TEST REPORT

Report Number: 14972479-E15V2

Applicant	:	APPLE, INC 1 APPLE PARK WAY CUPERTINO, CA 95014, U.S.A.
Model	:	A3084
Brand	:	APPLE
FCC ID	:	BCG-E8684A
EUT Description	:	SMARTPHONE
Test Standard(s)	:	FCC 47 CFR PART 2 AND PART 27

Date Of Issue:
2024-08-12

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ACCREDITED
CERT #0751.05

Revision History

Rev.	Issue Date	Revisions	Revised By
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V2	2024-08-12	Address TBC Feedback Section Cover page, 9 & page 50.	Tewodros Woldemichael

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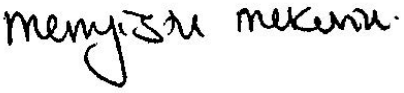
1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	APPLE, INC 1 APPLE PARK WAY CUPERTINO, CA 95014, U.S.A.
Model	A3084
Brand	APPLE
FCC ID	BCG-E8684A
EUT Description	SMARTPHONE
Serial Number	RADIATED: G9KF67HQTQ, F9NDW2CHY0 CONDUCTED: HVHH6Q0006R0000HN2, HVHH240003J0000HNO
Sample Receipt Date	2023-12-14
Date Tested	2023-12-14 to 2024-07-28
Applicable Standards	FCC 47 CFR PART 2 AND PART 27
Test Results	COMPLIES

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

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

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

Approved & Released By:	Reviewed By:	Prepared By:
		
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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 correctly integrating customer-provided data with measurements performed by UL Verification Services Inc.

Below is a list of the data provided by the customer:

1. Antenna gain (see section 6.4.)

Requirement Description	Band	Requirement Clause Number (FCC)	Result	Remarks
Equivalent Isotropic Radiated Power	41, 77	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, 27.53 (h), 27.53 (m)(4) & (m) (6), 27.53 (g), 27.53 (c) (f), 27.53(a), 27.53(l),	Complies	
Out of Band Emissions	2.1051, 27.53 (h), 27.53 (m)(4) & (m) (6), 27.53 (g), 27.53 (c) (f), 27.53(a), 27.53(l)	Complies	
Frequency Stability	2.1055, 27.54	Complies	
Peak-to-Average Ratio	27.50 (d) (5), 27.50 (j) (4),	Complies	
Field Strength of Spurious Radiation	2.1053, 27.53 (h), 27.53 (m)(4) & (m) (6), 27.53 (g), 27.53 (c) (f), 27.53(a), 27.53(l)	Complies	

3. TEST METHODOLOGY

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

- ANSI C63.26:2015
- FCC 47 CFR Part 2, Part 27
- FCC KDB 971168 D01 : Power Meas License Digital Systems
- FCC KDB 971168 D02: Misc Rev Approv License Devices
- FCC KDB 412172 D01 : 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
☒	Building 1: 47173 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	550739
☒	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA			
☐	Building 3: 843 Auburn Court, Fremont, CA 94538, USA			
☒	Building 4: 47658 Kato Rd, Fremont, CA 94538, USA			
☒	Building 5: 47670 Kato Rd, Fremont, CA 94538, USA			

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

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

5.2. DECISION RULES

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

5.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	U_{Lab}
Conducted Antenna Port Emission Measurement	1.940
Power Spectral Density	2.466
Time Domain Measurements Using SA	3.39
RF Power Measurement Direct Method Using Power Meter	0.450 Peak; 1.300 Ave.
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.22%
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.78 db
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 db
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

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

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:
Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)
36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The Apple iPhone is a smartphone with cellular GSM, GPRS, EGPRS, WCDMA, LTE, 5GNR1, 5GNR2, IEEE 802.11a/b/g/n/ac/ax/be, Bluetooth (BT), Ultra-Wideband (UWB), Global Positioning System (GPS), Near-Field

Communication (NFC), Narrow-Band (NB) UNII, 802.15.4, 802.15.4ab-Narrow Band (NB), WPT and Mobile Satellite Service (MSS) technologies. The rechargeable battery is not user accessible. This device is not user-serviceable and requires special tools to disassemble.

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 n41 (FCC)

Part 27	
EIRP Limit (W)	2.00
Antenna Gain (dBi)	-2.20

Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
10.0	BPSK	2501.0	2685.0	31.12	28.92	0.780	8616	8M62G7W
	QPSK			30.92	28.72	0.745	8684	8M68G7W
	16QAM			30.00	27.80	0.603	8581	8M58D7W
15.0	BPSK	2503.5	2682.5	31.08	28.88	0.773	12995	13M0G7W
	QPSK			31.14	28.94	0.783	12915	12M9G7W
	16QAM			30.20	28.00	0.631	12932	12M9D7W
20.0	BPSK	2506.5	2680.0	31.15	28.95	0.785	17913	17M9G7W
	QPSK			31.01	28.81	0.760	17902	17M9G7W
	16QAM			30.05	27.85	0.610	17876	17M9D7W
30.0	BPSK	2511.0	2675.0	30.98	28.78	0.755	26881	26M9G7W
	QPSK			31.13	28.93	0.782	26869	26M9G7W
	16QAM			30.10	27.90	0.617	26932	26M9D7W
40.0	BPSK	2516.0	2670.0	30.98	28.78	0.755	35773	35M8G7W
	QPSK			31.03	28.83	0.764	35914	35M9G7W
	16QAM			30.01	27.81	0.604	35849	35M8D7W
50.0	BPSK	2521.0	2665.0	31.09	28.89	0.774	45835	45M8G7W
	QPSK			30.14	27.94	0.622	45838	45M8G7W
	16QAM			30.11	27.91	0.618	45917	45M9D7W
60.0	BPSK	2526.0	2660.0	31.08	28.88	0.773	57865	57M9G7W
	QPSK			31.01	28.81	0.760	58052	58M1G7W
	16QAM			30.02	27.82	0.605	58036	58M0D7W
70.0	BPSK	2531.0	2655.0	30.78	28.58	0.721	64493	64M5G7W
	QPSK			30.95	28.75	0.750	64604	64M6G7W
	16QAM			29.78	27.58	0.573	64404	64M4D7W
80.0	BPSK	2536.0	2650.0	31.20	29.00	0.794	77210	77M2G7W
	QPSK			31.10	28.90	0.776	77458	77M5G7W
	16QAM			30.09	27.89	0.615	77392	77M4D7W
90.0	BPSK	2541.0	2645.0	31.04	28.84	0.766	86684	86M7G7W
	QPSK			30.88	28.68	0.738	87097	87M1G7W
	16QAM			30.07	27.87	0.612	86921	86M9D7W
100.0	BPSK	2546.0	2640.0	30.84	28.64	0.731	96431	96M4G7W
	QPSK			30.85	28.65	0.733	96543	96M5G7W
	16QAM			30.01	27.81	0.604	96461	96M5D7W

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

Part 27	
EIRP Limit (W)	1.00
Antenna Gain (dBi)	-5.40

Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
10.0	BPSK	3455.0	3545.0	30.98	25.58	0.361	8609	8M61G7W
	QPSK			31.08	25.68	0.370	8624	8M62G7W
	16QAM			30.06	24.66	0.292	8629	8M63D7W
15.0	BPSK	3457.5	3542.5	31.08	25.68	0.370	12879	12M9G7W
	QPSK			31.14	25.74	0.375	12945	12M9G7W
	16QAM			30.15	24.75	0.299	12971	13M0D7W
20.0	BPSK	3460.0	3540.0	31.04	25.64	0.366	17882	17M9G7W
	QPSK			31.20	25.80	0.380	17887	17M9G7W
	16QAM			30.22	24.82	0.303	17898	17M9D7W
30.0	BPSK	3465.0	3535.0	31.18	25.78	0.378	26803	26M8G7W
	QPSK			31.19	25.79	0.379	26894	26M9G7W
	16QAM			30.17	24.77	0.300	26876	26M9D7W
40.0	BPSK	3470.0	3530.0	31.10	25.70	0.372	35807	35M8G7W
	QPSK			31.06	25.66	0.368	35914	35M9G7W
	16QAM			30.13	24.73	0.297	35750	35M8D7W
50.0	BPSK	3475.0	3525.0	31.13	25.73	0.374	45889	45M9G7W
	QPSK			31.11	25.71	0.372	45734	45M7G7W
	16QAM			30.05	24.65	0.292	45740	45M7D7W
60.0	BPSK	3480.0	3520.0	31.13	25.73	0.374	57790	57M8G7W
	QPSK			31.02	25.62	0.365	57947	57M9G7W
	16QAM			30.11	24.71	0.296	57853	57M9D7W
70.0	BPSK	3485.0	3515.0	30.97	25.57	0.361	64376	64M4G7W
	QPSK			31.19	25.79	0.379	64573	64M6G7W
	16QAM			30.15	24.75	0.299	64322	64M3D7W
80.0	BPSK	3490.0	3510.0	31.10	25.70	0.372	77338	77M3G7W
	QPSK			31.20	25.80	0.380	77244	77M2G7W
	16QAM			30.20	24.80	0.302	77112	77M1D7W
90.0	BPSK	3495.0	3505.0	31.11	25.71	0.372	86764	86M8G7W
	QPSK			31.20	25.80	0.380	86792	86M8G7W
	16QAM			30.17	24.77	0.300	86513	86M5D7W
100.0	BPSK	3500.0	3500.0	30.96	25.56	0.360	96439	96M4G7W
	QPSK			31.11	25.71	0.372	96357	96M4G7W
	16QAM			30.01	24.61	0.289	96271	96M3D7W

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

Part 27	
EIRP Limit (W)	1.00
Antenna Gain (dBi)	-5.40

Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
10.0	BPSK	3705.0	3975.0	31.15	25.75	0.376	8591	8M59G7W
	QPSK			30.95	25.55	0.359	8595	8M60G7W
	16QAM			30.11	24.71	0.296	8647	8M65D7W
15.0	BPSK	3707.5	3972.5	31.20	25.80	0.380	12882	12M9G7W
	QPSK			31.20	25.80	0.380	12891	12M9G7W
	16QAM			30.07	24.67	0.293	12893	12M9D7W
20.0	BPSK	3710.0	3970.0	31.14	25.74	0.375	17865	17M9G7W
	QPSK			30.95	25.55	0.359	17874	17M9G7W
	16QAM			30.01	24.61	0.289	17888	17M9D7W
30.0	BPSK	3715.0	3965.0	31.07	25.67	0.369	26845	26M8G7W
	QPSK			31.10	25.70	0.372	26836	26M8G7W
	16QAM			30.14	24.74	0.298	26827	26M8D7W
40.0	BPSK	3720.0	3960.0	31.12	25.72	0.373	35722	35M7G7W
	QPSK			31.20	25.80	0.380	35656	35M7G7W
	16QAM			30.08	24.68	0.294	35748	35M7D7W
50.0	BPSK	3725.0	3955.0	31.19	25.79	0.379	45853	45M9G7W
	QPSK			31.10	25.70	0.372	45720	45M7G7W
	16QAM			30.14	24.74	0.298	45633	45M6D7W
60.0	BPSK	3730.0	3950.0	31.15	25.75	0.376	57868	57M9G7W
	QPSK			31.12	25.72	0.373	57969	58M0G7W
	16QAM			30.18	24.78	0.301	57755	57M8D7W
70.0	BPSK	3735.0	3945.0	31.12	25.72	0.373	64391	64M4G7W
	QPSK			31.18	25.78	0.378	64322	64M3G7W
	16QAM			30.19	24.79	0.301	64333	64M3D7W
80.0	BPSK	3740.0	3940.0	31.12	25.72	0.373	77127	77M1G7W
	QPSK			31.13	25.73	0.374	77076	77M1G7W
	16QAM			30.21	24.81	0.303	77336	77M3D7W
90.0	BPSK	3745.0	3935.0	31.12	25.72	0.373	86739	86M7G7W
	QPSK			31.20	25.80	0.380	86795	86M8G7W
	16QAM			30.17	24.77	0.300	86626	86M6D7W
100.0	BPSK	3750.0	3930.0	31.20	25.80	0.380	96349	96M3G7W
	QPSK			31.14	25.74	0.375	96416	96M4G7W
	16QAM			30.13	24.73	0.297	96276	96M3D7W

6.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version 0.02.01.

6.4. MAXIMUM ANTENNA GAIN

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

5G NR MIMO Bands	Frequency Range (MHz)	ANT 2+1 Antenna Gain (dBi)	ANT 2+3 Antenna Gain (dBi)	ANT 4+1 Antenna Gain (dBi)	ANT 4+3 Antenna Gain (dBi)
5G NR n41	2496 – 2690	-2.2	-2.8	-3.2	-4.3

5G NR MIMO Bands	Frequency Range (MHz)	ANT 7+8 Antenna Gain (dBi)	ANT 7+4 Antenna Gain (dBi)	ANT 9+8 Antenna Gain (dBi)	ANT 9+4 Antenna Gain (dBi)
5G NR n77	3450 – 3550 3700 – 3980	-5.4	-5.6	-6.1	-5.1

6.5. WORST-CASE CONFIGURATION AND MODE

The EUT supports the following LTE and 5G NRs:
5G NR n41and 5G NR n77.

5G NR n41 and 5G NR n77, SISO data were used for OBW, PAR and FS because these measurements are independent of the number of antennas used simultaniously.

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.

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

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

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

5G NR Bands	Worst case Antenna Port for Conducted Power
5G NR n41	Ant 2+1
5G NR n77	Ant 7+8

The EUT was investigated in three orthogonal orientations X/Y/Z on all ANT 2+1, and ANT 7+8 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	ANT2+1	ANT2+3	ANT4+1	ANT4+3	ANT7+8	ANT7+4	ANT9+8	ANT9+8
2300 – 2700 MHz	X	X	X	X	N/A	N/A	N/A	N/A
3300 – 3980 MHz	N/A	N/A	N/A	N/A	X	X	Z	X

Radiated spurious emissions were investigated from 9kHz to 30MHz, 30MHz-1GHz and above 18GHz. There were no emissions found with less than 20dB of margin from 9kHz to 30MHz, 30MHz-1GHz and above 18GHz.

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

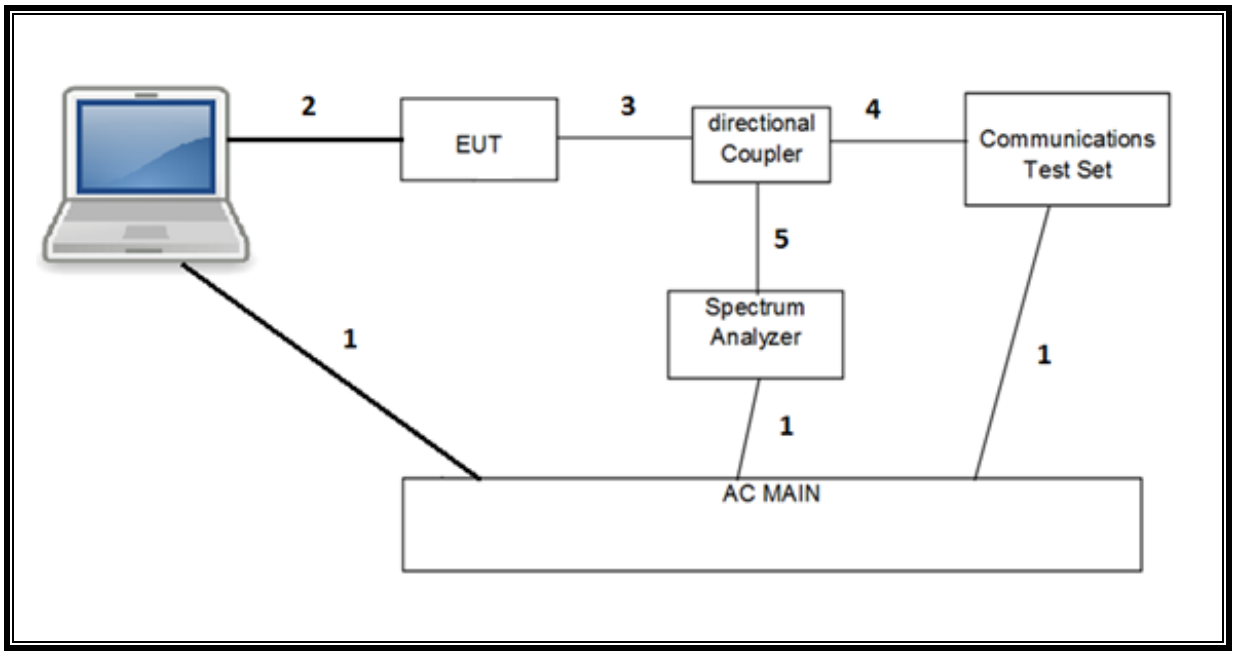
6.6. DESCRIPTION OF TEST SETUP

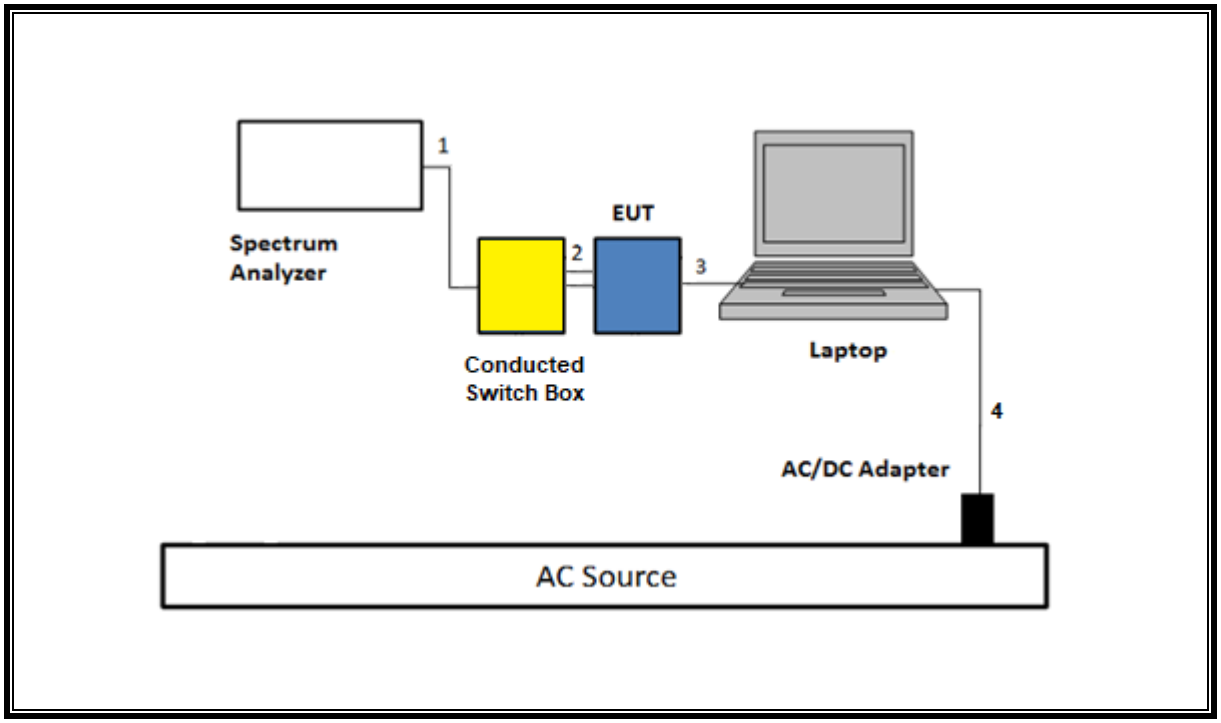
SUPPORT TEST EQUIPMENT				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID/ DoC**
Laptop	Apple	MacBook Pro	HRP082673	BCGA1708
AC/DC adapter	Apple	A1718	C4H64450HH3GN8RA6	--

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

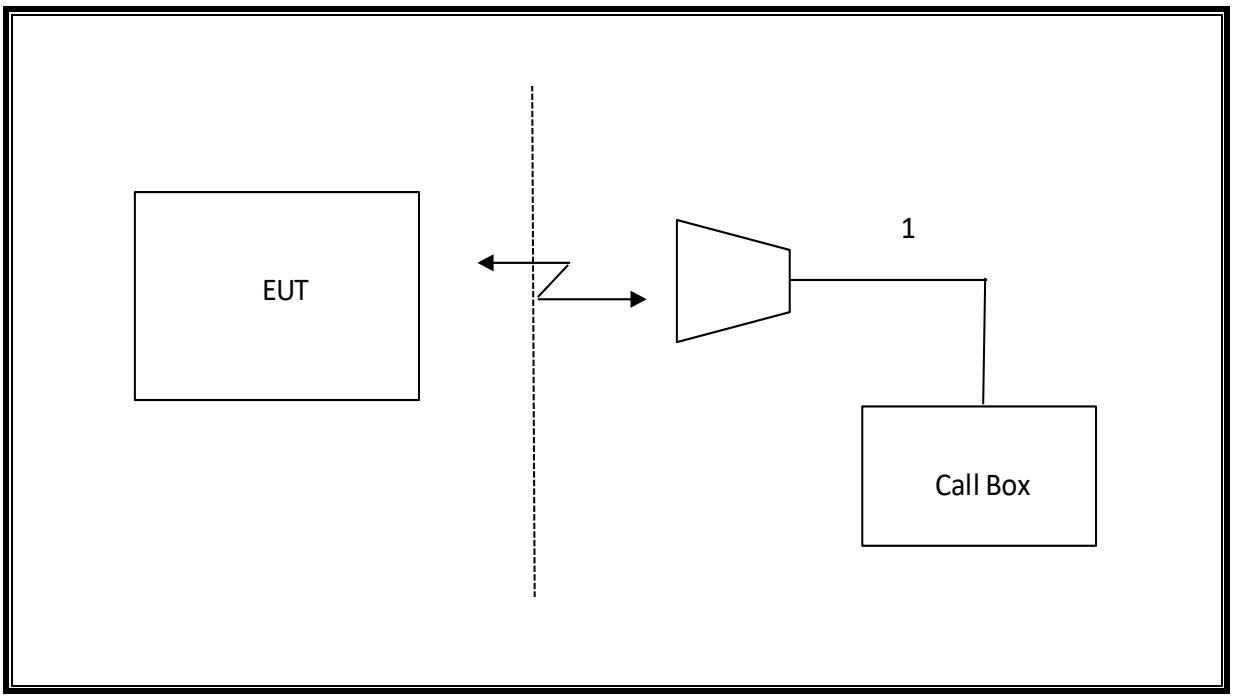
I/O CABLES (RF RADIATED TEST)						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	RF In/Out	1	Antenna	Un-shielded	5.0	N/A

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	80430	2024-08-31
Antenna, Horn 1-18GHz	ETS Lindgren	3117	79834	2024-06-30
Antenna, Broadband Hybrid, 30MHz to 3000MHz	SUNAR	JB3	222009	2024-10-31
RF Filter Box, 1-18GHz	UL-FR1	NA	217255	2024-10-31
RF Filter Box, 1-18GHz	UL-FR1	RATS 2	226781	2024-09-30
Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	430250	2024-09-30
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	169936	2025-02-28
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	169935	2025-02-28
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	85943	2025-02-28
Directional Coupler	KRYTAR	152610	198816	2024-10-31
Directional Coupler	KRYTAR	152610	231664	2025-01-22
Power Meter, P-series single channel	Keysight	N1912A	90719	2025-01-31
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight	N1921A	81319	2025-01-31
Filter, HPF 1.2GHz	Wainwright Instruments GmbH	WHKX6-948-1.2/15G-40ST	99	2024-10-31
Spectrum Analyzer, PXA, 2Hz to 44GHz	Keysight	N9030B	231739	2025-01-31
Spectrum Analyzer, PXA, 2Hz to 44GHz	Keysight	N9030B	245120	2025-02-28
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	85212	2025-02-28
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	222793	2025-02-28
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	222797	2025-02-28
Chamber, Environmental	Thermotron Corp.	SM-16C Mini-Max	179936	2024-06-30
Transmitting Antenna, Horn Antenna	TEKBOX Digital Solutions	TBMA4	226709	C.N.R.
Antenna, Horn 18 to 26.5GHz	A.R.A.	MWH-1826/B	199659	2024-12-31
Amplifier 18-26.5GHz, +5Vdc, -54dBm P1dB	AMPLICAL	AMP18G26.5-60	234683	2025-05-31
DC Power Supply	GWINSTEK	GPS18500	N/A	C.N.R.
Conducted Switch Box	N/A	CSB	208281	2025-05-08
Antenna, Passive Loop 30Hz - 1MHz	ELECTRO-METRICS	EM-6871	170014	2024-08-31
Antenna, Passive Loop 100KHz - 30MHz	ELECTRO-METRICS	EM-6872	170016	2024-08-31
UL AUTOMATION SOFTWARE				
CLT Software	UL	UL RF	V2023.11.21.0	
Power Measurement Software	UL	UL RF	V2023.08.14.0	
Radiated test software	UL	UL RF	Ver 9.5 2023-05-01	

NOTES:

1. * Testing is completed before equipment expiration date.

8. RF OUTPUT POWER MEASUREMENTS

CONDUCTED OUTPUT POWER MEASUREMENT PROCEDURE

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

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS136.101 specification.

UE Power Class: 3 (23 +/- 2dBm). Band 41 UE Power Class: 2 (26 +/-2 dBm).The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS136.101.

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

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

The 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	

RESULTS

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

8.1.1. 5G NR n41

Test Engineer ID:	28774	Test Date:	2024-05-14

OUTPUT POWER FOR 5G NR n41 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 1+2		
				500200	518600	537000	500200	518600	537000	500200	518600	537000
				2501.0	2593.0	2685.0	2501.0	2593.0	2685.0	2501.0	2593.0	2685.0
10.0	BPSK	1	0	21.50	22.41	21.66	21.60	22.38	22.00	24.56	25.41	24.84
		1	1	21.97	27.98	27.50	22.12	27.79	27.29	25.06	30.90	30.41
		1	22	27.32	**28.12**	27.35	27.46	**28.10**	27.41	30.40	**31.12**	30.39
		1	23	21.64	22.29	21.89	21.75	22.25	21.84	24.71	25.28	24.88
		12	6	23.95	26.45	25.91	23.71	26.38	25.97	26.84	29.43	28.95
		24	0	24.09	26.46	25.98	24.08	**26.42**	25.94	27.10	29.45	28.97
	QPSK	1	0	21.43	22.05	21.20	21.31	22.06	21.28	24.38	25.07	24.25
		1	1	21.21	27.94	27.47	21.66	**27.87**	27.20	24.45	**30.92**	30.35
		1	22	27.11	**28.00**	27.41	27.46	27.75	27.12	30.30	30.89	30.28
		1	23	21.45	21.83	21.41	21.50	22.10	21.46	24.49	24.98	24.45
		12	6	23.00	26.15	25.27	23.10	26.00	25.48	26.06	29.09	28.39
		24	0	22.87	25.81	25.48	22.73	25.87	25.20	25.81	28.85	28.35
	16QAM	1	0	21.47	22.06	21.36	21.07	21.88	21.24	24.28	24.98	24.31
		1	1	21.46	26.82	26.08	21.21	**27.15**	26.31	24.35	**30.00**	29.21
		1	22	26.28	**26.84**	26.06	26.18	27.13	26.31	29.24	30.00	29.20
		1	23	21.38	21.97	21.06	21.07	21.92	21.44	24.24	24.96	24.26
		12	6	22.23	25.20	24.33	22.59	25.12	24.30	25.42	28.17	27.33
		24	0	22.22	24.77	24.40	22.29	24.96	24.24	25.27	27.88	27.33
	64QAM	1	0	20.92	22.12	21.48	20.98	21.99	21.45	23.96	25.07	24.48
		1	1	21.06	24.78	24.41	20.82	**25.17**	24.10	23.95	**27.99**	27.27
		1	22	24.43	**24.91**	24.22	24.45	24.97	24.35	27.45	27.95	27.30
		1	23	21.23	22.09	21.24	21.26	22.12	21.32	24.26	25.12	24.29
		12	6	22.46	24.33	23.56	22.47	24.52	23.86	25.48	27.44	26.72
		24	0	22.65	24.59	23.85	22.52	24.58	23.95	25.60	27.60	26.91
	256QAM	1	0	19.22	**22.03**	21.37	19.33	22.00	21.02	22.29	25.03	24.21
		1	1	19.59	21.86	21.07	19.62	21.93	21.33	22.62	24.91	24.21
		1	22	21.16	21.85	21.44	21.33	**22.19**	21.15	24.26	25.03	24.31
		1	23	21.37	21.87	21.04	21.45	22.01	21.01	24.42	24.95	24.04
		12	6	20.74	22.01	21.31	20.87	22.15	21.18	23.82	**25.09**	24.26
		24	0	20.78	21.76	21.26	20.93	21.76	21.13	23.87	24.77	24.21

OUTPUT POWER FOR 5G NR n41 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 1+2		
				500700	518600	536500	500700	518600	536500	500700	518600	536500
				2503.5	2593.0	2682.5	2503.5	2593.0	2682.5	2503.5	2593.0	2682.5
15.0	BPSK	1	0	21.66	22.59	21.87	21.82	22.53	21.51	24.75	25.57	24.70
		1	1	22.11	27.93	27.22	21.95	27.89	27.31	25.04	30.92	30.28
		1	36	27.50	**28.11**	27.41	27.29	**28.02**	27.47	30.41	**31.08**	30.45
		1	37	21.94	22.70	21.97	21.70	22.60	21.93	24.83	25.66	24.96
		18	9	23.95	26.23	25.73	24.18	26.41	25.70	27.08	29.33	28.73
		36	0	23.93	26.23	25.94	23.97	26.37	25.83	26.96	29.31	28.90
	QPSK	1	0	21.26	21.80	21.35	21.36	22.19	21.14	24.32	25.01	24.26
		1	1	21.66	27.98	27.32	21.32	**28.17**	27.39	24.50	31.09	30.37
		1	36	27.08	**28.15**	27.03	27.17	28.10	27.12	30.14	**31.14**	30.09
		1	37	21.02	22.10	21.17	21.28	21.90	21.05	24.16	25.01	24.12
		18	9	22.95	26.11	25.21	23.17	26.01	25.43	26.07	29.07	28.33
		36	0	22.91	26.20	25.34	23.03	25.90	25.46	25.98	29.06	28.41
	16QAM	1	0	21.24	21.76	21.06	21.48	22.19	21.25	24.37	24.99	24.17
		1	1	21.61	27.10	26.37	21.41	26.96	26.46	24.52	30.04	29.43
		1	36	26.36	**27.19**	26.34	26.34	**27.19**	26.04	29.36	**30.20**	29.20
		1	37	21.06	21.76	21.02	21.40	21.96	21.28	24.24	24.87	24.16
		18	9	22.60	25.06	24.16	22.30	25.01	24.16	25.46	28.05	27.17
		36	0	22.44	25.16	24.41	22.31	25.10	24.27	25.39	28.14	27.35
	64QAM	1	0	20.82	21.95	21.46	21.19	21.85	21.30	24.02	24.91	24.39
		1	1	21.02	24.83	24.16	21.17	**25.18**	24.44	24.11	**28.02**	27.31
		1	36	24.44	**25.20**	24.43	24.23	24.76	24.26	27.35	28.00	27.36
		1	37	21.46	21.85	21.24	21.18	21.75	21.09	24.33	24.81	24.18
		18	9	22.47	24.65	23.57	22.47	24.36	23.63	25.48	27.52	26.61
		36	0	22.51	24.57	23.98	22.25	24.56	23.77	25.39	27.58	26.89
	256QAM	1	0	19.62	**22.15**	21.50	19.41	21.94	21.41	22.53	**25.06**	24.47
		1	1	19.70	21.81	21.19	19.32	21.81	21.10	22.52	24.82	24.16
		1	36	21.22	22.13	21.27	21.08	21.87	21.22	24.16	25.01	24.26
		1	37	21.08	21.73	21.25	21.24	21.99	21.50	24.17	24.87	24.39
		18	9	21.10	22.01	21.18	20.89	21.93	21.39	24.01	24.98	24.30
		36	0	21.18	21.80	21.22	20.76	**22.16**	21.14	23.99	24.99	24.19

OUTPUT POWER FOR 5G NR n41 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 1+2		
				501200	518600	536000	501200	518600	536000	501200	518600	536000
				2506.0	2593.0	2680.0	2506.0	2593.0	2680.0	2506.0	2593.0	2680.0
20.0	BPSK	1	0	21.87	22.26	21.82	21.77	22.21	21.94	24.83	25.25	24.89
		1	1	21.87	**28.15**	27.27	21.76	**28.13**	27.31	24.83	**31.15**	30.30
		1	49	27.07	28.01	27.10	27.37	28.00	27.15	30.23	31.02	30.14
		1	50	21.66	22.25	21.72	21.93	22.22	21.60	24.81	25.25	24.67
		25	12	24.17	26.29	25.52	24.02	26.51	25.92	27.11	29.41	28.73
		50	0	23.88	26.44	25.57	24.13	26.29	25.92	27.02	29.38	28.76
	QPSK	1	0	21.24	21.97	21.49	21.21	22.00	21.00	24.24	25.00	24.26
		1	1	21.63	**28.17**	27.06	21.62	27.83	27.15	24.64	**31.01**	30.12
		1	49	27.40	27.78	27.47	27.12	**28.12**	27.50	30.27	30.96	30.50
		1	50	21.12	21.97	21.09	21.30	22.03	21.37	24.22	25.01	24.24
		25	12	22.80	25.82	25.24	23.00	25.88	25.49	25.91	28.86	28.38
		50	0	22.91	26.20	25.30	22.86	25.77	25.31	25.90	29.00	28.32
	16QAM	1	0	21.24	22.12	21.17	21.10	22.14	21.44	24.18	25.14	24.32
		1	1	21.67	**27.00**	26.15	21.30	**27.07**	26.42	24.50	**30.05**	29.30
		1	49	26.07	26.90	26.13	26.07	26.81	26.48	29.08	29.87	29.32
		1	50	21.04	21.98	21.39	21.42	22.05	21.13	24.24	25.03	24.27
		25	12	22.69	24.86	24.44	22.41	24.84	24.47	25.56	27.86	27.47
		50	0	22.35	24.86	24.30	22.38	24.74	24.00	25.38	27.81	27.16
	64QAM	1	0	20.72	22.14	21.02	20.72	21.84	21.48	23.73	25.00	24.27
		1	1	21.03	**25.14**	24.28	20.85	**25.11**	24.43	23.95	**28.14**	27.37
		1	49	24.32	25.05	24.06	24.40	24.95	24.49	27.37	28.01	27.29
		1	50	21.01	21.98	21.15	21.13	21.80	21.45	24.08	24.90	24.31
		25	12	22.47	24.48	23.67	22.54	24.55	23.69	25.52	27.53	26.69
		50	0	22.27	24.59	23.65	22.62	24.58	23.59	25.46	27.60	26.63
	256QAM	1	0	19.36	21.86	21.19	19.46	21.87	21.35	22.42	24.88	24.28
		1	1	19.30	21.73	21.35	19.49	21.74	21.45	22.41	24.75	24.41
		1	49	21.49	**22.20**	21.31	21.36	21.73	21.36	24.44	24.98	24.35
		1	50	21.45	22.18	21.02	21.19	**22.05**	21.28	24.33	**25.13**	24.16
		25	12	20.72	22.16	21.39	20.90	22.03	21.43	23.82	25.11	24.42
		50	0	20.77	21.85	21.41	21.16	21.78	21.16	23.98	24.83	24.30

OUTPUT POWER FOR 5G NR n41 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 1+2		
				502200	518600	525000	502200	518600	525000	502200	518600	525000
				2511.0	2593.0	2675.0	2511.0	2593.0	2675.0	2511.0	2593.0	2675.0
30.0	BPSK	1	0	21.89	22.51	21.91	21.87	22.45	21.61	24.89	25.49	24.77
		1	1	21.90	**27.96**	27.10	22.19	27.98	27.50	25.06	**30.98**	30.31
		1	76	27.28	27.88	27.44	27.08	**28.00**	27.44	30.19	30.95	30.45
		1	77	21.93	22.59	21.59	21.96	22.42	21.85	24.96	25.52	24.73
		36	18	23.75	26.37	25.75	24.03	26.41	25.95	26.90	29.40	28.86
		75	0	24.17	26.66	25.56	24.09	26.45	25.61	27.14	29.57	28.60
	QPSK	1	0	21.00	21.78	21.20	21.48	21.87	21.42	24.26	24.84	24.32
		1	1	21.33	28.12	27.36	21.46	27.96	27.19	24.41	31.05	30.29
		1	76	27.35	**28.14**	27.15	27.09	**28.09**	27.17	30.23	**31.13**	30.17
		1	77	21.24	21.71	21.08	21.24	22.02	21.48	24.25	24.88	24.29
		36	18	22.99	25.80	25.39	23.05	25.99	25.40	26.03	28.91	28.41
		75	0	22.89	25.97	25.12	22.82	25.94	25.09	25.87	28.97	28.12
	16QAM	1	0	21.41	21.75	21.19	21.41	21.72	21.42	24.42	24.75	24.32
		1	1	21.36	27.09	26.42	21.46	**27.08**	26.45	24.42	**30.10**	29.45
		1	76	26.10	**27.12**	26.20	26.41	26.96	26.44	29.27	30.05	29.33
		1	77	21.14	21.71	21.50	21.30	21.88	21.00	24.23	24.81	24.27
		36	18	22.32	24.85	24.13	22.47	25.01	24.48	25.41	27.94	27.32
		75	0	22.44	25.16	24.02	22.20	24.70	24.06	25.33	27.95	27.05
	64QAM	1	0	20.85	22.07	21.40	21.01	21.70	21.27	23.94	24.90	24.35
		1	1	21.09	24.77	24.05	21.05	24.78	24.10	24.08	27.79	27.09
		1	76	24.14	**25.20**	24.42	24.27	**25.00**	24.41	27.22	**28.11**	27.43
		1	77	21.03	21.88	21.30	21.14	21.70	21.37	24.10	24.80	24.35
		36	18	22.41	24.70	23.60	22.63	24.25	23.57	25.53	27.49	26.60
		75	0	22.41	24.69	23.56	22.22	24.29	23.98	25.33	27.50	26.79
	256QAM	1	0	19.48	22.10	21.40	19.62	21.75	21.09	22.56	24.94	24.26
		1	1	19.54	**22.13**	21.44	19.31	**22.09**	21.44	22.44	**25.12**	24.45
		1	76	21.22	21.93	21.22	21.02	21.72	21.05	24.13	24.84	24.15
		1	77	21.22	21.86	21.25	21.42	21.76	21.43	24.33	24.82	24.35
		36	18	21.15	21.75	21.34	20.88	21.92	21.04	24.03	24.85	24.20
		75	0	20.75	22.13	21.49	20.79	21.85	21.32	23.78	25.00	24.42

OUTPUT POWER FOR 5G NR n41 (40.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 1+2		
				503200	518600	534000	503200	518600	534000	503200	518600	534000
				2516.0	2593.0	2670.0	2516.0	2593.0	2670.0	2516.0	2593.0	2670.0
40.0	BPSK	1	0	21.71	22.54	21.98	21.89	22.58	21.63	24.81	25.57	24.82
		1	1	22.14	27.80	27.19	21.95	**28.13**	27.01	25.06	**30.98**	30.11
		1	104	27.38	**27.88**	27.33	27.46	28.05	27.31	30.43	30.98	30.33
		1	105	21.52	22.25	21.81	21.81	22.56	21.77	24.68	25.42	24.80
		50	25	24.20	26.23	25.84	23.74	26.46	25.86	26.99	29.36	28.86
		100	0	24.10	26.66	25.71	24.05	26.51	25.84	27.09	29.60	28.79
	QPSK	1	0	21.44	21.76	21.40	21.18	21.82	21.45	24.32	24.80	24.44
		1	1	21.31	27.95	27.46	21.41	**28.08**	27.45	24.37	**31.03**	30.47
		1	104	27.09	**28.15**	27.05	27.37	27.77	27.40	30.24	30.97	30.24
		1	105	21.25	22.00	21.34	21.25	22.20	21.41	24.26	25.11	24.39
		50	25	23.18	26.03	25.23	23.00	25.77	25.29	26.10	28.91	28.27
		100	0	22.86	25.83	25.15	23.19	26.20	25.50	26.04	29.03	28.34
	16QAM	1	0	21.40	22.20	21.35	21.36	21.96	21.44	24.39	25.09	24.41
		1	1	21.50	26.92	26.32	21.64	**26.94**	26.17	24.58	29.94	29.26
		1	104	26.18	**27.06**	26.14	26.34	26.93	26.01	29.27	**30.01**	29.09
		1	105	21.11	21.93	21.14	21.02	22.04	21.48	24.08	25.00	24.32
		50	25	22.68	24.78	24.40	22.22	25.11	24.24	25.47	27.96	27.33
		100	0	22.62	25.11	24.18	22.40	24.80	24.13	25.52	27.97	27.17
	64QAM	1	0	20.87	21.94	21.37	21.19	21.96	21.18	24.04	24.96	24.29
		1	1	20.91	24.76	24.28	21.14	**25.08**	24.26	24.04	**27.93**	27.28
		1	104	24.30	**24.77**	24.24	24.12	25.05	24.46	27.22	27.92	27.36
		1	105	21.08	21.81	21.01	21.47	21.99	21.23	24.29	24.91	24.13
		50	25	22.36	24.64	23.75	22.34	24.58	23.82	25.36	27.62	26.80
		100	0	22.67	24.60	23.94	22.36	24.22	23.75	25.53	27.42	26.86
	256QAM	1	0	19.44	21.73	21.47	19.70	**22.20**	21.14	22.58	24.98	24.32
		1	1	19.70	21.86	21.34	19.35	22.19	21.45	22.54	25.04	24.41
		1	104	21.03	21.94	21.50	21.48	21.84	21.19	24.27	24.90	24.36
		1	105	21.26	21.85	21.18	21.21	22.10	21.40	24.25	24.99	24.30
		50	25	21.02	21.75	21.16	21.05	21.98	21.45	24.05	24.88	24.32
		100	0	20.99	**21.97**	21.44	20.96	22.10	21.21	23.99	**25.05**	24.34

OUTPUT POWER FOR 5G NR n41 (50.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 1+2		
				504200	518600	533000	504200	518600	533000	504200	518600	533000
				2521.0	2593.0	2665.0	2521.0	2593.0	2665.0	2521.0	2593.0	2665.0
50.0	BPSK	1	0	21.52	22.66	21.74	21.82	22.41	22.00	24.68	25.55	24.88
		1	1	22.01	**28.04**	27.17	22.12	28.12	27.19	25.08	**31.09**	30.19
		1	131	27.03	27.83	27.42	27.20	**28.17**	27.30	30.13	31.01	30.37
		1	132	21.51	22.58	21.78	21.97	22.59	21.51	24.76	25.60	24.66
		64	32	23.72	26.41	25.87	24.14	26.54	25.79	26.95	29.49	28.84
		128	0	24.14	26.60	25.63	24.11	26.59	25.67	27.14	29.61	28.66
	QPSK	1	0	21.23	21.80	21.27	21.04	22.07	21.42	24.15	24.95	24.36
		1	1	21.32	**28.13**	27.01	21.51	**28.12**	27.43	24.43	**31.14**	30.24
		1	131	27.47	28.03	27.50	27.48	28.02	27.11	30.49	31.04	30.32
		1	132	21.40	21.76	21.15	21.23	21.98	21.47	24.33	24.88	24.32
		64	32	23.01	25.71	25.12	23.19	26.10	25.23	26.11	28.92	28.19
		128	0	22.87	25.84	25.40	23.07	25.80	25.41	25.98	28.83	28.42
	16QAM	1	0	21.44	22.01	21.22	21.40	21.83	21.39	24.43	24.93	24.32
		1	1	21.21	26.97	26.21	21.46	26.85	26.50	24.35	29.92	29.37
		1	131	26.35	**27.07**	26.50	26.47	**27.12**	26.37	29.42	**30.11**	29.45
		1	132	21.27	22.18	21.02	21.12	22.12	21.46	24.21	25.16	24.26
		64	32	22.70	25.18	24.13	22.40	24.94	24.28	25.56	28.07	27.22
		128	0	22.47	25.02	24.02	22.57	25.15	24.37	25.53	28.10	27.21
	64QAM	1	0	20.85	21.82	21.28	21.19	22.15	21.40	24.03	25.00	24.35
		1	1	21.05	**25.04**	24.48	21.17	**25.15**	24.15	24.12	**28.11**	27.33
		1	131	24.18	24.87	24.23	24.01	25.12	24.50	27.11	28.01	27.38
		1	132	21.29	21.82	21.47	21.50	21.74	21.44	24.41	24.79	24.47
		64	32	22.40	24.46	23.91	22.45	24.66	23.60	25.44	27.57	26.77
		128	0	22.55	24.57	23.91	22.67	24.39	23.54	25.62	27.49	26.74
	256QAM	1	0	19.42	22.03	21.45	19.37	21.80	21.05	22.41	24.93	24.26
		1	1	19.56	21.76	21.43	19.54	22.02	21.31	22.56	24.90	24.38
		1	131	21.35	21.82	21.13	21.19	22.04	21.42	24.28	24.94	24.29
		1	132	21.22	21.81	21.50	21.29	22.01	21.19	24.27	24.92	24.36
		64	32	20.96	**22.12**	21.15	20.90	21.71	21.09	23.94	24.93	24.13
		128	0	21.01	21.83	21.48	21.12	**22.07**	21.20	24.08	**24.96**	24.35

OUTPUT POWER FOR 5G NR n41 (60.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 1+2		
				505200	518600	532000	505200	518600	532000	505200	518600	532000
				2526.0	2593.0	2660.0	2526.0	2593.0	2660.0	2526.0	2593.0	2660.0
60.0	BPSK	1	0	21.61	22.27	21.89	21.77	22.60	21.95	24.70	25.45	24.93
		1	1	21.95	27.91	27.07	22.12	27.71	27.40	25.05	30.82	30.25
		1	160	27.04	**28.06**	27.23	27.29	**28.08**	27.17	30.18	**31.08**	30.21
		1	161	21.91	22.60	21.63	22.00	22.32	22.00	24.97	25.47	24.83
		81	40	23.92	26.26	25.68	24.07	26.39	25.80	27.01	29.34	28.75
		162	0	24.09	26.22	25.99	24.05	26.39	25.85	27.08	29.32	28.93
	QPSK	1	0	21.15	21.93	21.09	21.45	22.00	21.45	24.31	24.98	24.28
		1	1	21.44	27.73	27.37	21.36	28.06	27.47	24.41	30.91	30.43
		1	160	27.17	**27.90**	27.19	27.43	**28.09**	27.36	30.31	**31.01**	30.29
		1	161	21.30	21.83	21.09	21.17	22.16	21.12	24.25	25.01	24.12
		81	40	22.93	26.14	25.35	23.18	26.15	25.01	26.07	29.16	28.19
		162	0	23.06	26.07	25.33	23.01	26.12	25.45	26.05	29.11	28.40
	16QAM	1	0	21.45	21.96	21.43	21.45	21.91	21.40	24.46	24.95	24.43
		1	1	21.49	26.88	26.01	21.62	**27.14**	26.03	24.57	**30.02**	29.03
		1	160	26.40	**27.10**	26.18	26.02	26.89	26.17	29.22	30.01	29.19
		1	161	21.16	22.11	21.04	21.36	22.14	21.47	24.27	25.14	24.27
		81	40	22.68	24.81	24.30	22.58	24.99	24.16	25.64	27.91	27.24
		162	0	22.67	24.98	24.49	22.50	25.03	24.41	25.60	28.02	27.46
	64QAM	1	0	21.16	21.80	21.02	21.17	22.20	21.23	24.18	25.01	24.14
		1	1	21.04	24.71	24.33	21.00	25.11	24.27	24.03	27.92	27.31
		1	160	24.23	**24.74**	24.06	24.48	**25.16**	24.46	27.37	**27.97**	27.27
		1	161	21.16	22.14	21.50	21.37	22.10	21.48	24.28	25.13	24.50
		81	40	22.44	24.63	23.89	22.59	24.47	23.79	25.53	27.56	26.85
		162	0	22.26	24.45	23.76	22.56	24.54	23.57	25.42	27.51	26.68
	256QAM	1	0	19.59	21.80	21.10	19.42	21.81	21.10	22.52	24.82	24.11
		1	1	19.32	21.74	21.30	19.33	**22.14**	21.27	22.34	24.95	24.30
		1	160	21.18	22.02	21.20	21.10	21.75	21.13	24.15	24.90	24.18
		1	161	21.16	22.09	21.22	21.11	22.01	21.46	24.15	25.06	24.35
		81	40	20.77	**22.18**	21.22	21.17	22.13	21.08	23.98	**25.17**	24.16
		162	0	21.19	21.97	21.32	21.10	21.80	21.30	24.16	24.90	24.32

OUTPUT POWER FOR 5G NR n41 (70.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 3		
				506200	518600	531000	506200	518600	531000	506200	518600	531000
				2531.0	2593.0	2655.0	2531.0	2593.0	2655.0	2531.0	2593.0	2655.0
70.0	BPSK	1	0	21.73	22.29	21.53	21.50	22.20	21.51	24.62	25.25	24.53
		1	1	21.85	22.70	27.11	21.89	22.70	27.16	24.88	25.71	30.14
		1	187	27.05	**27.70**	27.00	27.00	**27.84**	27.00	30.03	**30.78**	30.01
		1	188	21.66	22.20	21.50	21.78	22.70	21.50	24.73	25.46	24.51
		90	45	23.70	26.43	25.73	24.00	26.44	25.50	26.86	29.44	28.62
		180	0	23.87	26.35	25.72	23.82	26.20	25.68	26.85	29.28	28.71
	QPSK	1	0	21.42	21.70	21.50	21.22	21.80	21.07	24.33	24.76	24.30
		1	1	21.20	22.24	27.21	21.51	22.20	27.10	24.37	25.23	30.16
		1	187	27.00	**27.94**	27.45	27.18	**27.95**	27.32	30.10	**30.95**	30.39
		1	188	21.03	21.97	21.20	21.31	22.00	21.01	24.18	24.99	24.11
		90	45	22.73	25.83	25.22	22.89	25.70	25.00	25.82	28.77	28.12
		180	0	22.70	25.70	25.07	22.98	25.88	25.44	25.85	28.80	28.26
	16QAM	1	0	21.23	21.72	21.20	21.35	21.94	21.23	24.30	24.84	24.22
		1	1	21.43	22.20	26.17	21.45	22.20	26.00	24.45	25.21	29.09
		1	187	26.00	**26.70**	26.19	26.00	**26.84**	26.00	29.01	**29.78**	29.10
		1	188	21.00	21.70	21.00	21.45	21.85	21.16	24.24	24.78	24.09
		90	45	22.36	24.94	24.03	22.21	24.89	24.19	25.29	27.92	27.12
		180	0	22.35	24.70	24.18	22.60	24.72	24.11	25.48	27.72	27.15
	64QAM	1	0	20.70	21.73	21.00	20.85	21.87	21.37	23.78	24.81	24.20
		1	1	20.90	21.82	24.03	20.99	21.86	24.18	23.95	24.85	27.11
		1	187	24.17	**25.17**	24.17	24.18	**25.06**	24.09	27.18	**28.12**	27.14
		1	188	21.00	21.70	21.01	21.23	21.70	21.30	24.12	24.71	24.16
		90	45	22.20	24.23	23.50	22.40	24.39	23.73	25.31	27.32	26.62
		180	0	22.20	24.20	23.79	22.41	24.20	23.50	25.31	27.21	26.66
	256QAM	1	0	19.35	20.29	21.30	19.21	20.20	21.08	22.29	23.25	24.20
		1	1	19.22	20.35	21.27	19.70	20.20	21.13	22.47	23.28	24.21
		1	187	21.19	21.86	21.14	21.00	**22.20**	21.21	24.10	25.04	24.18
		1	188	21.23	21.88	21.14	21.00	21.78	21.33	24.12	24.84	24.24
		90	45	20.92	**22.11**	21.00	21.13	**22.20**	21.45	24.03	**25.16**	24.24
		180	0	21.03	21.93	21.41	20.74	21.84	21.22	23.89	24.89	24.32

OUTPUT POWER FOR 5G NR n41 (80.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 1+2		
				507200	518600	530000	507200	518600	530000	507200	518600	530000
				2536.0	2593.0	2650.0	2536.0	2593.0	2650.0	2536.0	2593.0	2650.0
80.0	BPSK	1	0	21.63	22.22	21.81	22.05	22.80	21.70	24.86	25.53	24.77
		1	1	22.29	23.15	27.35	22.12	22.88	27.11	25.22	26.03	30.24
		1	215	27.47	**28.12**	27.67	27.68	**28.38**	27.43	30.59	**31.20**	30.56
		1	216	21.97	22.87	21.77	21.63	22.62	21.86	24.81	25.76	24.83
		108	54	24.51	26.69	25.99	24.16	26.46	25.78	27.35	29.59	28.90
		216	0	24.36	26.90	25.82	23.78	26.44	26.23	27.09	29.69	29.04
	QPSK	1	0	21.25	22.21	21.84	21.26	21.97	21.26	24.27	25.10	24.57
		1	1	21.72	22.26	27.46	21.58	22.53	27.41	24.66	25.41	30.45
		1	215	27.46	**28.52**	27.42	27.33	**27.79**	27.58	30.41	**31.18**	30.51
		1	216	21.35	21.97	21.47	21.39	21.97	21.38	24.38	24.98	24.44
		108	54	23.01	25.89	25.54	23.04	25.87	25.47	26.04	28.89	28.52
		216	0	23.38	25.94	25.32	23.20	26.15	25.42	26.30	29.06	28.38
	16QAM	1	0	21.49	22.11	21.44	21.18	22.23	21.09	24.35	25.18	24.28
		1	1	21.59	22.24	26.48	21.54	22.23	26.73	24.58	25.25	29.62
		1	215	26.57	**27.31**	26.43	26.40	**26.83**	26.40	29.50	**30.09**	29.43
		1	216	21.32	22.02	21.67	21.50	22.02	21.40	24.42	25.03	24.55
		108	54	22.63	25.17	24.62	22.41	25.27	24.10	25.53	28.23	27.38
		216	0	22.55	25.10	24.59	22.66	24.95	24.30	25.62	28.04	27.46
	64QAM	1	0	21.29	21.91	21.61	20.80	22.69	21.78	24.06	25.33	24.71
		1	1	20.92	22.18	24.54	20.84	21.89	24.80	23.89	25.05	27.68
		1	215	24.46	**25.18**	24.41	24.40	**25.19**	24.56	27.44	**28.20**	27.50
		1	216	21.78	21.87	21.85	21.81	22.17	21.13	24.81	25.03	24.52
		108	54	22.68	24.89	23.65	22.58	24.42	23.95	25.64	27.67	26.81
		216	0	22.58	24.59	23.74	22.56	24.31	23.95	25.58	27.46	26.86
	256QAM	1	0	19.35	20.52	21.18	20.00	20.60	21.64	22.70	23.57	24.43
		1	1	19.68	20.25	21.24	19.53	20.57	21.26	22.62	23.42	24.26
		1	215	21.69	21.75	21.27	21.66	**22.44**	21.31	24.69	25.12	24.30
		1	216	21.50	22.30	21.29	21.54	22.08	21.78	24.53	25.20	24.55
		108	54	21.02	22.26	21.25	21.36	**22.44**	21.31	24.20	**25.36**	24.29
		216	0	21.03	**22.36**	21.23	21.04	22.13	21.36	24.05	25.26	24.31

OUTPUT POWER FOR 5G NR n41 (90.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 1+2		
				508200	518600	529000	508200	518600	529000	508200	518600	529000
				2541.0	2593.0	2645.0	2541.0	2593.0	2645.0	2541.0	2593.0	2645.0
90.0	BPSK	1	0	21.90	22.69	21.56	21.67	22.51	21.81	24.80	25.61	24.70
		1	1	21.80	22.76	27.12	22.16	22.86	27.09	24.99	25.82	30.12
		1	243	27.43	**28.15**	27.41	27.21	**27.90**	27.03	30.33	**31.04**	30.23
		1	244	21.90	22.28	21.77	21.75	22.48	22.00	24.84	25.39	24.90
		120	60	23.91	26.45	25.75	23.79	26.70	25.60	26.86	29.59	28.69
		243	0	23.98	26.58	25.69	23.72	26.42	25.80	26.86	29.51	28.76
	QPSK	1	0	21.37	22.07	21.35	21.18	21.94	21.48	24.29	25.02	24.43
		1	1	21.55	22.36	27.49	21.48	22.67	27.27	24.53	25.53	30.39
		1	243	27.20	**27.90**	27.10	27.43	**27.83**	27.01	30.33	**30.88**	30.07
		1	244	21.21	22.16	21.50	21.33	21.77	21.45	24.28	24.98	24.49
		120	60	22.79	26.20	25.28	23.01	25.73	25.12	25.91	28.98	28.21
		243	0	23.05	25.85	25.04	22.80	25.73	25.17	25.94	28.80	28.12
	16QAM	1	0	21.45	22.01	21.14	21.34	21.90	21.48	24.41	24.97	24.32
		1	1	21.22	22.31	26.05	21.44	22.46	26.33	24.34	25.40	29.20
		1	243	26.28	**26.93**	26.03	26.31	**27.18**	26.29	29.31	**30.07**	29.17
		1	244	21.33	22.13	21.11	21.27	21.82	21.01	24.31	24.99	24.07
		120	60	22.62	25.12	24.05	22.26	24.79	24.31	25.45	27.97	27.19
		243	0	22.48	24.85	24.24	22.45	24.98	24.31	25.48	27.93	27.29
	64QAM	1	0	21.10	21.73	21.13	20.94	21.99	21.44	24.03	24.87	24.30
		1	1	20.99	22.05	24.49	21.17	21.81	24.26	24.09	24.94	27.39
		1	243	24.23	**24.88**	24.37	24.06	**24.92**	24.06	27.16	**27.91**	27.23
		1	244	21.30	21.86	21.33	21.41	21.85	21.21	24.37	24.87	24.28
		120	60	22.63	24.22	23.82	22.66	24.70	23.77	25.66	27.48	26.81
		243	0	22.67	24.37	23.81	22.28	24.70	23.84	25.49	27.55	26.84
	256QAM	1	0	19.48	20.50	21.19	19.23	20.24	21.37	22.37	23.38	24.29
		1	1	19.31	20.57	21.30	19.25	20.32	21.43	22.29	23.46	24.38
		1	243	21.41	22.12	21.35	21.36	22.15	21.07	24.40	25.15	24.22
		1	244	21.05	21.95	21.37	21.01	22.14	21.47	24.04	25.06	24.43
		120	60	20.75	22.17	21.50	20.75	21.97	21.35	23.76	25.08	24.44
		243	0	20.95	**22.20**	21.36	21.19	**22.20**	21.46	24.08	**25.21**	24.42

OUTPUT POWER FOR 5G NR n41 (100.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 1			ANT 2			ANT 1+2		
				509200	528600	528000	509200	528600	528000	509200	528600	528000
				2546.0	2593.0	2640.0	2546.0	2593.0	2640.0	2546.0	2593.0	2640.0
100.0	BPSK	1	0	21.93	22.40	21.86	21.54	22.65	21.83	24.75	25.54	24.86
		1	1	21.93	23.15	27.46	22.06	22.80	27.31	25.01	25.99	30.40
		1	271	27.26	**27.92**	27.16	27.20	**27.73**	27.47	30.24	**30.84**	30.33
		1	272	21.88	22.55	21.53	21.94	22.38	21.62	24.92	25.48	24.59
		135	67	23.96	26.64	25.78	24.14	26.26	25.93	27.06	29.46	28.87
		270	0	24.11	26.40	25.75	23.71	26.59	25.55	26.92	29.51	28.66
	QPSK	1	0	21.34	21.79	21.02	21.49	22.16	21.39	24.43	24.99	24.22
		1	1	21.52	22.38	27.02	21.48	22.31	27.28	24.51	25.36	30.16
		1	271	27.12	**27.80**	27.05	27.23	**27.88**	27.39	30.19	**30.85**	30.23
		1	272	21.13	21.79	21.07	21.36	21.95	21.16	24.26	24.88	24.13
		135	67	22.84	25.80	25.28	22.77	26.18	25.02	25.82	29.00	28.16
		270	0	23.13	25.98	25.26	22.98	25.87	25.12	26.07	28.94	28.20
	16QAM	1	0	21.27	22.07	21.01	21.14	22.12	21.44	24.22	25.11	24.24
		1	1	21.43	22.46	26.43	21.55	22.21	26.41	24.50	25.35	29.43
		1	271	26.25	**26.90**	26.50	26.39	**27.10**	26.21	29.33	**30.01**	29.37
		1	272	21.48	21.89	21.25	21.42	22.02	21.22	24.46	24.97	24.25
		135	67	22.70	24.90	24.42	22.31	24.83	24.01	25.52	27.88	27.23
		270	0	22.55	24.91	24.48	22.69	25.06	24.04	25.63	28.00	27.28
	64QAM	1	0	20.99	22.11	21.16	21.13	21.80	21.14	24.07	24.97	24.16
		1	1	20.89	21.99	24.39	21.13	21.74	24.05	24.02	24.88	27.23
		1	271	24.18	**25.13**	24.02	24.08	**25.07**	24.37	27.14	**28.11**	27.21
		1	272	21.03	21.75	21.40	21.18	21.84	21.14	24.12	24.81	24.28
		135	67	22.36	24.23	23.95	22.35	24.33	23.57	25.37	27.29	26.77
		270	0	22.24	24.31	23.53	22.53	24.70	23.54	25.40	27.52	26.55
	256QAM	1	0	19.37	20.48	21.47	19.69	20.45	21.21	22.54	23.48	24.35
		1	1	19.63	20.47	21.36	19.62	20.55	21.44	22.64	23.52	24.41
		1	271	21.42	**22.10**	21.30	21.48	21.87	21.01	24.46	25.00	24.17
		1	272	21.37	21.97	21.17	21.25	21.86	21.06	24.32	24.93	24.13
		135	67	20.92	22.08	21.35	20.89	**22.16**	21.33	23.92	**25.13**	24.35
		270	0	21.01	22.05	21.08	21.11	22.14	21.03	24.07	25.11	24.07

8.1.2. 5G NR n77 (FCC Part 27 3450-3550MHz)

Test Engineer ID:	28774	Test Date:	2024-04-20

OUTPUT POWER FOR 5G NR n77 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				630333	633332	636333	630333	633332	636333	630333	633332	636333
				3455.0	3500.0	3545.0	3455.0	3500.0	3545.0	3455.0	3500.0	3545.0
10.0	BPSK	1	0	22.56	22.43	22.58	22.26	22.55	22.60	25.42	25.50	25.60
		1	1	27.72	28.02	27.74	27.76	27.76	27.85	30.75	30.90	30.81
		1	22	27.99	27.80	**28.19**	27.71	**28.13**	27.74	30.86	30.98	**30.98**
		1	23	22.61	22.29	22.65	22.55	22.60	22.34	25.59	25.46	25.51
		12	6	26.68	26.32	26.28	26.31	26.24	26.32	29.51	29.29	29.31
		24	0	26.53	26.42	26.60	26.44	26.31	26.63	29.50	29.38	29.63
	QPSK	1	0	21.85	21.78	21.95	22.04	22.04	21.72	24.96	24.92	24.85
		1	1	27.84	27.89	27.72	27.92	27.78	28.04	30.89	30.85	30.89
		1	22	27.88	27.74	**27.94**	28.06	27.91	**28.20**	30.98	30.84	**31.08**
		1	23	21.93	22.16	22.16	22.15	21.86	21.84	25.05	25.02	25.01
		12	6	25.74	25.92	25.91	26.17	26.03	25.94	28.97	28.99	28.94
		24	0	25.91	25.80	25.96	25.85	25.91	26.18	28.89	28.87	29.08
	16QAM	1	0	21.97	22.01	21.84	22.17	22.07	22.10	25.08	25.05	24.98
		1	1	26.85	26.86	26.72	26.72	26.94	**27.08**	29.80	29.91	29.91
		1	22	**27.10**	26.79	26.98	26.99	26.97	26.97	**30.06**	29.89	29.99
		1	23	22.03	21.83	21.92	21.72	21.82	22.17	24.89	24.84	25.06
		12	6	24.76	25.04	25.08	24.89	24.88	25.11	27.84	27.97	28.11
		24	0	24.90	24.90	24.77	25.10	25.01	25.12	28.01	27.97	27.96
	64QAM	1	0	22.06	22.16	22.09	22.14	22.20	21.78	25.11	25.19	24.95
		1	1	25.10	24.97	**25.16**	25.14	**25.20**	25.14	28.13	28.10	**28.16**
		1	22	24.80	25.07	25.01	24.92	25.05	24.92	27.87	28.07	27.98
		1	23	21.79	22.19	21.79	21.92	21.93	21.89	24.87	25.07	24.85
		12	6	24.66	24.37	24.51	24.55	24.26	24.60	27.62	27.33	27.57
		24	0	24.66	24.49	24.56	24.29	24.47	24.67	27.49	27.49	27.63
	256QAM	1	0	22.20	**22.20**	21.77	22.00	22.03	21.77	25.11	25.13	24.78
		1	1	21.96	21.90	21.93	22.13	21.78	22.13	25.06	24.85	25.04
		1	22	21.73	21.88	21.78	21.79	22.07	22.03	24.77	24.99	24.92
		1	23	21.74	21.75	22.19	21.88	22.15	21.97	24.82	24.96	25.09
		12	6	21.83	21.99	21.81	21.83	21.79	21.83	24.84	24.90	24.83
		24	0	22.14	21.94	21.96	**22.16**	21.83	21.90	**25.16**	24.90	24.94

OUTPUT POWER FOR 5G NR n77 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				630500	633332	636166	630500	633332	636166	630500	633332	636166
				3457.5	3500.0	3542.5	3457.5	3500.0	3542.5	3457.5	3500.0	3542.5
15.0	BPSK	1	0	22.70	22.63	22.57	22.51	22.23	22.45	25.62	25.44	25.52
		1	1	27.88	27.83	**28.12**	27.73	28.04	27.83	30.82	30.95	30.99
		1	36	28.04	28.08	27.91	**28.09**	27.88	27.87	**31.08**	30.99	30.90
		1	37	22.70	22.24	22.66	22.54	22.37	22.36	25.63	25.32	25.52
		18	9	26.66	26.64	26.47	26.27	26.54	26.60	29.48	29.60	29.55
		36	0	26.23	26.32	26.22	26.33	26.67	26.62	29.29	29.51	29.43
	QPSK	1	0	21.85	21.94	21.72	22.07	21.94	21.88	24.97	24.95	24.81
		1	1	27.84	27.71	27.81	27.95	**28.11**	28.03	30.91	30.92	30.93
		1	36	28.01	28.10	**28.18**	27.92	27.98	28.08	30.98	31.05	**31.14**
		1	37	22.09	21.82	21.95	22.09	22.14	21.94	25.10	24.99	24.96
		18	9	25.97	25.88	26.01	26.12	25.73	25.81	29.06	28.82	28.92
		36	0	26.17	26.03	25.88	25.83	25.89	25.90	29.01	28.97	28.90
	16QAM	1	0	22.04	21.88	22.19	22.14	21.71	22.13	25.10	24.81	25.17
		1	1	26.76	27.06	26.85	26.76	26.77	27.21	29.77	29.93	30.04
		1	36	26.94	26.90	**27.13**	**27.33**	27.32	27.05	**30.15**	30.13	30.10
		1	37	22.00	22.18	22.00	21.82	22.06	22.06	24.92	25.13	25.04
		18	9	24.95	25.12	25.09	24.85	24.95	25.05	27.91	28.05	28.08
		36	0	24.75	25.07	24.89	24.86	24.91	24.75	27.82	28.00	27.83
	64QAM	1	0	21.80	21.81	21.91	22.15	21.76	22.11	24.99	24.80	25.02
		1	1	24.92	24.97	**25.18**	24.75	24.78	**25.11**	27.85	27.89	**28.16**
		1	36	25.01	25.15	25.14	24.76	24.97	25.07	27.90	28.07	28.12
		1	37	21.91	22.17	21.99	22.11	22.18	21.82	25.02	25.19	24.92
		18	9	24.42	24.54	24.51	24.40	24.27	24.39	27.42	27.42	27.46
		36	0	24.63	24.45	24.22	24.52	24.30	24.69	27.59	27.39	27.47
	256QAM	1	0	21.99	21.72	21.77	22.12	21.72	22.12	25.07	24.73	24.96
		1	1	21.94	22.05	21.72	21.91	21.85	22.16	24.94	24.96	24.96
		1	36	21.85	22.00	21.99	22.06	**22.20**	21.79	24.97	**25.11**	24.90
		1	37	22.17	21.93	22.04	21.86	21.76	21.77	25.03	24.86	24.92
		18	9	22.11	21.86	22.08	21.72	21.91	21.89	24.93	24.90	25.00
		36	0	**22.19**	21.87	21.89	21.96	22.00	21.97	25.09	24.95	24.94

OUTPUT POWER FOR 5G NR n77 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				630666	633332	635998	630666	633332	635998	630666	633332	635998
				3460.0	3500.0	3540.0	3460.0	3500.0	3540.0	3460.0	3500.0	3540.0
20.0	BPSK	1	0	22.45	22.28	22.47	22.32	22.57	22.50	25.40	25.44	25.50
		1	1	27.77	27.95	27.90	**28.13**	28.10	27.80	30.96	**31.04**	30.86
		1	49	**28.04**	27.83	28.03	27.71	27.87	27.83	30.89	30.86	30.94
		1	50	22.40	22.63	22.68	22.56	22.24	22.23	25.49	25.45	25.47
		25	12	26.25	26.29	26.23	26.70	26.54	26.70	29.49	29.43	29.48
		50	0	26.57	26.33	26.43	26.22	26.41	26.34	29.41	29.38	29.40
	QPSK	1	0	22.07	21.73	21.72	22.16	22.02	21.75	25.13	24.89	24.75
		1	1	27.82	**28.18**	27.86	28.10	27.88	28.06	30.97	31.04	30.97
		1	49	28.16	28.01	28.08	**28.32**	27.96	27.99	**31.20**	31.00	31.05
		1	50	21.89	22.00	22.03	22.13	22.15	21.78	25.02	25.09	24.92
		25	12	25.81	26.19	25.87	25.98	25.75	25.79	28.91	28.99	28.84
		50	0	25.94	26.08	25.89	25.76	26.20	25.79	28.86	29.15	28.85
	16QAM	1	0	22.03	21.72	21.76	21.75	22.09	21.97	24.90	24.92	24.88
		1	1	26.97	26.87	26.83	27.19	26.99	**27.51**	30.09	29.94	30.19
		1	49	26.93	**26.99**	26.83	27.48	27.13	27.04	**30.22**	30.07	29.95
		1	50	22.09	21.84	21.73	21.94	22.09	21.88	25.03	24.98	24.82
		25	12	24.92	25.01	25.13	25.02	24.96	24.76	27.98	28.00	27.96
		50	0	24.96	24.88	24.85	24.78	24.96	25.08	27.88	27.93	27.98
	64QAM	1	0	21.86	22.08	22.15	21.94	21.81	21.95	24.91	24.96	25.06
		1	1	25.05	**25.17**	25.00	**25.40**	24.90	25.08	**28.24**	28.05	28.05
		1	49	24.98	24.95	24.86	24.82	25.15	25.06	27.91	28.06	27.97
		1	50	21.91	21.71	21.89	22.01	21.94	21.92	24.97	24.84	24.92
		25	12	24.32	24.36	24.62	24.64	24.65	24.65	27.49	27.52	27.65
		50	0	24.37	24.27	24.58	24.45	24.68	24.26	27.42	27.49	27.43
	256QAM	1	0	21.82	22.05	22.09	22.00	**22.19**	22.03	24.92	**25.13**	25.07
		1	1	22.12	**22.16**	22.01	21.79	21.98	21.76	24.97	25.08	24.90
		1	49	21.87	21.88	21.71	21.78	22.11	21.80	24.84	25.01	24.77
		1	50	21.81	21.96	21.78	21.72	22.13	21.96	24.78	25.06	24.88
		25	12	21.97	21.79	21.84	22.14	22.08	22.10	25.07	24.95	24.98
		50	0	21.82	21.91	22.01	22.09	22.00	22.09	24.97	24.97	25.06

OUTPUT POWER FOR 5G NR n77 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				631000	633332	635666	631000	633332	635666	631000	633332	635666
				3465.0	3500.0	3535.0	3465.0	3500.0	3535.0	3465.0	3500.0	3535.0
30.0	BPSK	1	0	22.59	22.59	22.66	22.52	22.56	22.61	25.57	25.59	25.65
		1	1	27.96	28.03	27.71	27.74	27.95	27.72	30.86	31.00	30.73
		1	76	28.09	27.86	**28.18**	27.74	27.91	**28.15**	30.93	30.90	**31.18**
		1	77	22.51	22.23	22.64	22.36	22.58	22.31	25.45	25.42	25.49
		36	18	26.30	26.57	26.34	26.49	26.42	26.67	29.41	29.51	29.52
		75	0	26.27	26.31	26.35	26.39	26.56	26.52	29.34	29.45	29.45
	QPSK	1	0	21.92	22.19	21.89	21.90	22.12	21.97	24.92	25.17	24.94
		1	1	27.84	27.96	27.72	28.11	27.78	28.03	30.99	30.88	30.89
		1	76	27.77	**28.20**	28.16	27.91	**28.15**	27.75	30.85	**31.19**	30.97
		1	77	22.10	21.80	22.12	22.00	21.95	21.87	25.06	24.89	25.01
		36	18	26.00	25.84	26.06	25.86	26.01	25.78	28.94	28.94	28.93
		75	0	26.19	26.20	25.85	25.79	25.94	26.17	29.00	29.08	29.02
	16QAM	1	0	21.83	22.17	21.84	21.96	21.84	21.78	24.91	25.02	24.82
		1	1	27.11	26.85	26.84	26.81	27.06	26.89	29.97	29.97	29.88
		1	76	26.89	26.88	**27.16**	26.88	**27.33**	27.16	29.90	30.12	**30.17**
		1	77	21.85	22.05	21.80	22.08	21.72	21.79	24.98	24.90	24.81
		36	18	25.13	24.89	25.02	24.82	24.79	25.02	27.99	27.85	28.03
		75	0	25.02	24.80	25.14	24.75	25.19	25.12	27.90	28.01	28.14
	64QAM	1	0	21.86	21.98	22.03	22.18	21.92	22.17	25.03	24.96	25.11
		1	1	24.71	25.13	25.12	24.89	**25.17**	24.77	27.81	**28.16**	27.96
		1	76	24.99	**25.18**	25.05	24.78	25.05	24.88	27.90	28.13	27.98
		1	77	22.12	21.83	22.05	22.10	21.81	22.17	25.12	24.83	25.12
		36	18	24.45	24.58	24.22	24.59	24.70	24.23	27.53	27.65	27.24
		75	0	24.56	24.70	24.63	24.52	24.26	24.57	27.55	27.50	27.61
	256QAM	1	0	21.97	21.76	**22.18**	21.79	21.90	21.99	24.89	24.84	25.10
		1	1	22.17	21.95	22.08	21.84	21.80	21.81	25.02	24.89	24.96
		1	76	22.17	21.73	22.12	21.77	22.01	22.03	24.98	24.88	25.09
		1	77	22.05	22.11	21.89	21.75	**22.09**	22.03	24.91	**25.11**	24.97
		36	18	22.10	21.95	21.88	22.00	21.99	21.90	25.06	24.98	24.90
		75	0	22.00	21.98	22.08	22.00	21.91	21.80	25.01	24.96	24.95

OUTPUT POWER FOR 5G NR n77 (40.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				631332	633332	635332	631332	633332	635332	631332	633332	635332
				3470.0	3500.0	3530.0	3470.0	3500.0	3530.0	3470.0	3500.0	3530.0
40.0	BPSK	1	0	22.34	22.67	22.25	22.54	22.28	22.55	25.45	25.49	25.41
		1	1	27.95	28.00	27.76	27.72	**28.10**	27.81	30.85	31.06	30.80
		1	104	**28.11**	28.03	28.06	28.07	28.08	27.98	**31.10**	31.07	31.03
		1	105	22.56	22.60	22.40	22.51	22.54	22.40	25.55	25.58	25.41
		50	25	26.60	26.51	26.22	26.54	26.51	26.48	29.58	29.52	29.36
		100	0	26.32	26.22	26.46	26.61	26.42	26.48	29.48	29.33	29.48
	QPSK	1	0	21.95	21.74	21.99	21.98	22.13	21.95	24.98	24.95	24.98
		1	1	27.97	**28.00**	27.78	28.13	27.85	**28.20**	**31.06**	30.94	31.01
		1	104	27.82	27.72	27.78	27.97	28.06	28.19	30.91	30.90	31.00
		1	105	21.87	21.91	21.88	21.93	22.00	21.81	24.91	24.97	24.86
		50	25	26.13	25.72	26.06	25.96	26.14	25.83	29.06	28.95	28.96
		100	0	25.75	25.74	25.99	25.94	26.21	25.98	28.86	28.99	29.00
	16QAM	1	0	22.18	22.03	22.12	22.19	22.09	21.78	25.20	25.07	24.96
		1	1	27.04	27.00	26.99	26.94	26.79	**27.15**	30.00	29.91	30.08
		1	104	26.97	26.91	**27.19**	26.85	27.10	27.04	29.92	30.02	**30.13**
		1	105	21.81	22.03	22.05	21.94	22.08	22.16	24.89	25.07	25.12
		50	25	25.01	25.07	24.76	25.04	24.88	24.91	28.04	27.99	27.85
		100	0	25.14	24.75	25.06	24.94	24.82	25.00	28.05	27.80	28.04
	64QAM	1	0	21.86	22.08	22.06	21.85	22.07	21.87	24.87	25.09	24.98
		1	1	24.72	24.80	24.93	25.06	25.10	**25.19**	27.90	27.96	28.07
		1	104	24.86	24.89	**25.18**	25.17	25.10	25.14	28.03	28.01	**28.17**
		1	105	21.95	22.10	22.18	21.72	21.97	22.06	24.85	25.05	25.13
		50	25	24.67	24.64	24.46	24.64	24.56	24.68	27.67	27.61	27.58
		100	0	24.24	24.28	24.50	24.40	24.36	24.43	27.33	27.33	27.48
	256QAM	1	0	21.83	21.91	21.80	21.80	21.91	21.72	24.83	24.92	24.77
		1	1	**22.15**	22.03	21.91	21.80	21.94	22.14	24.99	25.00	25.04
		1	104	22.13	21.76	22.02	21.76	22.06	22.18	24.96	24.92	**25.11**
		1	105	22.01	22.14	21.73	22.00	22.06	**22.19**	25.02	25.11	24.98
		50	25	21.80	21.90	21.91	21.77	21.94	22.10	24.80	24.93	25.02
		100	0	21.91	22.04	21.76	22.15	22.00	21.98	25.04	25.03	24.88

OUTPUT POWER FOR 5G NR n77 (50.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				631666	633332	634998	631666	633332	634998	631666	633332	634998
				3475.0	3500.0	3525.0	3475.0	3500.0	3525.0	3475.0	3500.0	3525.0
50.0	BPSK	1	0	22.37	22.64	22.42	22.37	22.49	22.29	25.38	25.58	25.37
		1	1	27.84	27.78	**28.14**	27.94	27.97	28.03	30.90	30.89	31.10
		1	131	27.83	28.13	27.98	28.06	**28.11**	27.84	30.96	**31.13**	30.92
		1	132	22.33	22.56	22.59	22.62	22.36	22.63	25.49	25.47	25.62
		64	32	26.52	26.24	26.58	26.27	26.61	26.43	29.41	29.44	29.52
		128	0	26.33	26.36	26.22	26.58	26.49	26.59	29.47	29.44	29.42
	QPSK	1	0	21.90	21.79	22.10	22.05	22.14	21.77	24.99	24.98	24.95
		1	1	28.11	**28.13**	28.05	28.07	27.82	27.87	31.10	30.99	30.97
		1	131	28.10	27.79	27.92	28.10	**28.19**	27.84	**31.11**	31.00	30.89
		1	132	21.97	21.75	21.89	21.86	21.91	22.11	24.93	24.84	25.01
		64	32	26.00	25.78	25.86	26.00	26.13	26.02	29.01	28.97	28.95
		128	0	26.11	25.82	25.83	25.89	26.03	25.95	29.01	28.94	28.90
	16QAM	1	0	22.01	21.91	21.77	21.97	22.11	21.88	25.00	25.02	24.84
		1	1	**27.06**	26.96	26.85	26.78	27.01	26.73	29.93	30.00	29.80
		1	131	26.92	26.96	27.00	26.75	26.76	**27.08**	29.85	29.87	**30.05**
		1	132	21.73	21.86	21.97	21.89	22.06	21.78	24.82	24.97	24.89
		64	32	24.97	24.83	25.07	25.14	24.95	25.02	28.07	27.90	28.06
		128	0	25.08	24.71	24.77	25.11	24.98	25.11	28.11	27.86	27.95
	64QAM	1	0	21.84	21.84	21.96	21.72	21.90	21.82	24.79	24.88	24.90
		1	1	25.08	24.73	25.06	25.15	24.76	25.02	28.13	27.76	28.05
		1	131	**25.11**	25.09	24.98	25.14	24.87	**25.19**	**28.14**	27.99	28.10
		1	132	21.85	21.71	22.18	21.80	21.91	21.92	24.84	24.82	25.06
		64	32	24.22	24.67	24.28	24.28	24.33	24.31	27.26	27.51	27.31
		128	0	24.34	24.58	24.62	24.60	24.22	24.68	27.48	27.41	27.66
	256QAM	1	0	21.81	22.17	21.81	22.00	**22.17**	22.09	24.92	**25.18**	24.96
		1	1	21.96	21.74	21.86	**22.17**	22.08	22.15	25.08	24.92	25.02
		1	131	22.17	21.84	22.15	22.14	22.11	22.17	25.17	24.99	25.17
		1	132	21.78	**22.20**	22.03	22.00	21.84	21.78	24.90	25.03	24.92
		64	32	21.88	21.86	22.16	21.96	22.04	21.86	24.93	24.96	25.02
		128	0	21.89	21.89	21.92	22.16	21.97	22.10	25.04	24.94	25.02

OUTPUT POWER FOR 5G NR n77 (60.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				632000	633332	634666	632000	633332	634666	632000	633332	634666
				3480.0	3500.0	3520.0	3480.0	3500.0	3520.0	3480.0	3500.0	3520.0
60.0	BPSK	1	0	22.45	22.21	22.52	22.37	22.70	22.65	25.42	25.47	25.60
		1	1	27.86	28.00	27.98	28.02	27.74	28.13	30.95	30.88	31.07
		1	160	28.16	28.07	**28.18**	27.94	**28.16**	27.82	31.06	**31.13**	31.01
		1	161	22.53	22.37	22.33	22.23	22.51	22.65	25.39	25.45	25.50
		81	40	26.41	26.45	26.47	26.58	26.66	26.32	29.51	29.57	29.41
		162	0	26.29	26.36	26.57	26.36	26.63	26.32	29.34	29.51	29.46
	QPSK	1	0	21.75	22.04	21.81	21.89	22.07	21.96	24.83	25.07	24.90
		1	1	27.74	27.76	27.85	28.05	27.85	**28.16**	30.91	30.82	**31.02**
		1	160	27.83	**27.92**	27.90	27.99	27.90	27.91	30.92	30.92	30.92
		1	161	21.95	22.17	22.17	22.05	21.93	21.86	25.01	25.06	25.03
		81	40	26.15	26.19	26.17	26.14	25.80	25.96	29.16	29.01	29.08
		162	0	25.72	25.77	25.98	26.11	26.05	25.89	28.93	28.92	28.95
	16QAM	1	0	21.97	21.73	22.16	22.09	22.10	22.19	25.04	24.93	25.19
		1	1	**27.07**	26.92	26.77	26.85	26.96	26.82	29.97	29.95	29.81
		1	160	26.76	26.99	27.01	26.93	26.91	**27.19**	29.86	29.96	**30.11**
		1	161	21.80	22.09	22.00	21.99	21.94	22.07	24.91	25.03	25.05
		81	40	24.80	24.76	24.73	24.71	25.12	24.86	27.77	27.95	27.81
		162	0	25.16	25.10	24.83	25.07	24.79	25.06	28.13	27.96	27.96
	64QAM	1	0	21.87	22.05	21.92	22.15	22.06	22.11	25.02	25.07	25.03
		1	1	**25.07**	24.92	24.80	25.10	24.84	25.14	**28.10**	27.89	27.98
		1	160	24.83	25.01	24.81	25.14	25.13	**25.19**	28.00	28.08	28.01
		1	161	21.87	22.06	21.88	21.86	21.78	21.73	24.88	24.93	24.82
		81	40	24.69	24.66	24.21	24.39	24.59	24.70	27.55	27.64	27.47
		162	0	24.66	24.29	24.59	24.56	24.64	24.35	27.62	27.48	27.48
	256QAM	1	0	21.73	21.71	21.72	21.98	21.87	22.13	24.87	24.80	24.94
		1	1	21.72	**22.17**	22.16	21.75	**22.15**	21.72	24.75	**25.17**	24.96
		1	160	22.03	22.12	21.93	21.72	21.81	21.97	24.89	24.98	24.96
		1	161	21.77	21.78	21.77	21.94	21.84	21.87	24.87	24.82	24.83
		81	40	21.80	22.02	22.05	21.75	21.71	21.71	24.79	24.88	24.89
		162	0	21.76	21.82	22.01	22.04	21.81	22.14	24.91	24.83	25.09

OUTPUT POWER FOR 5G NR n77 (70.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				632333	633332	634333	632333	633332	634333	632333	633332	634333
				3485.0	3500.0	3515.0	3485.0	3500.0	3515.0	3485.0	3500.0	3515.0
70.0	BPSK	1	0	22.53	22.58	22.32	22.59	22.28	22.54	25.57	25.44	25.44
		1	1	27.81	27.99	27.73	**28.02**	27.87	27.99	30.93	30.94	30.87
		1	187	27.99	**28.07**	27.94	27.90	27.80	27.98	30.96	30.95	**30.97**
		1	188	22.66	22.39	22.24	22.69	22.27	22.51	25.69	25.34	25.39
		90	45	26.48	26.42	26.34	26.56	26.54	26.47	29.53	29.49	29.42
		180	0	26.32	26.23	26.37	26.46	26.43	26.62	29.40	29.34	29.51
	QPSK	1	0	22.03	22.00	21.83	22.17	21.74	22.16	25.11	24.88	25.01
		1	1	28.08	27.78	28.01	27.86	28.16	28.19	30.98	30.98	31.11
		1	187	27.83	27.83	**28.15**	**28.51**	27.95	27.87	**31.19**	30.90	31.02
		1	188	21.87	21.82	22.03	22.20	22.17	21.77	25.05	25.01	24.91
		90	45	25.90	26.10	25.98	26.11	26.01	25.87	29.02	29.07	28.94
		180	0	26.02	25.80	25.75	26.14	26.04	26.12	29.09	28.93	28.95
	16QAM	1	0	22.05	22.06	21.80	22.06	21.83	21.92	25.07	24.96	24.87
		1	1	26.90	26.97	26.71	26.80	26.96	27.13	29.86	29.98	29.94
		1	187	26.90	27.06	**27.08**	26.86	**27.21**	27.05	29.89	**30.15**	30.08
		1	188	21.75	22.10	21.84	21.89	22.08	22.01	24.83	25.10	24.94
		90	45	25.10	25.04	25.09	25.16	25.19	24.75	28.14	28.13	27.93
		180	0	24.78	24.99	24.86	25.06	25.16	24.97	27.93	28.09	27.93
	64QAM	1	0	22.00	21.86	21.83	22.03	22.10	21.78	25.03	24.99	24.82
		1	1	24.83	24.93	25.01	25.10	24.74	25.11	27.98	27.85	28.07
		1	187	24.77	**25.10**	24.91	**25.34**	25.07	24.78	28.07	**28.10**	27.86
		1	188	21.94	21.83	21.93	21.80	22.16	21.82	24.88	25.01	24.89
		90	45	24.42	24.40	24.59	24.66	24.58	24.28	27.55	27.50	27.45
		180	0	24.37	24.43	24.52	24.42	24.52	24.55	27.41	27.49	27.55
	256QAM	1	0	21.85	21.79	22.02	21.87	21.97	22.17	24.87	24.89	25.11
		1	1	21.84	21.86	22.16	22.09	21.78	22.02	24.98	24.83	25.10
		1	187	21.74	21.79	21.94	21.92	21.76	21.99	24.84	24.79	24.98
		1	188	22.00	22.12	21.92	**22.19**	21.94	22.14	**25.11**	25.04	25.04
		90	45	21.98	21.93	21.97	22.17	21.78	22.02	25.09	24.87	25.01
		180	0	21.92	21.94	**22.16**	21.77	21.83	21.71	24.86	24.90	24.95

OUTPUT POWER FOR 5G NR n77 (80.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				632666	633332	633998	632666	633332	633998	632666	633332	633998
				3490.0	3500.0	3510.0	3490.0	3500.0	3510.0	3490.0	3500.0	3510.0
80.0	BPSK	1	0	22.48	22.24	22.65	22.54	22.36	22.65	25.52	25.31	25.66
		1	1	**28.18**	28.06	27.88	27.80	28.12	28.07	31.00	**31.10**	30.99
		1	215	27.85	27.73	27.82	**28.18**	27.84	27.76	31.03	30.80	30.80
		1	216	22.24	22.42	22.62	22.22	22.43	22.40	25.24	25.44	25.52
		108	54	26.63	26.47	26.46	26.58	26.64	26.31	29.62	29.57	29.40
		216	0	26.40	26.42	26.38	26.42	26.50	26.48	29.42	29.47	29.44
	QPSK	1	0	22.12	22.08	21.84	21.96	22.12	21.74	25.05	25.11	24.80
		1	1	27.92	27.99	28.10	28.11	27.97	27.94	31.03	30.99	31.03
		1	215	27.72	**28.14**	28.09	28.03	**28.64**	28.06	30.89	**31.20**	31.09
		1	216	22.03	22.00	22.14	21.99	21.86	21.94	25.02	24.94	25.05
		108	54	26.08	26.16	25.74	25.93	25.84	25.83	29.02	29.01	28.80
		216	0	25.91	25.90	25.94	26.15	25.75	26.65	29.04	28.84	29.32
	16QAM	1	0	21.89	21.85	21.99	21.98	21.90	21.87	24.95	24.89	24.94
		1	1	26.97	27.07	26.94	26.80	27.03	26.77	29.90	30.06	29.87
		1	215	27.07	26.72	**27.11**	**27.31**	27.13	27.04	**30.20**	29.94	30.09
		1	216	22.00	21.72	22.16	21.85	22.16	22.05	24.94	24.96	25.12
		108	54	25.02	25.20	24.93	24.93	25.01	25.08	27.99	28.12	28.02
		216	0	24.72	24.81	25.03	25.18	25.20	24.96	27.97	28.02	28.01
	64QAM	1	0	22.12	21.81	22.20	21.74	21.86	21.80	24.94	24.85	25.01
		1	1	24.93	24.75	**25.20**	24.91	24.76	**25.18**	27.93	27.77	**28.20**
		1	215	25.15	25.10	24.85	24.82	24.73	24.95	28.00	27.93	27.91
		1	216	21.78	21.93	22.02	22.01	21.88	21.75	24.91	24.92	24.90
		108	54	24.33	24.62	24.54	24.41	24.66	24.67	27.38	27.65	27.62
		216	0	24.41	24.49	24.64	24.41	24.62	24.51	27.42	27.57	27.59
	256QAM	1	0	21.71	22.14	21.82	**22.19**	21.78	21.99	24.97	24.97	24.92
		1	1	21.86	21.78	21.98	21.76	21.90	22.12	24.82	24.85	**25.06**
		1	215	21.82	21.79	22.07	22.05	21.83	21.87	24.95	24.82	24.98
		1	216	21.78	21.79	**22.18**	21.71	21.85	21.73	24.76	24.83	24.97
		108	54	22.00	21.87	21.81	22.05	21.92	21.79	25.04	24.91	24.81
		216	0	22.04	22.08	22.02	21.77	21.82	21.84	24.92	24.96	24.94

OUTPUT POWER FOR 5G NR n77 (90.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				633000	633332	633666	633000	633332	633666	633000	633332	633666
				3495.0	3500.0	3505.0	3495.0	3500.0	3505.0	3495.0	3500.0	3505.0
90.0	BPSK	1	0	22.27	22.37	22.46	22.62	22.35	22.24	25.46	25.37	25.36
		1	1	27.97	27.89	28.00	28.07	27.85	**28.20**	31.03	30.88	**31.11**
		1	243	27.85	27.80	**28.02**	28.17	28.15	28.13	31.02	30.99	31.09
		1	244	22.53	22.37	22.37	22.42	22.32	22.51	25.49	25.36	25.45
		120	60	26.59	26.49	26.56	26.51	26.29	26.67	29.56	29.40	29.63
		243	0	26.48	26.39	26.69	26.30	26.26	26.58	29.40	29.34	29.65
	QPSK	1	0	21.92	21.71	21.91	22.17	22.10	21.87	25.06	24.92	24.90
		1	1	27.80	27.79	27.73	28.03	27.77	27.83	30.93	30.79	30.79
		1	243	**28.18**	27.98	27.86	**28.28**	27.97	28.02	**31.20**	30.99	30.95
		1	244	21.98	22.07	21.85	21.96	22.14	21.88	24.98	25.12	24.88
		120	60	25.87	25.97	25.97	25.82	25.96	26.08	28.86	28.98	29.04
		243	0	26.07	25.90	26.10	26.07	26.00	26.14	29.08	28.96	29.13
	16QAM	1	0	22.16	21.77	21.79	21.79	21.87	21.81	24.99	24.83	24.81
		1	1	**27.15**	26.83	26.95	**27.16**	27.06	27.06	**30.17**	29.96	30.02
		1	243	27.11	26.85	27.00	26.97	27.04	27.06	30.05	29.96	30.04
		1	244	22.17	21.87	21.92	21.89	22.18	21.85	25.04	25.04	24.90
		120	60	24.79	24.87	24.81	25.16	24.94	24.93	27.99	27.92	27.88
		243	0	25.11	25.02	25.11	24.98	25.05	25.15	28.06	28.05	28.14
	64QAM	1	0	21.90	21.72	21.77	21.97	21.85	21.96	24.95	24.80	24.88
		1	1	**25.17**	25.09	25.15	24.93	24.80	**25.03**	28.06	27.96	**28.10**
		1	243	24.72	24.95	24.96	24.77	24.86	25.00	27.76	27.92	27.99
		1	244	21.94	22.04	21.91	22.06	22.05	21.74	25.01	25.06	24.84
		120	60	24.67	24.46	24.37	24.67	24.36	24.34	27.68	27.42	27.37
		243	0	24.61	24.43	24.45	24.65	24.43	24.46	27.64	27.44	27.47
	256QAM	1	0	22.13	21.80	21.78	21.84	21.80	21.85	25.00	24.81	24.83
		1	1	**22.17**	21.78	22.07	21.89	22.15	**22.18**	25.04	24.98	25.14
		1	243	21.73	21.96	22.00	22.14	22.12	21.71	24.95	25.05	24.87
		1	244	22.13	21.74	21.78	22.04	21.80	22.06	25.10	24.78	24.93
		120	60	21.86	21.88	21.90	22.17	21.82	22.02	25.03	24.86	24.97
		243	0	22.16	21.83	22.10	22.13	21.84	21.80	**25.16**	24.85	24.96

OUTPUT POWER FOR 5G NR n77 (100.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				N/A	633332	N/A	N/A	633332	N/A	N/A	633332	N/A
				N/A	3500.0	N/A	N/A	3500.0	N/A	N/A	3500.0	N/A
100.0	BPSK	1	0		22.35			22.55			25.46	
		1	1		28.04			**27.86**			**30.96**	
		1	271		**28.10**			27.72			30.92	
		1	272		22.48			22.36			25.43	
		135	67		26.38			26.29			29.35	
		270	0		26.42			26.56			29.50	
	QPSK	1	0		22.06			21.93			25.01	
		1	1		**28.18**			27.97			31.09	
		1	271		28.09			**28.11**			**31.11**	
		1	272		21.75			22.11			24.94	
		135	67		25.78			26.11			28.96	
		270	0		25.72			25.88			28.81	
	16QAM	1	0		21.96			22.09			25.04	
		1	1		26.81			**27.18**			**30.01**	
		1	271		**27.01**			26.74			29.89	
		1	272		22.07			22.20			25.15	
		135	67		25.06			25.05			28.07	
		270	0		24.89			24.76			27.84	
	64QAM	1	0		21.76			22.01			24.90	
		1	1		24.85			**24.91**			**27.89**	
		1	271		**24.87**			24.78			27.84	
		1	272		22.14			22.17			25.17	
		135	67		24.52			24.37			27.46	
		270	0		24.56			24.31			27.45	
	256QAM	1	0		21.76			**22.18**			24.99	
		1	1		21.76			21.76			24.77	
		1	271		21.73			21.89			24.82	
		1	272		**22.16**			21.78			24.98	
		135	67		21.94			22.17			**25.07**	
		270	0		21.72			22.12			24.93	

8.1.3. 5G NR n77 (FCC Part 27 3700-3980MHz)

Test Engineer ID:	28774	Test Date:	2024-04-24

OUTPUT POWER FOR 5G NR n77 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				647000	656000	665000	647000	656000	665000	647000	656000	665000
				3705.0	3840.0	3975.0	3705.0	3840.0	3975.0	3705.0	3840.0	3975.0
10.0	BPSK	1	0	22.57	22.59	22.67	22.69	22.70	22.66	25.64	25.66	25.68
		1	1	28.05	**28.16**	27.90	28.10	28.12	27.75	31.09	**31.15**	30.84
		1	22	27.93	28.05	28.06	28.03	**28.20**	28.16	30.99	31.14	31.12
		1	23	22.57	22.65	22.62	22.45	22.59	22.45	25.52	25.63	25.55
		12	6	26.54	26.55	26.45	26.62	26.30	26.58	29.59	29.44	29.53
		24	0	26.61	26.64	26.35	26.58	26.43	26.52	29.61	29.55	29.45
	QPSK	1	0	21.71	22.15	21.85	21.91	21.91	21.76	24.82	25.04	24.82
		1	1	**27.99**	27.87	27.89	27.75	27.90	27.99	30.88	30.90	**30.95**
		1	22	27.72	27.79	27.86	**28.12**	27.86	27.76	30.93	30.84	30.82
		1	23	21.82	22.13	21.88	22.09	22.00	22.02	24.97	25.08	24.96
		12	6	25.95	26.11	26.03	26.16	26.01	25.86	29.07	29.07	28.96
		24	0	26.03	25.75	25.74	25.78	26.15	25.85	28.92	28.96	28.81
	16QAM	1	0	21.89	22.02	22.03	21.79	22.32	21.91	24.85	25.18	24.98
		1	1	26.75	**27.02**	**27.02**	**27.18**	27.03	**27.18**	29.98	30.04	**30.11**
		1	22	**27.02**	26.91	26.93	26.74	26.93	26.85	29.89	29.93	29.90
		1	23	22.00	21.80	21.80	21.91	21.73	22.09	24.97	24.78	24.96
		12	6	24.86	25.20	24.77	25.18	25.08	25.08	28.03	28.15	27.94
		24	0	24.87	25.08	25.07	24.94	24.71	24.99	27.92	27.91	28.04
	64QAM	1	0	21.83	21.84	21.80	21.79	21.71	21.97	24.82	24.79	24.90
		1	1	**25.11**	24.97	25.06	25.03	**25.23**	25.08	28.08	**28.11**	28.08
		1	22	25.09	24.79	24.82	24.81	24.84	25.07	27.96	27.83	27.96
		1	23	21.88	22.05	22.18	22.20	22.00	21.88	25.05	25.04	25.04
		12	6	24.70	24.21	24.47	24.47	24.48	24.56	27.60	27.36	27.53
		24	0	24.46	24.56	24.38	24.45	24.26	24.43	27.47	27.42	27.42
	256QAM	1	0	21.73	22.15	21.98	21.83	21.83	22.01	24.79	25.00	25.01
		1	1	21.79	21.91	22.18	21.97	**22.20**	22.09	24.89	25.07	**25.15**
		1	22	21.77	22.15	21.73	21.95	22.06	22.11	24.87	25.12	24.93
		1	23	21.89	22.01	21.88	21.97	22.07	21.92	24.94	25.05	24.91
		12	6	22.12	21.97	22.10	22.02	22.01	21.74	25.08	25.00	24.93
		24	0	22.02	**22.19**	21.91	21.93	21.99	22.00	24.99	25.10	24.97

OUTPUT POWER FOR 5G NR n77 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				647166	656000	664833	647166	656000	664833	647166	656000	664833
				3707.5	3840.0	3972.5	3707.5	3840.0	3972.5	3707.5	3840.0	3972.5
15.0	BPSK	1	0	22.42	22.21	22.27	22.56	22.68	22.47	25.50	25.46	25.38
		1	1	28.18	27.92	28.05	28.03	28.12	28.04	31.12	31.03	31.06
		1	36	28.07	28.00	**28.20**	28.15	28.09	**28.18**	31.12	31.06	**31.20**
		1	37	22.70	22.70	22.22	22.36	22.43	22.28	25.54	25.58	25.26
		18	9	26.37	26.38	26.41	26.32	26.50	26.53	29.36	29.45	29.48
		36	0	26.54	26.53	26.21	26.32	26.35	26.67	29.44	29.45	29.46
	QPSK	1	0	22.20	22.03	22.07	22.17	21.72	21.85	25.20	24.89	24.97
		1	1	27.80	27.97	**28.10**	28.04	28.09	27.75	30.93	31.04	30.94
		1	36	27.97	28.05	28.00	27.83	**28.33**	28.00	30.91	**31.20**	31.01
		1	37	21.98	21.85	22.12	22.20	22.15	22.10	25.10	25.01	25.12
		18	9	25.82	25.87	25.91	25.95	26.02	25.90	28.90	28.96	28.92
		36	0	26.08	25.72	25.95	26.08	25.74	25.75	29.09	28.74	28.86
	16QAM	1	0	22.15	22.06	22.00	22.03	21.88	22.04	25.10	24.98	25.03
		1	1	**27.17**	26.71	26.93	26.95	**27.18**	27.16	**30.07**	29.96	30.06
		1	36	27.16	26.72	26.78	26.92	**27.18**	27.10	30.05	29.97	29.95
		1	37	21.95	22.16	22.09	22.10	22.16	21.72	25.04	25.17	24.92
		18	9	24.73	25.08	25.16	25.19	24.83	25.08	27.98	27.97	28.13
		36	0	25.00	24.94	24.85	24.97	25.03	24.94	28.00	28.00	27.91
	64QAM	1	0	21.77	21.72	21.92	21.89	22.14	21.82	24.84	24.95	24.88
		1	1	25.14	24.73	**25.15**	25.04	25.01	24.85	**28.10**	27.88	28.01
		1	36	24.96	24.77	25.12	**25.16**	24.87	24.76	28.07	27.83	27.95
		1	37	21.75	22.01	22.03	22.04	22.12	21.90	24.91	25.08	24.98
		18	9	24.63	24.34	24.35	24.37	24.32	24.64	27.51	27.34	27.51
		36	0	24.59	24.24	24.69	24.26	24.45	24.67	27.44	27.36	27.69
	256QAM	1	0	22.13	22.09	21.80	22.03	21.91	**22.18**	25.09	25.01	25.00
		1	1	21.95	21.74	21.98	21.81	21.91	21.82	24.89	24.84	24.91
		1	36	21.88	22.12	22.07	21.85	22.13	21.92	24.88	**25.14**	25.01
		1	37	21.87	21.96	**22.15**	21.99	21.72	21.99	24.94	24.85	25.08
		18	9	21.82	21.99	22.10	21.99	21.84	22.02	24.92	24.93	25.07
		36	0	21.74	21.79	21.91	21.77	21.82	21.87	24.77	24.82	24.90

OUTPUT POWER FOR 5G NR n77 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				647333	656000	664666	647333	656000	664666	647333	656000	664666
				3710.0	3840.0	3970.0	3710.0	3840.0	3970.0	3710.0	3840.0	3970.0
20.0	BPSK	1	0	22.29	22.26	22.29	22.54	22.66	22.55	25.43	25.47	25.43
		1	1	27.80	**28.16**	27.80	28.01	28.10	**28.18**	30.92	**31.14**	31.00
		1	49	28.10	28.07	27.77	27.90	27.81	28.08	31.01	30.95	30.94
		1	50	22.31	22.45	22.31	22.42	22.33	22.69	25.38	25.40	25.51
		25	12	26.52	26.30	26.63	26.36	26.46	26.44	29.45	29.39	29.55
		50	0	26.70	26.46	26.38	26.32	26.51	26.69	29.52	29.50	29.55
	QPSK	1	0	21.82	21.94	22.20	21.79	22.18	22.16	24.82	25.07	25.19
		1	1	27.75	27.96	28.01	**27.95**	27.92	27.75	30.86	**30.95**	30.89
		1	49	27.90	**28.01**	27.97	27.87	27.72	27.89	30.90	30.88	30.94
		1	50	21.85	21.96	22.18	22.01	21.73	21.74	24.94	24.86	24.98
		25	12	25.89	25.84	26.11	25.97	25.73	25.79	28.94	28.80	28.96
		50	0	26.01	26.08	26.14	25.75	25.77	25.84	28.89	28.94	29.00
	16QAM	1	0	21.98	21.82	21.80	22.03	22.00	22.20	25.02	24.92	25.01
		1	1	26.72	26.72	26.83	26.89	26.90	26.96	29.82	29.82	29.91
		1	49	26.83	26.78	**26.97**	**27.17**	26.98	26.71	**30.01**	29.89	29.85
		1	50	22.00	21.90	21.99	21.86	22.19	22.15	24.94	25.06	25.08
		25	12	24.72	24.80	25.19	24.77	24.73	24.92	27.76	27.78	28.07
		50	0	24.76	24.78	25.18	24.79	24.87	24.94	27.79	27.84	28.07
	64QAM	1	0	21.85	21.92	21.76	21.76	22.10	22.16	24.82	25.02	24.97
		1	1	24.99	25.15	25.08	24.84	24.99	24.77	27.93	28.08	27.94
		1	49	24.93	24.94	**25.16**	24.86	**25.25**	24.85	27.91	**28.11**	28.02
		1	50	22.03	21.85	21.82	22.04	21.86	22.05	25.05	24.87	24.95
		25	12	24.63	24.50	24.27	24.56	24.69	24.48	27.61	27.61	27.39
		50	0	24.33	24.21	24.37	24.40	24.65	24.59	27.38	27.45	27.49
	256QAM	1	0	22.17	22.05	22.19	**22.18**	21.94	21.99	**25.19**	25.01	25.10
		1	1	21.79	22.03	21.98	22.08	22.16	22.04	24.95	25.11	25.02
		1	49	21.88	21.79	21.77	22.03	22.16	21.98	24.97	24.99	24.89
		1	50	22.00	21.97	22.06	21.92	21.73	21.89	24.97	24.86	24.99
		25	12	**22.20**	21.81	22.17	21.97	21.92	21.92	25.10	24.88	25.06
		50	0	21.91	21.81	21.96	21.89	21.93	21.90	24.91	24.88	24.94

OUTPUT POWER FOR 5G NR n77 (30.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				647666	656000	664333	647666	656000	664333	647666	656000	664333
				3715.0	3840.0	3965.0	3715.0	3840.0	3965.0	3715.0	3840.0	3965.0
30.0	BPSK	1	0	22.36	22.24	22.26	22.58	22.62	22.59	25.48	25.44	25.44
		1	1	27.71	27.99	28.15	28.05	28.11	27.79	30.89	31.06	30.98
		1	76	**28.18**	27.96	28.09	27.76	**28.16**	27.80	30.99	**31.07**	30.96
		1	77	22.33	22.43	22.40	22.28	22.52	22.53	25.32	25.49	25.48
		36	18	26.58	26.53	26.29	26.51	26.39	26.62	29.56	29.47	29.47
		75	0	26.30	26.63	26.69	26.21	26.37	26.26	29.27	29.51	29.49
	QPSK	1	0	21.95	21.97	22.18	21.84	22.20	21.93	24.91	25.10	25.07
		1	1	28.04	27.80	28.10	28.04	27.82	27.92	31.05	30.82	31.02
		1	76	28.10	28.11	**28.14**	**28.07**	**28.07**	27.71	31.10	**31.10**	30.94
		1	77	21.95	22.05	21.72	22.06	21.78	21.78	25.02	24.93	24.76
		36	18	26.06	26.05	26.01	26.17	26.13	26.17	29.13	29.10	29.10
		75	0	26.20	26.20	25.86	25.95	25.73	26.17	29.09	28.98	29.03
	16QAM	1	0	21.87	21.72	21.77	22.04	21.83	21.97	24.97	24.79	24.88
		1	1	26.78	**27.15**	27.08	26.78	26.95	26.92	29.79	30.06	30.01
		1	76	26.76	27.09	26.90	27.01	**27.17**	26.83	29.90	**30.14**	29.88
		1	77	22.09	22.01	21.97	21.98	21.97	21.76	25.05	25.00	24.88
		36	18	24.83	24.88	25.05	25.03	25.13	24.97	27.94	28.02	28.02
		75	0	25.18	25.12	24.99	25.09	25.11	25.20	28.15	28.13	28.11
	64QAM	1	0	22.07	21.86	21.95	21.76	21.86	21.82	24.93	24.87	24.90
		1	1	24.95	25.03	**25.14**	**25.09**	24.76	24.97	28.03	27.91	**28.07**
		1	76	24.97	24.91	25.02	24.71	24.79	24.87	27.85	27.86	27.96
		1	77	22.00	21.87	22.13	21.82	22.19	21.75	24.92	25.04	24.95
		36	18	24.62	24.27	24.43	24.42	24.69	24.62	27.53	27.50	27.54
		75	0	24.41	24.22	24.24	24.41	24.36	24.66	27.42	27.30	27.47
	256QAM	1	0	21.94	21.94	21.91	22.10	22.11	22.04	25.03	25.04	24.99
		1	1	21.74	21.79	21.95	21.76	22.19	21.98	24.76	25.00	24.98
		1	76	21.82	22.08	22.07	22.08	22.06	21.81	24.96	25.08	24.95
		1	77	21.82	21.82	22.16	22.03	21.86	21.96	24.94	24.85	25.07
		36	18	22.04	22.17	**22.19**	**22.20**	22.02	21.82	**25.13**	25.11	25.02
		75	0	21.75	22.17	22.12	22.02	21.76	22.08	24.90	24.98	25.11

OUTPUT POWER FOR 5G NR n77 (40.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				648000	656000	664000	648000	656000	664000	648000	656000	664000
				3720.0	3840.0	3960.0	3720.0	3840.0	3960.0	3720.0	3840.0	3960.0
40.0	BPSK	1	0	22.39	22.65	22.32	22.29	22.33	22.67	25.35	25.50	25.51
		1	1	28.00	27.79	27.94	27.86	28.11	28.14	30.94	30.96	31.05
		1	104	27.74	27.94	**28.02**	27.76	28.02	**28.20**	30.76	30.99	**31.12**
		1	105	22.25	22.21	22.29	22.58	22.39	22.33	25.43	25.31	25.32
		50	25	26.43	26.24	26.30	26.40	26.48	26.30	29.43	29.37	29.31
		100	0	26.34	26.32	26.29	26.38	26.44	26.60	29.37	29.39	29.46
	QPSK	1	0	21.99	22.02	21.91	21.99	21.72	21.71	25.00	24.88	24.82
		1	1	**28.19**	27.76	28.13	**28.18**	28.03	27.89	**31.20**	30.91	31.02
		1	104	28.17	27.87	27.89	28.17	27.95	27.89	31.18	30.92	30.90
		1	105	21.74	21.89	22.08	21.80	21.92	22.01	24.78	24.92	25.06
		50	25	26.08	25.79	25.87	25.71	25.72	25.97	28.91	28.77	28.93
		100	0	25.88	25.86	25.94	25.88	26.15	25.88	28.89	29.02	28.92
	16QAM	1	0	21.97	21.92	22.04	22.06	21.89	22.06	25.03	24.92	25.06
		1	1	26.80	26.99	26.77	26.72	26.86	**27.09**	29.77	29.94	29.94
		1	104	26.82	**27.05**	26.99	26.83	27.08	26.84	29.84	**30.08**	29.93
		1	105	22.10	21.74	22.02	21.92	22.06	21.83	25.02	24.91	24.94
		50	25	24.85	25.02	24.75	25.17	24.87	25.17	28.02	27.96	27.98
		100	0	25.10	24.95	24.93	25.15	24.93	25.20	28.14	27.95	28.08
	64QAM	1	0	22.20	21.74	21.89	22.05	22.18	22.16	25.14	24.98	25.04
		1	1	25.03	24.73	24.75	**25.15**	24.76	25.07	**28.10**	27.76	27.92
		1	104	**25.10**	24.98	24.86	24.87	24.81	25.07	28.00	27.91	27.98
		1	105	21.77	22.16	21.79	22.01	22.01	22.10	24.90	25.10	24.96
		50	25	24.58	24.43	24.40	24.39	24.49	24.32	27.50	27.47	27.37
		100	0	24.67	24.54	24.65	24.38	24.46	24.70	27.54	27.51	27.69
	256QAM	1	0	22.06	22.20	21.75	22.04	21.78	22.01	25.06	25.01	24.89
		1	1	22.08	21.98	21.95	21.91	21.78	21.95	25.01	24.89	24.96
		1	104	22.14	21.84	21.90	21.71	22.01	22.16	24.94	24.94	25.04
		1	105	21.87	22.01	22.14	21.77	22.07	22.06	24.83	25.05	25.11
		50	25	22.17	22.08	21.85	21.72	21.95	**22.17**	24.96	25.03	25.02
		100	0	**22.20**	21.80	21.92	22.14	22.07	22.10	**25.18**	24.95	25.02

OUTPUT POWER FOR 5G NR n77 (50.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				648333	656000	663666	648333	656000	663666	648333	656000	663666
				3725.0	3840.0	3955.0	3725.0	3840.0	3955.0	3725.0	3840.0	3955.0
50.0	BPSK	1	0	22.31	22.39	22.46	22.70	22.25	22.26	25.52	25.33	25.37
		1	1	**28.17**	28.07	27.83	28.05	28.17	28.10	31.12	31.13	30.98
		1	131	27.97	27.98	28.16	27.90	28.18	**28.19**	30.95	31.09	**31.19**
		1	132	22.40	22.39	22.70	22.55	22.30	22.58	25.49	25.36	25.65
		64	32	26.63	26.51	26.29	26.34	26.52	26.43	29.50	29.53	29.37
		128	0	26.34	26.69	26.68	26.21	26.27	26.21	29.29	29.50	29.46
	QPSK	1	0	21.80	21.73	21.76	22.19	22.06	21.84	25.01	24.91	24.81
		1	1	27.87	27.80	27.88	28.15	27.90	27.95	31.02	30.86	30.93
		1	131	**28.02**	27.99	**28.02**	28.08	28.02	**28.16**	31.06	31.02	**31.10**
		1	132	22.14	22.07	21.72	22.20	21.88	22.14	25.18	24.99	24.95
		64	32	26.17	25.88	25.96	25.90	26.14	25.96	29.05	29.02	28.97
		128	0	26.04	25.74	26.12	25.88	25.79	26.03	28.97	28.78	29.09
	16QAM	1	0	21.71	21.79	21.92	21.75	22.13	21.91	24.74	24.97	24.93
		1	1	27.00	**27.14**	26.76	27.03	27.11	**27.20**	30.03	**30.14**	30.00
		1	131	26.94	26.99	26.97	26.87	26.71	27.00	29.92	29.86	30.00
		1	132	21.80	22.12	21.94	21.74	22.15	21.80	24.78	25.15	24.88
		64	32	24.89	25.10	24.73	25.20	25.17	25.02	28.06	28.15	27.89
		128	0	24.81	25.20	24.75	25.05	24.76	25.02	27.94	28.00	27.90
	64QAM	1	0	22.19	21.94	21.79	22.11	22.05	21.99	25.16	25.01	24.90
		1	1	24.80	24.93	**25.19**	25.04	24.98	**25.15**	27.93	27.97	**28.18**
		1	131	24.86	25.07	24.89	24.90	25.14	24.78	27.89	28.12	27.85
		1	132	22.03	22.01	21.80	22.02	22.19	22.05	25.04	25.11	24.94
		64	32	24.63	24.60	24.40	24.64	24.29	24.23	27.65	27.46	27.33
		128	0	24.61	24.21	24.42	24.24	24.57	24.65	27.44	27.40	27.55
	256QAM	1	0	21.96	21.82	22.03	21.95	21.93	21.85	24.97	24.89	24.95
		1	1	22.11	22.01	21.87	21.96	22.03	22.17	25.05	25.03	25.03
		1	131	21.98	22.07	**22.20**	21.76	21.87	22.00	24.88	24.98	25.11
		1	132	21.79	22.08	21.89	22.17	**22.20**	21.87	24.99	**25.15**	24.89
		64	32	21.77	22.12	21.93	21.84	22.07	21.79	24.82	25.11	24.87
		128	0	21.75	21.92	21.74	21.88	21.71	22.19	24.83	24.83	24.98

OUTPUT POWER FOR 5G NR n77 (60.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				648666	656000	663333	648666	656000	663333	648666	656000	663333
				3730.0	3840.0	3950.0	3730.0	3840.0	3950.0	3730.0	3840.0	3950.0
60.0	BPSK	1	0	22.47	22.38	22.66	22.48	22.41	22.54	25.49	25.41	25.61
		1	1	**28.19**	27.81	28.04	**28.09**	27.93	**28.09**	**31.15**	30.88	31.08
		1	160	28.02	27.71	27.95	27.81	28.07	28.00	30.93	30.90	30.99
		1	161	22.30	22.56	23.00	22.40	22.38	22.43	25.36	25.48	25.73
		81	40	26.35	26.67	26.63	26.70	26.46	26.67	29.54	29.58	29.66
		162	0	26.35	26.22	26.80	26.43	26.62	26.47	29.40	29.43	29.65
	QPSK	1	0	21.75	21.82	22.17	21.90	22.01	21.90	24.84	24.93	25.05
		1	1	27.91	27.85	27.94	28.07	27.88	27.90	31.00	30.88	30.93
		1	160	27.93	27.99	**28.08**	27.72	27.91	**28.13**	30.84	30.96	**31.12**
		1	161	22.10	22.12	22.10	22.16	22.20	21.84	25.14	25.17	24.98
		81	40	25.78	25.86	25.97	25.89	26.07	25.82	28.85	28.98	28.91
		162	0	25.89	25.97	25.76	25.74	25.74	25.72	28.83	28.87	28.75
	16QAM	1	0	21.91	22.11	22.08	21.71	22.16	21.75	24.82	25.15	24.93
		1	1	26.84	27.01	26.89	27.14	26.92	26.92	30.00	29.98	29.92
		1	160	**27.18**	26.91	26.79	**27.15**	27.10	27.05	**30.18**	30.02	29.93
		1	161	21.79	21.85	21.96	21.85	22.04	22.15	24.83	24.96	25.07
		81	40	24.97	24.89	25.17	25.16	24.98	25.19	28.08	27.95	28.19
		162	0	24.94	25.15	25.47	24.88	24.74	25.36	27.92	27.96	28.43
	64QAM	1	0	22.03	22.06	21.86	22.02	21.82	21.87	25.04	24.95	24.88
		1	1	25.15	25.15	**25.29**	24.79	24.92	24.98	27.98	28.05	28.15
		1	160	25.15	25.20	24.83	25.14	**25.17**	24.86	28.16	**28.20**	27.86
		1	161	22.16	22.05	21.72	21.99	21.98	21.79	25.09	25.03	24.77
		81	40	24.69	24.45	24.47	24.59	24.54	24.95	27.65	27.51	27.73
		162	0	24.52	24.49	24.27	24.56	24.37	24.88	27.55	27.44	27.60
	256QAM	1	0	22.18	21.72	22.07	**22.18**	21.95	21.92	**25.19**	24.85	25.01
		1	1	21.76	22.13	22.06	22.01	21.74	21.80	24.90	24.95	24.94
		1	160	21.96	22.17	21.74	21.91	21.76	21.97	24.95	24.98	24.87
		1	161	22.10	21.74	22.09	21.76	21.87	21.72	24.94	24.82	24.92
		81	40	21.90	21.86	21.88	22.06	21.97	22.10	24.99	24.93	25.00
		162	0	22.20	22.11	**22.39**	21.95	22.02	21.78	25.09	25.08	25.11

OUTPUT POWER FOR 5G NR n77 (70.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				649000	656000	663000	649000	656000	663000	649000	656000	663000
				3735.0	3840.0	3945.0	3735.0	3840.0	3945.0	3735.0	3840.0	3945.0
70.0	BPSK	1	0	22.42	22.46	22.33	22.24	22.31	22.63	25.34	25.40	25.49
		1	1	**28.15**	27.81	28.02	28.07	27.95	**28.18**	**31.12**	30.89	31.11
		1	187	28.14	27.99	27.91	27.76	28.11	27.96	30.96	31.06	30.95
		1	188	22.70	22.50	22.59	22.60	22.54	22.27	25.66	25.53	25.44
		90	45	26.27	26.46	26.46	26.48	26.24	26.41	29.39	29.36	29.45
		180	0	26.38	26.27	26.65	26.44	26.21	26.24	29.42	29.25	29.46
	QPSK	1	0	22.19	21.96	21.95	21.94	22.16	22.07	25.08	25.07	25.02
		1	1	**28.16**	27.83	27.82	**28.18**	28.04	28.07	**31.18**	30.95	30.96
		1	187	27.95	27.73	27.98	28.06	**28.18**	27.93	31.02	30.97	30.97
		1	188	21.71	22.00	21.71	22.01	21.82	21.71	24.87	24.92	24.72
		90	45	26.18	25.86	25.86	26.19	26.07	26.13	29.20	28.98	29.01
		180	0	25.77	26.00	25.89	25.92	25.78	25.96	28.86	28.90	28.94
	16QAM	1	0	22.12	21.90	22.04	21.99	21.76	22.17	25.07	24.84	25.12
		1	1	26.95	26.85	27.06	26.95	**27.49**	26.75	29.96	**30.19**	29.92
		1	187	26.96	27.09	**27.11**	26.97	26.76	26.94	29.98	29.94	30.04
		1	188	22.17	22.19	22.16	21.89	22.19	21.78	25.04	25.20	24.98
		90	45	25.04	25.14	24.79	25.15	24.79	24.90	28.11	27.98	27.86
		180	0	24.78	25.03	25.40	24.87	25.20	25.16	27.84	28.13	28.29
	64QAM	1	0	21.96	21.79	22.43	22.01	22.12	21.76	25.00	24.97	25.12
		1	1	24.81	24.97	25.06	24.82	**25.19**	24.97	27.83	28.09	28.03
		1	187	24.95	**25.13**	25.12	25.17	25.15	25.04	28.07	**28.15**	28.09
		1	188	22.07	22.16	21.81	22.01	22.17	22.03	25.05	25.18	24.93
		90	45	24.47	24.60	24.46	24.67	24.48	24.46	27.58	27.55	27.47
		180	0	24.29	24.56	25.09	24.56	24.63	24.52	27.44	27.61	27.82
	256QAM	1	0	21.72	21.71	22.02	22.09	21.95	21.72	24.92	24.84	24.88
		1	1	22.11	21.92	21.92	21.96	22.18	21.74	25.05	25.06	24.84
		1	187	22.00	22.16	21.93	21.80	21.77	21.97	24.91	24.98	24.96
		1	188	21.73	22.10	22.16	21.85	**22.25**	22.12	24.80	**25.19**	25.15
		90	45	21.95	22.11	21.72	21.98	22.20	22.04	24.98	25.17	24.89
		180	0	22.02	22.06	**22.24**	22.13	21.86	21.87	25.09	24.97	25.07

OUTPUT POWER FOR 5G NR n77 (80.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				649333	656000	662666	649333	656000	662666	649333	656000	662666
				3740.0	3840.0	3940.0	3740.0	3840.0	3940.0	3740.0	3840.0	3940.0
80.0	BPSK	1	0	22.33	22.26	22.48	22.37	22.35	22.27	25.36	25.32	25.39
		1	1	27.80	**28.16**	28.11	**28.16**	28.06	27.90	30.99	**31.12**	31.02
		1	215	27.81	27.81	27.88	27.84	27.86	28.09	30.84	30.85	31.00
		1	216	22.29	22.29	22.50	22.56	22.51	22.56	25.44	25.41	25.54
		108	54	26.48	26.63	26.38	26.35	26.31	26.54	29.43	29.48	29.47
		216	0	26.56	26.66	26.65	26.52	26.33	26.31	29.55	29.51	29.49
	QPSK	1	0	21.89	21.81	21.81	21.92	21.95	21.92	24.92	24.89	24.88
		1	1	**28.19**	28.16	27.89	27.72	27.91	28.12	30.97	31.05	31.02
		1	215	28.10	27.74	27.76	28.13	**28.20**	27.88	**31.13**	30.99	30.83
		1	216	21.86	22.13	21.76	21.84	22.15	21.78	24.86	25.15	24.78
		108	54	25.87	25.84	26.01	26.06	25.87	25.81	28.98	28.87	28.92
		216	0	25.82	25.72	26.06	25.81	25.78	25.84	28.83	28.76	28.96
	16QAM	1	0	22.00	22.07	22.02	21.88	22.18	21.74	24.95	25.14	24.89
		1	1	26.74	26.75	27.00	26.95	27.13	27.31	29.86	29.95	30.17
		1	215	26.84	**27.02**	26.89	26.88	**27.38**	26.83	29.87	**30.21**	29.87
		1	216	22.14	21.78	21.81	21.96	22.20	22.14	25.06	25.01	24.99
		108	54	25.14	24.93	24.78	24.81	25.02	24.89	27.99	27.99	27.85
		216	0	24.95	24.79	24.76	25.08	24.99	24.98	28.03	27.90	27.88
	64QAM	1	0	21.84	21.96	21.94	22.13	22.12	22.03	25.00	25.05	25.00
		1	1	25.16	24.92	25.17	25.17	**25.18**	24.87	**28.18**	28.06	28.03
		1	215	24.95	25.16	**25.19**	24.72	24.91	25.09	27.85	28.05	28.15
		1	216	21.88	21.89	21.87	21.91	21.85	21.87	24.91	24.88	24.88
		108	54	24.65	24.60	24.27	24.34	24.59	24.21	27.51	27.61	27.25
		216	0	24.42	24.28	24.28	24.28	24.46	24.48	27.36	27.38	27.39
	256QAM	1	0	21.89	21.72	22.13	21.83	21.94	22.18	24.87	24.84	**25.17**
		1	1	21.98	22.17	21.73	21.93	21.84	22.01	24.97	25.02	24.88
		1	215	21.93	21.84	22.07	21.85	21.95	21.82	24.90	24.91	24.96
		1	216	**22.19**	21.94	21.95	21.71	21.82	22.20	24.97	24.89	25.09
		108	54	22.10	21.79	21.84	22.02	21.86	21.97	25.07	24.84	24.92
		216	0	21.73	21.90	21.98	**22.20**	21.76	21.77	24.98	24.84	24.89

OUTPUT POWER FOR 5G NR n77 (90.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				649666	656000	662333	649666	656000	662333	649666	656000	662333
				3745.0	3840.0	3935.0	3745.0	3840.0	3935.0	3745.0	3840.0	3935.0
90.0	BPSK	1	0	22.34	22.26	22.68	22.58	22.38	22.35	25.47	25.33	25.53
		1	1	28.14	**28.16**	27.92	27.72	28.05	28.12	30.95	**31.12**	31.03
		1	243	27.95	27.97	27.85	27.80	27.95	**28.16**	30.89	30.97	31.02
		1	244	22.57	22.38	22.36	22.26	22.49	22.69	25.43	25.45	25.54
		120	60	26.30	26.38	26.67	26.65	26.65	26.40	29.49	29.53	29.55
		243	0	26.51	26.60	26.30	26.32	26.64	26.44	29.43	29.63	29.38
	QPSK	1	0	22.19	22.04	22.01	22.17	22.08	22.09	25.19	25.07	25.06
		1	1	27.75	**28.17**	28.01	28.14	27.83	27.89	30.96	31.01	30.96
		1	243	27.96	27.92	28.05	27.79	27.98	**28.33**	30.89	30.96	**31.20**
		1	244	22.00	21.74	22.02	21.74	22.18	21.91	24.88	24.98	24.98
		120	60	26.12	25.80	25.99	25.77	25.91	25.87	28.96	28.87	28.94
		243	0	25.92	26.10	25.73	26.07	25.93	26.12	29.01	29.03	28.94
	16QAM	1	0	22.07	22.19	21.87	21.91	21.73	21.99	25.00	24.98	24.94
		1	1	26.77	26.78	26.92	27.19	27.16	**27.38**	30.00	29.98	**30.17**
		1	243	26.81	**26.96**	26.78	27.11	27.20	27.05	29.97	30.09	29.93
		1	244	21.76	22.14	21.88	21.81	21.79	22.18	24.80	24.98	25.04
		120	60	24.90	24.83	24.99	24.72	24.79	25.04	27.82	27.82	28.03
		243	0	25.13	24.87	24.74	25.16	24.73	25.13	28.16	27.81	27.95
	64QAM	1	0	21.84	21.73	21.73	22.10	22.18	21.84	24.98	24.97	24.80
		1	1	25.00	24.76	**25.19**	24.87	**25.08**	24.74	27.95	27.93	27.98
		1	243	24.83	25.17	24.91	24.75	24.94	24.74	27.80	**28.07**	27.84
		1	244	22.07	21.75	21.93	21.82	22.15	22.01	24.96	24.96	24.98
		120	60	24.65	24.51	24.43	24.30	24.69	24.37	27.49	27.61	27.41
		243	0	24.56	24.22	24.61	24.32	24.34	24.46	27.45	27.29	27.55
	256QAM	1	0	22.06	22.12	21.95	22.02	21.80	22.03	25.05	24.97	25.00
		1	1	21.97	21.72	**22.20**	22.01	22.05	22.03	25.00	24.90	**25.13**
		1	243	21.78	21.75	22.16	21.98	21.95	21.77	24.89	24.86	24.98
		1	244	21.86	21.92	22.02	**22.20**	21.78	21.91	25.04	24.86	24.98
		120	60	22.09	21.89	22.18	22.06	21.99	22.02	25.09	24.95	25.11
		243	0	21.81	22.07	22.18	21.80	21.81	21.75	24.82	24.95	24.98

OUTPUT POWER FOR 5G NR n77 (100.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Conducted Average (dBm)								
				ANT 7			ANT 8			ANT 7+8		
				650000	656000	662000	650000	656000	662000	650000	656000	662000
				3750.0	3840.0	3930.0	3750.0	3840.0	3930.0	3750.0	3840.0	3930.0
100.0	BPSK	1	0	22.29	22.46	22.53	22.34	22.31	22.65	25.33	25.40	25.60
		1	1	**28.19**	27.98	27.88	28.18	28.18	27.75	**31.20**	31.09	30.83
		1	271	28.09	28.03	28.10	28.01	28.09	**28.19**	31.06	31.07	31.16
		1	272	22.50	22.61	22.40	22.33	22.40	22.45	25.43	25.52	25.44
		135	67	26.36	26.25	26.58	26.48	26.57	26.22	29.43	29.42	29.41
		270	0	26.58	26.61	26.27	26.55	26.51	26.55	29.58	29.57	29.42
	QPSK	1	0	21.93	21.75	21.84	21.97	21.84	21.88	24.96	24.81	24.87
		1	1	27.80	27.88	28.09	**28.18**	27.76	27.78	31.00	30.83	30.95
		1	271	**28.11**	28.09	27.87	28.02	28.16	27.77	31.08	**31.14**	30.83
		1	272	21.73	22.08	21.74	21.94	21.94	21.82	24.85	25.02	24.79
		135	67	26.07	25.71	26.17	25.71	25.97	25.77	28.90	28.85	28.98
		270	0	25.94	26.00	26.00	25.90	26.08	25.86	28.93	29.05	28.94
	16QAM	1	0	22.19	22.07	22.18	21.84	22.19	21.93	25.03	25.14	25.07
		1	1	26.80	26.78	26.80	27.12	26.71	26.87	29.97	29.76	29.85
		1	271	**27.12**	26.72	27.09	27.11	**27.20**	27.10	**30.13**	29.98	30.11
		1	272	21.84	22.18	22.01	21.80	22.16	22.08	24.83	25.18	25.06
		135	67	24.83	25.00	24.85	25.02	25.07	24.72	27.94	28.05	27.80
		270	0	25.08	25.11	24.77	25.09	24.84	25.14	28.10	27.99	27.97
	64QAM	1	0	22.18	21.84	22.03	22.15	21.77	21.99	25.18	24.82	25.02
		1	1	25.01	25.11	24.77	24.73	24.72	24.78	27.88	27.93	27.79
		1	271	24.96	24.84	**25.20**	**25.09**	25.05	24.83	**28.04**	27.96	28.03
		1	272	22.14	22.10	21.89	22.01	21.99	21.72	25.09	25.06	24.82
		135	67	24.58	24.36	24.40	24.51	24.31	24.40	27.56	27.35	27.41
		270	0	24.60	24.27	24.31	24.64	24.41	24.47	27.63	27.35	27.40
	256QAM	1	0	**22.15**	21.73	21.84	22.14	22.07	21.94	**25.16**	24.91	24.90
		1	1	22.09	21.82	21.84	22.11	22.14	21.71	25.11	24.99	24.79
		1	271	21.99	21.79	21.84	21.88	22.02	21.84	24.95	24.92	24.85
		1	272	22.07	21.71	22.00	22.07	21.92	21.75	25.08	24.83	24.89
		135	67	22.00	21.86	21.90	21.88	21.86	21.82	24.95	24.87	24.87
		270	0	22.03	21.73	22.13	21.90	**22.15**	21.99	24.98	24.96	25.07

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 except 5G NR n70 where mix of middle/high channels are used. Worst-case plots (highest bandwidth) are reported only.

5G NR n41

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n41 (FCC)	10MHz, BPSK	24/0	2593.0	8.616	9.549
	10MHz, QPSK			8.684	9.985
	10MHz, 16QAM			8.581	9.666
	15MHz, BPSK	36/0		12.995	14.46
	15MHz, QPSK			12.915	14.53
	15MHz, 16QAM			12.932	14.38
	20MHz, BPSK	50/0		17.913	19.73
	20MHz, QPSK			17.902	19.38
	20MHz, 16QAM			17.876	19.60
	30MHz, BPSK	75/0		26.881	29.00
	30MHz, QPSK			26.869	28.96
	30MHz, 16QAM			26.932	29.02
	40MHz, BPSK	100/0		35.773	37.99
	40MHz, QPSK			35.914	37.90
	40MHz, 16QAM			35.849	38.04
	50MHz, BPSK	128/0		45.835	48.22
	50MHz, QPSK			45.838	48.30
	50MHz, 16QAM			45.917	48.40
	60MHz, BPSK	162/0		57.865	60.86
	60MHz, QPSK			58.052	60.75
	60MHz, 16QAM			58.036	60.84
	70MHz, BPSK	180/0		64.493	67.69
	70MHz, QPSK			64.604	67.52
	70MHz, 16QAM			64.404	67.74
	80MHz, BPSK	216/0		77.210	80.73
	80MHz, QPSK			77.458	80.86
	80MHz, 16QAM			77.392	81.08
	90MHz, BPSK	243/0		86.684	90.52
	90MHz, QPSK			87.097	90.69
	90MHz, 16QAM			86.921	90.76
	100MHz, BPSK	270/0		96.431	100.60
	100MHz, QPSK			96.543	100.80
	100MHz, 16QAM			96.461	100.80
	100MHz, BPSK	1/0		0.597	1.06

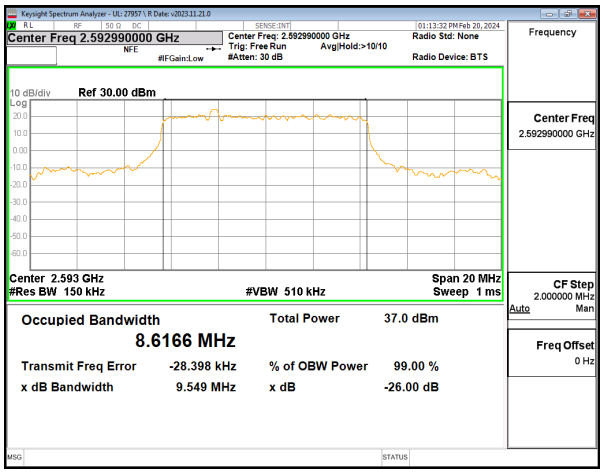
5G NR n77(FCC Part 27 3450-3550MHz)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n77 (FCC Part 27 3450-3550MHz)	10MHz, BPSK	24/0	3500.0	8.609	9.865
	10MHz, QPSK			8.624	9.956
	10MHz, 16QAM			8.629	9.804
	15MHz, BPSK	36/0		12.879	14.35
	15MHz, QPSK			12.945	14.34
	15MHz, 16QAM			12.971	14.36
	20MHz, BPSK	50/0		17.882	19.50
	20MHz, QPSK			17.887	19.44
	20MHz, 16QAM			17.898	19.56
	30MHz, BPSK	75/0		26.803	28.67
	30MHz, QPSK			26.894	28.74
	30MHz, 16QAM			26.876	28.78
	40MHz, BPSK	100/0		35.807	37.84
	40MHz, QPSK			35.914	37.91
	40MHz, 16QAM			35.750	37.87
	50MHz, BPSK	128/0		45.889	48.33
	50MHz, QPSK			45.734	48.38
	50MHz, 16QAM			45.740	47.97
	60MHz, BPSK	162/0		57.790	60.79
	60MHz, QPSK			57.947	60.60
	60MHz, 16QAM			57.853	60.77
	70MHz, BPSK	180/0		64.376	67.55
	70MHz, QPSK			64.573	67.70
	70MHz, 16QAM			64.322	67.34
	80MHz, BPSK	216/0		77.338	80.84
	80MHz, QPSK			77.244	80.67
	80MHz, 16QAM			77.112	80.59
	90MHz, BPSK	243/0		86.764	90.30
	90MHz, QPSK			86.792	90.68
	90MHz, 16QAM			86.513	90.70
	100MHz, BPSK	270/0		96.439	100.5
	100MHz, QPSK			96.357	100.7
	100MHz, 16QAM			96.271	100.7
	100MHz, BPSK	1/0		0.672	1.156

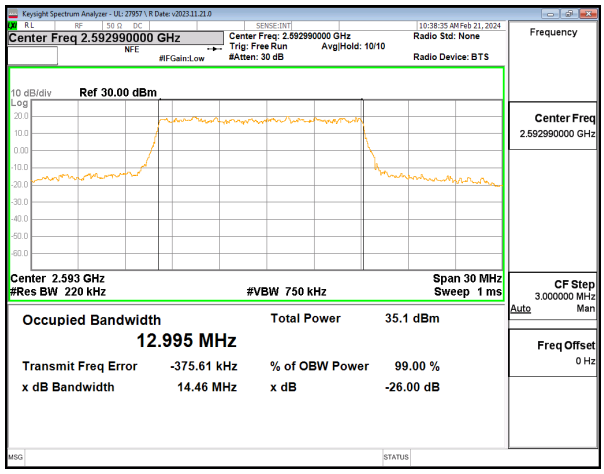
5G NR n77(FCC Part 27 3700-3980MHz)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
5G NR n77 (FCC Part 27 3700-3980MHz)	10MHz, BPSK	24/0	3840.0	8.591	9.584
	10MHz, QPSK			8.595	9.637
	10MHz, 16QAM			8.647	9.857
	15MHz, BPSK	36/0		12.882	13.90
	15MHz, QPSK			12.891	14.24
	15MHz, 16QAM			12.893	14.01
	20MHz, BPSK	50/0		17.865	19.09
	20MHz, QPSK			17.874	19.21
	20MHz, 16QAM			17.888	19.14
	30MHz, BPSK	75/0		26.845	28.51
	30MHz, QPSK			26.836	28.84
	30MHz, 16QAM			26.827	28.25
	40MHz, BPSK	100/0		35.722	37.38
	40MHz, QPSK			35.656	37.88
	40MHz, 16QAM			35.748	37.58
	50MHz, BPSK	128/0		45.853	48.28
	50MHz, QPSK			45.720	48.16
	50MHz, 16QAM			45.633	47.83
	60MHz, BPSK	162/0		57.868	60.32
	60MHz, QPSK			57.969	60.39
	60MHz, 16QAM			57.755	60.40
	70MHz, BPSK	180/0		64.391	67.18
	70MHz, QPSK			64.322	67.45
	70MHz, 16QAM			64.333	67.28
	80MHz, BPSK	216/0		77.127	80.42
	80MHz, QPSK			77.076	80.42
	80MHz, 16QAM			77.336	80.31
	90MHz, BPSK	243/0		86.739	90.32
	90MHz, QPSK			86.795	90.37
	90MHz, 16QAM			86.626	90.32
	100MHz, BPSK	270/0		96.349	100.3
	100MHz, QPSK			96.416	100.2
	100MHz, 16QAM			96.276	100.4
	100MHz, BPSK	1/0		0.595	0.966

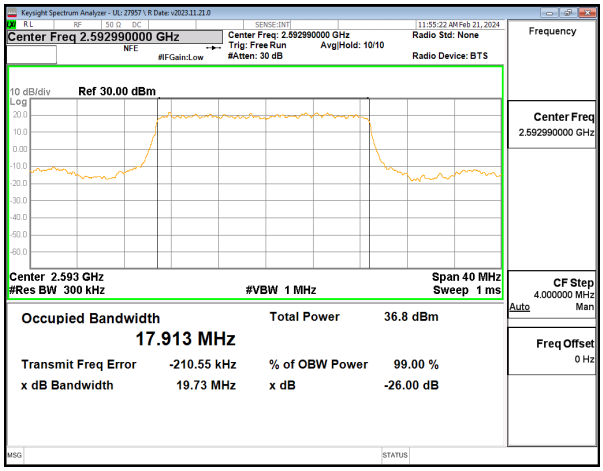
9.1.1. 5G NR n41



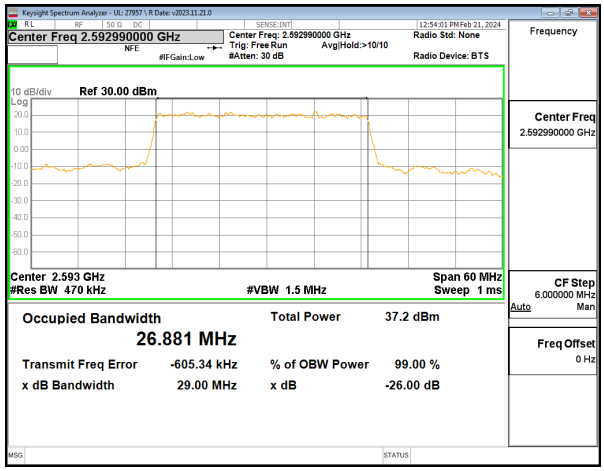
5G NR n41 10MHz BPSK Middle Channel RB24-0



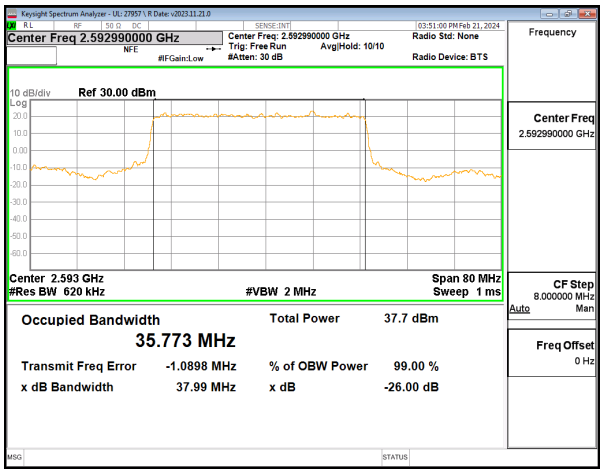
5G NR n41 15MHz BPSK Middle Channel RB36-0



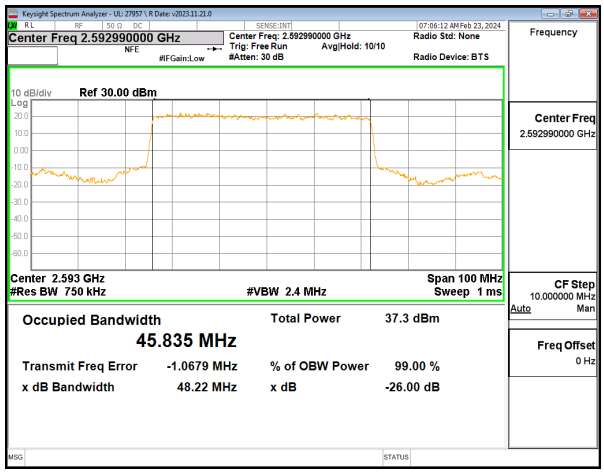
5G NR n41 20MHz BPSK Middle Channel RB50-0



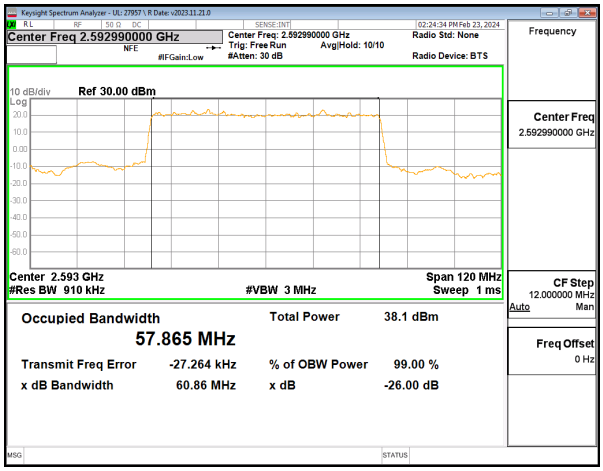
5G NR n41 30MHz BPSK Middle Channel RB75-0



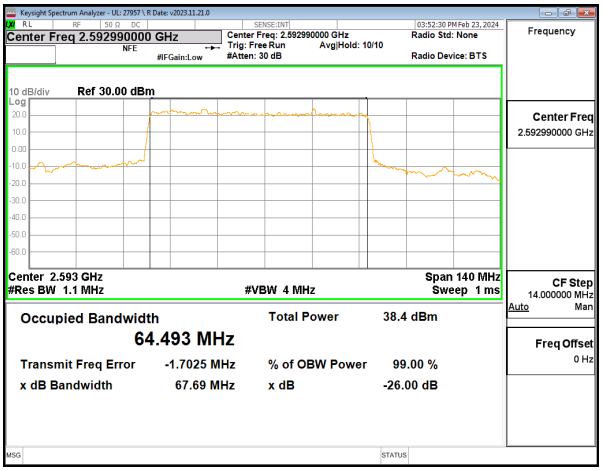
5G NR n41 40MHz BPSK Middle Channel RB100-0



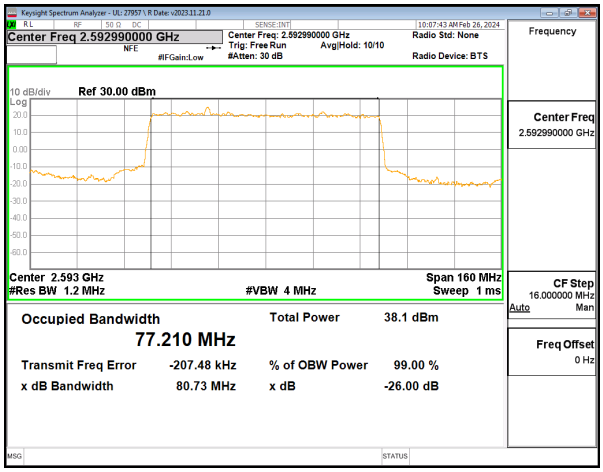
5G NR n41 50MHz BPSK Middle Channel RB128-0



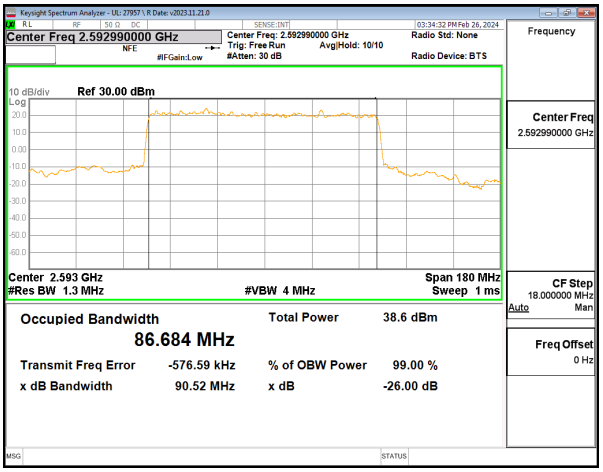
5G NR n41 60MHz BPSK Middle Channel RB162-0



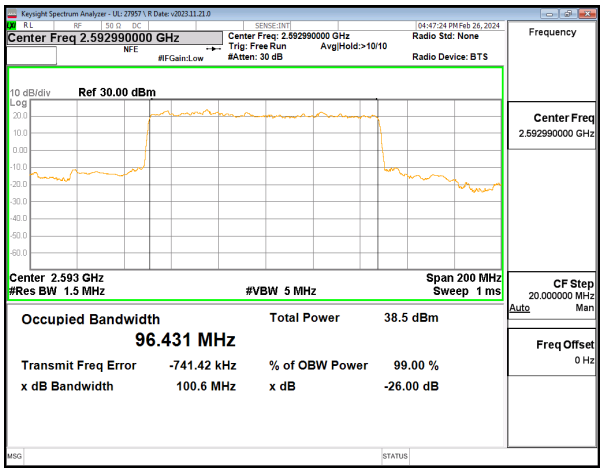
5G NR n41 70MHz BPSK Middle Channel RB180-0



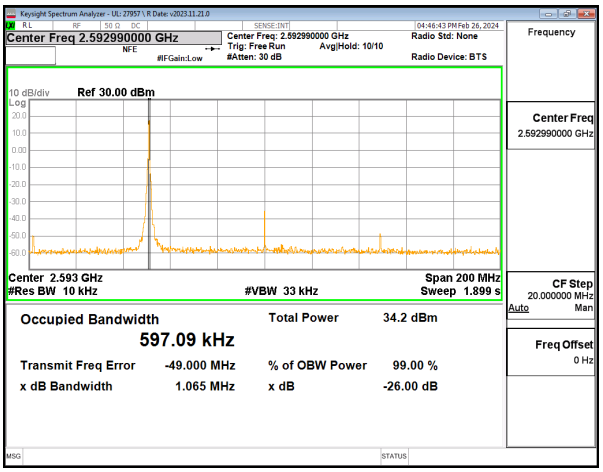
5G NR n41 80MHz BPSK Middle Channel RB216-0



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

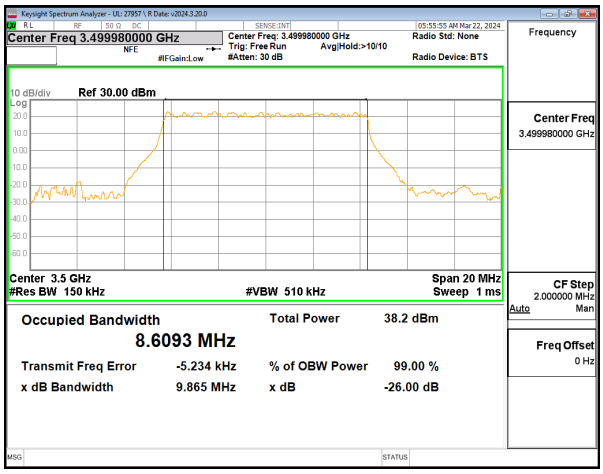


5G NR n41 100MHz BPSK Middle Channel RB270-0

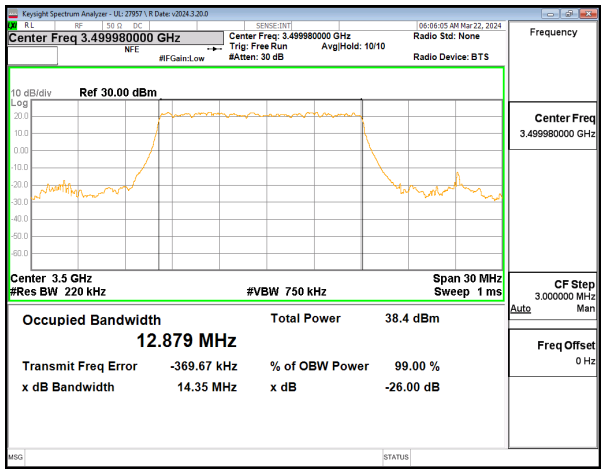


5G NR n41 100MHz BPSK Middle Channel RB1-0

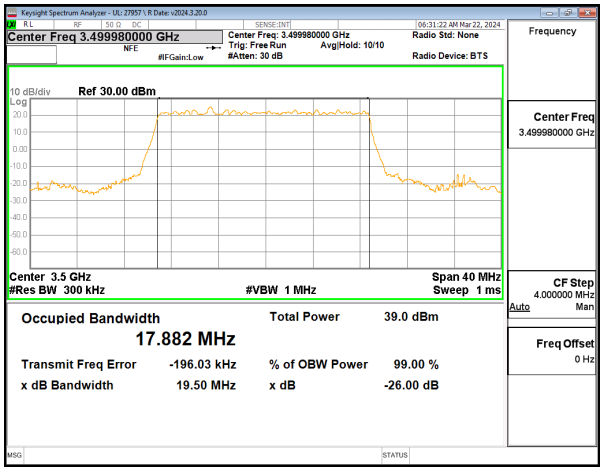
9.1.2. 5G NR n77 (FCC Part 27 3450-3550MHz)



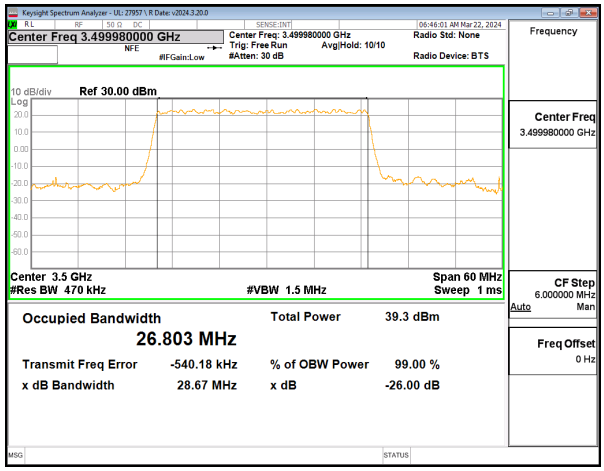
5G NR n77 10MHz BPSK Middle Channel RB24-0



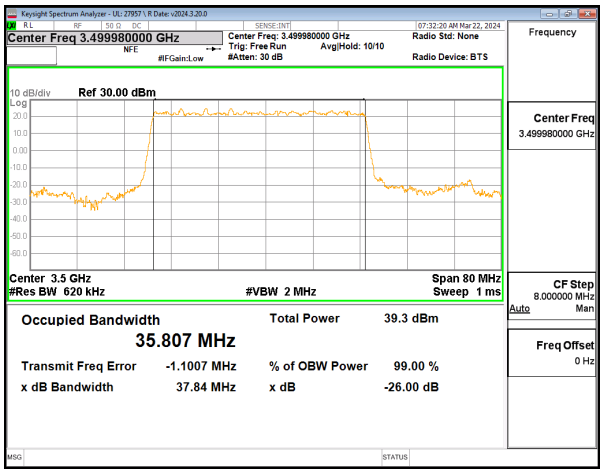
5G NR n77 15MHz BPSK Middle Channel RB36-0, ID 27342



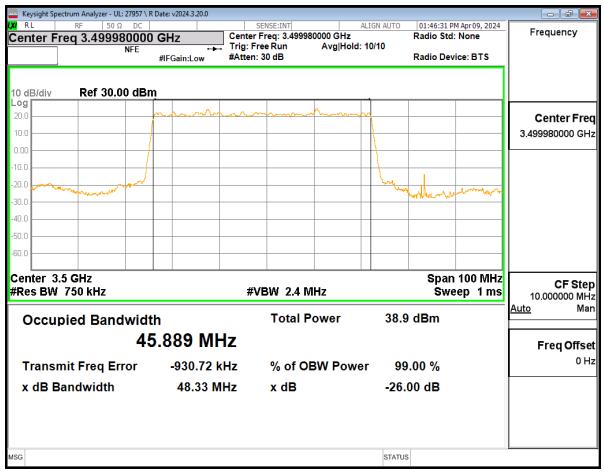
5G NR n77 20MHz BPSK Middle Channel RB50-0,



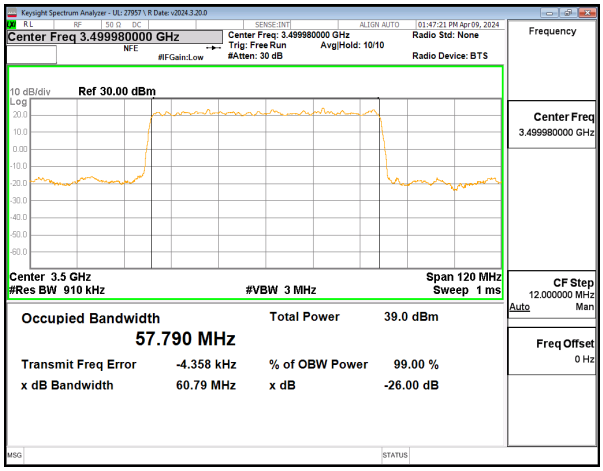
5G NR n77 30MHz BPSK Middle Channel RB75-0



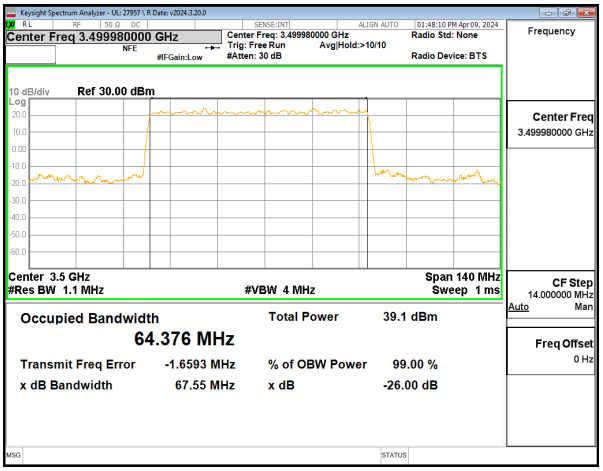
5G NR n77 40MHz BPSK Middle Channel RB100-0



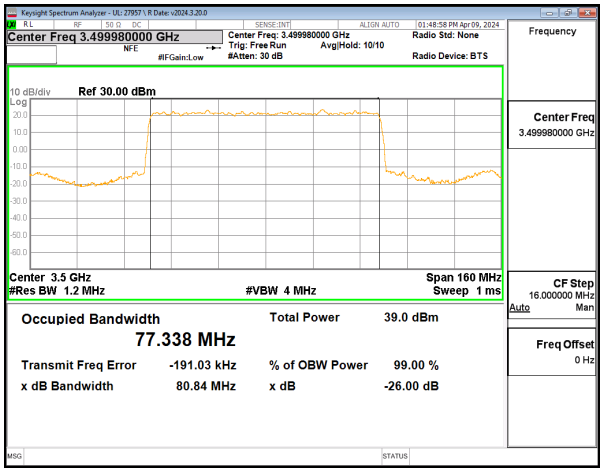
5G NR n77 50MHz BPSK Middle Channel RB128-0



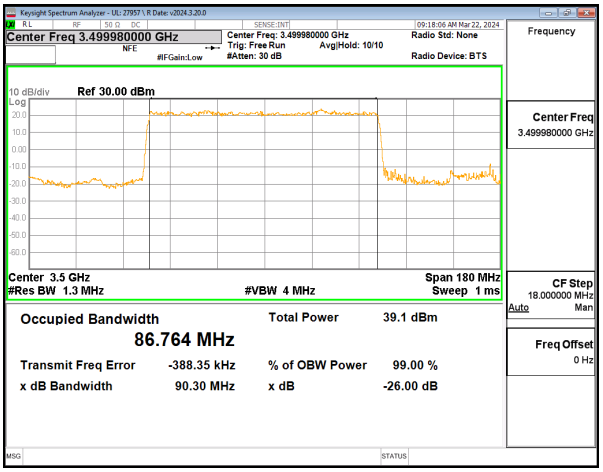
5G NR n77 60MHz BPSK Middle Channel RB162-0



5G NR n77 70MHz BPSK Middle Channel RB180-0



5G NR n77 80MHz BPSK Middle Channel RB216-0



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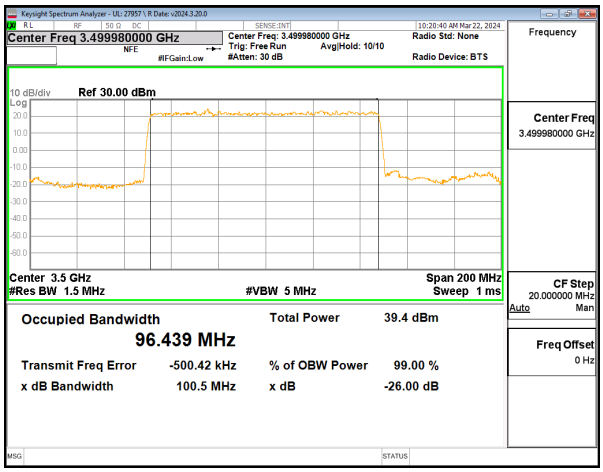

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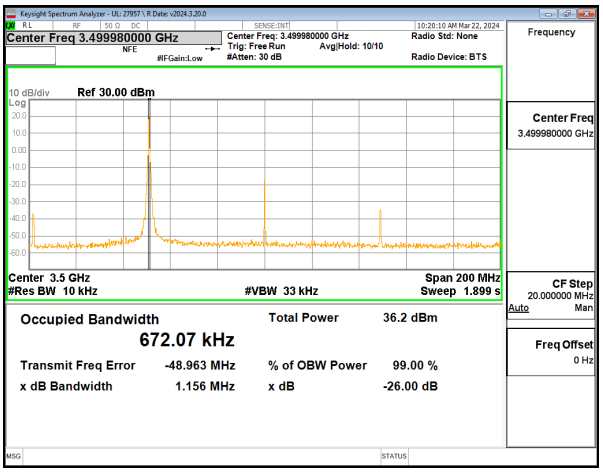
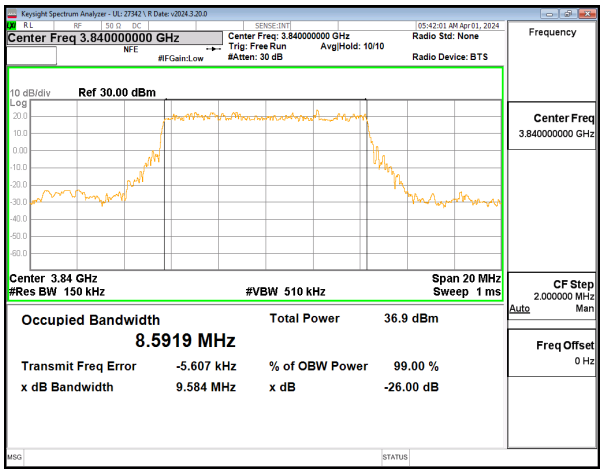
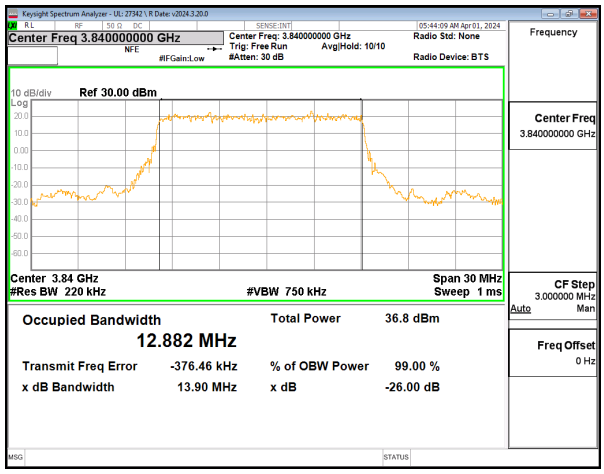


5G NR n77 100MHz BPSK Middle Channel RB1-0

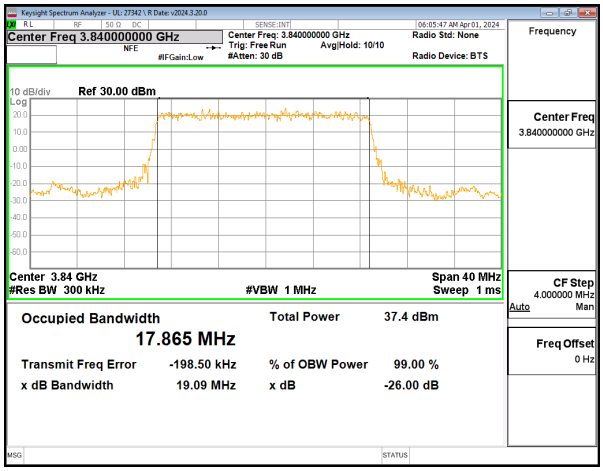
9.1.3. 5G NR n77 (FCC Part 27 3700-3980MHz)



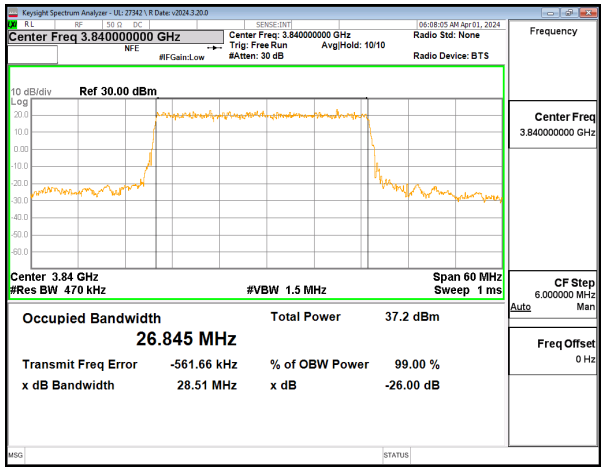
5G NR n77 10MHz BPSK Middle Channel RB24-0



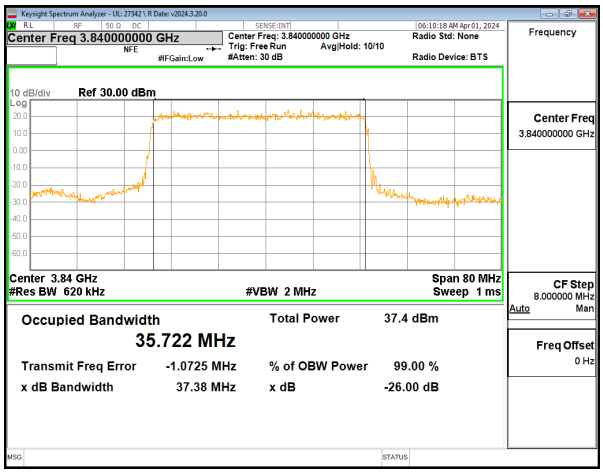
5G NR n77 15MHz BPSK Middle Channel RB36-0



5G NR n77 20MHz BPSK Middle Channel RB50-0



5G NR n77 30MHz BPSK Middle Channel RB75-0



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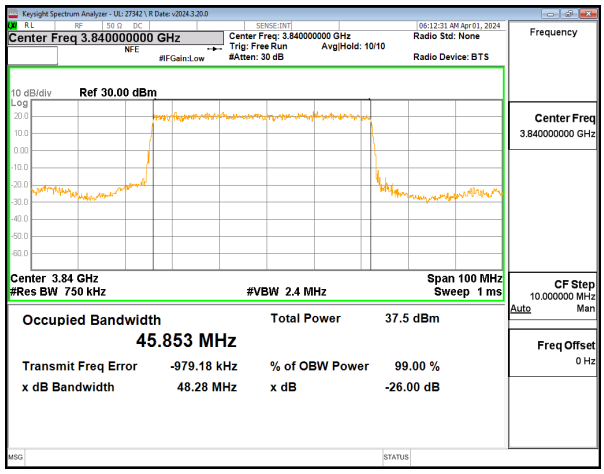
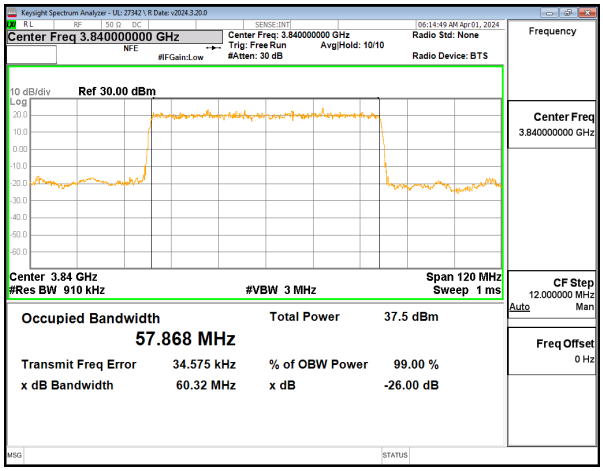
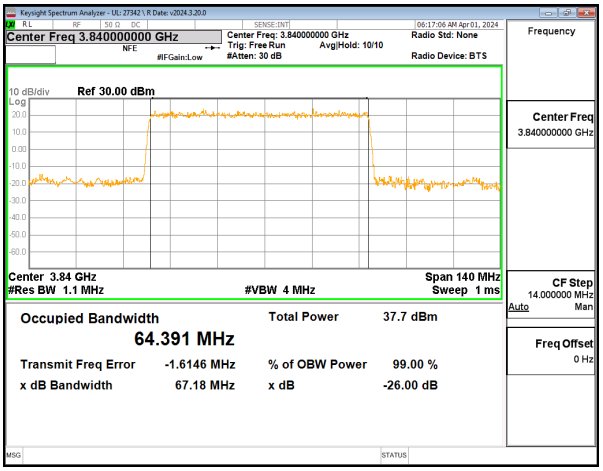


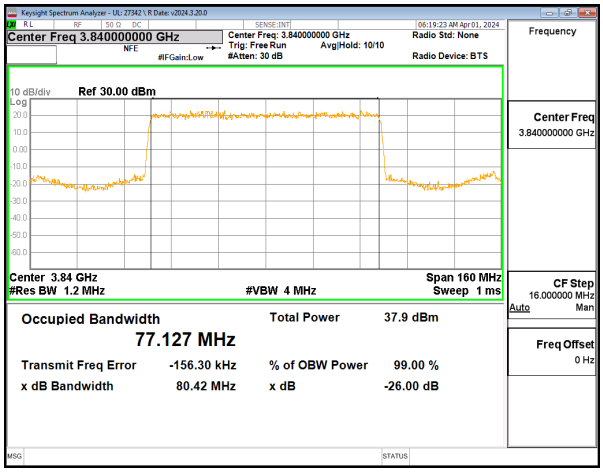
5G NR n77 50MHz BPSK Middle Channel RB128-0



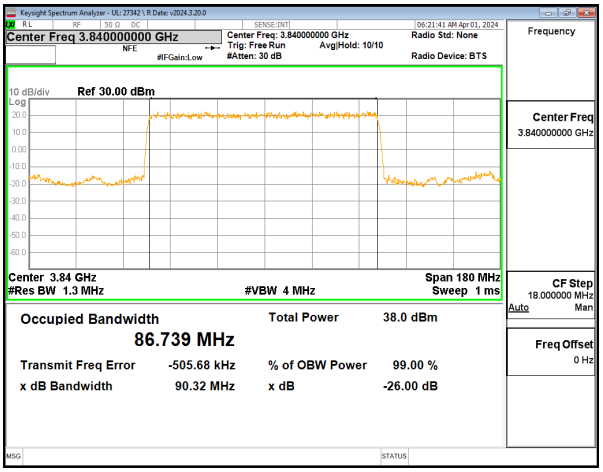
5G NR n77 60MHz BPSK Middle Channel RB162-0



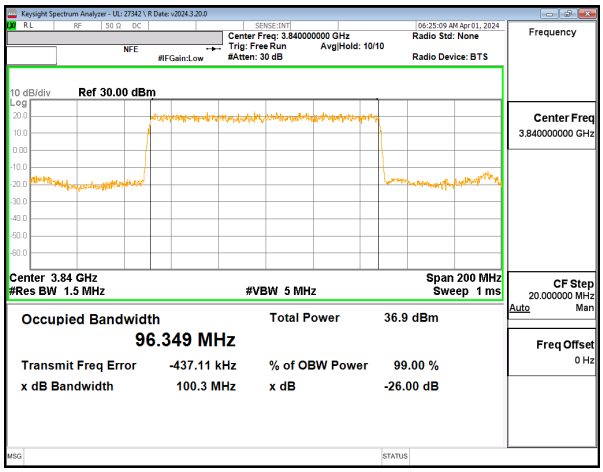
5G NR n77 70MHz BPSK Middle Channel RB180-0



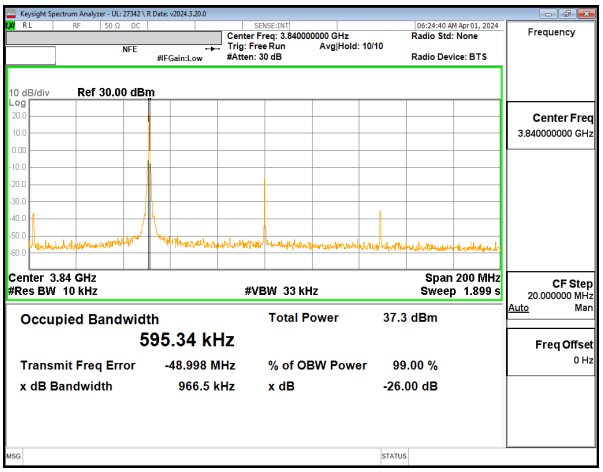
5G NR n77 80MHz BPSK Middle Channel RB216-0



5G NR n77 90MHz BPSK Middle Channel RB243-0



5G NR n77 100MHz BPSK Middle Channel RB270-0



5G NR n77 100MHz BPSK Middle Channel RB1-0

9.2. EMISSION MASK AND ADJACENT CHANNEL POWER

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

TEST PROCEDURE

The transmitter output was connected to a 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 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.

(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.

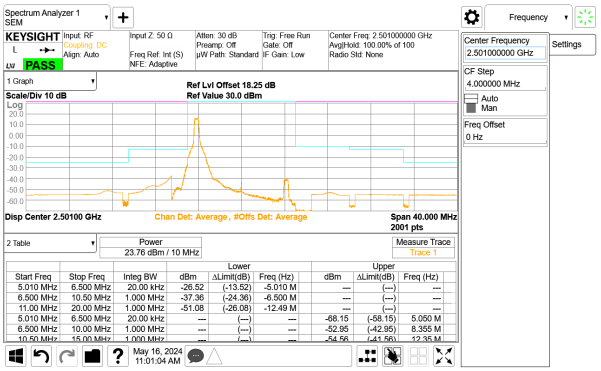
RESULTS

9.2.2. 5G NR n41 EMISSION MASK

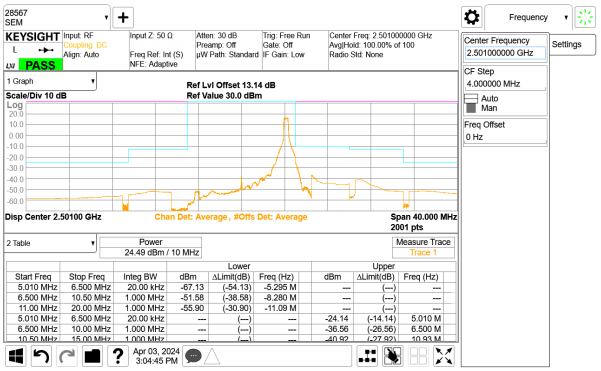
LIMITS

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 that 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.

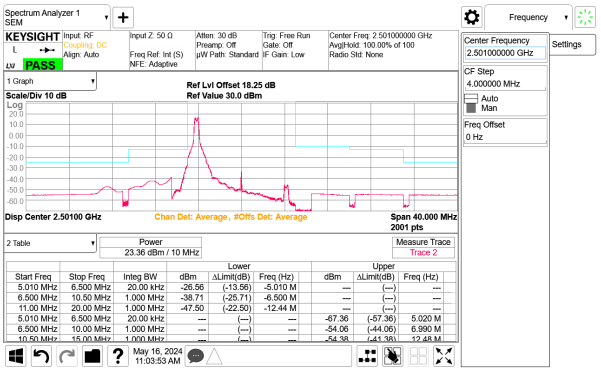
5G NR n41 EMISSION MASK



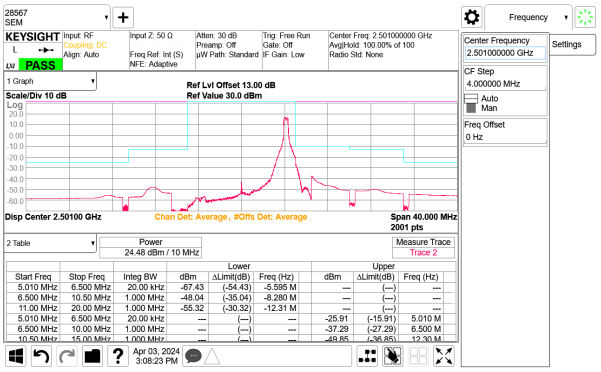
5G NR n41 10MHz BPSK Low Channel RB1-0 Port A ID: 32546



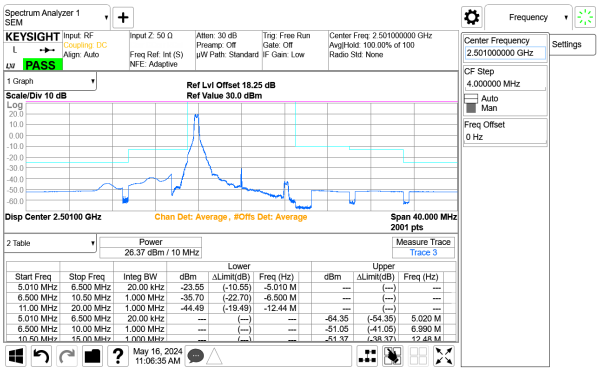
5G NR n41 10MHz BPSK Low Channel RB1-23 Port A



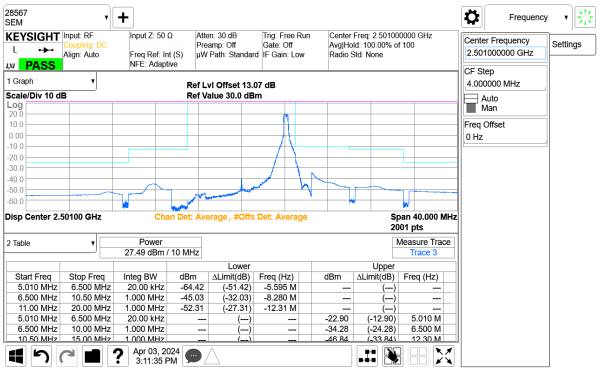
5G NR n41 10MHz BPSK Low Channel RB1-0 Port B ID: 32546



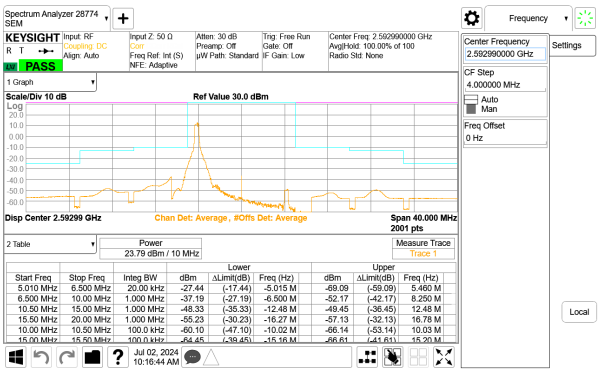
5G NR n41 10MHz BPSK Low Channel RB1-23 Port B



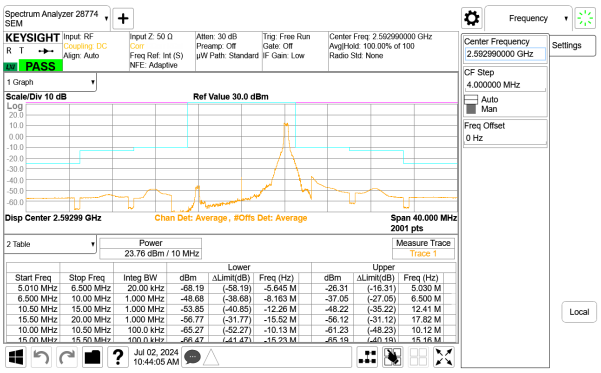
5G NR n41 10MHz BPSK Low Channel RB1-0 Port A+B ID: 32546



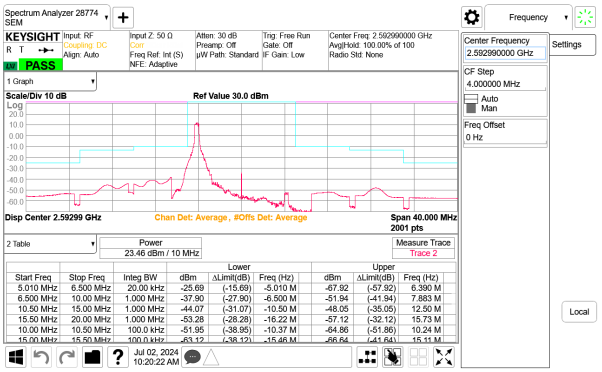
5G NR n41 10MHz BPSK Low Channel RB1-23 Port A+B



5G NR n41 10MHz BPSK Middle Channel RB1-0 Port A



5G NR n41 10MHz BPSK Mid Channel RB1-23 Port A



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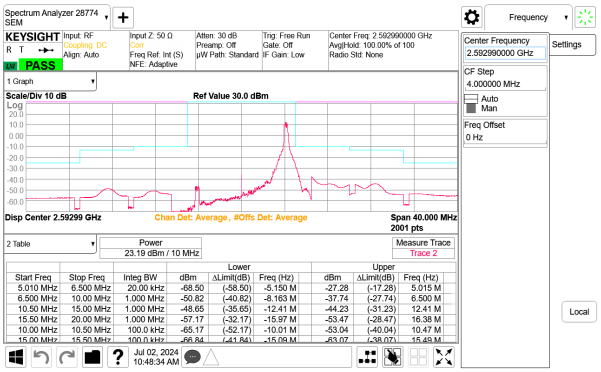

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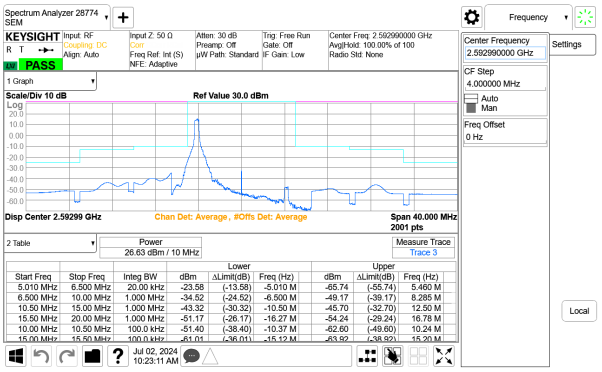
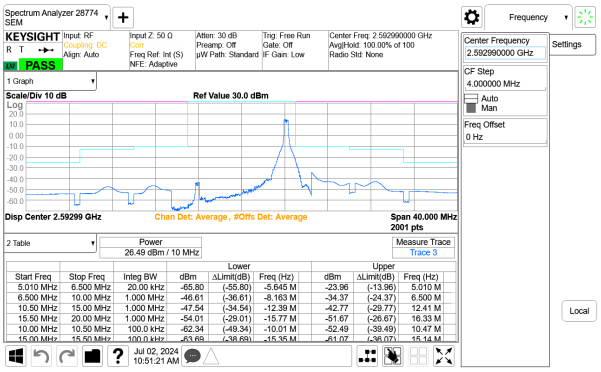
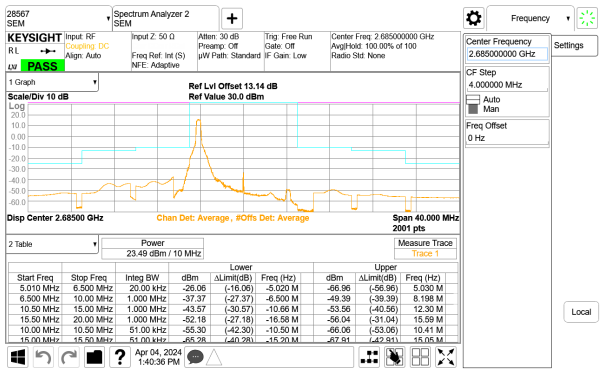


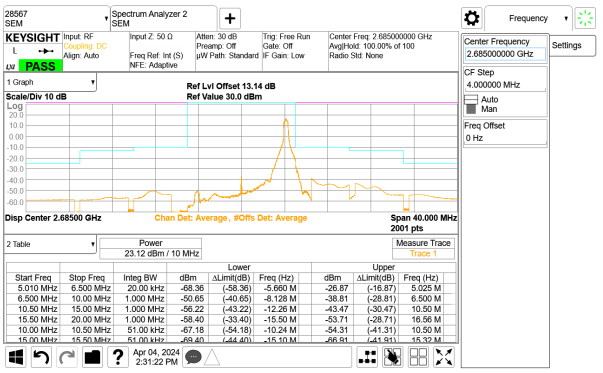
5G NR n41 10MHz BPSK Middle Channel RB1-0 Port A+B



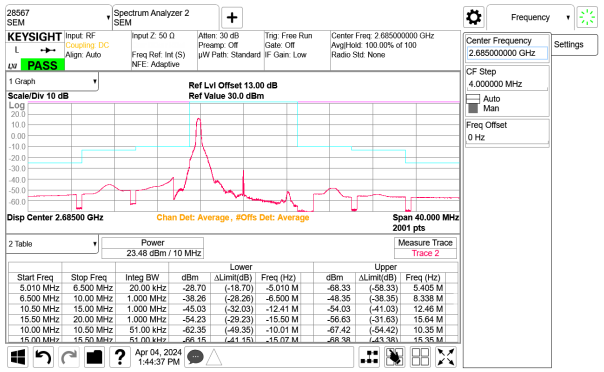
5G NR n41 10MHz BPSK Mid Channel RB1-23 Port A+B



5G NR n41 10MHz BPSK High Channel RB1-0 Port A



5G NR n41 10MHz BPSK High Channel RB1-23 Port A



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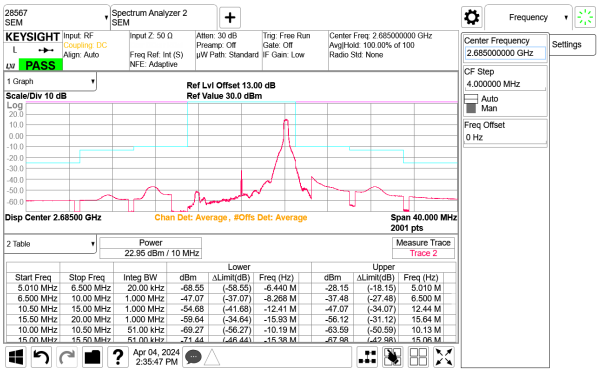

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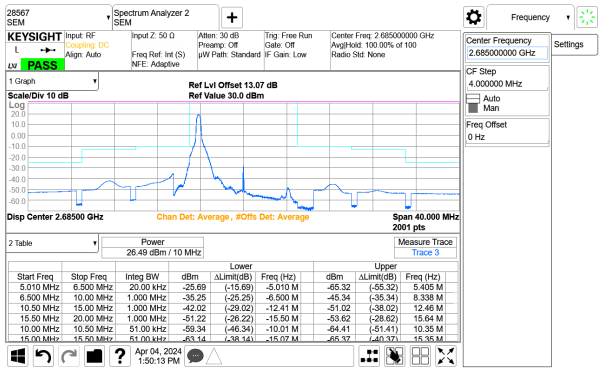
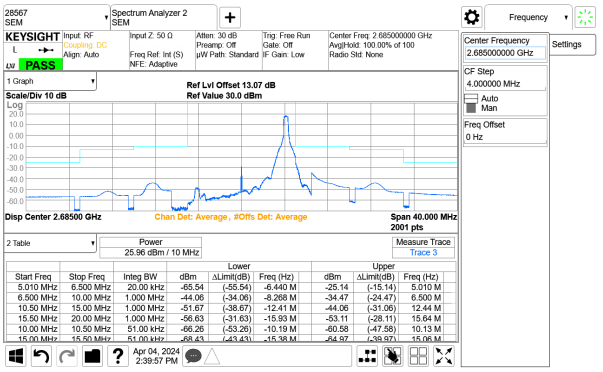
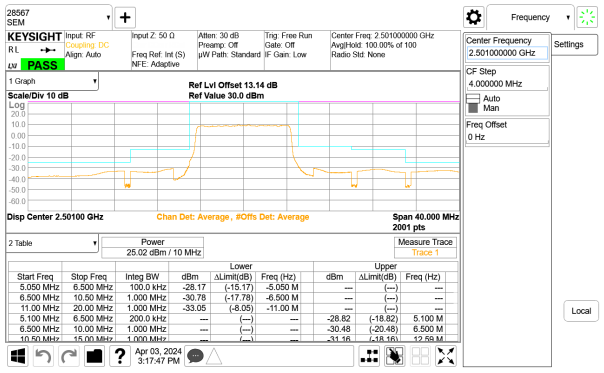


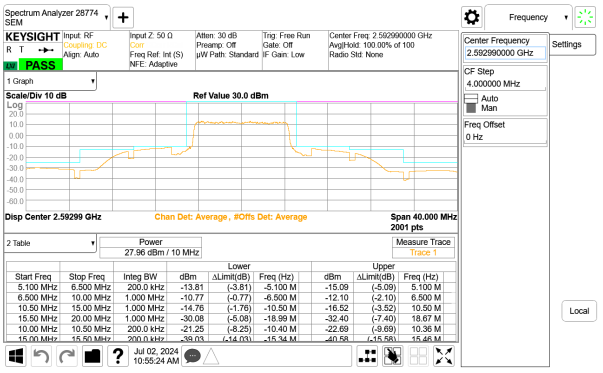
5G NR n41 10MHz BPSK High Channel RB1-0 Port A+B



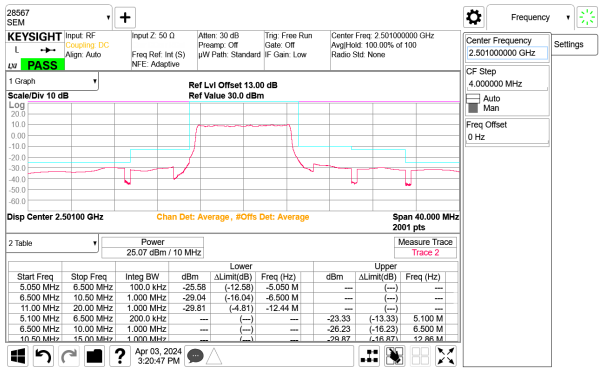
5G NR n41 10MHz BPSK High Channel RB1-23 Port A+B



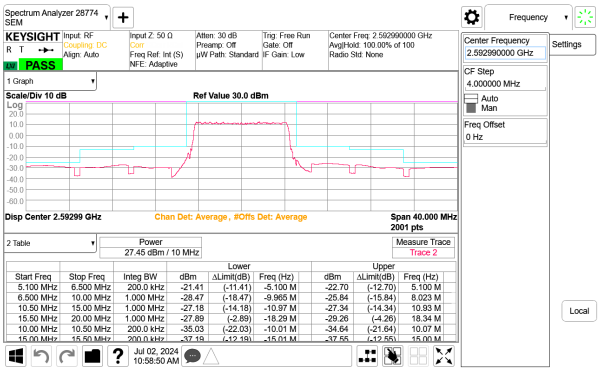
5G NR n41 10MHz BPSK Low Channel RB24-0 Port A



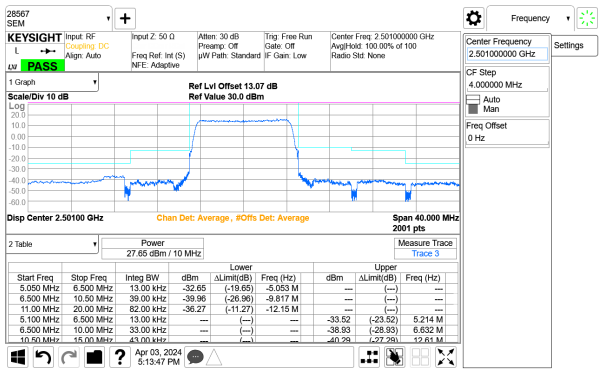
5G NR n41 10MHz BPSK Mid Channel RB24-0 Port A



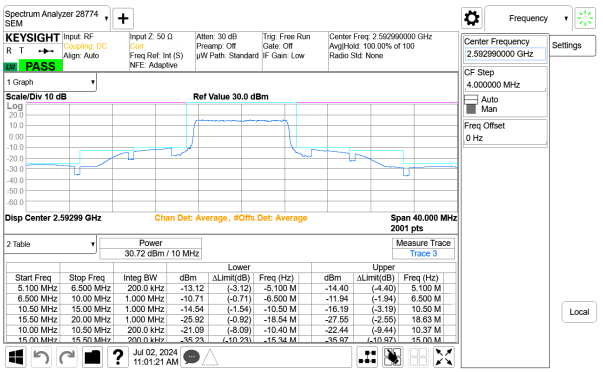
5G NR n41 10MHz BPSK Low Channel RB24-0 Port B



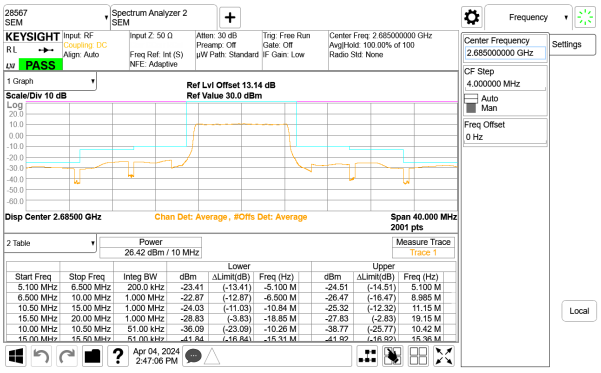
5G NR n41 10MHz BPSK Mid Channel RB24-0 Port B



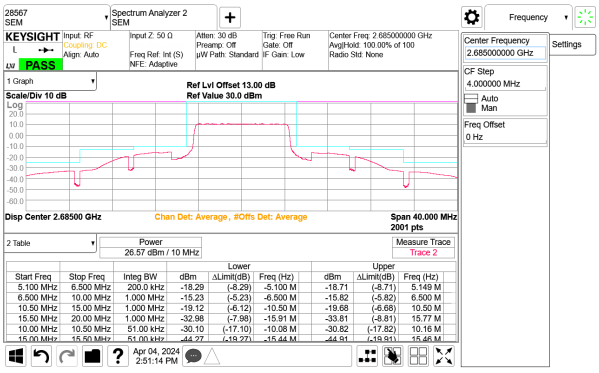
5G NR n41 10MHz BPSK Low Channel RB24-0 Port A+B



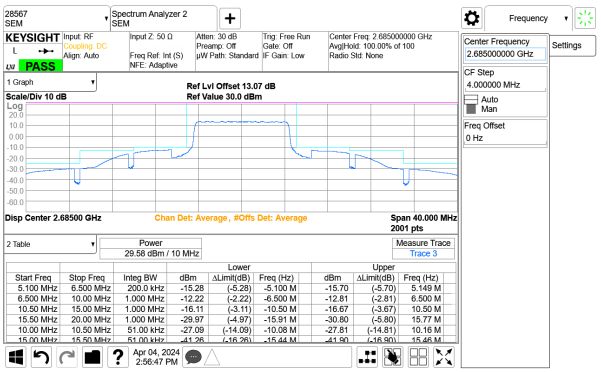
5G NR n41 10MHz BPSK Mid Channel RB24-0 Port A+B



5G NR n41 10MHz BPSK High Channel RB24-0 Port A



5G NR n41 10MHz BPSK High Channel RB24-0 Port B



5G NR n41 10MHz BPSK High Channel RB24-0 Port A+B

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