	21.03	20.94	20.72	18.84	18.93	19.10
		1	105	21.39	21.26	21.23	19.22	18.92	18.88	20.99	21.04	20.71	18.80	18.89	19.14
		50	25	21.53	21.53	21.48	19.18	18.61	18.78	20.96	21.05	20.80	18		

**OUTPUT POWER FOR 5G NR n66 (30.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				345000	349000	353000	345000	349000	353000	345000	349000	353000	345000	349000	353000
30.0	BPSK	1	0	23.42	23.70	23.36	21.24	21.33	21.65	22.82	22.93	22.73	21.55	21.54	21.58
		1	1	23.44	23.50	23.42	21.35	21.30	21.51	22.89	23.05	22.85	21.53	21.40	21.54
		1	158	23.54	23.49	23.39	21.29	21.31	21.46	22.79	23.03	22.81	21.60	21.70	21.59
		1	159	23.49	23.55	23.40	21.26	21.44	21.55	22.84	23.07	22.92	21.61	21.63	21.67
		80	40	23.36	23.41	23.36	21.07	21.15	21.29	22.67	22.83	22.69	21.28	21.49	21.41
	QPSK	160	0	23.53	23.48	23.36	21.14	21.15	21.34	22.64	22.82	22.66	21.28	21.44	21.42
		1	0	23.58	23.70	23.38	21.17	21.39	21.62	22.90	23.10	22.79	21.43	21.40	21.53
		1	1	23.53	23.52	23.54	21.47	21.32	21.50	23.06	23.02	22.92	21.47	21.49	21.48
		1	158	23.53	23.54	23.42	21.38	21.35	21.59	22.94	23.20	22.97	21.38	21.57	21.58
		1	159	23.49	23.52	23.41	21.34	21.70	21.61	22.78	23.05	22.95	21.48	21.62	21.63
	16QAM	80	40	23.39	23.41	23.36	21.16	21.14	21.33	22.63	22.76	22.62	21.40	21.47	21.45
		160	0	23.33	23.37	23.40	21.07	21.10	21.29	22.74	22.94	22.65	21.44	21.42	21.39
		1	0	22.45	22.99	22.74	20.28	20.58	20.40	21.99	22.02	21.51	20.14	20.20	20.31
		1	1	23.42	23.62	23.39	21.38	21.33	21.56	22.94	23.10	22.72	21.13	21.22	21.43
		1	158	22.67	22.70	22.66	21.28	21.33	21.62	22.78	23.06	22.91	21.11	21.13	21.51
	64QAM	1	159	23.50	23.58	23.31	20.26	20.40	20.48	21.89	22.16	21.96	20.19	20.60	20.47
		80	40	23.23	23.39	23.31	21.13	21.07	21.42	22.68	22.75	22.65	21.37	21.39	21.38
		160	0	22.67	22.83	22.74	20.12	20.18	20.41	21.79	21.94	21.71	20.47	20.48	20.51
		1	0	22.08	22.40	22.10	19.98	20.07	20.26	21.67	21.77	21.50	19.94	19.97	20.10
		1	1	22.05	22.19	22.00	20.28	20.08	20.23	21.51	21.68	21.61	20.04	20.12	20.30
	256QAM	1	158	22.08	22.08	22.30	20.05	20.18	20.45	21.50	21.95	21.64	19.99	20.17	20.18
		1	159	22.19	22.24	22.00	20.10	20.29	20.00	21.68	21.87	21.63	19.91	20.11	20.28
		80	40	22.07	22.38	22.22	19.60	19.63	19.86	21.19	21.24	21.13	19.84	19.95	19.92
		160	0	22.14	22.38	22.19	19.67	19.68	19.89	21.26	21.35	21.23	19.97	19.91	20.05
		1	0	22.11	20.63	19.76	18.10	17.74	17.93	19.51	19.21	19.17	17.87	17.90	18.17
	256QAM	1	1	20.11	20.45	20.32	18.39	18.09	18.01	19.69	19.36	19.32	18.13	17.85	17.92
		1	158	20.09	20.18	20.28	17.80	18.01	18.00	19.61	19.38	19.23	18.14	17.95	17.98
		1	159	20.29	20.39	20.16	17.75	17.88	18.01	19.19	19.57	19.36	18.03	18.00	17.93
		80	40	20.13	20.32	20.27	17.68	17.79	17.84	19.30	19.37	19.10	17.83	17.91	17.90
		160	0	20.15	20.30	20.27	17.63	17.64	17.85	19.24	19.35	19.19	17.91	17.95	17.92

**OUTPUT POWER FOR 5G NR n66 (40.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 1			ANT 2			ANT 3			ANT 4		
				346000	349000	352000	346000	349000	352000	346000	349000	352000	346000	349000	352000
40.0	BPSK	1	0	23.46	23.35	23.25	21.51	21.53	21.46	22.86	22.70	22.95	21.39	21.36	21.59
		1	1	23.38	23.37	23.32	21.51	21.55	21.50	22.91	22.86	22.94	21.61	21.36	21.62
		1	214	23.37	23.37	23.48	21.54	21.56	21.65	22.90	22.81	23.07	21.49	21.50	21.70
		1	215	23.35	23.43	23.38	21.52	21.48	21.70	22.92	22.88	23.20	21.51	21.55	21.69
		108	54	23.47	23.33	23.45	21.30	21.42	21.37	22.87	22.68	22.84	21.24	21.34	21.41
	QPSK	216	0	23.50	23.39	23.32	21.34	21.39	21.35	22.91	22.70	22.92	21.33	21.40	21.40
		1	0	23.52	23.47	23.18	21.62	21.60	21.50	23.01	22.83	22.99	21.19	21.32	21.62
		1	1	23.34	23.53	23.30	21.46	21.52	21.43	22.97	23.03	22.95	21.40	21.20	21.48
		1	214	23.36	23.44	23.32	21.55	21.54	21.59	22.87	22.74	23.18	21.46	21.38	21.64
		1	215	23.52	23.34	23.49	21.50	21.50	21.65	22.85	23.03	23.01	21.43	21.53	21.66
	16QAM	108	54	23.47	23.43	23.48	21.41	21.38	21.43	22.91	22.72	22.91	21.29	21.40	21.35
		216	0	23.45	23.34	23.29	21.46	21.48	21.33	22.82	22.70	22.94	21.36	21.43	21.44
		1	0	22.85	22.24	22.21	20.50	20.48	20.50	21.96	21.75	22.00	19.78	20.16	20.44
		1	1	23.26	23.34	23.28	21.32	21.42	21.40	22.81	22.86	22.86	21.01	20.94	21.25
		1	214	22.88	23.22	22.86	21.45	21.42	21.53	22.65	22.73	23.07	21.06	21.08	21.34
	64QAM	1	215	23.70	22.32	22.23	21.09	20.47	20.50	21.87	21.96	22.22	20.19	20.13	20.59
		108	54	23.50	23.33	23.30	21.49	21.35	21.40	22.88	22.71	22.96	21.20	21.32	21.40
		216	0	22.87	22.37	22.29	20.41	20.44	20.36	21.86	21.75	21.95	20.35	20.48	20.49
		1	0	22.69	21.93	22.09	20.51	20.44	20.22	21.61	21.52	21.79	19.70	19.95	20.21
		1	1	22.12	22.10	22.06	20.20	20.17	20.40	21.58	21.78	21.75	20.12	19.79	20.19
	256QAM	1	214	21.96	21.77	21.31	20.20	20.15	20.50	21.67	21.35	21.97	20.15	19.86	20.23
		1	215	22.16	21.72	21.71	20.40	20.31	20.27	21.52	21.61	21.86	19.95	20.02	20.43
		108	54	22.28	21.85	21.76	19.83	19.93	19.90	21.38	21.22	21.41	19.91	19.88	19.96
		216	0	22.34	21.90	21.75	19.90	19.97	19.89	21.39	21.21	21.48	19.88	19.90	19.92
		1	0	20.58	20.10	19.87	18.07	18.25	18.19	19.36	19.24	19.47	17.71	18.00	18.23
	256QAM	1	1	20.45	20.30	20.07	17.95	18.12	18.00	19.36	19.26	19.50	17.82	17.92	18.43
		1	214	20.38	20.13	20.06	18.00	18.08	18.00	19.39	19.34	19.45	17.99	17.83	18.31
		1	215	20.48	20.20	19.75	18.02	17.97	17.89	19.46	19.36	19.55	17.99	18.14	18.16
		108	54	20.20	19.79	19.89	17.93	1							

## 8.14. LTE BAND 71 AND 5G NR n71

### LTE BAND 71

Test Engineer ID:	39004	Test Date:	3/17/2021
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### OUTPUT POWER FOR LTE BAND 71 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				133147	133297	133447	133147	133297	133447
5.0	QPSK	1	0	25.69	25.68	25.65	24.58	24.66	24.70
		1	12	25.67	25.62	25.53	24.58	24.55	24.53
		1	24	25.70	25.61	25.45	24.61	24.56	24.48
		12	0	24.75	24.63	24.68	23.69	23.63	23.66
		12	6	24.75	24.64	24.64	23.70	23.62	23.59
		12	11	24.68	24.57	24.59	23.63	23.58	23.52
		25	0	24.74	24.64	24.64	23.65	23.60	23.57
		1	0	24.97	24.87	25.24	23.82	23.78	23.96
	16QAM	1	12	24.93	24.79	25.16	23.82	23.86	23.73
		1	24	24.82	24.76	25.15	23.81	23.75	23.65
		12	0	23.81	23.69	23.84	22.73	22.68	22.69
		12	6	23.84	23.75	23.80	22.75	22.71	22.62
		12	11	23.76	23.65	23.73	22.71	22.64	22.57
		25	0	23.70	23.66	23.69	22.61	22.58	22.55
		1	0	23.97	23.50	23.86	22.70	22.77	22.75
		1	12	23.98	23.48	23.88	22.70	22.76	22.68
256QAM	64QAM	1	24	23.90	23.48	23.85	22.71	22.66	22.59
		12	0	22.75	22.62	22.63	21.67	21.62	21.62
		12	6	22.79	22.64	22.56	21.69	21.64	21.58
		12	11	22.72	22.60	22.48	21.63	21.56	21.52
		25	0	22.74	22.54	22.56	21.75	21.67	21.61
		1	0	20.81	20.33	20.90	19.77	19.73	19.85
		1	12	20.72	20.28	20.73	19.70	19.65	19.65
		1	24	20.65	20.28	20.71	19.70	19.63	19.61
	256QAM	12	0	20.69	20.57	20.73	19.69	19.63	19.68
		12	6	20.73	20.58	20.69	19.71	19.66	19.65
		12	11	20.64	20.54	20.64	19.67	19.61	19.61
		25	0	20.72	20.65	20.63	19.73	19.67	19.69

### OUTPUT POWER FOR LTE BAND 71 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				133172	133322	133422	133172	133322	133422
10.0	QPSK	1	0	25.70	25.48	25.67	24.70	24.64	24.61
		1	24	25.60	25.43	25.64	24.59	24.53	24.64
		1	49	25.59	25.53	25.60	24.55	24.51	24.50
		25	0	24.68	24.55	24.74	23.66	23.60	23.67
		25	12	24.76	24.66	24.74	23.75	23.66	23.69
		25	24	24.69	24.61	24.75	23.68	23.60	23.72
		50	0	24.77	24.63	24.72	23.72	23.65	23.67
		1	0	25.14	24.63	24.70	23.61	23.64	23.74
	16QAM	1	24	25.03	24.57	24.64	23.52	23.48	23.65
		1	49	25.07	24.58	24.61	23.57	23.45	23.63
		25	0	23.74	23.66	23.76	22.67	22.61	22.78
		25	12	23.82	23.74	23.76	22.74	22.69	22.77
		25	24	23.78	23.69	23.80	22.69	22.64	22.83
		50	0	23.78	23.67	23.71	22.68	22.64	22.74
		1	0	23.82	23.84	23.68	22.68	22.61	22.78
		1	24	23.71	23.84	23.79	22.57	22.48	22.61
	64QAM	1	49	23.71	23.85	23.76	22.59	22.59	22.66
		25	0	22.71	22.57	22.76	21.69	21.64	21.75
		25	12	22.76	22.64	22.81	21.77	21.73	21.75
		25	24	22.71	22.64	22.83	21.69	21.68	21.79
		50	0	22.72	22.59	22.74	21.74	21.69	21.72
		1	0	20.70	20.99	20.45	19.72	19.67	19.75
		1	24	20.56	20.87	20.58	19.73	19.66	19.85
		1	49	20.68	21.19	20.50	19.72	19.62	19.78
	256QAM	25	0	20.76	20.58	20.83	19.79	19.72	19.90
		25	12	20.80	20.62	20.80	19.82	19.77	19.83
		25	24	20.66	20.61	20.76	19.72	19.68	19.83
		50	0	20.72	20.64	20.72	19.77	19.69	19.79

### OUTPUT POWER FOR LTE BAND 71 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				133197	133297	133397	133197	133297	133397
15.0	QPSK	1	0	25.70	25.67	25.63	24.70	24.63	24.63
		1	37	25.61	25.49	25.63	24.58	24.60	24.59
		1	74	25.55	25.56	25.53	24.62	24.56	24.50
		36	0	24.72	24.67	24.67	23.75	23.68	23.64
		36	16	24.74	24.67	24.66	23.76	23.70	23.63
		36	35	24.64	24.61	24.67	23.71	23.63	23.60
		75	0	24.67	24.66	24.60	23.75	23.68	23.59
	16QAM	1	0	25.18	24.72	25.06	23.69	23.98	23.98
		1	37	25.06	24.47	25.07	23.56	23.97	23.67
		1	74	25.08	24.62	24.94	23.66	23.96	23.79
		36	0	23.69	23.66	23.74	22.73	22.65	22.61
		36	16	23.73	23.69	23.72	22.73	22.69	22.60
		36	35	23.63	23.60	23.69	22.66	22.61	22.61
		75	0	23.72	23.68	23.70	22.76	22.67	22.58
	64QAM	1	0	23.86	23.83	23.70	22.89	22.83	22.84
		1	37	23.91	23.81	23.68	22.83	22.76	22.78
		1	74	23.86	23.89	23.61	22.83	22.72	22.69
		36	0	22.69	22.65	22.74	21.53	21.44	21.43
		36	16	22.71	22.66	22.71	21.53	21.48	21.39
		36	35	22.62	22.63	22.73	21.47	21.39	21.39
		75	0	22.73	22.62	22.65	21.51	21.44	21.36
	256QAM	1	0	20.82	21.03	20.40	19.84	19.89	19.89
		1	37	20.88	20.87	20.46	19.96	19.78	19.89
		1	74	20.83	21.10	20.39	19.90	19.96	19.80
		36	0	20.65	20.63	20.65	19.73	19.66	19.66
		36	16	20.68	20.67	20.63	19.75	19.70	19.63
		36	35	20.59	20.60	20.64	19.70	19.63	19.61
		75	0	20.69	20.65	20.59	19.74	19.67	19.64

### OUTPUT POWER FOR LTE BAND 71 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1			ANT 2		
				133222	133322	133372	133222	133322	133372
20.0	QPSK	1	0	25.70	25.70	25.61	24.70	24.67	23.98
		1	49	25.61	25.67	25.67	24.66	24.58	23.86
		1	99	25.56	25.69	25.59	24.63	24.57	23.84
		50	0	24.78	24.80	24.66	23.78	23.73	22.99
		50	24	24.79	24.80	24.69	23.79	23.74	22.96
		50	49	24.73	24.79	24.69	23.72	23.67	22.93
		100	0	24.79	24.80	24.67	23.80	23.74	22.95
	16QAM	1	0	25.17	25.27	25.11	24.26	24.07	23.37
		1	49	25.10	25.24	25.04	24.29	24.03	23.27
		1	99	25.01	25.25	25.03	24.15	23.98	23.25
		50	0	23.75	23.85	23.69	22.81	22.71	21.96
		50	24	23.75	23.86	23.73	22.83	22.74	21.91
		50	49	23.72	23.82	23.71	22.77	22.66	21.98
		100	0	23.79	23.83	23.69	22.87	22.73	21.94
	64QAM	1	0	23.83	23.99	23.87	22.64	22.65	22.57
		1	49	23.93	23.99	23.91	22.60	22.64	22.48
		1	99	23.79	23.86	23.96	22.65	22.62	22.52
		50	0	22.75	22.82	22.65	22.76	22.72	22.01
		50	24	22.75	22.86	22.69	22.81	22.75	21.94
		50	49	22.71	22.85	22.71	22.75	22.65	21.99
		100	0	22.75	22.80	22.66	22.85	22.77	21.97
	256QAM	1	0	20.49	20.87	20.69	19.63	19.56	18.77
		1	49	20.52	20.83	20.81	19.64	19.56	18.84
		1	99	20.62	21.03	20.84	19.77	19.51	18.93
		50	0	20.72	20.75	20.65	19.81	19.76	19.04
		50	24	20.75	20.78	20.67	19.82	19.78	18.99
		50	49	20.71	20.77	20.70	19.76	19.72	19.00
		100	0	20.74	20.72	20.64	19.83	19.76	18.98

## 5G NR n71

Test Engineer ID:	10641	Test Date:	4/5/2021
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### OUTPUT POWER FOR 5G NR n71 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1		ANT 2			
				133100	136100	139100	133100	136100	139100
5.0	BPSK	1	0	24.94	24.93	24.81	24.26	24.23	23.93
		1	1	25.46	25.11	25.32	24.44	24.38	23.93
		1	23	25.63	25.48	25.35	24.57	24.43	24.19
		1	24	25.15	25.01	24.80	24.11	23.99	23.68
		12	6	25.34	25.47	25.14	24.23	24.12	24.01
		25	0	24.74	24.56	24.97	24.03	23.57	23.86
	QPSK	1	0	24.65	24.42	24.21	23.73	23.82	23.72
		1	1	25.44	25.16	25.20	24.19	24.03	23.72
		1	23	25.70	25.59	25.37	24.70	24.59	24.34
		1	24	24.71	24.52	24.31	23.66	23.49	23.28
		12	6	25.17	25.44	24.78	24.11	23.77	23.61
		25	0	24.31	24.17	23.85	23.52	23.27	23.39
	16QAM	1	0	23.55	23.07	23.33	22.91	23.13	23.03
		1	1	24.57	24.32	24.52	22.95	23.09	23.03
		1	23	24.84	24.73	24.53	23.84	23.67	23.33
		1	24	23.69	23.54	23.60	22.75	22.58	22.39
		12	6	24.48	24.29	24.31	23.20	23.02	22.86
		25	0	23.27	22.92	23.35	22.31	22.21	22.42
	64QAM	1	0	22.55	23.10	22.94	22.47	21.99	22.31
		1	1	22.91	22.42	22.98	22.59	22.17	22.31
		1	23	23.11	23.04	22.81	22.31	22.19	21.94
		1	24	23.05	22.96	22.78	22.28	22.27	21.85
		12	6	22.84	22.93	23.20	21.99	21.84	22.17
		25	0	23.08	22.54	22.83	21.84	21.52	21.61
	256QAM	1	0	21.04	21.29	20.28	20.06	19.82	19.69
		1	1	20.87	20.79	20.86	20.15	19.62	19.69
		1	23	21.15	20.95	20.79	19.98	19.84	19.66
		1	24	21.14	20.94	20.75	20.02	19.79	19.61
		12	6	20.98	20.88	20.52	19.77	19.46	19.57
		25	0	20.87	20.70	20.35	19.67	19.49	19.55

### OUTPUT POWER FOR 5G NR n71 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)					
				ANT 1		ANT 2			
				133600	136600	138600	133600	136600	138600
10.0	BPSK	1	0	24.99	24.07	24.85	24.07	24.31	24.49
		1	1	25.60	25.33	25.19	24.26	24.42	24.49
		1	50	25.46	25.45	25.26	24.59	24.58	24.41
		1	51	25.04	24.98	24.76	24.14	24.02	23.83
		25	12	24.79	25.16	25.70	24.11	24.16	24.27
		50	0	24.99	24.89	24.80	23.92	24.03	24.16
	QPSK	1	0	24.73	24.28	24.48	23.86	23.83	23.93
		1	1	25.38	25.22	25.39	24.08	24.01	23.93
		1	50	25.52	25.54	25.31	24.68	24.70	24.42
		1	51	24.55	24.53	24.34	23.60	23.58	23.42
		25	12	25.27	25.30	24.85	23.88	23.84	23.80
		50	0	24.58	24.26	24.37	23.67	23.64	23.73
	16QAM	1	0	23.80	23.44	23.75	23.06	23.27	23.31
		1	1	24.59	24.32	24.64	23.23	23.36	23.31
		1	50	24.58	24.77	24.30	23.76	23.68	23.49
		1	51	23.54	23.61	23.37	22.76	22.87	22.56
		25	12	23.97	24.00	24.10	23.09	23.13	23.17
		50	0	23.48	23.14	23.22	22.84	22.70	23.01
	64QAM	1	0	23.16	22.20	23.35	22.66	22.59	22.74
		1	1	22.79	22.83	22.63	22.76	22.66	22.74
		1	50	23.12	23.06	22.72	23.35	22.30	22.21
		1	51	23.03	23.09	22.88	22.16	22.27	22.16
		25	12	22.47	22.65	22.48	22.53	22.34	22.49
		50	0	23.22	22.54	22.54	22.41	22.31	22.42
	256QAM	1	0	20.45	20.91	20.57	19.71	19.90	19.89
		1	1	20.77	20.67	20.82	19.79	19.81	19.89
		1	50	20.91	21.01	20.76	19.98	20.05	19.93
		1	51	21.00	21.04	20.67	19.97	20.04	19.82
		25	12	20.50	20.49	20.69	19.69	19.73	19.76
		50	0	20.70	21.06	20.77	19.68	19.67	19.73

### OUTPUT POWER FOR 5G NR n71 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)						
				ANT 1			ANT 2			
				134100	136100	138100	134100	136100	138100	
15.0	BPSK		1	0	25.10	25.02	24.97	24.17	24.49	24.48
			1	1	25.47	25.33	25.20	24.23	24.41	24.48
			1	77	25.39	25.51	25.52	24.59	24.62	24.36
			1	78	24.87	25.10	25.00	24.10	24.13	23.92
			36	18	25.50	25.20	25.23	24.11	24.29	24.41
			75	0	25.14	24.84	24.84	24.07	24.25	24.35
			1	0	24.60	24.45	24.76	23.93	24.06	24.22
	QPSK		1	1	25.60	25.44	25.08	23.97	24.08	24.22
			1	77	25.44	25.70	25.54	24.67	24.70	24.47
			1	78	24.46	24.59	24.53	23.62	23.59	23.43
			36	18	25.60	25.04	25.05	23.93	24.01	24.13
			75	0	24.48	24.40	24.04	23.76	23.68	24.02
			1	0	24.23	22.94	23.91	23.12	23.22	23.36
			1	1	24.94	24.65	24.53	23.18	23.26	23.36
	16QAM		1	77	24.67	24.76	24.64	23.74	23.82	23.22
			1	78	23.70	23.80	23.73	22.82	22.83	22.36
			36	18	24.45	24.74	24.52	22.89	23.16	23.14
			75	0	23.66	23.47	23.22	22.52	22.79	22.97
			1	0	24.29	23.19	22.76	22.70	22.67	22.83
			1	1	23.19	22.45	23.02	22.39	22.60	22.83
			1	77	23.24	23.32	23.03	22.21	22.23	21.98
	64QAM		1	78	23.30	23.23	23.18	22.21	22.30	21.96
			36	18	22.99	22.71	23.25	22.31	22.49	22.71
			75	0	22.67	22.65	22.36	22.16	22.22	22.63
			1	0	20.94	21.03	20.94	20.11	20.16	19.89
			1	1	21.02	21.12	21.08	20.28	20.13	19.89
			1	77	21.16	20.82	20.97	20.18	20.16	19.95
			1	78	20.97	21.00	20.91	20.14	20.09	19.91
	256QAM		36	18	21.01	20.77	20.80	20.16	19.96	19.69
			75	0	21.07	21.02	20.58	20.12	19.92	19.71

### OUTPUT POWER FOR 5G NR n71 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)						
				ANT 1			ANT 2			
				134600	136600	137600	134600	136600	137600	
20.0	BPSK		1	0	25.11	25.20	25.20	24.51	24.53	24.51
			1	1	25.02	25.43	24.96	24.45	24.49	24.51
			1	104	25.60	25.60	25.43	24.65	24.57	24.38
			1	105	25.11	25.08	24.91	24.06	23.98	23.90
			50	25	24.97	24.96	25.43	24.39	24.37	24.39
			100	0	24.81	25.05	25.26	24.36	24.32	24.27
			1	0	24.64	24.16	24.56	24.08	24.13	24.15
	QPSK		1	1	24.80	24.23	23.93	24.02	24.11	24.15
			1	104	25.70	25.65	25.45	24.70	24.63	24.45
			1	105	24.65	24.56	24.45	23.63	23.53	23.52
			50	25	24.65	24.50	23.78	23.91	23.97	24.06
			100	0	24.45	24.27	23.80	23.84	23.91	23.98
			1	0	24.32	24.26	24.12	23.28	23.44	23.36
			1	1	24.07	23.75	23.57	23.31	23.36	23.36
	16QAM		1	104	24.71	23.65	23.66	23.50	23.55	23.20
			1	105	23.78	23.78	23.54	22.54	22.64	22.25
			50	25	24.24	23.56	23.33	23.09	23.27	23.22
			100	0	24.17	23.50	23.27	23.05	23.19	23.18
			1	0	23.72	23.65	23.71	22.81	22.94	22.92
			1	1	23.46	23.20	22.93	22.84	22.85	22.92
			1	104	23.22	23.23	23.09	22.05	22.17	22.02
	64QAM		1	105	23.45	23.13	23.17	22.26	22.18	22.02
			50	25	23.53	23.20	22.83	22.75	22.76	22.78
			100	0	23.26	23.43	22.90	22.58	22.65	22.80
			1	0	21.17	21.23	21.50	20.27	20.36	20.06
			1	1	21.20	20.96	21.27	20.19	20.21	20.06
			1	104	21.13	21.01	20.96	20.11	20.08	19.99
			1	105	21.02	21.04	20.96	20.07	20.10	19.92
	256QAM		50	25	20.96	21.34	21.24	20.07	20.19	19.96
			100	0	21.13	21.28	21.16	19.97	20.02	20.01





**OUTPUT POWER FOR 5G NR n77 (60.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 7			ANT 8			ANT 9			ANT 4		
				632000	633332	634666	632000	633332	634666	632000	633332	634666	632000	633332	634666
60.0	BPSK	1	0	23.96	24.05	23.93	20.98	20.39	21.00	23.33	23.36	23.46	20.53	20.25	20.41
		1	1	27.54	27.53	27.49	24.57	24.03	24.47	26.86	26.87	27.10	23.88	23.87	23.80
		1	160	27.70	27.56	27.64	24.55	24.19	24.43	27.18	27.20	26.91	24.20	24.10	23.84
		1	161	24.17	24.16	23.95	20.99	20.37	21.02	23.56	23.47	23.37	20.52	20.64	20.52
		81	40	27.45	27.48	27.51	24.58	23.96	24.45	27.01	26.93	27.02	24.01	24.04	24.02
		162	0	26.96	27.00	26.97	23.96	23.48	23.97	26.49	26.42	26.46	23.48	23.46	23.52
		1	0	23.97	23.99	23.90	20.96	20.18	20.92	23.46	23.37	23.35	20.50	20.41	20.35
	QPSK	1	1	27.26	27.40	27.54	24.47	23.99	24.58	26.93	26.86	26.96	23.99	24.08	23.85
		1	160	27.53	27.37	27.56	24.70	24.07	24.48	27.19	27.08	26.87	24.11	24.09	23.88
		1	161	24.08	24.03	24.17	20.78	20.63	21.23	23.55	23.48	23.34	20.59	20.43	20.41
		81	40	27.40	27.42	27.50	24.58	23.98	24.41	27.09	26.97	26.92	24.04	24.06	23.98
		162	0	26.53	26.39	26.47	23.40	23.22	23.51	25.93	26.02	25.89	22.96	22.96	22.92
		1	0	24.09	24.40	24.55	20.64	20.26	19.98	23.14	23.31	23.20	20.37	20.47	20.58
		1	1	26.75	26.84	26.86	23.21	22.56	23.14	26.24	25.94	25.97	22.90	22.98	23.17
	16QAM	1	160	27.05	26.68	26.77	23.00	22.45	23.31	25.78	26.02	25.63	23.11	23.16	23.09
		1	161	24.56	24.48	24.47	20.63	20.21	20.65	23.44	23.45	23.38	20.90	20.67	20.56
		81	40	26.53	26.56	26.54	23.51	22.98	23.51	25.97	25.95	25.91	22.95	23.07	23.06
		162	0	25.39	25.45	25.44	22.52	21.95	22.47	24.93	24.92	24.93	22.02	21.94	21.90
		1	0	23.94	23.56	23.40	20.93	20.28	21.01	23.39	23.24	23.36	20.75	20.81	20.60
		1	1	24.53	24.59	24.53	21.85	21.44	21.83	24.42	24.43	24.46	21.76	21.74	21.89
		1	160	24.53	24.44	24.62	21.88	21.54	21.45	24.41	24.39	24.29	21.85	21.85	21.67
	64QAM	1	161	23.63	23.62	23.60	21.09	20.36	20.55	23.34	23.71	23.42	20.47	20.38	20.79
		81	40	24.93	25.09	25.00	22.00	21.48	21.96	24.47	24.40	24.38	21.50	21.42	21.49
		162	0	24.90	25.02	24.99	22.01	21.45	21.42	24.42	24.46	24.39	21.57	21.54	21.48
		1	0	22.98	23.38	23.08	20.09	19.41	19.93	22.42	22.52	22.33	19.22	19.65	19.39
		1	1	23.14	23.26	23.32	20.08	19.61	20.11	22.55	22.25	22.44	19.46	19.67	19.41
		1	160	23.32	23.38	23.22	20.29	19.56	20.10	22.68	22.36	22.27	19.61	19.65	19.58
		1	161	23.34	23.40	23.17	20.52	19.49	19.84	22.55	22.44	22.22	19.73	19.60	19.55
	256QAM	81	40	23.07	22.95	22.95	20.05	19.41	19.99	22.37	22.45	22.42	19.51	19.54	19.46
		162	0	22.94	22.97	22.97	20.04	19.47	19.99	22.43	22.43	22.39	19.53	19.57	19.44

**OUTPUT POWER FOR 5G NR n77 (70.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 7			ANT 8			ANT 9			ANT 4		
				632333	633332	634333	632333	633332	634333	632333	633332	634333	632333	633332	634333
70.0	BPSK	1	0	23.97	24.01	24.07	20.21	20.74	20.61	23.48	23.28	23.26	20.53	20.25	20.47
		1	1	27.68	27.70	27.63	23.89	24.04	24.05	26.72	26.69	26.89	23.95	23.86	23.92
		1	187	27.61	27.62	27.61	23.96	24.26	23.96	26.87	26.97	26.70	24.08	23.97	23.93
		1	188	24.21	24.07	24.13	20.22	20.75	20.34	23.50	23.36	23.09	20.51	20.47	20.43
		90	45	27.67	27.59	27.10	23.86	24.35	24.01	26.94	26.93	26.84	24.10	24.10	24.03
		180	0	27.08	27.13	26.47	23.30	23.82	23.44	26.45	26.44	26.41	23.47	23.25	23.43
		1	0	24.21	24.08	24.13	20.31	20.91	20.63	23.54	23.57	23.56	20.54	20.33	20.75
	QPSK	1	1	27.62	27.60	27.60	23.92	24.21	24.16	27.20	26.78	26.95	23.96	23.87	23.99
		1	187	27.62	27.59	27.57	24.13	24.70	23.93	27.10	26.92	26.64	24.20	24.15	23.91
		1	188	23.99	24.01	23.99	20.23	21.06	20.51	23.59	23.54	23.17	20.68	20.54	20.50
		90	45	27.60	27.58	26.49	23.82	24.41	23.92	26.98	26.90	26.87	24.06	24.12	24.02
		180	0	26.56	26.56	25.97	22.85	23.34	22.92	25.90	25.90	25.93	23.05	23.08	23.01
		1	0	24.54	24.56	24.58	19.46	20.14	19.97	23.58	23.36	23.57	19.89	20.24	20.45
		1	1	26.81	26.72	26.77	22.39	22.73	22.46	25.83	25.91	26.28	23.10	22.96	22.96
	16QAM	1	187	27.14	26.99	26.68	22.03	23.38	22.57	25.89	26.02	25.97	23.38	23.05	22.98
		1	188	24.42	24.57	24.43	19.30	20.38	20.02	23.39	23.47	23.15	20.76	20.54	20.73
		90	45	26.51	26.49	25.48	22.88	23.39	23.09	25.95	25.96	25.92	22.96	23.08	22.97
		180	0	25.60	25.46	24.93	21.88	22.36	21.96	24.91	24.88	25.00	22.05	21.98	21.95
		1	0	23.62	23.50	23.67	20.16	20.84	20.69	23.56	23.51	23.91	20.86	20.51	20.46
		1	1	24.62	24.48	24.57	21.50	21.98	20.29	24.76	24.49	24.72	21.76	21.37	21.58
		1	187	24.58	24.58	24.56	21.39	21.98	21.69	24.37	24.66	24.52	21.84	21.98	21.54
	64QAM	1	188	23.70	23.62	23.58	20.38	21.04	20.42	23.57	23.82	23.20	20.32	20.69	20.58
		90	45	25.09	25.08	24.99	21.39	21.81	21.48	24.36	24.40	24.46	21.56	21.49	21.53
		180	0	25.13	25.04	24.49	21.30	21.80	21.48	24.46	24.39	24.48	21.53	21.52	21.48
		1	0	23.09	23.39	23.52	19.55	19.96	19.41	22.35	22.13	22.51	19.72	19.48	19.71
		1	1	23.22	23.38	23.02	19.23	19.75	19.48	22.30	22.34	22.48	19.41	19.60	19.54
		1	187	23.01	23.37	23.22	19.65	19.82	19.57	22.34	22.42	22.03	19.61	19.52	19.52
		1	188	23.24	23.36	23.23	19.17	20.02	19.66	22.43	22.21	22.15	19.41	19.48	19.54
	256QAM	90	45	23.13	23.10	23.00	19.32	19.88	19.44	22.48					



**OUTPUT POWER FOR 5G NR n77 (100.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)							
				ANT 7		ANT 8		ANT 9		ANT 4	
				N/A	633332	N/A	N/A	633332	N/A	N/A	633332
				N/A	3500.0	N/A	N/A	3500.0	N/A	N/A	3500.0
100.0	BPSK	1	0	23.75		21.06		23.40		20.96	
		1	1	27.60		24.62		26.86		24.01	
		1	271	27.70		24.43		26.74		24.13	
		1	272	24.05		20.99		23.67		20.67	
		135	67	27.42		24.67		27.20		24.14	
		270	0	26.90		24.12		26.58		23.56	
		1	1	24.16		21.21		23.51		20.63	
	QPSK	1	271	27.56		24.70		27.16		24.05	
		1	272	24.14		24.64		27.07		24.15	
		135	67	27.35		24.66		23.42		20.54	
		270	0	26.40		23.66		27.13		24.20	
		1	0	23.68		20.91		23.56		20.77	
		1	1	26.43		23.77		26.00		22.83	
	16QAM	1	271	26.54		23.82		26.16		21.92	
		1	272	24.15		21.26		23.57		20.53	
		135	67	26.38		23.65		26.02		23.20	
		270	0	25.37		22.59		25.10		22.11	
		1	0	23.69		20.96		23.83		20.90	
	64QAM	1	1	24.72		22.15		25.54		21.74	
		1	271	24.60		22.39		24.54		21.58	
		1	272	23.57		20.80		23.99		21.07	
		135	67	24.84		22.12		24.68		21.68	
		270	0	24.87		21.94		24.72		21.60	
		1	0	23.32		19.78		22.79		19.63	
	256QAM	1	1	23.06		19.85		22.88		19.65	
		1	271	23.37		20.10		22.34		20.01	
		1	272	23.20		20.01		22.93		19.58	
		135	67	22.92		20.12		22.61		19.70	
		270	0	22.74		20.13		22.63		19.69	



**OUTPUT POWER FOR 5G NR n77 (40.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 7			ANT 8			ANT 9			ANT 4		
				648000	656000	664000	648000	656000	664000	648000	656000	664000	648000	656000	664000
40.0	BPSK	1	0	23.61	22.62	25.08	20.72	20.82	21.26	22.97	23.40	23.05	20.33	20.01	19.56
		1	1	27.70	27.49	27.30	24.03	24.38	24.67	26.90	26.67	26.61	24.20	23.07	23.33
		1	104	26.70	26.83	26.77	24.28	24.20	24.27	27.20	26.94	27.01	22.78	22.75	23.46
		1	105	23.39	23.24	23.15	20.84	20.64	20.73	23.71	23.42	23.49	19.33	19.31	19.81
		50	25	26.44	26.73	27.15	24.14	24.32	24.41	26.17	26.53	26.71	23.54	23.53	22.76
	QPSK	100	0	26.13	26.68	26.81	23.76	23.73	23.98	25.61	26.04	26.35	23.14	23.13	22.16
		1	0	23.31	23.63	24.36	20.63	20.86	21.39	22.42	22.98	24.06	19.97	19.93	19.14
		1	1	26.00	27.31	27.12	24.20	24.58	24.70	26.63	26.59	26.65	24.13	22.80	22.36
		1	104	26.80	26.64	26.62	24.23	24.08	24.27	27.15	26.94	26.87	19.79	22.80	23.34
		1	105	23.17	23.35	23.21	20.77	20.63	20.86	23.67	23.40	23.45	19.29	19.23	19.85
	16QAM	50	25	26.88	26.76	27.50	24.22	24.28	24.48	25.95	26.27	27.10	23.52	23.95	22.90
		100	0	25.58	26.05	26.36	23.30	23.24	23.59	25.32	25.13	25.81	22.41	22.68	21.58
		1	0	23.47	23.05	24.63	20.76	21.04	21.23	22.58	22.30	23.75	19.21	19.73	18.89
		1	1	25.76	25.66	26.24	23.25	23.57	24.26	24.36	25.61	26.16	22.21	22.17	21.76
		1	104	25.84	25.63	25.40	23.67	23.52	23.10	26.06	25.70	25.75	21.74	21.73	22.52
	64QAM	1	105	23.19	23.12	23.13	21.26	20.93	20.64	23.60	23.22	23.45	19.06	19.24	20.02
		50	25	25.71	26.36	26.46	23.31	23.28	23.51	25.33	25.42	25.50	22.32	22.65	21.72
		100	0	24.76	24.76	25.38	22.23	22.23	22.54	24.27	24.38	24.59	21.40	21.75	21.05
		1	0	23.34	22.92	23.48	20.97	20.95	21.51	22.59	21.63	23.19	19.34	19.43	19.11
		1	1	23.91	24.14	25.85	21.85	21.93	23.22	24.38	24.08	24.30	21.72	21.61	20.19
	256QAM	1	104	24.03	23.85	23.58	21.68	21.62	21.82	24.58	24.57	24.62	20.37	20.39	20.80
		1	105	22.97	22.93	22.94	20.79	20.42	20.87	23.86	23.36	23.62	19.46	19.40	19.54
		50	25	24.34	24.67	24.88	21.68	21.82	22.07	23.88	23.40	24.05	20.73	21.04	20.41
		100	0	24.12	24.48	24.93	21.79	21.72	22.02	23.51	23.78	24.11	20.95	21.09	20.32
		1	0	22.06	22.73	22.22	19.57	20.09	20.30	21.97	21.35	21.29	18.21	18.77	18.25
	256QAM	1	1	22.63	22.98	22.77	19.55	19.42	20.24	21.95	22.06	21.92	20.15	18.97	19.19
		1	104	22.51	22.66	22.29	19.66	19.36	19.64	22.40	22.12	22.27	18.19	18.01	18.59
		1	105	22.27	22.44	22.61	19.65	19.40	19.69	22.36	22.18	22.26	17.99	18.01	18.86
		50	25	22.42	22.50	22.62	19.72	19.68	19.83	21.64	21.58	21.69	18.90	19.26	18.26
		100	0	22.08	22.57	22.85	19.78	19.70	20.14	22.13	21.92	22.03	18.92	19.02	18.40

**OUTPUT POWER FOR 5G NR n77 (50.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 7			ANT 8			ANT 9			ANT 4		
				648333	656000	663666	648333	656000	663666	648333	656000	663666	648333	656000	663666
50.0	BPSK	1	0	24.09	24.18	24.46	20.41	20.69	21.33	22.85	22.96	23.08	20.62	20.24	20.25
		1	1	26.30	27.70	27.15	24.01	24.19	24.70	26.91	26.39	27.20	23.71	23.48	23.39
		1	131	26.83	27.08	26.75	23.97	24.12	24.10	27.12	26.85	26.86	23.35	23.50	23.82
		1	132	23.31	23.46	23.02	20.50	20.55	20.66	23.72	23.34	23.41	19.73	20.17	20.21
		64	32	27.12	27.43	27.56	23.93	24.14	24.20	26.44	27.13	26.90	23.74	23.81	23.51
	QPSK	128	0	26.44	26.91	26.95	23.34	23.57	23.83	25.78	25.78	26.45	23.25	23.41	22.77
		1	0	23.01	22.82	24.10	20.31	20.41	21.26	23.02	22.43	22.68	20.59	20.29	19.87
		1	1	26.55	27.56	27.28	23.83	22.91	24.68	26.87	26.43	26.96	24.05	23.10	22.74
		1	131	27.06	27.13	26.98	24.09	24.05	24.09	27.09	26.77	26.87	23.26	23.48	23.79
		1	132	23.42	23.56	23.17	20.58	20.58	20.65	23.63	23.38	23.39	20.01	19.93	20.32
	16QAM	64	32	26.95	27.33	27.53	23.78	24.00	24.37	26.09	26.15	26.88	23.87	24.20	22.96
		128	0	26.17	26.33	26.62	22.99	23.14	23.28	25.38	25.13	25.81	22.26	22.69	21.92
		1	0	23.13	22.57	23.45	20.96	20.76	21.73	22.70	21.99	23.11	20.43	19.55	19.88
		1	1	25.79	25.98	26.66	23.30	22.81	23.89	24.96	25.82	24.92	22.39	22.94	22.76
		1	131	25.70	25.98	25.63	22.83	22.91	25.87	25.81	25.72	22.22	22.25	22.47	
	64QAM	1	132	23.17	23.10	23.42	20.36	20.41	20.50	23.69	23.15	23.35	19.94	19.99	20.34
		64	32	26.00	26.75	26.77	22.98	23.17	23.62	25.76	25.42	25.98	22.59	23.21	22.33
		128	0	25.22	25.46	25.57	21.90	22.08	22.36	24.45	24.62	24.88	21.70	22.05	21.17
		1	0	22.93	24.04	23.18	20.59	20.31	21.16	22.30	22.23	23.28	19.65	19.56	19.65
		1	1	24.02	25.93	25.94	21.12	21.84	22.12	23.53	23.84	24.08	22.15	21.95	22.06
	256QAM	1	131	24.07	24.37	23.90	21.87	21.56	21.94	24.61	24.10	24.78	21.06	21.16	21.33
		1	132	23.05	23.23	22.89	20.92	20.79	21.07	23.75	23.44	23.56	19.96	19.93	20.56
		64	32	24.67	25.08	25.58	21.58	21.82	21.74	23.55	24.01	24.07	21.57	21.58	20.69
		128	0	24.49	24.89	24.91	21.46	21.69	21.98	24.03	23.90	24.47	21.21	21.34	20.79
		1	0	22.21	23.21	22.85	19.61	19.16	19.83	21.37	21.69	21.22	18.77	19.13	18.60
	256QAM	1	1	22.03	22.23	23.99	19.23	19.61	20.29	22.67	21.45	22.32	19.93	19.77	19.57
		1	131	22.81	22.73	22.39	19.58	19.64	19.59	22.39	21.94	22.31	18.52	18.83	19.15
		1	132	22.69	22.73	22.25	19.55	19.47	19.55	22.50	22.16	22.21	18.71	18.95	19.17
		64	32	22.61	22.80	23.18	19.40	19.67							





**OUTPUT POWER FOR 5G NR n77 (100.0 MHz)**

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)											
				ANT 7			ANT 8			ANT 9			ANT 4		
				650000	656000	662000	650000	656000	662000	650000	656000	662000	650000	656000	662000
100.0	BPSK	1	0	23.48	23.28	23.92	20.86	21.02	21.32	23.68	23.54	23.30	20.32	20.37	20.59
		1	1	27.70	26.90	27.28	24.48	24.70	24.47	26.85	27.04	26.84	23.78	23.81	24.03
		1	271	26.58	26.96	26.71	23.59	24.29	24.06	26.86	26.84	27.09	23.91	24.15	23.82
		1	272	23.03	23.41	23.15	20.16	20.64	20.43	23.44	23.49	23.06	20.29	20.87	20.32
		135	67	27.07	27.66	27.59	24.18	24.28	24.53	26.91	27.20	26.89	23.33	23.29	23.63
		270	0	26.51	26.77	27.17	23.88	23.70	23.89	26.87	26.58	25.93	22.80	23.12	23.40
		1	0	23.15	24.10	23.68	20.59	20.66	20.62	23.92	24.25	23.05	19.96	20.29	19.65
	QPSK	1	1	27.27	26.58	26.94	24.02	24.65	24.66	26.58	26.93	26.80	23.16	23.62	23.71
		1	271	26.41	27.00	26.70	23.62	24.04	23.89	26.83	26.77	26.53	23.97	24.20	23.88
		1	272	22.90	23.39	23.11	20.02	20.46	20.37	23.55	23.96	22.62	20.33	20.64	20.35
		135	67	26.84	27.60	27.51	24.32	24.26	24.55	26.71	26.97	26.84	22.86	23.20	23.49
		270	0	26.25	26.33	26.65	23.26	23.26	23.46	26.34	25.93	25.61	22.25	22.47	22.91
		1	0	22.56	23.30	23.41	21.01	21.07	20.97	23.77	23.88	23.21	19.79	19.99	19.62
		1	1	25.74	26.12	26.60	23.12	23.59	23.90	25.75	26.06	25.94	22.72	22.67	23.38
	16QAM	1	271	25.69	26.03	26.28	22.58	22.98	23.09	26.16	25.82	25.86	23.02	23.45	23.15
		1	272	23.36	23.31	23.70	20.19	20.47	20.62	23.45	23.77	22.83	20.38	20.54	19.08
		135	67	26.44	26.56	26.55	23.43	23.26	23.63	25.97	26.00	26.06	22.12	22.47	22.84
		270	0	24.96	25.26	25.71	22.35	22.20	22.46	25.27	25.08	24.89	21.18	21.08	21.88
		1	0	21.64	22.10	23.50	20.69	20.79	20.87	23.16	23.35	22.99	19.62	19.78	19.05
		1	1	24.65	25.52	25.15	21.75	22.48	22.06	25.10	24.73	25.00	21.54	20.69	22.85
		1	271	23.98	24.30	23.95	20.92	21.49	21.49	24.45	24.53	24.85	21.47	21.29	21.44
	64QAM	1	272	22.62	23.03	23.15	20.21	20.57	20.85	23.28	22.88	22.39	20.40	20.81	20.38
		135	67	24.62	24.74	25.20	21.78	21.79	22.11	24.56	24.98	24.88	20.68	21.20	21.36
		270	0	24.58	25.06	25.09	21.82	21.78	21.99	24.74	24.63	24.46	20.84	20.56	21.16
		1	0	21.53	21.63	22.36	19.92	19.75	20.03	21.46	21.47	21.69	18.40	19.34	18.23
		1	1	22.33	22.62	21.72	19.85	19.86	20.41	21.49	22.74	23.44	19.51	18.64	20.65
		1	271	21.76	22.57	21.96	19.32	19.56	19.33	21.99	22.39	22.89	19.24	19.49	19.18
		1	272	21.98	22.53	22.26	19.46	19.61	19.49	22.15	21.53	21.28	18.96	19.25	18.04
	256QAM	135	67	22.41	22.88	23.34	19.83	19.70	20.18	22.29	22.74	22.00	18.81	18.98	19.20
		270	0	22.66	22.86	23.09	19.78	19.77	20.01	23.11	22.29	22.38	18.53	18.95	19.32

## 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	4.551	5.079	
	5MHz, QPSK			4.571	5.162	
	5MHz, 16QAM			4.583	5.159	
	10MHz, BPSK	50/0		9.004	9.772	
	10MHz, QPSK			8.947	9.649	
	10MHz, 16QAM			8.937	9.689	
	15MHz, BPSK	75/0		13.455	14.22	
	15MHz, QPSK			13.448	14.29	
	15MHz, 16QAM			13.380	14.26	
	20MHz, BPSK	100/0		17.800	18.84	
	20MHz, QPSK			17.855	18.81	
	20MHz, 16QAM			17.794	18.86	
	20MHz, QPSK	1/0		0.2660	0.4594	

**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	4.498	4.875	
	5MHz, 16QAM			4.489	4.909	
	10MHz, QPSK	50/0		8.961	9.720	
	10MHz, 16QAM			8.919	9.705	
	15MHz, QPSK	75/0		13.399	14.534	
	15MHz, 16QAM			13.411	14.389	
	20MHz, QPSK	100/0		17.793	19.063	
	20MHz, 16QAM			17.879	19.117	
	20MHz, QPSK	1/0		0.2797	0.4962	

**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	4.595	5.215	
	5MHz, QPSK			4.604	5.206	
	5MHz, 16QAM			4.573	5.159	
	10MHz, BPSK	50/0		8.994	9.795	
	10MHz, QPSK			9.003	9.681	
	10MHz, 16QAM			8.978	9.747	
	15MHz, BPSK	75/0		13.403	14.27	
	15MHz, QPSK			13.385	14.22	
	15MHz, 16QAM			13.413	14.22	
	20MHz, BPSK	100/0		17.859	18.73	
	20MHz, QPSK			17.813	18.85	
	20MHz, 16QAM			17.832	18.83	
	25MHz, BPSK	128/0		22.824	23.71	
	25MHz, QPSK			22.753	23.68	
	25MHz, 16QAM			22.813	23.69	
	30MHz, BPSK	160/0		28.383	29.43	
	30MHz, QPSK			28.560	29.53	
	30MHz, 16QAM			28.436	29.46	
	40MHz, BPSK	216/0		38.393	39.98	
	40MHz, QPSK			38.388	39.95	
	40MHz, 16QAM			38.434	39.97	
	40MHz, BPSK	1/0		0.35797	0.58793	

**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	1.093	1.238	
	1.4MHz, 16QAM			1.083	1.222	
	3MHz, QPSK	15/0		2.693	2.961	
	3MHz, 16QAM			2.681	2.971	
	5MHz, QPSK	25/0		4.487	4.935	
	5MHz, 16QAM			4.486	4.857	
	10MHz, QPSK	50/0		8.938	9.542	
	10MHz, 16QAM			8.925	9.604	
	10MHz, QPSK	1/0		0.23414	0.4186	

### 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	4.549	5.048	
	5MHz, QPSK			4.563	5.177	
	5MHz, 16QAM			4.580	5.126	
	10MHz, BPSK	50/0		8.998	9.678	
	10MHz, QPSK			9.016	11.05	
	10MHz, 16QAM			8.944	9.676	
	15MHz, BPSK	75/0		13.457	14.25	
	15MHz, QPSK			13.447	14.30	
	15MHz, 16QAM			13.383	14.25	
	15MHz, BPSK	1/0		0.25411	0.3978	

### 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	4.496	4.947	
	5MHz, 16QAM			4.563	4.999	
	10MHz, QPSK	50/0		8.950	9.725	
	10MHz, 16QAM			8.998	9.608	
	10MHz, QPSK	1/0		9.016	0.4084	

### 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	4.513	4.931	
	5MHz, 16QAM			4.514	4.949	
	10MHz, QPSK	50/0		8.987	9.722	
	10MHz, 16QAM			8.948	9.794	
	10MHz, QPSK	1/0		0.22949	0.4034	

### 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	4.489	4.919	
	5MHz, 16QAM			4.503	4.971	
	10MHz, QPSK	50/0		8.947	9.677	
	10MHz, 16QAM			8.923	9.640	
	10MHz, QPSK	1/0		0.2306	0.413	

**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	1.087	1.203	
	1.4MHz, 16QAM			1.079	1.225	
	3MHz, QPSK	15/0		2.693	2.994	
	3MHz, 16QAM			2.690	2.970	
	5MHz, QPSK	25/0		4.489	4.898	
	5MHz, 16QAM			4.491	4.950	
	10MHz, QPSK	50/0		8.952	9.710	
	10MHz, 16QAM			8.934	9.739	
	15MHz, QPSK	75/0		13.406	14.414	
	15MHz, 16QAM			13.402	14.481	
	20MHz, QPSK	100/0		17.873	19.157	
	20MHz, 16QAM			17.846	19.182	
	20MHz, QPSK	1/0		0.29555	0.4693	

**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	4.476	4.850	
	5MHz, QPSK			4.494	4.977	
	5MHz, 16QAM			4.462	4.908	
	10MHz, BPSK	50/0		8.896	9.492	
	10MHz, QPSK			8.918	9.411	
	10MHz, 16QAM			8.877	9.436	
	15MHz, BPSK			13.397	14.25	
	15MHz, QPSK	75/0		13.420	14.13	
	15MHz, 16QAM			13.418	14.20	
	20MHz, BPSK			17.826	18.84	
	20MHz, QPSK	100/0		17.864	18.75	
	20MHz, 16QAM			17.868	18.78	
	25MHz, BPSK	128/0		22.835	23.78	
	25MHz, QPSK			22.858	23.72	
	25MHz, 16QAM			22.818	23.70	
	30MHz, BPSK	160/0		28.512	29.52	
	30MHz, QPSK			28.549	29.48	
	30MHz, 16QAM			28.469	29.46	
	40MHz, BPSK	216/0		38.467	43.37	
	40MHz, QPSK			38.402	39.98	
	40MHz, 16QAM			38.468	39.95	
	40MHz, BPSK	1/0		0.32202	0.4684	

**LTE BAND 26(FCC 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	1.086	1.230	
	1.4MHz, 16QAM			1.091	1.234	
	3MHz, QPSK	15/0		2.692	2.986	
	3MHz, 16QAM			2.697	2.994	
	5MHz, QPSK	25/0		4.518	4.932	
	5MHz, 16QAM			4.496	4.949	
	10MHz, QPSK	50/0		8.966	9.789	
	10MHz, 16QAM			8.938	9.767	
	10MHz, QPSK	1/0		0.23500	0.3744	

**LTE BAND 26 (FCC 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	1.088	1.215	
	1.4MHz, 16QAM			1.081	1.226	
	3MHz, QPSK	15/0		2.695	2.981	
	3MHz, 16QAM			2.690	3.002	
	5MHz, QPSK	25/0		4.519	4.961	
	5MHz, 16QAM			4.499	4.980	
	10MHz, QPSK	50/0		8.954	9.818	
	10MHz, 16QAM			8.962	9.781	

**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	4.502	4.926	
	5MHz, 16QAM			4.496	4.913	
	10MHz, QPSK	50/0		8.973	9.634	
	10MHz, 16QAM			8.981	9.692	
	10MHz, QPSK	1/0		0.2325	0.3827	

**5G NR n30**

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 30	5MHz, BPSK	25/0	2310.0	4.466	4.700	
	5MHz, QPSK			4.462	4.746	
	5MHz, 16QAM	50/0		4.461	4.736	
	10MHz, BPSK			8.958	9.400	
	10MHz, QPSK	1/0		8.948	9.371	
	10MHz, 16QAM			8.922	9.379	
	10MHz, BPSK			0.2402	0.377	

**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	4.489	4.848	
	5MHz, 16QAM			4.506	4.824	
	10MHz, QPSK	50/0		8.982	9.344	
	10MHz, 16QAM			8.937	9.366	
	15MHz, QPSK	75/0		13.426	14.154	
	15MHz, 16QAM			13.371	14.510	
	20MHz, QPSK	100/0		17.777	18.839	
	20MHz, 16QAM			17.776	18.930	
	20MHz, QPSK	1/0		0.27334	0.455	

**5G NR n41**

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR BAND n41 (FCC)	20MHz, BPSK	50/0	2593	17.902	18.74	
	20MHz, QPSK			17.889	18.69	
	20MHz, 16QAM			17.801	18.65	
	30MHz, BPSK	75/0		26.862	27.75	
	30MHz, QPSK			26.794	27.80	
	30MHz, 16QAM			26.689	27.68	
	40MHz, BPSK	100/0		35.533	37.39	
	40MHz, QPSK			35.762	37.35	
	40MHz, 16QAM			35.633	37.36	
	50MHz, BPSK	128/0		45.875	47.75	
	50MHz, QPSK			45.725	47.71	
	50MHz, 16QAM			45.698	47.80	
	60MHz, BPSK	162/0		57.702	60.12	
	60MHz, QPSK			57.945	60.45	
	60MHz, 16QAM			58.004	60.18	
	80MHz, BPSK	216/0		77.027	80.01	
	80MHz, QPSK			76.987	79.97	
	80MHz, 16QAM			77.106	79.83	
	90MHz, BPSK	243/0		86.790	90.37	
	90MHz, QPSK			86.713	90.28	
	90MHz, 16QAM			86.808	90.23	
	100MHz, BPSK	270/0		96.536	100.4	
	100MHz, QPSK			96.401	100.3	
	100MHz, 16QAM			96.506	100.6	
	100MHz, BPSK	1/0		3.2380	4.313	

#### 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	4.472	4.748	
	5MHz, 16QAM			4.473	4.809	
	10MHz, QPSK	50/0		8.949	9.576	
	10MHz, 16QAM			8.975	9.595	
	15MHz, QPSK	75/0		13.421	14.312	
	15MHz, 16QAM			13.470	14.000	
	20MHz, QPSK	100/0		17.880	18.922	
	20MHz, 16QAM			17.928	18.963	
	20MHz, QPSK	1/0		0.25359	0.4186	

#### 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	1.087	1.232	
	1.4MHz, 16QAM			1.077	1.219	
	3MHz, QPSK	15/0		2.686	2.938	
	3MHz, 16QAM			2.686	2.686	
	5MHz, QPSK	25/0		4.492	4.898	
	5MHz, 16QAM			4.487	4.865	
	10MHz, QPSK	50/0		8.945	9.616	
	10MHz, 16QAM			8.945	9.683	
	15MHz, QPSK	75/0		13.434	14.435	
	15MHz, 16QAM			13.403	14.532	
	20MHz, QPSK	100/0		17.833	19.149	
	20MHz, 16QAM			17.884	19.084	
	20MHz, QPSK	1/0		0.29306	0.4562	

#### 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	4.464	4.665	
	5MHz, QPSK			4.472	4.848	
	5MHz, 16QAM	50/0		4.454	4.721	
	10MHz, BPSK			8.870	9.334	
	10MHz, QPSK	100/0		8.926	9.336	
	10MHz, 16QAM			8.890	9.371	
	15MHz, BPSK	75/0		13.378	14.00	
	15MHz, QPSK			13.373	14.04	
	15MHz, 16QAM			13.291	13.91	
	20MHz, BPSK	160/0		17.887	18.68	
	20MHz, QPSK			17.859	18.65	
	20MHz, 16QAM			17.826	18.63	
	30MHz, BPSK	216/0		28.540	29.48	
	30MHz, QPSK			28.537	29.47	
	30MHz, 16QAM			28.498	29.49	
	40MHz, BPSK			38.400	51.51	
	40MHz, QPSK			38.496	40.04	
	40MHz, 16QAM			38.459	39.99	
	40MHz, BPSK	1/0		0.34839	0.5493	

### 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	4.489	4.923
	5MHz, 16QAM			4.482	4.846
	10MHz, QPSK	50/0	683	8.951	9.585
	10MHz, 16QAM			8.942	9.640
	15MHz, QPSK	75/0	680.5	13.391	14.553
	15MHz, 16QAM			13.384	14.548
	20MHz, QPSK	100/0	683	17.831	19.354
	20MHz, 16QAM			17.873	19.108
	20MHz, QPSK	1/0		0.24701	0.4107

### 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	4.858
	5MHz, QPSK			4.465	4.908
	5MHz, 16QAM			4.468	4.901
	10MHz, BPSK	50/0	683	8.928	9.498
	10MHz, QPSK			8.940	9.580
	10MHz, 16QAM			8.929	9.55
	15MHz, BPSK	75/0	680.5	13.354	13.84
	15MHz, QPSK			13.362	13.93
	15MHz, 16QAM			13.349	13.99
	20MHz, BPSK	100/0	683	17.831	18.78
	20MHz, QPSK			17.846	18.87
	20MHz, 16QAM			17.798	18.85
	20MHz, BPSK	1/0		0.283	0.478

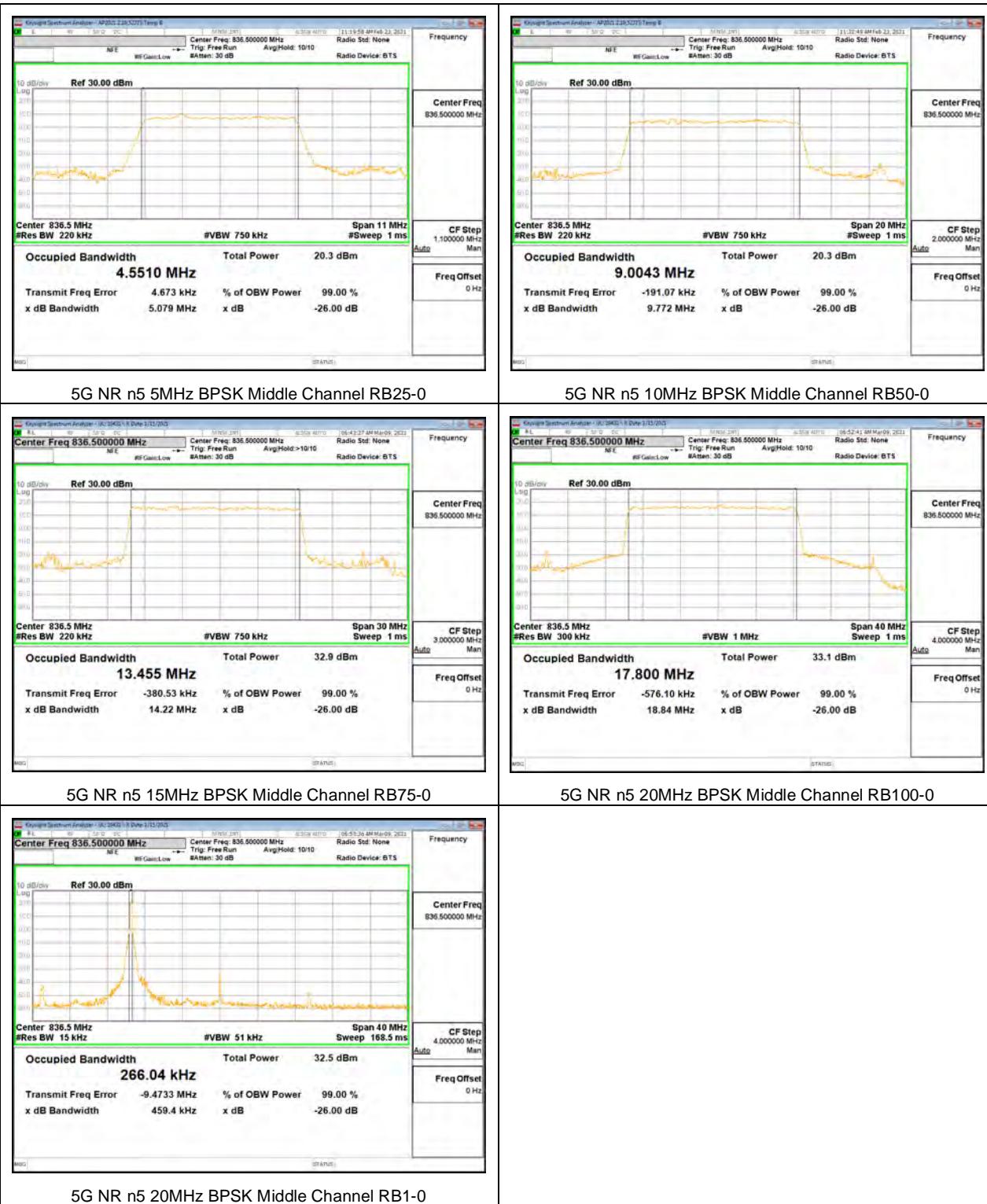
**5G NR n77(FCC Part 27 3450-3550MHz)**

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR n77 (FCC Part 27 3450- 3550MHz)	20MHz, BPSK	50/0	3500.0	17.945	18.9	
	20MHz, QPSK			17.901	18.89	
	20MHz, 16QAM			17.951	18.98	
	30MHz, BPSK	75/0		26.806	28.14	
	30MHz, QPSK			26.862	28.28	
	30MHz, 16QAM			26.810	28.22	
	40MHz, BPSK	100/0		35.793	37.51	
	40MHz, QPSK			35.744	37.66	
	40MHz, 16QAM			35.676	37.63	
	50MHz, BPSK	128/0		45.704	47.89	
	50MHz, QPSK			45.743	48.05	
	50MHz, 16QAM			45.669	48.07	
	60MHz, BPSK	162/0		57.951	60.93	
	60MHz, QPSK			58.148	61.64	
	60MHz, 16QAM			58.181	61.56	
	70MHz, BPSK	180/0		64.375	67.61	
	70MHz, QPSK			64.514	68.11	
	70MHz, 16QAM			64.659	68.21	
	80MHz, BPSK	216/0		77.270	81.01	
	80MHz, QPSK			77.330	81.21	
	80MHz, 16QAM			77.262	81.85	
	90MHz, BPSK	243/0		86.913	91.44	
	90MHz, QPSK			86.840	91	
	90MHz, 16QAM			86.766	90.87	
	100MHz, BPSK	270/0		96.713	101.5	
	100MHz, QPSK			96.658	101.7	
	100MHz, 16QAM			95.576	101.5	
	100MHz, BPSK	1/0		0.58514	0.9612	

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

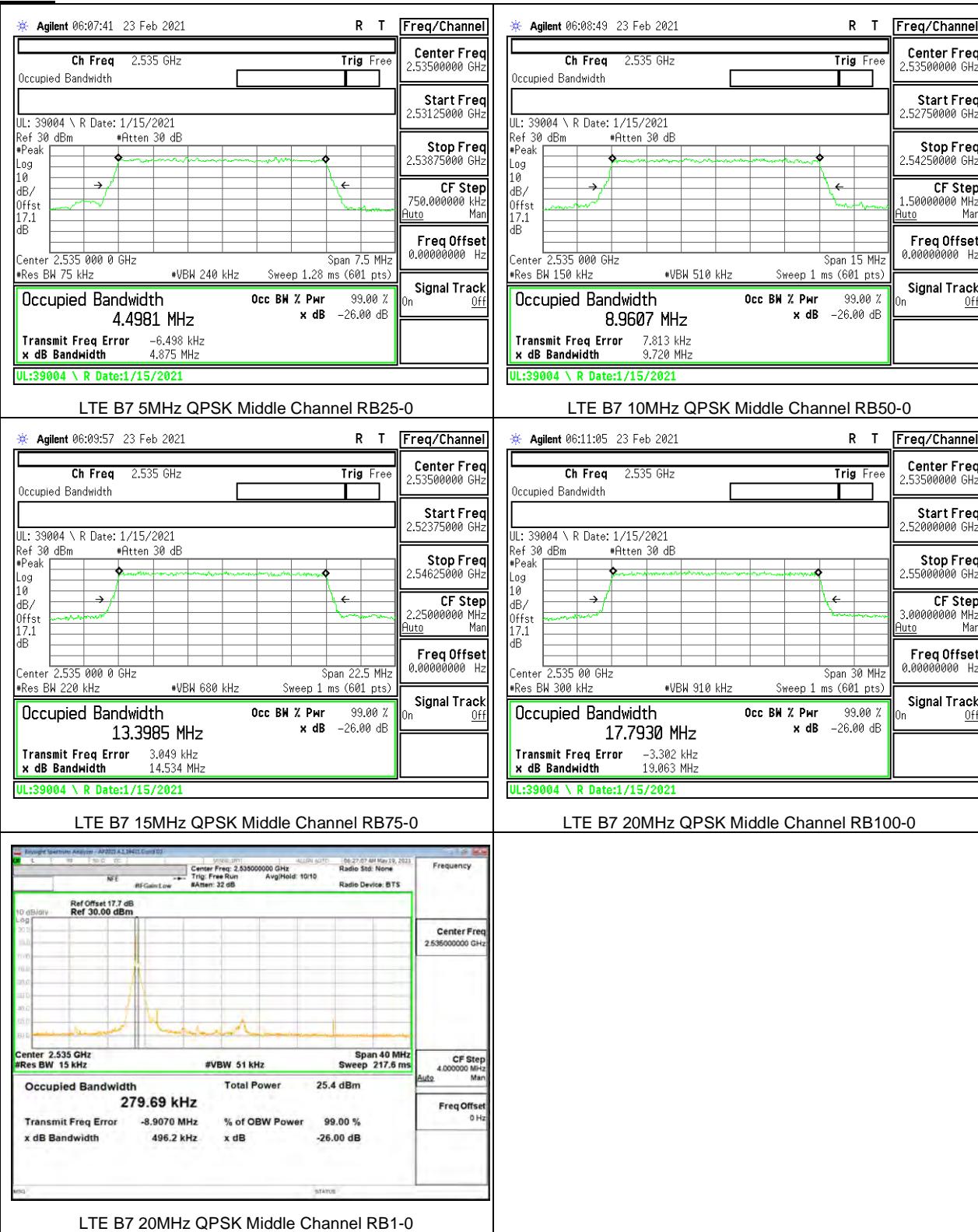
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
5G NR n77 (FCC Part 27 3700- 3980MHz)	20MHz, BPSK	50/0	3840.0	17.896	18.84	
	20MHz, QPSK			17.947	18.99	
	20MHz, 16QAM			17.908	19.09	
	30MHz, BPSK	75/0		26.783	28.09	
	30MHz, QPSK			26.832	28.10	
	30MHz, 16QAM			26.865	28.27	
	40MHz, BPSK	100/0		35.643	37.57	
	40MHz, QPSK			35.675	37.32	
	40MHz, 16QAM			35.573	37.53	
	50MHz, BPSK	128/0		45.802	47.93	
	50MHz, QPSK			45.675	47.88	
	50MHz, 16QAM			45.606	47.72	
	60MHz, BPSK	162/0		57.591	60.30	
	60MHz, QPSK			57.981	60.27	
	60MHz, 16QAM			57.802	60.28	
	70MHz, BPSK	180/0		64.182	67.07	
	70MHz, QPSK			64.160	67.01	
	70MHz, 16QAM			67.270	66.98	
	80MHz, BPSK	216/0		77.143	80.45	
	80MHz, QPSK			77.012	80.27	
	80MHz, 16QAM			77.187	80.43	
	90MHz, BPSK	243/0		86.532	90.34	
	90MHz, QPSK			86.650	90.16	
	90MHz, 16QAM			86.713	90.42	
	100MHz, BPSK	270/0		95.983	100.4	
	100MHz, QPSK			96.310	100.5	
	100MHz, 16QAM			96.314	100.4	
	100MHz, BPSK	1/0		0.596	0.980	

### 9.1.1. 5G NR n5



## 9.1.2. LTE BAND 7 AND 5G NR n7

### LTE BAND 7



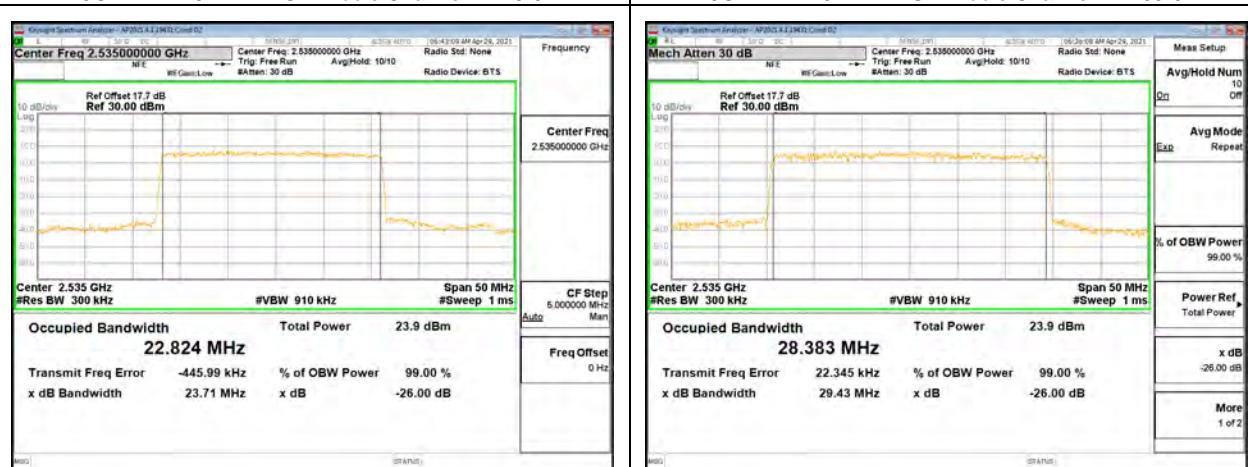
## 5G NR n7



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



5G NR n7 10MHz BPSK Middle Channel RB25-0

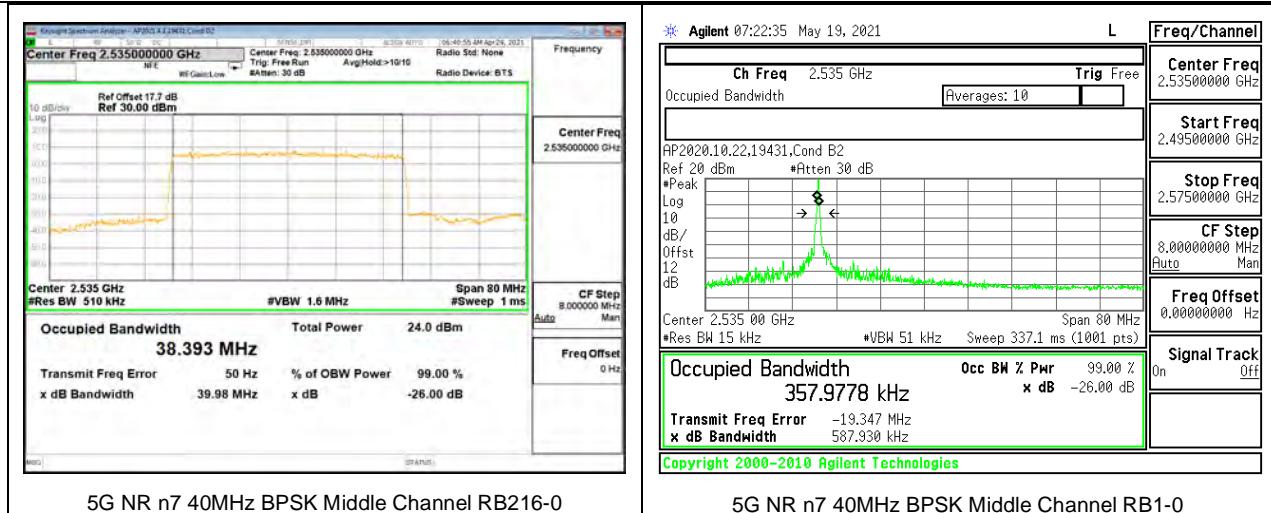


5G NR n7 20MHz BPSK Middle Channel RB75-0

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

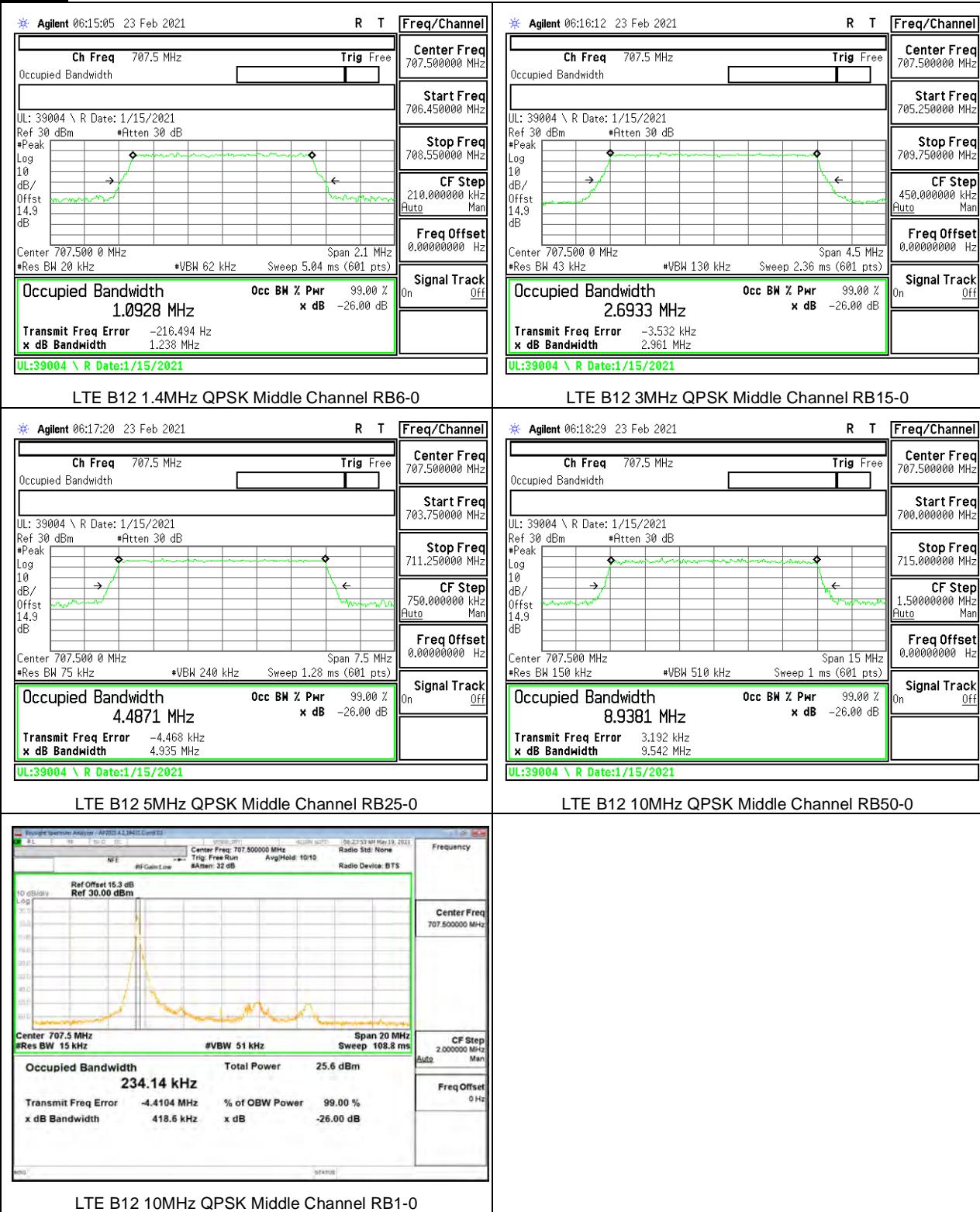
5G NR n7 30MHz BPSK Middle Channel RB100-0

5G NR n7 30MHz BPSK Middle Channel RB160-0



### 9.1.3. LTE BAND 12 AND 5G NR n12

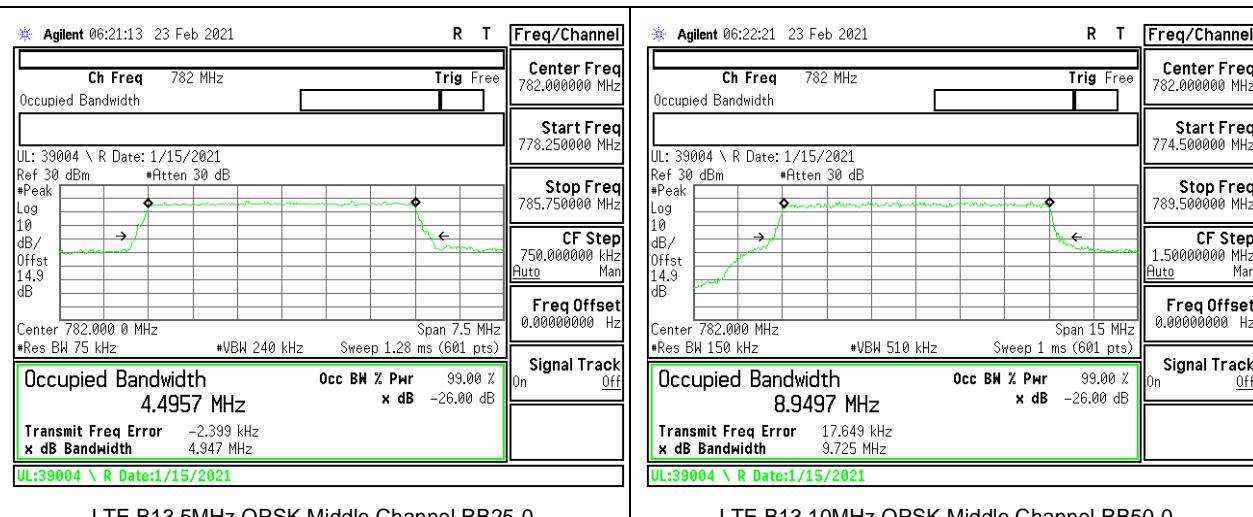
#### LTE BAND 12



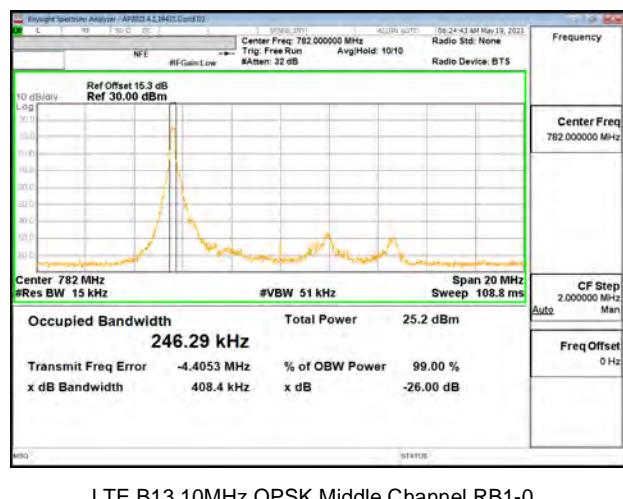
## 5G NR n12



## 9.1.4. LTE BAND 13



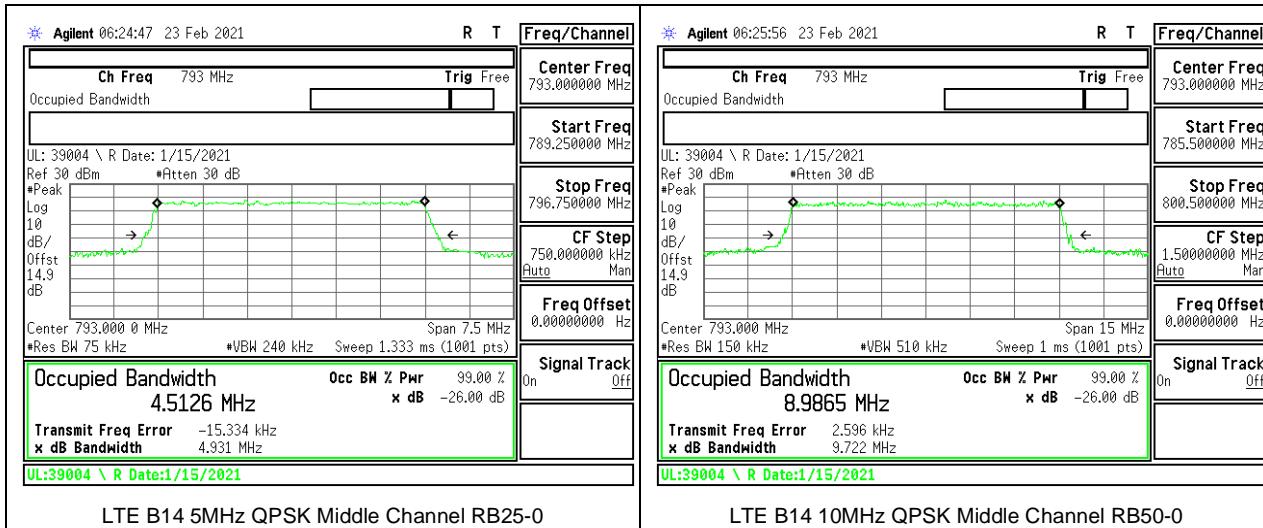
LTE B13 5MHz QPSK Middle Channel RB25-0



LTE B13 10MHz QPSK Middle Channel RB1-0

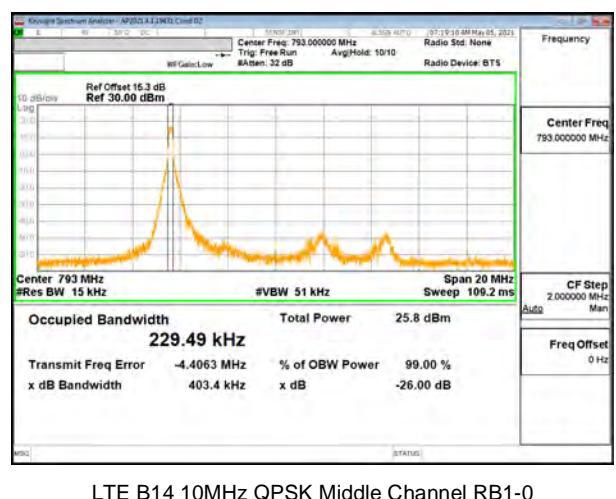
LTE B13 10MHz QPSK Middle Channel RB50-0

## 9.1.5. LTE BAND 14

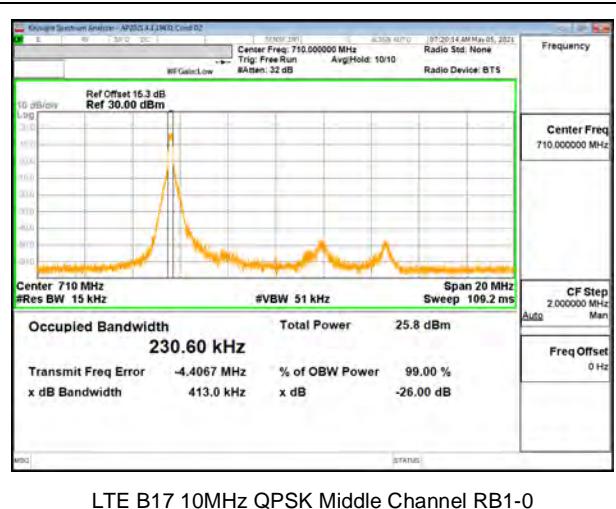
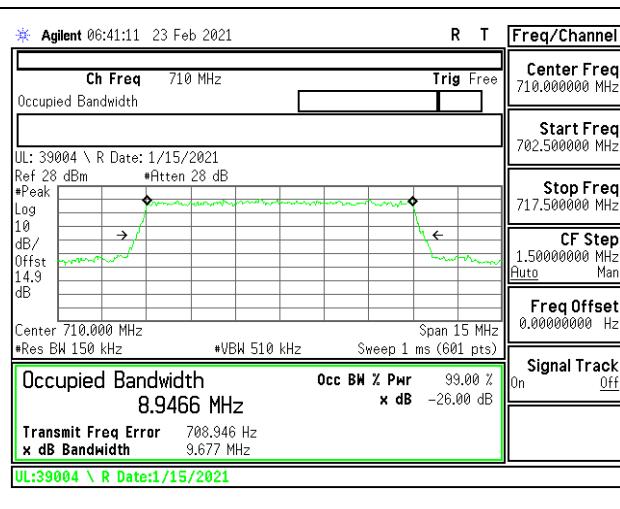
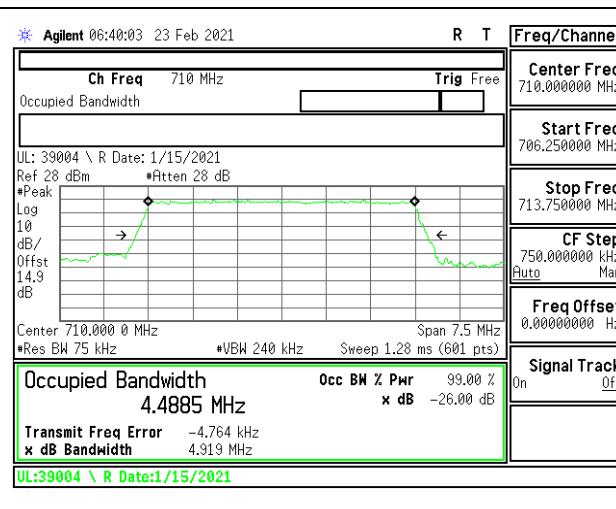


LTE B14 5MHz QPSK Middle Channel RB25-0

LTE B14 10MHz QPSK Middle Channel RB50-0

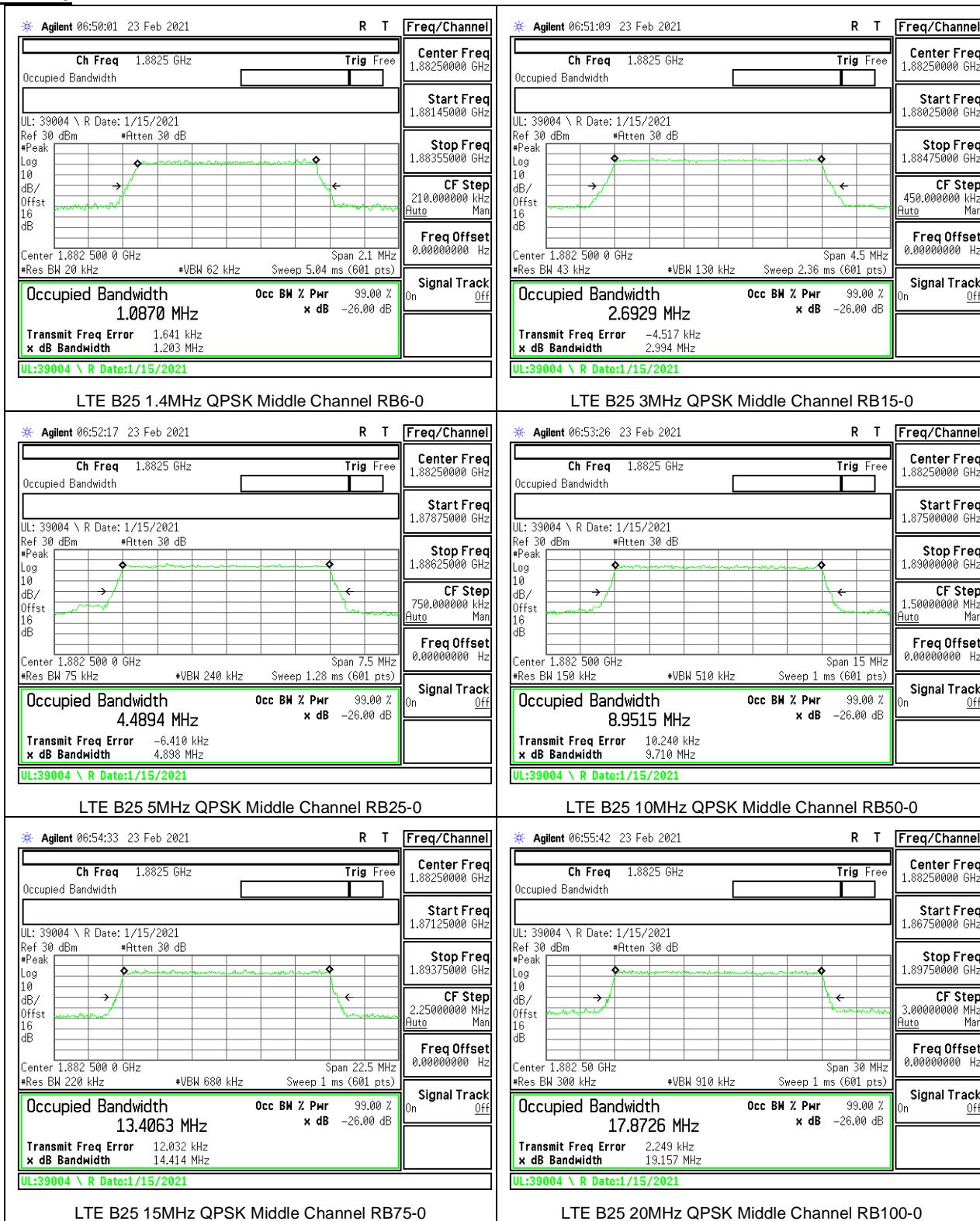


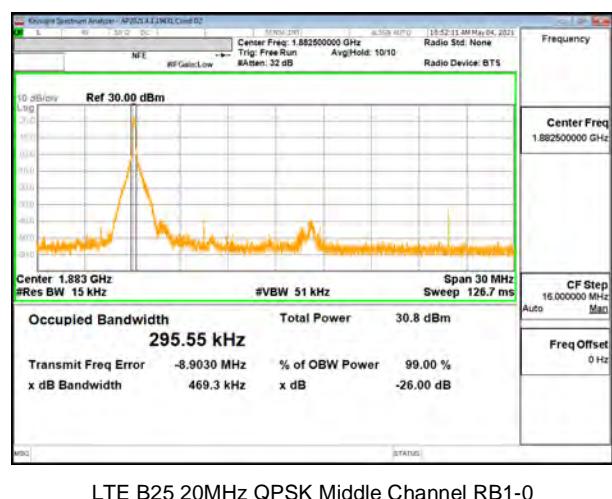
### 9.1.6. LTE BAND 17



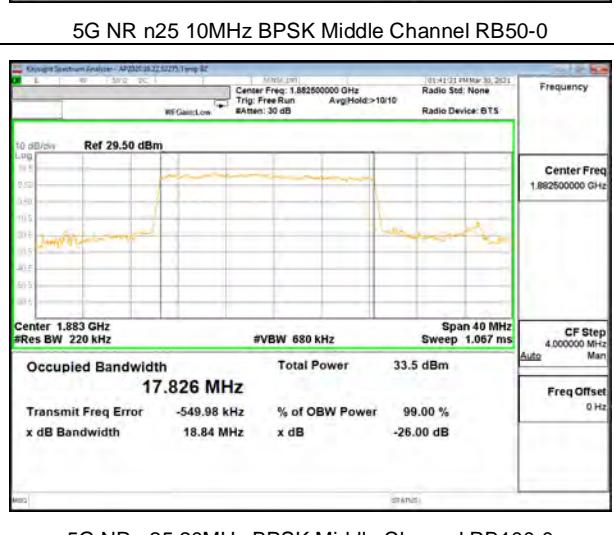
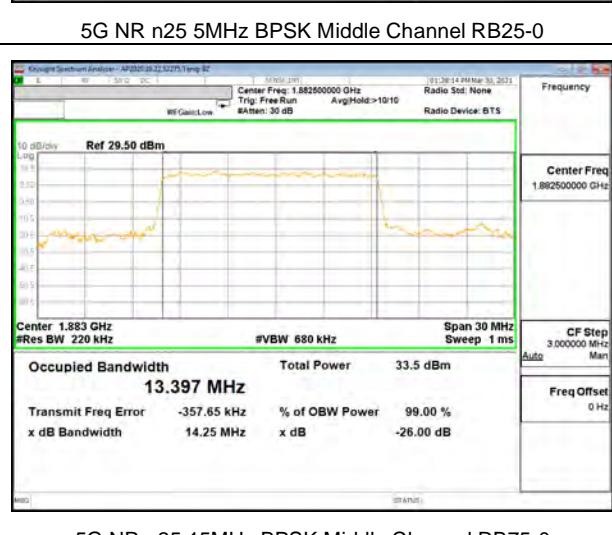
## 9.1.7. LTE BAND 25 AND 5G NR n25

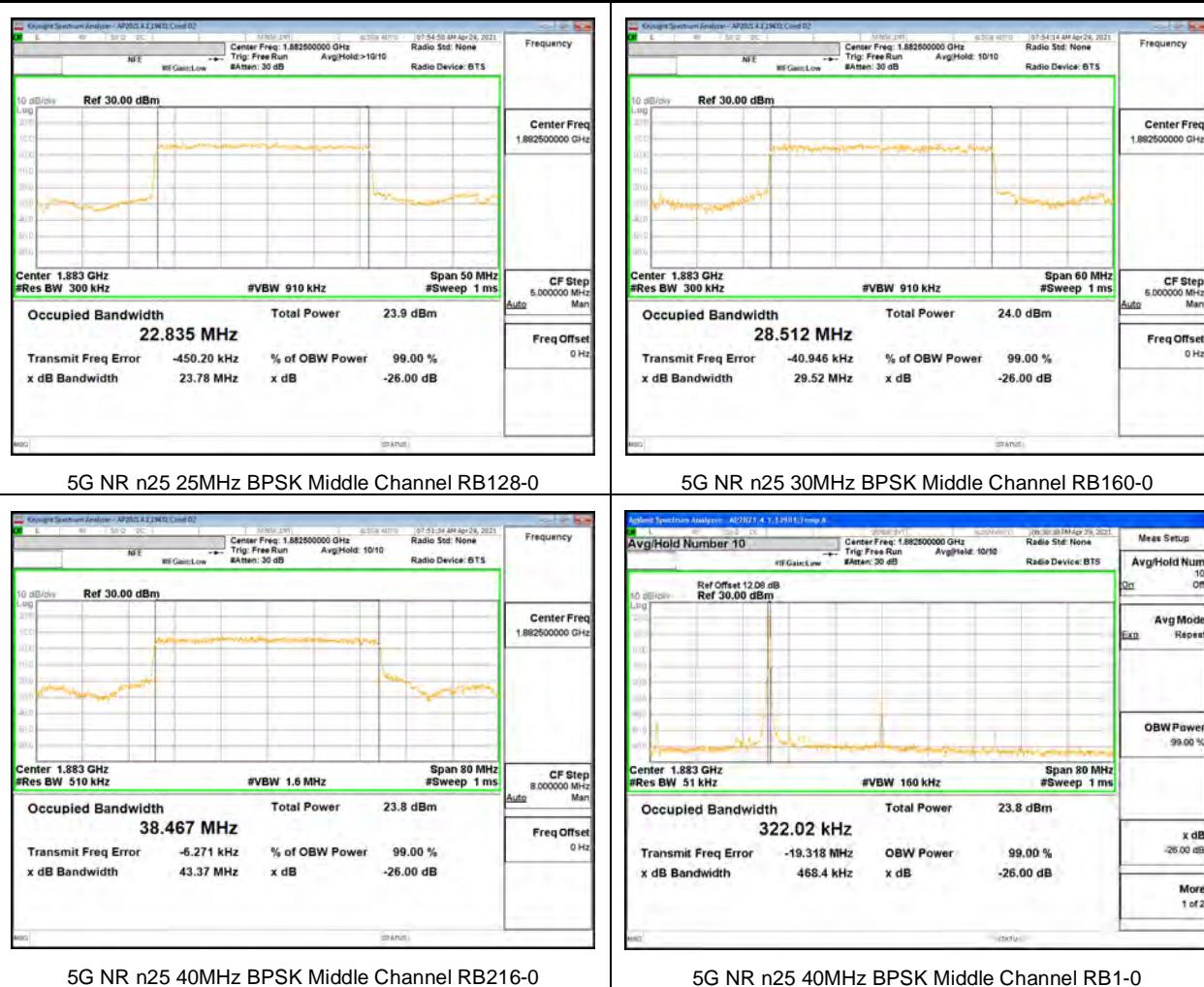
### LTE BAND 25





## 5G NR n25





### 9.1.8. LTE BAND 26 (FCC PART 90S)

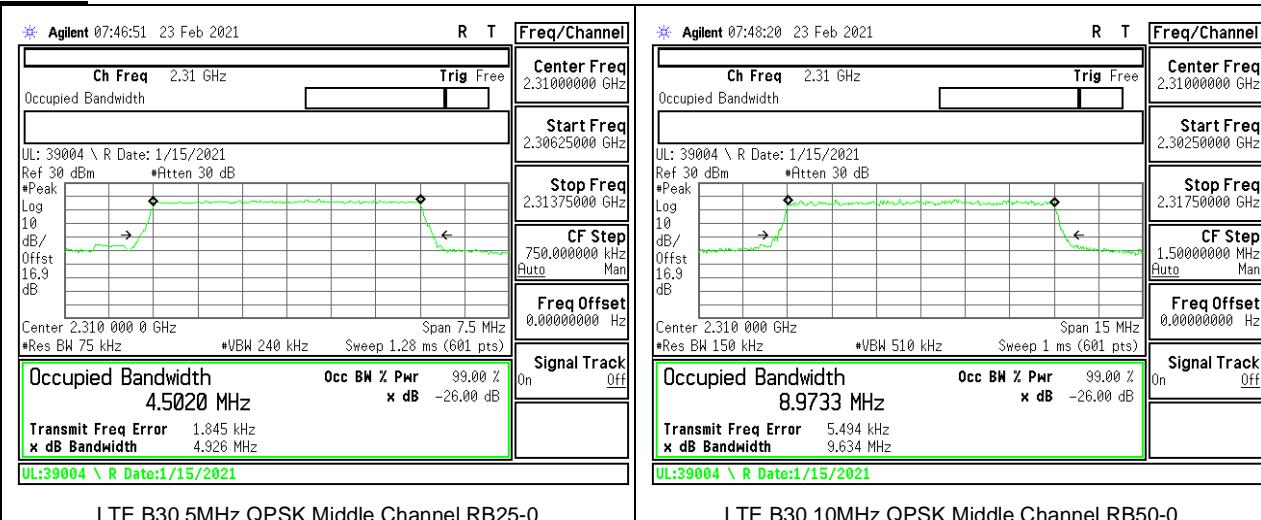


### 9.1.9. LTE BAND 26 (FCC PART 22)

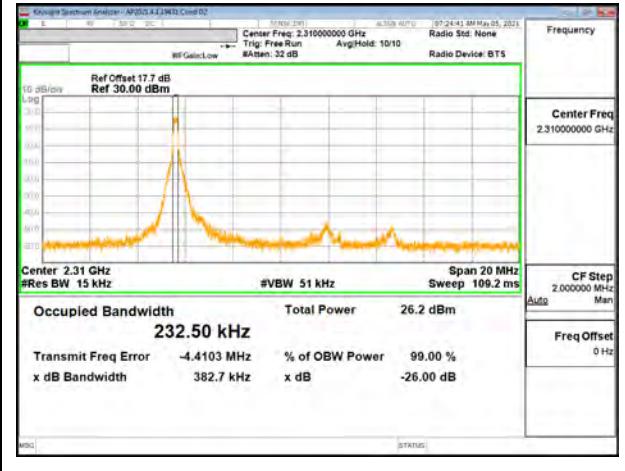


## 9.1.10. LTE BAND 30 AND 5G NR 30

### LTE BAND 30



LTE B30 5MHz QPSK Middle Channel RB25-0



LTE B30 10MHz QPSK Middle Channel RB50-0

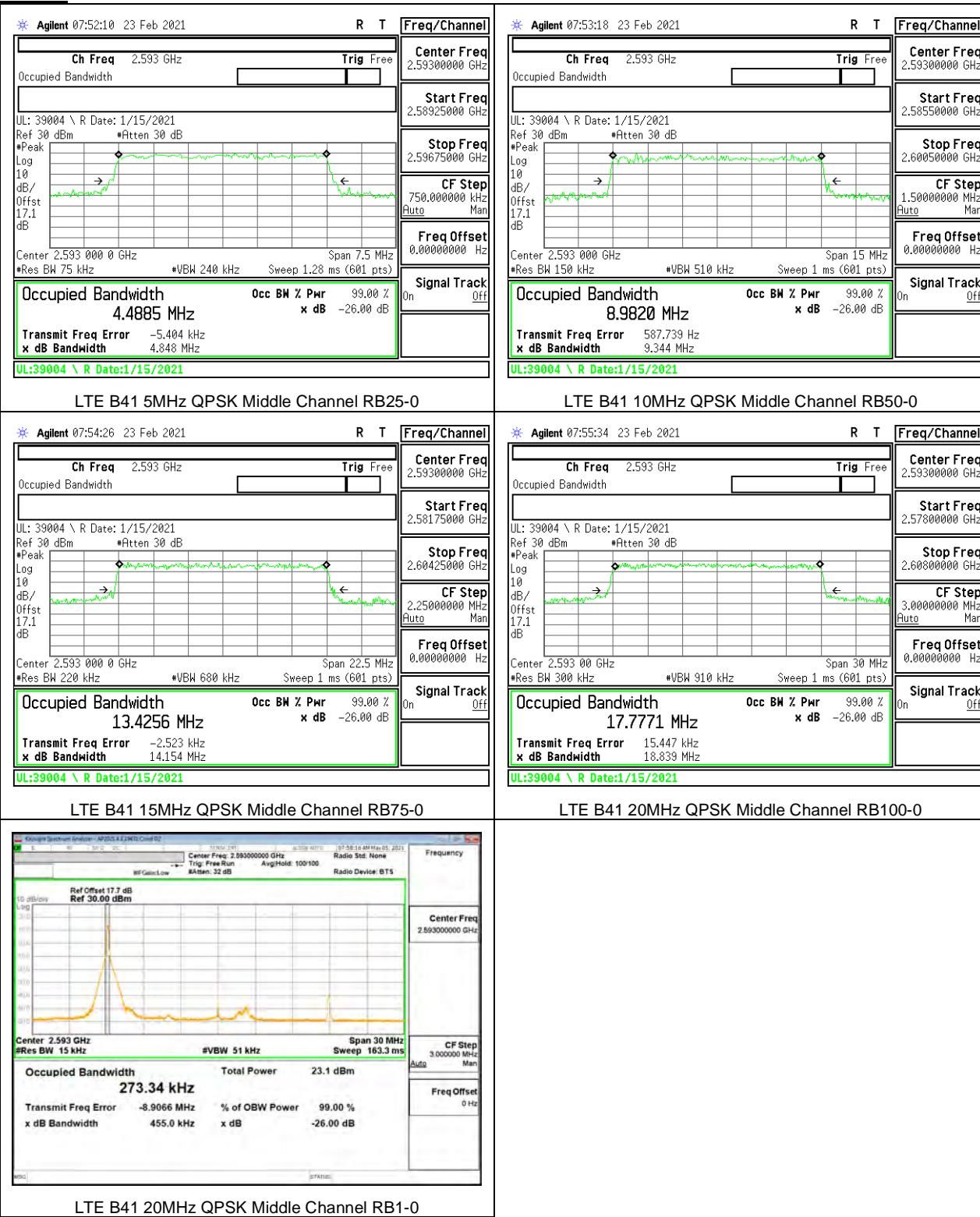
LTE B30 10MHz QPSK Middle Channel RB1-0

5G NR n30



## 9.1.11. LTE BAND 41 AND 5G NR n41

### LTE BAND 41

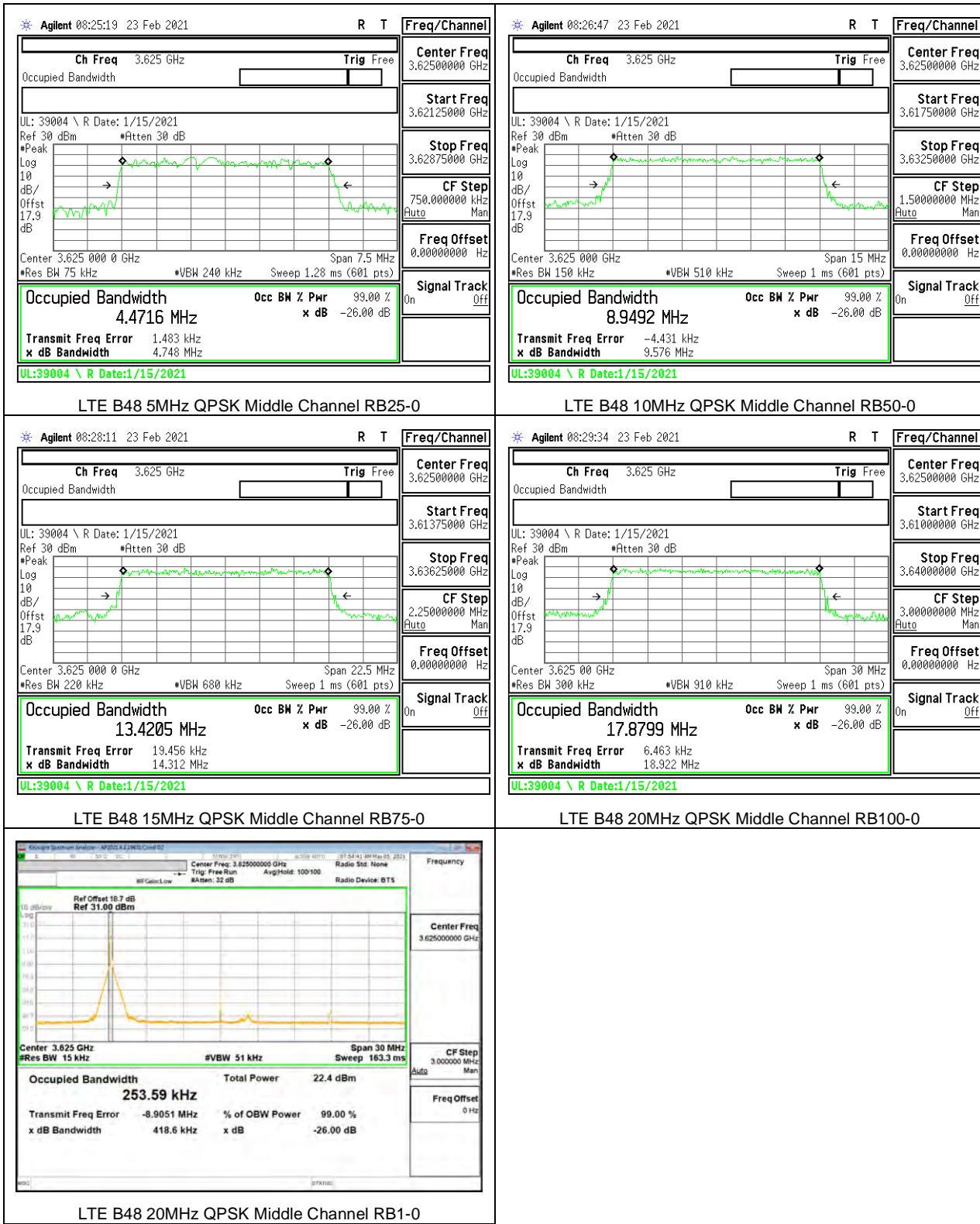


## 5G NR n41



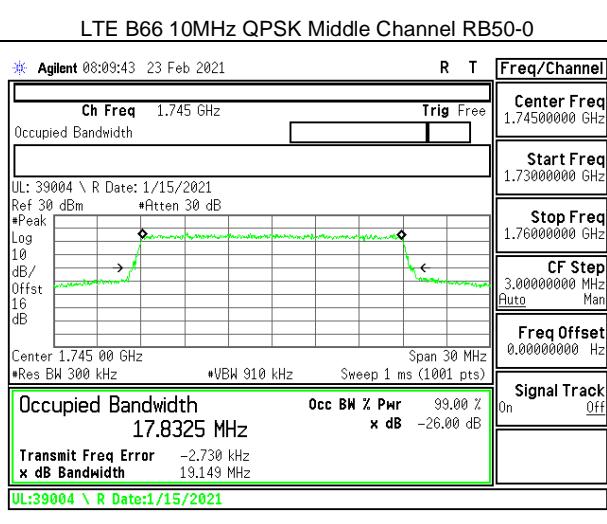
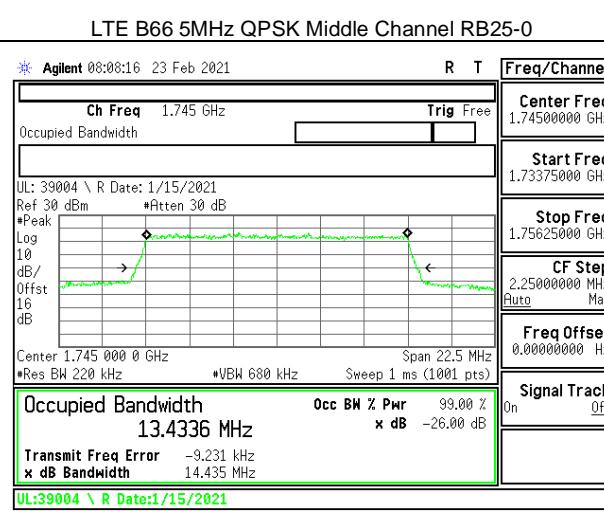
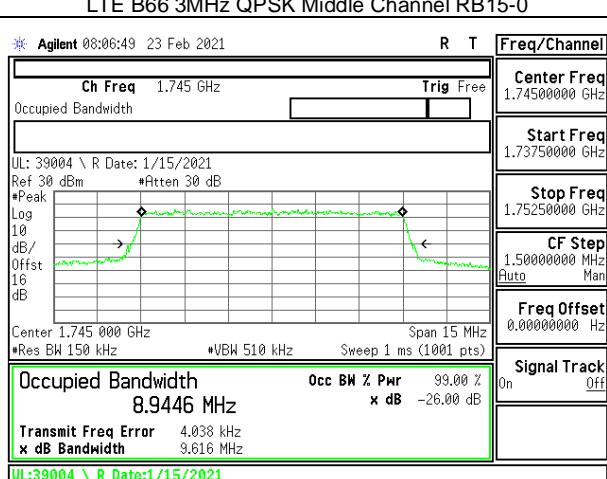
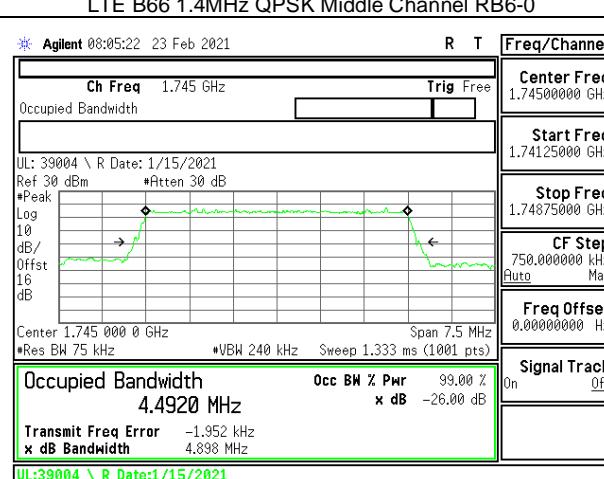


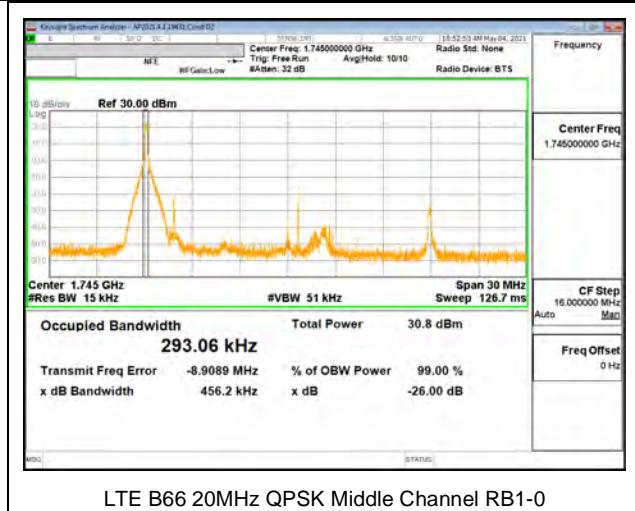
## 9.1.12. LTE BAND 48



## 9.1.13. LTE BAND 66 AND 5G NR n66

### LTE BAND 66

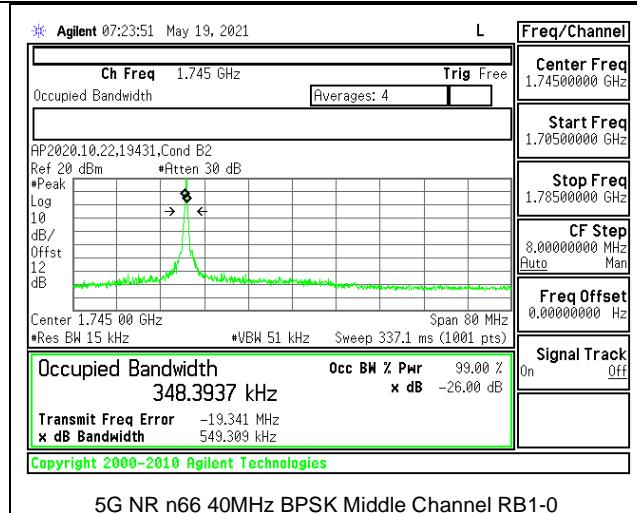




LTE B66 20MHz QPSK Middle Channel RB1-0

## 5G NR n66

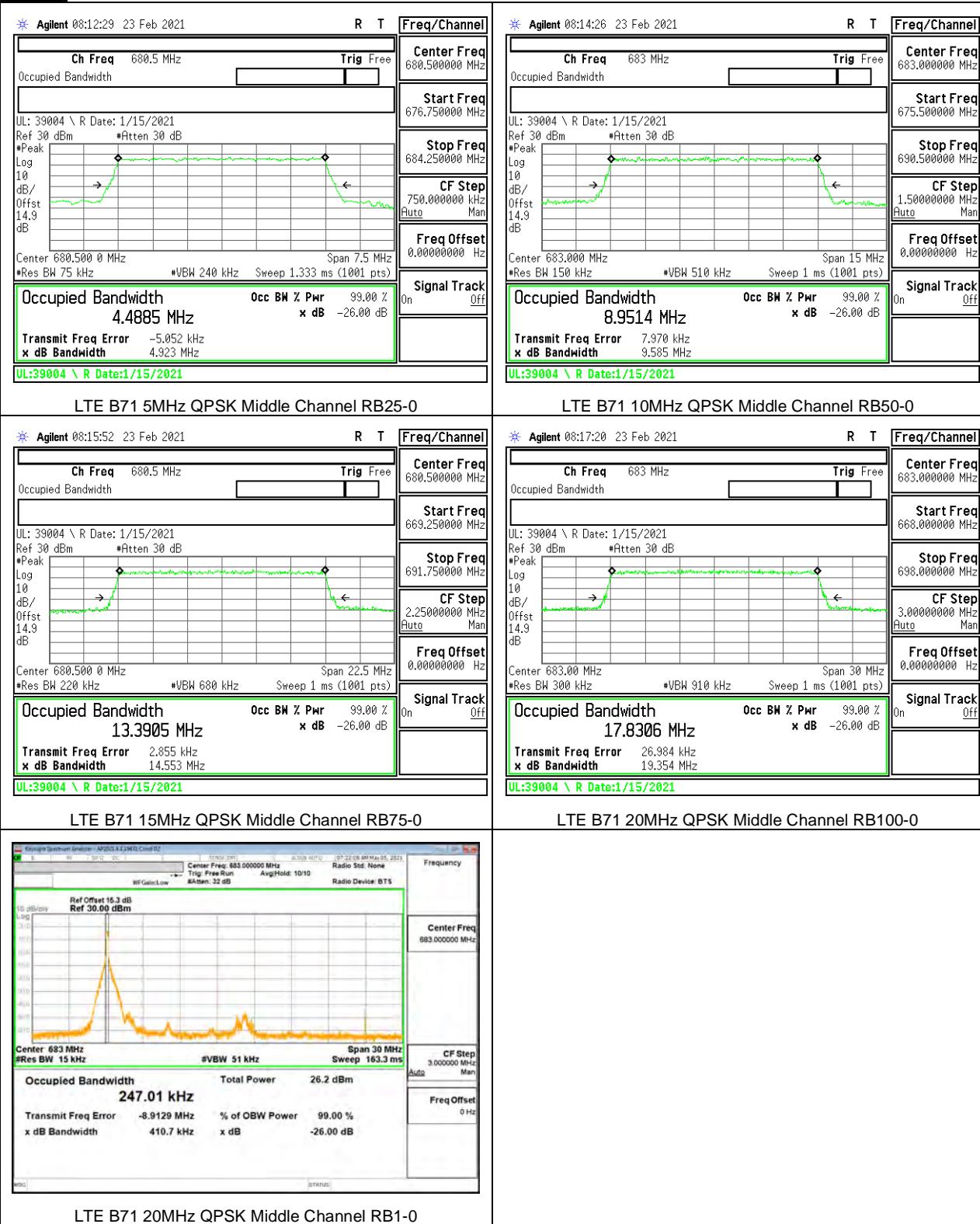




5G NR n66 40MHz BPSK Middle Channel RB1-0

## 9.1.14. LTE BAND 71 AND 5G NR n71

### LTE BAND 71



5G NR n71

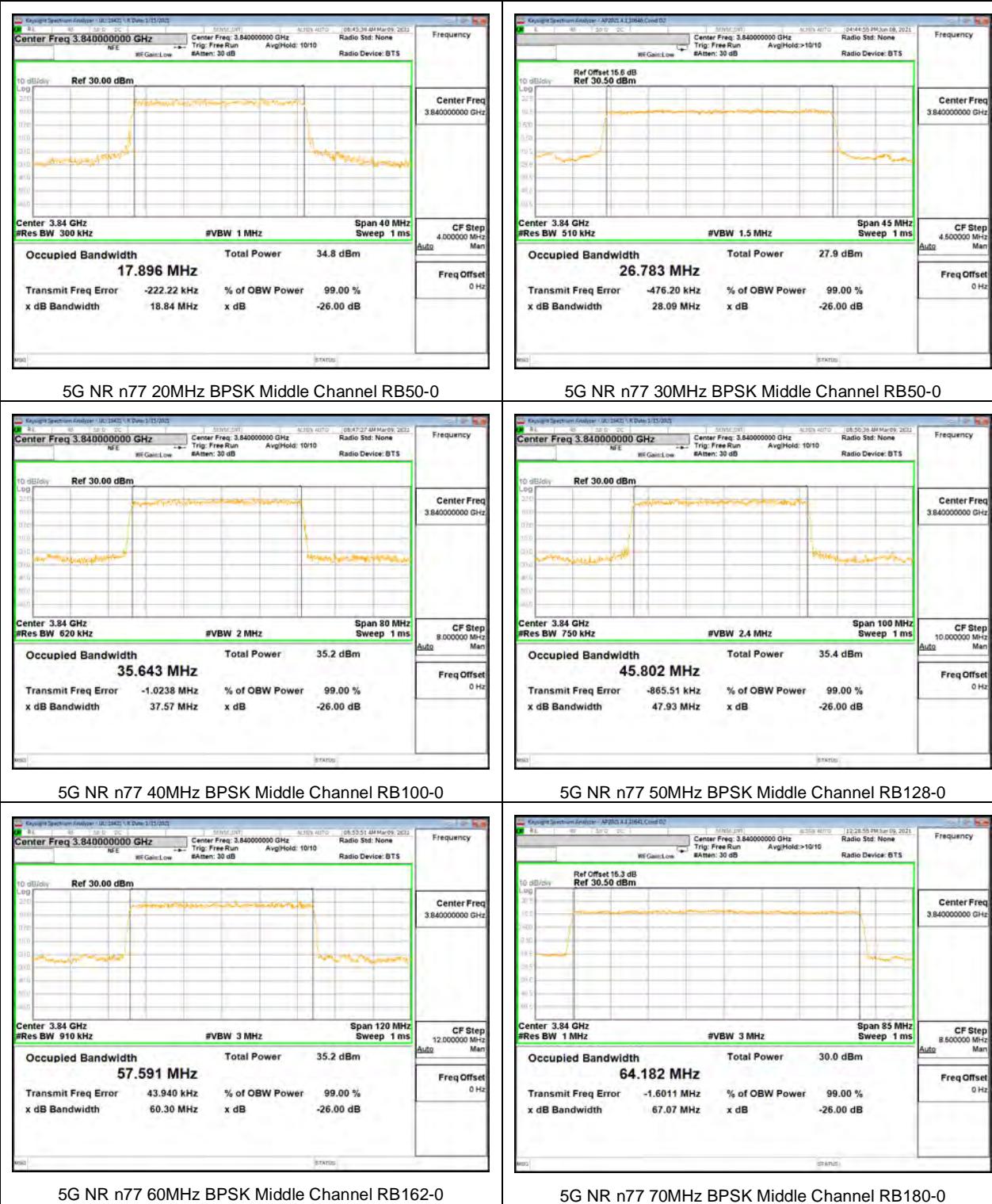


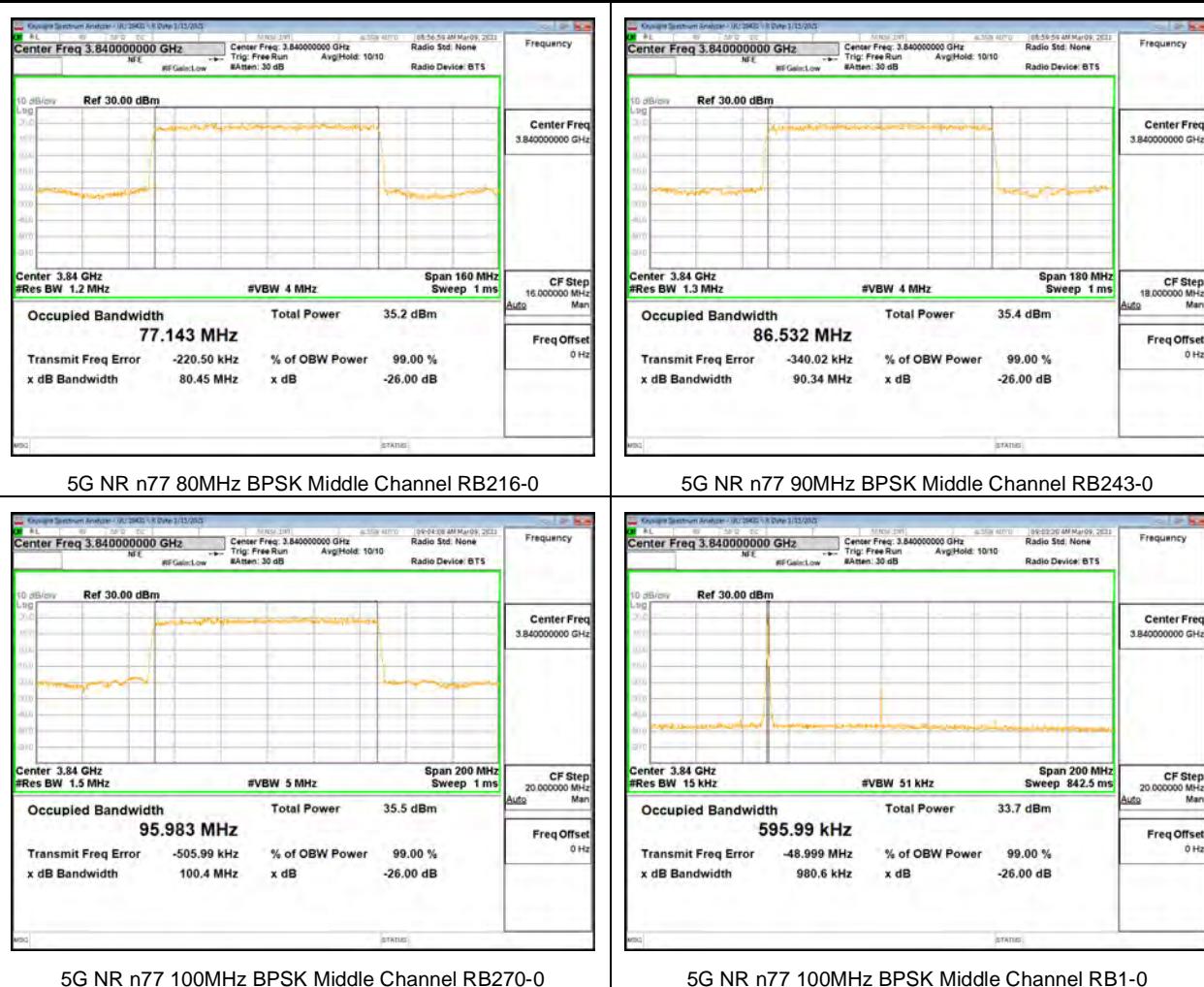
### 9.1.15. 5G NR n77 (FCC Part 27 3450-3550MHz)





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





## 9.2. BAND EDGE, EMISSION MASK, AND ADJACENT CHANNEL POWER

### TEST PROCEDURE

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

For each band edge measurement:

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

### TEST PROCEDURE (FCC 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 (FCC 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 (FCC 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 (FCC 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**

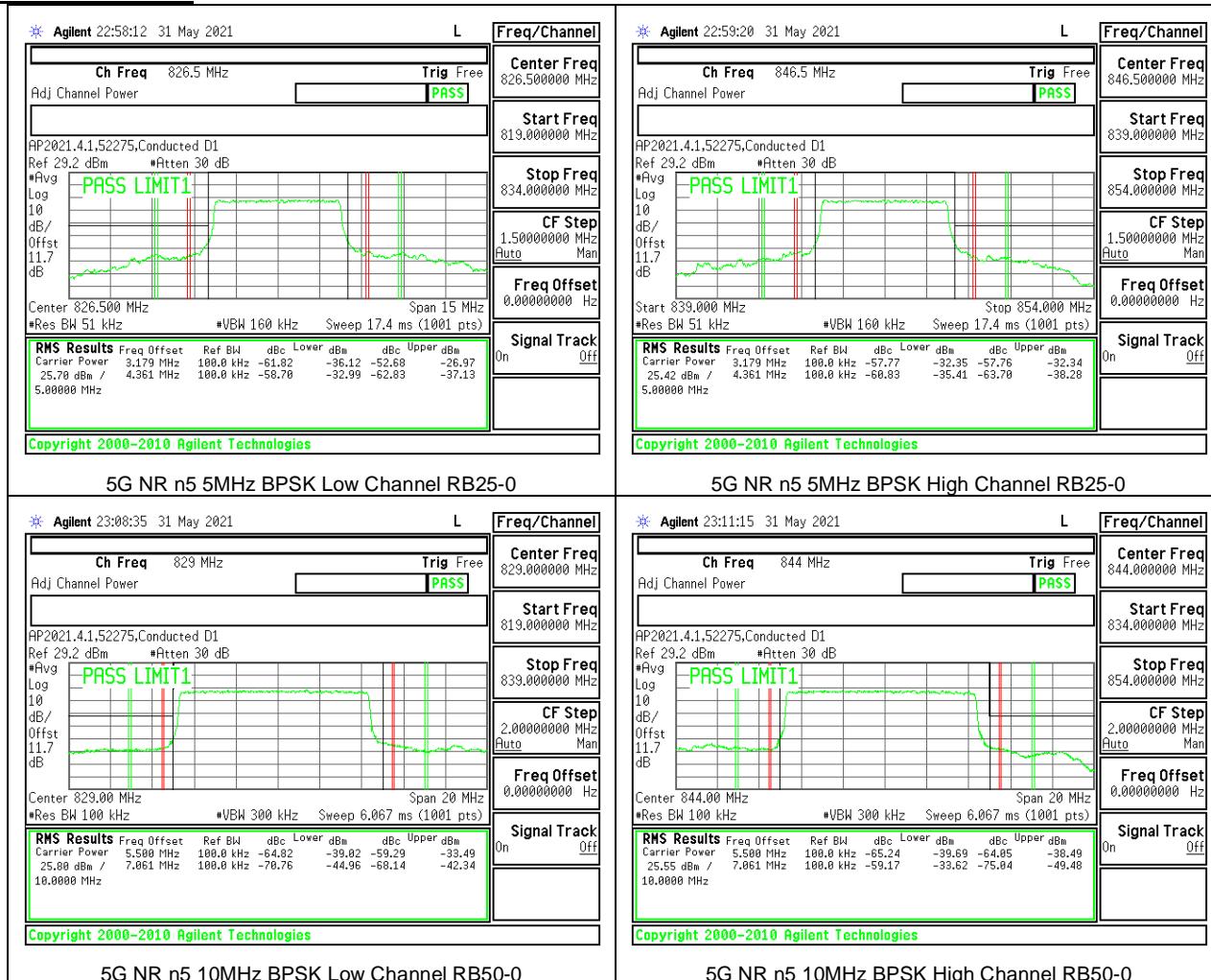
## 9.2.1. 5G NR n5 BANDEDGE

### LIMITS

FCC: §22.917 (a)

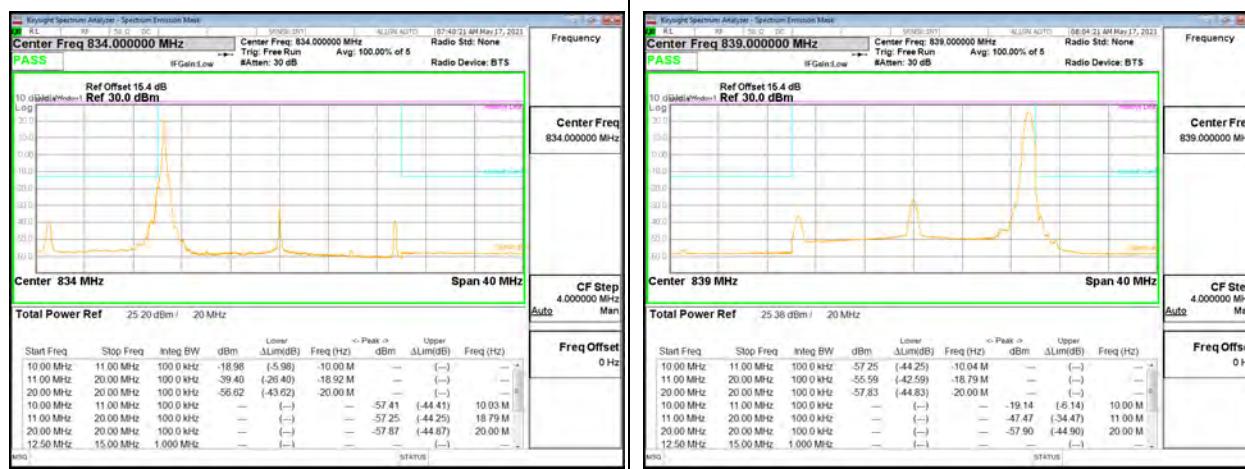
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

### 5G NR n5 BANDEDGE

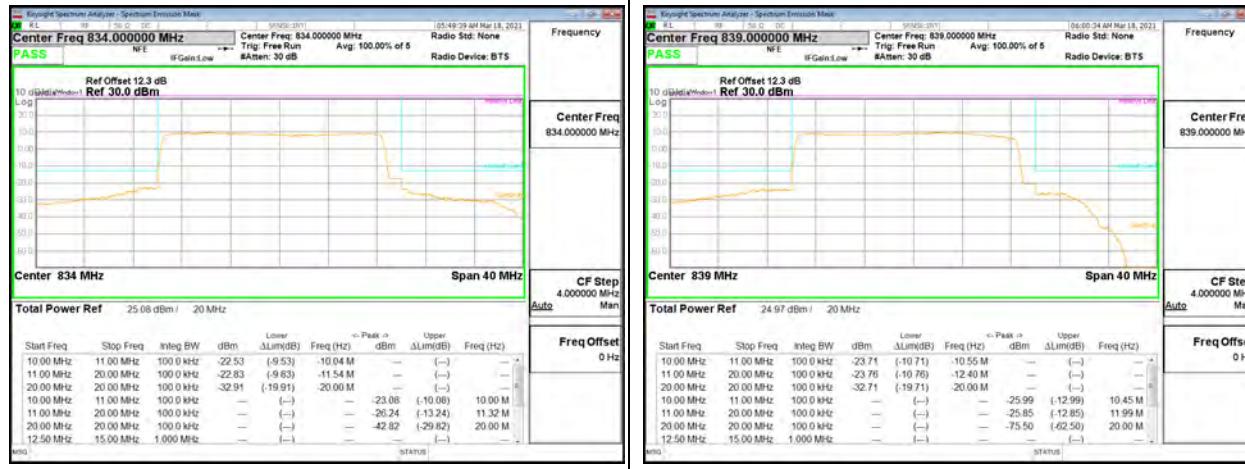




5G NR n5 15MHz BPSK Low Channel RB75-0



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



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

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

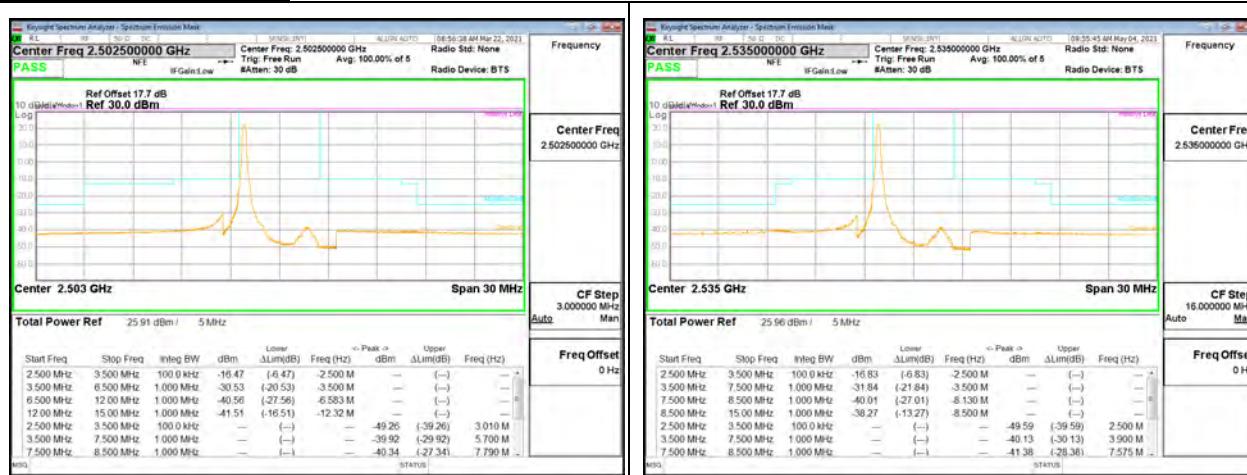
## 9.2.2. LTE BAND 7 AND 5G NR n7 EMISSION MASK

### LIMITS

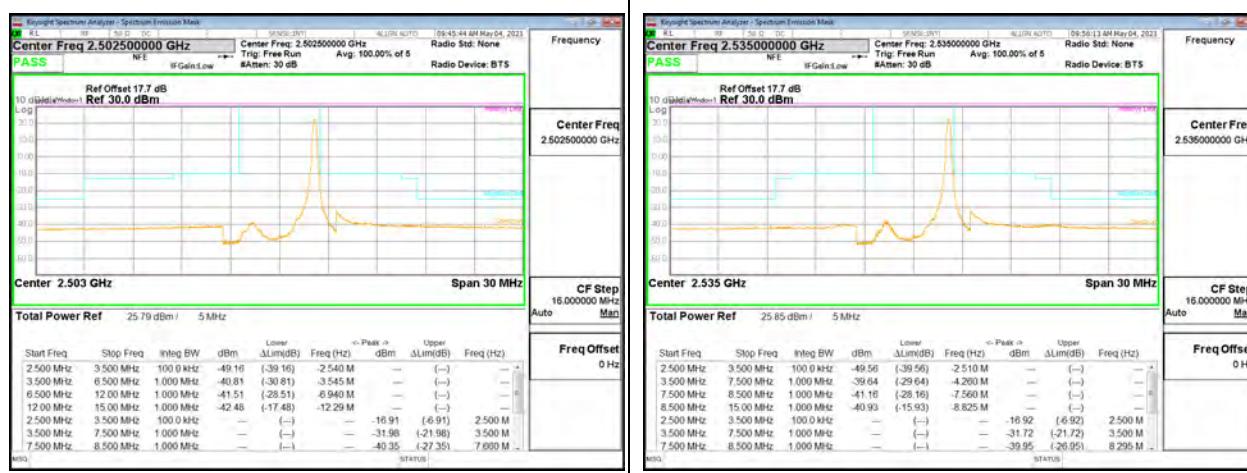
FCC: §27.53

(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.

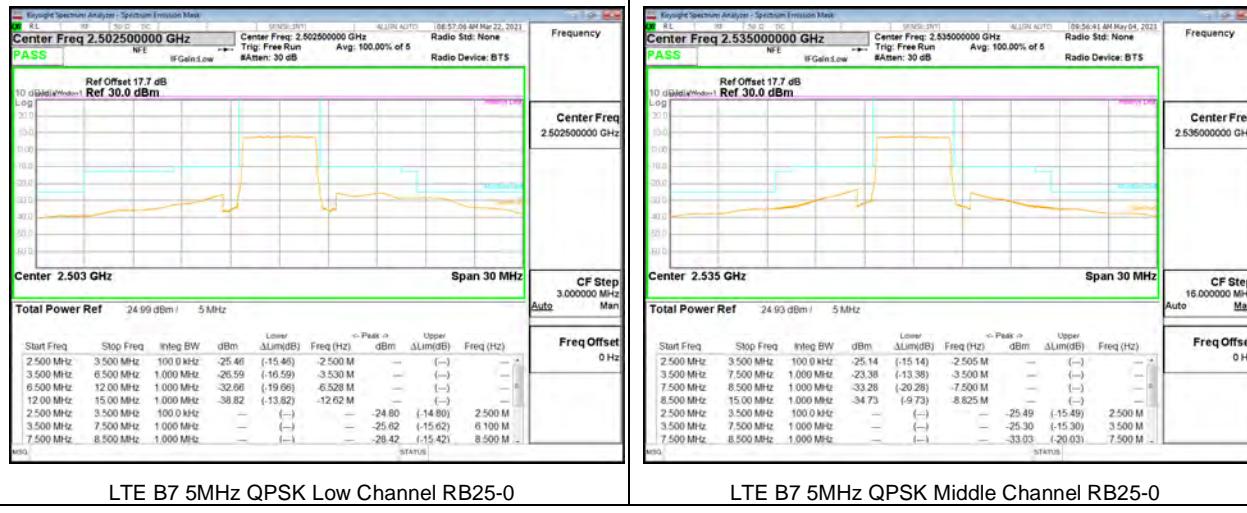
## LTE BAND 7 EMISSION MASK



LTE B7 5MHz QPSK Low Channel RB1-0

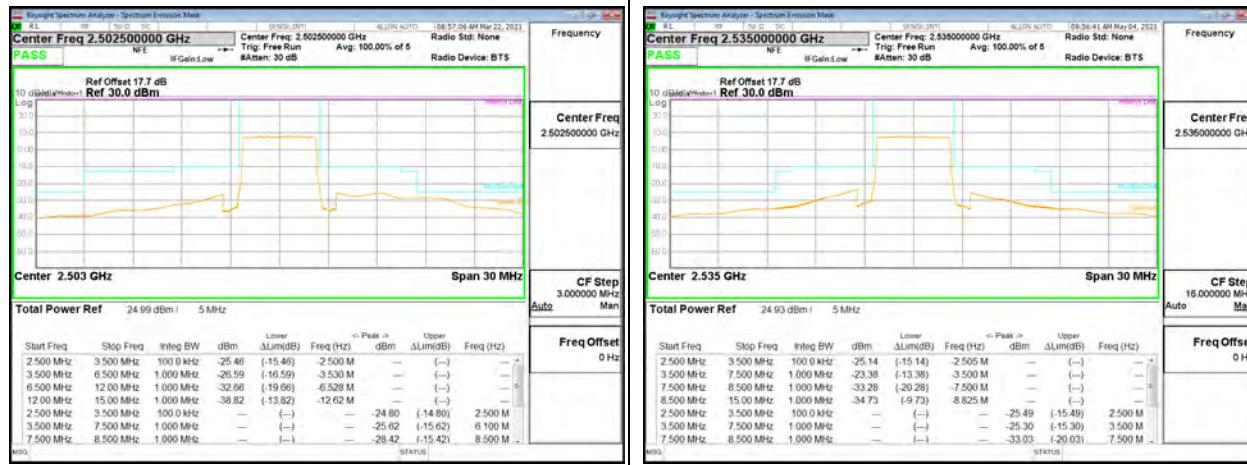


LTE B7 5MHz QPSK Middle Channel RB1-0



LTE B7 5MHz QPSK Low Channel RB1-24

LTE B7 5MHz QPSK Middle Channel RB1-24

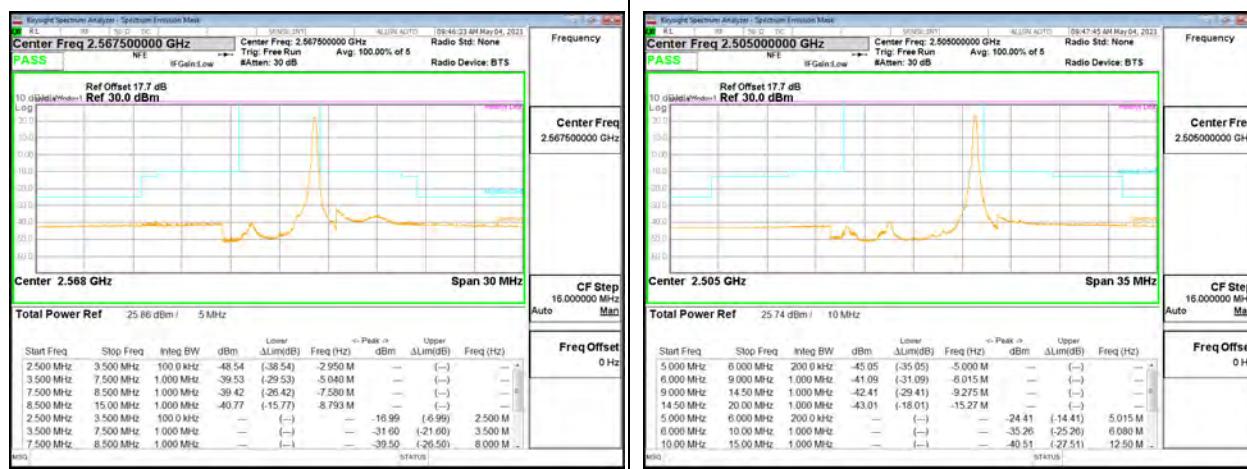


LTE B7 5MHz QPSK Low Channel RB25-0

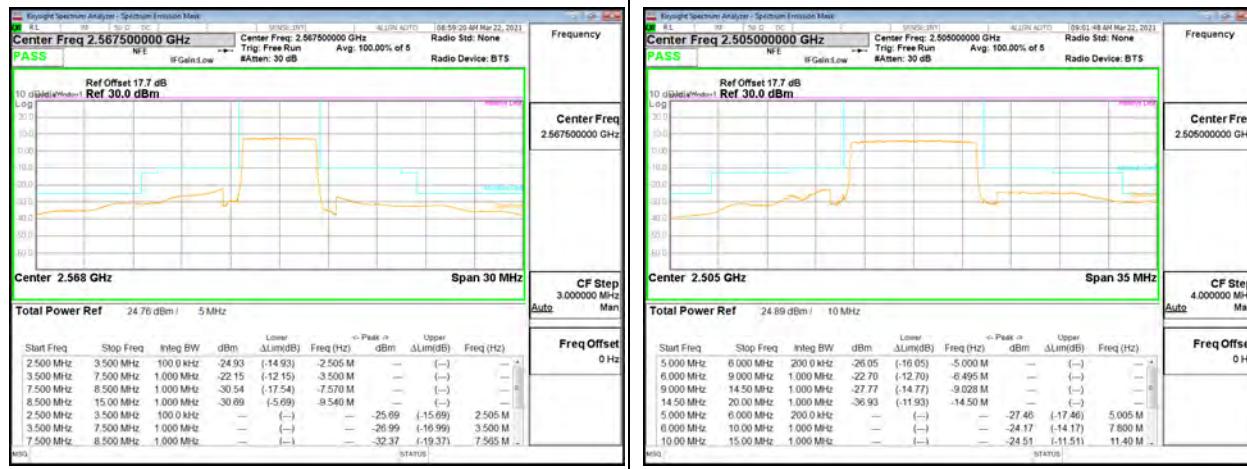
LTE B7 5MHz QPSK Middle Channel RB25-0



LTE B7 5MHz QPSK High Channel RB1-0



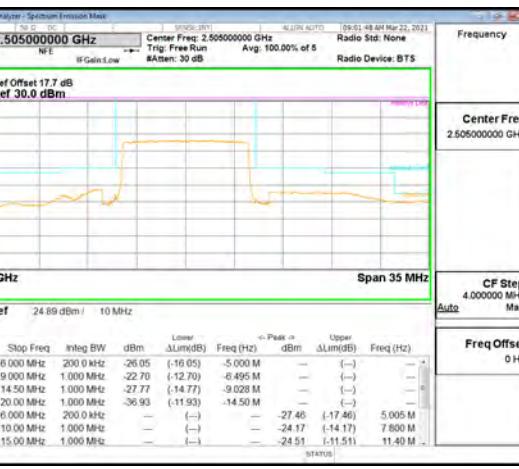
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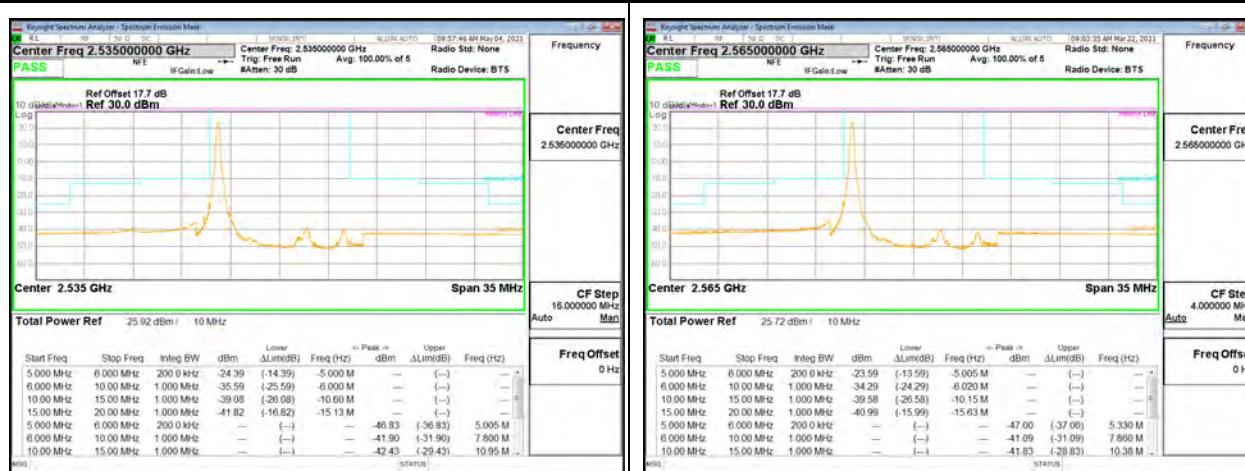
LTE B7 5MHz QPSK High Channel RB25-0

LTE B7 10MHz QPSK Low Channel RB1-0

LTE B7 5MHz QPSK High Channel RB1-24

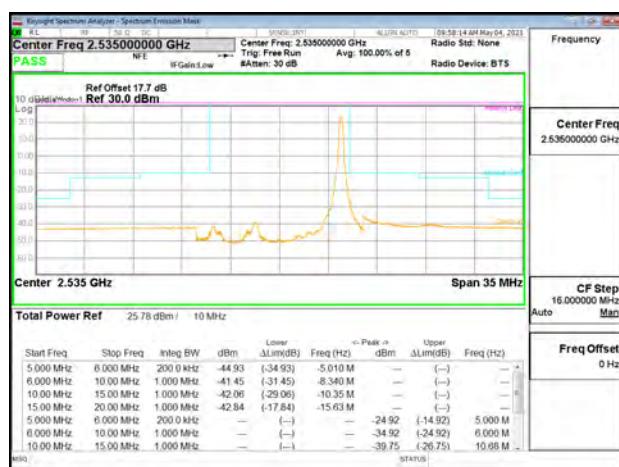


LTE B7 10MHz QPSK Low Channel RB1-0



LTE B7 10MHz QPSK Middle Channel RB1-0

LTE B7 10MHz QPSK High Channel RB1-0



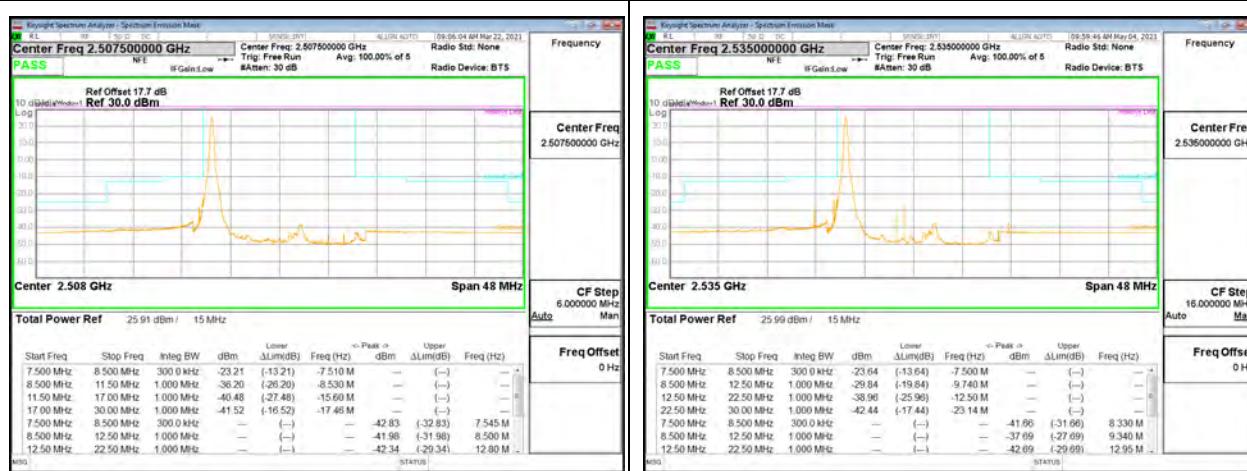
LTE B7 10MHz QPSK Middle Channel RB1-49

LTE B7 10MHz QPSK High Channel RB1-49



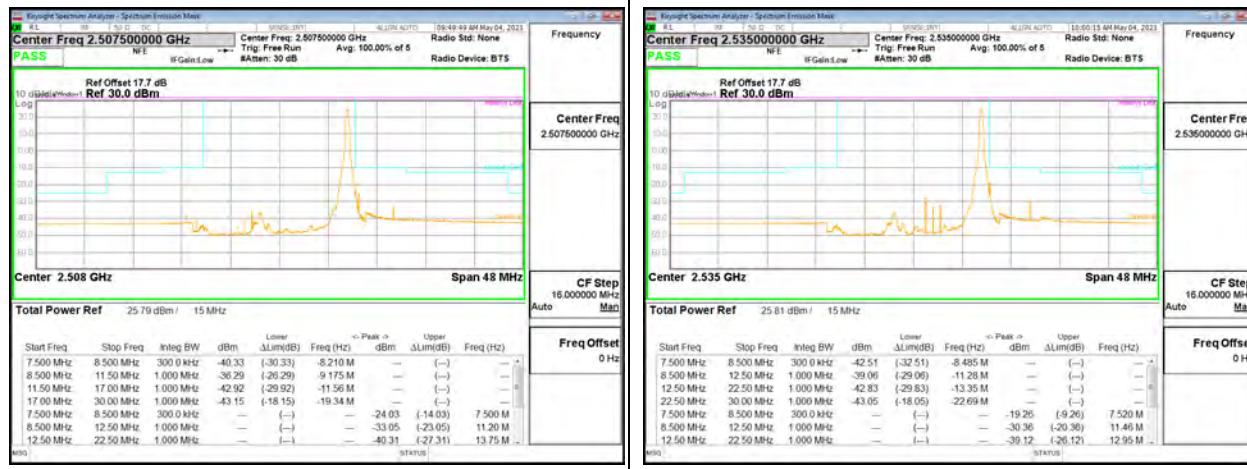
LTE B7 10MHz QPSK Middle Channel RB50-0

LTE B7 10MHz QPSK High Channel RB50-0



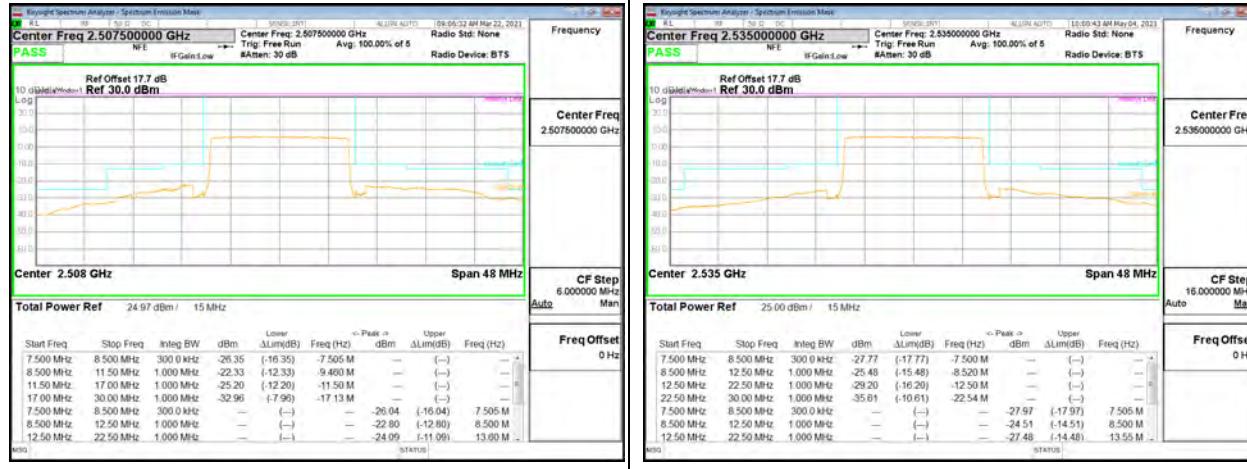
LTE B7 15MHz QPSK Low Channel RB1-0

LTE B7 15MHz QPSK Middle Channel RB1-0



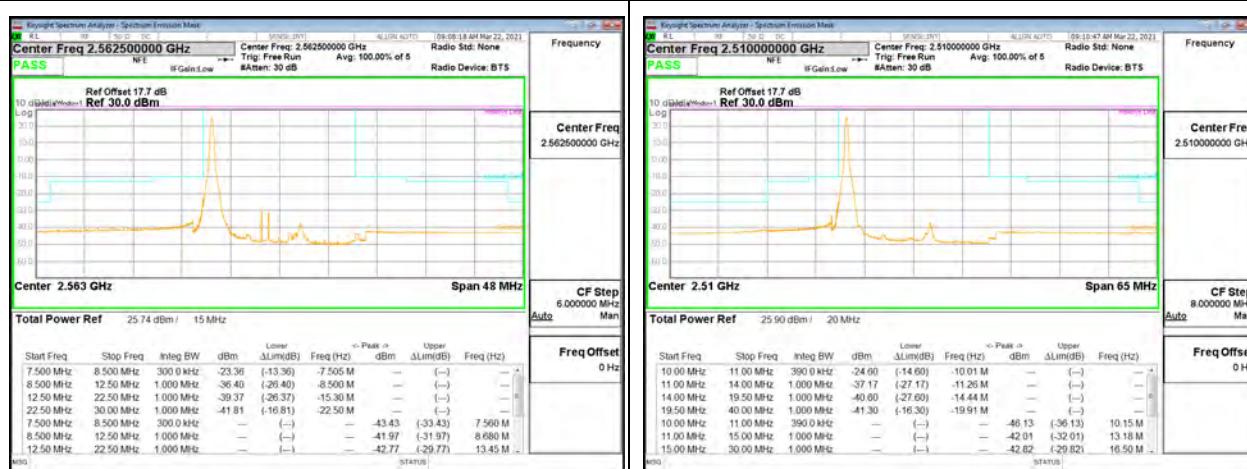
LTE B7 15MHz QPSK Low Channel RB1-74

LTE B7 15MHz QPSK Middle Channel RB1-74



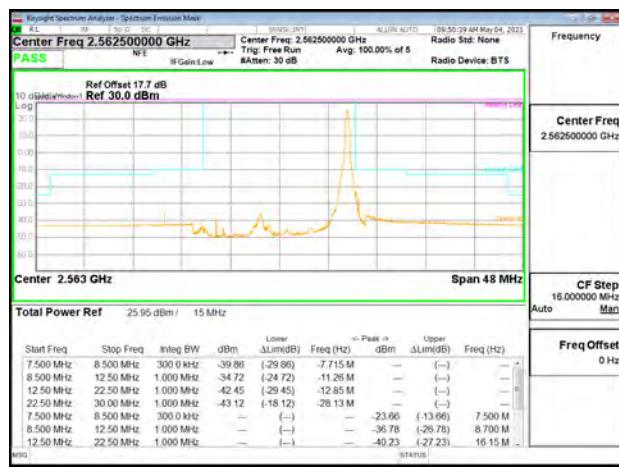
LTE B7 15MHz QPSK Low Channel RB75-0

LTE B7 15MHz QPSK Middle Channel RB75-0

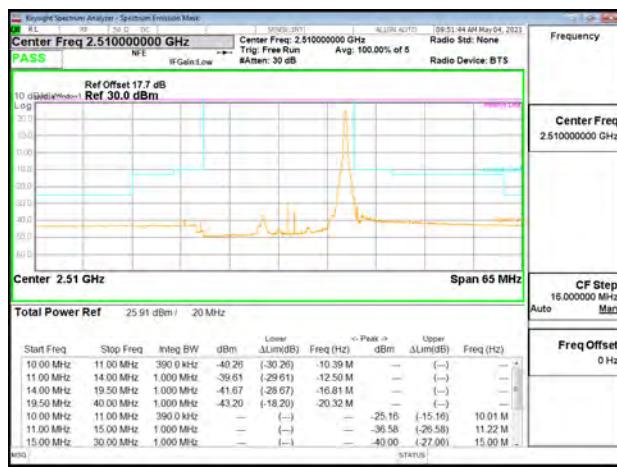


LTE B7 15MHz QPSK High Channel RB1-0

LTE B7 20MHz QPSK Low Channel RB1-0



LTE B7 15MHz QPSK High Channel RB1-74



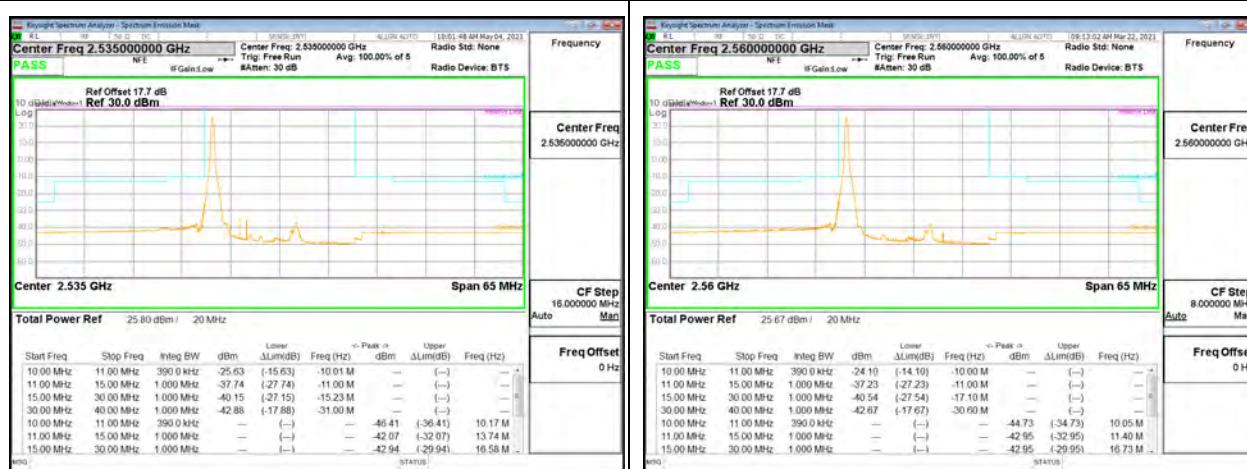
LTE B7 20MHz QPSK Low Channel RB1-0



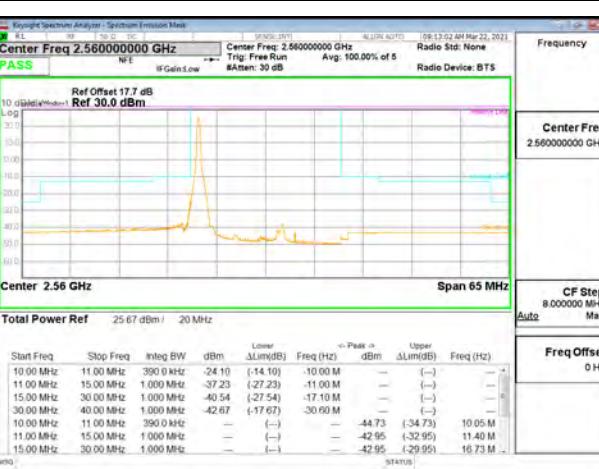
LTE B7 15MHz QPSK High Channel RB75-0



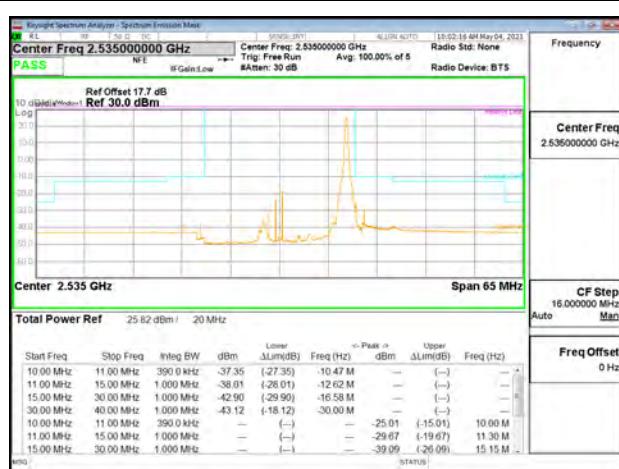
LTE B7 20MHz QPSK Low Channel RB1-99



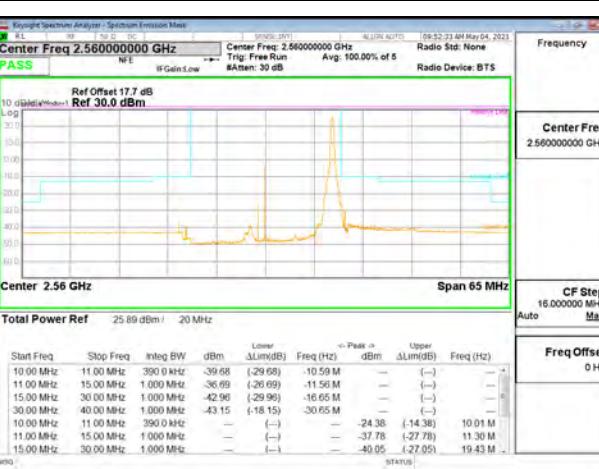
LTE B7 20MHz QPSK Middle Channel RB1-0



LTE B7 20MHz QPSK High Channel RB1-0



LTE B7 20MHz QPSK Middle Channel RB1-99



LTE B7 20MHz QPSK High Channel RB1-99

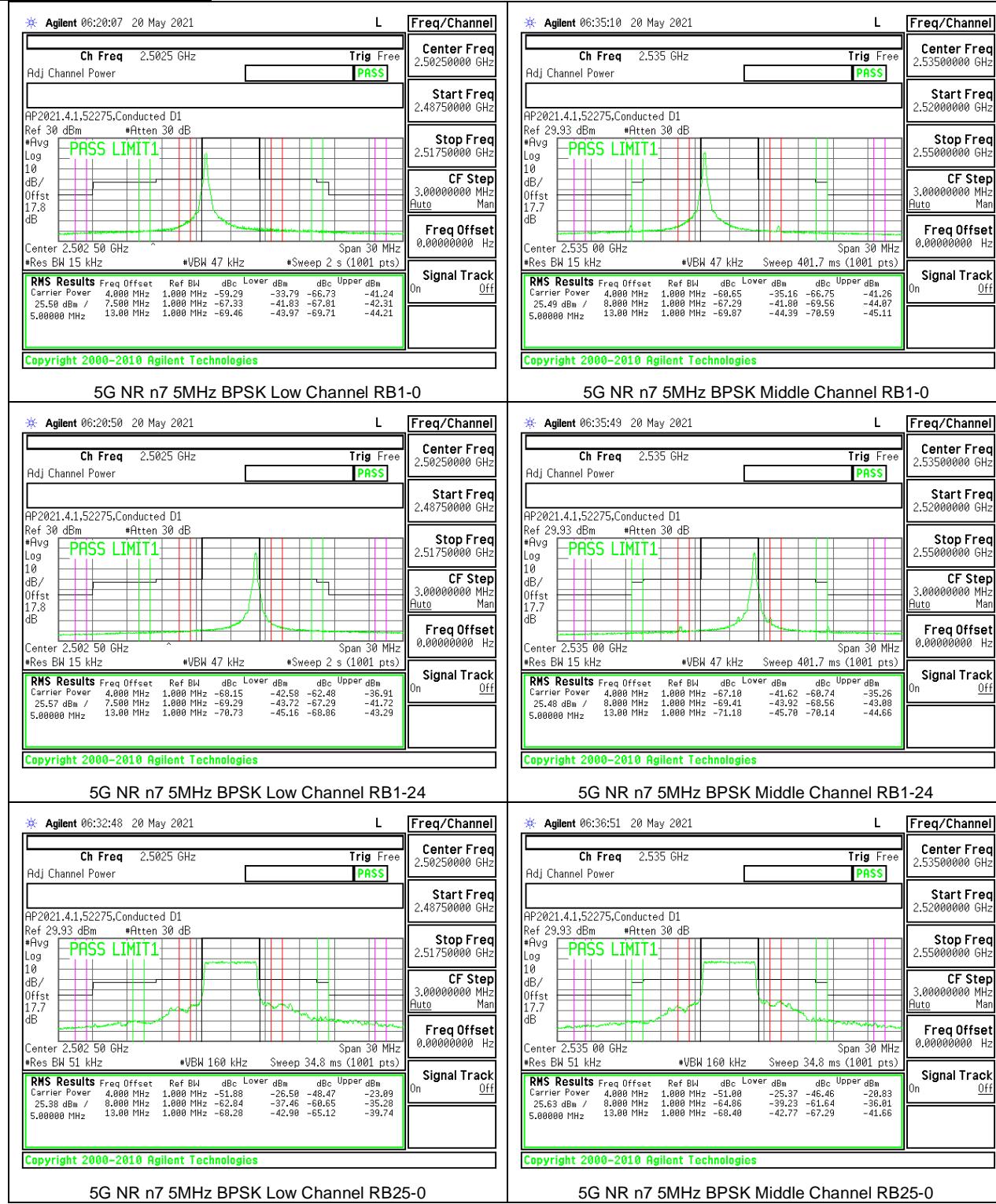


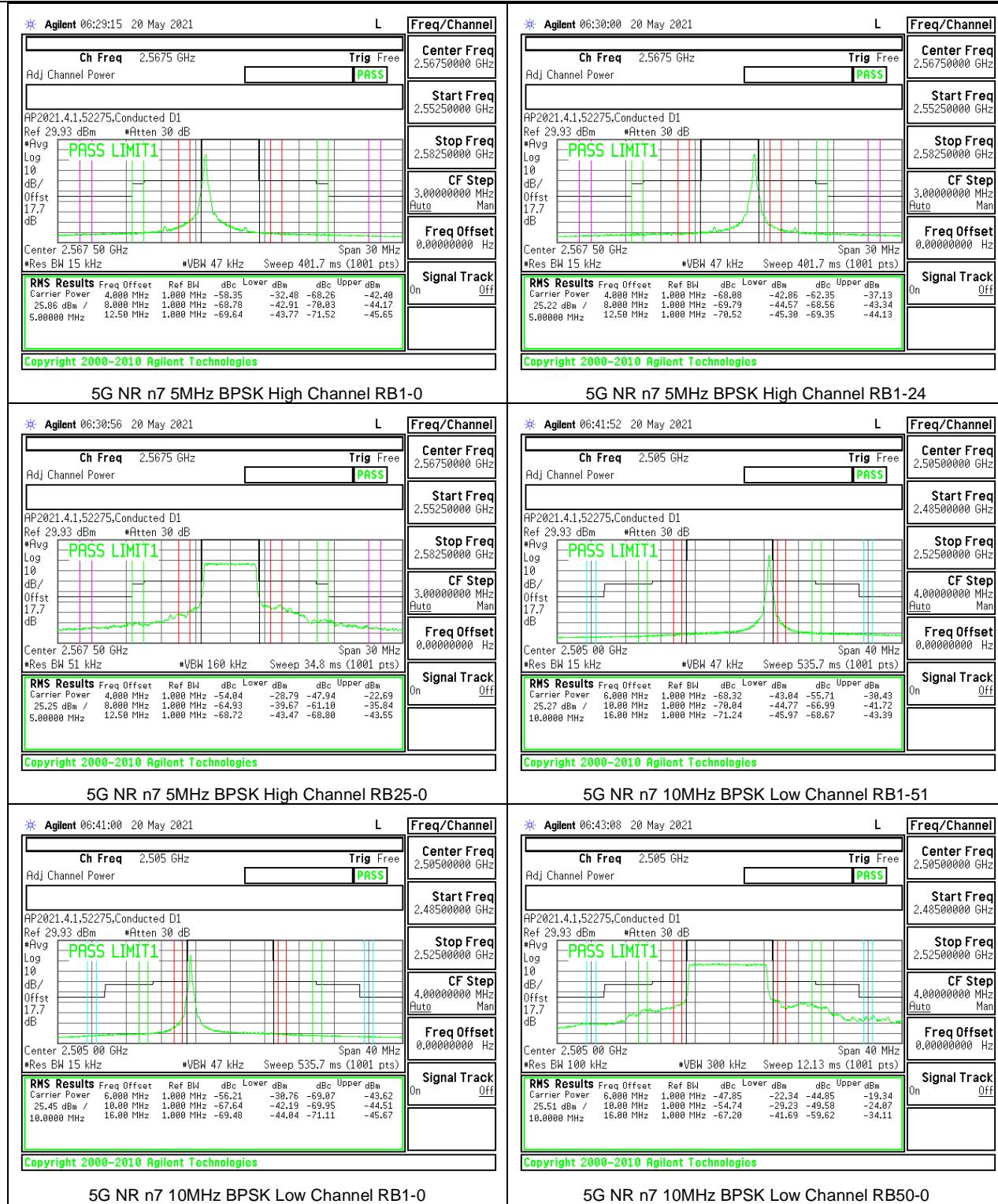
LTE B7 20MHz QPSK Middle Channel RB100-0

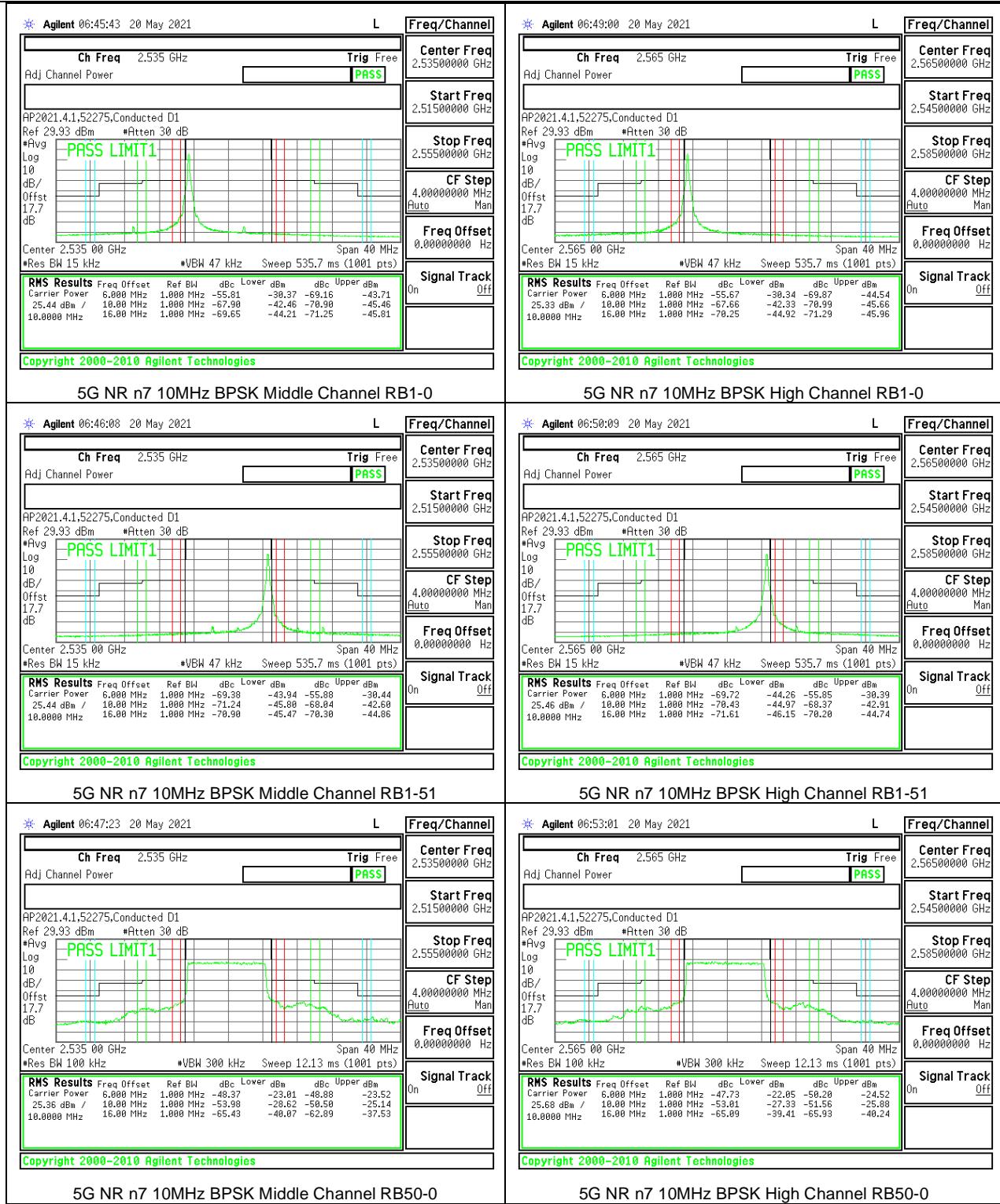


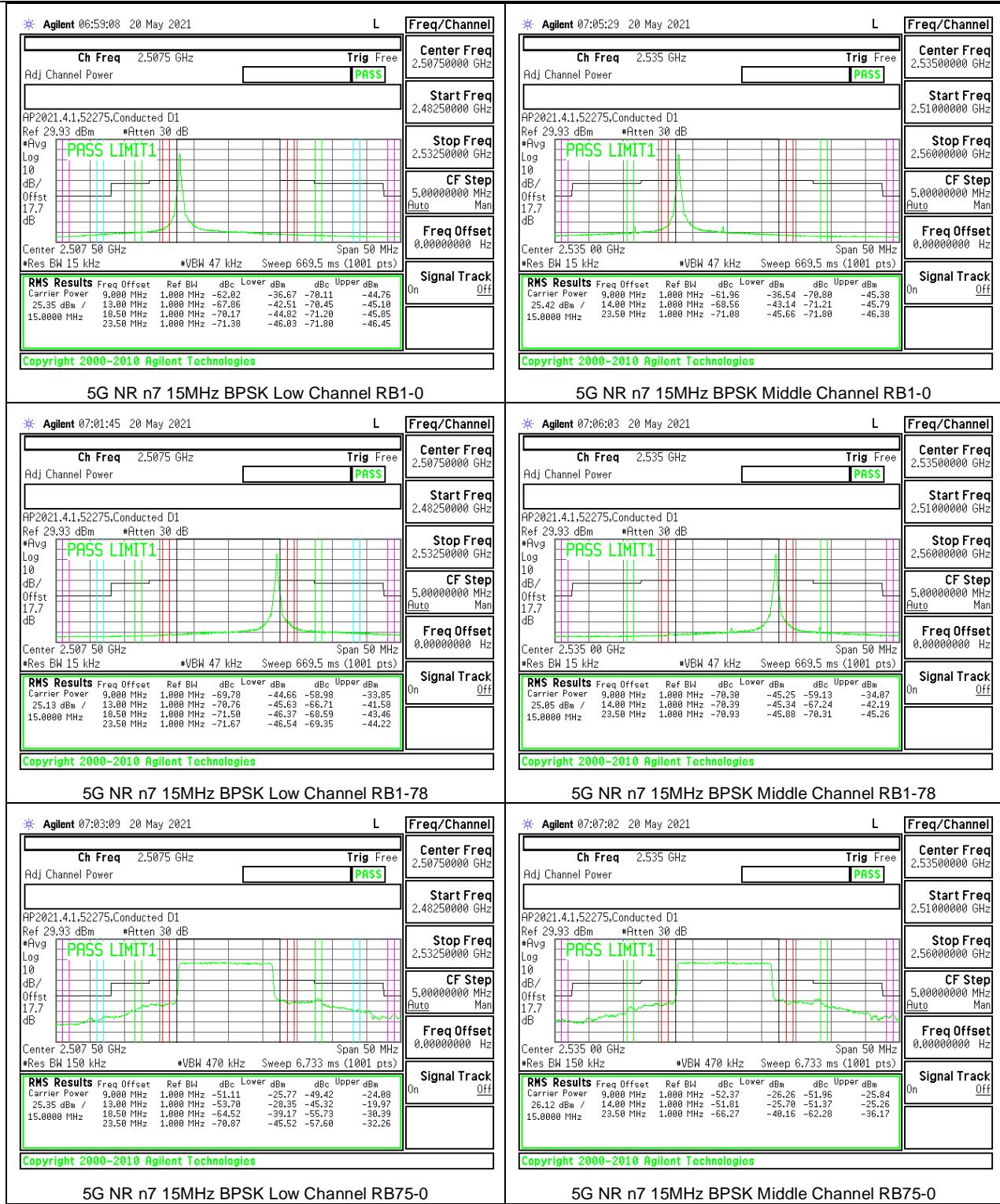
LTE B7 20MHz QPSK High Channel RB100-0

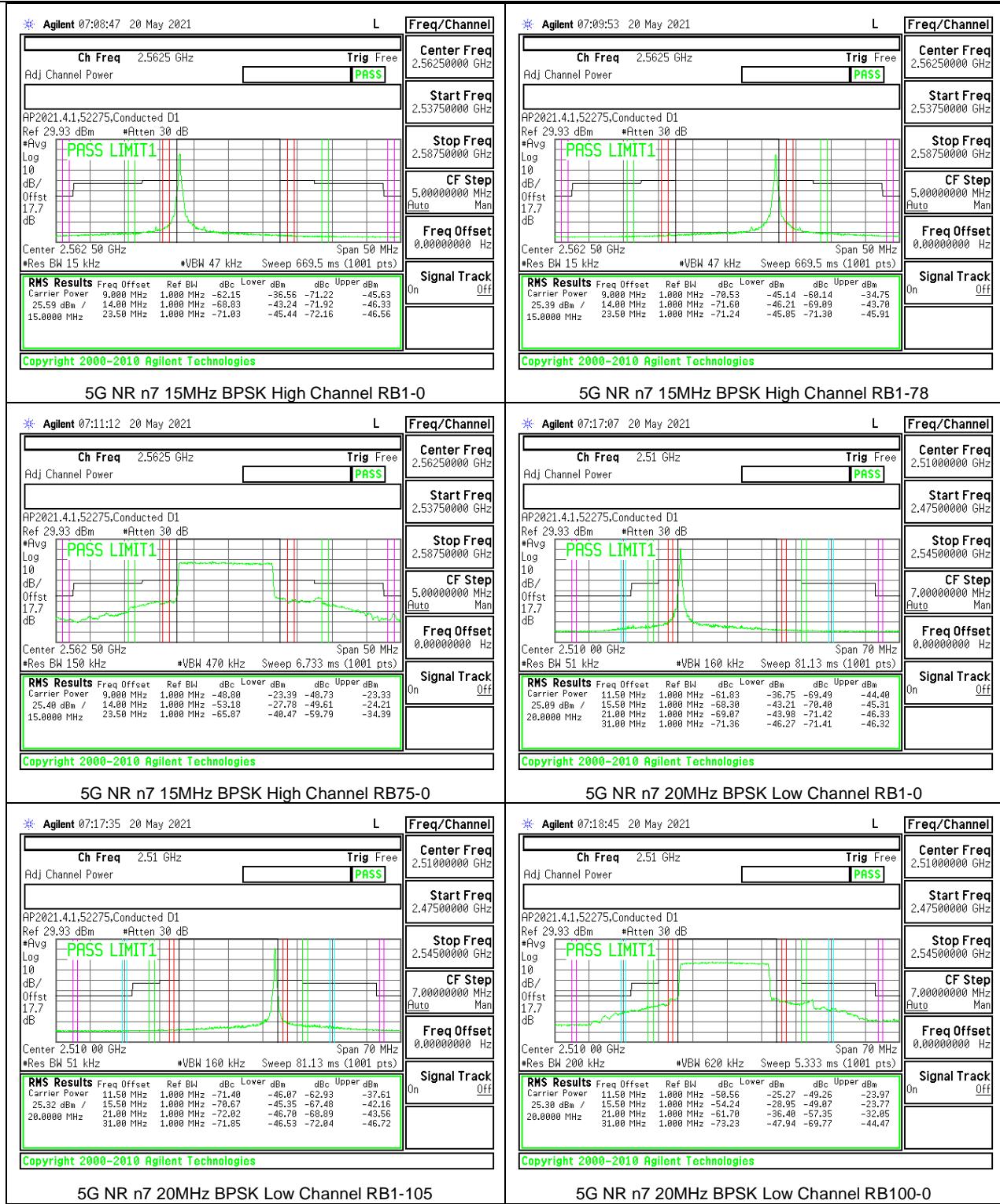
## 5G NR n7 EMISSION MASK

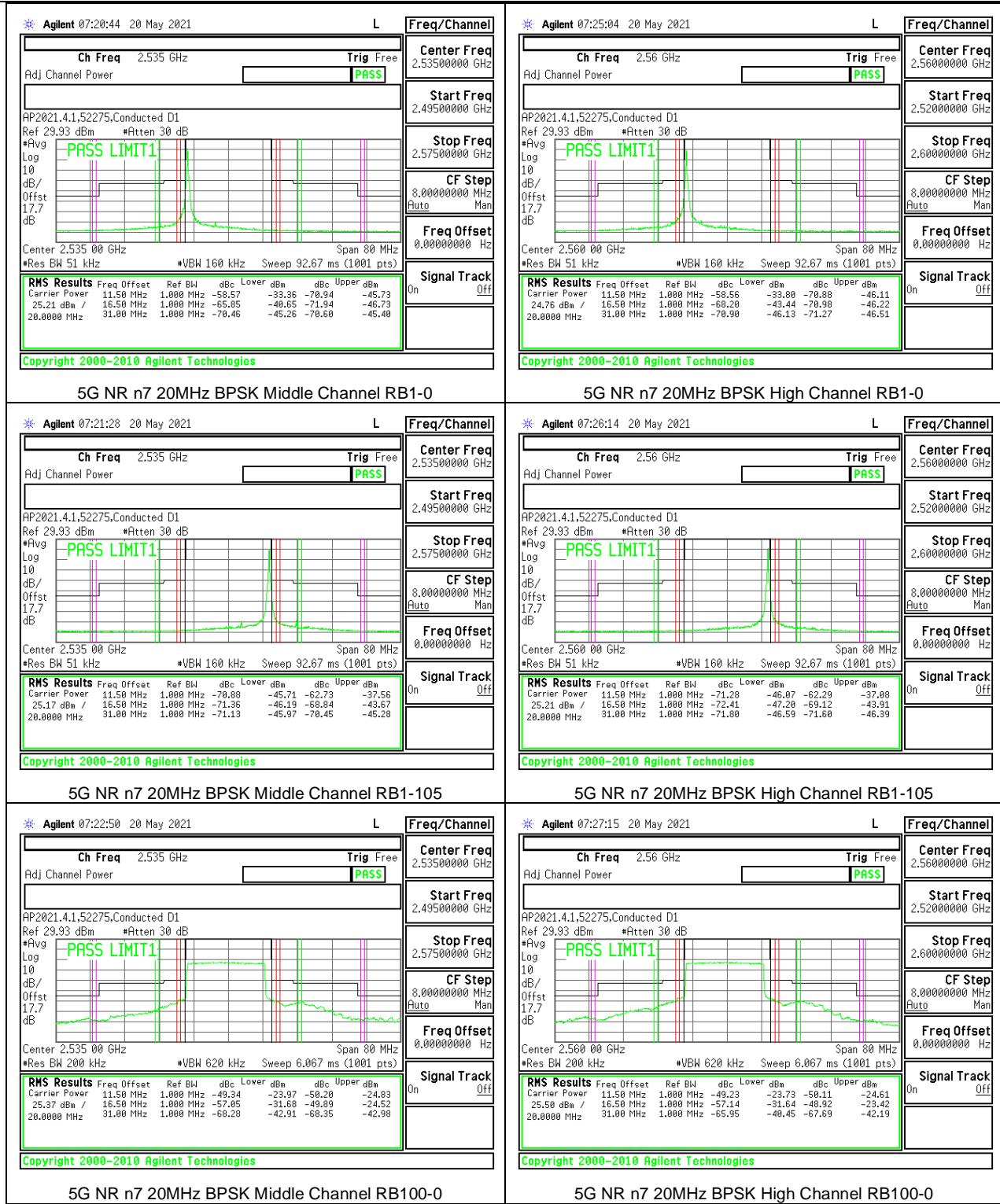


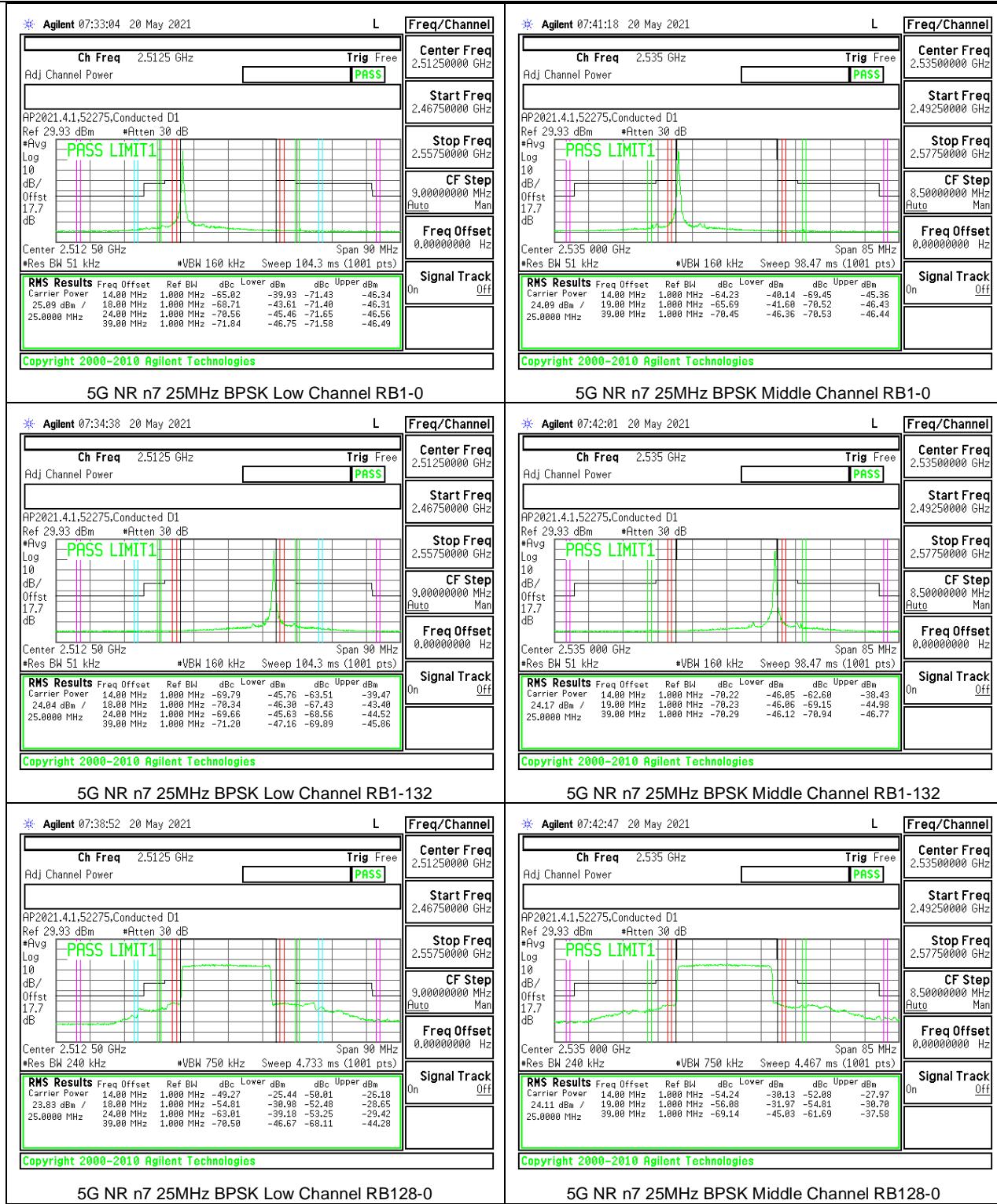




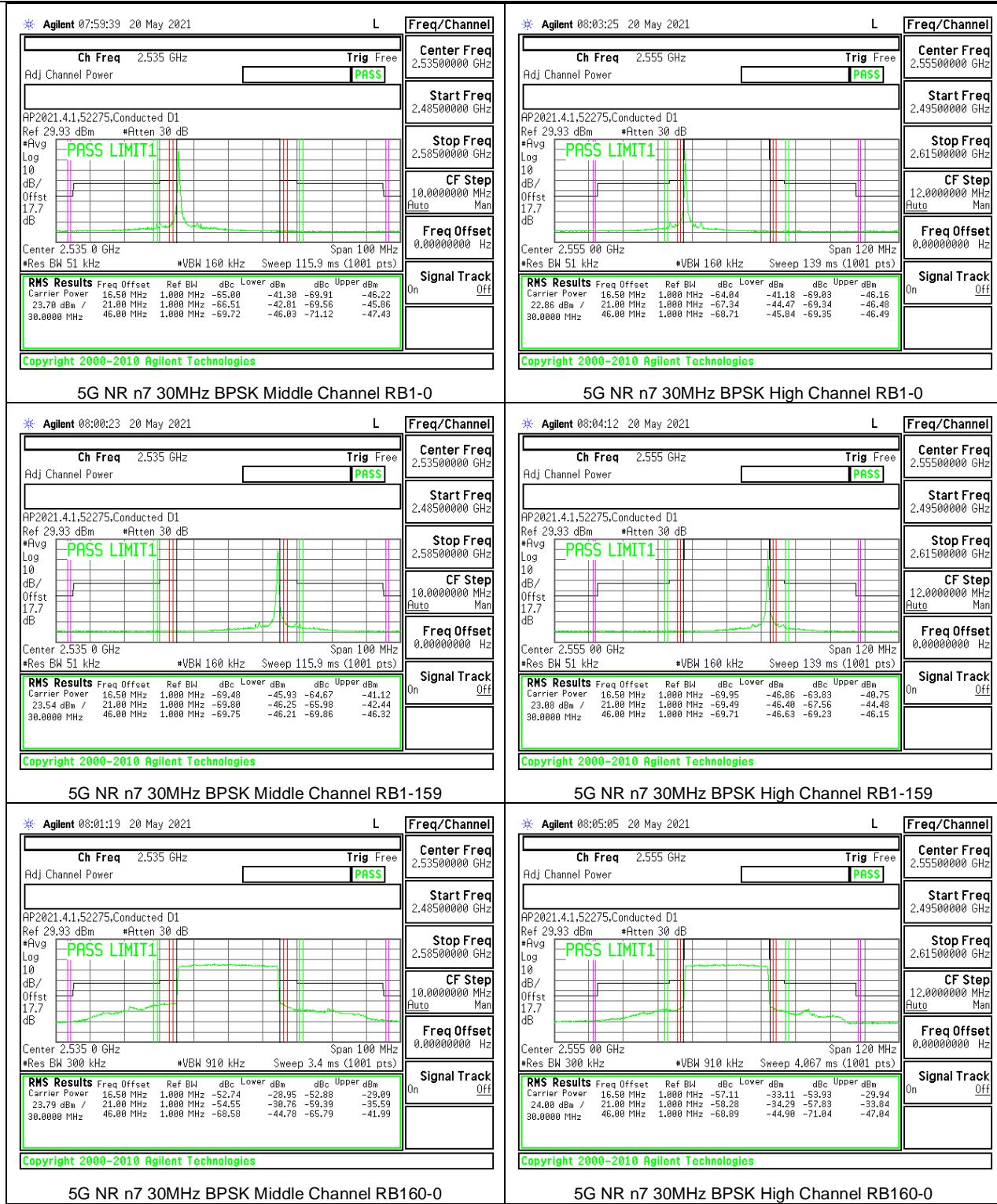




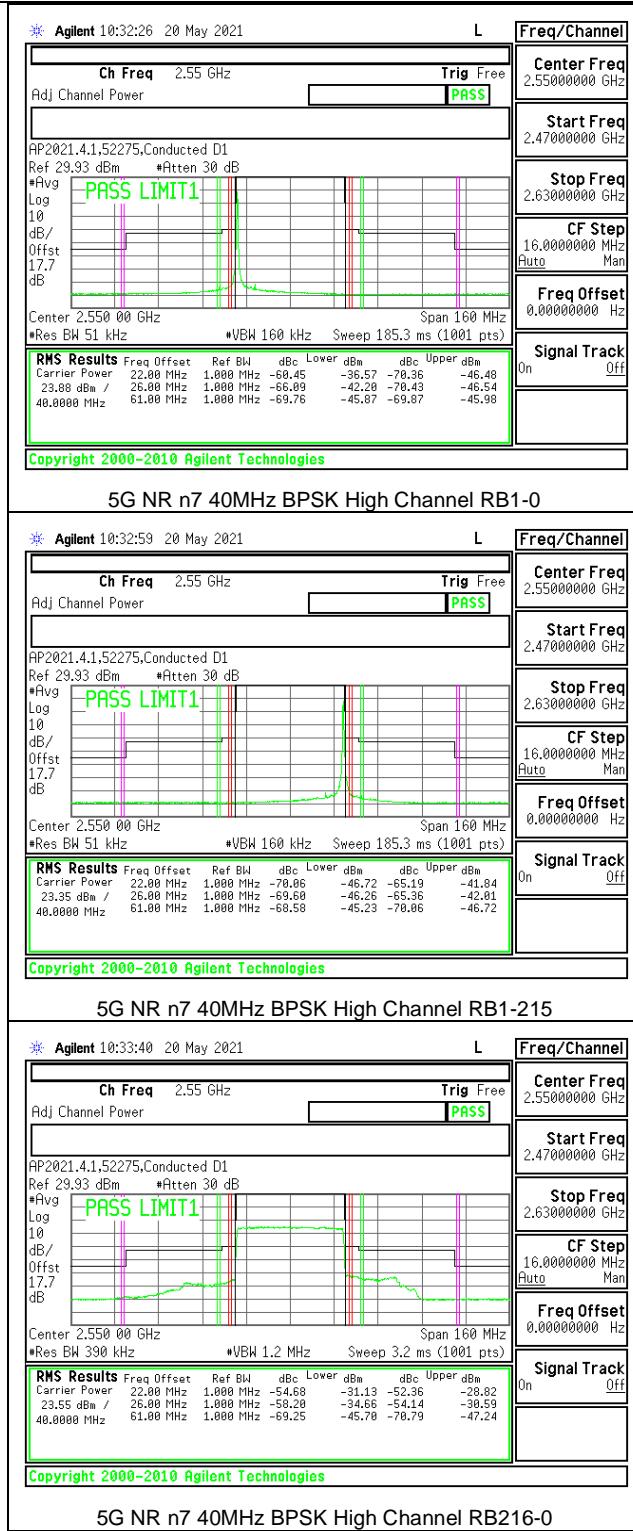












### 9.2.3. LTE BAND 12 AND 5G NR n12 EMISSION MASK

#### LIMITS

FCC: §27.53

(g) For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

## LTE BAND 12 EMISSION MASK

